3001-0302250010

MOUND

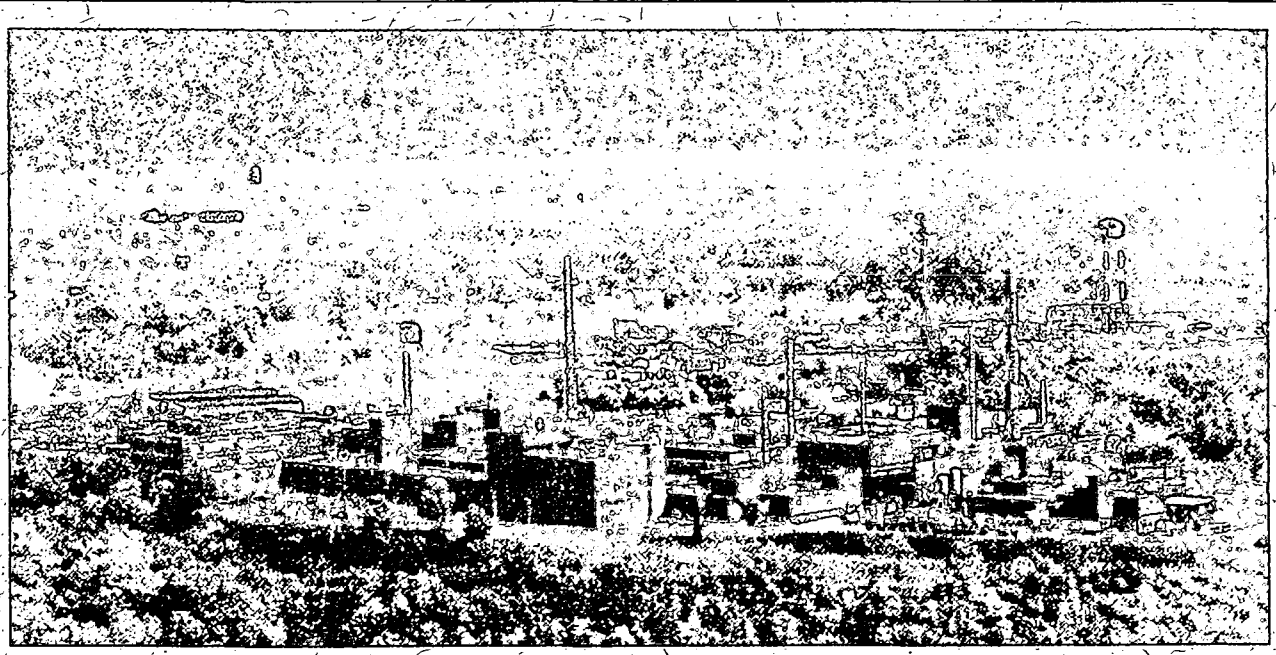
Environmental
Restoration
Program

MOUND PLANT

Potential Release Site Package

PRS #280

PUBLIC REVIEW DRAFT
APRIL 2002



MOUND PLANT
PRS 280
Former Waste Oil Drum Field

RECOMMENDATION:

Potential Release Site (PRS) 280 is a former waste oil drum field located in the east central part of the Mound property and was binned Further Assessment (FA) by the Core Team in November 1995. Further Assessment sampling was completed in August 1999 per the Sampling and Analysis Plan (SAP) approved by the Core Team.

Low-level chemical contamination found during a previous investigation was attributed to the previous staging of drums and the focus of the FA sampling.

A broad spectrum of chemical analyses, as well as standard radiological parameters, was performed on all samples. Only low level and isolated exceedances were noted above 10^{-6} RBGVs/screening levels, but none were above cleanup objectives (10^{-5} RBGV + background).

The additional sampling events conducted did not identify levels of concern. Therefore, PRS 280 requires NO FURTHER ASSESSMENT.

CONCURRENCE:

DOE/MEMP: _____ 3/13/02
Robert S. Rothman, Remedial Project Manager (date)

USEPA: _____ 3/18/02
Timothy J. Fischer, Remedial Project Manager (date)

OEPA: _____ 3/12/02
Brian K. Nickel, Project Manager (date)

PRS 280 Package Tracking Sheet

REVISION	DESCRIPTION	DATE
PREVIOUS	Binned Further Assessment (FA) on 2 November 1995. Addendum 1 summarizes results of FA sampling. Binned NFA on 28 February 2002. Signed recommendation page included in Addendum 1. Original package remains unchanged.	**N/A**
PUBLIC REVIEW DRAFT	Contains previous package material and Addendum 1.	**April 2002**
FINAL		

MOUND

Environmental
Restoration
Program

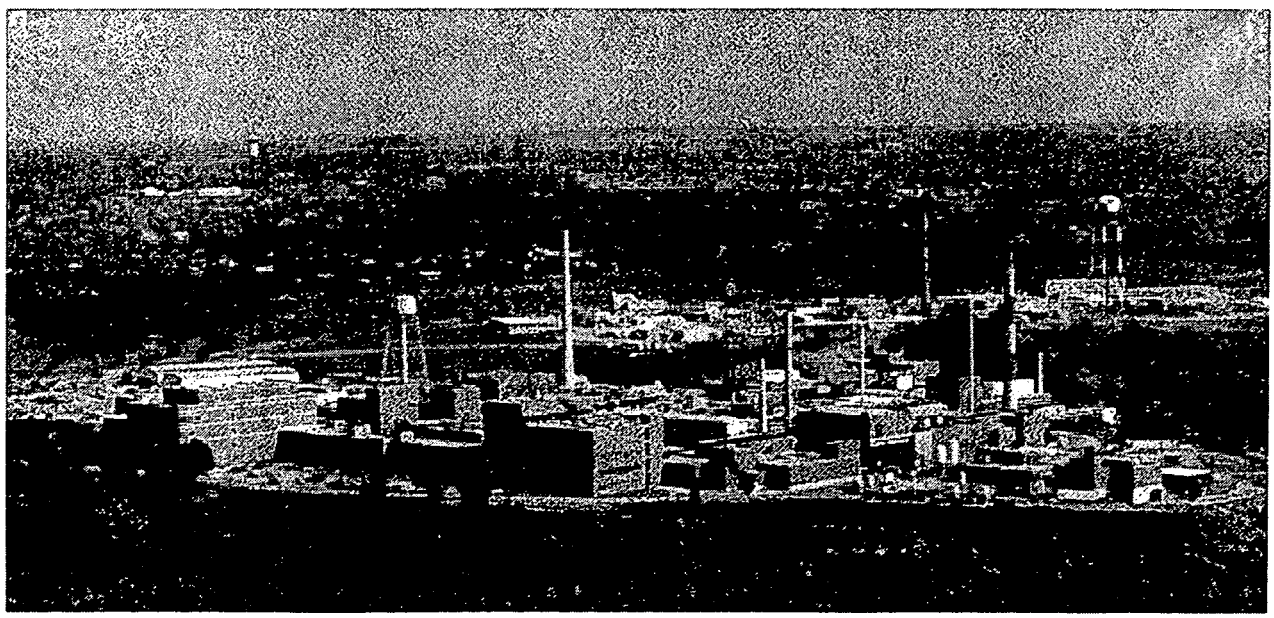
MOUND PLANT

Potential Release Site Package

PRS #280

Addendum 1

PUBLIC REVIEW DRAFT
APRIL 2002



PRS HISTORY:

Potential Release Site (PRS) 280, also known as the Former Waste Oil Drum Field, is located in the east-central part of the Mound Plant property as shown on Figure 1. Originally, the location was made a PRS because of a "thorium" result of 9.2 pCi/g (sample location C0264) and isolated lead and chromium detections above background levels[1]. The PRS was depicted as a single point in the PRS Package based on sample C0264 (Figure 2). The isolated thorium, lead, and chromium locations were the reason for the Further Assessment binning in November 1995, but had nothing to do with the drum field, and were addressed as part of the Building 21 Area Removal Action.

Based on a review of aerial photos, the drum field was identified as being located east of the depicted point at the location shown in Figure 3. Low-level chemical contamination (volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), total petroleum hydrocarbon (TPH), polychlorinated biphenyls (PCBs), pesticides, and lead) found during a previous investigation[2] was detected only in surface soil samples and was attributed to the previous staging of drums.

FURTHER ASSESSMENT ACTIVITY:

The DOE and EPA-approved **Sampling and Analysis Plan** (SAP)[3] was implemented in August 1999 and included the collection of 56 samples from 23 soil borings identified in Figure 4 and detailed in the PRS 280 FA Data Report[4]. Onsite gamma spec was performed on all soil samples, 11 of which were forwarded for offsite analyses as follows:

- ❑ SVOCs
- ❑ VOCs
- ❑ Lead
- ❑ TPH
- ❑ Pesticides/PCBs
- ❑ Isotopic Plutonium and Thorium (alpha spec)

The **Data Report**[4] presents a full account of soil sampling activities and sample results (onsite and offsite laboratory analyses) from the August 1999 fieldwork.

In January 2002, four of the samples with questionable minimum detectable activities (MDAs) were reanalyzed by onsite gamma spec (long count) to get a more accurate assessment of activity. The recounted sample results are presented in Table 1.

FURTHER ASSESSMENT RESULTS:

Because of the large number of analytes, all data tables from the Data Report are included herein as Tables 2 through 8. A summary for each suite of analyses is presented below.

SVOCs: Other than one detection of phenanthrene of 930 ug/kg with no Risk-Based Guideline Value (RBGV), all SVOC results were non-detect or below the contract required detection limit (CRDL).

VOCs: Other than acetone and methylene chloride that were found in blanks, all VOC results were non-detect.

Lead: All results were below background.

TPH: All results were non-detect or below the CRDL.

Pesticides/PCBs: All results were either non-detect or below RBGVs.

Onsite gamma spec: Maximum detections exceeding screening levels (SLs) are as follows:

- Co-60 maximum result 0.13 pCi/g and SL of 0.07 pCi/g
- Pb-210 maximum result 3.73 pCi/g and SL of 1.8 pCi/g
- Ra-226 maximum result 3.14 pCi/g and SL of 2.1 pCi/g
- Ac-227 maximum result 0.8 pCi/g and SL of 0.56 pCi/g
- All other detections were below screening levels

Offsite alpha and gamma spec: all of the results were below associated SLs (where available) except Ac-227 with a max 0.895 pCi/g and SL of 0.56 pCi/g.

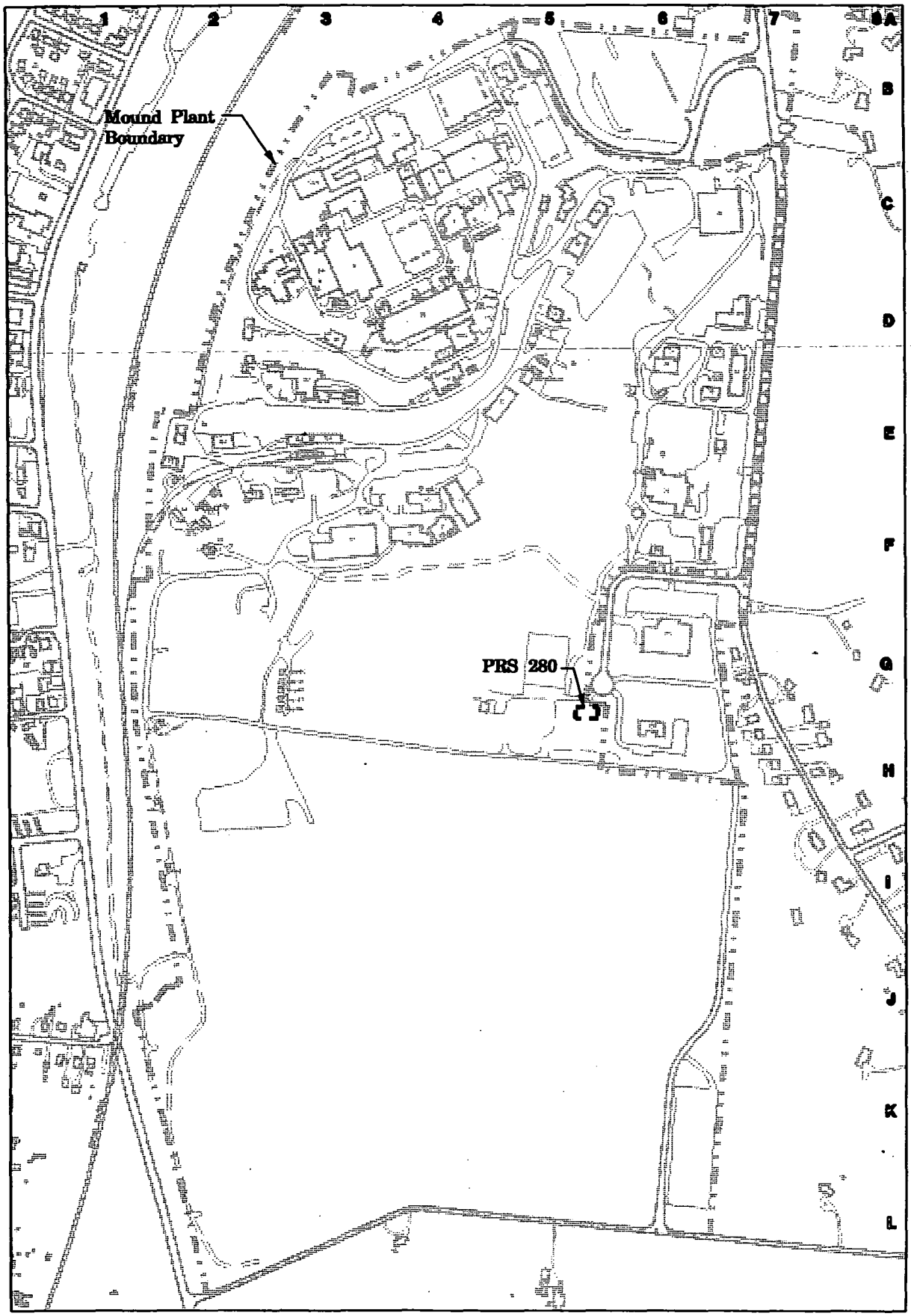
REFERENCES:

1) Potential Release Site Package, PRS #280, Mound Plant.
2) Operable Unit 3 Limited Field Investigation: Volume 7 – Waste Management, February 1993, Final.
3) Sampling and Analysis Plan, PRS No. 280, Final, 22 June 1999.
4) PRS 280 Further Assessment Data Report, Final, September 2001.

PREPARED BY:

Karen M. Arthur, BWXT of Ohio, Inc., ER QA

FIGURES



Legend

- Structures
- Paved roadway
- Unpaved roadway
- Railroad
- Water course
- Fence
- Mound Plant boundary
- Contour line

0 100 200 400 600 800 1000
Scale In Feet

	01/21/02	ISSUE FOR GENERAL USE	SSP		

MOUND
Environmental Restoration Geographic Information System

SHEET 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
ISSUE
SHEET 1 2 3 4 5 6
ISSUE A
PART CLASSIFICATION

( ) TITLE CLASSIFICATION

Figure 1
Location of PRS 280

MINIMUM CLASSIFICATION: UNCLASSIFIED
SIZE: D
DRAWING NUMBER: gen_site_plan.dgn
JOB NUMBER:
DWG TYPE: SITE
DWG:
CHECK:
SCALE: Graphic
SHEET 1 OF
STATUS: MS-REL-09/14/93
LOCATION: MSTATION / J

