

SURVEY PACKAGE

Survey Package ID: C4024 101C1

Survey Area Name: SETF, Building 4024

Survey Unit Name: SGTCC Test Cell B-102

Version: Revision 0, April 20, 2007

**Prepared IAW:
SETF Sample and Analysis Plan, Rev. 0, March 2007**

**Prepared For:
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CANOGA PARK, CALIFORNIA

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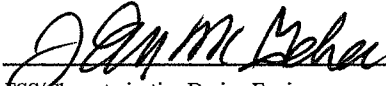
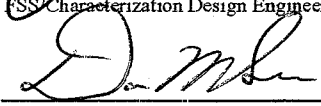
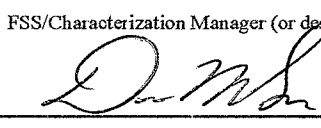
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Survey Package Cover Sheet

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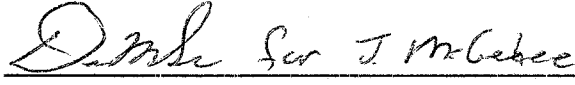
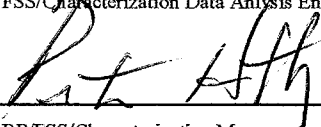
Survey Package Preparation:

The survey package instructions are prepared and ready for implementation.

Prepared By:		Date	<u>4/20/07</u>
	FSS/Characterization Design Engineer		
Reviewed By:		Date	<u>4/20/07</u>
	FSS/Characterization Manager (or designee)		
Approved By:		Date	<u>4/20/07</u>
	Project Manager		

Survey Completion:

The survey package instructions were implemented and the survey measurements have been reviewed for completeness in accordance with the Sample and Analysis Plan. The data collected has been reviewed for completeness in accordance with the survey package instructions.

Reviewed By:		Date:	<u>11/30/07</u>
	FSS/Characterization Supervisor (or designee)		
Reviewed By:	<u>N/A</u>	Date:	_____
	FSS/Characterization Data Analysis Engineer		
Reviewed By:		Date:	<u>11/30/07</u>
	RP/FSS/Characterization Manager (or designee)		
Approved By:		Date:	<u>11/30/07</u>
	Project Manager		

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Survey Area History

Survey Package Number:	C4024 101C1	Package Type:	Structure
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Survey Area Description:

Erected in 1960 and enlarged in 1962, 4 unshielded SNAP reactors were tested in the SETF. The reactor systems and radioactive test equipment were removed at the end of testing, additional D&D operations were performed in 1978 and again in 2005.

Survey Area History Information:

SETF Facility Description

As constructed, the SETF consisted of three basic areas: the high bay, general support and mechanical/electrical support areas. In addition to the building areas, a paved yard surrounds the main building. All of the building areas except for test cells B-102 and B-104 of the sub grade test cell complex (SGTCC) have been surveyed and confirmed to be DM by the DHS-RHB.

The test cells have an aluminum liner, contain activated concrete and metal rebar from former reactor testing. In the yard area, other above grade support structures and below grade components such as radioactive solid, liquid, and gas storage tanks were once buried. The tanks were removed, but surveys showing the radiological condition of the remaining vaults are not available.

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Survey Unit Description and History

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LC1: C4024	Survey Area Name: SETF, Building 4024	
LC2: 101C1	Survey Unit Name: SGTCC Test Cell B-102	

LC3 - Surface Category (P1-3) and Associated Area:

LC3_P1_3	Surface Description	Dimensions (Yes or No)	Total Area (m2)
CL3	Ceiling	No	0
FL1	Floor Surface	No	0
SM1	Sump or Storage Tubes	No	0
WL1	Lower Wall Surfaces	No	0
WU1	Upper Wall Surfaces	No	0

Work Breakdown Structure Information:

WBS ID: 10401 Characterization and Confirmatory Survey Activities

Survey Unit Description:

Sub Grade Test Cell Complex, Test Cell B-102

Survey Unit Historical Information: Operational History, etc.

Sub Grade Test Cell Complex

The sub grade test cell complex (SGTCC) consists of the three parallel cells (two power test cells and the center transfer cell), a partial rear corridor which interconnects the cells, and the operating gallery, see drawings, Sub Grade Test Cell Complex. To ensure gas tightness, the cells were completely lined on the inside with 3/16 inch-thick aluminum plate. This plate was seal welded to T-bar anchors in the structural concrete. The top of the cells' 8 foot thick roof is at ground level and serves as the high bay floor. The subsurface construction of the facility allowed advantage to be taken of the natural shielding for neutron and gamma radiation attenuation provided by the earth and rock on four sides of the complex. The below grade structure side and rear walls were back-filled with earthen fill materials. The floor was cast on the bedrock. The side wall structural concrete is nominally 3 feet thick, the south wall concrete is 2 feet thick and the floor concrete varies from 6.5 to 8 feet thick as the rock elevation varies. Concrete walls which separate the three cells are 4-1/2 feet thick; the transfer cell's front wall is

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Survey Unit Description and History

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4-1/2 feet thick; and the front walls of the two test cells are 9 feet thick. A 3-foot-thick concrete partial wall was built across the rear of each test cell, creating a common corridor. Nine floor storage vaults were constructed in the floor of the corridor, three at the rear of each cell.

