RF/RMRS-99-473.UN

Rocky Mountain Remediation Services, L.L.C.

779 Closure Project

BUILDING 779 CLUSTER CLOSURE PROJECT

Non-Radiological Closeout Report

for the

Main Building, Utility Area and B-Annex

Revision 0
December 13, 1999

Rocky Mountain
Remediation Services, L.L.C.

REVIEWED FOR CLASSIFICATION
By
Date 12/13/99

ADMIN RECORD

1/347

B779-A-000150

BUILDING 779
NON-RADIOLOGICAL CLOSEOUT REPORT
for the Main Building, Utility Area, and B Annex

Revision 0
December 1999

This Non-Radiological Closeout Report has been reviewed and approved by:

Kathy Zbryk — 12-20-99
Kathy Zbryk, Environmental Scientist, B779 (RMRS) — **Date**

12-20-99
R. Steve Luker, Quality Assurance, B779 (RMRS) — **Date**

12/20/99
Mark E. Hickman, Integration Manager, B779 (RMRS) — **Date**

12/20/99
Mark Zachary, Industrial Safety & Hygiene, B779 (RMRS) — **Date**

12/20/99
Thomas Dieter, Project Manager, B779 (RMRS) — **Date**

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1.0 INTRODUCTION

1.1 Purpose

The purpose of this Report is to provide the information required by the 779 Cluster Closure Project Non-Radiological Closeout Plan for the Main Building, Utility Area and Annex B of Building 779. Additionally, this document provides characterization information that supports the RFETS' decision to demolish the Building 779 Main Building, Utility Area and Annex B.

1.2 Scope

The scope of this document is to provide information appropriate to the Building 779 Main Building, Utility Area and Annex B. The scope includes a summary of the applicable information and survey data that has been conducted since the Reconnaissance Level Characterization Report was issued. This information demonstrates that all contaminants of concern (COCs) within the Main Building, Utility Area and Annex B of Building 779 have been identified, removed, or remediated to a level below regulated levels. Building 779 will be demolished in sections; the Main Building, Utility Area and Annex B are the final sections to be demolished (See Maps in Appendix A).

Radiological closeout activities are not addressed in this plan. Refer to RF/RMRS-97-123.UN *"Closeout Radiological Survey Plan for the Building 779 Cluster"*, Rev. 2, June 1999 for information concerning radiological surveys.

2.0 Removal of Contaminants of Concern (COCs)

The following sections discuss the current status of COCs within Main Building, Utility Area and Annex B of Building 779. Each section also discusses what actions were taken to remove/abate the COCs.

2.1 Asbestos

The following paragraphs identify the amount of asbestos initially identified in the Main Building, Utility Area and Annex B and the actions taken to abate the identified asbestos. Each area designated in **Table 2.1,** *Asbestos Data, Building 779 Main Building, Utility Area and Annex B*, as an abatement area was visually inspected and aggressively cleared according to requirements in CCR #8, Part B, Asbestos. An independent laboratory performed analysis of air samples by Phase Contrast Microscopy (PCM). In the event that PCM analysis exceeded 0.1 f/cc (fibers per cubic centimeter) on any sample, additional analysis by Transmission Electron Microscope (TEM) on all samples in the batch would be performed. There were two excedences of 0.1 f/cc for PCM data obtained in the Main Building, Utility Area and Annex B, therefore, TEM analysis was required to confirm asbestos content. In both instances, TEM data were below the regulatory threshhold and the areas were subsequently released for normal occupancy.

Main Building, Utility Area and Annex B

This area includes Rooms 103, 103A, 103B, 118 through 142, 170 through 173, 215 through 226, 228 through 235, 270 through 275, 277 and the southern portion of the east loading dock. The basement, Room 001 is not addressed in this report but will be covered in a subsequent non-radiological closeout report. The Main Building, Utility Area and Annex B asbestos abatement required the removal of approximately 7,590 square feet of floor tile and mastic, 7,737 square feet of drywall, tape and joint compound, 5,109 linear feet of insulation on pipes, and approximately 2,283 square feet of duct/pipe/wall penetration filler.

Asbestos abatement for each area was accomplished within a negative pressure secondary containment connected to a HEPA-filtered ventilation system. The insulation was abated using glove bags and/or wrap/cut operations. Abatement of the Main Building, Utility Area and Annex B was performed in stages due to access priorities and began on April 7, 1999 and was completed on October 13,1999. Based on the results of a visual inspection and analytical results from one hundred and twenty-seven air samples, the Main Building, Utility Area and Annex B areas were cleared, in total, for normal occupancy on October 13,1999. The air clearance samples for all rooms where asbestos was abated are summarized below (Table 2.1) and the results are documented in Appendix B.

TABLE 2.1
Asbestos Data, Building 779 Main Building, Utility Area and Annex B

ROOM NUMBER(S)	PCM SAMPLES	TEM SAMPLES	DATE CLEARED
119 (w)	5	0	8/15/99
121 (Includes Rooms 121A, 121B, 116 hall and 116A)	5	0	7/19/99
122	3	0	9/02/99
126	5		9/20/99
127 (C1)	3	0	6/5/99
127 (C1-A)	3	0	6/9/99
127 (C2)	5	0	8/11/99
127 (C3)	5	0	8/20/99
127 (C3-A)	5	0	10/8/99
127 (AC-1)	5	0	10/13/99
128 (Includes 125 and 124)	3	0	7/16/99
133	3	0	7/22/99
138 (Includes Rooms 132,134,135 and 136)	3	3	5/21/99
140 (Includes Rooms 140A, 140B, 141, 141A through 141C, and 137)	5	5	7/30/99
142	5	0	5/10/99
142 (C1)	5	0	3/25/99
142 (C2)	5	0	4/09/99
142 (C3)	5	0	4/30/99
142 (C4)	5	0	5/11/99
142 (C4-A)	5	0	5/10/99
142 (C4-B)	3	0	5/17/99
142 Plenum	3	0	6/22/99
173	3	0	5/21/99
216	5	0	5/15/99
218	3	0	5/17/99
221 (Includes 221A-C, 273, 274, 274, and 277)	3	0	5/06/99
229 through 235	3	0	5/12/99
234	3	0	7/06/99
271	2	0	4/07/99
271 (Includes 225 and 223)	3	0	6/24/99

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2.2 Beryllium

The beryllium analytical method and control limit changed during FY99. At the beginning of FY99, beryllium was controlled to a housekeeping limit of 25 $\mu g/ft^2$ Beryllium smears were being analyzed at RFETS on the Beryllium Activation Swipe Tester (BEAST). The Site beryllium equipment-release limit was established at 0.2 $\mu g/100\ cm^2$ on September 30, 1998. After this date, smear samples were sent to an off-site laboratory that could analyze to the lower level. The RFETS analytical method is incapable of analyzing to the lower 0.2 $\mu g/100\ cm^2$ limit.

During completion of the stripout activities in the Main Building, Utility Area and Annex B, the 779 Closure Project Beryllium Assessment Plans were used to identify the personnel monitoring and beryllium exposure controls that were used. Beryllium parts were stored and processed in the Main Building and Annex B during the facility's operation. Therefore, a significant number of beryllium swipes were taken in these areas. The equipment and components identified as beryllium-contaminated (above the DOE free-release criteria of 0.2 $\mu g/100\ cm^2$) were removed from the facility and packaged as low-level waste. Protective materials, such as tent and tent airlock floor coverings, were treated in the same manner as equipment. When the tents and tent airlocks were removed, the entire floor area was re-sampled. Building surfaces identified as being beryllium-contaminated were decontaminated and re-sampled to verify that the surface was less than 0.2 $\mu g/100\ cm^2$. Results of the Main Building, Utility Area and Annex B beryllium analyses are included as Appendix C. Beryllium samples were managed using the chain-of–custody process.

2.3 Polychlorinated Biphenyl (PCBs)

No areas within the Main Building, Utility Area and Annex B of Building 779 required sampling for PCBs per the 779 Cluster Reconnaissance Level Characterization Report. The Main Building, Utility Area and Annex B Area light ballasts were inspected prior to removal and handled as either TSCA, non-hazardous or low level (TSCA or non-hazardous) waste based on results of this inspection.

2.4 Solid Material Containing Regulated Levels of RCRA Metals

An analysis of materials that fall within this category were evaluated as part of a Site-wide lead-based paint evaluation and included Building 779 Cluster. The analysis is discussed below. The result of this evaluation was used to make decisions about the Main Building, Utility Area and Annex B.

Painted surfaces are the only material of potential concern in this category. Characterization of lead-based paints is required for worker protection under OSHA's Lead Abatement Program and for hazardous waste characterization in

accordance with 6 CCR 1007-3, Part 261.64. Consequently, both Inductively Coupled Plasma (ICP) and Toxicity Characteristic Leaching Procedure (TCLP) analyses were performed on paint within the 779 Cluster. Based on ICP data, the painted surfaces within the 779 Cluster were treated as containing lead for the purposes of personnel protection. For the purpose of this report, only TCLP data is considered (Appendix D) because the hazardous waste determination for the Main Building, Utility Area and Annex B Area is derived from TCLP data even though an ICP summary is included.

RFETS personnel have evaluated different types of surfaces painted with lead-based paints and other paint containing heavy metals (cadmium, chromium). The RFETS evaluation concluded that, in general, the painted surfaces at RFETS are non-hazardous waste forms. This determination was based upon hundreds of samples taken throughout RFETS. As part of a continuing characterization, 52 samples (including duplicates; see Appendix D) from the 779 Cluster were analyzed for heavy metals using the TCLP. Each paint sample was of a unique paint color and/or combination of paint colors. These samples consisted of paint chips rather than the total media (cinder block, concrete, and paint) so that a conservative characterization would result. The sample result ranges for the RCRA metals of concern are as follows:

- Cd (.06-0.1857 mg/l;)
- Cr (.15 – 2.2 mg/l) (Excluding one sample from a painted metal door in Room 218)
- Pb (.24 - 3.6 mg/l; Excluding Room 160 which is discussed below)

The characterization results demonstrate that the building debris is non-hazardous with respect to painted surfaces, based on TCLP analysis. Even though there are two TCLP analysis results that indicated some leachability, the non-hazardous determination is based on an interpretation from EPA guidance and the RFETS' Environmental Leadership Team.

The two results above regulatory threshold values for TCLP analysis were:

1. Paint on one metal door (chromium level of 19.7 mg/l; sample identification number 779-980416-MS-023).
2. Paint sampled from Room 160 in Building 779 (lead levels of 11.9 mg/l; sample identification number 779-0980416-MS-039). Painted surfaces in Room 160 have been scarified (all paint has been removed) and the entire waste matrix (paint and substrate) has been physically removed from the facility.

2.5 RCRA Regulated Waste Chemicals

Chemicals were stored in gloveboxes, hoods, and flame-proof cabinets within the Main Building, Utility Area and Annex B rooms throughout the use of the facility for research and development. All of the chemicals, oils, and solvents have been removed from these rooms. Appendix E identifies the results of sampling that was performed on chemicals in the Main Building, Utility Area and Annex B

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Areas. Currently no hazardous waste chemicals are located in the Main Building, Utility Area and Annex B Areas.

2.6 RCRA Units

There were two permitted RCRA units in the Main Building. The gloveboxes and hoods associated with RCRA Units 90.37 and 90.39 were closed by removal and placed into waste crates numbered P03840, P03837, S00443, S00452, S00453, S00459, S00460 and S00462 in accordance with the 779 DOP, Closure Description Document. Appendix G, *Building 779 Glovebox Removal Checklist, RCRA Units*, documents the removal of RCRA Units 90.37 and 90.39.

Two RCRA temporary units and one satellite collection unit existed in the main building; they were Units 779-2447 (Room137 and 139), 779-2449 (Room 222, 234), and 779-2450 (Room 221). These units were inactivated in accordance with Site procedures. (Documentation in Appendix F)

2.7 Staining Inspection

A visual inspection of the Main Building, Utility Area and Annex B is provided under Section 5. No unusual staining or odors were identified in the Main Building, Utility Area and Annex B Areas.

2.8 Quality Assurance

The sampling, analysis, and data for this report was obtained in accordance with the Quality Assurance Program used by RFETS Analytical Services. Consequently, Quality Assurance requirements described in Section 5 of the Building 779 Non-Radiological Closeout Plan were met.

3.0 CONCLUSION

In conclusion, waste chemicals, and hazardous and toxic contaminants, introduced into Building 779, Main Building, Utility Area and Annex B, have been removed or reduced to levels that are no longer hazardous or toxic. The release criteria identified in Section 2.0 of this report were accomplished through the building stripout process. Physical evaluation of the building and sampling were performed to confirm that Building 779, Main Building, Utility Area and Annex B Areas, met the release criteria in support of facility demolition.

4.0 REFERENCES

4.1 *Rocky Flats Cleanup Agreement (RFCA)*

4.2 *Decommissioning Operations Plan for the 779 Cluster Interim Measure/Interim Remedial Action*, Rev. 0, February 1998

4.3 *Reconnaissance Level Characterization Plan for the 779 Cluster*, Rev. 0, December 17, 1997

4.4 *Reconnaissance Level Characterization Report for the 779 Cluster*, Rev. 0, December 17, 1997

4.5 *Asbestos Characterization Report for the 779 Cluster Project*, Rev. 0, October 1997

4.6 *Lead/Metals in Paint Characterization For Building 779 Cluster*, Rev. 0, August 6, 1998

4.7 *Radiological Closeout Survey Plan for the Building 779 Cluster*, Rev. 2, June 1999

4.8 Procedure DA-GR01-v1-1, *Analytical Services General Guidelines for Data Verification and Validation*

4.9 29 CFR 1926.1101, Colorado Regulation 8, Asbestos

4.10 PCBs - 40 CFR 761; EPA 560/5/86-017; SW-846 Method 4020 Screening for PCBs by Immunoassay; Method 8082, PCBs by Gas Chromatography; disposal requirements - 40CF Part 761.62.

4.11 6 CCR 1007-3, Part 262.11, *Hazardous Waste Determination*, and 40 CFR 268. SW-846

4.12 Toxicity Characteristic Leaching Procedure, EPA SW 846 Method 1311.

4.13 MAN-071-IWCP, *Integrated Work Control Program Manual*

5.0 Visual Inspection Check Sheet

779 CLUSTER CLOSURE PROJECT
NON-RADIOLOGICAL CLOSEOUT
VISUAL INSPECTION CHECK SHEET

AREA/ROOMS INSPECTED: the following rooms were inspected:
100, 101, 101A, 103, 103A, 103B, 104, 116, 118, 119, 120, 121, 121A, 121B, 122, 123, 124, 125, 126, 127, 128, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 140A, 141, 141A, 141B, 141C, 142, 170, 171, 172 and the southern portion of the east loading dock.

Note: All walls within the main part of the building have been removed and inspected, therefore, not all rooms identified in Section 2 are called out on this inspection check sheet.

INSPECTION CATEGORY	YES	NO	COMMENTS
STAINING OBSERVED	X		Several locations showed signs of roof leakage. There were no indications of unusual color. There were no floor stains.
UNUSUAL ODOR PRESENT		X	No unusual odors were identified.
SPECIFIED COMPONENTS REMOVED	X		

ACTIONS REQUIRED:

None

PERFORMED BY: Mark Heckman **DATE:** 12/20/99
12/20/99

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VISUAL INSPECTION RESULTS

Staining Observed

The visual inspection completed for the B-Annex, Main and Utility Areas in Building 779 identified the following:

1. The dock area has minor rust staining from roof-water leakage. No further action is required based on this observation.
2. Localized minor staining was observed on the ceiling of several rooms at the roof seams. The stains are attributed to leakage of rainwater and snowmelt. No further action is required based on this observation.

Specified Components Removed:

The facility has been stripped out of all equipment and components have been removed on accordance with the Non-Radiological Closeout Plan and in support of the radiological closeout survey. Some conduit and piping remains and will be removed from the building rubble during demolition.

The structure's non-loads bearing interior walls have been removed. Therefore, although the inspection sheet identifies individual room numbers the inspection covered all the remaining areas. Painted surfaces, primarily black water sealant, remain in the remaining structure. The sealant has been sampled and contains no hazardous constituents. The exterior painted surfaces have been sampled and although the paint does contain lead, the lead is not in a leachable matrix as discussed in the text of this document.

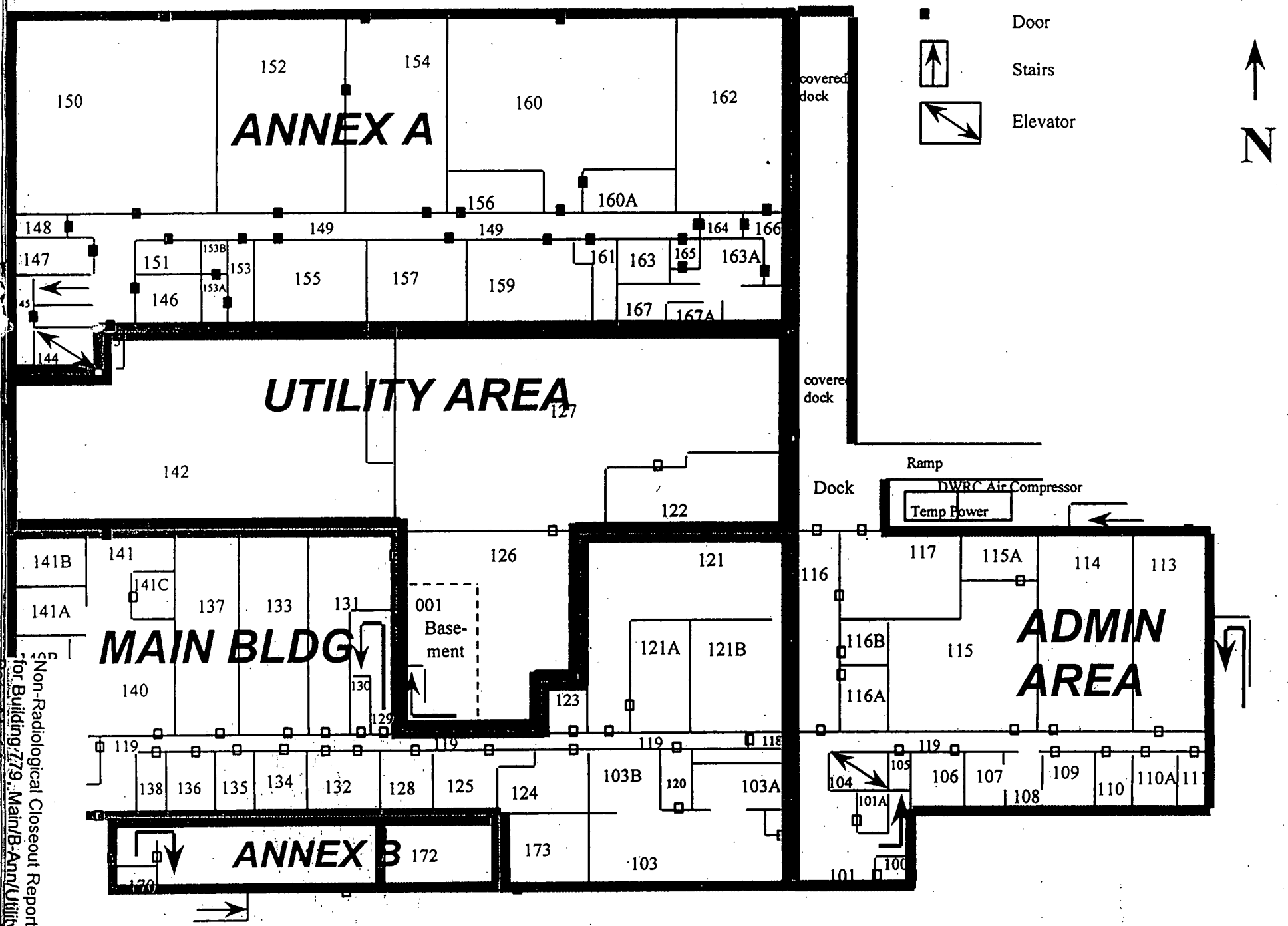
All hazardous chemicals have been removed from the facility.

Appendix A

Maps Depicting the Building 779
MAIN BUILDING, UTILITY AREAS, AND B-ANNEX

BUILDING 779 FIRST FLOOR - Area Location Map

October 5, 1999



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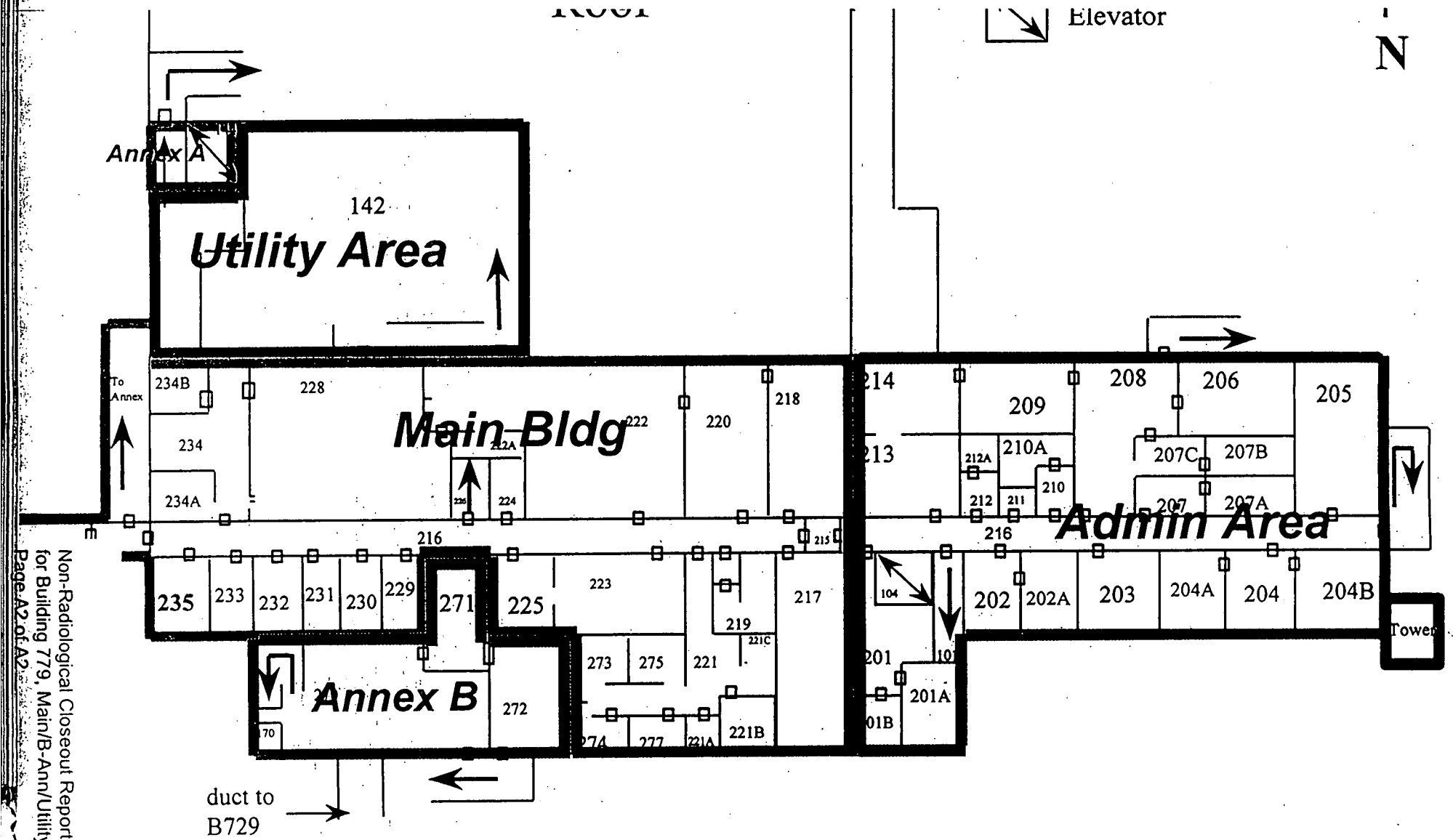
Report and Billing Instruction	Analysis Request	Seal# (Release #) 9929377
☐ Verbal To: Schlotzbur	Industrial Hygiene Sample	Condition of Seal:
☑ Fax To: 966-2864	☐ Standard Service ☐ Rush ☐ Other	☐ Broken ☐ Unbroken
☐ Report To: K-11	Asbestos Samples	Signature:
☐ Bill To: K195AA00	☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other	Comments:
☐ P.O.#/Release: K-11		Page Mike @ 543-5230
Lab: Roscoe		



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Appendix B

Asbestos Results

Rm. 001

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 62340-1
Client:	Kaiser-Hill Analytical Services Division
Client Project:	99Z9377, 779R001
Date Samples Received:	August 06, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990806-MS-001	EM 426641	1276	100	12.5	15.9	0.002	0.005
779-990806-MS-002	EM 426642	1269	100	5.0	BDL	0.002	BDL
779-990806-MS-003	EM 426643	1277	100	13.5	17.2	0.002	0.005
779-990806-MS-004	EM 426644	1287	100	19.5	24.8	0.002	0.007
779-990806-MS-005	EM 426645	1268	100	7.0	8.9	0.002	0.003
779-990806-MS-006	EM 426646	0	100	ND	BDL	---	---
779-990806-MS-007	EM 426647	0	100	ND	BDL	---	---

Field Area = 0.00785 sq mm Filter area = 385 sq mm

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

GT
Data QA

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RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Rm. 119W

Name of Originator: Schlutenbusch Title: IAM/AO Bldg/Ext: T1305 /4215 Date: 8/15/95 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-950815-MS-001	I1102B002	1296			A	TEM -001 through -005		
-002		1301			A	is one is ≥ .01 f/cc/PCM		
-003		1303			A			
-004		1315			A			
-005		1301			A			
-006		—			A			
-007		—			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	1845 8/15/95			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
elinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
elinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Hill ☐ Verbal To: Schlutenbusch
- ☐ Fax To: 966-2864
- ☐ Report To: K-H
- p ☐ Bill To: K-H
- ☐ P.O.#/Release: K95AA00
- Lab: Rocky Flats

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 9929475

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B3 of B62

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Rm. 119 W

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 62519-1
Client:	Kaiser-Hill Analytical Services Division
Client Project:	9929475, B779R119/118
Date Samples Received:	August 15, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990815-MS-001	EM 427926	1296	100	4.5	BDL	0.002	BDL
779-990815-MS-002	EM 427927	1301	100	1.5	BDL	0.002	BDL
779-990815-MS-003	EM 427928	1303	100	ND	BDL	0.002	BDL
779-990815-MS-004	EM 427929	1315	100	3.0	BDL	0.002	BDL
779-990815-MS-005	EM 427930	1301	100	0.5	BDL	0.002	BDL
779-990815-MS-006	EM 427931	0	100	ND	BDL	—	—
779-990815-MS-007	EM 427932	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

Beta QA

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RFP-F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

61813 Rm. 121

Name of Originator: Schlutenbach Title: IAM/AO Bldg/Ext: T130J/4215 Date: 7/19/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	PAB	Personal Area Bulk	REMARKS	Lab Number
229-990719-MS-001	THOR 8002	1325			A		TEM -001 thru -005	
-002		1322			A		is one is ≥ .01 f/cc PCM	
-003		1309			A			
-004		1300			A			
-005		1311			A			
-006		~			A			
-007		~			A			

MS 7/19/99

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	1936 7/19/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

Hill ☐ Verbal To: Schlutenbach
☑ Fax To: 966-2864
☐ Report To: K-H
rp ☐ Bill To: K-H
☐ P.O.#/Release: KT95AA00
Lab:

Analysis Request

Industrial Hygiene Sample
☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples
☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 952 8950
Condition of Seal: ☐ Broken ☐ Unbroken
Signature:
Comments: Page Mike @ 543-5230

Rm. 121

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 61813-1
Client:	Kaiser-Hill Analytical Services Division
Client Project:	99Z8950, Bldg. 779 Rm. 121
Date Samples Received:	July 19, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990719MS-001	EM 422708	1325	100	8.0	10.2	0.002	0.003
779-990719MS-002	EM 422709	1322	100	8.0	10.2	0.002	0.003
779-990719MS-003	EM 422710	1309	100	7.0	8.9	0.002	0.003
779-990719MS-004	EM 422711	1300	100	6.0	7.6	0.002	0.002
779-990719MS-005	EM 422712	1311	100	5.0	BDL	0.002	BDL
779-990719MS-006	EM 422713	0	100	ND	BDL	----	----
779-990719MS-007	EM 422714	0	100	ND	BDL	----	----

Field Area = 0.00785 sq mm Filter area = 385 sq mm

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

enced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

Data QA

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Room 122 ...

F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Page 1 of 1

Name of Originator: Schluterbusch Title: IAM/AO Bldg/Ext: T130J/4215 Date:

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	PAB	Personal Area Bulk	REMARKS	Lab Number
29-990902-MS-041	TH BB Bcc2	1252			A		TEM -001 thru -003 is	
-002		1281			A		one is ≥ 101 S/cc	
-003		1296			A			
-004		~~0~~			A			
-005		~~0~~			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[illegible]	H Chadwick	1316 9/2/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
inquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
inquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- [ ] Verbal To: Schluterbusch
- [ ] Fax To: 966-2864
- [ ] Report To: K-H
- [ ] Bill To: K-H
- [ ] P.O.#/Release: KT95AA00

Analysis Request

Industrial Hygiene Sample

- [ ] Standard Service
- [ ] Rush
- [ ] Other

Asbestos Samples

- [ ] Standard
- [ ] 24 Rush
- [x] 2 Rush
- [ ] Other

Seal# (Release #) 5920194

Condition of Seal: [ ] Broken [ ] Unbroken

Signature:

Comments: Page Mike @ 543-5230

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B7 of B62

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RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

8 Room 120 C 1

Name of Originator: M Sandtrebel Title: IAM/AO Bldg/Ext: 4215/T13EJ Date: 6/5/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-990605-MS-001	TH02B002	1377			A	IEM -001 thru -003		
-002	PCM Analysis	1419			A	if one is ≥ .01 f/cc		
-003		1447			A			
-004		—			A			
-005		—			A			

MS 6/5/99

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
M Sandtrebel	Ewen Kennedy	1530 6/5/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Bill
- ☐ Verbal To: Sandtrebel
- ☐ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95AA00
- Lab: Resi

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 9927858

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 573-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

23

Rm 127, C-1

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 60694-1
Client:	Kaiser-Hill Company, LLC
Client Project:	99Z7898, R12761
Date Samples Received:	June 05, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990605-MS-001	EM 412191	1377	100	2.5	BDL	0.002	BDL
779-990605-MS-002	EM 412192	1419	100	1.0	BDL	0.002	BDL
779-990605-MS-003	EM 412193	1447	100	2.5	BDL	0.002	BDL
779-990605-MS-004	EM 412194	0	100	ND	BDL	—	—
779-990605-MS-005	EM 412195	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 386 sq mm CBR = Cannot Be Read, see Table II

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm Referenced Interlaboratory Sr, s = 0.45

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

Data Analyzed:

EK
Data QA

24

RF-37831-32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Room 127 C1A

Name of Originator: Schlutzbach Title: JAM/AO Bldg/Ext: T130J/4215 Date: 6/9/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-990609-MS-001	IH02B002	1329					TEM -001 thru -003	
-002		1323					is one is ≥ .01 f/cc	
-003		1324						
-004		~~0~~						
-005		~~0~~						

MS 6/9/99

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	Evan Kravitz	1845 6/9/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
inquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
inquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: ~~Schlutzbach~~
- ☐ Fax To: ~~966-2864~~
- ☐ Report To: ~~K-H~~
- ☐ Bill To: ~~K-H~~
- ☐ P.O.#/Release: ~~K55AA00~~
- Lab: ~~Rocky~~

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 9927934

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: ~~Page Mike @ 543-5230~~

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B13 of B62

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Rm 127 C-1 A

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10788

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: RES 60836-1
Client: Kaiser-Hill Company, LLC
Client Project: 99Z7934, 127CIA
Date Samples Received: June 09, 1999
Analysis Type: PCM 7400 A, Issue 2, Air
Turnaround: 2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990609-MS-001	EM 413563	1329	100	2.5	BDL	0.002	BDL
779-990609-MS-002	EM 413564	1323	100	3.5	BDL	0.002	BDL
779-990609-MS-003	EM 413565	1324	100	5.5	7.0	0.002	0.002
779-990609-MS-004	EM 413566	0	100	ND	BDL	—	—
779-990609-MS-005	EM 413567	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm CBR = Cannot Be Read, see Table II
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm Referenced Interlaboratory S_r, s = 0.45
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Date Analyzed:

CT
Data QA

26

F 3791.32 (7/95)
merly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Room 127 C-2
Ref #: 62149

Name of Originator: Schluterbusch Title: IAM/AO Bldg/Ext: T130J/4215 Date: 8/11/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-990811-MS-001	THO2 B002	1295			A		TEM -001 THRU -005 is one is ≥ .01 f/cc PCM	
-002		1289			A			
-003		1302			A			
-004		1305			A			
-005		1299			A			
-006		—			A			
-007		—			A			

8/11/99

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	2040 8/11/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
nquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
nquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schluterbusch
- ☑ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT55AA00
- Lab:

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #) 997 9378

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B15 of B62

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Rm 127, C-2

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: RES 62449-1
Client: Kaiser-Hill Analytical Services Division
Client Project: 9929378, 779127C2
Date Samples Received: August 11, 1999
Analysis Type: PCM 7400 A, Issue 2, Air
Turnaround: 2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990811-MS-001	EM 427457	1295	100	2.5	BDL	0.002	BDL
779-990811-MS-002	EM 427458	1289	100	1.5	BDL	0.002	BDL
779-990811-MS-003	EM 427459	1302	100	3.5	BDL	0.002	BDL
779-990811-MS-004	EM 427460	1305	100	1.0	BDL	0.002	BDL
779-990811-MS-005	EM 427461	1299	100	3.0	BDL	0.002	BDL
779-990811-MS-006	EM 427462	0	100	ND	BDL	—	—
779-990811-MS-007	EM 427463	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

CT
Data QA

28

RES ENV SERV 002

F 3791.32 (7/95)
Formerly RF-47530

Room 127 C-3
62658

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Name of Originator: Schlutenbusch Title: IAM/AO Bldg/Ext: T1305/4215 Date: 8/20/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-990820-MS-001	JH02B002	1311			A		TEM -001 thru -005	
-002		1296			A		if one is ≥ .01 f/cc 1kM	
-003		1304			A			
-004		1307			A			
-005		1306			A			
-006		~~0~~			A			
-007		~~0~~			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[illegible]	[illegible]	2010 8/20/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlutenbusch
- ☐ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: K103PM00
- Lab: Research

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 9920028837

Condition of Seal: ☐ Broken ☑ Unbroken

Signature:

Comments: Page Mike @ 543-5230

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility Page B17 of B19

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Rm 127, C-3

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 62658-1
Client:	Kaiser-Hill Analytical Services Division
Client Project:	779R127C-3
Date Samples Received:	August 20, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990820-MS-001	EM 429086	1311	100	1.5	BDL	0.002	BDL
779-990820-MS-002	EM 429087	1296	100	3.5	BDL	0.002	BDL
779-990820-MS-003	EM 429088	1304	100	ND	BDL	0.002	BDL
779-990820-MS-004	EM 429089	1307	100	2.5	BDL	0.002	BDL
779-990820-MS-005	EM 429090	1306	100	3.0	BDL	0.002	BDL
779-990820-MS-006	EM 429091	0	100	ND	BDL	—	—
779-990820-MS-007	EM 429092	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

Referenced Interlaboratory Sr, s = 0.46 CBR = Cannot Be Read, see Table II

Data QA

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Rm. 127 ~~142~~ C-3A

Name of Originator: Schluterbusch Title: IAM/AO Bldg/Ext: T1305/4215 Date: 10/8/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-991008-MS-001	TH02 0002	1297					TEM -001 thru -005 if	
-002		1299					one is ≥ .01 f/cc DCM	
-003		1297						
-004		1294						
-005		1303						
-006		~						
-007		a						

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	2117 10/8/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
linquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
linquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schluterbusch
- ☑ Fax To: 966-2864
- ☐ Report To: K-11
- ☐ Bill To: K-11
- ☐ P.O.#/Release: KT95AA00
- Lab: Rocky Flats

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #) 0020446

Condition of Seal: ☐ Broken ☑ Unbroken

Signature:

Comments: Page Mike @ 543-5230

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
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Rm 127, G3A

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 63771-1
Client:	Kaiser-Hill Analytical Services Division
Client Project:	00ZD446, 779R127C3A
Date Samples Received:	October 08, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-991008-MS-001	EM 438030	1297	100	2.5	BDL	0.002	BDL
779-991008-MS-002	EM 438031	1299	100	6.0	7.6	0.002	0.002
779-991008-MS-003	EM 438032	1297	100	9.0	11.5	0.002	0.003
779-991008-MS-004	EM 438033	1294	100	8.0	10.2	0.002	0.003
779-991008-MS-005	EM 438034	1303	100	12.5	15.9	0.002	0.005
779-991008-MS-006	EM 438035	0	100	ND	BDL	----	----
779-991008-MS-007	EM 438036	0	100	ND	BDL	----	----

Field Area = 0.00785 sq mm Filter area = 385 sq mm

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

GT
Data QA

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

RF-37381-32 (7/95)
Formerly RF-47630

R127 AC-1

Name of Originator: Schlutenbach Title: IAM/AO Bldg/Ext: T130J/4215 Date: 10/13/95 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-951013-MS-001	T402B002	1328			A	TEM -001 #,M -005 if		
-002	PCM Asbestos	1303			A	one is ≥ .01 f/cc PCM		
-003		1334			A			
-004		1297			A			
-005		1302			A			
-006		"			A			
-007		"			A			

10/13/95

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
	Paul D. Scalzo	1840 10/13/95			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlutenbach
- ☐ Fax To: 966-2964
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95AA00
- Lab:

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #) 0020447

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B21 of B62

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Rm 127, AC-1

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 63881-1
Client:	Kaiser-Hill Analytical Services Division
Client Project:	00Z0447, 779R127AC1
Date Samples Received:	October 13, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-991013-MS-001	EM 438628	1328	100	14.5	18.5	0.002	0.005
779-991013-MS-002	EM 438629	1303	100	20.0	25.5	0.002	0.008
779-991013-MS-003	EM 438630	1334	100	11.0	14.0	0.002	0.004
779-991013-MS-004	EM 438631	1297	100	15.5	19.7	0.002	0.006
779-991013-MS-005	EM 438632	1302	100	8.0	10.2	0.002	0.003
779-991013-MS-006	EM 438633	0	100	ND	BDL	---	---
779-991013-MS-007	EM 438634	0	100	ND	BDL	---	---

Field Area = 0.00786 sq mm Filter area = 385 sq mm

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

Referenced Interlaboratory S_r, s = 0.45 CBR = Cannot Be Read, see Table II

PDL
Data QA

34

P F 3791.32 (7/95)
merly RF-47530

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

R 128

Name of Originator: Schlutenbusch Title: IAM/AO Bldg/Ext: 730J/4215 Date: 7/16/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-990716-MS-001	IH02B002	1322			A	TEM -001 thru -003		
-002		1338			A	if one is > .01 f/cc PCM		
-003		1332			A			
-004		~~0~~			A			
-005		~~0~~			A			

7/16/99

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[illegible]	Ernie Kraus	1920 7/16/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
linquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
linquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlutenbusch
- ☑ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95A100
- Lab: Rocky Flats

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 992 8549

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B23 of B62

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Rm 128

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 61781-1
Client:	Kaiser-Hill Analytical Services Division
Client Project:	779R128, 99Z8949
Date Samples Received:	July 16, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990716-MS-001	EM 422531	1322	100	20.0	25.5	0.002	0.007
779-990716-MS-002	EM 422532	1338	100	18.5	23.6	0.002	0.007
779-990716-MS-003	EM 422533	1332	100	24.0	30.6	0.002	0.009
779-990716-MS-004	EM 422534	0	100	ND	BDL	---	---
779-990716-MS-005	EM 422535	0	100	ND	BDL	---	---

Field Area = 0.00785 sq mm Filter area = 385 sq mm

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

Referenced Interlaboratory Sr, s = 0.46 CBR = Cannot Be Read, see Table II

GT
Data QA

36

FP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Room 133

Name of Originator: Schlutenbeck Title: IAM/AO Bldg/Ext: 1305/4215 Date: 7/22/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-990722-MS-001	IOBB002	1299			A	TEM	-001 thru -003 is	
-002		1316			A	one is ≥ .01 f/cc		
-003		1303			A			
-004		—			A			
-005		—			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	1905 7/22/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlutenbeck
- ☑ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95AA00
- Lab: Reservoirs

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 9929013

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page mike @ 543-5230

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B25 of B62

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Rm 133

07/22/99 THU 18:57 FAX 303 863 9180 RES. ENV. SERV.

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 61902-1
Client:	Kaiser-Hill Analytical Services Division
Client Project:	99Z9013, M. Schluterbusch, 779R133
Date Samples Received:	July 22, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990722-MS-001	EM 423385	1299	100	21.0	28.8	0.002	0.008
779-990722-MS-002	EM 423386	1316	100	13.0	16.6	0.002	0.005
779-990722-MS-003	EM 423387	1303	100	21.5	27.4	0.002	0.008
779-990722-MS-004	EM 423388	0	100	ND	BDL	----	----
779-990722-MS-005	EM 423389	0	100	ND	BDL	----	----

Field Area = 0.00785 sq mm Filter area = 385 sq mm

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

EK
Data QA

38

Room 138 . . .

RFP-3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Name of Originator: Schlotzbach Title: IAM/AO Bldg/Ext: J130J/4215 Date: 5/21/97 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
29-990521-IH3-001	IH02B002	1292			A		TEM -001 thru -003 is	
-002		1286			A		one is 2 .01 f/cc	
-003		1287			A			
-004		~~0~~			A			
-005		~~0~~			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	R13 5/21/97			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
ıquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
ıquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlotzbach
- ☐ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95AA00
- Lab: Rosi

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 9927624

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

39

Rm 138

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 60233-1
Client:	Kaiser-Hill Company, LLC
Client Project:	KT95AA00, 99Z7624
Date Samples Received:	May 21, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990521-MS-001	EM 407836	1292	100	33.0	42.0	0.002	0.013
779-990521-MS-002	EM 407837	1286	100	27.0	34.4	0.002	0.010
779-990521-MS-003	EM 407838	1287	100	28.0	35.7	0.002	0.011
779-990521-MS-004	EM 407839	0	100	ND	BDL	—	—
779-990521-MS-005	EM 407840	0	100	ND	BDL	—	—

Field Area = 0.00786 sq mm Filter area = 385 sq mm CBR = Cannot Be Read, see Table II

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm Referenced Interlaboratory Sr, s = 0.45

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

Date Analyzed:

GT
Data QA

40

Rm 138

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

NVLAP Accredited Laboratory #1896

TABLE I. TEM AIR FILTER SAMPLE DATA AND ANALYTICAL RESULTS

RES Job Number: RES 60233-2
Client: Kaiser-Hill Company, LLC
Client Project: 99Z7624, M. Schulterbusch
Date Samples Received: May 21, 1999
Analysis Type: TEM AHERA, Air
Turnaround: 6 Hour

Client ID Number	Lab ID Number	Area Analyzed (mm²)	Air Volume Sampled (L)	Number of Asbestos Structures Detected	Analytical Sensitivity (s/cc)	Asbestos Concentration (s/cc)	Filter Loading (s/mm²)
779-990521-MS-001	EM 407836	0.0700	1292	ND	0.0043	BAS	BAS
779-990521-MS-002	EM 407837	0.0700	1286	ND	0.0043	BAS	BAS
779-990521-MS-003	EM 407838	0.0700	1287	ND	0.0043	BAS	BAS

NA = Not Analyzed
ND = None Detected
BAS = Below Analytical Sensitivity
Average Grid Opening = 0.0100 sq mm

Filter Material = Mixed Cellulose Ester
Filter Diameter = 25 mm
Effective Filter Area = 385 sq mm

DATA QA

41

F3791.32 (7/95)
RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Rm. 140

Name of Originator: Schlutzebuck Title: IAM/AO Bldg/Ext: T1305 /4215 Date: 7/29/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
99-990729-MS-001	IH02B002	1341			A		TEM -001 thru -005	
-002		1334			A		if one is ≥ .01 f/cc PCM	
-003		1346			A			
-004		1333			A			
-005		1340			A			
-006		—			A			
-007		—			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	10:34 7/30/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
ished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
ished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

-] Verbal To: Schlutzebuck
- ✓ Fax To: 966-2864
-] Report To: K-H
-] Bill To: K-H
-] P.O.#/Release: KT95AA00
- Lab: Rocky

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 9929294

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B30 of B62

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Rm. 140

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: **RES 62099-1**
Client: **Kaiser-Hill Analytical Services Division**
Client Project: **9929284, 779R140, M. Schlueterbusch**
Date Samples Received: **July 30, 1999**
Analysis Type: **PCM 7400 A, Issue 2, Air**
Turnaround: **2 Hour**

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990729-MS-001	EM 424894	1341	100	24.5	31.2	0.002	0.009
779-990729-MS-002	EM 424895	1334	100	20.5	26.1	0.002	0.008
779-990729-MS-003	EM 424896	1346	100	29.5	37.6	0.002	0.011
779-990729-MS-004	EM 424897	1333	100	26.5	33.8	0.002	0.010
779-990729-MS-005	EM 424898	1340	100	37.0	47.1	0.002	0.014
779-990729-MS-006	EM 424899	0	100	ND	BDL	---	---
779-990729-MS-007	EM 424900	0	100	ND	BDL	---	---

Field Area = 0.00785 sq mm Filter area = 385 sq mm
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

Date QA

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Rm. 140

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

NVLAP Accredited Laboratory #1896

TABLE I. TEM AIR FILTER SAMPLE DATA AND ANALYTICAL RESULTS

RES Job Number: RES 62099-2
Client: Kaiser-Hill Analytical Services Division
Client Project: 99Z9284, 779R140, M. Schluterbusch
Date Samples Received: July 30, 1999
Analysis Type: TEM AHERA, Air
Turnaround: 6 Hour

Client ID Number	Lab ID Number	Area Analyzed (mm²)	Air Volume Sampled (L)	Number of Asbestos Structures Detected	Analytical Sensitivity (s/cc)	Asbestos Concentration (s/cc)	Filter Loading (s/mm²)
779-990729-MS-001	EM 424894	0.0600	1341	ND	0.0048	BAS	BAS
779-990729-MS-002	EM 424895	0.0600	1334	1	0.0048	0.0048	16.7
779-990729-MS-003	EM 424896	0.0600	1346	ND	0.0048	BAS	BAS
779-990729-MS-004	EM 424897	0.0600	1333	ND	0.0048	BAS	BAS
779-990729-MS-005	EM 424898	0.0600	1340	ND	0.0048	BAS	BAS

NA = Not Analyzed
ND = None Detected
BAS = Below Analytical Sensitivity
Average Grid Opening = 0.0100 sq mm

Filter Material = Mixed Cellulose Ester
Filter Diameter = 25 mm
Effective Filter Area = 385 sq mm

AVERAGE FILTER LOADING: 3.3
(Inside samples)

DATA QA

RFP F 3791.32 (7/95)
Formerly RF-47530

Rm. 142

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

779 R142 CUnt 1

Name of Originator: M Schlutenbach Bret Bauinkartner Title: AMS / TAM HO Bldg/Ext: 779D - 7076 Date: 3/24/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-990324-MS-001	TH02B002	1214			A		TEM ALL is one	
-002	PCM	1241			A			
-003		1204			A		≥ .01 f/cc	
-004		1252			A			
-005		1208			A			
-006		—			B			
-007		—			B			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
M Schlutenbach	REI Drop Box	0245 3/24/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
uished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
uished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

-] Verbal To: M Schlutenbach
-] Fax To: 966-2864
-] Report To: K-H
-] Bill To: K-H
-] P.O.#/Release: KT03AA00
- Lab:

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 99Z6141

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Bist @ 303-831-3673 +

Mike @ 303-543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B33 of B62

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Rm. 142

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: RES 58543-1
Client: Kaiser-Hill Company, LLC
Client Project: 99Z6141 Room 142 C-1
Date Samples Received: March 25, 1999
Analysis Type: PCM 7400 A, Air
Turnaround: 2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990324-MS-001	EM 392819	1214	100	0.5	BDL	0.002	BDL
779-990324-MS-002	EM 392820	1241	100	2.0	BDL	0.002	BDL
779-990324-MS-003	EM 392821	1204	100	1.0	BDL	0.002	BDL
779-990324-MS-004	EM 392822	1252	100	1.5	BDL	0.002	BDL
779-990324-MS-005	EM 392823	1208	100	2.0	BDL	0.002	BDL
779-990324-MS-006	EM 392824	0	100	ND	BDL	---	---
779-990324-MS-007	EM 392825	0	100	ND	BDL	---	---

Field Area = 0.00785 sq mm Filter area = 385 sq mm
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Referenced Interlaboratory Sr, a = 0.45 CBR = Cannot Be Read, see Table II

Data QA

F 3791.32 (7/95)
merly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Room 142 C-2

Safety and Hygiene Chain of Custody Record and Analysis Request

Name of Originator: Schlutenbeck Title: IAM/AO Bldg/Ext: 425/7305 Date: 4/9/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	PAB	Personal Area Bulk	REMARKS	Lab Number
7-990409-MS-001	IH02B002	1273			A		TEM AHA if gtc	
-002		1279			A			
-003		1291			A		is ≥ .01 f/cc PCM	
-004		1299			A			
-005		1294			A			
-006		-0-			B			
-007		-0-			B			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[illegible]	[illegible]	2040 4/9/99			
[illegible]quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[illegible]quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[illegible]quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: M Schlutenbeck
- ☐ Fax To: 966-2864/4308
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95AA00
- Lab: Resi

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 992 6638

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B35 of B62

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Rm 142

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10788

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: **RES 59032-1**
Client: **Kaiser-Hill Company, LLC**
Client Project: **KT95AA00-RJN98Z6638,** Room 142 C-2
Date Samples Received: **April 09, 1999**
Analysis Type: **PCM 7400 A, Air**
Turnaround: **2 Hour**

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990409-MS-001	EM 397371	1273	100	2.5	BDL	0.002	BDL
779-990409-MS-002	EM 397372	1279	100	4.0	BDL	0.002	BDL
779-990409-MS-003	EM 397373	1291	100	1.5	BDL	0.002	BDL
779-990409-MS-004	EM 397374	1298	100	1.0	BDL	0.002	BDL
779-990409-MS-005	EM 397375	1294	100	3.0	BDL	0.002	BDL
779-990409-MS-006	EM 397376	0	100	ND	BDL	—	—
779-990409-MS-007	EM 397377	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

GT
Data QA

48

RFP.F.3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Rm. 142 C-3

Safety and Hygiene Chain of Custody Record and Analysis Request

Name of Originator: M Schlutenbeck Title: TAM/AO Bldg/Ext: 1305/4215 Date: 4/29/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-990429-MS-006	THOR B002	1333					TEM ALL is One is	
-007		1309						
-008		1321					≥ .01 f/cc PCM	
-009		1318						
-010		1322						
-011								
-012								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
M Schlutenbeck		2249 4/29/99		[illegible]	1:45pm 4/29/99
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
nquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
nquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: M Schlutenbeck
- ☐ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: KT95AA00
- ☐ P.O.#/Release: KT95AA00
- Lab: Rosi

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 9929106

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike at 543-5230

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B37 of B62

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Rm 142 (C-3)

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: RES 59619-1
Client: Kaiser-Hill Company, LLC
Client Project: KT95AA00/99Z7106, M. Schulterbusch Room 142 C-3
Date Samples Received: April 29, 1999
Analysis Type: PCM 7400 A, Air
Turnaround: 2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990429-MS-006	EM 402126	1333	100	2.5	BDL	0.002	BDL
779-990429-MS-007	EM 402127	1309	100	2.0	BDL	0.002	BDL
779-990429-MS-008	EM 402128	1321	100	3.5	BDL	0.002	BDL
779-990429-MS-009	EM 402129	1318	100	3.0	BDL	0.002	BDL
779-990429-MS-010	EM 402130	1322	100	3.5	BDL	0.002	BDL
779-990429-MS-011	EM 402131	0	100	ND	BDL	—	—
779-990429-MS-012	EM 402132	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

Data QA

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Room 142 C4

Safety and Hygiene Chain of Custody Record and Analysis Request

Name of Originator: Schlutenbusch Title: IAM/AO Bldg/Ext: T130J/4215 Date: Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	PAB	Personal Area Bulk	REMARKS	Lab Number
T79-990511-MS-001	IH028002	1294			A		TEM -001 thru -005	
-002		1311			A			
-003		1285			A		if one is ≥ .01 f/cc	
-004		1289			A			
-005		1291			A			
-006					A			
-007					A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[illegible]	[illegible]	2150 5/11/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlutenbusch
- ☐ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95AA00
- Lab:

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #) 9922367

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Miller @ 543-5236

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B39 of B62

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Rm. 142 C4

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: **RES 59909-1**
Client: **Kaiser-Hill Company, LLC**
Client Project: **RIN# 99Z7367,** Rm142 C-4
Date Samples Received: **May 11, 1999**
Analysis Type: **PCM 7400 A, Issue 2, Air**
Turnaround: **2 Hour**

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990511-MS-001	EM 404991	1294	100	3.0	BDL	0.002	BDL
779-990511-MS-002	EM 404992	1311	100	2.5	BDL	0.002	BDL
779-990511-MS-003	EM 404993	1285	100	2.5	BDL	0.002	BDL
779-990511-MS-004	EM 404994	1289	100	3.0	BDL	0.002	BDL
779-990511-MS-005	EM 404995	1291	100	3.5	BDL	0.002	BDL
779-990511-MS-006	EM 404996	0	100	ND	BDL	—	—
779-990511-MS-007	EM 404997	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm CBR = Cannot Be Read, see Table II
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm Referenced Interlaboratory Sr, s = 0.45
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

GT
Data QA

ate Analyzed:

52

EMF-3781-32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Room 142 Plenum
6/19/99

Name of Originator: Schlutenbauer Title: TAM/AO Bldg/Ext: T130J/4215 Date: 6/22/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
29-990622-MS-001	IH02B002	1286			A			
-002		1318			A			
-003		1317			A			
-004		0			A			
-005		0			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	1600 6/22/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlutenbauer
- ☐ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95AAC0
- Lab: Rocky

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #) 9928308

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B41 of B62

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Rm 142
Plenum

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: **RES 61194-1**
Client: **Kaiser-Hill Company, LLC**
Client Project: **KT95AA00, 99Z8308**
Date Samples Received: **June 22, 1999**
Analysis Type: **PCM 7400 A, Issue 2, Air**
Turnaround: **2 Hour**

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990622-MS-001	EM 417024	1286	100	2.0	BDL	0.002	BDL
779-990622-MS-002	EM 417025	1318	100	1.5	BDL	0.002	BDL
779-990622-MS-003	EM 417026	1317	100	4.0	BDL	0.002	BDL
779-990622-MS-004	EM 417027	0	100	ND	BDL	----	----
779-990622-MS-005	EM 417028	0	100	ND	BDL	----	----

Field Area = 0.00785 sq mm Filter area = 385 sq mm
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

Data QA

FP F 3791.32 (7/95)
ormerly RF-47530

Rocky Flats Environmental Technology Site

Rm 142 ~~Security~~ / C4A

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Name of Originator: Schlotterbeck Title: IAm / AO Bldg/Ext: T130J / 4215 Date: 5/10/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-990510-MS-001	IH02B002	1300			A		ITEM 001-005 is one	
-002		1297			A		≥ .01 f/cc PCM	
-003		1288			A			
-004		1284			A			
-005		1291			A			
-006		~~0~~			A			
-007		~~0~~			A			

AMS 5/10/99

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	SCHAER	1215 5/10/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlotterbeck
- ☑ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95/AA00
- Lab: Resi

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 992 7366

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike E.

543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Non-Radiological Closeout Report
for Building 779, Main/B-Ann/Utility
Page B43 of B62

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Rm 142 C4A

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: RES 59862-1
Client: Kaiser-Hill Company, LLC
Client Project: 99Z7368, Rm 142 C4A
Date Samples Received: May 10, 1999
Analysis Type: PCM 7400 A, Issue 2, Air
Turnaround: 2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990510-MS-001	EM 404255	1300	100	1.5	BDL	0.002	BDL
779-990510-MS-002	EM 404256	1297	100	1.0	BDL	0.002	BDL
779-990510-MS-003	EM 404257	1288	100	2.5	BDL	0.002	BDL
779-990510-MS-004	EM 404258	1284	100	2.0	BDL	0.002	BDL
779-990510-MS-005	EM 404259	1291	100	5.0	BDL	0.002	BDL
779-990510-MS-006	EM 404260	0	100	ND	BDL	—	—
779-990510-MS-007	EM 404261	0	100	1.0	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm CBR = Cannot Be Read, see Table II
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm Referenced Interlaboratory Sr, s = 0.45
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Date Analyzed:

GI
Data QA

56

PF 3791.32 (7/95)
mainly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Room 142 C4B

Name of Originator: Schlutenbach Title: IAM/AO Bldg/Ext: T130J/4215 Date: 5/17/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	PAB	Personal Area Bulk	REMARKS	Lab Number
991990517-MS-001	IH02B002	1327			A	TEM	-001 thru -003 is	
-002		1325			A			
-003		1324			A	one is ≥ .015/cc PCM		
-004		—			A			
-005		—			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	S Kahl	1855 5/17/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlutenbach
- ☑ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95AAOC
- Lab: Ras.

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 992 7524

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Rm 142 C-4B

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: RES 60059-1
Client: Kaiser-Hill Company, LLC
Client Project: 99Z7524, 142C4B, M. Schuterbusch
Date Samples Received: May 17, 1999
Analysis Type: PCM 7400 A, Issue 2, Air
Turnaround: 2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990517-MS-001	EM 406175	1327	100	12.0	15.3	0.002	0.004
779-990517-MS-002	EM 406176	1325	100	15.5	19.7	0.002	0.006
779-990517-MS-003	EM 406177	1324	100	13.5	17.2	0.002	0.005
779-990517-MS-004	EM 406178	0	100	ND	BDL	—	—
779-990517-MS-005	EM 406179	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 386 sq mm CBR = Cannot Be Read, see Table II
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm Referenced Interlaboratory Sr, s = 0.45
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

GT
Data QA

Date Analyzed:

58

Rm. 173

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Name of Originator: Schlotterbeck Title: IAM/AO Bldg/Ext: T130J/4215 Date: 5/21/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
129-990521-MS-006	IH02B002	1250			A	TEM -006 thru -008		
-007		1248			A	if one is ≥ .01 f/cc		
-008		1255			A	PCM.		
-009		—			A			
-010		—			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	1934 5/21/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
...ished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
...ished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Verbal To: Schlotterbeck
- Fax To: 966-2864
- Report To: K-H
- Bill To: K-H
- P.O.#/Release: KT95AA00
- Lab: Rosi

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 992 7625

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility Page B47 of B62

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Rm. 173

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: RES 60249-1
Client: Kaiser-Hill Company, LLC
Client Project: 99Z7625, R173
Date Samples Received: May 21, 1999
Analysis Type: PCM 7400 A, Issue 2, Air
Turnaround: 2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990521-MS-006	EM 408039	1250	100	1.5	BDL	0.002	BDL
779-990521-MS-007	EM 408040	1448	100	3.5	BDL	0.002	BDL
779-990521-MS-008	EM 408041	1255	100	5.0	BDL	0.002	BDL
779-990521-MS-009	EM 408042	0	100	ND	BDL	—	—
779-990521-MS-010	EM 408043	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm CBR = Cannot Be Read, see Table II
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm Referenced Interlaboratory Sr, s = 0.45
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Date Analyzed:

Data QA

60

P F 3791.32 (7/95)
rmerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

216 Hall West Rm. 216H

241

Name of Originator: Schlutenbeck Title: IAM/AO Bldg/Ext: 7303 / 4215 Date: 9/12/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
99-990912-MS-001	THOR B002	1300			A		TEM -001 thru -005 is one	
-002		1294			A		is ≥ .01 f/cc PCM	
-003		1302			A			
-004		1299			A			
-005		1306			A			
-006		~~0~~			A			
-007		~~0~~			A			

MS 9/12/99

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[illegible]		9235 9/12/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlutenbeck
- ☐ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95AAAA
- Lab: Rocky

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 9520315

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
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RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: **RES 63241-1**
Client: **Kaiser-Hill Analytical Services Division**
Client Project: **9920315, 779216HW**
Date Samples Received: **September 16, 1999** West 216 Hallway
Analysis Type: **PCM 7400 A, Issue 2, Air**
Turnaround: **2 Hour**

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990917-MS-001	EM 433473	1300	100	7.0	8.9	0.002	0.003
779-990917-MS-002	EM 433474	1294	100	12.5	15.9	0.002	0.005
779-990917-MS-003	EM 433475	1302	100	15.0	19.1	0.002	0.006
779-990917-MS-004	EM 433476	1298	100	15.5	19.7	0.002	0.006
779-990917-MS-005	EM 433477	1306	100	6.0	7.6	0.002	0.002
779-990917-MS-006	EM 433478	0	100	ND	BDL	—	—
779-990917-MS-007	EM 433479	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

GT
Data QA

62

RLF 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Room 218 7178

RES #60151

Name of Originator: Schlutenbach Title: IAM/AO Bldg/Ext: T130J/4215 Date: 5/27/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	PAB	Personal Area Bulk	REMARKS	Lab Number
779-990527-MS-001	IH02B002	1298			A		TEM -001 thru -003	
-002		1599			A		is one is ≥ .01 f/cc PCM	
-003		1767			A			
-004		0			A			
-005		0			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	Erin Kawato	1855 5/27/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlutenbach
- ☐ Fax To: 966-2864
- ☐ Report To: K-11
- ☐ Bill To: K-11
- ☐ P.O.#/Release: KT95AA05
- Lab: Resi

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #) 997 7783

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B51 of B62

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Rm. 218

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: RES 60451-1
Client: Kaiser-Hill Company, LLC
Client Project: 99Z7783, RM 218
Date Samples Received: May 27, 1999
Analysis Type: PCM 7400 A, Issue 2, Air
Turnaround: 2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990527-MS-001	EM 410032	1288	100	12.5	15.9	0.002	0.005
779-990527-MS-002	EM 410033	1699	100	6.5	8.3	0.002	0.002
779-990527-MS-003	EM 410034	1767	100	9.5	12.1	0.002	0.003
779-990527-MS-004	EM 410035	0	100	ND	BDL	—	—
779-990527-MS-005	EM 410036	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm CBR = Cannot Be Read, see Table II
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm Referenced Interlaboratory Sr, s = 0.45
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Date Analyzed:

EK
Data QA

TP-F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Room 221

Name of Originator: Schluterbusch Title: IAM/AO Bldg/Ext: T305/4215 Date: 5/4/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
79-990505-MS-001	TH02B002	1258			A		JEM All is one of	
-002	PCM	1270			A		Sect 5 is ≥ .01 f/cc PCM	
-003		1949			A			
-004		~~-0~~			A			
-005		~~-0~~			A			

VMR 5/4/99

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[signature]	[signature]	1630 5/5/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
uished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
uished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: M Schluterbusch
- ☑ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95AA00
- Lab: Resi

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 992 7194

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Please page Mike at 303-543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

65

Rm 221

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: RES 59772-1
Client: Kaiser-Hill Company, LLC
Client Project: 99Z7194, Room 221
Date Samples Received: May 05, 1999
Analysis Type: PCM 7400 A, Issue 2, Air
Turnaround: 2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990505-MS-001	EM 403621	1258	100	4.5	BDL	0.002	BDL
779-990505-MS-002	EM 403622	1270	100	3.0	BDL	0.002	BDL
779-990505-MS-003	EM 403623	1979	100	1.5	BDL	0.001	BDL
779-990505-MS-004	EM 403624	0	100	1.0	BDL	—	—
779-990505-MS-005	EM 403625	0	100	0.0	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm CBR = Cannot Be Read, see Table II
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm Referenced Interlaboratory Sr, s = 0.45
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Date Analyzed:

Data QA

66

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Rm 229-235

RES 5994

Name of Originator: Schluterbusch Title: IAM/AO Bldg/Ext: T130J/4215 Date: 5/12/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	PAB	Personal Area Bulk	REMARKS	Lab Number
779-990512-MS-001	TH02B002	1300			A	IFM-001 thru -003		
-002		1312			A			
-003		1301			A	if one is ≥ .01 f/cc	PCM	
-004		—			A			
-005		—			A			

AM 5/12/99

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[illegible]	[illegible]	0945 5/12/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
nquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
nquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schluterbusch
- ☑ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KT95A100
- Lab: Rosi

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 9927414

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

67

Rm 229-235

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: RES 58941-1
Client: Kaiser-Hill Company, LLC
Client Project: 9927414, Mr. Schlarterbusch, Rm. 229
Date Samples Received: May 12, 1999
Analysis Type: PCM 7400 A, Issue 2, Air
Turnaround: 2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990512-MS-001	EM 405311	1300	100	19.0	24.2	0.002	0.007
779-990512-MS-002	EM 405312	1312	100	21.5	27.4	0.002	0.008
779-990512-MS-003	EM 405313	1301	100	13.5	17.2	0.002	0.005
779-990512-MS-004	EM 405314	0	100	ND	BDL	—	—
779-990512-MS-005	EM 405315	0	100	ND	BDL	—	—

Field Area = 0.00785 sq mm Filter area = 385 sq mm CBR = Cannot Be Read, see Table II
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm Referenced Interlaboratory Sr, s = 0.45
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Date Analyzed:

DOL
Data QA

68

Room 234

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

F-3791-32 (7/95)
Only RF-47530

Name of Originator: Schluterbusch Title: IAM/AO Bldg/Ext: T130J /4215 Date: 7/6/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
779-990706-MS-001	TH02B002	1471			A		TEM -001 thru -003 is	
-002	PCM Asbestos	1473			A		one is ≥ .01 f/cc	
-003		1477			A			
-004		~~0~~			A			
-005		~~0~~			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	S. Kahl	1700 7/6/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
nquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
nquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Seal# (Release #) 992 8757

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

Report and Billing Instruction

- ☐ Verbal To: M Schluterbusch
- ☐ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: KJ95 AA00
- Lab: Ros.

