Rocky Flats Environmental Technology Site

CHEMICAL CHARACTERIZATION PACKAGE

DMP 2/26/01

400/500/~~900~~ BUILDING CLUSTER CLOSURE PROJECT

REVISION 1

FEBRUARY 20, 2001

Prepared by: _____
Industrial Hygiene

Prepared by: _____
Environmental Compliance

Reviewed by: _____
Quality Assurance

Reviewed by: _____ 2/21/01
RISS Facility Characterization Coordinator

Approved by: FE Stable 2-26-01
Closure Project Facility Manager

Reviewed for Classification/UCNI/OUO
By: Janet Nesheim, Derivative Classifier
DOE, EMCBC
Date: 10-13-05
Confirmed Unclassified, Not UCNI, Not OUO

ADMIN RECORD

1/79

IA-A-000852

CHEMICAL CHARACTERIZATION PACKAGE

DAP 2/26/01

BUILDING(s): 400/500/900 CLUSTER – (T551A, 442W, 442L, ~~T900D~~)

* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols, and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities.
* PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
10. Collect and maintain all characterization paperwork in the Project File(s), and all electronic data in the appropriate D&D RISS subdirectory.

ASBESTOS		
Sample Location	**Estimated Number of Samples**	**Sample location and justification/rational**
442 L&W	37	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure
~~T900D~~	~~7~~	~~Asbestos inspection has not been performed. As a result a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure.~~
T551A	20	Asbestos inspection has not been performed. As a result a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure.
Total Samples:	64	The exact sample numbers and locations will not be determined until a comprehensive, invasive inspection is performed in accordance with 40 CFR Part 763, Subpart E. Sample locations will be specified on sample maps during characterization efforts. Samples will be obtained in accordance with PRO-653-ACPR, Asbestos Characterization Procedure and 40 CFR 763.

removed DAP 2/26/01

BERYLLIUM		
Sample Location	**Number of Samples (Smears)**	**Sample location and justification/rational**
442 L&W	Room 101 – 15 random, 2 biased Room 105 – 36 random, 4 biased All other Facility areas 5 – biased	Process history indicates B442W, Rooms 101 and 105 may have been used as a beryllium storage areas, no documented supporting data or process history proves otherwise. Therefore, random and biased sampling will be performed in Rooms 101 and 105. Room 101 and 105 are approximately 1900 sq. ft, and 5400 sq. ft respectively. There is no documented supporting data or process history that proves beryllium was not used or stored in the remaining portions of B442 L&W. Therefore, two biased samples per building will be obtained in areas other than B442W, Rooms 101 and 105.
T551A	5 – biased	No historical association with Beryllium. Sample locations will be biased and will be determined at the time of sampling.
~~T900D~~	~~5 – biased~~	~~No historical association with Beryllium. Sample locations will be biased and will be determined at the time of sampling.~~
Total Samples:	72	Samples will be obtained at locations specified on sample map(s) in accordance with PRO-536-BCPR, Beryllium Characterization Procedure. Biased sample locations will correspond with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition.

Removed DAP 2/26/01

LEAD		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
400, 500, ~~900~~ Cluster, all locations DAP 2/26/01	0	Lead sampling is not required in the 400, 500, 900 Cluster. All paint will remain a part of the infrastructure during demolition and therefore does not require sampling per Environmental Waste Compliance Guidance No. 27, Lead Based Paint (LBP) and LBP Debris Disposal. Sampling for lead for IH requirements will be at the discretion of the demolition contractor.
Total Samples:	0	

RCRA/CERCLA CONSTITIUENTS		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
442L & 442W	0	A walk-down of the building, review of building historical documents and conversations with personnel assigned to the building, with historical knowledge of the processes in the building, indicate that no major spills of concern occurred within the building. Dioctyl phthalate was used in the building in vacuum pumps, and while some material was probably dripped on the floor during the course of operations, it was in small quantities that were immediately cleaned up. The only incident that appears to have occurred at the building involved a spill of oil in the soil outside the building. It was remediated at the time of the spill, and turned out to be regular oil, not dioctyl phthalate, as suspected, therefore no sampling is required.
T551A	0	Process knowledge and a walk-down of this building indicates that no RCRA/CERCLA constituents of concern or historical spills exist in the trailer, therefore no sampling is required.

3

Removed DH 2/26/01

~~T900D~~	0	~~Process knowledge and a walk-down of this building indicates that no RCRA/CERCLA constituents of concern or historical spills exist in the trailer, therefore no sampling is required.~~
Total Samples:	0	

PCBs		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
442L, steam pump	4 (3 + duplicate)	There is visible staining on the concrete pad surrounding the steam pump from oil used to lubricate the pump (approximately 25 sqft). This oil could have been contained PCBs at one time. Core sampling (2" diameter, 2" depth) in the number indicated should be conducted to determine the presence or absence of PCBs. (Deeper samples will be taken in the unlikely event that contamination appears to have migrated farther than 2" into the slab.) Disposal of the entire slab as PCB bulk remediation waste would likely be more expensive, and would require soil sampling to determine any migration under the slab.
T551A	0	Process knowledge and a walk-down of this building indicates no potential for PCB contamination, therefore no sampling is required.
~~T900D~~	~~0~~	~~Process knowledge and a walk-down of this building indicates no potential for PCB contamination, therefore no sampling is required.~~
Total Samples:	4	

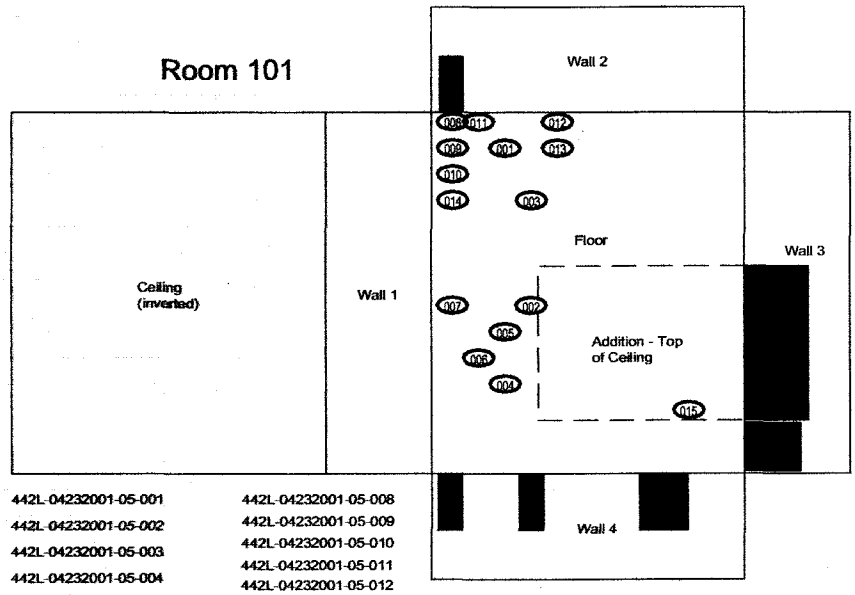
Removed DH 2/26/01

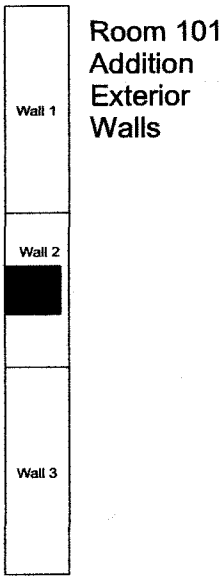
* PCB ballasts, fluorescent light bulbs, potential mercury switches in thermostats, and mercury vapor light bulbs shall be removed prior to demolition.

4

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: A **Survey Unit: 442-A-001** **Classification: N/A**
Building: 442L
Survey Unit Description: Interior of B442L





442L-04232001-05-001
442L-04232001-05-002
442L-04232001-05-003
442L-04232001-05-004
442L-04232001-05-005
442L-04232001-05-006
442L-04232001-05-007
442L-04232001-05-008
442L-04232001-05-009
442L-04232001-05-010
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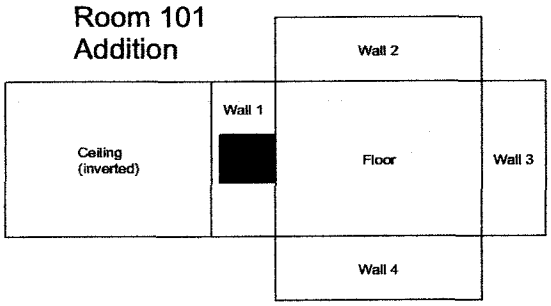
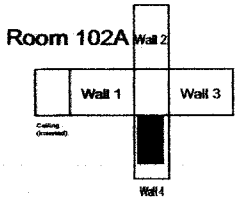
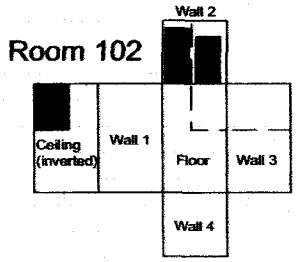
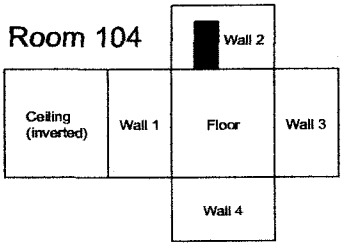
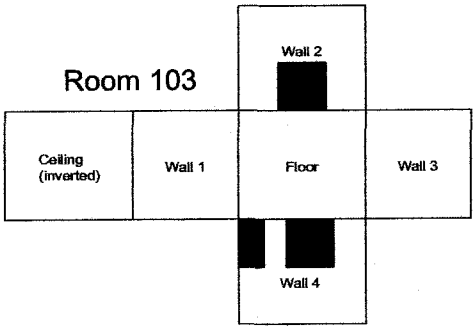
442L-04232001-05-014
442L-04232001-05-015











SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCB Sample Location

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N

Open/Inaccessible Area
Area in Another Survey Unit

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL

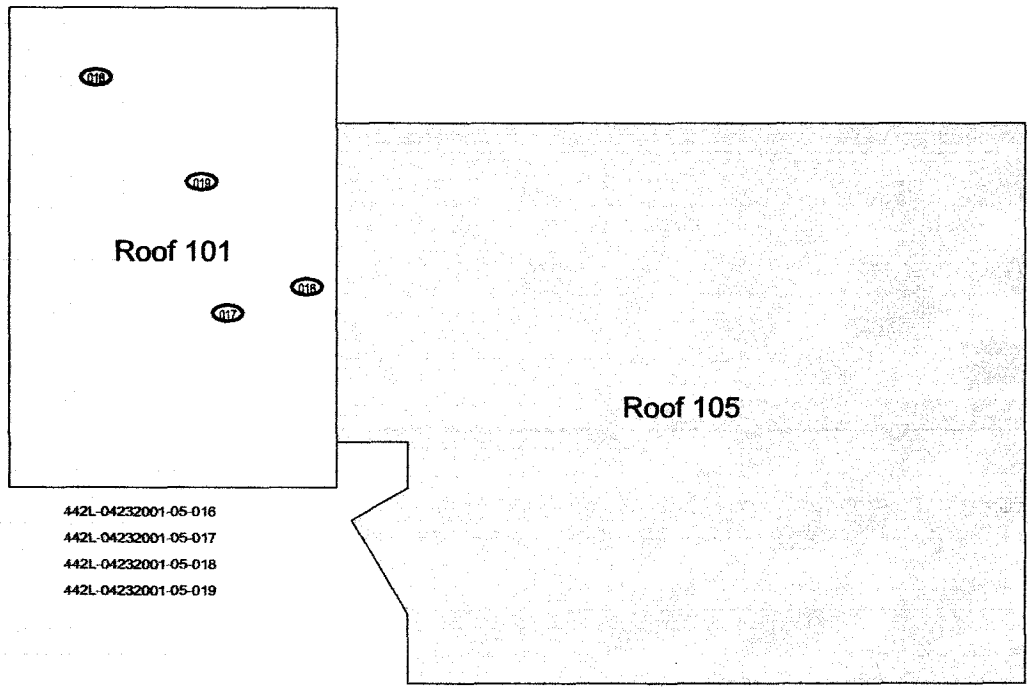
MAP ID: fy2001/01-0303 March 8, 2001

442-A-001

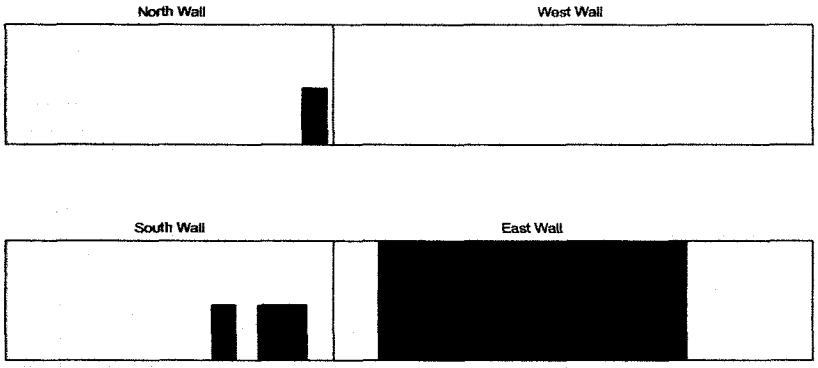
5

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: B **Survey Unit: 442-B-002** **Classification: N/A**
Building: 442L
Survey Unit Description: Exterior of B442L



442L-04232001-05-016
442L-04232001-05-017
442L-04232001-05-018
442L-04232001-05-019



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL

MAP ID: fy2001/01-0303 March 6, 2001

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

NVLAP Accredited Laboratory # 101896
TDH Licensed Laboratory # 30-0136

TABLE I. PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 76905-1&2**
Client: **Kaiser-Hill Analytical Services Division**
Client Project Number / P.O.: **01D0713/EDD30120**
Client Project Description: **On-Site Sample Analysis A. Gonzalez**
Date Samples Received: **May 1, 2001**
Analysis Type: **PLM Short Report, Bulk**
Turnaround: **24 Hour**

Analyst: PDL

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
442W-04232001-05-001	EM 539917	A	White/tan ceiling tile	100		ND	70	30
442W-04232001-05-002	EM 539918	A	White/tan ceiling tile	100		ND	70	30
442W-04232001-05-003	EM 539919	A	White/tan drywall w/white paint	100		ND	20	80
442W-04232001-05-004	EM 539920	A	Black mastic	10		ND	0	100
		B	White tile	90		ND	0	100
442W-04232001-05-005	EM 539921	A	Black mastic	8		ND	0	100
		B	White tile	92		ND	0	100
442W-04232001-05-006	EM 539922	A	White tape	5		ND	98	2
		B	White mud w/white paint	10		ND	0	100
		C	White/tan drywall	85		ND	15	85
442W-04232001-05-007	EM 539923	A	Tan mastic	10		ND	0	100
		B	White cove	90		ND	0	100
442L-04232001-05-001	EM 539924	A	Yellow mastic	1		ND	0	100
		B	White tile	99	Chrysotile	7	0	93

ND = None Detected
TR = Trace, < 1% Visual Estimate

Trem-Act = Tremolite-Actinolite

Data QA

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RES Job Number: **RES 76905-1&2**
Client: **Kaiser-Hill Analytical Services Division**
Client Project Number / P.O.: **01D0713/EDD30120**
Client Project Description: **On-Site Sample Analysis A. Gonzalez**
Date Samples Received: **May 1, 2001**
Analysis Type: **PLM Short Report, Bulk**
Turnaround: **24 Hour**

Analyst: PDL

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
442L-04232001-05-002	EM 539925	A	Yellow mastic	1		ND	0	100
		B	White tile	99	Chrysotile	7	0	93
442L-04232001-05-003	EM 539926	A	Yellow mastic	5		ND	0	100
		B	Gray plaster	10		ND	0	100
		C	White/gray tile	85		ND	0	100
442L-04232001-05-004	EM 539927	A	Yellow mastic	10		ND	0	100
		B	White/gray tile	90		ND	0	100
442L-04232001-05-005	EM 539928	A	Yellow mastic w/gray granular plaster	10		ND	0	100
		B	White tile	90		ND	0	100
442L-04232001-05-006	EM 539929	A	Yellow mastic	5		ND	0	100
		B	White tile	95		ND	0	100

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Data QA

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RES Job Number: **RES 76905-1&2**
Client: **Kaiser-Hill Analytical Services Division**
Client Project Number / P.O.: **01D0713/EDD30120**
Client Project Description: **On-Site Sample Analysis A. Gonzalez**
Date Samples Received: **May 1, 2001**
Analysis Type: **PLM Short Report, Bulk**
Turnaround: **24 Hour**

Analyst: PDL

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
442L-04232001-05-007	EM 539930	A	White fibrous woven material	10		ND	95	5
		B	White fibrous woven material w/white & gray paint & clear resin	15		ND	50	50
		C	White fibrous plaster	75	Chrysotile	TR	18	80
					Point Count	*TR*		
					Amosite	2		
					Point Count	*0.5*		
442L-04232001-05-008	EM 539931	A	White fibrous woven material w/white paint	10		ND	50	50
		B	White fibrous plaster	90	Chrysotile	7	0	80
					Amosite	13		
442L-04232001-05-009	EM 539932	A	White fibrous woven material w/white paint	8		ND	50	50
		B	White fibrous plaster	92	Chrysotile	7	0	80
					Amosite	13		
442L-04232001-05-010	EM 539933	A	White fibrous woven material w/white paint	10		ND	50	50
		B	White fibrous plaster	90	Chrysotile	7	0	93
					Amosite	13		

ND = None Detected
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Data QA

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Client: **Kaiser-Hill Analytical Services Division**
Client Project Number / P.O.: **01D0713/EDD30120**
Client Project Description: **On-Site Sample Analysis A. Gonzalez**
Date Samples Received: **May 1, 2001**
Analysis Type: **PLM Short Report, Bulk**
Turnaround: **24 Hour**