The 4 by 7 feet minimum dimension access doors between the operating gallery and each cell were stepped plugs of the same thickness as the shield walls which they penetrate and provided for personnel or equipment access to the cells. Tracks were provided in the floor, for the self-powered plugs to roll on. Two of these doors remain in the lower operating gallery area of the facility. The roof of each cell is penetrated by a 9 feet minimum diameter circular access port. The plugs filling this port are stepped for shielding purposes. To not exceed the capacity of the 20-ton gantry crane, the plugs are constructed in three layers to make up a total thickness of 8 feet. The center of the roof access plugs are penetrated by a 24 inch minimum diameter port with a single shield plug in each.

The roof, front face and walls separating cells from one another are all pierced by 8 inch and 10 inch minimum diameter stepped ports. Two other types of cell penetrations were provided; these are electrical and instrumentation conduits and "bent through tubes." The aluminum conduits run from the cell liner out through the walls or roof. Aluminum bent-design through-tubes of two sizes, 1-1/2 and 2 inch diameter penetrated the various walls.

The operating gallery is at two levels. The lower level is at the same elevation as the cell floors 28 feet below grade. The upper level is formed by a bolted steel floor 14 feet above the lower floor. The west end is partitioned off by a concrete wall that extends from the lower floor to the high bay floor. Personnel access to the gallery floors and equipment rooms is provided by a single stairway. Material and equipment was moved to either floor of the operating gallery by a 5-ton bridge crane.

Identity of Potential Contaminants

Radioactivity induced by testing SNAP reactors in the sub grade test cell complex was detected as documented in SAP Reference 7.5, Team Product Document No: RS-00025, Building 4024 Concrete Sampling, performed under the Closure of ETEC (R21-RS) Program (RS-00025 report). The RS-00025 report provides the results for concrete sampling in the SETF, Building 4024 conducted in 2003. The activity of 1 inch depth cores ranged from no detectable activity to 105 pCi/g of Europium-152 (Eu-152) and 9.4 pCi/g of Cobalt-60 (Co-60), the primary contaminants of concern (COC).

These results from the RS-00025 survey and were used to predict which concrete needs to be

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removed with radiological controls and managed as radioactive waste and which can be removed as decommissioning materials without radiological controls and shipped to a Class 1 landfill. According to the SAP Reference 7.6, Historical Site Assessment of Area IV Santa Susana Field Laboratory Ventura County, California (HSA), other potential radionuclide COCs in addition to Co-60 and Eu-152 include: Am-241, Cs-134, Cs-137, Eu-154, Fe-55, Fe-59, H-3, K-40, Mn-54, Na-22, Ni-63, Pu-238, Pu-239, Pu-240, Pu-241, Sr-90, Th-228, Th-230, Th-232, U-234, U-235, and U-238. These additional COCs will also be tested for during the confirmatory survey.

Additional Information Regarding Survey Unit Classification:

Inside RCA? Yes

Activated concrete and metal from SNAP reactor testing

Coolant? No

Spills? No

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Survey Package References

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References:

1. Sample and Analysis Plan for the SETF D&D Surveys, Rev 0, March 2007, AREVA
2. Health and Safety Plan for the SETF D&D Project, March 2007, AREVA
3. Quality Assurance Project Plan for the SETF D&D Surveys, Rev 0, March 2007, AREVA
4. MARSSIM, Multi-Agency Radiation Survey and Site Investigation Manual, EPA402-R-97-016 (NUREG-1575), August 2000

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Survey Safety Requirements

Survey Package Number:	C4024 101C1	Package Type:	Structure
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Safety Requirement and Considerations:

1. All work to be performed in accordance with the Job Hazard Analysis prepared for surveys of radiological areas.
2. All work to be performed in accordance with RWP prepared for surveys of radiological areas.

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Survey Support Requirements

Survey Package Number:	C4024 101C1	Package Type:	Structure
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Survey Support Requirements and Considerations:

1. Other equipment as needed
2. Lighting and extension cords
3. Water control dykes
4. Submersible pump with tubing for feed water and clamps
5. 55 gal. drum and drum dolly
6. Wet and dry vacuum
7. Man lift, 26'
8. 14" Diamond Blade Cutoff Saw,
9. Equipment needed may include:
Vacuum base Concrete Core Drill with 3" bit,
10. Boeing to provide crane operator as needed to place equipment in test cell.

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Survey Package Procedures

Survey Package Number:	C4024 101C1	Package Type:	Structure
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Survey Package Procedures:

1. DD-CS-001 Sample Identification and Chain of Custody
2. DD-CS-011 Operation of Ludlum Model 2350 Data Logger
3. DD-CS-014 Bulk Material and Core Bore Sampling
4. DD-RP-010 Portable Instrument Procedure
5. DD-RP-039 Quality Control of Counting Systems and Portable Counters
6. DD-RP-049 Operation of the Ludlum Model 2929 Dual Channel Scaler

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General Survey Package Instructions

Survey Package Number:	C4024 101C1	Package Type:	Structure
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Survey Unit Name:	SGTCC Test Cell B-102		

1. Perform measurements and collect samples of sufficient quantity to confirm nature and depth of activation radioactivity from former operations at Building 4024 and evaluate measurements and sample results for comparability to previous survey results.

Operate instruments for background study and survey direct measurements and sample analysis such that measurement and/or analysis sensitivities or minimum detectable concentrations (MDCs) are ALARA or, as a minimum less than the derived concentration guideline levels (DCGLs).