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Return to Originator

69

Rm. 234

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 61534-1
Client:	Kaiser-Hill Company, LLC
Client Project:	99Z8757, 779-R234
Date Samples Received:	July 06, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990706-MS-001	EM 420771	1471	100	12.5	15.9	0.002	0.004
779-990706-MS-002	EM 420772	1473	100	20.5	26.1	0.002	0.007
779-990706-MS-003	EM 420773	1477	100	10.5	13.4	0.002	0.003
779-990706-MS-004	EM 420774	0	100	ND	BDL	----	----
779-990706-MS-005	EM 420775	0	100	ND	BDL	----	----

Field Area = 0.00785 sq mm Filter area = 385 sq mm

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

EK
Date QA

70

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Room 271

Name of Originator: Schlitzebach Title: IAM/AO Bldg/Ext: T130J/4215 Date: 4/6/97 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
729-950406-MS-005	IH02B002	1249			A			
-006	PCM Asbestos	1257			A			
-007					B			
-008					B			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[illegible]	[illegible]	2300 4/6/97			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
quished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: K-H
- ☐ Fax To: 926-2964 / 4308
- ☐ Report To:
- ☐ Bill To:
- ☐ P.O.#/Release: KT95AA00
- Lab:

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☑ 2 Rush ☐ Other

Seal# (Release #) 9926543

Condition of Seal: ☐ Broken ☐ Unbroken

Signature: 271

Comments: ~~Fax~~ Page Mike R 303-543-5230

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page B59 of B62

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Rm 271

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number: RES 58910-1
Client: Kaiser-Hill Company, LLC
Client Project: KT95AA00/99Z6543, Room 271
Date Samples Received: April 06, 1999
Analysis Type: PCM 7400 A, Air
Turnaround: 2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990406-MS-005	EM 396349	1249	100	5.5	BDL	0.002	BDL
779-990406-MS-006	EM 396350	1257	100	2.5	BDL	0.002	BDL
779-990406-MS-007	EM 396351	0	100	1.0	BDL	----	----
779-990406-MS-008	EM 396352	0	100	ND	BDL	----	----

Field Area = 0.00785 sq mm Filter area = 385 sq mm
Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm
NA = Not Analyzed ND = None Detected BDL = Below Detection Limit
Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

GT
Date QA

Room 271

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

Name of Originator: Schlutenbach Title: IAM/HO Bldg/Ext: T130J /4215 Date: 6/23/99 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
990623-MS-006		1341			A		TEM -006 thru -008	
-007		1347			A		is one is ≥ .01 f/cc	
-008		1394			A			
-009		~			A			
-010		~			A			

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[illegible]	[illegible]	1035 6/24/99			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- ☐ Verbal To: Schlutenbach
- ☐ Fax To: 966-2864
- ☐ Report To: K-H
- ☐ Bill To: K-H
- ☐ P.O.#/Release: K95 4400
- Lab: Rcs

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #) 992 8310

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Page Mike @ 543-5230

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Rm 271

06/24/99 THU 13:42 FAX 303 863 9186 RES. ENV. SERV.

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

AIHA Certificate of Accreditation #480, Lab ID 10768

TABLE I. NIOSH 7400 FIBER COUNT ANALYSIS

RES Job Number:	RES 61260-1
Client:	Kaiser-Hill Company, LLC
Client Project:	99Z8310, KT95AA00, M. Schluterbusch
Date Samples Received:	June 24, 1999
Analysis Type:	PCM 7400 A, Issue 2, Air
Turnaround:	2 Hour

Client ID Number	Lab ID Number	Air Volume Sampled (L)	Fields Analyzed	Fiber Count	Fiber Density (F/mm²)	Limit of Detection (F/cc)	Fiber Concentration (F/cc)
779-990623-MS-006	EM 417792	1341	100	16.5	21.0	0.002	0.006
779-990623-MS-007	EM 417793	1347	100	20.5	26.1	0.002	0.007
779-990623-MS-008	EM 417794	1364	100	13.5	17.2	0.002	0.005
779-990623-MS-009	EM 417795	0	100	ND	BDL	---	---
779-990623-MS-0010	EM 417796	0	100	ND	BDL	---	---

Field Area = 0.00785 sq mm Filter area = 385 sq mm

Note: Estimated Limit of Detection for 7400 Method is 7 F/sq mm

NA = Not Analyzed ND = None Detected BDL = Below Detection Limit

Referenced Interlaboratory Sr, s = 0.45 CBR = Cannot Be Read, see Table II

Date QA

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Appendix C

Beryllium Results

	A	B	C	D	E	F	G
1	***Room Number***	***Date***	***Sample Number***	***Reporting Limit*** *micro grams/100cm2*	***Location/Description***	***Smear Results*** *micro grams/100ft^2 (unless otherwise indicated)*	***Sample Method or RIN#***
2	103	6/23/99	779-99-06-23-13-103-ML-01	0.1	Men's Locker Room Diffuser	<0.1 q/100cm^2	BEAST
3	103	6/23/99	779-99-06-23-13-103-ML-02	0.1	Men's Locker Room Diffuser	<0.1 q/100cm^2	BEAST

* Analysis for Be using NIOSH method 7300 elements by IGP

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BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOM 103

July 16, 1999

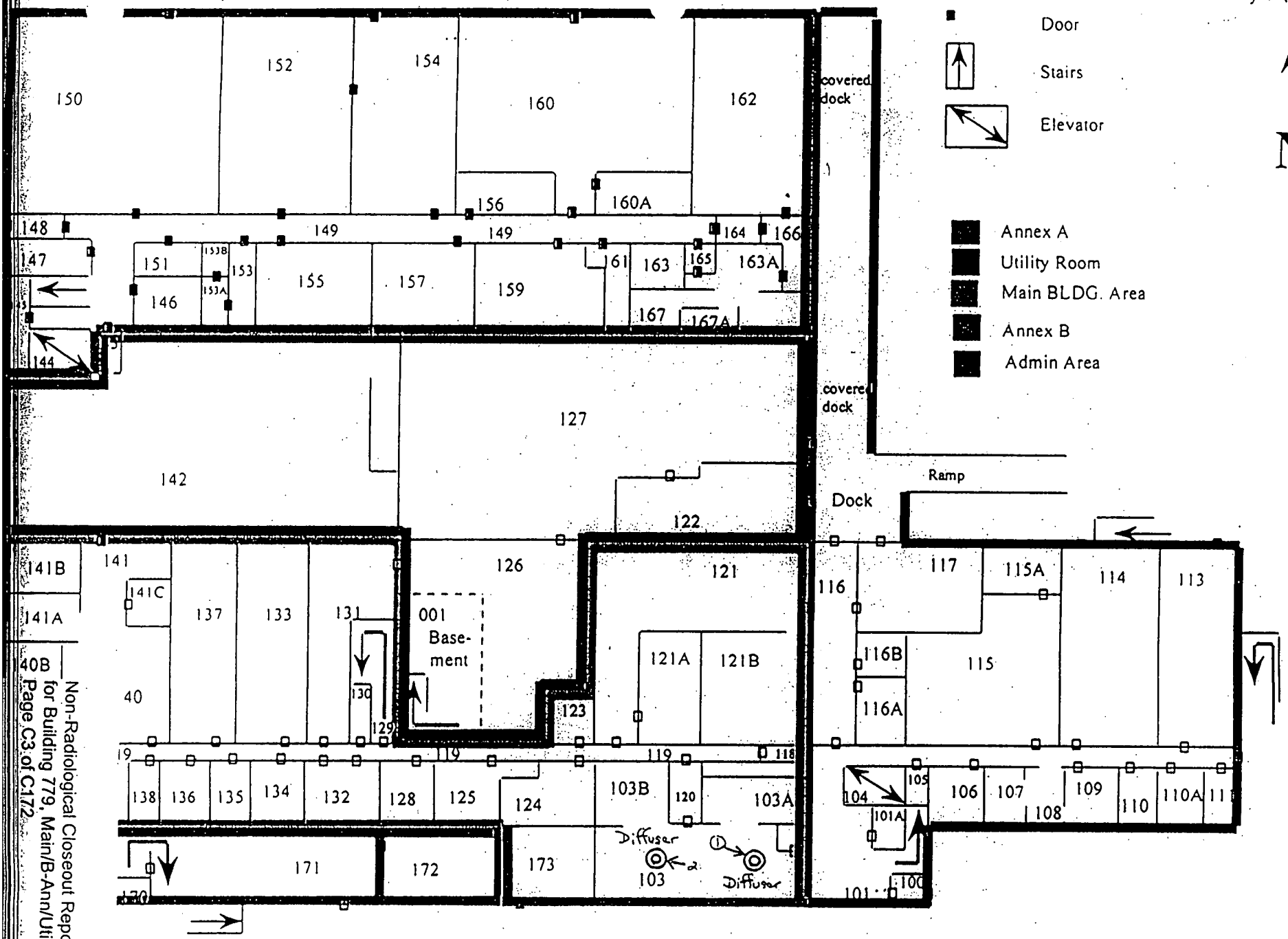
Sample Number	Reporting Limit micrograms	Location Details micrograms/100cm²
779-99-06-23-13-103-ML-01	0.1_{ug}	Men's Locker Room Diffuser $<0.1_{ug/100cm^2}$
779-99-06-23-13-103-ML-02	0.1_{ug}	Men's Locker Room Diffuser $<0.1_{ug/100cm^2}$

[1] See attached map of room 130 diffuser locations for approximate smear location. Survey done to confirm no Be at the source room air access. No known Be activities occurred in the men's locker room.

77

BUILDING 779 FIRST FLOOR - Area Location Map

Ja ry 14, 1999



78

	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft^2 (unless otherwise indicated)	Sample Method or RIN#
39	119	4/23/99	779-99-04-23-13-01	0.1	(OH) Pipe Cold Water	<0.1 q/100cm^2	BEAST
40	119	4/23/99	779-99-04-23-13-02	0.1	Floor	<0.1 q/100cm^2	BEAST
41	119	4/23/99	779-99-04-23-13-03	0.1	Floor	<0.1 q/100cm^2	BEAST

*Analysis for Be using NIOSH method 7300 elements by IGP

BUILDING 779

BERYLLIUM SMEAR RESULTS

MAIN BUILDING

April 28, 1999

Sample Number[1]	Reporting Limit micrograms	Location Totals micrograms/100cm²
779-99-04-23-13-01	0.1_{ug}	(OH) Pipe Cold Water $<0.1_{ug/100cm^2}$
779-99-04-23-13-02	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-99-04-23-13-03	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-99-04-23-13-04	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-99-04-23-13-05	0.1_{ug}	Step $<0.1_{ug/100cm^2}$
779-99-04-23-13-06	0.1_{ug}	Step $<0.1_{ug/100cm^2}$
779-99-04-23-13-07	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-99-04-23-13-08	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-99-04-23-13-09	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$

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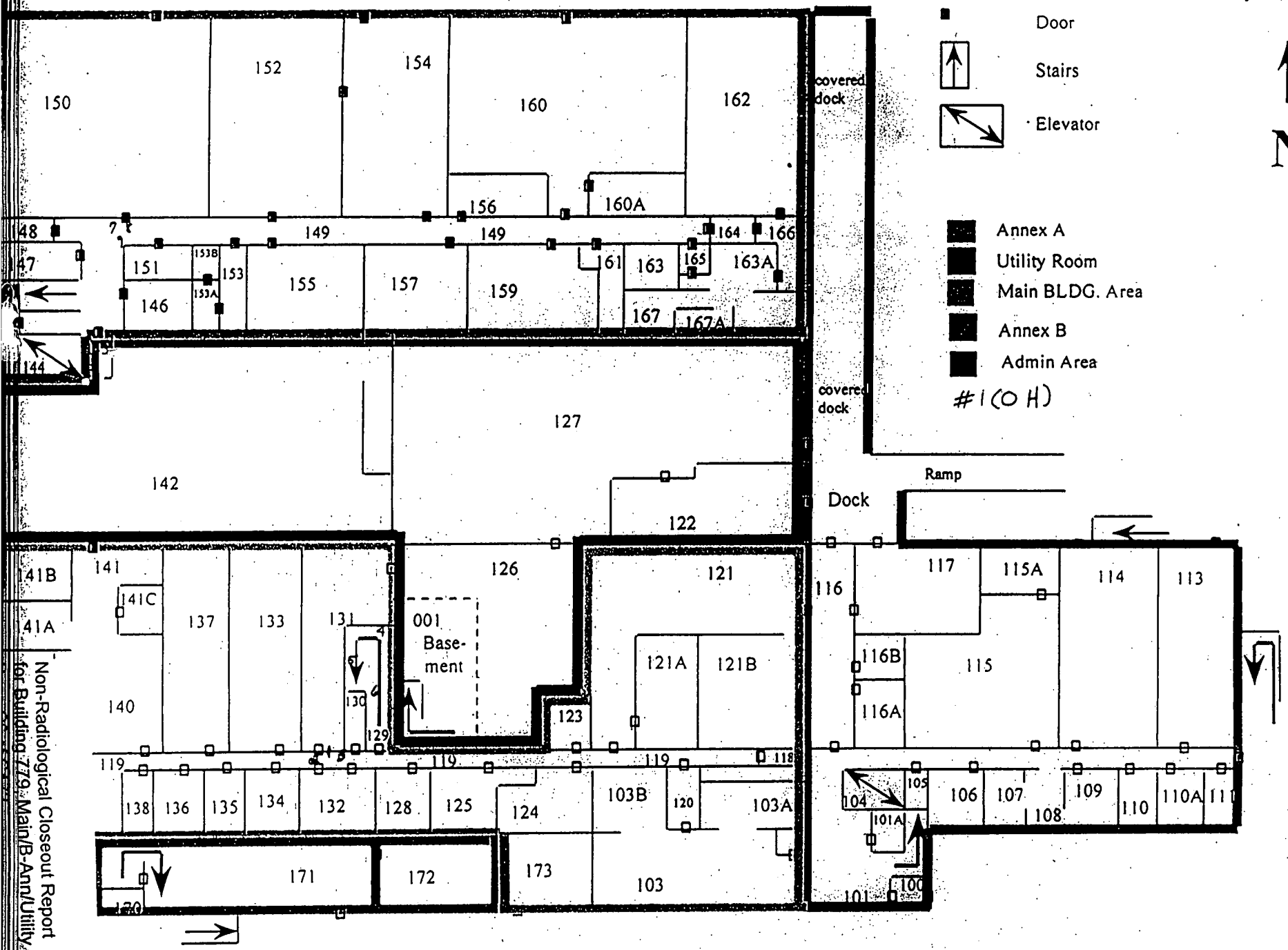
[1] See attached map of building 779 first floor for approximate smear locations. Follow up surveys for B

BUILD G 779 FIRST FLOOR - Area Location Map

January 14, 1999



Non-Radiological Closeout Report for Building 779 Main/B-Ann/Utility

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	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft² (unless otherwise indicated)	Sample Method or RIN#
42	127	4/15/98	779-127-01	NA	Chiller West	0.09	98D1784
43	127	4/15/98	779-127-02	NA	Chiller East	0.09	98D1784
44	127	4/15/98	779-127-03	NA	Floor South Doorway	0.09	98D1784
45	127	4/15/98	779-127-04	NA	Floor Middle of Room	0.09	98D1784
46	127	4/15/98	779-127-05	NA	Floor Southeast Doorway	0.09	98D1784
47	127	4/15/98	779-127-06	NA	Floor North Middle	0.09	98D1784
48	127	4/15/98	779-127-07	NA	Floor Wast doorway	0.09	98D1784
49	127	4/15/98	779-127-08	NA	West Deck Flooring	0.09	98D1784
50	127	4/15/98	779-127-09	NA	East Deck Flooring	0.09	98D1784
51	127	4/15/98	779-127-010	NA	Floor East Middle	0.09	98D1784
52	127	4/15/98	779-127-011	NA	Overhead Middle of Room	0.09	98D1784
53	127	4/15/98	779-127-012	NA	Overhead East Middle	0.09	98D1784
54	127	4/15/98	779-127-013	NA	Overhead Southeast Corner	0.09	98D1784
55	127	4/15/98	779-127-014	NA	Overhead Electrical Panel	0.09	98D1784
56	127	4/15/98	779-127-015	NA	Overhead Filter Plenum South	0.09	98D1784
57	127	4/15/98	779-127-016	NA	Overhead Fillter Plenum North	0.09	98D1784
58	127	4/15/98	779-127-017	NA	Overhead Northwest Corner	0.09	98D1784
59	127	4/15/98	779-127-018	NA	Overhead West Deck	0.09	98D1784
	127	4/15/98	779-127-019	NA	Overhead East Deck	0.09	98D1784
	127	4/15/98	779-127-020	NA	Overhead Tanks	0.09	98D1784
	127	7/23/99	779-07191999-13-501-127	0.1	Duct Inlet Above Plenum 404	<0.1 q/100cm²	*
	127	7/23/99	779-07191999-13-502-127	0.1	Duct Inlet Above Plenum 404	<0.1 q/100cm²	*

* Analysis for Be using NIOSH method 7300 elements by IGP

1 2

SAMPLERS (Signature) Tonya Sangaline / T-779A X-5392 / D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1784

LAB/LOCATION: ~~RECBA~~ DRO SW of Oklahoma

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

Preservation: Cooled to 4° C, NaOH, HNO3, H2SO4, HCl

Analyses: NR01A001 BE

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	NR01A001	BE
4-15-98	1030	001	001	127-01	Chiller	127-01	WHAT 41 Filter paper	R	
4-15-98		002	002	127-02		127-02			
		003	003	127-03	Floor	127-03			
		004	004	127-04		127-04			
		005	005	127-05		127-05			
		006	006	127-06		127-06			
		007	007	127-07		127-07			
		008	008	127-08	Dell Flooring	127-08			
		009	009	127-09		127-09			
		010	010	127-010	Floor	127-10			
		011	011	127-11	Overhead	127-11			
		012	012	127-12		127-12			

By:	Date	Time	Received By/Organization	Date	Time
[illegible]	4-15-98	1530	D. Karen Olson	4-15-98	1530
[illegible] Olson	4-16-98	1430	K Make	4-16-98	1430

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

Charge # KT03CX00

Project 779 D&D

Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No. _____

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility Page 66 of 0119

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2 2

SAMPLERS (Signature) TONYA SANGALINE / T-779A X-5392 / D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1784 LAB/LOCATION: RECRA

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analytes: AROIA001	BE
4-15-98	1030	013	013	127-13	OVERHEAD	127-13	WHAT-MAN FILTER PAPER						R	
		014	014	127-14		127-14								
		015	015	127-15		127-15								
		016	016	127-16		127-16								
		017	017	127-17		127-17								
		018	018	127-18		127-18								
		019	019	127-19		127-19								
		020	020	127-20		127-20								

...ed By:	Date	Time	Received By/Organization	Date	Time
Bell	4-15-98	1530	D. Karen Olson	4-15-98	1530
Karen Olson	4-16-98	1430	K Make	4-16-98	1430

LABORATORY USE ONLY (YD)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

...S:

Charge # KT03CX00

Project 779 D&D

...n Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No. _____

APO COC 8/5/97

Non-Radiological Closeout Report for Building 779 Main/P. Ann/Utility

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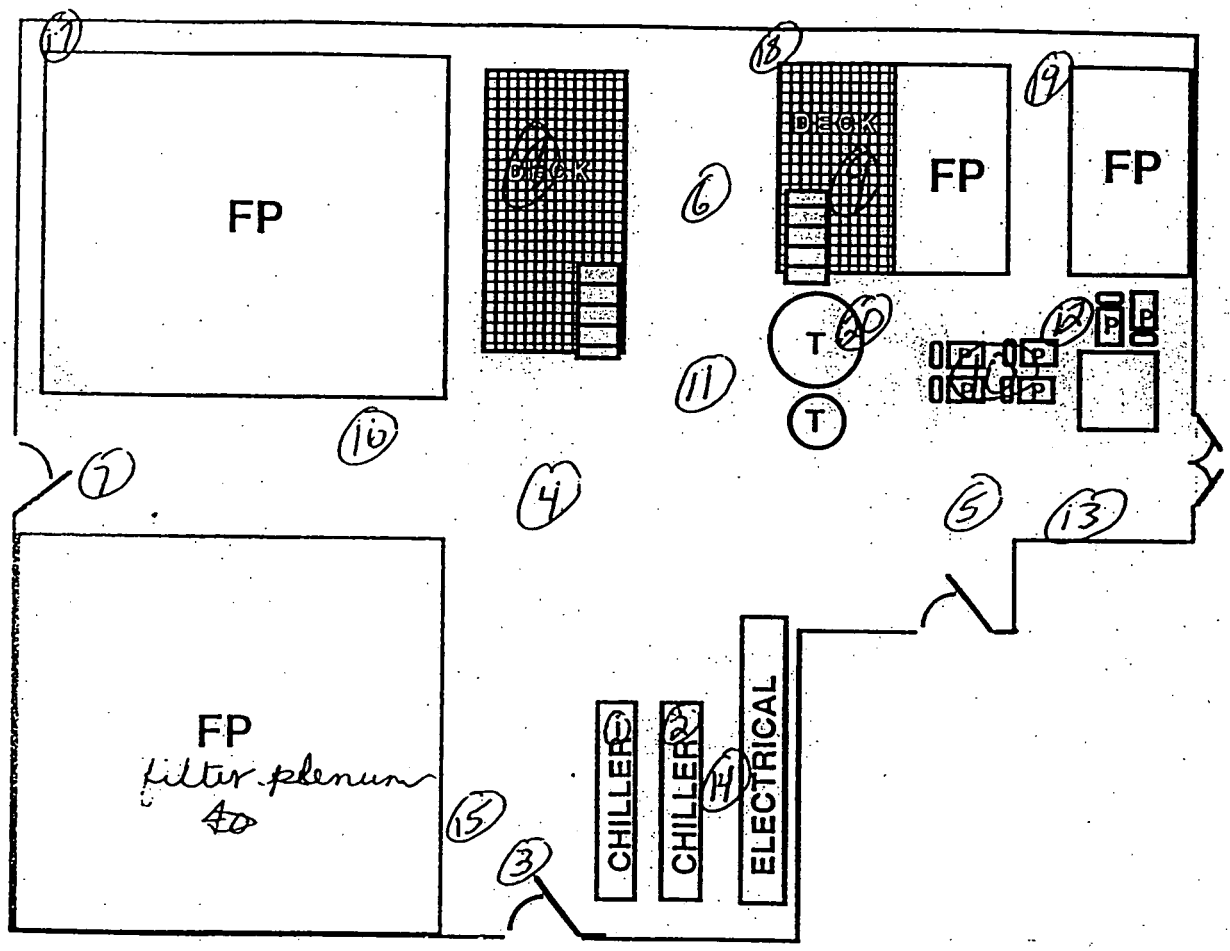
Room 127


FP
DECK
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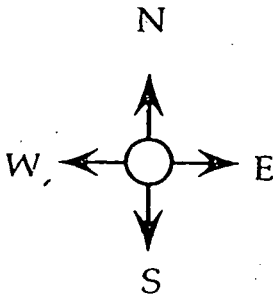
T
T
P
FP
filter plenum
CHILLER 1
CHILLER 2
ELECTRICAL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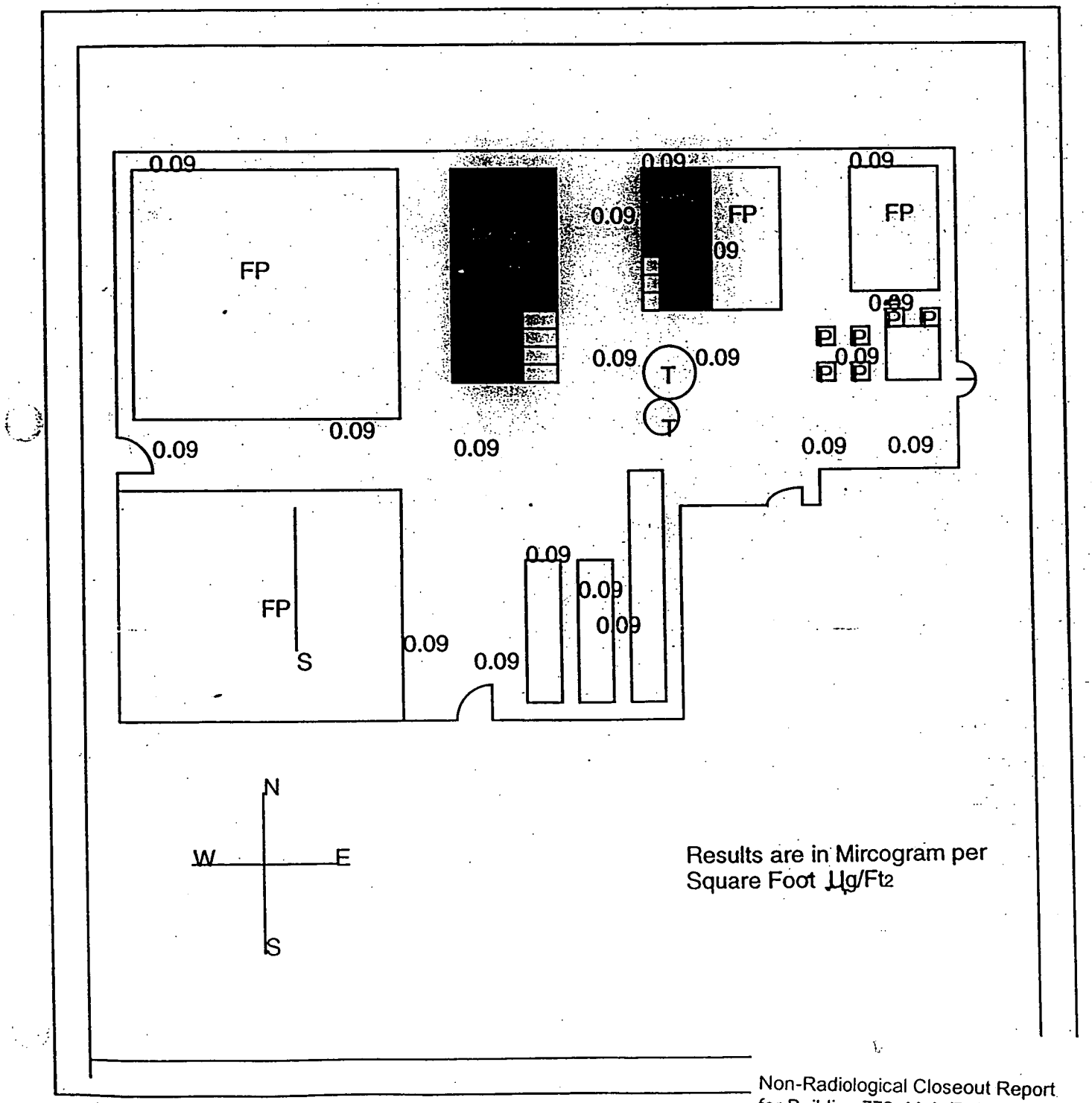
85

Beryllium Surface Locations

Drawing Showing Survey Points

Room 127



Results are in Mircogram per Square Foot µg/Ft2

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INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element:	Beryllium	Conc. Units:	UG/F
CAS No.:	7440-41-7	RIN #:	98D1784
Matrix:	FILTER		

Laboratory ID:	Client Sample ID:	Conc.	Flag
33633.01	127-01	0.09	U
33633.02	127-02	0.09	U
33633.03	127-03	0.09	U
33633.04	127-04	0.09	U
33633.05	127-05	0.09	U
33633.06	127-06	0.09	U
33633.07	127-07	0.09	U
33633.08	127-08	0.09	U
33633.09	127-09	0.09	U
33633.10	127-10	0.09	U
33633.11	127-11	0.09	U
33633.12	127-12	0.09	U
33633.13	127-13	0.09	U
33633.14	127-14	0.09	U
33633.15	127-15	0.09	U
33633.16	127-16	0.09	U
33633.17	127-17	0.09	U
33633.18	127-18	0.09	U
33633.19	127-19	0.09	U
33633.20	127-20	0.09	U

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

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BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOM 127

July 24, 1999

Sample Number	Reporting Limit micrograms	Location Results micrograms/100cm²
779-07191999-13-501-127	0.1_{ug}	Duct Inlet Above Plenum 404 $<0.1_{ug/100cm^2}$
779-07191999-13-502-127	0.1_{ug}	Duct Inlet Above Plenum 404 $<0.1_{ug/100cm^2}$

[1] See attached map of duct inlet above plenum 404 in room 127 for approximate smear location. Survey done to confirm no Be in the duct in room 127. Smears taken on grating on entrance to ducting.

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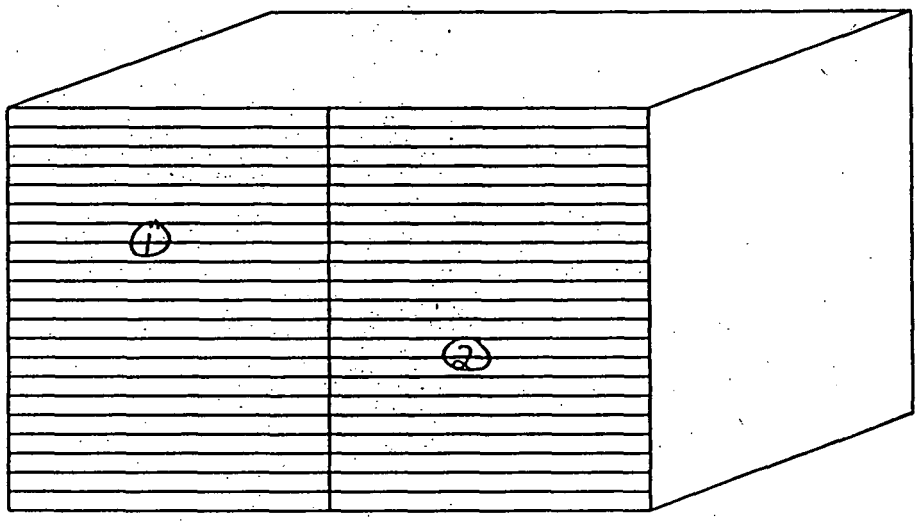
Building 779

Room 127

Building/Beryllium Exhaust Inlet



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	A	B	C	D	E	F	G
1	*Room Number*	*Date*	*Sample Number*	*Reporting Limit micro grams/100cm2*	*Location/Description*	*Smear Results micro grams/100ft² (unless otherwise indicated)*	*Sample Method or RIN#*
64	129	4/28/99	779-99-04-23-13-04	0.1	Floor	<0.1 q/100cm²	*
65	129	4/28/99	779-99-04-23-13-05	0.1	Floor	<0.1 q/100cm²	*
66	129	4/28/99	779-99-04-23-13-06	0.1	Floor	<0.1 q/100cm²	*

* Analysis for Be using NIOSH method 7300 elements by IGP

BUILDING 779

BERYLLIUM SMEAR RESULTS

MAIN BUILDING

April 28, 1999

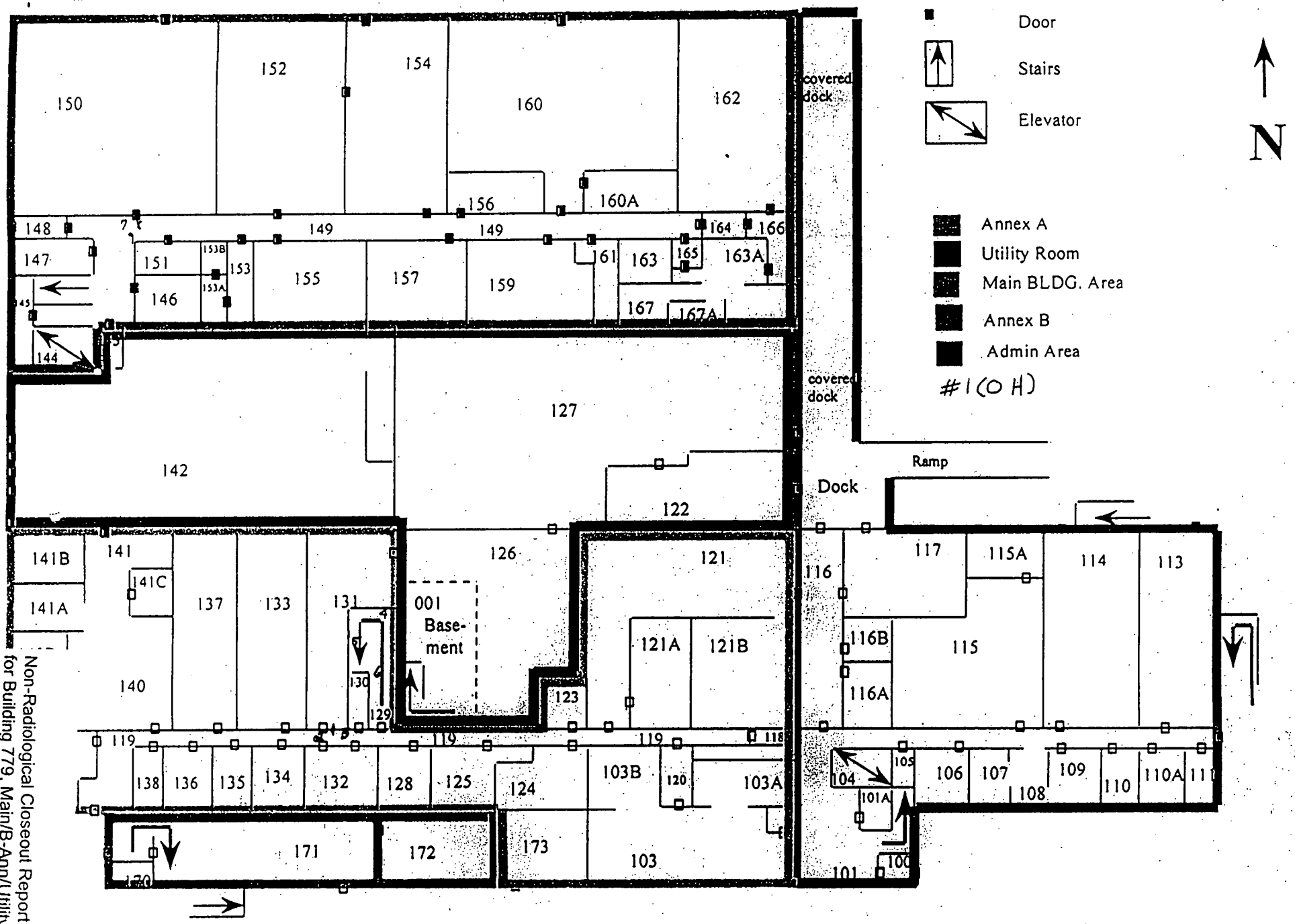
Sample Number	Reporting Limit micrograms	Location Totals micrograms/100cm²
779-99-04-23-13-01	0.1 ug	(OH) Pipe Cold Water <0.1 ug/100cm²
779-99-04-23-13-02	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-23-13-03	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-23-13-04	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-23-13-05	0.1 ug	Step <0.1 ug/100cm²
779-99-04-23-13-06	0.1 ug	Step <0.1 ug/100cm²
779-99-04-23-13-07	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-23-13-08	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-23-13-09	0.1 ug	Floor <0.1 ug/100cm²

[1] See attached map of building 779 first floor for approximate smear locations. Follow up surveys for

91

BUILDING 779 FIRST FLOOR - Area Location Map

January 14, 1999



92

	A	B	C	D	E	F	G
1	*Room Number*	*Date*	*Sample Number*	*Reporting Limit micro grams/100cm2*	*Location/Description*	*Smear Results micro grams/100ft^2 (unless otherwise indicated)*	*Sample Method or RIN#*
67	131	4/13/98	779-131-01	NA	South above SAAM	0.09	98D1774
68	131	4/13/98	779-131-02	NA	Overhead West Above GB 131B&131C	0.09	98D1774
69	131	4/13/98	779-131-03	NA	Overhead East Above GB 961	0.09	98D1774
70	131	4/13/98	779-131-04	NA	Overhead North Above GB 9511	0.09	98D1774

• Analysis for Be using NIOSH method 7300 elements by IGP

93

PLERS (Signature) TONYA SANGARINE / T-779 X-5392 / D-3052 DKO

ORT IDENTIFICATION NUMBER (RIN) 98D1774 LAB/LOCATION: ~~RECRA~~ SW of Oklahoma

ETS CONTRACTOR RMRS

OCKY FLATS
VIRONMENTAL TECHNOLOGY SITE
AIN OF CUSTODY NUMBER _____

TE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analytes: NRD/ADD	RE
98	1230	001	001	131-1	OVERHEAD	131-1	WHAT-MAN FILTER PAPER						R	
		002	002	131-2		131-2								
		003	003	131-3		131-3								
		004	004	131-4		131-4								
		005	005	133-5		133-5								
		006	006	133-6		133-6								
		007	007	133-7		133-7								
		008	008	133-8		133-8								
		009	009	133-9		133-9								
		010	010	133-10		133-10								
		011	011	137-11		137-11								
		012	012	137-12		137-12								

	Date	Time	Received By/Organization	Date	Time
	4-13-98	1445	D. Karen Olson	4-13-98	1445
olson	4-14-98	1430	K Make	4-16-98	1430

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

Charge # KT036X00

Project 779 D80

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility
Page C-19 of C-172

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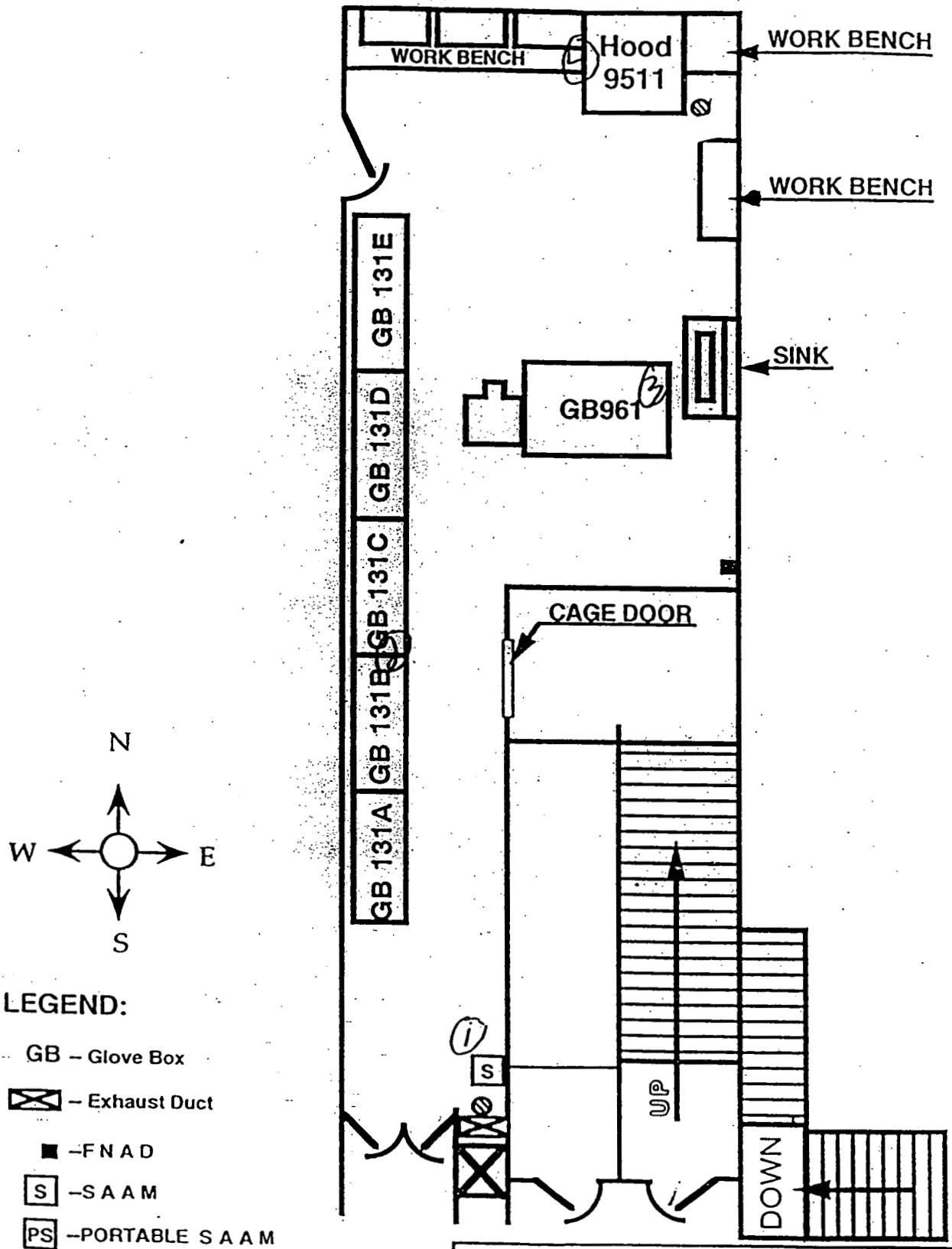
ROOM 131

Drawing Showing Survey Points



LEGEND:

- GB – Glove Box
- – Exhaust Duct
- – F N A D
- S – S A A M
- PS – PORTABLE S A A M
- – Air Head

NOTES: Swipe #30 NOT INCLUDED IN PA

All overheads

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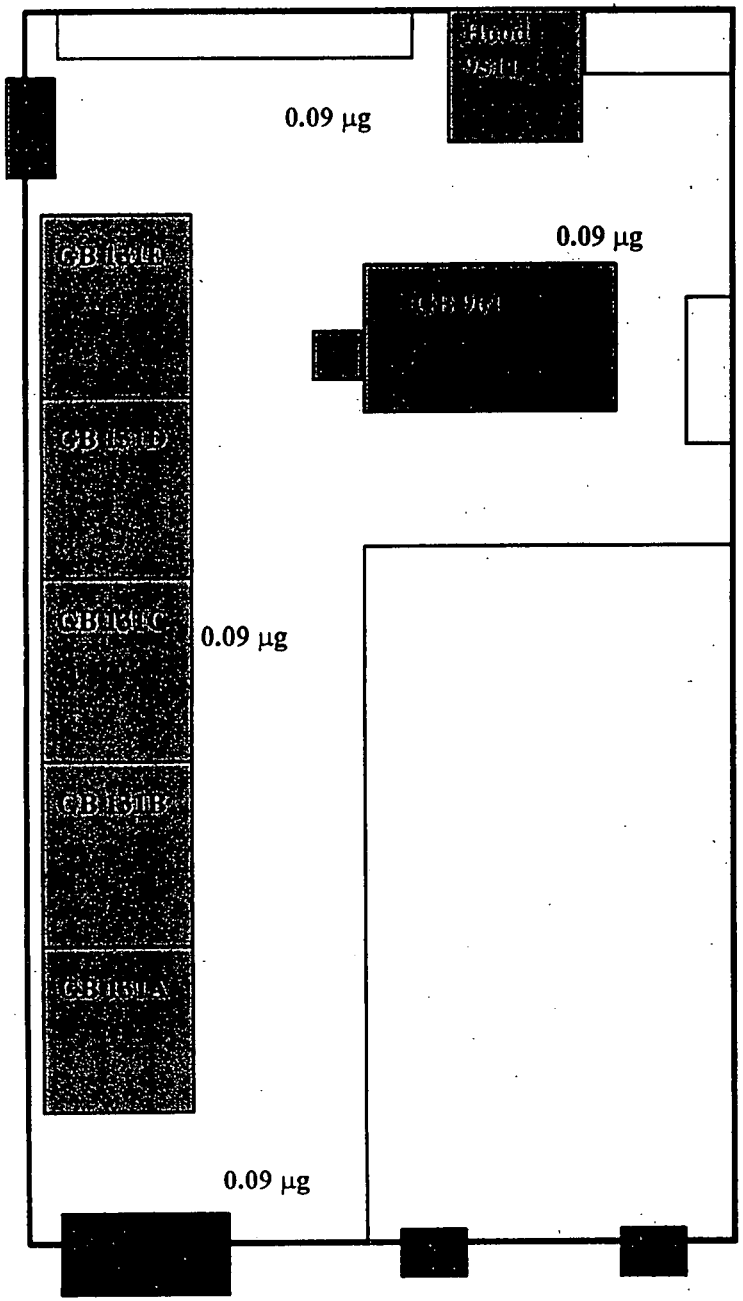
Building 779, Room 131 Beryllium Surface Control Levels

May 5, 1998



N

- All locations taken overhead
- All results below surface control levels
- Reported in Micrograms per square foot

96

INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium
CAS No.: 7440-41-7
Matrix: FILTER

Conc. Units: UG/F
RIN #: 98D1774

Laboratory ID:	Client Sample ID:	Conc.	Flag
33635.01	131-1	0.09	U
33635.02	131-2	0.09	U
33635.03	131-3	0.09	U
33635.04	131-4	0.09	U
33635.05	133-5	0.09	U
33635.06	133-6	0.09	U
33635.07	133-7	0.09	U
33635.08	133-8	0.09	U
33635.09	133-9	0.09	U
33635.10	133-10	0.09	U
33635.11	137-11	0.09	U
33635.12	137-12	0.09	U
33635.13	137-13	0.09	U
33635.14	137-14	0.09	U
33635.15	137-15	0.09	U
33635.16	139-16	0.09	U
33635.17	139-17	0.09	U
33635.18	139-18	0.09	U
33635.19	139-19	0.09	U

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

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	A	B	C	D	E	F	G
1	*Room Number*	*Date*	*Sample Number*	*Reporting Limit micro grams/100cm2*	*Location/Description*	*Smear Results micro grams/100ft^2 (unless otherwise indicated)*	*Sample Method or RIN#*
71	133	4/13/98	779-133-05	NA	Northeast Corner	0.09	98D1774
72	133	4/13/98	779-133-06	NA	Overhead East Above GB 959	0.09	98D1774
73	133	4/13/98	779-133-07	NA	Overhead South Above GB-957	0.09	98D1774
74	133	4/13/98	779-133-08	NA	Overhead Middle Above GB 956	0.09	98D1774
75	133	4/13/98	779-133-09	NA	Overhead West Above GB 955	0.09	98D1774
76	133	4/13/98	779-133-010	NA	Overhead South Above GB 954	0.09	98D1774

98

SAMPLERS (Signature) TONYA SANGAINE / T-779 X-5392 / D-3052 DKO

REPORT IDENTIFICATION NUMBER (RIN) 98D1774 LAB/LOCATION: ~~RECRA~~ SW of Oklahoma

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analytes: NRDIABOOL	Be
3/98	1230	001	001	131-1	OVERHEAD	131-1	WIPE-41 FILTER PAPER						R	
		002	002	131-2		131-2								
		003	003	131-3		131-3								
		004	004	131-4		131-4								
		005	005	133-5		133-5								
		006	006	133-6		133-6								
		007	007	133-7		133-7								
		008	008	133-8		133-8								
		009	009	133-9		133-9								
		010	010	133-10		133-10								
		011	011	137-11		137-11								
		012	012	137-12		137-12								

	Date	Time	Received By/Organization	Date	Time
	4-13-98	1445	D. Karen Olson	4-13-98	14:45
Olson	4-14-98	1430	K Malu	4-16-98	1430

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	

Charge # KT036X00

Project 779 D80

ements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No _____

ADO COC 5/5/97

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility

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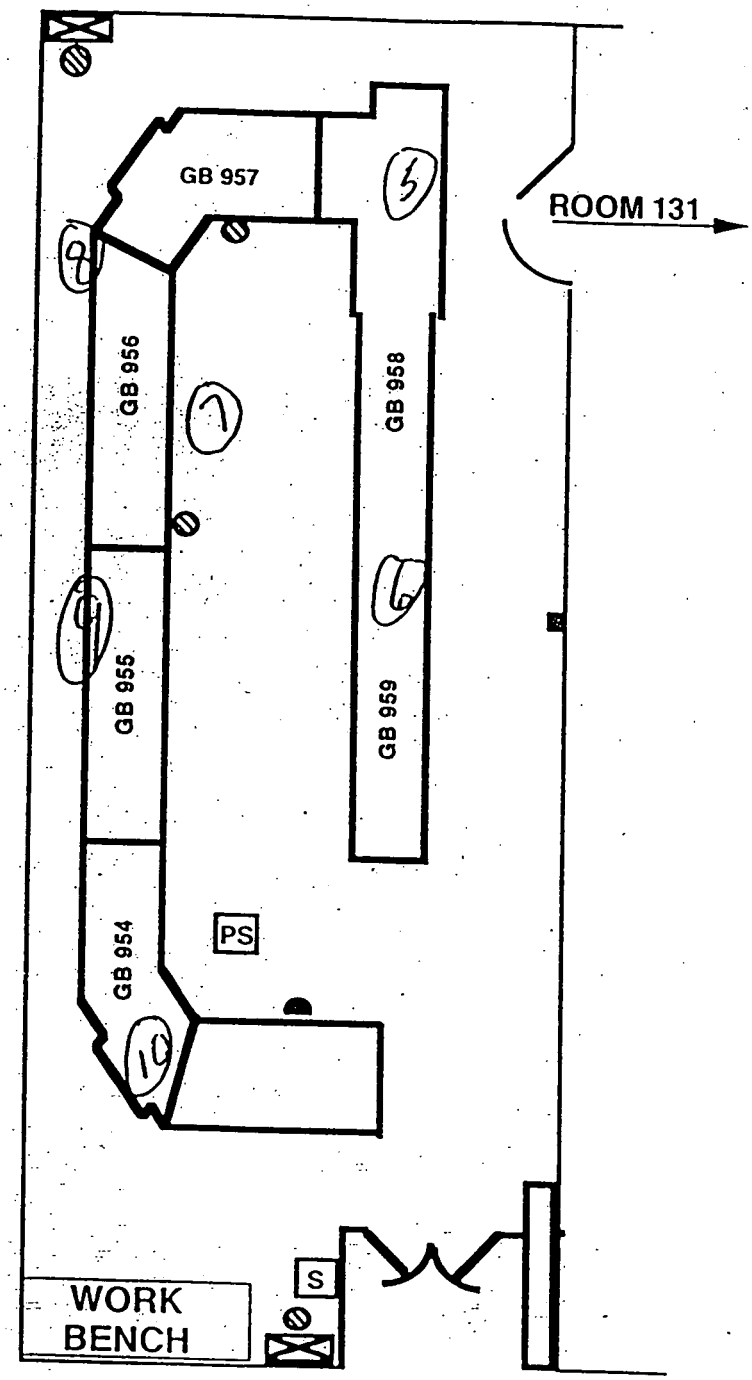
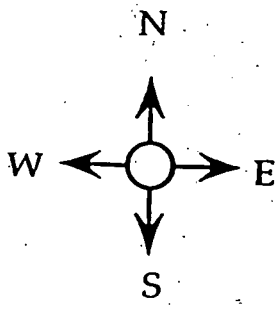
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

ROOM 133

Drawing Showing Survey Points





LEGEND:

- GB – GLOVE BOX
- ⊠ – Exhaust Duct
- ■ –F N A D
- S –S A A M
- PS –PORTABLE S A A M
- ⊘ –Air Head

NOTES:
Swipe #20 NOT INCLUDED IN PACKET.

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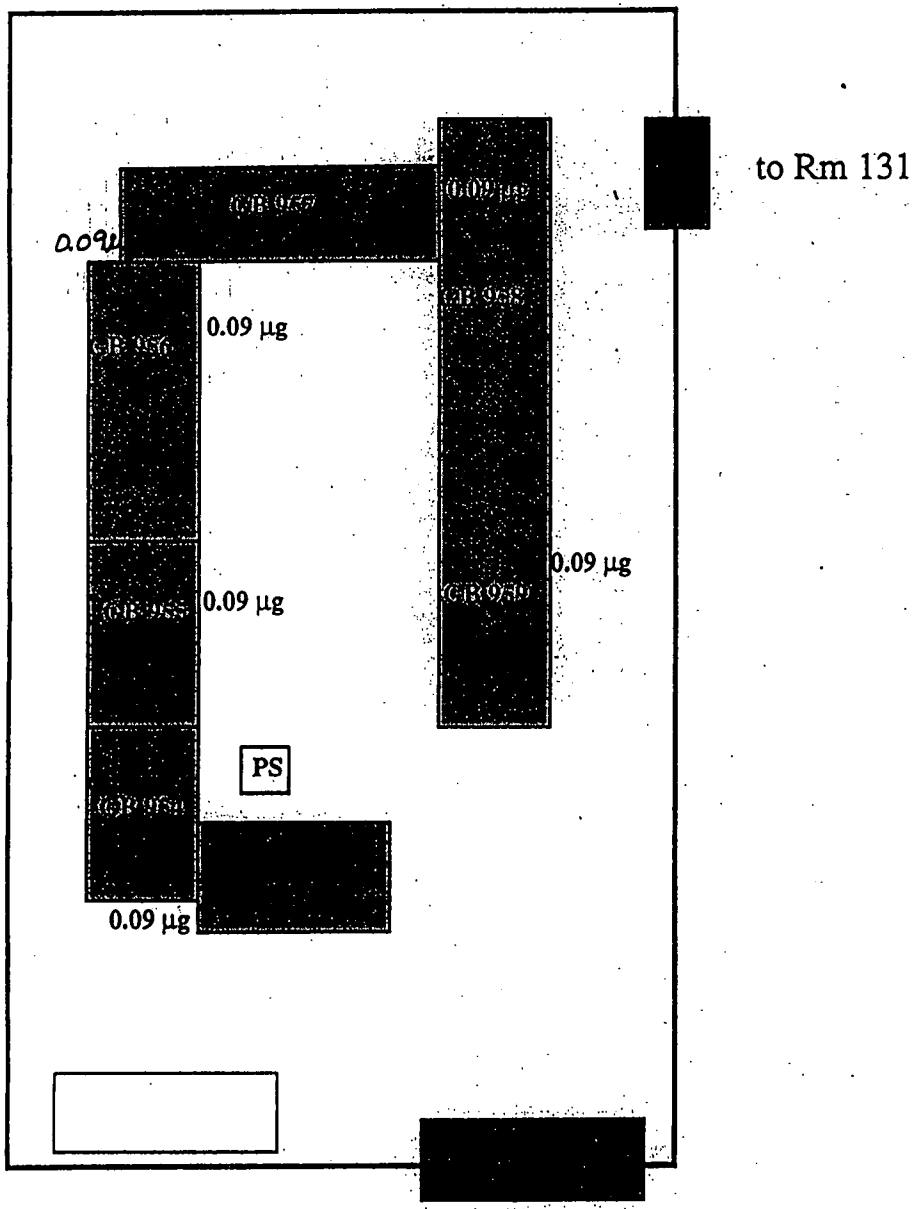
Building 779, Room 133 Beryllium Surface Control Levels

May 5, 1998



N

- All locations taken overhead
- All results below surface control levels
- Reported in Micrograms per square foot

INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium **Conc. Units:** UG/F
CAS No.: 7440-41-7 **RIN #:** 98D1774
Matrix: FILTER

Laboratory ID:	Client Sample ID:	Conc.	Flag
33635.01	131-1	0.09	U
33635.02	131-2	0.09	U
33635.03	131-3	0.09	U
33635.04	131-4	0.09	U
33635.05	133-5	0.09	U
33635.06	133-6	0.09	U
33635.07	133-7	0.09	U
33635.08	133-8	0.09	U
33635.09	133-9	0.09	U
33635.10	133-10	0.09	U
33635.11	137-11	0.09	U
33635.12	137-12	0.09	U
33635.13	137-13	0.09	U
33635.14	137-14	0.09	U
33635.15	137-15	0.09	U
33635.16	139-16	0.09	U
33635.17	139-17	0.09	U
33635.18	139-18	0.09	U
33635.19	139-19	0.09	U

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

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	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft² (unless otherwise indicated)	Sample Method or RIN#
77	137	4/13/98	779-137-11	NA	Overhead South Above hood 106-1	0.09	98D1774
78	137	4/13/98	779-137-12	NA	Overhead West Ceiling	0.09	98D1774
79	137	4/13/98	779-137-13	NA	Overhead Northwest Corner of Ceiling	0.09	98D1774
80	137	4/13/98	779-137-14	NA	Overhead Middle Above B-box 106-4	0.09	98D1774
81	137	4/13/98	779-137-15	NA	Overhead East Above B-box 106-2	0.09	98D1774
82	137	7/24/99	779-99-06-25-13-137-01	0.1	Floor	<0.1 q/100cm²	*
83	137	7/24/99	779-99-06-25-13-137-02	0.1	Floor	<0.1 q/100cm²	*
84	137	7/24/99	779-99-06-25-13-137-03	0.1	Floor	<0.1 q/100cm²	*
85	137	7/24/99	779-99-06-25-13-137-04	0.1	Floor	<0.1 q/100cm²	*
86	137	7/26/99	779-99-06-26-13-137-01	0.1	Floor	<0.1 q/100cm²	*
87	137	7/26/99	779-99-06-26-13-137-02	0.1	Floor	<0.1 q/100cm²	*
88	137	7/26/99	779-99-06-26-13-137-03	0.1	Floor	<0.1 q/100cm²	*
89	137	7/26/99	779-99-06-26-13-137-04	0.1	Floor	<0.1 q/100cm²	*
90	137	9/8/99	779-06301999-15-501	0.1	Front of Airlock access/egress to tent	<0.0 q/100cm²	99Z0151
91	137	9/8/99	779-06301999-15-502	0.1	Airlock Wipe	<0.0 q/100cm²	99Z0151
92	137	9/8/99	779-06301999-15-503	0.1	Airlock Wipe	<0.0 q/100cm²	99Z0151

* Analysis for Be using NIOSH method 7300 elements by IGP

SAMPLERS (Signature) TONYA SANGALINE / T-779 X-5392 / D-3052 DKO

REPORT IDENTIFICATION NUMBER (RIN) 98D1774 LAB/LOCATION: ~~RESRA~~ SW of Oklahoma

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl		Analytes: AIRDAD01	RE											
4/13/98	1230	001	001	131-1	OVERHEAD	131-1	WGAT-41 FILTER PAPER							R												
		002	002	131-2		131-2																				
		003	003	131-3		131-3																				
		004	004	131-4		131-4																				
		005	005	133-5		133-5																				
		006	006	133-6		133-6																				
		007	007	133-7		133-7																				
		008	008	133-8		133-8																				
		009	009	133-9		133-9																				
		010	010	133-10		133-10																				
		011	011	137-11		137-11																				
		012	012	137-12		137-12																				

	Date	Time	Received By/Organization	Date	Time
	4-13-98	1445	D. Karen Olson	4-13-98	1445
Olson	4-14-98	1430	K. Mahe	4-16-98	1430

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	

Charge # KT036X00

Project 779 D&D

ments: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No _____

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility Page C29 of C172

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2

SAMPLERS (Signature) TONYA SANGALINE IT-779 X-5392 D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1774 LAB/LOCATION: RESRA

FFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analytes: URO1A001	BE
4/13/98	1415	013	012	137-13	OVERHEAD	137-13	WHAT-41 FILTER PAPER						R	
		014	014	137-14		137-14								
		015	015	137-15		137-15								
		016	016	139-16		139-16								
		017	017	139-17		139-17								
		018	018	139-18		139-18								
		019	019	139-19		139-19								
		~~020~~	~~020~~	~~18~~										

	Date	Time	Received By/Organization	Date	Time
	4-13-98	1445	P. Karen Olson	4-13-98	14:45
			K Mele	4-16-98	1430

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	

Charge # KT03CX00

Project 779 D&D

nents: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No. _____

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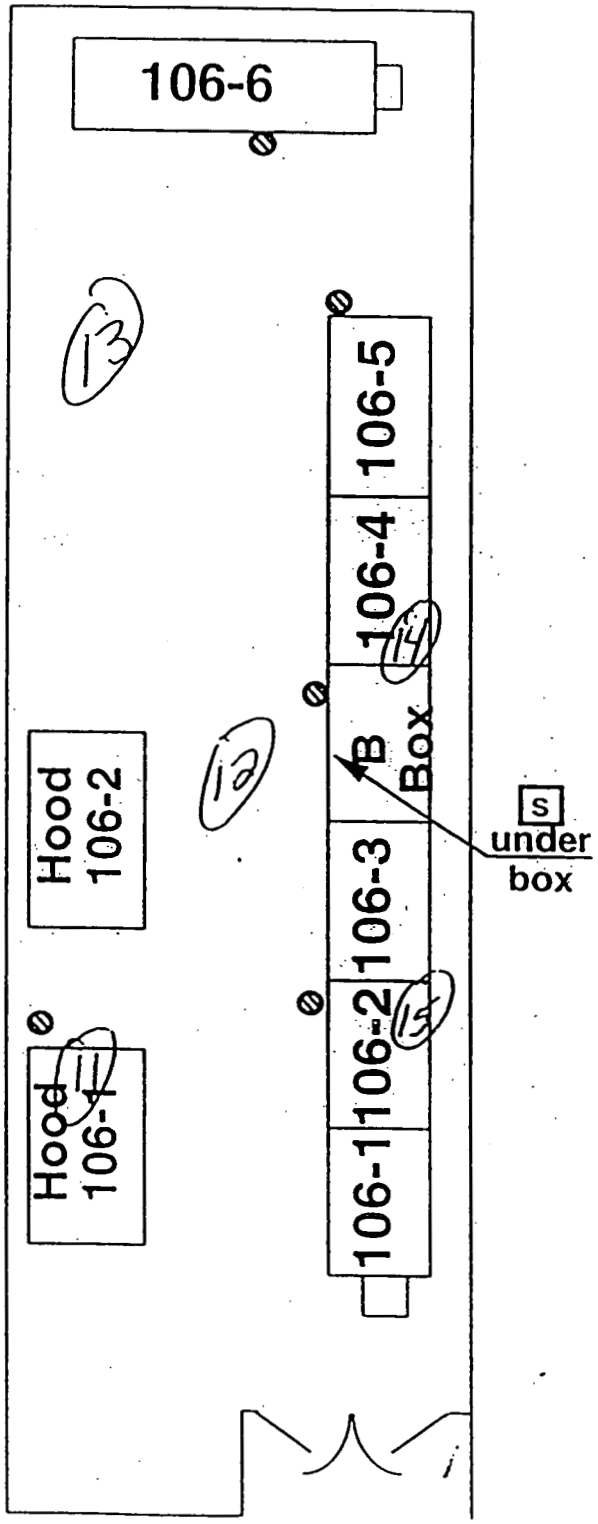
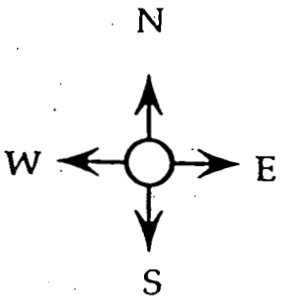
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

ROOM 137

Drawing Showing Survey Points





LEGEND:

- GB – GLOVE BOX
- ⊠ – Exhaust Duct
- ■ –F N A D
- S –S A A M
- PS –PORTABLE S A A M
- ⊘ –Air Head

NOTES: Swipe #20 NOT ICLUDED IN PACKET.