Analyst: PDL

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
442L-04232001-05-011	EM 539934	A	White paint w/white fibrous woven material	10	Chrysotile	TR	50	50
					Point Count	*TR*		
		B	Gray fibrous plaster	90		ND	15	85
442L-04232001-05-012	EM 539935	A	White fibrous woven material w/white paint	10		ND	50	50
		B	Gray fibrous plaster	90		ND	15	85
442L-04232001-05-013	EM 539936	A	White fibrous woven material w/white paint	10	Chrysotile	TR	50	50
					Point Count	TR		
		B	Gray fibrous plaster	90		ND	15	85
442L-04232001-05-014	EM 539937	A	Brown mastic	5		ND	5	95
		B	Brown cove	95		ND	0	100
442L-04232001-05-015	EM 539938	A	White tape	20		ND	98	2
		B	White mud w/white paint	35		ND	0	100
		C	White/tan drywall	45		ND	25	75

ND = None Detected
TR = Trace, < 1% Visual Estimate

Trem-Act = Tremolite-Actinolite

Date QA

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TABLE I. PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

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Client Project Number / P.O.: **01D0713/EDD30120**
Client Project Description: **On-Site Sample Analysis A. Gonzalez**
Date Samples Received: **May 1, 2001**
Analysis Type: **PLM Short Report, Bulk**
Turnaround: **24 Hour**

Analyst: PDL

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
442L-04232001-05-016	EM 539939	A	Brown fibrous tar w/black tar & silver paint	100	Chrysotile	30	35	35
442L-04232001-05-017	EM 539940	A	Yellow fibrous material	40		ND	85	15
		B	Black tar w/black fibrous tar	60		ND	15	85
442L-04232001-05-018	EM 539941	A	Yellow fibrous material	15		ND	85	15
		B	Black fibrous tar w/black tar	85		ND	25	75
442L-04232001-05-019	EM 539942	A	Brown fibrous tar w/black tar & silver paint	100	Chrysotile	30	30	40

ND = None Detected
TR = Trace, < 1% Visual Estimate

Trem-Act = Tremolite-Actinolite

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

01D0713

Name of Originator: A. Gonzalez Title: IH&S Bldg/Ext: 116/x6827 Date: 4/24/01 Page 1 of 2

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-04232001-05-001	Asbestos				B	IH028005		
442W-04232001-05-002								
442W-04232001-05-003								
442W-04232001-05-004							pt. count all	
442W-04232001-05-005							samples trace	to 3%
442W-04232001-05-006								
442W-04232001-05-007								
442L-04232001-05-001		Samples disposed						
442L-04232001-05-002		of in 881 waste pile						
442L-04232001-05-003								
442L-04232001-05-004								
442L-04232001-05-005								
442L-04232001-05-006								
442L-04232001-05-007								
442L-04232001-05-008								
442L-04232001-05-009								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	13:50 4/24/01			
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

- Kaiser-Hill ☒ Verbal To: A. Gonzalez
- RMRS ☐ Fax To: 6678
- SSOC ☐ Report To: KH
- DynCorp ☐ Bill To: KH
- WSI ☐ P.O.#/Release: EDD30120
- Lab: Reservoirs

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other

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

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

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

05/02/01 WED 14:19 FAX 303 863 9196 RES. ENV. SERV. 007

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

01D0713

Name of Originator: A. Gonzalez Title: IH&S Bldg/Ext: 116/X6727 Date: 4/24/01 Page 2 of 2

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442L-04232001-05-010	Asbestos						IH02B005	
442L-04232001-05-011								
442L-04232001-05-012							pt. count all	
442L-04232001-05-013							samples trace to 3%	
442L-04232001-05-014								
442L-04232001-05-015								
442L-04232001-05-016			Samples disposed of					
442L-04232001-05-017			in 881 waste-PAX.					
442L-04232001-05-018								
442L-04232001-05-019								

4/24/01

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	13:50 4-24-01			
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

Kaiser-Hill ☒ Verbal To: A. Gonzalez
RMRS ☐ Fax To: 6678
SSOC ☐ Report To: KH
DynCorp ☐ Bill To: KH
WSI ☐ P.O.#/Release: EDD30120
Lab: Reservoirs

Analysis Request

Industrial Hygiene Sample
☐ Standard Service ☐ Rush ☐ Other

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

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:
Comments:

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

05/02/01 WED 14:19 FAX 303 863 9196 RES. ENV. SERV. 008

NOTICE:

"BEST AVAILABLE COPY"

PORTIONS OF THE FOLLOWING DOCUMENT ARE ILLEGIBLE

The Administrative Record Staff

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

Name of Originator: Title: Bldg/Ext: Date: Page of

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number

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
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Kaiser-Hill ☐ Verbal To:
- RMRS ☐ Fax To:
- SSOC ☐ Report To:
- DynCorp ☐ Bill To:
- WSI ☐ P.O.#/Release:
- Lab:

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☒ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

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

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

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SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number

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
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

Kaiser-Hill ☐ Verbal To:
RMRS ☐ Fax To:
SSOC ☐ Report To:
DynCorp ☐ Bill To:
WSI ☐ P.O.#/Release:
Lab:

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

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

FOOTHILLS ENVIRONMENTAL, INC.
Industrial Hygiene, Safety, & Environmental Services

2801 Youngfield St., Ste. 300
Golden, CO 80401
Phone: (303) 275-3470
Fax: (720) 489-2832

ASBESTOS BULK SAMPLING FORM

CLIENT NAME: _____ LOCATION: _____

SAMPLE DATE: _____ SAMPLED BY: _____ PROJECT NUMBER: _____

Sample Number	Sample Type	Sample Description	Sample Location
4426-04232001-05-001	c.t.	2x4 white large deep groove	Room 2
4426-04232001-05-002	c.t.	2x4 white small dot & groove	Room 2
4426-04232001-05-003	drywall	drywall & tape joint compound	Fat cave to 106
4426-04232001-05-004	F.T.	12x12 white w/ blue streak and mastic	Room 106
4426-04232001-05-005	F.T.	" " " " " " " "	Room 106
4426-04232001-05-006	drywall	drywall & tape joint compound	Entrance to 002
4426-04232001-05-007	cove base	white cove base	Room 106

FOOTHILLS ENVIRONMENTAL, INC.
Industrial Hygiene, Safety, & Environmental Services

2801 Youngfield St., Ste. 300
Golden, CO 80401
Phone: (303) 275-3470
Fax: (720) 489-2832

ASBESTOS BULK SAMPLING FORM

CLIENT NAME: _____ LOCATION: _____

SAMPLE DATE: _____ SAMPLED BY: _____ PROJECT NUMBER: _____

Sample Number	Sample Type	Sample Description	Sample Location
442L-04232001-05-001	F.T.	12"x12" tan w/ brown streak + yellow mastic	Room 101
442L-04232001-05-002	"	" " " " "	Room 101
442L-04232001-05-003	"	12"x12" white w/ gray streak + yellow mastic (gray flow paint	Room 101
442L-04232001-05-004	"	" " " " " " "	Room 101
442L-04232001-05-005	"	12x12 white w/ light green (olive) streak + yellow mastic	Room 101
442L-04232001-05-006	"	" " " " " " " " "	Room 101
442L-04232001-05-007	TSI	elbow from condensate steam by pump white	Room 101
442L-04232001-05-008	TSI	straight section on pump steam line white - labeled asbestos	Room 101
442L-04232001-05-009	TSI	straight section on 125 steam white - labeled asbestos	Room 101
442L-04232001-05-010	TSI	elbow from pumper steam line white - labeled asbestos	Room 101
442L-04232001-05-011	TSI	elbow from condensate steam line - gray - labeled asbestos free	Room 101
442L-04232001-05-012	TSI	elbow from HVAC unit - gray - labeled asbestos free	Room 101
442L-04232001-05-013	TSI	elbow from HVAC unit - gray - " " "	Room 101
442L-04232001-05-014	cove base	brown cove base + brown mastic	Room 101
442L-04232001-05-015	drywall	drywall + tape joint compound	Room 101 addition
442L-04232001-05-016	roof	roof flashing	442L - East end
442L-04232001-05-017	roof	roof core - center	442L Roof
442L-04232001-05-018	roof	core - center - D.W.	442L Roof
442L-04232001-05-019	roof	roof flashing - center	442L Roof tall vent

Johns Manville

Johns Manville Corporation
10100 West Ute Avenue (80127)
P.O. Box 625005
Littleton, CO 80162-5005
Tel: (303) 978-3724

COVER PAGE

August 29, 2001

Shelly Johnsen
Rocky Flats Environmental Technology Site
P.O. Box 464, Bldg. 881
Golden, CO 80402-0464

Laboratory Report ID:	01082811
Laboratory Name:	Johns Manville IH Lab
Subcontract Number:	KH800188
RIN:	01D1373
Requestor:	David Babbs
P.O./Charge Code:	EDD30120

Dear Ms. Johnsen:

The Johns Manville Industrial Hygiene Laboratory has performed the following analytical testing services as requested. The results were calculated based upon the information supplied on the submission form. All laboratory data have been filed and are available upon request. The Johns Manville Laboratory is accredited by the American Industrial Hygiene association (AIHA) in the industrial hygiene program (Certificate #056), and participates in the AIHA ELPAT program.
If you have any questions, please call (303) 978-2584.

I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the RFETS specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Sincerely,

Scott Steiner
Industrial Hygiene Project Manager
August 29, 2001

442L

18

August 29, 2001

Laboratory Report ID: 01082811
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D1373
Requestor: David Babbs
P.O./Charge Code: EDD30120

Scope of Work:

Bottle Number(s)	Customer Number(s)	Laboratory ID Number(s)	Line Item Code	Sample Matrix	Instrument Run
01D1373-001.001	442L-8222001-315-101	01082811-001	NR01A001	WIPE	QU010829-B
01D1373-002.001	442L-8222001-315-102	01082811-002	NR01A001	WIPE	QU010829-B
01D1373-003.001	442L-8222001-315-103	01082811-003	NR01A001	WIPE	QU010829-B
01D1373-004.001	442L-8222001-315-104	01082811-004	NR01A001	WIPE	QU010829-B
01D1373-005.001	442L-8222001-315-105	01082811-005	NR01A001	WIPE	QU010829-B
01D1373-006.001	442L-8222001-315-106	01082811-006	NR01A001	WIPE	QU010829-B
01D1373-007.001	442L-8222001-315-107	01082811-007	NR01A001	WIPE	QU010829-B
01D1373-008.001	442L-8222001-315-108	01082811-008	NR01A001	WIPE	QU010829-B
01D1373-009.001	442L-8222001-315-109	01082811-009	NR01A001	WIPE	QU010829-B
01D1373-010.001	442L-8222001-315-110	01082811-010	NR01A001	WIPE	QU010829-B
01D1373-011.001	442L-8222001-315-111	01082811-011	NR01A001	WIPE	QU010829-B
01D1373-012.001	442L-8222001-315-112	01082811-012	NR01A001	WIPE	QU010829-B
01D1373-013.001	442L-8222001-315-113	01082811-013	NR01A001	WIPE	QU010829-B
01D1373-014.001	442L-8222001-315-114	01082811-014	NR01A001	WIPE	QU010829-B

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August 29, 2001

QC RESULTS SUMMARY

Laboratory Report ID: 01082811
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D1373
Requestor: David Babbs
P.O./Charge Code: EDD30120

QC Parameter	QC Item Type	Compound	Expected Recovery	Actual Recovery	Percent Recovery	QC Sample ID	Date Analyzed	Instrument Run
Preparation Blank	PB1	Beryllium	< 0.1 µg	<0.1 µg	N/A		8/29/2001	QU010829-B
Matrix Blank	MB1	Beryllium	< 0.1 µg	<0.1 µg	N/A		8/29/2001	QU010829-B
Matrix Blank Spike	MS1	Beryllium	5.0 µg	5.02 µg	100.4		8/29/2001	QU010829-B
Laboratory Control Sample	LC1	Beryllium	8.0 µg	7.82 µg	97.8	QC01081436	8/29/2001	QU010829-B
Laboratory Control Duplicate	LC1a	Beryllium	8.0 µg	7.77 µg	97.1	QC01081436	8/29/2001	QU010829-B
Preparation Blank	PB2	Beryllium	< 0.1 µg	<0.1 µg	N/A		8/29/2001	QU010829-B
Matrix Blank	MB2	Beryllium	< 0.1 µg	<0.1 µg	N/A		8/29/2001	QU010829-B
Matrix Blank Spike	MS2	Beryllium	5.0 µg	5.07 µg	101.4		8/29/2001	QU010829-B
Laboratory Control Sample	LC2	Beryllium	6.0 µg	5.99 µg	99.8	QC01081437	8/29/2001	QU010829-B
Laboratory Control Duplicate	LC2a	Beryllium	6.0 µg	5.93 µg	98.8	QC01081437	8/29/2001	QU010829-B

August 29, 2001

Laboratory Report ID 01082811
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D1373
Requestor: David Babbs
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Customer Number	Laboratory ID Number	Requested Analysis	Reporting Limit	CONCENTRATION Back Section	Front Section	Total	Q	Air Vol or Time	Air Concentration
442L-8222001-315-101	01082811-001	Beryllium	0.1 ug			< 0.1 ug	U		
442L-8222001-315-102	01082811-002	Beryllium	0.1 ug			< 0.1 ug	U		
442L-8222001-315-103	01082811-003	Beryllium	0.1 ug			0.455 ug			
442L-8222001-315-104	01082811-004	Beryllium	0.1 ug			< 0.1 ug	U		
442L-8222001-315-105	01082811-005	Beryllium	0.1 ug			< 0.1 ug			
442L-8222001-315-106	01082811-006	Beryllium	0.1 ug			< 0.1 ug	J		
442L-8222001-315-107	01082811-007	Beryllium	0.1 ug			< 0.1 ug	J		
442L-8222001-315-108	01082811-008	Beryllium	0.1 ug			< 0.1 ug	U		
442L-8222001-315-109	01082811-009	Beryllium	0.1 ug			< 0.1 ug	J		
442L-8222001-315-110	01082811-010	Beryllium	0.1 ug			< 0.1 ug	U		
442L-8222001-315-111	01082811-011	Beryllium	0.1 ug			< 0.1 ug	U		
442L-8222001-315-112	01082811-012	Beryllium	0.1 ug			< 0.1 ug	U		
442L-8222001-315-113	01082811-013	Beryllium	0.1 ug			< 0.1 ug	U		
442L-8222001-315-114	01082811-014	Beryllium	0.1 ug			< 0.1 ug	U		

RFETS

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

01082811 Due: 8/29/01

C.O.C. # 01D137

Page 1 of 2

Sampler(s) BABBS, DAVID (time/date)	Contact/Requester JOHNSEN, SHELLY	Telephone No. 6401
RIN 01D1373	Sampling Origin 442L	Purchase Order/Charge Code EDD30120
Project Title 442L BE SMEARS	Logbook No. N/A	Ice Chest No. N/A Temp.
To (Lab) Johns Manville	Method of Shipment HAND DELIVER	Bill of Lading/Air Bill No. N/A
Protocol	Related COC (if any)	PRE 010820-116-002

POSSIBLE SAMPLE HAZARDS/REMARKS
Are acid preserved samples DOT hazardous per 40 CFR Part 136.3 Table II? YES or NO
Are other known hazardous substances present? YES or NO
** ** **

SCREENING REQUIRED ☐

SPECIAL INSTRUCTIONS Hold Time

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative ; Packing
01D1373-001.001	442L-8222001-315-101	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-002.001	442L-8222001-315-102	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-003.001	442L-8222001-315-103	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-004.001	442L-8222001-315-104	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-005.001	442L-8222001-315-105	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-006.001	442L-8222001-315-106	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-007.001	442L-8222001-315-107	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None

Relinquished By: Date/Time	Received By: Date/Time	Relinquished By: Date/Time	Received By: Date/Time
Moore 8/28/01 1220	R. Malenck 8/28/01 1220		
Relinquished By: Date/Time	Received By: Date/Time	Relinquished By: Date/Time	Received By: Date/Time
Relinquished By: Date/Time	Received By: Date/Time	Relinquished By: Date/Time	Received By: Date/Time
Relinquished By: Date/Time	Received By: Date/Time	Relinquished By: Date/Time	Received By: Date/Time

FINAL SAMPLE DISPOSITION — Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process) — Disposed By — Date/Time

IH

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

01082811

C.O.C. # 01D1373

RIN 01D1373

Contact/Requestor JOHNSEN, SHELLY

Telephone No. 6401

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative ; Packing
01D1373-008.001	442L-8222001-315-108	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-009.001	442L-8222001-315-109	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-010.001	442L-8222001-315-110	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-011.001	442L-8222001-315-111	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-012.001	442L-8222001-315-112	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-013.001	442L-8222001-315-113	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
01D1373-014.001	442L-8222001-315-114	FILTER	08/22/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Rush]	N/A None
								N/A None
								N/A None

JJ 8/28/01

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
J Moore	8/28/01 1220	P. Malerick	8/28/01 1220				
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time

FINAL SAMPLE DISPOSITION Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process) Disposed By Date/Time

NARRATIVE

The laboratory did not encounter any problems or questions associated with the receipt of samples into the laboratory. All samples identified on the Chain-of-Custody (COC) form were received and accepted in good condition with tamper-resistant seals intact. (1.d, 4.b, 4.e)

Whatman 4 or Whatman 41 swipe samples were submitted in this project and analyzed for the identification and quantitation of beryllium in accordance with Line Item Code (LIC), NR01A001. The methodology does not define any required specific holding times for the compound on the sampling media. Results of the sample analyses were generated and reported by the specified turn-around time (TAT). (4.f, 5.6, 5.f, 6.b.7)

The laboratory preparation of samples in this project was performed following laboratory Standard Operating Procedure (SOP), IH M-1.02, Revision N. Additional references to the preparation technique of this sample type are addressed in EPA Method, 3015A and CEM Application Procedure, MS-9. The samples were prepared using the CEM Microwave Sample Preparation System, Model MDS 2000. The instrumental sample analysis for these samples follows SOP, IH M-1.04, Revision N, which covers the analytical procedure outlined in OSHA method, ID-125G. Start-up and calibration of the Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) instrument are performed following manufacturer's instructions and are addressed in SOP, IH M-1.03, Revision N. (5.a)

Results of all calibration verifications (initial and continuing), method blanks (calibration and matrix), Laboratory Control Samples (LCSs), Laboratory Control Sample Duplicates (LCDs) and internal QA/QC program monitoring standards for this analytical batch are within acceptable limits as specified in Statement of Work (SOW) modules, GR01-B.3 and NR01-A. (5.c, 5.d.2, 5.d.3, 6.b.2-6)