gen_site_plan.dgn

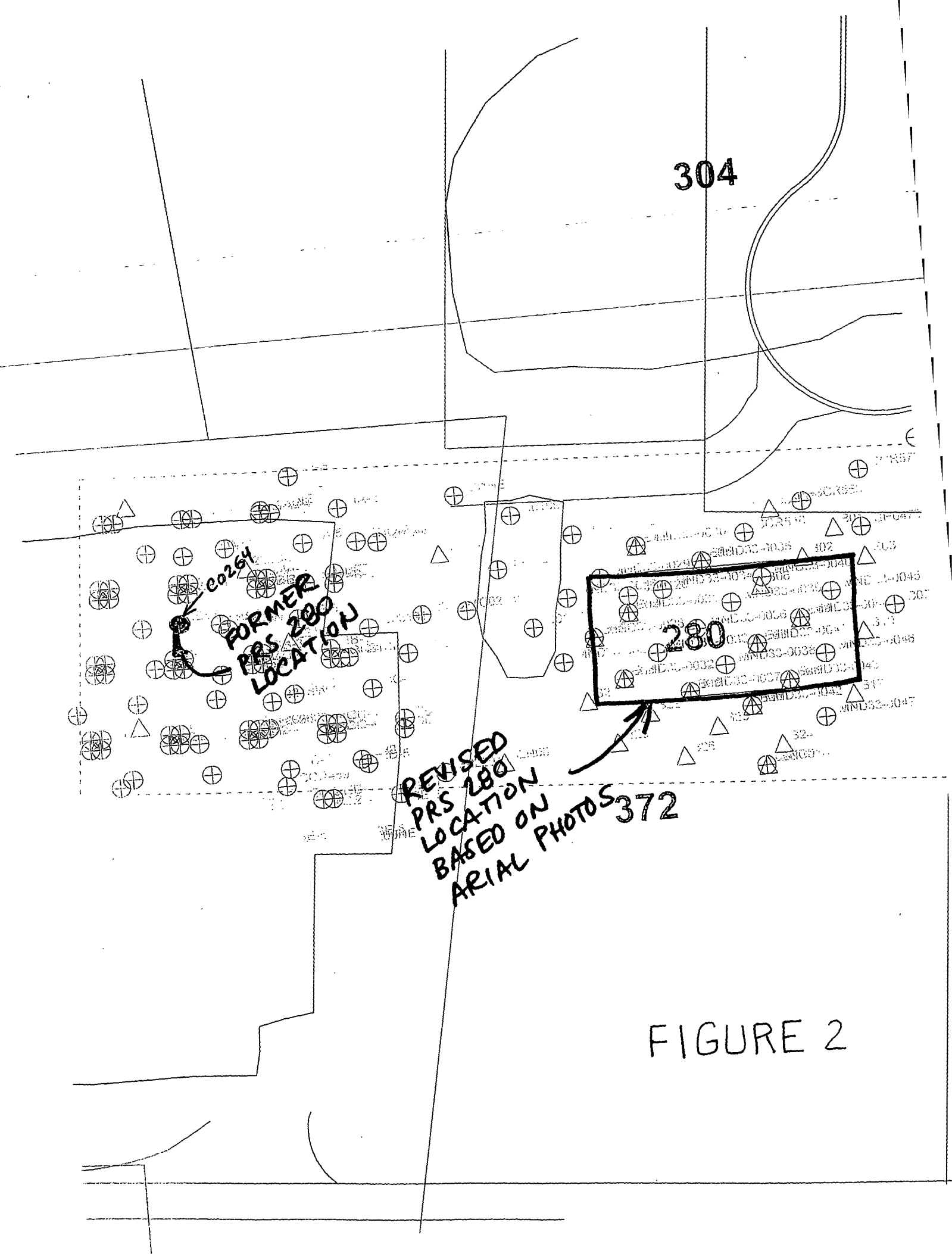

304
CO264
FORMER PRS 280 LOCATION
280
REVISED PRS 280 LOCATION BASED ON ARIAL PHOTOS
372

FIGURE 2

Figure 3

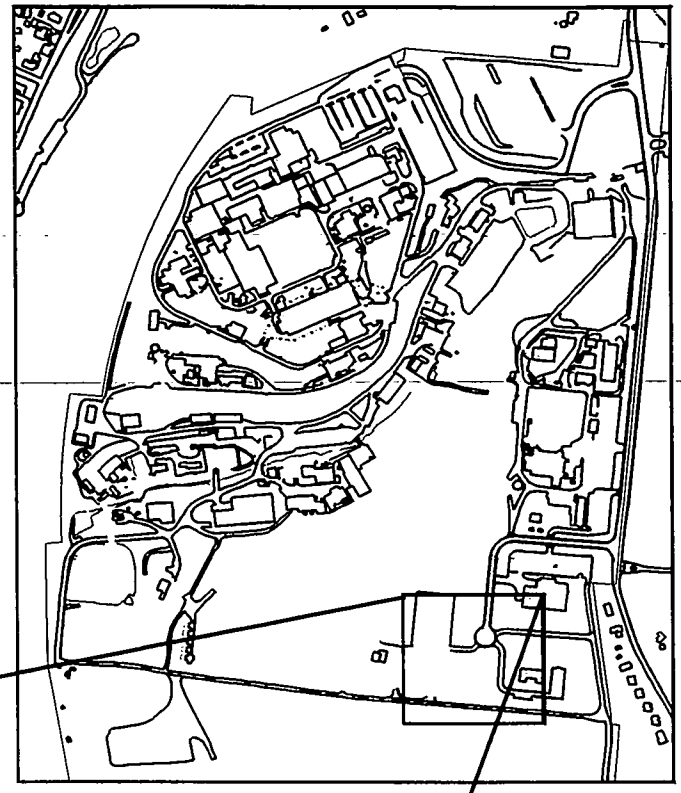
Mound Plant

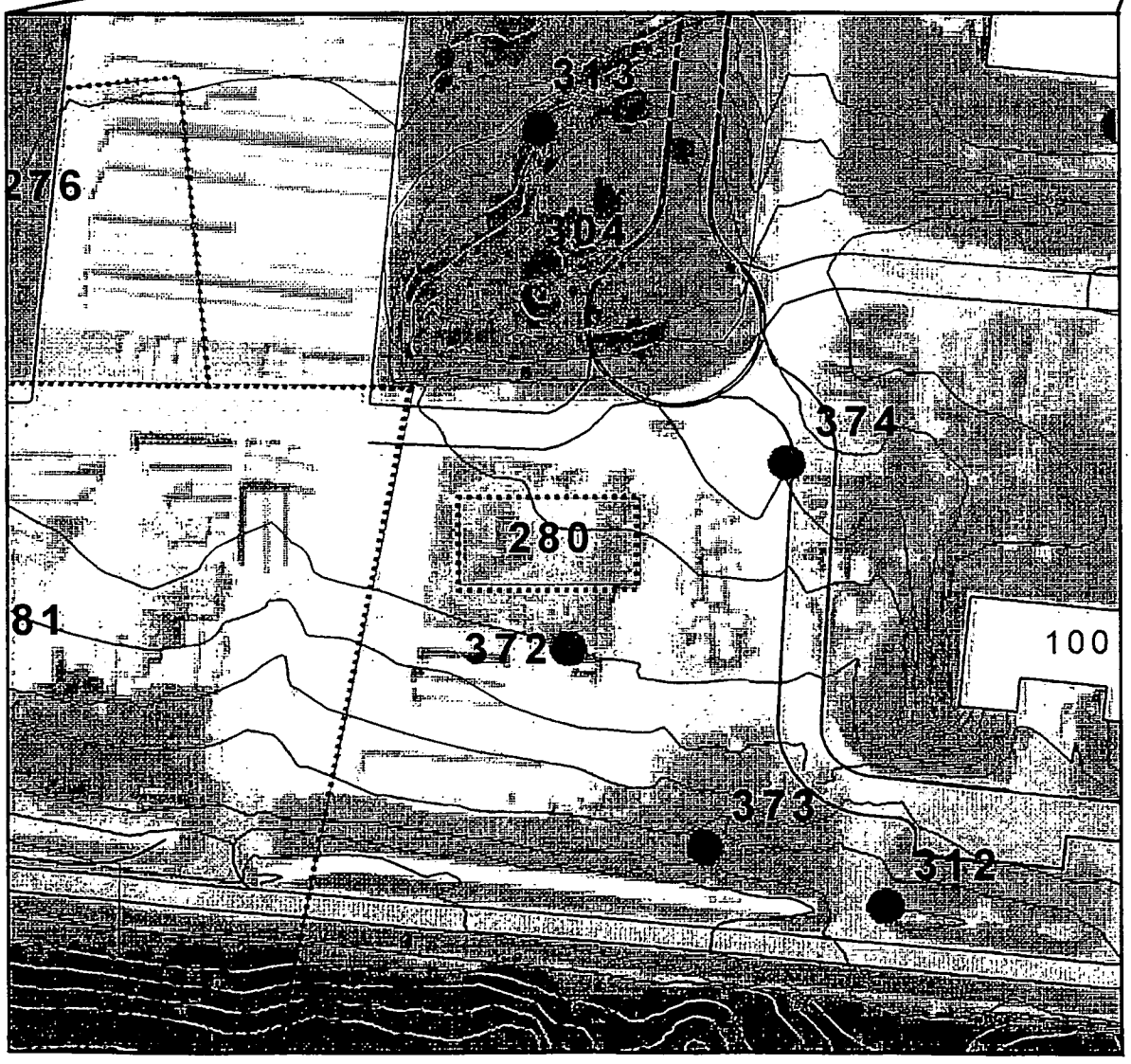
PRS 280

Former Drum Field

On the map below:

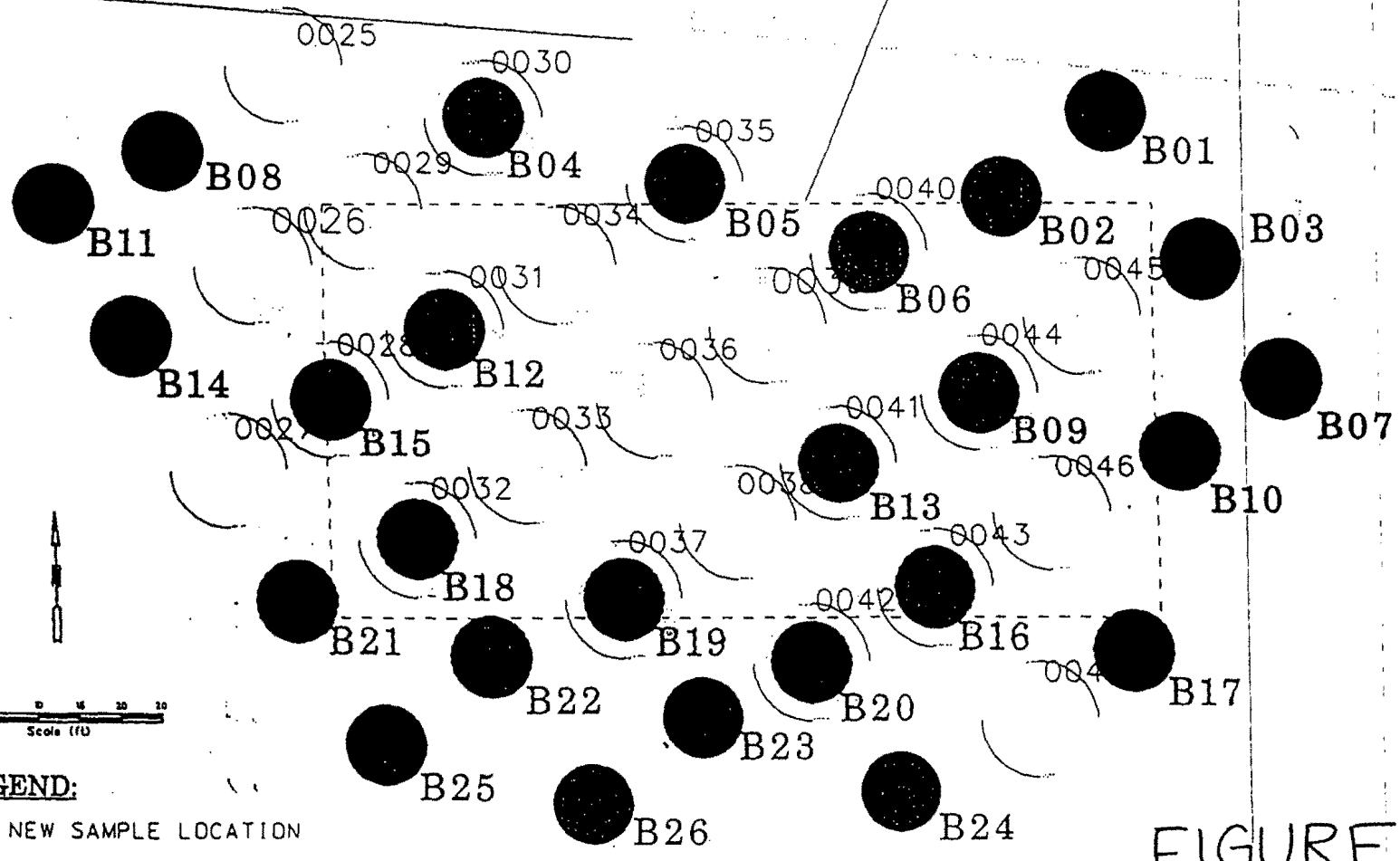
- elevation contours shown in red
- PRS 280 location shown in black
- Other PRSs locations shown in blue
- PRS numbers shown in black





NOTE: B08, B11, & B14 NOT SAMPLED. DMA 18JAN02

280



LEGEND:

- NEW SAMPLE LOCATION
- B08 — NEW SAMPLE I.D.
- 0025 — EXISTING SAMPLE I.D. FROM PROJECT MND33-****
- EXISTING SAMPLE LOCATION FROM PROJECT MND33-****

FIGURE 4

ISS	DATE	REVISION	BY	CHKR	DWG	UPLEC	APVD	M
	03/24/99		MR					

MOUND

Environmental Restoration Geographic Information System

SHEET / ISSUE	1 2 3 4 5 6
PART CLASSIFICATION	
DRAWING CLASSIFICATION	UNCLASSIFIED
SIZE	
DRAWING NUMBER	280grid_expan.dgn
JOB NUMBER	
DWG TYPE	STE
PROJ	ER-GIS
CADD	
SCALE	GRAPH
SHEET	1
STATUS	MD-REL-03/24/99
ORIGIN	MSTATION 5.0

FIGURE 1-2
PRS 280
SAMPLING LOCATIONS

DATA TABLES

TABLE 1: ONSITE GAMMA SPEC RECOUNT RESULTS (pCi/g)

PRS 280 Sample Recounts

Analyte	Boring: Sample ID:	B04 000011	Previous B04 000011	B016 000028	Previous B016 000028	B017 000023	Previous B017 000023	B024 000024	Previous B024 000024
Cobalt-60		0.04U	0.16U	0.03U	0.12U	0.03U	0.22U	0.06	0.14U
Cesium-137		0.06	0.13U	0.07	0.09	0.03U	0.19U	0.08	0.1
Lead-210		0.37U	2.41	0.98	2.36	0.59U	2.12U	1.2	2.4U
Radium-226		1.35	2.45U	1.84	2.33U	2.28	3.61	1.96	3.1U
Actinium-227		0.15U	0.71U	0.2U	1.26	0.19U	0.62U	0.31U	0.91U
Thorium-230		3.96U	24.44	5.91U	22.64U	5.79U	18.9U	8.86U	24.5U
Thorium-232		0.78	0.6	0.79	0.57	0.63	0.84	0.76	0.38U
Plutonium-238		9.0U	54.4U	40.19U	59.87U	15.82U	70.72U	24.22U	71.23
Americium-241		0.05U	0.294	0.06U	0.19U	0.06U	0.24U	0.09	0.23U

NOTES:

U -Indicates not detected at or above the laboratory reporting limit. The associated numerical value is the sample detection limit.

Questionable results and associated rerun results are highlighted for reference.

Table 2: Onsite Gamma Spec Results (pCi/g)

maximum *detected* values for each radionuclide are outlined in bold
*sample forwarded for offsite analysis

Analyte	Boring : Sample ID:	B03 000001	B03 000002	B03 000003	B01 000004	B01 000005	B05 000006	B05 000007	B05 000008
Cobalt-60		0.12U	0.12U	0.09U	0.13U	0.12U	0.09	0.09	0.13
Cesium-137		0.11U	0.11U	0.06U	0.10U	0.10U	0.13U	0.13U	0.15U
Lead-210		1.40U	1.40U	1.16	1.85U	1.87	1.74U	1.74U	2.07U
Radium-226		2.25	2.25	1.32	2.44U	1.89U	2.28	2.28	2.02U
Actinium-227		0.39U	0.39U	0.25U	0.68U	0.80	0.85U	0.85U	0.57U
Thorium-230		10.51U	10.51U	6.85U	20.67U	21.18U	22.85U	22.85U	20.69U
Thorium-232		0.60	0.60	0.76	0.71	0.43	0.66	0.66	0.54U
Plutonium-238		41.98U	41.98U	19.55U	70.30U	58.50U	49.64U	49.64U	52.80
Americium-241		0.11U	0.11U	0.07U	0.27U	0.21	0.20	0.20	0.23U

Analyte	Boring : Sample ID:	B05 000009	B04 000010	B04 000011	B07 000012	B07 000013	B06 000014*	B06 000015*	B06 000016
Cobalt-60		0.13	0.09U	0.16U	0.12U	0.15U	0.10U	0.10U	0.11U
Cesium-137		0.15U	0.07U	0.13U	0.12	0.09U	0.013U	0.013U	0.15U
Lead-210		2.07U	1.45U	2.41	1.47U	2.46	1.69U	1.69U	2.19U
Radium-226		2.02U	1.98U	2.45U	2.51	3.02	2.04U	2.04U	2.74U
Actinium-227		0.57U	0.50U	0.71U	0.69U	0.077U	0.51U	0.51U	0.73U
Thorium-230		20.69U	13.08U	24.44	21.50U	22.66U	22.99U	22.99U	23.70U
Thorium-232		0.54U	0.51U	0.60	0.50U	0.57U	0.64	0.64	0.66U
Plutonium-238		52.80	56.27U	54.40U	61.78U	61.79U	67.93U	67.93U	71.72U
Americium-241		0.23U	0.20U	0.294	0.23U	0.29U	0.022U	0.022U	0.26U

Analyte	Boring : Sample ID:	B06 000017	B09 000018*	B09 000019	B10 000020	B10 000021	B17 000022	B17 000023	B24 000024
Cobalt-60		0.11U	0.12U	0.20U	0.15U	0.19U	0.02U	0.22U	0.14U
Cesium-137		0.15U	0.09U	0.15U	0.12U	0.15U	0.14	0.19U	0.10
Lead-210		2.19U	2.59U	2.43U	1.88	2.01U	3.73	2.12U	2.40U
Radium-226		2.74U	2.86	2.25U	2.60	2.06U	2.53	3.61	3.10U
Actinium-227		0.73U	0.81U	0.70U	0.86U	0.76U	0.77U	0.62U	0.91U
Thorium-230		23.70U	20.04U	22.55U	19.29U	22.96U	24.17U	18.90U	24.50U
Thorium-232		0.66U	1.04	0.73	0.54	0.46U	0.80	0.84	0.38U
Plutonium-238		71.72U	71.94U	67.18U	70.46U	71.95U	58.22U	70.72U	71.23
Americium-241		0.26U	0.22U	0.26U	0.28U	0.23U	0.23U	0.24U	0.23U

Analyte	Boring : Sample ID:	B24 000025	B20 000026*	B20 000027	B16 000028*	B16 000029	B13 000030*	B13 000031	B23 000033*
Cobalt-60		0.16U	0.10U	0.10U	0.12U	0.17U	0.11U	0.15U	0.14U
Cesium-137		0.10U	0.10U	0.11U	0.09	0.15U	0.14U	0.14U	0.08
Lead-210		2.22U	2.31U	2.40U	2.36	2.80U	2.16U	1.81U	0.96U
Radium-226		1.96U	3.14	2.88U	2.33U	2.80U	2.96	2.13	2.21
Actinium-227		0.83U	0.75U	0.91U	1.26	0.79U	0.82U	0.69U	0.39U
Thorium-230		23.27U	21.14U	26.75U	22.64U	29.10U	23.46U	24.38U	11.36U
Thorium-232		0.53U	0.98	0.79	0.57	0.76	0.88	2.36U	0.84
Plutonium-238		89.10U	58.33U	81.92U	59.87U	69.39U	85.00U	63.30U	33.31U
Americium-241		0.24U	0.26U	0.24U	0.19U	0.27	0.28U	0.25U	0.10U

SHADED SAMPLES RECOUNTED, LONG COUNT RESULTS PRESENTED IN TABLE 1.

Table 2: Onsite Gamma Spec Results (pCi/g)

maximum *detected* values for each radionuclide are outlined in bold
*sample forwarded for offsite analysis

Analyte	Boring : Sample ID:	B23 000034	B23 000035	B26 000036	B26 000037	B19 000038*	B19 000039	B22 000040
Cobalt-60		0.08U	0.08U	0.18U	0.12U	0.11U	0.09U	0.14U
Cesium-137		0.15U	0.15U	0.15U	0.08U	0.10U	0.17U	0.08U
Lead-210		1.99U	1.99U	2.25U	0.87	1.89	2.08U	0.87U
Radium-226		2.26U	2.26U	2.76U	1.28	2.26U	2.23	1.81
Actinium-227		0.70U	0.70U	0.61U	0.38U	0.78U	0.70	0.35U
Thorium-230		21.81U	21.81U	23.18U	10.65U	23.95U	20.61U	8.77U
Thorium-232		0.55	0.55	0.62	0.88	0.73	0.46U	0.74
Plutonium-238		69.42U	69.42U	69.88U	27.95U	58.28U	58.05U	23.91U
Americium-241		0.24U	0.24U	0.29U	0.11U	0.24U	0.22U	0.10U

Analyte	Boring : Sample ID:	B22 000041	B25 000042	B25 000043	B18 000044*	B18 000045	B18 000046	B21 000047
Cobalt-60		0.07U	0.10U	0.21U	0.11U	0.09U	0.09U	0.19U
Cesium-137		0.10	0.12U	0.13U	0.10U	0.07U	0.07U	0.07U
Lead-210		2.43U	1.27U	2.44	2.54	1.25U	1.25U	1.15U
Radium-226		2.41U	1.47U	2.52U	2.00U	1.11	1.11	1.70
Actinium-227		0.70U	0.48U	0.95U	0.81U	0.43U	0.43U	0.33U
Thorium-230		18.83U	10.30U	23.22U	22.92U	11.42U	11.42U	11.31U
Thorium-232		0.68	0.79	0.50U	0.56	0.58	0.58	0.52
Plutonium-238		66.69U	33.38U	64.05U	60.76U	30.02U	30.02U	20.24U
Americium-241		0.21U	0.11U	0.24U	0.22U	0.11U	0.11U	0.11U

Analyte	Boring : Sample ID:	B21 000048	B15 000050*	B15 000051	B12 000052*	B12 000053	B02 000054	B02 000055
Cobalt-60		0.07U	0.10U	0.18U	0.06	0.07U	0.09U	0.09U
Cesium-137		0.11U	0.09U	0.09U	0.09U	0.09U	0.13U	0.13U
Lead-210		1.50U	1.70U	2.68U	1.14U	2.32U	2.14U	2.14U
Radium-226		2.20U	2.32	2.64U	1.75U	2.31U	2.35U	2.35U
Actinium-227		0.50U	0.59U	0.93U	0.47U	0.64U	0.68U	0.68U
Thorium-230		18.14U	20.98U	27.19U	12.98U	19.36U	23.20U	23.20U
Thorium-232		0.24U	0.63	1.00	0.66	0.71	0.96	0.96
Plutonium-238		0.24U	55.76U	65.41U	32.89U	52.48U	62.16U	62.16U
Americium-241		0.16U	0.19U	0.19U	0.014U	0.22U	0.25U	0.25U

Analyte	Boring : Sample ID:	B02 000056
Cobalt-60		0.13U
Cesium-137		0.09
Lead-210		2.05
Radium-226		3.10U
Actinium-227		0.76U
Thorium-230		25.84U
Thorium-232		0.66
Plutonium-238		70.50U
Americium-241		0.23U

note: onsite gamma spec analysis for cobalt-60 predates change of minimum detectable activity (MDA) to be consistent with current guideline value (GV) of 0.09 pCi/g.
note: onsite gamma spec analysis for thorium-230 and associated MDA were based on GV of 44 pCi/g. Current MDA requirements for onsite gamma spec analyses are more restrictive to reflect the current GV.
note: onsite gamma spec analysis for plutonium-238 predates the lowering of the MDA to be consistent with GV.