Page 1 of 10

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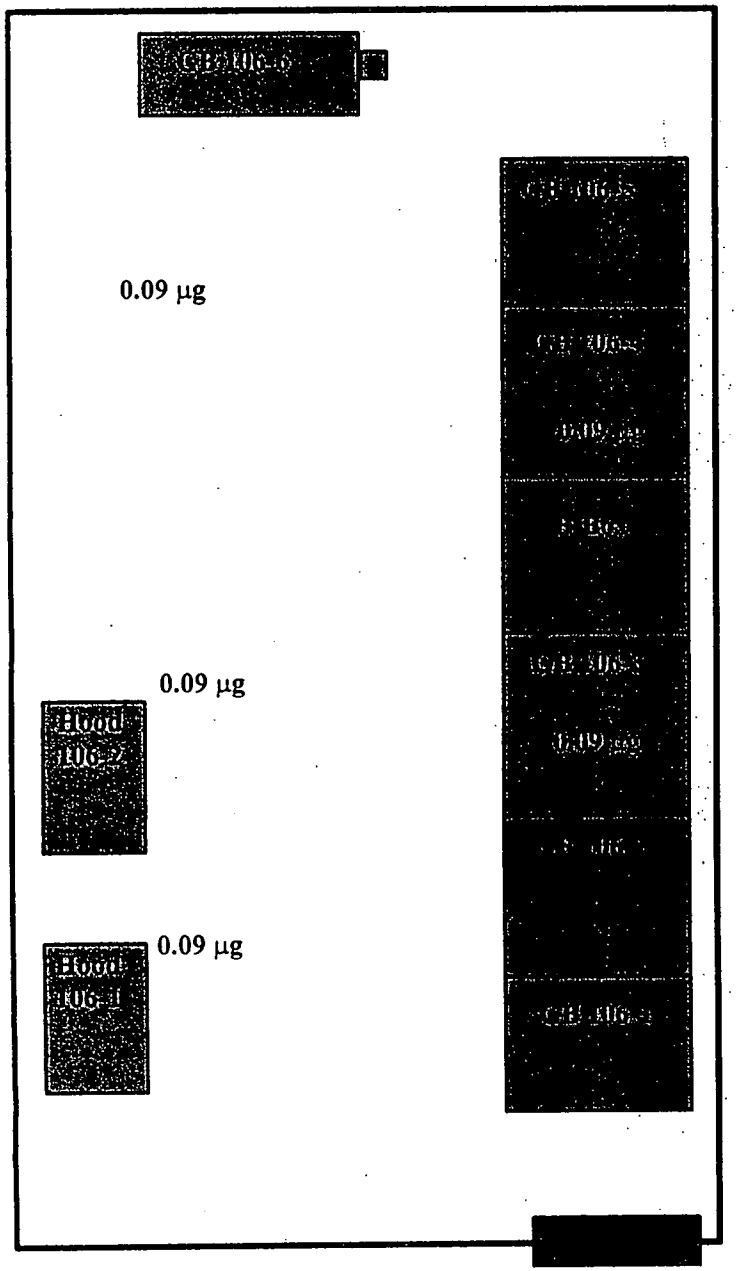
Building 779, Room 137 Beryllium Surface Control Levels

May 5, 1998



N

- All locations taken overhead
- All results below surface control levels
- Reported in Micrograms per square foot

INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium
CAS No.: 7440-41-7
Matrix: FILTER

Conc. Units: UG/F
RIN #: 98D1774

Laboratory ID:	Client Sample ID:	Conc.	Flag
33635.01	131-1	0.09	U
33635.02	131-2	0.09	U
33635.03	131-3	0.09	U
33635.04	131-4	0.09	U
33635.05	133-5	0.09	U
33635.06	133-6	0.09	U
33635.07	133-7	0.09	U
33635.08	133-8	0.09	U
33635.09	133-9	0.09	U
33635.10	133-10	0.09	U
33635.11	137-11	0.09	U
33635.12	137-12	0.09	U
33635.13	137-13	0.09	U
33635.14	137-14	0.09	U
33635.15	137-15	0.09	U
33635.16	139-16	0.09	U
33635.17	139-17	0.09	U
33635.18	139-18	0.09	U
33635.19	139-19	0.09	U

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOM 137

July 24, 1999

Sample Number	Reporting Limit micrograms	Location Results[1] micrograms/100cm²
779-99-06-25-13-137-01	0.1 µg	Floor <0.1 µg/100cm²
779-99-06-25-13-137-02	0.1 µg	Floor <0.1 µg/100cm²
779-99-06-25-13-137-03	0.1 µg	Floor <0.1 µg/100cm²
779-99-06-25-13-137-04	0.1 µg	Floor <0.1 µg/100cm²

[1] See attached map of room 137 for approximate smear locations. Smears taken prior to entry by personnel into tent to size reduce a filter box with Beryllium contamination.

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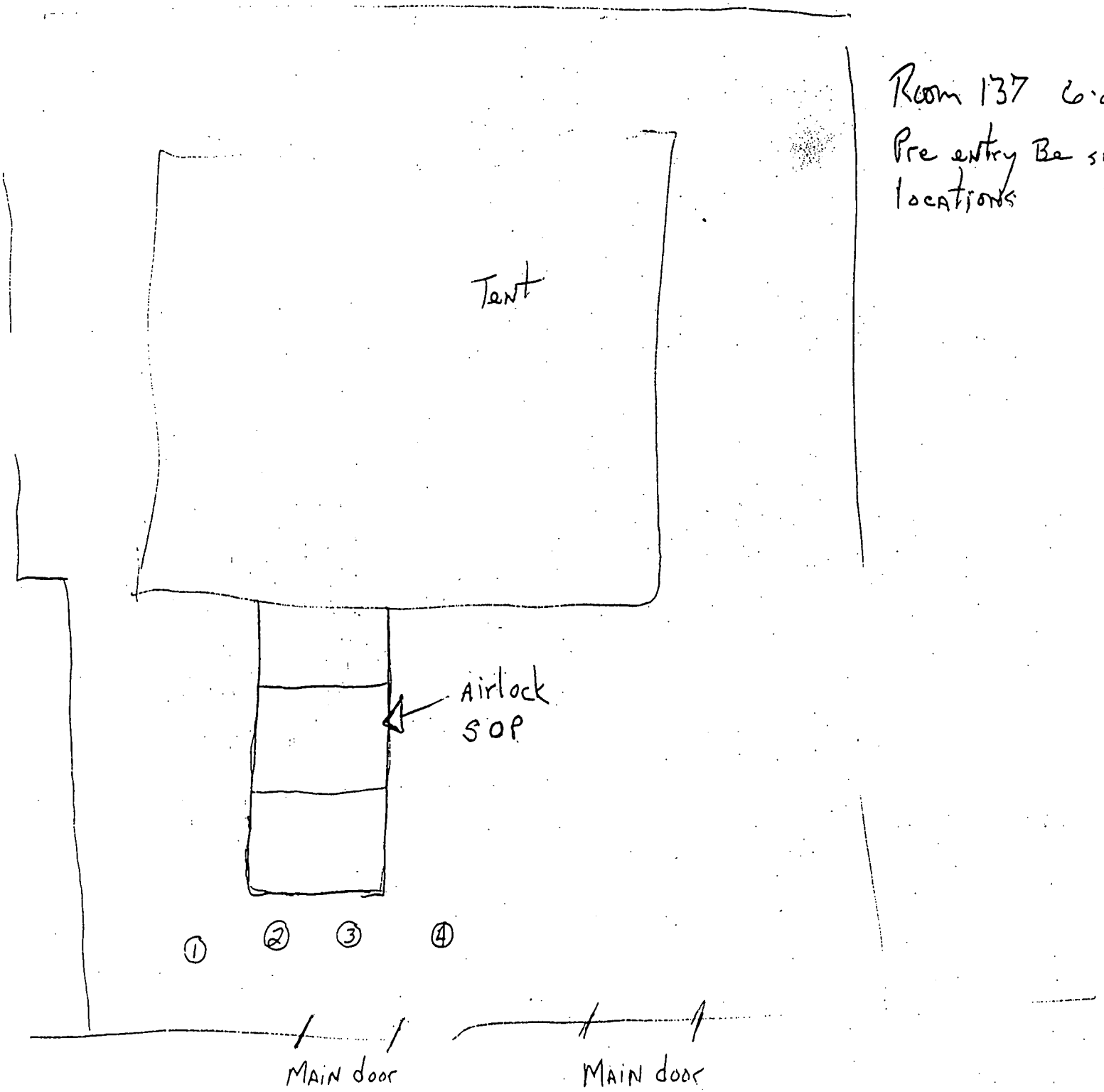
Room 137 6·25·99
Pre entry Be smear
locations



BUILDING 779

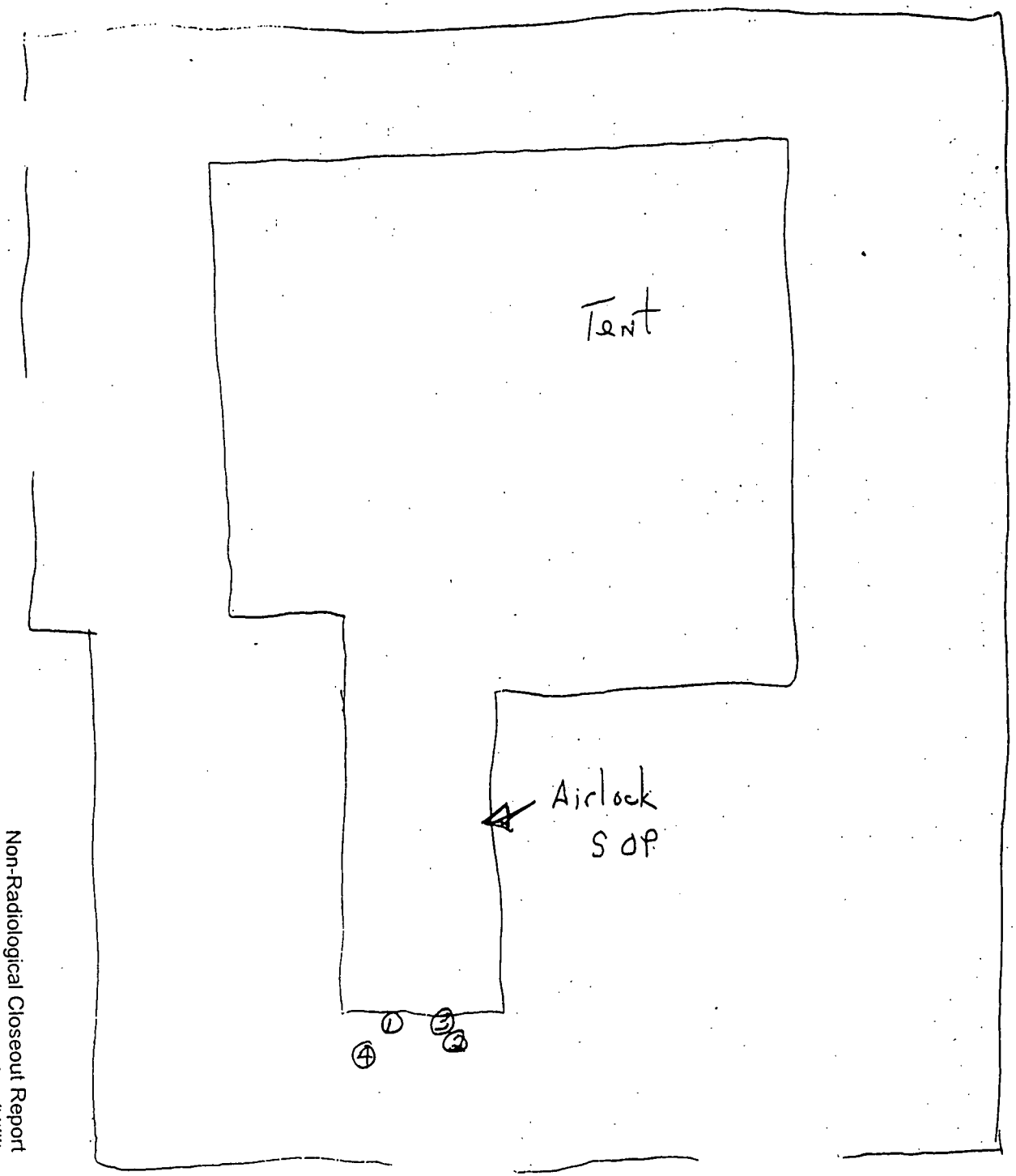
BERYLLIUM SMEAR RESULTS

ROOM 137

July 26, 1999

Sample Number	Reporting Limit micrograms	Location Tests micrograms/100cm²
779-99-06-26-13-137-01	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-99-06-26-13-137-02	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-99-06-26-13-137-03	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-99-06-26-13-137-04	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$

[1] See attached map of room 137 for approximate smear locations. Smears 1and 2 taken prior to exit from tent by personnel. Smears 3 and 4 taken post exit from tent. The airlock was wiped down after personnel exited the tent. The tent was being used to size reduce a Beryllium filter box.



Room 137 6·26·99
smear 1, 2 pre exit from tent
smear 3, 4 post exit from tent
Airlock wiped down after personnel exit tent.

112

Industrial Hygiene Information System
Surface Sample Report

!HISR_SURFACE_SAMPLE

.te: 09/08/1999

RIN: 99Z0151

Sample Number/Type: 779-06301999-15-501 WIPE Hygienist: WADE RUSSELL
Location Info: IN FRONT OF AIR LOCK ACCESS/EGRESS TO TENT.
Room No: 137
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.0000 UG/100CM2

Sample Number/Type: 779-06301999-15-502 WIPE Hygienist: WADE RUSSELL
Location Info:
Room No: 137
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.0000 UG/100CM2

Sample Number/Type: 779-06301999-15-503 WIPE Hygienist: WADE RUSSELL
Location Info:
Room No: 137
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.0000 UG/100CM2

Sample Number/Type: 779-08261999-15-501 BLANK Hygienist: WADE RUSSELL
Location Info:
Room No:
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.0000 UG

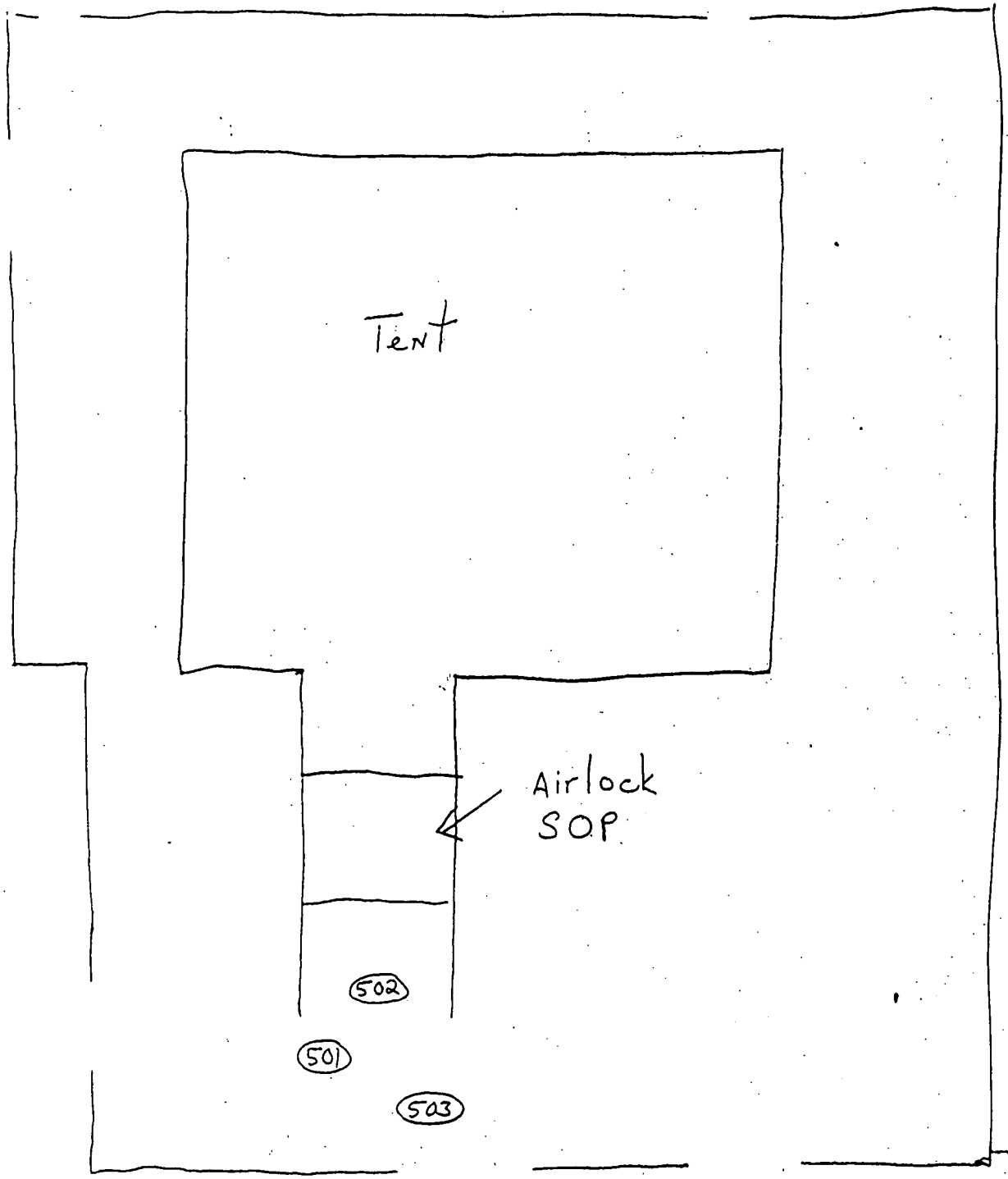
Sample Number/Type: 779-08261999-15-502 BLANK Hygienist: WADE RUSSELL
Location Info:
Room No:
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.0000 UG

Sample Number/Type: 779-08261999-15-503 BLANK Hygienist: WADE RUSSELL
Location Info:
Room No:
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.0000 UG

113

OFFICIAL USE ONLY

Contains information which may be exempt from public release under the Freedom of Information Act (5 USC 552), exemption numbers(s) 2



Room 137 6.30.99
Post entry Be smears
locations.

114

	A	B	C	D	E	F	G
1	*Room Number*	*Date*	*Sample Number*	*Reporting Limit micro grams/100cm2*	*Location/Description*	*Smear Results micro grams/100ft^2 (unless otherwise indicated)*	*Sample Method or RIN#*
93	139	7/26/99	779-139-16	NA	Overhead South Above Hood 139-5	0.09	98D1774
94	139	4/13/98	779-139-17	NA	Overheaad West Above B-box 139-4	0.09	98D1774
95	139	4/13/98	779-139-18	NA	OH North Above B-boxes 139-2/139-1	0.09	98D1774
96	139	4/13/98	779-139-19	NA	Overhead East Ceiling	0.09	98D1774

* Analysis for Be using NIOSH method 7300 elements by IGP

2

SAMPLERS (Signature) TONYA SANGAINE IT-779 X-5392 D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1774 LAB/LOCATION: RECRA

FEETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4° C	NaOH	HNO3	H2SO4	HCl	Analytes: URO1A001	BE											
4/8/98	1415	013	013	137-13	OVERHEAD	137-13	WHAT-41 FILTER PAPER						R												
		014	014	137-14		137-14																			
		015	015	137-15		137-15																			
		016	016	139-16		139-16																			
		017	017	139-17		139-17																			
		018	018	139-18		139-18																			
		019	019	139-19		139-19																			
		~~020~~	~~020~~	~~18~~																					

	Date	Time	Received By/Organization	Date	Time
	4-13-98	1445	P. Karen Olson	4-13-98	14:45
			KMale	4-16-98	1430

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

Charge # KT03CX00

Project 779 D&D

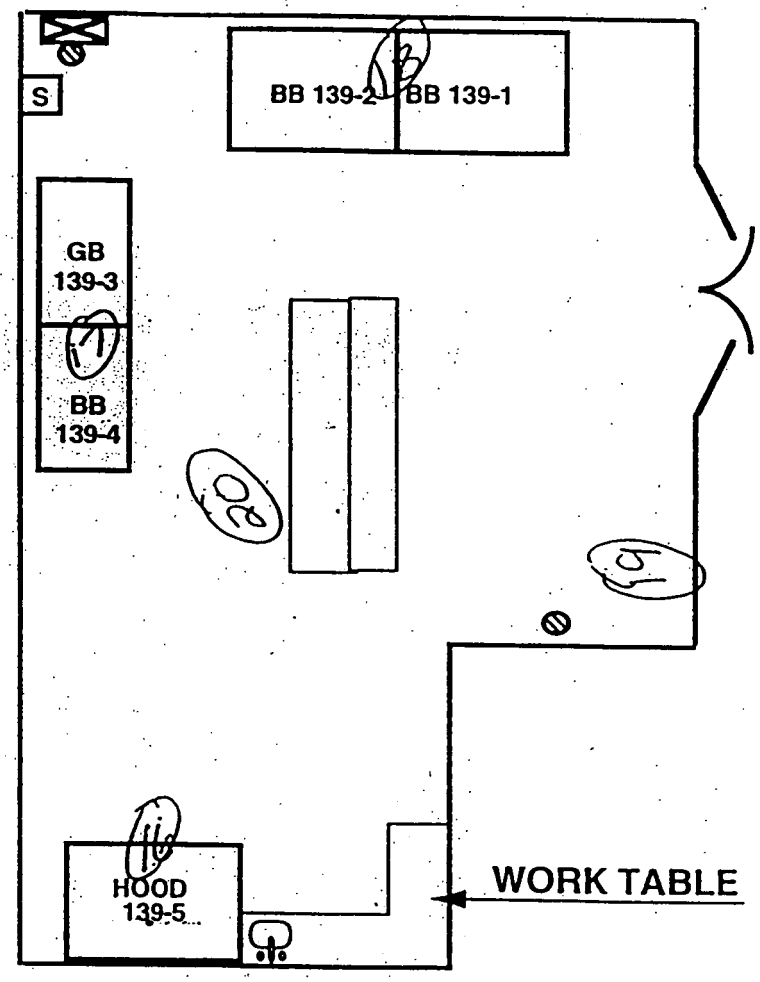
ments: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No. _____

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility

116

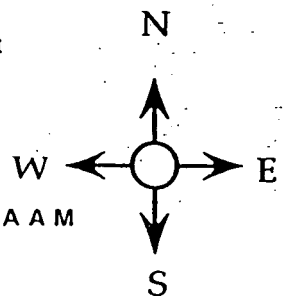
ROOM 139

Drawing Showing Survey Points



LEGEND:

- Wash Basin
- BB – B-BOX
- GB – GLOVE BOX
- Exhaust Duct
- F N A D
- S – S A A M
- PS – PORTABLE S A A M
- Air Head



NOTES:

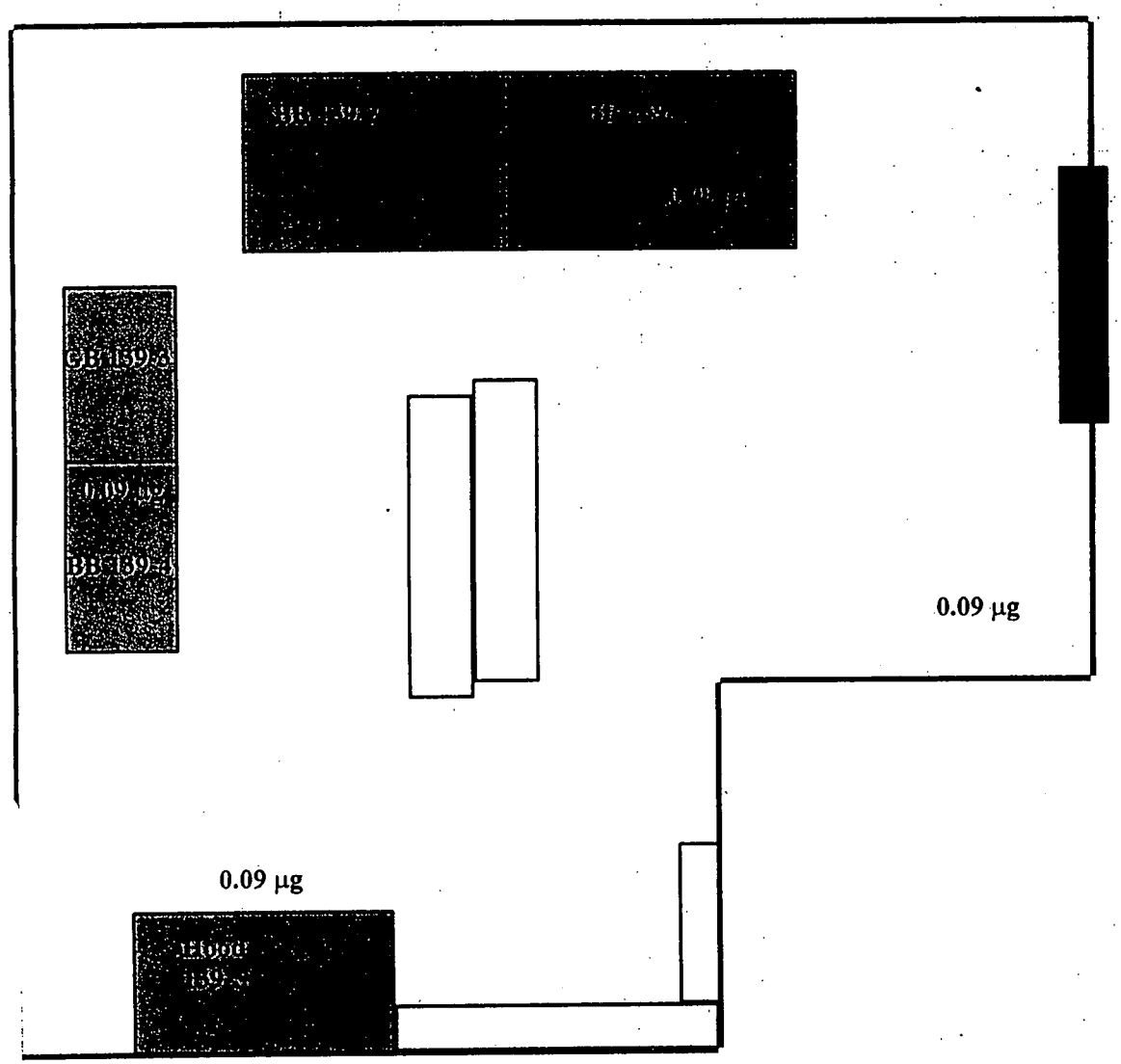
Swipe #20 NOT INCLUDED IN PACKET.

Page 1 of 10

117

Building 779, Room 139 Beryllium Surface Control Levels

May 5, 1998



N

- All locations taken overhead
- All results below surface control levels
- Reported in Micrograms per square foot

INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium
CAS No.: 7440-41-7
Matrix: FILTER

Conc. Units: UG/F
RIN #: 98D1774

Laboratory ID:	Client Sample ID:	Conc.	Flag
33635.01	131-1	0.09	U
33635.02	131-2	0.09	U
33635.03	131-3	0.09	U
33635.04	131-4	0.09	U
33635.05	133-5	0.09	U
33635.06	133-6	0.09	U
33635.07	133-7	0.09	U
33635.08	133-8	0.09	U
33635.09	133-9	0.09	U
33635.10	133-10	0.09	U
33635.11	137-11	0.09	U
33635.12	137-12	0.09	U
33635.13	137-13	0.09	U
33635.14	137-14	0.09	U
33635.15	137-15	0.09	U
33635.16	139-16	0.09	U
33635.17	139-17	0.09	U
33635.18	139-18	0.09	U
33635.19	139-19	0.09	U

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

119

	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft² (unless otherwise indicated)	Sample Method or RIN#
97	140	3/27/98	779-08-3-13-001-140	NA	Floor at South Doorway	0.04	98D1366
98	140	3/27/98	779-08-3-13-002-140	NA	Floor Under Hoods 140S and 140SE	0.64	98D1366
99	140	3/27/98	779-08-3-13-003-140	NA	Floor at West Doorway into Room 140A	0.49	98D1366
100	140	3/27/98	779-08-3-13-004-140	NA	Floor Middle of Room	0.15	98D1366
101	140	3/27/98	779-08-3-13-005-140	NA	South End of Work Bench	0.09	98D1366
102	140	3/27/98	779-08-3-13-006-140	NA	North End of Work Bench	0.04	98D1366
103	140	3/27/98	779-08-3-13-007140	NA	Floor North	0.04	98D1366
104	140	3/27/98	779-08-3-13-008140	NA	Floor at North Doorway	0.04	98D1366
105	140	3/27/98	779-08-3-13-009-140	NA	South End of Work Table on East Wall	0.11	98D1366
106	140	3/27/98	779-08-3-13-010-140	NA	North End of Work Table on East Wall	0.05	98D1366
107	140	4/7/98	E-001	NA	So End of Work Table on West Wall	0.04	98D1540
108	140	4/7/98	E-002	NA	No End of Work Table on West Wall	0.06	98D1540
109	140	4/7/98	E-003	NA	Work Bench No End	0.12	98D1540
110	140	4/7/98	E-004	NA	Work Bench So End	0.08	98D1540
111	140	4/7/98	E-005	NA	Floor at South Doorway	0.04	98D1540
112	140	4/7/98	E-006	NA	Floor under Wk Table Ctr of Rm	0.04	98D1540
113	140	4/7/98	E-007	NA	Floor at North Doorway	0.07	98D1540
114	140	4/7/98	E-008	NA	Bench in Room 140A	0.04	98D1540
115	140	4/7/98	E-009	NA	Room 140A Center	0.05	98D1540
	140	4/7/98	E-010	NA	Room 140B	0.07	98D1540
	140	4/7/98	E-011	NA	No End of Work Table	0.21	98D1540
	140	4/7/98	E-012	NA	So End of Work Table	0.34	98D1540
	140	3/20/99	779-00-03-09-13-140-01	0.1	Floor South Doorway	<0.1 q/100cm²	*
	140	3/20/99	779-00-03-09-13-140-02	0.1	Floor Under Hoods 140S and 140SE	<0.3 q/100cm²	*
	140	3/20/99	779-00-03-09-13-140-03	0.1	Floor Under Work Table in Ctr of Rm	<0.1 q/100cm²	*
	140	3/20/99	779-00-03-09-13-140-04	0.1	Floor North Doorway	<0.1 q/100cm²	*
	140	3/20/99	779-00-03-09-13-140-05	0.1	Overhead Ceiling North	<0.1 q/100cm²	*
	140	3/20/99	779-00-03-09-13-140-06	0.1	Floor South	<0.1 q/100cm²	*
	140	3/20/99	779-00-03-09-13-140-07	0.1	Floor North	<0.1 q/100cm²	*

...ysis for Be using NIOSH method 7300 elements by IGP

120

	A	B	C	D	E	F	G
1	*Room Number*	*Date*	*Sample Number*	*Reporting Limit micro grams/100cm2*	*Location/Description*	*Smear Results micro grams/100ft^2 (unless otherwise indicated)*	*Sample Method or RIN#*
126	140	3/20/99	779-00-03-09-13-140-08	0.1	Southeast corner	<0.1 q/100cm^2	*
127	140	4/5/99	779-00-03-31-13-140-01	0.1	Floor	<0.1 q/100cm^2	*

* Analysis for Be using NIOSH method 7300 elements by IGP

FAX NO. 303 966 2035 p.02

ITS COPY

1

SAMPLERS (Signature) Tonya Sangaline , T779 x5392 , d 3052

REPORT IDENTIFICATION NUMBER (RIN) 9801366 LAB/LOCATION: RECRA

RFETS CONTRACTOR AMRS

ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	~~CONTAINER~~ Room	MATRIX	Preservation: Cooled to 4° C	NaOH	HNO3	H2SO4	HCl	Analytes: NR9012001
3-13-98	9:00	N/A	N/A	001	779	140	Filter						R
				002		140	Filter						
				003		140	Filter						
				004		140	Filter						
				005		140	Filter						
				006		140							
				007		140							
				008		140							
				009		140							
				010		140							
	ITS				ITS								

Relinquished By:	Date	Time	Received By/Organization	Date	Time
Tonya Sangaline	3-13-98				

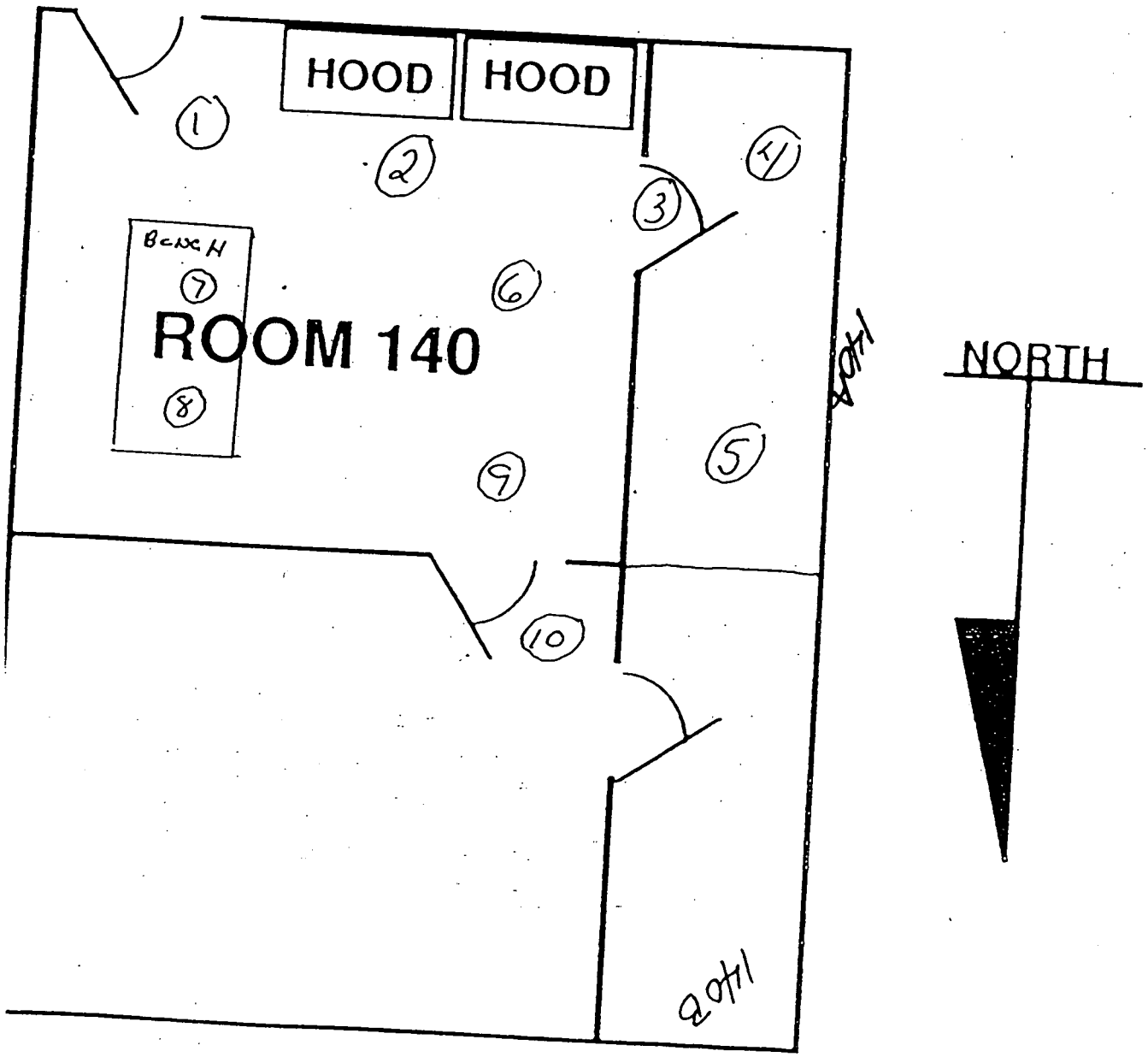
LABORATORY USE ONLY	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	
Charge #	
Project	

REMARKS:

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No.

APO COC 6/5/97

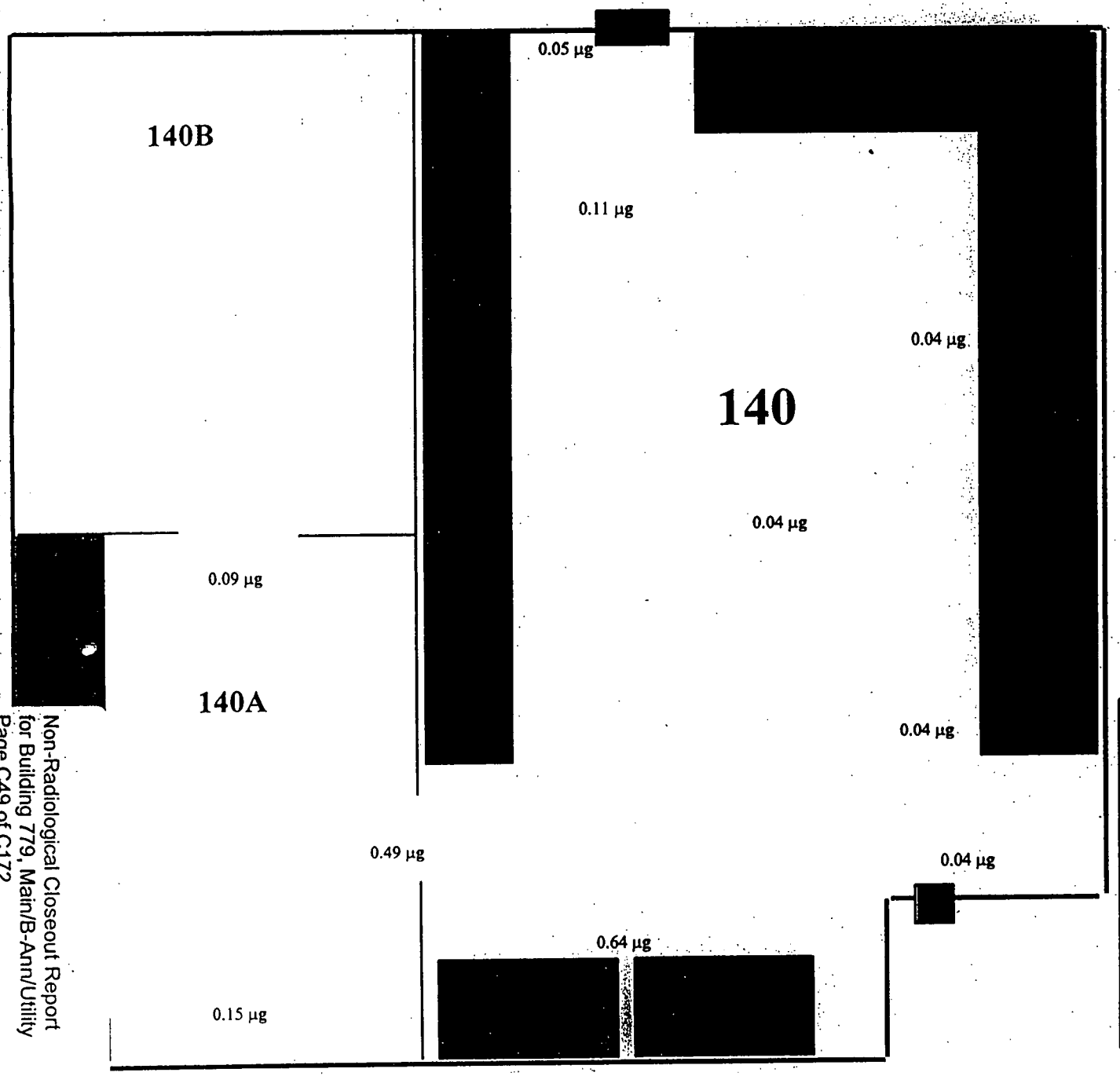
122



123

Building 779, Room 140, Beryllium Surface Control Levels

Mar 23, 1998



N

(OH) Overhead
(E) Equipment
•All other locations taken on the floor
•All results below surface control levels
•Reported in Micrograms per square foot

124

Recra LabNet - Lionville

INORGANICS DATA SUMMARY REPORT 03/23/98

CLIENT: K-H RIN#96D1430
WORK ORDER: 11830-001-001-9999-00

RECRA LOT #: 9803L961

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	779-98-1-13-B001-140	Beryllium, Total	0.04 u	UG	0.04	1.0
-002	779-98-1-13-B002-140	Beryllium, Total	0.04	UG	0.04	1.0
-003	779-98-1-13-B003-140	Beryllium, Total	0.49	UG	0.04	
-004	779-98-1-13-B004-140	Beryllium, Total	0.15	UG	0.04	
-005	779-98-1-13-B005-140	Beryllium, Total	0.09	UG	0.04	
-006	779-98-1-13-B006-140	Beryllium, Total	0.04	UG	0.04	
	779-98-1-13-B007-140	Beryllium, Total	0.04	UG	0.04	

PRELIMINARY

New RIN & assign
Lab error

125

Recra LabNet - Lionville

INORGANICS DATA SUMMARY REPORT 03/23/98

CLIENT: K-H KIN#5601366 RECRA LOT #: 9803L966
WORK ORDER: 11830-001-001-3559-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	779-98-3-13-SS#001	Beryllium, Total	0.04 u	UG	0.04	1.0
-002	779-98-3-13-SS#002	Beryllium, Total	0.04 u	UG	0.04	1.0
-003	779-98-3-13-SS#003	Beryllium, Total	0.04 u	UG	0.04	1.0
-004	779-98-3-13-SS#004	Beryllium, Total	0.04 u	UG	0.04	1.0
-005	779-98-3-13-SS#005	Beryllium, Total	0.04 u	UG	0.04	1.0
-006	779-98-3-13-SS#006	Beryllium, Total	0.04 u	UG	0.04	1.0
-007	779-98-3-13-SS#007	Beryllium, Total	0.04 u	UG	0.04	1.0
-008	779-98-3-13-SS#008	Beryllium, Total	0.04 u	UG	0.04	1.0
-009	779-98-3-13-SS#009	Beryllium, Total	0.04 u	UG	0.04	1.0
-010	779-98-3-13-SS#010	Beryllium, Total	0.04 u	UG	0.04	1.0
-011	779-98-3-13-SS#011	Beryllium, Total	0.04 u	UG	0.04	1.0
-012	779-98-3-13-SS#012	Beryllium, Total	0.04 u	UG	0.04	1.0
-013	779-98-3-13-SS#013	Beryllium, Total	0.04	UG	0.04	1.0
-014	779-98-3-13-SS#014	Beryllium, Total	0.04 u	UG	0.04	1.0
-015	779-98-3-13-SS#015	Beryllium, Total	0.38	UG	0.04	1.0
-016	779-98-3-13-SS#016	Beryllium, Total	0.04 u	UG	0.04	1.0
-017	779-98-3-13-SS#017	Beryllium, Total	0.10	UG	0.04	1.0
-018	779-98-3-13-008-140	Beryllium, Total	0.04	UG	0.04	1.0
-019	779-98-3-13-009-140	Beryllium, Total	0.11	UG	0.04	1.0
-020	779-98-3-13-010-140	Beryllium, Total	0.05	UG	0.04	1.0

126

1 3

SAMPLERS (Signature) Tonya Sangaline / T-779 X-5392 / Pager-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D-1540 LAB/LOCATION: RECRA

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	~~CONTAINER~~ Room	MATRIX	Preservation: Cooled to 4° C	NaOH	HNO3	H2SO4	HCl	Analytes: 241Pu/241Am
3/27/98	0920	N/A	N/A	E-001	779	140	1 WHAT-41 Filter Paper						P
				E-002									P
				E-003									P
				E-004									P
				F-005									P
				F-006									P
				F-007									P
				E-008									P
				F-009									P
				F-010									P
				OH-011									P
				OH-012									P

	Date	Time	Received By/Organization	Date	Time
NR	3/27/98	13:30	T Sangalino	3/27/98	13:30
	3/30/98	10:15	D Karen Olson	3/30/98	10:15
Olson	3/30/98	1455	J. Miller / ASI	3/30/98	1455

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

Charge # KT03CX00

Project 779 D&D

Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No _____

APO COC 6/5/97

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility

127

2 3

SAMPLERS (Signature) TONYA SANGALINE / T-779 X-5392 / PAGER-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D-1540 LAB/LOCATION: RECRA

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	~~CONTAINER~~ Room	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl		Analytes: NROIA001												
3/27/98	1040	N/A	N/A	F-013	779	157	WHAT-41 FILTER PAPER							P												
				F-014										P												
				F-015										P												
				F-016										P												
				E-017										P												
				OH-018										P												
				OH-019										P												
3/27/98	1400			F-020	779	160								P												
				F-021										P												
				F-022										P												
				F-023										P												
				F-024										P												

	Date	Time	Received By/Organization	Date	Time
[illegible]	3/27/98	3:30	T Sangaline	3-27-98	3:30
[illegible]	3/30/98	10:15	D Karen Olson	3-30-98	10:15
n Olson	3/30/98	1455	S. Miller / ASI	3/30/98	1455

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	

Charge # KT036X00

Project 779 D&D

irements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No _____

APO COC 6/5/97

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility Page C53 of C172

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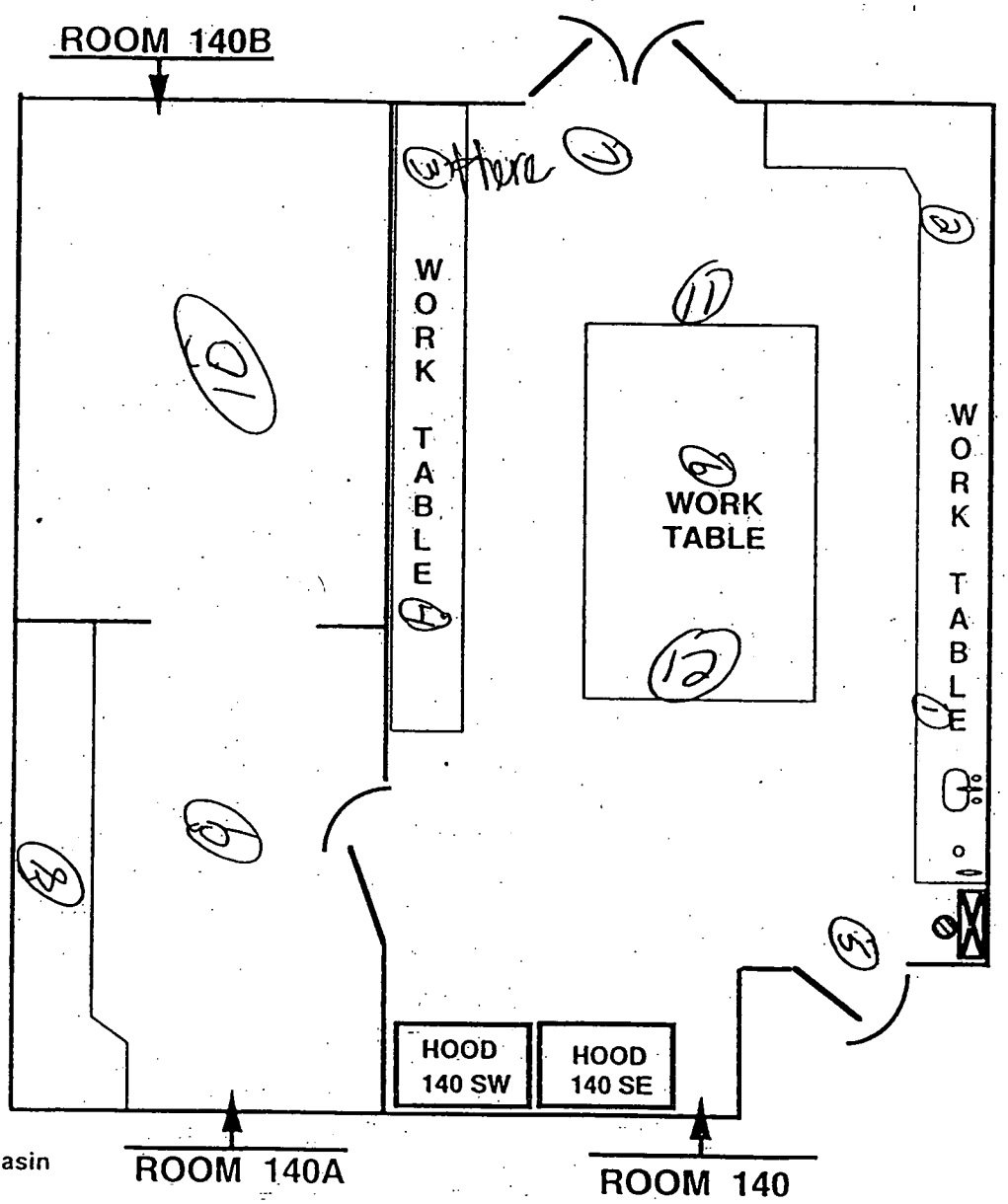
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

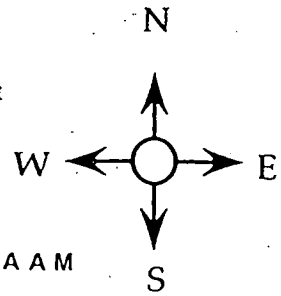
ROOM 140

Drawing Showing Survey Points



LEGEND:

- Wash Basin
- BB – B-BOX
- GB – GLOVE BOX
- Exhaust Duct
- –F N A D
- S –S A A M
- PS –PORTABLE S A A M
- –Air Head



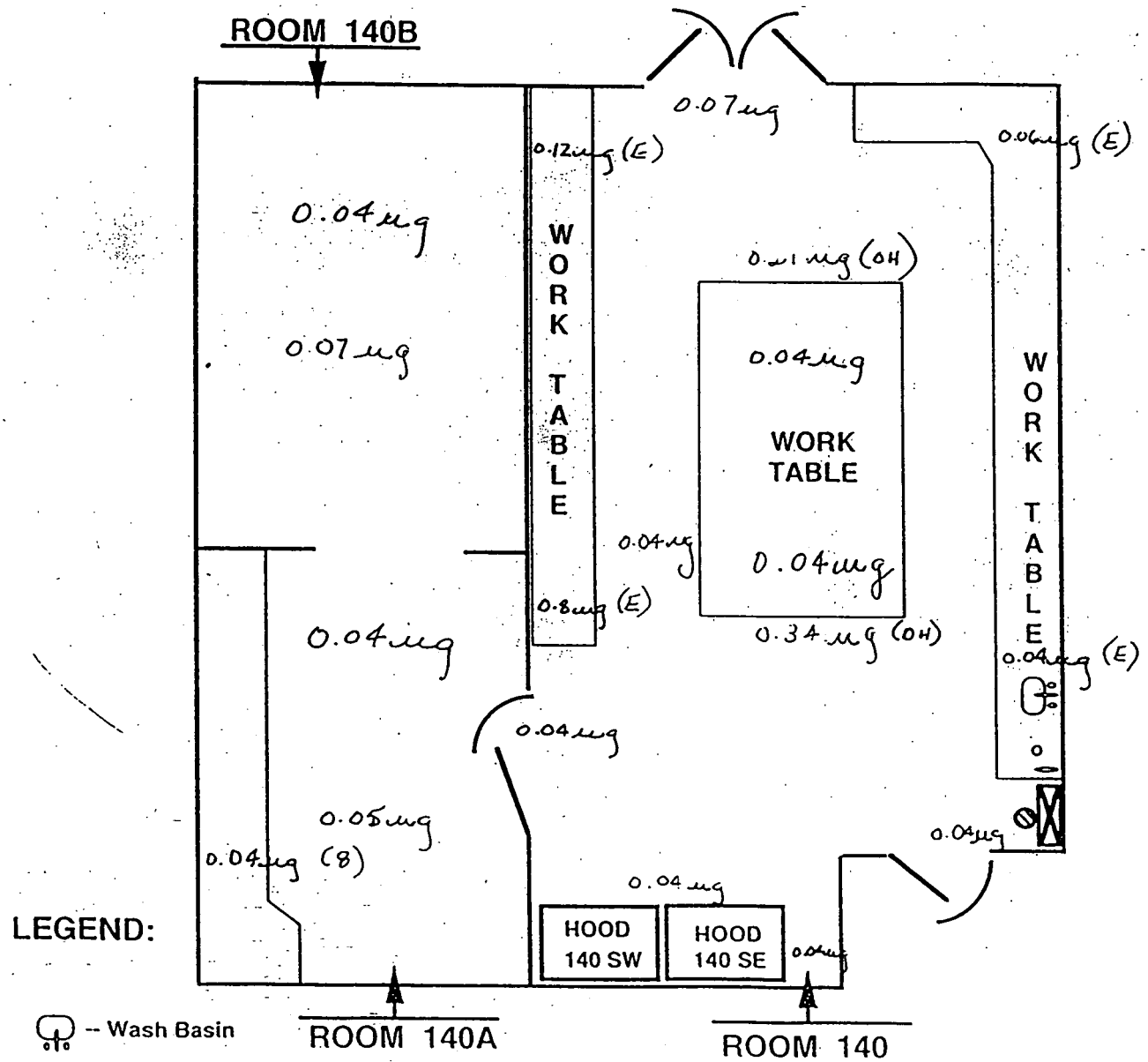
NOTES:

129

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

ROOM 140

Drawing Showing Survey Points



LEGEND:

- -- Wash Basin
- BB -- B-BOX
- GB -- GLOVE BOX
- -- Exhaust Duct
- -FNAD
- S -SAAM
- PS -PORTABLE SAAM
- -Air Head

N
W E
S

NOTES:

- (OH) — overhead
- (E) — equipment
- All other locations on floor
- All results below surface control levels.
- Reported in Micrograms per square foot
- Work table has been removed from middle of room

130

Recra LabNet - Lionville

INORGANICS DATA SUMMARY REPORT 04/07/98

CLIENT: K-H RIMS98D1840 RECRA LOT #: 9803L163

WORK ORDER: 11830-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	E-001	Beryllium, Total	0.04 u	UG	0.04	1.0
-002	E-002	Beryllium, Total	0.06	UG	0.04	1.0
-003	E-003	Beryllium, Total	0.12	UG	0.04	1.0
-004	E-004	Beryllium, Total	0.08	UG	0.04	1.0
-005	F-005	Beryllium, Total	0.04 u	UG	0.04	1.0
-006	F-006	Beryllium, Total	0.04	UG	0.04	1.0
-007	F-007	Beryllium, Total	0.07	UG	0.04	1.0
-008	E-008	Beryllium, Total	0.04 u	UG	0.04	1.0
-009	F-009	Beryllium, Total	0.05	UG	0.04	1.0
-010	F-010	Beryllium, Total	0.07	UG	0.04	1.0
-011	CH-011	Beryllium, Total	0.21	UG	0.04	1.0
-012	CH-012	Beryllium, Total	0.34	UG	0.04	1.0
-013	F-013	Beryllium, Total	0.04 u	UG	0.04	1.0
-014	F-014	Beryllium, Total	0.05	UG	0.04	1.0
-015	F-015	Beryllium, Total	0.04 u	UG	0.04	1.0
-016	F-016	Beryllium, Total	0.04 u	UG	0.04	1.0
-017	E-017	Beryllium, Total	0.04 u	UG	0.04	1.0
-018	CH-018	Beryllium, Total	0.04 u	UG	0.04	1.0
-019	CH-019	Beryllium, Total	0.04 u	UG	0.04	1.0
-020	F-020	Beryllium, Total	0.04 u	UG	0.04	1.0

14048

(3)

BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOM 140

March 20, 1999

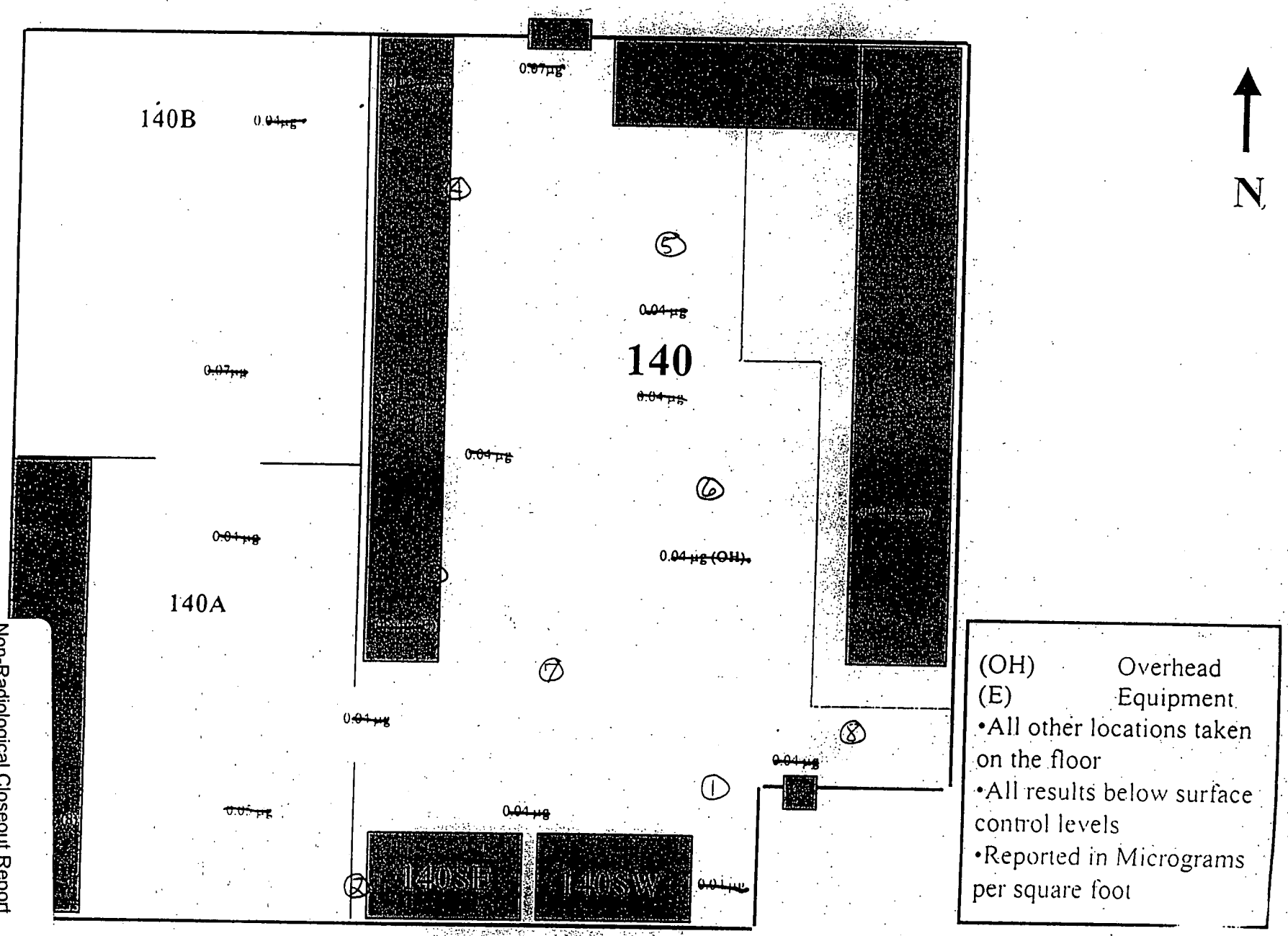
Sample Number	Reporting Limit micro grams	Location Totals [1] micro grams/100cm^2
779-99-03-09-13-140-01	0.1 ug	Floor <0.1 ug/100cm^2
779-99-03-09-13-140-02	0.1 ug	Floor 0.3 ug/100cm^2
779-99-03-09-13-140-03	0.1 ug	Floor <0.1 ug/100cm^2
779-99-03-09-13-140-04	0.1 ug	Floor <0.1 ug/100cm^2
779-99-03-09-13-140-05	0.1 ug	Floor <0.1 ug/100cm^2
779-99-03-09-13-140-06	0.1 ug	Floor <0.1 ug/100cm^2
779-99-03-09-13-140-07	0.1 ug	Floor <0.1 ug/100cm^2
779-99-03-09-13-140-08	0.1 ug	Floor <0.1 ug/100cm^2

[1] See attached map of room 140 for approximate smear locations on floor.

132

Building 779, Room 140, Beryllium Surface Control Levels

May 5, 1998



133

BUILDING 779

BERYLLIUM SMEAR RESULTS

Room 140

April 5, 1999

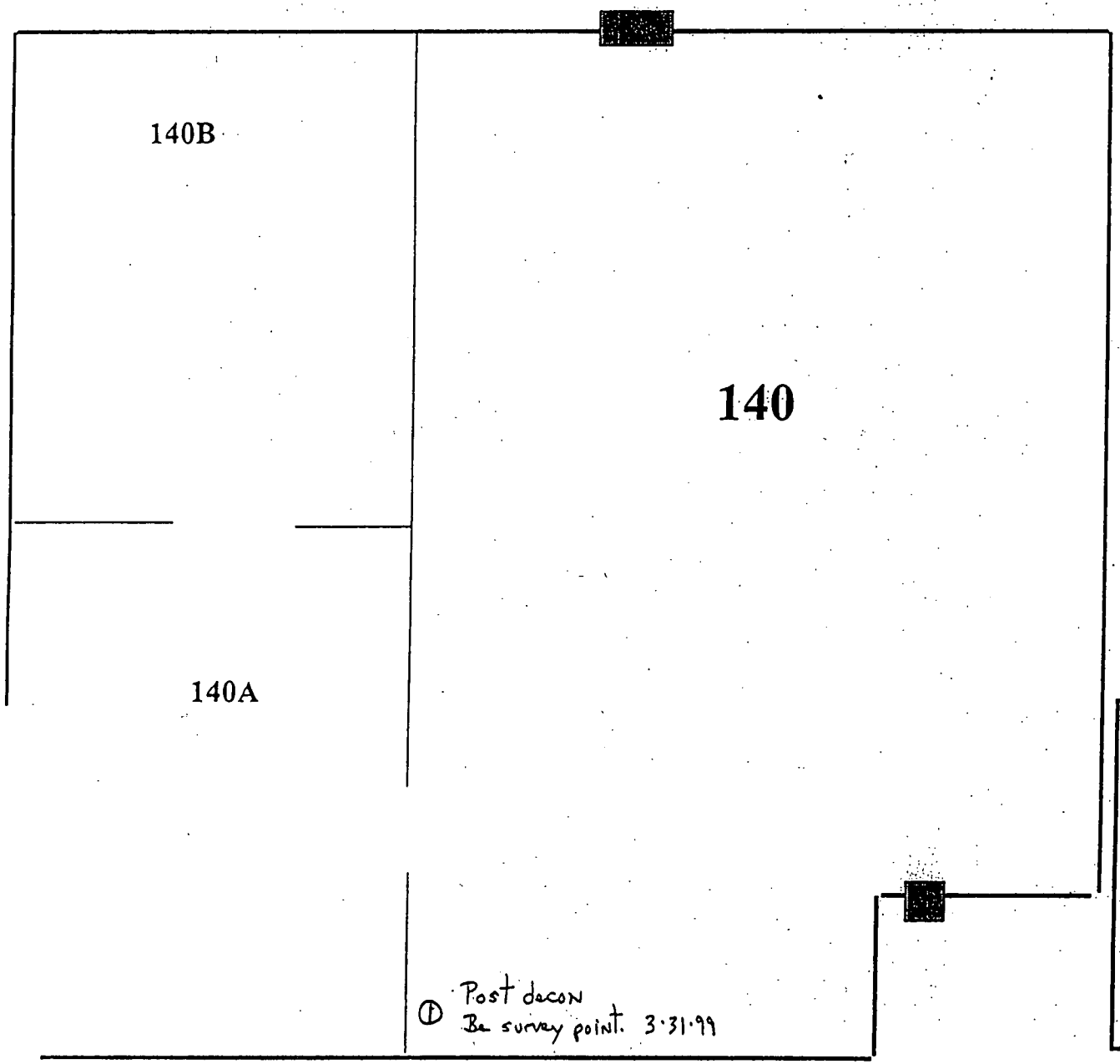
Sample Number	Reporting Limit micrograms	Location Totals micrograms/100cm²
779-99-03-31-13-140-01	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$

[1] See attached map of room 140 for approximate smear locations on floor. This result show a successful decon of the area identified.

134

Building 779, Room 140, Beryllium Surface Control Levels

May 5, 1998



N

(OH) Overhead
(E) Equipment
•All other locations taken on the floor
•All results below surface control levels
•Reported in Micrograms per square foot

135

	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft^2 (unless otherwise indicated)	Sample Method or RIN#
128	142	4/16/98	779-142-F-001	NA	Floor East Doorway	0.04	98D1800
129	142	4/16/98	779-142-F-002	NA	Floor South by Hot Water Pumps	0.04	98D1800
130	142	4/16/98	779-142-F-003	NA	Floor East of Chillers	0.04	98D1800
131	142	4/16/98	779-142-F-004	NA	Floor West next to Air Dryer	0.04	98D1800
132	142	4/16/98	779-142-F-005	NA	Floor East Side of Stairs	0.04	98D1800
133	142	4/16/98	779-142-F-006	NA	Floor South of Caged Area	0.04	98D1800
134	142	4/16/98	779-142-F-007	NA	Floor North of Kathabar Unit	0.04	98D1800
135	142	4/16/98	779-142-F-008	NA	Floor Upper Level East of Stairs	0.04	98D1800
136	142	4/16/98	779-142-F-009	NA	Floor Upper Next to West Wall	0.04	98D1800
137	142	4/16/98	779-142-F-010	NA	Floor Middle upper Level	0.04	98D1800
138	142	4/16/98	779-142-OH-011	NA	Overhead Upper Level North of Stairs	0.04	98D1800
139	142	4/16/98	779-142-OH-012	NA	Overhead Upper Level East Wall	0.04	98D1800
140	142	4/16/98	779-142-OH-013	NA	Overhead East of Kathabar Unit	0.04	98D1800
141	142	4/16/98	779-142-OH-014	NA	Overhead south of Caged Area	0.04	98D1800
142	142	4/16/98	779-142-OH-015	NA	Overhead West of kathabar Unit	0.04	98D1800
143	142	4/16/98	779-142-OH-016	NA	Overhead Hot Water Pumps West Wall	0.04	98D1800
144	142	4/16/98	779-142-OH-017	NA	Overhead South Chiller	0.04	98D1800
145	142	4/16/98	779-142-OH-018	NA	Overhead North Chiller	0.04	98D1800
146	142	4/16/98	779-142-OH-019	NA	Overhead North Doorway	0.04	98D1800
	142	4/16/98	779-142-OH-020	NA	Overhead West of Stairs	0.04	98D1800
	142	6/21/99	779-99-05-11-13-142-01	0.2	Exhaust elbow interior	<0.1 q/100cm^2	*
	142	6/21/99	779-99-05-11-13-142-02	0.2	Exhaust elbow interior	<0.1 q/100cm^2	*
	142	6/21/99	779-99-05-11-13-142-03	0.2	Exhaust elbow interior	<0.1 q/100cm^2	*
	142	6/21/99	779-99-05-11-13-142-04	0.2	Exhaust elbow interior	<0.1 q/100cm^2	*

...ysis for Be using NIOSH method 7300 elements by IGP

136

SAMPLERs (Signature) TONYA SANGALINE / T-779A X-5392 / D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1800 LAB/LOCATION: RECRA

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

Preservation: Cooled to 4°C; NaOH; HNO3; H2SO4; HCl

Analytes: NR01A001; BE

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	NR01A001	BE
4-16-98	1000	001	001	142-1	FLOOR	142-1	WHAT-41 FILTER PAPER	D	
		002	002	142-2		142-2			
		003	003	142-3		142-3			
		004	004	142-4		142-4			
		005	005	142-5		142-5			
		006	006	142-6		142-6			
		007	007	142-7		142-7			
		008	008	142-8		142-8			
		009	009	142-9		142-9			
		010	010	142-10		142-10			
		011	011	142-11	OVERHEAD	142-11			
		012	012	142-12		142-12			

quished By:	Date	Time	Received By/Organization	Date	Time
Bevin	4-16-98	14:10	Tonya J Sangaline	4-16-98	14:10
Sangaline	4-16-98	14:10	D Kenon Olson		
Kenon Olson	4-23-98	09:30	[illegible]	4/30/98	0930

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	

MARKS:

Charge # KT8CX00

Project 779 D&D

hipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No.

