3005-0302240003

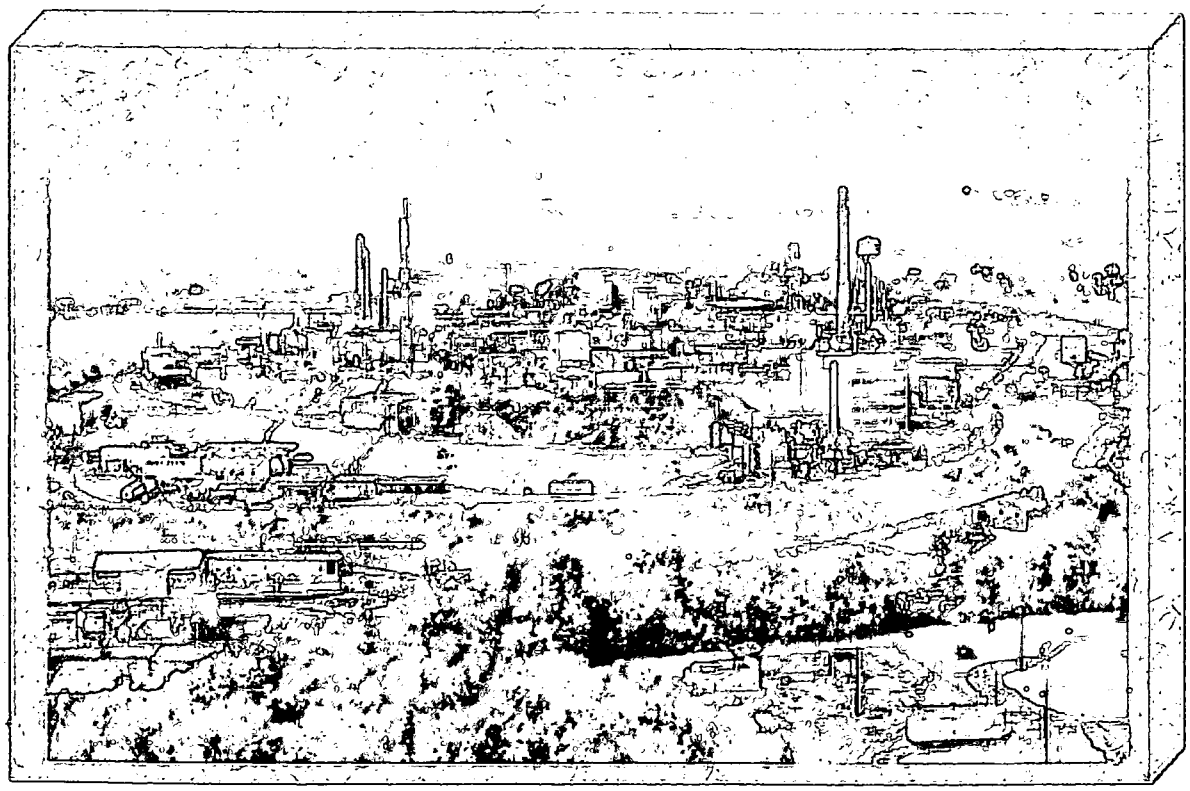
MOUND

Environmental Restoration Program

OhioEPA

MOUND PLANT
Building Data Package
Building 29

Public Review Draft
May 2002



BWX Technologies, Inc.
a McDermott company

3005-0302240003

BWXT of Ohio, Inc.
1 Mound Road
P.O. Box 3030
Miamisburg, Ohio 45343-3030
(937) 865-4020

SM-043/02
May 2, 2002

Mr. Richard B. Provencher, Director
Miamisburg Environmental Management Project
U. S. Department of Energy
P. O. Box 66
Miamisburg, OH 45343-0066

ATTENTION: Robert S. Rothman

SUBJECT: Contract No. DE-AC24-97OH20044
BUILDING 29, BUILDING DATA PACKAGE, PUBLIC REVIEW DRAFT

REFERENCE: Statement of Work Requirement C.7.1e - Regulator Reports

Dear Mr. Provencher:

Rob Rothman from your office has approved the release of the following document to the regulators and the public for their review:

- Building 29 Building Data Package, Public Review Draft

The public review period will be from 8 May until 7 June 2002 and BWXTO will respond to any comments received and incorporate the responses into the final document.

If you or members of your staff have any questions regarding the document, or if additional support is needed, please contact Bob Ransbottom at extension 4220.

Sincerely,

C. D. Thompson
SMPP/TFV Project Manager

CDT/VKD:jdg

Enclosures

cc: Tim Fischer, USEPA, (1) w/attachments
Brian Nickel, OEPA, (4) w/attachments
Ruth Vandegrift, ODH, (1) w/attachments
Frank Schmaltz, DOE/MEMP, (1) w/attachments
Sue Smiley, DOE/MEMP, (1) w/attachments
Randy Tormey, DOE/HQ, (1) w/attachments
Dann Bird, MMCIC, (3), w/attachments
Craig Hansen, BWXT of Ohio, (1) w/attachments
Bob Ransbottom, BWXT of Ohio, (1) w/attachments
Val Darnell, BWXT of Ohio, (1) w/attachments
Budd Thompson, BWXT of Ohio, (2) w/attachments
Public Reading Room, (5) w/attachments
DCC

MOUND

Environmental Restoration Program

MOUND PLANT BUILDING DATA PACKAGE

Notice of Public Review Period

The following Building Data Package (BDP) is available for public review in the CERCLA Public Reading Room, 305 E. Central Ave., Miamisburg, Ohio. Public comment on this document will be accepted May 8, 2002 through June 7, 2002.

BDP Building 29: Plastics Formulation Facility

Questions can be referred to Paul Lucas at (937) 865-4578.

BDP Building 29

REV	DESCRIPTION	DATE
WORKING DRAFT (to DOE)		**April 2002**
DRAFT (to Core Team)	BDPs for construction demolitions undergo simultaneous review by the Core Team and public.	**N/A**
DRAFT PROPOSED FINAL (incorporates Core Team comments)		**N/A**
PUBLIC REVIEW DRAFT		**May 2002**
FINAL		

BUILDING DATA PACKAGE (BDP)

Building 29

(Demolition)

DOE MOUND PLANT

MIAMISBURG, OHIO 45343

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1.0 GENERAL OVERVIEW

1.1 Introduction

The purpose of this Building Data Package (BDP) is to prepare for the demolition of Building 29 (Plastics Formulation Facility) and to identify, if possible, any recognized environmental conditions (defined below) that may affect the subject property and building.

Recognized Environmental Condition: The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a likely release, a past release, or a material threat of a release of any hazardous substances or petroleum into structures, or into the air, ground, groundwater, or surface water near the building.

1.2 Scope

This document has been prepared in accordance with the agreements and requirements as specified in the *Work Plan for Environmental Restoration of the DOE Mound Site, The Mound 2000 Approach*. This document is a BDP for Building 29 located at the Department of Energy (DOE) Mound Plant in Miamisburg, Ohio. The investigation performed to support this BDP models procedures found in *ASTM Standard Practice for Environmental Site Assessments; Phase I Environmental Site Assessment Process* (Designation E 1527-97).

The scope of the investigation included Building 29, the soil beneath, and a 15-foot wide perimeter border around the building. The investigation of Building 29 included the following:

A) A building and perimeter inspection.
B) An examination of historical aerial photographs and maps.
C) A review of federal and state regulatory agency records.
D) Personnel interviews.
E) A review of Mound Plant records for:

   1) History of spills, releases, and chemical inventories
   2) Past sampling data

      - Radiological survey
      - Soil sampling
      - Lead-based paint
      - Asbestos
      - Radon

In addition to the building investigation conducted by BWXT of Ohio, Inc. (BWXTO) personnel, documents were reviewed. Information used to compile BDPs includes the following:

- Characterization of Mound's Hazardous, Radioactive, and Mixed Wastes, August 1990
- OU-9 Site Scoping Report, Volumes 1-12
- Mound Facility Physical Characterization, December 1992
- Active Underground Storage Tank Plan, November 1994
- OU-9 Hydrological Investigation, Bedrock Report, January 1994
- OU-9 Hydrological Investigation, Buried Valley Aquifer Report, March 1994
- Environmental Appraisal Report of the Mound Plant, March 1996
- Title Search
- Lease Information
- EDR Report - Radius Map
- Building Prints
- Potential Release Site (PRS) information
- MD-222153, Mound Site Radionuclides By Location, July 1995 Contaminant Surveys
- MLM-3791, Mound Facility Physical Characterization, December 1993

2.0 BUILDING SPECIFIC OVERVIEW

Building 29 is located in the upper portion of the Test Fire Valley between the Main Hill and the Special Metallurgical/Plutonium Processing (SM/PP) Hill as shown on Figures 1 and 3. It was constructed in 1965, and is approximately 6,600 square feet. The building has two-stories with the second story penthouse only covering about one-third of the first floor. The building is concrete masonry block construction with a metal deck roof over steel beams. There are fifteen rooms and one walk-in refrigerator. Outside of the northeast side of the building is an enclosed drum storage area, and outside of the southwest side of the building is an enclosed chemical storage area (PRS 85). Both exterior storage sheds are 'lean-to' types of additions. Floor plans are included in Appendix D.

Services to the building have been terminated, but included HVAC systems providing central steam heat, chilled water for cooling, potable water, and 480 volt electric service. Refrigerants in the HVAC system and the walk-in room cooler were drained and disposed of in 1996. Sanitary services are provided by the Mound Plant facility and will be disconnected prior to demolition. No waste is currently stored in Building 29 or in the two exterior storage sheds.

2.1 Current Uses of Building 29

Building 29 is currently inactive, and has been vacant and unused since 1987. Safe Shutdown activities are complete. All required equipment has been removed from the building. The remaining equipment will be left in place and demolished/disposed of with the building.

2.2 Past Uses of Building 29

Building 29 was constructed and used for fabricating (e.g., injection molding) plastic parts. The plastic was received as granules, often mixed with asbestos as a filler. On a research and development basis, fiberglass was used to replace asbestos as the filler. All support operations in the facility have ceased and the facility is currently undergoing preparations for demolition.

2.3 Summary of Environmental Concerns and Findings - Building 29

Table 1: Summary of Environmental Concerns and Findings

Description	Comment	Resolution
Lead-Based Paint	Due to the age of the building, it is assumed that the paint contains lead.	Lead-based paint will not impact the demolition or disposal of the facility. Close worker disturbance of paint coatings (sanding, grinding, scraping, torching) will be avoided during demolition. If close disturbance is necessary, point of contact will be tested for lead and appropriate controls and personal protective equipment (PPE) used for disturbance as required.
Chemicals	All chemicals have been removed from the building and attached sheds. No record of or visual indication of spills was evident.	No further action required.
Fluorescent Lamps and PCBs	Fluorescent lamps were used in the building. Ballasts may contain polychlorinated biphenyls (PCBs).	Will be removed prior to demolition.
Air Emissions	N/A	N/A
Asbestos	Asbestos abatement was performed in Building 29 and asbestos filler was removed from the building.	No further action required.

Table 1: Summary of Environmental Concerns and Findings

Description	Comment	Resolution
Drainage Sumps	Building 29, Room 5 has a sump; sludge was analyzed and there were no results exceeding RCRA guideline values, and no asbestos (Appendix K).	No further action required.
Lead	N/A	N/A
Mercury	N/A	N/A
Radiological	N/A	N/A
Septic System	PRSs 86 and 338 are septic tanks near (but not associated with) Building 29. Both PRSs have been determined to require no further action.	No further action required.
Waste Water	Sanitary services are provided by the Mound Plant facility.	Pipes will be disconnected prior to demolition.
Stains & Corrosion/HVAC	N/A	N/A
Storage Tanks	N/A	N/A
Solid Waste Disposal	All required equipment and material have been removed from the building.	N/A
Migratory Hazards	N/A	N/A
Radon	N/A	N/A
Energetic Material/HVAC	N/A	N/A

N/A: Not applicable
RCRA: Resource Conservation and Recovery Act

2.4 Radiological Characterization Summary for Building 29

An assessment of Building 29 was performed reviewing operational history and radiological survey information. The building has no known history of having handled or stored radioactive materials. Radiological surveys of the building and remaining equipment indicate no readings above surface release criteria. The low-levels of smearable activity that were detected are believed to be naturally occurring or may have been transferred to the building by dust associated with onsite excavation, soil sampling, and the trucking of soil around the site. The detected levels are well below the guidelines for human health, and do not pose a concern regarding the demolition of this building.

In accordance with Multi-Agency Radiological Survey and Site Investigation Manual (MARSSIM) and "Generic Process for the Disposition of Buildings that Have Potential or Actual Radiological Contamination," the review team concluded that the building is a

non-radiological building. Associated radiological survey documentation for the information summarized in the following table is contained in Appendix G.

Table 2: Radiological Summary

TYPE	RSDS	LOCATION	MAXIMUM SURVEY RESULTS (dpm/100 cm²)	SURFACE CONTAMINATION GUIDELINES (dpm/100 cm²) (Note 1)
Highest Alpha Smearable Activity	02-TF-0098	Horizontal Surfaces & Equipment	7.58	20
Highest Alpha Fixed Activity	Note 2	Misc.	< 100	100
Highest Beta Smearable Activity	02-TF-0098	Horizontal Surfaces & Equipment	9.61	1,000
Highest Beta Fixed Activity	Note 2	Misc.	< 5,000	5,000
Highest Tritium Smearable Activity	02-TF-0187	Horizontal Surfaces & Equipment	18.93	10,000

RSDS: Radiological Survey Data Sheet
Note 1: Guideline values per DOE Order 5400.5, Radiation Protection of the Public and the Environment
Note 2: All radiological surveys indicated <100 dpm/100cm² alpha and < 5,000 dpm/100cm² beta

3.0 SITE DESCRIPTION

3.1 Site/Vicinity Location and Characteristics

Building 29 is located at the DOE Miamisburg Environmental Management Project (MEMP), formerly known as Mound Plant. Mound Plant is situated in the City of Miamisburg, Miami Township, Montgomery County, State of Ohio as shown in Appendix B.

The Mound Plant at one time was situated on approximately 300 acres of land and contained approximately 130 buildings with a total of approximately 1.4 million square feet of floor space (the number of buildings is constantly diminishing as buildings are decommissioned and either sold or demolished). The original 182-acre site, purchased by the Manhattan Engineer District in 1946, consisted of two hills and an intervening valley that runs approximately east and west. The 124-acre tract acquired in 1981 was an undeveloped mixture of fields and woods that undulates and slopes downward to the west, away from the main site. This area was acquired to serve as a buffer and has been used as a staging area and parking area for contractors working onsite.

To the west lies a railroad line and the north south trending Miami-Erie Canal. The northern boundaries of the site abut the residential area of Miamisburg, Ohio. Mound Road marks the northern half of the eastern perimeter of the facility then veers east, away from the southern half of the eastern boundary. A public golf course (belonging to the City of Miamisburg), the Miamisburg Mound Memorial Park, old agricultural fields, residential lots, and vacant wooded lots border against the facility along Mound Road. Benner Road forms

the southern property line of the Mound Plant, with agricultural fields and farms occupying the lands beyond.

3.2 Description of Structures, Roads, Other Improvements in Proximity to Building 29

As shown on Figures 2 and 4, Building 29 is bordered on the north by a small asphalt parking area, on the east and south by grassy areas, and on the west by a dirt and gravel parking area. In the vicinity of Building 29 are a roadway, a parking lot, and overhead pipes.

3.3 Current and Past Uses of Buildings in Proximity to Building 29

The closest buildings to Building 29 are Buildings 98 and 45. Building 98, the current Central Fire Station, is just southwest of Building 29, and Building 45, the Health Physics Calibration Facility, is across the road to the west (Figures 2 and 4). Both Buildings 98 and 45 are believed to have no environmental impact on Building 29.

4.0 RECORDS REVIEW

4.1 General/Historical CERCLA Information

In compliance with permit requirements under Resource Conservation and Recovery Act (RCRA), the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), and the Clean Air Act (CAA), Mound Plant has applied for or has received permits for its surface water discharges, air emissions, and hazardous waste program. Mound Plant is currently operating a hazardous waste storage facility under a RCRA Part B permit dated October 18, 1996. Mound Plant also maintains a National Pollutant Discharge Elimination System (NPDES) surface water discharge permit with Facility I.D. number OH 0009857. Operations that produce particulate or vaporous emissions are either permitted or registered with Regional Air Pollution Control Agency (RAPCA) and the Ohio Environmental Protection Agency (OEPA). Mound Plant also submits annual Emergency and Hazardous Chemical Inventory forms to the OEPA, pursuant to the Superfund Amendment and Reauthorization Act (SARA), Title III, the Emergency Planning and Community Right-to-Know Act. The 2001 version of this report indicated that no chemicals are stored in Building 29.

The Mound Plant was identified as a contaminated site on the National Priorities List under CERCLA (Superfund) in 1989. The Mound Plant site was originally listed due to volatile organic compound (VOC) contamination in the western end of the lower valley area. The cleanup of the Mound site was originally to be accomplished under the CERCLA-mandated procedures for regulating Superfund Sites using the operable unit (OU) system to define and characterize cleanup areas. As the cleanup effort went forward, it became apparent that the Mound site did not fit the profile for a cleanup strategy based on the operable units. The DOE, the United States Environmental Protection Agency (USEPA), and the OEPA designed a new decision making process for the cleanup of the Mound site. The new process is known formally as a "removal site evaluation process" and informally as the

"Mound 2000 Process." The Mound 2000 Process system divided the Mound site into geographical parcels containing over 400 PRSs with approximately equal numbers of PRSs concerned with potentially contaminated soil and with potential contamination in or associated primarily with building operations. A PRS is an area where knowledge of historic or current use indicates that the site may have had releases of radioactive and/or hazardous materials. For a more detailed description, refer to the *Work Plan for Environmental Restoration of the DOE Mound Site, the Mound 2000 Approach.*

4.2 Specific Record Sources

4.2.1 Occurrence Reports

A search of the occurrence reporting system revealed one report, which did not involve any environmental issues:

- Fire alarms related to asbestos abatement work

4.2.2 Spills and Releases

- None

4.2.3 Associated PRS Overview

As a result of the investigations and documentation accomplished to comply with the CERCLA cleanup process via the Federal Facilities Agreement (FFA)/DOE Environmental Restoration (ER) Program, DOE and BWXTO have tabulated all the PRSs identified under the various regulatory programs in effect at the site. Of these 440 PRSs, four are at or near Building 29. PRSs in the vicinity of Building 29 are identified in Table 3 and shown on Figure 2. Additional information is included in Appendix N.

Table 3: PRSs in Proximity to Building 29

PRS	CERCLA or Bldg. Related	Binning Status	Comments
66	CERCLA	Removal Action (RA)	Area 7, Thorium and Polonium Wastes. Part of Building 29 is located within PRS 66.
85	CERCLA	No Further Action (NFA)	Building 29 Solvent Storage Shed (Room 16).
86	CERCLA	NFA	Actinium Contamination Near Underground Septic Tank (Tank 224).
338	CERCLA	NFA	Building 29 Septic Tank (Tank 270).

4.2.4 Sampling Data

4.2.4.1 Radiological Surveys

Survey data summarized in Section 2.4 indicates that radiological readings meet surface release criteria. Supporting documentation is contained in Appendix G.

4.2.4.2 Soil Sampling Data

Appendix L contains a graphic and table presenting results of all soil sampling data within a 15-foot perimeter of Building 29. Maximum exceedances to screening levels (10^{-6} guideline values plus background, or Core Team approved) are listed in Table 4. All other soil sampling results are below applicable levels.

Table 4: Maximum Results Exceeding Screening Levels

Analyte	Maximum Result	Background	RBGV (10^{-6})	Screening Level Comparison
Cobalt-60 (pCi/g)	0.0754	N/A	0.07	0.07
Potassium-40 (pCi/g)	40.7	37	1.42	38.42
Thorium-232+D (pCi/g)	1.84	1.4	0.07	1.47

RBGV: most stringent of construction and office worker scenarios per Risk-Based Guideline Values, March 1997, Final, as performed using April 2001 HEAST slope factors.
pCi/g: picoCuries per gram.
N/A: not available.
"+D": indicates that pertinent daughter products are included within the risk calculations.

Because approximately half of Building 29 is within PRS 66 area, additional soil sampling will be performed for the PRS 66 project, separate from the Building 29 demolition.

4.2.4.3 Chemical History

Building 29 was used to fabricate plastic parts. The primary chemicals used were plastics and dyes together with hydraulic oil, acetone, alcohols, and toluene. There is no evidence that chemicals stored in Building 29 entered the wastewater collection system. There have been no reported spills from Building 29.

The building underwent Safe Shutdown in 1996 at which time these materials were removed from the building. The most recent (March 2002) annual chemical inventory report found no "emergency and hazardous" chemicals located in the building.

4.2.4.4 Lead-Based Paint

No objective data could be found or was generated during the walk-through assessment of Building 29 to indicate the presence of lead in paint coatings. Therefore, all such coatings are assumed to potentially contain lead.

4.2.4.5 Asbestos

An asbestos survey was performed and confirmed that asbestos was prevalent in Building 29. Asbestos-containing materials (ACM) of non-friable nature were used in floor tiles and mastic, roofing material, transite work surfaces, and fume hoods. Friable ACM included pipe joint insulation, condensation tape, pipe wrap, and thermal insulation. Much friable asbestos was used as filler material, mixed with plastic, to form molded parts. This airborne asbestos contaminated the HVAC ductwork, processing equipment, and the internal building structure.

Asbestos abatement was performed in 2002.

4.2.4.6 Radon

The results of a 1989-90 Mound Indoor Radon study indicated an average radon concentration of 0.4 pCi/L in Building 29 (Appendix H). The USEPA recommended standard for a maximum radon level is 4.0 pCi/L.

4.3 Review of Building Prints

Building prints were reviewed and floor plans are included in Appendix D.

4.4 Aerial Photographs

Aerial photographs from 1965 (prior to construction), 1968 (following construction), and 1996 (most recent aerial photo) were reviewed and are presented in Appendix E.

4.5 Interviews

Historical information was provided by Mark Tibbs, a Project Engineer of Building 29 during Safe Shutdown operations from 1994 through 1997.

Past Building Manager, R. A. Ward, was interviewed via a building manager questionnaire (included in Appendix F). The subsequent Building Manager, Ken Hacker, and the current Building Manager, Gary Weidenbach, were also interviewed regarding past facility operations and current conditions. No significant items in the building were identified based on the questionnaire or interviews.

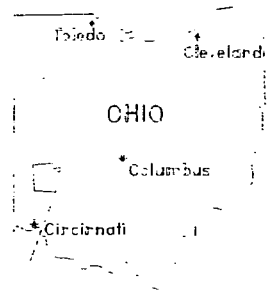
Appendix A

General Listing of Acronyms

ASTM	American Society for Testing and Materials
BDP	Building Data Package
BWXTO	BWXT of Ohio, Inc.
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act
cm^2	centimeters squared
CWA	Clean Water Act
DOE	United States Department of Energy
DPM	disintegrations per minute
EPA	United States Environmental Protection Agency
ER	Environmental Restoration (Program)
FFA	Federal Facility Agreement
HAZMAT	hazardous materials
MARSSIM	Multi-Agency Radiological Survey and Site Investigation Manual
MEMP	Miamisburg Environmental Management Project
N/A	not applicable
NPDES	National Pollutant Discharge Elimination System
OEPA	Ohio Environmental Protection Agency
OU	Operable Unit
PCB	polychlorinated biphenyl
pCi/L	picoCuries per liter
PRS	Potential Release Site
RI/FS	Remedial Investigation/Feasibility Study
RAPCA	Regional Air Pollution Control Agency
RCRA	Resource Conservation and Recovery Act
RSDS	Radiological Survey Data Sheet
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

Appendix B

Map of Montgomery County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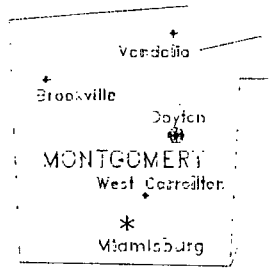
OHIO
Columbus
Cincinnati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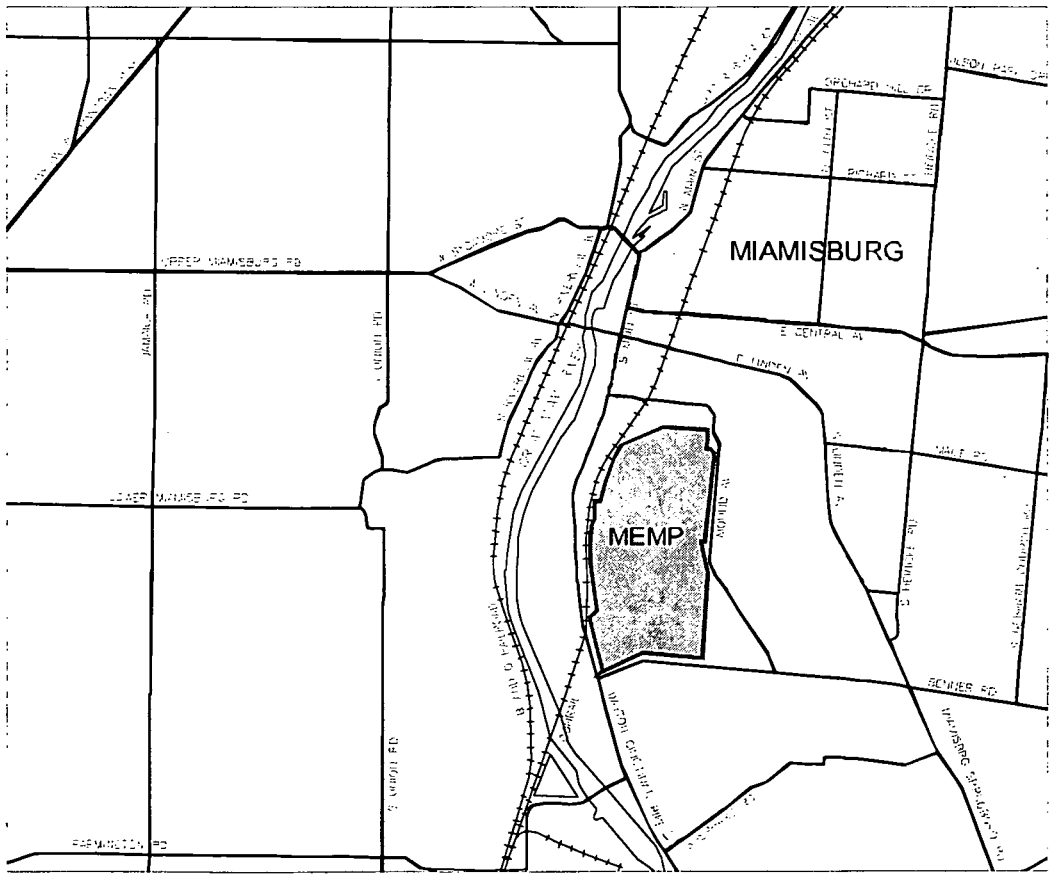
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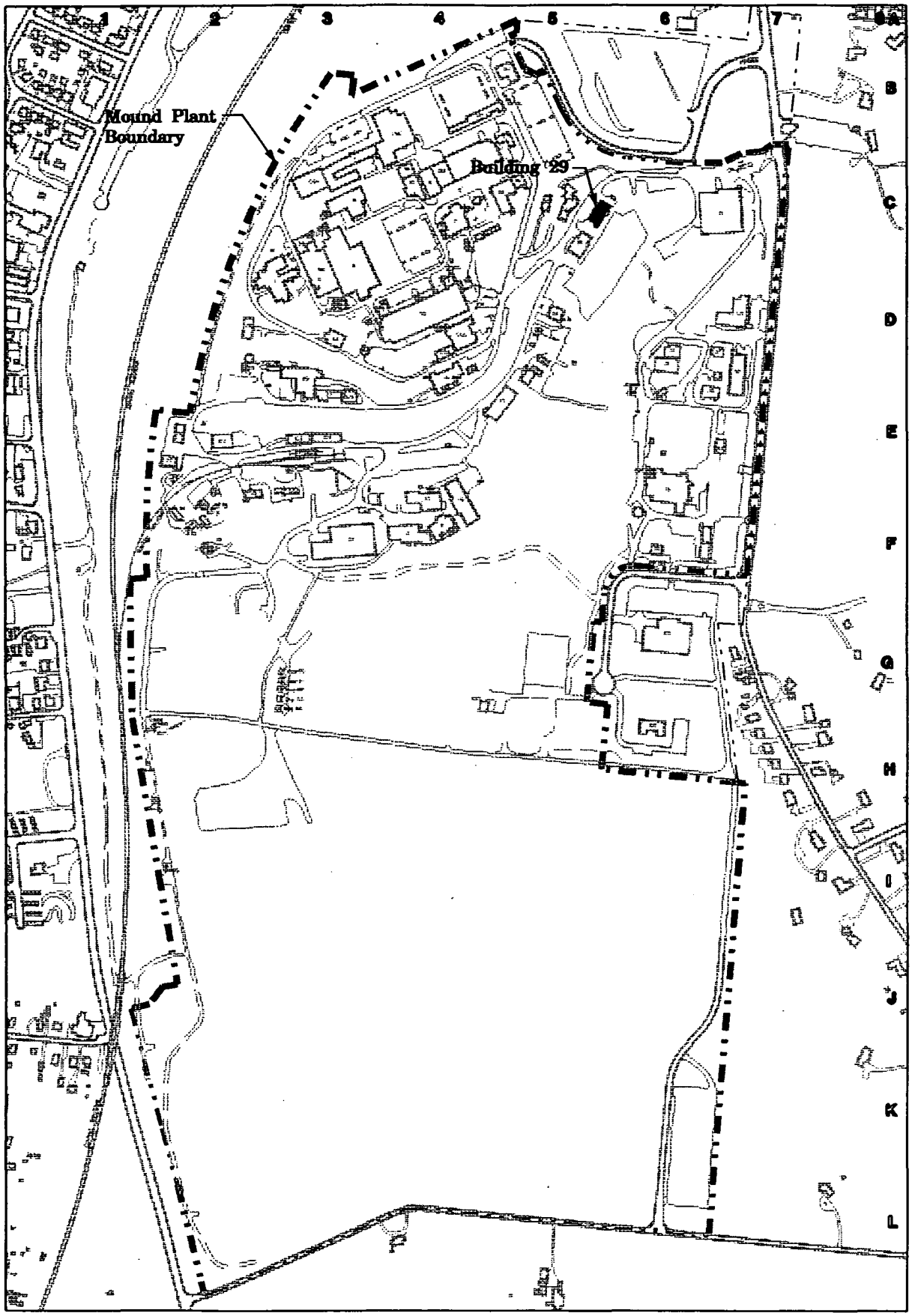
E CENTRAL AV
SCHNER RD
FARMINGTON RD

Appendix C

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

ISS	DATE	REVISION	BY	DSR	DIG	#
	03/12/02	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 Building 29

DRAWING CLASSIFICATION: UNCLASSIFIED
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JOB NUMBER:
DWG TYPE: SITE
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SHEET:
SCALE: Graphic
SHEET 1 OF
STATUS: MD-REL-03/14/99
ORIGIN: MSTATION / J

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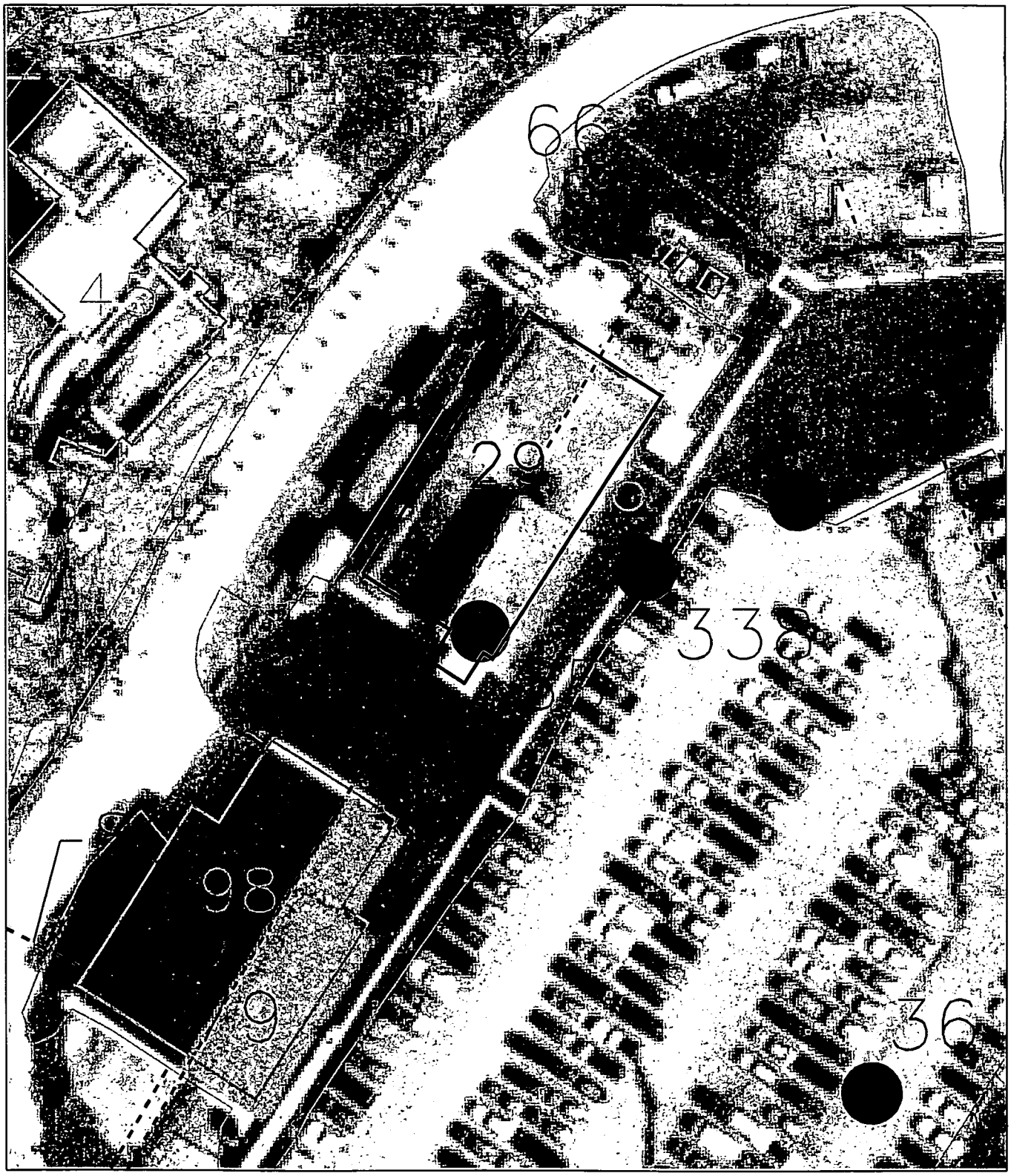

PRS Point

PRS Area

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Environmental Restoration Geographic Information System

Figure 2
Building 29
and Vicinity

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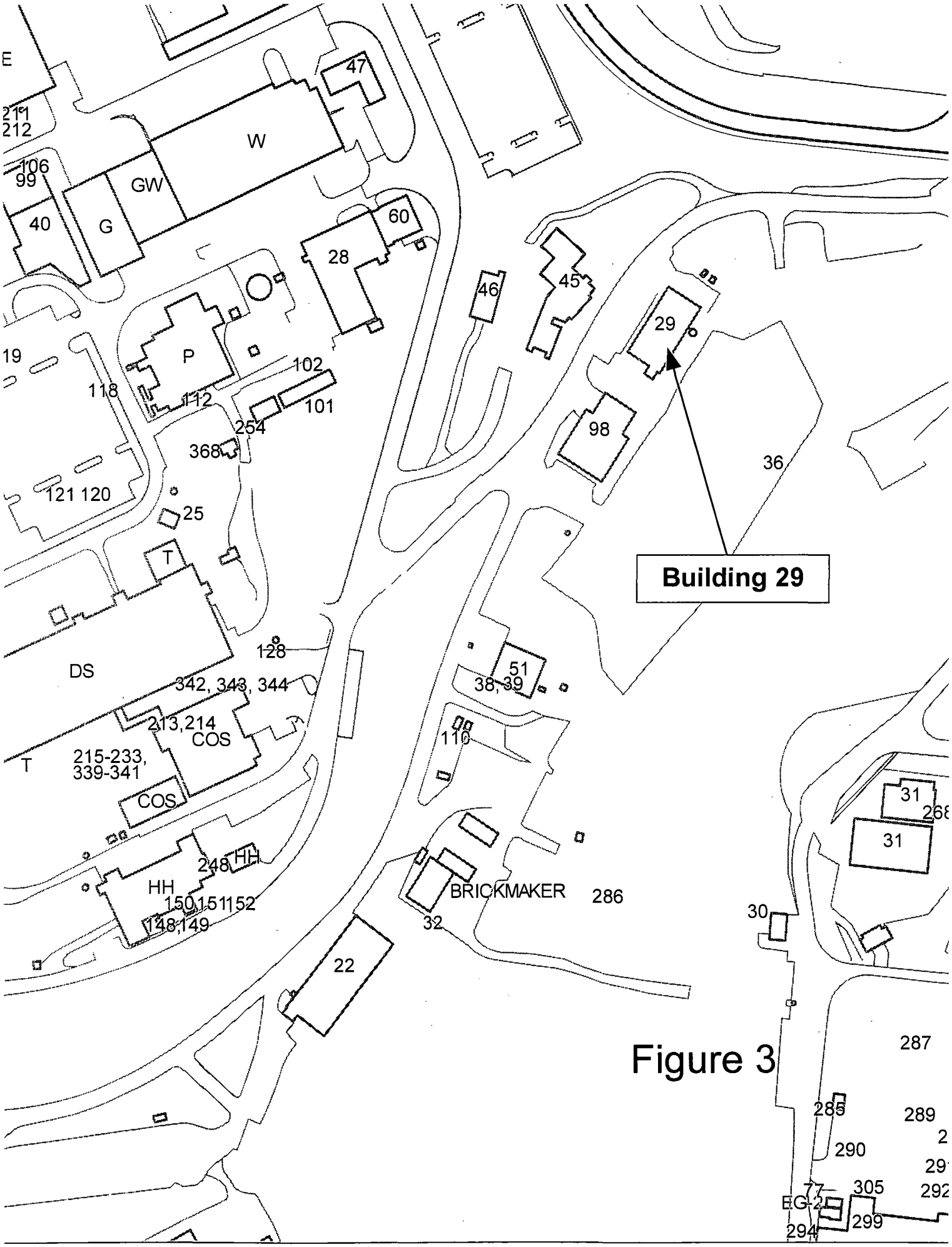
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Figure 3

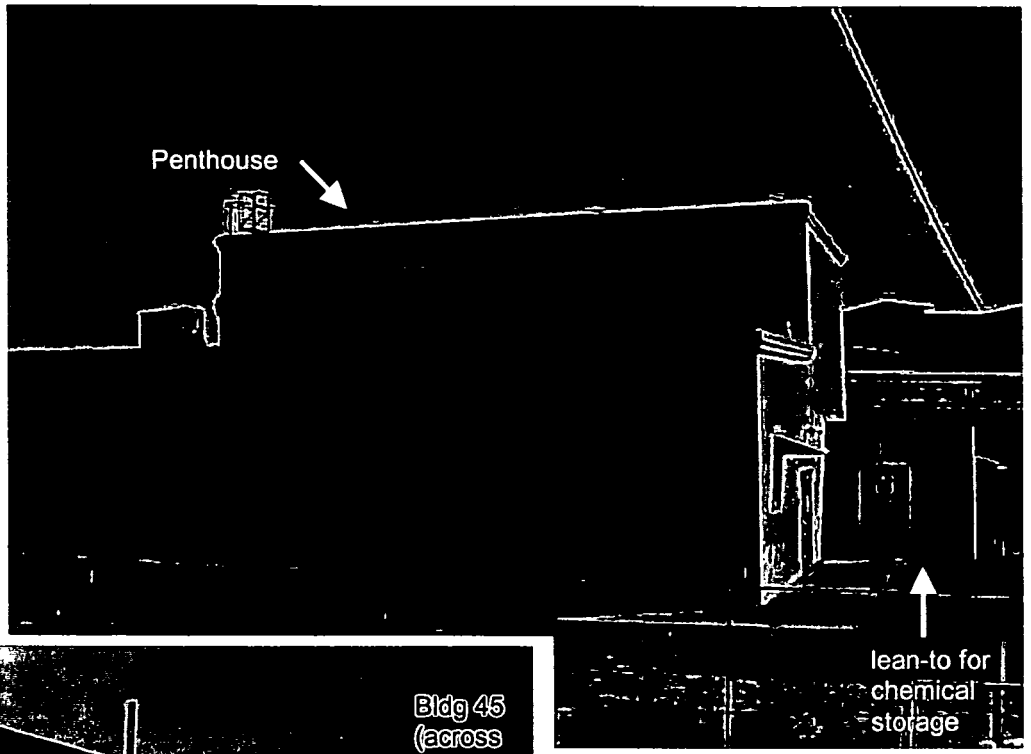
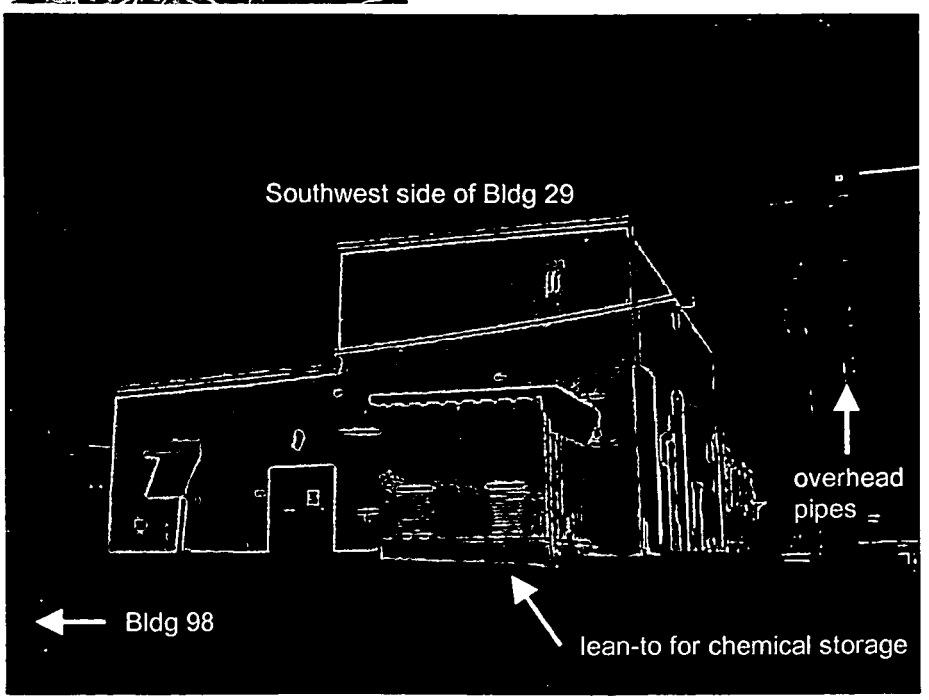


Figure 4: Building 29 Recent Exterior Photos

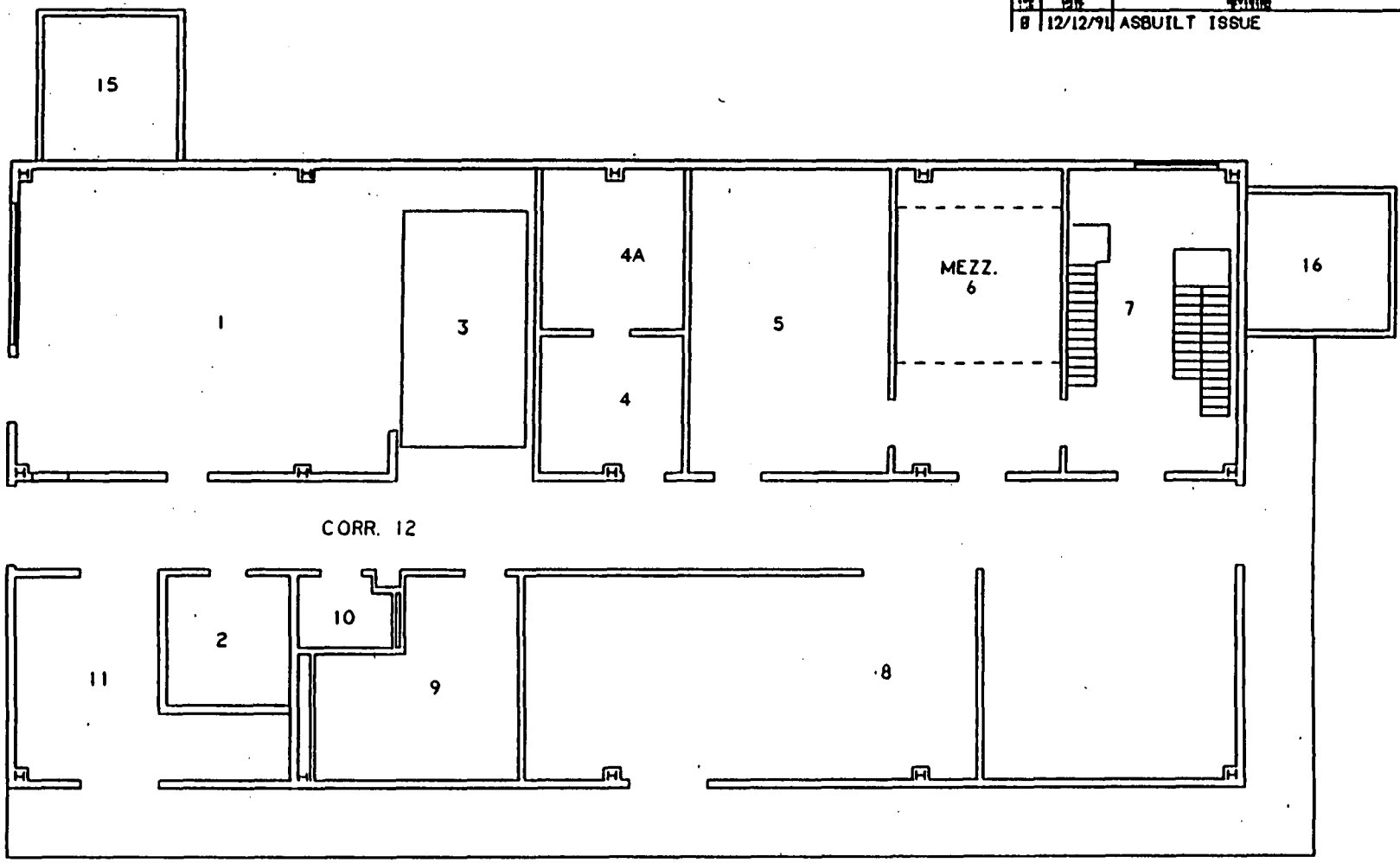
taken 8 March 2002



Appendix D

Floor Plans

REV	DATE	REVISION	BY	CHKD	ENG	APPD	APPD	R
0	12/12/91	ASBUILT ISSUE	DCB				DVD	



0 3' 6' 10' 20'

DERIVATIVE CLASSIFIER

Sr. Class. Anal. 2/20/96

(Title) (Date)

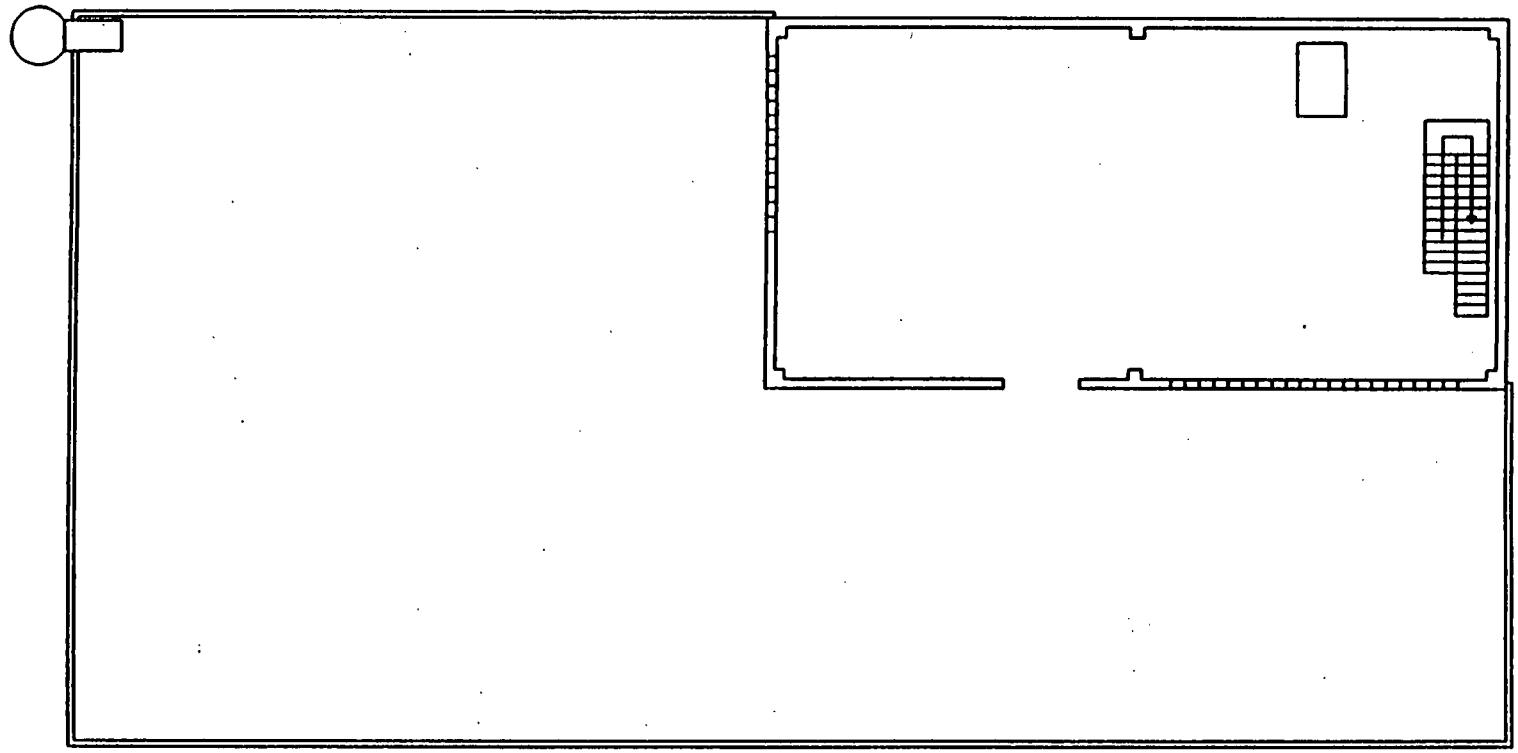
NOT FOR PUBLIC DISSEMINATION

MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.