The internal quality control procedures for statistical monitoring of analytical data to ensure the production of quality results with continuing high validity are addressed in the JMTC IH Laboratory Quality Assurance Manual, Section 10.0. Results of all method-specific QC assessments for this analytical batch are within acceptable limits in accordance with SOW modules, GR01-B.3 and NR01-A. (5.c, 6.b.1)

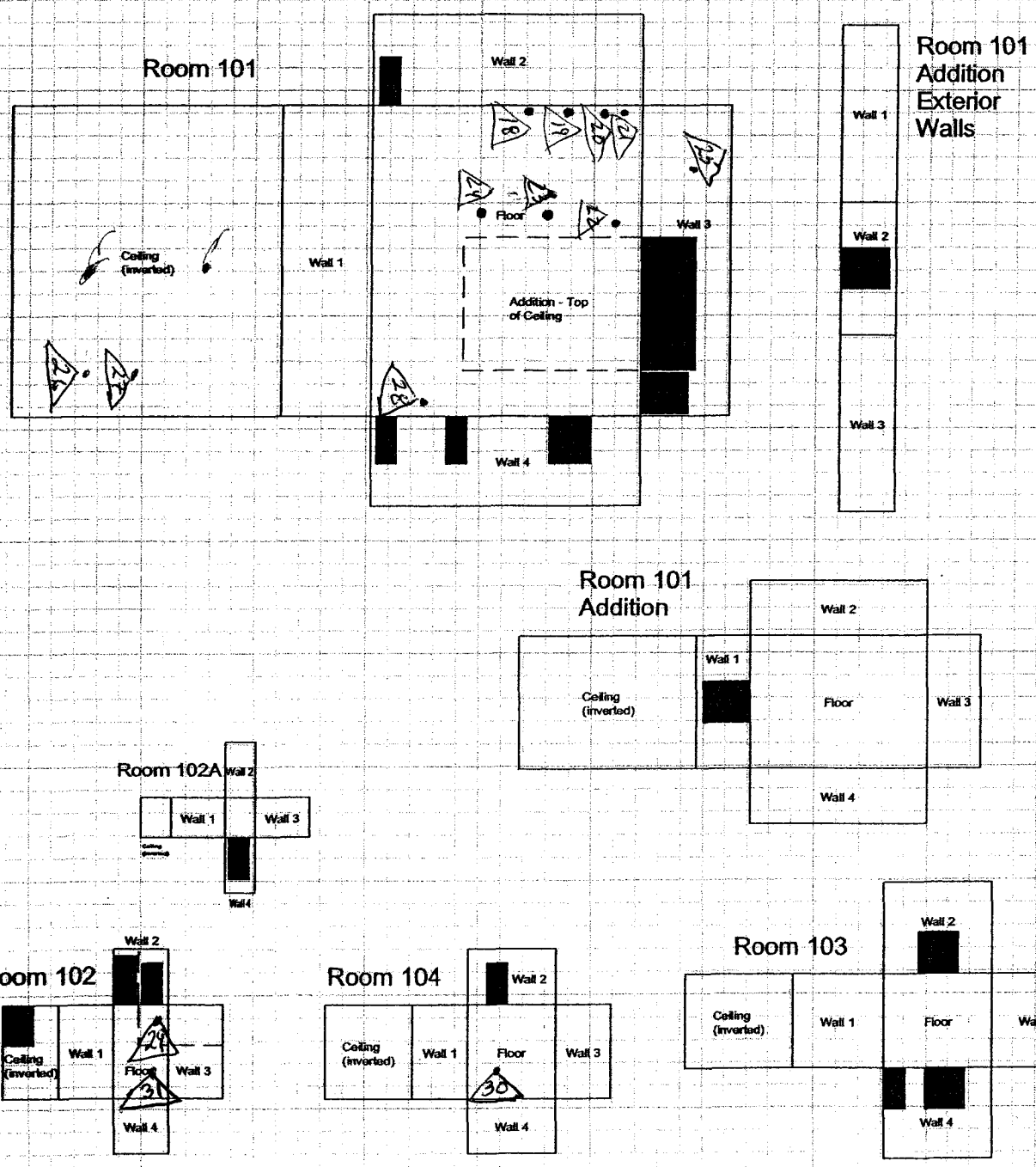
The Instrument Detection Limit (IDL) has been determined to be 0.00028 µg/ml using the ICP-AES instrument, Perkin Elmer - Optima model 3000DV. Method Detection Limit (MDL) determinations are performed in accordance with the EPA Method contained in 40 CFR Part 136, Appendix B. The MDL for beryllium on the Whatman swipe matrix by ICP-AES has been determined to be 0.012 µg/swipe. These values meet the required detection limits for SOW module, NR01-A. (5.d.1) The sample batch did not require any sample re-analyses due to dilutions or any anomalies. (5.d) The qualifiers used for the results page are "U" for non-detect and "J" for levels greater than the MDL, but less than the Reporting Limit.

The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate N. 056) and continues to rate proficient within the Proficiency Analytical Testing (PAT) program. This program is designed for laboratories involved in analyzing samples taken in the workplace environment. The JMTC IH Analytical Laboratory is also accredited in the Environmental Lead Laboratory Accreditation Program (ELLAP), which is recognized by the EPA National Lead Laboratory Accreditation Program (NLLAP). This program accredits and monitors performance of laboratories testing for lead in environmental samples such as paint, soil, dust wipes and air. (5.a)

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: A **Survey Unit: 442-A-001** **Classification: N/A**
Building: 442L
Survey Unit Description: Interior of B442L

BE SMEARS - FLOOR DRAINS & HVAC



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Open/Inaccessible Area
Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7700 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

KAISER-HILL

MAP ID: fy2001/01-0303 March 8, 2001

442-A-001

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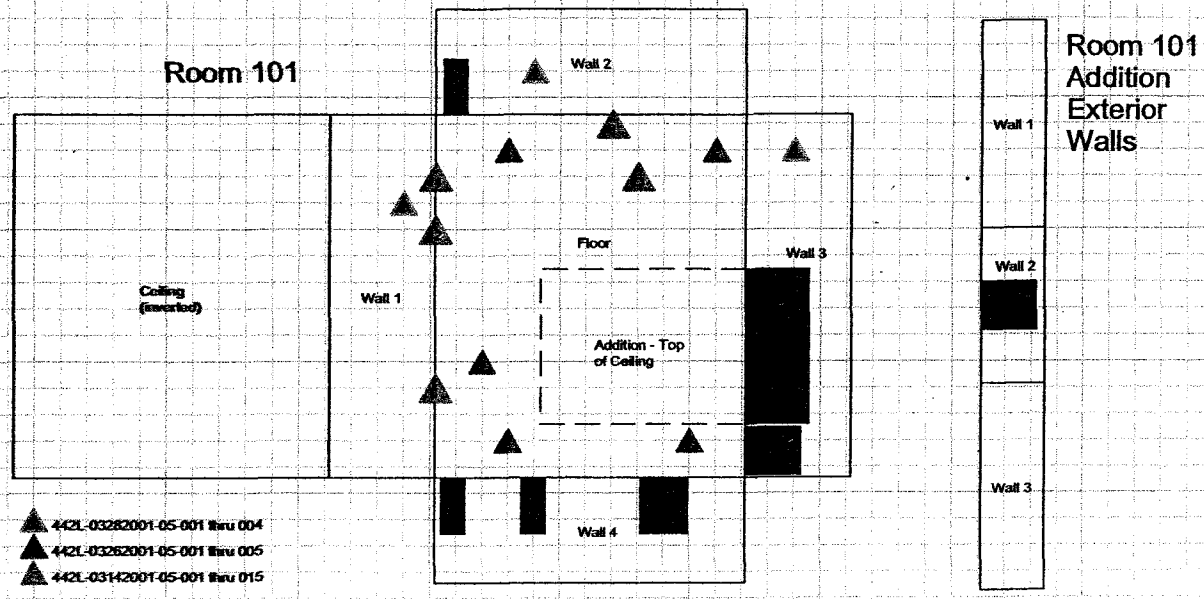
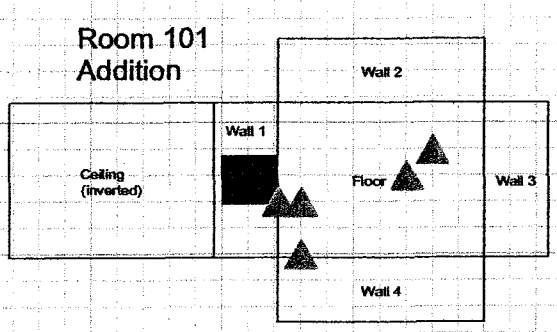
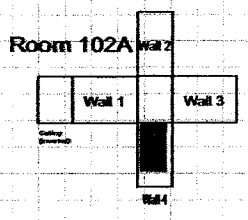
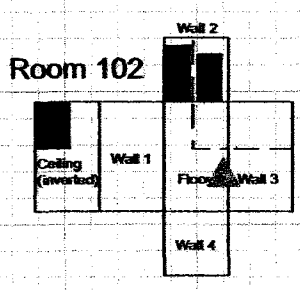
PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

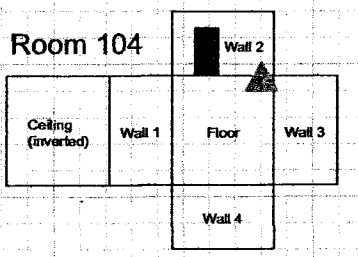
Survey Area: A **Survey Unit: 442-A-001** **Classification: N/A**
Building: 442L
Survey Unit Description: Interior of B442L

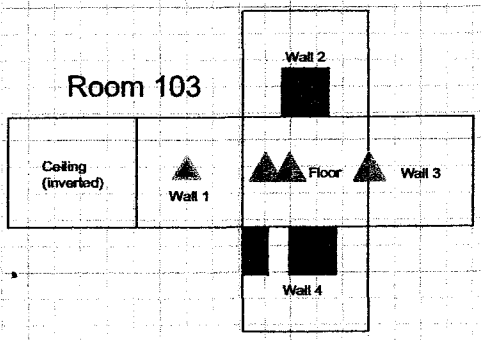












SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCB Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7700 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

KAISER-HILL

MAP ID: fy2001/01-0303

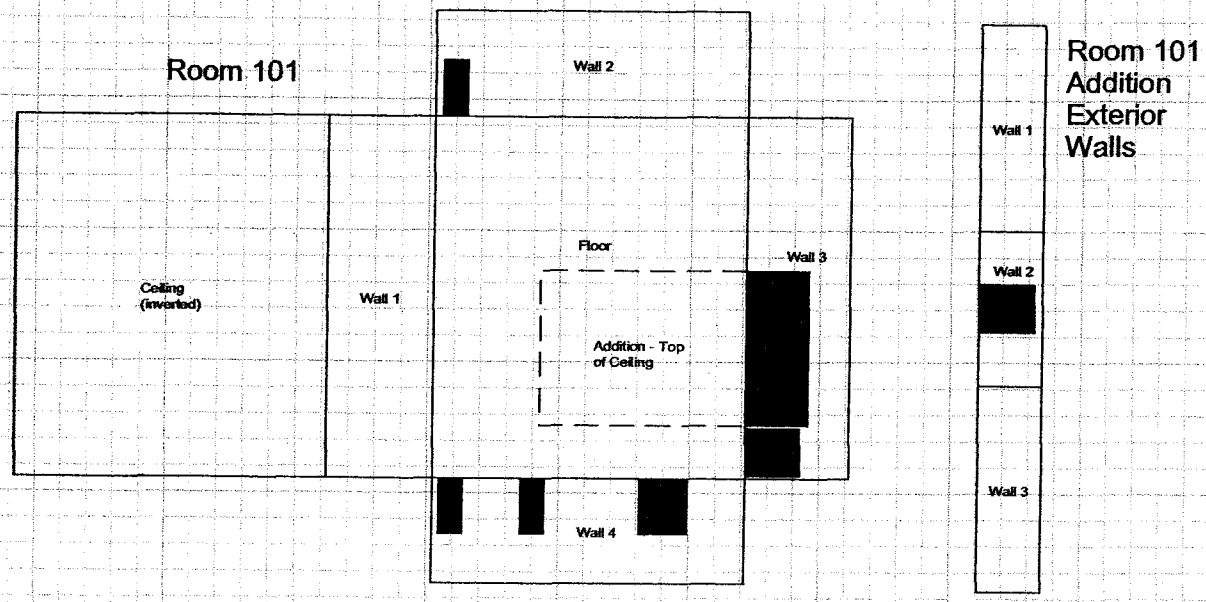
March 8, 2001

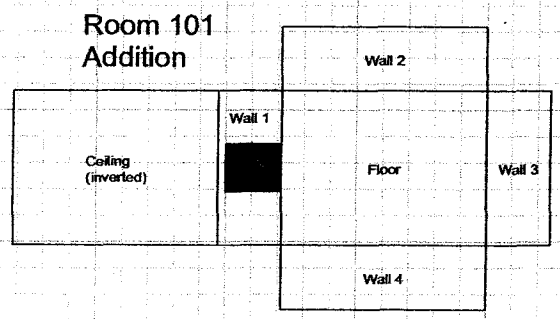
442-A-001

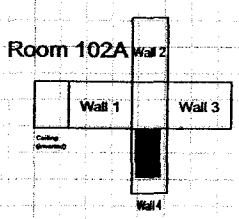
56

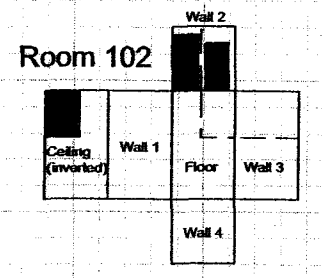
PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

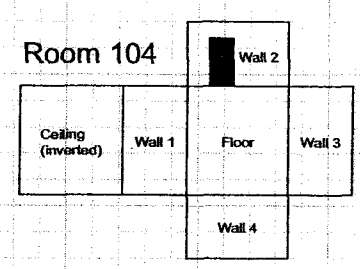
Survey Area: A **Survey Unit: 442-A-001** **Classification: N/A**
Building: 442L
Survey Unit Description: Interior of B442L

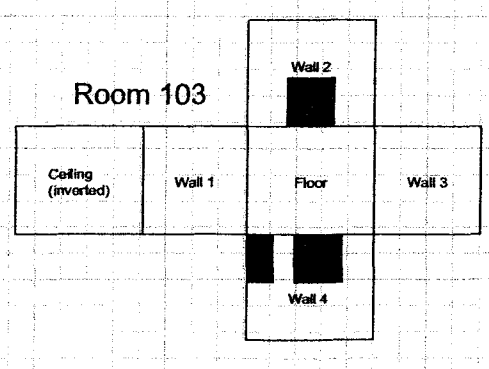












SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location

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- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7700 Prepared for:

DynCorp THE ART OF TECHNOLOGY

KAISER-HILL COMPANY

MAP ID: fy2001/01-0303 March 8, 2001

27

FLOOR DRAINS & HVAC

Rocky Flats Environmental Technology Site Beryllium Wipe Sample Log

Sample Prefix: 442L 8212001 315
Bldg. - Date - IH#
Example: 865-09022000-310

RIN #:

IWCP#:

Check survey pts w/ current drawing

Sampler (print): David Babbs
Employee #: [redacted]
Signature:

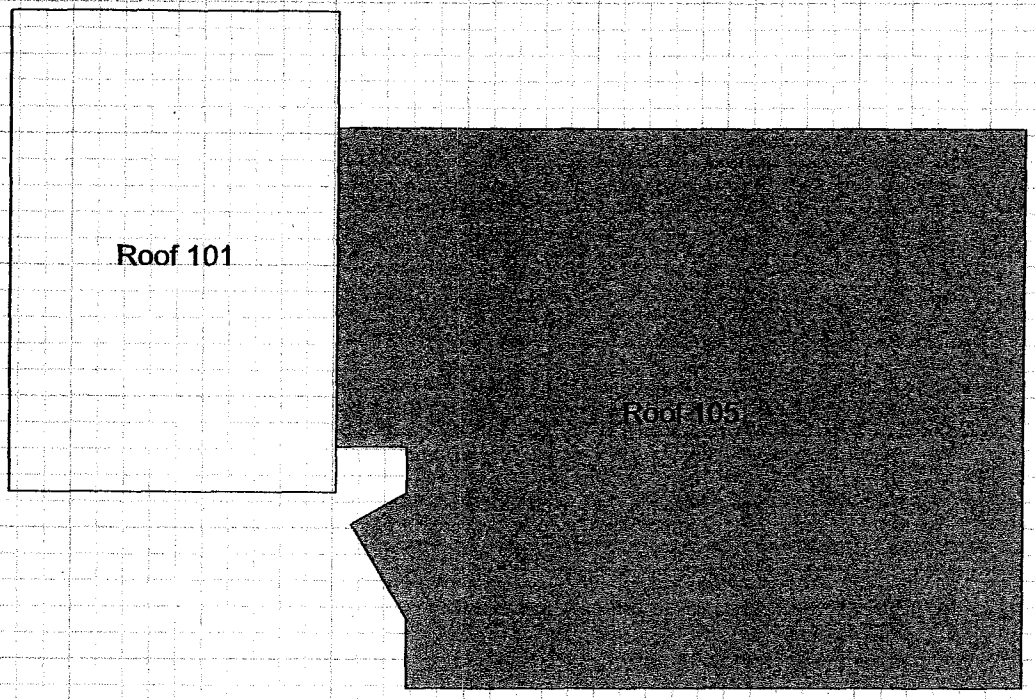
Sample Sequence #	Room	Point on survey map	Description	Notes (ie deviations from 100cm2)
101	101	18	Interior surface of floor drain	
102	101	19	" " " " "	
103	101	20	" " " " "	
104	101	21	" " " " "	
105	101	22	" " " " "	
106	101	23	" " " " "	
107	101	24	" " " " "	
108	101	25	Exhaust duct, west window, 9' h	
109	101 Add	26	Exhaust duct, ceiling, 15' h	
110	101 Add	27	Exhaust duct, ceiling 15' h	
111	101	28	Interior surface of floor drain	
112	102	29	Women's bathroom, shower drain exterior	
113	104	30	Interior surface of floor drain	
114	102	31	Women's bathroom, floor drain by crummb	
115				
116				
117				