2. The survey is to aid in removal activities, waste management activities, and remediation planning

Upon completion of the initial survey specified in this survey package, the data will be analyzed and a determination will be made as to whether or not the structure has been adequately characterized.

3. If materials that are potentially hazardous are encountered during the survey, note this in the item description under "material" and report the location of the material to the FSS/Characterization Manager and EH&S Manager.

4. The number of measurements and/or samples prescribed are minimum number required

Additional measurements may be required to bound the lateral/vertical extent of radiological contamination in the survey unit to an approximate 24" depth. Survey maps for each room contained in this survey unit are located in Appendix A.

5. Use the floor, wall or ceiling designation from drawings in the LC5 code of the M2350 to identify measurements by surface. Mark each measurement location with an appropriate label, including LC5 and LC6 code

6. The M2350 data logger(s) are to be downloaded into the Measure Database at completion of survey or at end of shift at a minimum.

7. All samples are to be logged into the Sample Database at completion of survey or at end of shift at a minimum.

Note any problems, comments, or other information pertinent to the data or sample collection under the "FIELD NOTES" section.

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Specific Survey Package Instructions

Survey Package Number:	C4024 101C1	Package Type:	Structure
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1. Contact Gamma

Gamma Scan - Perform a gamma scan survey of surfaces of the interior of the test cell.

Use a Model 44-10 detector with collimator shield installed to focus field of view. The scans shall be performed by moving at a maximum rate of one detector width per second while listening to the audible output of the instrument. For interior surfaces perform a 100% scan survey of floor, lower 2 meters of wall surfaces upper walls, and ceiling.

Note any areas of highest and lowest activity on the appropriate survey drawing contained in Appendix A and mark at the SML. Do not log scan results.

2. Gamma Contact

Perform contact gamma measurement at the locations of highest and lowest activity identified during the scan for each of the surfaces.

Use Model 44-10 with collimator shield installed, the M2350 in the scaler mode with a 12 second count time and code the measurement LC4_P4 as "F," for Field Count. A minimum of 24 direct beta measurements will be collected on the surfaces of the test cell. Measurements will be distributed on the building surfaces as follows:

Interior surfaces:

Floor - 3

Walls below 2 meters - 6

Upper walls above 2 meters - 6

Ceiling - 3

Sumps and Storage Tubes - 6

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Specific Survey Package Instructions

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3. Direct Beta

Perform direct beta measurements at each of the contact gamma SMLs.

Use a Model 44-116 or equal detector. A minimum of 18 direct beta measurements will be collected on the surfaces of the building and at locations with the most potential for contamination and where the measurement geometry is most appropriate.

With the background shield installed, perform a 60 second "C" count to determine the field background. Using the field MDA verification sheet, adjust the count time to ensure that the MDC is less than 900 dpm/100 square centimeters.

Collect three pre-survey and three post survey shielded background counts. If pre-survey background counts in the survey unit are within +/- 20% of mean, use LMI Model 44-116 detector with the M2350 in the scaler mode with a 60 second count time and code the measurement LC4_P4 as "G," for Field Background and LC4_P5 as "A" for Average Background application (per measurement). If otherwise, collect a single shielded background at each of the direct beta measurement locations, code the measurement LC4_P4 as "G," field background and LC4_P5 as "S" for Single Background (per measurement).

For the direct measurement, use LMI Model 44-116 detector with the M2350 in the scaler mode with a 60 second count time and code the measurement LC4_P4 as "F," for Field Count and LC4_P5 as "A" for Average Background application or "S" for Single Background (per measurement) as appropriate.

4. Direct Alpha

Perform direct alpha measurement at each of the direct beta measurement locations.

Use a Model 43-90 or equal detector. With the background shield installed, perform a 2 minute "C" count to determine the field background. Using the field MDA verification sheet, adjust the count time to ensure that the MDA is less than 75 dpm/100 square centimeters.

Use Model 43-90 detector with the same background protocol and codes as with the direct beta measurements.

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5. A/B Smear

Collect a smear for removable alpha and beta contamination at each of the direct beta measurement locations.

Collect the smear sample by wiping approximately 100 cm² area for the sample. Combine and analyze by gamma spectroscopy A/B smear samples collected at locations where removable alpha was > 100 dpm/100 cm² or removable beta was >1000 dpm/100 cm².

6. G-Spec Sample

G-Spec Core Bore Sample

For core bore sample locations, the survey team will evaluate the SMLs from the scan and direct measurements to determine locations to perform core bore sampling using a vacuum based core drill with 3" diameter diamond bit.

The core bores once obtained will be handled as follows:

- a) Marked for location and orientation to cell surface and placed in clean plastic wrapper
- b) Moved to a low background area
- c) Drawing developed to depict measurements and wafer locations
- d) Direct beta measurements performed on each end
- e) Axial gamma scan performed along length of core bore with collimated NaI(Tl) detector to indicate depth of activation
- f) Core will be sliced into approximate 0.5 inch thick slices (pucks)
- g) Pucks will be marked for location and have direct alpha and beta measurements performed on each end
- h) Step e. and f. will be repeated until direct measurement results are indistinguishable from background levels
- i) Results of data evaluations will be used to determine pucks to send to offsite laboratory for further isotopic analysis

The samples will be packaged and field screened by the project team personnel, chain of custody forms and sample shipping paperwork completed, and sent to the offsite AREVA E-Lab for analysis.