BLDG #29
FIRST FLOOR
BLDG CODE:3029

TITLE	BLDG #29 FLOOR PLANS
(U) TITLE CLASSIFICATION	
SIZE	C
DRAWING NUMBER	FSC911241
JOB NUMBER	12335
DWG TYPE	SFP
FROM	BLDG #29
CODE	14045
SCALE AS NOTED	
SHEET	1 OF 2
STATUS	MD-REL-12/12/91
CREATOR	MD-BRJ-V3.3

9.52-59



0 3' 6' 10' 20'

DERIVATIVE CLASSIFIER

[illegible]

Sr. Class. Anal. 2/10/96

(Title) (Date)

N

2/10/96

BLDG #29
PENTHOUSE
BLDG CODE:3029

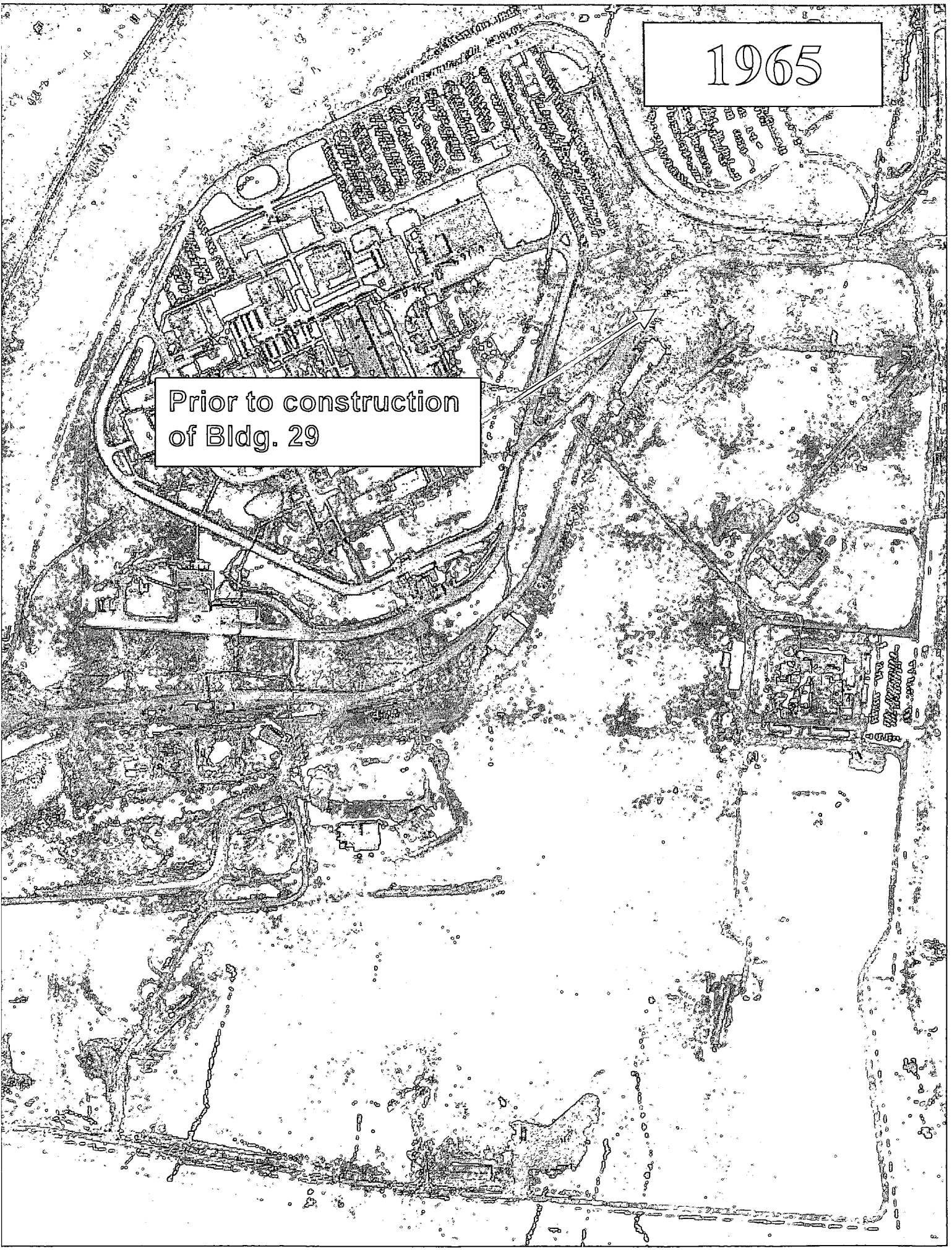
NOT FOR PUBLIC DISSEMINATION

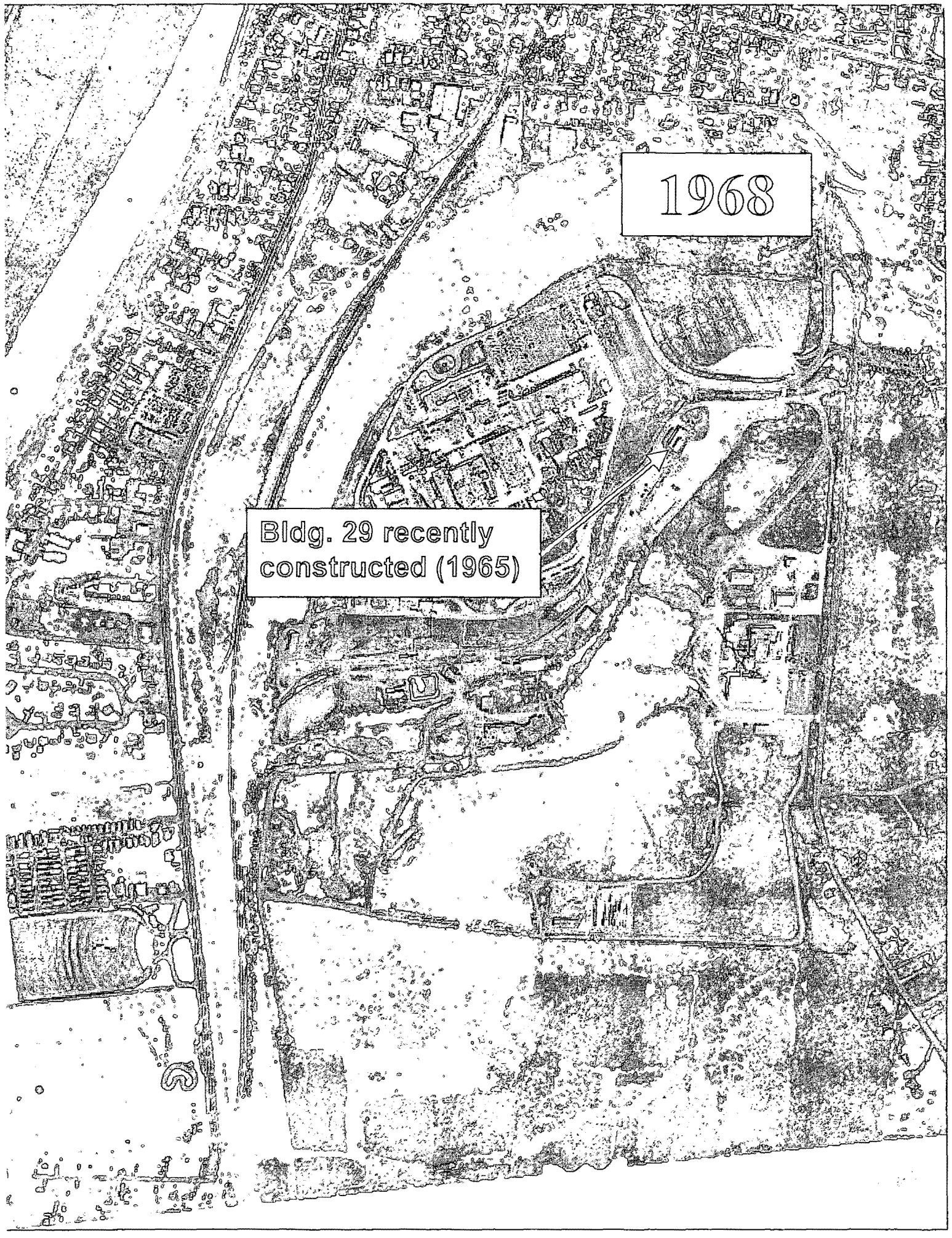
MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.

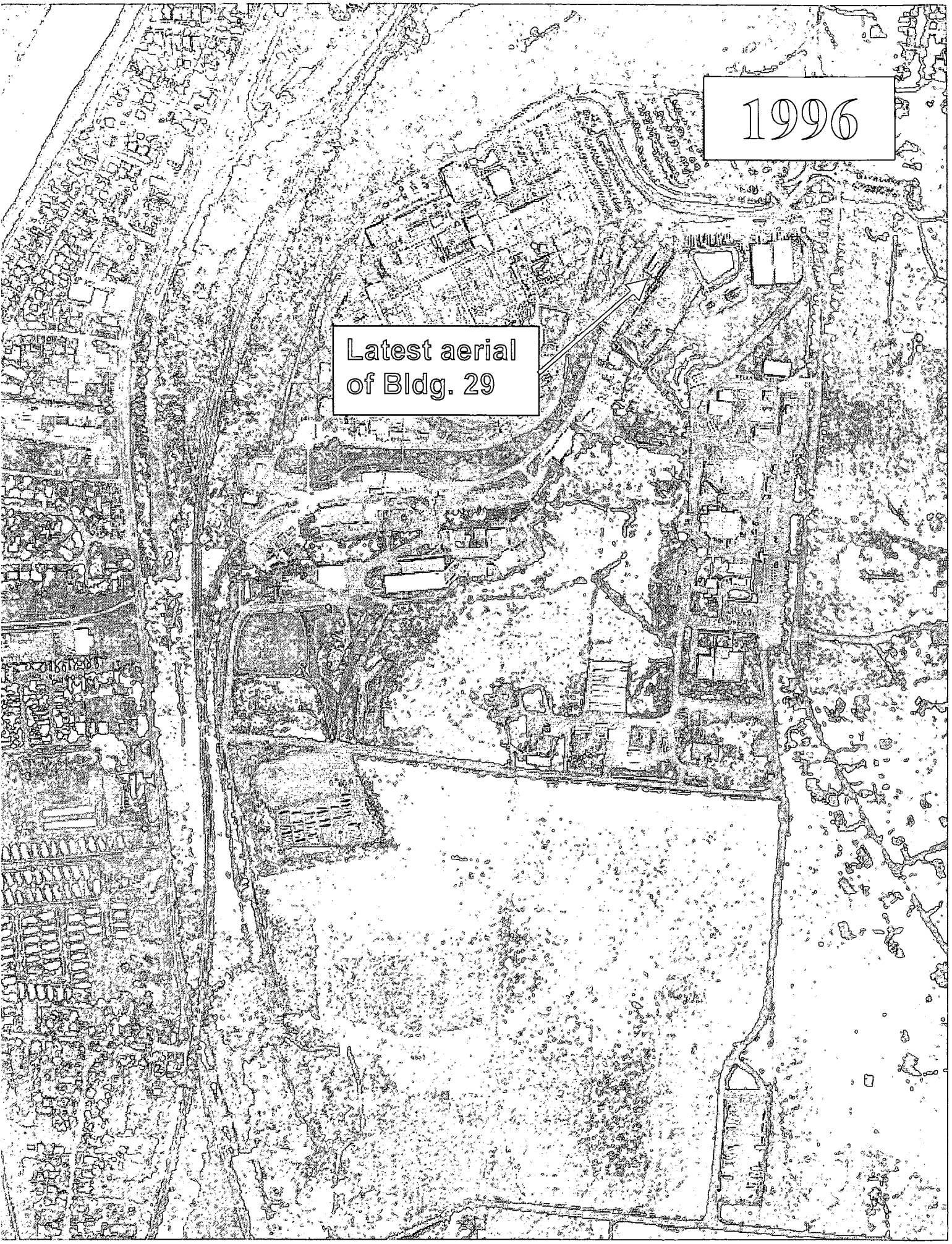
DRAWING NUMBER	FSC911241
JOB NUMBER	12335
DRAWING CLASSIFICATION	UCNI
SIZE	C
CODE	14865
SCALE	AS NOTED
TOTAL	8
SHEET	2
STATUS	MD-REL-12/12/91

Appendix E

Aerial Photographs


1965
Prior to construction of Bldg. 29


1968
Bldg. 29 recently constructed (1965)


1996
Latest aerial of Bldg. 29

Appendix F

Environmental Appraisal Report of the Mound Plant (excerpt)

9.52 BUILDING 29

9.52.1 Scope of Building 29 Report

In late 1995 and the early months of 1996, EG&G MAT performed a review of environmental conditions at the Mound Plant. The purpose was to develop a performance baseline, and to identify areas for improvement on a building and a sitewide basis. EG&G MAT did not perform a "due diligence" or Phase I Environmental Site Assessment as specified by ASTM 1527 or ASTM 1528. The scope of the appraisal effort and a discussion of the appraisal methodology are detailed in Sections 2.0 and 5.0, found in Volume 1 of this report.

The appraisal team performed a walk-through of Building 29 on the morning of February 27, 1996. The EAC (Attachment 1—Section 9.52.6.1) was used to record findings. The appraisers were not accompanied by either the building manager or the process managers (Safe Shutdown). A subsequent meeting was held with the process manager to review shutdown records and to discuss various aspects of the shutdown procedures being conducted in the building. Other information was supplied by the building manager and recorded on the BMQ, included as Attachment 2 (Section 9.52.6.2).

9.52.2 Description of Building 29

Building 29 was used for plastics formulation and manufacturing. It is a 6,601-square-foot, one-story structure, with a 325-square-foot mezzanine with a steel grate floor above Room 6, and an internal 1,200-square-foot (steel floor) penthouse. Constructed of concrete/concrete blocks with a built-up membrane roof (coaltar), Building 29 sits on a slab-below-grade foundation. Location is shown in Attachment 3 (Section 9.52.6.3). The building is bounded by Building 98 to the west, a parking lot to the south, a roadway to the north and Building 45 across the roadway up a hill. Floor plans are presented as Attachment 4 (Section 9.52.6.4). The main floor contains a mechanical room, refrigeration storage unit, plastic test room, roll mill room, mixer room, solvent supply room, dry plastic process room and office support including toilets, locker, janitorial, storage, and office. The mezzanine supports the asbestos slurry kettle and the penthouse equipment, including two varnish kettles, a Malta mixer, acetone pumps, and the building air exhaust filter system. A lean-to on the northeast side of the building held two tank containers for contaminated acetone. A lean-to on the opposite side of the building provided shelter for containers of new acetone.

The building operation has been out-of-service since 1987; it is now undergoing Safe Shutdown. The building is serviced by HVAC systems providing central heat (steam), chilled water, a fire sprinkler system, potable water, and electric service of 480V (Mound Facility Physical Characterization, 12-1-93). Service water is distributed within the building and within the fire sprinkler system.

Building 29 was constructed in 1965 (MD-10391, *Asbestos Program Manual*, 9-14-95). The building was used for the same purpose since construction.

9.52.3 Summary of Findings

Building 29 is undergoing Safe Shutdown and is no longer occupied. All processes have been secured. Acetone lines, storage tanks, and pumps have been disconnected (acetone removed). Numerous pieces of equipment have been disconnected, their exteriors cleaned (asbestos wipe), wrapped in plastic, and labeled "asbestos-containing-materials" or "suspected-asbestos-containing-materials." Office furnishings have been tested for radioactivity and cleaned. Hand tools have also been tested, cleaned, and wrapped in plastic. Chemicals (lubricants, hydraulic fluid, etc.) have been removed from all but one item of installed equipment. There were two issues of environmental concern identified during the walk-through and during review of reference materials.

9.52.4 Observations

9.52.4.1 Air Emissions

The building has a central exhaust, with filtration. The air handling system processed air from rooms where potential fugitive asbestos dust and evaporating acetone were generated (mixers and press). Process production ceased in 1987 and EG&G MAT notified the RAPCA in 1992 that a permit application would not be submitted since the process operations had been terminated and there was no intention to reactivate. The exhaust system is not included in the air emissions database. There are no fumehoods. There are no fuel-burning units in the building. There is no evidence of fugitive dust or fugitive asbestos; however, the central exhaust system is presumed to contain asbestos. It is not scheduled for cleaning until final disposition of the building is determined by DOE.

9.52.4.1 Wastewater Emissions

The Mound Facility has three wastewater collection systems: a sanitary wastewater system; a storm water system; and a radioactively contaminated process wastewater system. Sanitary wastewater is treated at an onsite tertiary treatment plant and subsequently discharged by hard pipe to the Great Miami River. Storm water and any non-process wastewater, single pass cooling water, and softener backwash may be discharged directly to the Great Miami River, via the Miami-Erie Canal, or may be diverted to a 3.1-million-gallon holding pond for settling prior to discharge. Radioactively contaminated wastewater is treated in Building WD by physical-chemical treatment. If appropriate, wastewater may be discharged by hard pipe to the Great Miami River. If concentrations of radioactive contaminants cannot be reduced to acceptable levels, wastewater is solidified and shipped to the Nevada Test Site or Envirocare for disposal. All outfalls are permitted under an active NPDES permit. Routine monitoring activities are in place. Based on NPDES monitoring report data reviewed, it appears that the facility is in compliance with qualitative and quantitative conditions of the permit.

9.52.4.2.1 Sanitary

The building has sanitary services. According to a diagram of underground utility lines (Attachment 5—Section 9.52.6.5), the building is serviced by a sanitary line. Confirmation of drainage of sanitary waste into sanitary conveyance lines was not within the scope of this effort; therefore, dye tests or smoke tests were not conducted.

Sanitary effluent is conveyed to the onsite tertiary wastewater treatment facility, and subsequently discharged to the Great Miami River. There is no monitoring of building effluent. Based upon discussions with the former process operations personnel, effluent from Building 29 did not deviate from that expected by the sanitary treatment plant manager.

9.52.4.2.2 Storm Wastewater

The exterior of the building and all floor drains (except Rooms 5, 6, and 7) are serviced by storm drains. Exterior grates and drains were not tested to confirm that they connect to the storm drainage system. Inspection showed no sign of odors or scarring. There were signs of colored discharges (asbestos dye) which would indicate that materials other than storm water could have entered the storm drainage system when the processes were in operation.

9.52.4.2.3 Chemicals

A review of the procedures and requirements contained in MD-10431, Safe Shutdown Standards Operating Procedures, and the Safe Shutdown Process Managers' records indicate that once Phase II Activities (i.e., commencement of Safe Shutdown) begin, all chemicals within the building are inventoried. Chemicals contained in idle equipment are handled separately). Chemicals which can be reused at Mound or transferred to the City of Miamisburg, subject to age and condition, are identified and processed separately.

Subsequently, all the remaining chemicals are containerized, characterized, and transferred to Waste Management for disposition. A copy of the inventory, chemical profile of each container, and Waste Management's acceptance becomes a permanent part of the Mound Safe Shutdown Plan for the specific building. As chemicals are transferred to Waste Management, a central chemical database in the Program Manager's Office is updated monthly to reflect the disposition. All activities are conducted in accordance with MD-70523, 40 CFR 265, and OAC 3745.52. As hazardous waste generators, all Safe Shutdown Process Managers have received training in accordance with 40 CFR 265.16. There was evidence that chemicals entered the storm drains, but not into sanitary drains. It should be noted that the process equipment remained idle from 1987 until the Safe Shutdown process began in 1994.

During the visual inspection of Building 29 the appraisal team could not determine whether or not all chemicals have been removed from the idle equipment. The acetone storage tanks, lines, pumps, and mixers had been disconnected and are free of chemicals. A subsequent discussion with the process manager and a review of the Safe Shutdown records for the building indicated

that chemicals in all idle equipment have been removed, including the compressor noted to be leaking in Room 8 during the appraisal site visit.

9.52.4.3 Potable and Service Water

Potable water is supplied to the building. Backflow prevention devices are installed at all visible points of potential cross connection in the mechanical and janitorial rooms. The fountain which supplies drinking water has not been tested for lead. According to EPA protocol, annual sampling criteria do not require testing of the fountain. There is service water supplied to the building; it is distributed in the fire sprinkler system.

9.52.4.4 Chemical Storage and Hazardous Materials

As discussed in Section 9.52.4.2.3 of this report, chemicals, including those in idle equipment, were removed from the building. The building is equipped with appropriate fire extinguishers (charged). Each extinguisher is bar-coded. The inspection date database is maintained in the Fire Station (Building 98). There is an Emergency Evacuation Plan, and signs were posted.

There are no aboveground storage tanks in or around the building and no underground storage tanks are associated with this building. There are no separators, or catch basins, in or around the building. One concrete sump located in Room 6 provides containment for the plastic/asbestos mixer. It has no drain or overflow outlet. According to the process manager, the sump had been half full of heavy oil. The oil had been removed, tested, characterized and removed by Waste Management prior to the appraisal visit.

The building had been tested and contains asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). Because of the process conducted in Building 29, the air exhaust system, as well as most of the process equipment and equipment appurtenances, are presumed to contain friable asbestos.

There are no capacitors or transformers containing PCB's located in the building. The adjacent electrical substation (northeast) does contain PCB; it is properly labeled. The replacement transformer unit is positioned nearby. Verification of records indicated that the PCB from the transformer and the transformer core have been contracted for removal by a licensed vendor.

No research, development, or production activities using radioactive or energetic materials have occurred in the building (Mound Facility Physical Characterization, 12-1-93).

9.52.5 Solid, Hazardous, and Radioactive Waste

During the Safe Shutdown process, hazardous materials and/or mixed wastes are generated in the process of cleaning idle equipment, furnishings, and personal property; removing tanks, cylinders, and process piping; and cleaning sumps and pits; etc. A review of procedures and requirements contained in MD-10431, Safe Shutdown Standard Operating Procedures, and the Safe Shutdown Process Manager's records indicate that the wastes are containerized, characterized (including

testing for radionuclides), and then transferred to Waste Management for disposition. A copy of the inventory, chemical profile of each container, and Waste Management's acceptance become a permanent part of the Mound Safe Shutdown Plan for the specific building. All activities are conducted in accordance with MD-70523, 40 CFR 265, and OAC 3745.52. As hazardous waste generators, all Safe Shutdown Process Managers have received training in accordance with 40 CFR 265.16. There is no evidence that hazardous waste entered either the storm or sanitary systems.

Room 8 contains an installed air compressor and a small quantity of compressor oil is leaking onto the concrete floor. The oil, by visual inspection, has not entered the floor drain nor the storm water collection system. The compressor should be handled as idle equipment, along with other equipment in Building 29. According to the process manager, it was the last item to be cleaned. It was cleaned and the oil removed by Waste Management within 72 hours of the visual inspection.

In addition, idle equipment and equipment appurtenances are believed to contain asbestos materials. Exteriors of this equipment have been cleaned and small items wrapped, sealed and labeled accordingly. The NESHAPS, 40 CFR 61, 29 CFR 1910.1001, 29 CFR 1926.1101, and OSHA regulations become pertinent when cleanup efforts begin and continue in effect through disposal. In a discussion with the Safe Shutdown process manager, packaging of the equipment and equipment appurtenances which contain, or may contain asbestos, is the only identified, written planned action. A process (plan) to cleanup/dispose of the asbestos from the air exhaust system and equipment has not been identified, using MD-10391 as a guide.

9.52.4.6 Waste Minimization and Pollution Prevention

At Mound there is an active program to minimize waste streams in accordance with state and federal requirements and Executive Order 12856.

As part of the Safe Shutdown process, equipment and supplies were evaluated for reuse. They were handled in several ways: reused at Mound; sent to other DOE facilities; claimed by the City of Miamisburg; sold at auction; sold to recycle; or disposed.

9.52.5 Findings and Recommendations

Photographs were taken to document environmental appraisal activities. They are included as Attachment 6 (Section 9.52.6.6).

The environmental appraisal of Building 29 indicates that the following action items, in recommended priority, should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

29-1. RCRA regulations require that waste be removed from idled manufacturing process and waste producing equipment within 90 days (40 CFR 261.4). ("Idle" is defined as occurring either from the cessation of production or idled between production runs).

Equipment in Building 29 remained idle from 1987 until 1994-96. Excessive delays in processing idle equipment in other buildings should be reviewed and a plan of action identified to preclude further delays in noncompliance with 40 CFR 261.4.

29-2. As long as the equipment containing asbestos materials remains packaged and labeled, EG&G MAT is not in violation of any federal or state regulation. The NESHAPS, 40 CFR 61, and OSHA regulations become pertinent at that point in time where cleanup operations begin (protection of personnel) and disposal of waste occurs. Consideration should be given to developing a specific plan (characterizing equipment, identifying waste expected, decontamination procedures, identifying health and safety issues, and disposal methology) prior to implementing cleanup operations. Developing such a plan would occur in close coordination with Industrial Hygiene personnel, following MD-10391.

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 29 PLASTIC FORMULATION

Appraisers:

TEAM #4

Name	Discipline
MARK GILLIAT	ENGINEER
MARCIA VANNET	CHEMIST
MYRON SMITH	ENGINEER

Building Manager: Bob WARD (x-3821)

Process Manager: MARK TIBBS (x-4734)

Date: 27 FEBRUARY 1996

ENVIRONMENTAL APPRAISAL CHECKLIST

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Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

Clean Water Act (CWA) Screening Checklist

Question	Response	Comments
Does the outside drain spouting of the building discharge directly to a storm sewer/sanitary system?	(Y)/ N	If the answer to any of these questions is yes, proceed with the following checklist.
Are there sinks, toilets and floor drains in the building?	(Y)/ N	
Are chemicals being used in the building?	Y /(N)	
Is there a process which discharges to the storm or sanitary system?	(Y)/ N	

CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list? Are they properly contained?	Y / N Y / N	MOST CHEMICALS ON ATTACHED LIST REMOVED UNDER SAFE SHUTDOWN REMAINING ARE BEING USED BY SAFE SHUTDOWN
	Is the building in operation? What are the processes and where do they discharge to?	Y /(N) _____ _____	
	Do the floor drains, sinks & toilets appear to be draining properly?	(Y)/ N	
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	(Sanitary) (Storm)	
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	(Y)/ N _____ _____ Y / N Y / N	Room 6.
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	(Y)/ N (Y)/ N (Y)/ N	IN SECOND FLOOR & MECHANICAL Room 1 RED ASBESTOS DYE STAINS - NOT USED SINCE 1987. BECAUSE OF PROCESS ALMOST ANY ROOM WITH FLOOR DRAINS

9.52-11

Environmental Appraisal Checklist

Building Name: 29 Appraisers: TEAM # 4 Date: 2-27-96

9.55-12

Clean Air Act (CAA) Screening Checklist

Regulatory Guideline	Question	Response	Comments
	Are there any rooms that have air emissions sources that vent to the outside of the building, e.g., fumehoods, equipment? If so, note the rooms.	(Y) / N	AIR SAFETY EXHAUST SYSTEMS W/ FILTER SYSTEM ON ROOF. COLLECTS ASBESTOS & FRIABLE ASBESTOS - ROOMS 5,6,7, MEZZANINE & 2ND FLOOR
OAC 3745-35	Using the air emissions inventory reference for this building, are there any sources in the building that are not documented?	(Y) / N	IN 1992 AIR EMISSIONS PERMIT APPLICATION & C&C SUBMITTED NOT INCLUDING AIR SYSTEM BECAUSE PROCESS DISCONTINUED
	Is there evidence of fugitive dust emissions inside or outside of the building	Y / (N)	PROCESS SHUT DOWN - NEW EQUIPMENT FROM SUCH SHUTDOWN ACTIVITIES

CAA Checklist

Regulatory Guideline	Question	Response	Comments
	Are there existing air permits or applications applicable to the building?	Y / (N)	
OAC 3745-31,35	If yes, are the terms and conditions of the permit or the information included on the application (see air emissions database) being followed? Note any differences and update the air emissions database.	Y / N	
OAC 3745-31	Are there any sources that are not included in the air emissions database? If so, note the room, hood number, active or not, POC, and applicable air emission database information on Table B.	(Y) / N	INACTIVE ROOMS 5,6,7, MEZZANINE & 2ND FLOOR AIR COLLECTION SYSTEMS.
OAC 3745-31-03	Are there sources which are lab equipment of lab fumeheads used exclusively for chemical or physical analyses and bench scale lab equipment? These sources do not require a permit. However, the air emissions database should be updated.	Y / (N)	
	Has there been any release of air contaminants from this building?	Y / (N)	NOT SINCE 1987

...onmenta ppraisal Checklist

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

CAA Checklist

Comments: Note the number of sources/hoods per room, the number that are active, and the POC on the reference document.

TABLE A									
Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
			Y / N	Y / N					
			Y / N	Y / N					
			Y / N	Y / N					
			Y / N	Y / N					
			Y / N	Y / N					

Blank

Source:_____

9.52-13

Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

9.52-14

Hazardous Materials (HM) Screening Checklist

Question	Response	Comments
Are any chemicals used or stored in this building, now or in the past?	(Y)/ N	If the answer is yes, proceed with the following checklist.

HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.1200(b,f)	All containers of hazardous chemicals shall be labeled as to the identity of the chemical and the appropriate hazard warnings.	(Y)/ N	only one qt & one hand spray can
29 CFR 1910.1200(g)	MSDS shall be available to the employees in close proximity to the work area.	(Y)/ N	
29 CFR 1910.22, 1910.106, 1910.176	All places of employment, passageways, storerooms and service areas shall be kept clean and orderly and in a sanitary manner. Aisles shall be unobstructed. Drums and containers are not leaking and are tightly sealed.	(Y)/ N	
29 CFR 1910.106	Storage cabinets for flammable materials are constantly kept closed, are fire resistant and are labeled "FLAMMABLE - Keep Fire Away". Containers inside should be labeled and closed. No spills inside cabinet.	(Y)/ N	
29 CFR 1910.106(d)(7)	Incompatible chemicals are not stored together.	Y / (N)	
29 CFR 1910.106(d)(4)	Inside Flammable/combustible storage rooms must meet the following: 4 in. raised sill or trench that drains to a safe area, liquid tight wall/floor joints, self-closing doors, gravity or mechanical exhaust providing 6 room changes/hr., exhaust switch located outside room, at least one 3 ft. aisle; no cracks in secondary containment.	Y / N	N/A

Environmenta ppraisal Checklist

Building Name: 29 Appraisers: Team # 4 Date: 2-29-96

HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	(Y) / N	
29 CFR 1910.151	Eyewashes/showers shall be provided within the work area. Ensure unit is operational.	(Y) / N	
CGA P-1 3.3 & 3.3.10	All gas cylinders (full or empty) shall carry a legible label or marking identifying the contents.	Y / N	REMOVED
CGA P-1 3.5.3	Full and empty containers should be stored separately with the storage layout planned so that containers comprising of old stock can be removed first with a minimum handling of other containers.	Y / N	N/A
CGA P-1 3.5.8	All compressed gas containers in service or in storage shall be stored standing upright and the container shall be secured.	Y / N	NONE IN BLDG
CGA P-1 4.2.2	Oxygen cylinders shall be separated from flammable gas containers or combustible materials a minimum of 20 ft. or a noncombustible barrier 5 ft. high.	Y / N	N/A
29 CFR 1910.104(2)(10)	Oxygen stored as a liquid shall be on a noncombustible surface. Asphalt is considered combustible. Wood and long dry grass shall be cut back 15 ft. from the container.	Y / N	N/A
29 CFR 1910.104	Bulk oxygen storage shall be permanently placarded "OXYGEN - NO SMOKING - NO OPEN FLAMES".	Y / N	N/A
	Is there a sign posted in each work area regarding emergency egress and emergency response action?	(Y) / N	
	Is there an emergency response plan available?	(Y) / N	

9.52-15

9.52-16

Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

HM Checklist

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	(Y)/ N	
	Does it have proper containment?	(Y)/ N	Except for floor drains Rm 84 no floor
	Is there a liquid bulk transfer area?	(Y)/ N	Acetone outside (2 locations)
	Is there proper containment?	Y / (N)	No longer Required Process Chemicals Removed
	Is there an above ground storage tank? If so, complete Table B.	Y / (N)	

Above Ground Storage Tanks Inventory

TABLE B—Above Ground Storage Tanks Inventory

Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/ Contamination	If Empty, Flushed
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
		Blank		Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N

Source: _____

Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team # 4 Date: 2-27-96

Safe Drinking Water Act (SDWA) Screening Checklist

Does this facility have potable water?	(Y) / N	If yes, conduct the following survey.

SDWA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 95-02 (A)	Do actual or potential cross-connections exist between potable (light green) and service water (dark green)?	Y / (N)	
OAC 3745 95-04 (B)(C)	Are backflow prevention devices installed where cross connections (hoses connected to faucets, hot water tank vented directly to a drain) exist?	(Y) / N	
	Are sources of service water (janitorial and laboratory faucets, or outdoor spigots) posted as non-potable water sources?	(Y) / N	
	Does the facility contain any water coolers or fountains that are not lead free? Complete Table C.	Y / (N)	Removed

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
			Blank

Source: _____

9.52-17

Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team # 4 Date: 2-27-96

RCRA Screening Checklist

Does this facility generate waste or use chemicals?	(Y)/ N	If yes, conduct the following survey.

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 52-11	Has any material generated been characterized RCRA hazardous?	(Y)/ N	FORMERLY USED
	Was charactarization by analysis or by process knowledge?	(analysis) / (process)	
	Are lab results or documentation of process knowledge readily available?	Y / N	
	Note any uncharacterized material in comment section.		NONE
	Is it waste?	Y / N	
	If yes, proceed with next section.		
OAC 3745 52-11	Are any of the materials noted RCRA hazardous waste?	(Y)/ N	ACETONE (USED & Removed
	If no, note and stop here.		RECORDS INDICATE PROPER DISPOSAL THROUGH WM
	If yes, note the location of the management unit, and the method of management, and proceed with the appropriate section below.		ASBESTOS NOT RCRA

9.52-18

Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team # 4 Date: 2-27-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area? Is it treated as such?	(Y) / N Y / N	Former outside attached storage shed - used/contaminated acetone - sump in rm 8 - heavy oil - removed
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas? If no, proceed to the next section. If yes, answer the following.	Y / (N)	
	Are the containers marked with the words hazardous waste, or other words denoting the hazard?	Y / N	No longer applicable
	Are the containers in good condition?	Y / N	
	Are the waste compatible with the containers?	Y / N	
	Are containers managing ignitable hazardous waste stored at least 50 feet from the plant site boundary?	Blank Y / N	
	Are containers kept closed and locked except during filling?	Y / N	
	Are containers moved within 3 days of being filled?	Y / N	

9.52-19

Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745-52-11 (A)	If a Satellite accumulation area has been abandoned and/or if waste left in place, and the containers may be subject to the 90-day-storage exclusion. If this exclusion does not apply, go to the next section. If the containers have been in storage under this exclusion, answer the following:		IDLE EQUIPMENT REMAINED W/O CLEANING 1987 TO 1995 WORK COMPLETED IN FEB 96
	Are the containers in good condition?	(Y) / N	ONE USED OIL/CONTAMINATED HOSE Remain
	Are the waste compatible with the containers?	(Y) / N	
	Are the containers kept closed except during filling?	(Y) / N	
	Are the containers managed in such a way, that they are not ruptured, or leaks caused?	(Y) / N	
	Is the area inspected at least once weekly?	(Y) / N	
	Is the inspection recorded? Where is the log? Is it properly completed, dated, and signed?	(Y) / N Y / N	WITH BLDG PROCESS Mgr.
	Are containers managing ignitable hazardous waste stored at least 50 feet from the facility boundary?	Y / N	N/A
	Are incompatible wastes managed in such a way that they will not react with another incompatible waste?	Y / N	N/A
OAC 3745-52-34(B)	Has any of the waste (except in Building 23, Building 72 and the Burn Area) been managed in excess of 90-days?	Y / N	TOWN AS COLLECTED FM EQUIPMENT/SUMP
	If no go to next section.		
	If yes, note.		
	For Building 23, Building 72 & Burn Area use special checklist.		

* Removed w/n 72 hrs

Building Name: 2 9 Appraisers: Team #4 Date: 2-29-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	(Y) / N	From 1987 until SPCC shutdown started 1994 completed 2/29/96
	If the answer was no, then proceed with the following:	Y / N	
	Has the tank or piece of equipment had an integrity assessment?	Y / N	
	Is there a sump?	Y / N	
	Is it dry?	Y / N	
	Does the tank or equipment have secondary containment?	Y / N	Blank
	Does the tank or equipment have leak detection device(s)?	Y / N	
	Has spill control prevention been enacted?	Y / N	
	Has any hazardous waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y / N	
	If the answer was no, then proceed with the following:		
	Has the tank or piece of equipment had an integrity assessment?	Y / N	
	Does the tank or equipment have secondary containment?	Y / N	
	Does the tank or equipment have leak detection device(s)?	Y / N	
	Has spill control prevention been enacted?	Y / N	
	Is there a closure plan?	Y / N	
	If yes, then note.		
OAC 3745-67	Has any of the waste been managed in a surface impoundment? If yes, then note. Go to the next section.	Y / N	

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Environmental Appraisal Checklist

Building Name: 23 Appraisers: Team # 4 Date: 2-27-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745-68	Has any of the waste been managed in a Landfill? If yes, then note. Go to the next section.	Y / (N)	
OAC 3745-68	Has any of the waste been managed in an Incinerator (other than Burn area units)? If yes, then note. Go to the next section.	Y / N	Blank
OAC 3745-68	Has any of the waste been managed in a Thermal treatment Unit (other than Burn area units)? If yes, then note. Go to the next section	Y / N	
OAC 3745-69	Has any of the waste been managed in a Miscellaneous Treatment Unit (other than Burn area units)? If yes, then not. Go to the next section.	Y / N	
OAC 3745-56	Has any of the waste been managed in a Waste Pile? If yes, then note. Go to the next section.	Y / N	

General Comments:

Environmen. Appraisal Checklist

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

Asbestos Screening Checklist

Does this facility contain ACBM?	(Y)/ N	If yes, conduct the following survey.

Asbestos Checklist

Note: Routinely, the asbestos standard for ACBM in schools has been applied to facilities for purpose of cleanup. In addition to AEHERA, there are additional standards in the NESHAPS that may be of importance.

Regulatory Guideline	Question	Response	Comments
ADAPTED FROM TSCA ACBM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?	(Y)/ N	
	If no for this building or area note this conclusion in the comment section.		
	Is there any evidence of friable asbestos?	Y /(N)	HOWEVER, INSTALLED EQUIPMENT & EQUIPMENT APPURTANCES CONTAIN FRIABLE ASBESTOS
	Is the asbestos removal properly managed? (See questions listed below)	Y / N	If there is no asbestos removal, do not complete the following section.
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACBM during the removal.	(Y)/ N	KRAMIN PHYSICS INVOLVED
40 CFR 61.152(b) (1)	ACBM is treated with water in accordance with 40 CFR 152(b)?	(Y)/ N	ACCORDING TO PROCESS MGR NO WORK IN PROGRESS DURING VISIT.
40 CFR 61.154	Is friable asbestos adequately wetted during stripping? Or, has an adequate ventilation and collection system been installed?	(Y)/ N	"
40 CFR 61.152	Is wetting continued until the waste friable asbestos is collected for disposal?	(Y)/ N	"

9.52-23

9.52-24

Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

Toxic Substances and Control Act (TSCA) PCB's Screening Checklist

Does this facility potentially contain any PCB's or PCB contaminated equipment? TRANSFORMER SUBSTATION OUTSIDE	(Y) N	If yes, are transformers labeled (Blue or Yellow stickers)? If yes, conduct the following survey.