Table 3: VOC Analytical Results (ug/kg)

all *detected* values highlighted

Analyte	Mound RBGV, HI=1	Boring : Sample ID:	B23 000033	B23 000034	B23 000035*	B26 000036	B26 000037	B22 000040	B22 000041	B25 000042	B25 000043	B21 000047	B21 000048
Chloromethane			12 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U
Bromomethane			12 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U
Vinyl Chloride			12 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U
Chloroethane	160,000		12 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U
Methylene Chloride			10 B	13 B	9 B	12 B	10 B	15 B	8 B	11 B	14 B	8 B	11 B
Acetone	21,000,000		12 B	12 B	11 B	12 B	10 JB	12 U	11 U	12 U	8JB	12 U	11 U
Carbon Disulfide	21,000,000		6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
1,1-Dichloroethene			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
1,1-Dichloroethane	7,800		6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
1,2- Dichloroethene (total)			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Chloroform			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
1,2 Dichloroethane	11,000		6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
2-Butanone	9,300,000		12 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U
1,1,1-Trichloroethane			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Carbon Tetrachloride	12,000		6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Bromodichloromethane	48,000		6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
1,2-Dichloropropane			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
cis-1,3-Dichloropropene			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Trichloroethene	125,000		6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Dibromochloromethane	35,500		6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
1,1,2-Trichloroethane			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	32,000		6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Trans-1,3-Dichloropropene			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Bromoform			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
4-Methyl-2-pentanone	700,000		12 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U
2-Hexanone			12 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U

Table 3: VOC Analytical Results (ug/kg)

all *detected* values highlighted

Analyte	Mound RBGV, HI=1	Boring : Sample ID:	B23 000033	B23 000034	B23 000035*	B26 000036	B26 000037	B22 000040	B22 000041	B25 000042	B25 000043	B21 000047	B21 000048
Tetrachloroethene			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
1,1,2,2-Tetrachloroethane			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Toluene	250,000		6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Chlorobenzene			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Ethylbenzene	480		6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Styrene			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Xylene (total)	430,000,000		6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Acrylonitrile			120 U	120 U	110 U	120 U	110 U	120 U	110 U	120 U	110 U	120 U	110 U
Acetonitrile			120 U	120 U	110 U	120 U	110 U	120 U	110 U	120 U	110 U	120 U	110 U
1,1,2-Trichlorotrifluoroethane			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
1,2-Diethylbenzene			6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Hexane	91,000		12 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U
Iodomethane			12 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U
Vinyl Acetate			12 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U	12 U	11 U

NOTES:

- * – represents a duplicate soil sample
- U – indicates not detected at or above the laboratory reporting limit. The associated numerical value is the sample detection limit.
- (U) – indicates the result was qualified non-detect during data review.
- B –detected in blank
- HI – represents Hazard Index
- J – indicates the value is an estimate and the result is below the Contract Required Detection Limit (CRDL).
- RBGV – Risk-Based Guideline Value

Table 4: SVOC Analytical Results (ug/kg)

all *detected* values highlighted

Analyte	RBGV, HI=1	Boring : Sample ID:	B03 000001	B03 000002*	B03 000003	B01 000004	B01 000005	B07 000012	B07 000013	B10 000020	B10 000021	B02 000054	B02 000056
Phenol	130,000,000		380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Bis(2-Chloroethyl)ether			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
2-Chlorophenol			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
1,3-Dichlorobenzene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
1,4-Dichlorobenzene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
1,2-Dichlorobenzene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
2-Methylphenol			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
2,2'-oxybis(1-Chloropropane)			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
4-Methylphenol	1,100,000		380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
N-Nitroso-di-n-propylamine			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Hexachloroethane			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Nitrobenzene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Isophorone	3,150,000		380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
2-Nitrophenol			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
2,4-Dimethylphenol			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Bis(2-Chloroethoxy)methane			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
2,4-Dichlorophenol			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
1,2,4-Trichlorobenzene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Naphthalene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	26 J	390 U	390 U
4-Chloroaniline			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Hexachlorobutadiene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
4-Chloro-3-methylphenol			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
2-Methylnaphthalene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Hexachlorocyclopentadiene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
2,4,6-Trichlorophenol			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
2,4,5-Trichlorophenol			940 U	940 U	1000 U	940 U	900 U	940 U	960 U	940 U	960 U	980 U	980 U
2-Chloronaphthalene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
2-Nitroaniline			940 U	940 U	1000 U	940 U	900 U	940 U	960 U	940 U	960 U	980 U	980 U
Dimethylphthalate			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Acenaphthylene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
2,6-Dinitrotoluene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U

Table 4: SVOC Analytical Results (ug/kg)

all *detected* values highlighted

Analyte	RBGV, HI=1	Boring : Sample ID:	B03 000001	B03 000002*	B03 000003	B01 000004	B01 000005	B07 000012	B07 000013	B10 000020	B10 000021	B02 000054	B02 000056
3-Nitroaniline			940 U	940 U	1000 U	940 U	900 U	940 U	960 U	940 U	960 U	980 U	980 U
Acenaphthene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	130 J	390 U	390 U
2,4-Dinitrophenol			940 U	940 U	1000 U	940 U	900 U	940 U	960 U	940 U	960 U	980 U	980 U
4--Nitrophenol			940 U	940 U	1000 U	940 U	900 U	940 U	960 U	940 U	960 U	980 U	980 U
Dibenzofuran			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	83 J	390 U	390 U
2,4-Dinitrotoluene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Diethylphthalate			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
4-Chlorophenyl-phenylether			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Fluorene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	180 J	390 U	390 U
4-Nitroaniline			940 U	940 U	1000 U	940 U	940 U	900 U	960 U	940 U	960 U	980 U	980 U
4,6-Dinitro-2-methylphenol			940 U	940 U	1000 U	940 U	940 U	900 U	960 U	940 U	960 U	980 U	980 U
N-Nitrosodiphenylamine(1)	600,000		380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
4-Bromophenyl-phenylether			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Hexachlorobenzene			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Pentachlorophenol	25,000		940 U	940 U	1000 U	940 U	940 U	900 U	960 U	940 U	960 U	980 U	980 U
Phenanthrene			83 J	380 U	100 J	380 U	27 J	360 U	390 U	43 J	920	39 J	140 J
Anthracene	64,000,000		27 J	380 U	22 J	380 U	380 U	360 U	390 U	370 U	360 J	390 U	44 J
Carbazole			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	170 J	390 U	390 U
Di-n-butylphthalate	21,000,000		380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Fluoranthene	8,500,000		140 J	380 U	150 J	380 U	53 J	23 J	24 J	130 J	890	76 J	200 J
Pyrene	6,400,000		120 J	380 U	150 J	380 U	49 J	30 J	28 J	130 J	760	65 J	170 J
Butylbenzylphthalate	43,000,000		380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
3,3'Dichlorobenzidine			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Benzo(a)anthracene	4,100		63 J	380 U	67 J	380 U	28 J	360 U	390 U	73 J	390	30 J	74 J
Chrysene	410,000		67 J	380 U	70 J	380 U	31 J	360 U	390 U	67 J	390	36 J	85 J
Bis(2-Ethylhexyl)phthalate	215,000		380 (U)	380 U	400 (U)	380 U	380 U	360 (U)	390 U	370 U	390 (U)	390 U	390 U
Di-n-octylphthalate	4,300,000		380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Benzo(b)fluoranthene	4,100		49 J	380 U	56 J	380 U	380 U	360 U	390 U	57 J	260 J	25 J	69 J
Benzo(k)fluoranthene	41,000		54 J	380 U	48 J	380 U	25 J	360 U	390 U	60 J	300 J	32 J	67 J
Benzo(a)pyrene	410		56 J	380 U	49 J	380 U	24 J	360 U	390 U	59 J	300 J	32 J	65 J
Indeno(1,2,3-cd)pyrene	4,100,000		33 J	380 U	25 J	380 U	380 U	360 U	390 U	32 J	180 J	390 U	44 J

Table 4: SVOC Analytical Results (ug/kg)

all *detected* values highlighted

Analyte	RBGV, HI=1	Boring : Sample ID:	B03 000001	B03 000002*	B03 000003	B01 000004	B01 000005	B07 000012	B07 000013	B10 000020	B10 000021	B02 000054	B02 000056
Dibenz(a,h)anthracene	410		380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	71 J	390 U	390 U
Benzo(g,h,i)perylene			33 J	380 U	27 J	380 U	380 U	360 U	390 U	30 J	160 J	390 U	46 J
Benzyl alcohol			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U
Benzoic acid	850,000,000		1900 U	1900 U	2000 U	1900 U	1900 U	1800 U	1900 U	1900 U	1900 U	2000 U	2000 U
2-Benzyl-4-chlorophenol			380 U	380 U	400 U	380 U	380 U	360 U	390 U	370 U	380 U	390 U	390 U

NOTES:

* Represents a duplicate soil sample

U – indicates not detected at or above the laboratory reporting limit. The associated numerical value is the sample detection limit.

B – indicates the parameter was between the Instrument Detection Limit (IDL) and the Contract Required Detection Limit (CRDL).

HI – represents Hazard Index

RBGV– Risk-Based Guideline Value

J – indicates the value is an estimate and the result is below the RDL.

Table 5: TPH Analytical Results (mg/kg)

Analyte	RBGV, HI=1	Boring : Sample ID:	B05 000006	B05 000007*	B05 000008	B05 000009*	B04 000010	B04 000011	B06 000014	B06 000016	B09 000018	B09 000019	B20 000026	B20 000027	B16 000028
Petroleum Hydrocarbons	NA		25.0(U)	21.1(U)	11.7(U)	64.3(J)	11.9(J)	13.5(J)	418(J)	35.6(J)	21.9(J)	118(J)	45.3(J)	49.9(J)	13.9(J)

Analyte	RBGV, HI=1	Boring : Sample ID:	B16 000029	B13 000030	B13 000031	B19 000038	B19 000039	B18 000044	B18 000045	B18 000046*	B15 000050	B15 000051	B12 000052	B12 000053
Petroleum Hydrocarbons	NA		120(J)	5.4(J)	48.6(J)	283(J)	798(J)	10.7(J)	21.2(J)	7.3(J)	9.7(J)	22.6(J)	10.1(J)	90.5(J)

NOTES:
TPH – total petroleum hydrocarbon
* Represents a duplicate soil sample
HI – represents Hazard Index
RBGV – Risk-Based Guideline Value
J – indicates the value is an estimate and the result is below the RDL.
U – indicates not detected at or above the laboratory reporting limit. The associated numerical value is the sample detection limit.

Table 6: Pesticide/PCB Analytical Results (ug/kg)

all *detected* values highlighted

Analyte	RBGV, HI=1	Boring : Sample ID:	B03 000001	B03 000002*	B03 000003	B01 000004	B01 000005	B07 000012	B07 000013	B10 000020	B10 000021
Alpha - BHC			1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
Beta - BHC	1,650		1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
Delta – BHC			1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
Gamma – BHC (Lindane)			1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
Heptachlor			1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
Aldrin			1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
Heptachlor Epoxide			1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
Endosulfan I			1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
Dieldrin	185		3.8 U	3.8 U	4.0 U	3.8 U	3.8 U	3.6 U	3.9 U	3.7 U	3.8 U
4,4' – DDE	9,000		3.8 U	3.8 U	4.0 U	3.8 U	3.8 U	3.6 U	3.9 U	3.7 U	3.8 U
Endrin			3.8 U	3.8 U	4.0 U	3.8 U	3.8 U	3.6 U	3.9 U	3.7 U	3.8 U
Endosulfan II			3.8 U	3.8 U	4.0 U	3.8 U	3.8 U	3.6 U	3.9 U	3.7 U	3.8 U
4,4'- DDD			3.8 U	3.8 U	4.0 U	3.8 U	3.8 U	3.6 U	3.9 U	3.7 U	3.8 U
Endosulfan sulfate			3.8 U	3.8 U	4.0 U	3.8 U	3.8 U	3.6 U	3.9 U	3.7 U	3.8 U
4,4' – DDT	9,000		3.8 U	3.8 U	4.0 U	3.8 U	3.8 U	3.6 U	3.9 U	3.7 U	3.8 U
Methoxychlor			19 U	19 U	20 U	19 U	19 U	18 U	19 U	19 U	19 U
Endrin Ketone			3.8 U	3.8 U	4.0 U	3.8 U	3.8 U	3.6 U	3.9 U	3.7 U	3.8 U
Endrin aldehyde			3.8 U	3.8 U	4.0 U	3.8 U	3.8 U	3.6 U	3.9 U	3.7 U	3.8 U
Alpha – Chlordane			1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
Gamma – Chlordane			1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
Toxaphene			190 U	190 U	200 U	190 U	190 U	180 U	190 U	190 U	190 U
Aroclor – 1016			38 U	38 U	40 U	38 U	38 U	36 U	39 U	37 U	38 U
Aroclor – 1221			76 U	76 U	80 U	76 U	75 U	72 U	77 U	75 U	76 U
Aroclor – 1232			38 U	38 U	40 U	38 U	38 U	36 U	39 U	37 U	38 U
Aroclor – 1242			38 U	38 U	40 U	38 U	38 U	36 U	39 U	37 U	38 U
Aroclor – 1248	385		38 U	38 U	40 U	38 U	38 U	36 U	39 U	37 U	38 U
Aroclor – 1254	385		38 U	38 U	40 U	38 U	38 U	36 U	39 U	37 U	38 U
Aroclor - 1260	385		38 U	38 U	40 U	38 U	38 U	36 U	39 U	37 U	38 U

Table 6: Pesticide/PCB Analytical Results (ug/kg)

all *detected* values highlighted

Analyte	RBGV, HI=1	Boring : Sample ID:	B17 000022	B17 000023	B24 000024	B24 000025	B22 000040	B22 000041	B25 000042	B25 000043
Alpha - BHC			1.8 U	1.8 U	1.9 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U
Beta - BHC	1,650		1.8 U	1.8 U	1.9 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U
Delta – BHC			1.8 U	1.8 U	1.9 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U
Gamma – BHC (Lindane)			1.8 U	1.8 U	1.9 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U
Heptachlor			1.8 U	1.8 U	1.9 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U
Aldrin			1.8 U	1.8 U	1.9 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U
Heptachlor Epoxide			1.8 U	1.8 U	1.9 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U
Endosulfan I			1.8 U	1.8 U	1.9 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U
Dieldrin	185		3.7 U	3.6 U	3.9 U	3.8 U	4.0 U	3.8 U	3.9 U	3.9 U
4,4' – DDE	9,000		3.7 U	3.6 U	3.9 U	3.8 U	4.0 U	3.8 U	3.9 U	3.9 U
Endrin			3.7 U	3.6 U	3.9 U	3.8 U	4.0 U	3.8 U	3.9 U	3.9 U
Endosulfan II			3.7 U	3.6 U	3.9 U	3.8 U	4.0 U	3.8 U	3.9 U	3.9 U
4,4'- DDD			3.7 U	3.6 U	3.9 U	3.8 U	4.0 U	3.8 U	3.9 U	3.9 U
Endosulfan sulfate			3.7 U	3.6 U	3.9 U	3.8 U	4.0 U	3.8 U	3.9 U	3.9 U
4,4' – DDT	9,000		3.7 U	3.6 U	3.9 U	3.8 U	4.0 U	3.8 U	3.9 U	3.9 U
Methoxychlor			18 U	18 U	19 U	19 U	20 U	19 U	20 U	20 U
Endrin Ketone			3.7 U	3.6 U	3.9 U	3.8 U	4.0 U	3.8 U	3.9 U	3.9 U
Endrin aldehyde			3.7 U	3.6 U	3.9 U	3.8 U	4.0 U	3.8 U	3.9 U	3.9 U
Alpha – Chlordane			1.8 U	1.8 U	1.9 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U
Gamma – Chlordane			1.8 U	1.8 U	1.9 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U
Toxaphene			180 U	180 U	190 U	190 U	200 U	190 U	200 U	200 U
Aroclor – 1016			37 U	36 U	39 U	38 U	40 U	38 U	39 U	39 U
Aroclor – 1221			74 U	72 U	77 U	76 U	79 U	76 U	78 U	78 U
Aroclor – 1232			37 U	36 U	39 U	38 U	40 U	38 U	39 U	39 U
Aroclor – 1242			37 U	36 U	39 U	38 U	40 U	38 U	39 U	39 U
Aroclor – 1248	385		37 U	36 U	39 U	38 U	40 U	38 U	39 U	39 U
Aroclor – 1254	385		37 U	36 U	39 U	38 U	40 U	38 U	39 U	39 U
Aroclor - 1260	385		37 U	36 U	39 U	38 U	40 U	38 U	39 U	39 U

Table 6: Pesticide/PCB Analytical Results (ug/kg)

all *detected* values highlighted

Analyte	RBGV, HI=1	Boring : Sample ID:	B21 000047	B21 000048	B02 000054	B02 000055*	B02 000056
Alpha - BHC			1.9 U	1.9 U	2.0 U	1.9 U	2.0 U
Beta - BHC	1,650		1.9 U	1.9 U	2.0 U	1.9 U	2.0 U
Delta – BHC			1.9 U	1.9 U	2.0 U	1.9 U	2.0 U
Gamma – BHC (Lindane)			1.9 U	1.9 U	2.0 U	1.9 U	2.0 U
Heptachlor			1.9 U	1.9 U	2.0 U	1.9 U	2.0 U
Aldrin			1.9 U	1.9 U	2.0 U	1.9 U	2.0 U
Heptachlor Epoxide			1.9 U	1.9 U	2.0 U	1.9 U	2.0 U
Endosulfan I			1.9 U	1.9 U	2.0 U	1.9 U	2.0 U
Dieldrin	185		3.9 U	3.8 U	3.9 U	3.8 U	3.9 U
4,4' – DDE	9,000		3.9 U	3.8 U	3.9 U	3.8 U	3.9 U
Endrin			3.9 U	3.8 U	3.9 U	3.8 U	3.9 U
Endosulfan II			3.9 U	3.8 U	3.9 U	3.8 U	3.9 U
4,4'- DDD			3.9 U	3.8 U	3.9 U	3.8 U	3.9 U
Endosulfan sulfate			3.9 U	3.8 U	3.9 U	3.8 U	3.9 U
4,4' – DDT	9,000		3.9 U	3.8 U	3.9 U	3.8 U	3.9 U
Methoxychlor			19 U	19 U	20 U	19 U	20 U
Endrin Ketone			3.9 U	3.8 U	3.9 U	3.8 U	3.9 U
Endrin aldehyde			3.9 U	3.8 U	3.9 U	3.8 U	3.9 U
Alpha – Chlordane			1.9 U	1.9 U	2.0 U	1.9 U	2.0 U
Gamma – Chlordane			1.9 U	1.9 U	2.0 U	1.9 U	2.0 U
Toxaphene			190 U	190 U	200 U	190 U	200 U
Aroclor – 1016			39 U	38 U	39 U	38 U	39 U
Aroclor – 1221			77 U	76 U	78 U	76 U	78 U
Aroclor – 1232			39 U	38 U	39 U	38 U	39 U
Aroclor – 1242			39 U	38 U	39 U	38 U	39 U
Aroclor – 1248	385		74	38 U	39 U	38 U	39 U
Aroclor – 1254	385		39 U	38 U	39 U	38 U	39 U
Aroclor - 1260	385		39 U	38 U	39 U	38 U	39 U

NOTES:
PCB: polychlorinated biphenyl
* Represents a duplicate soil sample
HI – represents Hazard Index
U – indicates not detected at or above the laboratory reporting limit. The associated numerical value is the sample detection limit.
RBGV – Risk-Based Guideline Value

Table 7: Lead Analytical Results (mg/kg)

Analyte	Background Level	Boring : Sample ID:	B03 000001	B03 000002*	B03 000003	B01 000004	B01 000005	B07 000012	B07 000013
Lead	48		16.3	12.8	15.8	20.2	12.0	19.7	12.9

Analyte	Background Level	Boring : Sample ID:	B10 000020	B10 000021	B17 000022	B17 000023	B24 000024	B24 000025	B23 000033	B23 000034
Lead	48		17.1	15.7	16.0	16.0	12.6	12.2	11.6	6.2

Analyte	Background Level	Boring : Sample ID:	Boring : Sample ID:	B23 000035*	B26 000036	B26 000037	B22 000040	B22 000041	B25 000042	B25 000043
Lead	48			8.1	10.2	8.9	13.9	9.9	9.9	11.8

Analyte	Background Level	Boring : Sample ID:	B21 000047	B21 000048
Lead	48		15.6	10.9

NOTES:
* Represents a duplicate soil sample

Table 8: Offsite Radionuclide (Alpha & Gamma Spec) Results (pCi/g)

maximum *detected* values highlighted

Analyte	Background Level	Boring : Sample ID:	B06 000014	B06 000015*	B09 000018	B20 000026	B16 000028
Thorium-228	1.50		0.698	0.753	0.795	0.658	0.685
Thorium-230	1.90		0.367	0.483	0.675	0.516	0.692
Thorium-232	1.40		0.527	0.466	0.693	0.528	0.586
Uranium-234	1.10		0.873	1.07	1.03	0.808	1.36
Uranium-238	1.20		0.930	0.680	1.04	0.851	1.12
Plutonium-238	0.13		0.0684	0.0713	0.107	0.113	0.0561
Plutonium-239/240	0.18		0.032 U	0.023 U	0.033 U	0.055 U	0.018 U
Actinium-228	NA		0.096	1.19	1.09	1.15	1.38
Actinium-227	0.11		0.895	0.489 U	0.480 U	0.462 U	0.538 U
Americium-241	ND		0.74 U	0.22 U	0.22 U	0.21 U	0.14 U
Bismuth-207	ND		0.069 U	0.068 U	0.067 U	0.064 U	0.057 U
Bismuth-210M (Pb-210)	ND		0.093 U	0.099 U	0.11 U	0.088 U	0.095 U
Bismuth-214	NA		0.734	0.696	0.846	0.774	0.895
Cobalt-60	NA		0.084 U	0.090 U	0.081 U	0.098 U	0.074 U
Cesium-137	0.42		0.086 U	0.096 U	0.084 U	0.083 U	0.088 U
Potassium-40	37.0		19	19.9	19.9	18.6	21.5
Lead-212	NA		0.954	1.09	1.03	0.927	1.01
Lead-214	NA		0.930	0.680	1.04	0.851	1.12
Radium-224	NA		0.984	1.12	1.06	0.956	1.04
Radium-226	2.0		0.734	0.696	0.846	0.774	0.895
Radium-228	NA		0.970	1.20	1.11	1.16	1.39
Thallium-208	NA		0.156	---	0.390	0.316	0.401

Table 8: Offsite Radionuclide (Alpha & Gamma Spec) Results (pCi/g)

maximum *detected* values highlighted

Analyte	Background Level	Boring : Sample ID:	B13 000030	B23 000033	B19 000038	B18 000044	B15 000050	B12 000052
Thorium-228	1.50		0.776	0.693	0.786	0.780	0.912	0.811
Thorium-230	1.90		0.614	0.518	0.505	0.507	0.533	0.488
Thorium-232	1.40		0.600	0.561	0.666	0.568	0.726	0.570
Uranium-234	1.10		1.19	1.24	0.934	1.03	0.790	1.05
Uranium-238	1.20		1.08	0.972	0.827	0.831	0.941	0.994
Plutonium-238	0.13		0.0397	0.171	0.105	0.0794	0.0433	0.113
Plutonium-239/240	0.18		0.014 U	0.016 U	0.014 U	0.014 U	0.0058 U	0.013 U
Actinium-228	NA		1.07	0.762	0.991	---	---	---
Actinium-227	0.11		0.492 U	0.466 U	0.401 U	0.867	0.843	0.458 U
Americium-241	ND		0.40 U	0.12 U	0.23 U	0.83 U	1.0 U	0.23 U
Bismuth-207	ND		0.065 U	0.053 U	0.062 U	0.066 U	0.073 U	0.070 U
Bismuth-210M (Pb-210)*	ND		0.094 U	0.086 U	0.086 U	0.10 U	0.13 U	0.092 U
Bismuth-214	NA		0.869	0.807	0.699	0.815	0.760	0.926
Cobalt-60	NA		0.081 U	0.076 U	0.068 U	0.077 U	0.086 U	0.074 U
Cesium-137	0.42		0.10 U	0.083 U	0.081 U	0.096 U	0.11 U	0.081 U
Potassium-40	37.0		13.9	17.1	17.9	20.3	22.6	19.9
Lead-212	NA		0.893	0.943	0.843	1.22	1.06	0.892
Lead-214	NA		1.08	0.972	0.827	0.831	0.941	0.994
Radium-224	NA		0.921	0.971	0.868	1.26	1.10	0.919
Radium-226	2.0		0.869	0.807	0.700	0.815	0.760	0.926
Radium-228	NA		1.08	0.769	1.00	---	---	---
Thallium-208	NA		0.317	0.322	0.276	0.291	0.376	0.286

NOTES:

* – represents a duplicate soil sample

U – indicates the result was less than the MDA. This includes the case when the radionuclide was analyzed for and not detected.