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7. G-Spec Sample

G-Spec Material Sample, for sump and storage tube locations

If available, collect a sample from each location composed of loose materials, sediment or sludge to combine for one or two composite samples for gamma spectral analysis.

The samples in order of priority are as follows:

1 to 2 kg Soil/Sediment Samples for Gamma Spectroscopy, if an amount to produce ≥ 125 g of dry sample cannot be obtained, collect materials for a composite sample for the survey unit.

The sample may include a bulk material sample for a petri dish and/or 250 ml marinelli beaker sample.

To achieve the analysis MDC desired, the laboratory requested sample sizes (an amount of soil) that will yield 500 grams of dried soil. The wet soil amount can vary significantly depending on its moisture content. If the desired sample size cannot be obtained, the minimum sample size to achieve an analysis MDC is an amount of wet soil (~1 kg) that will produce 125g of dried soil.

If an amount to produce 125g of dried soil cannot be obtained, combine and analyze by gamma spectroscopy smear sample results showing > 100 alpha or > 1000 beta dpm/100cm².

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Survey Package Location Codes

Survey Package Number C4024 101C1 **Package Type:** Structure

LC1: C4024 **Survey Area Name:** SETF, Building 4024

LC2: 101C1 **Survey Unit Name:** SGTCC Test Cell B-102

Class Description: Impacted Class 1 Structure

Reason Description: C1 Characterization Survey

LC3_P1-3 and Surface Category: CL3 Ceiling surfaces (including back surfaces)

LC3_P45 Material Description

G1 Miscellaneous Material

M1 Metal

C1 Concrete (Bare)

LC4_P13 - Detector Type, Analysis Codes, and Measurement/Samples Quantity

Measurement	LC4 P13 Code	Model	Description	Qty Prescribed	Qty Collected	Collected By (Initials)
A/B Smear	L01	A/B Smear Analysis	Alpha/Beta Counter	3	3	W/A
Contact Gamma	G01	44-10	2"x2" NaI(Tl) Gamma Scintillator	3	3	
Direct Alpha	A04	43-89A	Alpha Scintillator	3	3	
	A03	43-90	Alpha Scintillator			
Direct Beta	B14	43-89B	Beta Scintillator	3	3	
	B02	44-116	Beta Scintillator			
G-Spec Sample	L05	GS Corebore Analysis	Gamma Spectrometry	3	0	

LC3_P1-3 and Surface Category: FL1 Floor Surface

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LC1: C4024 Survey Area Name: SETF. Building 4024

LC2: 101C1 Survey Unit Name: SGTCC Test Cell B-102

Class Description: Impacted Class 1 Structure

Reason Description: C1 Characterization Survey

LC3_P45 Material Description

C1 Concrete (Bare)
 G1 Miscellaneous Material
 M1 Metal

LC4_P13 - Detector Type, Analysis Codes, and Measurement/Samples Quantity

Measurement	LC4 P13 Code	Model	Description	Qty Prescribed	Qty Collected	Collected By (Initials)
A/B Smear	L01	A/B Smear Analysis	Alpha/Beta Counter	3	3	N/A
Contact Gamma	G01	44-10	2"x2" NaI(Tl) Gamma Scintillator	3	3	
Direct Alpha	A04	43-89A	Alpha Scintillator	3	3	
	A03	43-90	Alpha Scintillator			
Direct Beta	B14	43-89B	Beta Scintillator	3	3	
	B02	44-116	Beta Scintillator			
G-Spec Sample	L05	GS Corebore Analysis	Gamma Spectrometry	3	0	

LC3_P1-3 and Surface Category: SM1 Sump or Storage Tubes

LC3_P45 Material Description

G1 Miscellaneous Material

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LC1: C4024 **Survey Area Name:** SETF Building 4024

LC2: 101C1 **Survey Unit Name:** SGTCC Test Cell B-102

Class Description: Impacted Class 1 Structure

Reason Description: C1 Characterization Survey

C2 Concrete (Painted)

M1 Metal

C1 Concrete (Bare)

LC4_P13 - Detector Type, Analysis Codes, and Measurement/Samples Quantity

Measurement	LC4 P13 Code	Model	Description	Qty Prescribed	Qty Collected	Collected By (Initials)
A/B Smear	L01	A/B Smear Analysis	Alpha/Beta Counter	6	6	N/A
Direct Alpha	A04	43-89A	Alpha Scintillator	6	6	[Signature]
	A03	43-90	Alpha Scintillator			
Direct Beta	B14	43-89B	Beta Scintillator	6	6	
	B02	44-116	Beta Scintillator			
G-Spec Sample	L04	GS Material Analysis	Gamma Spectrometry	2	2	[Signature]

LC3_P1-3 and Surface Category: WL1 Lower Wall Surfaces

LC3_P45 Material Description

C1 Concrete (Bare)

G1 Miscellaneous Material

M1 Metal

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LC2: 101C1	Survey Unit Name: SGTCC Test Cell B-102		
	Class Description: Impacted Class 1 Structure		
	Reason Description: C1 Characterization Survey		