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ? If the answer is no, note . If the answer is yes, proceed with next section.	Y / N	NONE INSIDE BUILDING
	Based on an inspection, are any of the materials or equipment potentially PCB contaminated? If no, note and stop here. If yes, note the location of the management unit, and the method of management, and proceed.	(Y) / N	SUBSTATION
40 CFR 761.65 (c) (5)	Are PCB articles or containers stored in this building checked for leaks at least once every 30 days?	(Y) / N	BY ELECTRICAL MAINTENANCE
	If yes, are auditable records maintained.	(Y) / N	BLDG W
40 CFR.30 (a) (1) (ix)	Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?	(Y) / N	
	Are they visually inspected quarterly? If yes, are auditable records maintained?	(Y) / N	CONTRACT TO REPLACE. NEW SUBSTATION AT SITE

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.30 (a) 1,viii	Are all combustible materials (i.e., paints, solvents, plastics, paper, sawn wood, etc.) cleared from areas containing PCB transformers to a distance of five meters?	(Y) / N	
40 CFR 761.65 (b) (8)	Are all PCB articles and containers labeled with the date they were placed in storage?	Y / N	N/A
	Are labeled PCB articles and containers stored so that the labels can be referenced?	(Y) / N	
40 CFR 761.65 (a)	Are all PCB's and PCB contaminated items at concentrations above 50 PPM, that are stored for disposal, stored no longer than one year from the date they were placed in storage?	Y / N	NONE
40 CFR 761.62 (b) (1) (i)	Do all PCB storage areas have an adequate roof and walls to prevent rainwater from reaching the stored items?	Y / N	NONE
40 CFR 761.62 (b) (1) (iv)	Are storage are floors curbed and constructed of continuous smooth and impervious materials?	Y / N	NONE
40 CFR 761.62 (b) (1) (i)	Are the curbs at least 6 inches high?	Y / N	NONE
40 CFR 761.62 (b) (1) (iii)	No drains are allowed in storage areas. Are there drains in the storage areas?	Y / N	N/A

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Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team #7 Date: 2-27-96

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitators and PCB-containing electrical equipment are allowed to be stored outside of PCB storage areas, on pallets if stored outside, with containment for 10 percent of the volume of the equipment. Do all PCB's stored in this configuration conform with this requirement?	Y / N	N/A
40 CFR 761.45 and .65	Are all PCB storage areas marked with a large PCB mark as described in 40 CFR 761.45 (a)?	Y / N	TRANSFORMER LABELED
40 CFR 761.65 (c) (5)	Have all leaking PCB articles and containers been transferred to non-leaking containers?	Y / N	N/A
40 CFR 761.65 (c) (6)	Do all PCB storage containers for the storage of liquid and non-liquid PCB's comply with DOT shipping container specifications?	Y / N	N/A

GENERAL COMMENTS:

Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team 4 Date: 2-27-96

Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste ?	Y (N)	If yes, conduct the following survey.

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ? If the answer is no, note. If the answer is yes, proceed with next section.	Y / N	Blank
DOE Order 5820.2A Chapter III.	Are any of the materials noted by inspection LLW? If no, The audit would stop here, because there are no LLW. If yes, note the location of the management unit, and the method of management, and proceed with the section below.	Y / N	
DOE Order 5820.2A Chapter III, 3.a.	Have the storage configurations in use in this area been taken into account for keeping external exposures to the general public below 25 mrem/yr?	Y / N	
	Is the waste stored in a configuration that protects ground-water resources?	Y / N	
DOE Order 5820.2A Chapter III, 3.b.	Has monitoring been conducted in this area in accordance with DOE Order 5820.2A in order to evaluate the area against the performance standard?	Y / N	
	Based on field data, does the monitoring conducted in this area conform to the performance standard?	Y / N	

Furniture, Bldg & Equipment tested prior to asbestos cleaning.

9.52-27

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Environmental Appraisal Checklist

Building Name: 23 Appraisers: Team #4 Date: 2-27-96

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A Chapter III, 3.d.	Based on field data, is the characterization of the materials in this area sufficient to assure proper segregation to assure proper segregation, treatment, storage, and disposal?	Y / N	
	Based on field data does the characterization as documented at the time of generation of the waste ensure that the actual physical and chemical characteristics, and major radionuclide content of this material are recorded and known at all stages of the waste management process?	Y / N	Blank
	Do characterization data include the following:		
	Physical and chemical characteristics of the waste?	Y / N	
	Volume of the waste (including solidification and absorbent material)?	Y / N	
	Weight of the waste (including solidification and absorbent material)?	Y / N	
	Major radionuclides and their concentrations?	Y / N	
	Packaging date, package weight, external volume?	Y / N	
	How were the concentration of radionuclides determined? Direct methods?	_____	
	How were the concentrations of radionuclides determined? Indirect methods?	_____	
DOE Order 5820.2A Chapter III, 3.h	Is the storage configuration in long term storage sufficient to meet the performance standard?	Y / N	
	Are records maintained at the facility enabling this waste to be traced from its origin?	Y / N	

Building Name: 29 Appraisers: Team # 4 Date: 2-27-96

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	Can any waste generated in, or from this building be characterized either through process knowledge or by analyses to determine if it is TRU waste? If no, note and stop. If yes, proceed with the next section.	Y / N	Blank
	Are any of the materials noted as being TRU waste during an inspection? If no, note and stop. If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.	Y / N	
DOE Order 5820.2A, Chapter II, 3.a	Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste? (Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)	Y / N	
	Did the determination of TRU radionuclide concentration include the mass of the container, including shielding? These should be included in calculating the specific activity of the waste.	Y / N	

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9.52-30

Environmental Appraisal Checklist

Building Name: 28 Appraisers: Team #4 Date: 2-27-96

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A, Chapter II, 3.b	Has the TRU waste been assayed or otherwise evaluated to determine its radioactive content prior to storage?	Y / N	Blank
	Has the TRU waste been characterized or otherwise evaluated to determine if hazardous waste is present?	Y / N	
	Has classified TRU waste been treated to destroy the classified characteristics?	Y / N	
DOE Order 5820.2A, Chapter II 3.d	Has all newly generated TRU waste been packaged in non-combustible packaging that meets DOT requirements?	Y / N	
	Have all Type A TRU waste packages been equipped with a method to prevent pressure buildup?	Y / N	
	Have all TRU packages been marked, labeled and sealed in accordance with 40 CFR 261 Subpart C and 49 CFR 172 Subparts D, E and 49 CFR 173 Subpart I?	Y / N	

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A, Chapter II 3.e	Has the TRU waste been segregated in manner that will not permit commingling of TRU waste with LLW or high-level waste?	Y / N	
	Has the TRU waste been protected from unauthorized access?	Y / N	Blank
	Has the TRU waste been monitored periodically to ensure that it is not releasing its radioactive and/or hazardous constituents?	Y / N	
	Has this TRU waste storage area been designed, constructed, maintained, and operated to minimize the possibility of fire, explosion, or accidental release of its radioactive and/or hazardous constituents?	Y / N	
	Does the facility have a contingency plan designed to minimize the adverse impacts of fire, explosion, or accidental release of its radioactive and/or hazardous constituents?	Y / N	

GENERAL COMMENTS:

9.52-31

9.52-32

Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

Waste Minimization/Pollution Prevention Activities Screening Checklist

Does this facility generate waste or use chemicals?	Y / N	If yes, conduct the following survey.

Waste Minimiaztion/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.). If yes, list candidate areas in the comment section.	Y / N	SAFE SHUTDOWN WASTE MIN PROCEDURES IN PLACE.
	Are there solvent wastes?	Y / N	
	Is vehicle maintenance performed?	Y / N	
	Are oils used ?	Y / N	
	Are these corrosive wastes?	Y / N	Blank
	Are there sludges?	Y / N	
	Are there halogenated organic (nonsolvent) wastes?	Y / N	
	Are metals recovered from wastewater?	Y / N	
	Is waste sludge generated?	Y / N	
	Are any waste minimization practices used that reduce the generation of sludge?	Y / N	
	Ion exchange process?	Y / N	
	Lead in gasoline lowered to reduce tank sludge toxicity?	Y / N	
	Storage tank agitators installed?	Y / N	
	Corrosive resistant materials used?	Y / N	
	Prevention of crude oil oxidation ?	Y / N	
	Drying?	Y / N	

Environment... Appraisal Checklist

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
HALOGENATED ORGANIC (NONSOLVENT) WASTES			
	Are halogenated organic wastes used as fuel in cement kilns?	Y / N	N/A
	Are baghouse filters used to collect pesticides and pesticide intermediates?	Y / N	N/A
	Are solid wastes generated from the collection of baghouse dust?	Y / N	AIR FILTERS REMOVED
	Wet instead of dry grinding used?	(Y) / N	ASBESTOS REMOVAL
	The output spray dried?	Y / N	
	Has baghouse emptying and recycling of baghouse fines been scheduled?	Y / N	N/A
	Have operations been evaluated to improve procedures such as handling, storage and spill prevention for increased efficiency?	Y / N	N/A
METAL WASTES			
	Are any technologies for the recovering of metals from waste rinsewater used?	Y / N	Blank
	Evaporation of waste rinsewater?	Y / N	
	Reverse osmosis?	Y / N	
	Ion exchange?	Y / N	
	Electrolysis?	Y / N	
	Agglomeration?	Y / N	
CORROSIVE WASTES			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y / N	

9.52-33

9.52-34

Environmental Appraisal Checklist

Building Name: 29 Appraisers: Team # 4 Date: 2-27-96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are ion exchange resins used to remove heavy metals and cyanides from acid and base solutions?	Y / N	
	Is crystallization used to remove corrosives from solution by cooling?	Y / N	
	Is the process of evaporation of liquid wastes by heating used to leave behind a more concentrated solution?	Y / N	
CYANIDE AND REACTIVE WASTES			Blank
	Has non-cyanide or low concentration of cyanide process replaced zinc cyanide bath ?	Y / N	
	Are any of these processes used to recycle cyanide wastes?	Y / N	
	Refrigeration/crystallization?	Y / N	
	Evaporation?	Y / N	
	Ion exchange?	Y / N	
	Membrane separation which includes reverse osmosis or electrodialysis?	Y / N	
VEHICLE MAINTENANCE			
	How are auto parts cleaned?	Y / N	
	Solvent sink?	Y / N	
	Solvent dunk bucket?	Y / N	
	Solvent dip tank?	Y / N	
	Are parts cleaning solvents used for anything else besides cleaning parts?	Y / N	
	Are spills reduced by locating sinks or dunk buckets near auto service bays?	Y / N	

Building Name: 29 Appraisers: Team #4 Date: 2-27-96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are cleaned parts drained on the sink to minimize solvent spills?	Y / N	Blank
	Are drip tanks used to capture losses?	Y / N	
	Is a solvent sink used for mineral solvents rather than a dunk bucket or dip tank?	Y / N	
	Does a waste hauler collect solvent waste for recycling or treatment?	Y / N	
OILS			
	What kind of oils are used?		
	Hydraulic oil?	(Y) / N	Safe Shutdown collection
	Transformer oil?	Y / (N)	
	Metal working fluids?	Y / (N)	
	Spent lubricating oils?	(Y) / N	Safe Shutdown collectors
	Can the process be modified or changed to use water-based fluids?	Y / N	
	Are these good housekeeping and operation practices used to minimize oil waste production?		
	Use oils not contaminated with other liquids?	Y / (N)	
	Oil spills prevented?	(Y) / N	and compressor leaks, RA 8 *
	Drip pans installed?	Y / N	
	Oil soaked rags laundered?	Y / N	
	Rags and absorbants used to their limit?	Y / N	

* Equipment cleaned within 72 hrs of visit

9.52-35

Building Name: 23 Appraisers: Team # 4 Date: 2-27-96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are these treatment techniques used to promote separation of oil/water wastes?		Blank
	Reclaiming process to remove water and solvents by heat?	Y / N	
	Gravity setting?	Y / N	
	Screening?	Y / N	
	Centrifugation?	Y / N	
	Filtration?	Y / N	
SOLVENT WASTES			
	Has there been an attempt to reduce volume or toxicity by:		
	Eliminating solvents?	Y / N	
	Reducing the use of solvents?	Y / N	Blank
	Reducing the loss of solvents?	Y / N	
	Increasing recyclability?	Y / N	
	Are solvents segregated?	Y / N	
	Are waste solvents free from water and garbage?	Y / N	
	Are recycled solvent containers labeled as such?	Y / N	
	Are containers kept closed?	Y / N	
	Free and sheltered from the elements?	Y / N	
	Are solvent tanks kept as free from contaminations as possible so that the waste can be recycled?	Y / N	
	Is a method used to minimize the use of new materials such as a countercurrent process?	Y / N	

9.52-36

Environmental Appraisal Checklist

Building Name: 29 Appraisers: TEAM #4 Date: 2-27-96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	If there is a recycling program, what technique is used?	Y / N	
	Distillation?	Y / N	
	Solids removal?	Y / N	
	Dispersion breaking?	Y / N	Blank
	Dissolved and emulsified organics recovery?	Y / N	
	Are any of these housekeeping procedures used to minimize the production of solvent wastes?		
	Separators cleaned and checked?	Y / N	
	Parts not allowed to enter the degreaser while wet?	Y / N	
	Sludge from the bottom of the tank not allowed to accumulate?	Y / N	
	Lids kept on tanks?	Y / N	
	Freeboard space on tanks increased?	Y / N	
	Are better operating practices used to reduce waste?	Y / N	
	How long is solvent waste stored and where?	_____ _____	

9.52-37

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Building Manager's Questionnaire

Building Name: 29 Building Manager: R.L. Ward Phone: 3821 Date: 12-07-95
Alternate: K. Koehler Phone: 4886

1. What are the access requirements(training, clearance etc.)?

NONE

2. What protective equipment is required to enter the building?

NONE

3. Are there any restricted areas? Yes (No)
Where are they?

4. Provide a physical description of the building.

Building is one-story of concrete block construction with a BUM roof (coal tar and metal). Total area is 6,601 ft². Some equipment in the building is contaminated with asbestos. HVAC systems are of central steam and chilled water. MEZZANINE WITH STEEL DECK EQUIPMENT INCLUDES ACETONE pumps.

Source: Mound Facility Physical Characterization, 12-1-93

5. Provide a drawing of the building.

Attached

6. What is the current building use?

Shut down.

Source: Mound Buildings, 5-9-95

7. What is the history of building use other than that described in #6?

Used as a plastics formulation and manufacturing facility.

Source: Mound Buildings, 5-9-95

9.52-41

Building Manager's Questionnaire

Building Name: 29 Building Manager: R A Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

8. What are ongoing operations or processes? What are the raw materials and waste streams from each process? Who is the best contact for each process?

Process(es) Housed: Blending of plastic powders

How Wastes Are Generated:

In this building DAP powder is blended with a fiber. In one current process DAP is blended with fiberglass. In another it is blended with Orlon. In the past, it has been blended with asbestos. (Asbestos is being phased out.) Acetone is the medium in which the fiber and powder are mixed. The mixture is dried by allowing the acetone to evaporate. Drying is facilitated by squeezing acetone out of the mixture using rollers. Acetone that is squeezed out also evaporates.

After a "batch" of powder/fiber mixture is processed, the equipment is cleaned with acetone. Acetone used in cleaning, along with any fibers that might be suspended in it, is put in a waste drum for pickup by Waste Management.

Occasionally some DAP mixture cannot be used and is packaged for pickup by Waste Management.

When lubricating oil from the equipment is changed, it is left for Waste Management.

Contact:
Phone #:

Source: Characterization of Mound's Hazardous, Radioactive, and Mixed Wastes, (8-15-90).

9.52-42

Building Manager's Questionnaire

Building Name: 29 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

9. In the last six months, have any modifications been made to the building or to processes in the building? (Yes) No

EQUIPMENT REMOVAL OR DISCONNECTED

10. Does the building have air emission sources? No

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
			Y / N					
			Y / N					
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

SAFETY Air collection SYSTEM WITH FILTERS. ORIGINALLY USED TO COLLECT ASBESTOS PARTICULATES & ACETONE FUMES.

9.52-43

Building Manager's Questionnaire

Building Name: 29 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

11. Describe air pollution control equipment used to reduce emissions for each source. None Listed

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

12. For existing permits are emissions monitored? At what frequency? Where are the records maintained? None Listed

Process Source	Permit	Log	Permit Conditions & Frequncy of Monitoring
		Y / N	
		Y / N	
		Y / N	
		Y / N	
		Y / N	

Source: Air Permits 2/4/95

13. Does the building have domestic water service? (Yes) No
Is there bottled water? Yes (No)

14. Does the building discharge to the storm sewer? (Yes) No
Where?

15. Does the building discharge to the sanitary sewer? (Yes) No
Where?

16. Has an asbestos survey been conducted? Yes
What are the results? Yes

Source: Technical Manual MD-10391, Issue 3 Asbestos Program Manual 9/6/95

9.52-44

Building Manager's Questionnaire

Building Name: 29 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

17. Does the building contain transformers or capacitors? YES
Transformer, Inerteen, SN:YAR-95581:In Service

Source: PCB ANNUAL DOCUMENT LOG/

18. Has the building been identified as containing PCBs? YES

Source: PCB ANNUAL DOCUMENT LOG

19. What chemicals are used or stored inside or outside of the building? Include compressed gasses not in large tanks.

Chemical Name	State	Amount (MAX)
NONE		

Source: Chemical Inventory 1994

SUBSTATION DOES CONTAIN PCB LABELED. REPLACEMENT AT SITE

9.52-45

Building Manager's Questionnaire

Building Name: 29 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

20. Has there been a reported spill, leak, or other release of any chemical? Yes (No)
What, how much, and what clean-up measures were followed?

Chemical	Amount	Clean-up Measures

Source: _____

21. Where do waste chemicals go?

CHEMICALS REMOVED

22. What janitorial supplies are stored inside or outside of the building?

SHUT DOWN

23. Where do excess janitorial supplies go?

Source: _____

24. Are pesticides or herbicides stored or used in or around the building? Yes (No)

Chemical	Amount	Chemical	Amount

Source: _____

9.52-46

Building Manager's Questionnaire

Building Name: 29 Building Manager: RA Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

25. Does the building contain active or inactive above ground storage tanks? Yes No
For each tank, list the content, quantity, last inspection, registration number.

NONE

26. Is there a sump or pit or underground tank in or around the building?
Yes No Unknown
Is it double-walled? What does it contain? How many days per year is it filled?
Is there an emergency overflow tank? Have there been previous overflows?

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
Y / N			Y / N	Y / N

Source: _____

27. Does the building generate, store, or dispose of hazardous waste? Yes No SHUTDOWN

Materials	Amount
100ZZ	38.0
Acetone	0.2
Acetone Waste	115.0
Acetone Waste	382.0
Acetone Waste	383.0
Acetone Waste	382.0
Acetone Waste	312.0
Acetone Waste	385.0
Acetone Waste	280.0
Asbestos Waste	90.6
Asbestos Waste, Debris (208 Bags)	3060.0
Asbestos, Dap Fiberglass	100.0
Asbestos, Dap Fiberglass	200.0
ASP	4.1
Bldg 29 Pit Sample, 94-997	2.0
Bontone Brown	50.0
Butyl (T) Peroxy Benzoate	9.9
Butyl (T) Phosphonate	0.1
Calcium Carbonate	5.5
Calcium Metasilicate	26.0
Calcium Stearate	18.8
Celogen	5.0
Citaton Red	17.0
DAP Fiberglass	253.0
DAP Fiberglass	362.0
Dapon 35	0.1
Diallyl Phthallate	7.3
Dianelle Orange	25.0
Dispal	2.8
Epoxylite 8822 Part A	6.4

KEN
N
RATION
DG
UTDOWN

9.52-47

Building Manager's Questionnaire

Building Name: 29 Building Manager: R.L. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

Materials	Amount
Epoxylite 8822 Part B	2.4
Flux	1.0
Gasoil	0.5
Green Dye	8.5
Hydroquinone	1.7
III Solution	4.5
Kermid	10.0
Lexan	20.0
Lexan	17.0
Lithium Carbonate	51.7
Low Odor 410	33.5
Lucite	19.0
Lucite	53.0
Mercury	14.7
Mercury	0.1
NI-410-A	5.6
NI-410-B	6.5
No Drip	4.0
Oil Waste	191.7
Oil Waste	450.5
Orlon Waste Shavings	110.3
Orlon Waste Shavings	105.7
Orlon Waste Shavings	106.2
Orlon Waste Shavings	106.2
Orlon Waste Shavings	110.7
Orlon Waste Shavings	107.0
Orlon Waste Shavings	110.6
Orlon Waste Shavings	69.6
Orlon Waste Shavings	106.2
Orlon Waste Shavings	105.7
Orlon Waste Shavings	105.5
Orlon Waste Shavings	106.4
Orlon Waste Shavings	106.2
Orlon Waste Shavings	105.4
Orlon Waste Shavings	105.9
Orlon Waste Shavings	110.9
Orlon Waste Shavings	104.5
Orlon Waste Shavings	106.0
Orlon Waste Shavings	111.2
Orlon Waste Shavings	104.4
Orlon Waste Shavings	110.9
Orlon Waste Shavings	110.9
Orlon Waste Shavings	105.7
Orlon, Fiberglass, Graphite, Carbon	256.0
Peek	163.0
Peek	55.0
Plexiglass	50.0
Poly Acrylonitrile	6.4
Polyether Sulfone	55.0
Polyether Sulfone	6.6

Building Manager's Questionnaire

Building Name: 29 Building Manager: R.L. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

28. Does the building have abandoned process equipment such as tanks, piping, containers, etc.? Yes No

29. Is waste material stored in or around the building for more than 90 days?
Yes No

30. Has the building been identified as a 90 day waste accumulation area?
Yes No

31. Has the building been identified as a satellite accumulation area?
Yes No

32. Is mixed waste generated, stored, or disposed of from the building? Yes No
Where are logs found?

Process	Waste	Stored	Disposed	Logs
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N

Source: _____

Building Manager's Questionnaire

Building Name: 29 Building Manager: R.L. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

33. Is TRU radioactive waste generated, stored, or disposed of from the building?
Yes No
Where are logs found?

Process	Waste	Stored	Disposed	Logs
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N

Source: _____

9.52-50

Building Manager's Questionnaire

Building Name: 29 Building Manager: R.L. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

34. Is low-level radioactive waste generated, stored, or disposed of from the building? Yes (No)
Where are logs found?

Process	Waste	Stored	Disposed	Logs
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N

Source: _____

35. Identify all administrative orders, temporary or permanent injunctions, civil administrative penalties, or criminal activities issued against the building.

9.52-51

Building Manager's Questionnaire

Building Name: 29 Building Manager: R.L. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

36. Is there a waste minimization program in the building? Yes (No)
Discuss your ideas about how to minimize waste.

37. Has a pollution prevention program been developed for the building? Yes (No)

Appendix G

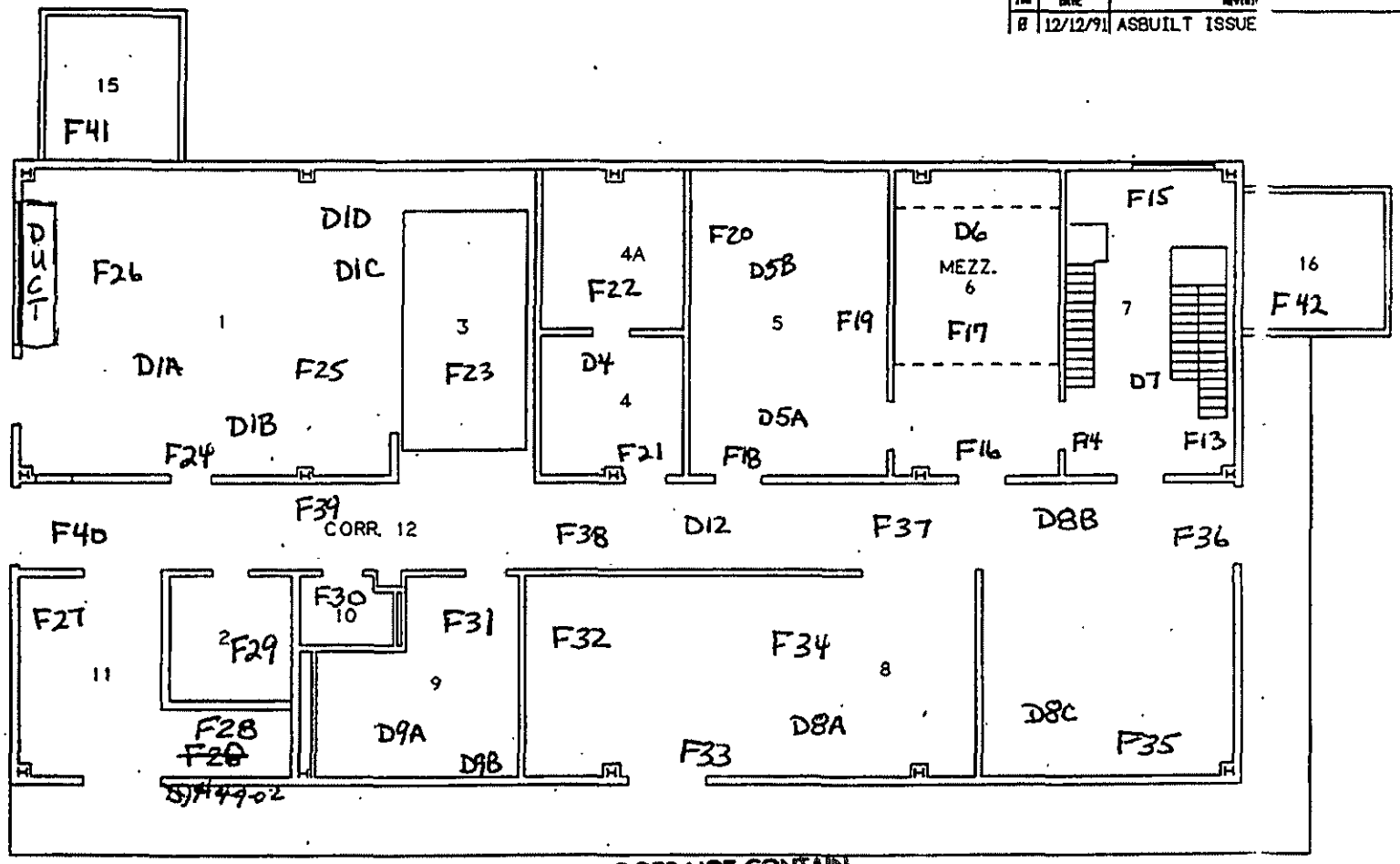
Radiological Information

Building 29 – RSDS Results

RSDS #	Building Section	Sample Location	All Samples Meet Surface Release Criteria
02-TF-0098	Room 6	Equipment, floors and wall	Yes
02-TF-0187	All areas of building	Asbestos piping and ventilation ducts	Yes
02-TF-0565	All areas of building	Floors and drains	Yes

All radiological surveys of Building 29 are below surface release criteria; there were no elevated readings. Survey areas included all areas of the building, as shown on the attached sketch for 02-TF-0565. During and after demolition, all rolloffs and debris piles will be radiologically surveyed to determine disposition of demolition debris. Disposition will be per the direction of Waste Management.

ISS	DATE	REVISION	BY	CHKR	CHR	APPD	APVD	#
B	12/12/91	ASBUILT ISSUE	DCW				DVD	



NOTE: F = FLOOR
D = DRAIN

DOES NOT CONTAIN
UNCLASSIFIED CONTROLLED
NUCLEAR INFORMATION

Reviewing Official: J. A. NESHEIM
EMCBC Classifier Name Office
Date: 08-26-08

02-TF-0565
Page

NOT FOR PUBLIC DISSEMINATION
MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.

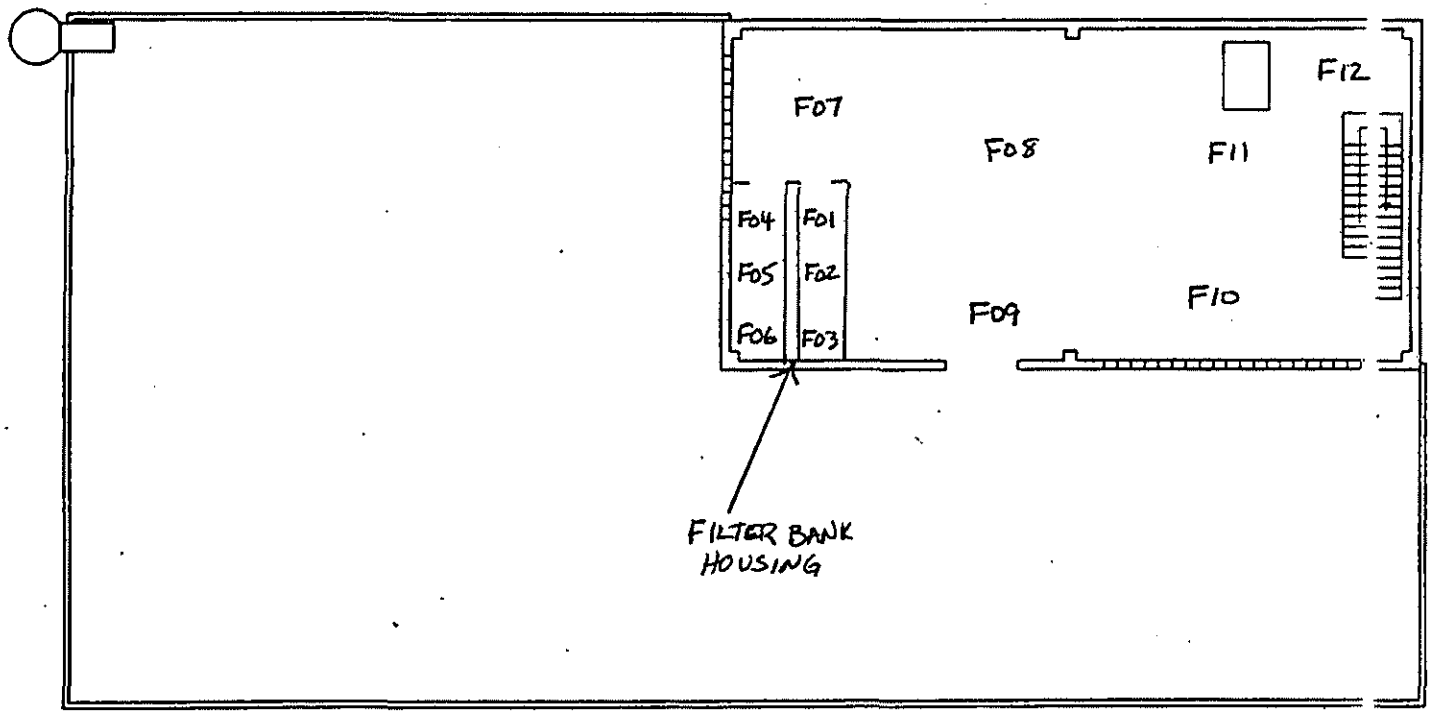
[redacted]

0 3' 6' 10' 20'

BLDG #29
FIRST FLOOR
BLDG CODE:3029

TITLE	BLDG #29 FLOOR PLANS		(U) TITLE CLASSIFICATION
SIZE C	DRAWING NUMBER FSC911241	JOB NUMBER 12335	
DWG TYPE SFP	BLDG #29	CODE 14065	SCALE AS NOTED	SHEET 1 OF 2
STATUS MO-REL-1	7/12/91	ORIGIN MO-BR3-V3.0	

SAFETY COMMITTEE REVIEWED: NONE TRUEDOC TEDOC DVDOC
TECH. REP. DATE
ENG. REP.
VALIDOC
TEDOC
DVDOC



NOTE: F = FLOOR

0 3' 6' 10' 20'

N

20/(c)/n
ORIN

BLDG #29
PENTHOUSE
BLDG CODE:3029

DOES NOT CONTAIN
UNCLASSIFIED CONTROLLED
NUCLEAR INFORMATION

Reviewing Official: J. A. NESHEIM
EMCBC Classifn Officer Name
Date: 08-26-08

02-TF-0565
A94

~~NOT FOR PUBLIC DISSEMINATION~~
~~MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.~~

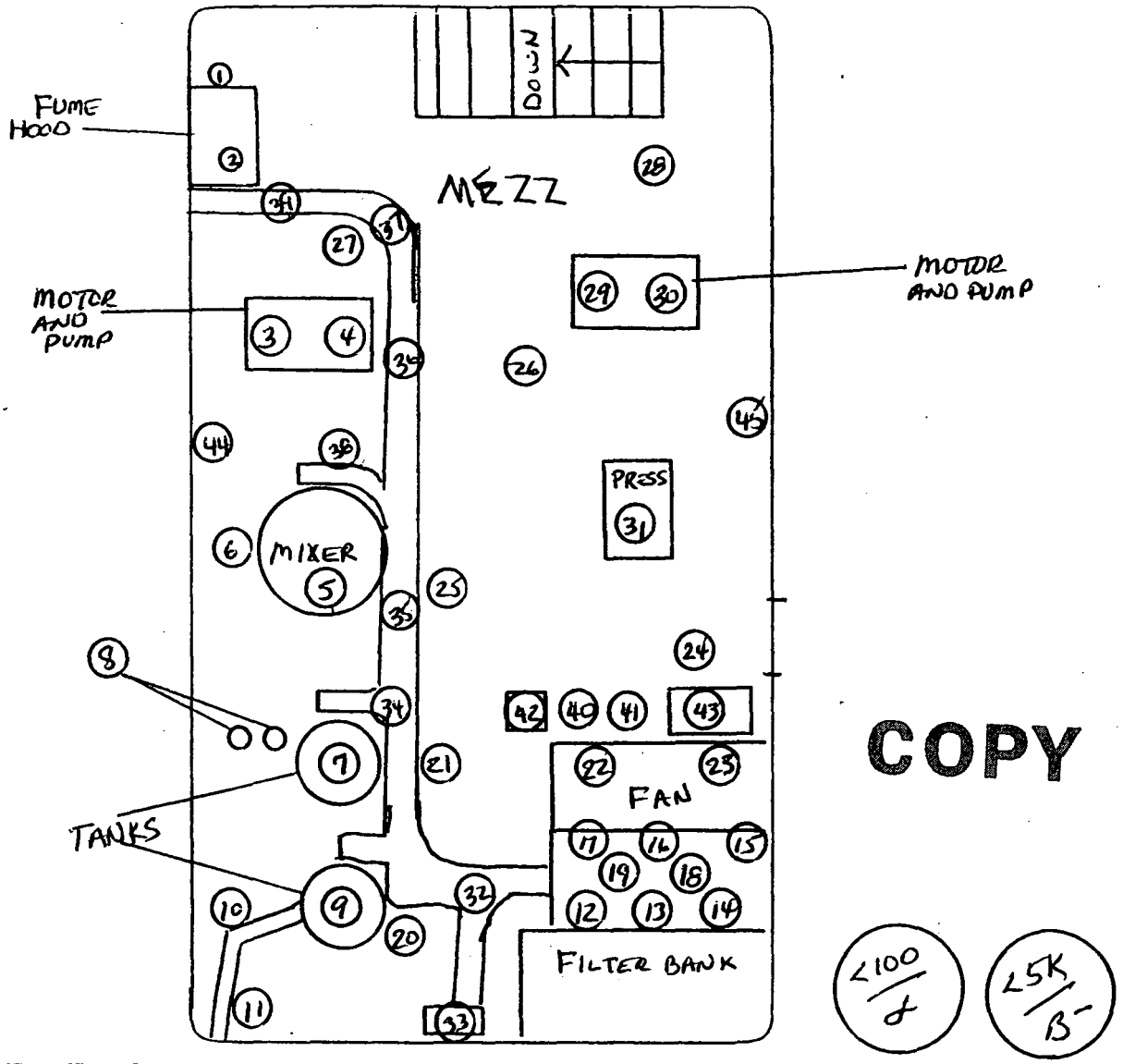
DRAWING NUMBER	FSC911241
JOB NUMBER	12335
DRAWING CLASSIFICATION	UCNI
SIZE C	CODE 14865
SCALE AS NOTED	
SHEET 2	
STATUS MD-REL-12/12/91	

1 of ~~10~~ 11

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) BLDG 29 - ROOM 6 - MEZZ	SURVEY NO. 02-TF-0098 (DJH 2-12-02)
PURPOSE: CHARACTERIZATION	RWP NO. N/A
	DATE: 1-21-02
	TIME: 1530

MAP/DRAWING



LEGEND:
= mrem/hr (γ) whole body
#E = mrem/hr (β+η+γ) extremity on contact
△# = mrem/hr neutron
[#] = air sample number
(#) = swipe number
(#/α) or/β = direct cont. measurement in dpm/100cm²
AND LARGE AREA WIPES

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
ELECTRA	5439/5298	12-10-02
	N/A	

[redacted]

HP #	Date:
6178	1-31-02
5268	1/31/02
7707	02/13/02

ML-9620 (2-98)

P2

2 of 11

Survey No. 02-TF-0098

Page ____ of ____

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments
1	SEE	ATTACHED		FUME HOOD 2/5
2				FUME HOOD 1/5
3				MOTOR
4				PUMP
5				MIXER
6				MIXER PIPING
7				TANK
8				FILTERS
9				TANK
10-11				PIPING
12-14				FILTERS
15-17				BLADES
18-19				FLOOR
20-21				FLOOR
22-23				FAN HOUSING
24-28				FLOOR
29				MOTOR
30				PUMP
31				PRESS
32-39				VENT. DUCT
40				FILTER DRUM
41				VACUUM
42				TABLE
43				LIFT
44-45				WALLS
			A	
		N		

Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments
		N	A	

COMMENTS: N/A

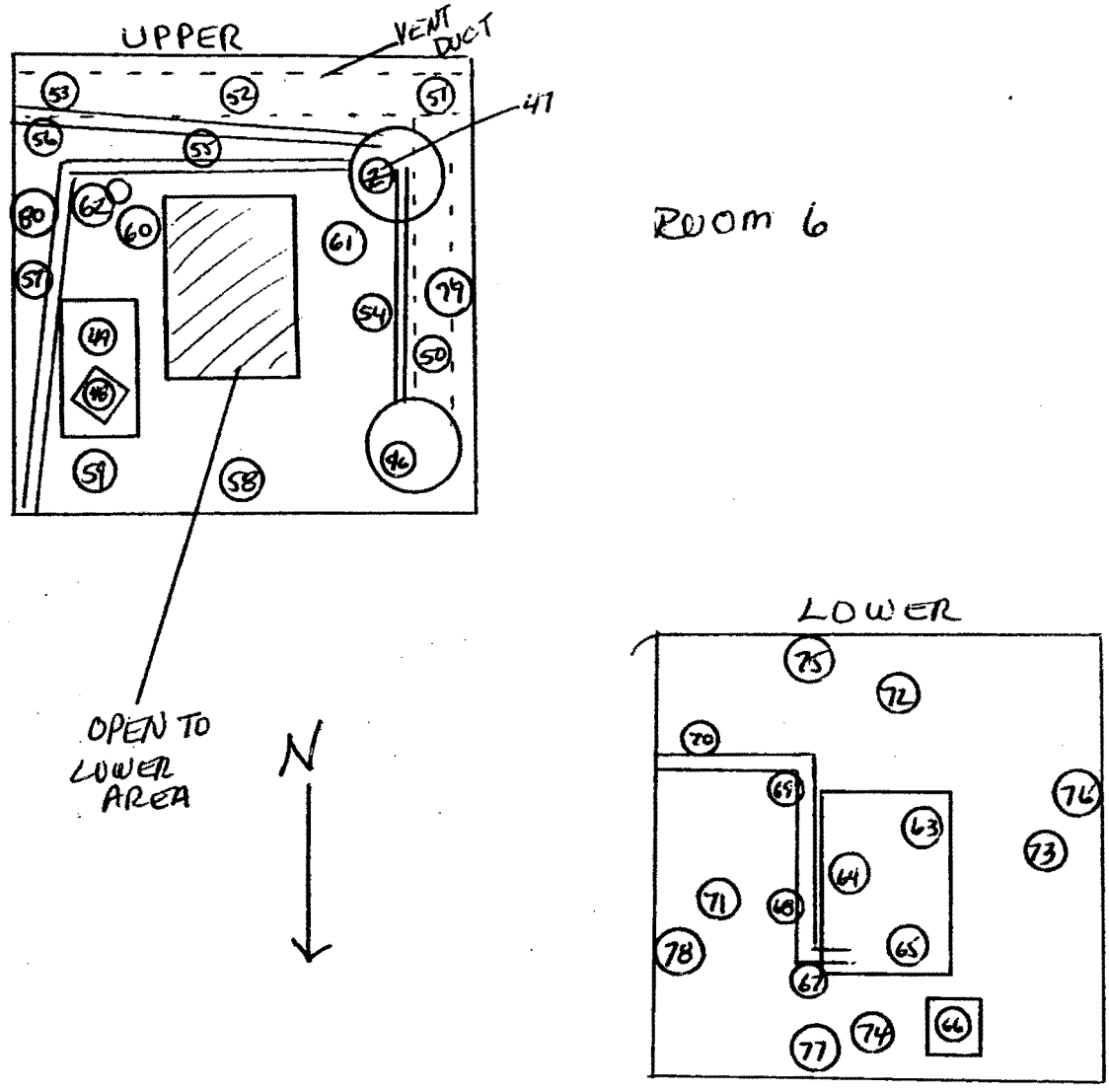
NOTES:
1. See MD-80036 10002 for calculations of WB, extremity and skin dose rates.
2. To request RO Count Room analysis for β/γ, alpha or tritium, leave column blank. Mark column N/A if not needed. If count room printout of results are attached, write "see attached" in column.
3. Annotate special sample type (e.g., soil, water), special identifiers or otherwise in Comments. If not needed, mark N/A.

ML-9620A (4-98)

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) BLDG 29 - Room 6 - MEZZ	SURVEY NO. 02-TF-0098
PURPOSE: CHARACTERIZATION	RWP NO. N/A
	DATE: 1-21-02
	TIME: 1530

MAP/DRAWING



LEGEND: # = mrem/hr (γ) whole body
#E = mrem/hr (β+η+γ) extremity on contact
△# = mrem/hr neutron
□# = air sample number
(#) = swipe number
(#/α) or/β = direct cont. measurement in dpm/100cm²

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
	SEE PAGE 1	

Completed by: (Signature)	HP #	Date:
Completed by: (Print Name)		
Counted by: (Signature) SEE PAGE 1	HP #	Date:
Counted by: (Print Name)		
Reviewed/Approved by: (Signature)	HP #	Date:
Reviewed/Approved by: (Print Name)		

ML-9620 (2-98)

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Survey No. 02-TF-0098

Page ____ of ____

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments
~~1-2~~ 46-47 SEE ATTACHED				TANK
48				MOTOR
49				PUMP
50-53				VENT DUCT
54-57				PIPING
58-61				FLOOR
62				HOPPER
63-65				TANK
66				TABLE
67-70				PIPING
71-74				FLOOR
75-80				WALLS
		N	A	

Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments
		N	A	

COMMENTS: N/A

NOTES:

1. See MD-80036 10002 for calculations of WB, extremity and skin dose rates.
2. To request RO Count Room analysis for β/γ, alpha or tritium, leave column blank. Mark column N/A if not needed. If count room printout of results are attached, write "see attached" in column.
3. Annotate special sample type (e.g., soil, water), special identifiers or otherwise in Comments. If not needed, mark N/A.