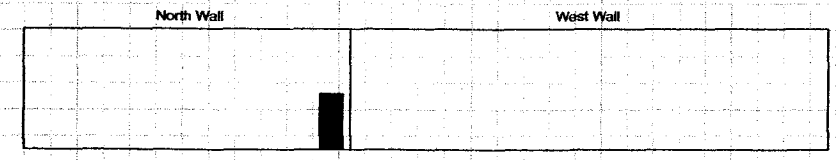
Checked By (print/sign): _____ Empl.#: _____ Date: _____

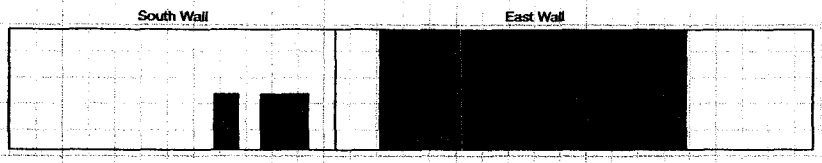
Shaded area = 100cm2

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: B **Survey Unit: 442-B-002** **Classification: N/A**
Building: 442L
Survey Unit Description: Exterior of B442L







SURVEY MAP LEGEND

- (#) Asbestos Sample Location
- (#) Beryllium Sample Location
- [#] Lead Sample Location
- (#) RCRA/CERCLA Sample Location
- (#) PCBS Sample Location

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Open/Inaccessible Area

Area in Another Survey Unit

0 FEET 30

0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7700 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

KAISER-HILL COMPANY

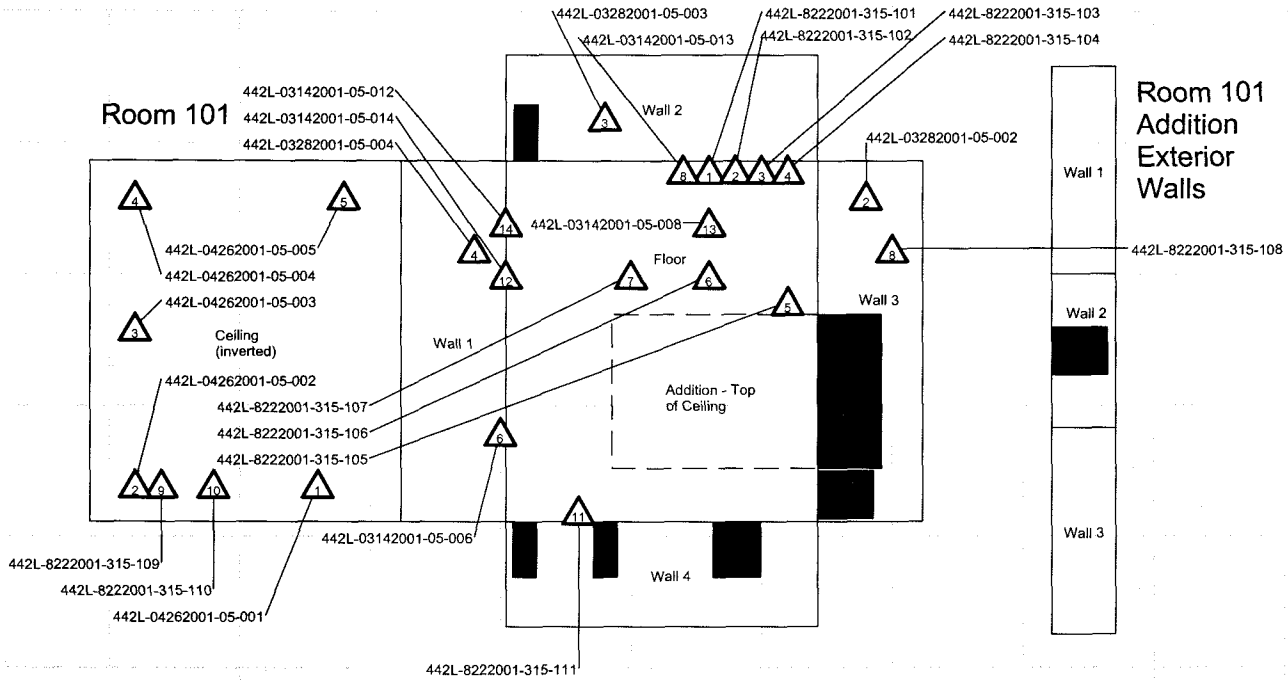
MAP ID: fy2001/01-0303 March 6, 2001

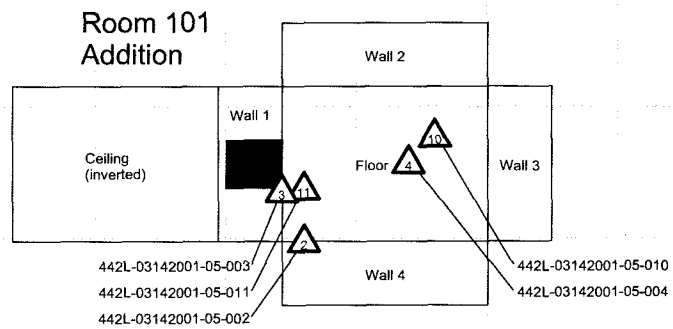
442-B-002

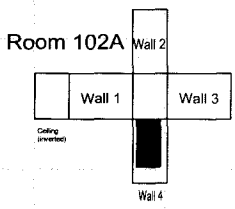
29

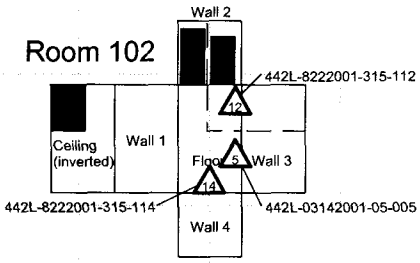
PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

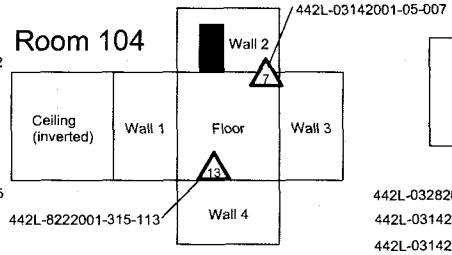
Survey Area: A **Survey Unit: 442-A-001** **Classification: N/A**
Building: 442L
Survey Unit Description: Interior of B442L

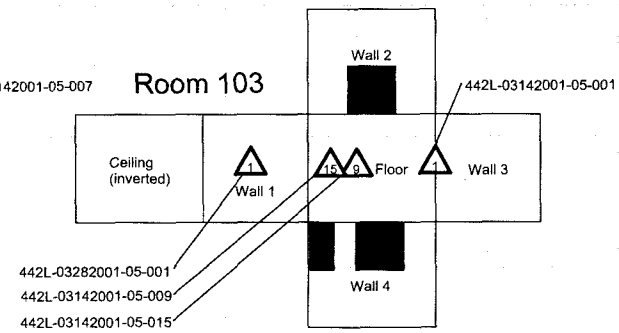












SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCB Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

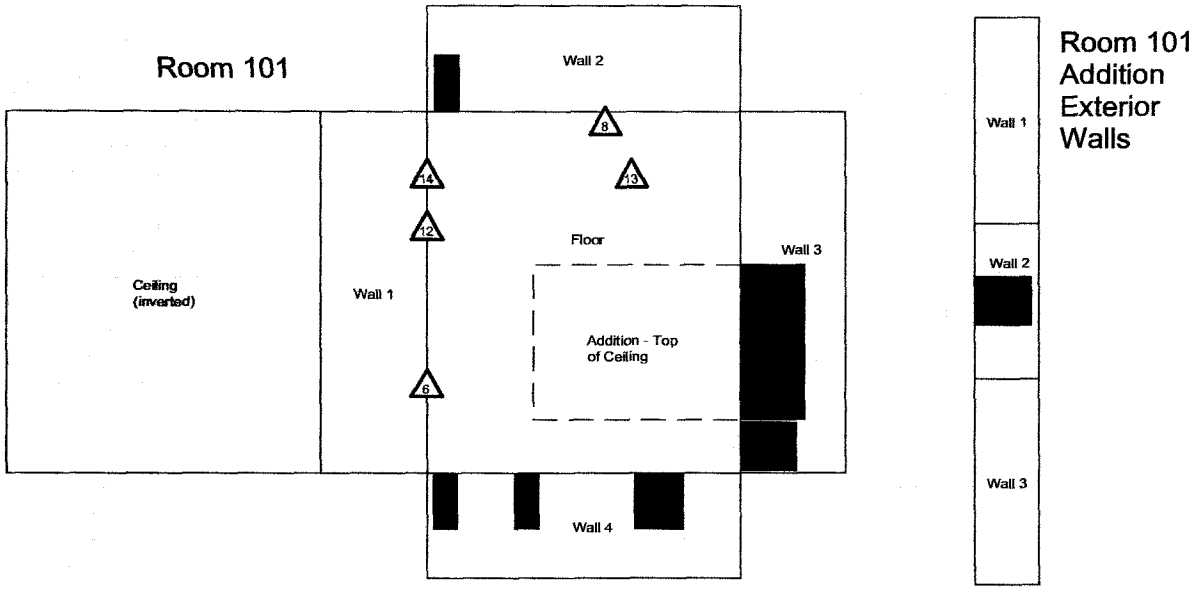
DynCorp THE ART OF TECHNOLOGY

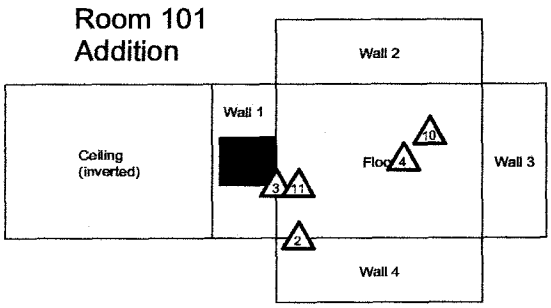
KAISER HILL

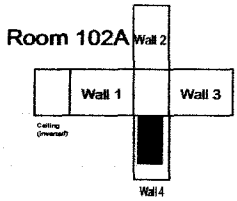
MAP ID: fy2001/01-0303 September 12, 2001

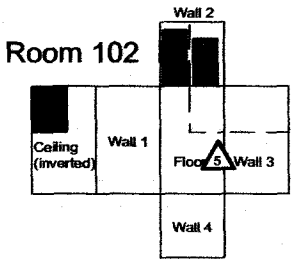
PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

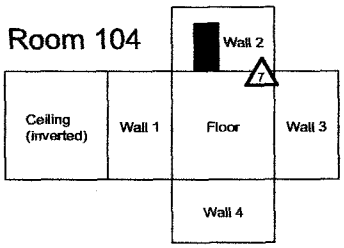
Survey Area: A **Survey Unit: 442-A-001** **Classification: N/A**
Building: 442L
Survey Unit Description: Interior of B442L

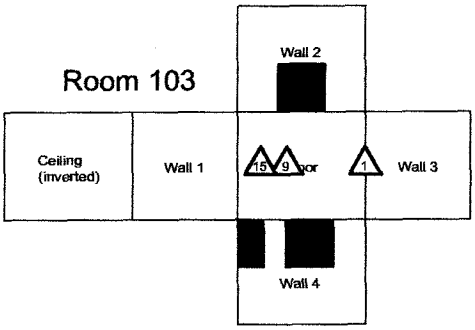












SURVEY MAP LEGEND

- (#) Asbestos Sample Location
- (#) Beryllium Sample Location
- [#] Lead Sample Location
- (#) RCRA/CERCLA Sample Location
- (#) PCB Sample Location

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N

Open/Inaccessible Area
Area in Another Survey Unit

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7700 Prepared for:
DynCorp THE ART OF TECHNOLOGY
KAISER-HILL

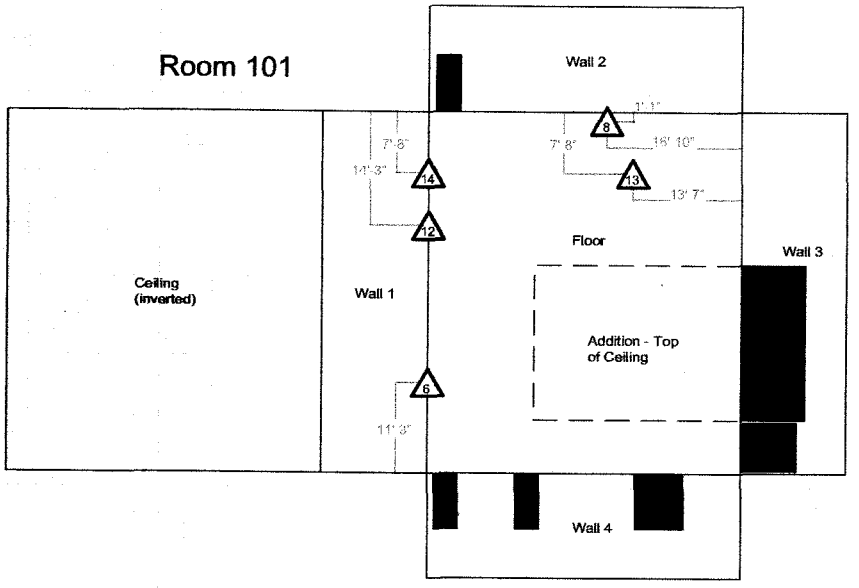
MAP ID: fy2001/01-0303 March 9, 2001

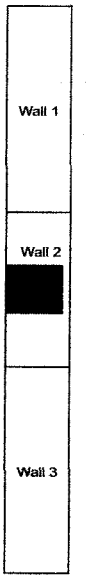
442-A-001

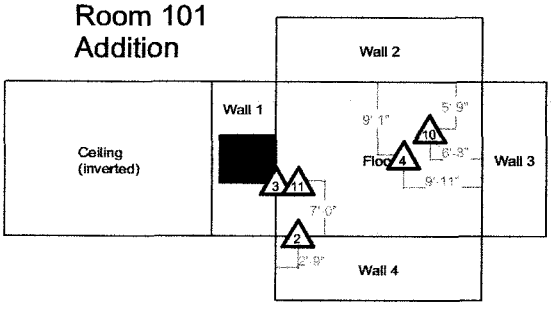
31

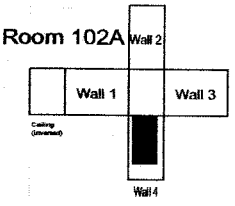
PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

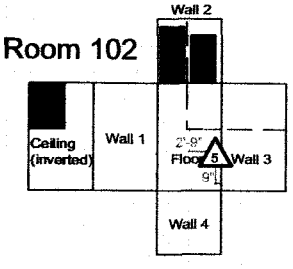
Survey Area: A **Survey Unit: 442-A-001** **Classification: N/A**
Building: 442L
Survey Unit Description: Interior of B442L

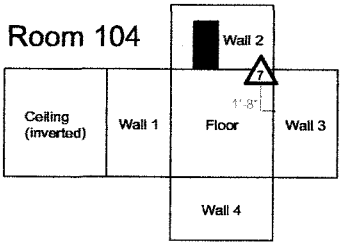


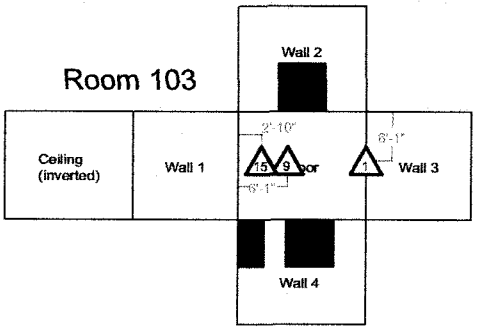












SURVEY MAP LEGEND

- (#) Asbestos Sample Location
- (#) Beryllium Sample Location
- (#) Lead Sample Location
- (#) RCRA/CERCLA Sample Location
- (#) PCBS Sample Location

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N

Open/Inaccessible Area

Area in Another Survey Unit

0 FEET 30

0 METERS 10

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U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7700 Prepared for:

DynCorp THE ART OF TECHNOLOGY

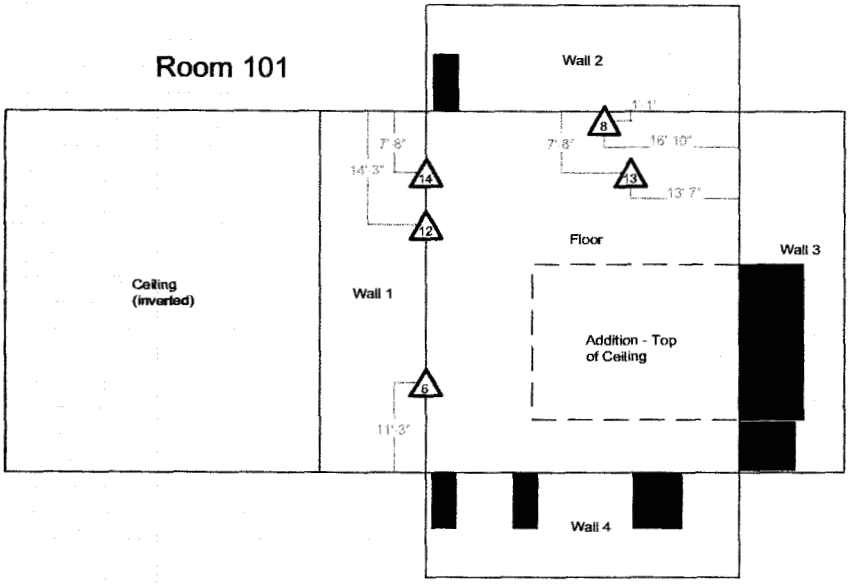
KAISER HILL

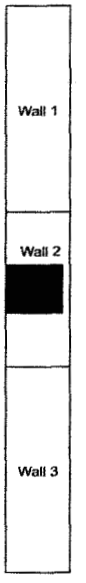
MAP ID: fy2001/01-0303 March 8, 2001

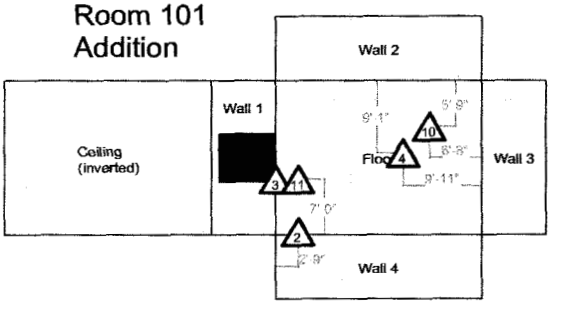
32

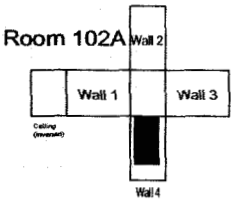
PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