LC4_P13 - Detector Type, Analysis Codes, and Measurement/Samples Quantity

Measurement	LC4 P13 Code	Model	Description	Qty Prescribed	Qty Collected	Collected By (Initials)
A/B Smear	L01	A/B Smear Analysis	Alpha/Beta Counter	6	6	N/A
Contact Gamma	G01	44-10	2"x2" NaI(Tl) Gamma Scintillator	6	6	[Signature]
Direct Alpha	A04	43-89A	Alpha Scintillator	6	6	
	A03	43-90	Alpha Scintillator	6	6	
Direct Beta	B14	43-89B	Beta Scintillator	6	6	
	B02	44-116	Beta Scintillator	6	6	
G-Spec Sample	L05	GS Corebore Analysis	Gamma Spectrometry	6	6	[Signature]

LC3_P1-3 and Surface Category: WU1 Upper Wall Surfaces

LC3_P45 Material Description

M1	Metal
C1	Concrete (Bare)
G1	Miscellaneous Material

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Survey Package Number C4024 101C1 **Package Type:** **Structure**

LC1: C4024 **Survey Area Name:** SETF Building 4024

LC2: 101C1 **Survey Unit Name:** SGTCC Test Cell B-102

Class Description: Impacted Class 1 Structure

Reason Description: C1 Characterization Survey

LC4_P13 - Detector Type, Analysis Codes, and Measurement/Samples Quantity

Measurement	LC4 P13 Code	Model	Description	Qty Prescribed	Qty Collected	Collected By (Initials)
A/B Smear	L01	A/B Smear Analysis	Alpha/Beta Counter	6	6	W/A
Contact Gamma	G01	44-10	2"x2" NaI(Tl) Gamma Scintillator	6	6	
Direct Alpha	A04	43-89A	Alpha Scintillator	6	6	
	A03	43-90	Alpha Scintillator			
Direct Beta	B14	43-89B	Beta Scintillator	6	6	
	B02	44-116	Beta Scintillator			
G-Spec Sample	L05	GS Corebore Analysis	Gamma Spectrometry	6	6	

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Survey Package Location Codes

Survey Package Number C4024 101C1	Package Type:	Structure
-----------------------------------	---------------	-----------

LC1: C4024 Survey Area Name: SETF Building 4024

LC2: 101C1 Survey Unit Name: SGTCC Test Cell B-102

Class Description: Impacted Class 1 Structure

Reason Description: C1 Characterization Survey

LC4_P4 - Count Type

LC4_P5 - Background Mode Codes

A Pre-use Background Check
B Pre-use Source Check
C Post-use Background Check
D Post-use Source Check
F Field Count
G Field Background
S Field Scan

A Average Background
N Background Not Required
S Single Background

Survey Field Notes: Additional information regarding the performance of the survey, measurements, sample collection, etc. Use additional pages as needed for field notes.

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Survey Package Appendix A – Drawings