ML-9620A (4-98)

Alpha/Beta Analysis

Batch ID: 02-TF-0098 HARVEY(80) BSB

Batch File: Smear Unit 1 - 200201211605
Group: C
Device: Unit 1
Geometry: Swipe/Smear
Serial Number: 64937

Acquisition Date: 1/21/2002
Count Time (min): 1.5
Recalibration Date: 5/22/2003

Sample ID	Carrier	Alpha (dpm)	2σ	Beta (dpm)	2σ
1	142	0.00	0.66	1.65	4.09
2	48	0.00	0.66	0.51	3.40
3	6	3.61	5.66	0.50	3.40
4	20	0.00	0.66	0.51	3.40
5	75	1.62	4.03	2.78	4.68
6	1	3.60	5.66	5.05	5.68
7	114	1.62	4.03	0.00	2.53
8	125	0.00	0.66	0.00	2.53
9	36	1.62	4.03	1.64	4.09
10	99	3.61	5.66	2.77	4.68
11	4	3.61	5.66	0.50	3.40
12	99	0.00	0.66	6.20	6.12
13	33	1.62	4.03	3.92	5.21
14	59	0.00	0.66	0.00	2.53
15	65	0.00	0.66	0.51	3.40
16	10	0.00	0.66	1.65	4.09
17	12	0.00	0.66	0.51	3.40
18	91	1.62	4.03	2.78	4.68
19	37	0.00	0.66	1.65	4.09
20	24	0.00	0.66	1.65	4.09

DJH DJH

Alpha/Beta Analysis

Sample ID	Carrier	Alpha (dpm)	2σ	Beta (dpm)	2σ
21	38	0.00	0.66	1.65	4.09
22	1	0.00	0.66	1.65	4.09
23	115	1.62	4.03	1.64	4.09
24	1	7.58	7.98	1.62	4.10
25	29	0.00	0.66	9.61	7.28
26	65	0.00	0.66	2.79	4.68
27	35	0.00	0.66	0.51	3.40
28	21	0.00	0.66	0.51	3.40
29	13	0.00	0.66	2.79	4.68
30	129	0.00	0.66	5.06	5.68
31	79	0.00	0.66	0.00	2.53
32	9	0.00	0.66	2.79	4.68
33	31	0.00	0.66	5.06	5.68
34	142	0.00	0.66	0.00	2.53
35	37	0.00	0.66	0.51	3.40
36	29	0.00	0.66	1.65	4.09
37	30	0.00	0.66	5.06	5.68
38	71	0.00	0.66	2.79	4.68
39	30	0.00	0.66	2.79	4.68
40	65	3.60	5.66	6.19	6.12
41	58	0.00	0.66	2.79	4.68
42	42	3.60	5.66	5.05	5.68
43	113	0.00	0.66	2.79	4.68
44	139	1.62	4.03	0.51	3.40
45	60	0.00	0.66	0.00	2.53
46	139	0.00	0.66	3.93	5.21
47	15	1.62	4.03	0.00	2.53

DJH DJH

Alpha/Beta Analysis

Sample ID	Carrier	Alpha (dpm)	2σ	Beta (dpm)	2σ
48	108	5.59	6.91	0.49	3.41
49	139	1.62	4.03	0.51	3.40
50	38	1.62	4.03	3.92	5.21
51	60	0.00	0.66	0.51	3.40
52	73	0.00	0.66	0.51	3.40
53	33	0.00	0.66	3.93	5.21
54	22	0.00	0.66	3.93	5.21
55	133	0.00	0.66	0.00	2.53
56	131	1.62	4.03	2.78	4.68
57	18	1.62	4.03	1.64	4.09
58	3	1.62	4.03	3.92	5.21
59	39	0.00	0.66	5.06	5.68
60	15	0.00	0.66	0.51	3.40
61	41	0.00	0.66	0.51	3.40
62	144	0.00	0.66	1.65	4.09
63	112	1.62	4.03	5.06	5.68
64	11	0.00	0.66	1.65	4.09
65	40	0.00	0.66	3.93	5.21
66	23	0.00	0.66	0.00	2.53
67	87	0.00	0.66	0.51	3.40
68	12	0.00	0.66	2.79	4.68
69	92	1.62	4.03	2.78	4.68
70	140	1.62	4.03	0.51	3.40
71	115	0.00	0.66	2.79	4.68
72	114	0.00	0.66	1.65	4.09
73	92	1.62	4.03	3.92	5.21
74	109	1.62	4.03	5.06	5.68

Alpha/Beta Analysis

Sample ID	Carrier	Alpha (dpm)	2σ	Beta (dpm)	2σ
75	49	0.00	0.66	3.93	5.21
76	140	1.62	4.03	3.92	5.21
77	31	0.00	0.66	1.65	4.09
78	14	1.62	4.03	2.78	4.68
79	31	0.00	0.66	1.65	4.09

Alpha/Beta Analysis

Batch ID: 02-TF-0098 HARVEY (#80) BSB

Batch File: Smear Unit 1 - 200201211821
Group: C
Device: Unit 1
Geometry: Swipe/Smear
Serial Number: 64937

Acquisition Date: 1/21/2002
Count Time (min): 9.9
Recalibration Date: 5/22/2003

Sample ID	Carrier	Alpha (dpm)	2σ	Beta (dpm)	2σ
80 +	38	1.13	1.50	1.49	1.86
1/22/02		DJH		DJH	

Protocol #: 2 PW H3 #403727 User : 526

Time: 2.00
Data Mode: DPM Nuclide: H3 QUENCH Quench Set: H3QUENCH
Background Subtract: 1st Vial

	LL	UL	LCR	2S%	BKG
Region A:	0.5 -	18.6	0	0.0	6.77
Region B:	2.0 -	18.6	0	0.0	6.73
Region C:	40.0 -	2000	0	0.0	12.88

Quench Indicator: tSIE/AEC
Ext Std Terminator: Count
02-TF-0098 HARVEY(80) BSB
Luminescence Correction On
Coincidence Time(ns): 18
Delay Before Burst(ns): Normal
Protocol Data Filename: C:\DATA\PROT2.DAT
Count Data Filename: C:\DATA\SDATA2.DAT

S#	TIME	CPMA	CPMB	CPMC	tSIE	LUM	FLAG	DPM1	2SIGMA
-1	10.00	6.77	6.73	12.88	556.48	4	B		0.00
0	2.00	393.50	380.53	0.00	510.75	1		817.12	84.07
1	2.00	0.73	0.42	0.00	640.26	0		1.36	7.86
2	2.00	0.00	0.00	0.00	521.16	0		0.00	0.00
3	2.00	0.00	0.00	1.12	479.98	0		0.00	0.00
4	2.00	1.23	1.27	0.00	329.74	0		3.44	12.13
5	2.00	0.00	0.00	0.00	423.05	0		0.00	0.00
6	2.00	1.23	1.18	0.00	498.06	0		3.59	9.15
7	2.00	0.00	0.00	0.00	525.49	0		0.00	0.00
8	2.00	0.00	0.00	0.00	563.55	0		0.00	0.00
9	2.00	0.00	0.00	0.00	459.34	0		0.00	0.00
10	2.00	0.00	0.00	0.12	563.10	0		0.00	0.00
11	2.00	0.56	0.45	0.00	529.34	0		1.14	8.53
12	2.00	0.73	0.64	0.00	519.44	0		1.50	8.69
13	2.00	0.10	0.14	0.00	511.60	0		0.20	8.44
14	2.00	0.00	0.00	0.00	478.19	0		0.00	0.00
15	2.00	0.00	0.00	0.00	419.14	0		0.00	0.00
16	2.00	0.00	0.00	0.00	472.88	0		0.00	0.00
17	2.00	0.23	0.27	0.00	434.28	0		0.52	9.40
18	2.00	0.00	0.00	0.00	384.87	0		0.00	0.00
19	2.00	0.00	0.00	0.00	363.84	0		0.00	0.00
20	2.00	0.00	0.00	0.00	639.43	0		0.00	0.00
21	2.00	0.00	0.00	0.00	571.96	0		0.00	0.00
22	2.00	0.00	0.00	0.00	497.66	0		0.00	0.00
23	2.00	0.00	0.00	0.00	339.13	0		0.00	0.00
24	2.00	0.00	0.00	0.00	342.67	0		0.00	0.00
25	2.00	0.23	0.00	0.62	516.90	0		0.47	8.46
26	2.00	0.00	0.00	0.00	293.98	0		0.00	0.00
27	2.00	0.00	0.00	0.00	559.64	0		0.00	0.00
28	2.00	0.00	0.00	1.90	344.39	0		0.00	0.00
29	2.00	2.21	2.25	0.00	459.31	0		4.91	10.11
30	2.00	0.00	0.00	0.62	357.34	0		0.00	0.00
31	2.00	0.00	0.00	0.00	683.04	0		0.00	0.00
32	2.00	0.00	0.00	2.62	417.67	0		0.00	0.00
33	2.00	0.00	0.00	0.00	640.54	0		0.00	0.00
34	2.00	2.73	2.53	0.00	580.05	0		5.34	9.14
35	2.00	1.23	0.68	0.00	611.32	0		2.34	8.27

DJH

S#	TIME	CPMA	CPMB	CPMC	tSIE	LUM FLAG	DPM1	2SIGMA
36	2.00	0.00	0.00	0.00	622.58	0	0.00	0.00
37	2.00	0.73	0.77	0.00	606.09	0	1.39	8.08
38	2.00	1.45	1.49	0.00	651.72	0	2.68	8.10
39	2.00	1.73	1.67	0.00	502.37	0	3.63	9.34
40	2.00	2.23	2.27	0.00	492.81	0	4.73	9.69
41	2.00	1.23	1.27	0.00	545.93	0	2.47	8.73
42	2.00	0.00	0.00	2.03	450.74	0	0.00	0.00
43	2.00	2.86	2.71	0.00	557.46	0	5.71	9.37
44	2.00	0.00	0.00	0.00	610.39	0	0.00	0.00
45	2.00	0.00	0.00	0.00	548.55	0	0.00	0.00
46	2.00	0.00	0.00	0.00	544.39	0	0.00	0.00
47	2.00	0.00	0.00	0.00	506.97	0	0.00	0.00
48	2.00	1.73	0.70	0.00	485.13	0	3.71	9.54
49	2.00	1.77	1.31	0.00	581.92	0	3.46	8.71
50	2.00	2.86	2.90	0.00	586.93	0	5.56	9.14
51	2.00	0.00	0.00	0.00	548.37	0	0.00	0.00
52	2.00	0.23	0.27	0.62	515.65	0	0.47	8.47
53	2.00	0.23	0.00	0.00	529.86	0	0.47	8.37
54	2.00	1.84	1.57	0.00	615.29	0	3.49	8.50
55	2.00	0.73	0.42	2.12	641.57	0	1.35	7.85
56	2.00	2.09	2.13	0.00	600.90	0	4.02	8.71
57	2.00	3.37	3.41	2.12	617.36	0	6.39	9.12
58	2.00	1.23	1.13	0.62	526.52	0	2.52	8.88
59	2.00	2.98	3.02	0.00	594.39	0	5.77	9.14
60	2.00	1.95	1.67	0.00	621.80	0	3.68	8.50
61	2.00	0.00	0.00	1.62	237.17	0	0.00	0.00
62	2.00	0.00	0.02	0.00	534.38	0	0.00	0.00
63	2.00	0.10	0.00	0.00	529.08	0	0.21	8.31
64	2.00	1.37	1.32	0.00	498.09	0	2.89	9.21
65	2.00	2.73	2.77	0.00	684.91	0	4.92	8.42
66	2.00	0.00	0.00	0.00	289.65	0	0.00	0.00
67	2.00	0.00	0.00	2.12	498.10	0	0.00	0.00
68	2.00	1.23	1.27	1.62	612.95	0	2.34	8.25
69	2.00	2.23	1.88	0.00	660.36	0	4.08	8.36
70	2.00	2.94	2.98	0.00	621.70	0	5.56	8.92
71	2.00	0.64	0.34	0.00	636.87	0	1.20	7.84
72	2.00	0.00	0.00	0.00	501.05	0	0.00	0.00
73	2.00	2.23	1.48	0.00	605.46	0	4.27	8.74
74	2.00	1.73	1.20	0.00	485.05	0	3.71	9.54
75	2.00	0.00	0.00	0.00	593.92	0	0.00	0.00
76	2.00	0.00	0.00	0.00	533.58	0	0.00	0.00
77	2.00	0.00	0.00	0.00	540.15	0	0.00	0.00
78	2.00	0.00	0.00	0.00	407.22	0	0.00	0.00
79	2.00	0.23	0.27	0.00	651.88	0	0.42	7.56
80	2.00	0.00	0.00	0.00	615.20	0	0.00	0.00

DJH

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) 29-BUILDING	SURVEY NO 02-TF-0187
PURPOSE: INVESTIGATIVE SURVEY PRIOR TO ASBESTOS REMOVAL	RWP NO. N/A
	DATE: 2-5-2002
	TIME: 1600

MAP / DRAWING

108 SMEARS AND DIRECTS TAKEN ON SUSPECTED ASBESTOS PIPING AND VENTILATION DUCTS THROUGHOUT THE BUILDING.

SMEAR RESULTS ON PAGES 3-9

COPY

<100/α

<5K/β-

LEGEND:

= mrem/hr (γ) whole body

#E = mrem/hr (β+η+γ) extremity on contact

K = factor of 1000

—·—·— = radiological boundary

△# = mrem/hr neutron

(#) = swipe number

[.#] = air sample number

(#/α) or /β = direct contamination measurement in dpm/100 cm²

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date		
ELECTRA	5603/5604	2-6-2003	HP#6178	Date:4-12-2002
			HP# NA	Date: NA
	N/A		HP# 7737	Date: 4-12-02

[redacted]

Survey No. 02-TF-0187

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments
1-108	SEE	ATTACHED		PIPING AND DUCTWORK
		N	A	

Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments
		N	A	

COMMENTS: N/A

NOTES:
1. See MD-80036 10002 for calculations of WB, extremity and skin dose rates.
2. To request RO Count Room analysis for β/γ, alpha or tritium, leave column blank. Mark column N/A if not needed. If count room printout of results are attached, write "see attached" in column.
3. Annotate special sample type (e.g., soil, water), special identifiers or otherwise in Comments. If not needed, mark N/A.

ML-9620A (4-98)

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Aqua
Data file name: SMEAR005
Batch Ended: 2/6/02 9:53

Crosstalk correction performed.

Recalibration Date: 4/3/02
Serial Number: 26966-1

Batch ID: HARVEY 02-TF-0187 (108) CYR

Detector ID	Sample ID	Alpha Activity DPM	Alpha Activity σ	Alpha Activity flags	Beta Activity DPM	Beta Activity σ	Beta Activity flags
A1	1	0.00	2.20		0.00	2.09	
A2	2	0.00	2.24		0.00	1.49	
A3	3	0.00	2.05		0.00	1.88	
A4	4	0.00	2.03		2.19	2.96	
B1	5	1.85	2.04		0.21	1.68	
B2	6	0.00	2.07		0.27	1.72	
B3	7	0.00	1.91		0.00	1.68	
B4	8	0.00	1.89		0.78	1.59	
C1	9	1.68	2.26		1.63	4.73	
C2	10	0.00	2.14		0.88	3.32	
C3	11	0.00	1.99		0.00	2.41	
C4	12	1.66	1.94		0.00	1.93	
D1	13	0.00	2.20		0.00	1.51	
D2	14	0.00	2.17		1.05	1.97	
D3	15	0.00	2.06		0.27	1.94	
A1	16	0.00	2.19		0.00	1.63	
A2	17	1.70	2.24		0.00	1.49	
A3	18	1.58	2.04		0.00	1.41	
A4	19	0.00	2.03		2.19	2.96	
B1	20	0.00	2.04		0.35	1.68	
B2	21	0.00	2.07		0.27	1.72	
B3	22	0.00	1.94		2.17	2.37	
B4	23	0.00	1.88		0.00	1.12	
C1	24	1.67	2.28		4.32	5.10	
C2	25	0.00	2.14		0.88	3.32	
C3	26	0.00	1.98		0.00	1.60	
C4	27	3.57	2.70		0.00	1.43	
D1	28	0.00	2.21		1.13	2.02	
D2	29	0.00	2.17		1.05	1.97	
D3	30	0.00	2.06		0.00	1.44	
A1	31	1.63	2.19		0.00	1.63	
A2	32	0.00	2.25		1.14	1.99	

29 41

29 #

Carol G. Robinson

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Aqua
Data file name: SMEAR005
Batch Ended: 2/6/02 9:53

Crosstalk correction performed.

Recalibration Date: 4/3/02
Serial Number: 26966-1

Batch ID: HARVEY 02-TF-0187 (108) CYR

Detector ID	Sample ID	Alpha Activity DPM	Alpha Activity σ	Alpha Activity flags	Beta Activity DPM	Beta Activity σ	Beta Activity flags
A3	33	0.00	2.07		2.19	2.57	
A4	34	1.49	2.02		0.80	2.68	
B1	35	0.00	2.04		0.35	1.68	
B2	36	0.00	2.13		3.91	2.72	
B3	37	0.00	1.90		0.00	1.19	
B4	38	3.38	2.67		2.75	2.25	
C1	39	0.00	2.23		0.00	3.89	
C2	40	0.00	2.15		2.28	3.60	
C3	41	0.00	1.98		0.00	1.60	
C4	42	0.00	1.95		2.65	2.65	
D1	43	0.00	2.21		1.13	2.02	
D2	44	0.00	2.15		0.00	1.42	
D3	45	0.00	2.08		2.86	2.67	
A1	46	0.00	2.20		0.00	2.09	
A2	47	0.00	2.25		1.14	1.99	
A3	48	0.00	2.04		0.00	1.41	
A4	49	0.00	2.00		0.00	2.01	
B1	50	0.00	2.04		0.35	1.68	
B2	51	0.00	2.07		0.27	1.72	
B3	52	0.98	1.92		0.84	2.05	
B4	53	0.00	1.88		0.00	1.12	
C1	54	0.00	2.25		0.41	4.53	
C2	55	1.76	2.14		0.75	3.32	
C3	56	0.00	1.99		0.00	2.04	
C4	57	0.00	1.94		1.37	2.32	
D1	58	0.00	2.20		0.00	1.51	
D2	59	0.00	2.15		0.00	1.42	
D3	60	0.00	2.07		1.56	2.34	
A1	61	0.00	2.20		0.00	2.09	
A2	62	0.00	2.24		0.00	1.49	
A3	63	1.58	2.07		2.05	2.57	
A4	64	0.00	2.03		2.19	2.96	
B1	65	0.00	2.05		1.54	2.06	
B2	66	0.00	2.06		0.00	1.22	

AJH AJH

Carol G. Robinson

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Aqua
Data file name: SMEAR005
Batch Ended: 2/6/02 9:53

Crosstalk correction performed.

Recalibration Date: 4/3/02
Serial Number: 26966-1

Batch ID: HARVEY 02-TF-0187 (108) CYR

Detector ID	Sample ID	Alpha Activity DPM	Alpha Activity σ	Alpha Activity flags	Beta Activity DPM	Beta Activity σ	Beta Activity flags
B3	67	0.00	1.95		3.36	2.65	
B4	68	0.00	1.88		0.00	1.12	
C1	69	0.00	2.25		0.00	4.33	
C2	70	0.00	2.13		0.00	2.66	
C3	71	0.00	1.98		0.00	1.60	
C4	72	0.00	1.94		1.37	2.32	
D1	73	0.00	2.20		0.00	1.51	
D2	74	0.00	2.17		1.05	1.97	
D3	75	0.00	2.06		0.27	1.94	
A1	76	0.00	2.19		0.00	1.63	
A2	77	0.00	2.24		0.00	1.49	
A3	78	0.00	2.04		0.00	1.41	
A4	79	1.49	2.02		0.80	2.68	
B1	80	0.00	2.03		0.00	1.19	
B2	81	0.00	2.06		0.00	1.22	
B3	82	0.00	1.91		0.00	1.68	
B4	83	0.00	1.88		0.00	1.12	
C1	84	0.00	2.25		0.00	4.33	
C2	85	1.76	2.14		0.75	3.32	
C3	86	0.00	1.99		0.00	2.04	
C4	87	1.65	1.95		2.53	2.65	
D1	88	0.00	2.20		0.00	1.51	
D2	89	0.00	2.18		2.42	2.40	
D3	90	0.00	2.06		0.00	1.44	
A1	91	0.00	2.20		0.00	2.09	
A2	92	0.00	2.25		1.14	1.99	
A3	93	0.00	2.06		0.95	2.25	
A4	94	0.00	2.03		2.19	2.96	
B1	95	0.00	2.05		1.54	2.06	
B2	96	0.00	2.09		1.48	2.10	
B3	97	0.00	1.90		0.00	1.19	
B4	98	0.00	1.88		0.00	1.12	
C1	99	0.00	2.25		0.41	4.53	
C2	100	0.00	2.14		0.00	3.00	
C3	101	0.00	1.98		0.00	1.60	

DJH

DJH

Carol Ly Robinson

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Aqua
Data file name: SMEAR005
Batch Ended: 2/6/02 9:53

Crosstalk correction performed.

Recalibration Date: 4/3/02
Serial Number: 26966-1

Batch ID: HARVEY 02-TF-0187 (108) CYR

Detector ID	Sample ID	Alpha Activity DPM	Alpha Activity σ	Alpha Activity flags	Beta Activity DPM	Beta Activity σ	Beta Activity flags
C4	102	0.00	1.93		0.00	1.43	
D1	103	0.00	2.21		1.13	2.02	
D2	104	0.00	2.20		3.78	2.76	
D3	105	0.00	2.06		0.00	1.44	
A1	106	0.00	2.21		0.00	2.47	
A2	107	1.70	2.24		0.00	1.49	
A3	108	0.00	2.04		0.00	1.41	

DJH DJH

Carol Y. Robinson

Protocol #: 2 Name:PW H3 #401387 06-Feb-2002 11:17
Region A: LL-UL= 0.5-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 2.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL=40.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Time = 2.00 QIP = tSIE/AEC ES Terminator = Count
HARVEY SUR #02-TF-0187 (1-108)/BKS
Conventional DPM
Nuclide 1 = 800
Luminescence Correction On
Data/Application Drive & Path = c:\data

SAMP	TIME	CPMA	CPMB	CPMC	FLAG	LUM	tSIE	DPM1	A:2S%
-1	10.00	9.51	8.66	5.28	B	3	650.		20.50
0	2.00	233.19	222.49	0.00	L	0	507.	492.00	9.53
1	2.00	0.00	0.00	0.00	L	0	551.	0.00	0.00
2	2.00	0.00	0.00	0.72		0	604.	0.00	0.00
3	2.00	0.00	0.00	0.00		0	538.	0.00	0.00
4	2.00	0.00	0.00	0.00		0	569.	0.00	0.00
5	2.00	0.00	0.00	0.00		12	463.	0.00	0.00
6	2.00	0.00	0.00	0.00		0	571.	0.00	0.00
7	2.00	0.00	0.00	0.00		22	572.	0.00	0.00
8	2.00	0.00	0.00	0.00		24	501.	0.00	0.00
9	2.00	0.00	0.00	1.72		0	535.	0.00	0.00
10	2.00	0.00	0.00	0.72		7	475.	0.00	0.00
11	2.00	0.00	0.00	0.00		0	553.	0.00	0.00
12	2.00	0.00	0.00	1.72		0	613.	0.00	0.00
13	2.00	0.00	0.00	1.22		0	585.	0.00	0.00
14	2.00	0.00	0.00	1.22		0	587.	0.00	0.00
15	2.00	0.00	0.00	2.44		0	602.	0.00	0.00
16	2.00	0.00	0.00	0.22		0	600.	0.00	0.00
17	2.00	0.00	0.00	1.72		0	502.	0.00	0.00
18	2.00	1.86	1.91	0.00		0	627.	3.47	277.6
19	2.00	0.00	0.00	0.00		0	627.	0.00	0.00
20	2.00	0.00	0.00	1.22		0	551.	0.00	0.00
21	2.00	0.00	0.00	0.00		12	534.	0.00	0.00
22	2.00	0.00	0.00	0.00		0	580.	0.00	0.00
23	2.00	0.00	0.00	1.22		0	562.	0.00	0.00
24	2.00	0.00	0.00	0.00		18	558.	0.00	0.00
25	2.00	0.00	0.00	0.00		11	544.	0.00	0.00
26	2.00	0.00	0.00	0.00		0	595.	0.00	0.00
27	2.00	0.00	0.00	1.22		6	525.	0.00	0.00
28	2.00	0.00	0.00	0.72		11	584.	0.00	0.00
29	2.00	0.00	0.00	0.00		0	529.	0.00	0.00
30	2.00	0.00	0.00	1.22		14	608.	0.00	0.00
31	2.00	0.00	0.00	0.00		0	504.	0.00	0.00
32	2.00	0.00	0.00	0.00		15	501.	0.00	0.00
33	2.00	1.24	0.64	0.00		0	630.	2.31	406.3
34	2.00	0.00	0.00	0.00		14	597.	0.00	0.00
35	2.00	0.00	0.00	3.22		0	623.	0.00	0.00
36	2.00	0.00	0.00	0.00		36	585.	0.00	0.00
37	2.00	0.00	0.00	0.22		0	582.	0.00	0.00
38	2.00	0.00	0.00	0.00		0	490.	0.00	0.00
39	2.00	0.00	0.00	0.00		0	605.	0.00	0.00
40	2.00	0.00	0.00	0.86		0	630.	0.00	0.00
41	2.00	3.42	1.64	0.00		8	641.	6.33	170.1
42	2.00	0.00	0.00	0.72		12	562.	0.00	0.00
43	2.00	0.00	0.00	0.22		0	613.	0.00	0.00

DJH
Carol G. Robinson

SAMP	TIME	CPMA	CPMB	CPMC	FLAG	LUM	tSIE	DPM1	A:2S%
44	2.00	0.00	0.01	0.00		0	636.	0.00	0.00
45	2.00	0.00	0.00	0.00		0	666.	0.00	0.00
46	2.00	0.00	0.00	0.72		14	637.	0.00	0.00
47	2.00	0.00	0.00	0.72		14	649.	0.00	0.00
48	2.00	1.46	0.00	20.39		5	643.	2.68	362.7
49	2.00	0.00	0.00	1.22		6	669.	0.00	0.00
50	2.00	2.61	0.96	0.22		0	594.	5.03	203.0
51	2.00	0.00	0.00	0.00		0	683.	0.00	0.00
52	2.00	0.00	0.00	0.72		18	621.	0.00	0.00
53	2.00	0.00	0.00	0.22		8	569.	0.00	0.00
54	2.00	0.00	0.00	0.00		0	627.	0.00	0.00
55	2.00	0.00	0.00	2.72		0	637.	0.00	0.00
56	2.00	0.00	0.00	1.22		0	517.	0.00	0.00
57	2.00	0.00	0.00	0.22		0	669.	0.00	0.00
58	2.00	0.00	0.00	0.00		0	579.	0.00	0.00
59	2.00	0.00	0.00	0.00		0	562.	0.00	0.00
60	2.00	0.00	0.00	0.00		0	635.	0.00	0.00
61	2.00	0.00	0.00	0.00		7	572.	0.00	0.00
62	2.00	0.00	0.00	0.00		0	608.	0.00	0.00
63	2.00	0.00	0.00	0.00		9	621.	0.00	0.00
64	2.00	1.62	0.91	0.00		0	653.	2.96	315.7
65	2.00	0.00	0.00	0.00		0	659.	0.00	0.00
66	2.00	0.00	0.00	0.00		0	649.	0.00	0.00
67	2.00	0.00	0.00	0.00		0	650.	0.00	0.00
68	2.00	0.00	0.00	0.00		0	641.	0.00	0.00
69	2.00	0.00	0.00	0.00		0	532.	0.00	0.00
70	2.00	0.00	0.00	0.00		14	603.	0.00	0.00
71	2.00	0.00	0.00	0.00		0	614.	0.00	0.00
72	2.00	0.00	0.00	0.00		0	621.	0.00	0.00
73	2.00	0.00	0.00	0.72		15	560.	0.00	0.00
74	2.00	0.00	0.00	0.00		0	620.	0.00	0.00
75	2.00	0.00	0.00	0.00		0	644.	0.00	0.00
76	2.00	0.00	0.00	0.00		7	566.	0.00	0.00
77	2.00	0.49	0.00	1.22		0	655.	0.89	1004.
78	2.00	0.00	0.00	0.00		0	592.	0.00	0.00
79	2.00	0.21	0.00	0.00		0	514.	0.43	2347.
80	2.00	0.00	0.00	0.00		0	617.	0.00	0.00

Carol G. Robinson

Protocol #: 2 Name:PW H3 #401387 06-Feb-2002 15:57
Region A: LL-UL= 0.5-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 2.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL=40.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Time = 2.00 QIP = tSIE/AEC ES Terminator = Count
HARVEY SUR #02-TF-0187 (1-108)/BKS
Conventional DPM
Nuclide 1 = 800
Luminescence Correction On
Data/Application Drive & Path = c:\data

SAMP	TIME	CPMA	CPMB	CPMC	FLAG	LUM	tSIE	DPM1	A:2S%
81	2.00	0.00	0.00	0.72		0	554.	0.00	0.00
82	2.00	0.00	0.00	0.00		0	559.	0.00	0.00
83	2.00	0.00	0.00	0.00		0	603.	0.00	0.00
84	2.00	0.00	0.00	1.22		0	651.	0.00	0.00
85	2.00	0.00	0.00	0.00		0	309.	0.00	0.00
86	2.00	0.00	0.00	0.00		0	575.	0.00	0.00
87	2.00	0.00	0.00	0.00		0	503.	0.00	0.00
88	2.00	0.00	0.00	1.22		0	362.	0.00	0.00
89	2.00	0.00	0.00	0.00		14	641.	0.00	0.00
90	2.00	0.00	0.00	0.00		0	509.	0.00	0.00
91	2.00	0.00	0.00	0.00		0	559.	0.00	0.00
92	2.00	0.00	0.00	0.00		0	638.	0.00	0.00
93	2.00	0.00	0.00	0.00		12	577.	0.00	0.00
94	2.00	0.00	0.00	0.00		0	598.	0.00	0.00
95	2.00	0.00	0.00	0.00		0	631.	0.00	0.00
96	2.00	9.86	3.69	0.00		0	598.	18.93	66.14
97	2.00	0.00	0.00	0.00		0	467.	0.00	0.00
98	2.00	0.00	0.00	0.72		14	595.	0.00	0.00
99	2.00	0.00	0.00	0.00		0	597.	0.00	0.00
100	2.00	0.00	0.00	0.00		0	559.	0.00	0.00
101	2.00	0.00	0.00	0.00		0	510.	0.00	0.00
102	2.00	0.00	0.00	0.00		0	424.	0.00	0.00
103	2.00	0.00	0.00	0.00		16	591.	0.00	0.00
104	2.00	0.00	0.00	1.22		0	640.	0.00	0.00
105	2.00	0.00	0.00	0.00		0	624.	0.00	0.00
106	2.00	0.00	0.00	0.22		0	533.	0.00	0.00
107	2.00	0.00	0.00	0.00		0	585.	0.00	0.00
108	2.00	0.00	0.00	0.00		0	500.	0.00	0.00

DJH
Carol G. Robinson
#413

9 of 9

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) 29-BUILDING / ALL ROOMS	SURVEY NO 02-TF-0565
PURPOSE: CHARACTERIZATION SURVEY	RWP NO. N/A
	DATE: 4-5-2002
	TIME: 1415

MAP / DRAWING

DIRECT READING WITH THE LUDLUM 2350 THROUGHOUT THE BUILDING.
MAPS ARE ON PAGES 2-3
RESULTS ARE ON PAGES 4-5

COPY

- ALL DIRECT SURVEY RESULTS: <100dpm/100cm2 ALPHA AND <5K dpm/100cm2 BETA
- LARGE AREA WIPES TAKEN ON ALL HORIZONTAL SURFACES AND IN THE VENTILATION DUCTS RESULTS: <100 dpm/100cm2 ALPHA AND <5K dpm/100cm2 BETA

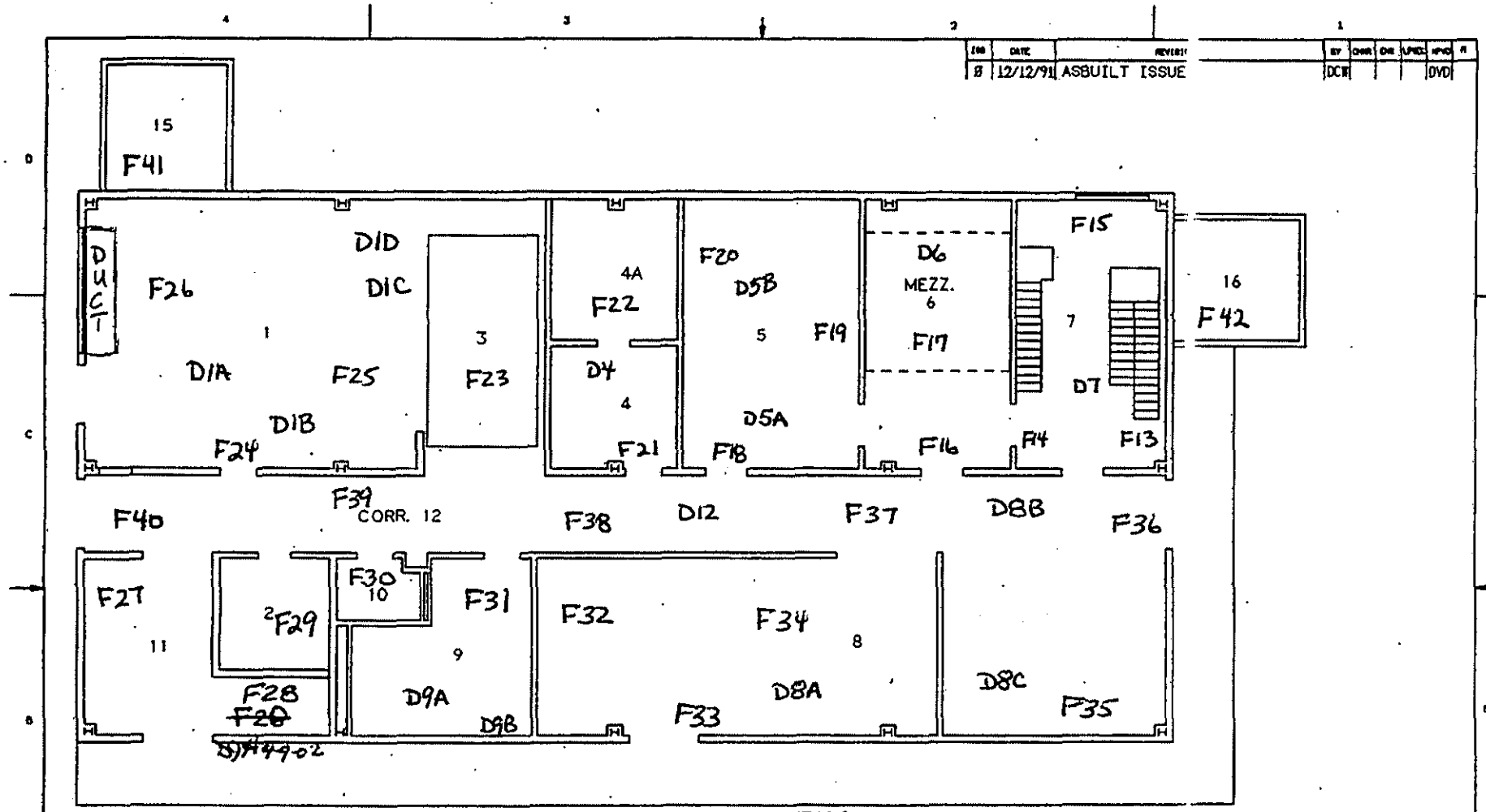
INTEGRATED COUNT PERFORMED IF AUDIBLE RESPONSE DETECTED. ALL OTHER DIRECT SURVEY RESULTS: <100dpm/100cm2 ALPHA, WITH NO AUDIBLE RESPONSE.

LEGEND:
= mrem/hr (γ) whole body
#E = mrem/hr (β+η+γ) extremity on contact
K = factor of 1000
— · — · — = radiological boundary
△# = mrem/hr neutron
(#) = swipe number
[#] = air sample number
(#/α) or /β = direct contamination measurement in dpm/100 cm²

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date			
			[redacted]	HP# 6178 8420	Date: 4-8-2002
ELECTRA	5603/5604	2-6-2003	[redacted]	HP# N/A	Date: N/A
ELECTRA	5347/5352	3-6-2003	[redacted]		
	N/A		[redacted]	HP# 7707	Date: 4-9-02
			[redacted]		

ISS	DATE	REVISION	BY	CHKR	CHR	UPRD	APVD	A
0	12/12/91	ASBUILT ISSUE	DCW				DVD	



NOTE: F = FLOOR
D = DRAIN

DOES NOT CONTAIN
UNCLASSIFIED CONTROLLED
NUCLEAR INFORMATION

Reviewing Official: J. A. NESHEIM
EMCBC Name

Date: 08-26-08 per telecon RED
Applies to page 2 of 5 and 3 of 5

20/L1/n
0/1/A

0 3' 6' 18' 28'

BLDG #29
FIRST FLOOR
BLDG CODE:3029

02-TF-0565
A6N

NOT FOR PUBLIC DISSEMINATION

MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.

APPROVALS: SAFETY COMMITTEE REVIEWED: ___NONE ___TRUEDOC ___TEDOC ___EDOC
TECH. REP. ___ DATE: ___
GR. REP. ___
TRUEDOC ___
TEDOC ___
EDOC ___

SHEET	1	2	3	4	5	6
ISSUE	0	0				

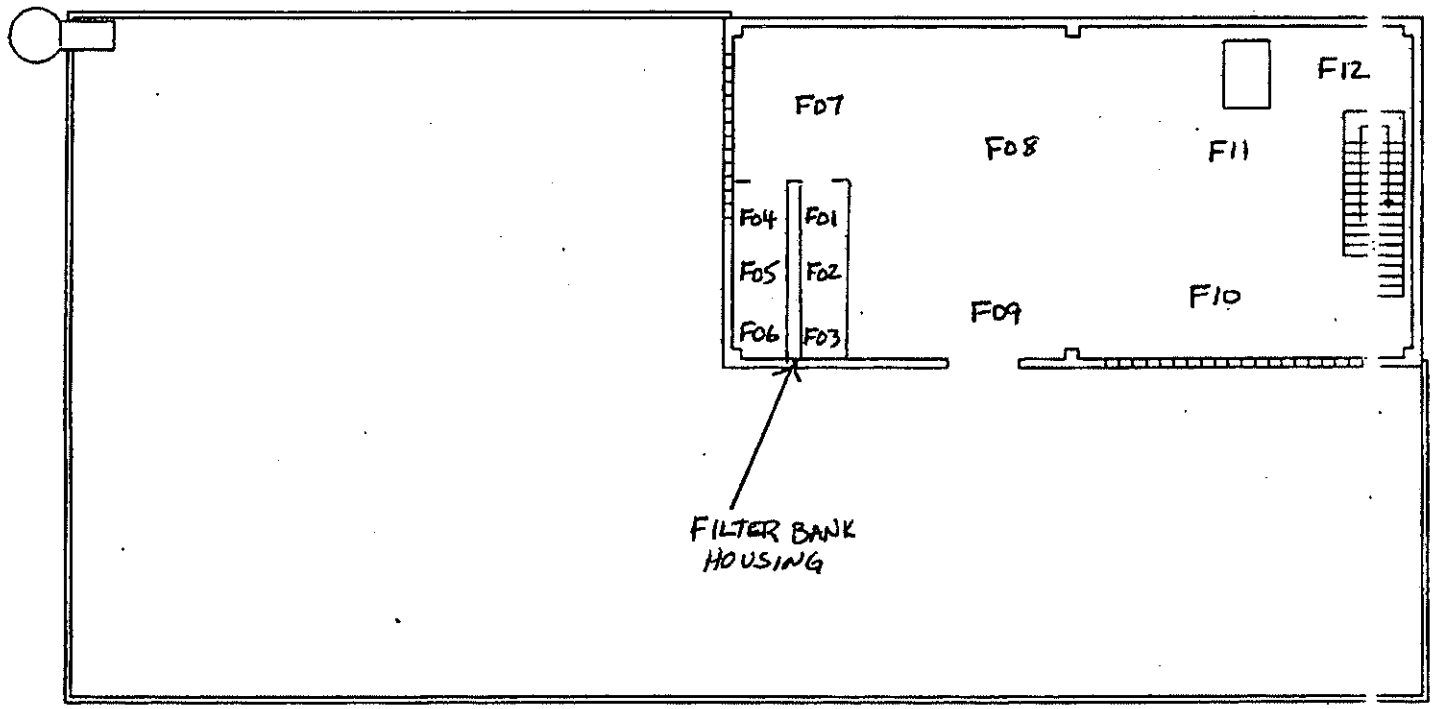
PART CLASSIFICATION
DOCUMENT CLASSIFICATION UCNI

TITLE (U) TITLE CLASSIFICATION
BLDG #29
FLOOR PLANS

SIZE C | DRAWING NUMBER FSC911241 | JOB NUMBER 12335

DWG TYPE SFP | PCN | BLDG #29 | CHRG 14865 | SCALE AS NOTED | SHEET 1 OF 2
STATUS MD-REL-1 | 12/91 | ORIGIN MD-BR3-V3.0

2 of 5



NOTE: F = FLOOR

0 3' 6' 10' 20'

20/(c)/n OPAN

N

BLDG #29
PENTHOUSE
BLDG CODE:3029

~~NOT FOR PUBLIC DISSEMINATION~~

MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.

DRAWING NUMBER	FSC911241
JOB NUMBER	12335
DRAWING CLASSIFICATION	~~UCNI~~
SIZE C	CODE 14065
SCALE AS NOTED	
ISSUE B	SHEET 2
STATUS MD-REL-12/12/91	

02-TF-0565
A9A

385

29-BLDG M-2350 SURVEY

RSDS# 02-TF-0565 RCT: 29A RCT:_____

43-20 BKG:	0	EFF:	0.193	PROBE AREA:	181	cm2	Surface Eff:		0.5	Detector # :	2
43-37 BKG:	0	EFF:	0.166	PROBE AREA:	584	cm2	Surface Eff:		0.5	Detector # :	3
LOCATION	2350#	RCT ID	PROBE	DET #	ITEM #	DATE	TIME	CNTS	CT TIME	dpm/100cm2	
SRC BKG	5673	6178	5676	3		4/5/02	12:04	26	300	11	
SRCCHECK	5673	6178	5676	3		4/5/02	12:16	2014	60	4155	
SRCCHECK	5673	6178	5676	3		4/5/02	12:18	2113	60	4359	
SRCCHECK	5673	6178	5676	3		4/5/02	12:19	2129	60	4392	
SRCCHECK	5673	6178	5676	3		4/5/02	12:21	2069	60	4268	
SRCCHECK	5673	6178	5676	3		4/5/02	12:22	2020	60	4167	
SRCCHECK	5673	6178	5676	3		4/5/02	12:24	2250	60	4642	
BLD29 D11	5673	6178	5676	3	1	4/5/02	13:00	7	30	29	
BLD29 D1B	5673	6178	5676	3	2	4/5/02	13:02	6	30	25	
BLD29 D1A	5673	6178	5676	3	3	4/5/02	13:03	1	30	4	
BLD29 D1C	5673	6178	5676	3	4	4/5/02	13:04	5	30	21	
BLD29 D1D	5673	6178	5676	3	5	4/5/02	13:04	4	30	17	
BLD29 D9A	5673	6178	5676	3	6	4/5/02	13:08	4	30	17	
BLD29 D9B	5673	6178	5676	3	7	4/5/02	13:09	0	30	0	
BLD29 D4	5673	6178	5676	3	8	4/5/02	13:12	4	30	17	
BLD29 D12	5673	6178	5676	3	9	4/5/02	13:13	7	30	29	
BLD29 D8A	5673	6178	5676	3	10	4/5/02	13:15	0	30	0	
BLD29 D8B	5673	6178	5676	3	11	4/5/02	13:16	3	30	12	
BLD29 D8C	5673	6178	5676	3	12	4/5/02	13:17	3	30	12	
BLD29 D5A	5673	6178	5676	3	13	4/5/02	13:19	5	30	21	
BLD29 D5B	5673	6178	5676	3	14	4/5/02	13:20	4	30	17	
BLD29 D6	5673	6178	5676	3	15	4/5/02	13:21	5	30	21	
BLD29 D7	5673	6178	5676	3	16	4/5/02	13:22	2	30	8	
BLD29 F01	5673	6178	5676	3	17	4/5/02	13:27	10	30	41	
BLD29 F02	5673	6178	5676	3	18	4/5/02	13:28	7	30	29	
BLD29 F03	5673	6178	5676	3	19	4/5/02	13:28	9	30	37	
BLD29 F04	5673	6178	5676	3	20	4/5/02	13:30	3	30	12	
BLD29 F05	5673	6178	5676	3	21	4/5/02	13:31	3	30	12	
BLD29 F06	5673	6178	5676	3	22	4/5/02	13:31	2	30	8	
BLD29 F07	5673	6178	5676	3	23	4/5/02	13:33	7	30	29	
BLD29 F08	5673	6178	5676	3	24	4/5/02	13:34	0	30	0	
BLD29 F09	5673	6178	5676	3	25	4/5/02	13:35	0	30	0	
BLD29 F10	5673	6178	5676	3	26	4/5/02	13:36	2	30	8	
BLD29 F11	5673	6178	5676	3	27	4/5/02	13:37	6	30	25	
BLD29 F12	5673	6178	5676	3	28	4/5/02	13:38	5	30	21	

29-BLDG M-2350 SURVEY

RSDS# 02-TF-0565 RCT: DJH RCT:_____

LOCATION	2350#	RCT ID	PROBE	DET #	ITEM #	DATE	TIME	CNTS	CT TIME	dpm/100cm2
BLD29 F13	5673	6178	5676	3	29	4/5/02	13:40	5	30	21
BLD29 F14	5673	6178	5676	3	30	4/5/02	13:41	4	30	17
BLD29 F15	5673	6178	5676	3	31	4/5/02	13:42	1	30	4
BLD29 F16	5673	6178	5676	3	32	4/5/02	13:43	6	30	25
BLD29 F17	5673	6178	5676	3	33	4/5/02	13:44	2	30	8
BLD29 F18	5673	6178	5676	3	34	4/5/02	13:45	1	30	4
BLD29 F19	5673	6178	5676	3	35	4/5/02	13:46	5	30	21
BLD29 F20	5673	6178	5676	3	36	4/5/02	13:47	1	30	4
BLD29 F21	5673	6178	5676	3	37	4/5/02	13:48	3	30	12
BLD29 F22	5673	6178	5676	3	38	4/5/02	13:49	3	30	12
BLD29 F23	5673	6178	5676	3	39	4/5/02	13:50	5	30	21
BLD29 F24	5673	6178	5676	3	40	4/5/02	13:51	7	30	29
BLD29 F25	5673	6178	5676	3	41	4/5/02	13:52	4	30	17
BLD29 F26	5673	6178	5676	3	42	4/5/02	13:53	3	30	12
BLD29 F27	5673	6178	5676	3	43	4/5/02	13:54	5	30	21
BLD29 F28	5673	6178	5676	3	44	4/5/02	13:55	4	30	17
BLD29 F29	5673	6178	5676	3	45	4/5/02	13:56	1	30	4
BLD29 F30	5673	6178	5676	3	46	4/5/02	13:57	0	30	0
BLD29 F31	5673	6178	5676	3	47	4/5/02	13:59	5	30	21
BLD29 F32	5673	6178	5676	3	48	4/5/02	14:00	3	30	12
BLD29 F33	5673	6178	5676	3	49	4/5/02	14:01	1	30	4
BLD29 F34	5673	6178	5676	3	50	4/5/02	14:02	6	30	25
BLD29 F35	5673	6178	5676	3	51	4/5/02	14:02	4	30	17
BLD29 F36	5673	6178	5676	3	52	4/5/02	14:03	3	30	12
BLD29 F37	5673	6178	5676	3	53	4/5/02	14:04	4	30	17
BLD29 F38	5673	6178	5676	3	54	4/5/02	14:05	5	30	21
BLD29 F39	5673	6178	5676	3	55	4/5/02	14:06	4	30	17
BLD29 F40	5673	6178	5676	3	56	4/5/02	14:07	1	30	4
BLD29 F41	5673	6178	5676	3	57	4/5/02	14:08	4	30	17
BLD29 F42	5673	6178	5676	3	58	4/5/02	14:11	6	30	25

Appendix H

Radon Information

UNC Geotech

UNC Geotech
2597 B 3/4 Road
P.O. Box 14000
Grand Junction, Colorado 81502-5504
303/242-8621

April 12, 1990

Dennis Murphy
EG&G Mound Applied Technonogies
P.O. Box 3000
Mound Road
Miamisburg, OH 45343-3000

Dear Mr. Murphy:

I have enclosed the results of the radon measurements made at your site as part of the DOE Indoor Radon Study. A copy of these results can be provided in electronic format if desired. The results will be forwarded to the study sponsor, the DOE Office of Projects and Facilities Management, by the end of April.