--- – indicates a value was not reported.

NA – not available

Table 9: Sample and Interval Index

Sample ID	Boring	Interval* (ft)	offsite rad	Comments
000001	B03	0-0.5		
000002	B03	0-0.5		dup
000003	B03	0.5-1		
000004	B01	0-0.5		
000005	B01	0.5-1		
000006	B05	0-0.5		
000007	B05	0-0.5		dup
000008	B05	0.5-1		
000009	B05	0.5-1		dup
000010	B04	0-0.5		
000011	B04	0.5-1		
000012	B07	0-0.5		
000013	B07	0.5-1		
000014	B06	0-0.5	1	
000015	B06	0-0.5	2	dup per RFW cd
000016	B06	0.5-1		
000017	B06			dup per RFW cd, in FR, not in Vista
000018	B09	0-0.5	3	
000019	B09	0.5-1		
000020	B10	0-0.5		
000021	B10	0.5-1		
000022	B17	0-0.5		interval per Vista
000023	B17	0.5-1		interval per Vista
000024	B24	0-0.5		interval per Vista
000025	B24	0.5-1		interval per Vista
000026	B20	0-0.5	4	
000027	B20	0.5-1		
000028	B16	0-0.5	5	
000029	B16	0.5-1		
000030	B13	0-0.5	6	
000031	B13	0.5-1		
000032				rinse blank, no onsite gamma, results not in Vista
000033	B23	0-0.5	7	
000034	B23	0.5-1		
000035	B23	0.5-1		dup
000036	B26	0-0.5		
000037	B26	0.5-1		
000038	B19	0-0.5	8	
000039	B19	0.5-1		
000040	B22	0-0.5		
000041	B22	0.5-1		
000042	B25	0-0.5		
000043	B25	0.5-1		
000044	B18	0-0.5	9	
000045	B18	0.5-1		
000046	B18	0.5-1		dup
000047	B21	0-0.5		
000048	B21	0.5-1		

Table 9: Sample and Interval Index

Sample ID	Boring	Interval* (ft)	offsite rad	Comments
~~000049~~				rinse blank, no onsite gamma, results not in Vista
000050	B15	0-0.5	10	
000051	B15	0.5-1		
000052	B12	0-0.5	11	
000053	B12	0.5-1		
000054	B02	0-0.5		
000055	B02	0-0.5		dup
000056	B02	0.5-1		
000057				trip blank for VOCs

*used vista query intervals because discrepancies in Findings Report

duplicates = 8
rinse blanks = 2
soil borings = 23 23x2+8=54 onsite gamma spec results
intervals/boring = 2

MOUND

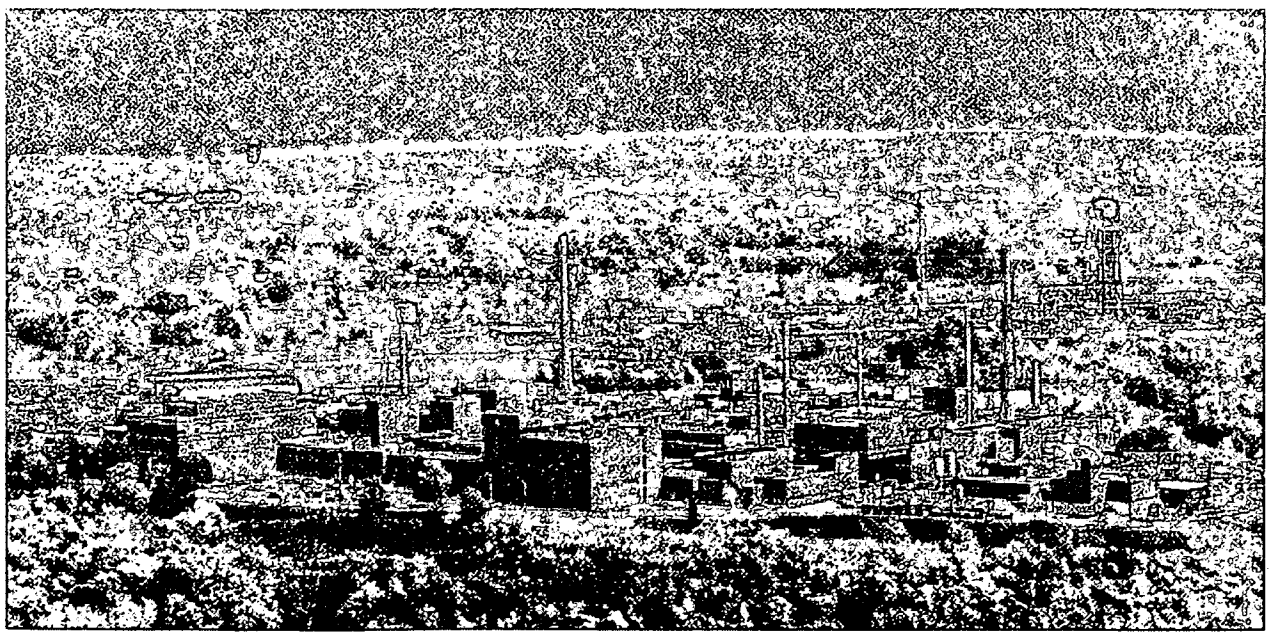
Environmental
Restoration
Program

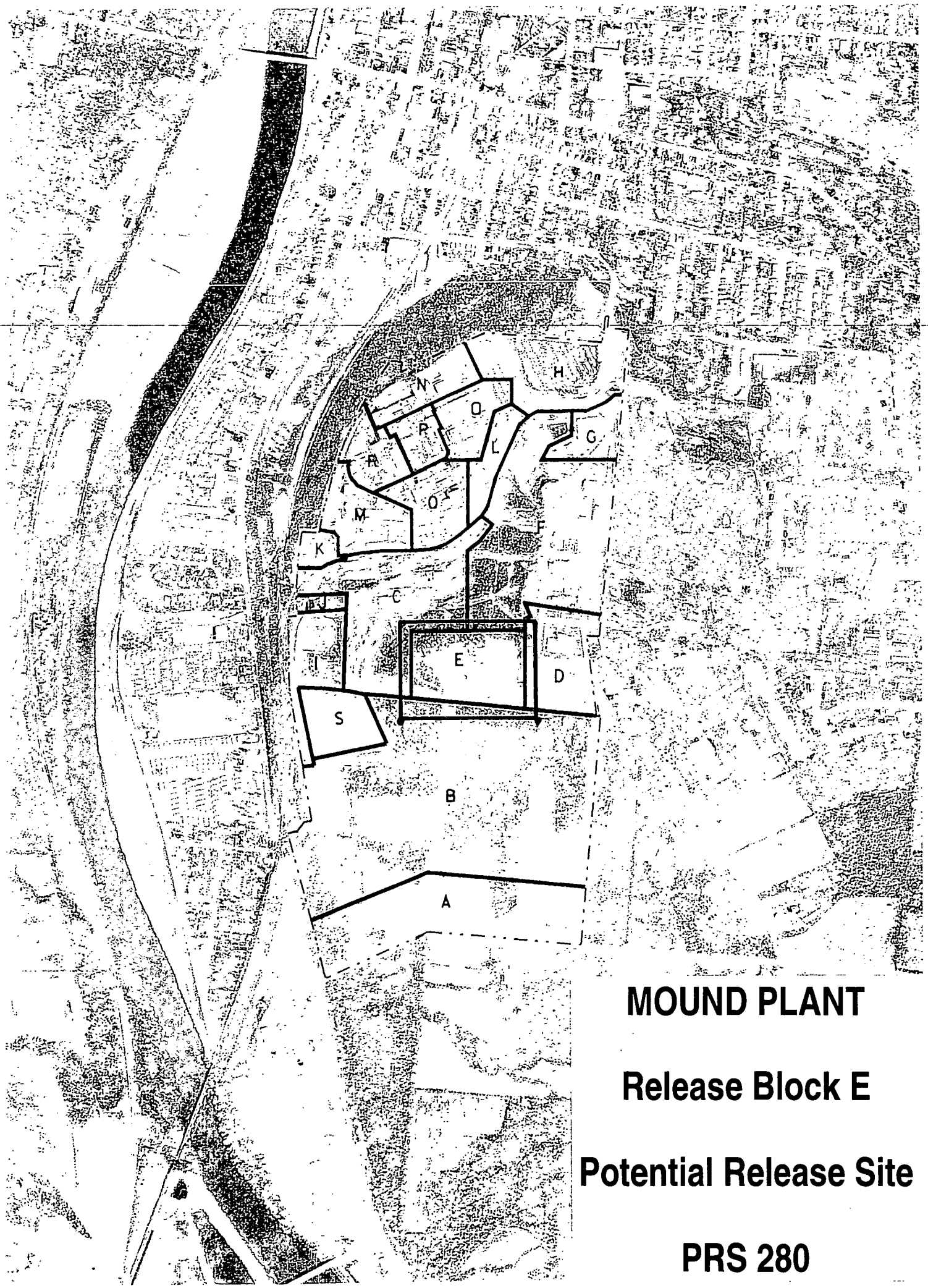
MOUND PLANT

Potential Release Site Package

PRS #280

PUBLIC REVIEW DRAFT



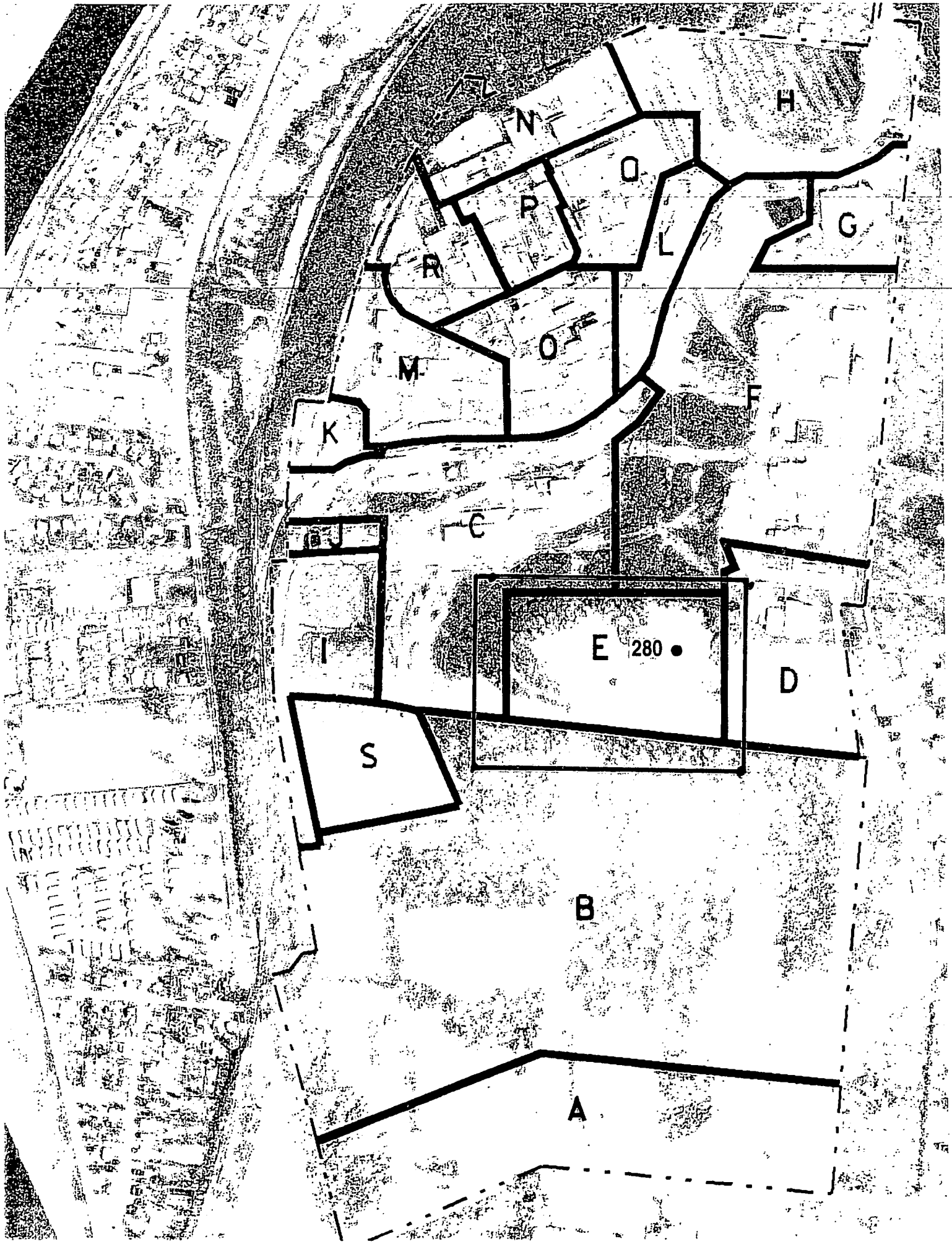


MOUND PLANT

Release Block E

Potential Release Site

PRS 280

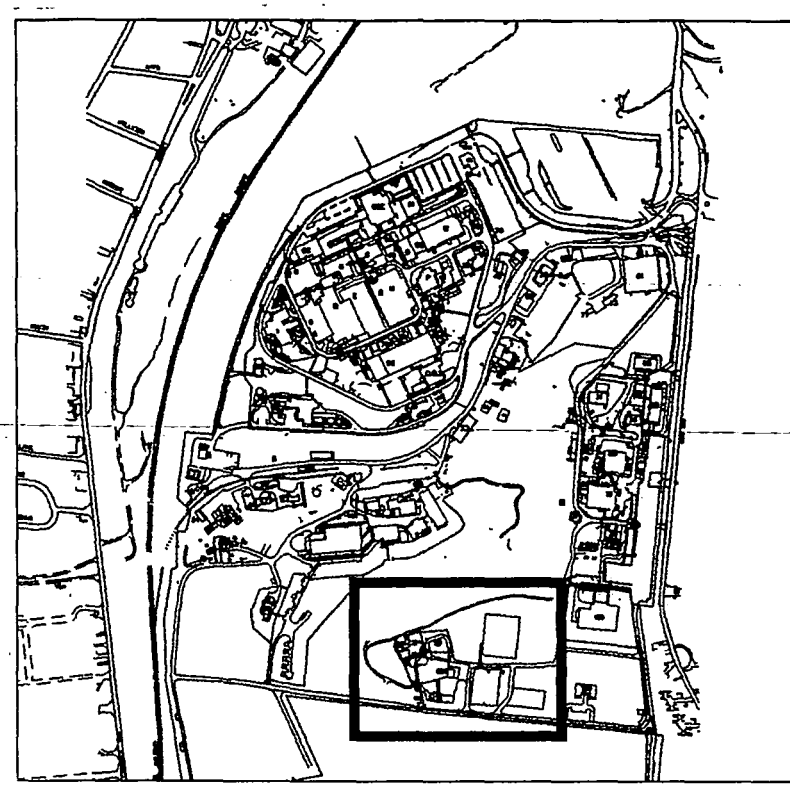

H
N
O
P
G
L
R
O
M
F
K
C
E
280
D
I
S
B
A

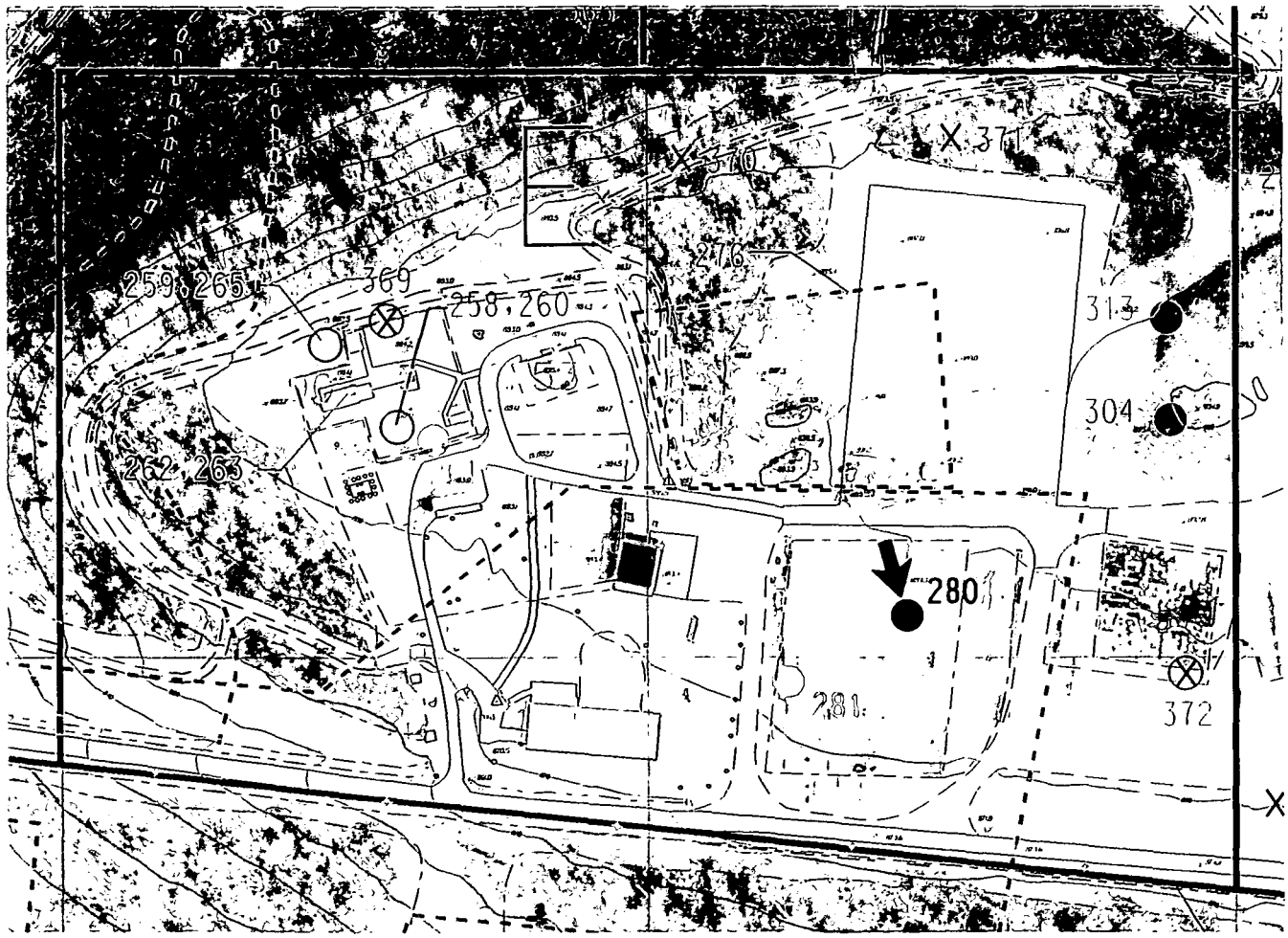
MOUND PLANT

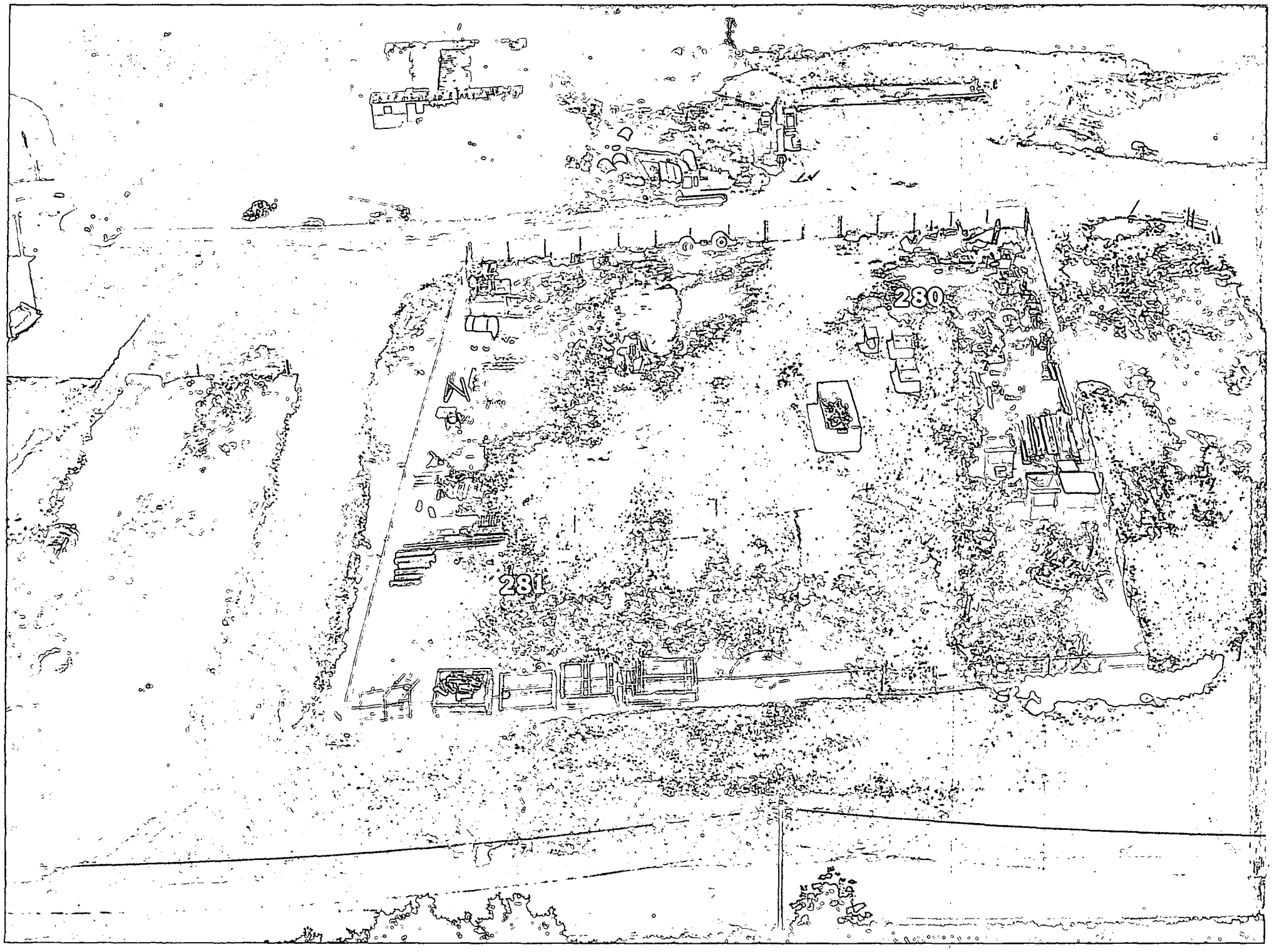
Release Block E

PRS 280

August 14, 1995






280
281

PRS 280

PRS HISTORY:

PRS 280 is located in an area that was once used as storage for waste oil drums. It was identified as an isolated Thorium hot spot in the Volume 3 - Radiological Site Survey.[1]

No radioactive or hazardous waste generating processes are known to have occurred at the location of PRS 280.