APO COC 6/5/9

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility Page 137

137

SAMPLERS (Signature) Tonya Sangaline / T-779A X-5392 / D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1800 LAB/LOCATION: RECRA

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analytes: Uranium/Rad	Be
4-16-98	1330	013	013	142-13	OUCRECRA	142-13	WMAT-41 FILTER PAPER						R	
		014	014	142-14		142-14								
		015	015	142-15		142-15								
		016	016	142-16		142-16								
		017	017	142-17		142-17								
		018	018	142-18		142-18								
		019	019	142-19		142-19								
		020	020	142-20		142-20								

Relinquished By:	Date	Time	Received By/Organization	Date	Time
Beer AL	4-16-98	14:10	Tonya J. Sangaline	4-16-98	14:10
Sangaline	4-16-98	14:10	D. Karen Olson		
Karen Olson	4-23-98	0900	[illegible]	4/23/98	0932

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	

REMARKS:

Charge ~~BKT06X00~~ KT03X00

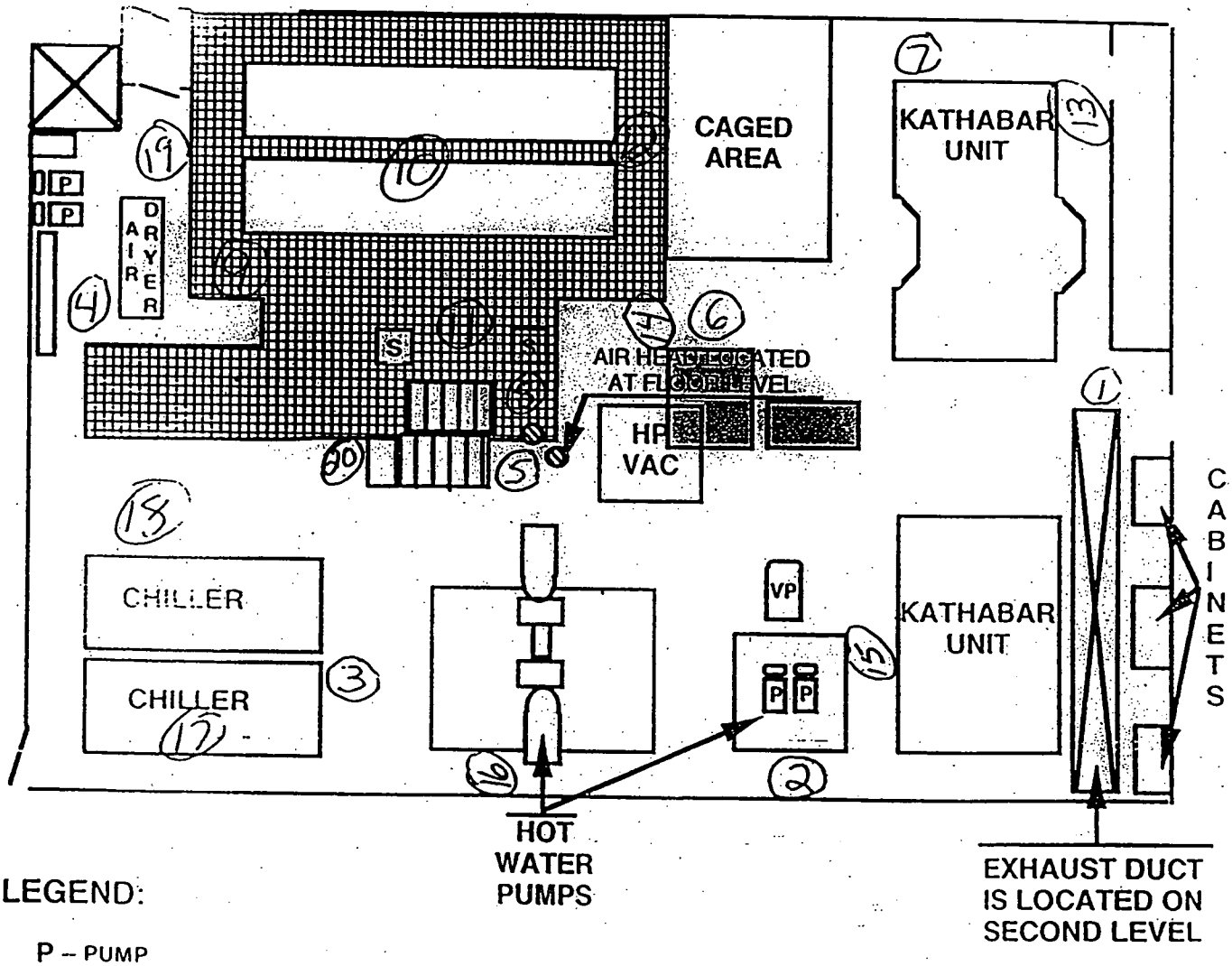
Project 779 D&D

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No. _____

APO COC 6/5/97

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

ROOM 142



LEGEND:

P – PUMP

VP – VACUUM PUMP

FP – FILTER PLENUM

-- Exhaust Duct

--Suppiy Duct

--F N A D

S --S A A M

PS --PORTABLE S A A M

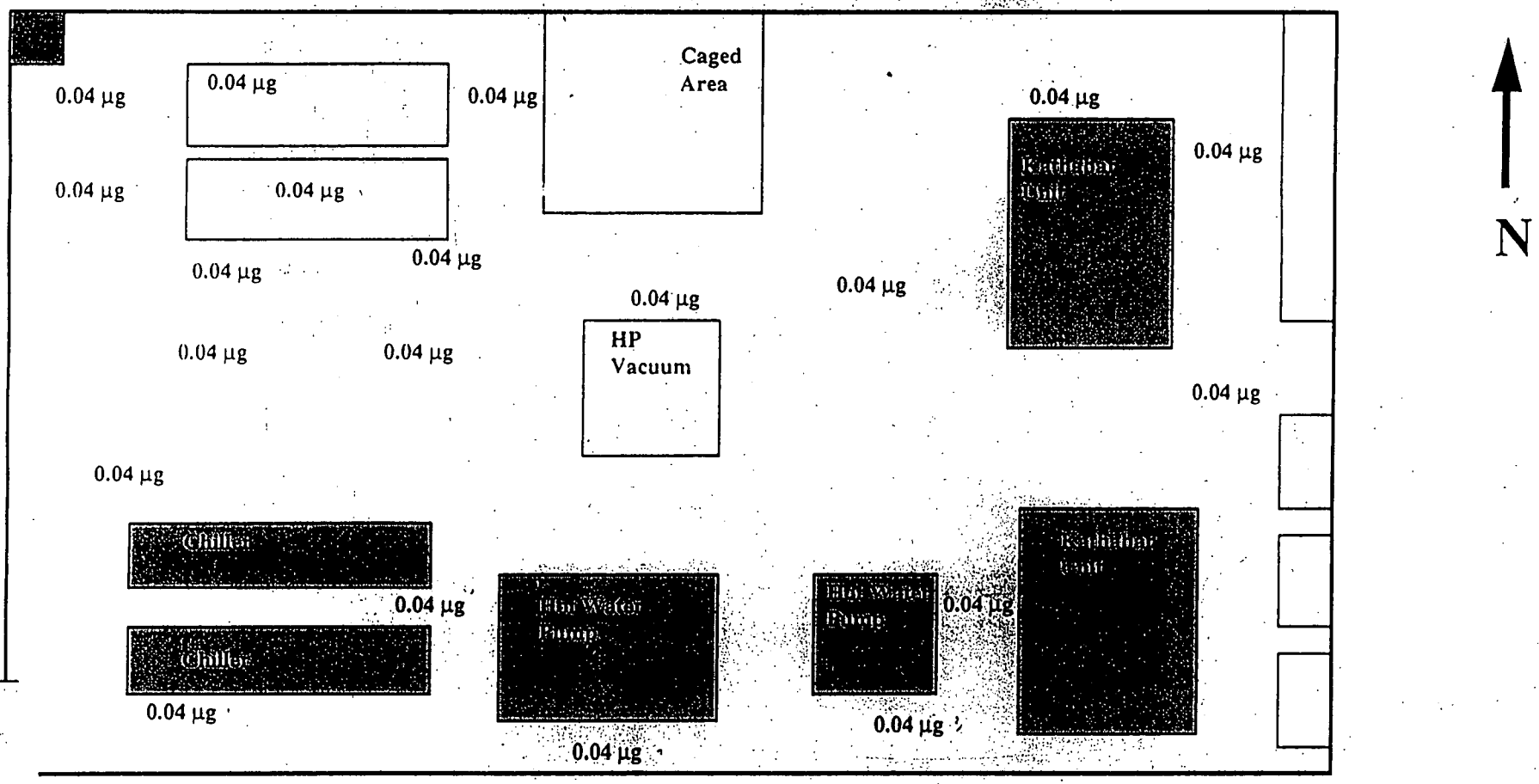
--Air Head

N
W E
S

NOTES:

Building 779, Room 142 Beryllium Surface Control Levels

May 5, 1998



- All locations taken overhead
- All results below surface control levels
- Reported in Micrograms per square foot

CLIENT: F-H RIN#98D1800 RECRA LOT #: 9804L536

WORK ORDER: 11830-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	001.001.142-1	Beryllium, Total	0.04 u	UG	0.04	1.0
-002	002.001.142-2	Beryllium, Total	0.04 u	UG	0.04	1.0
-003	003.001.142-3	Beryllium, Total	0.04 u	UG	0.04	1.0
-004	004.001.142-4	Beryllium, Total	0.04 u	UG	0.04	1.0
-005	005.001.142-5	Beryllium, Total	0.04 u	UG	0.04	1.0
-006	006.001.142-6	Beryllium, Total	0.04 u	UG	0.04	1.0
-007	007.001.142-7	Beryllium, Total	0.04 u	UG	0.04	1.0
-008	008.001.142-8	Beryllium, Total	0.04 u	UG	0.04	1.0
-009	009.001.142-9	Beryllium, Total	0.04 u	UG	0.04	1.0
-010	010.001.142-10	Beryllium, Total	0.04 u	UG	0.04	1.0
-011	011.001.142-11	Beryllium, Total	0.04 u	UG	0.04	1.0
-012	012.001.142-12	Beryllium, Total	0.04 u	UG	0.04	1.0
-013	013.001.142-13	Beryllium, Total	0.04 u	UG	0.04	1.0
-014	014.001.142-14	Beryllium, Total	0.04 u	UG	0.04	1.0
-015	015.001.142-15	Beryllium, Total	0.04 u	UG	0.04	1.0
-016	016.001.142-16	Beryllium, Total	0.04 u	UG	0.04	1.0
-017	017.001.142-17	Beryllium, Total	0.04 u	UG	0.04	1.0
-018	018.001.142-18	Beryllium, Total	0.04 u	UG	0.04	1.0
-019	019.001.142-19	Beryllium, Total	0.04 u	UG	0.04	1.0
-020	020.001.142-20	Beryllium, Total	0.04 u	UG	0.04	1.0

BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOM 142

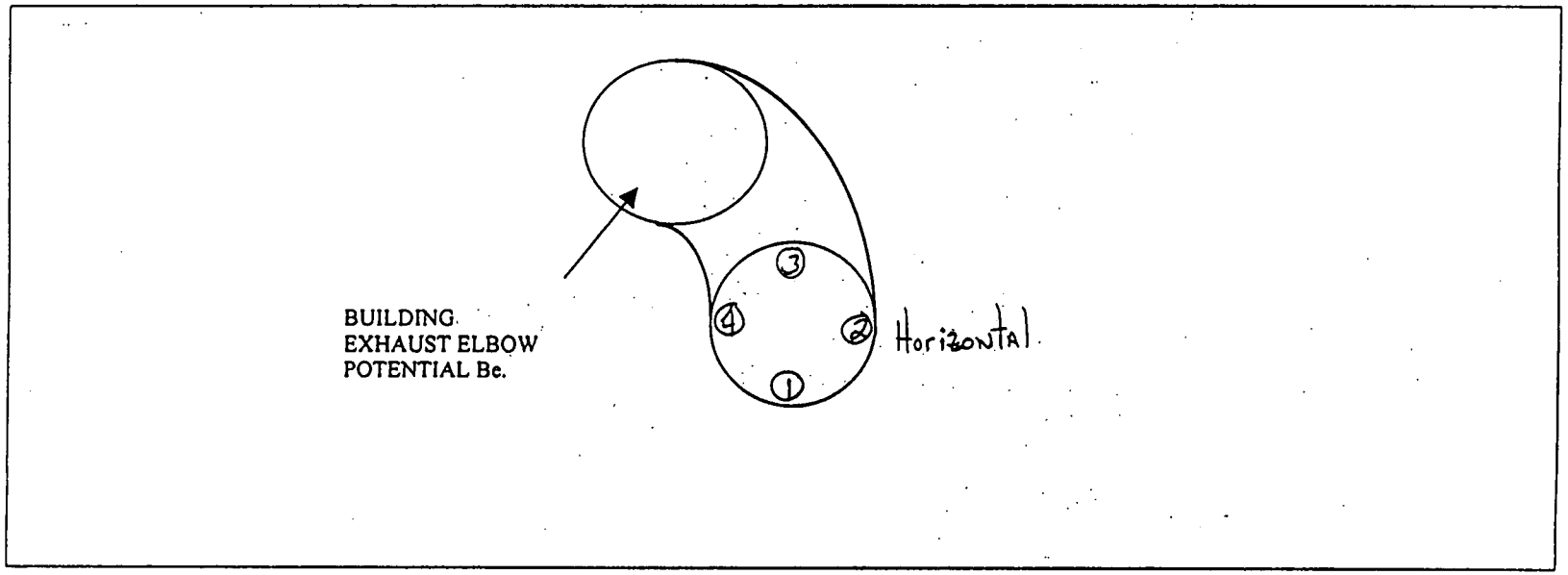
June 21, 1999

Sample Number	Reporting Limit micro grams	Location Points micro grams/100cm
779-99-05-11-13-142-01	0.1 ug	Room 162 exhaust elbow interior <0.1 ug/100cm^2
779-99-05-11-13-142-02	0.1 ug	Room 162 exhaust elbow interior <0.1 ug/100cm^2
779-99-05-11-13-142-03	0.1 ug	Room 162 exhaust elbow interior <0.1 ug/100cm^2
779-99-05-11-13-142-04	0.1 ug	Room 162 exhaust elbow interior <0.1 ug/100cm^2

[1] See attached map of elbow exhaust interior for smear locations. Elbow was removed from room 142.

142

ROOM 142 ELBOW DUCT



	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft^2 (unless otherwise indicated)	Sample Method or RIN#
493	201	4/8/98	W-201-01	NA	Fire Extinguisher north wall	0.09	98D1678
494	201	4/8/98	W-201-02	NA	Door north wall	0.09	98D1678
495	201	4/8/98	F-201-03	NA	Floor North Doorway	0.09	98D1678
496	201	4/8/98	F-201-04	NA	Floor Middle of Room	0.09	98D1678
497	201	3/19/99	779-99-03-17-13-201-01	0.01	Floor Carpet	<0.01 q/100cm^2	*
498	201	3/19/99	779-99-03-17-13-201-02	0.01	Floor Carpet	<0.01 q/100cm^2	*
499	201	3/19/99	779-99-03-17-13-201-03	0.01	Floor Carpet	<0.01 q/100cm^2	*
500	201	3/19/99	779-99-03-17-13-201-04	0.01	Floor Carpet	<0.01 q/100cm^2	*
501	201	3/19/99	779-99-03-17-13-201-05	0.01	Floor Carpet	<0.01 q/100cm^2	*
502	201	3/19/99	779-99-03-17-13-201-06	0.01	Floor Carpet	<0.01 q/100cm^2	*

* Analysis for Be using NIOSH method 7300 elements by IGP

144

SAMPLERS (Signature) TONYA SANGALINE / T-779 X-5392 / D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1678 LAB/LOCATION: ~~RECRA~~ DKO 4-8-98 SouthWest of Ollai

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analytes: URANIUM	BE
4/8/98	1000	001	001	201-1	EXTINGUISHER 779	201-1	WHAT-41 FILTER PAPER						R	
		002	002	201-2	DOOR	201-2								
		003	003	201-3	FLOOR	201-3								
		004	004	201-4	FLOOR	201-4								

...ished By:	Date	Time	Received By/Organization	Date	Time
[signature]	4-8-98	11:30	Karen Olson	4-8-98	11:30
[signature]	4-8-98	1430	D. Miller / ASI	4-8-98	1430

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	

...RKS:

Charge # KT03CX00

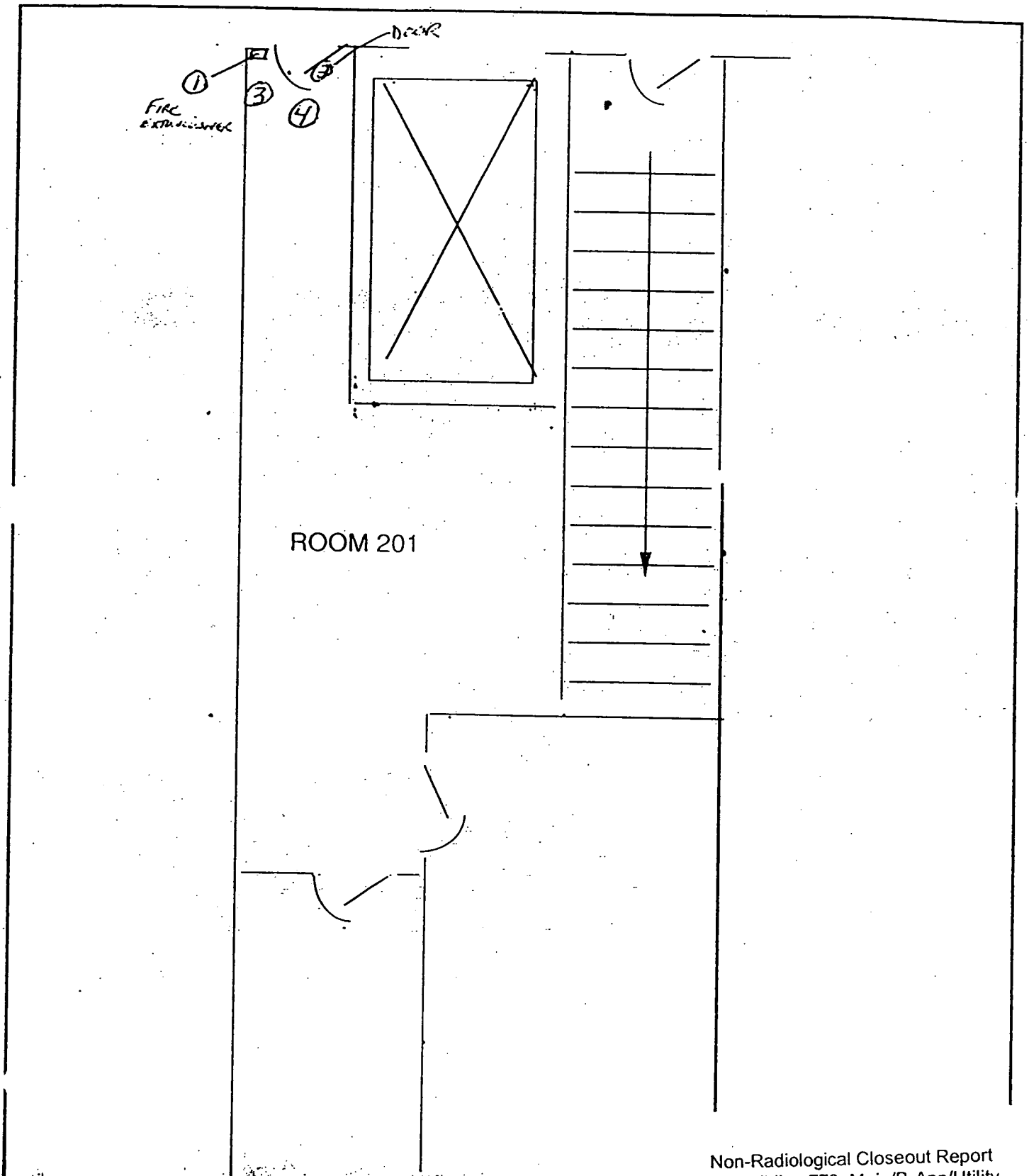
Project 779 D&D

...pping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No _____

APO COC 6/5/

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

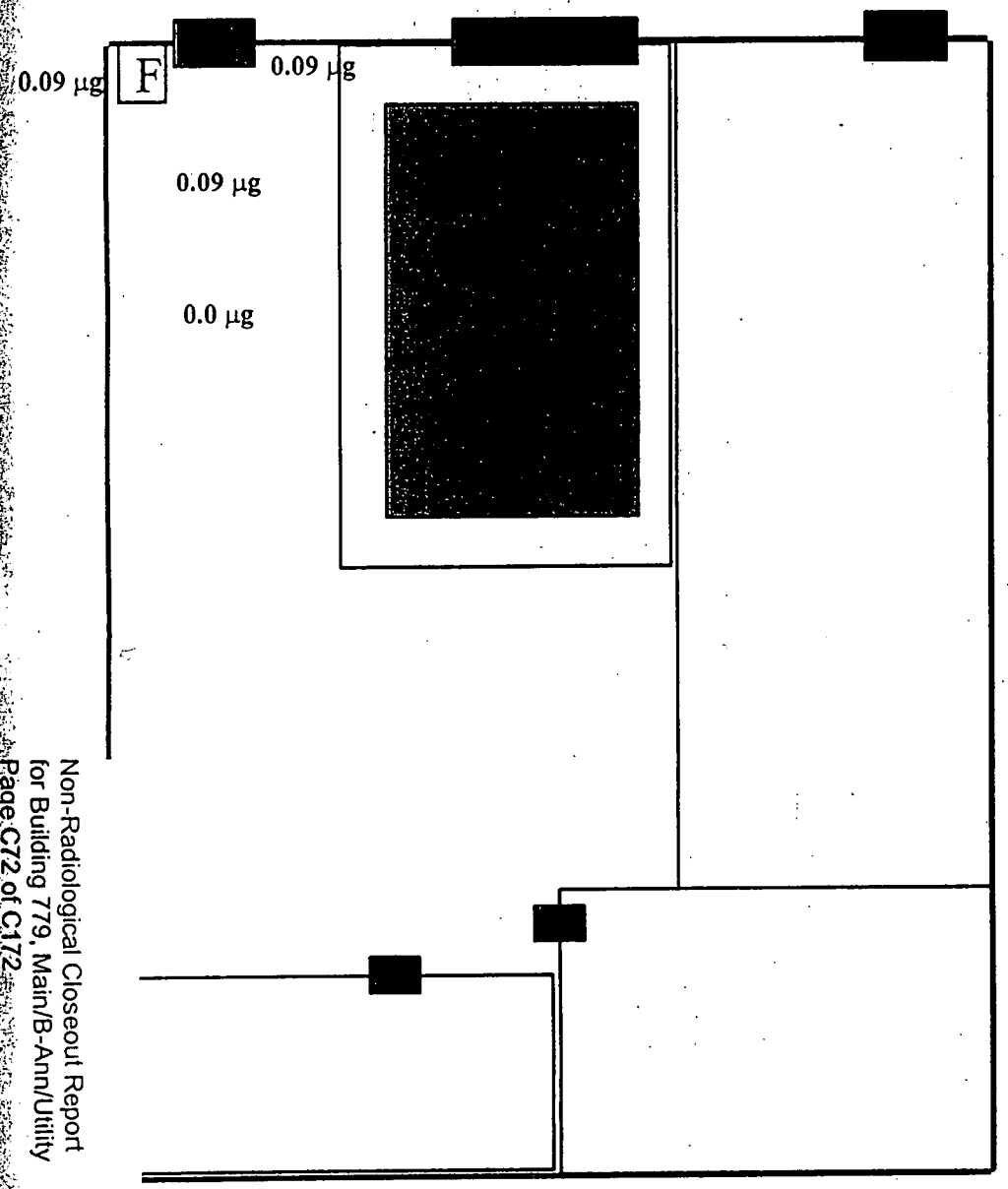
Radiological Operations
Drawing Showing Survey Points



146

Building 779, Room 201 Beryllium Surface Control Levels

May 5, 1998



All smears taken on the floor
•All results below surface control levels
•Reported in Micrograms per square foot

147

INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium **Conc. Units:** UG/F
CAS No.: 7440-41-7 **RIN #:** 98D1678
Matrix: FILTER

Laboratory ID:	Client Sample ID:	Conc.	Flag
33537.01	228-1	0.09	U
33537.02	228-2	0.09	U
33537.03	228-4	0.09	U
33537.04	228-5	0.09	U
33537.05	228-6	0.09	U
33537.06	228-7	0.09	U
33537.07	228-8	0.09	U
33537.08	228-9	0.09	U
33537.09	228-10	0.09	U
33537.10	228-11	0.09	U
33537.11	228-13	0.09	U
33537.12	228-14	0.09	U
33537.13	228-16	0.09	U
33537.14	228-17	0.09	U
33537.15	222-18	0.09	U
33537.16	222-19	0.09	U
33537.17	222-20	0.09	U
33537.18	222-21	0.09	U
33537.19	222-22	0.09	U
33537.20	222-23	0.09	U
33537.21	222-26	0.09	U
33537.22	234-27	0.09	U
33537.23	234-29	0.09	U
33537.24	234-30	0.09	U
33537.25	201-1	0.09	U
33537.26	201-2	0.09	U
33537.27	201-3	0.09	U
33537.28	201-4	0.09	U

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

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BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOM 201

March 19, 1999

Sample Number	Reporting Limit micro grams	Location Totals micro grams/100cm²
779-99-03-17-13-201-01	0.01 ug	Floor carpet <0.01 ug/100cm²
779-99-03-17-13-201-02	0.01 ug	Floor carpet <0.01 ug/100cm²
779-99-03-17-13-201-03	0.01 ug	Floor carpet <0.01 ug/100cm²
779-99-03-17-13-201-04	0.01 ug	Floor carpet <0.01 ug/100cm²
779-99-03-17-13-201-05	0.01 ug	Floor carpet <0.01 ug/100cm²
779-99-03-17-13-201-06	0.01 ug	Floor carpet <0.01 ug/100cm²

[1] See attached map of room 201 for approximate smear locations on floor.

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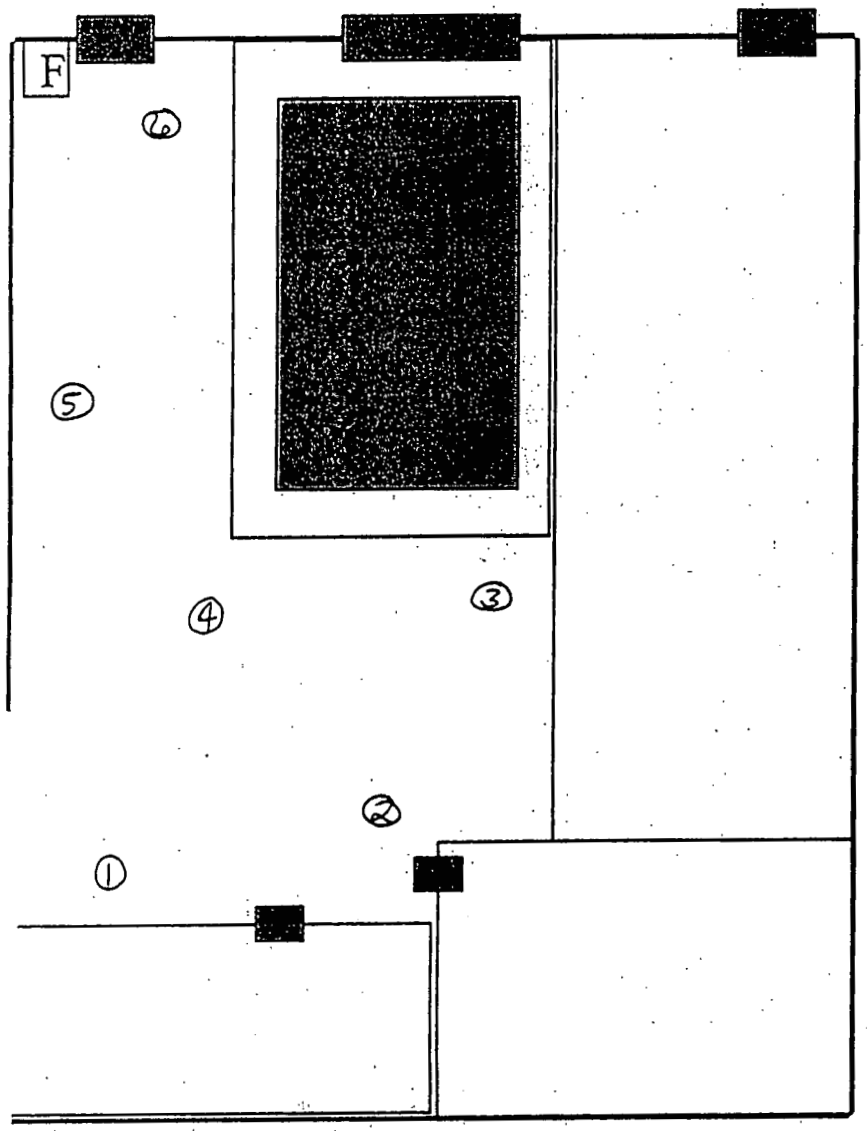
Building 779, Room 201

April 15, 1999



	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft² (unless otherwise indicated)	Sample Method or RIN#
503	208	6/21/99	779-99-05-13-13-208-01	0.2	Plexiglas Access point #4	<0.1 q/100cm²	*
504	208	6/21/99	779-99-05-13-13-208-02	0.2	Plexiglas Access point #4	<0.1 q/100cm²	*
505	209	6/21/99	779-99-05-12-13-209-01	0.2	Flange Acess Point #1	<0.1 q/100cm²	*
506	209	6/21/99	779-99-05-12-13-209-02	0.2	Flange Acess Point #1	<0.1 q/100cm²	*
507	214	6/21/99	779-99-05-13-13-214-01	0.2	Flange Access point #2	1.2 q/100cm²	*
508	214	6/21/99	779-99-05-13-13-214-02	0.2	Flange Access point #2	0.9 q/100cm²	*

*Analysis for Be using NIOSH method 7300 elements by IGP

BUILDING 779

BERYLLIUM SMEAR RESULTS

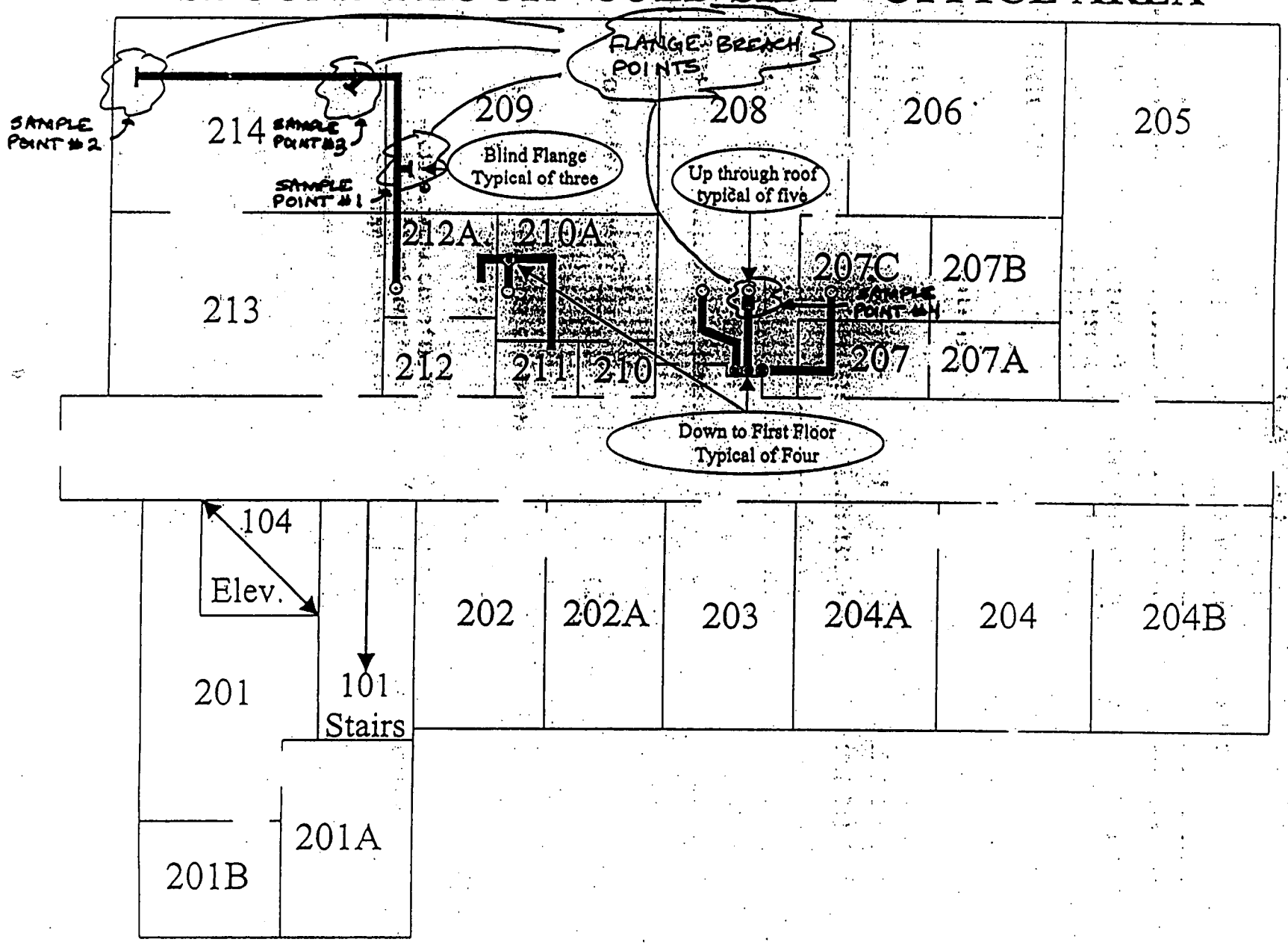
ROOMS 208, 209 AND 214

June 21, 1999

Sample Number	Reporting Limit micrograms	Location Totals micro grams/100cm²
779-99-05-12-13-209-01	0.1_{ug}	Flange Access Point #1 $<0.1_{ug/100cm^2}$
779-99-05-12-13-209-02	0.1_{ug}	Flange Access Point #1 $<0.1_{ug/100cm^2}$
779-99-05-13-13-208-01	0.1_{ug}	Plexiglas Access Point #4 $<0.1_{ug/100cm^2}$
779-99-05-13-13-208-02	0.1_{ug}	Plexiglas Access Point #4 $<0.1_{ug/100cm^2}$
779-99-05-13-13-214-01	0.1_{ug}	Flange Access Point #2 $1.2_{ug/100cm^2}$
779-99-05-13-13-214-02	0.1_{ug}	Flange Access Point #2 $0.9_{ug/100cm^2}$

[1] See attached map of rooms 208, 209 & 214 for smear locations.

SECOND FLOOR *"COLD SIDE"* OFFICE AREA



APPENDIX 5
PAGE 3 OF 3

	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft^2 (unless otherwise indicated)	Sample Method or RIN#
509	217	4/14/98	779-217-01	NA	Floor north doorway	0.09	98D1783
510	217	4/14/98	779-217-02	NA	Floor Middle of Room	0.09	98D1783
511	217	4/14/98	779-217-03	NA	Floor southwest corner	0.09	98D1783
512	217	4/14/98	779-217-04	NA	Floor southeast corner	0.09	98D1783
513	217	4/14/98	779-217-05	NA	Floor northeast corner	0.09	98D1783
514	217	4/14/98	779-217-06	NA	Overhead above the spectrometer	0.09	98D1783
515	217	4/14/98	779-217-07	NA	Overhead GB 330-371	0.09	98D1783
516	217	4/14/98	779-217-08	NA	Overhead GB 963	0.09	98D1783
517	217	4/14/98	779-217-09	NA	Overhead balance Hood 217E	0.09	98D1783
518	217	4/14/98	779-217-010	NA	Overhead Storage cabinet west wall	0.09	98D1783

• Analysis for Be using NIOSH method 7300 elements by IGP

1 2

SAMPLERS (Signature) TONYA SANGALINE / T-779 X-5392 / D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1783 LAB/LOCATION: ~~RECRA~~ SW of Oklahoma

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl		Analytes: NR01A001	BE											
4-14-98	0900	001	001	217-01	FLOOR	217-1	WHAT-41 FILTER PAPER							R												
		002	002	217-2		217-2																				
		003	003	217-3		217-3																				
		004	004	217-4		217-4																				
		005	005	217-5		217-5																				
		006	006	217-6	OVERHEAD	217-6																				
		007	007	217-7		217-7																				
		008	008	217-8		217-8																				
		009	009	217-9		217-9																				
		010	010	217-10		217-10																				
	1030	011	011	218-11	FLOOR	218-11																				
		012	012	218-12		218-12																				

...ished By:	Date	Time	Received By/Organization	Date	Time
Sekhar	4-14-98	16 00	D Karen Olsen	4-14-98	16 00
Karen Olsen	4-16-98	14 10	K Make	4-16-98	14 10

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

...RKS:

Charge # KT03CX00

Project 779 D&D

...Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No. _____

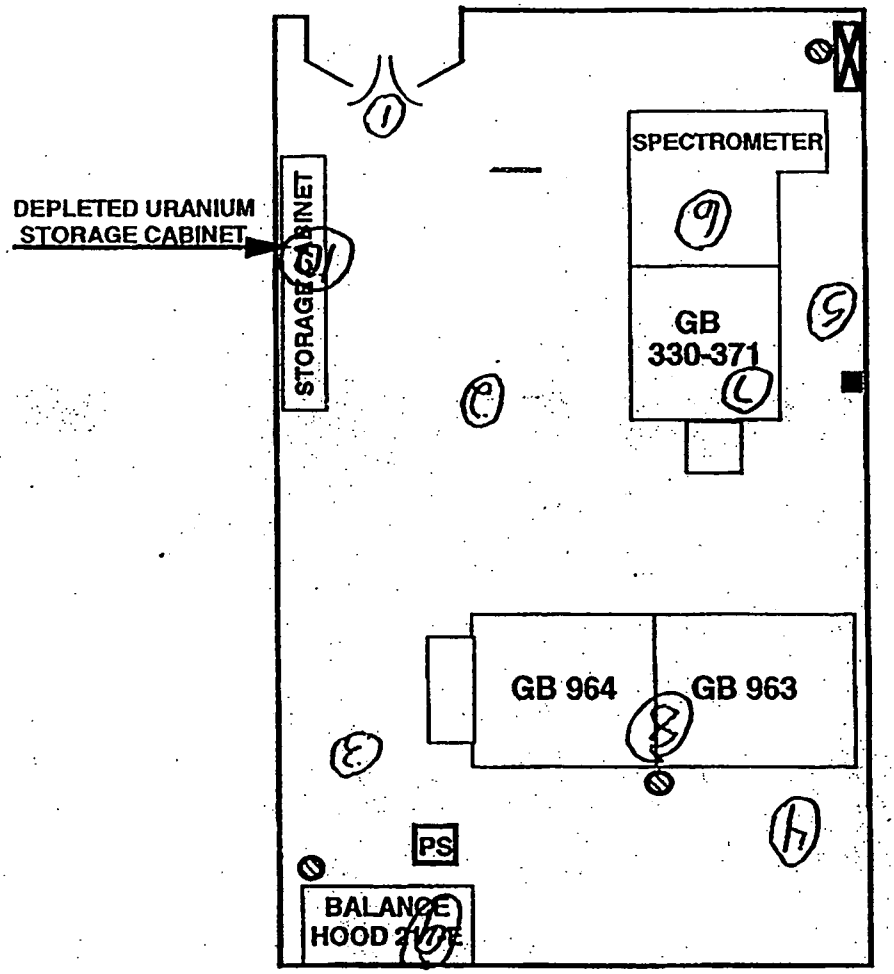
Non-Radiological Closeout Report for Building 779 Main/B-Ann/Utility Page 155 of 177

155

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

ROOM 217

Drawing Showing Survey Points



LOC NUMBER - 980325-B779-01

LEGEND:

GB – Glove Box

– Exhaust Duct

– F N A D

S – S A A M

PS – PORTABLE S A A M

– Air Head

N
W E
S

NOTES:

PAGE 3 of 4

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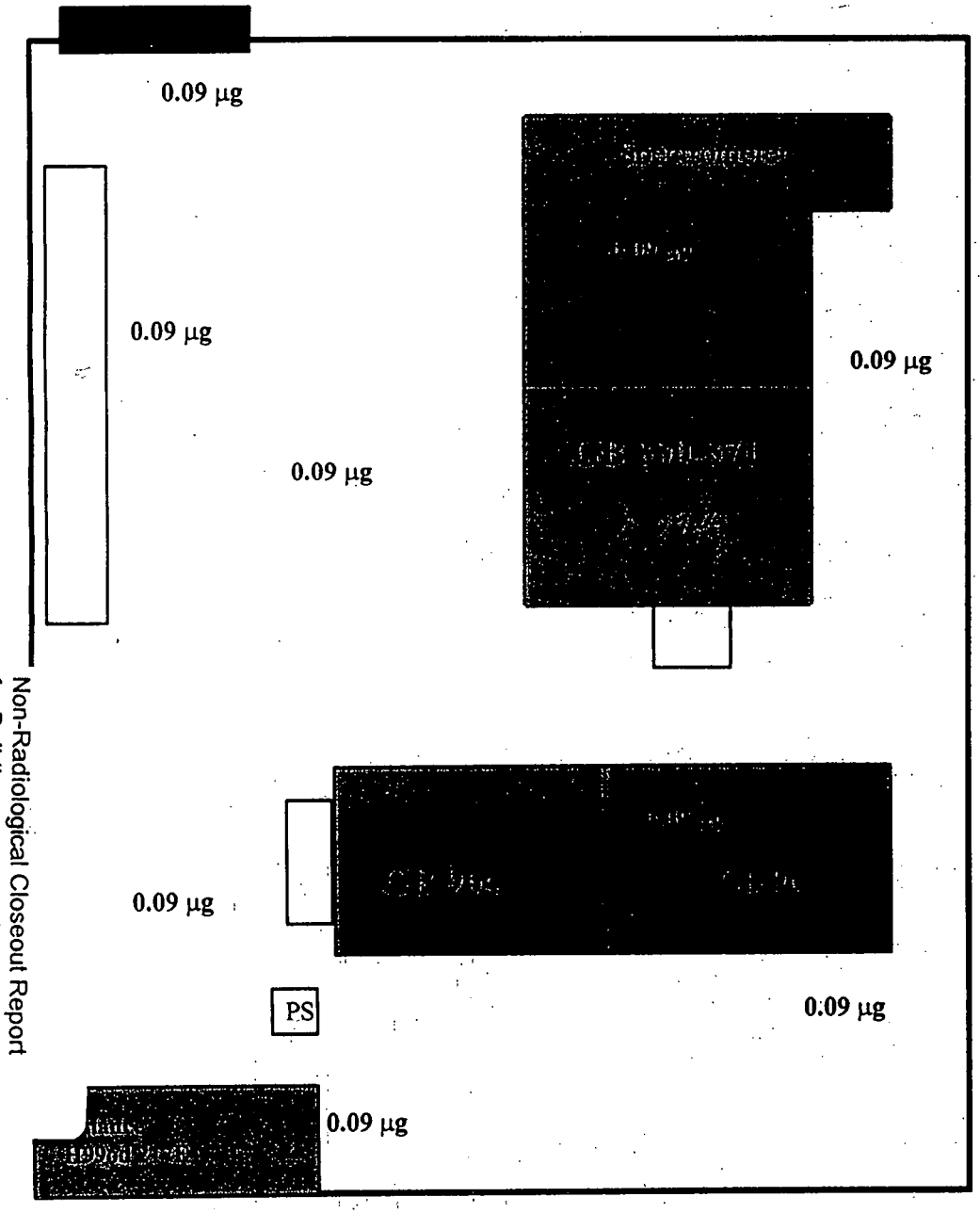
Building 779, Room 217 Beryllium Surface Control Levels

May 5, 1998



N

- All smears taken on the floor
- All results below surface control levels
- Reported in Micrograms per square foot

INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium
CAS No.: 7440-41-7
Matrix: FILTER

Conc. Units: UG/F
RIN #: 98D1783

Laboratory ID:	Client Sample ID:	Conc.	Flag
33636.01	217-01	0.09	U
33636.02	217-2	0.09	U
33636.03	217-3	0.09	U
33636.04	217-4	0.09	U
33636.05	217-5	0.09	U
33636.06	217-6	0.09	U
33636.07	217-7	0.09	U
33636.08	217-8	0.09	U
33636.09	217-9	0.09	U
33636.10	217-10	0.09	U
33636.11	218-11	0.09	U
33636.12	218-12	0.09	U
33636.13	218-13	0.09	U
33636.14	218-14	0.09	U
33636.15	218-15	0.09	U
33636.16	218-16	0.09	U
33636.17	218-17	0.09	U
33636.18	218-18	0.09	U
33636.19	218-19	0.09	U
33636.20	218-20	0.09	U

217

Room 217

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

158

	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft² (unless otherwise indicated)	Sample Method or RIN#
519	218	4/14/98	779-218-F-011	NA	Floor South Doorway	0.09	98D1783
520	218	4/14/98	779-218-F-012	NA	Floor Middle of Room	0.09	98D1783
521	218	4/14/98	779-218-F-013	NA	Floor northeast corner	0.09	98D1783
522	218	4/14/98	779-218-F-014	NA	Floor southeast corner	0.09	98D1783
523	218	4/14/98	779-218-OH-015	NA	Overhead Hood 218SW	0.09	98D1783
524	218	4/14/98	779-218-OH-016	NA	Overhead Hood 218S	0.09	98D1783
525	218	4/14/98	779-218-OH-017	NA	Overhead GB 971	0.09	98D1783
526	218	4/14/98	779-218-OH-018	NA	Overhead B-Box 218SE	0.09	98D1783
527	218	4/14/98	779-218-E-019	NA	Equipment Gamma Source	0.09	98D1783
528	218	4/14/98	779-218-OH-020	NA	Overhead Middle of west wall	0.09	98D1783
529	218	8/6/99	779-07241999-13-501	0.1	Source Container Top	<0.1 q/100cm²	*
530	218	8/6/99	779-07241999-13-502	0.1	Source Container Top	<0.1 q/100cm²	*
531	218	8/6/99	779-07241999-13-503	0.1	Source Container Top	<0.1 q/100cm²	*
532	218	8/6/99	779-07241999-13-504	0.1	Control Panel	<0.1 q/100cm²	*
533	218	8/6/99	779-07241999-13-505	0.1	Skid Top	<0.1 q/100cm²	*
534	218	8/6/99	779-07241999-13-506	0.1	Panel Exterior	<0.1 q/100cm²	*
535	218	8/18/99	779-08101999-15-501	0.1	Cobalt Source Container, Int	<0.1 q/100cm²	99Z9494
	218	8/18/99	779-08101999-15-502	0.1	Cobalt Source Container, Int	<0.1 q/100cm²	99Z9494
	218	8/18/99	779-08101999-15-503	0.1	Cobalt Source Container, Int	<0.1 q/100cm²	99Z9494
	218	8/18/99	779-08101999-15-504	0.1	Cobalt Source Container, Int	<0.1 q/100cm²	99Z9494
	218	8/18/99	779-08101999-15-505	0.1	Cobalt Source Container, Int	<0.1 q/100cm²	99Z9494
	218	8/18/99	779-08101999-15-506	0.1	Cobalt Source Container, Int	<0.1 q/100cm²	99Z9494
	218	8/18/99	779-08101999-15-507	0.1	Cobalt Source Container, Int	<0.1 q/100cm²	99Z9494
	218	8/18/99	779-08121999-15-501	0.1	Ductwork	<0.1 q/100cm²	99Z9494
	218	8/18/99	779-08121999-15-502	0.1	Ductwork	<0.1 q/100cm²	99Z9494
	218	8/18/99	779-08121999-15-503	0.1	Ductwork	<0.1 q/100cm²	99Z9494
	218	8/18/99	779-08121999-15-504	0.1	Ductwork	<0.1 q/100cm²	99Z9494

* Analysis for Be using NIOSH method 7300 elements by IGP

1 2

SAMPLERS (Signature) TONYA SANGALINE / T-779 X-5392 / D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1783 LAB/LOCATION: ~~RECRA~~ SW of Oklahoma

RFETS CONTRACTOR RMRS

ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4° C	NaOH	HNO3	H2SO4	HCl	Analytes: NR01A001	BE
4-14-98	0900	001	001	217-01	FLOOR	217-1	WHAT-YI FILTER PAPER						X	
		002	002	217-2		217-2								
		003	003	217-3		217-3								
		004	004	217-4		217-4								
		005	005	217-5		217-5								
		006	006	217-6	OVERHEAD	217-6								
		007	007	217-7		217-7								
		008	008	217-8		217-8								
		009	009	217-9		217-9								
		010	010	217-10		217-10								
	1030	011	011	218-11	FLOOR	218-11								
		012	012	218-12		218-12								

...ed By:	Date	Time	Received By/Organization	Date	Time
BERNA	4-14-98	16 00	DKoren Olson	4-14-98	16 00
...ren Olson	4-16-98	14 10	K Make	4-16-98	14 10

LABORATORY USE ONLY	(1)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT		
SAMPLE LABELS/COCs AGREE		
TEMPERATURE AT TIME OF RECEIPT ___ °C		

...KS:

Charge # KT03CX00

Project 779 D&D

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No.

160

SAMPLERS (Signature) TONYA SANGALINE / T-779 X-5392 / D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1783 LAB/LOCATION: ~~RECRA~~ SW of Oklahoma

RFETS CONTRACTOR RMRS

ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl		Analytes: URO1A00L	BZ											
4/14/98	1030	013	013	218-13	Floor	218-13	WHAT-41 Filter paper							R												
		014	014	218-14		218-14																				
		015	015	218-15	DUCEMEAD	218-15																				
		016	016	218-16		218-16																				
		017	017	218-17		218-17																				
		018	018	218-18		218-18																				
		019	019	218-19	EQUIPMENT	218-19																				
		020	020	218-20	DUCEMEAD	218-20																				

By:	Date	Time	Received By/Organization	Date	Time
Becca	4-14-98	16 00	D Karen Olsen	4-14-98	16 00
Karen Olsen	4-16-98	14 10	K Make	4-16-98	14 10

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

Charge # KT03CX00

Project 779 D&D

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No. _____

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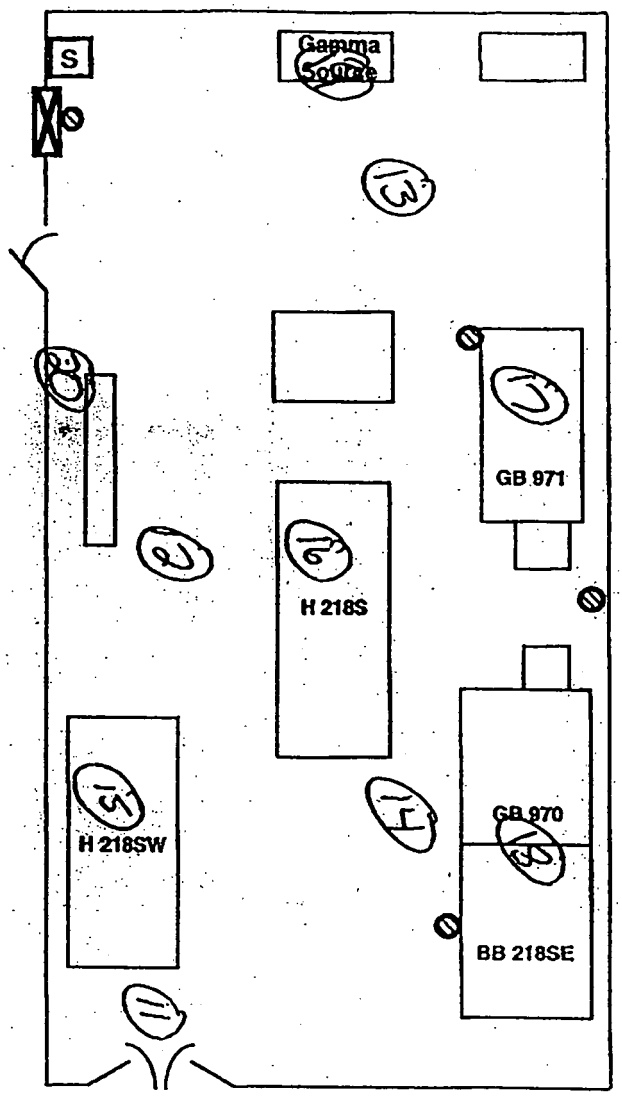
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

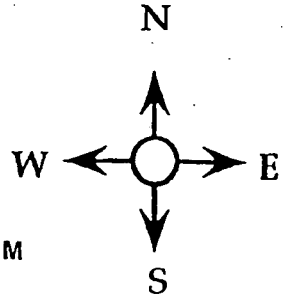
ROOM 218

Drawing Showing Survey Points



LEGEND:

- H – HOOD
- BB – B-Box
- GB – Glove Box
- – Exhaust Duct
- – F N A D
- S – S A A M
- PS – PORTABLE S A A M
- – Air Head



NOTES:

Log Number - 980325-B779-01

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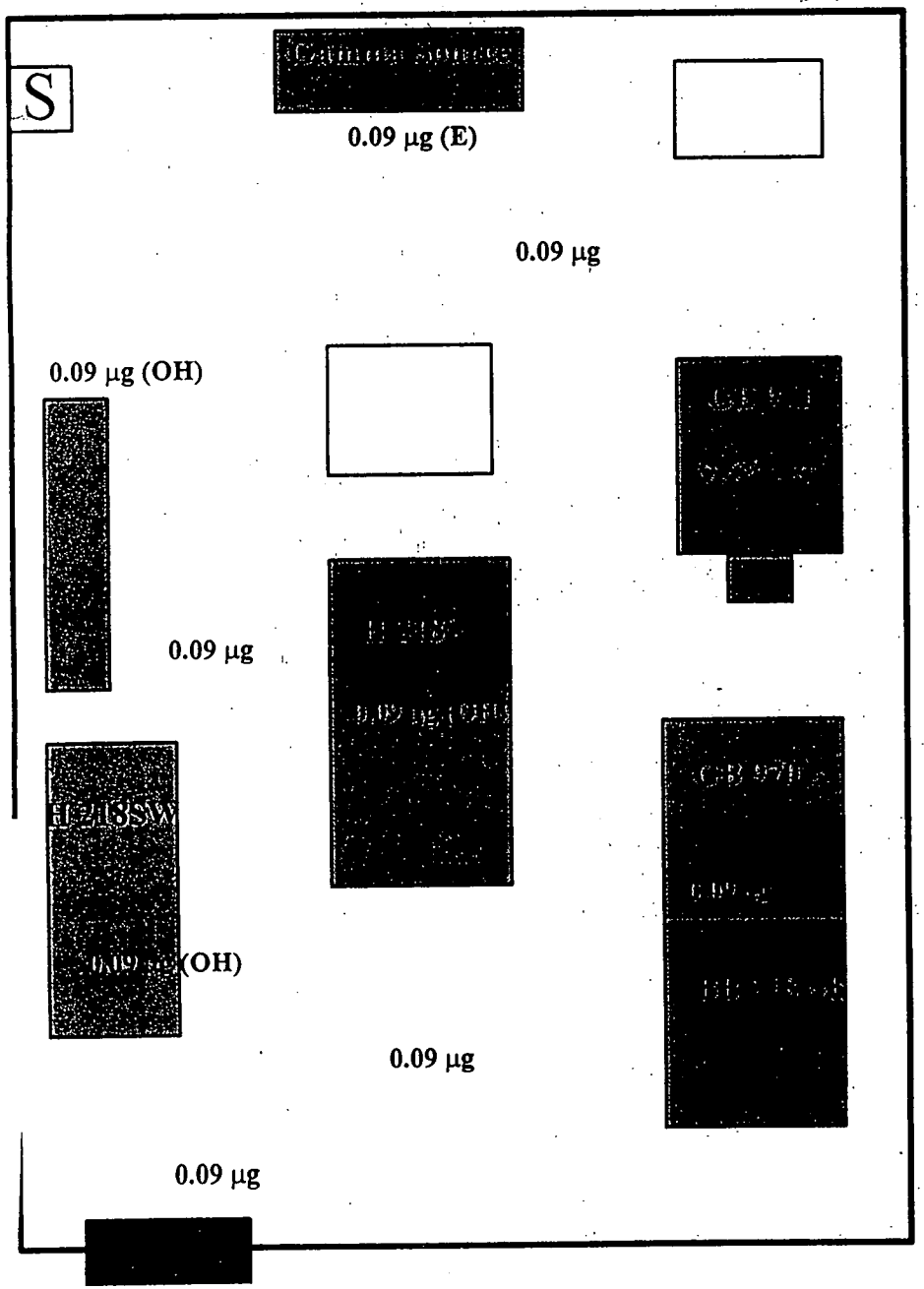
Building 779, Room 218 Beryllium Surface Control Levels

May 5, 1998



(OH) Overhead
(E) Equipment
•All other smears taken on the floor
•All results below surface control levels
•Reported in Micrograms per square foot

INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium
CAS No.: 7440-41-7
Matrix: FILTER

Conc. Units: UG/F
RIN #: 98D1783

Laboratory ID:	Client Sample ID:	Conc.	Flag
33636.01	217-01	0.09	U
33636.02	217-2	0.09	U
33636.03	217-3	0.09	U
33636.04	217-4	0.09	U
33636.05	217-5	0.09	U
33636.06	217-6	0.09	U
33636.07	217-7	0.09	U
33636.08	217-8	0.09	U
33636.09	217-9	0.09	U
33636.10	217-10	0.09	U
33636.11	218-11	0.09	U
33636.12	218-12	0.09	U
33636.13	218-13	0.09	U
33636.14	218-14	0.09	U
33636.15	218-15	0.09	U
33636.16	218-16	0.09	U
33636.17	218-17	0.09	U
33636.18	218-18	0.09	U
33636.19	218-19	0.09	U
33636.20	218-20	0.09	U

218

Room 218

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

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BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOM 218

August 6, 1999

Sample Number	Reporting Limit micro grams	Location Notes micro grams/100cm²
779-07241999-13-501	0.1_{ug}	Source Container Top $<0.1_{ug/100cm^2}$
779-07241999-13-502	0.1_{ug}	Source Container Top $<0.1_{ug/100cm^2}$
779-07241999-13-503	0.1_{ug}	Source Container Top $<0.1_{ug/100cm^2}$
779-07241999-13-504	0.1_{ug}	Control Panel $<0.1_{ug/100cm^2}$
779-07241999-13-505	0.1_{ug}	Skid Top $<0.1_{ug/100cm^2}$
779-07241999-13-506	0.1_{ug}	Panel Exterior $<0.1_{ug/100cm^2}$

[1] See attached map of room 218 for approximate smear locations. Smears taken on equipment to be released to off site vendor. All smears taken on exterior surfaces per the equipment release guide.