Please contact me at FTS 326-6293 or commercial (303) 248-6293 if you have any questions.

Sincerely yours,

Mark D. Pearson

Mark D. Pearson
Project Manager
UNC Geotech

cc: DOE Points of Contact

21		ABOVE AIR SAMPLER	161.1	125.0	1670055	1666782	12/14/89	2/16/90	MET - OLD THORIUM STORAGE
21		ABOVE AIR SAMPLERS	116.7		1668584		12/14/89	2/16/90	MET - OLD THORIUM STORAGE
	SM	19 NIO EAST WALL	4.8		1661547		12/12/89	2/19/90	HISTORY OF ELEVATED READINGS
48		114 B CLOSET ON SPRINKLER PIPE	3.2		1671292		12/12/89	2/19/90	
19		ROOM 1	2.6		1670051		12/13/89	2/19/90	
	OLD SO BLDG	BASEMENT RIGHT CABINET	2.4		1681595		12/14/89	2/19/90	
55		1 BELOW THENOSTAT ON E WALL	2.1		1661515		12/18/89	2/19/90	
57		ROOM 1	1.9		1681565		12/12/89	2/19/90	
87		143	1.5		1681563		12/13/89	2/19/90	
998	FIRE STATION	ROOM 802 EQUIPMENT ROOM WITH SUMP	1.4		1654460		12/12/89	2/19/90	
24		ROOM 1 PLANT NORTH WALL	1.3		1672047		12/12/89	2/19/90	
	PAINT SHOP	PS 4	1.2		1661516		12/12/89	2/16/90	
30		ROOM 3 EAST	1.1		1671262		12/12/89	2/16/90	
100		103 MIDDLE OF NORTH WALL	1.0		1670060		12/12/89	2/19/90	
37		6 NORTH WALL	1.0		1670046		12/12/89	2/19/90	
34		34 A WEST WALL	.9	.6	1672062	1672042	12/12/89	2/16/90	MET
102		123	.8		1681577		12/14/89	2/19/90	
61		RM 221 MIDDLE OF NORTH WALL	.8		1681585		12/13/89	2/19/90	
67		101 N	.8		1670021		12/12/89	2/19/90	
G-13	LOG	G-514 WEST WALL	.8		1661544		12/12/89	2/16/90	
	T	CORRIDOR 24	.8		1670039		1/15/90	2/19/90	
	T	153	.8		1670067		1/15/90	2/19/90	
	T	78	.9		1670077		1/15/90	2/19/90	
	T	[illegible]	.6		[illegible]		1/15/90	2/19/90	
105	PARTS MACHINING BUILDING	STAIRWELL NEXT TO ROOM 127	.8		1681564		12/12/89	2/19/90	
25	ARAC	3 ON BOOK CASE MIDDLE	.8		1671214		12/15/89	2/19/90	
60		1 ON DOOR TO ROOM 3	.8		1670049		12/12/89	2/19/90	
	A	153C CENTER CUBICLE WEST WALL	.8		1672056		12/14/89	2/16/90	
	C BUILDING OLD CAFETERIA	NORTHEAST SECTION INTERNAL WALL RM2	.8		1672052		12/12/89	2/16/90	
	R BUILDING	68 NORTH WALL	.8		1670050		12/13/89	2/16/90	
	SM	8 WEST WALL AT OLD RECOVERY	.8		1672057		12/11/89	2/16/90	
	WO BLDG	WO 8	.8		1670045		12/18/89	2/16/90	
87		124	.8		1670032		12/12/89	2/19/90	
48		ROOM 116 ON NORHT WALL RIGHT OF CEN	.7	.6	1661524	1661535	12/12/89	2/19/90	
69		101 NEAR BACK CORNER BY ROOF DRAIN	.7	.5	1666783	1668532	12/15/89	2/19/90	
22		RM 1 EAST CORRIDOR ON STORAGE RACK	.7		1670070		12/12/89	2/19/90	
56	FIRE PUMP HOUSE	ROOM 1 THERE IS ONLY 1 ROOM	.7		1670066		12/12/89	2/19/90	
	E ANNEX	E 225 EAST WALL	.7		1681552		12/18/89	2/16/90	
	POWER HOUSE PH-1	REPAIR SHOP NORTH EAST CORNER	.7		1670040		12/12/89	2/19/90	
	M BLDG	M-135	.7		1681553		12/12/89	2/16/90	
26		ROOM 84 SOUTH WEST WALL	.6	.5	1672040	1667159	12/13/89	2/16/90	
69		RM 7 ON NORTH WALL	.6	.4	1672044	1672077	12/12/89	2/19/90	
26		ROOM 84 SOUTH WEST WALL	.6		1671270		12/13/89	2/16/90	
35		RM 7	.6		1654459		12/14/89	2/19/90	
30	PP BLDG	PP CORR 136	.6		1670016		12/14/89	2/19/90	
72		ON OVERHEAD DOOR BEAM	.6		1672069		1/03/90	2/19/90	
93		HALLWAY 107 (MIDWAY)	.6		1681629		12/13/89	2/20/90	
98	FIRE STATION	ROOM 114 DORM	.6		1661507		12/12/89	2/19/90	
	COS	RM STAIRWELL AT BASEMENT LEVEL	.6		1672086		12/14/89	2/19/90	
	OSM	120 C	.6		1681573		12/12/89	2/16/90	
	SM	150 WEST END GAS BOX	.6		1670043		12/11/89	2/16/90	
	A	34 EAST WALL	.5	.7	1672075	1672051	12/14/89	2/16/90	
47		102 MIDDLE OF EAST WALL	.5	.5	1658136	1666819	12/12/89	2/16/90	

Area	Bldg	Bldg Description	Room	Avg Radon pCi/l	Duplicate Radon pCi/l	Monid	Dupid	Monitor Install Date	Monitor Retrieve Date	Comments
	45		WORK STATION AREA	.4		1681568		12/14/89	2/15/90	
	46		81 EAST WALL	.4		1672070		12/12/89	2/15/90	
	49		HALL OUTSIDE RM 125	.4		1670020		12/14/89	2/15/90	
	51		107 TOP OF FUME HOOD	.4		1681575		12/12/89	2/15/90	
	63		ROOM 134	.4		1672059		12/13/89	2/20/90	
	63W		RM 4	.4		1670070		12/14/89	2/15/90	
	65		ROOM 10 CONFERANCE ROOM	.4		1671204		12/14/89	2/15/90	
	66		OFFICE AREA	.4		1681554		12/12/89	2/15/90	
	68		EAST WALL CENTER BEAM	.4		1681555		12/14/89	2/15/90	
	69		RM 10A	.4		1681576		12/12/89	2/15/90	
	70		170 MEETING ROOM CENTER WALL	.4		1670041		12/12/89	2/15/90	
	80		ROOM 116	.4		1671205		12/12/89	2/15/90	
	95	SH/PP	95- BLD-ROOM41	.4		1661531		12/12/89	2/20/90	
		DS BUILDING	CORRIDOR 2 - 6 FT. ABOVE FLOOR	.4		1670071		12/13/89	2/15/90	
		E	E HALLWAY	.4		1667184		12/12/89	2/15/90	
		N BUILDING	N 21 WEST WALL	.4		1670057		12/15/89	2/20/90	
		POWER HOUSE PH-1	OFFICE SUPERVISOR	.4		1670036		12/12/89	2/15/90	
		R BUILDING	12 SOUTH WALL	.4		1661566		12/13/89	2/15/90	
	34		BURN ROOM			1654481		12/12/89		BURNT (NOT AVAILABLE)
	C1		RM 151			1661507		12/13/89		MISSING

Bldg	Bldg Description	Room	Radon pCi/l	Radon pCi/l	Monid	Dupid	Install Date	Retrieve Date	Comments
	R BUILDING	163 NEXT TO NORTH WALL	.5	.5	1660533	1660816	12/13/89	2/16/90	
101		ROOM S ON SOUTH WEST WALL IN OFFSET	.5		1671208		12/12/89	2/19/90	
	"B" 115	175 WEST WALL	.5		1670048		12/12/89	2/16/90	
.6		ELECTRICAL PANEL RM IN ELEC/RONICS	.5		1670062		12/12/89	2/19/90	
40		100	.5		1654480		12/13/89	2/16/90	
43		1 EAST WALL OVER WATER DISPENSER	.5		1670076		12/12/89	2/20/90	
44		ON BULLETIN BOARD	.5		1670047		12/12/89	2/16/90	
47		102 MIDDLE OF EAST WALL	.5		1670050		12/12/89	2/16/90	
50		CELL 113	.5		1661502		12/13/89	2/19/90	
70		CENTRAL HALLWAY WEST OF DOOR TO RM7	.5		1661605		12/18/89	2/16/90	
89		101 NEAR BACK CORNER BY ROOF DRAIN	.5		1670079		12/15/89	2/19/90	
91		1ST FLOOR	.5		1661525		12/15/89	2/16/90	
91		2ND FLOOR OUTSIDE RM215	.5		1661593		12/15/89	2/16/90	
92		HALLWAY RIGHT OFF ROOM 8	.5		1661509		12/12/89	2/19/90	
94		BAY 2 NORTH WALL	.5		1654477		12/12/89	2/19/90	
	A	215 WEST WALL	.5		1661572		12/14/89	2/16/90	
	A	1040 WEST WALL	.5		1661580		12/14/89	2/16/90	
	COS	119 N WALL NEAR PUNCH PRESS	.5		1654456		12/12/89	2/19/90	
	COS	319 WALL CABINET TO RIGHT OF SINK	.5		1661598		12/12/89	2/19/90	
	E BUILDING	159 WEST WALL	.5		1670033		12/14/89	2/16/90	
	E BUILDING	103 WEST WALL	.5		1670072		12/14/89	2/16/90	
	E-ANNEX	E 212 NORTH WALL	.5		1661562		12/18/89	2/16/90	
	GH BUILDING	ROOM 2	.5		1670065		12/12/89	2/16/90	
	GP 81	1A MIDDLE OF WEST WALL	.5		1670054		12/12/89	2/19/90	
	M BLDG	ROOM 127	.5		1661571		12/12/89	2/16/90	
	MH	MH-8	.5		1671269		12/18/89	2/19/90	
	E BUILDING	BASEMENT LEFT CRAWL SPACE DOOR	.5		1671260		12/12/89	2/19/90	
	N BUILDING	N 108	.5		1670056		12/15/89	2/19/90	
	OSE	CORRIDOR 437	.5		1661536		12/15/89	2/16/90	
	OSE	CORRIDOR 301 ACROSS FROM WATER FOUN	.5		1672084		12/15/89	2/16/90	
	OSM	4HT FLOOR	.5		1670020		12/12/89	2/16/90	
	OSE	CORR 212 SOUTH WALL NEAR 218 DOOR	.5		1670036		12/15/89	2/16/90	
	OSM	319	.5		1670069		12/13/89	2/16/90	
	OSM	2ND FLOOR	.5		1661611		12/12/89	2/16/90	
	POWER HOUSE PH-1	STATIONARY BOARD CORNER	.5		1670073		12/12/89	2/19/90	
	R BUILDING	145 WEST WALL ABOVE BALANCE	.5		1654530		12/14/89	2/16/90	
	SW/R TRITIUM COMPLEX	128 OVER LARGE METAL FLOOR DISC	.5		1670019		12/12/89	2/16/90	
	W BLDG	W135 WEST CENTRAL WALL	.5		1671293		12/12/89	2/16/90	
	WO BLDG	WOA 110	.5		1671301		12/18/89	2/16/90	
	"B" 124	EAST WALL	.5		1667189		12/12/89	2/16/90	
	OSE	113 BULLETIN BOARD OPPOSITE ELEVATO	.5		1670027		12/15/89	2/16/90	
TF-2		114 EAST WALL CENTER OF ROOM	.4		1670064		12/12/89	2/19/90	
	MH	MH-24	.4		1667187		12/14/89	2/19/90	
	OS BUILDING	CORRIDOR 7 NEXT TO ROOM 216	.4		1661614		12/13/89	2/19/90	
	GP 81	1A MIDDLE OF WEST WALL	.4	.5	1672135	1661542	12/12/89	2/19/90	
105	PARTS MACHINING BUILDING	136 QC OFFICE	.4		1670017		12/12/89	2/19/90	
27		CELL 8 - WALL	.4		1661503		12/12/89	2/19/90	
28	CERAMIC PRODUCTION	101	.4		1672061		12/12/89	2/19/90	
→ 29		HALLWAY	.4		1672105		12/14/89	2/19/90	
	TEST FIRE BUILDING 3	3-315	.4		1672036		12/12/89	2/19/90	
38	PP BLDG	PP CORR 16/BAY 2 WALL	.4		1661570		12/14/89	2/19/90	
39		BREAK RM	.4		1670050		12/14/89	2/19/90	
42		101 B EAST WALL	.4		1670031		12/13/89	2/19/90	

Appendix I

Asbestos Information

Asbestos abatement was performed. No further action required.

Appendix J

Lead Information

Paint is assumed to contain lead. No other lead was identified in the building.

Appendix K

Chemical Information

All chemicals have been removed from the building.

o u n d Electronic Message/AOS

om :R. Steven Tunning
TUNNRS
pt. :OPERATIONS
l. No :865-3674
te :14-Jun-1994 09:10am EST
bject :Sump Sampling Results in Building 29

:Michael A. Reker (REKEMA)

:Debra White (WHITDA)
:Mike Isper (ISPEMP)

ke

rry, I thought I'd sent you a memo on this subject.

yden Laboratories provided a RCRA TCLP analysis of a sample of the sludge from e sump in Room 5 of Building 29. This analysis was completed on May 16, 1994, d indicated no results above regulatory limits. In addition, the sludge was alyzed for asbestos and none detected.

will deliver a copy of the analysis results to you this morning for your les.

Summary of Hayden Laboratory Analysis of Building 29 Sump Sludge

Substance	Regulatory* Limit (mg/L)	Analytical Result (mg/L)
Mercury	0.2	0.0137
Silver	5.0	0.233
Barium	100.0	0.584
Cadmium	1.0	0.027
Chromium	5.0	< 0.100
Lead	5.0	< 0.100
Selenium	1.0	< 0.005
Arsenic	5.0	0.058
Vinyl Chloride	0.2	< 0.125
Teratchloroethylene	0.7	< 0.125
Trichloroethylene	0.5	< 0.125
Methyl Ethyl Ketone	200.0	< 1.25
1,1-Dichloroethylene	0.7	< 0.125
1,2-Dichloroethane	0.5	< 0.063
Chloroform	6.0	< 0.063
Chlorobenzene	100.0	< 0.125
Carbon tertachloride	0.5	< 0.125
Benzene	0.5	< 0.125
1,4-Dichlorobenzene	7.5	< 0.004
2,4-Dinitrotoluene	0.13	< 0.012
Hexachlorobenzene	0.13	< 0.012
Hexachlorobutadiene	0.5	< 0.020
Hexachloroethane	3.0	< 0.012
Nitrobenzene	2.0	< 0.012
Pentachlorophenol	100.0	< 0.020
Pyridine	5.0	< 0.024
2,4,5-Trichlorophenol	400.0	< 0.012
2,4,6-Trichlorophenol	2.0	< 0.012
o-Cresol	200.0	< 0.012
m-Cresol	200.0	0.37
p-Cresol	200.0	0.37

* RCRA Regulations & Keyword Index, 1999 edition.

Bldg 29
Room 5
Sump

LABORATORY ANALYSIS REPORT

Mr. Mike Isper
EG&G MOUND APPLIED TECHNOLOGIES, INC.
1 Mound Ave.
Miamisburg, OH 45343

Page 1
Report Date : 05/16/94
HEG Task # : 94050098
HEG P/N, Acct:

P.O. Number: 32908
Proj Name: Waste Management

Date Received: 05/09/94
Proj #: Building 72

HEG Sample # : 9405707 Sample Date: 05/09/94 Sample Priority: Rush
Sample ID : WM94-997

Parameter	Units		Results	Comments
TCLP RCRA Metals (with extraction)				
TCLP Mercury	mg/L		0.0137	15
TCLP Silver	mg/L		0.233	
TCLP Barium	mg/L		0.584	
TCLP Cadmium	mg/L		0.027	
TCLP Chromium	mg/L	<	0.100	
TCLP Lead	mg/L	<	0.100	
TCLP Selenium	mg/L	<	0.005	
TCLP Arsenic	mg/L		0.058	
TCLP Volatile Organics And Extraction				
TCLP Volatile Organic Quality Control				
1,2-Dichloroethane-d4	%		99	
Toluene-d8	%		98	
4-Bromofluorobenzene	%		114	
TCLP Vinyl Chloride	mg/L	<	0.125	
TCLP Tetrachloroethylene	mg/L	<	0.125	
TCLP Trichloroethylene	mg/L	<	0.125	
TCLP Methyl Ethyl Ketone	mg/L	<	1.25	
TCLP 1,1-Dichloroethylene	mg/L	<	0.125	
TCLP 1,2-Dichloroethane	mg/L	<	0.063	
TCLP Chloroform	mg/L	<	0.063	
TCLP Chlorobenzene	mg/L	<	0.125	
TCLP Carbon Tetrachloride	mg/L	<	0.125	
TCLP Benzene	mg/L	<	0.125	
TCLP Semi-Volatile Organics				
TCLP Acid Extractables Quality Control				
2-Fluorophenol	%		59	
Phenol-d6	%		39	
2,4,6-Tribromophenol	%		88	

Continued ...

HAYDEN LABORATORIES

LABORATORY ANALYSIS REPORT

Mr. Mike Isper
EG&G MOUND APPLIED TECHNOLOGIES, INC.
1 Mound Ave.
Miamisburg, OH 45343

Page 2
Report Date : 05/16/94
HEG Task # : 94050098
HEG P/N, Acct:

HEG Sample # : 9405707 Sample Date: 05/09/94 Sample Priority: Rush
Sample ID : WM94-997 (Continued ...)

Parameter	Units	Results	Comments
TCLP Base Neutral Quality Control			
Nitrobenzene-d5	%	113	
2-Fluorobiphenyl	%	114	
Terphenyl-d14	%	84	
TCLP 1,4-Dichlorobenzene	mg/L	< 0.004	
TCLP 2,4-Dinitrotoluene	mg/L	< 0.012	
TCLP Hexachlorobenzene	mg/L	< 0.012	
TCLP Hexachlorobutadiene	mg/L	< 0.020	
TCLP Hexachloroethane	mg/L	< 0.012	
TCLP Nitrobenzene	mg/L	< 0.012	
TCLP Pentachlorophenol	mg/L	< 0.020	
TCLP Pyridine	mg/L	< 0.024	
TCLP 2,4,5-Trichlorophenol	mg/L	< 0.012	
TCLP 2,4,6-Trichlorophenol	mg/L	< 0.012	
TCLP o-Cresol	mg/L	< 0.012	
TCLP m-Cresol	mg/L	0.37	27
TCLP p-Cresol	mg/L	0.37	27
Bulk Asbestos			
Gross Sample Appearance		Heterogeneous	
Color		Black	
Asbestos Type		None detected	
Asbestos Type			
Asbestos Type			
Total % Asbestos		-	
Other Fibrous Mat'l		Cellulose	
Other Fibrous Mat'l			
Other Non-Fib. Mat'l		Oil, rocks	

15 Estimated concentration

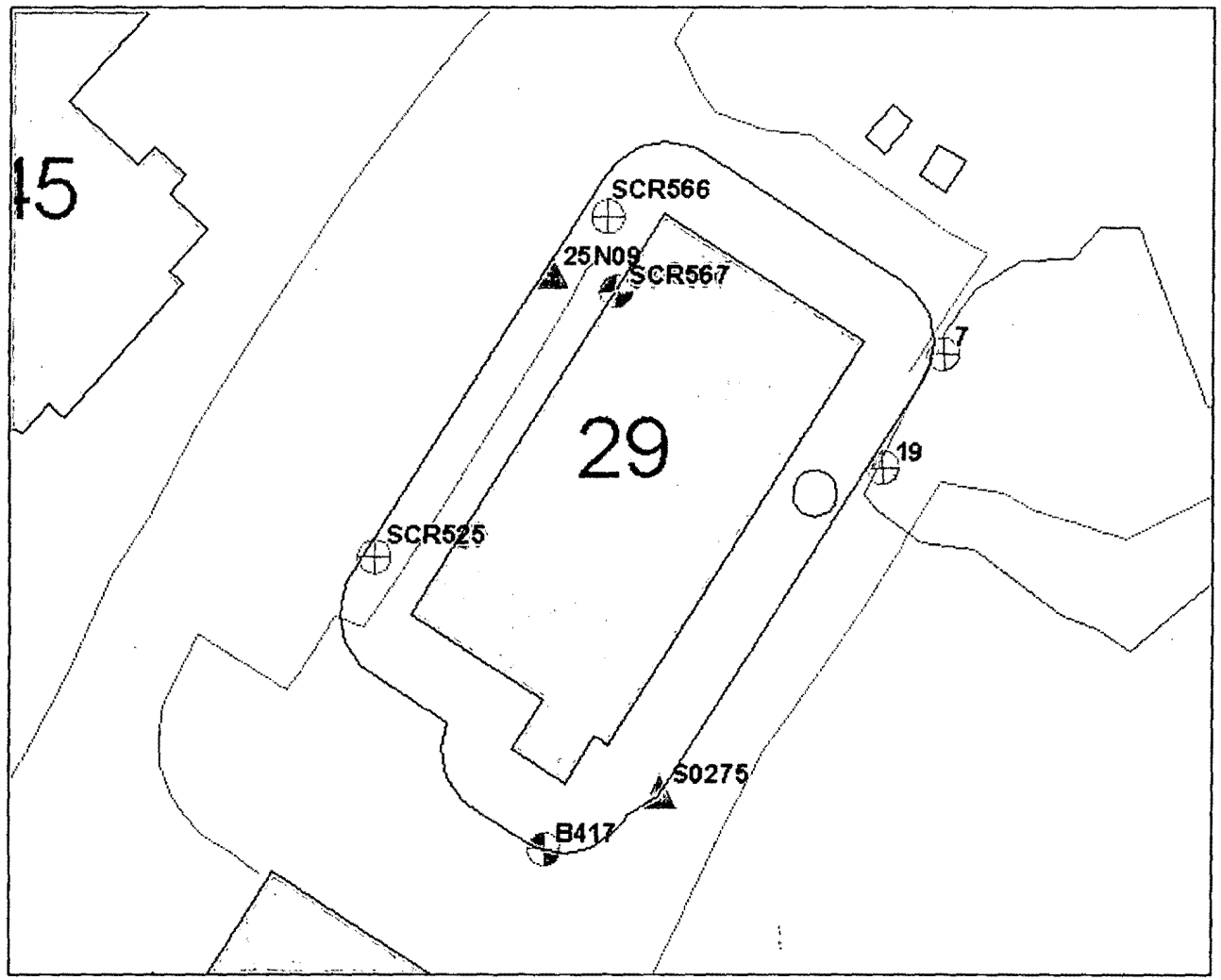
27 These compounds coelute

HAYDEN LABORATORIES

Appendix L

Soil Sampling, Vicinity

Bldg. 29 Sample Locations within 15 feet



Sample Detect
Sample Detect Outline
Sample Nondetect Outline
Excavated Boundaries
Surveyed
Digitized
Building Label
Text Bldg ID
Building Outline
Hidden Building Outline
Building Outline
Building
Color Fill
Roads
Paved Drives/Parking
Unpaved Drives/Parking

N
W E
S

25 0 25 50 75 100 Feet

03/18/02

Building 29 Detects

Location	Sample_i	Collection	Value_name	Measured_valu	Value_u	Detection	Chem_	Start	End_	La	Dat	Project_c	Med	Comments
B417	000088	19991101	2-Butanone	30.0000	UG/KG		ORVO	10.0	15.0			PRS 66_	Soil	
B417	000087	19991101	2-Butanone	6.0000	UG/KG		ORVO	5.0	10.0	J		PRS 66_	Soil	
B417	000094	19991101	2-Butanone	3.0000	UG/KG		ORVO	20.0	25.0	JB		PRS 66_	Soil	
B417	000088	19991101	Acetone	180.0000	UG/KG		ORVO	10.0	15.0	B		PRS 66_	Soil	
B417	000089	19991101	Acetone	12.0000	UG/KG		ORVO	15.0	20.0	B		PRS 66_	Soil	
B417	000094	19991101	Acetone	7.0000	UG/KG		ORVO	20.0	25.0	JB		PRS 66_	Soil	
B417	000087	19991101	Actinium-227	0.9310	PCI/G	0.7140	RAD	5.0	10.0	J		PRS 66_	Soil	
B417	000089	19991101	Aluminum	18500.0000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	
B417	000094	19991101	Aluminum	17400.0000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	
B417	000087	19991101	Aluminum	15400.0000	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Aluminum	13700.0000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	
B417	000086	19991101	Aluminum	5850.0000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000089	19991101	Antimony	0.2400	MG/KG		INORG	15.0	20.0	B		PRS 66_	Soil	
B417	000094	19991101	Antimony	0.2200	MG/KG		INORG	20.0	25.0	B		PRS 66_	Soil	
B417	000094	19991101	Arsenic	5.6000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	
B417	000089	19991101	Arsenic	5.1000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	
B417	000086	19991101	Arsenic	4.9000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000088	19991101	Arsenic	3.6000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	
B417	000087	19991101	Arsenic	2.8000	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	
B417	000094	19991101	Barium	71.1000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	
B417	000089	19991101	Barium	38.6000	MG/KG		INORG	15.0	20.0	B		PRS 66_	Soil	
B417	000088	19991101	Barium	31.6000	MG/KG		INORG	10.0	15.0	B		PRS 66_	Soil	
B417	000086	19991101	Barium	30.8000	MG/KG		INORG	0.0	5.0	B		PRS 66_	Soil	
B417	000087	19991101	Barium	15.5000	MG/KG		INORG	5.0	10.0	B		PRS 66_	Soil	
B417	000086	19991101	Benzo(a)anthracene	35.0000	UG/KG		ORSV	0.0	5.0	J		PRS 66_	Soil	
B417	000086	19991101	Benzo(a)pyrene	32.0000	UG/KG		ORSV	0.0	5.0	J		PRS 66_	Soil	
B417	000086	19991101	Benzo(b)fluoranthene	38.0000	UG/KG		ORSV	0.0	5.0	J		PRS 66_	Soil	
B417	000086	19991101	Benzo(g,h,i)perylene	29.0000	UG/KG		ORSV	0.0	5.0	J		PRS 66_	Soil	
B417	000086	19991101	Benzo(k)fluoranthene	33.0000	UG/KG		ORSV	0.0	5.0	J		PRS 66_	Soil	
B417	000089	19991101	Beryllium	1.0000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000094	19991101	Beryllium	0.9900	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000087	19991101	Beryllium	0.8100	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000088	19991101	Beryllium	0.7600	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000086	19991101	Beryllium	0.3700	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000088	19991101	Bis(2-ethylhexyl)phthalate	42.0000	UG/KG		ORSV	10.0	15.0	J		PRS 66_	Soil	
B417	000086	19991101	Bis(2-ethylhexyl)phthalate	33.0000	UG/KG		ORSV	0.0	5.0	J		PRS 66_	Soil	
B417	000094	19991101	Cadmium	0.2800	MG/KG		INORG	20.0	25.0	B		PRS 66_	Soil	
B417	000086	19991101	Cadmium	0.1400	MG/KG		INORG	0.0	5.0	B		PRS 66_	Soil	
B417	000086	19991101	Calcium	165000.0000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000088	19991101	Calcium	113000.0000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	
B417	000089	19991101	Calcium	82800.0000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	
B417	000087	19991101	Calcium	47800.0000	MG/KG		INORG	5.0	10.0		J	PRS 66_	Soil	
B417	000094	19991101	Calcium	32200.0000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	
B417	000089	19991101	Carbon Tetrachloride	1.0000	UG/KG		ORVO	15.0	20.0	J		PRS 66_	Soil	
B417	000087	19991101	Cesium-137	0.0699	PCI/G	0.0299	RAD	5.0	10.0			PRS 66_	Soil	
B417	000089	19991101	Cesium-137	0.0202	PCI/G	0.0142	RAD	15.0	20.0			PRS 66_	Soil	
B417	000086	19991101	Chloride	54.2000	MG/KG	2.6000	ANION	0.0	5.0			PRS 66_	Soil	
B417	000094	19991101	Chloride	41.0000	MG/KG	2.7000	ANION	20.0	25.0			PRS 66_	Soil	
B417	000089	19991101	Chloride	32.6000	MG/KG	2.9000	ANION	15.0	20.0			PRS 66_	Soil	
B417	000088	19991101	Chloride	31.4000	MG/KG	2.8000	ANION	10.0	15.0			PRS 66_	Soil	

Location	Sample_i	Collection	Value_name	Measured_valu	Value_u	Detection	Chem_	Start	End_	La	Dat	Project_c	Med	Comments
B417	000087	19991101	Chloride	28.2000	MG/KG	2.8000	ANION	5.0	10.0		J	PRS 66_	Soil	
B417	000089	19991101	Chromium	21.9000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	2-Exceeds background value.
B417	000094	19991101	Chromium	21.6000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	2-Exceeds background value.
B417	000087	19991101	Chromium	18.7000	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Chromium	16.4000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	
B417	000086	19991101	Chromium	8.2000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000086	19991101	Chrysene	39.0000	UG/KG		ORSV	0.0	5.0	J		PRS 66_	Soil	
B417	000094	19991101	Cobalt	28.9000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	2-Exceeds background value.
B417	000089	19991101	Cobalt	14.3000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	
B417	000087	19991101	Cobalt	11.7000	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Cobalt	10.1000	MG/KG		INORG	10.0	15.0	B		PRS 66_	Soil	
B417	000086	19991101	Cobalt	4.5000	MG/KG		INORG	0.0	5.0	B		PRS 66_	Soil	
B417	000088	19991101	Cobalt-60	0.0754	PCI/G	0.0459	RAD	10.0	15.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV. 3-Exceeds screening level.
B417	000094	19991101	Copper	29.0000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	2-Exceeds background value.
B417	000089	19991101	Copper	26.8000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	2-Exceeds background value.
B417	000087	19991101	Copper	18.9000	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Copper	14.2000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	
B417	000086	19991101	Copper	10.0000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000088	19991101	Dichloromethane (Methylene Chlori	14.0000	UG/KG		ORVO	10.0	15.0	B		PRS 66_	Soil	
B417	000089	19991101	Dichloromethane (Methylene Chlori	13.0000	UG/KG		ORVO	15.0	20.0	B		PRS 66_	Soil	
B417	000094	19991101	Dichloromethane (Methylene Chlori	13.0000	UG/KG		ORVO	20.0	25.0	B		PRS 66_	Soil	
B417	000086	19991101	Dichloromethane (Methylene Chlori	13.0000	UG/KG		ORVO	0.0	5.0	B		PRS 66_	Soil	
B417	000086	19991101	Fluoranthene	71.0000	UG/KG		ORSV	0.0	5.0	J		PRS 66_	Soil	
B417	000089	19991101	Fluoride	12.5000	MG/KG	1.2000	ANION	15.0	20.0			PRS 66_	Soil	
B417	000086	19991101	Fluoride	4.3000	MG/KG	1.0000	ANION	0.0	5.0			PRS 66_	Soil	
B417	000088	19991101	Fluoride	4.2000	MG/KG	1.1000	ANION	10.0	15.0			PRS 66_	Soil	
B417	000087	19991101	Fluoride	2.4000	MG/KG	1.1000	ANION	5.0	10.0			PRS 66_	Soil	
B417	000086	19991101	Indeno(1,2,3-cd)pyrene	22.0000	UG/KG		ORSV	0.0	5.0	J		PRS 66_	Soil	
B417	000094	19991101	Iron	50300.0000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	2-Exceeds background value.
B417	000089	19991101	Iron	30400.0000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	
B417	000087	19991101	Iron	26300.0000	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Iron	23600.0000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	
B417	000086	19991101	Iron	11900.0000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000094	19991101	Lead	8.2000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	
B417	000086	19991101	Lead	6.3000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000088	19991101	Lead	5.7000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	
B417	000089	19991101	Lead	5.2000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	
B417	000087	19991101	Lead	3.8000	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	
B417	000086	19991101	Lead-210	0.7673	PCI/G	0.4742	RAD	0.0	5.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000089	19991101	Lead-210	0.2854	PCI/G	0.1831	RAD	15.0	20.0			PRS 66_	Soil	
B417	000089	19991101	Lead-212	1.5800	PCI/G	0.1390	RAD	15.0	20.0			PRS 66_	Soil	
B417	000094	19991101	Lead-212	1.4200	PCI/G	0.1670	RAD	20.0	25.0			PRS 66_	Soil	
B417	000087	19991101	Lead-212	1.3500	PCI/G	0.1380	RAD	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Lead-212	1.3100	PCI/G	0.1780	RAD	10.0	15.0			PRS 66_	Soil	
B417	000086	19991101	Lead-212	0.7680	PCI/G	0.1270	RAD	0.0	5.0			PRS 66_	Soil	
B417	000094	19991101	Lead-214	1.1500	PCI/G	0.1520	RAD	20.0	25.0			PRS 66_	Soil	
B417	000087	19991101	Lead-214	0.9400	PCI/G	0.1720	RAD	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Lead-214	0.9300	PCI/G	0.1510	RAD	10.0	15.0			PRS 66_	Soil	
B417	000086	19991101	Lead-214	0.8720	PCI/G	0.1270	RAD	0.0	5.0			PRS 66_	Soil	
B417	000089	19991101	Lead-214	0.6400	PCI/G	0.1780	RAD	15.0	20.0			PRS 66_	Soil	
B417	000087	19991101	Lithium	42.2000	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	2-Exceeds background value.
B417	000089	19991101	Lithium	40.6000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	2-Exceeds background value.

Location	Sample_i	Collection	Value_name	Measured_valu	Value_u	Detection	Chem_	Start	End_	La	Dat	Project_c	Med	Comments
B417	000094	19991101	Lithium	37.7000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	2-Exceeds background value.
B417	000088	19991101	Lithium	33.8000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	2-Exceeds background value.
B417	000086	19991101	Lithium	11.9000	MG/KG		INORG	0.0	5.0	B		PRS 66_	Soil	
B417	000086	19991101	Magnesium	40400.0000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	2-Exceeds background value.
B417	000087	19991101	Magnesium	14900.0000	MG/KG		INORG	5.0	10.0		J	PRS 66_	Soil	
B417	000088	19991101	Magnesium	12900.0000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	
B417	000094	19991101	Magnesium	11700.0000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	
B417	000089	19991101	Magnesium	10200.0000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	
B417	000094	19991101	Manganese	1480.0000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	2-Exceeds background value.
B417	000089	19991101	Manganese	810.0000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	
B417	000088	19991101	Manganese	555.0000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	
B417	000087	19991101	Manganese	506.0000	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	
B417	000086	19991101	Manganese	427.0000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000094	19991101	Nickel	30.9000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	
B417	000089	19991101	Nickel	27.8000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	
B417	000087	19991101	Nickel	25.0000	MG/KG		INORG	5.0	10.0		J	PRS 66_	Soil	
B417	000088	19991101	Nickel	20.9000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	
B417	000086	19991101	Nickel	10.8000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000086	19991101	Nitrate-Nitrite-N	1.6000	MG/KG	0.2100	ANION	0.0	5.0			PRS 66_	Soil	
B417	000087	19991101	Nitrate-Nitrite-N	0.3200	MG/KG	0.2300	ANION	5.0	10.0		J	PRS 66_	Soil	
B417	000089	19991101	Nitrate-Nitrite-N	0.3100	MG/KG	0.2200	ANION	15.0	20.0			PRS 66_	Soil	
B417	000086	19991101	Percent Solids	95.3000	%	0.0100	GENER	0.0	5.0			PRS 66_	Soil	
B417	000094	19991101	Percent Solids	90.9000	%	0.0100	GENER	20.0	25.0			PRS 66_	Soil	
B417	000087	19991101	Percent Solids	90.2000	%	0.0100	GENER	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Percent Solids	88.7000	%	0.0100	GENER	10.0	15.0			PRS 66_	Soil	
B417	000089	19991101	Percent Solids	84.9000	%	0.0100	GENER	15.0	20.0			PRS 66_	Soil	
B417	000086	19991101	Phenanthrene	42.0000	UG/KG		ORSV	0.0	5.0	J		PRS 66_	Soil	
B417	000089	19991101	Phosphate, As P - Total	1720.0000	MG/KG	262.0000	GENER	15.0	20.0			PRS 66_	Soil	
B417	000088	19991101	Phosphate, As P - Total	1370.0000	MG/KG	264.0000	GENER	10.0	15.0			PRS 66_	Soil	
B417	000087	19991101	Phosphate, As P - Total	1330.0000	MG/KG	138.0000	GENER	5.0	10.0		J	PRS 66_	Soil	
B417	000094	19991101	Phosphate, As P - Total	1100.0000	MG/KG	133.0000	GENER	20.0	25.0			PRS 66_	Soil	
B417	000086	19991101	Phosphate, As P - Total	298.0000	MG/KG	52.1000	GENER	0.0	5.0			PRS 66_	Soil	
SCR567	93060210	19930602	Plutonium-238	31.0000	PCI/G		RAD	3.0	3.0			SCRDAT	Soil	1-Exceeds soil 10-6 GV. 2-Exceeds background value.
S0275	5970	19840701	Plutonium-238	0.2900	PCI/G	0.0100	RAD	0.0	0.0			RSS	Soil	2-Exceeds background value.
19	D101000	19970602	Plutonium-238	0.1810	PCI/G	0.0332	RAD	0.5	1.0	J		PRS 86	Soil	2-Exceeds background value.
B417	000086	19991101	Plutonium-238	0.0857	PCI/G	0.0232	RAD	0.0	5.0			PRS 66_	Soil	
B417	000089	19991101	Potassium	5500.0000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	2-Exceeds background value.
B417	000094	19991101	Potassium	5380.0000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	2-Exceeds background value.
B417	000087	19991101	Potassium	5070.0000	MG/KG		INORG	5.0	10.0		J	PRS 66_	Soil	2-Exceeds background value.
B417	000088	19991101	Potassium	4770.0000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	2-Exceeds background value.
B417	000086	19991101	Potassium	2240.0000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	2-Exceeds background value.
B417	000094	19991101	Potassium-40	40.7000	PCI/G	0.6150	RAD	20.0	25.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV. 2-Exceeds background value.
B417	000087	19991101	Potassium-40	36.4000	PCI/G	1.0200	RAD	5.0	10.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000088	19991101	Potassium-40	32.7000	PCI/G	0.7010	RAD	10.0	15.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000089	19991101	Potassium-40	32.5000	PCI/G	0.7200	RAD	15.0	20.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000086	19991101	Potassium-40	14.5000	PCI/G	0.6040	RAD	0.0	5.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
7	F201000	19970602	Potassium-40	11.6000	PCI/G	0.0000	RAD	0.5	1.0			PRS 86	Soil	1-Exceeds soil 10-6 GV.
19	D101000	19970602	Potassium-40	7.2600	PCI/G	0.0000	RAD	0.5	1.0			PRS 86	Soil	1-Exceeds soil 10-6 GV.
B417	000086	19991101	Pyrene	60.0000	UG/KG		ORSV	0.0	5.0	J		PRS 66_	Soil	
B417	000089	19991101	Radium-224	1.6600	PCI/G	0.1460	RAD	15.0	20.0			PRS 66_	Soil	
B417	000094	19991101	Radium-224	1.5000	PCI/G	0.1760	RAD	20.0	25.0			PRS 66_	Soil	
B417	000087	19991101	Radium-224	1.4300	PCI/G	0.1450	RAD	5.0	10.0			PRS 66_	Soil	

Location	Sample_i	Collection	Value_name	Measured_valu	Value_u	Detection	Chem_	Start	End_	La	Dat	Project_c	Med	Comments
B417	000088	19991101	Radium-224	1.3800	PCI/G	0.1870	RAD	10.0	15.0			PRS 66_	Soil	
B417	000086	19991101	Radium-224	0.8090	PCI/G	0.1340	RAD	0.0	5.0			PRS 66_	Soil	
B417	000086	19991101	Radium-226	1.9700	PCI/G	0.6256	RAD	0.0	5.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000087	19991101	Radium-226	1.8660	PCI/G	1.1340	RAD	5.0	10.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000088	19991101	Radium-226	1.5870	PCI/G	0.7283	RAD	10.0	15.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000094	19991101	Radium-226	1.4030	PCI/G	1.2020	RAD	20.0	25.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000089	19991101	Radium-226	1.3130	PCI/G	0.2415	RAD	15.0	20.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000094	19991101	Radium-226	0.9480	PCI/G	0.3350	RAD	20.0	25.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000086	19991101	Radium-226	0.8880	PCI/G	0.2860	RAD	0.0	5.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000087	19991101	Radium-226	0.8810	PCI/G	0.1560	RAD	5.0	10.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000088	19991101	Radium-226	0.8570	PCI/G	0.3680	RAD	10.0	15.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000089	19991101	Radium-226	0.7130	PCI/G	0.3310	RAD	15.0	20.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
7	F201000	19970602	Radium-226	0.7030	PCI/G	0.0000	RAD	0.5	1.0	J		PRS 86	Soil	1-Exceeds soil 10-6 GV.
19	D101000	19970602	Radium-226	0.4730	PCI/G	0.2560	RAD	0.5	1.0	J		PRS 86	Soil	1-Exceeds soil 10-6 GV.
B417	000087	19991101	Radium-228	1.7500	PCI/G	0.4080	RAD	5.0	10.0			PRS 66_	Soil	
B417	000094	19991101	Radium-228	1.5800	PCI/G	0.3320	RAD	20.0	25.0			PRS 66_	Soil	
B417	000089	19991101	Radium-228	1.3500	PCI/G	0.6960	RAD	15.0	20.0			PRS 66_	Soil	
B417	000086	19991101	Radium-228	0.9240	PCI/G	0.2930	RAD	0.0	5.0			PRS 66_	Soil	
B417	000094	19991101	Selenium	0.8500	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	2-Exceeds background value.
B417	000088	19991101	Selenium	0.4500	MG/KG		INORG	10.0	15.0	B		PRS 66_	Soil	2-Exceeds background value.
B417	000086	19991101	Sodium	280.0000	MG/KG		INORG	0.0	5.0	B		PRS 66_	Soil	2-Exceeds background value.
B417	000088	19991101	Sodium	253.0000	MG/KG		INORG	10.0	15.0	B		PRS 66_	Soil	2-Exceeds background value.
B417	000087	19991101	Sodium	249.0000	MG/KG		INORG	5.0	10.0	B		PRS 66_	Soil	2-Exceeds background value.
B417	000089	19991101	Sodium	217.0000	MG/KG		INORG	15.0	20.0	B		PRS 66_	Soil	
B417	000094	19991101	Sodium	212.0000	MG/KG		INORG	20.0	25.0	B		PRS 66_	Soil	
B417	000087	19991101	Sulfate	1600.0000	MG/KG	554.0000	ANION	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Sulfate	632.0000	MG/KG	56.4000	ANION	10.0	15.0			PRS 66_	Soil	
B417	000094	19991101	Sulfate	58.8000	MG/KG	27.5000	ANION	20.0	25.0			PRS 66_	Soil	
B417	000089	19991101	Sulfate	44.8000	MG/KG	29.4000	ANION	15.0	20.0			PRS 66_	Soil	
B417	000094	19991101	Thallium	1.3000	MG/KG		INORG	20.0	25.0	B		PRS 66_	Soil	2-Exceeds background value.
B417	000087	19991101	Thallium	0.7600	MG/KG		INORG	5.0	10.0	B		PRS 66_	Soil	2-Exceeds background value.
B417	000089	19991101	Thallium	0.7200	MG/KG		INORG	15.0	20.0	B		PRS 66_	Soil	2-Exceeds background value.
B417	000088	19991101	Thallium-208	0.4850	PCI/G	0.1380	RAD	10.0	15.0			PRS 66_	Soil	
B417	000094	19991101	Thallium-208	0.4280	PCI/G	0.0824	RAD	20.0	25.0			PRS 66_	Soil	
B417	000087	19991101	Thallium-208	0.4090	PCI/G	0.0813	RAD	5.0	10.0			PRS 66_	Soil	
B417	000086	19991101	Thallium-208	0.3190	PCI/G	0.0617	RAD	0.0	5.0			PRS 66_	Soil	
B417	000088	19991101	Thorium-228	1.4200	PCI/G	0.4040	RAD	10.0	15.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000089	19991101	Thorium-228	1.3500	PCI/G	0.4370	RAD	15.0	20.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000094	19991101	Thorium-228	1.2600	PCI/G	0.2420	RAD	20.0	25.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000087	19991101	Thorium-228	1.2000	PCI/G	0.2380	RAD	5.0	10.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000094	19991101	Thorium-228	1.1200	PCI/G	0.0541	RAD	20.0	25.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000089	19991101	Thorium-228	0.9600	PCI/G	0.0787	RAD	15.0	20.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000086	19991101	Thorium-228	0.9340	PCI/G	0.1810	RAD	0.0	5.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000087	19991101	Thorium-228	0.9170	PCI/G	0.0620	RAD	5.0	10.0		J	PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000088	19991101	Thorium-228	0.8640	PCI/G	0.0811	RAD	10.0	15.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000086	19991101	Thorium-228	0.6720	PCI/G	0.0636	RAD	0.0	5.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
19	D101000	19970602	Thorium-228	0.2390	PCI/G	0.0245	RAD	0.5	1.0	J		PRS 86	Soil	1-Exceeds soil 10-6 GV.
7	F201000	19970602	Thorium-228	0.2150	PCI/G	0.0197	RAD	0.5	1.0	J		PRS 86	Soil	1-Exceeds soil 10-6 GV.
B417	000086	19991101	Thorium-230	0.6250	PCI/G	0.0329	RAD	0.0	5.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000087	19991101	Thorium-230	0.4690	PCI/G	0.0282	RAD	5.0	10.0	J	J	PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000094	19991101	Thorium-230	0.4080	PCI/G	0.0283	RAD	20.0	25.0	J		PRS 66_	Soil	1-Exceeds soil 10-6 GV.
19	D101000	19970602	Thorium-230	0.3540	PCI/G	0.0182	RAD	0.5	1.0	J		PRS 86	Soil	1-Exceeds soil 10-6 GV.