CONTAMINATION:

One elevated hit of Thorium (9.2 pCi/g) was accounted for in the Vol. 3 Radiological Site Survey.[1] This is above the Mound ALARA guideline for thorium (5.0 pCi/g).

In an analysis of metals' content (Building 21 Investigation Report)[3], lead (98.6 mg/kg) and chromium (101 mg/kg) appear above background levels (lead - 85 mg/kg, chromium - 32 mg/kg).[4] However, after reviewing surrounding data samples, these hits appear to be an isolated instance.

READING ROOM REFERENCES:

1) OU9 Site Scoping Report, Volume 3 - Radiological Site Survey, June 1993.
2) OU9 Site Scoping Report, Volume 12 - December 1994.

OTHER REFERENCES:

3) Bldg. 21 Investigation Data Report, June 1995.
4) Background Values for Mound Plant Soils, July 1995.

PREPARED BY:

Eric Horstman, Member of EG&G Technical Staff

REFERENCE MATERIAL

FOR

PRS 280

ENVIRONMENTAL RESTORATION PROGRAM

OPERABLE UNIT 9
SITE SCOPING REPORT:
VOLUME 12 - SITE SUMMARY REPORT

MOUND PLANT
MIAMISBURG, OHIO

December 1994

U.S. DEPARTMENT OF ENERGY
OHIO FIELD OFFICE

ENVIRONMENTAL RESTORATION PROGRAM
EG&G MOUND APPLIED TECHNOLOGIES

FINAL

Table V.1. (page 4 of 5)

No.	Site Name	Evidence of Release[a]	Further Action Recommended[a]	FFA OU
58	Dredge Spoil Drying Beds	Yes	Yes	5
59	Contaminated Soil Box Storage Area	No	Yes	5
63	Building 19 Soils	Yes	Yes	5
64	Building 19 Historic Gasoline Tank (Tank 238)	No	Yes	5
65	Building 61 Area, Former Heavy Equipment Area	Yes	Yes	5
66	Area 7, Throium and Polonium Wastes (AKA old septic tank)	Yes	Yes	5
71	Building 85 Waste Solvent Tank (Tank 136)	No	No	5
72	Area 13, Polonium-Contaminated Wood from Dayton Unit IV	Yes	Yes	5
73	Evaporator Storage Area	No	No	5
74	Quonset Hut (former)	No	No	5
76	Warehouse 9	Yes	Yes	5
77	Warehouse 10	Yes	Yes	5
79	Warehouse 15	Yes	Yes	5
80	Warehouse 15A	Yes	Yes	5
81	Drilling Mud Drum Storage Areas (3 locations)	No	No	5
261	Trash Burner	No	No	5
269	Building 36 Historic Gasoline Tanks (Tanks 239 and 240)	No	No	5
274	Area 21 Old Bunker	Yes	Yes	5
275	Area 21 Detonator Shack	Yes	Yes	5
276	Area 22 Orphan Soil from Other Areas	Yes	Yes	5
277	Area J, Hillside Disposal Area (AKA Dredged Material Disposal Area 11a)	Yes	Yes	5
278	Area J, Hillside catch basin	No	Yes	5
279	Old Firing Range Drum Storage Area	Yes	Yes	5
280	Waste Oil Drum Field Area	Yes	Yes	5
281	Area E, Waste Oil Spill	Yes	No	5
282	Spoils Disposal Area/Construction Spoils Area	Yes	Yes	5
304	Excavated Materials Disposal Area (AKA Rader's Hill)	No	Yes	5
306	SM/PP Hill Seep 0609	No	Yes	5

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes[a]	Results	Ref
280	Waste Oil Drum Field Area	I-8	Historical	Waste oil Plating Operations waste Explosive/solvent waste Herbicides Waste chemicals Photo-processing waste Batteries Kitchen grease Epoxy resins Ethylene glycol Scintillation vials	4, 5, 18	Confirmed VOCs	S	4	3, 4, 5, 6, 8, 12	Tables B.6, B.7, and B.8 RSS[c] Locations S0263, S0164, S0265, and S0266 (Appendix E in Ref.6) Table B.9	7 6
281	Area E, Waste Oil Spill	J-8	Historical	Waste oil	1	Minor oil	S	1	No Data		
282	Spoils Disposal Area/Construction Spoils Area	J-5 K-5	In service	Plutonium-238, Thorium Gasoline contaminated soils from G Building	4, 5, 18	Plutonium-238 < 25 pci/gm Thorium < 5 pci/gm	S	6	14, 15, 16	Table B.1 (Table X.3 in Ref. 6)	6
283	Area 1, Bulk Transfer of Thorium Drums (AKA, Plutonium Recoverable Waste Storage)	I to L 6 to 8	Grounds	Thorium sludge constituents, Plutonium-238	1, 4, 5, 18	Thorium dust Plutonium-238	S	6	3, 4 14, 15, 16	Tables B.6, B.7, and B.8 Table B.1 (Table IV.2 in Ref. 6)	8 6
284	Building 21, Thorium Sludge Storage Facility	J-7 J-8	Surplus	Thorium sludge constituents	4	Thorium dust	S	4, 6	See Area 1		
285	Area 11, Contamination from SM Building Operations	G-9	Surplus	Plutonium-238	1, 4, 5, 18	Plutonium-238	S	6	3, 4, 5, 6 14, 16	Tables B.6, B.7, and B.8 Table B.1 (Table IV.3 in Ref. 6)	8 6
286	Area 16, SM Building Sanitary Sewage Septic Tank Leach Field	F-9 G-9	Surplus	Plutonium-238, Thorium Sanitary wastes from SM Building	1, 4, 5, 18	Plutonium-238	S	6	3, 4, 6 14, 15, 16	Tables B.6, B.7, and B.8 Table B.1 (Table IV.5 in Ref. 6)	8 6

Document Control No. DGC
W.P. DAVIS

Environmental Restoration Program

OPERABLE UNIT 9, SITE SCOPING REPORT
VOLUME 3 - RADIOLOGICAL SITE SURVEY

MOUND PLANT
MIAMISBURG, OHIO

June 1993

FINAL

Department of Energy
Albuquerque Field Office

Environmental Restoration Program
EG&G Mound Applied Technologies

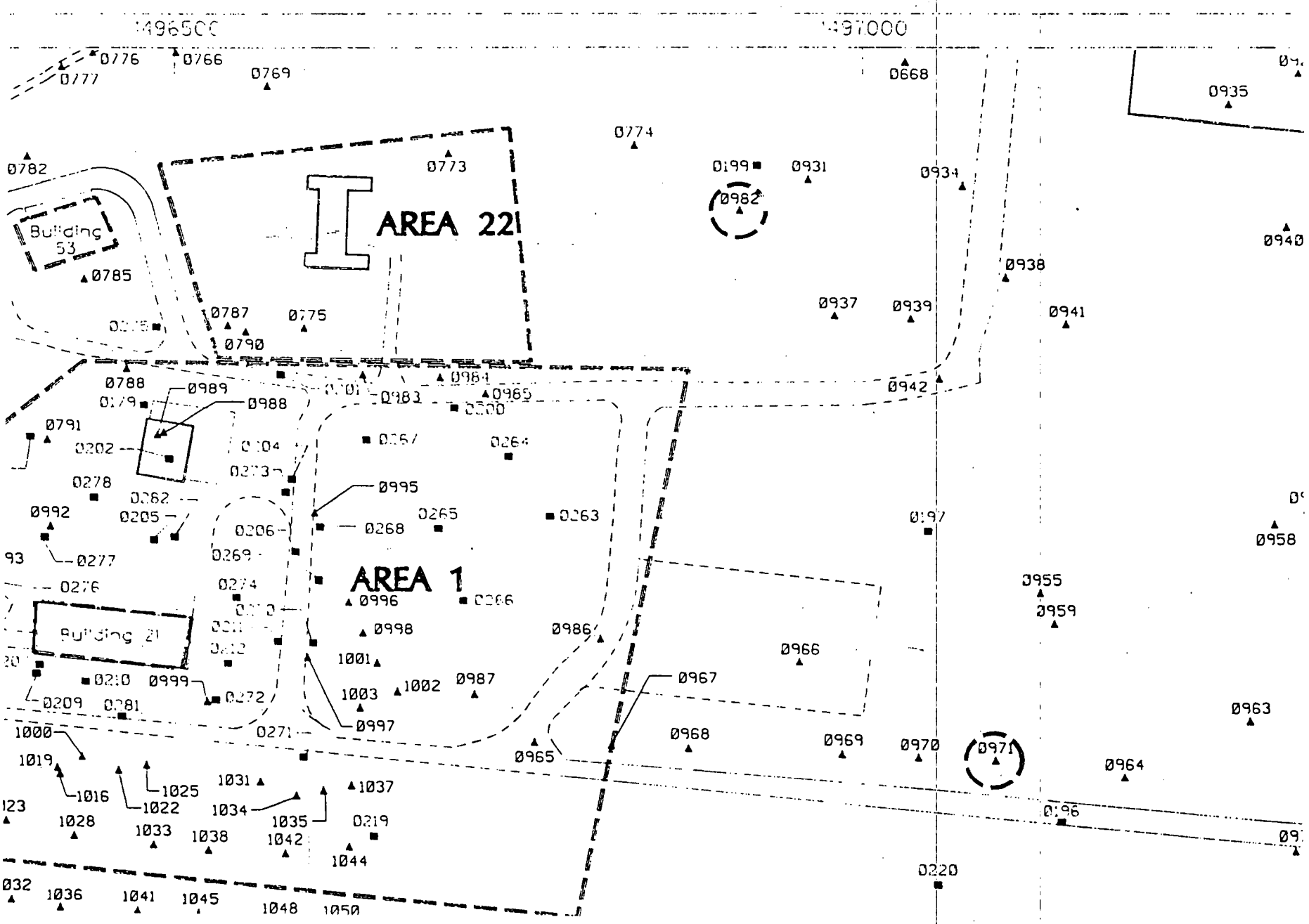

496500
497000
AREA 22
AREA 1
Building 53
Building 21
0776
0766
0777
0769
0668
0935
0774
0773
0782
0199
0931
0934
0982
0940
0938
0785
0937
0939
0941
0787
0775
0790
0942
0788
0989
0988
0984
0965
0983
0791
0202
0267
0264
0278
0995
0992
0205
0206
0268
0265
0263
0197
0958
0277
0269
0276
0274
0996
0266
0955
0959
0998
0986
0966
1001
1002
0987
0967
0999
0209
0281
0272
1003
0997
0963
1000
0271
0968
0969
0970
0971
0965
0964
1019
1016
1025
1031
1037
1022
1034
1035
0196
1028
1033
1038
1042
0219
1044
0220
1036
1041
1045
1048
1050

Table IV.2. (page 9 of 12)

Plate 1 Location[a]	Coordinates South	Coordinates West	MRC ID No.	Mo-Yr	Depth (inch)	Plutonium-238 (pCi/g)	Thorium[b] (pCi/g)	Tritium (pCi/mL)	Cobalt-60 (pCi/g)	Cesium-137 (pCi/g)	Radium-226 (pCi/g)	Americium-241 (pCi/g)
C0264	3724.8	3254.3	None	04-84	0	NR	9.2					
(280)			None	04-84	12	NR	1.7					
			None	04-84	24	NR	0.8					
			None	04-84	36	NR	0.5					
			None	04-84	48	NR	0.3					
C0265	3752.4	3322.9	None	04-84	0	NR	1.7					
			None	04-84	12	NR	1.3					
			None	04-84	24	NR	0.3					
			None	04-84	36	NR	0.3					
C0266	3808.2	3328.7	None	04-84	0	NR	1.0					
			None	04-84	12	NR	0.6					
			None	04-84	24	NR	0.4					
			None	04-84	36	NR	0.3					
			None	04-84	48	NR	0.4					
C0267	3670.8	3342.9	None	04-84	0	NR	0.4					
			None	04-84	12	NR	0.5					
			None	04-84	24	NR	0.4					
			None	04-84	36	NR	0.3					
C0268	3716.1	3400.6	None	04-84	0	NR	0.9					
			None	04-84	12	NR	0.4					
			None	04-84	24	NR	0.4					
			None	04-84	36	NR	0.4					
C0269	3751.3	3418.2	None	04-84	0	NR	0.6					
			None	04-84	12	NR	0.5					
			None	04-84	24	NR	0.2					
			None	04-84	36	NR	0.2					
			None	04-84	48	NR	0.3					

ENVIRONMENTAL RESTORATION PROGRAM

BUILDING 21 AND SURROUNDING SOILS INVESTIGATION DATA REPORT

MOUND PLANT
MIAMISBURG, OHIO

June 1995

U.S. DEPARTMENT OF ENERGY
OHIO FIELD OFFICE

DECONTAMINATION AND DECOMMISSIONING PROGRAM
EG&G MOUND APPLIED TECHNOLOGIES

Building 21 Report: Soil Gamma Spectroscopy Results

Sample ID	Isotope	Total Error	Result	Q	MDA	Unit
SW0/2(202)	AC-227DA		2.19E-01	U	2.19E-01	PCI/G
SW0/2(202)	AC-227DA		2.38E-01	U	2.38E-01	PCI/G
SW0/2(202)	AM-241		1.41E-01	U	1.41E-01	PCI/G
SW0/2(202)	AM-241		2.37E-01	U	2.37E-01	PCI/G
SW0/2(202)	BI-210M		4.84E-02	U	4.84E-02	PCI/G
SW0/2(202)	BI-210M		4.69E-02	U	4.69E-02	PCI/G
SW0/2(202)	CO-60		4.87E-02	U	4.87E-02	PCI/G
SW0/2(202)	CO-60		4.04E-02	U	4.04E-02	PCI/G
SW0/2(202)	CS-137DA	4.11E-02	1.14E-01		0.00E+00	PCI/G
SW0/2(202)	CS-137DA	3.89E-02	1.54E-01		0.00E+00	PCI/G
SW0/2(202)	EU-152		9.57E-02	U	9.57E-02	PCI/G
SW0/2(202)	EU-152		9.98E-02	U	9.98E-02	PCI/G
SW0/2(202)	EU-154		1.49E-01	U	1.49E-01	PCI/G
SW0/2(202)	EU-154		1.34E-01	U	1.34E-01	PCI/G
SW0/2(202)	RA-224DA	1.33E-01	1.10E+00		0.00E+00	PCI/G
SW0/2(202)	RA-224DA	1.39E-01	1.20E+00		0.00E+00	PCI/G
SW0/2(202)	RA-226DA	1.57E-01	1.17E+00		0.00E+00	PCI/G
SW0/2(202)	RA-226DA	1.65E-01	1.19E+00		0.00E+00	PCI/G
SW0/2(202)	TH-232DA	2.24E-01	1.22E+00		0.00E+00	PCI/G
SW0/2(202)	TH-232DA	2.42E-01	1.42E+00		0.00E+00	PCI/G
SW0/2(221)	AC-227DA		2.25E-01	U	2.25E-01	PCI/G
SW0/2(221)	AM-241		2.21E-01	U	2.21E-01	PCI/G
SW0/2(221)	BI-210M		4.38E-02	U	4.38E-02	PCI/G
SW0/2(221)	CO-60		3.97E-02	U	3.97E-02	PCI/G
SW0/2(221)	CS-137DA		3.77E-02	U	3.77E-02	PCI/G
SW0/2(221)	EU-152		9.02E-02	U	9.02E-02	PCI/G
SW0/2(221)	EU-154		1.36E-01	U	1.36E-01	PCI/G
SW0/2(221)	RA-224DA	1.67E-01	1.49E+00		0.00E+00	PCI/G
SW0/2(221)	RA-226DA	1.73E-01	1.28E+00		0.00E+00	PCI/G
SW0/2(221)	TH-232DA	2.35E-01	1.43E+00		0.00E+00	PCI/G
SW2/1(006)	BI-207		6.07E+00	U	6.07E+00	PCI/L
SW2/1(006)	BI-207		7.06E+00	U	7.06E+00	PCI/L
SW2/1(006)	BI-210M		7.74E+00	U	7.74E+00	PCI/L
SW2/1(006)	BI-210M		7.24E+00	U	7.24E+00	PCI/L
SW2/1(006)	CO-60		9.33E+00	U	9.33E+00	PCI/L
SW2/1(006)	CO-60		8.53E+00	U	8.53E+00	PCI/L
SW2/1(006)	CS-137DA		7.30E+00	U	7.30E+00	PCI/L
SW2/1(006)	CS-137DA		7.54E+00	U	7.54E+00	PCI/L
SW2/1(006)	K-40	1.07E+02	4.14E+01		0.00E+00	PCI/L
SW2/1(006)	K-40	1.24E+02	5.01E+01		0.00E+00	PCI/L

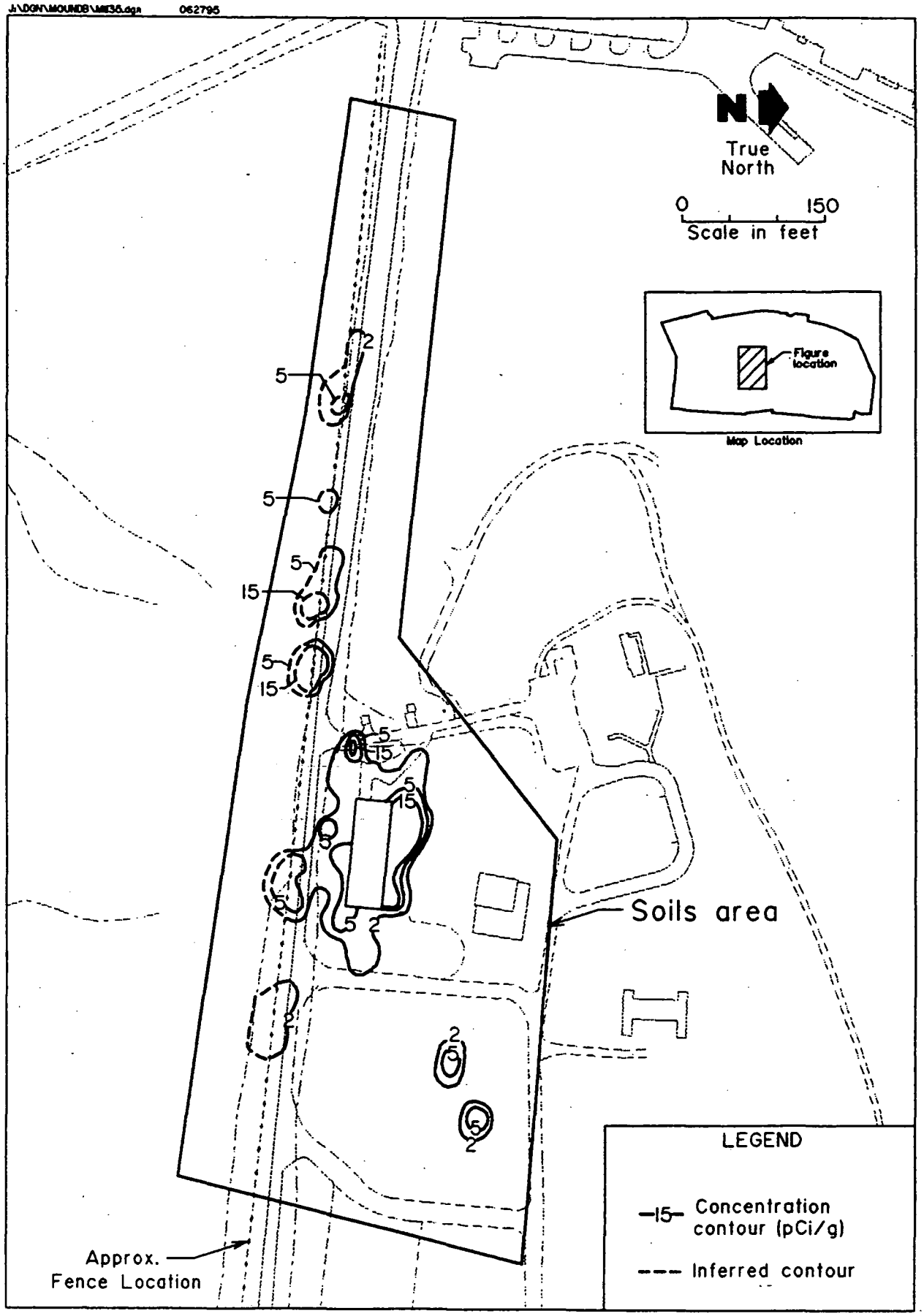


Figure 3.7. Distirbution of thorium-232 0"-12" depth.