2 Equipment identification number is 00031252-00.

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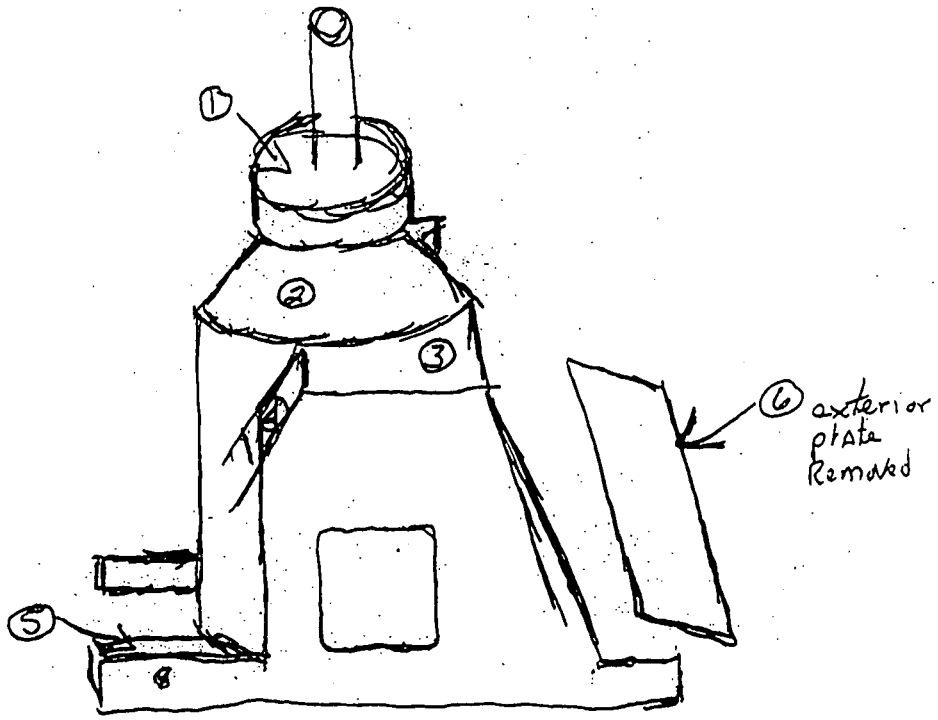
Room 218 7·24·99

Cell Gamm Irrad
00031252



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Industrial Hygiene Information System
Surface Sample Report

IHISR_SURFACE_SAMPLE
Date: 08/18/1999

RIN: 99Z9494

Sample Number/Type: 779-08101999-15-501 WIPE Hygienist: WADE RUSSELL
Location Info: COBALT SOURCE CONTAINER, INTERIOR
Room No: 218
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 779-08101999-15-502 WIPE Hygienist: WADE RUSSELL
Location Info: COBALT SOURCE CONER INETEIOR
Room No: 218
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 779-08101999-15-503 WIPE Hygienist: WADE RUSSELL
Location Info: COBALT SOURCE CONER INETEIOR
Room No: 218
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 779-08101999-15-504 WIPE Hygienist: WADE RUSSELL
Location Info: COBALT SOURCE CONER INETEIOR
Room No: 218
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 779-08101999-15-505 WIPE Hygienist: WADE RUSSELL
Location Info: COBALT SOURCE CONER INETEIOR
Room No: 218
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 779-08101999-15-506 WIPE Hygienist: WADE RUSSELL
Location Info: COBALT SOURCE CONER INETEIOR
Room No: 218
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 779-08101999-15-507 WIPE Hygienist: WADE RUSSELL
Location Info: COBALT SOURCE CONER INETEIOR
Room No: 218
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 779-08101999-15-508 BLANK Hygienist: WADE RUSSELL
Location Info:
Room No: 218
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG

Sample Number/Type: 779-08101999-15-509 BLANK Hygienist: WADE RUSSELL
Location Info:
Room No: 218
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG

Sample Number/Type: 779-08101999-15-510 BLANK Hygienist: WADE RUSSELL
Location Info:
Room No: 218
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG

Sample Number/Type: 779-08121999-15-501 WIPE Hygienist: WADE RUSSELL
Location Info: DUCTWORK
Room No:
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 779-08121999-15-502 WIPE Hygienist: WADE RI

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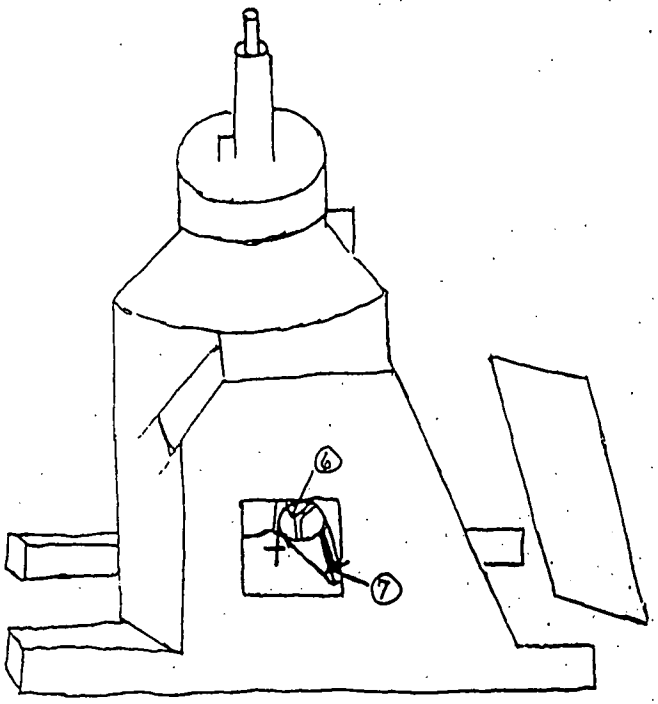
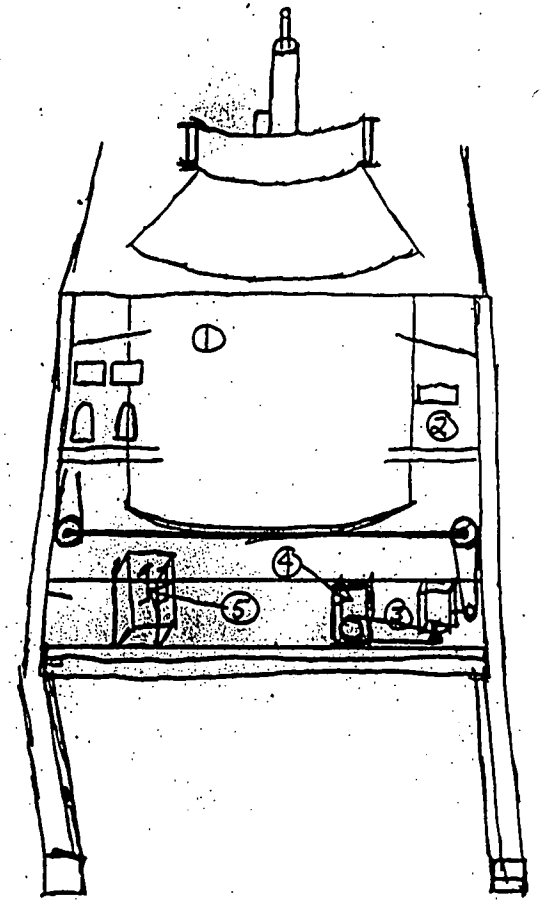
Cell Gamma Irrad. 0003125-00



Open access port



Open side access

168

Industrial Hygiene Information System
Surface Sample Report

IHISR_SURFACE_SAMPLE
Date: 08/18/1999

RIN: 99Z9494

Sample Number/Type: 779-08121999-15-502 WIPE Hygienist: WADE RUSSELL
Location Info: DUCTWORK
Room No:
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 779-08121999-15-503 WIPE Hygienist: WADE RUSSELL
Location Info: DUCTWORK
Room No:
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 779-08121999-15-504 WIPE Hygienist: WADE RUSSELL
Location Info: DUCTWORK
Room No:
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 779-08101999-15-510 BLANK Hygienist: WADE RUSSELL
Location Info:
Room No: 218
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG

Sample Number/Type: 779-08121999-15-501 WIPE Hygienist: WADE RUSSELL
Location Info: DUCTWORK
Room No:
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 UG/100CM2

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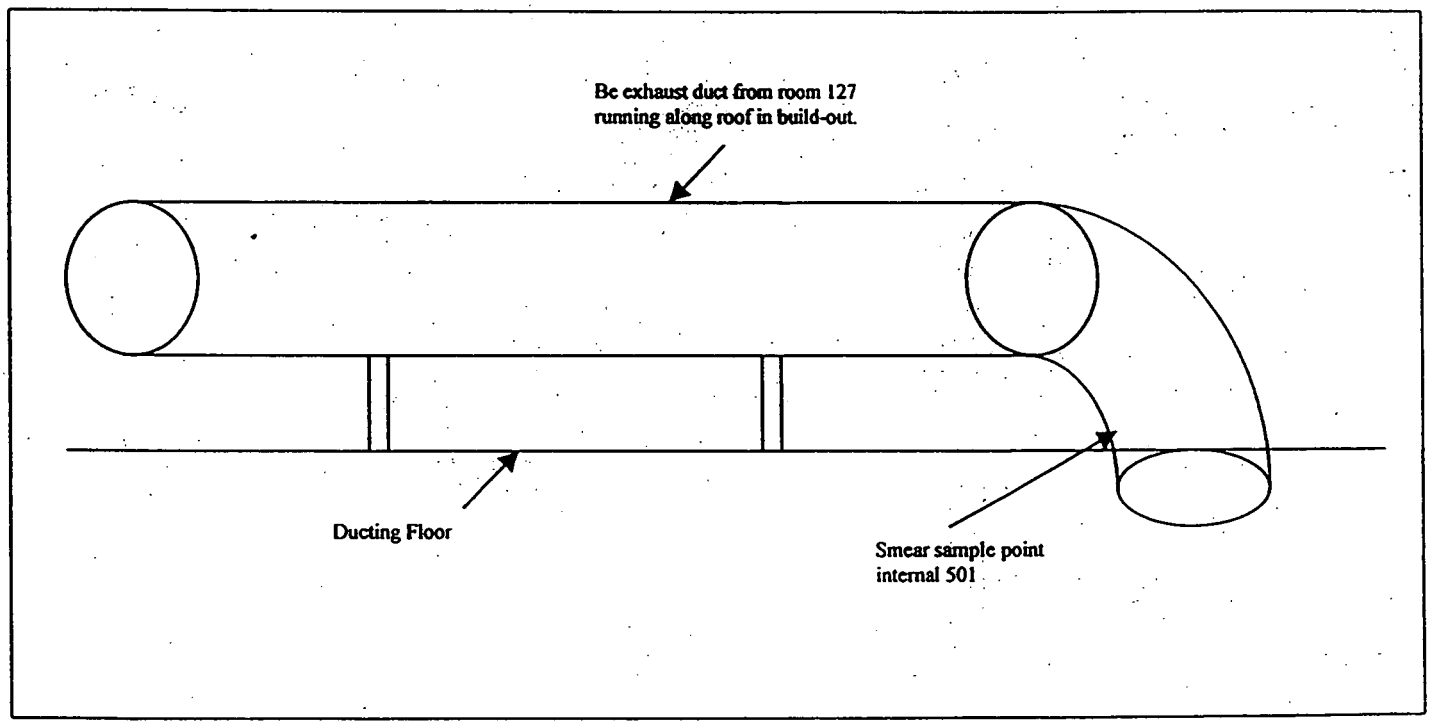
FOR OFFICIAL USE ONLY

Building 779

Beryllium Smear Locations

Beryllium Exhaust Line

Room Source 127



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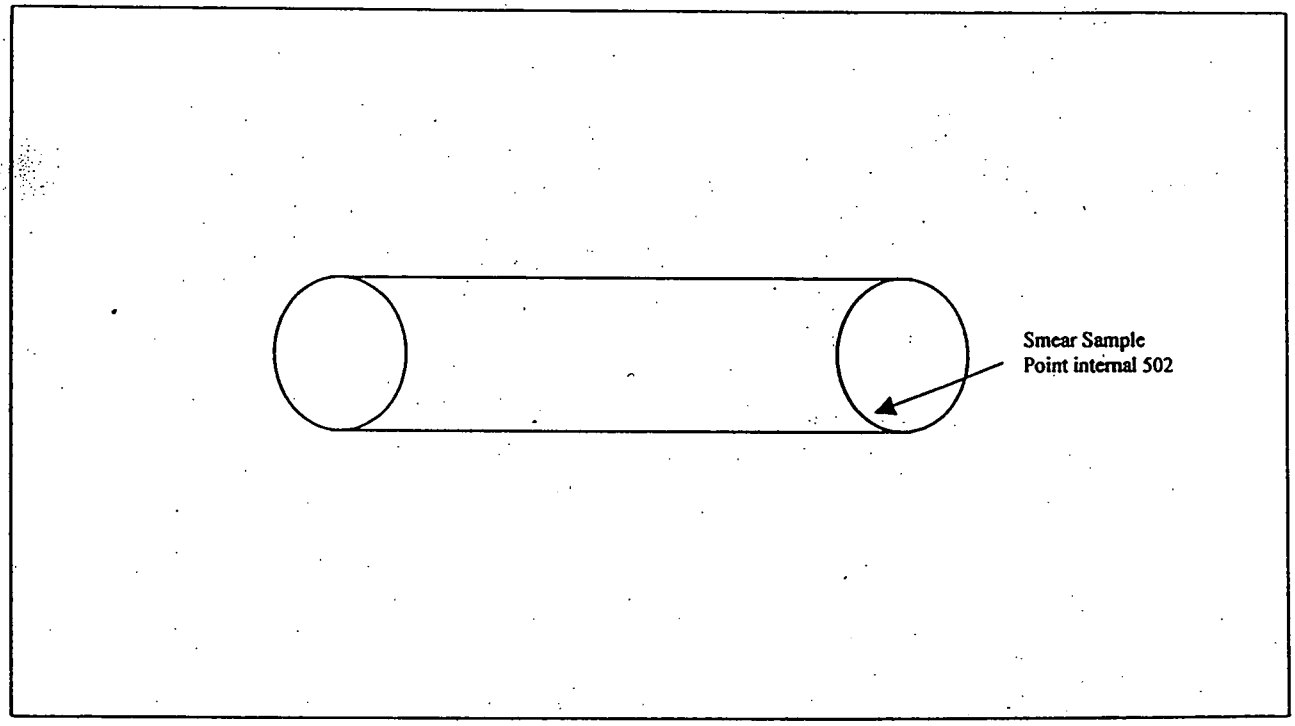
Building 779

Beryllium Smear Locations

Beryllium Exhaust Line

Room Source 127



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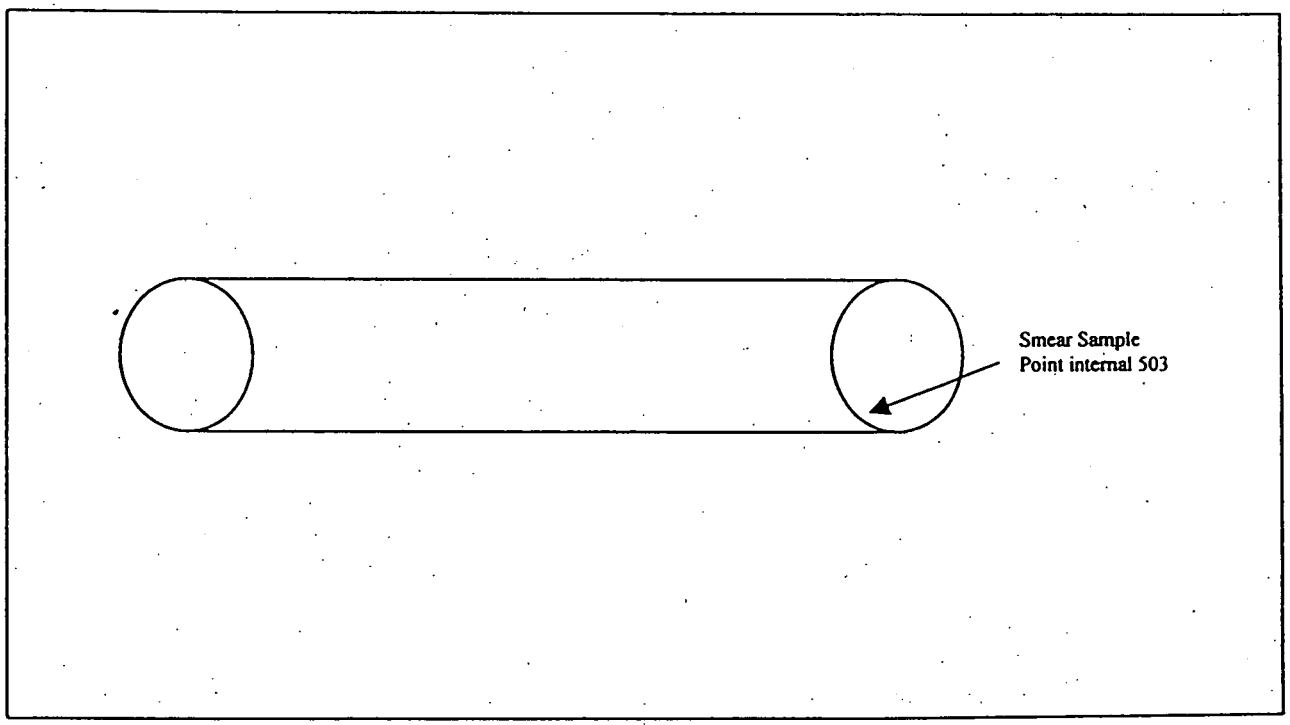
Building 779

Beryllium Smear Locations

Beryllium Exhaust Line

Room Source 127



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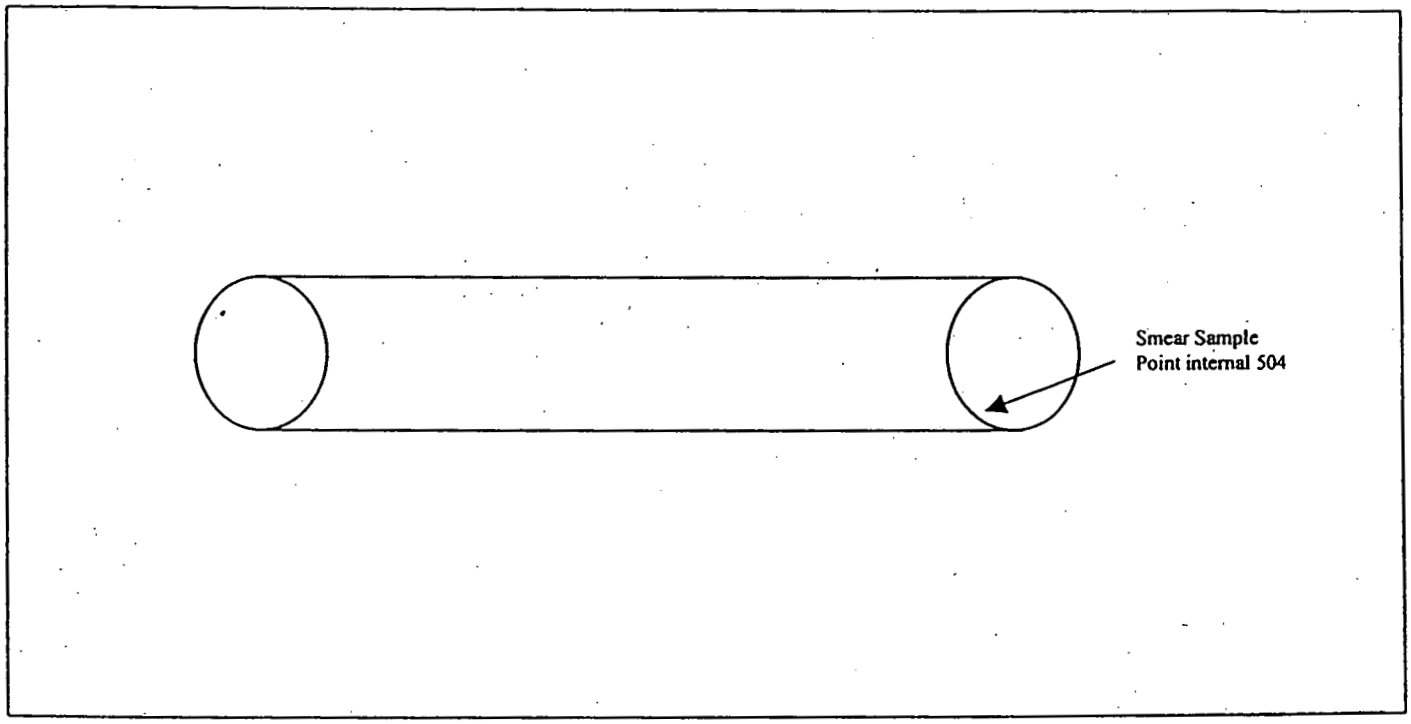
Building 779

Beryllium Smear Locations

Beryllium Exhaust Line

Room Source 127



	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft^2 (unless otherwise indicated)	Sample Method or RIN#
546	222	4/7/98	779-222-18	NA	Floor east of GB 992	0.09	98D1678
547	222	4/7/98	779-222-19	NA	Floor north of GB 986	0.09	98D1678
548	222	4/7/98	779-222-20	NA	Floor east doorway	0.09	98D1678
549	222	4/7/98	779-222-21	NA	Floor Middle of Room	0.09	98D1678
550	222	4/7/98	779-222-22	NA	Floor South Doorway	0.09	98D1678
551	222	4/7/98	779-222-23	NA	Overhead Northwest Corner	0.09	98D1678
552	222	4/7/98	779-222-26	NA	Overhead Middle of Room	0.09	98D1678

* Analysis for Be using NIOSH method 7300 elements by IGP

SAMPLERS (Signature) TONYA SANGALINE / T-779 X-5392 / PAUL D-3052 DKO 4/7/98

REPORT IDENTIFICATION NUMBER (RIN) 98D1678

LAB/LOCATION: ~~RECRA~~ Southwest of Oklahoma

RFETS CONTRACTOR RMRS

ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl		Analyses: TOL001	BS											
4-7-98	1030	016	016	228-16	OVERHEAD	228-16	WMAT-41 Filter paper							R												
		017	017	228-17		228-17																				
		018	018	222-18	FLOOR	222-18																				
		019	019	222-19		222-19																				
		020	020	222-20		222-20																				
		021	021	222-21		222-21																				
		022	022	222-22		222-22																				
		023	023	222-23	OVERHEAD	222-23																				
		026	026	222-26		222-26																				
		027	027	~~222-27~~ 234-27	FLOOR	234-27																				
		029	029	~~222-29~~ 234-29		234-29																				
		030	030	234-30		234-30																				

Relinquished By:	Date	Time	Received By/Organization	Date	Time
C. Bebout	4-7-98	1430	D. Karen Olson / RMRS	4-7-98	1430
D. Karen Olson	4-8-98	1430	J. Miller / AST	4-8-98	1430

LABORATORY USE ONLY	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	

REMARKS:

Charge # KT03CX00

Project 779 D&D

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No.

APO COC 6/5/97

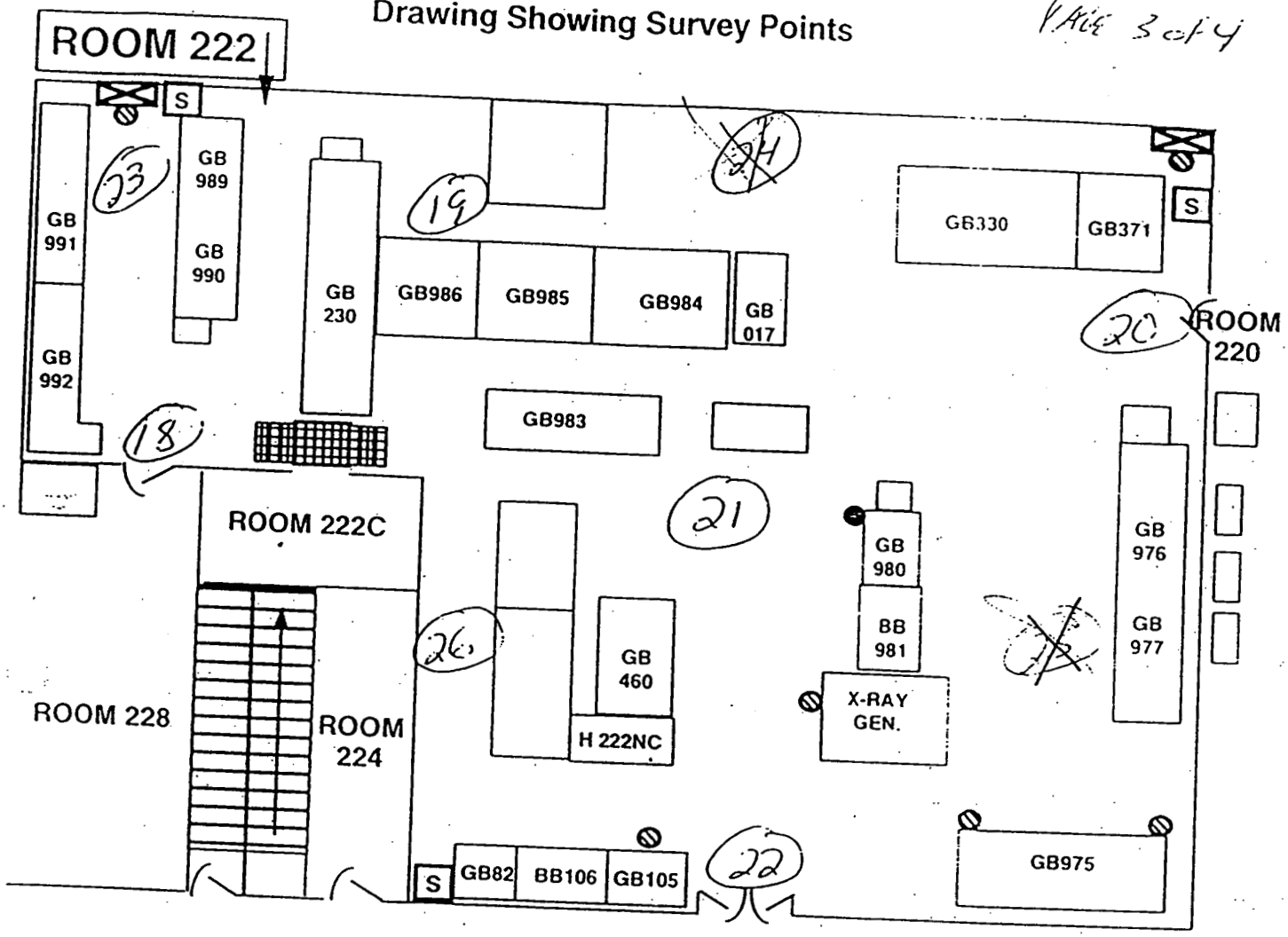
PKE# 78 0025 D479-01

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

ROOM 222

Drawing Showing Survey Points

PAGE 3 of 4



LEGEND:

H -- HOOD

BB -- B BOX

GB -- GLOVE BOX

-- Exhaust Duct

S --S A A M

-- Air Head

N

W E

S

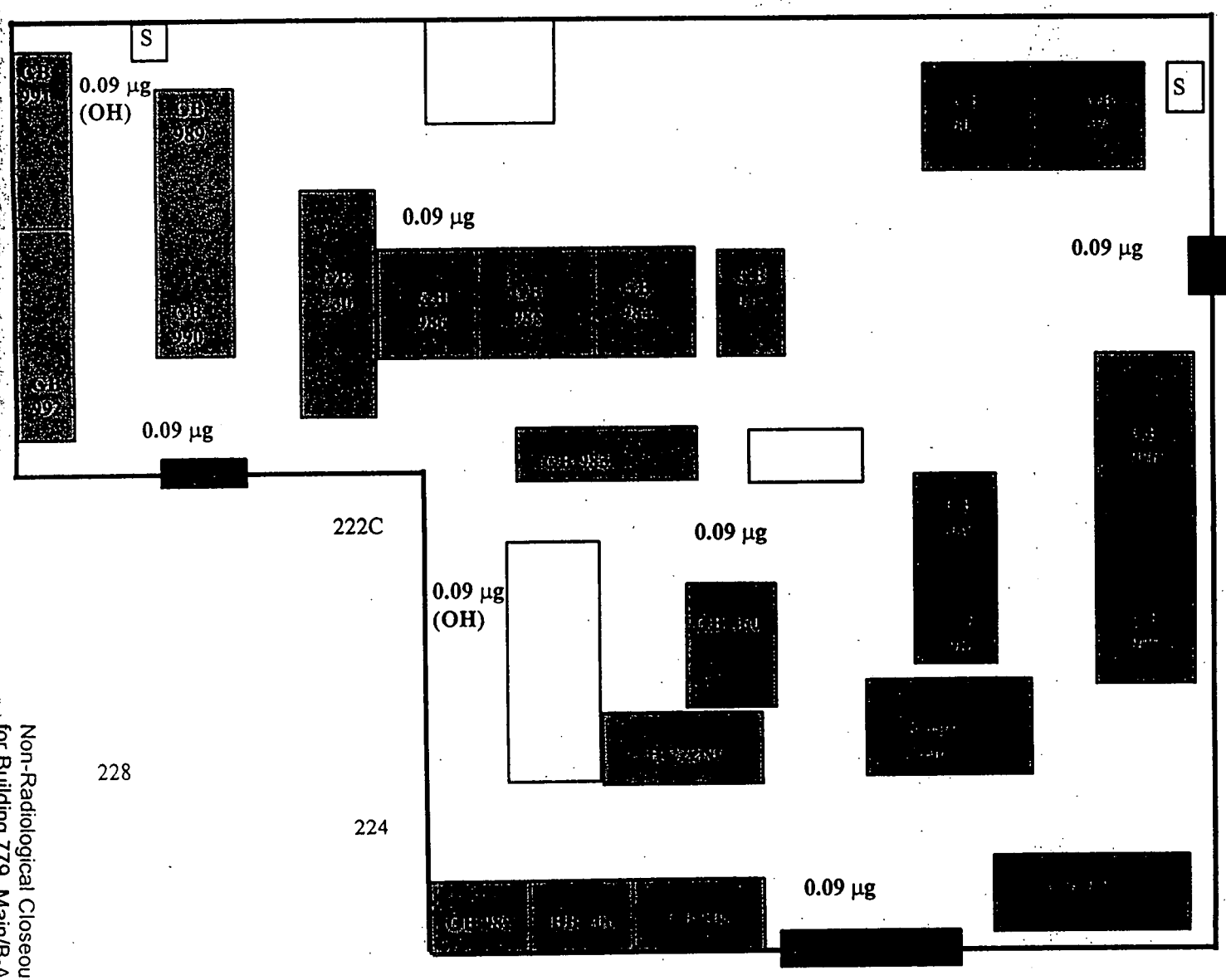
NOTES:

SAMPLES #3, #12, #15, #24, #25 NOT INCLUDED IN PACKET.

176

Building 779, Room 222 Beryllium Surface Control Levels

May 5, 1998



(OH) Overhead

- All other locations taken on the floor
- All results below surface control levels
- Reported in Micrograms per square foot

INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium
CAS No.: 7440-41-7
Matrix: FILTER

Conc. Units: UG/F
RIN #: 98D1678

Laboratory ID:	Client Sample ID:	Conc.	Flag
33537.01	228-1	0.09	U
33537.02	228-2	0.09	U
33537.03	228-4	0.09	U
33537.04	228-5	0.09	U
33537.05	228-6	0.09	U
33537.06	228-7	0.09	U
33537.07	228-8	0.09	U
33537.08	228-9	0.09	U
33537.09	228-10	0.09	U
33537.10	228-11	0.09	U
33537.11	228-13	0.09	U
33537.12	228-14	0.09	U
33537.13	228-16	0.09	U
33537.14	228-17	0.09	U
33537.15	222-18	0.09	U
33537.16	222-19	0.09	U
33537.17	222-20	0.09	U
33537.18	222-21	0.09	U
33537.19	222-22	0.09	U
33537.20	222-23	0.09	U
33537.21	222-26	0.09	U
33537.22	234-27	0.09	U
33537.23	234-29	0.09	U
33537.24	234-30	0.09	U
33537.25	201-1	0.09	U
33537.26	201-2	0.09	U
33537.27	201-3	0.09	U
33537.28	201-4	0.09	U

222

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

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	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft^2 (unless otherwise indicated)	Sample Method or RIN#
553	223	5/4/99	779-99-04-14-13-223-01	0.1	Equipment	<0.1 q/100cm2	*
554	223	5/4/99	779-99-04-14-13-223-02	0.1	Floor	<0.1 q/100cm2	*
555	223	5/4/99	779-99-04-14-13-223-03	0.1	Floor	0.2 q/100cm2	*
556	223	5/4/99	779-99-04-14-13-223-04	0.1	Wall	<0.1 q/100cm2	*
557	223	5/4/99	779-99-04-14-13-223-05	0.1	Floor	<0.1 q/100cm2	*
558	223	5/4/99	779-99-04-14-13-223-06	0.1	Equipment	<0.1 q/100cm2	*
559	223	5/4/99	779-99-04-14-13-223-07	0.1	Floor	<0.1 q/100cm2	*
560	223	5/4/99	779-99-04-14-13-223-08	0.1	Floor	<0.1 q/100cm2	*
561	223	5/4/99	779-99-04-14-13-223-09	0.1	Table Top	<0.1 q/100cm2	*
562	223	5/4/99	779-99-04-14-13-223-10	0.1	Floor	<0.1 q/100cm2	*
563	223	5/4/99	779-99-04-14-13-223-11	0.1	Wall Mounted Equip.	<0.1 q/100cm2	*
564	223	5/4/99	779-99-04-14-13-223-12	0.1	Floor	<0.1 q/100cm2	*
565	223	5/4/99	779-99-04-14-13-223-13	0.1	Floor	<0.1 q/100cm2	*
566	223	5/4/99	779-99-04-14-13-223-14	0.1	Wall Mounted Equip.	<0.1 q/100cm2	*
567	223	5/4/99	779-99-04-14-13-223-15	0.1	Floor	<0.1 q/100cm2	*
568	223	5/4/99	779-99-04-14-13-223-16	0.1	Floor	<0.1 q/100cm2	*
569	223	5/4/99	779-99-04-14-13-223-17	0.1	Floor	<0.1 q/100cm2	*
570	223	5/4/99	779-99-04-14-13-223-18	0.1	Wall	0.1 q/100cm2	*

* Analysis for Be using NIOSH method 7300 elements by IGP

BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOM 223

May 4, 1999

Sample Number	Reporting Limit micro grams	Location Totals micro grams/100cm²
779-99-04-14-13-223-01	0.1 ug	Equipment <0.1 ug/100cm²
779-99-04-14-13-223-02	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-223-03	0.1 ug	Floor 0.2 ug/100cm²
779-99-04-14-13-223-04	0.1 ug	Wall <0.1 ug/100cm²
779-99-04-14-13-223-05	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-223-06	0.1 ug	Equipment <0.1 ug/100cm²
779-99-04-14-13-223-07	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-223-08	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-223-09	0.1 ug	Table Top <0.1 ug/100cm²
779-99-04-14-13-223-10	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-223-11	0.1 ug	Wall Mounted Equip. <0.1 ug/100cm²
779-99-04-14-13-223-12	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-223-13	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-223-14	0.1 ug	Wall Mounted Equip. <0.1 ug/100cm²
779-99-04-14-13-223-15	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-223-16	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-223-17	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-223-18	0.1 ug	Wall 0.1 ug/100cm²

[1] See attached map of room 223 for approximate smear locations.

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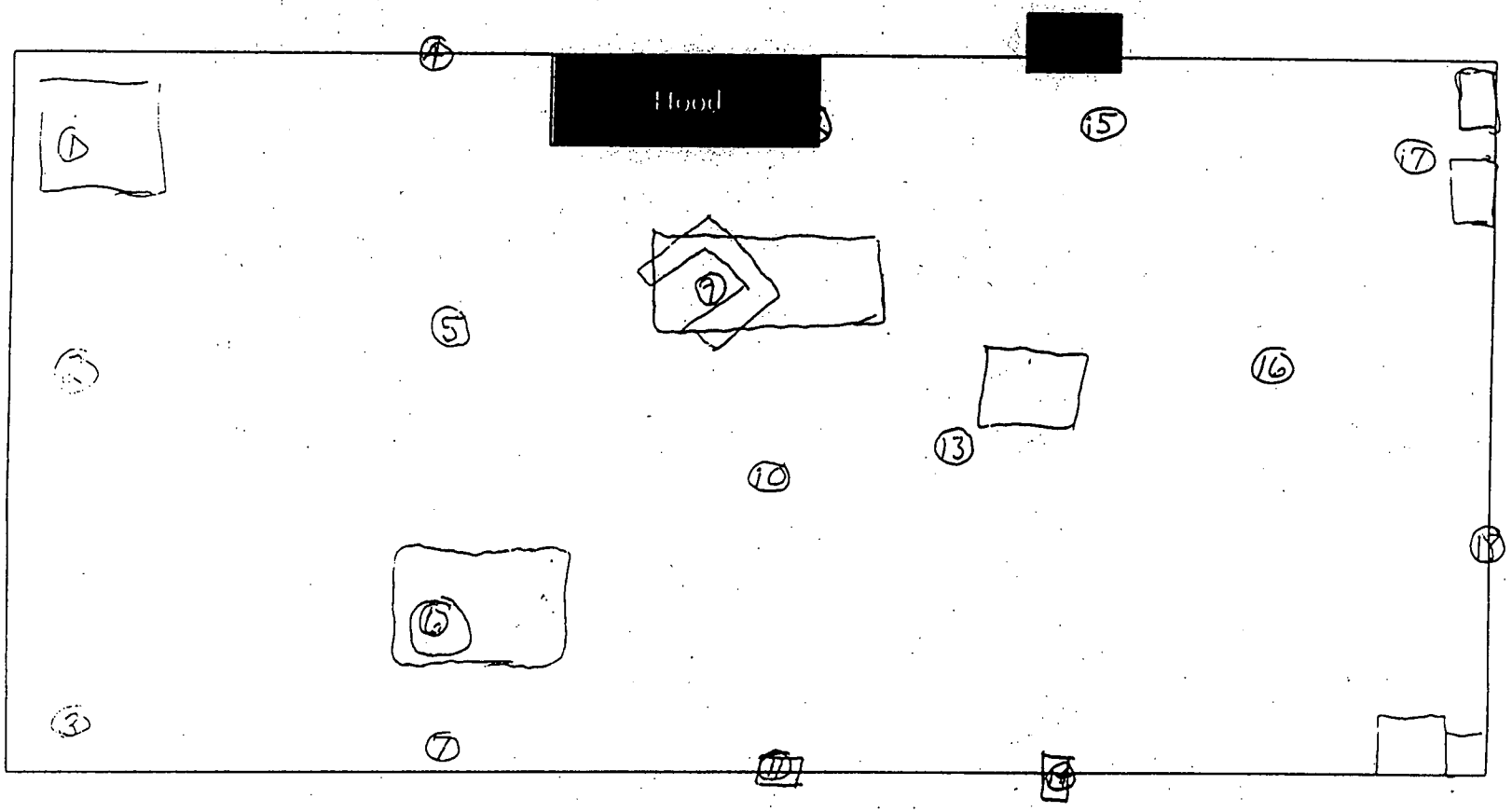
Building 779, Room 223



	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft^2 (unless otherwise indicated)	Sample Method or RIN#
571	225	4/14/99	779-99-04-14-13-225-01	0.1	Floor	<0.1 q/100cm^2	*
572	225	4/14/99	779-99-04-14-13-225-02	0.1	Equipment	<0.1 q/100cm^2	*
573	225	4/14/99	779-99-04-14-13-225-03	0.1	Floor	<0.1 q/100cm^2	*
574	225	4/14/99	779-99-04-14-13-225-04	0.1	Floor	<0.1 q/100cm^2	*
575	225	4/14/99	779-99-04-14-13-225-05	0.1	Equipment	<0.1 q/100cm^2	*
576	225	4/14/99	779-99-04-14-13-225-06	0.1	Equipment	<0.1 q/100cm^2	*
577	225	4/14/99	779-99-04-14-13-225-07	0.1	Floor	<0.1 q/100cm^2	*
578	225	4/14/99	779-99-04-14-13-225-08	0.1	Floor	<0.1 q/100cm^2	*
579	225	4/14/99	779-99-04-14-13-225-09	0.1	Wall	<0.1 q/100cm^2	*
580	225	4/14/99	779-99-04-14-13-225-10	0.1	Floor	<0.1 q/100cm^2	*

* Analysis for Be using NIOSH method 7300 elements by IGP

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BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOM 225

May 4, 1999

Sample Number	Reporting Limit micrograms	Location Totals micrograms/100cm²
779-99-04-14-13-225-01	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-225-02	0.1 ug	Equipment <0.1 ug/100cm²
779-99-04-14-13-225-03	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-225-04	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-225-05	0.1 ug	Equipment <0.1 ug/100cm²
779-99-04-14-13-225-06	0.1 ug	Equipment <0.1 ug/100cm²
779-99-04-14-13-225-07	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-225-08	0.1 ug	Floor <0.1 ug/100cm²
779-99-04-14-13-225-09	0.1 ug	Wall <0.1 ug/100cm²
779-99-04-14-13-225-10	0.1 ug	Floor <0.1 ug/100cm²

[1] See attached map of room 225 for approximate smear locations.

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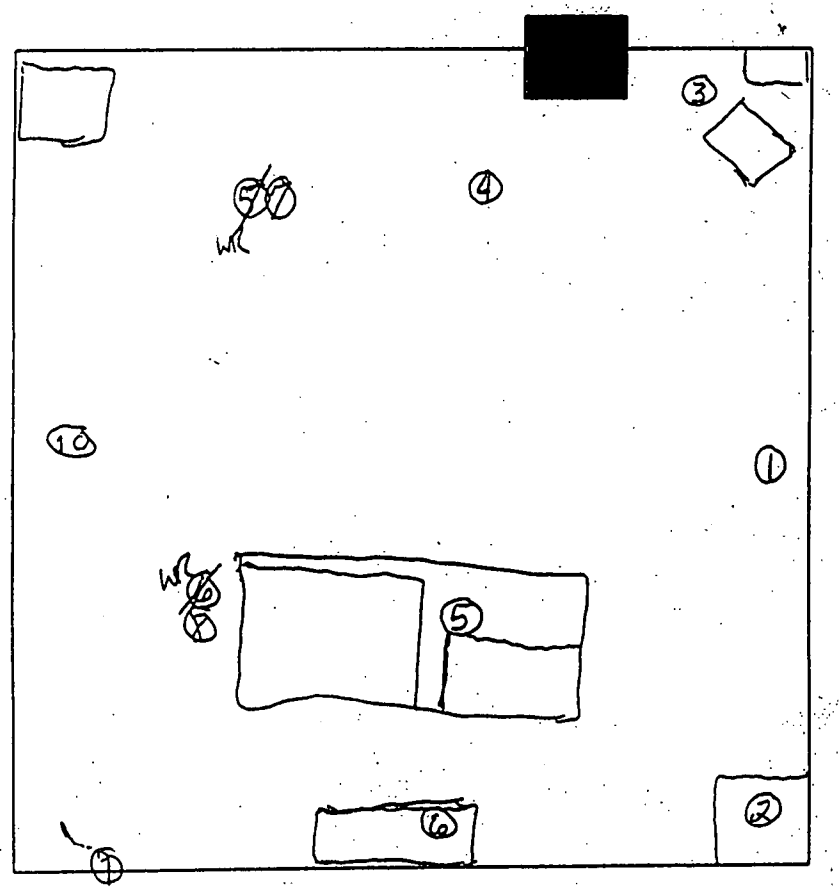
Building 779, Room 225



	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft^2 (unless otherwise indicated)	Sample Method or RIN#
581	228	4/7/98	779-228-1	NA	Floor west doorway	0.09	98D1678
582	228	4/7/98	779-228-2	NA	Floor north of GB 045	0.09	98D1678
583	228	4/7/98	779-228-4	NA	Floor southeast	0.09	98D1678
584	228	4/7/98	779-228-5	NA	Floor east middle	0.09	98D1678
585	228	4/7/98	779-228-6	NA	Floor northeast corner	0.09	98D1678
586	228	4/7/98	779-228-7	NA	Flor middle of Room	0.09	98D1678
587	228	4/7/98	779-228-8	NA	Floor northwest corner	0.09	98D1678
588	228	4/7/98	779-228-9	NA	Hood west wall	0.09	98D1678
589	228	4/7/98	779-228-10	NA	Equipment GB 203	0.09	98D1678
590	228	4/7/98	779-228-11	NA	Equipment GB 201	0.09	98D1678
591	228	4/7/98	779-228-13	NA	Equipment GB 192	0.09	98D1678
592	228	4/7/98	779-228-14	NA	Equipment GB 045	0.09	98D1678
593	228	4/7/98	779-228-16	NA	Overhead Middle of Room	0.09	98D1678
594	228	4/7/98	779-228-17	NA	Overhead southeast corner	0.09	98D1678

* Analysis for Be using NIOSH method 7300 elements by IGP

(3)

SAMPLERS (Signature) TONYA SANGALINE / T-779 X-5392 / PAGE D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1678 DKO 4-7-98

LAB/LOCATION: REGRA Southwest of Oklahoma

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl		Analyses: NR01A001	BE											
4-7-98	0930	001	001	228-1	Floor	228-1	WHAT-MAN FILTER PAPER							R												
		002	002	228-2		228-2																				
		004	004	228-4		228-4																				
		005	005	228-5		228-5																				
		006	006	228-6		228-6																				
		007	007	228-7		228-7																				
		008	008	228-8		228-8																				
		009	009	228-9	EQUIPMENT	228-9																				
		010	010	228-10		228-10																				
		011	011	228-11		228-11																				
		013	013	228-13		228-13																				
		014	014	228-14		228-14																				

Relinquished By:	Date	Time	Received By/Organization	Date	Time	LABORATORY USE ONLY	Y/N
C. Berna	4-7-98	1430	D. Karen Olson / RMRS	4-7-98	1430	PCKG REC'D/CUSTODY SEALS INTACT	
Karen Olson	4-8-98	1430	L. Miller / ASI	4-8-98	1430	SAMPLE LABELS/COCs AGREE	
						TEMPERATURE AT TIME OF RECEIPT ___ °C	

REMARKS:

Charge #: KT03CX00

Project: 779 D&D

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No.

APO COC 6/5/97

SAMPLERS (Signature) TONYA SANGALINE / T-779 X-5392 / PAUL D-3052 DKO 4/7/98

REPORT IDENTIFICATION NUMBER (RIN) 98D1678 LAB/LOCATION: RECRA Southwest of Oklahoma

RFETS CONTRACTOR RMRS

ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Cooled to 4°C	NaOH	HNO3	H2SO4	HCl			Analyses: U ROLA 001	B3												
4-7-98	1030	016	016	228-16	OVERHEAD	228-16	WHAT-41 FILTER PAPER								R													
		017	017	228-17		228-17																						
		018	018	222-18	FLOOR	222-18																						
		019	019	222-19		222-19																						
		020	020	222-20		222-20																						
		021	021	222-21		222-21																						
		022	022	222-22		222-22																						
		023	023	222-23	OVERHEAD	222-23																						
		026	026	222-26		222-26																						
		027	027	~~222-27~~ 234-27	FLOOR	234-27																						
		029	029	~~222-29~~ 234-29		234-29																						
		030	030	234-30		234-30																						

Relinquished By:	Date	Time	Received By/Organization	Date	Time
C. Behrens	4-7-98	1430	D. Karen Olson / RMRS	4-7-98	1430
D. Karen Olson	4-8-98	1430	J. Miller / ACI	4-8-98	1430

LABORATORY USE ONLY	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

REMARKS:

Charge # KT03CX00

Project 779 D/D

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No.

APO COC 6/5/97

RADIOLOGICAL OPERATIONS

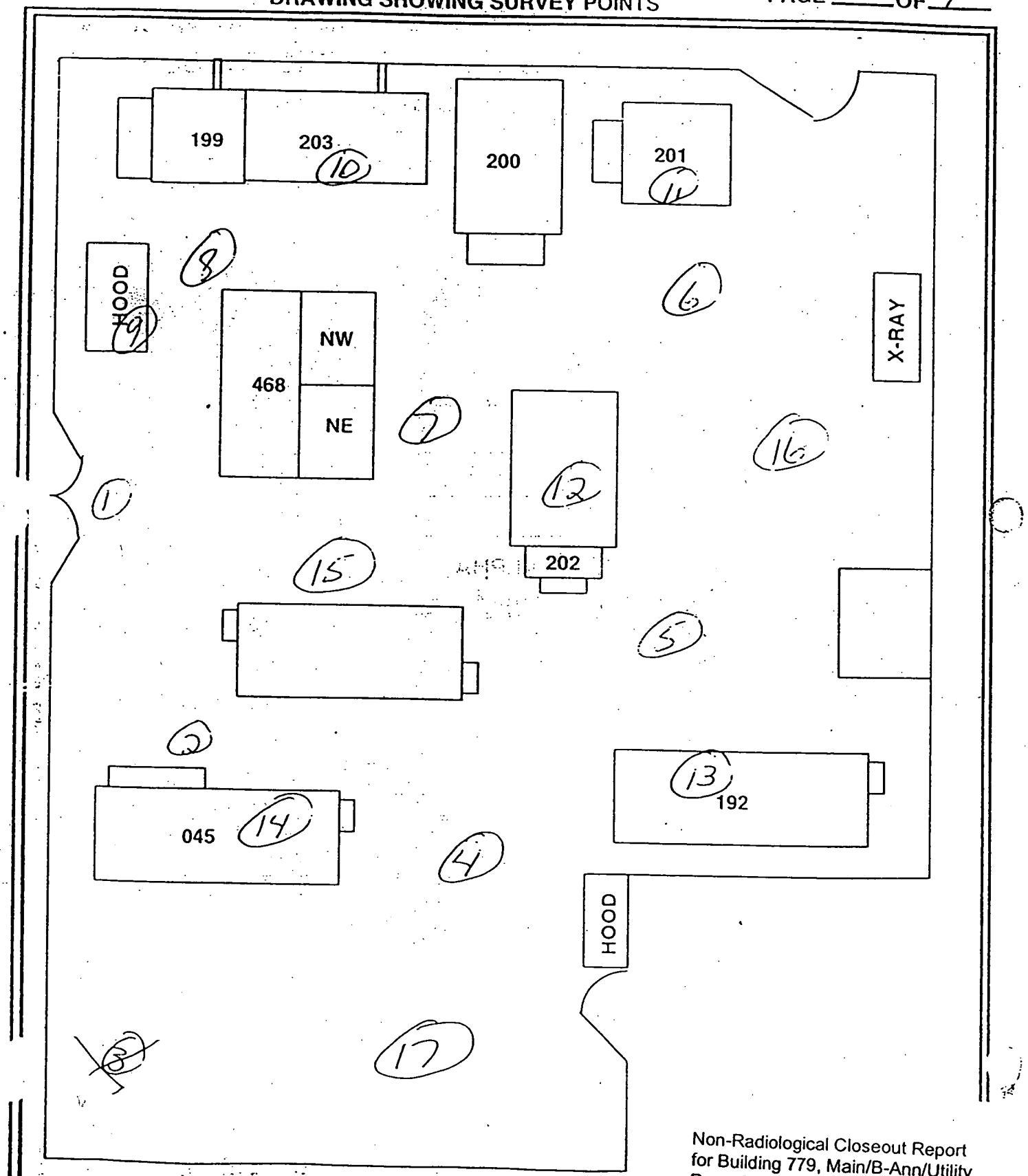
ROOM SURVEY

DRAWING SHOWING SURVEY POINTS

ROOM#228

DATE 4/7/98

PAGE 2 OF 4



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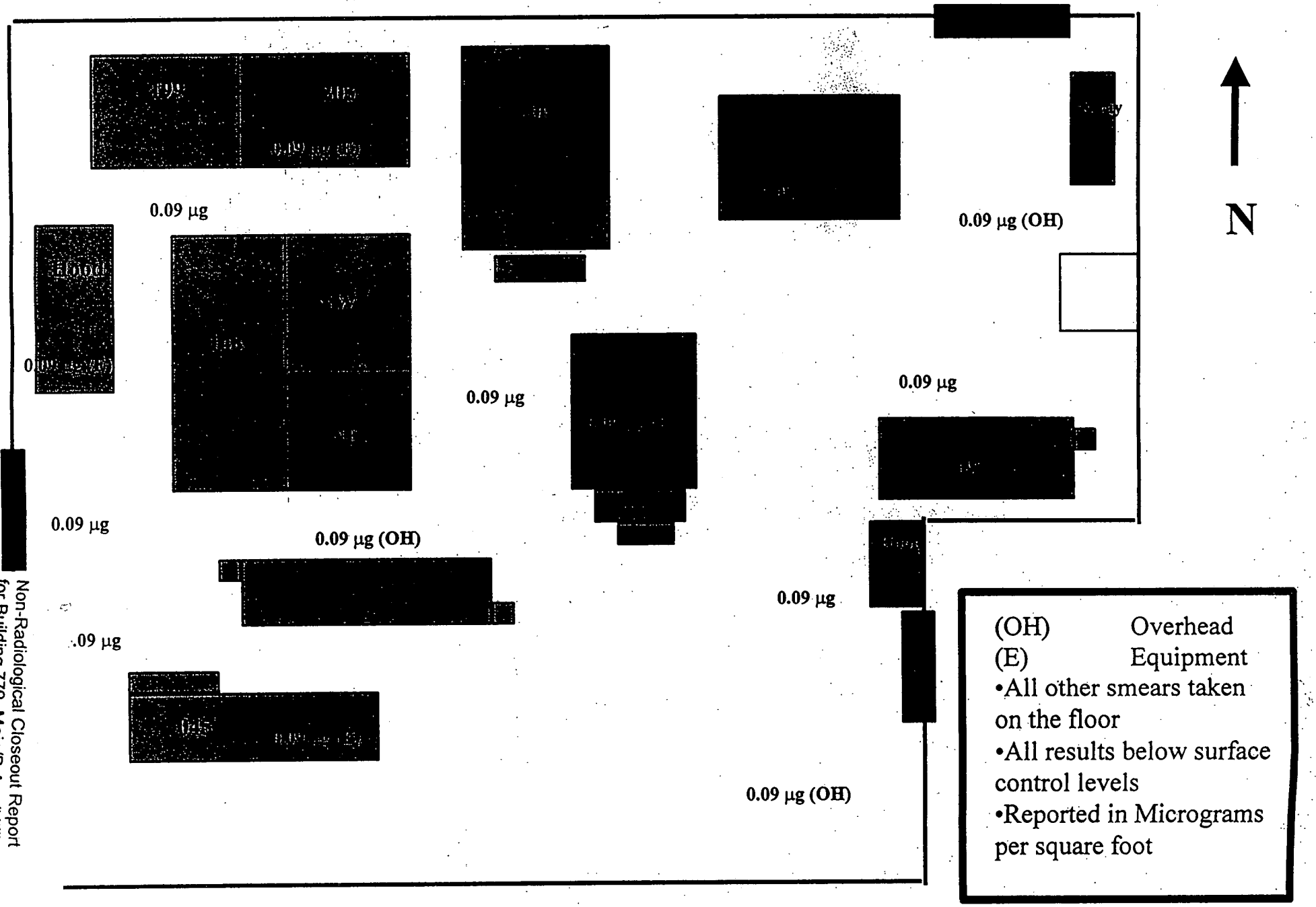
Building 779, Room 228 Beryllium Surface Control Levels

May 5, 1998



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INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium
CAS No.: 7440-41-7
Matrix: FILTER

Conc. Units: UG/F
RIN #: 98D1678

Laboratory ID:	Client Sample ID:	Conc.	Flag
33537.01	228-1	0.09	U
33537.02	228-2	0.09	U
33537.03	228-4	0.09	U
33537.04	228-5	0.09	U
33537.05	228-6	0.09	U
33537.06	228-7	0.09	U
33537.07	228-8	0.09	U
33537.08	228-9	0.09	U
33537.09	228-10	0.09	U
33537.10	228-11	0.09	U
33537.11	228-13	0.09	U
33537.12	228-14	0.09	U
33537.13	228-16	0.09	U
33537.14	228-17	0.09	U
33537.15	222-18	0.09	U
33537.16	222-19	0.09	U
33537.17	222-20	0.09	U
33537.18	222-21	0.09	U
33537.19	222-22	0.09	U
33537.20	222-23	0.09	U
33537.21	222-26	0.09	U
33537.22	234-27	0.09	U
33537.23	234-29	0.09	U
33537.24	234-30	0.09	U
33537.25	201-1	0.09	U
33537.26	201-2	0.09	U
33537.27	201-3	0.09	U
33537.28	201-4	0.09	U

Room 228

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

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	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft^2 (unless otherwise indicated)	Sample Method or RIN#
595	234	4/7/98	779-234-27	NA	Floor South Doorway	0.09	98D1678
596	234	4/7/98	779-234-29	NA	Floor Middle of Room	0.09	98D1678
597	234	4/7/98	779-234-30	NA	Floor northwest corner	0.09	98D1678
598	234	4/7/98	779-234-31	NA	Floor east doorway	0.09	98D1678
599	234	4/7/98	779-234-32	NA	Overhead northeast corner	0.09	98D1678
600	234	4/7/98	779-234-33	NA	Overhead Middle of west wall	0.09	98D1678
601	234	4/7/98	779-234-34	NA	Equipment GB 205C	0.09	98D1678
602	234	4/7/98	779-234-35	NA	Floor Southwest Corner	0.09	98D1678
603	234	4/7/98	779-234-36	NA	Equipment GB 205A	0.09	98D1678
604	234	4/7/98	779-234-37	NA	Equipment Shelf	0.09	98D1678

* Analysis for Be using NIOSH method 7300 elements by IGP

SAMPLERS (Signature) TONYA SANGALINS / T-779 X-5392 / PAUL D-3052 DKO 4/7/98

REPORT IDENTIFICATION NUMBER (RIN) 98D1678

LAB/LOCATION: RECBA Southwest of Oklahoma

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

Preservation: Cooled to 4°C; NaOH; HNO3; H2SO4; HCl

Analyses: RO1A001; B3

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	RO1A001	B3
4-7-98	1030	016	016	228-16	OVERHEAD	228-16	WHAT-41 Kitchen floor	R	
		017	017	228-17		228-17			
		018	018	222-18	FLOOR	222-18			
		019	019	222-19		222-19			
		020	020	222-20		222-20			
		021	021	222-21		222-21			
		022	022	222-22		222-22			
		023	023	222-23	OVERHEAD	222-23			
		026	026	222-26		222-26			
		027	027	~~222-27~~ 234-27	FLOOR	234-27			
		029	029	~~222-29~~ 234-29		234-29			
		030	030	234-30		234-30			

Relinquished By:	Date	Time	Received By/Organization	Date	Time
C. Bebek	4-7-98	1430	D. Karen Olson / RMRS	4-7-98	1430
D. Karen Olson	4-8-98	1430	J. Miller / ASI	4-8-98	1430

LABORATORY USE ONLY	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

REMARKS:

Charge # KT03CX00

Project 779 D&D

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No.

APO COC 6/5/97

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SAMPLERS (Signature) TONYA SANGALINE / T-779 X-5392 / PAGE D-3052 DEO 4/7/98

REPORT IDENTIFICATION NUMBER (RIN) 98D1679

LAB/LOCATION: RECRA South west of Oklahoma

RFETS CONTRACTOR RMRS

ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl		Analyses: NR04001	BZ												
4-7-98	1400	031	031	234-31	FLOOR	234-31	WHAT-MAN FILTER PAPER							R													
		032	032	234-32	OVERHEAD	234-32																					
		033	033	234-33		234-33																					
		034	034	234-34	EQUIPMENT	234-33																					
		035	035	234-35	OVERHEAD	234-35																					
		036	036	234-36	EQUIPMENT	234-36																					
		037	037	234-37		234-37																					

Relinquished By:	Date	Time	Received By/Organization	Date	Time	LABORATORY USE ONLY	Y/N
C. Beard	4-7-98	1430	D. Karen Olson / RMRS	4-7-98	1430	PCKG REC'D/CUSTODY SEALS INTACT	
D. Karen Olson	4-8-98	1430	S. Miller / AST	4-8-98	1430	SAMPLE LABELS/COCs AGREE	
						TEMPERATURE AT TIME OF RECEIPT ___ °C	

REMARKS:

Charge # KT03CX00

Project 779 D&D

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No.

APO COC 6/5/97

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RADIOLOGICAL OPERATIONS

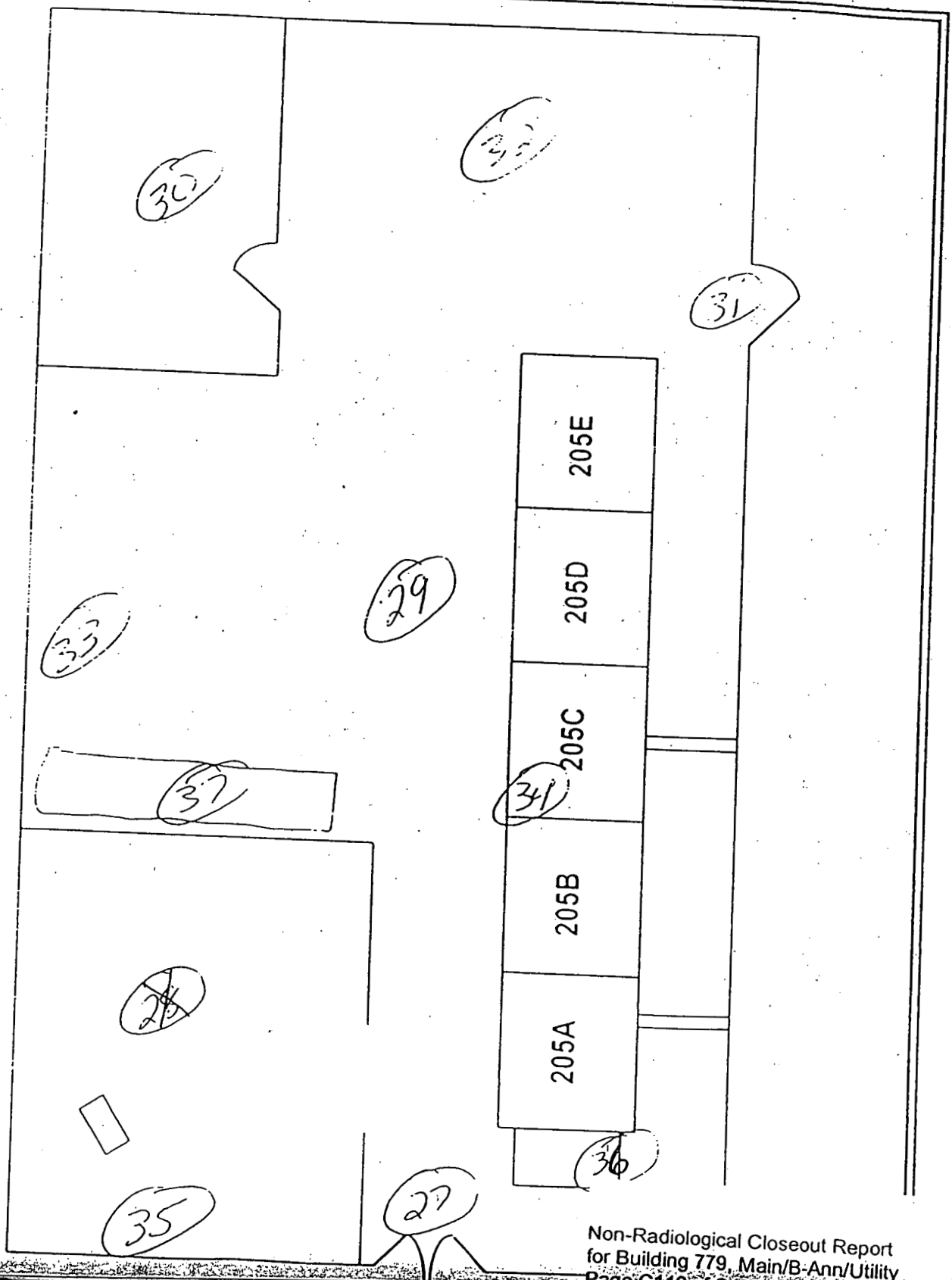
ROOM SURVEY

DRAWING SHOWING SURVEY POINTS

ROOM#234

DATE 4/7/98

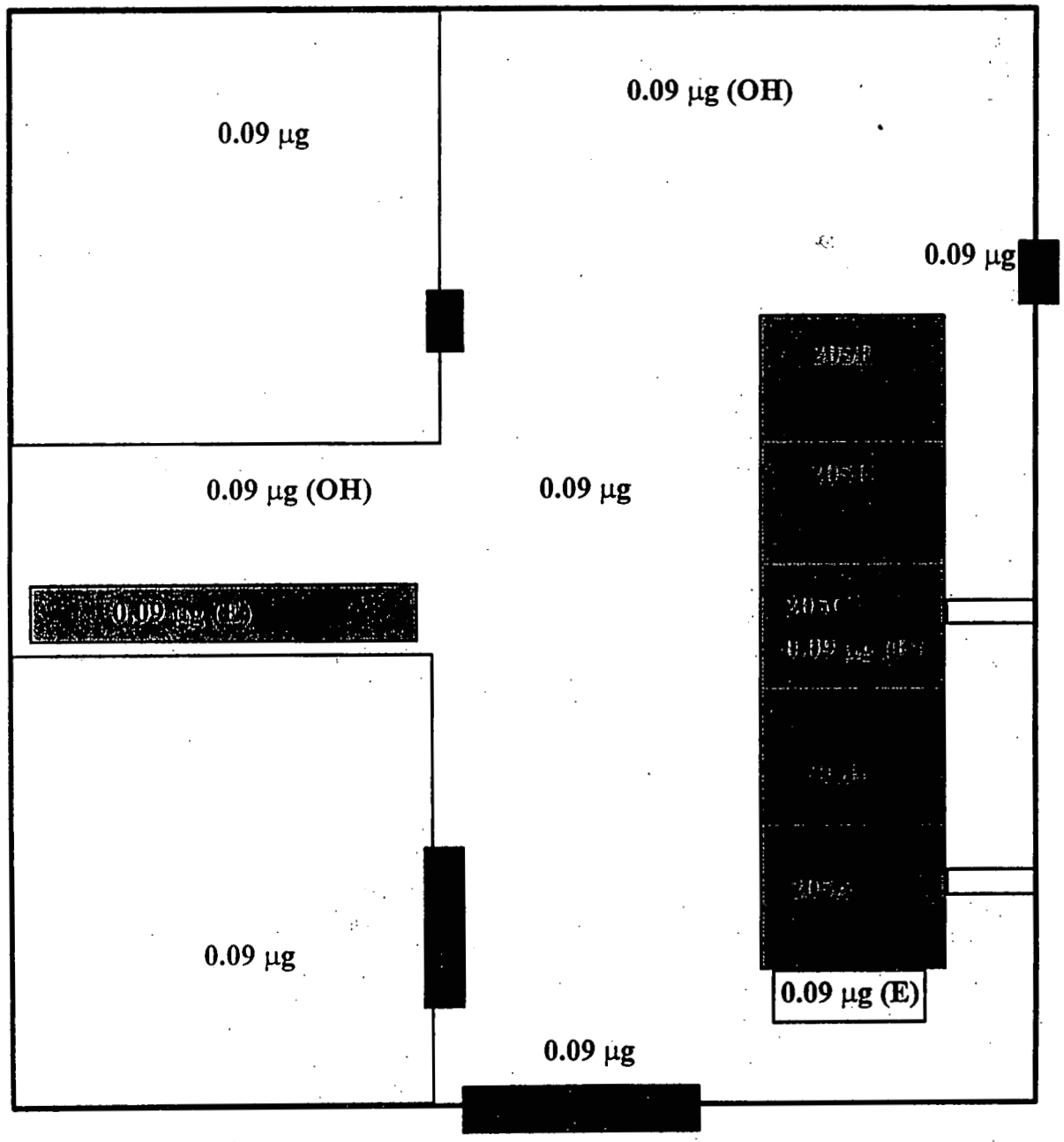
PAGE 4 OF 4



194

Building 779, Room 234 Beryllium Surface Control Levels

May 5, 1998



N

(OH) Overhead
(E) Equipment
•All other smears taken on the floor
•All results below surface control levels
•Reported in Micrograms per square foot

195

INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium
CAS No.: 7440-41-7
Matrix: FILTER

Conc. Units: UG/F
RIN #: 98D1678

Laboratory ID:	Client Sample ID:	Conc.	Flag
33537.01	228-1	0.09	U
33537.02	228-2	0.09	U
33537.03	228-4	0.09	U
33537.04	228-5	0.09	U
33537.05	228-6	0.09	U
33537.06	228-7	0.09	U
33537.07	228-8	0.09	U
33537.08	228-9	0.09	U
33537.09	228-10	0.09	U
33537.10	228-11	0.09	U
33537.11	228-13	0.09	U
33537.12	228-14	0.09	U
33537.13	228-16	0.09	U
33537.14	228-17	0.09	U
33537.15	222-18	0.09	U
33537.16	222-19	0.09	U
33537.17	222-20	0.09	U
33537.18	222-21	0.09	U
33537.19	222-22	0.09	U
33537.20	222-23	0.09	U
33537.21	222-26	0.09	U
33537.22	234-27	0.09	U
33537.23	234-29	0.09	U
33537.24	234-30	0.09	U
33537.25	201-1	0.09	U
33537.26	201-2	0.09	U
33537.27	201-3	0.09	U
33537.28	201-4	0.09	U

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

196

INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium
CAS No.: 7440-41-7
Matrix: FILTER

Conc. Units: UG/F
RIN #: 9801679

Laboratory ID:	Client Sample ID:	Conc.	Flag
33538.01	234-31	0.09	U
33538.02	234-32	0.09	U
33538.03	234-33	0.09	U
33538.04	234-34	0.09	U
33538.05	234-35	0.09	U
33538.06	234-36	0.09	U
33538.07	234-37	0.09	U

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

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	A	B	C	D	E	F	G
1	*Room Number*	*Date*	*Sample Number*	*Reporting Limit micro grams/100cm2*	*Location/Description*	*Smear Results micro grams/100ft^2 (unless otherwise indicated)*	*Sample Method or RIN#*
605	235	4/21/98	779-235-05	NA	Equipment Electron Microscope	0.04	98D1799
606	235	4/21/98	779-235-06	NA	Equipment Electron Microscope	0.04	98D1799
607	235	4/21/98	779-235-07	NA	Equipment Electron Microscope	0.04	98D1799
608	235	4/21/98	779-235-08	NA	Equipment Electron Microscope	0.04	98D1799
609	235	4/21/98	779-235-09	NA	Equipment Electron Microscope	0.04	98D1799
610	235	4/21/98	779-235-10	NA	Equipment Electron Microscope	0.04	98D1799
611	235	4/21/98	779-235-11	NA	Equipment Electron Microscope	0.04	98D1799
612	235	4/21/98	779-235-12	NA	Equipment Electron Microscope	0.04	98D1799
613	235	4/21/98	779-233-13	NA	Equipment Electron Microscope	0.04	98D1799
614	235	4/21/98	779-233-14	NA	Equipment Electron Microscope	0.04	98D1799
615	235	4/21/98	779-235-15	NA	Equipment Electron Microscope	0.04	98D1799