Location	Sample_i	Collection	Value_name	Measured_valu	Value_u	Detection	Chem_	Start	End_	La	Dat	Project_c	Med	Comments
B417	000089	19991101	Thorium-230	0.3480	PCI/G	0.0185	RAD	15.0	20.0	J		PRS 66_	Soil	1-Exceeds soil 10-6 GV.
7	F201000	19970602	Thorium-230	0.2890	PCI/G	0.0111	RAD	0.5	1.0	J		PRS 86	Soil	1-Exceeds soil 10-6 GV.
B417	000088	19991101	Thorium-230	0.2860	PCI/G	0.0275	RAD	10.0	15.0	J		PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000088	19991101	Thorium-232	1.8400	PCI/G	0.4590	RAD	10.0	15.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV. 2-Exceeds bckgnd value. 3-Exceeds screening level.
B417	000089	19991101	Thorium-232	1.3300	PCI/G	0.4940	RAD	15.0	20.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000087	19991101	Thorium-232	1.3100	PCI/G	0.5250	RAD	5.0	10.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000094	19991101	Thorium-232	1.1180	PCI/G	0.1975	RAD	20.0	25.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000094	19991101	Thorium-232	1.1100	PCI/G	0.4900	RAD	20.0	25.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000088	19991101	Thorium-232	0.8174	PCI/G	0.2414	RAD	10.0	15.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000089	19991101	Thorium-232	0.7770	PCI/G	0.0185	RAD	15.0	20.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000087	19991101	Thorium-232	0.7721	PCI/G	0.2723	RAD	5.0	10.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000087	19991101	Thorium-232	0.7710	PCI/G	0.0282	RAD	5.0	10.0		J	PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000089	19991101	Thorium-232	0.7493	PCI/G	0.0643	RAD	15.0	20.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000086	19991101	Thorium-232	0.7300	PCI/G	0.4020	RAD	0.0	5.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000094	19991101	Thorium-232	0.7270	PCI/G	0.0154	RAD	20.0	25.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000086	19991101	Thorium-232	0.6550	PCI/G	0.0195	RAD	0.0	5.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000086	19991101	Thorium-232	0.6282	PCI/G	0.2088	RAD	0.0	5.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
B417	000088	19991101	Thorium-232	0.6070	PCI/G	0.0275	RAD	10.0	15.0			PRS 66_	Soil	1-Exceeds soil 10-6 GV.
7	F201000	19970602	Thorium-232	0.2120	PCI/G	0.0111	RAD	0.5	1.0	J		PRS 86	Soil	1-Exceeds soil 10-6 GV.
19	D101000	19970602	Thorium-232	0.1810	PCI/G	0.0137	RAD	0.5	1.0	J		PRS 86	Soil	1-Exceeds soil 10-6 GV.
25N09	25N09	19940829	Total Aromatic Hydrocarbons	1008988.0000	IC		GENER	0.0	1.5			2680	Soil	
25N09	25N09	19940829	Total C5 TO C11 Petroleum Hydroc	1295839.0000	IC		GENER	0.0	1.5			2680	Soil	
B417	000089	19991101	Tritium	0.2600	PCI/G	0.0427	RAD	15.0	20.0	J		PRS 66_	Soil	
B417	000094	19991101	Tritium	0.2480	PCI/G	0.0426	RAD	20.0	25.0	J		PRS 66_	Soil	
B417	000088	19991101	Tritium	0.1750	PCI/G	0.0388	RAD	10.0	15.0	J		PRS 66_	Soil	
B417	000087	19991101	Tritium	0.0900	PCI/G	0.0316	RAD	5.0	10.0	J		PRS 66_	Soil	
B417	000089	19991101	Uranium-234	1.3600	PCI/G	0.3470	RAD	15.0	20.0			PRS 66_	Soil	2-Exceeds background value.
B417	000087	19991101	Uranium-234	1.1600	PCI/G	0.3390	RAD	5.0	10.0			PRS 66_	Soil	2-Exceeds background value.
B417	000094	19991101	Uranium-234	1.0700	PCI/G	0.2850	RAD	20.0	25.0			PRS 66_	Soil	
B417	000088	19991101	Uranium-234	1.0300	PCI/G	0.2570	RAD	10.0	15.0			PRS 66_	Soil	
B417	000086	19991101	Uranium-234	1.0100	PCI/G	0.1970	RAD	0.0	5.0			PRS 66_	Soil	
B417	000094	19991101	Uranium-234	0.3820	PCI/G	0.0325	RAD	20.0	25.0			PRS 66_	Soil	
B417	000087	19991101	Uranium-234	0.3700	PCI/G	0.0256	RAD	5.0	10.0			PRS 66_	Soil	
B417	000086	19991101	Uranium-234	0.3230	PCI/G	0.0321	RAD	0.0	5.0			PRS 66_	Soil	
B417	000088	19991101	Uranium-234	0.2750	PCI/G	0.0294	RAD	10.0	15.0			PRS 66_	Soil	
B417	000089	19991101	Uranium-234	0.2380	PCI/G	0.0248	RAD	15.0	20.0			PRS 66_	Soil	
B417	000086	19991101	Uranium-238	0.3300	PCI/G	0.0264	RAD	0.0	5.0			PRS 66_	Soil	
B417	000087	19991101	Uranium-238	0.1620	PCI/G	0.0207	RAD	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Uranium-238	0.1380	PCI/G	0.0226	RAD	10.0	15.0			PRS 66_	Soil	
B417	000094	19991101	Uranium-238	0.1290	PCI/G	0.0419	RAD	20.0	25.0			PRS 66_	Soil	
B417	000089	19991101	Uranium-238	0.1080	PCI/G	0.0108	RAD	15.0	20.0			PRS 66_	Soil	
B417	000094	19991101	Vanadium	26.1000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	2-Exceeds background value.
B417	000089	19991101	Vanadium	24.6000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	
B417	000087	19991101	Vanadium	18.7000	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Vanadium	17.8000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	
B417	000086	19991101	Vanadium	12.5000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000086	19991101	Zinc	69.3000	MG/KG		INORG	0.0	5.0			PRS 66_	Soil	
B417	000094	19991101	Zinc	67.2000	MG/KG		INORG	20.0	25.0			PRS 66_	Soil	
B417	000089	19991101	Zinc	64.1000	MG/KG		INORG	15.0	20.0			PRS 66_	Soil	
B417	000087	19991101	Zinc	59.5000	MG/KG		INORG	5.0	10.0			PRS 66_	Soil	
B417	000088	19991101	Zinc	48.2000	MG/KG		INORG	10.0	15.0			PRS 66_	Soil	

Building 29 Non-Detects

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000088	19991101	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	1,1-Dichloroethane	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	1,1-Dichloroethane	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	1,1-Dichloroethane	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,1-Dichloroethane	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,1-Dichloroethane	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	1,1-Dichloroethene	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	1,1-Dichloroethene	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	1,1-Dichloroethene	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,1-Dichloroethene	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,1-Dichloroethene	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	1,2,4-Trichlorobenzene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	1,2,4-Trichlorobenzene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	1,2,4-Trichlorobenzene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,2,4-Trichlorobenzene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,2,4-Trichlorobenzene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	1,2-Dichlorobenzene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	1,2-Dichlorobenzene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	1,2-Dichlorobenzene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,2-Dichlorobenzene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,2-Dichlorobenzene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000088	19991101	1,2-Dichloroethane	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	1,2-Dichloroethane	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	1,2-Dichloroethane	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,2-Dichloroethane	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,2-Dichloroethane	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	1,2-Dichloroethene	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	1,2-Dichloroethene	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	1,2-Dichloroethene	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,2-Dichloroethene	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,2-Dichloroethene	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	1,2-Dichloropropane	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	1,2-Dichloropropane	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	1,2-Dichloropropane	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,2-Dichloropropane	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,2-Dichloropropane	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	1,3-Dichlorobenzene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	1,3-Dichlorobenzene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	1,3-Dichlorobenzene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,3-Dichlorobenzene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,3-Dichlorobenzene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	1,4-Dichlorobenzene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	1,4-Dichlorobenzene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	1,4-Dichlorobenzene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	1,4-Dichlorobenzene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	1,4-Dichlorobenzene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2,2'-oxybis(1-chloropropane)	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2,2'-oxybis(1-chloropropane)	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2,2'-oxybis(1-chloropropane)	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2,2'-oxybis(1-chloropropane)	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2,2'-oxybis(1-chloropropane)	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2,4,5-Trichlorophenol	980.0000	UG/KG	980.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2,4,5-Trichlorophenol	940.0000	UG/KG	940.0000	ORSV	10.0	15.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000087	19991101	2,4,5-Trichlorophenol	920.0000	UG/KG	920.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2,4,5-Trichlorophenol	920.0000	UG/KG	920.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2,4,5-Trichlorophenol	880.0000	UG/KG	880.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2,4,6-Trichlorophenol	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2,4,6-Trichlorophenol	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2,4,6-Trichlorophenol	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2,4,6-Trichlorophenol	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2,4,6-Trichlorophenol	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2,4-Dichlorophenol	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2,4-Dichlorophenol	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2,4-Dichlorophenol	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2,4-Dichlorophenol	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2,4-Dichlorophenol	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2,4-Dimethylphenol	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2,4-Dimethylphenol	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2,4-Dimethylphenol	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2,4-Dimethylphenol	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2,4-Dimethylphenol	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2,4-Dinitrophenol	980.0000	UG/KG	980.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2,4-Dinitrophenol	940.0000	UG/KG	940.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2,4-Dinitrophenol	920.0000	UG/KG	920.0000	ORSV	5.0	10.0	U	UJ	PRS 66_	Soil
B417	000094	19991101	2,4-Dinitrophenol	920.0000	UG/KG	920.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2,4-Dinitrophenol	880.0000	UG/KG	880.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2,4-Dinitrotoluene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2,4-Dinitrotoluene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2,4-Dinitrotoluene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2,4-Dinitrotoluene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2,4-Dinitrotoluene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2,6-Dinitrotoluene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2,6-Dinitrotoluene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2,6-Dinitrotoluene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2,6-Dinitrotoluene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2,6-Dinitrotoluene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2-Butanone	12.0000	UG/KG	12.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000086	19991101	2-Butanone	11.0000	UG/KG	11.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2-Chloronaphthalene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2-Chloronaphthalene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000087	19991101	2-Chloronaphthalene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2-Chloronaphthalene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2-Chloronaphthalene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2-Chlorophenol	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2-Chlorophenol	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2-Chlorophenol	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2-Chlorophenol	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2-Chlorophenol	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	2-Hexanone	12.0000	UG/KG	12.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	2-Hexanone	12.0000	UG/KG	12.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	2-Hexanone	12.0000	UG/KG	12.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2-Hexanone	11.0000	UG/KG	11.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2-Hexanone	11.0000	UG/KG	11.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2-Methylnaphthalene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2-Methylnaphthalene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2-Methylnaphthalene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2-Methylnaphthalene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2-Methylnaphthalene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2-Methylphenol	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2-Methylphenol	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2-Methylphenol	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2-Methylphenol	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2-Methylphenol	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2-Nitroaniline	980.0000	UG/KG	980.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2-Nitroaniline	940.0000	UG/KG	940.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2-Nitroaniline	920.0000	UG/KG	920.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2-Nitroaniline	920.0000	UG/KG	920.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2-Nitroaniline	880.0000	UG/KG	880.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	2-Nitrophenol	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	2-Nitrophenol	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	2-Nitrophenol	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	2-Nitrophenol	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	2-Nitrophenol	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	3,3'-Dichlorobenzidine	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	3,3'-Dichlorobenzidine	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	3,3'-Dichlorobenzidine	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	3,3'-Dichlorobenzidine	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000086	19991101	3,3'-Dichlorobenzidine	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	3-Nitroaniline	980.0000	UG/KG	980.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	3-Nitroaniline	940.0000	UG/KG	940.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	3-Nitroaniline	920.0000	UG/KG	920.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	3-Nitroaniline	920.0000	UG/KG	920.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	3-Nitroaniline	880.0000	UG/KG	880.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	4,4'-DDD	3.8000	UG/KG	3.8000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	4,4'-DDD	3.8000	UG/KG	3.8000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	4,4'-DDD	3.7000	UG/KG	3.7000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	4,4'-DDD	3.7000	UG/KG	3.7000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4,4'-DDD	3.5000	UG/KG	3.5000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	4,4'-DDE	3.8000	UG/KG	3.8000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	4,4'-DDE	3.8000	UG/KG	3.8000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	4,4'-DDE	3.7000	UG/KG	3.7000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	4,4'-DDE	3.7000	UG/KG	3.7000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4,4'-DDE	3.5000	UG/KG	3.5000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	4,4'-DDT	3.8000	UG/KG	3.8000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	4,4'-DDT	3.8000	UG/KG	3.8000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	4,4'-DDT	3.7000	UG/KG	3.7000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	4,4'-DDT	3.7000	UG/KG	3.7000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4,4'-DDT	3.5000	UG/KG	3.5000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	4,6-Dinitro-o-Cresol	980.0000	UG/KG	980.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	4,6-Dinitro-o-Cresol	940.0000	UG/KG	940.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	4,6-Dinitro-o-Cresol	920.0000	UG/KG	920.0000	ORSV	5.0	10.0	U	UJ	PRS 66_	Soil
B417	000094	19991101	4,6-Dinitro-o-Cresol	920.0000	UG/KG	920.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4,6-Dinitro-o-Cresol	880.0000	UG/KG	880.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	4-Bromophenyl-phenyl Ether	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	4-Bromophenyl-phenyl Ether	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	4-Bromophenyl-phenyl Ether	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	4-Bromophenyl-phenyl Ether	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4-Bromophenyl-phenyl Ether	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	4-Chloro-3-Methylphenol	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	4-Chloro-3-Methylphenol	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	4-Chloro-3-Methylphenol	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	4-Chloro-3-Methylphenol	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4-Chloro-3-Methylphenol	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	4-Chloroaniline	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000088	19991101	4-Chloroaniline	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	4-Chloroaniline	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	4-Chloroaniline	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4-Chloroaniline	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	4-Chlorophenyl-Phenylether	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	4-Chlorophenyl-Phenylether	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	4-Chlorophenyl-Phenylether	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	4-Chlorophenyl-Phenylether	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4-Chlorophenyl-Phenylether	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	4-Methyl-2-pentanone	12.0000	UG/KG	12.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	4-Methyl-2-pentanone	12.0000	UG/KG	12.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	4-Methyl-2-pentanone	12.0000	UG/KG	12.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	4-Methylphenol	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	4-Methylphenol	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	4-Methylphenol	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	4-Methylphenol	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4-Methylphenol	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	4-Nitroaniline	980.0000	UG/KG	980.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	4-Nitroaniline	940.0000	UG/KG	940.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	4-Nitroaniline	920.0000	UG/KG	920.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	4-Nitroaniline	920.0000	UG/KG	920.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4-Nitroaniline	880.0000	UG/KG	880.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	4-Nitrophenol	980.0000	UG/KG	980.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	4-Nitrophenol	940.0000	UG/KG	940.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	4-Nitrophenol	920.0000	UG/KG	920.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	4-Nitrophenol	920.0000	UG/KG	920.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	4-Nitrophenol	880.0000	UG/KG	880.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Acenaphthene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Acenaphthene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Acenaphthene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Acenaphthene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Acenaphthene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Acenaphthylene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Acenaphthylene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Acenaphthylene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000094	19991101	Acenaphthylene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Acenaphthylene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000087	19991101	Acetone	12.0000	UG/KG		ORVO	5.0	10.0	B	UJ	PRS 66_	Soil
B417	000086	19991101	Acetone	11.0000	UG/KG	11.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
19	D1010000	19970602	Actinium	0.3834	PCI/G	0.3830	RAD	0.5	1.0	U		PRS 86	Soil
7	F2010000	19970602	Actinium	0.3240	PCI/G	0.3240	RAD	0.5	1.0	U		PRS 86	Soil
B417	000089	19991101	Actinium-227	0.6670	PCI/G	0.6670	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Actinium-227	0.5820	PCI/G	0.5820	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000094	19991101	Actinium-227	0.5170	PCI/G	0.5170	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000094	19991101	Actinium-227	0.3930	PCI/G	0.3930	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000087	19991101	Actinium-227	0.3719	PCI/G	0.3719	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000086	19991101	Actinium-227	0.3550	PCI/G	0.3550	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Actinium-227	0.2758	PCI/G	0.2758	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000086	19991101	Actinium-227	0.1858	PCI/G	0.1858	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Actinium-227	0.0772	PCI/G	0.0772	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Aldrin	1.9000	UG/KG	1.9000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Aldrin	1.9000	UG/KG	1.9000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Aldrin	1.8000	UG/KG	1.8000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Aldrin	1.8000	UG/KG	1.8000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Aldrin	1.7000	UG/KG	1.7000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Alpha Chlordane	1.9000	UG/KG	1.9000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Alpha Chlordane	1.9000	UG/KG	1.9000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Alpha Chlordane	1.8000	UG/KG	1.8000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Alpha Chlordane	1.8000	UG/KG	1.8000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Alpha Chlordane	1.7000	UG/KG	1.7000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Alpha-BHC	1.9000	UG/KG	1.9000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Alpha-BHC	1.9000	UG/KG	1.9000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Alpha-BHC	1.8000	UG/KG	1.8000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Alpha-BHC	1.8000	UG/KG	1.8000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Alpha-BHC	1.7000	UG/KG	1.7000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000087	19991101	Americium-241	0.9580	PCI/G	0.9580	RAD	5.0	10.0	U		PRS 66_	Soil
19	D1010000	19970602	Americium-241	0.5383	PCI/G	0.5380	RAD	0.5	1.0	U		PRS 86	Soil
B417	000088	19991101	Americium-241	0.4160	PCI/G	0.4160	RAD	10.0	15.0	U		PRS 66_	Soil
7	F2010000	19970602	Americium-241	0.2800	PCI/G	0.2800	RAD	0.5	1.0	U		PRS 86	Soil
B417	000094	19991101	Americium-241	0.2600	PCI/G	0.2600	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Americium-241	0.1800	PCI/G	0.1800	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Americium-241	0.1630	PCI/G	0.1630	RAD	15.0	20.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000094	19991101	Americium-241	0.1353	PCI/G	0.1353	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000087	19991101	Americium-241	0.1135	PCI/G	0.1135	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000088	19991101	Americium-241	0.0734	PCI/G	0.0734	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000086	19991101	Americium-241	0.0570	PCI/G	0.0570	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Americium-241	0.0198	PCI/G	0.0198	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000089	19991101	Anthracene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Anthracene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Anthracene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Anthracene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Anthracene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Antimony	0.2200	MG/KG		INORG	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Antimony	0.2200	MG/KG		INORG	5.0	10.0	U	J	PRS 66_	Soil
B417	000086	19991101	Antimony	0.2100	MG/KG		INORG	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Aroclor-1016	38.0000	UG/KG	38.0000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Aroclor-1016	38.0000	UG/KG	38.0000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Aroclor-1016	37.0000	UG/KG	37.0000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Aroclor-1016	37.0000	UG/KG	37.0000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Aroclor-1016	35.0000	UG/KG	35.0000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Aroclor-1221	77.0000	UG/KG	77.0000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Aroclor-1221	75.0000	UG/KG	75.0000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Aroclor-1221	74.0000	UG/KG	74.0000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Aroclor-1221	73.0000	UG/KG	73.0000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Aroclor-1221	70.0000	UG/KG	70.0000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Aroclor-1232	38.0000	UG/KG	38.0000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Aroclor-1232	38.0000	UG/KG	38.0000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Aroclor-1232	37.0000	UG/KG	37.0000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Aroclor-1232	37.0000	UG/KG	37.0000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Aroclor-1232	35.0000	UG/KG	35.0000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Aroclor-1242	38.0000	UG/KG	38.0000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Aroclor-1242	38.0000	UG/KG	38.0000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Aroclor-1242	37.0000	UG/KG	37.0000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Aroclor-1242	37.0000	UG/KG	37.0000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Aroclor-1242	35.0000	UG/KG	35.0000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Aroclor-1248	38.0000	UG/KG	38.0000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Aroclor-1248	38.0000	UG/KG	38.0000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Aroclor-1248	37.0000	UG/KG	37.0000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Aroclor-1248	37.0000	UG/KG	37.0000	ORPP	20.0	25.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000086	19991101	Aroclor-1248	35.0000	UG/KG	35.0000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Aroclor-1254	38.0000	UG/KG	38.0000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Aroclor-1254	38.0000	UG/KG	38.0000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Aroclor-1254	37.0000	UG/KG	37.0000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Aroclor-1254	37.0000	UG/KG	37.0000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Aroclor-1254	35.0000	UG/KG	35.0000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Aroclor-1260	38.0000	UG/KG	38.0000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Aroclor-1260	38.0000	UG/KG	38.0000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Aroclor-1260	37.0000	UG/KG	37.0000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Aroclor-1260	37.0000	UG/KG	37.0000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Aroclor-1260	35.0000	UG/KG	35.0000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Benzene	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Benzene	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Benzene	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Benzene	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Benzene	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Benzo(a)anthracene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Benzo(a)anthracene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Benzo(a)anthracene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Benzo(a)anthracene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000089	19991101	Benzo(a)pyrene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Benzo(a)pyrene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Benzo(a)pyrene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Benzo(a)pyrene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000089	19991101	Benzo(b)fluoranthene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Benzo(b)fluoranthene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Benzo(b)fluoranthene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Benzo(b)fluoranthene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000089	19991101	Benzo(g,h,i)perylene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Benzo(g,h,i)perylene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Benzo(g,h,i)perylene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Benzo(g,h,i)perylene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000089	19991101	Benzo(k)fluoranthene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Benzo(k)fluoranthene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Benzo(k)fluoranthene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Benzo(k)fluoranthene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000088	19991101	Beta-BHC	1.9000	UG/KG	1.9000	ORPP	10.0	15.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000089	19991101	Beta-BHC	1.9000	UG/KG	1.9000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Beta-BHC	1.8000	UG/KG	1.8000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Beta-BHC	1.8000	UG/KG	1.8000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Beta-BHC	1.7000	UG/KG	1.7000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Bis(2-chloroethoxy)methane	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Bis(2-chloroethoxy)methane	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Bis(2-chloroethoxy)methane	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Bis(2-chloroethoxy)methane	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Bis(2-chloroethoxy)methane	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Bis(2-chloroethyl)ether	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Bis(2-chloroethyl)ether	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Bis(2-chloroethyl)ether	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Bis(2-chloroethyl)ether	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Bis(2-chloroethyl)ether	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Bis(2-ethylhexyl)phthalate	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Bis(2-ethylhexyl)phthalate	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Bis(2-ethylhexyl)phthalate	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000087	19991101	Bismuth-207	0.0867	PCI/G	0.0867	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000089	19991101	Bismuth-207	0.0819	PCI/G	0.0819	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Bismuth-207	0.0806	PCI/G	0.0806	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000094	19991101	Bismuth-207	0.0751	PCI/G	0.0751	RAD	20.0	25.0	U		PRS 66_	Soil
19	D1010000	19970602	Bismuth-207	0.0615	PCI/G	0.0615	RAD	0.5	1.0	U		PRS 86	Soil
7	F2010000	19970602	Bismuth-207	0.0493	PCI/G	0.0493	RAD	0.5	1.0	U		PRS 86	Soil
B417	000086	19991101	Bismuth-207	0.0486	PCI/G	0.0486	RAD	0.0	5.0	U		PRS 66_	Soil
19	D1010000	19970602	Bismuth-210	0.0746	PCI/G	0.0746	RAD	0.5	1.0	U		PRS 86	Soil
7	F2010000	19970602	Bismuth-210	0.0622	PCI/G	0.0622	RAD	0.5	1.0	U		PRS 86	Soil
B417	000088	19991101	Bismuth-210M	0.1180	PCI/G	0.1180	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Bismuth-210M	0.1140	PCI/G	0.1140	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000089	19991101	Bismuth-210M	0.1130	PCI/G	0.1130	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000094	19991101	Bismuth-210M	0.1040	PCI/G	0.1040	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Bismuth-210M	0.0809	PCI/G	0.0809	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Bromodichloromethane	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Bromodichloromethane	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Bromodichloromethane	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Bromodichloromethane	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Bromodichloromethane	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Bromoform	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000089	19991101	Bromoform	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Bromoform	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Bromoform	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Bromoform	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Butyl Benzyl Phthalate	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Butyl Benzyl Phthalate	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Butyl Benzyl Phthalate	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Butyl Benzyl Phthalate	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Butyl Benzyl Phthalate	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Cadmium	0.0400	MG/KG		INORG	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Cadmium	0.0400	MG/KG		INORG	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Cadmium	0.0400	MG/KG		INORG	5.0	10.0	U		PRS 66_	Soil
B417	000089	19991101	Carbazole	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Carbazole	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Carbazole	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Carbazole	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Carbazole	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Carbon Disulfide	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Carbon Disulfide	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Carbon Disulfide	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Carbon Disulfide	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Carbon Disulfide	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Carbon Tetrachloride	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Carbon Tetrachloride	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Carbon Tetrachloride	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Carbon Tetrachloride	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Cesium-137	0.0990	PCI/G	0.0990	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Cesium-137	0.0957	PCI/G	0.0957	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000094	19991101	Cesium-137	0.0933	PCI/G	0.0933	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000087	19991101	Cesium-137	0.0897	PCI/G	0.0897	RAD	5.0	10.0	U		PRS 66_	Soil
19	D1010000	19970602	Cesium-137	0.0796	PCI/G	0.0796	RAD	0.5	1.0	U		PRS 86	Soil
B417	000086	19991101	Cesium-137	0.0755	PCI/G	0.0755	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000094	19991101	Cesium-137	0.0662	PCI/G	0.0662	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000088	19991101	Cesium-137	0.0662	PCI/G	0.0662	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000086	19991101	Cesium-137	0.0540	PCI/G	0.0540	RAD	0.0	5.0	U		PRS 66_	Soil
7	F2010000	19970602	Cesium-137	0.0515	PCI/G	0.0515	RAD	0.5	1.0	U		PRS 86	Soil
B417	000088	19991101	Chlorobenzene	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000089	19991101	Chlorobenzene	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Chlorobenzene	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Chlorobenzene	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Chlorobenzene	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Chloroform	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Chloroform	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Chloroform	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Chloroform	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Chloroform	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Chrysene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Chrysene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Chrysene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Chrysene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000088	19991101	Cobalt-60	0.1150	PCI/G	0.1150	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Cobalt-60	0.1080	PCI/G	0.1080	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Cobalt-60	0.1040	PCI/G	0.1040	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Cobalt-60	0.1000	PCI/G	0.1000	RAD	20.0	25.0	U		PRS 66_	Soil
19	D1010000	19970602	Cobalt-60	0.0856	PCI/G	0.0856	RAD	0.5	1.0	U		PRS 86	Soil
7	F2010000	19970602	Cobalt-60	0.0671	PCI/G	0.0671	RAD	0.5	1.0	U		PRS 86	Soil
B417	000087	19991101	Cobalt-60	0.0669	PCI/G	0.0669	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Cobalt-60	0.0581	PCI/G	0.0581	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Cobalt-60	0.0523	PCI/G	0.0523	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000086	19991101	Cobalt-60	0.0509	PCI/G	0.0509	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Cobalt-60	0.0226	PCI/G	0.0226	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Delta-BHC	1.9000	UG/KG	1.9000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Delta-BHC	1.9000	UG/KG	1.9000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Delta-BHC	1.8000	UG/KG	1.8000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Delta-BHC	1.8000	UG/KG	1.8000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Delta-BHC	1.7000	UG/KG	1.7000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Dibenz(a,h)anthracene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Dibenz(a,h)anthracene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Dibenz(a,h)anthracene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Dibenz(a,h)anthracene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Dibenz(a,h)anthracene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Dibenzofuran	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Dibenzofuran	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Dibenzofuran	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000094	19991101	Dibenzofuran	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Dibenzofuran	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Dibromochloromethane	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Dibromochloromethane	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Dibromochloromethane	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Dibromochloromethane	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Dibromochloromethane	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000087	19991101	Dichloromethane (Methylene C	12.0000	UG/KG		ORVO	5.0	10.0	B	UJ	PRS 66_	Soil
B417	000088	19991101	Dieldrin	3.8000	UG/KG	3.8000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Dieldrin	3.8000	UG/KG	3.8000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Dieldrin	3.7000	UG/KG	3.7000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Dieldrin	3.7000	UG/KG	3.7000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Dieldrin	3.5000	UG/KG	3.5000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Diethyl Phthalate	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Diethyl Phthalate	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Diethyl Phthalate	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Diethyl Phthalate	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Diethyl Phthalate	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Dimethyl Phthalate	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Dimethyl Phthalate	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Dimethyl Phthalate	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Dimethyl Phthalate	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Dimethyl Phthalate	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Di-n-butyl Phthalate	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Di-n-butyl Phthalate	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Di-n-butyl Phthalate	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Di-n-butyl Phthalate	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Di-n-butyl Phthalate	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Di-n-octyl Phthalate	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Di-n-octyl Phthalate	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Di-n-octyl Phthalate	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Di-n-octyl Phthalate	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Di-n-octyl Phthalate	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Endosulfan I	1.9000	UG/KG	1.9000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Endosulfan I	1.9000	UG/KG	1.9000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Endosulfan I	1.8000	UG/KG	1.8000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Endosulfan I	1.8000	UG/KG	1.8000	ORPP	20.0	25.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000086	19991101	Endosulfan I	1.7000	UG/KG	1.7000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Endosulfan II	3.8000	UG/KG	3.8000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Endosulfan II	3.8000	UG/KG	3.8000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Endosulfan II	3.7000	UG/KG	3.7000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Endosulfan II	3.7000	UG/KG	3.7000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Endosulfan II	3.5000	UG/KG	3.5000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Endosulfan Sulfate	3.8000	UG/KG	3.8000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Endosulfan Sulfate	3.8000	UG/KG	3.8000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Endosulfan Sulfate	3.7000	UG/KG	3.7000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Endosulfan Sulfate	3.7000	UG/KG	3.7000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Endosulfan Sulfate	3.5000	UG/KG	3.5000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Endrin	3.8000	UG/KG	3.8000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Endrin	3.8000	UG/KG	3.8000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Endrin	3.7000	UG/KG	3.7000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Endrin	3.7000	UG/KG	3.7000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Endrin	3.5000	UG/KG	3.5000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Endrin Aldehyde	3.8000	UG/KG	3.8000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Endrin Aldehyde	3.8000	UG/KG	3.8000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Endrin Aldehyde	3.7000	UG/KG	3.7000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Endrin Aldehyde	3.7000	UG/KG	3.7000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Endrin Aldehyde	3.5000	UG/KG	3.5000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Endrin Ketone	3.8000	UG/KG	3.8000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Endrin Ketone	3.8000	UG/KG	3.8000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Endrin Ketone	3.7000	UG/KG	3.7000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Endrin Ketone	3.7000	UG/KG	3.7000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Endrin Ketone	3.5000	UG/KG	3.5000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Ethylbenzene	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Ethylbenzene	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Ethylbenzene	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Ethylbenzene	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Ethylbenzene	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Fluoranthene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Fluoranthene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Fluoranthene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Fluoranthene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000089	19991101	Fluorene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Fluorene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000087	19991101	Fluorene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Fluorene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Fluorene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000094	19991101	Fluoride	1.1000	MG/KG	1.1000	ANION	20.0	25.0	U		PRS 66_	Soil
B417	000088	19991101	Gamma Chlordane	1.9000	UG/KG	1.9000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Gamma Chlordane	1.9000	UG/KG	1.9000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Gamma Chlordane	1.8000	UG/KG	1.8000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Gamma Chlordane	1.8000	UG/KG	1.8000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Gamma Chlordane	1.7000	UG/KG	1.7000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Gamma-BHC (Lindane)	1.9000	UG/KG	1.9000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Gamma-BHC (Lindane)	1.9000	UG/KG	1.9000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Gamma-BHC (Lindane)	1.8000	UG/KG	1.8000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Gamma-BHC (Lindane)	1.8000	UG/KG	1.8000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Gamma-BHC (Lindane)	1.7000	UG/KG	1.7000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Heptachlor	1.9000	UG/KG	1.9000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Heptachlor	1.9000	UG/KG	1.9000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Heptachlor	1.8000	UG/KG	1.8000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Heptachlor	1.8000	UG/KG	1.8000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Heptachlor	1.7000	UG/KG	1.7000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Heptachlor Epoxide	1.9000	UG/KG	1.9000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Heptachlor Epoxide	1.9000	UG/KG	1.9000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Heptachlor Epoxide	1.8000	UG/KG	1.8000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Heptachlor Epoxide	1.8000	UG/KG	1.8000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Heptachlor Epoxide	1.7000	UG/KG	1.7000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Hexachlorobenzene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Hexachlorobenzene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Hexachlorobenzene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Hexachlorobenzene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Hexachlorobenzene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Hexachlorobutadiene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Hexachlorobutadiene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Hexachlorobutadiene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Hexachlorobutadiene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Hexachlorobutadiene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Hexachlorocyclopentadiene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Hexachlorocyclopentadiene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Hexachlorocyclopentadiene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000094	19991101	Hexachlorocyclopentadiene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Hexachlorocyclopentadiene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Hexachloroethane	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Hexachloroethane	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Hexachloroethane	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Hexachloroethane	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Hexachloroethane	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Indeno(1,2,3-cd)pyrene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Indeno(1,2,3-cd)pyrene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Indeno(1,2,3-cd)pyrene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Indeno(1,2,3-cd)pyrene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000089	19991101	Isophorone	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Isophorone	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Isophorone	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Isophorone	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Isophorone	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Lead-210	1.6700	PCI/G	1.6700	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Lead-210	1.5300	PCI/G	1.5300	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Lead-210	1.5100	PCI/G	1.5100	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000087	19991101	Lead-210	1.3250	PCI/G	1.3250	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000086	19991101	Lead-210	1.2600	PCI/G	1.2600	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000094	19991101	Lead-210	1.1810	PCI/G	1.1810	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000094	19991101	Lead-210	1.0700	PCI/G	1.0700	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000088	19991101	Lead-210	0.6460	PCI/G	0.6460	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Mercury	0.0300	MG/KG		INORG	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Mercury	0.0300	MG/KG		INORG	20.0	25.0	U		PRS 66_	Soil
B417	000088	19991101	Mercury	0.0200	MG/KG		INORG	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Mercury	0.0200	MG/KG		INORG	15.0	20.0	U		PRS 66_	Soil
B417	000086	19991101	Mercury	0.0200	MG/KG		INORG	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Methoxychlor	19.0000	UG/KG	19.0000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Methoxychlor	19.0000	UG/KG	19.0000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Methoxychlor	18.0000	UG/KG	18.0000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Methoxychlor	18.0000	UG/KG	18.0000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Methoxychlor	17.0000	UG/KG	17.0000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Naphthalene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Naphthalene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Naphthalene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000094	19991101	Naphthalene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Naphthalene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Nitrate-Nitrite-N	0.2300	MG/KG	0.2300	ANION	10.0	15.0	U		PRS 66_	Soil
B417	000094	19991101	Nitrate-Nitrite-N	0.2000	MG/KG	0.2000	ANION	20.0	25.0	U		PRS 66_	Soil
B417	000089	19991101	Nitrobenzene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Nitrobenzene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Nitrobenzene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Nitrobenzene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Nitrobenzene	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	N-Nitroso-di-n-propylamine	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	N-Nitroso-di-n-propylamine	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	N-Nitroso-di-n-propylamine	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	N-Nitroso-di-n-propylamine	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	N-Nitroso-di-n-propylamine	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	N-Nitrosodiphenylamine	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	N-Nitrosodiphenylamine	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	N-Nitrosodiphenylamine	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	N-Nitrosodiphenylamine	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	N-Nitrosodiphenylamine	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Pentachlorophenol	980.0000	UG/KG	980.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Pentachlorophenol	940.0000	UG/KG	940.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Pentachlorophenol	920.0000	UG/KG	920.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Pentachlorophenol	920.0000	UG/KG	920.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Pentachlorophenol	880.0000	UG/KG	880.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Phenanthrene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Phenanthrene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Phenanthrene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Phenanthrene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000089	19991101	Phenol	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Phenol	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Phenol	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Phenol	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Phenol	350.0000	UG/KG	350.0000	ORSV	0.0	5.0	U		PRS 66_	Soil
B417	000087	19991101	Plutonium-238	38.2400	PCI/G	38.2400	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Plutonium-238	24.9700	PCI/G	24.9700	RAD	20.0	25.0	U		PRS 66_	Soil
SCR567	9306026	19930602	Plutonium-238	23.0000	PCI/G		RAD	3.0	3.0	U		SCRDAT	Soil
SCR525	9305134	19930513	Plutonium-238	22.0000	PCI/G		RAD	0.0	0.0	U		SCRDAT	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
SCR567	9306028	19930602	Plutonium-238	22.0000	PCI/G		RAD	3.0	3.0	U		SCRDAT	Soil
SCR567	93060211	19930602	Plutonium-238	20.0000	PCI/G		RAD	3.0	3.0	U		SCRDAT	Soil
B417	000088	19991101	Plutonium-238	14.5800	PCI/G	14.5800	RAD	10.0	15.0	U		PRS 66_	Soil
SCR567	9306029	19930602	Plutonium-238	14.0000	PCI/G		RAD	1.0	1.0	U		SCRDAT	Soil
SCR566	9305135	19930513	Plutonium-238	14.0000	PCI/G		RAD	0.0	0.0	U		SCRDAT	Soil
B417	000086	19991101	Plutonium-238	12.3200	PCI/G	12.3200	RAD	0.0	5.0	U		PRS 66_	Soil
SCR567	9306027	19930602	Plutonium-238	7.0000	PCI/G		RAD	2.5	2.5	U		SCRDAT	Soil
B417	000089	19991101	Plutonium-238	4.2820	PCI/G	4.2820	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000089	19991101	Plutonium-238	0.0369	PCI/G	0.0369	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Plutonium-238	0.0320	PCI/G	0.0320	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000088	19991101	Plutonium-238	0.0314	PCI/G	0.0314	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000094	19991101	Plutonium-238	0.0211	PCI/G	0.0211	RAD	20.0	25.0	U		PRS 66_	Soil
7	F2010000	19970602	Plutonium-238	0.0033	PCI/G	0.0033	RAD	0.5	1.0	U		PRS 86	Soil
SCR567	93060212	19930602	Plutonium-238	0.0000	PCI/G		RAD	3.0	3.0	U		SCRDAT	Soil
B417	000087	19991101	Plutonium-239/240	0.0564	PCI/G	0.0564	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000086	19991101	Plutonium-239/240	0.0484	PCI/G	0.0484	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Plutonium-239/240	0.0369	PCI/G	0.0369	RAD	15.0	20.0	U		PRS 66_	Soil
19	D1010000	19970602	Plutonium-239/240	0.0224	PCI/G	0.0224	RAD	0.5	1.0	U		PRS 86	Soil
B417	000094	19991101	Plutonium-239/240	0.0211	PCI/G	0.0211	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000088	19991101	Plutonium-239/240	0.0150	PCI/G	0.0150	RAD	10.0	15.0	U		PRS 66_	Soil
7	F2010000	19970602	Plutonium-239/240	0.0072	PCI/G	0.0072	RAD	0.5	1.0	U		PRS 86	Soil
B417	000089	19991101	Pyrene	390.0000	UG/KG	390.0000	ORSV	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Pyrene	370.0000	UG/KG	370.0000	ORSV	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Pyrene	370.0000	UG/KG	370.0000	ORSV	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Pyrene	370.0000	UG/KG	370.0000	ORSV	20.0	25.0	U		PRS 66_	Soil
B417	000088	19991101	Radium-228	0.6380	PCI/G	0.6380	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Selenium	0.4200	MG/KG		INORG	5.0	10.0	U		PRS 66_	Soil
B417	000089	19991101	Selenium	0.4100	MG/KG		INORG	15.0	20.0	U		PRS 66_	Soil
B417	000086	19991101	Selenium	0.4100	MG/KG		INORG	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Silver	0.0900	MG/KG		INORG	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Silver	0.0800	MG/KG		INORG	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Silver	0.0800	MG/KG		INORG	5.0	10.0	U		PRS 66_	Soil
B417	000086	19991101	Silver	0.0800	MG/KG		INORG	0.0	5.0	U		PRS 66_	Soil
B417	000094	19991101	Silver	0.0600	MG/KG		INORG	20.0	25.0	U		PRS 66_	Soil
B417	000088	19991101	Styrene	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Styrene	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Styrene	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000094	19991101	Styrene	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Styrene	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000086	19991101	Sulfate	26.2000	MG/KG	26.2000	ANION	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Tetrachloroethene	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Tetrachloroethene	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Tetrachloroethene	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Tetrachloroethene	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Tetrachloroethene	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Thallium	0.4600	MG/KG		INORG	10.0	15.0	U		PRS 66_	Soil
B417	000086	19991101	Thallium	0.4300	MG/KG		INORG	0.0	5.0	U		PRS 66_	Soil
B417	000087	19991101	Thorium-230	12.5900	PCI/G	12.5900	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Thorium-230	12.5800	PCI/G	12.5800	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000088	19991101	Thorium-230	7.0100	PCI/G	7.0100	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000086	19991101	Thorium-230	5.7890	PCI/G	5.7890	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000089	19991101	Thorium-230	1.9700	PCI/G	1.9700	RAD	15.0	20.0	U		PRS 66_	Soil
S0275	5970	19840701	Thorium-232	2.0000	PCI/G	2.0000	RAD	0.0	0.0	U		RSS	Soil
SCR525	9305134	19930513	Thorium-232	1.2000	PCI/G		RAD	0.0	0.0	U		SCRDAT	Soil
SCR567	9306028	19930602	Thorium-232	1.2000	PCI/G		RAD	3.0	3.0	U		SCRDAT	Soil
SCR567	93060210	19930602	Thorium-232	0.9000	PCI/G		RAD	3.0	3.0	U		SCRDAT	Soil
SCR567	93060211	19930602	Thorium-232	0.9000	PCI/G		RAD	3.0	3.0	U		SCRDAT	Soil
SCR567	9306027	19930602	Thorium-232	0.8000	PCI/G		RAD	2.5	2.5	U		SCRDAT	Soil
SCR567	93060212	19930602	Thorium-232	0.7000	PCI/G		RAD	3.0	3.0	U		SCRDAT	Soil
SCR567	9306026	19930602	Thorium-232	0.7000	PCI/G		RAD	3.0	3.0	U		SCRDAT	Soil
SCR567	9306029	19930602	Thorium-232	0.5000	PCI/G		RAD	1.0	1.0	U		SCRDAT	Soil
SCR566	9305135	19930513	Thorium-232	0.5000	PCI/G		RAD	0.0	0.0	U		SCRDAT	Soil
B417	000088	19991101	Toluene	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Toluene	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Toluene	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Toluene	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Toluene	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Toxaphene	190.0000	UG/KG	190.0000	ORPP	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Toxaphene	190.0000	UG/KG	190.0000	ORPP	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Toxaphene	180.0000	UG/KG	180.0000	ORPP	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Toxaphene	180.0000	UG/KG	180.0000	ORPP	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Toxaphene	170.0000	UG/KG	170.0000	ORPP	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Trichloroethene	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Trichloroethene	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil

Location	Sample_id	Collection	Value_name	Measured_v	Value_u	Detection_li	Chem_	Start_	End_d	Lab	Dat	Project_c	Me
B417	000087	19991101	Trichloroethene	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Trichloroethene	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Trichloroethene	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000086	19991101	Tritium	0.0286	PCI/G	0.0286	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000086	19991101	Uranium-235	0.0249	PCI/G	0.0249	RAD	0.0	5.0	U		PRS 66_	Soil
B417	000094	19991101	Uranium-235	0.0243	PCI/G	0.0243	RAD	20.0	25.0	U		PRS 66_	Soil
B417	000088	19991101	Uranium-235	0.0226	PCI/G	0.0226	RAD	10.0	15.0	U		PRS 66_	Soil
B417	000087	19991101	Uranium-235	0.0226	PCI/G	0.0226	RAD	5.0	10.0	U		PRS 66_	Soil
B417	000089	19991101	Uranium-235	0.0214	PCI/G	0.0214	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000089	19991101	Uranium-238	1.4900	PCI/G	1.4900	RAD	15.0	20.0	U		PRS 66_	Soil
B417	000088	19991101	Vinyl Chloride	12.0000	UG/KG	12.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Vinyl Chloride	12.0000	UG/KG	12.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Vinyl Chloride	12.0000	UG/KG	12.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Vinyl Chloride	11.0000	UG/KG	11.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Vinyl Chloride	11.0000	UG/KG	11.0000	ORVO	0.0	5.0	U		PRS 66_	Soil
B417	000088	19991101	Xylenes, Total	6.0000	UG/KG	6.0000	ORVO	10.0	15.0	U		PRS 66_	Soil
B417	000089	19991101	Xylenes, Total	6.0000	UG/KG	6.0000	ORVO	15.0	20.0	U		PRS 66_	Soil
B417	000087	19991101	Xylenes, Total	6.0000	UG/KG	6.0000	ORVO	5.0	10.0	U		PRS 66_	Soil
B417	000094	19991101	Xylenes, Total	6.0000	UG/KG	6.0000	ORVO	20.0	25.0	U		PRS 66_	Soil
B417	000086	19991101	Xylenes, Total	6.0000	UG/KG	6.0000	ORVO	0.0	5.0	U		PRS 66_	Soil

LABORATORY DATA QUALIFIERS (LABQUAL)

The following qualifiers will be applied to the organic analysis results by the laboratory in accordance with CLP SOW direction:

ORGANICS

U	Indicates compound was analyzed for but not detected. The associated sample quantitation limit will be the CRQL, corrected for dilution and for percent moisture.
J	Indicates an estimated value. This flag is used under the following circumstances: 1) when estimating a concentration for tentatively identified compounds (TICs) assuming a 1:1 response, 2) when the qualitative data indicated the presence of a compound that meets the volatile, semivolatile, and pesticide/Aroclor identification criteria, and the result is less than the CRQL but greater than zero.
N	Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where identification is based on a mass spectral library search.
P	Used for pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.
C	Applies to pesticide results where the identification has been confirmed by GC/MS.
B	Used when the analyte is found in the associated blank as well as in the sample. This flag must be used for a TIC as well as for a positively identified target compound.
E	Identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
D	Identifies all compounds identified in an analysis at a secondary dilution factor.
A	Indicates that a TIC is a suspected aldol-condensation product.