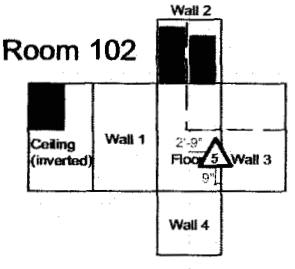
Survey Area: A **Survey Unit: 442-A-001** **Classification: N/A**
Building: 442L
Survey Unit Description: Interior of B442L

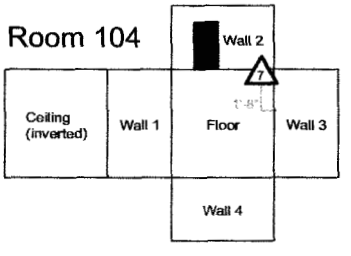


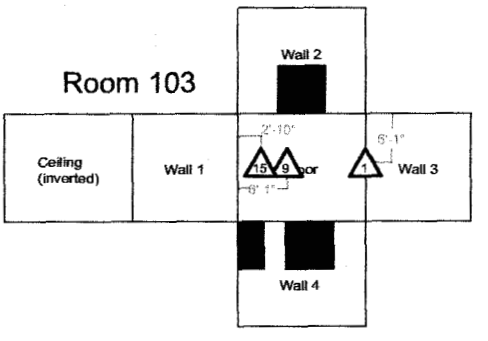












SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location

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N

Open/Inaccessible Area
Area in Another Survey Unit

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp THE ART OF TECHNOLOGY
KAISER HILL

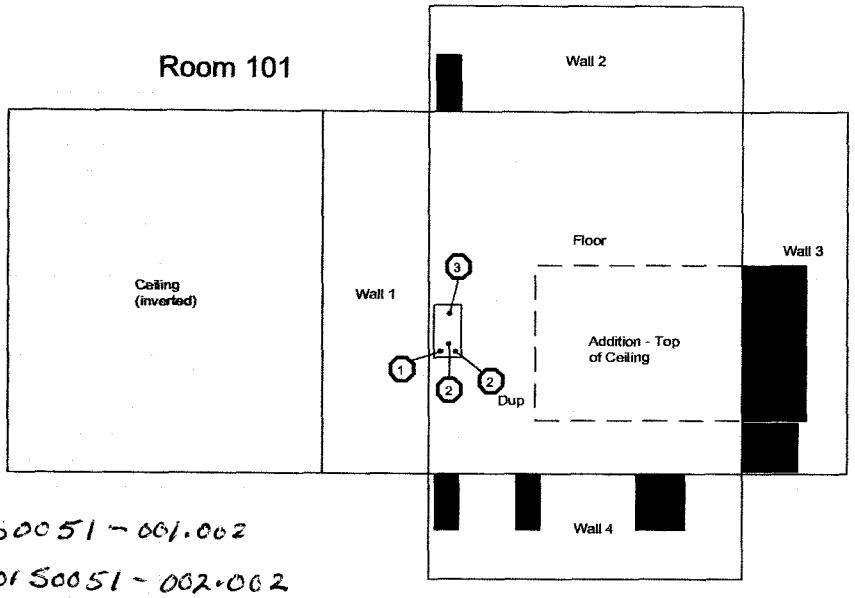
MAP ID: fy2001/01-0303 March 8, 2001

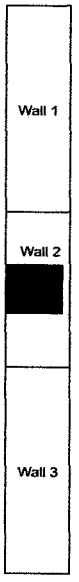
442-A-001

33

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: A **Survey Unit: 442-A-001** **Classification: N/A**
Building: 442L
Survey Unit Description: Interior of B442L





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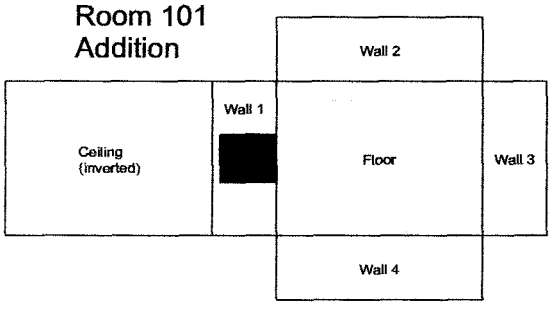
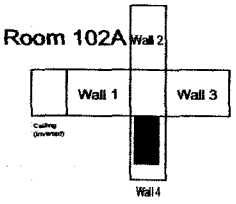
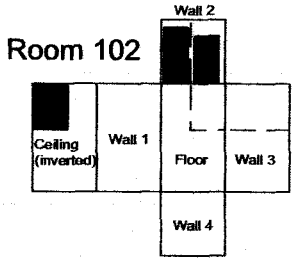
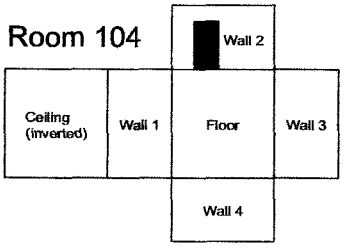
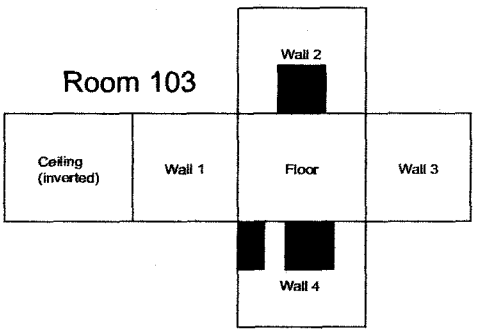
#2 → 0150051-002.002
#2DUP → 0150051-004.002
#3 → 0150051-003.002











SURVEY MAP LEGEND

- # Asbestos Sample Location
- # Beryllium Sample Location
- # Lead Sample Location
- # RCRA/CERCLA Sample Location
- # PCB Sample Location

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Open/Inaccessible Area
Area in Another Survey Unit

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL

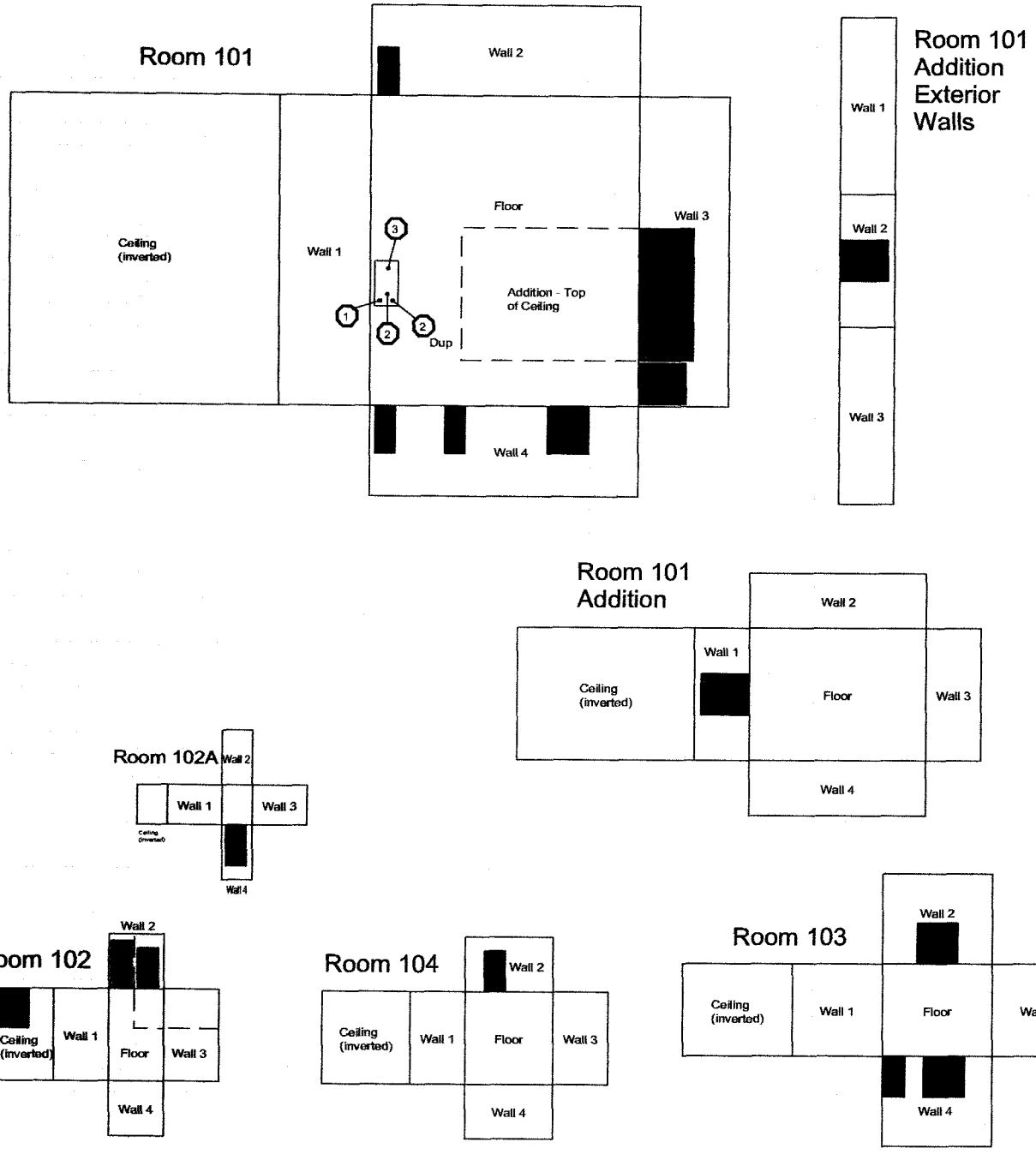
MAP ID: fy2001/01-0303 March 8, 2001

442-A-001

31

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: A **Survey Unit: 442-A-001** **Classification: N/A**
Building: 442L
Survey Unit Description: Interior of B442L



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCB Sample Location

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N

Open/Inaccessible Area

Area in Another Survey Unit

0 FEET 30

0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

KAISER HILL

MAP ID: fy2001/01-0303 March 8, 2001

April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/28/01
Date Analyzed: 03/30/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID	
442W-03142001-05-031	01032806-047	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-032	01032806-048	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-033	01032806-049	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-034	01032806-050	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-035	01032806-051	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-036	01032806-052	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-037	01032806-053	Beryllium			< 0.1 µg	TR1	U	7440-41-7	FB
442W-03142001-05-038	01032806-054	Beryllium			< 0.1 µg	TR1	U	7440-41-7	FB
442W-03142001-05-039	01032806-055	Beryllium			< 0.1 µg	TR1	U	7440-41-7	FB

36

April 2, 2001

Laboratory Report ID: 01032903
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0654
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/29/01
Date Analyzed: 04/02/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442W-03282001-05-001	01032903-001	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-002	01032903-002	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-003	01032903-003	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-004	01032903-004	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-001	01032903-005	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-002	01032903-006	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-003	01032903-007	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-004	01032903-008	Beryllium			< 0.1 µg	TR1	U	7440-41-7

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 01D0632

Name of Originator: A. Gonzalez Title: Bldg/Ext: Date: Page 2 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-03142001-05-001	BF						NRA01A001	
442W-03142001-05-002								
442W-03142001-05-003								
442W-03142001-05-004								
442W-03142001-05-005								
442W-03142001-05-006								
442W-03142001-05-007								
442W-03142001-05-008								
442W-03142001-05-009								
442W-03142001-05-010								
442W-03142001-05-011								
442W-03142001-05-012								
442W-03142001-05-013								
442W-03142001-05-014								
442W-03142001-05-015								
442W-03142001-05-016								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	1410 3/27/01			
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

- Kaiser-Hill ☒ Verbal To:
- RMRS ☐ Fax To:
- SSOC ☐ Report To:
- DynCorp ☐ Bill To:
- WSI ☐ P.O.#/Release: EDD3422
- Lab: JM

Analysis Request

Industrial Hygiene Sample

☒ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

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

RFP F3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D0632

Name of Originator: Arlie Gonzales Title: IH-1 Bldg/Ext: 116/6222 Date: 3/26/01 Page 3 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-03142001-05-017	BE						NR01A021	
442W-03142001-05-018								
442W-03142001-05-019								
442W-03142001-05-020								
442W-03142001-05-021								
442W-03142001-05-022								
442W-03142001-05-023								
442W-03142001-05-024								
442W-03142001-05-025								
442W-03142001-05-026								
442W-03142001-05-027								
442W-03142001-05-028								
442W-03142001-05-029								
442W-03142001-05-030								
442W-03142001-05-031								
442W-03142001-05-032								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	J Kinney	0940 3/27/01			
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

- Kaiser-Hill ☑ Verbal To:
- RMRS ☐ Fax To:
- SSOC ☐ Report To:
- DynCorp ☐ Bill To:
- WSI ☐ P.O.#/Release:
- Lab:

SAME

Analysis Request

Industrial Hygiene Sample

☑ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

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

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

01D0632

Name of Originator: A. Gonzalez Title: THI Bldg/Ext: 1661 x6722 Date: 3/26/01 Page 4 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-0314 2001-05-033	BE						NR01A021	
442W-0314 2001-05-034								
442W-0314 2001-05-035								
442W-0314 2001-05-036								
442W-0314 2001-05-037								
442W-0314 2001-05-038								
442W-0314 2001-05-039								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
	[illegible]	0940 3/27/01			
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

- Kaiser-Hill ☒ Verbal To:
- RMRS ☐ Fax To:
- SSOC ☐ Report To:
- DynCorp ☐ Bill To: SAME
- WSI ☐ P.O.#/Release:
- Lab:

Analysis Request

Industrial Hygiene Sample

☒ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

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

SURVEY UNIT 442-A-001 CHEMICAL
RANDOM START DATA SHEET

Measurement Location	Page	X-Coord	Y-Coord	Measurement Location	Page	X-Coord	Y-Coord
	1	11	14		1	13	28
	1	45	53		1	53	1
1	1	48	9		1	53	26
	1	47	55		1	19	2
	1	38	36		1	46	20
	1	25	32		1	26	29
	1	2	30		1	29	23
	1	21	18		1	0	23
	1	32	10	2	1	38	20
	1	21	35		1	40	49
	1	39	16	3	1	37	22
	1	46	36		1	21	21
	1	55	17		1	28	1
	1	46	19		1	4	17
	1	30	8	4	1	42	23
	1	48	25		1	55	36
	1	20	14	5	1	11	7
	1	9	14		1	32	28
	1	35	12		1	52	47
	1	16	15		1	32	13
	1	18	30		1	9	12
	1	48	26		1	7	17
	1	52	17		1	47	20
	1	0	38		1	14	51
	1	35	35		1	19	36
	1	52	11		1	30	1
	1	19	17		1	50	5
	1	41	1		1	13	52
	1	37	42		1	4	25
	1	34	15		1	5	48
	1	1	42		1	17	25
	1	19	8		1	10	27
	1	36	39		1	47	52
	1	48	13		1	49	7
	1	14	13		1	34	2
	1	32	15		1	1	30
	1	46	28	6	1	20	39
	1	55	18		1	10	50
	1	4	10	7	1	28	10
	1	10	17		1	2	7
	1	5	46		1	12	15
	1	2	20		1	35	8
	1	51	24		1	32	34
	1	45	38		1	54	18
	1	21	50		1	17	46

LEGEND:

C-N/A = UNPAINTED CEILING
X-N/A = > NUMBER OF SAMPLES REQUIRED

REVIEWED BY SIGNATURE:
DMP 2/20/01

3/8/01

41

SURVEY UNIT 442-A-001 CHEMICAL
RANDOM START DATA SHEET

Measurement Location	Page	X-Coord	Y-Coord	Measurement Location	Page	X-Coord	Y-Coord
	1	18	53		1	38	35
	1	2	7		1	47	3
	1	13	2		1	4	54
	1	33	17		1	19	13
	1	16	34		1	7	21
	1	12	43		1	41	2
	1	36	33		1	2	5
	1	35	5	9	1	45	9
	1	3	34		1	16	55
	1	7	51		1	55	31
	1	54	47		1	6	25
	1	42	11		1	7	50
	1	42	53		1	8	14
	1	53	0		1	54	41
	1	19	40		1	19	6
	1	3	30		1	51	50
	1	19	30		1	48	47
	1	5	19		1	44	40
	1	13	2		1	47	4
	1	4	30		1	45	0
	1	15	31	10	1	43	24
	1	25	53		1	28	15
	1	9	3		1	55	33
	1	10	36		1	26	54
8	1	27	49		1	11	34
	1	6	48		1	37	48
	1	44	55		1	40	29
	1	14	24		1	16	35
	1	9	18		1	53	16
	1	53	47		1	55	44
	1	34	4		1	47	43
	1	49	22		1	6	6
	1	23	10		1	44	18
	1	1	34		1	32	4
	1	3	30		1	3	30
	1	30	4		1	25	54
	1	43	19		1	34	25
	1	47	45		1	54	24
	1	19	19		1	37	3
	1	55	52		1	5	55
	1	11	5		1	47	2
	1	50	25		1	31	42
	1	29	43		1	43	14
	1	23	18		1	35	44
	1	33	50	11	1	38	22

LEGEND:

C-N/A = UNPAINTED CEILING
X-N/A = > NUMBER OF SAMPLES REQUIRED

REVIEWED BY SIGNATURE:
MAP 2/20/01

3/8/01

42

SURVEY UNIT 442-A-001 CHEMICAL
RANDOM START DATA SHEET

Measurement Location	Page	X-Coord	Y-Coord	Measurement Location	Page	X-Coord	Y-Coord
	1	8	20		1	42	10
	1	14	26		1	36	31
	1	39	49		1	36	37
	1	17	49		1	53	22
	1	32	26		1	31	22
12	1	20	45		1	27	23
	1	48	30		1	17	6
	1	15	19		1	15	16
	1	16	28		1	35	43
	1	51	43		1	53	28
	1	46	43		1	1	17
	1	11	27		1	26	8
	1	53	30		1	2	17
	1	41	14		1	19	9
	1	2	44		1	16	14
	1	18	32		1	25	53
	1	35	54		1	27	5
	1	2	12		1	2	21
	1	21	33		1	9	52
	1	45	55		1	52	11
13	1	28	47		1	32	9
	1	4	37		1	9	37
	1	2	18		1	34	13
	1	45	12		1	39	13
	1	31	16		1	50	25
	1	31	5		1	48	24
	1	19	26		1	16	0
	1	40	34		1	32	55
	1	48	25		1	44	9
14	1	20	47		1	47	48
	1	36	44		1	51	4
	1	37	28		1	4	43
	1	16	31		1	36	20
	1	51	24		1	36	14
	1	38	31		1	27	11
	1	48	35		1	25	10
	1	49	39		1	30	17
	1	13	22		1	43	45
	1	33	17		1	16	23
	1	27	22		1	46	49
	1	20	3		1	46	0
15	1	44	9		1	24	1
	1	17	20		1	15	20
	1	16	5		1	13	23
	1	8	17		1	50	32

LEGEND:

C-N/A = UNPAINTED CEILING
X-N/A = > NUMBER OF SAMPLES REQUIRED

REVIEWED BY SIGNATURE:
DAP 2/20/01

43

3/8/01

SURVEY UNIT 442-A-003 CHEMICAL
RANDOM START DATA SHEET

Measurement Location	Page	X-Coord	Y-Coord	Measurement Location	Page	X-Coord	Y-Coord
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2	1	15	42	~~31~~	1	35	26
	1	45	15	~~32~~	1	32	1
	1	7	0		1	36	52
~~3~~	1	53	47		1	45	38
4	1	47	10	33	1	22	31
~~5~~	1	7	32		1	46	12
~~6~~	1	15	16	~~34~~	1	36	48
	1	55	5	35	1	27	30
~~7~~	1	23	20		1	38	39
	1	48	14	~~36~~	1	16	55
~~8~~	1	49	25	3	1	29	46
~~9~~	1	26	54		1	3	35
~~10~~	1	47	19		1	10	13
~~11~~	1	48	21		1	19	17
	1	4	9		1	34	6
	1	50	27		1	47	28
	1	15	16		1	47	6
	1	53	2		1	49	49
	1	37	5		1	51	13
~~12~~	1	7	23	4	1	27	32
~~13~~	1	40	36		1	9	21
~~14~~	1	26	25		1	24	52
	1	54	16	5	1	49	33
15	1	25	43	6	1	34	37
~~16~~	1	15	4		1	10	1
~~17~~	1	6	27		1	43	17
	1	37	0		1	36	3
~~18~~	1	34	15		1	37	15
19	1	31	43		1	37	41
20	1	48	6		1	5	48
21	1	20	30	7	1	13	44
~~22~~	1	38	39		1	2	53
23	1	26	34		1	42	54
	1	37	38		1	31	27
	1	43	17		1	38	14
	1	1	12	8	1	29	36
~~24~~	1	28	54	9	1	22	47
25	1	25	46	10	1	17	38
	1	40	26		1	5	45
26	1	14	47		1	6	41
27	1	13	39		1	27	26
~~28~~	1	30	22		1	52	5
~~29~~	1	25	50		1	30	52
	1	3	21	11	1	22	40

LEGEND:

C-N/A = UNPAINTED CEILING
X-N/A = > NUMBER OF SAMPLES REQUIRED

REVIEWED BY SIGNATURE:
DAP 2/21/01

3/8/01

44

SURVEY UNIT 442-A-003 CHEMICAL
RANDOM START DATA SHEET

Measurement Location	Page	X-Coord	Y-Coord	Measurement Location	Page	X-Coord	Y-Coord
	1	7	48	22	1	17	46
	1	7	31		1	24	54
12	1	32	31		1	29	19
	1	46	24		1	6	3
	1	2	47		1	19	20
	1	36	49		1	5	23
	1	10	54		1	44	14
	1	40	40		1	40	40
	1	46	29		1	47	8
	1	28	22		1	8	4
	1	51	47		1	12	2
	1	18	26		1	53	13
13	1	17	30		1	11	16
	1	44	24		1	34	17
	1	45	16	24	1	12	29
14	1	22	41		1	35	32
	1	37	15	28	1	31	33
	1	4	51	29	1	14	40
	1	41	12		1	14	15
16	1	29	38		1	39	55
	1	36	19		1	42	20
17	1	51	36		1	25	25
	1	50	29	31	1	24	28
	1	51	21		1	29	15
	1	35	4		1	23	55
	1	37	52	32	1	24	41
18	1	23	29		1	37	54
	1	49	29		1	19	17
	1	22	7		1	2	40
	1	46	22		1	6	33
	1	53	32		1	26	21
	1	4	14		1	17	16
	1	42	25	34	1	49	22
	1	47	25		1	53	7
	1	19	8	36	1	13	42
	1	53	29		1	9	28
	1	24	51		1	4	52
	1	18	51		1	25	53
	1	3	28		1	38	23
	1	4	44		1	46	21
	1	36	26		1	25	34
	1	35	30		1	26	12
	1	10	21		1	35	55
	1	0	32		1	38	25
	1	43	18		1	7	33

LEGEND:

C-N/A = UNPAINTED CEILING
X-N/A = > NUMBER OF SAMPLES REQUIRED

REVIEWED BY SIGNATURE:
DAP 2/21/01

3/8/01

45

Johns Manville

Johns Manville Corporation
10100 W. Ute Avenue (80127)
P.O. Box 625005
Littleton, CO 80162-5005
303 978 2000

COVER PAGE

April 2, 2001

Rocky Flats Environmental Technology Site
Ms. Shelly Johnsen
P.O. Box 464, Building 881
Golden, CO 80402-0464

Laboratory Report ID: 01032903
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0654
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

Dear Ms. Johnsen:

The Johns Manville Technical Center (JMTC) has performed the following analytical services as requested. The results are calculated based upon the information supplied on the submission form. All laboratory data has been filed and are available upon request.
The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate No. 056) and participates in the AIHA ELPAT program.
If you have any questions, please call (303) 978-2584.

Scope of Work:

Requested Analysis	Bottle Number(s)	Customer Number(s)	Laboratory ID Number	Line Item Code	Sample Matrix
Beryllium	01D0654-001.001	442W-03282001-05-001	01032903-001	NR01A001	WIPE
Beryllium	01D0654-002.001	442W-03282001-05-002	01032903-002	NR01A001	WIPE
Beryllium	01D0654-003.001	442W-03282001-05-003	01032903-003	NR01A001	WIPE
Beryllium	01D0654-004.001	442W-03282001-05-004	01032903-004	NR01A001	WIPE
Beryllium	01D0654-005.001	442L-03282001-05-001	01032903-005	NR01A001	WIPE
Beryllium	01D0654-006.001	442L-03282001-05-002	01032903-006	NR01A001	WIPE
Beryllium	01D0654-007.001	442L-03282001-05-003	01032903-007	NR01A001	WIPE
Beryllium	01D0654-008.001	442L-03282001-05-004	01032903-008	NR01A001	WIPE

Comments: No problem were encountered with sample receiving and sample analysis

I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy sample package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Scott A. Steiner
Industrial Hygiene Project Manager

Date

46

April 2, 2001

Laboratory Report ID: 01032903
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0654
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/29/01
Date Analyzed: 04/02/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442W-03282001-05-001	01032903-001	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-002	01032903-002	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-003	01032903-003	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-004	01032903-004	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-001	01032903-005	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-002	01032903-006	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-003	01032903-007	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-004	01032903-008	Beryllium			< 0.1 µg	TR1	U	7440-41-7

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 0100654

Name of Originator: Andie Gonzalez Title: IH&S Bldg/Ext: 116X6727 Date: 3/28/01 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
442W-03282001-05-001	Beryllium						NR01A001	
442W-03282001-05-002								
442W-03282001-05-003								
442W-03282001-05-004								
442L-03282001-05-001								
442L-03282001-05-002								
442L-03282001-05-003								
442L-03282001-05-004								

3/28/01

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
		1538 3/28/01			
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

- Kaiser-Hill ☒ Verbal To: A. Gonzalez
- RMRS ☐ Fax To: 6678
- SSOC ☐ Report To: A. Gonzalez
- DynCorp ☐ Bill To: KH
- WSI ☐ P.O.#/Release: EDD30120
- Lab: JM

Analysis Request

Industrial Hygiene Sample

☒ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature: NO NO

Comments: FY/HC

3/28/01

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

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

01D0632

Name of Originator: Andie Gonzales Title: IH&S Bldg/Ext: 1161 6227 Date: 3/26/01 Page 1 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
4426-03142001-05-001	BE						NR01A001	
4426-03142001-05-002								
4426-03142001-05-003								
4426-03142001-05-004								
4426-03142001-05-005								
4426-03142001-05-006								
4426-03142001-05-007								
4426-03142001-05-008								
4426-03142001-05-009								
4426-03142001-05-010								
4426-03142001-05-011								
4426-03142001-05-012							AV 3/27/01	
4426-03142001-05-013								
4426-03142001-05-014								
4426-03142001-05-015								
4426-03142001-05-016								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	0910 3/27/01			
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

- Kaiser-Hill ☒ Verbal To: A Gonzales
- RMRS ☐ Fax To: 6678
- SSOC ☐ Report To: A. Gonzales
- DynCorp ☐ Bill To: KH
- WSI ☐ P.O.#/Release: EDD30120
- Lab: JM

Analysis Request

Industrial Hygiene Sample

☒ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: unable to verify contents of RIN 01D0632 [illegible] 3/27/01

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

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

01D0632

Name of Originator: A. Gonzalez Title: Bldg/Ext: Date: Page 2 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-03142001-05-001	BG						WR01A001	
442W-03142001-05-002								
442W-03142001-05-003								
442W-03142001-05-004								
442W-03142001-05-005								
442W-03142001-05-006								
442W-03142001-05-007								
442W-03142001-05-008								
442W-03142001-05-009								
442W-03142001-05-010								
442W-03142001-05-011								
442W-03142001-05-012								
442W-03142001-05-013								
442W-03142001-05-014								
442W-03142001-05-015								
442W-03142001-05-016								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	J Yancey	0940 3/27/01			
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

- Kaiser-Hill ☒ Verbal To:
- RMRS ☐ Fax To:
- SSOC ☐ Report To:
- DynCorp ☐ Bill To:
- WSI ☐ P.O.#/Release: EDD30120
- Lab: JM

Analysis Request

Industrial Hygiene Sample

☒ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

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

RFP F3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D0632

Name of Originator: Andy Gonzalez Title: IH&I Bldg/Ext: 116/6777 Date: 3/26/01 Page 3 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-03142001-05-017	BE						NA01A001	
442W-03142001-05-018								
442W-03142001-05-019								
442W-03142001-05-020								
442W-03142001-05-021								
442W-03142001-05-022								
442W-03142001-05-023								
442W-03142001-05-024								
442W-03142001-05-025								
442W-03142001-05-026								
442W-03142001-05-027								
442W-03142001-05-028								
442W-03142001-05-029								
442W-03142001-05-030								
442W-03142001-05-031								
442W-03142001-05-032								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	J Francey	0940 3/27/01			
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

- Kaiser-Hill ☒ Verbal To:
- RMRS ☐ Fax To:
- SSOC ☐ Report To:
- DynCorp ☐ Bill To: SAME
- WSI ☐ P.O.#/Release:
- Lab:

Analysis Request

Industrial Hygiene Sample: ☒ Standard Service ☐ Rush ☐ Other

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

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

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

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

01D0632

Name of Originator: A. Gonzalez Title: IH01 Bldg/Ext: 116/ x6722 Date: 3/26/01 Page 4 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-03142001-05-033	BE						NR01A021	
442W-03142001-05-034								
442W-03142001-05-035								
442W-03142001-05-036								
442W-03142001-05-037								
442W-03142001-05-038								
442W-03142001-05-039								

3/27/01

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
	Mckenney	0940 3/27/01			
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	Analysis Request	Seal# (Release #)
Kaiser-Hill ☒ Verbal To: ____ RMRS ☐ Fax To: ____ SSOC ☐ Report To: ____ DynCorp ☐ Bill To: ____ WSI ☐ P.O.#/Release: ____ Lab: ____ SAME	Industrial Hygiene Sample ☒ Standard Service ☐ Rush ☐ Other ____ Asbestos Samples ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other ____	Condition of Seal: ☐ Broken ☐ Unbroken Signature: ____ Comments: ____

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

April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/28/01
Date Analyzed: 03/30/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442W-03142001-05-008	01032806-024	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-009	01032806-025	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-010	01032806-026	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-011	01032806-027	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-012	01032806-028	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-013	01032806-029	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-014	01032806-030	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-015	01032806-031	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-016	01032806-032	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-017	01032806-033	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-018	01032806-034	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-019	01032806-035	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-020	01032806-036	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-021	01032806-037	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-022	01032806-038	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-023	01032806-039	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-024	01032806-040	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-025	01032806-041	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-026	01032806-042	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-027	01032806-043	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-028	01032806-044	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-029	01032806-045	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-030	01032806-046	Beryllium			< 0.1 µg	TR1	U	7440-41-7

April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/28/01
Date Analyzed: 03/30/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID	
442W-03142001-05-031	01032806-047	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-032	01032806-048	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-033	01032806-049	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-034	01032806-050	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-035	01032806-051	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-036	01032806-052	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-037	01032806-053	Beryllium			< 0.1 µg	TR1	U	7440-41-7	FB
442W-03142001-05-038	01032806-054	Beryllium			< 0.1 µg	TR1	U	7440-41-7	FB
442W-03142001-05-039	01032806-055	Beryllium			< 0.1 µg	TR1	U	7440-41-7	FB

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April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/28/01
Date Analyzed: 03/30/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442L-03142001-05-001	01032806-001	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-002	01032806-002	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-003	01032806-003	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-004	01032806-004	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-005	01032806-005	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-006	01032806-006	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-007	01032806-007	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-008	01032806-008	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-009	01032806-009	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-010	01032806-010	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-011	01032806-011	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-012	01032806-012	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-013	01032806-013	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-014	01032806-014	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-015	01032806-015	Beryllium			< 0.1 µg	TR1	U	7440-41-7
* 442L-03142001-05-016	01032806-016	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-001	01032806-017	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-002	01032806-018	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-003	01032806-019	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-004	01032806-020	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-005	01032806-021	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-006	01032806-022	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-007	01032806-023	Beryllium			< 0.1 µg	TR1	U	7440-41-7

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April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/28/01
Date Analyzed: 03/30/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442W-03142001-05-008	01032806-024	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-009	01032806-025	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-010	01032806-026	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-011	01032806-027	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-012	01032806-028	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-013	01032806-029	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-014	01032806-030	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-015	01032806-031	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-016	01032806-032	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-017	01032806-033	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-018	01032806-034	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-019	01032806-035	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-020	01032806-036	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-021	01032806-037	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-022	01032806-038	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-023	01032806-039	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-024	01032806-040	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-025	01032806-041	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-026	01032806-042	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-027	01032806-043	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-028	01032806-044	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-029	01032806-045	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-030	01032806-046	Beryllium			< 0.1 µg	TR1	U	7440-41-7

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Johns Manville

COVER PAGE

Johns Manville Corporation
10100 W. Ute Avenue (80127)
P.O. Box 025005
Littleton, CO 80162-5005
303 978 2000

May 4, 2001

Rocky Flats Environmental Technology Site
Ms Shelly Johnsen
P.O. Box 464, Building 881
Golden, CO 80402-0464

Laboratory Report ID: 01042710
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0752
Requestor: Andre Gonzalez
P.O./Charge Code: EEC50021

Dear Ms. Johnsen:

The Johns Manville Technical Center (JMTC) has performed the following analytical services as requested. The results are calculated based upon the information supplied on the submission form. All laboratory data has been filed and are available upon request.
The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate No. 056) and participates in the AIHA ELPAT program.
If you have any questions, please call (303) 978-2584.

Scope of Work:

Requested Analysis	Bottle Number(s)	Customer Number(s)	Laboratory ID Number	Line Item Code	Sample Matrix
Beryllium	01D0752-001.001	442L-04262001-05-001	01042710-001	NR01A001	WIPE
Beryllium	01D0752-002.001	442L-04262001-05-002	01042710-002	NR01A001	WIPE
Beryllium	01D0752-003.001	442L-04262001-05-003	01042710-003	NR01A001	WIPE
Beryllium	01D0752-004.001	442L-04262001-05-004	01042710-004	NR01A001	WIPE
Beryllium	01D0752-005.001	442L-04262001-05-005	01042710-005	NR01A001	WIPE

Comments: No problem were encountered with sample receiving and sample analysis.