* Analysis for Be using NIOSH method 7300 elements by IGP

198

3

SAMPLERS (Signature) TONYA SANGARINE / T-779 X-5392 / D-3052

LAB/LOCATION: RECRA

REPORT IDENTIFICATION NUMBER (RIN) 98D1799

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analytes: NROIADOI	BE
4-21-98	0930	001	001	114-01	WELDING FIXTURE	114-01	WHATMAN FILTER PAPER						R	
		002	002	114-02		114-02								
		003	003	114-03		114-03								
		004	004	114-04		114-04								
		005	005	235-05	ELECTRON MICROSCOPE	235-05								
		006	006	235-06		235-06								
		007	007	235-07		235-07								
		008	008	235-08		235-08								
		009	009	235-09		235-09								
		010	010	235-010		235-10								
		011	011	235-11		235-11								
		012	012	235-12		235-12								

quished By:	Date	Time	Received By/Organization	Date	Time
L. Berner	4-21-98	1605	D. Karen Olson	4-21-98	1605
Karen Olson	4-23-98	0930		4/23/98	0930

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

Charge # KT036X00

Project 779 DED

MARKS:

Air Bill No

APO COC 6/

199

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility Page C1191 of C1172

3

SAMPLERS (Signature) TONYA SANGALINS / T-779 X-5392 / D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1799 LAB/LOCATION: RECRA

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl		Analytes: AR01A001	B2										
4-21-98	1000	013	013	233-13	ELECTRAL MICROWAVE	233-13	WHAT FILTER PAPER							R											
		014	014	233-14																					
		015	015	235-15		235-15																			
		016	016	270-16	AUGER SYSTEMS	270-16																			
		017	017	270-17		270-17																			
		018	018	270-18		270-18																			
		019	019	270-19		270-19																			
		020	020	270-20		270-20																			
		021	021	270-21		270-21																			
		022	022	270-22		270-22																			
		023	023	270-23		270-23																			
		024	024	270-24		270-24																			

shed By:	Date	Time	Received By/Organization	Date	Time
Berna	4-21-98	1605	D Karen Olson	4-21-98	1605
Karen Olson	4-23-98	0930	[illegible]	4/23/98	0930

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

:KS:

Charge # KT03LX00

Project 779 DFD

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No _____

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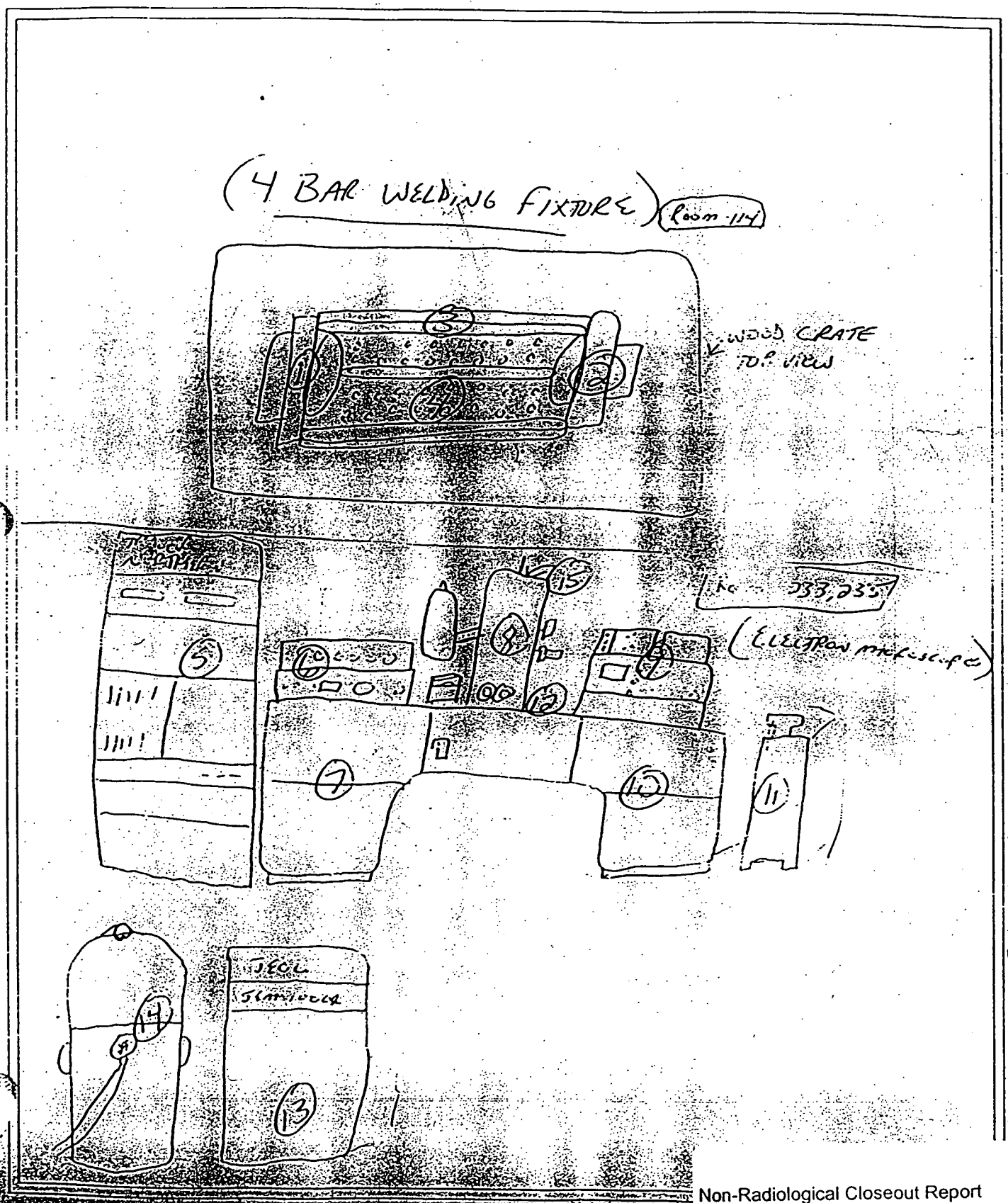
Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility

RADIOLOGICAL OPERATIONS

Drawing Showing Survey Points



PAGE # 98C3375-B779 01

Page 3 of 4

CLIENT: F-H RIN#98D1798
WORK ORDER: 11830-001-001-9999-00

RECRA LOT #: 9804L342

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	001.001.114-01	Beryllium, Total	0.04 u	UG	0.04	1.0
-002	002.001.114-02	Beryllium, Total	0.04 u	UG	0.04	1.0
-003	003.001.114-03	Beryllium, Total	0.04 u	UG	0.04	1.0
-004	004.001.114-04	Beryllium, Total	0.04 u	UG	0.04	1.0
-005	005.001.235-05	Beryllium, Total	0.04 u	UG	0.04	1.0
-006	006.001.235-06	Beryllium, Total	0.04 u	UG	0.04	1.0
-007	007.001.235-07	Beryllium, Total	0.04 u	UG	0.04	1.0
-008	008.001.235-08	Beryllium, Total	0.04 u	UG	0.04	1.0
-009	009.001.235-09	Beryllium, Total	0.04 u	UG	0.04	1.0
-010	010.001.235-10	Beryllium, Total	0.04 u	UG	0.04	1.0
-011	011.001.235-11	Beryllium, Total	0.04 u	UG	0.04	1.0
-012	012.001.235-12	Beryllium, Total	0.04 u	UG	0.04	1.0
-013	013.001.233-13	Beryllium, Total	0.04 u	UG	0.04	1.0
-014	014.001.233-14	Beryllium, Total	0.04 u	UG	0.04	1.0
-015	015.001.235-15	Beryllium, Total	0.04 u	UG	0.04	1.0
-016	016.001.270-16	Beryllium, Total	0.04 u	UG	0.04	1.0
-017	017.001.270-17	Beryllium, Total	0.04 u	UG	0.04	1.0
-018	018.001.270-18	Beryllium, Total	0.04 u	UG	0.04	1.0
-019	019.001.270-19	Beryllium, Total	0.04 u	UG	0.04	1.0
-020	020.001.270-20	Beryllium, Total	0.04 u	UG	0.04	1.0

202

	A	B	C	D	E	F	G
1	Room Number	Date	Sample Number	Reporting Limit micro grams/100cm2	Location/Description	Smear Results micro grams/100ft^2 (unless otherwise indicated)	Sample Method or RIN#
616	270	4/8/98	779-F-017	NA	Floor southeast corner	0.09	98D1655
617	270	4/8/98	779-F-018	NA	Floor Middle of Room	0.09	98D1655
618	270	4/8/98	779-F-019	NA	Floor north middle	2.40	98D1655
619	270	4/8/98	779-F-020	NA	Floor west	0.09	98D1655
620	270	4/8/98	779-F-021	NA	Floor northwest corner	0.09	98D1655
621	270	4/8/98	779-E-022	NA	Equipment GB 972	0.09	98D1655
622	270	4/8/98	779-E-023	NA	Equipment GB 302-7	0.09	98D1655
623	270	4/8/98	779-E-024	NA	Shelf southwest corner of room	0.09	98D1655
624	270	4/8/98	779-OH-025	NA	Overhead southeast corner	0.09	98D1655
625	270	4/8/98	779-OH-026	NA	Overhead west side	0.09	98D1655
626	270	4/8/98	779-OH-027	NA	Overhead east side	0.09	98D1655
627	270	4/8/98	779-OH-028	NA	Overhead Middle	0.09	98D1655
628	270	4/21/98	779-270-16	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
629	270	4/21/98	779-270-17	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
630	270	4/21/98	779-270-18	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
631	270	4/21/98	779-270-19	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
632	270	4/21/98	779-270-20	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
633	270	4/21/98	779-270-21	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
634	270	4/21/98	779-270-22	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
	270	4/21/98	779-270-23	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
	270	4/21/98	779-270-24	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
	270	4/21/98	779-270-25	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
	270	10/22/98	270-001	0.1	Inside duct work	<0.1 q/100cm^2	99Z0142
	270	10/22/98	270-002	0.1	Inside duct work	<0.1 q/100cm^2	99Z0142
	270	10/22/98	270-003	0.1	Inside duct work	<0.1 q/100cm^2	99Z0142
	270	10/22/98	270-004	0.1	Inside duct work	<0.1 q/100cm^2	99Z0142
	270	10/22/98	270-005	0.1	Inside duct work	<0.1 q/100cm^2	99Z0142

...ysis for Be using NIOSH method 7300 elements by IGP

2 3

MPLERS (Signature) Tonya Sangalise / T-779 X-5392 / Page 3052

DKO 4/1/98

PORT IDENTIFICATION NUMBER (RIN) 9801655 LAB/LOCATION: ~~RECRA~~ Southwest of Oklahoma

ETS CONTRACTOR RMRS

OCKY FLATS
NVIRONMENTAL TECHNOLOGY SITE
HAIN OF CUSTODY NUMBER _____

TE	TIME	EVENT	BOTTLE	USER ID	LOCATION	~~CONTAINER~~ Room	MATRIX	Cooled to 4° C	NaOH	HNO3	H2SO4	HCl	NR01A001												
98	1015	N/A	N/A	F-013	779	272	WHAT-41 FILTER PAPER						R												
				E-014									R												
				OH-015									R												
				OH-016									R												
	1045	N/A	N/A	F-017	779	270	WHAT 41 FILTER PAPER						R												
				F-018									R												
				F-019									R												
				F-020									R												
				F-021									R												
				E-022									R												
				E-023									R												
				E-024									R												

Date	Time	Received By/Organization	Date	Time
4-2-98	1800	Tonya Sangalise / IH&S	4-6-98	1310
4-8-98	1430	B. Miller / AST	4-8-98	1430

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

Charge # KT03CX00

Project 779 D&D

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No. _____

APO COC 6/5/97

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3 3

PLERS (Signature) Tonya Sangaline / T-779 X-5392 / PAOC 3052

DKO 4/7/98

PORT IDENTIFICATION NUMBER (RIN) 98D1655 LAB/LOCATION: ~~REGRA~~ Southwest of Oklahoma

TS CONTRACTOR RMRS

OCKY FLATS
VIRONMENTAL TECHNOLOGY SITE
AIN OF CUSTODY NUMBER _____

	TIME	EVENT	BOTTLE	USER ID	LOCATION	~~CONTAINER~~ Room	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analytes: NROLA001L
8	1350	N/A	N/A	OH-025	779	270	WHAT-41 Filter Paper						R
				OH-026									R
				OH-027									R
				OH-028									R

	Date	Time	Received By/Organization	Date	Time
	4-2-98	13:00	Tonya L Sangaline	4-6-98	13:10
	4-8-98	1430	L. Miller / AST	4-8-98	1430

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	

Charge # KT03CX00

Project 779 D&D

ments: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No _____

APO COC 6/5/97

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility

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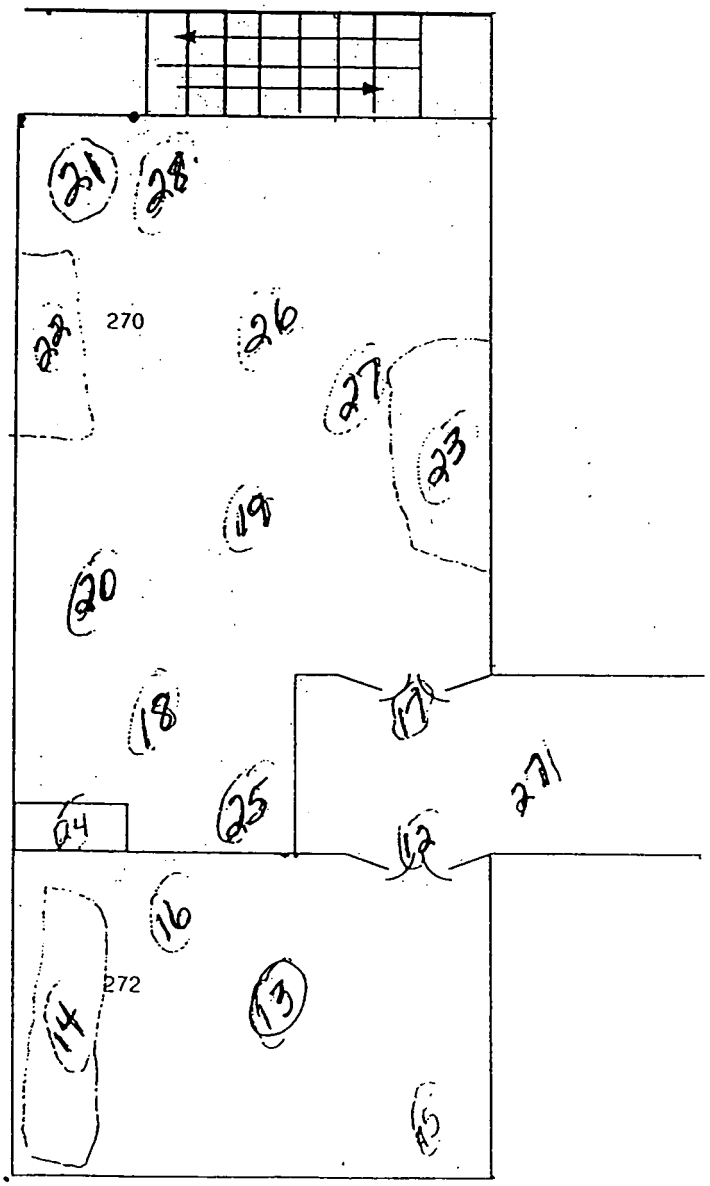
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

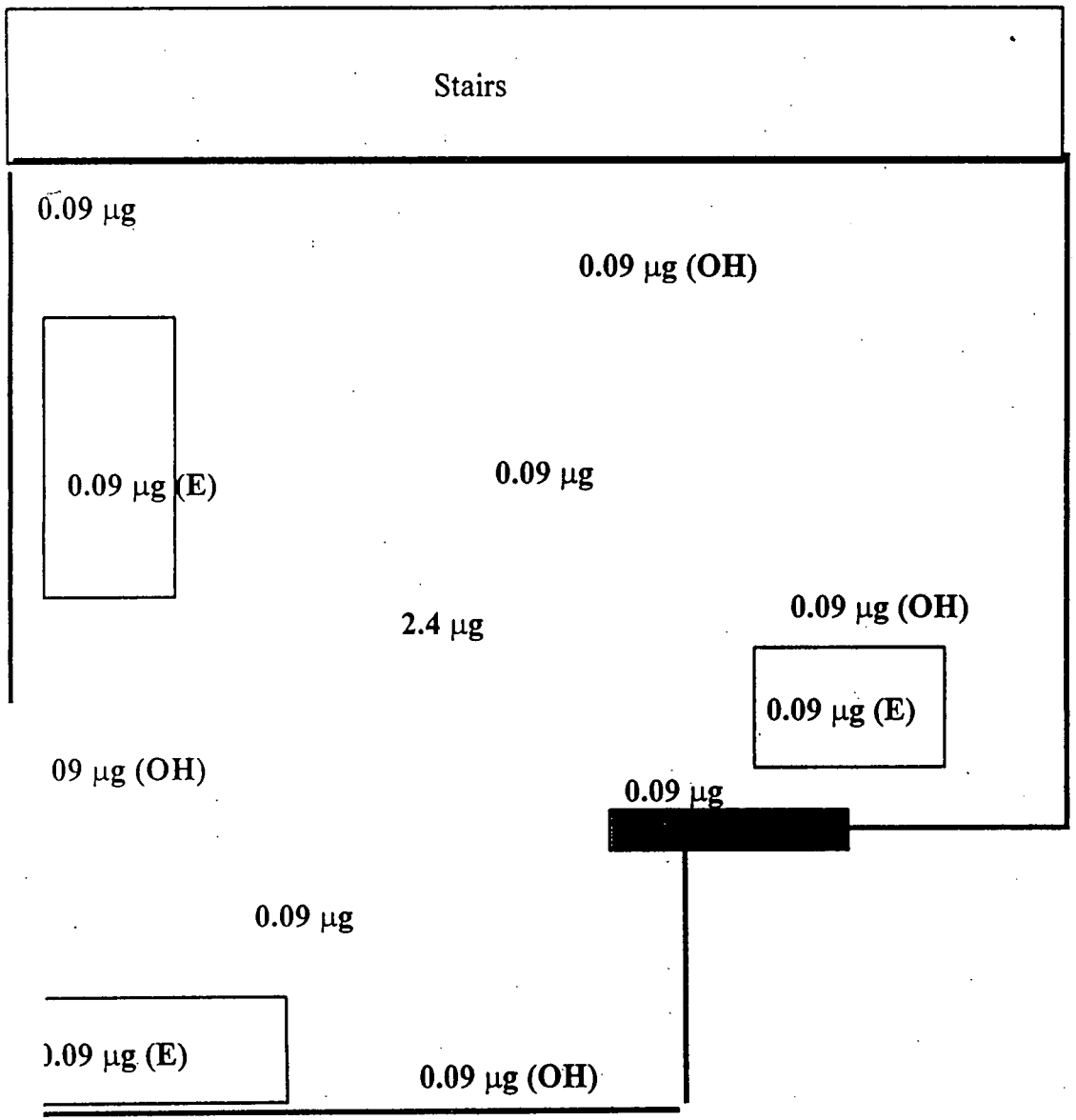
Radiological Operations
Drawing Showing Survey Points

ROOM 270 and 272



Building 779, Room 270 Beryllium Surface Control Levels

May 5, 1998



N

(OH) Overhead
(E) Equipment
•All other smears taken on the floor
•All results below surface control levels
•Reported in Micrograms per square foot

207

INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium
CAS No.: 7440-41-7
Matrix: FILTER

Conc. Units: UG/F
RIN #: 98D1655

Laboratory ID:	Client Sample ID:	Conc.	Flag
33536.01	F-001	0.09	U
33536.02	F-002	0.09	U
33536.03	E-003	0.09	U
33536.04	F-004	0.09	U
33536.05	F-005	0.09	U
33536.06	F-006	0.09	U
33536.07	E-007	0.09	U
33536.08	OH-008	0.09	U
33536.09	OH-009	0.09	U
33536.10	OH-010	0.09	U
33536.11	OH-011	0.09	U
33536.12	F-012	0.09	U
33536.13	F-013	0.09	U
33536.14	E-014	0.09	U
33536.15	OH-015	0.09	U
33536.16	OH-016	0.09	U
33536.17	F-017	0.09	U
33536.18	F-018	0.09	U
33536.19	F-019	2.4	
33536.20	F-020	0.09	U
33536.21	F-021	0.09	U
33536.22	E-022	0.09	U
33536.23	E-023	0.09	U
33536.24	E-024	0.09	U
33536.25	OH-025	0.09	U
33536.26	OH-026	0.09	U
33536.27	OH-027	0.09	U
33536.28	OH-028	0.09	U

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

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2 3

SAMPLERS (Signature) TONYA SANGATINS / T-779 X-5392 / D-3052

REPORT IDENTIFICATION NUMBER (RIN) 98D1799 LAB/LOCATION: RECRA

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analytes: AR01A001	B2
4-21-98	1000	013	013	233-13	ELECTRAL MICROWAVE	233-13	WHAT FILTER PAPER						R	
		014	014	233-14		233-14								
		015	015	235-15		235-15								
		016	016	270-16	AUGER SYSTEMS	270-16								
		017	017	270-17		270-17								
		018	018	270-18		270-18								
		019	019	270-19		270-19								
		020	020	270-20		270-20								
		021	021	270-21		270-21								
		022	022	270-22		270-22								
		023	023	270-23		270-23								
		024	024	270-24		270-24								

	Date	Time	Received By/Organization	Date	Time
Rite	4-21-98	1605	D Karen Olson	4-21-98	1605
en Olson	4-23-98	0930	[signature]	4/23/98	0930

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

Charge # KT03LX00

Project 779 DFD

Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No _____

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility

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3 . 3

SAMPLERS (Signature): TONYA SANGARINE / T-779 X-5392 / D-3052

REPORT IDENTIFICATION NUMBER (RIN): 98D1799 LAB/LOCATION: RECRA

RFETS CONTRACTOR: RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analyses: AUROLA001	BE
4-21-98	1030	025	025	270-25	AUGER SYSTEM ~~270-B50~~	270-25	WHAT FILTER PAPER						R	
		026	026	274-26		274-26								
		027	027	274-27		274-27								
		028	028	274-28		274-28								

	Date	Time	Received By/Organization	Date	Time
	4-21-98	1605	D. Karen Olson	4-21-98	1605
Olson	4-23-98	0930			

LABORATORY USE ONLY	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___ °C	

Charge # KD3CX00

Project 779 D&D

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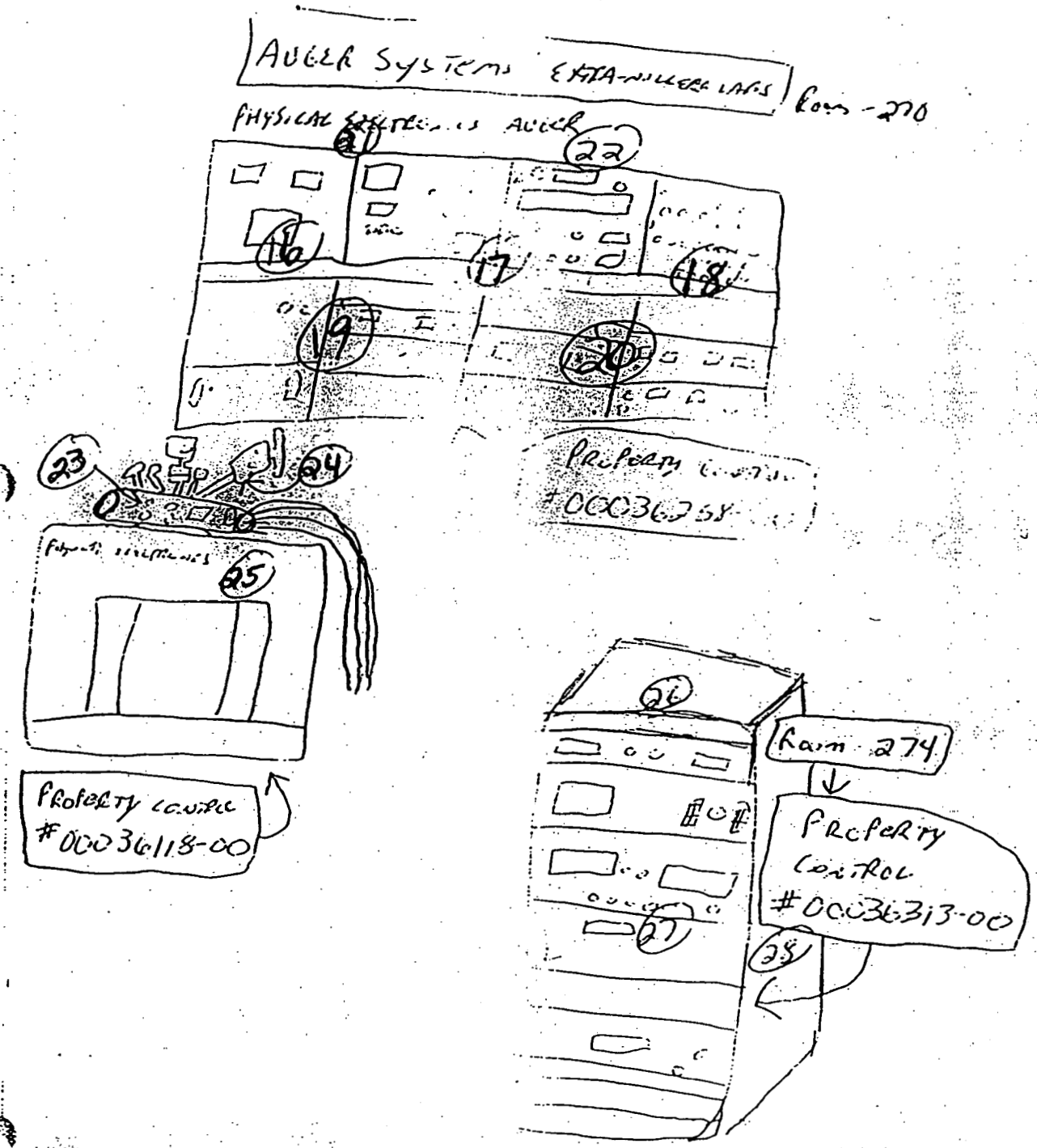
RADIOLOGICAL OPERATIONS

Drawing Showing Survey Points



PRE # 95C0325-B0115-01

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CLIENT F-H RIN#9ED1789

RECRA LOT #: 9804L343

WORK ORDER 11B30-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	001.001.114-01	Beryllium, Total	0.04 u	UG	0.04	1.0
-002	002.001.114-02	Beryllium, Total	0.04 u	UG	0.04	1.0
-003	003.001.114-03	Beryllium, Total	0.04 u	UG	0.04	1.0
-004	004.001.114-04	Beryllium, Total	0.04 u	UG	0.04	1.0
-005	005.001.235-05	Beryllium, Total	0.04 u	UG	0.04	1.0
-006	006.001.235-06	Beryllium, Total	0.04 u	UG	0.04	1.0
-007	007.001.235-07	Beryllium, Total	0.04 u	UG	0.04	1.0
-008	008.001.235-08	Beryllium, Total	0.04 u	UG	0.04	1.0
-009	009.001.235-09	Beryllium, Total	0.04 u	UG	0.04	1.0
-010	010.001.235-10	Beryllium, Total	0.04 u	UG	0.04	1.0
-011	011.001.235-11	Beryllium, Total	0.04 u	UG	0.04	1.0
-012	012.001.235-12	Beryllium, Total	0.04 u	UG	0.04	1.0
-013	013.001.213-13	Beryllium, Total	0.04 u	UG	0.04	1.0
-014	014.001.213-14	Beryllium, Total	0.04 u	UG	0.04	1.0
-015	015.001.235-15	Beryllium, Total	0.04 u	UG	0.04	1.0
-016	016.001.270-16	Beryllium, Total	0.04 u	UG	0.04	1.0
-017	017.001.270-17	Beryllium, Total	0.04 u	UG	0.04	1.0
-018	018.001.270-18	Beryllium, Total	0.04 u	UG	0.04	1.0
-019	019.001.270-19	Beryllium, Total	0.04 u	UG	0.04	1.0
-020	020.001.270-20	Beryllium, Total	0.04 u	UG	0.04	1.0

Auger

212

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CLIENT: F-H RIN#98D1799
WORK ORDER: 11630-001-001-9999-00

RECRA LOT #: 9804L544

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	021.001.270-21	Beryllium, Total	0.04 u	UG	0.04	1.0
-002	022.001.270-22	Beryllium, Total	0.04 u	UG	0.04	1.0
-003	023.001.270-23	Beryllium, Total	0.04 u	UG	0.04	1.0
-004	024.001.270-24	Beryllium, Total	0.04 u	UG	0.04	1.0
-005	025.001.270-25	Beryllium, Total	0.04 u	UG	0.04	1.0
-006	026.001.274-26	Beryllium, Total	0.04 u	UG	0.04	1.0
-007	027.001.274-27	Beryllium, Total	0.04 u	UG	0.04	1.0
-008	028.001.274-28	Beryllium, Total	0.04 u	UG	0.04	1.0

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JOHNS MANVILLE TECHNICAL CENTER (JMTC)

Oct-28-98

Laboratory Project No.: 98102301
Client: Kaiser Hill
PO#/Release #:
Site Sample #: NR01
Seal #: 9920142
Requestor: Tanya Sangaline

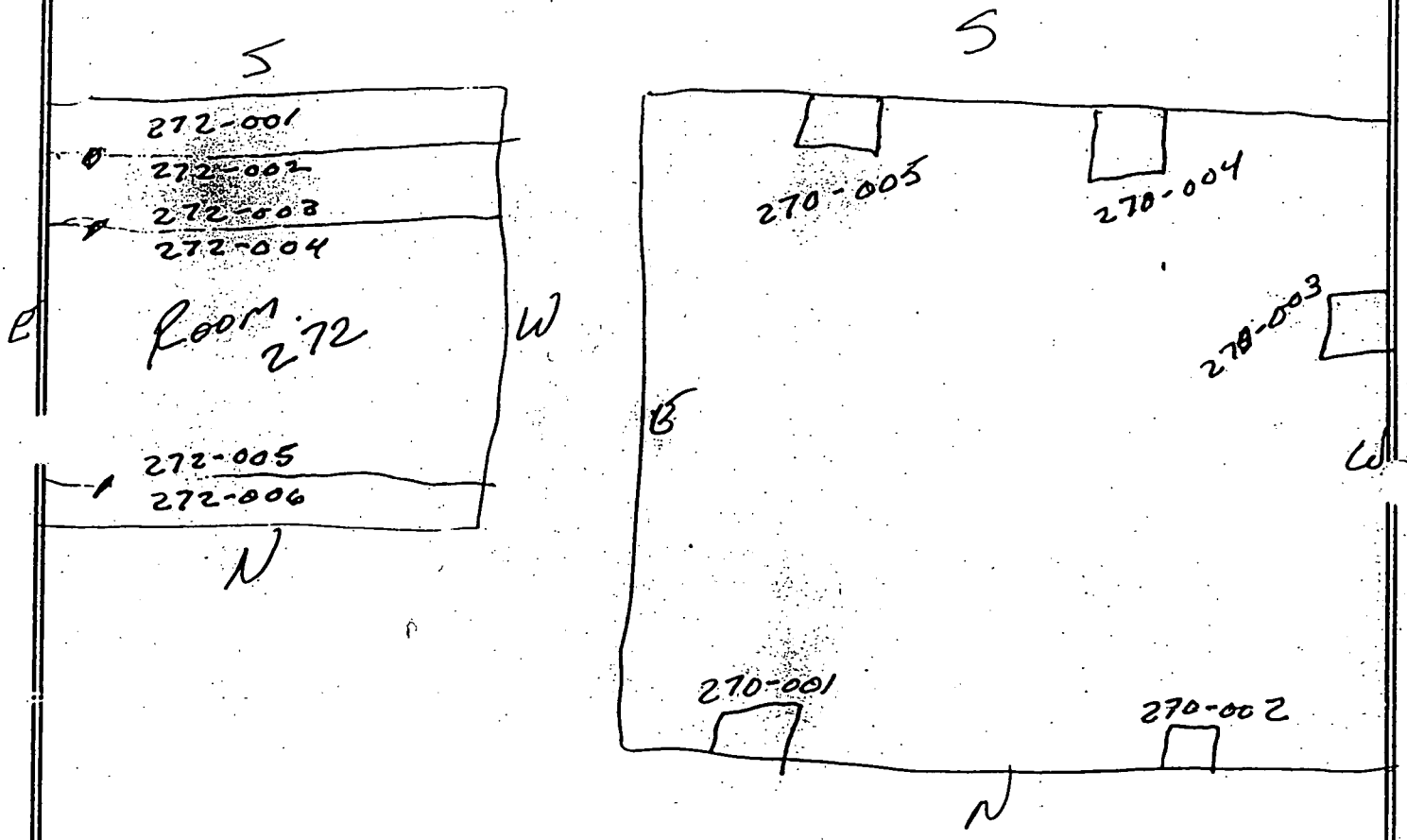
TABLE I: Sample Results

Client Sample No.	Laboratory Sample No.	Analysis	Method	Matrix	Reporting Limit	Total
272-001	981023A-001	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
272-002	981023A-002	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
272-003	981023A-003	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
272-004	981023A-004	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
272-005	981023A-005	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
272-006	981023A-006	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
270-001	981023A-007	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
270-002	981023A-008	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
270-003	981023A-009	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
270-004	981023A-010	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
270-005	981023A-011	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

RADIOLOGICAL SAFETY

Drawing Showing Survey Points



JOHNS MANVILLE TECHNICAL CENTER (JMTC)

Oct-28-98

Laboratory Project No.: 98102301
Client: Kaiser Hill
PO#/Release #:
Site Sample #: NR01
Seal #: 99Z0142
Requestor: Tanya Sangaline

TABLE II: Quality Control

QC No.	Analyte	Method	Matrix	Reporting Limit	Amount Spiked	Amount Recovered	Percent Recovery
Media Blank	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	N/A	< 0.1 ug	
Q8-687	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	5.00 ug	4.91 ug	98.2%
Q8-687 Dup.	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	5.00 ug	4.97 ug	99.4%

Analyst: _____
Anthony Carr

Quality Assurance: _____
Dennis Murray

AIHA Accreditation No. 056

	A	B	C	D	E	F	G
1	***Room Number***	***Date***	***Sample Number***	***Reporting Limit*** *micro grams/100cm2*	***Location/Description***	***Smear Results*** *micro grams/100ft²* *(unless otherwise indicated)*	***Sample Method or RIN#***
643	272	4/2/98	779-F-012	NA	Floor northeast corner	0.09	98D1655
644	272	4/2/98	779-F-013	NA	Floor Middle of Room	0.09	98D1655
645	272	4/2/98	779-E-014	NA	Equipment GB 6621	0.09	98D1655
646	272	4/2/98	779-OH-015	NA	Overhead southeast corner	0.09	98D1655
647	272	4/2/98	779-OH-016	NA	Overhead Northwest Corner	0.09	98D1655
648	272	10/22/98	272-001	0.2	Outside duct work	<0.1 q/100cm²	99Z0142
649	272	10/22/98	272-002	0.2	Inside duct work	<0.1 q/100cm²	99Z0142
650	272	10/22/98	272-003	0.2	Outside duct work	<0.1 q/100cm²	99Z0142
651	272	10/22/98	272-004	0.2	Inside duct work	<0.1 q/100cm²	99Z0142
652	272	10/22/98	272-005	0.2	Inside duct work	<0.1 q/100cm²	99Z0142
653	272	10/22/98	272-006	0.2	Outside duct work	<0.1 q/100cm²	99Z0142

*Analysis for Be using NIOSH method 7300 elements by IGP

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SAMPLERS (Signature) Tonya Sangaline / T-779 X-5392 / Page 3052

REPORT IDENTIFICATION NUMBER (RIN) 9801655 LAB/LOCATION: ~~RECRA~~ Southwest of Oklahoma OKO 4/7/98

RFETS CONTRACTOR RMRS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CHAIN OF CUSTODY NUMBER _____

F-012

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	~~CONTAINER~~ Room	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analytes: NR01A001
4/8/98	1015	N/A	N/A	F-013	779	272	WHAT-41 FILTER PAPER						R
				E-014									R
				OH-015									R
				OH-016									R
4/9/98	1045	N/A	N/A	F-017	779	270	WHAT 41 FILTER PAPER						R
				F-018									R
				F-019									R
				F-020									R
				F-021									R
				E-022									R
				E-023									R
				E-024									R

	Date	Time	Received By/Organization	Date	Time
	4-2-98	1300	Tonya Sangaline / IH&S	4-6-98	1310
	4-8-98	1430	[illegible] / AST	4-8-98	1430

LABORATORY USE ONLY (19)	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	

Charge # KT03CX00

Project 779 D&D

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No. _____

APO COC 6/5/97

Non-Radiological Closeout Report for Building 779, Main/B-Ann/Utility Page C143 of C172

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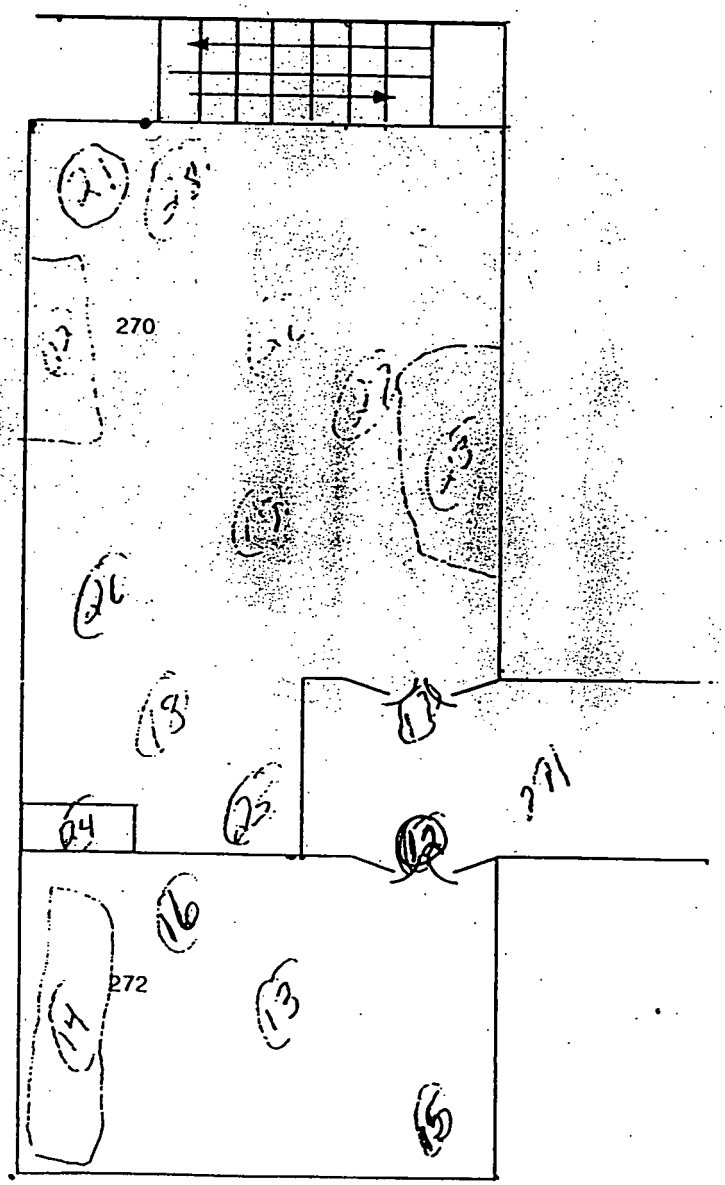
Radiological Operations
Drawing Showing Survey Points

ROOM 270 and 272



INORGANIC ANALYSES DATA SHEET (SUMMARY)

Element: Beryllium
CAS No.: 7440-41-7
Matrix: FILTER

Conc. Units: UG/F
RIN #: 98D1655

Laboratory ID:	Client Sample ID:	Conc.	Flag
33536.01	F-001	0.09	U
33536.02	F-002	0.09	U
33536.03	E-003	0.09	U
33536.04	F-004	0.09	U
33536.05	F-005	0.09	U
33536.06	F-006	0.09	U
33536.07	E-007	0.09	U
33536.08	OH-008	0.09	U
33536.09	OH-009	0.09	U
33536.10	OH-010	0.09	U
33536.11	OH-011	0.09	U
33536.12	F-012	0.09	U
33536.13	F-013	0.09	U
33536.14	E-014	0.09	U
33536.15	OH-015	0.09	U
33536.16	OH-016	0.09	U
33536.17	F-017	0.09	U
33536.18	F-018	0.09	U
33536.19	F-019	2.4	
33536.20	F-020	0.09	U
33536.21	F-021	0.09	U
33536.22	E-022	0.09	U
33536.23	E-023	0.09	U
33536.24	E-024	0.09	U
33536.25	OH-025	0.09	U
33536.26	OH-026	0.09	U
33536.27	OH-027	0.09	U
33536.28	OH-028	0.09	U

270 + 272

Southwest Laboratory of Oklahoma, 1700 W Albany, Broken Arrow, OK

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Building 779

RFP F 3781.32 (7/86)
Formerly RF-47530 98102801
Due: 10/28/98

Rocky Flats Environmental Technology Site
Golden, CO 80402-0464
Safety and Hygiene Chain of Custody Record and Analysis Request

Name of Originator: Tonya Sangalone Title: Health & Safety Bldg/Ext: 776 x5392 Date: October 22 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME	MEDIA	P A B	Personal Area Bulk Location	REMARKS	Lab Number
272-001	Beryllium	—	—	Whatman 41	B	OUTSIDE duct		
272-002	Beryllium	—	—	Whatman 41	B	inside duct		
272-003	Beryllium	—	—	Whatman 41	B	OUTSIDE duct		
272-004	Beryllium	—	—	Whatman 41	B	Inside duct		
272-005	Beryllium	—	—	Whatman 41	B	Inside duct		
272-006	Beryllium	—	—	Whatman 41	B	OUTSIDE duct		
270-001	Beryllium	—	—	Whatman 41	B	Inside	see map/survey	
270-002	Beryllium	—	—	Whatman 41	B	"	"	
270-003	Beryllium	—	—	Whatman 41	B	"	"	
270-004	Beryllium	—	—	Whatman 41	B	Inside	see map/survey	
270-005	Beryllium	—	—	Whatman 41	B	"	"	

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Tonya J Sangalone	[signature]	1300 10-22-98	[signature]	[signature]	1345 10/22/98
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	1500 10/22/98	[signature]	[signature]	1600 10/22/98
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
				[signature]	0930 10/23/98
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

Kaiser-Hill ☐ Verbal To: Tonya Sangalone
RMRS ☒ Fax To: 966-2964
SSOC ☐ Report To: KH 966-5392
DynCorp ☐ Bill To: KH
WSI ☐ P.O.#/Release: 9970142
Lab: John Manville

Analysis Request

Industrial Hygiene Sample
☐ Standard Service ☒ Rush 3-DAY ☐ Other
Asbestos Samples
☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

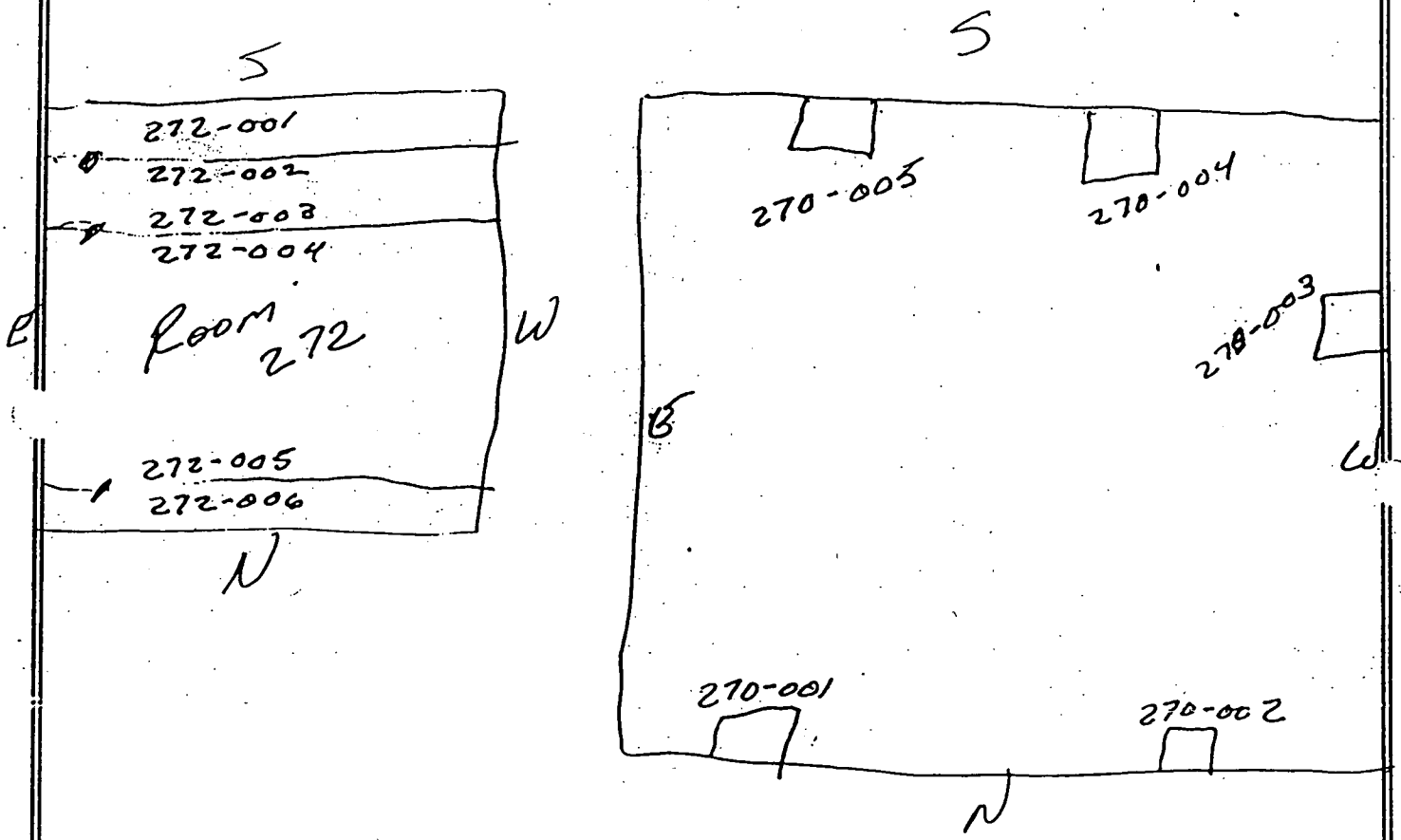
Seal# (Release #) 9970142
Condition of Seal: ☐ Broken ☐ Unbroken
Signature [signature]
Comments: No Asbestos present on samples.

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

RADIOLOGICAL SAFETY

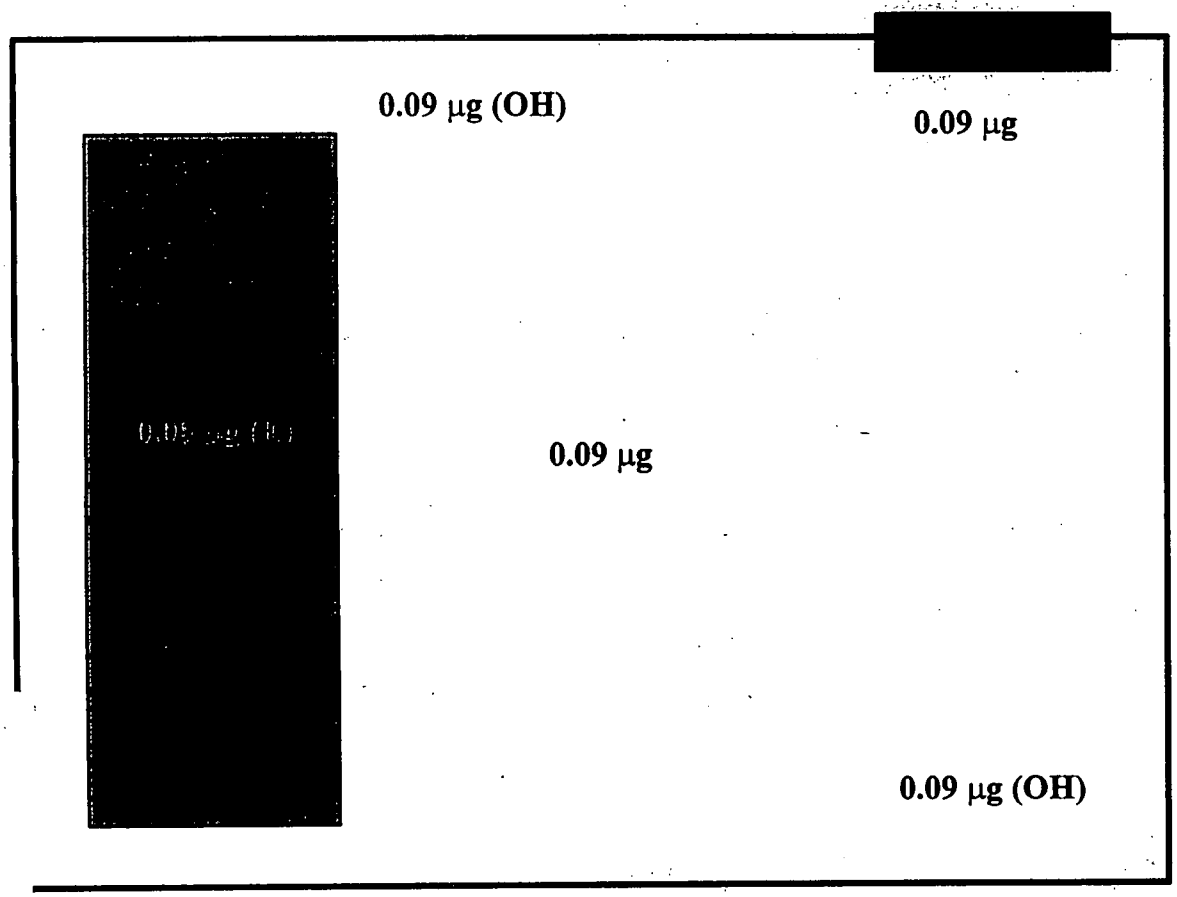
Drawing Showing Survey Points



222

Building 779, Room 272 Beryllium Surface Control Levels

May 5, 1998



N

(OH) Overhead
(E) Equipment
•All other smears taken on the floor
•All results below surface control levels
•Reported in Micrograms per square foot

JOHNS MANVILLE TECHNICAL CENTER (JMTC)

Oct-28-98

Laboratory Project No.: 98102301
Client: Kaiser Hill
PO#/Release #:
Site Sample #: NR01
Seal #: 99Z0142
Requestor: Tanya Sangaline

TABLE I: Sample Results

Client Sample No.	Laboratory Sample No.	Analysis	Method	Matrix	Reporting Limit	Total
272-001	981023A-001	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
272-002	981023A-002	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
272-003	981023A-003	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
272-004	981023A-004	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
272-005	981023A-005	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
272-006	981023A-006	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
270-001	981023A-007	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
270-002	981023A-008	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
270-003	981023A-009	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
270-004	981023A-010	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug
270-005	981023A-011	Beryllium	EPA-SW846-3051/OSHA ID-121	Whatman filter	0.1 µg	< 0.1 ug

	A	B	C	D	E	F	G
1	***Room Number***	***Date***	***Sample Number***	***Reporting Limit*** ***micro grams/100cm2***	***Location/Description***	***Smear Results*** ***micro grams/100ft^2*** ***(unless otherwise indicated)***	***Sample Method or RIN#***
654	274	4/21/98	779-274-26	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
655	274	4/21/98	779-274-27	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799
656	274	4/21/98	779-274-28	NA	Equip Auger XSP/ESCA Surf Analyzer	0.04	98D1799

• Analysis for Be using NIOSH method 7300 elements by IGP

3 . 3

MPLERS (Signature) TONYA SANGRAINE / T-779 X-5392 / D-3052

PORT IDENTIFICATION NUMBER (RIN) 98D1799 LAB/LOCATION: RECRA

ETS CONTRACTOR RMRS

OCKY FLATS
NVIRONMENTAL TECHNOLOGY SITE
HAIN OF CUSTODY NUMBER _____

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Cooled to 4°C	H2SO4	HNO3	H2SO4	NO	AUROIA601	BE														
4/21/98	1030	025	025	270-25	AUGER SYSTEM ~~270-25~~	270-25	WHAT RITER AFM						R															
		026	026	274-26		274-26																						
		027	027	274-27		274-27																						
		028	028	274-28		274-28																						

	Date	Time	Received By/Organization	Date	Time
	4-21-98	1605	D. Karen Olson	4-21-98	1605
Olson	4-23-98	0930			

LABORATORY USE ONLY	(Y)	(N)
PCKG REC'D/CUSTODY SEALS INTACT		
SAMPLE LABELS/COCs AGREE		
TEMPERATURE AT TIME OF RECEIPT ___ °C		

Charge # KD3CX00

Project 779 D&D

Non-Radiological Closeout Report
for Building 779, Main/B-Ant/Utility

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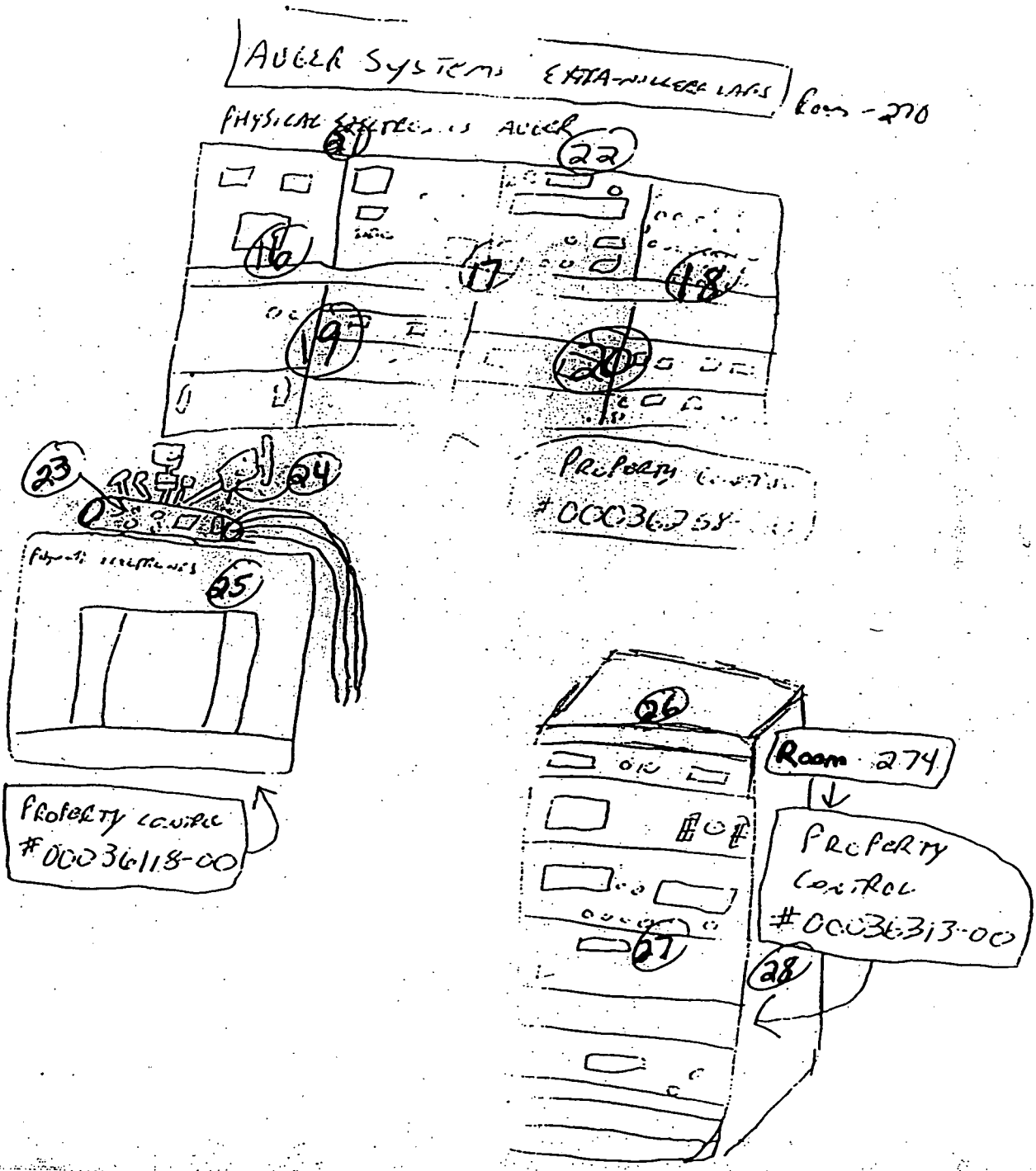
RADIOLOGICAL OPERATIONS

Drawing Showing Survey Points



PRR # 95-0325-B-775-1

Page 4 of 4

CLIENT: F-H RIN#98D1799

WORK ORDER: 11630-001-001-9999-00

RECRA LOT #: 9804L644

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	021.001.270-21	Beryllium, Total	0.04 u	UG	0.04	1.0
-002	022.001.270-22	Beryllium, Total	0.04 u	UG	0.04	1.0
-003	023.001.270-23	Beryllium, Total	0.04 u	UG	0.04	1.0
-004	024.001.270-24	Beryllium, Total	0.04 u	UG	0.04	1.0
-005	025.001.270-25	Beryllium, Total	0.04 u	UG	0.04	1.0
-006	026.001.274-26	Beryllium, Total	0.04 u	UG	0.04	1.0
-007	027.001.274-27	Beryllium, Total	0.04 u	UG	0.04	1.0
-008	028.001.274-28	Beryllium, Total	0.04 u	UG	0.04	1.0

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	A	B	C	D	E	F	G
1	*Room Number*	*Date*	*Sample Number*	*Reporting Limit micro grams/100cm2*	*Location/Description*	*Smear Results micro grams/100ft² (unless otherwise indicated)*	*Sample Method or RIN#*
751	Dock	4/5/99	779-99-03-27-13-Cargo-01	0.1	Cargo Floor	<0.1 q/100cm²	*
752	Dock	4/5/99	779-99-03-27-13-Cargo-02	0.1	Cargo Floor	<0.1 q/100cm²	*
753	Dock	4/5/99	779-99-03-27-13-Cargo-03	0.1	Cargo Floor	<0.1 q/100cm²	*
754	Dock	8/6/99	779-0723-1999-13-501	0.1	Be Hopper Exhaust Internal	<0.1 q/100cm²	*
755	Dock	8/6/99	779-0726-1999-13-501	0.1	Be Hopper Exhaust Internal	<0.1 q/100cm²	*
756	Dock	8/6/99	779-0727-1999-13-501	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
757	Dock	8/6/99	779-0727-1999-13-502	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
758	Dock	8/6/99	779-0727-1999-13-503	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
759	Dock	8/6/99	779-0727-1999-13-504	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
760	Dock	8/6/99	779-0728-1999-13-501	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
761	Dock	8/6/99	779-0728-1999-13-502	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
762	Dock	8/6/99	779-0728-1999-13-503	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
763	Dock	8/6/99	779-0728-1999-13-504	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
764	Dock	8/6/99	779-0728-1999-13-505	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
765	Dock	8/6/99	779-072-81999-13-506	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
766	Dock	8/6/99	779-0728-1999-13-507	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
767	Dock	8/6/99	779-0728-1999-13-508	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
	)ock	8/6/99	779-0731-1999-13-502	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
	)ock	8/6/99	779-0731-1999-13-503	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
	)ock	8/6/99	779-0731-1999-13-504	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
	)ock	8/6/99	779-0731-1999-13-505	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
	)ock	8/6/99	779-0731-1999-13-506	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
	)ock	8/6/99	779-0731-1999-13-507	0.1	Be Hopper - Floor	<0.1 q/100cm²	*
	ock-Roof	8/9/99	779-0715-1999-13-503	0.1	Be Hopper Exhaust Internal At Second Elbow	<0.1 q/100cm²	*
	ock-Roof	8/9/99	779-0715-1999-13-504	0.1	Be Hopper Exhaust Internal At First Elbow	<0.1 q/100cm²	*

* Analysis for Be using NIOSH method 7300 elements by IGP

	A	B	C	D	E	F	G
1	*Room Number*	*Date*	*Sample Number*	*Reporting Limit micro grams/100cm2*	*Location/Description*	*Smear Results micro grams/100ft² (unless otherwise indicated)*	*Sample Method or RIN#*
776	Roof-Buildout	9/8/99	779-0828-1999-15-501	0.1	Be Exhaust Line, Internal	<0.2 q/100cm²	99Z0153
777	Roof-Buildout	9/8/99	779-0828-1999-15-502	0.1	Be Exhaust Line, Internal	<0.8 q/100cm²	99Z0153

* Analysis for Be using NIOSH method 7300 elements by IGP

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BUILDING 779

BERYLLIUM SMEAR RESULTS

Cargo

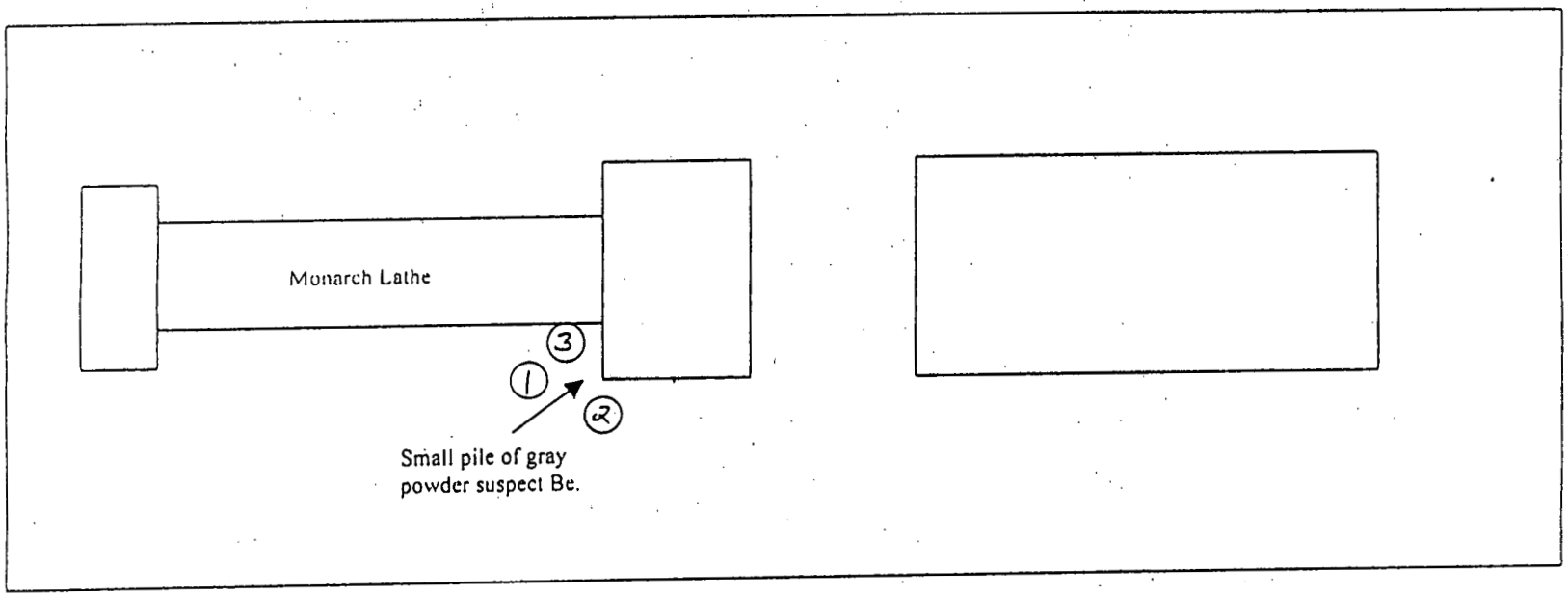
April 5, 1999

Sample Number	Reporting Limit micro grams	Location Totals[1] micro grams/100cm^2
779-99-03-27-13-Cargo-01	0.1$_{ug}$	Cargo Floor <0.1$_{ug/100cm^2}$
779-99-03-27-13-Cargo-02	0.1$_{ug}$	Cargo Floor <0.1$_{ug/100cm^2}$
779-99-03-27-13-Cargo-03	0.1$_{ug}$	Cargo Floor <0.1$_{ug/100cm^2}$

[1] See attached map of cargo for approximate smear locations on floor. Cargo contains equipment from room 162.