INORGANICS

B	Indicates that the reported value was obtained from a reading that was less than the CRDL but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates that the analyte was analyzed for but not detected.
E	Indicates the reported value is estimated because of the presence of interferences.
M	Duplicate injection precision was not met.
N	Spiked sample recovery not within control limits.
S	Reported value was determined by the Method of Standard Additions (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits, while sample absorbency is less than 50% of spike absorbency.
*	Duplicate analysis not within control limits.
+	Correlation coefficient for the MSA is less than 0.995.

DATA QUALIFIER CODES (DATAQUAL)

ORGANICS AND INORGANICS

U	The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.
J	The associated numerical value is an estimated quantity.
R	The data are unusable (compound may or may not be present). Resampling and reanalysis is necessary for verification.
N	Presumptive evidence of the presence of the material.
NJ	Presumptive evidence of the presence of the material at an estimated quantity.
UJ	The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

SUB-QUALIFIER CODES

ORGANICS

D	Duplicates
B	Qualified due to blank
C	Qualified due to calibration
H	Holding time exceeded
K	Qualified due to surrogate recovery
L	Qualified due to Laboratory Control Sample
S	Qualified due to matrix spike recovery
I	Qualified due to internal standard
N	Tentative identification (only for TICs)
P	Pesticide/PCB results have >25 percent difference on two different columns
+	Positive bias (added after subqualifier)
-	Negative bias (added after subqualifier)

INORGANICS

D	Duplicates
B	Qualified due to blank
C	Qualified due to calibration
H	Holding time exceeded
L	Qualified due to Laboratory Control Sample
S	Qualified due to matrix spike recovery
I	Qualified due to interference
+	Positive bias (added after subqualifier)
-	Negative bias (added after subqualifier)
Examples of final qualification might be J-C, UJ-S(+), UJ-BC(-), etc.	

The subqualifiers have been included to clarify any reports you may use. The subqualifiers have been captured when it was included in the electronic data submitted by the contractor. Most of the data in MEIMS does not include them.

The above data was extracted from the OU9 Site Wide Quality Assurance Project Plan, pages 9-16 and Appendix H page 3-1. It was updated from the Methods Compendium.

1	107-06-2	1,2-Dichloroethane	3.20E+00	MG/KG
1	118-96-7	2,4,6-Trinitrotoluene	1.91E+02	MG/KG
1	72-55-9	4,4'-DDE	9.00E+00	MG/KG
1	50-29-3	4,4'-DDT	9.00E+00	MG/KG
1	309-00-2	Aldrin	1.80E-01	MG/KG
1	5103-71-9	Alpha Chlordane	8.50E+00	MG/KG
1	12672-29-6	Aroclor-1248	3.85E-01	MG/KG
1	11096-82-5	Aroclor-1260	3.85E-01	MG/KG
1	7440-38-2	Arsenic	1.20E+03	MG/KG
1	71-43-2	Benzene	8.90E+00	MG/KG
1	56-55-3	Benzo(a)anthracene	4.10E+00	MG/KG
1	50-32-8	Benzo(a)pyrene	4.10E-01	MG/KG
1	205-99-2	Benzo(b)fluoranthene	4.10E+00	MG/KG
1	207-08-9	Benzo(k)fluoranthene	4.10E+01	MG/KG
1	7440-41-7	Beryllium	7.00E-01	MG/KG
1	319-85-7	Beta-BHC	1.65E+00	MG/KG
1	117-81-7	Bis(2-ethylhexyl)phthalate	2.15E+02	MG/KG
1	75-27-4	Bromodichloromethane	4.80E+01	MG/KG
1	75-25-2	Bromoform	3.75E+02	MG/KG
1	7440-43-9	Cadmium	1.00E+04	MG/KG
1	56-23-5	Carbon Tetrachloride	4.60E+00	MG/KG
1	67-66-3	Chloroform	3.10E+00	MG/KG
1	7440-47-3	Chromium	1.50E+03	MG/KG
1	218-01-9	Chrysene	4.10E+02	MG/KG
1	53-70-3	Dibenz(a,h)anthracene	4.10E-01	MG/KG
1	124-48-1	Dibromochloromethane	3.55E+01	MG/KG
1	75-09-2	Dichloromethane	3.95E+02	MG/KG
1	60-57-1	Dieldrin	1.85E-01	MG/KG
1	5103-74-2	Gamma Chlordane	8.50E+00	MG/KG
1	58-89-9	Gamma-BHC (Lindane)	2.30E+00	MG/KG
1	76-44-8	Heptachlor	0.66	MG/KG
1	1024-57-3	Heptachlor Epoxide	0.33	MG/KG
1	193-39-5	Indeno(1,2,3-cd)pyrene	4.10E+00	MG/KG
1	78-59-1	Isophorone	3.15E+03	MG/KG
1	86-30-6	N-Nitrosodiphenylamine	6.00E+02	MG/KG
1	87-86-5	Pentachlorophenol	2.50E+01	MG/KG
1	121-82-4	RDX	2.70E+01	MG/KG
1	79-01-6	Trichloroethene	4.10E+01	MG/KG
1	7440-41-7	1,1,1,2-Tetrachloroethane	1.10E-02	MG/L
1	7440-38-2	1,1,2,2-Tetrachloroethane	1.40E-03	MG/L
1	7440-34-8	Actinium-227	4.50E-01	PCI/G
1	14596-10-2	Americium-241	6.30E+00	PCI/G
1	13982-38-2	Bismuth-207	1.60E-01	PCI/G
1	10045-97-3	Cesium-137	3.40E-01	PCI/G
1	10198-40-0	Cobalt-60	7.00E-02	PCI/G
1	14255-04-0	Lead-210	6.20E-01	PCI/G
1	13981-16-3	Plutonium-238	6.10E+00	PCI/G
1	15117-48-3	Plutonium-239	5.50E+00	PCI/G

1	PU239/240	Plutonium-240		5.50E+00	PCI/G
1	13966-00-2	Potassium-40		1.42E+00	PCI/G
1	14331-85-2	Protactinium-231		3.90E-01	PCI/G
1	13982-63-3	Radium-226		9.00E-02	PCI/G
1	10098-97-2	Strontium-90		3.00E+00	PCI/G
1	14274-82-9	Thorium-228		1.40E-01	PCI/G
1	14269-63-7	Thorium-230		9.00E-02	PCI/G
1	7440-29-1	Thorium-232		7.00E-02	PCI/G
1	10028-17-8	Tritium		2.35E+04	PCI/G
1	13968-55-3	Uranium-233		9.68E-01	PCI/G
1	13966-29-5	Uranium-234		1.05E+01	PCI/G
1	15117-96-1	Uranium-235		1.60E+00	PCI/G
1	24678-82-8	Uranium-238		1.00E-01	PCI/G
1	14596-10-2	Americium-241		4.90E-01	PCI/L
1	14331-79-4	Bismuth-210		2.20E+01	PCI/L
1	15262-20-1	Radium-228		3.30E-01	PCI/L
1	13967-73-2	Strontium-85		1.10E+02	PCI/L
1	10098-97-2	Strontium-90		3.90E+00	PCI/L
1	15623-47-9	Thorium-227		4.00E+00	PCI/L
1	14274-82-9	Thorium-228		6.90E-01	PCI/L
1	14269-63-7	Thorium-230		1.20E-01	PCI/L
1	7440-29-1	Thorium-232		3.10E-01	PCI/L
1	24678-82-8	Uranium-238		1.10E-01	PCI/L
2	72-54-8	4,4'-DDD		4.2	MG/KG
2	72-55-9	4,4'-DDE		4.3	MG/KG
2	50-29-3	4,4'-DDT		13	MG/KG
2	309-00-2	Aldrin	ND		MG/KG
2	5103-71-9	Alpha Chlordane	ND		MG/KG
2	319-84-6	Alpha-BHC	ND		MG/KG
2	7429-90-5	Aluminum		19000	MG/KG
2	14596-10-2	Americium-241	ND		MG/KG
2	12672-29-6	Aroclor-1248	ND		MG/KG
2	11097-69-1	Aroclor-1254		58	MG/KG
2	11096-82-5	Aroclor-1260	ND		MG/KG
2	7440-38-2	Arsenic		8.6	MG/KG
2	7440-39-3	Barium		180	MG/KG
2	7440-41-7	Beryllium		1.3	MG/KG
2	319-85-7	Beta-BHC	ND		MG/KG
2	7440-69-9	Bismuth	ND		MG/KG
2	13982-38-2	Bismuth-207	ND		MG/KG
2	13982-38-2	Bismuth-207	ND		MG/KG
2	14331-79-4	Bismuth-210m	ND		MG/KG
2	7440-43-9	Cadmium		2.1	MG/KG
2	7440-70-2	Calcium		310000	MG/KG
2	7440-47-3	Chromium		20	MG/KG
2	7440-48-4	Cobalt		19	MG/KG
2	7440-50-8	Copper		26	MG/KG
2	57-12-5	Cyanide	ND		MG/KG

2	60-57-1	Dieldrin	ND	MG/KG
2	959-98-8	Endosulfan I	ND	MG/KG
2	1031-07-8	Endosulfan Sulfate	ND	MG/KG
2	72-20-8	Endrin	ND	MG/KG
2	7421-93-4	Endrin Aldehyde	ND	MG/KG
2	53494-70-5	Endrin Ketone	ND	MG/KG
2	5103-74-2	Gamma Chlordane	ND	MG/KG
2	58-89-9	Gamma-BHC (Lindane)	ND	MG/KG
2	76-44-8	Heptachlor	ND	MG/KG
2	1024-57-3	Heptachlor Epoxide	ND	MG/KG
2	77-47-4	Hexachlorocyclopentadiene	ND	MG/KG
2	7439-89-6	Iron	35000	MG/KG
2	7439-92-1	Lead	48	MG/KG
2	7439-93-2	Lithium	26	MG/KG
2	7439-95-4	Magnesium	40000	MG/KG
2	7439-96-5	Manganese	1400	MG/KG
2	7439-97-6	Mercury	ND	MG/KG
2	72-43-5	Methoxychlor	30	MG/KG
2	7439-98-7	Molybdenum	27	MG/KG
2	7440-02-0	Nickel	32	MG/KG
2	7440-09-7	Potassium	1900	MG/KG
2	7782-49-2	Selenium	ND	MG/KG
2	7440-22-4	Silver	1.7	MG/KG
2	7440-23-5	Sodium	240	MG/KG
2	7440-28-0	Thallium	0.46	MG/KG
2	7440-31-5	Tin	20	MG/KG
2	7440-62-2	Vanadium	25	MG/KG
2	7440-66-6	Zinc	140	MG/KG
2	7440-34-8	Actinium-227	1.10E-01	PCI/G
2	10045-97-3	Cesium-137	0.42	PCI/G
2	14255-04-0	Lead-210	1.20E+00	PCI/G
2	13981-16-3	Plutonium-238	0.13	PCI/G
2	15117-48-3	Plutonium-239	1.80E-01	PCI/G
2	PU239/240	Plutonium-240	1.80E-01	PCI/G
2	13966-00-2	Potassium-40	37	PCI/G
2	14331-85-2	Protactinium-231	1.10E-01	PCI/G
2	13982-63-3	Radium-226	2	PCI/G
2	10098-97-2	Strontium-90	0.72	PCI/G
2	14274-82-9	Thorium-228	1.5	PCI/G
2	14269-63-7	Thorium-230	1.9	PCI/G
2	7440-29-1	Thorium-232	1.4	PCI/G
2	10028-17-8	Tritium	1.6	PCI/G
2	13966-29-5	Uranium-234	1.1	PCI/G
2	15117-96-1	Uranium-235	0.11	PCI/G
2	24678-82-8	Uranium-238	1.2	PCI/G
3	7439-92-1	Lead	400	MG/KG
3	7440-34-8	Actinium-227	5.60E-01	PCI/G
3	14596-10-2	Americium-241	6.3	PCI/G

3	10045-97-3	Cesium-137	0.76	PCI/G
3	10198-40-0	Cobalt-60	7.00E-02	PCI/G
3	14255-04-0	Lead-210	1.80E+00	PCI/G
3	13981-16-3	Plutonium-238	55	PCI/G
3	14331-85-2	Protactinium-231	4.00E+00	PCI/G
3	13982-63-3	Radium-226	2.1	PCI/G
3	14274-82-9	Thorium-228	3	PCI/G
3	14269-63-7	Thorium-230	3	PCI/G
3	7440-29-1	Thorium-232	1.47	PCI/G
3	15117-96-1	Uranium-235	1.7	PCI/G
3	24678-82-8	Uranium-238	1.3	PCI/G
5	71-55-6	1,1,1-Trichloroethane	0.2	MG/L
5	79-00-5	1,1,2-Trichloroethane	0.005	MG/L
5	75-35-4	1,1-Dichloroethene	0.007	MG/L
5	120-82-1	1,2,4-Trichlorobenzene	0.07	MG/L
5	156-59-2	1,2-cis-Dichloroethene	0.07	MG/L
5	106-93-4	1,2-Dibromoethane	0.00005	MG/L
5	95-50-1	1,2-Dichlorobenzene	0.6	MG/L
5	107-06-2	1,2-Dichloroethane	0.005	MG/L
5	78-87-5	1,2-Dichloropropane	0.005	MG/L
5	156-60-5	1,2-trans-Dichloroethene	0.01	MG/L
5	106-46-7	1,4-Dichlorobenzene	0.075	MG/L
5	95-95-4	2,4,5-Trichlorophenol	0.05	MG/L
5	94-75-7	2,4-D	0.07	MG/L
5	7440-36-0	Antimony	0.0006	MG/L
5	7440-38-2	Arsenic	0.05	MG/L
5	7440-39-3	Barium	2	MG/L
5	71-43-2	Benzene	0.005	MG/L
5	50-32-8	Benzo(a)pyrene	0.002	MG/L
5	7440-41-7	Beryllium	0.004	MG/L
5	117-81-7	bis(2-ethylhexyl)phthalate	0.006	MG/L
5	75-27-4	Bromodichloromethane	0.008	MG/L
5	75-25-2	Bromoform	0.008	MG/L
5	7440-43-9	Cadmium	0.005	MG/L
5	56-23-5	Carbon Tetrachloride	0.005	MG/L
5	57-74-9	Chlordane	0.002	MG/L
5	108-90-7	Chlorobenzene	0.1	MG/L
5	67-66-3	Chloroform	0.008	MG/L
5	7440-47-3	Chromium	0.1	MG/L
5	7440-50-8	Copper	1.3	MG/L
5	57-12-5	Cyanide	0.2	MG/L
5	96-12-8	Dibromochloropropane	0.0002	MG/L
5	75-09-2	Dichloromethane (Methylene Chloride)	0.005	MG/L
5	88-85-7	Dinoseb	0.007	MG/L
5	1746-01-6	Dioxin	0.00000003	MG/L
5	72-20-8	Endrin	0.002	MG/L
5	100-41-4	Ethylbenzene	0.07	MG/L
5	16984-48-8	Flouride	4	MG/L

5	58-89-9	Gamma-BHC (Lindane)	0.0002	MG/L
5	76-44-8	Heptachlor	0.0004	MG/L
5	1024-57-3	Heptachlor Epoxide	0.0002	MG/L
5	118-74-1	Hexachlorobenzene	0.001	MG/L
5	77-47-4	Hexachlorocyclopentadiene	0.05	MG/L
5	7439-92-1	Lead	0.015	MG/L
5	7439-97-6	Mercury	0.002	MG/L
5	72-43-5	Methoxychlor	0.04	MG/L
5	7440-02-0	Nickel	0.1	MG/L
5	NO3	Nitrate	10	MG/L
5	14797-65-0	Nitrite	1	MG/L
5	87-86-5	Pentachlorophenol	0.001	MG/L
5	7782-49-2	Selenium	0.05	MG/L
5	100-42-5	Styrene	0.1	MG/L
5	127-18-4	Tetrachloroethene	0.005	MG/L
5	7440-28-0	Thallium	0.002	MG/L
5	108-88-3	Toluene	1	MG/L
5	8001-35-2	Toxaphene	0.003	MG/L
5	79-01-6	Trichloroethene	0.005	MG/L
5	75-01-4	Vinyl Chloride	0.002	MG/L
5	1330-20-7	Xylenes, Total	10	MG/L
5	7440-34-8	Actinium-227	0.4	PCI/L
5	14596-10-2	Americium-241	1.2	PCI/L
5	13982-38-2	Bismuth-207	1200	PCI/L
5	10045-97-3	Cesium-137	120	PCI/L
5	10198-40-0	Cobalt-60	400	PCI/L
5	13981-16-3	Plutonium-238	1.6	PCI/L
5	13982-63-3	Radium-226	4	PCI/L
5	10098-97-2	Strontium-90	40	PCI/L
5	14274-82-9	Thorium-228	16	PCI/L
5	14269-63-7	Thorium-230	12	PCI/L
5	7440-29-1	Thorium-232	2	PCI/L
5	10028-17-8	Tritium	20000	PCI/L
5	13968-55-3	Uranium-233	20	PCI/L
5	13966-29-5	Uranium-234	20	PCI/L
5	15117-96-1	Uranium-235	24	PCI/L
5	24678-82-8	Uranium-238	24	PCI/L
6	76-13-1	1,1,2-Trichloro-1,2,2triflouroethane	7.00E+04	MG/KG
6	75-34-3	1,1-Dichloroethane	7.80E+00	MG/KG
6	120-82-1	1,2,4-Trichlorobenzene	2.04E+04	MG/KG
6	156-59-2	1,2-cis-Dichloroethene	2.13E+03	MG/KG
6	156-60-5	1,2-trans-Dichloroethene	4.30E+03	MG/KG
6	99-65-0	1,3-Dinitrobenzene	2.00E+02	MG/KG
6	118-96-7	2,4,6-Trinitrotoluene	1.00E+03	MG/KG
6	78-93-3	2-Butanone	9.30E+03	MG/KG
6	95-57-8	2-Chlorophenol	1.06E+03	MG/KG
6	108-10-1	2-Methyl-4-pentanone	7.00E+02	MG/KG
6	50-29-3	4,4'-DDT	1.10E+02	MG/KG

6	106-44-5	4-Methylphenol	1.10E+03	MG/KG
6	67-64-1	Acetone	2.10E+04	MG/KG
6	309-00-2	Aldrin	6.4	MG/KG
6	5103-71-9	Alpha Chlordane	110	MG/KG
6	7429-90-5	Aluminum	210000	MG/KG
6	120-12-7	Anthracene	6.40E+04	MG/KG
6	7440-36-0	Antimony	8.50E+01	MG/KG
6	11097-69-1	Aroclor-1254	4.30E+00	MG/KG
6	7440-38-2	Arsenic	6.40E+01	MG/KG
6	7440-39-3	Barium	1.50E+04	MG/KG
6	65-85-0	Benzoic Acid	8.50E+05	MG/KG
6	7440-41-7	Beryllium	1.10E+03	MG/KG
6	117-81-7	Bis(2-ethylhexyl)phthalate	4.30E+03	MG/KG
6	75-27-4	Bromodichloromethane	4.30E+03	MG/KG
6	75-25-2	Bromoform	4.30E+03	MG/KG
6	85-68-7	Butyl Benzyl Phthalate	4.30E+04	MG/KG
6	7440-43-9	Cadmium	2.10E+02	MG/KG
6	75-15-0	Carbon Disulfide	2.80E+02	MG/KG
6	56-23-5	Carbon Tetrachloride	1.50E+02	MG/KG
6	75-00-3	Chloroethane	1.60E+02	MG/KG
6	67-66-3	Chloroform	2.10E+03	MG/KG
6	7440-47-3	Chromium	1.10E+03	MG/KG
6	18540-29-9	Chromium-VI	6.39E+02	MG/KG
6	7440-50-8	Copper	7.90E+03	MG/KG
6	57-12-5	Cyanide	4.30E+03	MG/KG
6	53-70-3	Dibenz(a,h)anthracene	4.08E-02	MG/KG
6	124-48-1	Dibromochloromethane	4.30E+03	MG/KG
6	75-09-2	Dichloromethane	1.00E+03	MG/KG
6	60-57-1	Dieldrin	1.10E+01	MG/KG
6	84-74-2	Di-n-butyl Phthalate	2.10E+04	MG/KG
6	117-84-0	Di-n-octyl Phthalate	4.30E+03	MG/KG
6	959-98-8	Endosulfan I	1300	MG/KG
6	33213-65-9	Endosulfan II	1300	MG/KG
6	100-41-4	Ethylbenzene	4.80E-01	MG/KG
6	86-73-7	Flourene	8.50E+03	MG/KG
6	206-44-0	Fluoranthene	8.50E+03	MG/KG
6	5103-74-2	Gamma Chlordane	110	MG/KG
6	58-89-9	Gamma-BHC (Lindane)	64	MG/KG
6	76-44-8	Heptachlor	110	MG/KG
6	1024-57-3	Heptachlor Epoxide	2.8	MG/KG
6	110-54-3	Hexane	9.10E+01	MG/KG
6	193-39-5	Indeno(1,2,3-cd)pyrene	4.08E-01	MG/KG
6	78-59-1	Isophorone	4.30E+04	MG/KG
6	7439-96-5	Manganese	2.70E+04	MG/KG
6	7439-97-6	Mercury	6.40E+01	MG/KG
6	72-43-5	Methoxychlor	1100	MG/KG
6	7440-02-0	Nickel	4.30E+03	MG/KG
6	87-86-5	Pentachlorophenol	6.40E+03	MG/KG

6	108-95-2	Phenol	1.30E+05	MG/KG
6	129-00-0	Pyrene	6.40E+03	MG/KG
6	7782-49-2	Selenium	1100	MG/KG
6	7440-22-4	Silver	1.10E+03	MG/KG
6	127-18-4	Tetrachloroethene	2.10E+03	MG/KG
6	7440-28-0	Thallium	17	MG/KG
6	7440-31-5	Tin	130000	MG/KG
6	108-88-3	Toluene	2.50E+02	MG/KG
6	75-69-4	Trichlorofluoromethane	7.30E+02	MG/KG
6	7440-62-2	Vanadium	1.50E+03	MG/KG
6	1330-20-7	Xylenes, Total	4.30E+05	MG/KG
6	7440-66-6	Zinc	6.40E+04	MG/KG
6	7440-41-7	1,1,1,2-Tetrachloroethane	2.90E-01	MG/L
6	7440-38-2	1,1,2,2-Tetrachloroethane	2.50E-01	MG/L
6	71-55-6	1,1,1-Trichloroethane	1.80E+00	MG/L
6	76-13-1	1,1,2-Trichloro-1,2,2triflouroethane	2.50E+03	MG/L
6	7429-90-5	Aluminum	100	MG/L
6	7440-42-8	Boron	9.00E+00	MG/L
6	18540-29-9	Chromium-VI	3.00E-01	MG/L
6	7440-48-4	Cobalt	6	MG/L
6	7440-50-8	Copper	4.00E+00	MG/L
6	7439-98-7	Molybdenum	0.5	MG/L
6	7782-49-2	Selenium	0.5	MG/L
6	7440-28-0	Thallium	0.008	MG/L
6	7440-31-5	Tin	60	MG/L
6	2691-41-0	HMX	1.10E+04	UG/KG
6	121-82-4	RDX	6.40E+04	UG/KG

1 Value is 10-6 Risk-Based Guide Value
2 Value is OU9 Soil Background Value
3 Value is screening level
5 Value is MCL
6 Value is the Guide Value based on the hazard index

Note:
Edited on 10/08/01
01/29/02 Removed all color

Appendix M

Occurrence Reports

No environmentally significant occurrence reports were issued for this facility.

Appendix N

PRS Information

MOUND PLANT RECOMMENDATION

PRS 66

Background:

Potential Release Site (PRS) 66 encompasses a historical ravine that was leveled with fill and paved over with asphalt. From the mid-1950s to mid-1960s, an estimated 10,000 to 15,000 emptied thorium drums from repackaging operations were crushed and buried along the western part of the original ravine. In either 1959 or 1960, three truckloads of soil and debris contaminated with radium-226, actinium-227, and thorium-228 was excavated from the SW Building and disposed of in an old septic tank on the northeastern edge of PRS 66. The area near the septic tank (PRS 86) was excavated during a CERCLA removal action and subsequently designated No Further Action (NFA) by the Core Team in 1998. Records show the practice of disposing waste items into the ravine continued through the mid-1960s. During construction excavation in 1986, plutonium contaminated soil was discovered in the far southwest corner of the historic ravine, known as PRS 40.

Recommendation:

Potential Release Site 40, 66, 79, 80, 86, 235, 309, and 338 are found within PRS 66. This area has been periodically filled in with materials contaminated with thorium-232, polonium-210 and some actinium-227. On August 20, 1996, the Core Team recommended Further Assessment (FA) for PRS 66. Subsequently, the cost of further investigation versus removing the potentially contaminated soils were evaluated. On July 10, 1997, this evaluation resulted in the decision to continue with the original FA recommendation. As a result of this further assessment, elevated plutonium-238, cesium-137 and americium-241 contamination was found.

By December 1999, the Mound Gamma Spectrometry Lab had analyzed approximately 162 investigative soil samples taken during the 1999 PRS 66 Core Sampling Characterization. The maximum plutonium-238 concentration measured was 5,868 pCi/g, as compared to the 10^{-5} Risk Based Guideline Value of 55 pCi/g. The maximum thorium-232 concentration measured was 397 pCi/g compared to a 10^{-5} Risk Based Guideline Value of 1.1 pCi/g. The Core Team, therefore, now recommends that a <u>REMOVAL ACTION</u> be accomplished for PRS 66.

Concurrence:

DOE/MEMP: Art Kleinrath — Feb 17 2000
Art Kleinrath, Remedial Project Manager (date)

USEPA: Timothy J. Fischer — 2/22/2000
Timothy J. Fischer, Remedial Project Manager (date)

OEPA: Brian Nickel — Feb 17 2000
Brian Nickel, Project Manager (date)

MOUND PLANT
PRS 85
BUILDING 29 SOLVENT STORAGE SHED AREA

RECOMMENDATION:

Potential Release Site (PRS) 85 was identified due to its use as a solvent storage shed. Construction and operation of the shed began in 1972 and the shed became inactive in 1990. Acetone was the only solvent stored in the shed.

Subsequent to the removal of the shed, the 1992 Soil Gas and Geophysical Investigation and the OU5 Operational Area Phase I Investigation indicated that organic contaminants are below their applicable guideline or calculated guideline criteria. Additionally, there is no history of spills or radiological processes in the area.

Therefore, since no evidence of contamination exists, PRS 85 is recommended for NO FURTHER ASSESSMENT.

CONCURRENCE:

DOE/MB: Arthur W. Kleinrath, Remedial Project Manager — 11/21/96 (date)

USEPA: Timothy J. Fischer, Remedial Project Manager — 11/19/96 (date)

OEPA: Brian K. Nickel, Project Manager — 11/21/96 (date)

SUMMARY OF COMMENTS AND RESPONSES:

Comment period from 11/29/96 to 01/01/97

☒ No comments were received during the comment period.

☐ Comment responses can be found on page _____ of this package.

Page R

MOUND PLANT
PRS 86
ACTINIUM CONTAMINATION
NEAR UNDERGROUND SEPTIC TANK

RECOMMENDATION:

Potential Release Site (PRS) 86 is an actinium contaminated soils area near an inactive underground septic tank. The contamination is believed to stem from the dumping of approximately 3 truckloads of radiologically contaminated debris in 1959 or 1960.

Concentrations of actinium-227, at PRS 86, have measured as high as 1,400 pCi/g (the 10^{-6} Risk Based Guideline Criteria for actinium-227 is 1.0 pCi/g). Repeated soil samples have located the actinium contamination starting at approximately 6 feet below surface and continuing to a depth of approximately 18 feet.

A PRS 86 Removal Action is currently in progress. Therefore, NO FURTHER ASSESSMENT beyond that described in the action memo is recommended. Verification of the completion of the removal will be documented in the On-Scene Coordinator Report after all work is completed.

CONCURRENCE:

DOE/MB: Arthur W. Kleinrath, Remedial Project Manager 11/21/96 (date)

USEPA: Timothy J. Fischer, Remedial Project Manager 11/21/96 (date)

OEPA: Brian K. Nickel, Project Manager 11/21/96 (date)

SUMMARY OF COMMENTS AND RESPONSES:

Comment period from 11/29/96 to 01/01/97

☒ No comments were received during the comment period.

☐ Comment responses can be found on page _____ of this package.

Page R

MOUND PLANT
PRS 338
BUILDING 29 SEPTIC TANK

RECOMMENDATION:

Potential Release Site (PRS) 338 was identified as the Building 29 Septic Tank, which is now inactive. Plutonium-238 sampling results are below the 10^{-5} guideline criteria of 55 pCi/g. All thorium results are below the 5/15 pCi/g guideline criteria. In addition, all volatile organic compound (VOC) soil gas results are below the calculated acceptable guideline criteria. All metals concentrations are below risk-based guideline values. Therefore, NO FURTHER ASSESSMENT is recommended for PRS 338.

CONCURRENCE:

DOE/MB: Arthur W Kleinrath 11/27/96
Arthur W. Kleinrath, Remedial Project Manager (date)

USEPA: Timothy J. Fischer 12/3/96
Timothy J. Fischer, Remedial Project Manager (date)

OEPA: Brian K. Nickel 12/12/96
Brian K. Nickel, Project Manager (date)

SUMMARY OF COMMENTS AND RESPONSES:

Comment period from 1/30/97 to 3/6/97

☒ No comments were received during the comment period.

☐ Comment responses can be found on page _____ of this package.

Appendix O

Work Plan

WORK PACKAGE / PRELIMINARY HAZARD ANALYSIS

☐☐ Office Master Copy (Original Approval Signatures) ☐ ☐ Field Working Copy (Original Field Sign -Offs) ☐ ☐ Review Copy [Note: Mark this section in color] ☐ ☐ Other Copy

The Project Engineer is responsible for completing Sections 1 through 10. On subcontractor projects, the subcontractor shall complete sections 6, 9, and 10.

1. WORK PACKAGE TITLE: **Building 29 Demolition**

2. WORK PACKAGE NUMBER. ***SMPP/TFV- 29720-00*** | **REQUESTOR: L. Koehmstedt**

1. WORK PACKAGE SCOPE:

The purpose of this effort is to demolish Building 29, see Figure 1.0. Using heavy equipment to demolish the facility, remove and dispose of the debris and provide temporary erosion protection with seeding and mulch. The area is scheduled for soil remediation in the near future; therefore permanent restoration is not warranted. Asbestos abatement and safe shutdown activities will have already been completed prior to demolition.

4. WORK PACKAGE PHASES:

1. **Establish Work Zone.**
2. **Demolish Structure.**
3. **Demolish Slab and Foundation.**
4. **Organize area for future soil remediation.**

Insert the proper sequence of Work Package phases for the job. A phase is a separately definable portion of the project.

5. WORK LOCATION:

Building #: **29**

Room #: N/A

Other: Spoils Area

6. SPECIAL MATERIALS AND EQUIPMENT:

1. **Tracked excavator with shear, grapple, hoe ram, concrete cracker/pulverizer, or bucket attachment.**
2. **Rubber tired and tracked front-end loaders.**
3. **Rock crusher.**
4. **Transport equipment for debris as required**

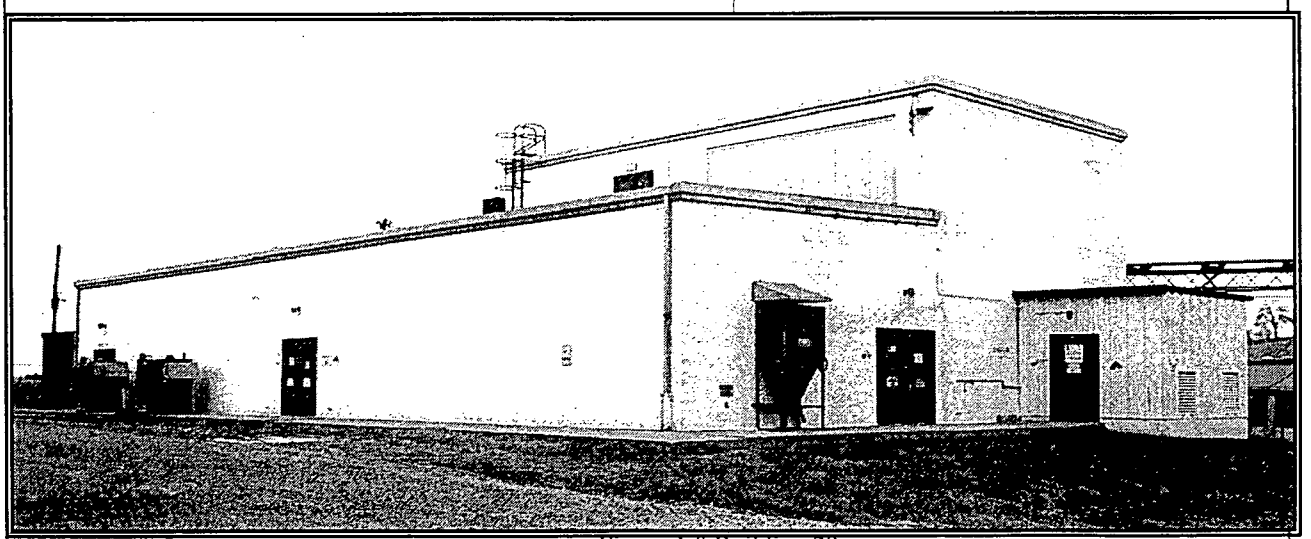


Figure 1.0 Building 29

7. DETAILED WORK STEPS: See the attached Job Specific Work Plan (JSWP)

Insert the activities to be performed during the job. Describe the specific methods of accomplishing these activities. Activities listed must be grouped under the Work Package phases listed in item 4.

8. *Note: Comments, to identify activities/hazards that are common to multiple phases of the project. Identification of these items will facilitate the option of addressing the items once in the pre-job briefing, as opposed to redundantly listing them in the JSHAs for different phases.*

COMMENTS:

Enter any review comment or issues in this section and/or information generated as a result of completing detailed work steps.

9. REVIEW SIGNATURES:

Job Foreman: _____ Date: ___/___/___ Phone:

Superintendent/Constr. Mgr: _____ Date: ___/___/___ Phone:

Industrial Safety & Hygiene: _____ Date: ___/___/___ Phone:

Rad. Controls: _____ Date: ___/___/___ Phone:

ES&C: _____ Date: ___/___/___ Phone:

Waste Mgmt: _____ Date: ___/___/___ Phone:

Bldg. Mgr: _____ Date: ___/___/___ Phone:

Craft Review: _____ Date: ___/___/___ Phone:

Craft Review: _____ Date: ___/___/___ Phone:

Craft Review: _____ Date: ___/___/___ Phone:

Craft Review: _____ Date: ___/___/___ Phone:

10. USQ SCREEN / DETERMINATION REQUIRED? ☐ YES ☒ NO

Brief Explaination _____

_____

USQ Trained Person: _____ Date: ___/___/___ Phone:

10. AUTHORIZATION SIGNATURE:

Project Manager: _____ Date: ___/___/___ Phone:

11. WORK PACKAGE CLOSURE:

Job Supervisor: _____ Date: ___/___/___ Phone:

Project Manager: _____ Date: ___/___/___ Phone:

RETURN PHA TO IS&H AT JOB COMPLETION.

PRELIMINARY HAZARD ANALYSIS (PHA)
FOR WORK PACKAGE ACTIVITIES

SECTION A, INDUSTRIAL SAFETY - TO BE COMPLETED BY THE INDUSTRIAL SAFETY AND HEALTH REPRESENTATIVE
Identify engineering/administrative controls or PPE as required, keyed to the following checklist items. Insert any required and/or other special actions to be taken because of the particular hazard (i.e. lead compliance plans, confined space plans, hearing conservation programs, etc.), including any notations for future Hazard Analyses. Additionally, identify any activities which DOE prescribed Occupational Safety and Health standards, that require protective measures be designed, inspected, or approved by a professional engineer or other competent person. (Use Section D if additional space is needed.)

Item	Exist	Work Package Phase	Comments, Controls, Methods of Compliance
Blockage of exits or means of egress	NO	N/A	[EGRESS]
Blockages/obstructions (Identify)	NO	N/A	
Burning, welding, hot-work (Fire Watch)	YES	Demolition	[BURN] Possible use of cutting torch during demolition. Administrative Controls. Permit required. Keep fire extinguisher near by during cutting.
Chemical compatibility of corrosives/flammables	NO	N/A	
Chemical process safety	NO	N/A	
Compressed gas cylinders	YES	Demolition	Project work controls (use of cutting torches).
Confined space entry	NO	N/A	[CONFINE]
Crane operations, overhead or mobile	NO	N/A	
Critical lifts (heavy or high value loads)	NO	N/A	[CLIFT]
Electrical hazards	NO	N/A	[LIVEL] Electrical Isolation of facility was accomplished during safe shut down activities.
Elevated work/fall protection	NO	N/A	[ELEV]
Emergency eyewash/shower available	NO	N/A	[EWASH]
Emergency alarms or evacuation plans required	YES	All	[EMERG] Plant Public Address system will be used to announce any plant emergency over the plant radio channel, cell phones will be used also, no specific added hazards exist in the demolition of this building.
Explosive/flammable atmosphere	NO	N/A	
Explosives	NO	N/A	
Fire protection system/equipment outage	YES	Structural Demolition	[FIRE/EFIRE] Fire Alarm System isolation prior to start of structural demolition.
Fire Hazards Analysis Required of Demolition	YES	Structural Demolition	[FHA/ADJA]
Flammable liquids/gases	YES	Structural Demolition	[FLAM] Possible use of cutting torch during demolition. Administrative Controls. Permit required. Keep fire extinguisher near by during cutting.
Forklifts, aerial lifts or material handling equipment	NO	N/A	
Grounding of electrical equipment	YES	Structural Demolition	Temp. power to portable equipment. All hand held electrical tools must be equipped with GFCI.
Hazards due to condition of facility or terrain (Identify)	NO	N/A	
Hoisting and rigging	NO	N/A	[HOIST]
Lighting/illumination/adequacy	NO	N/A	[MLITE]
Excavation and Soil disturbance	YES	Slab and Foundation Demolition	A excavation and soil disturbing permit required.

SECTION A, INDUSTRIAL SAFETY - TO BE COMPLETED BY THE SAFETY AND HEALTH REPRESENTATIVE

Identify engineering/administrative controls or PPE as required, keyed to the following checklist items. Insert any required and/or other special actions to be taken because of the particular hazard (i.e. lead compliance plans, confined space plans, hearing conservation programs, etc.), Including any notations for future Job Safety and Health Analysis(JSHA). Additionally, identify any activities which DOE prescribed Occupational Safety and Health standards that require protective measures be designed, inspected, or approved by a professional engineer or other competent person. (Use Section D if additional space is needed.)