I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy sample package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Scott A. Steiner
Industrial Hygiene Project Manager

5/4/01
Date

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May 4, 2001

Laboratory Report ID: 01042710
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 80018$SX6
RIN: 01D0752
Requestor: Andre Gonzalez
P.O./Charge Code: EEC50021

QUICK RESULTS SUMMARY

Line Item Code:	NR01A001	Reporting Limit:	0.1 µg
Sample Matrix:	WIPE	Date Received:	04/27/01
Analytical Method:	OSHA ID-125G	Date Analyzed:	05/03/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442L-04262001-05-001	01042710-001	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-04262001-05-002	01042710-002	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-04262001-05-003	01042710-003	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-04262001-05-004	01042710-004	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-04262001-05-005	01042710-005	Beryllium			< 0.1 µg	TR1	U	7440-41-7

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Commodore Advanced Sciences, Inc.
RFETS

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

01D4B710 Due: 5/4/01

C.O.C.# 01D0752#001

Page 1 of 1

Sampler(s) ANDRE GONZALEZ (time/date)	Contact/Requester JOHNSEN, SHELLY	Telephone No. 6401
RIN 01D0752	Sampling Origin 442L	Purchase Order/Charge Code 6ED60123
Project Title 442L BE SMEARS	Logbook No. N/A	Ice Chest No. N/A Temp.
To (Lab) Johns Manville	Method of Shipment FEDERAL EXPRESS	Bill of Lading/Air Bill No. 4523-2127-
Protocol	Related COC (if any)	PRE 010124-T11PC-002

POSSIBLE SAMPLE HAZARDS/REMARKS
Are acid preserved samples DOT hazardous per 40 CFR Part 136.3 Table II? YES or NO
Are other known hazardous substances present? YES or NO
** ** **

SCREENING REQUIRED ☐

SPECIAL INSTRUCTIONS Hold Time

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative; Packing
01D0752-001.001	442L-04262001-05-001	FILTER	04/26/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0752-002.001	442L-04262001-05-002	FILTER	04/26/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0752-003.001	442L-04262001-05-003	FILTER	04/26/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0752-004.001	442L-04262001-05-004	FILTER	04/26/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0752-005.001	442L-04262001-05-005	FILTER	04/26/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None

CB 4-26-01

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
C Brown	4-26-01 1500	FED EX		fed-ex		J. Slate	4/27/01 10:30

FINAL SAMPLE DISPOSITION — Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process) — Disposed By — Date/Time

Inc. trial Hygiene Information S. tem
Surface Sample Report

IHISR_SURFACE_SAMPLE

Date: 05/09/2001

RIN: 01D0752

Sample Number/Type: 442L-04262001-05-001 WIPE Hygienist: ANDRE GONZALEZ
Location Info: ROOM 101, SOUTHEAST CORNER, TOP OF LIGHT FIXTURE
Room No: N/A
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 442L-04262001-05-002 WIPE Hygienist: ANDRE GONZALEZ
Location Info: ROOM 101, SOUTHWEST CORNER, TOP OF LIGHT FIXTURE
Room No: N/A
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 442L-04262001-05-003 WIPE Hygienist: ANDRE GONZALEZ
Location Info: ROOM 101, WEST END, TOP OF LIGHT FIXTURE
Room No: N/A
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 442L-04262001-05-004 WIPE Hygienist: ANDRE GONZALEZ
Location Info: ROOM 101, NORHTWEST CORNER, TOP OF LIGHT FIXTURE
Room No: N/A
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 442L-04262001-05-005 WIPE Hygienist: ANDRE GONZALEZ
Location Info: ROOM 101, NORTHEAST CORNER, TOP OF LIGHT FIXTURE
Room No: N/A
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 _ UG/100CM2

DOES NOT CONTAIN
OFFICIAL USE ONLY INFORMATION
Name/Org. J A Neshem Date 10/13/08
EMCBC Classifier Office

~~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.
Approval by the Department of Energy prior to public release is required.~~

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RFETS Industrial Hygiene	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# 01D0752#1 Page: 1 of 1

RIN	Contact/Requestor	Telephone No.	MSIN	FAX
01D0752	ANDRE GONZALEZ	3039666727		

Bottle No.	Customer Number	Matrix	Date	Time	Location	No/Type Container	Sample Analysis	Preservative Packing
	442L-04262001-05-001				442L	1-FILTER N/A	BERYLLIUM AND BE COMPOUNDS (AS BE)	N/A None
	442L-04262001-05-002				442L	1-FILTER N/A	BERYLLIUM AND BE COMPOUNDS (AS BE)	N/A None
	442L-04262001-05-003				442L	1-FILTER N/A	BERYLLIUM AND BE COMPOUNDS (AS BE)	N/A None
	442L-04262001-05-004				442L	1-FILTER N/A	BERYLLIUM AND BE COMPOUNDS (AS BE)	N/A None
	442L-04262001-05-005				442L	1-FILTER N/A	BERYLLIUM AND BE COMPOUNDS (AS BE)	N/A None

4C / FedX
4/26/01

Routine Turnaround

DOES NOT CONTAIN
OFFICIAL USE ONLY INFORMATION
Name/Org. J A Nelson Date 10/3/08
EMCBC Classification Office

unable to verify contents of Rin # 01D0752
CS 4-26-01

Are acid preserved samples DOT Hazardous per 40 CFR Part 136.3 Table II? YES or NO
4/26/01

Are other known hazardous substances present? YES or NO

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	4/26/01 1321	C Brown	4-26-01 1321				
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time

FINAL SAMPLE DISPOSITION	Disposal method (e.g., Return to customer, per lab procedur, used in process)	Disposed By:	Date/Time

~~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.~~
~~Approval by the Department of Energy prior to public release is required.~~

FOOTHILLS ENVIRONMENTAL, INC.
Industrial Hygiene, Safety, & Environmental Services

2801 Youngfield St., Ste. 300
Golden, CO 80401
Phone: (303) 275-3470
Fax: (720) 489-2832

BE ~~ASBESTOS BULK~~ SAMPLING FORM

CLIENT NAME: _____ LOCATION: _____

SAMPLE DATE: _____ SAMPLED BY: _____ PROJECT NUMBER: _____

Sample Number	Sample Type	Sample Description	Sample Location
4426-03282001-05-001	6ft	Pillar A, Section 38 - vert.	South wall, Room 105
002	6ft	on top of blue panel - horz.	East wall, Room 105
003	6ft	1st pillar from east end - vert.	North wall, Room 105
004	6ft	pillar next to bulletin board - vert.	west wall, Room 105
4426-03282001-05-001	6ft.	~~top of~~ fill west wall	Room 103
002	4 ft	window sill at east end	Room 101
003	4 ft	window sill at northwest corner	Room 101
004	4 ft	window sill at ~~no~~ west north corner	Room 101
4426-03282001-05-001	>8 Ft	on top of light fixture	Room 101
-002	>8 Ft	"	
-003	>8 Ft	"	
-004	>8 Ft	"	
-005	>8 Ft.	"	

FOOTHILLS ENVIRONMENTAL, INC.
Industrial Hygiene, Safety, & Environmental Services

2801 Youngfield St., Ste. 300
Golden, CO 80401
Phone: (303) 275-3470
Fax: (720) 489-2832

BE ~~ASBESTOS BULK~~ SAMPLING FORM

CLIENT NAME: _____ LOCATION: _____

SAMPLE DATE: _____ SAMPLED BY: _____ PROJECT NUMBER: _____

Sample Number	Sample Type	Sample Description	Sample Location
442W-03282001-05-001	6ft	Pillar A, Section 38 - vert.	South wall, Room 105
002	6ft	on top of blue panel - horz.	East wall, Room 105
003	6ft	1st pillar from east end - vert.	North wall, Room 105
004	6ft	pillar next to bulletin board - vert.	west wall, Room 105
442L-03282001-05-001	6ft.	~~top of fill~~ west wall	Room 103
002	4 ft	window sill at east end	Room 101
003	4 ft	window sill at northwest corner	Room 101
004	4 ft	window sill at ~~no~~ west north corner	Room 101
442L-04262001-05-001	>8 Ft	on top of light fixture	Room 101
-002	>8 Ft	"	
-003	>8 Ft	"	
-004	>8 Ft	"	
-005	>8 Ft.	"	

Johns Manville

Johns Manville Corporation
10100 W. Ute Avenue (80127)
P.O. Box 625005
Littleton, CO 80162-5005
303 978 2000

COVER PAGE

April 2, 2001

Rocky Flats Environmental Technology Site
Ms. Shelly Johnsen
P.O. Box 464, Building 881
Golden, CO 80402-0464

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

Dear Ms. Johnsen:

The Johns Manville Technical Center (JMTC) has performed the following analytical services as requested. The results are calculated based upon the information supplied on the submission form. All laboratory data has been filed and are available upon request.
The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate No. 056) and participates in the AIHA ELPAT program.
If you have any questions, please call (303) 978-2584.

Scope of Work:

Requested Analysis	Bottle Number(s)	Customer Number(s)	Laboratory ID Number	Line Item Code	Sample Matrix
Beryllium	01D0632-001.001	442L-03142001-05-001	01032806-001	NR01A001	WIPE
Beryllium	01D0632-002.001	442L-03142001-05-002	01032806-002	NR01A001	WIPE
Beryllium	01D0632-003.001	442L-03142001-05-003	01032806-003	NR01A001	WIPE
Beryllium	01D0632-004.001	442L-03142001-05-004	01032806-004	NR01A001	WIPE
Beryllium	01D0632-005.001	442L-03142001-05-005	01032806-005	NR01A001	WIPE
Beryllium	01D0632-006.001	442L-03142001-05-006	01032806-006	NR01A001	WIPE
Beryllium	01D0632-007.001	442L-03142001-05-007	01032806-007	NR01A001	WIPE
Beryllium	01D0632-008.001	442L-03142001-05-008	01032806-008	NR01A001	WIPE
Beryllium	01D0632-009.001	442L-03142001-05-009	01032806-009	NR01A001	WIPE
Beryllium	01D0632-010.001	442L-03142001-05-010	01032806-010	NR01A001	WIPE
Beryllium	01D0632-011.001	442L-03142001-05-011	01032806-011	NR01A001	WIPE
Beryllium	01D0632-012.001	442L-03142001-05-012	01032806-012	NR01A001	WIPE
Beryllium	01D0632-013.001	442L-03142001-05-013	01032806-013	NR01A001	WIPE
Beryllium	01D0632-014.001	442L-03142001-05-014	01032806-014	NR01A001	WIPE
Beryllium	01D0632-015.001	442L-03142001-05-015	01032806-015	NR01A001	WIPE
Beryllium	01D0632-016.001	442L-03142001-05-016	01032806-016	NR01A001	WIPE FB
Beryllium	01D0632-017.001	442W-03142001-05-001	01032806-017	NR01A001	WIPE
Beryllium	01D0632-018.001	442W-03142001-05-002	01032806-018	NR01A001	WIPE
Beryllium	01D0632-019.001	442W-03142001-05-003	01032806-019	NR01A001	WIPE
Beryllium	01D0632-020.001	442W-03142001-05-004	01032806-020	NR01A001	WIPE
Beryllium	01D0632-021.001	442W-03142001-05-005	01032806-021	NR01A001	WIPE
Beryllium	01D0632-022.001	442W-03142001-05-006	01032806-022	NR01A001	WIPE
Beryllium	01D0632-023.001	442W-03142001-05-007	01032806-023	NR01A001	WIPE
Beryllium	01D0632-024.001	442W-03142001-05-008	01032806-024	NR01A001	WIPE
Beryllium	01D0632-025.001	442W-03142001-05-009	01032806-025	NR01A001	WIPE
Beryllium	01D0632-026.001	442W-03142001-05-010	01032806-026	NR01A001	WIPE
Beryllium	01D0632-027.001	442W-03142001-05-011	01032806-027	NR01A001	WIPE

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April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

Scope of Work: *(cont.)*

Requested Analysis	Bottle Number(s)	Customer Number(s)	Laboratory ID Number	Line Item Code	Sample Matrix
Beryllium	01D0632-028.001	442W-03142001-05-012	01032806-028	NR01A001	WIPE
Beryllium	01D0632-029.001	442W-03142001-05-013	01032806-029	NR01A001	WIPE
Beryllium	01D0632-030.001	442W-03142001-05-014	01032806-030	NR01A001	WIPE
Beryllium	01D0632-031.001	442W-03142001-05-015	01032806-031	NR01A001	WIPE
Beryllium	01D0632-032.001	442W-03142001-05-016	01032806-032	NR01A001	WIPE
Beryllium	01D0632-033.001	442W-03142001-05-017	01032806-033	NR01A001	WIPE
Beryllium	01D0632-034.001	442W-03142001-05-018	01032806-034	NR01A001	WIPE
Beryllium	01D0632-035.001	442W-03142001-05-019	01032806-035	NR01A001	WIPE
Beryllium	01D0632-036.001	442W-03142001-05-020	01032806-036	NR01A001	WIPE
Beryllium	01D0632-037.001	442W-03142001-05-021	01032806-037	NR01A001	WIPE
Beryllium	01D0632-038.001	442W-03142001-05-022	01032806-038	NR01A001	WIPE
Beryllium	01D0632-039.001	442W-03142001-05-023	01032806-039	NR01A001	WIPE
Beryllium	01D0632-040.001	442W-03142001-05-024	01032806-040	NR01A001	WIPE
Beryllium	01D0632-041.001	442W-03142001-05-025	01032806-041	NR01A001	WIPE
Beryllium	01D0632-042.001	442W-03142001-05-026	01032806-042	NR01A001	WIPE
Beryllium	01D0632-043.001	442W-03142001-05-027	01032806-043	NR01A001	WIPE
Beryllium	01D0632-044.001	442W-03142001-05-028	01032806-044	NR01A001	WIPE
Beryllium	01D0632-045.001	442W-03142001-05-029	01032806-045	NR01A001	WIPE
Beryllium	01D0632-046.001	442W-03142001-05-030	01032806-046	NR01A001	WIPE
Beryllium	01D0632-047.001	442W-03142001-05-031	01032806-047	NR01A001	WIPE
Beryllium	01D0632-048.001	442W-03142001-05-032	01032806-048	NR01A001	WIPE
Beryllium	01D0632-049.001	442W-03142001-05-033	01032806-049	NR01A001	WIPE
Beryllium	01D0632-050.001	442W-03142001-05-034	01032806-050	NR01A001	WIPE
Beryllium	01D0632-051.001	442W-03142001-05-035	01032806-051	NR01A001	WIPE
Beryllium	01D0632-052.001	442W-03142001-05-036	01032806-052	NR01A001	WIPE
Beryllium	01D0632-053.001	442W-03142001-05-037	01032806-053	NR01A001	WIPE
Beryllium	01D0632-054.001	442W-03142001-05-038	01032806-054	NR01A001	WIPE
Beryllium	01D0632-055.001	442W-03142001-05-039	01032806-055	NR01A001	WIPE

Comments: No problem were encountered with sample receiving and sample analysis

I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy sample package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Scott A. Steiner
Industrial Hygiene Project Manager

Date

KAISER-HILL
COMPANY
ANALYTICAL SERVICES DIVISION

FAXED 4-3-01 gl

FAX COVER SHEET FOR FINAL DATA PACKAGE REPORTS

RIN NUMBER: 01S0051

FROM: SKIP NIELSEN

PHONE: (303) 966-4289

FAX: (303) 966-8345

TO: S. Knapp

FAX: 6678

PHONE: _____

NUMBER OF PAGES, INCLUDING COVER SHEET: _____

Please contact _____ if the fax is not received in its entirety.
(phone number)

NOTE:
This facsimile contains the results, in the Final Sample Data Package, for the analytes requested in this RIN. The package has been scheduled for verification or validation. Until verification or validation is completed the results must be considered preliminary. You will be forwarded a copy of the verification or validation report shortly after it is received by ASD. You should examine this report to determine if any qualifiers (flags) have been attached to the results. Flagged data may or may not be suitable for use as originally intended and should be evaluated for acceptability before use. If you have any questions please contact your Analytical Services Project Lead, do no contact the laboratory directly.

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Paragon Analytics, Inc.

PCBs Case Narrative

Kaiser-Hill Co., L.L.C.

BLDG. 442L CORE SAMPLES -- 01S0051

Order Number - 0103095

1. This report consists of 4 solid samples. The samples were received cool and intact by Paragon on 03/15/2001.

2. These samples were extracted and analyzed according to SW-846, 3rd Edition procedures. Specifically, the solid samples were extracted using soxhlet procedures according to Paragon Analytics, Inc. Standard Operating Procedure 625 Revision 4 based on Method 3540C. The extracts were then processed using sulfuric acid cleanup according to Paragon Analytics Standard Operating Procedure 651 Revision 4 based on Method 3665 in an attempt to remove potential interferences.

3. The extracts were then analyzed using GC/ECD (electron capture detectors) with a RTX-CLPesticides capillary column according to Paragon Analytics Standard Operating Protocol 409 Revision 0 based on SW-846 Method 8082. All positive results were then confirmed on a RTX-CLPesticidesII column. The quantitation of each analyte is the lower of the concentrations obtained from each column which met initial and continuing calibration criteria. This minimizes the chances of reporting elevated results based on interferences.

4. All initial and continuing calibration criteria were met with the following exceptions:

   Continuing calibration 1660 032001-1CCV - decachlorobiphenyl was out low on both columns.
   Continuing calibration 1660 032001-2CCV - decachlorobiphenyl was out low on column 2.
   All results for decachlorobiphenyl were reported from the 1254 quantitation which passed initial and continuing calibration criteria for this analyte.

5. The method blank associated with this project was below the reporting limits for all analytes.

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6. All laboratory control spike and laboratory control spike duplicate recoveries and RPDs were within the acceptance criteria.

7. All matrix spike and matrix spike duplicate recoveries and RPDs were within acceptance criteria with the following exceptions:

Spiked Compound	QC Sample	Direction
aroclor 1260	0103095-3MS	high

The recoveries of this compound in the laboratory control spike and laboratory control spike duplicate were within control limits, which suggest the outliers in the matrix spike may have been due to matrix effects. No further action was warranted. Blank spike and blank spike duplicate results have been included.

8. All samples were extracted and analyzed within the established holding times.

9. All surrogate recoveries were within acceptance criteria.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, Paragon Analytics, Inc. certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

for Dan Sheneman — 26 Mar 2001
GC Analyst — Date

Reviewer's Initials — 03-25-01
Date

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Paragon Analytics, Inc.
Data Qualifier Flags
Chromatography and Mass Spectrometry

U or ND: This flag indicates that the compound was analyzed for but not detected.

J: This flag indicates an estimated value. This flag is used as follows : (1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; (2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the reporting limit (RL) but greater than the method detection limit (MDL); and (3) when the retention time data indicate the presence of a compound that meets the GC identification criteria, and the result is less than the RL but greater than the MDL.

B: This flag is used when the analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user. This flag shall be used for a tentatively identified compound (TIC) as well as for a positively identified target compound.

E: This flag identifies compounds whose concentration exceeds the upper level of the calibration range.

***:** This flag indicates that a spike recovery is equal to or outside the control criteria used. (This flag appears when a spike recovery is equal to, and therefore within, the control criteria due to a limitation in the current PAI LIMS system.)

+: This flag indicates that the relative percent difference (RPD) equals or exceeds the control criteria. (This flag appears when the RPD is equal to, and therefore within, the control criteria due to a limitation in the current PAI LIMS system.)