231

CARGO



BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOF OF COVERED DOCK

August 6, 1999

Sample Number	Reporting Limit micro grams	Location Totals[1] micro grams/100cm
779-07231999-13-501	0.1_{ug}	Be Hopper Exhaust Internal $<0.1_{ug/100cm^2}$

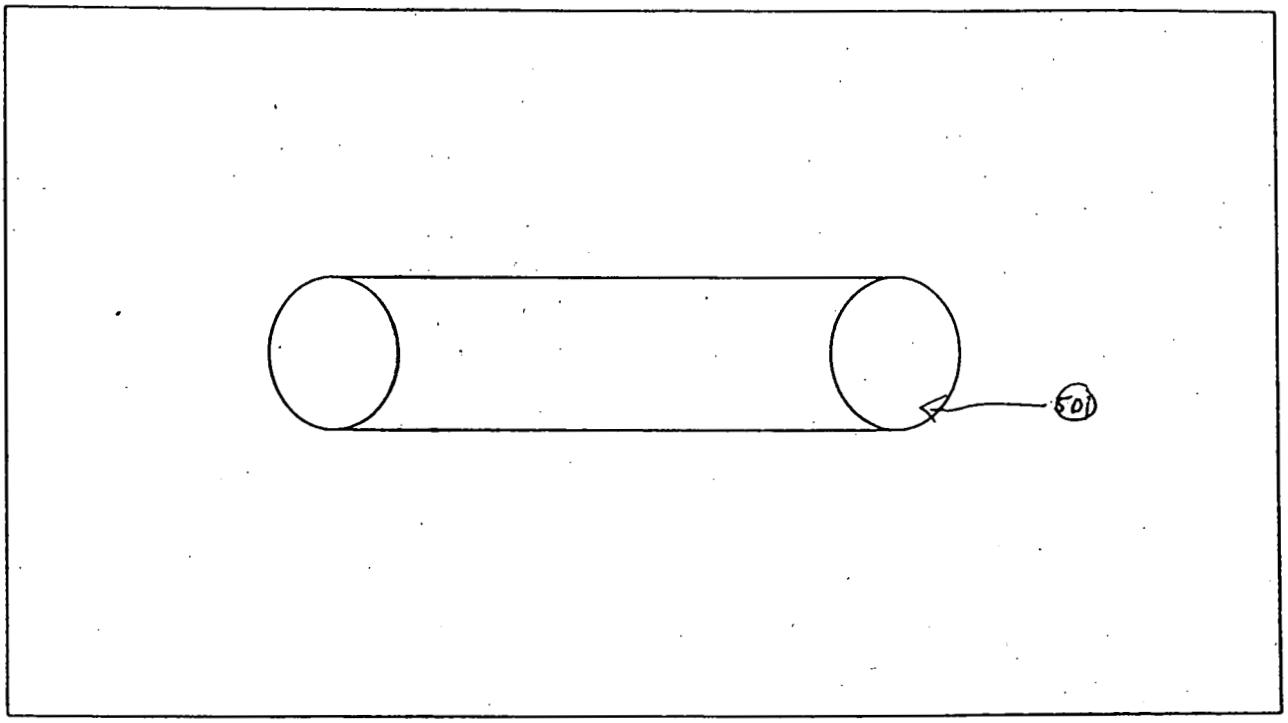
[1] See attached map of Be exhaust for approximate smear locations. Smears taken in exhaust running above the covered dock. Smear taken while full negative on.

233

Building 779

Beryllium Smear Locations

Beryllium Exhaust Line



234

BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOF OF COVERED DOCK

August 6, 1999

Sample Number	Reporting Limit micro grams	Location Tests micro grams
779-07261999-13-501	0.1_{ug}	Be Hopper Exhaust Internal $<0.1_{ug/100cm^2}$

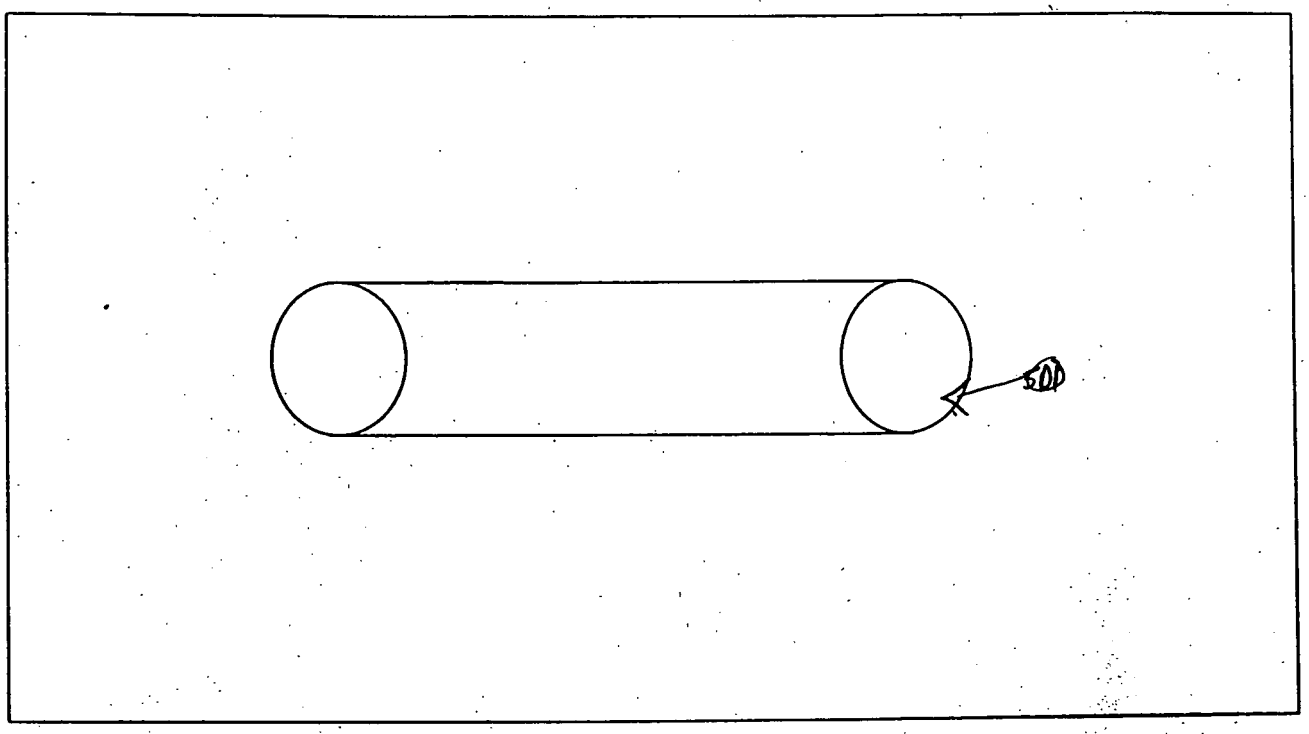
[1] See attached map of Be exhaust for approximate smear locations. Smears taken in exhaust running above the covered dock. Smear taken while full negative on.

235

Building 779

Beryllium Smear Locations

Beryllium Exhaust Line



236

BUILDING 779

BERYLLIUM SMEAR RESULTS

Be HOPPER COVERED DOCK

August 6, 1999

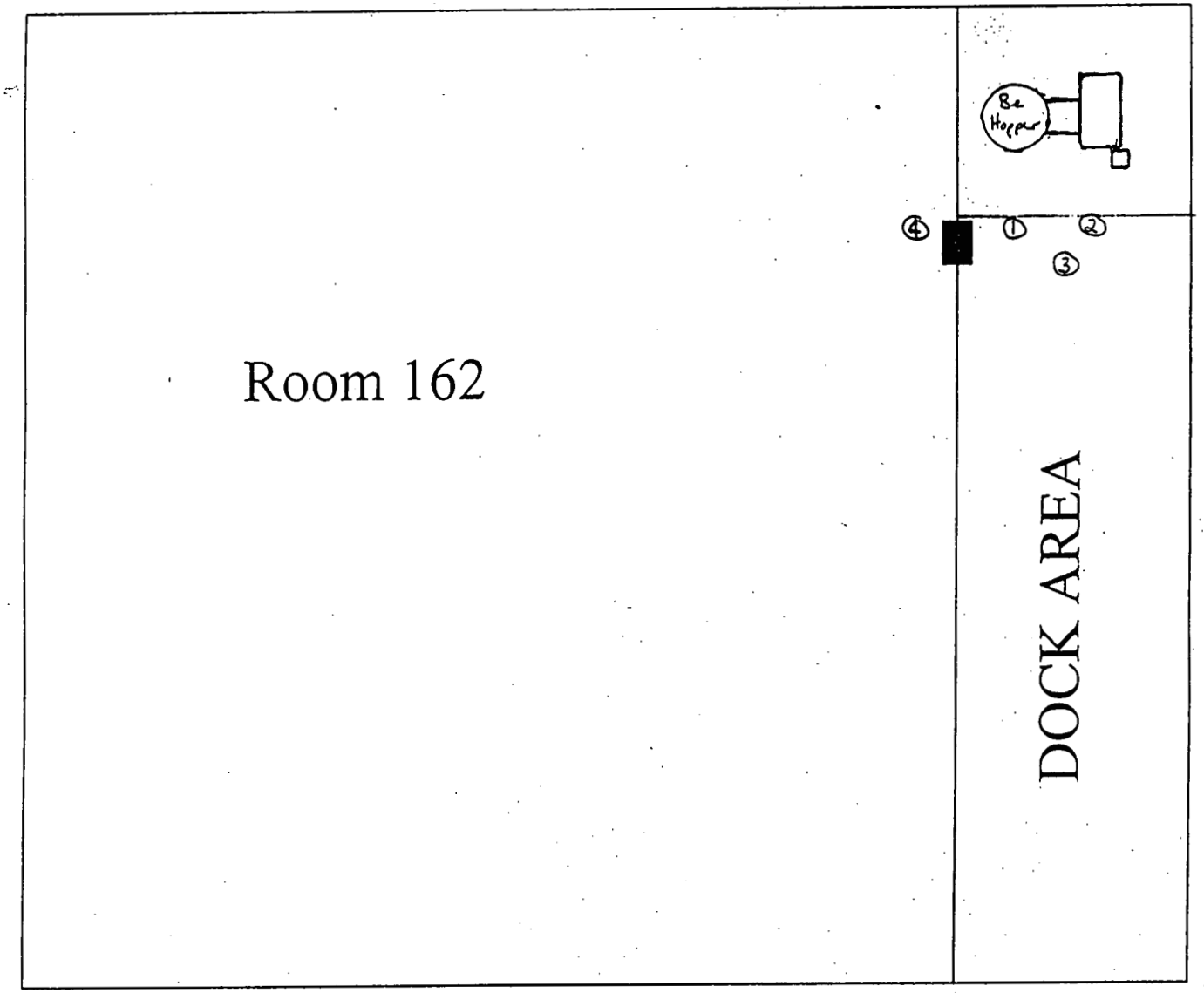
Sample Number	Reporting Limit micro grams	Location Levels micro grams/100cm^2
779-07271999-13-501	0.1$_{ug}$	Floor <0.1$_{ug/100cm^2}$
779-07271999-13-502	0.1$_{ug}$	Floor <0.1$_{ug/100cm^2}$
779-07271999-13-503	0.1$_{ug}$	Floor <0.1$_{ug/100cm^2}$
779-07271999-13-504	0.1$_{ug}$	Floor <0.1$_{ug/100cm^2}$

[1] See attached map of covered dock for approximate smear locations. Smears taken near Be hopper, also one in room 162. Smears 1-4 taken pre cutting of duct into room 162.

237

Building 779, Room 162, Beryllium Surface Control Levels

~~February 26, 1999~~ WR
7·27·99
pre cutting



N

BUILDING 779

BERYLLIUM SMEAR RESULTS

Be HOPPER COVERED DOCK

August 6, 1999

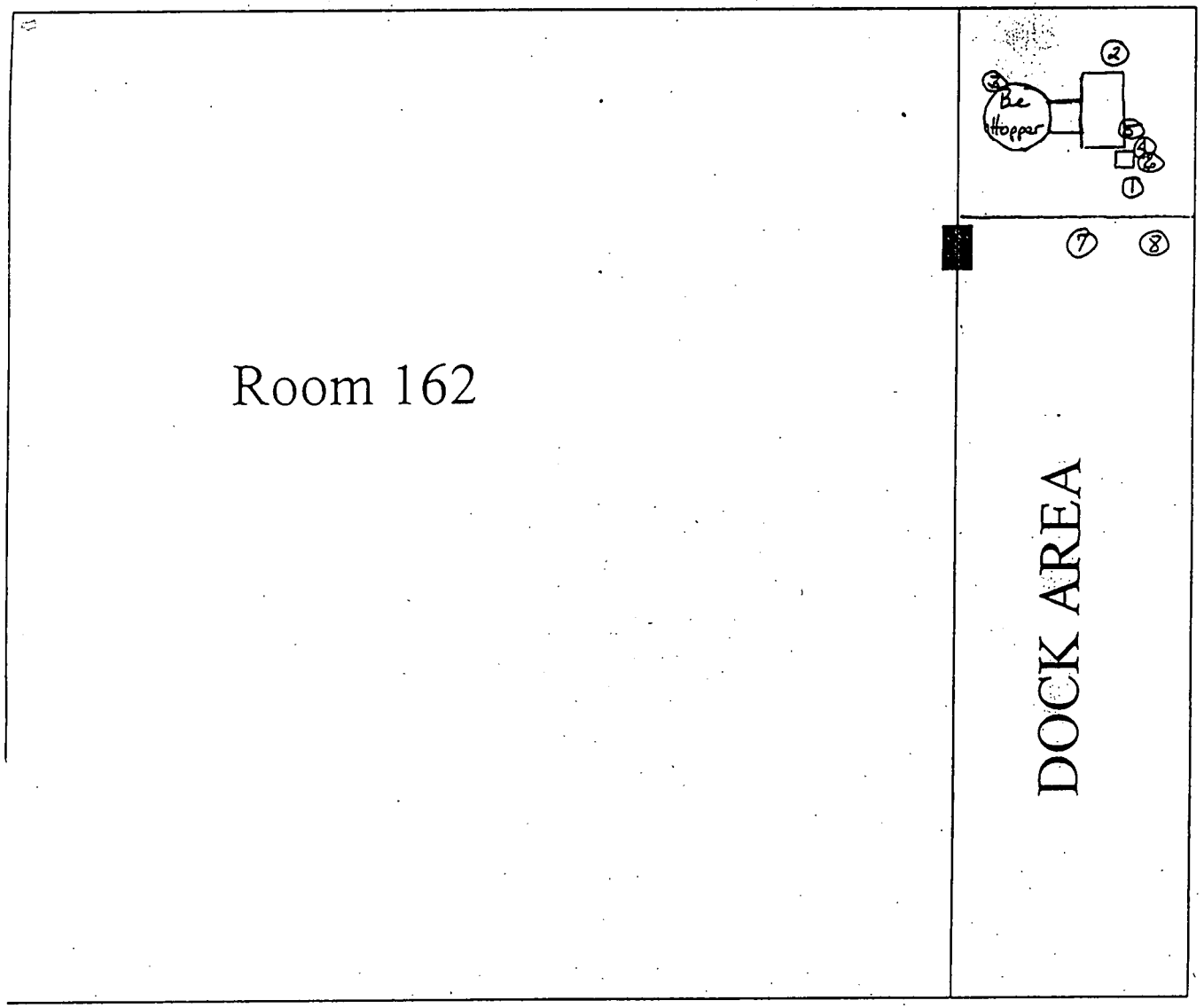
Sample Number	Reporting Limit micro grams	Location Totals[1] micro grams/100cm²
779-07281999-13-501	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-07281999-13-502	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-07281999-13-503	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-07281999-13-504	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-07281999-13-505	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-07281999-13-506	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-07281999-13-507	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$
779-07281999-13-508	0.1_{ug}	Floor $<0.1_{ug/100cm^2}$

[1] See attached map of covered dock for approximate smear locations. Smears taken around Be hopper. Smears 1-4 taken pre cutting of duct pipe and 5-8 taken after cutting done.

239

Building 779, Room 162, Beryllium Surface Control Levels

~~February 26, 1999~~ HR
7·28·99
pre cutting 1-4
post cutting 5-8



N

BUILDING 779

BERYLLIUM SMEAR RESULTS

COVERED DOCK

August 6, 1999

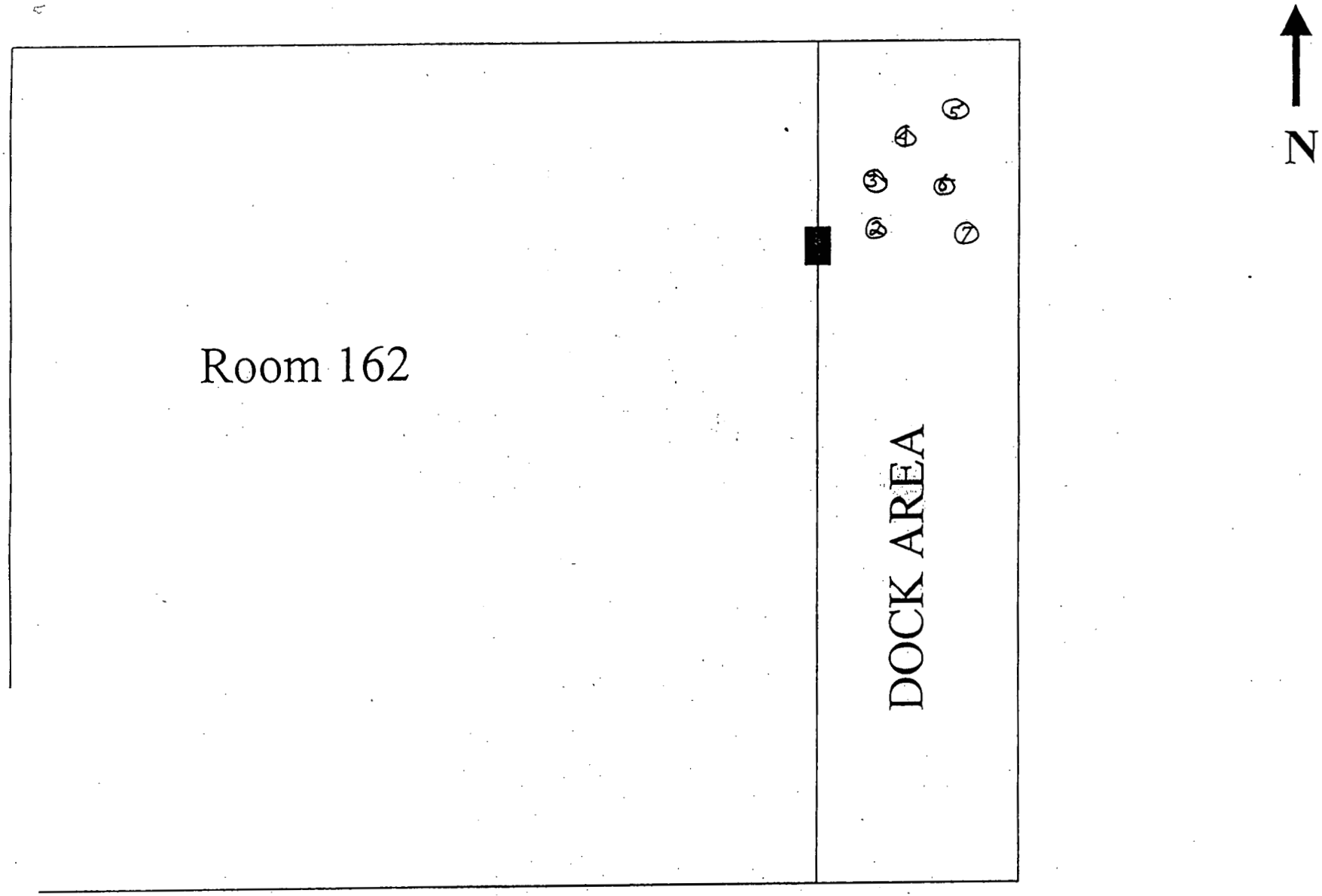
Sample Number	Reporting Limit micro grams	Location Totals[1] micro grams/100cm^2
779-07311999-13-502	0.1 ug	Floor <0.1 ug/100cm^2
779-07311999-13-503	0.1 ug	Floor <0.1 ug/100cm^2
779-07311999-13-504	0.1 ug	Floor <0.1 ug/100cm^2
779-07311999-13-505	0.1 ug	Floor <0.1 ug/100cm^2
779-07311999-13-506	0.1 ug	Floor <0.1 ug/100cm^2
779-07311999-13-507	0.1 ug	Floor <0.1 ug/100cm^2

[1] See attached map of covered dock for approximate smear locations. Smears taken after Be hopper removed from covered dock. Smears 2-7 taken post removal.

241

Building 779, Room 162, Beryllium Surface Control Levels

February 26, 1999



BUILDING 779

BERYLLIUM SMEAR RESULTS

ROOF OF COVERED DOCK

August 9, 1999

Sample Number	Reporting Limit micrograms	Location[1] micrograms/100cm²
779-07151999-13-503	0.1_{ug}	Be Hopper Exhaust Internal $<0.1_{ug/100cm^2}$
779-07151999-13-504	0.1_{ug}	Be Hopper Exhaust Internal $<0.1_{ug/100cm^2}$

[1] See attached map of Be exhaust for approximate smear locations. Smears taken in exhaust running above the covered dock. Smear taken while full negative on.

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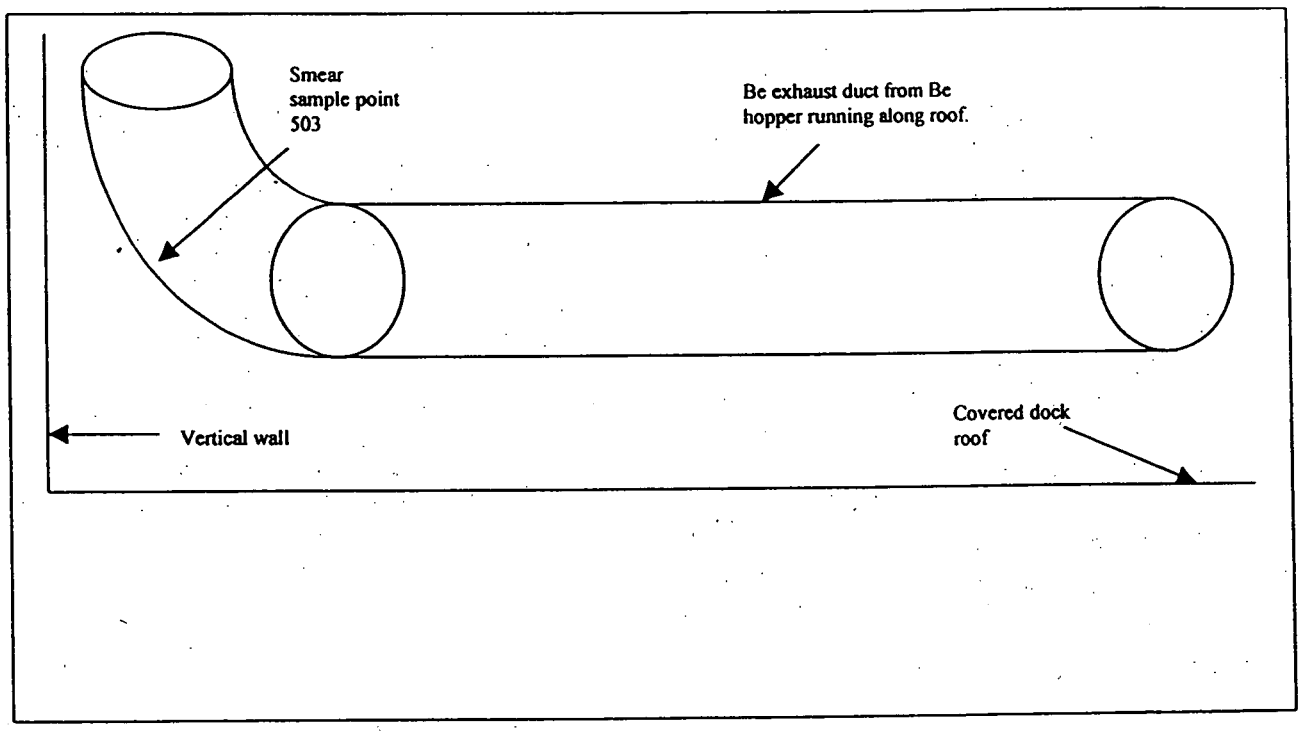
Building 779

Beryllium Smear Locations

Beryllium Exhaust Line

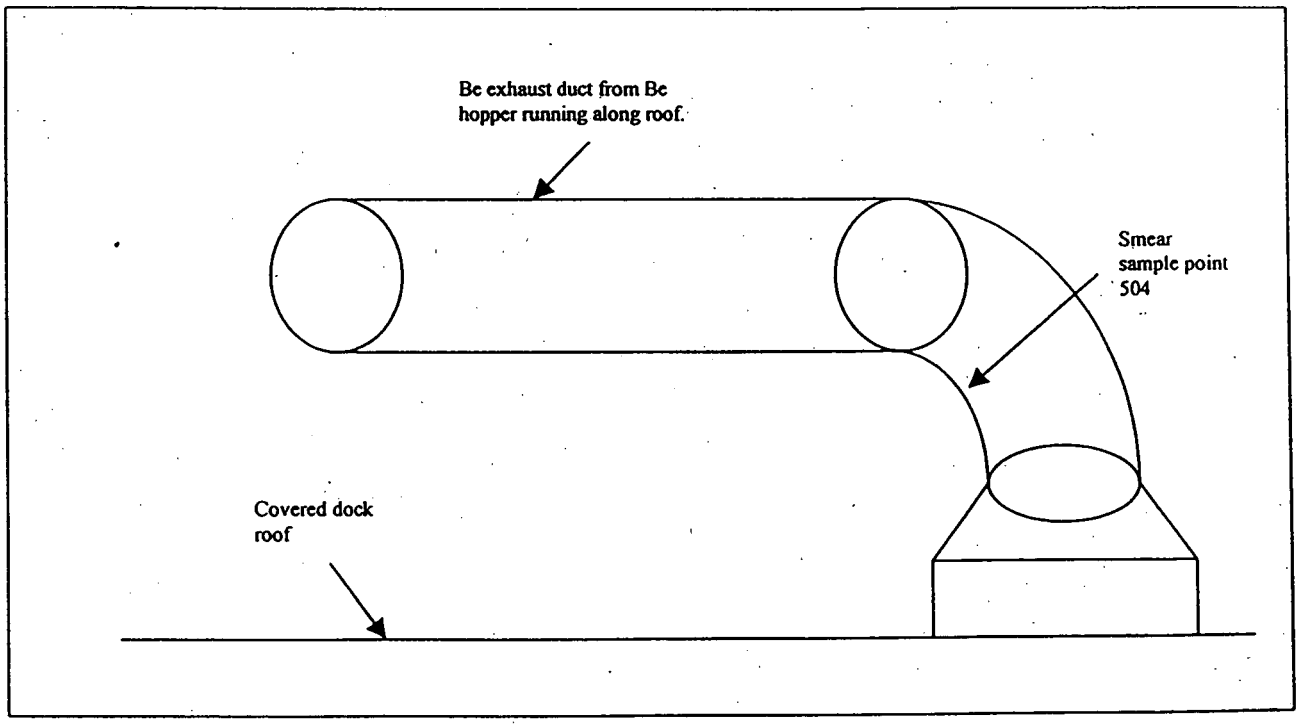


244

Building 779

Beryllium Smear Locations

Beryllium Exhaust Line



245

Industrial Hygiene Information System
Surface Sample Report

IHISR_SURFACE_SAMPLE
Date: 09/08/1999

RIN: 99Z0153

Sample Number/Type:	779-08281999-15-501	WIPE	Hygienist:	WADE RUSSELL
Location Info:	BLDG. 779 ROOF BUILD-OUT.			
Room No:				
		Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)	
		Concentration:	0.2000 UG/100CM2	
Sample Number/Type:	779-08281999-15-502	WIPE	Hygienist:	WADE RUSSELL
Location Info:	ROOF BUILD-OUT			
Room No:				
		Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)	
		Concentration:	0.8000 UG/100CM2	
Sample Number/Type:	779-08281999-15-511	BLANK	Hygienist:	WADE RUSSELL
Location Info:				
Room No:				
		Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)	
		Concentration:	< 0.0000 UG	
Sample Number/Type:	779-08281999-15-512	BLANK	Hygienist:	WADE RUSSELL
Location Info:				
Room No:				
		Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)	
		Concentration:	< 0.0000 UG	

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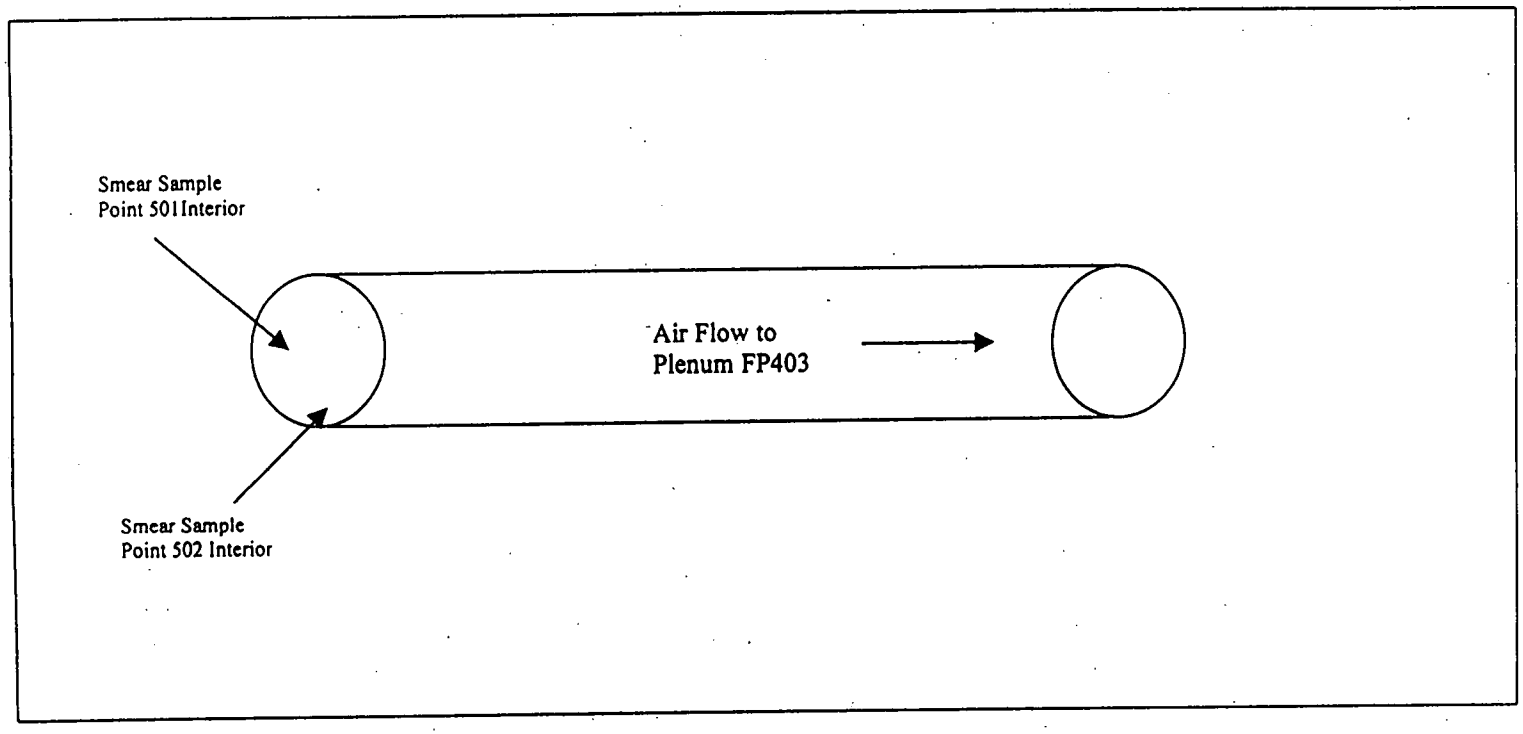
OFFICIAL USE ONLY
Contains information that may be withheld from public use under the Freedom of Information Act (5 USC 552), exemption number(s) 2.

Building 779

Beryllium Smear Locations

Beryllium Exhaust Line
Down Stream of Y Tie-in From
Admin. Area in Roof Build-out



Appendix D

RCRA Hazardous Substances

Results (Solids)

PAINT CHIP BULK SAMPLE DATA TABLE 2-1

Sample Number	Sample Description and Location	Lab Result TCLP * / (ICP)
779-980416-MS-001	Green/white on drywall; from room 150, N wall, 1' W of N exit, 4' from the floor.	ND / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)
779-980416-MS-002	Brown/green/red primer on metal; from room 150 door jamb, N side, 2' from the floor.	ND / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)
779-980416-MS-003	Beige/green on cinderblock; from room 156 N wall, 8' W of NE corner, 6' from the floor.	ND / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)
779-980416-MS-004	Magenta on cinderblock; from room 157 S wall, 3' E of SW corner, 4' from the floor.	ND / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)
779-980416-MS-005	Orange/lt green on cinderblock; from room 157, W wall, 9' N of S wall, 4' from the floor.	ND / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)
779-980416-MS-006	White on concrete; from room 150 ceiling, 10' N of S entry, 28' W of E wall.	ND / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)
779-980416-MS-007	Yellow on cinderblock; from room 157, N wall, center.	ND / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)
779-980416-MS-008	Blue on cinderblock; from room 157, E wall center, N end.	ND / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)
779-980416-MS-009	Off-white on cinderblock; from room 159, W wall, 11' N of SW corner, 5' from the floor.	ND / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)

*Note: TCLP column denotes in excess of max concentration. Otherwise ND, which means None Detected. ICP column denotes metals detected. Please refer to Lab Data S

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LEAD/METALS IN PAINT
CHARACTERIZATION REPORT
FOR BUILDING 779 CLUSTER

Sample Number	Sample Description and Location	Lab Result TCLP * / (ICP)
779-980416-MS-010	Beige/lime green/ on cinderblock; from 237 hall, W wall, 11' S of stairs, 3' from the floor.	ND / (arsenic, barium, cadmium, chromium, **lead**, mercury, **selenium**, silver, others)
779-980416-MS-011	Light blue on plaster; from 777 bridge, N wall, 12' W of E entry, 3' from the floor.	ND / (arsenic, barium, cadmium, chromium, **lead**, mercury, selenium, silver, others)
779-980416-MS-012	Black on drywall; from room 234B, E wall, 2' S of E entry, 4' from the floor.	ND / (arsenic, **barium**, cadmium, chromium, **lead**, mercury, selenium, silver, others)
779-980416-MS-013	Lime green/pink on cinderblock; from room 234, E wall, 3' N of 228 entry, 4' from the floor.	ND / (arsenic, **barium**, cadmium, chromium, **lead**, **mercury**, selenium, silver, others)
779-980416-MS-014	Red-orange/tan on plaster; from room 234, N wall, 3' E of NW corner, 6' from the floor.	ND / (arsenic, barium, cadmium, **chromium**, **lead**, mercury, selenium, silver, others)
779-980416-MS-015	Lime yellow/tan on plaster; from room 234, W wall, 2' N of SW corner, 3' from the floor.	ND / (arsenic, barium, cadmium, chromium, **lead**, mercury, **selenium**, silver, others)
779-980416-MS-016	Forest-lime green on cinderblock; from room 228 W wall, 10' S of W entry, 4' from the floor.	ND / (arsenic, **barium**, cadmium, chromium, **lead**, **mercury**, selenium, silver, others)
779-980416-MS-017	Pea green/tan on plaster; from room 228 far S wall, 6' E of SW corner, 3' from the floor.	ND / (arsenic, barium, cadmium, **chromium**, **lead**, mercury, selenium, silver, others)
779-980416-MS-018	Light yellow/tan on cinderblock; from room 228 N wall, 5' E of NW corner, 4' from the floor.	ND / (arsenic, **barium**, cadmium, chromium, **lead**, **mercury**, selenium, silver, others)
779-980416-MS-019	Aqua/tan on cinderblock and metal; from room 228 S wall and 222 entry door jamb, 3' from the floor.	ND / (arsenic, **barium**, cadmium, chromium, **lead**, **mercury**, selenium, silver, others)

*Note: TCLP column denotes in excess of max concentration. Otherwise ND, which means None Detected. ICP column denotes metals detected. Please refer to Lab Data

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LEAD/METALS IN PAINT
CHARACTERIZATION REPORT
FOR BUILDING 779 CLUSTER

Sample Number	Sample Description and Location	Lab Result TCLP * / (ICP)
779-980416-MS-020	Light pink/beige on cinderblock; from room 222 E wall, 8' N of SE corner, 4' from the floor.	ND / (arsenic, **barium**, cadmium, chromium, **lead**, **mercury**, selenium, silver, others)
779-980416-MS-021	Pink/beige on concrete; from room 222 W wall, 12' S of NW corner, 3' from the floor.	ND / (arsenic, barium, cadmium, chromium, **lead**, **mercury**, selenium, silver, others)
779-980416-MS-022	Lt. green/lt. blue/tan on concrete and cinderblock; from room 220 W wall, 10' N of 222 entry, 3' from the floor.	ND / (arsenic, **barium**, cadmium, chromium, **lead**, **mercury**, selenium, silver, others)
779-980416-MS-023	Lt. blue/off-white on metal door; from room 220/218 door, lower left.	chromium / (arsenic, barium, **cadmium**, **chromium**, **lead**, mercury, selenium, silver, others)
779-980416-MS-024	Lt. pea green on drywall; from room 277 N wall, 2' W of entry, 4' from the floor.	ND / (arsenic, barium, cadmium, chromium, lead, **mercury**, selenium, silver, others)
779-980416-MS-025	Lt. green/magenta on drywall; from room 274 N wall, 4' W of entry, 4' from the floor.	ND / (arsenic, barium, cadmium, chromium, **lead**, **mercury**, selenium, silver, others)
779-980416-MS-026	Yellow on cinderblock; from room 221C E wall, 3' S of NE corner, 4' from the floor.	ND / (arsenic, barium, cadmium, chromium, **lead**, **mercury**, selenium, silver, others)
779-980416-MS-027	Lt. pink/beige on drywall; from room 275H N wall, 3' W of 275 entry, 5' from the floor.	ND / (arsenic, barium, cadmium, chromium, lead, **mercury**, selenium, silver, others)
779-980416-MS-028	Lime green on drywall; from room 272 E wall, 4' S of entry, 3' from the floor.	ND / (arsenic, barium, cadmium, **chromium**, **lead**, **mercury**, selenium, silver, others)
779-980416-MS-029	V. Lt. Yellow on cinderblock; from room 229 N wall, 1' E of NW corner, 4' from the floor.	ND / (arsenic, barium, cadmium, chromium, **lead**, **mercury**, selenium, silver, others)

*Note: TCLP column denotes in excess of max concentration. Otherwise ND, which means None Detected. ICP column denotes metals detected. Please refer to Lab Data

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LEAD/METALS IN PAINT
CHARACTERIZATION REPORT
FOR BUILDING 779 CLUSTER

Sample Number	Sample Description and Location	Lab Result TCLP * / (ICP)
779-980416-MS-030	Blue on plaster; from room 231 S wall, 3' E of SW corner, 3' from the floor.	ND / (arsenic, barium, cadmium, **chromium, lead, mercury**, selenium, silver, others)
779-980416-MS-031	Tan/beige/red/maroon on metal; from room 231/216 Hall, center of door, E jamb.	ND / (arsenic, barium, cadmium, **chromium, lead**, mercury, selenium, silver, others)
779-980416-MS-032	Textured beige/tan on concrete and cinderblock; from 779B exterior S wall, 10' W of door 20, 2' from the floor.	ND / (arsenic, barium, cadmium, chromium, lead, **mercury**, selenium, silver, others)
779-980416-MS-033	Textured beige/tan on cinderblock; from 779A exterior N wall, 12' W of door 6, 3' from the ground.	ND / (arsenic, barium, cadmium, chromium, lead, **mercury**, selenium, silver, others)
779-980416-MS-034	Textured beige/tan on cinderblock; from 779 exterior N wall, 30' W of door 16, 5' from the ground.	ND / (arsenic, barium, cadmium, chromium, lead, **mercury**, selenium, silver, others)
779-980416-MS-035	Textured beige/tan on cinderblock; from 729 exterior W wall, 7' N of W entry, 1' from the ground.	ND / (arsenic, barium, cadmium, chromium, lead, **mercury**, selenium, silver, others)
779-980416-MS-036 (QA)	Textured beige/tan on cinderblock; from 729 exterior W wall, 7' N of W entry, 1' from the ground.	ND / (arsenic, barium, cadmium, chromium, lead, **mercury**, selenium, silver, others)
779-980416-MS-037	White gloss on cinderblock; from 729, room 105 S wall, 10' E of SW corner, 5' from the floor.	ND / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)
779-980416-MS-038	White gloss/grey gloss on concrete; from 782 E wall, 25' S of NE corner, 4' from the floor.	ND / (arsenic, barium, cadmium, chromium, **lead**, mercury, selenium, silver, others)
779-980416-MS-039	White/beige/lt. green on cinderblock; from room 160, W entry wall, NW corner, 4' from the floor.	lead / (arsenic, barium, cadmium, chromium, **lead**, mercury, selenium, silver, others)

*Note: TCLP column denotes in excess of max concentration. Otherwise ND, which means None Detected. ICP column denotes metals detected. Please refer to Lab Dat

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LEAD/METALS IN PAINT
CHARACTERIZATION REPORT
FOR BUILDING 779 CLUSTER

Sample Number	Sample Description and Location	Lab Result TCLP * / (ICP)
779-980416-MS-040	Lt. blue/white on cinderblock; from room 154 E wall, 15' S of NE corner, 4' from the floor.	ND / (arsenic, barium, cadmium, chromium, **lead**, mercury, selenium, silver, others)
779-980416-MS-041	Tan/green ceramic tile; from room 167 restroom area N wall, 4' E of NE corner, 4' from the floor.	ND / (arsenic, barium, cadmium, chromium, **lead**, mercury, selenium, silver, others)
779-980416-MS-042 (QA)	Tan/green ceramic tile; from room 167 restroom area N wall, 4' E of NE corner, 4' from the floor.	ND / (arsenic, barium, cadmium, chromium, **lead**, mercury, selenium, silver, others)
779-980416-MS-043	Light brown 6" ceramic tile; from room 167 at N devising wall to restroom/vestibule area, E end.	ND / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)
779-980416-MS-044	Battleship grey on concrete; from 121A floor, 11' N of S entry, 3' E of W wall.	ND / (arsenic, barium, cadmium, **chromium**, lead, mercury, selenium, silver, others)
779-980721-MS-001	Charcoal grey sheet metal flashing; from 779 roof duct plenum far west N-S extention, 7' N of SE angle, west side.	NA / (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, others)
779-980721-MS-002	Lt. brown/white back corrugated sheet metal; 779 from roof duct plenum far west N-S extention wall, 7'N of SE angle.	NA / (arsenic, barium, cadmium, **chromium**, lead, mercury, selenium, silver, others)

*Note: TCLP column denotes in excess of max concentration. Otherwise ND, which means None Detected. ICP column denotes metals detected. Please refer to Lab Data Sh

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SAMPLERS (Signature) M Schluterbusch [signature] 1 X4215 P 5244 F 653°

REPORT IDENTIFICATION NUMBER (RIN) 98A2065 LAB/LOCATION: 559

RFETS CONTRACTOR GEG/RMRS

ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER MS-001

Preservation: Cooled to 4°C, NaOH, HNO3, H2SO4, HCl

Analyses

DATE	TIME	EVENT	BOTTLE	USER ID	~~LOCATION~~	CONTAINER	MATRIX
4/28	1530	001	001	T79-980416-	MS-001		
					-002		
					-003		
					-004		
					-005		
					-006		
					-007		
					-008		
					-009		
					-010		
					-011		
					-012 -016 -021 -038		

Relinquished By:	Date	Time	Received By/Organization	Date	Time
M. Schluterbusch	4/28/98	1530	779 Rad ops lock box		

LABORATORY USE ONLY	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	
SAMPLE LABELS/COCs AGREE	
TEMPERATURE AT TIME OF RECEIPT ___°C	

REMARKS:

Charge #

Project

Shipping Re ents: Overnight Delivery ☐ 2-Day Delivery ☐ Air L

APO COC 6/5/97

Non-Radiological Closeout Report for Building 779 Page D6 of D83

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PLERS (Signature) M Schlutenbusch [signature] Phone 4215 Pge 5244

ORT IDENTIFICATION NUMBER (RIN) 98A2065 LAB/LOCATION: 559

TS CONTRACTOR RMRS/SEG

CKY FLATS
VIRONMENTAL TECHNOLOGY SITE
AIN OF CUSTODY NUMBER SEG 006

Non-Radiological Closeout Report for Building 779
Page D7 of D83

	TIME	EVENT	BOTTLE	USER ID	~~LOCATION~~	CONTAINER	MATRIX	Preservation: Cooled to 4° C	NaOH	HNO3	H2SO4	HCl		Analytes:	Total Metals + Hg		TCLP Metals + Hg											
8	—	001	001	779-980416	MS-001									X		X												
			002	779-980416	MS-002									X		X												
			003		-003									X		X												
			004		-004									X		X												
			005		-005									X		X												
			006		-006									X		X												
			007		-007									X		X												
			008		-008									X		X												
			009		-009									X		X												
			010		-010									X		X												
			011		-011									X		X												
			012		-012									X		X												

ished By:	Date	Time	Received By/Organization	Date	Time	LABORATORY USE ONLY	Y/N
[signature]	5/13/98	1410	LB Johnson Labs	5/13/98	1410	PCKG REC'D/CUSTODY SEALS INTACT	N/A
						SAMPLE LABELS/COCs AGREE	
						TEMPERATURE AT TIME OF RECEIPT ___ °C	

RKS: PRIORITY 2

Charge #

Project

ing Require 1: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill No.

A. COC 6/5/97

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SAMPLERS (Signature) Schlutzebuck / Phone 4215 psc 5244

REPORT IDENTIFICATION NUMBER (RIN) 98A2065 LAB/LOCATION: 559

RFETS CONTRACTOR RMRS/SEG

ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER SEG-006

DATE	TIME	EVENT	BOTTLE	USER ID	~~LOCATION~~	CONTAINER	MATRIX	Preservation: Cooled to 4°	NaOH	HNO3	H2SO4	HCl		Analyses: Total Metals Hg	TCLP Metals Hg										
5/13/98	-	001	013	779-980416	MS-013									X	X										
			014		-014									X	X										
			015		-015									X	X										
			016		-016									X	X										
			017		-017									X	X										
			018		-018									X	X										
			019		-019									X	X										
			020		-020									X	X										
			021		-021									X	X										
			022		-022									X	X										
			023		-023									X	X										
			024		-024									X	X										

Non-Radiological Closeout Report for Building 779
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...ly:	Date	Time	Received By/Organization	Date	Time
M Schlutzebuck	5/13/98	1410	LB Johnson Labs	5/13/98	1410

LABORATORY USE ONLY	Y/N/S
PCKG REC'D/CUSTODY SEALS INTACT	N/A
SAMPLE LABELS/COCs AGREE	✓
TEMPERATURE AT TIME OF RECEIPT ___ °C	
	✓
Charge #	
Project	

REMARKS: PRIORITY 2

Shipping Requi... Overnight Delivery ☐ 2-Day Delivery ☐

AF JC 6/5/97

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SAMPLERS (Signature) Schlutenbusch / Phone 4215 pge 5244

REPORT IDENTIFICATION NUMBER (RIN) 98A2065 LAB/LOCATION: 559

RFETS CONTRACTOR RMRS/SEG

ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER SEG-006

DATE	TIME	EVENT	BOTTLE	USER ID	LOCATION	CONTAINER	MATRIX	Preservation: Cooled to 4°C	NaOH	HNO3	H2SO4	HCl	Analytes:	Total Metals + Hg		TCLP Metals + Hg											
5/98	–	001	025	779-980416	-MS-025								X		X												
			026		-026								X		X												
			027		-027								X		X												
			028		-028								X		X												
			029		-029								X		X												
			030		-030								X		X												
			031		-031								X		X												
			032		-032								X		X												
			033		-033								X		X												
			034		-034								X		X												
			035		-035								X		X												
			036		-036								X		X												

Non-Radiological Closeout Report for Building 779
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Relinquished by:	Date	Time	Received By/Organization	Date	Time	LABORATORY USE ONLY	Y/N
Michael T. Schlutenbusch	5/13/98	1410	LB Johnson Sales	5/13/98	1410	PCKG REC'D/CUSTODY SEALS INTACT	N/A
						SAMPLE LABELS/COCs AGREE	✓
						TEMPERATURE AT TIME OF RECEIPT ___ °C	✓

REMARKS: PRIORITY 2

Shipping Requirements: Overnight Delivery ☐ 2-Day Delivery ☐

APO . C 6/5/97

SAMPLERS (Signature) M Schluterbusch [signature] / Ph 4215 pgs 5244

REPORT IDENTIFICATION NUMBER (RIN) 98A2065 LAB/LOCATION: 559

RFETS CONTRACTOR RMRS/SEG

ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER SEG-006

Non-Radiological Closeout Report for Building 779
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DATE	TIME	EVENT	BOTTLE	USER ID	~~LOCATION~~	CONTAINER	MATRIX	Preservation	Total Metals+Hg	TCLP Metals+Hg
3/98	-	001	037	779-980416	MS-037				X	X
			038		-038				X	X
			039		-039				X	X
			040		-040				X	X
			041		-041					X
			042		-042					X
			043		-043					X
			044		-044				X	X

Relinquished By:	Date	Time	Received By/Organization	Date	Time
[signature]	5/13/98	1410	LB Johnson Labs	5/18/98	1410

LABORATORY USE ONLY	Y/N
PCKG REC'D/CUSTODY SEALS INTACT	N/A
SAMPLE LABELS/COCs AGREE	✓
TEMPERATURE AT TIME OF RECEIPT ___ °C	
Charge #	
Project	

REMARKS:

Shipping Requi: Overnight Delivery ☐ 2-Day Delivery ☐ Air Bill

APC 6/5/97

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ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER: 98A5204#001

SAMPLERS (Signature): M Schlutenhaus
REPORT IDENTIFICATION NUMBER (RIN): 98A5204
LABORATORY: Building 559 Laboratory
AGGREGATE AREA: 779
RFETS CONTRACTOR: RMRS

Bottle Num.	User Samp. Num.	Date	Time	Location	Container	Matrix	Preservation	RS08A007 (TCLP Inorganics wo Hg)	PA03A032 (TCLP Mercury - 559)
98A5204-001.001	779-980721-MS	001			100G P/G		None	P	P
98A5204-002.001	779-980721-MS	002			100G P/G		None	P	P
~~98A5204-003.001~~					~~100G P/G~~		~~None~~		
~~98A5204-004.001~~					~~100G P/G~~		~~None~~		
~~98A5204-005.001~~					~~100G P/G~~		~~None~~		

7/21/98

ENTERED

Non-Radiological Closeout Report for Building 779
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POSSESSION

Sign/Print Names

Relinquished By: Johnson Labs	Date/Time: 7/21/98 @ 1424	Received By: Johnson Labs	Date/Time: 7/21/98 1424
Relinquished By:	Date/Time: 7/21/98 1424	Received By: Trig 102-6	Date/Time: 7/21/98 1424
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

REMARKS: LAB REQUIRES SHEET METAL SAMPLES TO BE 1 INCH SQUARES OR LESS
Sheet metal samples- burrs & sharp edges

Charge #: KT03CX00
Project: WASTE PROJECTS

Shipping Requirements:
Air Bill No.:

FAXED 7/21/98 APO

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ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
CHAIN OF CUSTODY NUMBER: 98A5204#001

SAMPLERS (Signature): M Schlutenhued

REPORT IDENTIFICATION NUMBER (RIN): 98A5204

LABORATORY: Building 559 Laboratory

AGGREGATE AREA: 779

RFETS CONTRACTOR: RMRS

Bottle Num.	User Samp. Num.	Date	Time	Location	Container	Matrix	Preservation	RS08A007 (TCLP Inorganics wo Hg)	PA03A032 (TCLP Mercury - 559)
98A5204-001.001	779-980721-MS	001			100G P/G		None	P	P
98A5204-002.001	779-980722-MS	002			100G P/G		None	P	P
98A5204-003.001					100G P/G		None		
98A5204-004.001					100G P/G		None		
98A5204-005.001					100G P/G		None		

OF POSSESSION

Sign/Print Names

M Schlutenhued	Date/Time 7/21/98 @ 1424	Received By L B Johnson Lobo	Date/Time 7/21/98 1424
	Date/Time	Received By	Date/Time
ied By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

REMARKS: LAB REQUIRES SHEET METAL SAMPLES TO BE 1 INCH SQUARES OR LESS

Sheet metal samples- burrs + sharp edges

Charge #: KT03CX00

Project: WASTE PROJECTS

Shipping R ments:

Air Bill No.:

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Turnaround Times for 98A5204

7/17/98 9:31:52 AM

COC Num.	Bottle Num.	Line Item Code	Processing
98A5204#001	LAB: Building 559 Laboratory		
	98A5204-001.001		
		PA03A032	Priority
		RS08A007	Priority
	98A5204-002.001		
		PA03A032	Priority
		RS08A007	Priority
	98A5204-003.001		
		PA03A032	Priority
		RS08A007	Priority
	98A5204-004.001		
		PA03A032	Priority
		RS08A007	Priority
	98A5204-005.001		
		PA03A032	Priority
		RS08A007	Priority

AMPLE SUMMARY FOR RIN: 98A5204

RIN Title:
Project Name: WASTE PROJECTS
Task Name: BLDG 779
Aggregate Area:

Sampling Team:
Sampling Mgr/Coordinator:
Samplers:
Field Logbook ID:
Matrix Class:

Sample summary is supplied to waste generators as notification of sample collection. Inquires into the status of this sampling effort may be directed to the Analytical Services Division (ASD).

Bottle Number	Customer Bottle Number	Location	LIC (See Attached)	Laboratory	Date Collected	Date Shipped	Date Returned	Comments
A5204-001.001			1,2	Building 559 Laboratory				
A5204-002.001			1,2	Building 559 Laboratory				
A5204-003.001			1,2	Building 559 Laboratory				
A5204-004.001			1,2	Building 559 Laboratory				
A5204-005.001			1,2	Building 559 Laboratory				

Handling Excess Sample Material:

Unmodified sample material remaining after analysis is generally returned to the generator. The generator must be prepared to receive and dispose of excess sample material for applicable state and federal regulations. Regulatory exclusions for returning excess sample material are specified in the Code of Colorado Regulation (CCR) 1007-3, Part 261.4(d) 'Samples'. If problems with the disposal of excess sample material are encountered, the Environmental Coordinator for the generation area should be contacted for resolution of the issues. Only sample material which has not been modified during analysis will be returned. Material which has been acidified for preservation purposes will not be returned.

Customer Acknowledgement: _____
(Sign and Print Name)

Comments:

Item Code's:

PA03A032 (TCLP Mercury - 559)
RS00A007 (TCLP Inorganics wo Hg)

Date: 7/17/98 9:30:56 AM

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ANALYTICAL SERVICES DIVISION
SAMPLING AND ANALYSIS REQUEST FORM

ASD USE ONLY

RIN: 98A5204 Priority: Priority

ASD Project Lead: STONER, NORM Phone: 4289 Pager:

CUSTOMER INFORMATION

Date: 7/17/98 9:03:38

Project Charge No.:

Requestor: SCHLUTERBUSCH,MIKE Phone: 7215 Pager:
Bldg: Fax:

Secondary Contact: Phone: Pager:
Bldg: Fax:

Fax Data Results To: SAME Phone: 6538 Fax:

SAMPLE INFORMATION

Sample Location: BLDG 779

Sample Description and Sample Identifiers: SHEET METAL SAMPLES – Roof

Sample Matrix: ☐ Aqueous ☐ Org. Liquid ☒ Solid ☐ Sludge ☐ Multi Phase

When will sample be available for sampling? 7/17/98

When is data required by requestor?

Estimated quantity Available for Sampling:

Waste Stream ID No. (if known): Waste Stream Name (if known):

EPA CODES: MSDS: ○ Yes ◉ No ATTACHED: ○ Yes ◉ No

COMPATIBILITY CODE WFC/ IDC:

90 Day Area? ○ Yes ◉ No Start Date: End Date:

ANALYSES REQUESTED

☐ Alpha/Beta Screen	☐ Total VOA	☐ TCLP VOA	☐ pH	Other:
☐ Gross Alpha/Beta	☐ Total SVOAS	☐ TCLP SVOAS	☐ Fingerprint	TCLP HG
☐ Isotopics	☐ Total Metals (ICP)	☒ TCLP Metals	☐ IR	
☐ g/l Isotopics	☐ Total PCBs	☐ TCLP PCBs	Analyses Criticality Sensitive? ○ Yes ◉ No	
☐ Gamma Spec	☐ Total Herbicides	☐ TCLP Herbicides	If Yes: ○ Single ○ Double	Analyses:

RADIOLOGICAL ENTRY REQUIREMENTS

IS THIS A RADIOACTIVE WASTE STREAM? Suspected to be radioactive? ○ Yes ◉ No

☐ Pu ☐ Am ☐ U Other:

Located In: ☐ RBA ☐ RMA ☐ RMMA ☐ CA ☐ HCA ☐ RA ☐ HRA Other Area:

RCT Support: ○ Yes ◉ No Comments:

RWP Required: ○ Yes ◉ No

PWRE Required: ○ Yes ◉ No

GENERAL ENTRY REQUIREMENTS/SAFETY CONCERNS

☐ Plan of the Day	☐ Industrial Hygiene Assistance	☐ Electrical
☐ Maintenance Assistance	☐ Carcinogen Control Area	☐ IWCP
☐ Operator's Assistance	☐ Lock-out/Tag-out	☐ Confined Space
☐ Mechanical	☐ Waste Contains Fluorides	Other:

Special Instructions:

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Requestor Signature:

RMRS

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.# 99A5527-001

Page 1 of 1

Collector	Contact/Requester: Mike Schilterbusch	Telephone No.: 4215 MSIN FAX
RIN: 99A5527	Sampling Origin: Bldg 779	Purchase Order/Charge Code: KI95AA00
Project Title	Logbook No.	Ice Chest No. Temp.
To (Lab): Building 559 Laboratory	Method of Shipment	Bill of Lading/Air Bill No.
Protocol		Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS: ** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☐ No ☐

Bottle No.	Customer Number	Matrix	Date	Time	Location	No/Type Container	Sample Analysis	Preservative; Packing
99A5527-001.001		SOLID	2/25/99	0900	Bldg 779	5-G P/G	RS05A048 (Mtls SW846) [Rush] PRIORITY MS 2/25/99	None None
99A5527-002.001		SOLID	2/25/99	0700		5-G P/G	RS05A048 (Mtls SW846) [Rush] PRIORITY MS	None None

MS 2/25/99

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
	2/25/99 @1350	LB Johnson	2/25/99 1350				

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

Paint from 779-B S wall cages

Non-Radiological Closeout Report for Building 779
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RMRS

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # 99A4089#001

Page 001 of 001

llector Name: M Schluterbusch	Contact/Requester: SCHLUTERBUSCHMIKE	Telephone No.: 4215.2126517	MSIN / FAX: 4308
N: 99A4089	Sampling Origin: B782	Purchase Order/Charge Code: XT95AA00	
oject Title: 779 D&D	Logbook No.	Ice Chest No.	Temp.
(Lab) Building 559 Laboratory	Method of Shipment: Hand carried	Bill of Lading/Air Bill No.	
otocol		Offsite Property No.	

XSSIBLE SAMPLE HAZARDS/REMARKS

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
ANALYZE TOTAL METALS FIRST TO DETERMINE IF TCLP METALS ARE REQUIRED.

Bottle No.	Customer Number	Matrix	Date	Time	Location	No/Type Container	Sample Analysis	Preservative; Packing
9A4089-01.001	782-98 12 08-MS-001	Solid	12/8/98	1400	B782 Box 140	5-G G	PA03A016 (Mercury) [Priority]; RS05A022 (Mtls Unfit SW846 w/o Hg) [Priority]	None 4 degrees C
9A4089-01.002	"	"	"	"	"	25-G G	PA03A016 (Mercury) [Priority]; RS08A006 (TCLP Metals) [Priority]	None 4 degrees C

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
	12/14/98 1455	L B Johnson Labs	12/14/98 1455				
B Johnson Labs	12/14/98 1455	Mig 102-6	12/14/98 1455				

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

Non-Radiological Closeout Report for Building 779 Page D17 of D83

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Commodore Advanced Sciences

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

98103011 Date: 10/28/98

C.O.C. # 99Z3392#001

Page 1 of 1

Collector: TONYA SANGALINE	Contact/Requester: ROGER GICHORZ	Telephone No.: 966-2155 MSIN: FAX:
RIN: 99Z3392	Sampling Origin: 779	Purchase Order/Charge Code: KT95AA00
Project Title:	Logbook No.: NA	Ice Chest No.: NA Temp.:
To (Lab): Johns Manville	Method of Shipment: HAND CARRY	Bill of Lading/Air Bill No.:
Protocol:		Offsite Property No.:

POSSIBLE SAMPLE HAZARDS/REMARKS: ** **

SPECIAL INSTRUCTIONS: Hold Time: Total Activity Exemption: Yes ☐ No ☐

Batch No.	Customer Number	Matrix	Date	Time	Location	No/Type/Container	Sample Analysis	Preservative/Parking
99Z3392-001.001	9810150-68313	IM	NA	NA	779	1-SAMPLE P	D010C012 (Metals by NIOSH 7300 (AIH)) [Routine]	N/A N/A
99Z3392-002.001	9810150-68313	SOLID	NA	NA	779	1-BAG N/A	R010A001 (TCLP Metals) [Routine]	N/A None

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	10/28/98 [illegible]	[illegible]	10/28/98 1622				
		[illegible]	10/28/98 0630				

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By: Date/Time:

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SIN # MTLS01-A2 REPORT

COVER PAGE

INORGANIC ANALYSES DATA PACKAGE

Lab Name: Building 559 PA Inorganic Laboratories SOW No.: 7/93

Section: ICPAES

QC Report Number: SD052398.RPT SDG No.: MAY23

Lab Sample ID's beginning with 'X' are TCLP Extracts.

Revised TCLP Metals

Sample No.	APO Sample I. D.	Lab Sample ID.
1	X-98A2065-001	Bldg 779 Solid Paint Sample
2	X-98A2065-001 D	Bldg 779 Solid Paint Sample Lab Duplicate
3	X-98A2065-002	Bldg 779 Solid Paint Sample
4	X-98A2065-003	Bldg 779 Solid Paint Sample
5	X-98A2065-004	Bldg 779 Solid Paint Sample
6	X-98A2065-005	Bldg 779 Solid Paint Sample
7	X-98A2065-006	Bldg 779 Solid Paint Sample
8	X-98A2065-008	Bldg 779 Solid Paint Sample
9	X-98A2065-009	Bldg 779 Solid Paint Sample
10	X-98A2065-010	Bldg 779 Solid Paint Sample
11	X-98A2065-011	Bldg 779 Solid Paint Sample
12	X-98A2065-012	Bldg 779 Solid Paint Sample
13	X-98A2065-014	Bldg 779 Solid Paint Sample
14	X-98A2065-015	Bldg 779 Solid Paint Sample
15	X-TCLP EXT #1	TCLP Extraction Fluid Reagent Blank
16	EPA QC #21 STD	EPA QC # 21 Aqueous Laboratory Control Standard
17	EPA QC #7A STD	EPA QC # 7A Aqueous Laboratory Control Standard

Were ICP Inter-element Corrections applied? Yes/No Y

Were ICP Background Corrections applied? Yes/No Y

I have reviewed the following data for the Sample No.'s listed above:

Signature: R. Kelle

Date: 6/8/98 Title: Analytical Chemist

Signature: Yvonne B Mazza

Date: June 16, 1998 Title: Reviewer

Comments:

FAXED APO

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FAXED

SIN # MTLS01-A2 REPORT

COVER PAGE

INORGANIC ANALYSES DATA PACKAGE

Lab Name: Building 559 PA Inorganic Laboratories SOW No.: 7/93

Section: ICPAES

QC Report Number: SD052598.RPT SDG No.: MAY25

ENTERED

Lab Sample ID's beginning with 'X' are TCLP Extracts.

TCLP metals

Sample No.	APO Sample I. D.	Lab Sample ID.
1	X-98A2065-007	Bldg 779 Solid Paint Sample
2	X-98A2065-017	Bldg 779 Solid Paint Sample
3	X-98A2065-017 D	Bldg 779 Solid Paint Sample Lab Duplicate
4	X-98A2065-023	Bldg 779 Solid Paint Sample
5	X-98A2065-031	Bldg 779 Solid Paint Sample
6	X-98A2065-032	Bldg 779 Solid Paint Sample
7	X-98A2065-033	Bldg 779 Solid Paint Sample
8	X-98A2065-034	Bldg 779 Solid Paint Sample
9	X-98A2065-038	Bldg 779 Solid Paint Sample
10	X-98A2065-039	Bldg 779 Solid Paint Sample
11	X-98A2065-040	Bldg 779 Solid Paint Sample
12	X-98A2065-042	Bldg 779 Solid Paint Sample
13	X-98A2065-043	Bldg 779 Solid Paint Sample
14	X-98A2065-044	Bldg 779 Solid Paint Sample
15	X-TCLP EXT #1	TCLP Extraction Fluid Reagent Blank
16	EPA QC #21 STD	EPA QC # 21 Aqueous Laboratory Control Standard
17	EPA QC #7A STD	EPA QC # 7A Aqueous Laboratory Control Standard

Were ICP Inter-element Corrections applied? Yes/No Y

Were ICP Background Corrections applied? Yes/No Y

I have reviewed the following data for the Sample No.'s listed above.