Item	Exist	Work Package Phase	Comments, Controls, Methods of Compliance
Lockout/tagout of hazardous sources:	NO	N/A	[LOTO/ISO] Electrical/Mechanical Isolation of facility was accomplished during safe shutdown activities.
• Electrical	NO	N/A	See Above
• Mechanical (steam, hydraulic, pneumatic)	NO	N/A	See Above
• Interlocks	NO	N/A	[ILOCK]
• Chemical	NO	N/A	
• Radiological	NO	N/A	
Machine guards	NO	N/A	
Modification to Fire Wall/Door	NO	N/A	[FIREWAL]
Obstruction of fire protection equipment (pull boxes, hydrants, fire department connections, control panels, fire extinguishers, etc.)	NO	N/A	
Off-shift work	NO	N/A	
Outages of the plant public announcement (PA) system or the emergency notification system	YES	Demolition	[OUTAGE] The plant radio system transmits public announcements, which will be use to monitor for emergencies.
Overhead or underground utilities (Identify)	NO	N/A	[UITL] Electrical/Mechanical Isolation of facility was accomplished during safe shut down activities.
Penetrations into walls, floors, etc.	NO	N/A	[PENETR]
Plastic sheeting or wood framing/enclosures	NO	N/A	
Powder-actuated tools	NO	N/A	
Plant utilities (Identify)	NO	N/A	[WATER] Electrical/Mechanical Isolation of facility was accomplished during safe shut down activities.
Repetitive work	NO	N/A	[ERGO]
Structural Modification	YES	Demolition	[STRUCT] Building is being demolished.
Special Fire Protection Equipment Required	NO	N/A	[FIREQU]
Trenching/Shoring	NO	N/A	[DIG]
Temporary heating facilities	NO	N/A	
Temporary/portable buildings or structures	NO	N/A	[FACIL]
Temporary service hook-ups (Identify)	YES	Structural Demolition	Temp. electrical and water service (for dust control).
Traffic control/flagman	YES	Demolition	[TRAFIC] Loading, and demolition near the roadway.
Work in attics, ceilings, chases, or crawlspaces	NO	N/A	
Work impacting adjacent normally occupied areas	NO	N/A	[ADJAC/BMAPP/SIGNS/NOTIF]
Work Requiring Scaffolding, construction and inspection	NO	N/A	[SCAFF]
Other (Specify)	N/A	N/A	

SECTION B, INDUSTRIAL HYGIENE - TO BE COMPLETED BY INDUSTRIAL HYGIENE REPRESENTATIVE

Identify engineering/administrative controls or PPE as required, keyed to the following checklist items. Insert any required and/or other special actions to be taken because of the particular hazard (i.e. lead compliance plans, confined space plans, hearing conservation programs, etc.), Including any notations for future Job Safety and Health Analysis (JSHA). Additionally, identify any activities which DOE prescribed Occupational Safety and Health standards that require protective measures be designed, inspected, or approved by a professional engineer or other competent person. (Use Section D if additional space is needed.)

Item	Exist	Work Package Phase	Comments, Controls, Methods of Compliance
Abrasive blast (MSDS available)*	NO	N/A	
Asbestos	NO	N/A	[ASBEST] Asbestos Abatement completed.
Beryllium	NO	N/A	
Blood-borne pathogens*	NO	N/A	
Cadmium	NO	N/A	
Carcinogens (MSDS available)*	NO	N/A	[CARC]
Chemicals/solvents (MSDS available)*	NO	N/A	[CHEM/MSDS]
Chlorofluorcarbon (CFC)	NO	N/A	[CFC]
Coal, tar or asphalt products	YES	Structural demolition	Roofing material contains tar and asphalt products, to be disposed of as construction debris.
Coating/painting (MSDS available)*	NO	N/A	
Corrosives/acids/caustics (MSDS available)*	NO	N/A	
Dusty operations	YES	demolition	[POWDER] potential dust generation controlled via water misting.
Hazardous Waste Operations (HAZWOPER)*	NO	N/A	
High Pressure systems	NO	N/A	[HIPRES]
Insulation/man-made mineral fibers (MSDS available)*	NO	N/A	
Lasers	NO	N/A	
Lead	YES	N/A	Paint may contain lead, do not torch cut painted surfaces.
Foam in Place Operations	NO	N/A	
Mercury	NO	N/A	
Noise in excess of 85 dBA	Yes	demolition	[NOISE] Hearing protection will be used.
Polychlorinated biphenyls (PCBs)	NO	N/A	
Removal of ceiling tiles*	NO	N/A	
Spraying/generation of mists*	YES	demolition	Demolition dust control via water mist.
Temperature extremes (heat or cold stress)	Yes	ALL	[CRYRO/COLD/HEAT] Provide heating or cooling for personnel.
Ventilation or Air Monitoring requirements	Yes	demolition	[VENTIL/IH] Air monitoring for potential silica during demolition activities will be performed.
Welding, brazing, or thermal cutting operations	Yes	demolition	[BURN] Cutting of rebar and etc. will require a permit.
Other (specify)	N/A	N/A	

***NOTE:** Requires a description of the materials involved which present a hazard. Identify the physical location of the MSDS.

SECTION C, RADIOLOGICAL PROTECTION - TO BE COMPLETED BY RADIOLOGICAL CONTROLS REPRESENTATIVE

Identify engineering/administrative controls or PPE as required, keyed to the following checklist items. Insert any required and/or other special actions to be taken because of the particular hazard (i.e. RWP, ALARA Plan, etc.). Additionally, identify any activities which DOE prescribed Occupational Safety and Health standards that require protective measures be designed, inspected, or approved by a professional engineer or other competent person. (Use Section D if additional space is needed.)

Item		Exist	Work Package Phase	Comments, Controls, Methods of Compliance
Location:	Controlled Area	NO	N/A	
	Contamination Area	NO	N/A	[STP]
	High Contamination Area	NO	N/A	[STP]
	Radioactive Materials Storage Area	NO	N/A	
	Airborne Radioactivity Area (STP or OBT)	NO	N/A	
	Radiation Area	NO	N/A	
	High Radiation Area	NO	N/A	
	Very High Radiation Area	NO	N/A	
	Other (Specify)	YES	demolition	Possible soil contamination within the area.
Activities:	Criticality Safety Concerns	NO	N/A	
	Digging/Soil Removal	YES	Demolition/slab and foundation demolition	[DIG] Water mist to control potential dust. Air monitoring during demolition. Sample soil following slab removal.
	Surface destruction of radioactively contaminated materials or equipment?	NO	N/A	[SURFAC]
	Welding, burning, or grinding?	NO	demolition	[SURFAC]
	Hammering, chipping or scraping?	NO	N/A	[SURFAC]
	Abrasive blasting?	NO	N/A	[SURFAC]
	Dust-collecting equipment or systems?	NO	N/A	
	Decontamination and clean-up?	NO	N/A	
	Rad Waste Storage and Disposal Required	NO	N/A	[RWSTOR/WASTE/CHAR]
	Other (Specify)	N/A		
Sources:	X-Ray machine/generator	NO	N/A	[XRAY]
	Sealed radioactive sources	NO	N/A	
	Unsealed radioactive sources	NO	N/A	
Controls:	Radiological Work Permit	NO	N/A	[RWP/RWP=JS/RWP=N/R/RPGEN]
	ALARA Plan	NO	N/A	[ALARA]
	Air Flow Studies	NO	N/A	[AIRFLOW/CAM]
	Urinalysis program	NO	N/A	
	Preliminary or in-process characterization	NO	N/A	[SURVPS/SURVIP]
	Anti-contamination clothing	NO	N/A	
	Respiratory protection	NO	N/A	[RESP]
	Needs Analysis Evaluation	NO	N/A	
	Hazards Analysis	NO	N/A	
	Engineering Controls	YES	ALL	Dust control via misting.
	Administrative Controls	YES	N/A	Barricades of construction zone
	Supplemental dosimetry	NO	N/A	
	Shielding	NO	N/A	
	Personnel monitoring (frisking)	NO	N/A	

SECTION D - OTHER CONDITIONS, CONCERNS, OR SUPPLEMENTAL INFORMATION FROM SECTIONS A THROUGH C
Identify Assembly Points: West of Building 98, Take shelter area is in building 98, basement rooms 002,003,004 -See Appendix E

Work Package Revision Form

Work Package Revision Form			
Work Package No.SMPP/TFV-29720-00	Revision No.		
Revision Description: (attach page revisions to form)			
	Name	Signature	Date
PREPARED BY:			
Revision Preparer:			
REVIEWED BY:			
Project Foreman:			
Project Superintendent/ Constr. Mgr.:			
Industrial Safety & Hygiene P o C:			
Radiological Point of Contact:			
Environmental Safeguards & Compliance P o C:			
Waste Management PoC:			
Building Manager:			
Other:			
Other:			
USQ Trained Person			
USQ SCREEN / DETERMINATION REQUIRED? ☐YES ☒NO Brief Explaination_____			
APPROVED BY:			
Project Manager:			

Work Package Revision History Form

WORK PACKAGE REVISION HISTORY FORM			
REV. NO.	REASON	SIGNATURE	DATE

Job Specific Work Plan
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Job Specific Work Plan

1. WORK SCOPE

1.1. Introduction

This Job Specific Work Package (JSWP) follows the outline of PP-1059A, Integrated Work Control Program at the Mound Site, Miamisburg, Ohio. Included are a Preliminary Hazard Analysis (PHA) and a Job Safety & Hazard Analysis (JSHA). A Pre-Job Briefing Form (ML-9657) and the Project Manager's Authorization to Commence Work signature will be completed to document that the workers were briefed on the activities covered in this JSWP before work begins.

1.2. Work package scope

The purpose of this effort is to demolish Building 29, remove the debris, and to provide temporary seeding and mulching of the area to prevent erosion protection. This will be accomplished by confirming that all utilities have been isolated during safe shutdown activities, establishing a safe work zone, and the demolition of the building using heavy-duty equipment, and removing of debris as directed by Waste Management.

1.3. Site Information

Building 29 was constructed in 1965, and is located in the plant valley area, just off the flank of the Main Hill. Building 29 contains 6,601 square feet. There have not been any large-scale additions to Building 29, based upon the collection of drawings (the only drawings are the "as-built" drawings dated June 29, 1967). The only evident modifications to the building is the enclosure of an original construction concrete slab on the western-side of the building, the construction of an enclosure on the eastern corner of the building, and the addition of walls in some of the interior rooms.

According to a 1996 appraisal of Mound plant site buildings, Building 29 was used for plastics formulation and manufacturing. The appraisal report notes that the processes in Building 29 had been "out-of-service" since 1987, and that the building at the time of the appraisal, was undergoing safe shutdown. As illustrated in a later section, this mission use remained constant until the building was shutdown, the major process changes had to do with the fibers used in the plastics formulation, as less hazardous fiber-types to substitute for asbestos were explored.

2. DRAWINGS AND REFERENCES

PP-1059A, Issue 7, "Integrated Work Control Program"
MD-50000, Issue 10, "Maintenance Work Order and Material Processing"

3. INITIAL CONDITIONS AND PREREQUISITES

3.1 Lessons Learned

A search of the Lessons Learned Database found the following relevant item:

- Driver has near miss with electrocution when overhead wires catch on truck.

See Appendix F for the full report. The result of the Lessons Learned is that heavy equipment must be kept clear of all energized wires.

3.2 Industrial Safety and Health Requirements

3.2.1 A Job Specific Hazards Analysis (JSHA) is required. The construction zone, as defined in Appendix E, identifies construction boundaries, evacuation routes, the take shelter area, and the assembly area. Debris will be cleared from the immediate construction zone as required to promote safe equipment activity.

3.2.2 Underground electrical utilities will be identified and field located by scanning the area prior to beginning any field activities. Lock-out-tag-out procedures will be followed and electrical energy detection will be performed prior to any electrical demolition activities.

3.2.3 An excavation/soil disturbance permit will be required prior to demolition activities.

3.2.4 Monitoring for fugitive dust will be performed periodically as determined by previous monitoring results and site Safety and Health. Site Safety and Health will be notified before the demolition of concrete begins.

3.2.5 Whole body vibration will be administratively controlled and by reviewing topic at pre-job meeting.

3.2.6 A Hot Work Permit will be required if a torch is used for cutting. Coordinate with site Safety and Health.

3.2.7 Monitoring of noise levels will be performed as determined by previous monitoring results and site Safety and Health. Earplugs (or other hearing protection) will be worn, as appropriate.

4. RADIATION PROTECTION REQUIREMENTS

An assessment of Building 29 was performed reviewing operational history and radiological survey information. Radiological surveys of the building and equipment indicate no elevated radioactivity levels. Additionally, the building has no known history of having handled or stored radioactive materials. Several prior assessments have concluded that the building was non-impacted from site radiological operations.

During slab and foundation removal radiological control personnel will perform radiological screening of soil and concrete surfaces that are in contact with the soil.

5. ENVIRONMENTAL PROTECTION REQUIREMENTS

5.1 CERCLA

As a result of the investigations and documentation accomplished to comply with the CERCLA cleanup process via the Federal Facilities Agreement (FFA)/DOE Environmental Restoration (ER) Program, DOE and BWXTO have tabulated all the PRSs identified under the various regulatory programs in effect at the site. Of these 440 PRSs, four are at or near Building 29. PRSs in the vicinity of Building 29 are identified in Table 1.

Table 1: PRSs in Proximity to Building 29

PRS	CERCLA or Bldg. Related	Binning Status	Comments
66	CERCLA	Removal Action (RA)	Area 7, Thorium and Polonium Wastes. Part of Building 29 located within PRS 66.
85	CERCLA	No Further Action (NFA)	Building 29 Solvent Storage Shed.
86	CERCLA	NFA	Building 29 Septic Tank (Tank 224).
338	CERCLA	NFA	Building 29 Septic Tank (Tank 270).

5.2 National Emissions Standards for Hazardous Air Pollutants (NESHAPs)

Per Environmental Practice 2.2, if buildings to be demolished have a surface area less than 72 million square feet, direct readings below MDA, and wipe results below applicable action levels, additional dose calculations are not necessary.

5.3 Notification

A Notification of Demolition and Renovation form must be filed with the Regional Air Pollution Control Agency (RAPCA) at least 10 business days before planned building demolition.

5.4 Restriction of emission of fugitive dust (OAC 3745-17-08)

Reasonably available control measures must be employed to prevent fugitive dust from becoming airborne. Visual particulate emissions from any fugitive dust source shall not exceed 20% opacity as a three-minute average. Appropriate activities would include:

5.4.1 Water misting, or other suitable dust suppression, will be used to minimize fugitive dust resulting from demolition activities.

5.4.2 Periodic application of water, or other suitable dust suppression, to adjacent roadways and parking lots will be used to prevent dust from becoming airborne.

5.4.3 Trucks hauling debris to the onsite spoils area should be covered while in transit.

5.5 Clean Water Act & Storm Water Pollution Prevention

5.5.1 All inlets to the sanitary and storm systems will be plugged to prevent accidental discharges to the wastewater treatment plant or the environment.

5.5.2 The site's National Pollutant Discharge Elimination System (NPDES) Permit No. 1IO00005*HD requires the use of control measures to ensure the quality of storm water leaving the site. These control measures and practices are outlined in the site's Storm Water Pollution Prevention Plan OPA980099. Appropriate activities would include, Redirect flow patterns around the project site to prevent stormwater run-on. Provide inlet protection to the storm sewer system by covering catch basins immediately adjacent to the project site and plugging roof drains at ground level until which time the underground pipes can be appropriately abandoned. Exercise good housekeeping techniques by segregating materials in a timely manner, including the prompt disposal of wastes, and sweeping debris from the streets to prevent stormwater pollution. Water that has collected in an open excavation or in sumps, must be monitored prior to discharging to the sanitary or storm sewer systems. Contact Environmental Monitoring at extension 4188 for monitoring and review of these non-routine discharges.

5.6 National Historic Preservation Act (NHPA)

Building 29 is not listed as a historic structure with the Ohio Historic Preservation Office (OHPO). No mitigative documentation package is required. However, if any items or artifacts are discovered as this project progresses, the Cultural Resource Representative will be notified at extension 3691. Work will be temporarily suspended until which time the items or artifacts have been recovered.

5.7 Safe Drinking Water Act

The potable water supply to Building 29 was turned off and capped to protect the integrity of the water supply to that portion of the plant site.

5.8 Emergency Spill Response

Building 29 has been disconnected from all utility services and the lines drained. There should be no regulated component that will be encountered. In the event of a major spill of any regulated substances, or the rupture of a non-isolated utility line (fire, domestic water, ethylene glycol) call 911 if using an onsite phone or 937-865-4040 if using a cell or other outside phone to report it, also see Emergency Preparedness section. All spills must be contained onsite and should be prevented from entering the storm drains if

possible. If spills enter the storm drains, all effluent must be retained onsite at the overflow pond.

6. CHEMICAL AND WASTE MANAGEMENT REQUIREMENTS

All waste will be managed in accordance with the Waste Management Plan for the Mound Exit Project, MD-10499. The Waste Coordinator will ensure that this is accomplished and summarize in a Job Specific Waste Management Plan.

Fluorescent tubes and non-PCB containing ballasts will be left in place, and will be demolished with the building. PCB containing ballasts had been in the building; they have been removed during Safe Shutdown activities. Note: The fluorescent tubes have been removed.

7. EMERGENCY PREPAREDNESS

7.1 Site Notification Procedures

7.1.1 Use **911** for all emergency services onsite. This is the first response for any emergency, spill, or release. If using a cell phone, dial **865-4040**. This number will ring into the plant 911 system.

7.1.2 Any injury, no matter how minor, shall be reported immediately to the Medical Department for evaluation and treatment. The injured employee shall report any injury to the supervisor in charge or designee.

7.1.3 Employees will be notified of emergency or abnormal conditions by the plant paging system or project two-way radios. Additionally, unique sheltering and evacuation signals are available should site-wide protective actions be necessary.

7.2 Evacuation Route/Assembly Areas

The assembly area is southwest of Building 29 at the east side of Building 98. See map per Appendix E.

7.3 Take Shelter Area

The take shelter area is in the basement of Building 98 in Rooms 002, 003, and 004. See map per Appendix E.

8. PRE-DEMOLITION SEQUENCE OF WORK

8.1 Site Characterization

8.1.1 Physical Characterization

A structural engineering survey was performed and documented for Building 29 to meet the requirements of OSHA 29 CFR 1926.850(a). A walkdown of the structure was used to identify potential hazards as listed in 29 CFR 1926.850(e)

through (i). It has been determined the building does not meet the criteria that cause the structure to be historically significant.

8.1.2 Radiological Characterization

An assessment of Building 29 was performed reviewing operational history and radiological survey information. Radiological surveys of the building(s) and equipment indicate no elevated radioactivity levels. Additionally, the building has no known history of having handled or stored radioactive materials. Several prior assessments have concluded that the building was non-impacted from site radiological operations.

8.1.3 Chemical and Metals Characterization

Building 29 was used to fabricate plastic parts. The primary chemicals used were plastics and dyes together with hydraulic oil, acetone, alcohols, and toluene. There is no evidence that chemicals stored in Building 29 entered the wastewater collection system. There have been no reported spills from Building 29.
The building underwent Safe Shutdown in 1996 at which time these materials were removed from the building. The annual chemical inventory report found no chemicals located in the building.

8.1.4 Asbestos Characterization

An asbestos survey was completed. Asbestos was prevalent in Building 29. Asbestos-containing materials (ACM) of non-friable nature were used in floor tiles and mastic, roofing material, transite work surfaces, and fume hoods. Friable ACM included pipe joint insulation, condensation tape, pipe wrap, and thermal insulation. Much friable asbestos was used as filler material, mixed with plastic, to form molded parts. This airborne asbestos contaminated the HVAC ductwork, processing equipment, and the internal building structure. An asbestos abatement decontamination program was performed; no further action is required.

8.2 Site Preparation

8.2.1 Site Access Control

The demolition area will be identified utilizing the existing fence around the building, or at the discretion of the project construction manager/foreman, marked off with barricade tape/fencing.

8.2.2 Clearing and Grubbing

The area around the building will be mowed and insecticide will be sprayed if appropriate. Coordinate with site Safety and Health and Environmental Compliance.

HAZARD	MITIGATION
Insect bites	Mow area around building. Wear long pants and long sleeve shirt. Tape arm and leg openings, if desired .
Exposure to insecticide	Follow requirements of MD-10286 D2. Use licensed personnel. Follow label directions and MSDS.

8.2.3 Temporary Utilities

The only temporary utility that may be required is water. Coordinate with site Safety and Health. Water will be used to control dust emissions.

8.2.4 Temporary Facilities

This project may use the existing Building 44 and Building 38 shower/restroom area or utilize SMPP/TV F project new trailer complex to be located in the existing Mound "C" parking lot. Also, a portable toilet has been located at the job site.

8.2.5 Temporary Communications

Temporary communications are required (cell phone, radios) due to the difficulty of hearing plant announcements and emergency notifications. At the job site, plant announcements and emergency notifications can be heard on the Plant radio channel.

8.2.6 Staging Areas

The project site is of sufficient size to also be used as a staging area.

8.3 Preliminary Activities

8.3.1 Domestic water, fire water, electrical, fire alarm system and communications lines have been disconnected under separate safe shutdown MSR. 30034. An excavation/soil disturbance permit for slab and footing removal will be required prior to excavation activities.

8.3.2 Verify all mercury-containing switches have been removed. If found, dispose through Waste Management.

8.3.3 Confirm all Freon has been previously removed and recycled from HVAC units inside and outside of the building.

8.3.4 Fluorescent tubes, ballasts, and explosion proof lights will remain in place; asbestos abatement has been completed. If PCB-containing ballasts are encountered, remove and dispose through Waste Management. Note: Contact site Safety and Health with any concerns about fluorescent tubes, ballast, or explosion proof fixture seals.

HAZARD	MITIGATION
Fall hazard	Follow requirements of MD-10286 M-14

9. BUILDING DEMOLITION SEQUENCE OF WORK

9.1. Establish Work Zone

Establish work zone boundary using the existing fence and/or with barricade tape as directed by the Project Foreman. Proper signage will be placed at all access points to the site. This zone is not to be entered by anyone not directly involved with the demolition unless they have contacted the Project Manager/Foreman first. Initial demolition work will be scheduled to start on a Saturday, when the impact from the closure of the roadway will be minimized, since the construction boundary will force temporary closure of the roadway. Enough of the demolition of the front of the structure shall be completed on Saturday to enable the construction zone width to be out of the roadway and the re-opening of traffic on the following Monday.

Do not begin any demolition activities until the following items are completed.

All new workers assigned to this project have received a pre-job briefing prior to performing work and a walkdown of the project area. The following must be completed prior to starting work.

Review of the *Preliminary Hazard Analysis* for work package activities must be complete.

9.1.1. The *Pre-Job Briefing Record* must be completed and signed.

9.1.2. The *Job Specific Hazards Analysis (JSHA) must be reviewed.*

NOTE: All workers have Stop Work Authority. Situations where stop work authority is to be exercised are:

- **To stop unsafe work.**
- **To stop unauthorized work, for example, work outside the scope of this work package.**

9.1.3 Verify Safe Shutdown activities have isolated all the connections to Building 29, including the following systems: electric/communication/fire alarm systems, steam and glycol, sewage and potable water systems.

9.1.4. Verify that all pre-demolition notifications have been made and permits are in place.

9.1.5. Install sediment/storm water control fence around designated construction area as necessary.

9.1.6. Prepare water distribution system for the control of dust. Traffic control is ready.

9.2. Structural Demolition

9.2.1 Front Section Structure Demolition

Demolish the Front Section of the structure's block walls and structural steel using heavy equipment. Use a portion of the debris to construct a ramp for heavy equipment to access of the higher Rear Section for demolition. Use the existing slab for load out surface for loading debris and placing into appropriate hauling containers or trucks.

HAZARD	MITIGATION
Contact overhead power lines with heavy-duty equipment.	If heavy-duty equipment will be operating within 10' of overhead powers, perform LOTO.
Struck by flying debris Struck by moving equipment	Establish construction boundary. Temporary closure of the roadway to be coordinated with site wide safety, emergency and other necessary entities. Wear hard hat safety glasses, safety shoes, and reflective vest inside construction area. Maintain the following distances from operating equipment: Shear – 75 feet Hoe Ram – 50 feet Other heavy duty equipment – 30 feet Bobcat – 15 feet
Noise Hazard	Wear hearing protection while running heavy-duty equipment. Follow the requirements of MD-10286 D9.
Burns from torch cutting	Obtain and follow Hot Work permit per MD-10286 O2
Heat/Cold Stress	Follow the requirements of MD-10286 D13/D16

Exact sequence of demolition will be left up to the skill of the craft.

9.2.2 Rear Upper Section Structure Demolition

Using the ramp constructed from demolition debris and heavy equipment, raze the rear upper section of the structure working down to the concrete slab. Use the existing concrete slab for load out surface for loading debris and placing into appropriate hauling containers or trucks.

Note: The progressions of the building demolition will ultimately be determined in the field.

9.2.3 Slab and Foundation Demolition

Using heavy equipment, break apart the concrete slab, foundation, and footers to 3' below grade, torch cut the rebar as required (Hot Work Permit is required if used) to support demolition and downsizing. During the concrete demolition, use heavy equipment to assist radiological control personnel to perform radiological screening of all concrete surfaces. Based on radiological screening results, transport to Mound's spoils area, offsite disposal, or rail spur as directed by Waste Management.

HAZARD	MITIGATION
Burns/fire	Burn permit, fire protection, and PPE.
Strike underground utilities	Obtain Excavation permit and follow its requirements per MD-10286 O5

9.2.4 Organize area for future soil remediation

The last step will be to temporarily restore the area by grading and seeding. Remove any unnecessary remaining sediment/storm water control fences. Scan equipment for radiological contamination and decontaminate prior to leaving area. Remove dust control water distribution system, temporary power fencing and any traffic control. Restoration will be temporary in scope since the area is scheduled to be disturbed in the near future by the efforts of the PRS 66 removal action.

Appendix A
JSHA/HASP

Project/Activity: Building 29 Demolition
Name: Lee Koehmstedt

JSHA CRITERIA CHECKLIST	YES	NO	N/A
1. Work performed with a 6 ft. or greater fall hazard, excluding portable ladders. See Item 14 for further requirements.		X	
2. Roof work requiring the use of fall protection (within 6 ft of an unprotected edge) or special fall protection procedures.		X	
3. Potential hazardous chemical exposure above action levels or permissible exposure limits (PELs), or ACGIH Threshold Limit Values (TLVs).		X	
4. Work activity in an immediately dangerous to life or health (IDLH) breathing hazard environment.		X	
5. Fire or explosion hazards. Are fire hazards beyond a Hot Work Permit? (Reference O2, MD-10286)		X	
6. Work within close proximity of live electrical than 50 volts, conductors, and/or work that requires multiple locks, multiple hazard sources, or complicated lockout/tagout circumstances. (Reference MD-10444, *Lockout/Tagout Procedure Manual*, for multiple energy lockout/tagout.)	X		
7. Any maintenance or repair of equipment under pressure where the pressure cannot be shut off and de-energized.		X	
8. Work with high or extreme exposure to ionizing or nonionizing radiation (reference MD-80036, Op 10002), noise, or heat or cold stress (reference D9, D13 & D16, MD-10286).	X		
9. Determined by an appropriate core team, building manager, member of general or executive management, or the IS&H manager to require a JSHA.	X		
10. Any onsite construction or service project directed to have JSHAs based on this procedure and/or instruction from project personnel or IS&H staff.	X		
11. Near-miss event with the potential for loss of life or limb or disabling injury/illness if repeated.		X	
12. Excessive trauma/motion/vibration work situations or manual lifting involving heavy, large, and/or awkward-to-handle objects (reference MD-10407, *Ergonomics Program.*		X	
13. Unguarded, unmarked close clearance, pinch point, exposed moving machinery parts.		X	
14. Known potential falling object hazards (e.g., employees working above other employees, potential for dropping tools, falling equipment or material) or working in areas with the potential for flying objects (flying chips, sandblasting, etc.), exposure to sharp or protruding objects (e.g., working inside plenums, air mover ducts, etc.).	X		

MANDATORY JSHA REQUIRED TO ADDRESS ANY/ALL (YES) RESPONSES

JOB SAFETY & HEALTH ANALYSIS

JSHA MASTER DOCUMENT CONTROL NO:
SMPP/TFV – 29720-0

DATE: 4/25/02	_X_ NEW ___ REV	**BUILDING:** 29	**JOB:** Demolish Building 29
DEPARTMENT/COMPANY: SMPP/TFV			**SECTION:** N/A
OCCUPATIONS: Heavy Duty, Demo Tech, Construction Craft, Pipefitter/Welder, Electrical Control, Fab Mechanic, RCT, III			

SIGNATURES

ORIGINATOR: Lee Koehmstedt
REVIEW/REV: Jared Willis
REVIEW/REV: Lynn Null
REVIEW/REV: Gary Weidenbach
APPROVED: C.D. Thompson

REQUIRED PERSONAL PROTECTIVE EQUIPMENT:	**MSDS(s)/CHEMICALS ASSOCIATED WITH THE JOB:**
Hard Hat, Safety Glasses with side shields, safety shoes, safety vest	Insecticide

BASIC JOB STEPS	POTENTIAL ACCIDENT/ILLNESSES OR KNOWN HAZARDS	SAFE JOB PROCEDURES
Break the job down into basic steps that tell what is done first, what is done next, and so on Record the job steps in their normal order of occurrence. Describe what is done, not the details of how it is done. Usually, three or four words are sufficient to describe each job step. For example, the job of "replacing a light bulb" may break down into basic steps as follows 1. Bring and set up ladder 2. Ascend ladder 3. Remove light globe & bulb 4. Replace light bulb 5. Replace light globe 6. Descend ladder 7. Remove and store ladder	Ask yourself for each job what accidents/illnesses could occur to the employee doing the job. Record potential accidents/illnesses by combining one of the abbreviations below with the agent of contact. For example, "struck by a crane hook" is recorded "SB-crane hook." Number each potential accident. SB - Struck by CB - Contacted by SA - Struck against CW - Contact with CI - Caught in CO - Caught on IB - Caught between F - Fall SO - Strain-overexertion* E - Exposure (occ. illness) *Show ergonomic stresses as SO (repetitive trauma, single event strain, or awkward position)	For each potential accident/illness, ask yourself exactly what the employee should do or not do to avoid the accident/illness. Describe specific precautions in detail. Give each precaution the same number given in the potential accident (center column) to which it applies. Avoid generalities such as "Be alert," "Be careful," and "Take caution." Use simple do or don't statements; e.g., "Lock out main power switch." "Stand clear of lift before signaling," or "Check wrench grip before exerting full force." If necessary, explain how, as well as what, to do. Amount of detail is a matter of judgment. Describe ergonomic solutions (job redesign, new tools, worker lift assistance, etc.)
General Safety Note	A wide variety of incidents occur on a regular basis that potentially could result in injury or illness	1) Be cognizant of your own safe work practices as well as those of your co-workers 2) Review any related safety procedures of which you are unsure 3) Utilize STOP WORK Authority as necessary
Pre-job meeting with involved personnel to discuss the work plan and safety requirements.	NA	This project engages in Enhanced Work Planning(EWP), a ISM process that evaluates and improves the approach by which work is identified, planned, approved, controlled, and executed.
Operation of heavy equipment near electric overhead lines	Electrocution	LOTO all electrical overhead lines.

JOB SAFETY AND HEALTH ANALYSIS FORM
(CONTINUATION SHEET)

BASIC JOB STEPS	POTENTIAL ACCIDENT/ILLNESSES OR KNOWN HAZARDS	SAFE JOB PROCEDURES
Demolish building and slab using excavator mounted shear, hoe ram, grapple, loader, and bobcat	Struck by flying debris Struck by moving equipment Noise Hazard	Establish construction boundary. Wear hard hat safety glasses, safety shoes, and reflective vest inside construction area. Make eye contact with operator when working around equipment. Use hand signals to communicate intent. Maintain the following distances from operating equipment: Shear – 75 feet Hoe Ram – 50 feet Other heavy duty equipment – 30 feet Bobcat – 15 feet Make sure equipment is in safe working order. Use spotter vision is obstructed. Install traffic control. Wear hearing protection while running heavy duty equipment Follow the requirements of MD-10286 D9
Torch cut rebar or to weaken structural members	Burns, fire Potential lead paint	Obtain and follow Hot Work permit per MD-10286 O2. Wear proper PPE, have fire extinguishers in the construction zone. Test for lead paint; do not torch cut lead paint.
Working in excessive heat/cold	Heat Stress/Cold Stress	Follow the requirements of MD-10286 D13/D16
Working outside.	Adverse weather conditions	Be aware of adverse weather conditions, assembly and take shelter areas.
Slab removal	Strike underground utilities Silica exposure	Obtain Excavation permit and follow its requirements per MD-10286 O5 Monitor for silica, keep area wet for fugitive dust suppression.

SIGN-OFF SHEET

I have read and understand the attached Job Specific Work Plan and JSHA:

SIGNATURE	**Date**	**Department**

Appendix C
PRE-JOB BRIEFING

JOB SPECIFIC WORK PLAN
PRE-JOB UPDATE

MSR/PROCEDURE (if applicable):	JOB SUPERVISOR

A.	Time, Date and Location of PJB:
B.	Applicable Procedure Number:
C.	Job Description:
D.	Personnel Attending:

HP#	SIGNATURE	HP#	SIGNATURE

JOB SUPERVISOR – This is a reminder checklist for the update. The supervisor need only discuss and note changes from the previous day's briefing or update. (Use NC for No Change).

1.	Any changes/revisions to safety envelope for work: a. New/added assignments and responsibilities of any individual b. Changes in facility conditions, tagouts, valve lineups c. New or changed precautions/hazards d. Valid RWP or other required work permits still in effect
2.	Adequate supply of PPE
3.	New training, any training coming up on expiration
4.	New changes to relevant Category "A" or Category "B" procedures.
5.	Equipment and tools calibrations in effect
6.	Relevant lessons learned, critique reports
7.	RWP revisions: a. Changes to radiological conditions of the workplace, particularly with respect to postings. b. Change in scope, especially if it is a reduction in scope or Stop Work Levels.
8.	Changes to radiological and/or health monitoring.
9.	Open the floor to questions.

The above minimum requirements have been met; this PJB has been conducted in sufficient detail to maximize continued safe conduct of the job, and all personnel have been through a previous Pre-Job Brief.

_____ _____

Job Supervisor/Foreman Date

NOTE: Completed pre-job update sheet must be retained with the work package or maintained in your record file.

JOB SPECIFIC WORK PLAN

Daily Toolbox Safety Meeting

Project:	**Date:**
Safety Topic of Meeting:	
Work Description of Meeting:	

Review the following to determine if conditions have changed since the last Pre-Job Meeting
If this is the 1st meeting with a subcontractor, has Safe Work Authorization been done?
Check off each item that applies or mark N/A if it doesn't apply.

Hot Work Permit (torch cutting, spark producing grinding, open flame heaters, welding)		Signage and Barricades (construction area, hazard notification, rad postings, etc).	
Penetration Permit (penetrating walls, ceilings, or floors in a building)		Air Monitoring (as required by Environmental Compliance and/or Industrial Hygiene)	
Excavation Permit (digging in soil)		Dust Suppression (misting, etc.)	
Trench Plan (shoring, soil layback, etc. if over 4 feet below grade)		Water Runoff Prevention (silt fence, straw bales, collection pond, etc.)	
Confined Space Entry Permit (manhole, tank, or other confined space entry)		Radiation Work Permit (as required by Rad Controls)	
Fall Protection (person's feet over 6 feet above ground)		TLDs (as required by RWP and rad postings)	
Lockout/Tagout (all energy sources to equipment being worked on)		Waste Containers (rolloffs, sealands, dumpsters, LSA boxes, drums, etc.)	
PPE (respirators, Tyveks, safety shoes, safety glasses, hard hats, gloves, reflective vests, etc.)		Utility review especially for asbestos abatement contractor (label live utilities e.g. FAS, phone, electric)	
Personnel Training up-to-date for assigned work (Radworker II, Asbestos, Lead, etc.)		Hoisting and Rigging Review	

JOB SPECIFIC WORK PLAN
PRE-JOB UPDATE

Continuation Sheet for _____/_____/_____

HP#	SIGNATURE	HP#	SIGNATURE

JOB SPECIFIC WORK PLAN

PRE-JOB UPDATE

MSR/PROCEDURE (if applicable):	JOB SUPERVISOR

A.	Time, Date and Location of PJB:
B.	Applicable Procedure Number:
C.	Job Description:
D.	Personnel Attending:

HP#	SIGNATURE	HP#	SIGNATURE

JOB SUPERVISOR – This is a reminder checklist for the update. The supervisor need only discuss and note changes from the previous day's briefing or update. (Use NC for No Change).

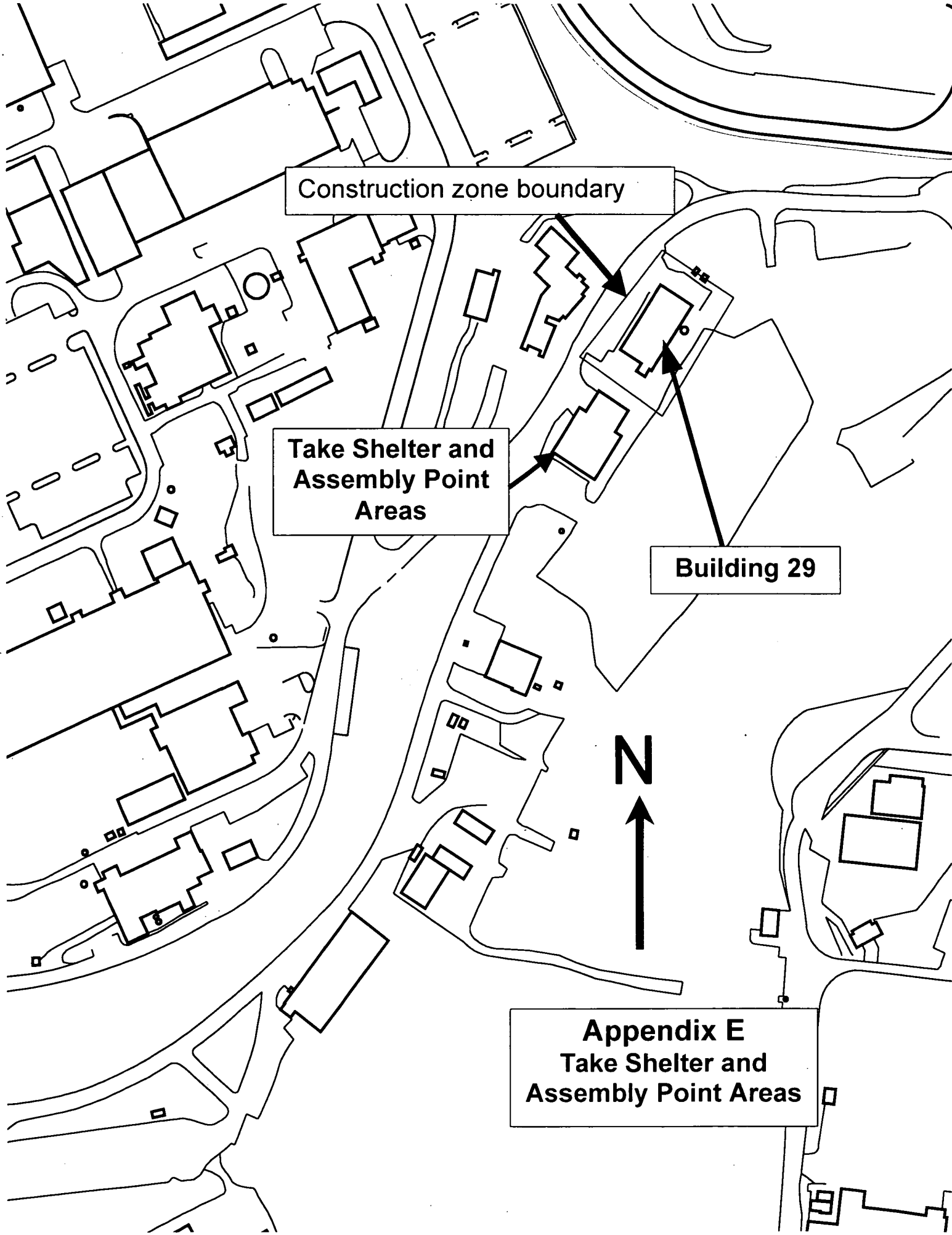
2. Any changes/revisions to safety envelop for work: e. New/added assignments and responsibilities of any individual f. Changes in facility conditions, tagouts, valve lineups g. New or changed precautions/hazards h. Valid RWP or other required work permits still in effect
2. Adequate supply of PPE
3. New training, any training coming up on expiration
4. New changes to relevant Category "A" or Category "B" procedures.
5. Equipment and tools calibrations in effect
6. Relevant lessons learned, critique reports
8. RWP revisions: c. Changes to radiological conditions of the workplace, particularly with respect to postings. d. Change in scope, especially if it is a reduction in scope or Stop Work Levels.
8. Changes to radiological and/or health monitoring.
9. Open the floor to questions.

The above minimum requirements have been met; this PJB has been conducted in sufficient detail to maximize continued safe conduct of the job, and all personnel have been through a previous Pre-Job Brief.

_____

Job Supervisor/Foreman Date

Appendix E
DRAWINGS/SKETCHES



Appendix E
Take Shelter and Assembly Point Areas

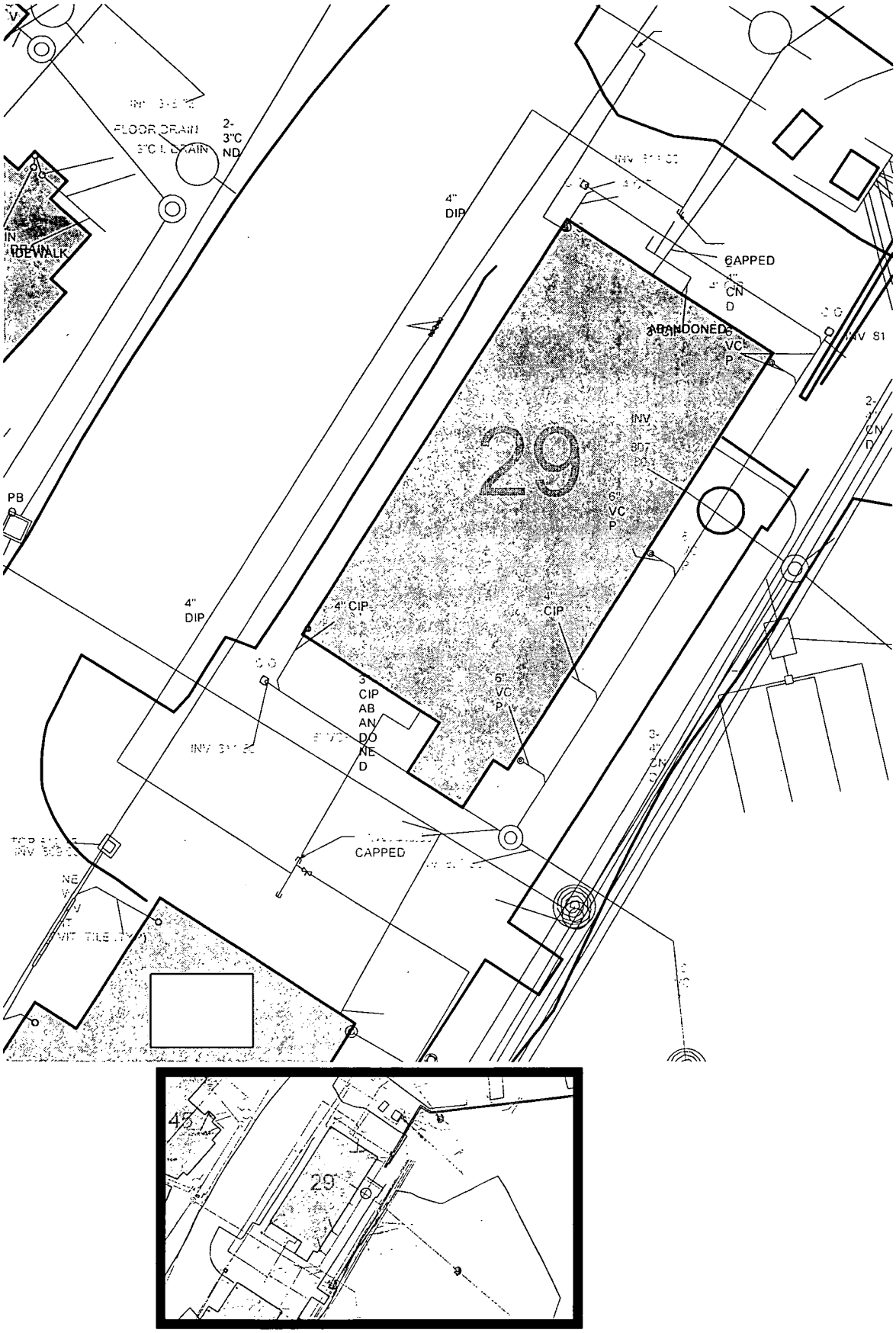


Figure 3.1 – Utilities around Building 29

Appendix F
REFERENCES/ LESSONS LEARNED

Appendix G
MISCELLANEOUS
(USQ, RWP, Permits, etc.)

No USQs or RWPs are required at this time. An excavation permit will be required for the slab removal and a burn permit will be required for torch cutting rebar.

Appendix H
POST-JOB CONFERENCE

Title:	
Work Package No. (JSWP or MSR)	

POST JOB CONFERENCE

What went well?

What could be improved?

Other Comments:

Title:	
Work Package No. **(JSWP or MSR)**	

Items Requiring Further Action:

POST-JOB CONFERENCE ATTENDEES

NAME	HP	NAME	HP

Title:	
Work Package No. (JSWP or MSR)	

LESSONS LEARNED INPUT FORM

What Happened? (Describe in as little or as much detail as necessary the situation and what occurred. Do not mention any names, only job functions and activities)

What did you learned? (Describe how the job could have been done better, how a hazard could have been eliminated, etc.)

Submitted by: _____ **Date:** _____

OPTIONAL