Commodore Advanced Sciences, Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

0103095

C.O.C. # 01S0051#002

Page 1 of 1

RFETS /

Sampler: [redacted]

RIN 01S0051

Project Title: BLDG 442L CORE SAMPLES (PCB)

To (Lab): Paragon Analytics

Protocol: CAS SOP.003 REV 3

Contact/Requester: KNAPP, SHAUN / NELSEN, SKIP

Sampling Origin: BLDG. 442L NEAR STEM PUMP

Logbook No.: 99 Ford

Method of Shipment: Sample Team

Related COC (if any): 01S0051

Telephone No.: 7828/4289

Purchase Order/Charge Code: EDD30120

Ice Chest No.: NA Temp.: NA

Bill of Lading/Air Bill No.: 4533-2127-1433

PRE: 010306-T130C-002

POSSIBLE SAMPLE HAZARDS/REMARKS
Are acid preserved samples DOT hazardous per 40 CFR Part 136.3 Table II? YES or NO
Are other known hazardous substances present? YES or NO
** ** **

SCREENING REQUIRED: ☐

SPECIAL INSTRUCTIONS: IDC 1374

Hold Time

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative; Packing
01S0051-001.002	MAP LOCATION #1	SOLID	3/13/01	1210	BLDG. 442L CONCRETE CORE	30-G / G /1	SS03B006 (PCB 8080A/8081-Soil) [Priority]	None 4 degrees C
01S0051-002.002	MAP LOCATION #2	SOLID	3/13/01	1234	BLDG. 442L CONCRETE CORE	30-G / G /1	SS03B006 (PCB 8080A/8081-Soil) [Priority]	None 4 degrees C
01S0051-003.002	MAP LOCATION # 3	SOLID	3/13/01	1142	BLDG. 442L CONCRETE CORE	30-G / G /1	SS03B006 (PCB 8080A/8081-Soil) [Priority]	None 4 degrees C
01S0051-004.002	MAP LOCATION #2 DUP	SOLID	3/13/01	1301	BLDG. 442L CONCRETE CORE	30-G / G /1	SS03B006 (PCB 8080A/8081-Soil) [Priority]	None 4 degrees C

SP. 3/13/01

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/13/01 1530	T891 Ref #2	3/13/01 1330	Relinq #2 CB	3-14-01 1412	[signature]	3-14-01 14R
[signature]	3-14-01 1500	FEDEX		FEDEX		[signature]	3-15-01 09³⁰

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)

Disposed By

PCBs

Method SW8082
Method Blank

Lab Name: Paragon Analytics, Inc.
Work Order Number: 0103095
Client Name: Kaiser-Hill Co., L.L.C.
ClientProject ID: BLDG. 4421, CORE SAMPLES 01S0051

Lab ID: EX010316-4MB

Sample Matrix: SOLID
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/16/2001
Date Analyzed: 03/20/2001

Prep Batch: EX010316-4
QCBatchID: EX010316-4-1
Run ID: PT010320-1
Cleanup: SW3665
Basis: N/A

Sample Aliquot: 30 G
Final Volume: 10 ML
Result Units: UG/KG
File Name: EA003491

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
12674-11-2	AROCLOR-1016	1	33	33	U	
11104-28-2	AROCLOR-1221	1	67	67	U	
11141-16-5	AROCLOR-1232	1	33	33	U	
53469-21-9	AROCLOR-1242	1	33	33	U	
12672-29-6	AROCLOR 1248	1	33	33	U	
11097-69-1	AROCLOR-1254	1	33	33	U	
11096-82-5	AROCLOR-1260	1	33	33	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
2051-24-3	DECACHLOROBIPHENYL	12.5		16.7	75	34 - 129
877-09-8	TETRACHLORO-M-XYLENE	17		16.7	102	47 - 137

Data Package ID: *PT0103095-1*

PCBs

Method SW8082
Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 0103095
Client Name: Kaiser-Hill Co., L.L.C.
ClientProject ID: BLDG. 442L CORE SAMPLES 01S0051

Field ID: 01S0051 001.002
Lab ID: 0103095-1

Sample Matrix: SOLID
% Moisture: N/A
Date Collected: 13-Mar-01
Date Extracted: 16-Mar-01
Date Analyzed: 21-Mar-01

Prep Batch: EX010316-4
QCBatchID: EX010316-4-1
Run ID: PT010320-1
Cleanup: SW3665
Basis: As Received

Sample Aliquot: 30 G
Final Volume: 10 ML
Result Units: UG/KG
File Name: EA003496

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
12674-11-2	AROCLOR-1016	1	33	33	U	
11104-28-2	AROCLOR-1221	1	67	67	U	
11141-16-5	AROCLOR-1232	1	33	33	U	
53469-21-9	AROCLOR-1242	1	33	33	U	
12672-29-6	AROCLOR-1248	1	33	33	U	
11097-69-1	AROCLOR-1254	1	33	33	U	
11096-82-5	AROCLOR-1260	1	33	33	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
2051-24-3	DECACHLOROBIPHENYL	12.5		16.7	75	34 - 129
877-09-8	TETRACHLORO-M-XYLENE	16.2		16.7	97	47 - 137

Data Package ID: *PT0103095-1*

PCBs

Method SW8082
Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 0103095
Client Name: Kaiser-Hill Co., L.L.C.
ClientProject ID: BLDG. 442L CORE SAMPLES 01S0051

Field ID: 01S0051-002.002
Lab ID: 0103095-2

Sample Matrix: SOLID
% Moisture: N/A
Date Collected: 13-Mar-01
Date Extracted: 16-Mar-01
Date Analyzed: 21 Mar-01

Prep Batch: EX010316-4
QCBatchID: EX010316-4-1
Run ID: PT010320-1
Cleanup: SW3665
Basis: As Received

Sample Aliquot: 30.02 G
Final Volume: 10 ML
Result Units: UG/KG
File Name: EA003497

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
12674-11-2	AROCLOR-1016	1	33	33	U	
11104-28-2	AROCLOR-1221	1	67	67	U	
11141-16-5	AROCLOR-1232	1	33	33	U	
53469-21-9	AROCLOR-1242	1	33	33	U	
12672-29-6	AROCLOR-1248	1	33	33	U	
11097-69-1	AROCLOR-1254	1	33	33	U	
11096-82-5	AROCLOR 1260	1	33	33	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
2051-24-3	DECACHLOROBIPHENYL	10.8		16.7	65	34 - 129
877 09-8	TETRACHLORO-M-XYLENE	15.7		16.7	94	47 - 137

Data Package ID: *PT0103095-1*

PCBs

Method SW8082
Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 0103095
Client Name: Kaiser-Hill Co., L.L.C.
ClientProject ID: BLDG. 442L CORE SAMPLES 01S0051

Field ID: 01S0051-003.002
Lab ID: 0103095-3

Sample Matrix: SOLID
% Moisture: N/A
Date Collected: 13-Mar-01
Date Extracted: 16-Mar-01
Date Analyzed: 21-Mar-01

Prep Batch: EX010316-4
QCBatchID: EX010316-4-1
Run ID: PT010320-1
Cleanup: SW3665
Basis: As Received

Sample Aliquot: 30.02 G
Final Volume: 10 ML
Result Units: UG/KG
File Name: EA003198

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
12674-11-2	AROCLOR-1016	1	33	33	U	
11104-28-2	AROCLOR-1221	1	67	67	U	
11141-16-5	AROCLOR-1232	1	33	33	U	
53469-21-9	AROCLOR-1242	1	33	33	U	
12672-29-6	AROCLOR-1248	1	33	33	U	
11097-69-1	AROCLOR-1254	1	33	33	U	
11096-82-5	AROCLOR-1260	1	33	33	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
2051-24-3	DECACHLOROBIPHENYL	11.8		16.7	71	34 - 129
877-09-8	TETRACHLORO-M-XYLENE	15.9		16.7	95	47 - 137

Data Package ID: *PT0103095-1*

PCBs

Method SW8082
Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 0103095
Client Name: Kaiser-Hill Co., L.L.C.
ClientProject ID: BLDG. 442L CORE SAMPLES 01S0051

Field ID: 01S0051-004.002
Lab ID: 0103095-4

Sample Matrix: SOLID
% Moisture: N/A
Date Collected: 13-Mar-01
Date Extracted: 16-Mar-01
Date Analyzed: 21-Mar-01

Prep Batch: EX010316-4
QCBatchID: EX010316-4-1
Run ID: PT010320-1
Cleanup: SW3665
Basis: As Received

Sample Aliquot: 30.01 G
Final Volume: 10 ML
Result Units: UG/KG
File Name: EA003501

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
12674-11-2	AROCLOR-1016	1	33	33	U	
11104-28-2	AROCLOR-1221	1	67	67	U	
11141-16-5	AROCLOR-1232	1	33	33	U	
53469-21-9	AROCLOR-1242	1	33	33	U	
12672-29-6	AROCLOR-1248	1	33	33	U	
11097-69-1	AROCLOR-1254	1	33	33	U	
11096-82-5	AROCLOR-1260	1	33	33	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
2051-24-3	DECACHLOROBIPHENYL	11		16.7	66	34 - 129
877-09-8	TETRACHLORO-M-XYLENE	15.5		16.7	93	47 - 137

Data Package ID: *PT0103095-1*

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00013

KAISER•HILL
COMPANY
ANALYTICAL SERVICES DIVISION

FAX COVER SHEET FOR FINAL DATA PACKAGE REPORTS

RIN NUMBER: 0150051

FROM: **SKIP NIELSEN**

PHONE: **(303) 966-4289**

FAX: **(303) 966-8345**

TO: S. Knapp

FAX: 6678

PHONE: _____

NUMBER OF PAGES, INCLUDING COVER SHEET: _____

Please contact _____ if the fax is not received in its entirety.
(phone number)

NOTE:
This facsimile contains the results, in the Final Sample Data Package, for the analytes requested in this RIN. The package has been scheduled for verification or validation. Until verification or validation is completed the results must be considered preliminary. You will be forwarded a copy of the verification or validation report shortly after it is received by ASD. You should examine this report to determine if any qualifiers (flags) have been attached to the results. Flagged data may or may not be suitable for use as originally intended and should be evaluated for acceptability before use. If you have any questions please contact your Analytical Services Project Lead, do no contact the laboratory directly.

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Eberline Services - Rocky Flats
RFETS, Building T886D
Golden, Colorado 80403
(303) 966-7765

RIN: 01S0051
Report Date: 3/29/2001

Method Summary

Gross alpha and gross beta activities are measured by evaporating an aliquot of the prepared sample onto a counting planchet and counting the alpha and beta activities in a low background, thin-windowed, gas flow proportional counter. Organics or combustible solids are ashed, the residue dissolved in acid, and the solution or an aliquot of the solution is evaporated onto a counting planchet. Aqueous samples are concentrated and then evaporated onto a counting planchet. The initial preparation of soils, sludges, and sediments is described in detail in procedure ATP-002, *"Initial Preparation of Soils/Sludges/Sediments for Dissolution."* Analysis of prepared non-aqueous samples is described in detail in procedure ATP-026, *"Sample Preparation for Analysis of Gross Alpha and Gross Beta Activity in Solid Samples."* Analysis of prepared aqueous samples is described in detail in procedure ATP-015, *"Sample Preparation for Analysis of Gross Alpha and Gross Beta Activity in Aqueous Samples."* Preparation of oils, solvents and other combustible organics is described in procedure ATP-005, *"Preparation of Oils and Solvents for Analysis of Gross Alpha and Gross Beta Activity."* The counting procedure is described in procedure ATP-008, *"Operation of the Tennelec LB4100 Gas Proportional Counters."*

The detector counting efficiency and self-absorption effects of the salt residue on the planchet are determined from calibration curves which are generated by counting several planchets prepared with a known amount of alpha or beta activity and increasing amounts of salt (0 to 100 mg). Americium-241 is used as the spike for the alpha curves and a solution of Sr-90, Y-90 is used for the beta curves. These standards are prepared from certified reference material which is traceable to the National Institute of Standards Technology (NIST).

The theoretical minimum detectable activity (MDA) for the analysis is based on the detector background, detector efficiency and self-absorption effects, count time and quantity of sample analyzed. The MDA for each analysis is calculated and is also reported. If the reported result is based on the average of two or more counts, the average MDA is reported.

Quality Control Summary

A sample batch consists of eleven or fewer samples, a duplicate of one of the samples, an alpha and a beta laboratory control sample, and a preparation blank. Each set of samples forms a "QC Batch" and is assigned a QC batch number. A sample can be traced back to its corresponding quality control samples through the QC Batch number. The preparation blank (PB), an aliquot of deionized, distilled water, is prepared and analyzed with the samples to confirm that the samples were not contaminated during the analysis. The activities reported for samples and standards were not corrected for preparation blank activity. The alpha and beta laboratory control samples are aqueous standards of ^{241}Am and ^{90}Sr, respectively. The SRM standards used to prepared these standards are traceable to NIST. The duplicate, designated as the sample ID followed by a "D", is a second aliquot of one of the samples in the QC Batch which is carried through the procedure as a separate sample.

The instrument QC includes determining instrument backgrounds weekly and counting an instrument check source daily on the Tennelec LB4100 multidetector gas proportional counters. The instrument backgrounds are based on the average of at least five, and normally ten or more, 4 hour counts. The instrument check sources are counted daily to verify that the efficiencies of the detectors have not changed. A summary of the instrument backgrounds is included in the instrument raw data section of this report. The daily check source information is available in the supporting documentation package.

Narrative

These samples were described as concrete core material from Building 442L. The radscreen analyses were performed according to ATP-004, *"Sample Preparation for Radiological Screening of Soil Samples by Gas Proportional Counting,"* in QC batch 01RS030. The radscreen report was faxed to Kaiser-Hill Analytical Services and Commodore Advanced Sciences, Inc., on March 14, 2001. A copy of the radscreen report is included in Appendix A of this report.

In addition to the radscreen analyses, the samples were also submitted for analysis of gross alpha and gross beta activities. The samples were prepared for analysis according to procedure ATP-002, *"Initial Preparation of Soils/Sludges/ Sediments for Dissolution,"* and procedure ATP-026, *"Sample Preparation for Analysis of Gross Alpha and Gross Beta Activity in Solid Samples."* The samples were analyzed in QC batch 01AB048. This QC batch also contained samples from RIN 01S0049. Sample 1003772-07 D is a duplicate of sample 1003772-04. The first time the sample set was counted, the gross alpha MDAs for samples 1003772-02, 1003772-04, 1003772-07 D and 1003773-03 exceeded the RDL of 5 pCi/g. The planchets for these samples were recounted for 12 hours and the data from the recount are reported. All other data are based on a routine count time of 4 hours. There were no other problems noted with these analyses and all QC data are acceptable.

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Commodore Advanced Sciences, Inc.

RFETS

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.# 01S0051#001

Page 1 of 1

Sampler(s) [redacted]	Contact/Requester KNAPP, SHAUN / NIELSEN, SKIP	Telephone No. 7828/4289
RIN 01S0051	Sampling Origin BLDG. 442L NEAR STEM PUMP	Purchase Order/Charge Code EDD30129
Project Title BLDG. 442L CORE SAMPLES (PCB)	Logbook No. 99 Ford	Ice Chest No. NA Temp. NA
To (Lab) Thermo NuTech	Method of Shipment Sample Team	Bill of Lading/Air Bill No.
Protocol CAS SOP .003 REV 3	Related COC (if any) 01S0051 #002	PRE 010306-T130C-002

POSSIBLE SAMPLE HAZARDS/REMARKS
Are acid preserved samples DOT hazardous per 40 CFR Part 136.3 Table II? YES or NO
Are other known hazardous substances present? YES or NO
** ** **

SCREENING REQUIRED ☐

SPECIAL INSTRUCTIONS IDC Hold Time 1374

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative ; Packing
01S0051-001.003		SOLID	3/13/01	1210	BLDG. 442L CONCRETE CORE	20-ML / G /1	OS01A003 (Rad-Screen - Solid) [Routine]; OS01A006 (Gross Alpha/Beta - Solid) [Routine]	None None
01S0051-002.003		SOLID	3/13/01	1234	BLDG. 442L CONCRETE CORE	20-ML / G /1	OS01A003 (Rad-Screen - Solid) [Routine]; OS01A006 (Gross Alpha/Beta - Solid) [Routine]	None None
01S0051-003.003		SOLID	3/13/01	1142	BLDG. 442L CONCRETE CORE	20-ML / G /1	OS01A003 (Rad-Screen - Solid) [Routine]; OS01A006 (Gross Alpha/Beta - Solid) [Routine]	None None
01S0051-004.003		SOLID	3/13/01	1301	BLDG. 442L CONCRETE CORE	20-ML / G /1	OS01A003 (Rad-Screen - Solid) [Routine]; OS01A006 (Gross Alpha/Beta - Solid) [Routine]	None None
	SP		3/13/01					

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/13/01 1520	[signature]	3/13/01 1520				
[signature]	3/13/01 1530	C4	3/13/01 1530				

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)	Disposed By	Date/Time

Eberline Services - Rocky Flats
RFETS, Building T886D
Golden, Colorado 80403
(303) 966-7765

RIN: 01S0051
Report Date: 3/29/2001

Sample and Duplicate Analysis Results

Customer Sample ID	Lab Sample ID	Gross Alpha			Gross Beta			Units	QC Batch
		Activity	Unc. (2s)	MDA	Activity	Unc. (2s)	MDA		
01S0051-001 003	1003772-01	18	4	5	33	3	2	pCi/g	01AB048
01S0051-002 003	1003772-02	20	3	6	35	2	1	pCi/g	01AB048
01S0051-003.003	1003772-03	17	4	5	34	3	2	pCi/g	01AB048
01S0051-004 003	1003772-04	21	3	5	35	3	1	pCi/g	01AB048
01S0051-004 003	1003772-07 D	21	4	6	34	2	1	pCi/g	01AB048

Preparation Blank Results

QC Batch	Lab Sample ID	Gross Alpha			Gross Beta			Units	
		Activity	Unc. (2s)	MDA	Activity	Unc. (2s)	MDA		
01AB048	1003772-08	0.0	0.3	0.5	-0.8	0.5	1.0	pCi/g	

LCS Results

QC Batch	Lab Sample ID	Gross Alpha			Gross Beta			Units	SRM
		Activity	Unc. (2s)	MDA	Activity	Unc. (2s)	MDA		
01AB048	1003772-09	9.4	1.5	1.6	11.4	1.5	1.7	pCi/ml	STD_79