Signature: R.C. Kell

Date: 6/11/98 Title: Analytical Chemist

Signature:

Date: Title: Reviewer

Comments:

FAXED

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 1

Lab Sample ID: X-98A2065-001 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY23

Lab Receipt Date: 5/13/98 QC Report No.: SD052398.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	1.8864	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	612.3981	B	*	P
Chromium	0.1500	U		P
Cobalt	0.2659	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	1.1648	B		P
Magnesium	20.6913	B	*	P
Manganese	0.4314	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	3.3699	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	2.0952	B	*	P
Thallium	0.5676	B		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	5.0601	B	*	P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 2

Lab Sample ID: X-98A2065-001 D Bldg 779 Solid Paint Sample Lab Duplicate

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY23

Lab Receipt Date: 5/13/98 QC Report No.: SD052398.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	2.3262	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	199.3578	B		P
Chromium	0.1500	U		P
Cobalt	0.2361	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	1.1274	B		P
Magnesium	15.0210	B		P
Manganese	0.3924	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	2.2614	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.6085	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	3.8286	B		P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 3

Lab Sample ID: X-98A2085-002 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98

SDG No. : MAY23

Lab Receipt Date: 5/13/98

QC Report No.: SD052398.RPT

Matrix:
Water
Soil
Sludge
Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1668	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	75.9916	B	*	P
Chromium	0.1500	U		P
Cobalt	0.5124	B		P
Copper	0.3000	U		P
Iron	10.3944	B		P
Lead	1.2807	B		P
Magnesium	1.1388	B	*	P
Manganese	0.1668	B		P
Molybdenum	0.1500	U		P
Nickel	0.1506	B		P
Phosphorus	13.2777	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.0765	B	*	P
Thallium	0.3000	U		P
Titanium	0.1422	B		P
Vanadium	0.2400	U		P
Zinc	20.4891	B	*	P

Color Before: Pink

Clarity Before: Cloudy

Color After: Colorless

Clarity After: Clear

Texture:

Artifacts: Fine mesh orange solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 4

Lab Sample ID: X-98A2065-003 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY23

Lab Receipt Date: 5/13/98 QC Report No.: SD052398.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1868	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	143.2281	B	*	P
Chromium	0.1500	U		P
Cobalt	0.4290	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.3114	B		P
Magnesium	4.2294	B	*	P
Manganese	0.3033	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	7.1619	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.1260	B	*	P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	6.0285	B	*	P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 5

Lab Sample ID: X-98A2065-004 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98

SDG No. : MAY23

Lab Receipt Date: 5/13/98

QC Report No.: SD052398.RPT

Matrix:

Water	
Soil	
Sludge	
Other	X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	N V E O S + Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	430.7598	B	*	P
Chromium	0.1500	U		P
Cobalt	0.2739	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.3093	B		P
Magnesium	4.3298	B	*	P
Manganese	0.2876	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	10.9200	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.4191	B	*	P
Thallium	0.3000	U		P
Titanium	1.5666	B		P
Vanadium	0.2400	U		P
Zinc	15.1728	B	*	P

Color Before: White

Clarity Before: Cloudy

Color After: Colorless

Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 6

Lab Sample ID: X-98A2065-005 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY23

Lab Receipt Date: 5/13/98 QC Report No.: SD052398.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	1.2375	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	375.5454	B	*	P
Chromium	0.1500	U		P
Cobalt	0.4926	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.3501	B		P
Magnesium	4.0941	B	*	P
Manganese	0.3376	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	22.8552	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.2376	B	*	P
Thallium	0.3000	U		P
Titanium	0.9006	B		P
Vanadium	0.2400	U		P
Zinc	34.3791	B	*	P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh yellow solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 7

Lab Sample ID: X-98A2065-006 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY23

Lab Receipt Date: 5/13/98 QC Report No.: SD052398.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	315.1404	B	*	P
Chromium	0.1500	U		P
Cobalt	0.4884	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.3192	B		P
Magnesium	3.3111	B	*	P
Manganese	0.2601	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	23.9280	B	*	P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.2001	B	*	P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	37.8735	B	*	P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 1

Lab Sample ID: X-98A2065-007 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY25

Lab Receipt Date: 5/13/98 QC Report No.: SD052598.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	269.7147	B		P
Chromium	0.1500	U		P
Cobalt	0.3501	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	3.0111	B		P
Manganese	0.2322	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	16.4790	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.1875	B		P
Thallium	0.3000	U		P
Titanium	0.4491	B		P
Vanadium	0.2400	U		P
Zinc	23.1210	B		P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh yellow solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 8

Lab Sample ID: X-98A2065-008 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No.: MAY23

Lab Receipt Date: 5/13/98 QC Report No.: SD052398.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	N V * E O O S + Q	M
Aluminum	1.4994	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	372.2829	B	*	P
Chromium	0.1500	U		P
Cobalt	0.4276	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.3312	B		P
Magnesium	4.0860	B	*	P
Manganese	0.2982	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	19.6062	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.2445	B	*	P
Thallium	0.3000	U		P
Titanium	1.1673	B		P
Vanadium	0.2400	U		P
Zinc	29.1045	B	*	P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh blue solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 9

Lab Sample ID: X-98A2065-009 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY23

Lab Receipt Date: 5/13/98 QC Report No.: SD052398.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1564	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	528.9264	B	*	P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.3024	B		P
Magnesium	5.6970	B	*	P
Manganese	0.3567	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	2.6733	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.3240	B	*	P
Thallium	0.3000	U		P
Titanium	2.7735	B		P
Vanadium	0.2400	U		P
Zinc	2.0754	B	*	P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 10

Lab Sample ID: X-98A2065-010 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY23

Lab Receipt Date: 5/13/98 QC Report No.: SD052398.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	1.2660	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1509	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	297.5400	B	*	P
Chromium	0.1500	U		P
Cobalt	0.1905	B		P
Copper	0.3000	U		P
Iron	1.6692	B		P
Lead	0.3627	B		P
Magnesium	3.4440	B	*	P
Manganese	0.2979	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	2.9499	B		P
Selenium	0.4578	B		P
Silver	0.0900	U		P
Strontium	0.2484	B	*	P
Thallium	0.3000	U		P
Titanium	0.5985	B		P
Vanadium	0.2400	U		P
Zinc	2.7726	B	*	P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh yellow solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 11

Lab Sample ID: X-98A2065-011 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample: 100.0000

Date Sampled: 5/13/98

SDG No.: MAY23

Lab Receipt Date: 5/13/98

QC Report No.: SD052398.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	735.1308	B		P
Chromium	0.1500	U		P
Cobalt	0.6006	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	3.3189	B		P
Magnesium	7.5087	B		P
Manganese	0.7035	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	5.7267	B		P
Selenium	0.3933	B		P
Silver	0.0900	U		P
Strontium	1.4949	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	7.3560	B		P

Color Before: White

Clarity Before: Cloudy

Color After: Colorless

Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 12

Lab Sample ID: X-98A2065-012 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract

% Solids for Sample: 100.0000

Date Sampled: 5/13/98 SDG No.: MAY23

Lab Receipt Date: 5/13/98 QC Report No.: SD052398.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	3.0406	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	322.4313	B		P
Chromium	0.1500	U		P
Cobalt	3.4104	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	17.2047	B		P
Manganese	1.3917	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	2.6350	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	2.2371	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	1.2807	B		P

Color Before: Colorless Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh gray solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 1

Lab Sample ID: X-98A2065-013 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ; Soil ; Sludge ; Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.2982	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	784.9932	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.3912	B		P
Magnesium	9.4527	B		P
Manganese	0.0711	B		P
Molybdenum	0.1500	U		P
Nickel	0.3732	B		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	1.0884	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: Brown Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 2

Lab Sample ID: X-98A2065-013 D Bldg 779 Solid Paint Sample Lab Duplicate

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample: 100.0000

Date Sampled: 5/13/98 SDG No.: MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ; Soil ; Sludge ; Other X

Elements Identified and Measured

Concentration Units: mg/L

N V * E O O S +

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.2196	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	696.6693	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.4155	B		P
Magnesium	7.7421	B		P
Manganese	0.0300	U		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.9918	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: Brown Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 13

Lab Sample ID: X-98A2065-014 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 6/13/98 SDG No. : MAY23

Lab Receipt Date: 6/13/98 QC Report No.: SD052398.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	736.4106	B		P
Chromium	0.1500	U		P
Cobalt	0.2616	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.3003	B		P
Magnesium	260.3304	B		P
Manganese	0.3513	B		P
Molybdenum	0.1500	U		P
Nickel	0.5751	B		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	1.3734	B		P
Thallium	0.3000	U		P
Titanium	0.1266	B		P
Vanadium	0.2400	U		P
Zinc	0.3584	B		P

Color Before: Orange Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh orange solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 14

Lab Sample ID: X-98A2065-015 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY23

Lab Receipt Date: 5/13/98 QC Report No.: SD052398.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	1354.0797	B	*	P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.3648	B		P
Magnesium	69.1389	B	*	P
Manganese	0.0300	U		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	6.6487	B	*	P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U	*	P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 3

Lab Sample ID: X-98A2065-016 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.2202	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	741.7095	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.4488	B		P
Magnesium	8.2200	B		P
Manganese	0.0300	U		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.9084	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: Yellow Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh yellow solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 2

Lab Sample ID: X-98A2065-017 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY25

Lab Receipt Date: 5/13/98 QC Report No.: SD052598.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	N V E O O S + Q	M
Aluminum	0.9000	U		P
Antimony	0.3429	B		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	1035.3561	B		P
Chromium	0.2949	B		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	169.9711	B		P
Manganese	0.0300	U		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	4.8177	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh yellow solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass-fiber filter to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 3

Lab Sample ID: X-98A2065-017 D Bldg 779 Solid Paint Sample Lab Duplicate

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY25

Lab Receipt Date: 5/13/98 QC Report No.: SD052598.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	758.2793	B		P
Chromium	0.1500	U		P
Cobalt	0.1902	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	146.6493	B		P
Manganese	0.3366	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	2.1561	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	1.4304	B		P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh yellow solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 4

Lab Sample ID: X-98A2065-018 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample: 100.0000

Date Sampled: 5/13/98 SDG No.: MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	820.1058	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.4881	B		P
Magnesium	0.6000	U		P
Manganese	0.0300	U		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.9408	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: Brown Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 5

Lab Sample ID: X-98A2065-019 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 6/13/98 SDG No. : MAY20

Lab Receipt Date: 6/13/98 QC Report No.: SD052098.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1636	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	706.0068	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.6177	B		P
Magnesium	6.2292	B		P
Manganese	0.0300	U		P
Molybdenum	0.1600	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.8277	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: Blue Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh blue solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, [illegible] to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 6

Lab Sample ID: X-98A2065-020 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1695	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	795.4176	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.4821	B		P
Magnesium	0.6000	U		P
Manganese	0.0300	U		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.6000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	1.0734	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: Brown Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 7

Lab Sample ID: X-98A2065-021 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample: 100.0000

Date Sampled: 6/13/98 SDG No.: MAY20

Lab Receipt Date: 6/13/98 QC Report No.: SD052098.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	N V * E O O S + Q	M
Aluminum	6.5301	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1626	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	869.7762	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.5004	B		P
Magnesium	0.6000	U		P
Manganese	0.0579	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.6000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	1.1919	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 8

Lab Sample ID: X-98A2065-022 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	822.3384	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.4761	B		P
Magnesium	0.8172	B		P
Manganese	0.0300	U		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.6000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	1.1091	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: White Clarity Before: Cloudy

Color After: Yellow Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, to obtain the TCLP final sample extract.

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 4

Lab Sample ID: X-98A2065-023 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY25

Lab Receipt Date: 5/13/98 QC Report No.: SD052598.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.4173	B		P
Arsenic	0.3000	U		P
Barium	0.1719	B		P
Beryllium	0.0150	U		P
Cadmium	0.1857	B		P
Calcium	231.2457	B		P
Chromium	19.7658			P
Cobalt	0.5208	B		P
Copper	0.3000	U		P
Iron	33.5013	B		P
Lead	3.5550	B		P
Magnesium	2.6187	B		P
Manganese	0.4710	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	32.0349	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.2319	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	54.6327	B		P

Color Before: Orange Clarity Before: Cloudy

Color After: Orange Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber fi to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 9

Lab Sample ID: X-98A2065-024 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample: 100.0000

Date Sampled: 5/13/98 SDG No.: MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.3660	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	743.0427	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.5508	B		P
Magnesium	24.6946	B		P
Manganese	0.2283	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.6322	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.9069	B		P

Color Before: Brown Clarity Before: Cloudy

Color After: Yellow Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, w[illegible] to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 10

Lab Sample ID: X-98A2065-025 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	1.0233	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.2709	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	743.9100	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.5016	B		P
Magnesium	17.8896	B		P
Manganese	0.2031	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.5481	B		P
Thallium	0.3000	U		P
Titanium	0.1551	B		P
Vanadium	0.2400	U		P
Zinc	1.2618	B		P

Color Before: Brown Clarity Before: Cloudy

Color After: Yellow Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, wa to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 659 PA Inorganic Laboratories Sample No.: 11

Lab Sample ID: X-98A2065-026 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	N V * E O O S + Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.4197	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	654.5664	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.4656	B		P
Magnesium	7.3920	B		P
Manganese	0.1935	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	1.2606	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: Brown Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was pe to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 12

Lab Sample ID: X-98A2065-027 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	N V * E O O S + Q	M
Aluminum	4.9887	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0160	U		P
Cadmium	0.0600	U		P
Calcium	424.5654	B		P
Chromium	0.1500	U		P
Cobalt	0.1506	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.4311	B		P
Magnesium	6.0642	B		P
Manganese	0.2846	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	4.0497	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	2.1984	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	4.3428	B		P

Color Before: Yellow Clarity Before: Cloudy

Color After: Yellow Clarity After: Clear

Texture:

Artifacts: Fine mesh yellow solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

298

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 13

Lab Sample ID: X-98A2065-028 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	N V * E O O S + Q	M
Aluminum	2.7483	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	1003.3158	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.6960	B		P
Magnesium	21.2187	B		P
Manganese	0.2934	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	2.3088	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.8184	B		P

Color Before: Brown Clarity Before: Cloudy

Color After: Yellow Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 14

Lab Sample ID: X-98A2065-029 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98

SDG No. : MAY20

Lab Receipt Date: 5/13/98

QC Report No.: SD052098.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	N V * E O O S + Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.4017	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	694.4994	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.4788	B		P
Magnesium	7.0923	B		P
Manganese	0.1887	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	1.3122	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: Brown

Clarity Before: Cloudy

Color After: Colorless

Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was to obtain the TCLP final sample extract.

300

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 15

Lab Sample ID: X-98A2065-030 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY20

Lab Receipt Date: 5/13/98 QC Report No.: SD052098.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	N V * E O O S + Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	484.6419	B		P
Chromium	0.1500	U		P
Cobalt	1.6680	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	1.8132	B		P
Magnesium	28.1813	B		P
Manganese	0.6039	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	3.0858	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	1.1697	B		P
Thallium	0.3000	U		P
Titanium	0.1848	B		P
Vanadium	0.2400	U		P
Zinc	3.4983	B		P

Color Before: Blue Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh blue solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

301

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 5

Lab Sample ID: X-98A2065-031 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY25

Lab Receipt Date: 5/13/98 QC Report No.: SD052598.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	2.2635	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.3726	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	142.8066	B		P
Chromium	2.1690	B		P
Cobalt	1.3344	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.9438	B		P
Magnesium	3.1609	B		P
Manganese	0.6966	B		P
Molybdenum	0.1500	U		P
Nickel	0.9810	B		P
Phosphorus	28.9704	B		P
Selenium	0.3600	U		P
Silver	0.2130	B		P
Strontium	0.1425	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	29.8029	B		P

Color Before: Pink Clarity Before: Cloudy

Color After: Pink Clarity After: Clear

Texture:

Artifacts: Fine mesh pink solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 6

Lab Sample ID: X-98A2065-032 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98

SDG No. : MAY25

Lab Receipt Date: 5/13/98

QC Report No.: SD052598.RPT

Matrix:
Water
Soil
Sludge
Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.5889	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	558.1329	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	7.0779	B		P
Manganese	0.4161	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	13.6362	B		P
Selenium	0.3600	U		P
Silver	0.3345	B		P
Strontium	1.4829	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	22.2654	B		P

Color Before: Brown

Clarity Before: Cloudy

Color After: Colorless

Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, v to obtain the TCLP final sample extract.

30 303

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 8

Lab Sample ID: X-98A2065-034 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY25

Lab Receipt Date: 5/13/98 QC Report No.: SD052598.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	2.7090	B		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.2220	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	633.4569	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	13.6216	B		P
Manganese	0.1503	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.6000	U		P
Selenium	0.3600	U		P
Silver	0.1284	B		P
Strontium	1.6583	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.9060	B		P

Color Before: Brown Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter to obtain the TCLP final sample extract.

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SIN # MTLS01-A2 REPORT

TCLP Metals

COVER PAGE

INORGANIC ANALYSES DATA PACKAGE

Lab Name: Building 559 PA Inorganic Laboratories SOW No.: 7/93

Section: ICPAES

QC Report Number: SD052698.RPT SDG No.: MAY26

Lab Sample ID's beginning with 'X' are TCLP Extracts.

Sample No.	APO Sample I. D.	Lab Sample ID.
1	X-98A2065-035	Bldg 779 Solid Paint Sample
2	X-98A2065-035 D	Bldg 779 Solid Paint Sample Lab Duplicate
3	X-98A2065-036	Bldg 779 Solid Paint Sample
4	X-98A2065-037	Bldg 779 Solid Paint Sample
5	X-98A2065-041	Bldg 779 Solid Paint Sample
6	X-TCLP EXT #1	Deionized Water Preparation Blank
7	EPA QC #21 STD	EPA QC # 21 Aqueous Laboratory Control Standard
8	EPA QC #7A STD	EPA QC # 7A Aqueous Laboratory Control Standard

Were ICP Inter-element Corrections applied? Yes/No Y

Were ICP Background Corrections applied? Yes/No Y

I have reviewed the following data for the Sample No.'s listed above

Signature: Yvonne B Mapp

Date: June 15, 1998 Title: Analytical Chemist

Signature:

Date: Title: Reviewer

Comments:

FAXED

306

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 659 PA Inorganic Laboratories Sample No.: 6

Lab Sample ID: X-TCLP EXT #1 TCLP Extraction Fluid Reagent Blank

Section: ICPAES Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : < 0.5000

Date Sampled: 6/8/98 SDG No. : MAY26

Lab Receipt Date: 6/8/98 QC Report No.: SD052698.RPT

Matrix: Water X
Soil
Sludge
Other

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	0.3000	U		P
Antimony	0.1000	U		P
Arsenic	0.1000	U		P
Barium	0.0500	U		P
Beryllium	0.0050	U		P
Cadmium	0.0200	U		P
Calcium	0.2000	U		P
Chromium	0.0500	U		P
Cobalt	0.0500	U		P
Copper	0.1000	U		P
Iron	0.2000	U		P
Lead	0.0800	U		P
Magnesium	0.2000	U		P
Manganese	0.0100	U		P
Molybdenum	0.0500	U		P
Nickel	0.0500	U		P
Phosphorus	0.5000	U		P
Selenium	0.1200	U		P
Silver	0.0300	U		P
Strontium	0.0100	U		P
Thallium	0.1000	U		P
Titanium	0.0200	U		P
Vanadium	0.0800	U		P
Zinc	0.1000	U		P

Color Before: Colorless Clarity Before: Clear

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Nothing left on TCLP Filter.

Comments: Sample < 0.50 % solids. Therefore, the filtered sample is taken to be the final TCLP extract. Pressure filtration of the initial sample through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the final TCLP filtered sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

SAMPLE NO. 7

Lab Sample ID: EPA QC-21 Standard

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids (0 - N/A): 0.0000

Date Sampled: 6/9/98 SDG No.: MAY26

Lab Receipt Date: 6/9/98 QC Report No.: SD052698.RPT

Matrix: Water X Soil ____ Sludge ____ Other ____

Elements Identified and Measured

Concentration Units: (mg/L)

Analyte	Concentration	C	Q	M
Aluminum				P
Antimony	3.9297	B		P
Arsenic	4.0180	B		P
Barium				P
Beryllium	3.9655	B		P
Cadmium	4.2232			P
Calcium	4.6556	B		P
Chromium	4.2908	B		P
Cobalt	4.1820	B		P
Copper	3.6977	B		P
Iron	3.9019	B		P
Lead	4.2028	B		P
Magnesium	4.1032	B		P
Manganese	3.9144	B		P
Molybdenum	4.1943	B		P
Nickel	3.8687	B		P
Phosphorus				P
Selenium	4.1329			P
Silver				P
Strontium	4.3178	B		P
Thallium	4.0982	B		P
Titanium	3.8017	B		P
Vanadium	4.2908	B		P
Zinc	4.2105	B		P

Color Before: Clarity Before: Texture:
Color After: Clarity After:

Artifacts:

Comments: Sample = 0.00 % Solids. Total Metals Digestion only!
EPA QC-21 Trace Metals Aqueous Reference Standard
(External Control Standard).

308

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 659 PA Inorganic Laboratories SAMPLE NO. 8

Lab Sample ID: EPA QC-7A Standard

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids (0 - N/A): 0.0000

Date Sampled: 6/9/98 SDG No.: MAY26

Lab Receipt Date: 6/9/98 QC Report No.: SD062698.RPT

Matrix: Water X Soil ____ Sludge ____ Other ____

Elements Identified and Measured

Concentration Units: (mg/L)

Analyte	Concentration	C	Q	M
Aluminum	3.7223	B		P
Antimony				P
Arsenic				P
Barium	4.0634	B		P
Beryllium				P
Cadmium				P
Calcium				P
Chromium				P
Cobalt				P
Copper				P
Iron				P
Lead				P
Magnesium				P
Manganese				P
Molybdenum				P
Nickel				P
Phosphorus				P
Selenium				P
Silver	1.7969	B		P
Strontium				P
Thallium				P
Titanium				P
Vanadium				P
Zinc				P

Color Before: Clarity Before: Texture:
Color After: Clarity After:

Artifacts:

Comments: Sample = 0.00 % Solids. Total Metals Digestion only!
EPA QC-7A Trace Metals Aqueous Reference Standard.
(External Control Standard).

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 15

Lab Sample ID: X-TCLP EXT #1 TCLP Extraction Fluid Reagent Blank

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : < 0.5000

Date Sampled: 6/3/98

SDG No. : MAY25

Lab Receipt Date: 6/3/98

QC Report No.: SD052598.RPT

Matrix: Water X
Soil
Sludge
Other

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.3000	U		P
Antimony	0.1000	U		P
Arsenic	0.1000	U		P
Barium	0.0500	U		P
Beryllium	0.0050	U		P
Cadmium	0.0200	U		P
Calcium	0.2000	U		P
Chromium	0.0500	U		P
Cobalt	0.0500	U		P
Copper	0.1000	U		P
Iron	0.2000	U		P
Lead	0.0800	U		P
Magnesium	0.2000	U		P
Manganese	0.0100	U		P
Molybdenum	0.0500	U		P
Nickel	0.0500	U		P
Phosphorus	0.5000	U		P
Selenium	0.1200	U		P
Silver	0.0300	U		P
Strontium	0.0100	U		P
Thallium	0.1000	U		P
Titanium	0.0200	U		P
Vanadium	0.0800	U		P
Zinc	0.1000	U		P

Color Before: Colorless

Clarity Before: Clear

Color After: Colorless

Clarity After: Clear

Texture:

Artifacts: Nothing left on TCLP Filter.

Comments: Sample < 0.50 % solids. Therefore, the filtered sample is taken to be the final TCLP extract. Pressure filtration of the initial sample through a standard TCLP pressure filtration unit containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain TCLP filtered sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

SAMPLE NO. 16

Lab Sample ID: EPA QC-21 Standard

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids (0 - N/A) : 0.0000

Date Sampled: 6/9/98 SDG No.: MAY26

Lab Receipt Date: 6/9/98 QC Report No.: SD052598.RPT

Matrix: Water X Soil ____ Sludge ____ Other ____

Elements Identified and Measured

Concentration Units: (mg/L)

Analyte	Concentration	C	Q	M
Aluminum				P
Antimony	4.0113	B		P
Arsenic	4.0375	B		P
Barium				P
Beryllium	3.8866	B		P
Cadmium	4.2610			P
Calcium	3.7052	B		P
Chromium	4.2479	B		P
Cobalt	3.9222	B		P
Copper	3.7413	B		P
Iron	3.9389	B		P
Lead	4.2284	B		P
Magnesium	4.0537	B		P
Manganese	4.0059	B		P
Molybdenum	4.2138	B		P
Nickel	4.0008	B		P
Phosphorus				P
Selenium	3.9656			P
Silver				P
Strontium	4.2906	B		P
Thallium	3.9874	B		P
Titanium	3.9238	B		P
Vanadium	4.2003	B		P
Zinc	4.2171	B		P

Color Before: Clarity Before: Texture:
Color After: Clarity After:

Artifacts:

Comments: Sample = 0.00 % Solids. Total Metals Digestion only!
EPA QC-21 Trace Metals Aqueous Reference Standard
(External Control Standard).

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 659 PA Inorganic Laboratories

SAMPLE NO. 17

Lab Sample ID: EPA QC-7A Standard

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids (0 - N/A) : 0.0000

Date Sampled: 6/9/98

SDG No.: MAY25

Lab Receipt Date: 6/9/98

QC Report No.: SD052598.RPT

Matrix: Water X Soil ____ Sludge ____ Other ____

Elements Identified and Measured

Concentration Units: (mg/L)

Analyte	Concentration	C	Q	M
Aluminum	3.9198	B		P
Antimony				P
Arsenic				P
Barium	4.1443	B		P
Beryllium				P
Cadmium				P
Calcium				P
Chromium				P
Cobalt				P
Copper				P
Iron				P
Lead				P
Magnesium				P
Manganese				P
Molybdenum				P
Nickel				P
Phosphorus				P
Selenium				P
Silver	1.9399	B		P
Strontium				P
Thallium				P
Titanium				P
Vanadium				P
Zinc				P
				P

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:

Artifacts:

Comments: Sample = 0.00 % Solids. Total Metals Digestion only!
EPA QC-7A Trace Metals Aqueous Reference Standard.
(External Control Standard).

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 1

Lab Sample ID: X-98A2065-035 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample: 100.0000

Date Sampled: 5/13/98 SDG No.: MAY26

Lab Receipt Date: 5/13/98 QC Report No.: SD052698.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.2733	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	712.3143	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	10.8873	B		P
Manganese	0.0930	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	1.9077	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3111	B		P

Color Before: Brown Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 2

Lab Sample ID: X-98A2065-035 D Bldg 779 Solid Paint Sample Lab Duplicate

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY26

Lab Receipt Date: 5/13/98 QC Report No.: SD052698.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

N V * E O O S +

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.2801	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	704.5869	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	11.6947	B		P
Manganese	0.0694	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.6000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	1.9308	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: Brown Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 3

Lab Sample ID: X-98A2065-036 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY26

Lab Receipt Date: 5/13/98 QC Report No.: SD052698.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	N V * E O O S + Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.2751	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	662.5910	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	10.9395	B		P
Manganese	0.0648	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	1.7955	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: Brown Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP-pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was [illegible] to obtain the TCLP final sample extract.

315

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 4

Lab Sample ID: X-98A2066-037 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY26

Lab Receipt Date: 5/13/98 QC Report No.: SD052698.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/l.

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.3129	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	685.1562	B		P
Chromium	0.1500	U		P
Cobalt	0.3162	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	10.8444	B		P
Manganese	1.2897	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	2.4528	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: Brown Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 9

Lab Sample ID: X-98A2065-038 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY25

Lab Receipt Date: 5/13/98 QC Report No.: SD052598.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.4584	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	604.8391	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	13.4433	B		P
Manganese	0.3594	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	2.0745	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	4.6060	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.8397	B		P

Color Before: Brown Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 10

Lab Sample ID: X-98A2065-039 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample: 100.0000

Date Sampled: 5/13/98 SDG No.: MAY25

Lab Receipt Date: 5/13/98 QC Report No.: SD052598.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V E O O S +)	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1500	U		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	59.6622	B		P
Chromium	0.1500	U		P
Cobalt	0.2580	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	11.9907			P
Magnesium	2.2767	B		P
Manganese	0.2601	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	6.7209	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.0942	B		P
Thallium	0.3000	U		P
Titanium	0.7503	B		P
Vanadium	0.2400	U		P
Zinc	5.4366	B		P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 11

Lab Sample ID: X-98A2068-040 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98

SDG No. : MAY25

Lab Receipt Date: 5/13/98

QC Report No.: SD052598.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.1695	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	407.7573	B		P
Chromium	0.1500	U		P
Cobalt	0.2895	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	3.4590	B		P
Manganese	0.2736	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	6.5436	B		P
Selenium	0.3600	U		P
Silver	0.1227	B		P
Strontium	0.5361	B		P
Thallium	0.3000	U		P
Titanium	0.7032	B		P
Vanadium	0.2400	U		P
Zinc	7.3548	B		P

Color Before: White

Clarity Before: Cloudy

Color After: Colorless

Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 5

Lab Sample ID: X-98A2065-041 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98 SDG No. : MAY26

Lab Receipt Date: 5/13/98 QC Report No.: SD052698.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.8208	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	238.9761	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.5562	B		P
Magnesium	140.7270	B		P
Manganese	0.0852	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.8049	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.3000	U		P

Color Before: White Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 12

Lab Sample ID: X-98A2065-042 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample: 100.0000

Date Sampled: 5/13/98

SDG No.: MAY25

Lab Receipt Date: 5/13/98

QC Report No.: SD052598.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.3528	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	178.3730	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	63.0968	B		P
Manganese	0.0300	U		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.6094	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.4332	B		P

Color Before: White

Clarity Before: Cloudy

Color After: Colorless

Clarity After: Clear

Texture:

Artifacts: Fine mesh white solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was pr to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 13

Lab Sample ID: X-98A2065-043 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98

SDG No. : MAY25

Lab Receipt Date: 5/13/98

QC Report No.: SD052598.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.4641	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	499.4211	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	2.4630	B		P
Manganese	0.5778	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.5000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	2.1327	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	1.2756	B		P

Color Before: Brown

Clarity Before: Cloudy

Color After: Colorless

Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 14

Lab Sample ID: X-98A2065-044 Bldg 779 Solid Paint Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 5/13/98

SDG No. : MAY25

Lab Receipt Date: 5/13/98

QC Report No.: SD052598.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	0.9000	U		P
Antimony	0.3000	U		P
Arsenic	0.3000	U		P
Barium	0.2184	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	720.1941	B	*	P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	0.2400	U		P
Magnesium	0.3591	B		P
Manganese	0.6258	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	1.6000	U		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	3.7047	B	*	P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	0.6132	B		P

Color Before: Brown

Clarity Before: Cloudy

Color After: Colorless

Clarity After: Clear

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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SIN # MTLS01-A2 REPORT

COVER PAGE

INORGANIC ANALYSES DATA PACKAGE

Lab Name: Building 559 PA Inorganic Laboratories SOW No.: 7/93

Section: ICPAES

QC Report Number: SD071498.RPT SDG No.: JUL14

ENTERED

Lab Sample ID's beginning with 'X' are TCLP Extracts.

Sample No.	APO Sample I. D.	Lab Sample ID.
1	X-98A5204-001	Bldg 779 Solid Sample
2	X-98A5204-002	Bldg 779 Solid Sample
3	X-98A5204-002 D	Bldg 779 Solid Sample Lab Duplicate
4	X-TCLP EXT #1	TCLP Extraction Fluid Reagent Blank
5	EPA QC #21 STD	EPA QC # 21 Aqueous Laboratory Control Standard
6	EPA QC #7A STD	EPA QC # 7A Aqueous Laboratory Control Standard

Were ICP Inter-element Corrections applied? Yes/No Y

Were ICP Background Corrections applied? Yes/No Y

I have reviewed the following data for the Sample No.'s listed above.

Signature: R.C. Kelly

Date: 7/31/98 Title: Analytical Chemist

Signature:

Date: Title: Reviewer

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FAX 8-7-98

Comments:

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Lab Sample ID: X-98A5204-001 Bldg 779 Solid Sample

Sample No.: 1

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 7/21/98

Lab Receipt Date: 7/21/98

SDG No. : JUL14

QC Report No.: SD071498.RPT

Matrix: Water ___ Soil ___ Sludge ___ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	N V * E O O S + Q	M
Aluminum	0.9000	U	N	P
Antimony	0.6165	B		P
Arsenic	0.3000	U		P
Barium	0.2772	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	0.7956	B		P
Chromium	0.1500	U		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	18.7782	B		P
Lead	0.6954	B		P
Magnesium	0.6000	U		P
Manganese	0.4095	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	456.4572	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.0300	U		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	797.4954	B		P

Color Before: Colorless

Clarity Before: Clear

Color After: Brown

Clarity After: Cloudy

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 2

Lab Sample ID: X-98A5204-002 Bldg 779 Solid Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 7/21/98 SDG No. : JUL14

Lab Receipt Date: 7/21/98 QC Report No.: SD071498.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q (N V * E O O S +)	M
Aluminum	1.1823	B	N	P
Antimony	0.7287	B		P
Arsenic	0.3000	U		P
Barium	2.4396	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	2.5125	B		P
Chromium	1.0230	B		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	7.3266	B		P
Lead	0.7362	B		P
Magnesium	0.6000	U		P
Manganese	0.3162	B		P
Molybdenum	0.1500	U		P
Nickel	0.1617	B		P
Phosphorus	359.2050	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.0300	U		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	601.5051	B		P

Color Before: Colorless Clarity Before: Clear

Color After: Brown Clarity After: Cloudy

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standa pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was perform to obtain the TCLP final sample extract.

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 3

Lab Sample ID: X-98A5204-002 D Bldg 779 Solid Sample Lab Duplicate

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 7/21/98

SDG No. : JUL14

Lab Receipt Date: 7/21/98

QC Report No.: SD071498.RPT

Matrix:

Water	
Soil	
Sludge	
Other	X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	1.1409	B	N	P
Antimony	0.8181	B		P
Arsenic	0.3000	U		P
Barium	2.4165	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	2.5632	B		P
Chromium	1.0248	B		P
Cobalt	0.1500	U		P
Copper	0.3000	U		P
Iron	7.2066	B		P
Lead	0.7371	B		P
Magnesium	0.6000	U		P
Manganese	0.3075	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	347.6838	B		P
Selenium	0.3600	U		P
Silver	0.0900	U		P
Strontium	0.0300	U		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.2400	U		P
Zinc	601.5393	B		P

Color Before: Colorless

Clarity Before: Clear

Color After: Brown

Clarity After: Cloudy

Texture:

Artifacts: Fine mesh brown solids left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract through a standard T pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the TCLP final sample extract.

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Sample No.: 4

Lab Sample ID: X-TCLP EXT #1 TCLP Extraction Fluid Reagent Blank

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : < 0.5000

Date Sampled: 7/27/98

SDG No. : JUL14

Lab Receipt Date: 7/27/98

QC Report No.: SD071498.RPT

Matrix: Water X
Soil
Sludge
Other

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
			N V * E O O S +	
Aluminum	0.3000	U	N	P
Antimony	0.1000	U		P
Arsenic	0.1000	U		P
Barium	0.0500	U		P
Beryllium	0.0050	U		P
Cadmium	0.0200	U		P
Calcium	0.2000	U		P
Chromium	0.0500	U		P
Cobalt	0.0500	U		P
Copper	0.1000	U		P
Iron	0.2000	U		P
Lead	0.0800	U		P
Magnesium	0.2000	U		P
Manganese	0.0100	U		P
Molybdenum	0.0500	U		P
Nickel	0.0500	U		P
Phosphorus	0.5000	U		P
Selenium	0.1200	U		P
Silver	0.0300	U		P
Strontium	0.0100	U		P
Thallium	0.1000	U		P
Titanium	0.0200	U		P
Vanadium	0.0800	U		P
Zinc	0.1000	U		P

Color Before: Colorless

Clarity Before: Clear

Color After: Colorless

Clarity After: Clear

Texture:

Artifacts: Nothing left on TCLP Filter.

Comments: Sample < 0.50 % solids. Therefore, the filtered sample is taken to be the final TCLP extra Pressure filtration of the initial sample through a standard TCLP pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filter, was performed to obtain the final TCLP filtered sample extract.

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Lab Sample ID: EPA QC-21 Standard

SAMPLE NO. 5

Section: ICPAES

% Solids (0 - N/A): 0.0000

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

Date Sampled: 7/28/98

SDG No.: JUL14

Lab Receipt Date: 7/28/98

QC Report No.: SD071498.RPT

Matrix: Water X Soil ____ Sludge ____ Other ____

Elements Identified and Measured

Concentration Units: (mg/L)

Analyte	Concentration	C	Q	M
Aluminum				P
Antimony	4.1575	B		P
Arsenic	4.0165	B		P
Barium				P
Beryllium	4.0921	B		P
Cadmium	4.2376			P
Calcium	4.4200	B		P
Chromium	4.3829	B		P
Cobalt	4.0990	B		P
Copper	3.9724	B		P
Iron	4.0057	B		P
Lead	4.3879	B		P
Magnesium	4.3797	B		P
Manganese	4.0136	B		P
Molybdenum	4.3133	B		P
Nickel	4.0577	B		P
Phosphorus				P
Selenium	3.9512			P
Silver				P
Strontium	4.2148	B		P
Thallium	4.0262	B		P
Titanium	3.9559	B		P
Vanadium	4.2749	B		P
Zinc	4.2116	B		P

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:

Artifacts:

Comments: Sample = 0.00 % Solids. Total Metals-Digestion only! EPA QC-21 Trace Metals Aqueous Reference Standard. (External Control Standard).

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories

Lab Sample ID: EPA QC-7A Standard

SAMPLE NO. 6

Section: ICPAES

% Solids (0 - N/A) : 0.0000

Lab Sample I.D.s beginning with 'X' indicates TCLP Extract.

Date Sampled: 7/20/98

SDG No.: JUL14

Lab Receipt Date: 7/28/98

QC Report No.: SD071498.RPT

Matrix: Water X Soil ____ Sludge ____ Other ____

Elements Identified and Measured

Concentration Units: (mg/L)

Analyte	Concentration	C	Q	M
Aluminum	4.3147	B		P
Antimony				P
Arsenic				P
Barium	4.2273	B		P
Beryllium				P
Cadmium				P
Calcium				P
Chromium				P
Cobalt				P
Copper				P
Iron				P
Lead				P
Magnesium				P
Manganese				P
Molybdenum				P
Nickel				P
Phosphorus				P
Selenium				P
Silver	1.9345	B		P
Strontium				P
Thallium				P
Titanium				P
Vanadium				P
Zinc				P
				P

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:

Artifacts:

Comments: Sample = 0.00 % Solids. Total Metals Digestion only! EPA QC-7A Trace Metals Aqueous Reference Standard. (External Control Standard).

ENTERED

FORM 1A-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Building 559 PA Inorganic Laboratories Sample No.: 2

Lab Sample ID: X-99A4069-001 Bldg 782 Solid Sample

Section: ICPAES

Lab Sample I.D.s beginning with X' indicates TCLP Extract.

% Solids for Sample : 100.0000

Date Sampled: 12/8/98 SDG No. : JAN05

Lab Receipt Date: 12/14/98 QC Report No.: SD010599.RPT

Matrix: Water ____ Soil ____ Sludge ____ Other X

Elements Identified and Measured

Concentration Units: mg/L

Analyte	Concentration	C	Q	M
Aluminum	0.9000	U		P
Antimony	0.3169	B		P
Arsenic	0.3000	U		P
Barium	0.2169	B		P
Beryllium	0.0150	U		P
Cadmium	0.0600	U		P
Calcium	113.1324	B		P
Chromium	0.1500	U		P
Cobalt	1.4133	B		P
Copper	0.3000	U		P
Iron	0.6000	U		P
Lead	62.4330			P
Magnesium	1.3311	B	E	P
Manganese	0.1929	B		P
Molybdenum	0.1500	U		P
Nickel	0.1500	U		P
Phosphorus	10.9944	B		P
Selenium	0.3000	U		P
Silver	0.0900	U		P
Strontium	0.4239	B		P
Thallium	0.3000	U		P
Titanium	0.0600	U		P
Vanadium	0.1500	U		P
Zinc	16.7907	B		P

Color Before: Orange Clarity Before: Cloudy

Color After: Colorless Clarity After: Clear

Texture:

Artifacts: White and red particulates left on TCLP Filter.

Comments: Sample = 100 % solids. Pressure filtration of the TCLP solids extract thru pressure filtration unit, containing a 0.7 micron borosilicate glass fiber filte to obtain the TCLP final sample extract.

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Appendix E

RCRA Hazardous Substances

Results (Chemicals)

Sampling Required

Room	Item	Component	g/l	Comments	RIN	Sample Numbers
117	Pump	oil	1.02E-07	Free release based on MDA	99A0248	.001.001
east dock	H2SO4	liquid	3.80E-08		99R0332	.001.001
east dock	2- 4 L bottles	water	8.00E-09		99R0334	.001.001
121	Monarch lathe	oil reserve liquids	8.60E-08		97P1036	.005.009
121	Drum liner	water from house vacuum	6.14E-06		99A9433	.001.001 .002.001
121	Spill		2.4 pCi/g		98A5139	.001.001-.003
121	Various machines	oil	9.00E-07	Free release	97P1036	.001.001
121	Various machines	oil	8.60E-08	Free release	97P1036	.005.009
121	CaO/Ca Cl	solid	6.6 g/g		99A0189	.001.001
126	GB-126	crit drain liquids	8.90E-08		99A5336	.001.001-.002
126	Drum A27317	glycol	1.00E-08	Beta contamination, not free release-able	98A5509	.001.001 .002.001
126	Pump 103A/103B	hot water	5E-09 8E-09 7E-09 7E-09		99A4643	.002.001-.004; .003.001-.004
127	Tower Chiller Water pumps 102/102A	water	1.3E-8 8E-9		99A3394	.001.001-.003; .002.001-.003
127	Tower Chiller Water pumps 102/102A	water	8E-09 5E-09		99A4643	.001.001-.004
127	Tower Chiller Water pumps 101/101A	water	6E-09 7E-09		99A4705	.015.001-.002 .016.001-.002
131	GB-131A	crit drain liquids	4.34E-04		98A1914	.003.002
131	GB-131B	crit drain liquids	5.36E-04		98A1914	.002.002

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Sampling Required

Room	Item	Component	g/l	Comments	RIN	Sample Numbers
131	GB-131D	crit drain liquids	8.48E-07		98A1914	.001.002
131	GB-131E	crit drain liquids	3.91E-05		98A1914	.018.002
131	GB-961	crit drain liquids	1.30E-04		98A1914	.019.002
131	Pump, Hood 9511		2.39E-06		98A1943	.002.001
133	GB-953	crit drain liquids	3.34E-06		98A2133	.005.001
133	GB-954	crit drain liquids	6.87E-03		98A2133	.006.001
133	GB-955	crit drain liquids	1.56E-03		98A2133	.007.001
133	GB-957	crit drain liquids	1.18E-03		98A2133	.008.001
133	GB-958	crit drain liquids	8.56E-05		98A2133	.009.001
133	GB-959	crit drain liquids	2.45E-04		98A2133	.010.001
133	Vacuum pump in room	oil reservoirs	2.71E-06		98A2133	.016.001
137	GB-106-2	crit drain liquids	2.50E-06		98A1547	.004.007
137	GB-106-3	crit drain liquids	6.41E-05		98A1547	.005.009
137	3 pumps, GB-106-3	oil reservoir	3.18E-06		98A1803	.001.001
137	Pump, GB-106-3	oil reservoir	2.50E-06		98A1547	.006.011
137	GB-106-4	crit drain liquids	1.27E-04		98A1547	.007.013
137	GB-106-5	crit drain liquids	3.67E-04		98A1547	.008.015
137	GB-106-6	crit drain liquids	1.28E-04		98A1547	.009.017
137	Pump, GB-106-6	oil reservoir	2.16E-06		98A1547	.010.019
137	Hood 106-2	chloroform	2.50E-07		98A5439	.001.001 .002.002
137	U238 std.	powder	1.5E-3 g/g		98A1284	.007.019
137	U238 std.	powder	N/A	Total metals	98A5141	.001.002-.003
139	Hood 139-1	crit drain liquids	9.88E-06		98A1674	.001.001
139	GB-139-3	crit drain liquids	3.23E-06		98A1674	.002.002
139	Vault waterwall	water	3.36E-05		99A6079	.001.001-.001.002
139	Pump, GB-139-3	oil reservoir	1.80E-06		98A1674	.003.003
142	Pump 101	hot water	5E-09 7E-09		99A4643	.004.001-.004

Sampling Required

Room	Item	Component	g/l	Comments	RIN	Sample Numbers
142	Pump 102	hot water	5E-09 6E-09		99A4643	.005.001-.004
142	Pump 101/102	chilled water	7E-09 5E-09		99A4787	.001.001 .002.001
142	Pump 101/102	chilled water	7E-09 5E-09		99A4787	.003.001 .004.001
142	Pump 05/06	process water	5E-09 5E-09		99A4787	.005.001 .006.001
142	Pump 05/06	process water	7E-09 5E-09		99A4787	.007.001 .008.001
142	Shower	water	3.73E-07	Elevator oil	99A7347	.001.001-.002
142	Drum GO5107	oil	9.00E-09	Chiller oil	99A9442	.001.001
142	Drum	oil	2.17E-07		99A9442	.002.001
171	Water walls	water	3.36E-05		99A6079	.001.001
171	Vault waterwall	water wall	3.70E-07		99A6079	.002.001
216	Hallway	paint	N/A		98A0543	.002.001
217	X-ray (VG Scientific); 3 pumps	oil reservoirs	4.47E-06		98A1914	.010.002
218	GB-971	crit drain liquids	2.09E-04		98A1914	.009.002
218	Pump, GB-971	oil reservoir	5.43E-06		98A1914	.008.002
218	GB-218 Hood; 2 pumps	oil reservoirs	3.01E-06		98A1914	0.007.002
218	Hood 218SW	crit drain liquids	3.84E-06		98A1914	.006.002
218	Hood 218SW, 2 pumps	oil reservoirs	5.58E-06		98A1914	.005.002

Sampling Required

Room	Item	Component	g/l	Comments	RIN	Sample Numbers
218	Hood 218SE, 2 pumps	oil reservoirs	2.89E-06		98A1914	.004.002
218	Drum RO1442	oil	2.48E-05		99A8269	.001.001
218	4L bottle	oil	2.46E-07		99A8297	.001.001
218	4L bottle	process water	7.00E-09		99A8297	.002.001
218	4L bottle	oil	2.40E-05		99A8297	.003.001
218	4L bottle	water	1.20E-08		99A7218	.001.001
218	4L bottle	oil	8.80E-08		99A7218	.002.001
218	4L bottle	oil	1.10E-07		99A7218	.003.001
218	4L bottle	oil	2.24E-07	GB045	99A7218	.004.001
218	4L bottle	oil	2.96E-04	Elevator oil	99A7218	.005.001
218	4L bottle	oil	2.24E-07	Air conditioner coolant	99A7218	.006.001
218	4L bottle	oil	1.20E-07	Gear box oil	99A7218	.007.001
218	4L bottle	oil	5.14E-07	Refrig. compressor colant	99A7218	.008.001
218	4L bottle	oil	2.21E-07	Non-RCRA	99A7219	.009.001
218	4L bottle	water	1.90E-08	Non-RCRA	99A6691	.001.001; .001.002
218	Drum GO5110	hydraulic oil	1.90E-07		99A9435	.001.001
218	2- 4L bottle	vacuum pump oil	1.61E-07		99A9436	.001.001
218	4L bottle	blue liquid	1.10E-08		99A9430	.001.001
218	8- 4L bottle	kathene water	1.70E-07	Chiller oil	99A9432	.001.001 .002.001
218	4L bottle	oil	2.17E-07	Rm 150 vacuum pump	99A9442	.002.001
218	3-4L bottles	oil	1.60E-07		99A9436	.001.001
221	Shims	metal	9.00E-09		98A5015	.001.001-.002
222	Pump, GB-17	oil reservoir	4.10E-08		98A1209	.007.018-020

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Sampling Required

Room	Item	Component	g/l	Comments	RIN	Sample Numbers
222	United Dynamics pump, GB-017	oil reservoir	7.50E-08		98A1380	.001.001
222	Pump, GB-105	oil reservoir	3.34E-06		98A1209	.020.058-059
222	GB-230	crit drain liquids	5.27E-05		98A1209	.021.061-062
222	GB-330-371	crit drain liquids	2.50E-06		98A1209	.024.070
222	Pump, GB-371	oil reservoir	1.30E-06		98A1209	.025.073
222	Pump, GB-460	oil reservoir	3.18E-06		98A1209	.027.079
222	Diffusion pump, GB 460	oil reservoir	3.39E-06		98A1209	.026.076
222	GB-3338	oil reservoir in vacuum pump	7.90E-08		98A1284	.002-005
222	GB-3338	process water and vacuum pump oil	4.1E-8 8E-9		H2O- 98A1160; oil- 98A1160	.004.010-012; .005.013
222	Pump, GB-976	oil reservoir	2.33E-06		98A1209	.029.085
222	Pump, GB-206-977	oil reservoir	3.50E-06		98A1209	.030.088-89
222	Pump, GB-980	oil reservoir	3.20E-08		98A1209	.009.024-26
222	Pump, GB-982	oil reservoir	2.21E-06	Non-RCRA	98A1209	.031.091
222	Drum RO1729	water	7.00E-09	Less than MDA	99D8270	.001.001-.002
222	GB-983	crit drain liquids	5.40E-08		98A1122	.002.004,5,6
222	Pump, GB-990	oil reservoir	8.74E-05		98A1209	.033.097
223	4 L bottle	oil	5.30E-05		99A3346	.001.001
223	4 L bottle	oil	7.80E-07		99A3346	.002.001
223	4 L bottle	oil	6.60E-08		99A3346	.003.001
223	4 L bottle	oil	6.50E-08		99A3346	.004.001

Sampling Required						
Room	Item	Component	g/l	Comments	RIN	Sample Numbers
223	4 L bottle	oil	7.50E-08		99A3346	.005.001
223	4 L bottle	oil	8.70E-07		99A3346	.006.001
223	4 L bottle	oil	2.7E-07 1.1E-04		99A3936	.001.001
223	4 L bottle	oil	1.07E-07		99A3936	.002.001
223	4 L bottle	oil	1.2E-5 3.02E-6		99A3936	.003.001
223	4 L bottle	oil	9.20E-06		99A3936	.004.001
223	Drum of oil from HV systems in Rms 141A and 235	oil	9.80E-09		99A4842	.001.001-.002
223	2- 4L bottles	oil	8.40E-06		99A4842	.002.001
223	2- 4L bottles	water	5.30E-08		99A4842	.003.001
223	4 bottle composite	oil	2.44E-07		99A4842	.004.001
223	4 bottle composite	oil	1.46E-07	Rm 121	99A4842	.005.001
223	4L bottle	oil	2.50E-06		99A5335	.001.001-.002
223	4L bottle	oil	4.70E-06	Vacuum pump oil, Rm 150	99A5335	.002.001-.002
223	4L bottle	oil	1.60E-06	Rm 133	99A5335	.003.001-.002
223	4L bottle	oil	3.40E-05	Labeled 480 V vac. Pump #4	99A5335	.004.001-.002
223	4L bottle	oil	2.00E-04	Crit drain oil from GB-126, Rm 126	99A5335	.005.001-.002
223	4L bottle	oil	8.90E-08		99A5336	.001.001-.002
223	4L bottle	oil	2.17E-03		99A5540	.00.001
223	4L bottle	water	1.90E-08	Yellow liquid, RCRA for Cr	99A5541	.001.001

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Sampling Required

Room	Item	Component	g/l	Comments	RIN	Sample Numbers
223	7- 4 L bottles	water	4.00E-09	From Rms 137 and 154, RCRA for Cr	99A4785	.001.001-.002
223	2- 4 L bottles	cooling water	6.54E-07		99A4785	.002.001-.002
223	4 L bottle	hot water, Rm 137/140	1.00E-08		99A4785	.003.001-.002
228	GB-45	crit drain liquids	2.08E-05		98A1209	.012.034
228	GB-45	crit drain 2, oil	8.67E-06		98A5091	.001.001-.002
228	Hood 191	isomet saw, #3415, with liquids	5..6E-8		98A1209	.006.015
228	Pump, GB-192	oil	2.33 E-6		98A1943	.003.001
228	GB-200	crit drain liquids	2.54E-06		98A1209	.015.043
228	Hood 202	vari-cut VC-50 (#00037168-00) oil	2.19E-07		98A1209	.016.012-13
228	GB-203	crit drain liquids	1.51E-05		98A1209	.018.052
228	Pump, GB-203	oil reservoir	1.99E-06		98A1209	.019.055
228	Isomet vari-cut saw	cutting oil	1.27E-05		98A1209	.005.012
228	X-ray system	oil reservoir	3.50E-06		98A1943	.001.001-002
228	Rotary vacuum pump (next to return air)	oil reservoir	4.16E-06		98A1943	.004.001
228	Rigaku Rotoflex System	transformer oil	6.20E-08		98A1209	.002.003-4
228	Roughing pump	oil reservoir	3.39E-06		98A1547	.001.001-.002
228	Sample packets from tent	metal oxide	4.00E-04		99A5356	.001.001-.003
233	Chemical	aluminum oxide	3.70E-10		98A5142	.001.001-.002; .002.001-.002; .003.001.-.002

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Sampling Required

Room	Item	Component	g/l	Comments	RIN	Sample Numbers
234	Pump, GB-205	oil reservoir	6.15E-06		98A1771	.004.004
234	GB-205B	crit drain liquids	6.15E-06		98A1771	.002.002
234	GB-205C	crit drain liquids	2.15E-04		98A1771	.001.001
270	GB-972/973, 2 pumps	oil reservoirs	5.00E-08		98A1362	.001.001
270	B-Box 3072B	crit drain liquids	1.02E-07		98A1123	.004.007
270	GB-3072	crit drain liquids	8.00E-08	Less than MDA.	98A1123	.005.009
270	GB-2115	crit drain liquids	5.40E-08		98A1122	.004.010
270	5 pumps	oil reservoir	2.77E-06		98A1547	.002.003
270	GB 972/973 process cooling water	water	2.01E-06		98A1123	.006.011-.012
272	GB-6621	pump	2.40E-08		98A1350	.003.003
272	Pump, GB-6621	oil reservoir	1.00E-07		98A1350	.004.004
272	Compressor from AC unit	oil reservoir	1.99E-06		98A2060	.001.001

Appendix F
Waste and Environmental Management System Area Location Report

RCRA Temporary Units
and
SATELLITE COLLECTION UNIT

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MAR-16-99 TUE 15:15 LII P.02

Post-it® Fax Note 7671	Date	# of pages ▶ 2
To Cheryl Stoll	From R. LEITNER	
Co./Dept.	Co.	
Phone #	Phone #	
Fax # 4308	Fax #	

94-DMR-001466

APPENDIX 2
Page 2 of 2

RFP Tracking # 3223
DOE # 5400.3
Page 1 of 2

ACCUMULATION REQUEST FORM

ADDITION/DELETION/MODIFICATION/RELOCATION/CUSTODIAN CHANGE
(Circle the appropriate request above)

Date Requested 2/24/99
Requested By M. H. Conlogue
Extension X4152
Department Tech Support
Building 706

AREA INFORMATION
Assigned RCRA ID Number [redacted]
Building 779
Area Type RTU

(Complete Old information column & only the modified item(s) in the new information column)

OLD INFORMATION	NEW INFORMATION
Room Number: 139-5 Hood	Room Number:
Physical Description of Waste: Misc. Remediation Waste Generated During D&D Activities	Physical Description of Waste:
Hazardous Constituent(s): See Below	Hazardous Constituent(s):
EPA Code(s): D001 Trch D011 F001-F005	EPA Code(s):
Compatibility Code(s): Various	Compatibility Code(s):
IDC/WFC/NA: Various	IDC/WFC/NA:
Volume Allowed: N/A	Volume Allowed:
Storage Unit Destination: N/A	Storage Unit Destination:
Custodian's Name: C. Lee	Custodian's Name:
Custodian's Employee #: [redacted]	Custodian's Employee #:
Extension/Pager: 2463	Extension/Pager:
Name of Unit Owner: M. Conlogue	Name of Unit Owner:

Non-Radiological Closeout Report
for Building 779, Main/B-Ann/Utility
Page F1 of F3

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ICO HOPKINS 4-8-42

WEMS AREA LOCATION REQUEST FORM

1 ACTION REQUIRED (Circle one.) ADD INACTIVATE MODIFY RELOCATE

If action is ADD, complete of Sections 1, 2A, and 3 through 6.

If action is INACTIVATE, complete Sections 1, 2A, and 6. Also, ensure that no active waste packages still reside in this Area Location.

If action is MODIFY, complete Sections 1, 2A, and 6, and provide ONLY *information that has changes* in Sections 3, 4, and 5.

If action is RELOCATE, complete BOTH columns A and B in Section 2, and provide ONLY *information that has changed* in Sections 3, 4, and 5. Also complete Sections 1 and 6.

2 (A) AREA LOCATION (Current, New, or From) (B) AREA LOCATION (To Used for RELOCATE only.)

Building 779 Unit 2449 Room 222/234 | Building _____ Unit _____ Room _____

(If this request is applicable to a number of Area Locations, attach the list of affected Area Locations (Building/Unit/Room) to one completed, signed WEMS Area Location Request Form.) NOTE: If Area Location is offsite, also complete Addendum 1.

3 UNIT INFORMATION

Unit Type: RTU
(Enter one Unit Type from List 1.)

RCRA Unit: ☐ Yes ☐ No (Please √.)

Exceeds U-235 Gram Limit: ☐ Yes ☐ No (Please √.)
(Note: Yes indicates waste packages exceeding 15 grams U-235 cannot be stored in this unit.)

Area Description: _____
(Free form text field. Enter useful information.)

Area Volume: _____
(Optional. Enter storage capacity of Area Location and units of measure.)

Permit Status: (Please √ one.) ☐ N/A ☐ Permitted

Waste Description: _____
(Free form text field. Enter useful information.)

4 OWNERSHIP INFORMATION

Custodian

Custodian Employee Number: _____
(R, N, or Social Security Number)

Custodian Name: _____
(First, Middle Initial, Last)

Extension: _____ Pager: _____

(If the person has never been involved with WEMS, also provide the following information.)

Company Name: _____

Group: _____ Building: _____

Unit Owner

Unit Owner Employee Number: [redacted]
(R, N, or Social Security Number)

Unit Owner Name: KATHRYN O. ZBRYK
(First, Middle Initial, Last)

Extension: 6647 Pager: 212 4197

(If the person has never been involved with WEMS, also provide the following information.)

Company Name: RMRS

Group: 779 CLOSURE Building: 779

5 WASTE INFORMATION

Waste Types: _____
(Enter ALL Waste Types allowed for storage in this Area Location, from List 2.)

Compatibility Codes: _____
(Enter ALL Compatibility Codes allowed for storage in this Area Location, from List 3.)

EPA Codes: _____
(Enter ALL EPA Codes allowed for storage in this Area Location.)

6 APPROVAL SIGNATURES

Unit Owner: KATHRYN ZBRYK / Kathryn Zbryk / 9-14-99
(Required for all requests.) Print Name Signature Date

I certify that the above mentioned regulated unit has been established or modified in compliance with the applicable permit, Consent Order, and/or regulatory requirements, and that the designated Unit Owner and Custodian are properly trained to conduct their duties.

Environmental Manager: TED A HOPKINS / Ted A Hopkins / 9/14/99
Print Name Signature Date

(Required for requests for all Unit Types other than NRA and OFF.)

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Ted Hopkins F4542

WEMS AREA LOCATION REQUEST FORM

1 ACTION REQUIRED (Circle one.) ADD **INACTIVATE** MODIFY RELOCATE

If action is ADD, complete of Sections 1, 2A, and 3 through 6.

If action is INACTIVATE, complete Sections 1, 2A, and 6. Also, ensure that no active waste packages still reside in this Area Location.

If action is MODIFY, complete Sections 1, 2A, and 6, and provide ONLY *information that has changes* in Sections 3, 4, and 5.

If action is RELOCATE, complete BOTH columns A and B in Section 2, and provide ONLY *information that has changed* in Sections 3, 4, and 5. Also complete Sections 1 and 6.

2 (A) AREA LOCATION (Current, New, or From) | (B) AREA LOCATION (To – Used for RELOCATE only.)

Building 779 Unit 2450 Room 221 | Building _____ Unit _____ Room _____

(If this request is applicable to a number of Area Locations, attach the list of affected Area Locations (Building/Unit/Room) to one completed, signed WEMS Area Location Request Form.) NOTE: If Area Location is offsite, also complete Addendum 1.

3 UNIT INFORMATION

Unit Type: SCA
(Enter one Unit Type from List 1.)

RCRA Units: ☐ Yes ☐ No (Please √.)

Exceeds U-235 Gram Limit: ☐ Yes ☐ No (Please √.)
(Note: "Yes" indicates waste packages exceeding 15 grams U-235 cannot be stored in this unit.)

Area Description: _____
(Free form text field. Enter useful information.)

Area Volume: _____
(Optional. Enter storage capacity of Area Location and units of measure.)

Permit Status: (Please √ one.) ☐ N/A ☐ Permitted

Waste Description: _____
(Free form text field. Enter useful information.)

4 OWNERSHIP INFORMATION

Custodian

Custodian Employee Number: _____
(R, N, or Social Security Number)

Custodian Name: _____
(First, Middle Initial, Last)

Extension: _____ Pager: _____

(If the person has never been involved with WEMS, also provide the following information.)

Company Name: _____

Group: _____ Building: _____

Unit Owner

Unit Owner Employee Number: [redacted]
(R, N, or Social Security Number)

Unit Owner Name: KATHRYN D. ZBRYK
(First, Middle Initial, Last)

Extension: 6647 Pager: 212-4197

(If the person has never been involved with WEMS, also provide the following information.)

Company Name: RMRS

Group: 779 CLOSURE Building: 706

5 WASTE INFORMATION

Waste Types: _____
(Enter ALL Waste Types allowed for storage in this Area Location, from List 2.)

Compatibility Codes: _____
(Enter ALL Compatibility Codes allowed for storage in this Area Location, from List 3.)

EPA Codes: _____
(Enter ALL EPA Codes allowed for storage in this Area Location.)

6 APPROVAL SIGNATURES

Unit Owner: KATHRYN ZBRYK / Kathryn Zbryk / 9-14-99
(Required for all requests.) Print Name Signature Date

I certify that the above mentioned regulated unit has been established or modified in compliance with the applicable permit, Consent Order, and/or regulatory requirements, and that the designated Unit Owner and Custodian are properly trained to conduct their duties.

Environmental Manager: TED A HOPKINS / Ted A Hopkins / 9/14/99
Print Name Signature Date

(Required for requests for all Unit Types other than NRA and OPF.)

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Appendix G

GLOVEBOX REMOVAL CHECKLIST

RCRA UNITS

Building 779 Glovebox Removal Checklist (Continued)

Building 779 Glovebox Removal Checklist

No	Room	Glovebox	Property Control No.	Waste Crate Number	YES	NO
83	228	199	00034940-00	S00339, S00333	X	
84	270	972	00034924-00	S00334, S00333	X	
85	270	973	00034924-00	S00333	X	
86	222	371	00036046-00	S00334	X	
87	220	220SE	00035785-00	S00364, S00372	X	
88	220	463	00035785-00	S00372	X	
89	222	985	No PCN #	S00287	X	
90	218	971S	00035792-00	S00363	X	
91	218	971N	00035792-00	S00366	X	
92	217	964	00035855-00	S00363, S00366	X	
93	217	963	00035855-00	S00367	X	
94	220	462	00034835-00	S00367, S00368	X	
95	220	974	00035965-00	S00369, S00468	X	
96	234	BBox 205D	00035813-00	S00468, S00466	X	
97	234	205	00035813-00	S00468, S00466	X	
98	234	205A	00035813-00	S00468, S00466	X	
99	234	205B	00035813-00	S00468, S00466	X	
100	234	205C	00035813-00	S00468, S00466	X	
101	140	BBox SW	00035826-00	P04258	X	
102	218	218SE	00035847-00	S00451	X	
103	218	970	00035847-00	S00451	X	
104	137	106-2	00035840-00	S00443, S00452	X	
105	137	106-3	00035840-00	S00453	X	
106	222	230	No PCN #	S00447	X	
107	137	106-1	0035840-00	S00443, S00452	X	
108	139	139-3	00026410-00	S00443	X	
109	139	139-4	00026410-00	S00443	X	
110	139	139-1	00035798-00	S00458	X	
111	139	139-2	D-71-3099-94226	S00458	X	
112	131	131C	No PCN #	S00459	X	
113	131	131A	00023217-00	S00459	X	
114	131	131B	00023217-00	S00459	X	
115	131	131D	00023218-00	S00460	X	
116	131	131E	00023218-00	S00460	X	
117	137	106-6	00035842-00	S00460	X	
118	140	Hood 140SE	00035827-00	P04258	X	
119	137	106-5	00035841-00	S00462	X	
120	137	106-B	00036061-00	S00462	X	
121	137	106-4	00035841-00	S00462	X	
122	131	961	00036036-00	S00471	X	
123	126	126	00023809-00 00023810-00	S00455	X	
124	139	Hood 139-5	00035845-00	S00343	X	
125	133	953	00036465-00	S00490, S00497	X	
126	133	954	00035848-00	S00341, S00348	X	

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Building 779 Glovebox Removal Checklist (Continued)

No	Room	Glovebox	Property Control No.	Waste Crate Number	Removed YES	Removed NO
127	133	957	00035853-00	S00347, S00343	X	
128	133	959	00036462-00	S00352	X	
129	133	958	No PCN#	S00341, S00486	X	
130	228	045	00035818-00	S00501, S00449	X	
131	133	955	00035849-00	S00341	X	
132	217	330-371	(LANL) 00036775	Crated for LANL Transfer	X	
133	133	956	No PCN#	S00509	X	

I certify that the Gloveboxes listed above have been removed from Building 779; placed in a waste crate, and have been placed in the RFETS waste stream for disposal.

Item number 132 has not been placed in a waste stream for disposal as it was packaged and sent to LANL.

Proj Mgr

Signature/K-H Title **Date** 5/10/99

Signature/DOE Title **Date** 5/10/99

347/347