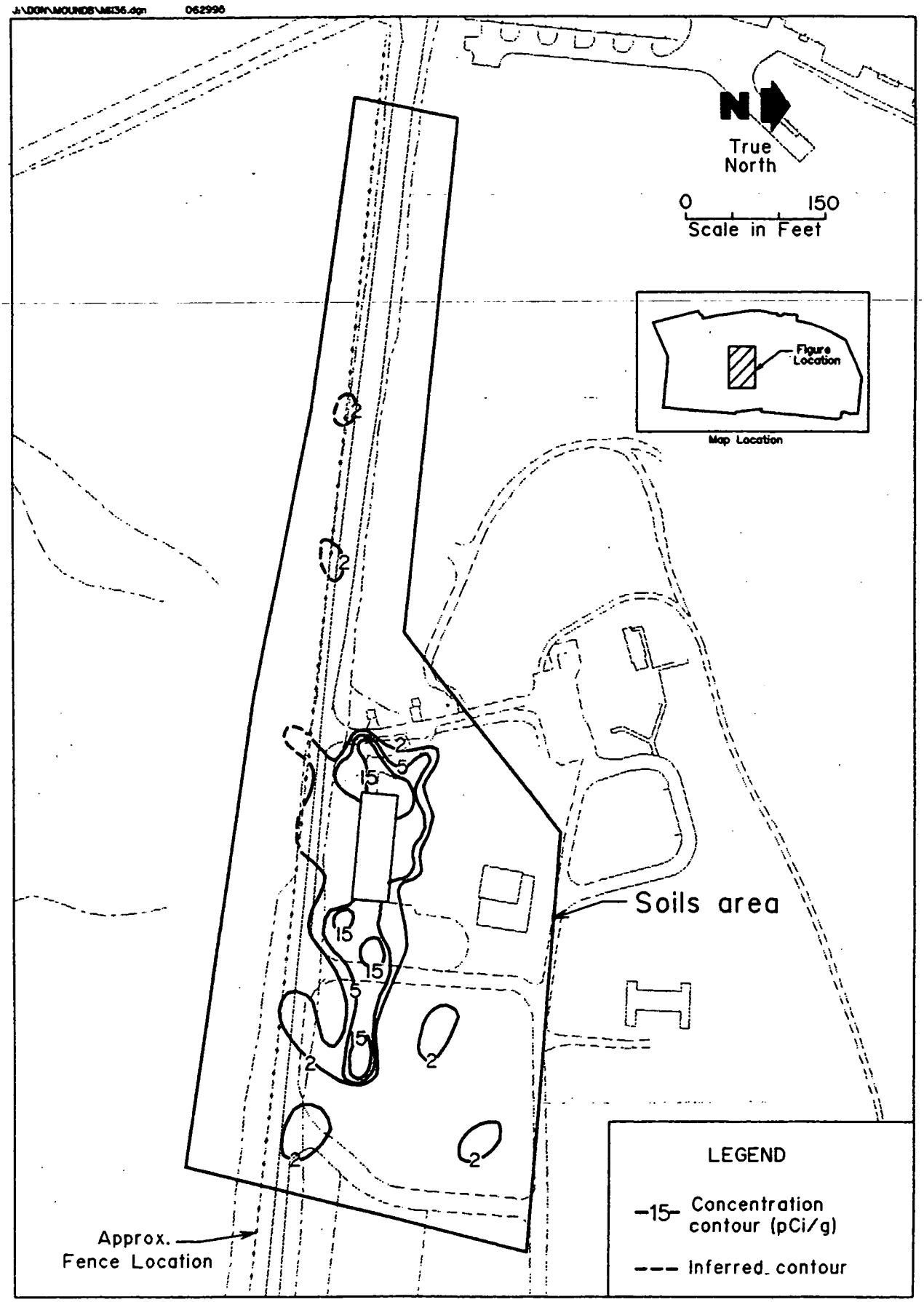


Figure 3.8. Distirbution of thorium-232 12"-24" depth.

Building 21 Report: Soil Gamma Spectroscopy Results

Sample ID	Isotope	Total Error	Result	Q	MDA	Unit
SW0/2(202)	AC-227DA		2.19E-01	U	2.19E-01	PCI/G
SW0/2(202)	AC-227DA		2.38E-01	U	2.38E-01	PCI/G
SW0/2(202)	AM-241		1.41E-01	U	1.41E-01	PCI/G
SW0/2(202)	AM-241		2.37E-01	U	2.37E-01	PCI/G
SW0/2(202)	BI-210M		4.84E-02	U	4.84E-02	PCI/G
SW0/2(202)	BI-210M		4.69E-02	U	4.69E-02	PCI/G
SW0/2(202)	CO-60		4.87E-02	U	4.87E-02	PCI/G
SW0/2(202)	CO-60		4.04E-02	U	4.04E-02	PCI/G
SW0/2(202)	CS-137DA	4.11E-02	1.14E-01		0.00E+00	PCI/G
SW0/2(202)	CS-137DA	3.89E-02	1.54E-01		0.00E+00	PCI/G
SW0/2(202)	EU-152		9.57E-02	U	9.57E-02	PCI/G
SW0/2(202)	EU-152		9.98E-02	U	9.98E-02	PCI/G
SW0/2(202)	EU-154		1.49E-01	U	1.49E-01	PCI/G
SW0/2(202)	EU-154		1.34E-01	U	1.34E-01	PCI/G
SW0/2(202)	RA-224DA	1.33E-01	1.10E+00		0.00E+00	PCI/G
SW0/2(202)	RA-224DA	1.39E-01	1.20E+00		0.00E+00	PCI/G
SW0/2(202)	RA-226DA	1.57E-01	1.17E+00		0.00E+00	PCI/G
SW0/2(202)	RA-226DA	1.65E-01	1.19E+00		0.00E+00	PCI/G
SW0/2(202)	TH-232DA	2.24E-01	1.22E+00		0.00E+00	PCI/G
SW0/2(202)	TH-232DA	2.42E-01	1.42E+00		0.00E+00	PCI/G
SW0/2(221)	AC-227DA		2.25E-01	U	2.25E-01	PCI/G
SW0/2(221)	AM-241		2.21E-01	U	2.21E-01	PCI/G
SW0/2(221)	BI-210M		4.38E-02	U	4.38E-02	PCI/G
SW0/2(221)	CO-60		3.97E-02	U	3.97E-02	PCI/G
SW0/2(221)	CS-137DA		3.77E-02	U	3.77E-02	PCI/G
SW0/2(221)	EU-152		9.02E-02	U	9.02E-02	PCI/G
SW0/2(221)	EU-154		1.36E-01	U	1.36E-01	PCI/G
SW0/2(221)	RA-224DA	1.67E-01	1.49E+00		0.00E+00	PCI/G
SW0/2(221)	RA-226DA	1.73E-01	1.28E+00		0.00E+00	PCI/G
SW0/2(221)	TH-232DA	2.35E-01	1.43E+00		0.00E+00	PCI/G
SW2/1(006)	BI-207		6.07E+00	U	6.07E+00	PCI/L
SW2/1(006)	BI-207		7.06E+00	U	7.06E+00	PCI/L
SW2/1(006)	BI-210M		7.74E+00	U	7.74E+00	PCI/L
SW2/1(006)	BI-210M		7.24E+00	U	7.24E+00	PCI/L
SW2/1(006)	CO-60		9.33E+00	U	9.33E+00	PCI/L
SW2/1(006)	CO-60		8.53E+00	U	8.53E+00	PCI/L
SW2/1(006)	CS-137DA		7.30E+00	U	7.30E+00	PCI/L
SW2/1(006)	CS-137DA		7.54E+00	U	7.54E+00	PCI/L
SW2/1(006)	K-40	1.07E+02	4.14E+01		0.00E+00	PCI/L
SW2/1(006)	K-40	1.24E+02	5.01E+01		0.00E+00	PCI/L

Sample ID	Isotope	Total error	Result	Q	MDA	Unit
CC0/2(047)	U-235		6.03E-02	U	6.03E-02	PCI/G
CC0/2(047)	U-235	5.83E-02	6.79E-02		4.51E-02	PCI/G
CC0/2(047)	U-238DA	3.60E-01	1.21E+00		5.24E-02	PCI/G
CC0/2(047)	U-238DA	2.66E-01	7.82E-01		6.45E-02	PCI/G
CC0/2(076)	AC-227DA		2.09E-01	U	2.09E-01	PCI/G
CC0/2(076)	BI-210M		3.94E-02	U	3.94E-02	PCI/G
CC0/2(076)	CO-60		3.68E-02	U	3.68E-02	PCI/G
CC0/2(076)	CS-137DA		3.56E-02	U	3.56E-02	PCI/G
CC0/2(076)	EU-152		8.10E-02	U	8.10E-02	PCI/G
CC0/2(076)	EU-154		1.10E-01	U	1.10E-01	PCI/G
CC0/2(076)	PU-238	2.17E-02	2.55E-02		1.73E-02	PCI/G
CC0/2(076)	PU-238		3.11E-02	U	3.11E-02	PCI/G
CC0/2(076)	PU239/40		3.11E-02	U	3.11E-02	PCI/G
CC0/2(076)	PU239/40	1.01E-01	2.31E-01		3.02E-02	PCI/G
CC0/2(076)	PU239/40		1.73E-02	U	1.73E-02	PCI/G
CC0/2(076)	RA-224DA	1.17E-01	9.87E-01		0.00E+00	PCI/G
CC0/2(076)	RA-226DA	1.35E-01	1.03E+00		0.00E+00	PCI/G
CC0/2(076)	TH-232DA	1.79E-01	9.13E-01		0.00E+00	PCI/G
CC0/2(076)	TH228	1.83E-01	9.44E-01		2.76E-02	PCI/G
CC0/2(076)	TH230	2.00E-01	1.07E+00		2.03E-02	PCI/G
CC0/2(076)	TH232	1.70E-01	8.57E-01		1.36E-02	PCI/G
CC0/2(076)	U-234	2.31E-01	9.24E-01		4.13E-02	PCI/G
CC0/2(076)	U-235		3.18E-02	U	3.18E-02	PCI/G
CC0/2(076)	U-238DA	2.11E-01	8.22E-01		2.80E-02	PCI/G
CC0/2(202)	PU-238		1.81E-02	U	1.81E-02	PCI/G
CC0/2(202)	PU239/40		1.81E-02	U	1.81E-02	PCI/G
CC0/2(202)	TH228	2.39E-01	1.20E+00		5.17E-02	PCI/G
CC0/2(202)	TH230	2.80E-01	1.50E+00		1.70E-02	PCI/G
CC0/2(202)	TH232	2.37E-01	1.20E+00		2.52E-02	PCI/G
CC0/2(202)	U-234	2.52E-01	1.08E+00		3.20E-02	PCI/G
CC0/2(202)	U-235	3.98E-02	5.62E-02		3.20E-02	PCI/G
CC0/2(202)	U-238DA	2.66E-01	1.16E+00		2.93E-02	PCI/G
CC1/2(202)	PU-238		3.83E-02	U	3.83E-02	PCI/G
CC1/2(202)	PU239/40		8.93E-02	U	8.93E-02	PCI/G
CC1/2(202)	TH228	2.08E-01	1.07E+00		3.76E-02	PCI/G
CC1/2(202)	TH230	2.27E-01	1.23E+00		2.19E-02	PCI/G
CC1/2(202)	TH232	1.91E-01	9.69E-01		2.49E-02	PCI/G
CC1/2(202)	U-234	2.23E-01	6.96E-01		5.65E-02	PCI/G
CC1/2(202)	U-235		6.43E-02	U	6.43E-02	PCI/G
CC1/2(202)	U-238DA	2.84E-01	9.64E-01		6.43E-02	PCI/G
NE0/1(023)	AC-227DA		1.07E-01	U	1.07E-01	PCI/G
NE0/1(023)	AM-241		8.18E-02	U	8.18E-02	PCI/G
NE0/1(023)	BI-210M		2.25E-02	U	2.25E-02	PCI/G
NE0/1(023)	CO-60		1.74E-02	U	1.74E-02	PCI/G
NE0/1(023)	CS-137DA		2.18E-02	U	2.18E-02	PCI/G
NE0/1(023)	EU-152		4.83E-02	U	4.83E-02	PCI/G

Building 21 Report: pH RESULTS

Sample ID			Matrix	Analyte Name	Reported Conc.	Units
CC	0/1	-124	SOIL	pH	8.42	pH Units
CC	0/2	-124	SOIL	pH	7.67	pH Units
CC	0/1	-125	SOIL	pH	9.09	pH Units
CC	0/2	-125	SOIL	pH	7.58	pH Units
CC	0/2	-138	SOIL	pH	7.69	pH Units
CC	0/1	-138	SOIL	pH	8.77	pH Units
CC	0/1	-141	SOIL	pH	8.81	pH Units
CC	0/2	-141	SOIL	pH	8.49	pH Units
CC	0/1	-148	SOIL	pH	7.81	pH Units
CC	0/2	-148	SOIL	pH	7.46	pH Units
CC	0/2	-151	SOIL	pH	7.66	pH Units
CC	0/1	-151	SOIL	pH	8.78	pH Units
CC	0/2	-161	SOIL	pH	7.84	pH Units
CC	0/1	-161	SOIL	pH	8.83	pH Units
CC	0/2	-163	SOIL	pH	7.31	pH Units
CC	0/1	-163	SOIL	pH	7.64	pH Units
CC	0/1	-170	SOIL	pH	8.31	pH Units
CC	0/2	-170	SOIL	pH	6.79	pH Units
CC	0/1	-174	SOIL	pH	8.57	pH Units
CC	0/1	-178	SOIL	pH	8.68	pH Units
CC	0/2	-178	SOIL	pH	7.69	pH Units
CC	0/1	-182	SOIL	pH	8.75	pH Units
CC	0/2	-182	SOIL	pH	8.69	pH Units
CC	0/1	-185	SOIL	pH	8.52	pH Units
CC	0/1	-187	SOIL	pH	8.43	pH Units
CC	0/2	-187	SOIL	pH	7.64	pH Units
CC	0/1	-196	SOIL	pH	8.79	pH Units
CC	0/1	-202	SOIL	pH	8.52	pH Units
CC	0/2	-202	SOIL	pH	7.58	pH Units
CC	1/2	-202	SOIL	pH	7.39	pH Units
CC	0/1	-209	SOIL	pH	8.24	pH Units
CC	0/2	-209	SOIL	pH	7.74	pH Units
CC	0/1	-221	SOIL	pH	8.88	pH Units
CC	0/2	-221	SOIL	pH	8.29	pH Units
CC	1/1	-221	SOIL	pH	8.78	pH Units
CC	0/1	-222	SOIL	pH	8.79	pH Units
CC	0/2	-222	SOIL	pH	7.95	pH Units
CC	0/1	-231	SOIL	pH	8.86	pH Units
CC	0/2	-231	SOIL	pH	7.74	pH Units

Sampe ID	Matrix	Analyte Name	Concentration	Lab Qualifier	Units
CC 0/2 161	SOIL	AROCLOR-1260	40	U	mg/kg
CC 0/2 163	SOIL	AROCLOR-1016	41	U	mg/kg
CC 0/2 163	SOIL	AROCLOR-1221	82	U	mg/kg
CC 0/2 163	SOIL	AROCLOR-1232	41	U	mg/kg
CC 0/2 163	SOIL	AROCLOR-1242	41	U	mg/kg
CC 0/2 163	SOIL	AROCLOR-1248	41	U	mg/kg
CC 0/2 163	SOIL	AROCLOR-1254	41	U	mg/kg
CC 0/2 163	SOIL	AROCLOR-1260	41	U	mg/kg
CC 0/2 170	SOIL	AROCLOR-1016	37	U	mg/kg
CC 0/2 170	SOIL	AROCLOR-1221	73	U	mg/kg
CC 0/2 170	SOIL	AROCLOR-1232	37	U	mg/kg
CC 0/2 170	SOIL	AROCLOR-1242	37	U	mg/kg
CC 0/2 170	SOIL	AROCLOR-1248	37	U	mg/kg
CC 0/2 170	SOIL	AROCLOR-1254	37	U	mg/kg
CC 0/2 170	SOIL	AROCLOR-1260	37	U	mg/kg
CC 0/2 178	SOIL	AROCLOR-1016	37	U	mg/kg
CC 0/2 178	SOIL	AROCLOR-1221	75	U	mg/kg
CC 0/2 178	SOIL	AROCLOR-1232	37	U	mg/kg
CC 0/2 178	SOIL	AROCLOR-1242	37	U	mg/kg
CC 0/2 178	SOIL	AROCLOR-1248	37	U	mg/kg
CC 0/2 178	SOIL	AROCLOR-1254	37	U	mg/kg
CC 0/2 178	SOIL	AROCLOR-1260	37	U	mg/kg
CC 0/2 182	SOIL	AROCLOR-1016	38	U	mg/kg
CC 0/2 182	SOIL	AROCLOR-1221	75	U	mg/kg
CC 0/2 182	SOIL	AROCLOR-1232	38	U	mg/kg
CC 0/2 182	SOIL	AROCLOR-1242	38	U	mg/kg
CC 0/2 182	SOIL	AROCLOR-1248	38	U	mg/kg
CC 0/2 182	SOIL	AROCLOR-1254	38	U	mg/kg
CC 0/2 182	SOIL	AROCLOR-1260	38	U	mg/kg
CC 0/2 187	SOIL	AROCLOR-1016	39	U	mg/kg
CC 0/2 187	SOIL	AROCLOR-1221	78	U	mg/kg
CC 0/2 187	SOIL	AROCLOR-1232	39	U	mg/kg
CC 0/2 187	SOIL	AROCLOR-1242	39	U	mg/kg
CC 0/2 187	SOIL	AROCLOR-1248	39	U	mg/kg
CC 0/2 187	SOIL	AROCLOR-1254	39	U	mg/kg
CC 0/2 187	SOIL	AROCLOR-1260	39	U	mg/kg
CC 0/2 202	SOIL	AROCLOR-1016	38	U	mg/kg
CC 0/2 202	SOIL	AROCLOR-1221	76	U	mg/kg
CC 0/2 202	SOIL	AROCLOR-1232	38	U	mg/kg
CC 0/2 202	SOIL	AROCLOR-1242	38	U	mg/kg
CC 0/2 202	SOIL	AROCLOR-1248	38	U	mg/kg
CC 0/2 202	SOIL	AROCLOR-1254	38	U	mg/kg
CC 0/2 202	SOIL	AROCLOR-1260	38	U	mg/kg
CC 1/2 202	SOIL	AROCLOR-1016	38	U	mg/kg
CC 1/2 202	SOIL	AROCLOR-1221	76	U	mg/kg
CC 1/2 202	SOIL	AROCLOR-1232	38	U	mg/kg
CC 1/2 202	SOIL	AROCLOR-1242	38	U	mg/kg
CC 1/2 202	SOIL	AROCLOR-1248	38	U	mg/kg
CC 1/2 202	SOIL	AROCLOR-1254	38	U	mg/kg
CC 1/2 202	SOIL	AROCLOR-1260	38	U	mg/kg