Survey Package: C4024 101C1

Package: Structure

Survey Area Name: SETF, Building 4024

Survey Unit Name: SGTCC Test Cell B-102

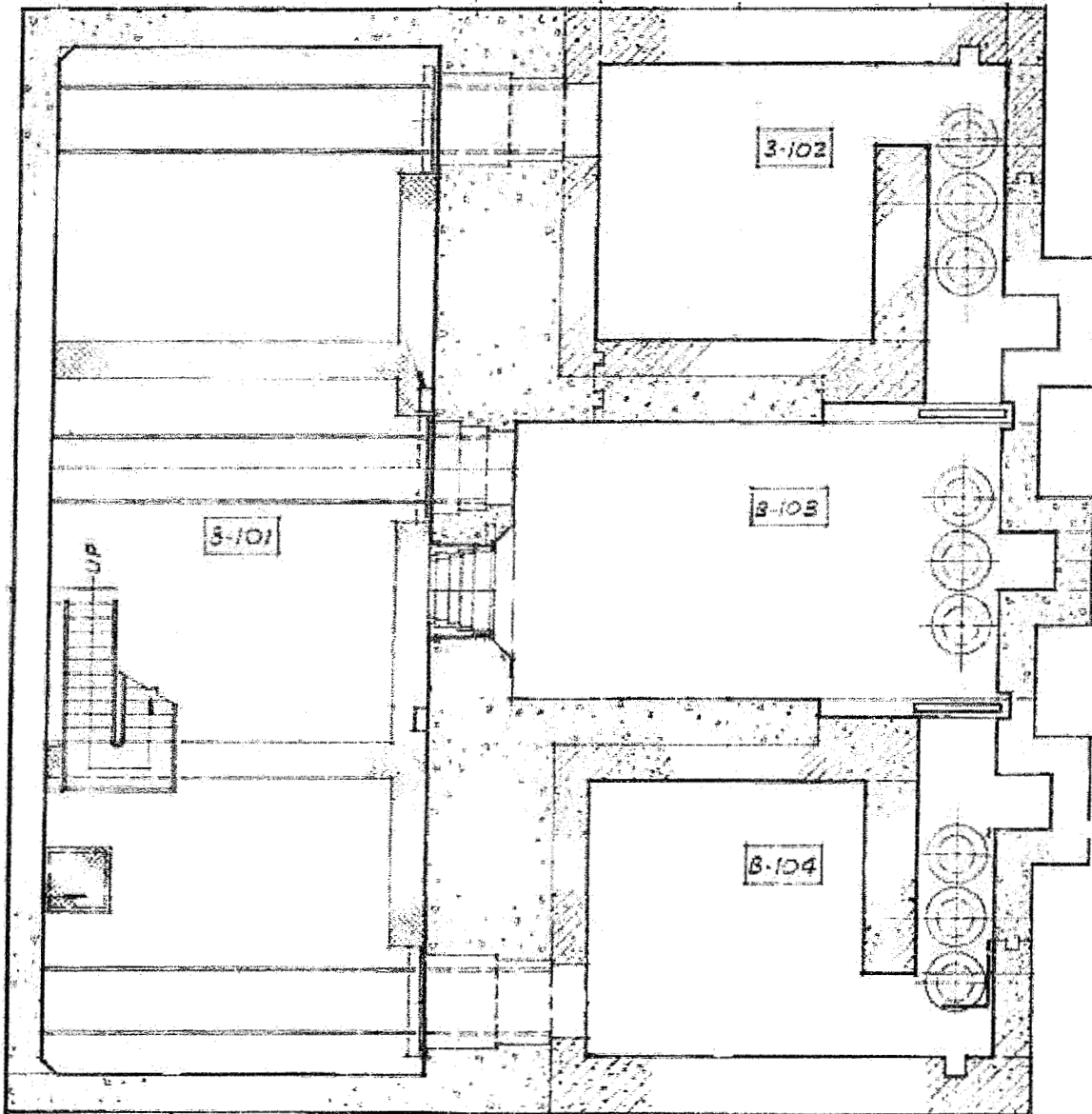
Survey Package Appendix A - Drawings

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA

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Survey Package Appendix A – Drawings



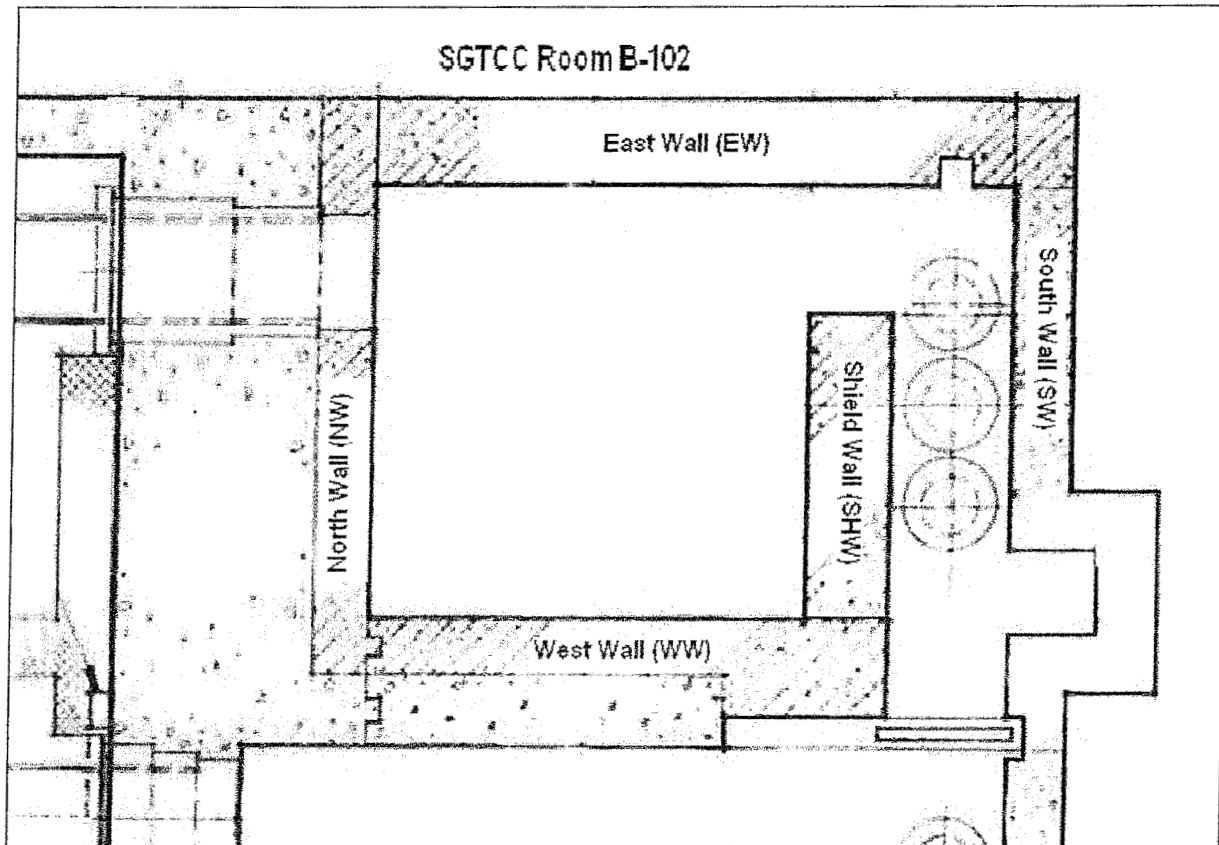
SETF, Basement Floor Plan (SGTCC)

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA

4/20/2007

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Survey Package Appendix A – Drawings