Building 21 Report: VOA RESULTS

Sample ID			Matrix	Analyte	Analyte Name	Reported Conc.	Lab Qualifier
CC	0/2	202	SOIL	VOC	Trichloroethene	6	U
CC	0/2	202	SOIL	VOC	1,2-Dichloropropane	6	U
CC	0/2	202	SOIL	VOC	Bromodichloromethane	6	U
CC	0/2	202	SOIL	VOC	Dibromomethane	6	U
CC	0/2	202	SOIL	VOC	cis-1,3-Dichloropropene	6	U
CC	0/2	202	SOIL	VOC	Toluene	2	J
CC	0/2	202	SOIL	VOC	trans-1,3-Dichloropropene	6	U
CC	0/2	202	SOIL	VOC	1,1,2-Trichloroethane	6	U
CC	0/2	202	SOIL	VOC	Tetrachloroethene	6	U
CC	0/2	202	SOIL	VOC	1,3-dichloropropane	6	U
CC	0/2	202	SOIL	VOC	Dibromochloromethane	6	U
CC	0/2	202	SOIL	VOC	1,2-dibromoethane	6	U
CC	0/2	202	SOIL	VOC	Chlorobenzene	6	U
CC	0/2	202	SOIL	VOC	Ethylbenzene	6	U
CC	0/2	202	SOIL	VOC	1,1,1,2-tetrachloroethane	6	U
CC	0/2	202	SOIL	VOC	m-&p-xylene	6	U
CC	0/2	202	SOIL	VOC	O-xylene	6	U
CC	0/2	202	SOIL	VOC	Styrene	6	U
CC	0/2	202	SOIL	VOC	isopropylbenzene	6	U
CC	0/2	202	SOIL	VOC	Bromoform	6	U
CC	0/2	202	SOIL	VOC	Bromobenzene	6	U
CC	0/2	202	SOIL	VOC	1,3,5-trimethylbenzene	6	U
CC	0/2	202	SOIL	VOC	1,1,2,2-Tetrachloroethane	6	U
CC	0/2	202	SOIL	VOC	2-chlorotoluene	6	U
CC	0/2	202	SOIL	VOC	4-chlorotoluene	6	U
CC	0/2	202	SOIL	VOC	tert-butylbenzene	6	U
CC	0/2	202	SOIL	VOC	1,2,4-trimethylbenzene	6	U
CC	0/2	202	SOIL	VOC	sec-butylbenzene	6	U
CC	0/2	202	SOIL	VOC	4-isopropyltoluene	6	U
CC	0/2	202	SOIL	VOC	1,3-Dichlorobenzene	6	U
CC	0/2	202	SOIL	VOC	1,4-Dichlorobenzene	6	U
CC	0/2	202	SOIL	VOC	n-butylbenzene	6	U
CC	0/2	202	SOIL	VOC	1,2-Dichlorobenzene	6	U
CC	0/2	202	SOIL	VOC	1,2-dibromo-3-chloropropane	6	U
CC	0/2	202	SOIL	VOC	1,2,4-Trichlorobenzene	6	U
CC	0/2	202	SOIL	VOC	1,2,3-trichloropropane	6	U
CC	0/2	202	SOIL	VOC	Hexachlorobutadiene	6	U
CC	0/2	202	SOIL	VOC	Naphthalene	6	U
CC	0/2	202	SOIL	VOC	1,2,3-trichlorobenzene	6	U
CC	0/2	202	SOIL	VOC	n-propylbenzene	6	U
CC	1/2	202	SOIL	VOC	Dichlorodifluoromethane	6	U
CC	1/2	202	SOIL	VOC	Chloromethane	6	U
CC	1/2	202	SOIL	VOC	Vinyl Chloride	6	U
CC	1/2	202	SOIL	VOC	Bromomethane	6	U
CC	1/2	202	SOIL	VOC	Chloroethane	6	U
CC	1/2	202	SOIL	VOC	Trichlorofluoromethane	6	U
CC	1/2	202	SOIL	VOC	1,1-Dichloroethene	6	U
CC	1/2	202	SOIL	VOC	Methylene Chloride	3	J
CC	1/2	202	SOIL	VOC	trans-1,2-dichloroethene	6	U
CC	1/2	202	SOIL	VOC	1,1-Dichloroethane	6	U
CC	1/2	202	SOIL	VOC	2,2-dichloropropane	6	U
CC	1/2	202	SOIL	VOC	cis-1,2-dichloroethene	6	U

3/:

Building 21 Report: VOA RESULTS

Sample ID			Matrix	Analyte	Analyte Name	Reported Conc.	Lab Qualifier
CC	1/2	202	SOIL	VOC	Chloroform	6	U
CC	1/2	202	SOIL	VOC	Bromochloromethane	6	U
CC	1/2	202	SOIL	VOC	1,1,1-Trichloroethane	6	U
CC	1/2	202	SOIL	VOC	1,1-dichloropropene	6	U
CC	1/2	202	SOIL	VOC	Carbon Tetrachloride	6	U
CC	1/2	202	SOIL	VOC	Benzene	6	U
CC	1/2	202	SOIL	VOC	1,2-Dichloroethane	6	U
CC	1/2	202	SOIL	VOC	Trichloroethene	6	U
CC	1/2	202	SOIL	VOC	1,2-Dichloropropane	6	U
CC	1/2	202	SOIL	VOC	Bromodichloromethane	6	U
CC	1/2	202	SOIL	VOC	Dibromomethane	6	U
CC	1/2	202	SOIL	VOC	cis-1,3-Dichloropropene	6	U
CC	1/2	202	SOIL	VOC	Toluene	2	J
CC	1/2	202	SOIL	VOC	trans-1,3-Dichloropropene	6	U
CC	1/2	202	SOIL	VOC	1,1,2-Trichloroethane	6	U
CC	1/2	202	SOIL	VOC	Tetrachloroethene	6	U
CC	1/2	202	SOIL	VOC	1,3-dichloropropane	6	U
CC	1/2	202	SOIL	VOC	Dibromochloromethane	6	U
CC	1/2	202	SOIL	VOC	1,2-dibromoethane	6	U
CC	1/2	202	SOIL	VOC	Chlorobenzene	6	U
CC	1/2	202	SOIL	VOC	Ethylbenzene	6	U
CC	1/2	202	SOIL	VOC	1,1,1,2-tetrachloroethane	6	U
CC	1/2	202	SOIL	VOC	m-&p-xylene	6	U
CC	1/2	202	SOIL	VOC	O-xylene	6	U
CC	1/2	202	SOIL	VOC	Styrene	6	U
CC	1/2	202	SOIL	VOC	isopropylbenzene	6	U
CC	1/2	202	SOIL	VOC	Bromoform	6	U
CC	1/2	202	SOIL	VOC	Bromobenzene	6	U
CC	1/2	202	SOIL	VOC	1,3,5-trimethylbenzene	6	U
CC	1/2	202	SOIL	VOC	1,1,2,2-Tetrachloroethane	6	U
CC	1/2	202	SOIL	VOC	2-chlorotoluene	6	U
CC	1/2	202	SOIL	VOC	4-chlorotoluene	6	U
CC	1/2	202	SOIL	VOC	tert-butylbenzene	6	U
CC	1/2	202	SOIL	VOC	1,2,4-trimethylbenzene	6	U
CC	1/2	202	SOIL	VOC	sec-butylbenzene	6	U
CC	1/2	202	SOIL	VOC	4-isopropyltoluene	6	U
CC	1/2	202	SOIL	VOC	1,3-Dichlorobenzene	6	U
CC	1/2	202	SOIL	VOC	1,4-Dichlorobenzene	6	U
CC	1/2	202	SOIL	VOC	n-butylbenzene	6	U
CC	1/2	202	SOIL	VOC	1,2-Dichlorobenzene	6	U
CC	1/2	202	SOIL	VOC	1,2-dibromo-3-chloropropane	6	U
CC	1/2	202	SOIL	VOC	1,2,4-Trichlorobenzene	6	U
CC	1/2	202	SOIL	VOC	1,2,3-trichloropropane	6	U
CC	1/2	202	SOIL	VOC	Hexachlorobutadiene	6	U
CC	1/2	202	SOIL	VOC	Naphthalene	6	U
CC	1/2	202	SOIL	VOC	1,2,3-trichlorobenzene	6	U
CC	1/2	202	SOIL	VOC	n-propylbenzene	6	U
CC	2/2	202	WATER	VOC	Dichlorodifluoromethane	5	U
CC	2/2	202	WATER	VOC	Chloromethane	5	U
CC	2/2	202	WATER	VOC	Vinyl Chloride	5	U
CC	2/2	202	WATER	VOC	Bromomethane	5	U
CC	2/2	202	WATER	VOC	Chloroethane	5	U

Building 21 Report: TOC RESULTS

Sample ID	Matrix	Analyte Name	Concentration	Units
CC 0/1 -108	SOIL	Total Organic Carbon	78800	mg/kg
CC 0/2 -108	SOIL	Total Organic Carbon	18600	mg/kg
CC 0/1 -111	SOIL	Total Organic Carbon	22700	mg/kg
CC 0/2 -111	SOIL	Total Organic Carbon	63800	mg/kg
CC 0/1 -118	SOIL	Total Organic Carbon	47200	mg/kg
CC 0/2 -118	SOIL	Total Organic Carbon	30700	mg/kg
CC 0/1 -119	SOIL	Total Organic Carbon	31700	mg/kg
CC 0/2 -119	SOIL	Total Organic Carbon	15700	mg/kg
CC 0/1 -120	SOIL	Total Organic Carbon	42600	mg/kg
CC 0/2 -120	SOIL	Total Organic Carbon	38600	mg/kg
CC 0/1 -124	SOIL	Total Organic Carbon	60600	mg/kg
CC 0/2 -124	SOIL	Total Organic Carbon	8790	mg/kg
CC 0/2 -125	SOIL	Total Organic Carbon	46600	mg/kg
CC 0/2 -125	SOIL	Total Organic Carbon	6380	mg/kg
CC 0/1 -138	SOIL	Total Organic Carbon	122000	mg/kg
CC 0/2 -138	SOIL	Total Organic Carbon	11300	mg/kg
CC 0/1 -141	SOIL	Total Organic Carbon	87800	mg/kg
CC 0/2 -141	SOIL	Total Organic Carbon	79800	mg/kg
CC 0/1 -148	SOIL	Total Organic Carbon	13400	mg/kg
CC 0/2 -148	SOIL	Total Organic Carbon	6550	mg/kg
CC 0/1 -151	SOIL	Total Organic Carbon	88700	mg/kg
CC 0/2 -151	SOIL	Total Organic Carbon	4580	mg/kg
CC 0/1 -161	SOIL	Total Organic Carbon	99700	mg/kg
CC 0/2 -161	SOIL	Total Organic Carbon	1420	mg/kg
CC 0/1 -163	SOIL	Total Organic Carbon	79500	mg/kg
CC 0/2 -163	SOIL	Total Organic Carbon	58400	mg/kg
CC 0/1 -170	SOIL	Total Organic Carbon	49200	mg/kg
CC 0/2 -170	SOIL	Total Organic Carbon	12300	mg/kg
CC 0/1 -174	SOIL	Total Organic Carbon	70400	mg/kg
CC 0/1 -178	SOIL	Total Organic Carbon	57100	mg/kg
CC 0/2 -178	SOIL	Total Organic Carbon	7570	mg/kg
CC 0/1 -182	SOIL	Total Organic Carbon	67800	mg/kg
CC 0/2 -182	SOIL	Total Organic Carbon	16500	mg/kg
CC 0/1 -185	SOIL	Total Organic Carbon	105000	mg/kg
CC 0/1 -187	SOIL	Total Organic Carbon	99100	mg/kg
CC 0/2 -187	SOIL	Total Organic Carbon	5900	mg/kg
CC 0/1 -196	SOIL	Total Organic Carbon	175000	mg/kg
CC 0/1 -202	SOIL	Total Organic Carbon	116000	mg/kg
CC 0/2 -202	SOIL	Total Organic Carbon	8600	mg/kg
CC 1/2 -202	SOIL	Total Organic Carbon	5870	mg/kg
CC 0/1 -209	SOIL	Total Organic Carbon	66300	mg/kg
CC 0/2 -209	SOIL	Total Organic Carbon	21400	mg/kg
CC 0/1 -221	SOIL	Total Organic Carbon	136000	mg/kg
CC 0/2 -221	SOIL	Total Organic Carbon	109000	mg/kg
CC 1/1 -221	SOIL	Total Organic Carbon	127000	mg/kg
CC 0/1 -222	SOIL	Total Organic Carbon	160000	mg/kg
CC 0/2 -222	SOIL	Total Organic Carbon	39800	mg/kg
CC 0/1 -231	SOIL	Total Organic Carbon	100000	mg/kg
CC 0/1 -47	SOIL	Total Organic Carbon	36600	mg/kg

Table B.7. Target Compound List - SVOC, P/PCB, PAH, and EPH [(a)]

SITE NAME	SVOC	Polycyclic Aromatic Hydrocarbons (PAH)											Pesticides, Polychlorinated Biphenyls						EPH & TPH		
	Bis(2-ethylhexyl)phthalate	Acenapthene	Anthracene	Phenanthrene	Pyrene	Fluoranthene	Benzopyrene	Benzofluoranthene	Benzoanthracene	Indeno(1,2,3-CD)pyrene	Chrysene1	Benzo(g,h,i)perelene	PCBs	Chlordane	Endrin	Alpha,Beta,Delta, BHC (Lindane)	Dieldrin	4,4'-DDT, 4,4'-DDE	Extractable Petrol. Hydrocarbons	Total Petrol. Hydrocarbons	Reference
261. Trash Burner	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			7
270. Underground Sewer Lines G6 and G7	0.89	ND	ND	3.0	3.2	5.2	1.7	1.5	1.9	1.3	2.2	1.3	ND	ND	ND	ND	ND	ND			7
279. Old Firing Range Drum Storage Area	4.2	6.8	15	73	83	98	35	59	43	23	55	19	0.56	ND	ND	ND	ND	ND			7
280. Waste Oil Drum Field Area	6.5	ND	2.8	11	9.7	11	3.6	2.8	4.2	1.9	ND	2.1	1.15	0.098	0.023	ND	ND	ND		1500	7
283. Area 1, Bulk transfer of Thorium drums (AKA Plutonium recoverable waste storage)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8
285. Area 11, Contamination from SM Building Operations	4700	ND	ND	ND	5000	ND	ND	ND	ND	ND	ND	ND	ND	ND	39	50	ND	ND	ND	ND	8
286. Area 16, SM Building sanitary sewage septic tank/leach field	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8
288. Area 17, SM Building soils	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8
300. Area 19, underground waste transfer line			900	790	900	1,000															8
302. Area D, Acid Leach Field															20	12					8
314. Farm Trash Area	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			7

(a) - All units are reported in mg/Kg unless noted otherwise.
(b) - Additional data on ot her analytes are available in reference 16.
(c) - This site is the same as Site #19.
(d) - Groundwater data. Unit of measure is mg/L.
(e) - Unit of measure is g/Kg

References:
7) DOE 1933c
8) DOE 1992d
15) Halford 1990
16) DOE 1993e
18) DOE 1992a
24) DOE 1994

Table B.6 - Target Compound List - VOC (a,b)

SITE NAME	Acetone	2-Butanone	Toluene	Benzene	Ethyl Benzene	Xylenes	1,2 Dichloroethane	Methylene Chloride	Perchloroethylene	2-Hexanone	4-Methyl-2-Pentanone	Trichloroethene	1,1,2 Trichloroethane	Carbon Disulfide	1,1,1-Trichloroethane	Chloroform	Freon 11	Freon 113	1,1-Dichloroethane	Bromo-dichloromethane	Bromoform	Reference
114-117. Powerhouse Area Fuel Tanks (Tanks 113, 114, 115, 116)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
125. Underground Sanitary Sewer Line G24																						7
159. Area 4A, WD Building Sewage Sludge Drying Pits	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8
172. WDA Building Basement Wash Sump (AKA Glass Melter Room Sump)	.065	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
174. WD Building Drum Staging Area	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
175. Area 4, WD Building Influent Tank Overflow	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8
176. Area 14, Radioactive Waste Line Break			9.0												11							8
258. Area H Open Burn Pit (AKA Pyrotechnic Waste Disposal Area)	ND	ND	0.051	ND	ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND	7
259. Pyrotechnic Waste Shed	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
260. Thermal Treatment Unit			.04		0.011	0.03	0.2		0.04			0.074										7
261. Trash Burner	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
270. Underground Sewer Lines G6 and G7	ND	ND	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
279. Old Firing Range Drum Storage Area	0.23	0.03	0.016	ND	ND	0.02	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
280. Waste Oil Drum Field Area	0.15	0.03	ND	ND	ND	ND	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes[a]	Results	Ref
280	Waste Oil Drum Field Area	I-8	Historical	Waste oil Plating Operations waste Explosive/solvent waste Herbicides Waste chemicals Photo-processing waste Batteries Kitchen grease Epoxy resins Ethylene glycol Scintillation vials	4, 5, 18	Confirmed VOCs	S	4	3, 4, 5, 6, 8, 12	Tables B.6, B.7, and B.8 RSS[c] Locations S0263, S0164, S0265, and S0266 (Appendix E in Ref.6) Table B.9	7 6
281	Area E, Waste Oil Spill	J-8	Historical	Waste oil	1	Minor oil	S	1	No Data		
282	Spoils Disposal Area/Construction Spoils Area	J-5 K-5	In service	Plutonium-238, Thorium Gasoline contaminated soils from G Building	4, 5, 18	Plutonium-238 < 25 pci/gm Thorium < 5 pci/gm	S	6	14, 15, 16	Table B.1 (Table X.3 in Ref. 6)	6
283	Area 1, Bulk Transfer of Thorium Drums (AKA, Plutonium Recoverable Waste Storage)	I to L 6 to 8	Grounds	Thorium sludge constituents, Plutonium-238	1, 4, 5, 18	Thorium dust, Plutonium-238	S	6	3, 4 14, 15, 16	Tables B.6, B.7, and B.8 Table B.1 (Table IV.2 in Ref. 6)	8 6
284	Building 21, Thorium Sludge Storage Facility	J-7 J-8	Surplus	Thorium sludge constituents	4	Thorium dust	S	4, 6	See Area 1		
285	Area 11, Contamination from SM Building Operations	G-9	Surplus	Plutonium-238	1, 4, 5, 18	Plutonium-238	S	6	3, 4, 5, 6 14, 16	Tables B.6, B.7, and B.8 Table B.1 (Table IV.3 in Ref. 6)	8 6
286	Area 16, SM Building Sanitary Sewage Septic Tank Leach Field	F-9 G-9	Surplus	Plutonium-238, Thorium Sanitary wastes from SM Building	1, 4, 5, 18	Plutonium-238	S	6	3, 4, 6 14, 15, 16	Tables B.6, B.7, and B.8 Table B.1 (Table IV.5 in Ref. 6)	8 6

Building 21 Report: TOX RESULTS

Sample ID	Matrix	Analyte Name	Laboratory Reporting Limit	Conc./Lab Qualifier	Units
CC 0/2 -138	SOIL	Total Organic Halides	6.02	6.79	mg/kg
CC 0/1 -141	SOIL	Total Organic Halides	5.3	U	mg/kg
CC 0/2 -141	SOIL	Total Organic Halides	5.96	9.1	mg/kg
CC 0/1 -148	SOIL	Total Organic Halides	6.17	11.4	mg/kg
CC 0/2 -148	SOIL	Total Organic Halides	6.32	19	mg/kg
CC 0/1 -151	SOIL	Total Organic Halides	5.49	U	mg/kg
CC 0/2 -151	SOIL	Total Organic Halides	6.25	8.66	mg/kg
CC 0/1 -161	SOIL	Total Organic Halides	6.12	6.54	mg/kg
CC 0/2 -161	SOIL	Total Organic Halides	6.22	U	mg/kg
CC 0/1 -163	SOIL	Total Organic Halides	6.15	U	mg/kg
CC 0/2 -163	SOIL	Total Organic Halides	6.17	U	mg/kg
CC 0/1 -170	SOIL	Total Organic Halides	5.77	U	mg/kg
CC 0/2 -170	SOIL	Total Organic Halides	5.75	52.7	mg/kg
CC 0/1 -174	SOIL	Total Organic Halides	5.42	73.1	mg/kg
CC 0/1 -178	SOIL	Total Organic Halides	5.44	U	mg/kg
CC 0/2 -178	SOIL	Total Organic Halides	5.77	U	mg/kg
CC 0/1 -182	SOIL	Total Organic Halides	5.35	73.7	mg/kg
CC 0/2 -182	SOIL	Total Organic Halides	5.23	81.1	mg/kg
CC 0/1 -185	SOIL	Total Organic Halides	5.47	7.07	mg/kg
CC 0/1 -187	SOIL	Total Organic Halides	5.54	16.2	mg/kg
CC 0/2 -187	SOIL	Total Organic Halides	6.17	16.2	mg/kg
CC 0/1 -196	SOIL	Total Organic Halides	5.79	26.7	mg/kg
CC 0/1 -202	SOIL	Total Organic Halides	5.37	74	mg/kg
CC 0/2 -202	SOIL	Total Organic Halides	5.73	12.1	mg/kg
CC 1/2 -202	SOIL	Total Organic Halides	5.85	U	mg/kg
CC 0/1 -209	SOIL	Total Organic Halides	6.04	6.91	mg/kg
CC 0/2 -209	SOIL	Total Organic Halides	5.79	U	mg/kg
CC 0/1 -221	SOIL	Total Organic Halides	5.45	11.9	mg/kg
CC 0/2 -221	SOIL	Total Organic Halides	5.8	8.01	mg/kg
CC 1/1 -221	SOIL	Total Organic Halides	5.46	15.7	mg/kg
CC 0/1 -222	SOIL	Total Organic Halides	5.46	10.2	mg/kg
CC 0/2 -222	SOIL	Total Organic Halides	5.48	U	mg/kg
CC 0/1 -231	SOIL	Total Organic Halides	5.82	15.8	mg/kg
CC 0/2 -231	SOIL	Total Organic Halides	5.89	23.6	mg/kg

Building 21 Report: CYANIDE RESULTS

Sample ID	Analyte Name	Laboratory Reporting Limit	Conc./Lab Qualifier	Units
CC 0/1 -148	Cyanide Analysis - Solid	0.58	U	mg/kg
CC 0/2 -148	Cyanide Analysis - Solid	0.62	U	mg/kg
CC 0/1 -151	Cyanide Analysis - Solid	0.55	U	mg/kg
CC 0/2 -151	Cyanide Analysis - Solid	0.58	U	mg/kg
CC 0/1 -161	Cyanide Analysis - Solid	0.57	U	mg/kg
CC 0/2 -161	Cyanide Analysis - Solid	0.6	U	mg/kg
CC 0/1 -163	Cyanide Analysis - Solid	0.61	U	mg/kg
CC 0/2 -163	Cyanide Analysis - Solid	0.61	U	mg/kg
CC 0/1 -170	Cyanide Analysis - Solid	0.58	U	mg/kg
CC 0/2 -170	Cyanide Analysis - Solid	0.56	U	mg/kg
CC 0/1 -174	Cyanide Analysis - Solid	0.54	U	mg/kg
CC 0/1 -178	Cyanide Analysis - Solid	0.54	U	mg/kg
CC 0/2 -178	Cyanide Analysis - Solid	0.55	U	mg/kg
CC 0/1 -182	Cyanide Analysis - Solid	0.49	U	mg/kg
CC 0/2 -182	Cyanide Analysis - Solid	0.49	U	mg/kg
CC 0/1 -185	Cyanide Analysis - Solid	0.51	U	mg/kg
CC 0/1 -187	Cyanide Analysis - Solid	0.51	U	mg/kg
CC 0/2 -187	Cyanide Analysis - Solid	0.62	U	mg/kg
CC 0/1 -196	Cyanide Analysis - Solid	0.53	U	mg/kg
CC 0/1 -202	Cyanide Analysis - Solid	0.52	U	mg/kg
CC 0/2 -202	Cyanide Analysis - Solid	0.54	U	mg/kg
CC 1/2 -202	Cyanide Analysis - Solid	0.58	U	mg/kg
CC 0/1 -209	Cyanide Analysis - Solid	0.59	U	mg/kg
CC 0/2 -209	Cyanide Analysis - Solid	0.57	U	mg/kg
CC 0/1 -221	Cyanide Analysis - Solid	0.51	U	mg/kg
CC 0/2 -221	Cyanide Analysis - Solid	0.54	U	mg/kg
CC 1/1 -221	Cyanide Analysis - Solid	0.51	U	mg/kg
CC 0/1 -222	Cyanide Analysis - Solid	0.53	U	mg/kg
CC 0/2 -222	Cyanide Analysis - Solid	0.62	U	mg/kg
CC 0/1 -231	Cyanide Analysis - Solid	0.57	U	mg/kg
CC 0/2 -231	Cyanide Analysis - Solid	0.56	U	mg/kg

Building 21 Report: SULFIDE RESULTS

Sample ID	Matrix	Analyte Name	Laboratory Reporting Limit	Conc./Lab Qualifier	Units
CC 0/1 -148	SOIL	Sulfide in Solid	19.8	U	mg/kg
CC 0/2 -148	SOIL	Sulfide in Solid	20.3	25.2	mg/kg
CC 0/1 -151	SOIL	Sulfide in Solid	22	U	mg/kg
CC 0/2 -151	SOIL	Sulfide in Solid	25.1	29.9	mg/kg
CC 0/1 -161	SOIL	Sulfide in Solid	24.6	U	mg/kg
CC 0/2 -161	SOIL	Sulfide in Solid	24.9	U	mg/kg
CC 0/1 -163	SOIL	Sulfide in Solid	24.6	U	mg/kg
CC 0/2 -163	SOIL	Sulfide in Solid	24.7	U	mg/kg
CC 0/1 -170	SOIL	Sulfide in Solid	18.5	U	mg/kg
CC 0/2 -170	SOIL	Sulfide in Solid	18.4	U	mg/kg
CC 0/1 -174	SOIL	Sulfide in Solid	21.8	26.1	mg/kg
CC 0/1 -178	SOIL	Sulfide in Solid	21.8	U	mg/kg
CC 0/2 -178	SOIL	Sulfide in Solid	23.1	41.5	mg/kg
CC 0/1 -182	SOIL	Sulfide in Solid	21.4	U	mg/kg
CC 0/2 -182	SOIL	Sulfide in Solid	21	U	mg/kg
CC 0/1 -185	SOIL	Sulfide in Solid	17.5	21.8	mg/kg
CC 0/1 -187	SOIL	Sulfide in Solid	17.8	22.2	mg/kg
CC 0/2 -187	SOIL	Sulfide in Solid	19.8	24.6	mg/kg
CC 0/1 -196	SOIL	Sulfide in Solid	18.6	32.4	mg/kg
CC 0/1 -202	SOIL	Sulfide in Solid	21.5	U	mg/kg
CC 0/2 -202	SOIL	Sulfide in Solid	23	U	mg/kg
CC 1/1 -202	SOIL	Sulfide in Solid	23.5	U	mg/kg
CC 0/1 -209	SOIL	Sulfide in Solid	19.4	29	mg/kg
CC 0/2 -209	SOIL	Sulfide in Solid	18.6	27.8	mg/kg
CC 0/1 -221	SOIL	Sulfide in Solid	17.5	56.6	mg/kg
CC 0/2 -221	SOIL	Sulfide in Solid	18.6	64.8	mg/kg
CC 1/1 -221	SOIL	Sulfide in Solid	32.3	143	mg/kg
CC 0/1 -222	SOIL	Sulfide in Solid	17.5	26.2	mg/kg
CC 0/2 -222	SOIL	Sulfide in Solid	29.6	96.3	mg/kg
CC 0/1 -231	SOIL	Sulfide in Solid	18.7	27.9	mg/kg
CC 0/2 -231	SOIL	Sulfide in Solid	18.9	U	mg/kg

Building 21 Report: METALS RESULTS

Sample ID	Matrix	Analyte Name	Laboratory Reporting Limit	Concentration	Lab Qualiifier	Units
CC 0/2 -187	SED	Iron	100	37400		mg/kg
CC 0/2 -187	SED	Lead	3	18.4		mg/kg
CC 0/2 -187	SED	Magnesium	5000	11400		mg/kg
CC 0/2 -187	SED	Manganese	15	707		mg/kg
CC 0/2 -187	SED	Mercury	0.2	0.062	U	mg/kg
CC 0/2 -187	SED	Nickel	40	34.6		mg/kg
CC 0/2 -187	SED	Potassium	5000	1650		mg/kg
CC 0/2 -187	SED	Selenium	5	0.56	U	mg/kg
CC 0/2 -187	SED	Silver	10	2.7		mg/kg
CC 0/2 -187	SED	Sodium	5000	139		mg/kg
CC 0/2 -187	SED	Thallium	10	0.38	U	mg/kg
CC 0/2 -187	SED	Vanadium	50	37		mg/kg
CC 0/2 -187	SED	Zinc	20	71.3		mg/kg
CC 0/2 -202	SED	Aluminum	200	6970		mg/kg
CC 0/2 -202	SED	Antimony	60	2.4	U	mg/kg
CC 0/2 -202	SED	Arsenic	10	5.4		mg/kg
CC 0/2 -202	SED	Barium	200	59.5		mg/kg
CC 0/2 -202	SED	Beryllium	5	0.33		mg/kg
CC 0/2 -202	SED	Cadmium	5	0.31		mg/kg
CC 0/2 -202	SED	Calcium	5000	3780		mg/kg
CC 0/2 -202	SED	Chromium	10	9.7		mg/kg
CC 0/2 -202	SED	Cobalt	50	9.6		mg/kg
CC 0/2 -202	SED	Copper	25	9.6		mg/kg
CC 0/2 -202	SED	Iron	100	11900		mg/kg
CC 0/2 -202	SED	Lead	3	15.4		mg/kg
CC 0/2 -202	SED	Magnesium	5000	2120		mg/kg
CC 0/2 -202	SED	Manganese	15	441		mg/kg
CC 0/2 -202	SED	Mercury	0.2	0.057	U	mg/kg
CC 0/2 -202	SED	Nickel	40	8.7		mg/kg
CC 0/2 -202	SED	Potassium	5000	605		mg/kg
CC 0/2 -202	SED	Selenium	5	0.54	U	mg/kg
CC 0/2 -202	SED	Silver	10	0.65		mg/kg
CC 0/2 -202	SED	Sodium	5000	217		mg/kg
CC 0/2 -202	SED	Thallium	10	0.36	U	mg/kg
CC 0/2 -202	SED	Vanadium	50	19		mg/kg
CC 0/2 -202	SED	Zinc	20	29.4		mg/kg
CC 2/2 -202	SED	Aluminum	200	8790		mg/kg
CC 2/2 -202	SED	Aluminum	200	9780		mg/kg
CC 2/2 -202	SED	Aluminum	200			mg/kg
CC 2/2 -202	SED	Antimony	60	2.5	U	mg/kg
CC 2/2 -202	SED	Antimony	60	2.5	U	mg/kg
CC 2/2 -202	SED	Antimony	60	32.6	U	mg/kg
CC 2/2 -202	SED	Arsenic	10	8.5		mg/kg
CC 2/2 -202	SED	Arsenic	10	99.6		mg/kg
CC 2/2 -202	SED	Barium	200	58.4		mg/kg
CC 2/2 -202	SED	Barium	200	62.7		mg/kg
CC 2/2 -202	SED	Barium	200	98.8		mg/kg
CC 2/2 -202	SED	Beryllium	5	0.36		mg/kg
CC 2/2 -202	SED	Beryllium	5	0.42		mg/kg
CC 2/2 -202	SED	Beryllium	5	98.4		mg/kg
CC 2/2 -202	SED	Cadmium	5	0.31	U	mg/kg

Building 21 Report: METALS RESULTS

Sample ID	Matrix	Analyte Name	Laboratory Reporting Limit	Concentration	Lab Qualiifier	Units
CC 2/2 -202	SED	Cadmium	5	0.31	U	mg/kg
CC 2/2 -202	SED	Cadmium	5	93.7	U	mg/kg
CC 2/2 -202	SED	Calcium	5000	3410		mg/kg
CC 2/2 -202	SED	Calcium	5000	3840		mg/kg
CC 2/2 -202	SED	Calcium	5000			mg/kg
CC 2/2 -202	SED	Chromium	10	11.6		mg/kg
CC 2/2 -202	SED	Chromium	10	12.6		mg/kg
CC 2/2 -202	SED	Chromium	10	101		mg/kg
CC 2/2 -202	SED	Cobalt	50	9.3		mg/kg
CC 2/2 -202	SED	Cobalt	50	9.4		mg/kg
CC 2/2 -202	SED	Cobalt	50	96.2		mg/kg
CC 2/2 -202	SED	Copper	25	9.9		mg/kg
CC 2/2 -202	SED	Copper	25	10.4		mg/kg
CC 2/2 -202	SED	Copper	25	97.1		mg/kg
CC 2/2 -202	SED	Iron	100	15400		mg/kg
CC 2/2 -202	SED	Iron	100	16100		mg/kg
CC 2/2 -202	SED	Iron	100			mg/kg
CC 2/2 -202	SED	Lead	3	14.1		mg/kg
CC 2/2 -202	SED	Lead	3	14.2		mg/kg
CC 2/2 -202	SED	Lead	3	98.6		mg/kg
CC 2/2 -202	SED	Magnesium	5000	2310		mg/kg
CC 2/2 -202	SED	Magnesium	5000	2340		mg/kg
CC 2/2 -202	SED	Magnesium	5000			mg/kg
CC 2/2 -202	SED	Manganese	15	161		mg/kg
CC 2/2 -202	SED	Manganese	15	492		mg/kg
CC 2/2 -202	SED	Manganese	15	495		mg/kg
CC 2/2 -202	SED	Mercury	0.2	0.051	U	mg/kg
CC 2/2 -202	SED	Mercury	0.2	0.058	U	mg/kg
CC 2/2 -202	SED	Mercury	0.2	99.8	U	mg/kg
CC 2/2 -202	SED	Nickel	40	9.6		mg/kg
CC 2/2 -202	SED	Nickel	40	10.3		mg/kg
CC 2/2 -202	SED	Nickel	40	95.8		mg/kg
CC 2/2 -202	SED	Potassium	5000	699		mg/kg
CC 2/2 -202	SED	Potassium	5000	779		mg/kg
CC 2/2 -202	SED	Potassium	5000			mg/kg
CC 2/2 -202	SED	Selenium	5	0.55	U	mg/kg
CC 2/2 -202	SED	Selenium	5	0.56	U	mg/kg
CC 2/2 -202	SED	Selenium	5	95.3	U	mg/kg
CC 2/2 -202	SED	Silver	10	0.79		mg/kg
CC 2/2 -202	SED	Silver	10	1.3		mg/kg
CC 2/2 -202	SED	Silver	10	97.8		mg/kg
CC 2/2 -202	SED	Sodium	5000	300		mg/kg
CC 2/2 -202	SED	Sodium	5000	302		mg/kg
CC 2/2 -202	SED	Sodium	5000			mg/kg
CC 2/2 -202	SED	Thallium	10	0.37	U	mg/kg
CC 2/2 -202	SED	Thallium	10	0.38	U	mg/kg
CC 2/2 -202	SED	Thallium	10	96.9	U	mg/kg
CC 2/2 -202	SED	Vanadium	50	21.8		mg/kg
CC 2/2 -202	SED	Vanadium	50	23.8		mg/kg
CC 2/2 -202	SED	Vanadium	50	104		mg/kg
CC 2/2 -202	SED	Zinc	20	34.2		mg/kg

Building 21 Report: METALS RESULTS

Sample ID	Matrix	Analyte Name	Laboratory Reporting Limit	Concentration	Lab Qualifier	Units
CC 0/2 -178	SED	Cadmium	5	0.32	U	mg/kg
CC 0/2 -178	SED	Calcium	5000	10200		mg/kg
CC 0/2 -178	SED	Chromium	10	10.1		mg/kg
CC 0/2 -178	SED	Cobalt	50	12.7		mg/kg
CC 0/2 -178	SED	Copper	25	9.6		mg/kg
CC 0/2 -178	SED	Iron	100	13100		mg/kg
CC 0/2 -178	SED	Lead	3	16.4		mg/kg
CC 0/2 -178	SED	Magnesium	5000	4580		mg/kg
CC 0/2 -178	SED	Manganese	15	596		mg/kg
CC 0/2 -178	SED	Mercury	0.2	0.058	U	mg/kg
CC 0/2 -178	SED	Nickel	40	11		mg/kg
CC 0/2 -178	SED	Potassium	5000	646		mg/kg
CC 0/2 -178	SED	Selenium	5	0.57	U	mg/kg
CC 0/2 -178	SED	Silver	10	0.81		mg/kg
CC 0/2 -178	SED	Sodium	5000	214		mg/kg
CC 0/2 -178	SED	Thallium	10	0.38	U	mg/kg
CC 0/2 -178	SED	Vanadium	50	20.9		mg/kg
CC 0/2 -178	SED	Zinc	20	35.8		mg/kg
CC 0/2 -182	SED	Aluminum	200	1950		mg/kg
CC 0/2 -182	SED	Antimony	60	2.2	U	mg/kg
CC 0/2 -182	SED	Arsenic	10	3.1		mg/kg
CC 0/2 -182	SED	Barium	200	61.6		mg/kg
CC 0/2 -182	SED	Beryllium	5	0.066		mg/kg
CC 0/2 -182	SED	Cadmium	5	0.27	U	mg/kg
CC 0/2 -182	SED	Calcium	5000	190000		mg/kg
CC 0/2 -182	SED	Chromium	10	5.9		mg/kg
CC 0/2 -182	SED	Cobalt	50	2		mg/kg
CC 0/2 -182	SED	Copper	25	6.2		mg/kg
CC 0/2 -182	SED	Iron	100	10500		mg/kg
CC 0/2 -182	SED	Lead	3	24.8		mg/kg
CC 0/2 -182	SED	Magnesium	5000	76600		mg/kg
CC 0/2 -182	SED	Manganese	15	246		mg/kg
CC 0/2 -182	SED	Mercury	0.2	0.05	U	mg/kg
CC 0/2 -182	SED	Nickel	40	5.3		mg/kg
CC 0/2 -182	SED	Potassium	5000	473		mg/kg
CC 0/2 -182	SED	Selenium	5	0.48	U	mg/kg
CC 0/2 -182	SED	Silver	10	0.46	U	mg/kg
CC 0/2 -182	SED	Sodium	5000	468		mg/kg
CC 0/2 -182	SED	Thallium	10	0.33	U	mg/kg
CC 0/2 -182	SED	Vanadium	50	7.6		mg/kg
CC 0/2 -182	SED	Zinc	20	19.9		mg/kg
CC 0/2 -187	SED	Aluminum	200	21000		mg/kg
CC 0/2 -187	SED	Antimony	60	4.4		mg/kg
CC 0/2 -187	SED	Arsenic	10	12.5		mg/kg
CC 0/2 -187	SED	Barium	200	141		mg/kg
CC 0/2 -187	SED	Beryllium	5	1.1		mg/kg
CC 0/2 -187	SED	Cadmium	5	0.31	U	mg/kg
CC 0/2 -187	SED	Calcium	5000	25400		mg/kg
CC 0/2 -187	SED	Chromium	10	24		mg/kg
CC 0/2 -187	SED	Cobalt	50	11.3		mg/kg
CC 0/2 -187	SED	Copper	25	23.1		mg/kg

Building 21 Report: METALS RESULTS

Sample ID	Matrix	Analyte Name	Laboratory Reporting Limit	Concentration	Lab Qualiifier	Units
CC 2/2 -202	SED	Zinc	20	36.5		mg/kg
CC 2/2 -202	SED	Zinc	20	98.9		mg/kg
CC 0/2 -209	SED	Aluminum	200	13100		mg/kg
CC 0/2 -209	SED	Antimony	60	2.4	U	mg/kg
CC 0/2 -209	SED	Arsenic	10	9.6		mg/kg
CC 0/2 -209	SED	Barium	200	87.2		mg/kg
CC 0/2 -209	SED	Beryllium	5	0.73		mg/kg
CC 0/2 -209	SED	Cadmium	5	0.3	U	mg/kg
CC 0/2 -209	SED	Calcium	5000	58900		mg/kg
CC 0/2 -209	SED	Chromium	10	16.7		mg/kg
CC 0/2 -209	SED	Cobalt	50	8.8		mg/kg
CC 0/2 -209	SED	Copper	25	16.5		mg/kg
CC 0/2 -209	SED	Iron	100	22500		mg/kg
CC 0/2 -209	SED	Lead	3	15.2		mg/kg
CC 0/2 -209	SED	Magnesium	5000	17000		mg/kg
CC 0/2 -209	SED	Manganese	15	548		mg/kg
CC 0/2 -209	SED	Mercury	0.2	0.055	U	mg/kg
CC 0/2 -209	SED	Nickel	40	19.2		mg/kg
CC 0/2 -209	SED	Potassium	5000	1390		mg/kg
CC 0/2 -209	SED	Selenium	5	0.54	U	mg/kg
CC 0/2 -209	SED	Silver	10	0.72		mg/kg
CC 0/2 -209	SED	Sodium	5000	323		mg/kg
CC 0/2 -209	SED	Thallium	10	0.36	U	mg/kg
CC 0/2 -209	SED	Vanadium	50	27.4		mg/kg
CC 0/2 -209	SED	Zinc	20	55.1		mg/kg
CC 0/2 -221	SED	Aluminum	200	5460		mg/kg
CC 0/2 -221	SED	Antimony	60	2.4	U	mg/kg
CC 0/2 -221	SED	Arsenic	10	8		mg/kg
CC 0/2 -221	SED	Barium	200	49		mg/kg
CC 0/2 -221	SED	Beryllium	5	0.28		mg/kg
CC 0/2 -221	SED	Cadmium	5	0.3	U	mg/kg
CC 0/2 -221	SED	Calcium	5000	149000		mg/kg
CC 0/2 -221	SED	Chromium	10	10.2		mg/kg
CC 0/2 -221	SED	Cobalt	50	3.6		mg/kg
CC 0/2 -221	SED	Copper	25	32.7		mg/kg
CC 0/2 -221	SED	Iron	100	12500		mg/kg
CC 0/2 -221	SED	Lead	3	22.3		mg/kg
CC 0/2 -221	SED	Magnesium	5000	52000		mg/kg
CC 0/2 -221	SED	Manganese	15	242		mg/kg
CC 0/2 -221	SED	Mercury	0.2	0.053	U	mg/kg
CC 0/2 -221	SED	Nickel	40	9.2		mg/kg
CC 0/2 -221	SED	Potassium	5000	819		mg/kg
CC 0/2 -221	SED	Selenium	5	0.53	U	mg/kg
CC 0/2 -221	SED	Silver	10	0.51	U	mg/kg
CC 0/2 -221	SED	Sodium	5000	562		mg/kg
CC 0/2 -221	SED	Thallium	10	0.36	U	mg/kg
CC 0/2 -221	SED	Vanadium	50	13		mg/kg
CC 0/2 -221	SED	Zinc	20	43.7		mg/kg
CC 0/2 -222	SED	Aluminum	200	3780		mg/kg
CC 0/2 -222	SED	Antimony	60	2.4	U	mg/kg
CC 0/2 -222	SED	Arsenic	10	4.3		mg/kg

Building 21 Report: PHENOLS RESULTS

Sample ID	Matrix	Analyte Name	Laboratory Reporting Limit	Conc./Lab Qualifier	Units
CC 0/2 151	SOIL	Phenolics	6.24	U	mg/kg
CC 0/2 161	SOIL	Phenolics	6.23	U	mg/kg
CC 0/2 163	SOIL	Phenolics	6.09	U	mg/kg
CC 0/2 170	SOIL	Phenolics	5.72	U	mg/kg
CC 0/2 178	SOIL	Phenolics	5.39	U	mg/kg
CC 0/2 182	SOIL	Phenolics	5.21	U	mg/kg
CC 0/2 187	SOIL	Phenolics	6.09	U	mg/kg
CC 0/2 202	SOIL	Phenolics	5.71	U	mg/kg
CC 1/2 202	SOIL	Phenolics	5.8	U	mg/kg
CC 2/2 202	SOIL	Phenolics	5.9	U	mg/kg
CC 0/2 209	SOIL	Phenolics	5.69	U	mg/kg
CC 0/2 221	SOIL	Phenolics	5.75	U	mg/kg
CC 0/2 222	SOIL	Phenolics	5.53	U	mg/kg
CC 0/2 231	SOIL	Phenolics	5.91	U	mg/kg