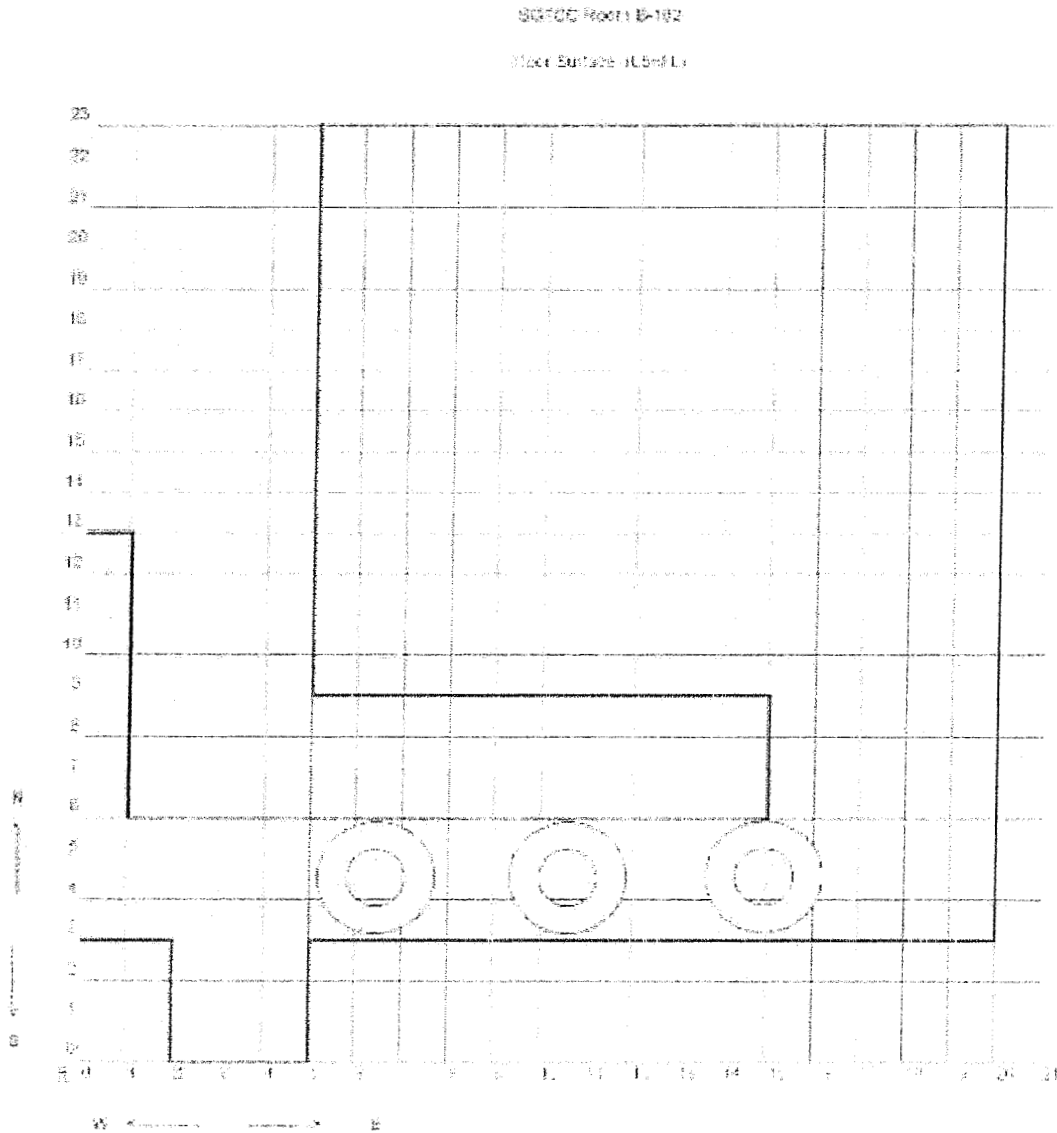


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Survey Package Appendix A – Drawings



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA

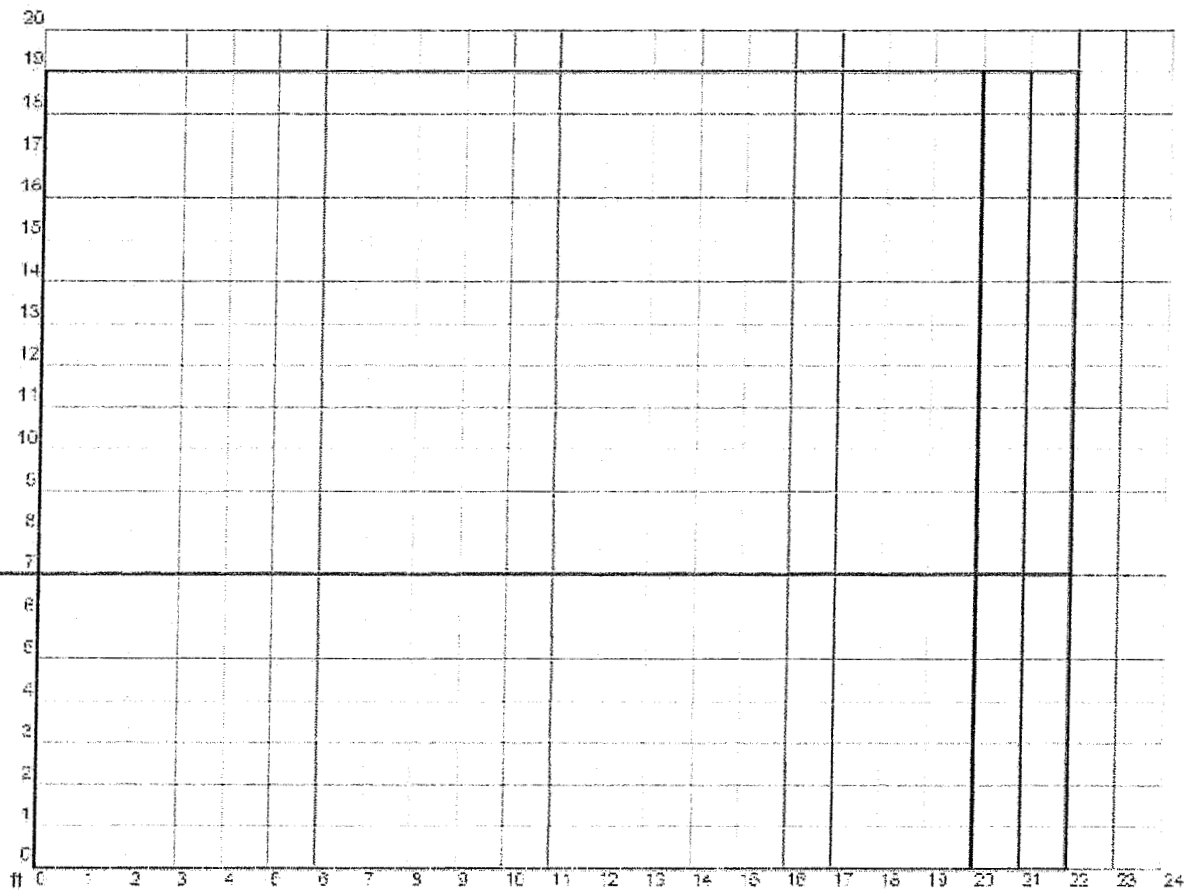
4/20/2007

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Survey Package Appendix A – Drawings

SGTCC Room B-102
East Wall (L5=EW)

4/20/2007



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CANOGA PARK, CALIFORNIA

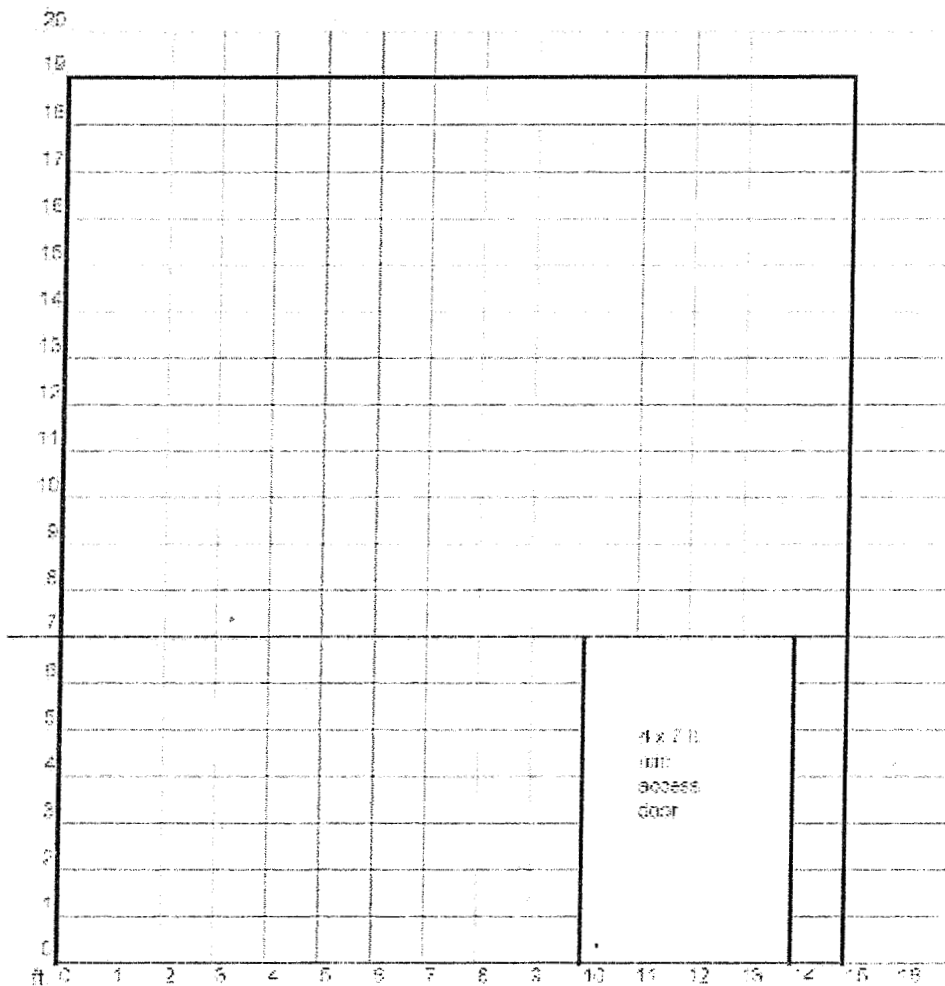
4/20/2007

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Survey Package Appendix A – Drawings

SGTCC Room B-102
North Wall (L5=NW)

4/20/2007



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CANOGA PARK, CALIFORNIA

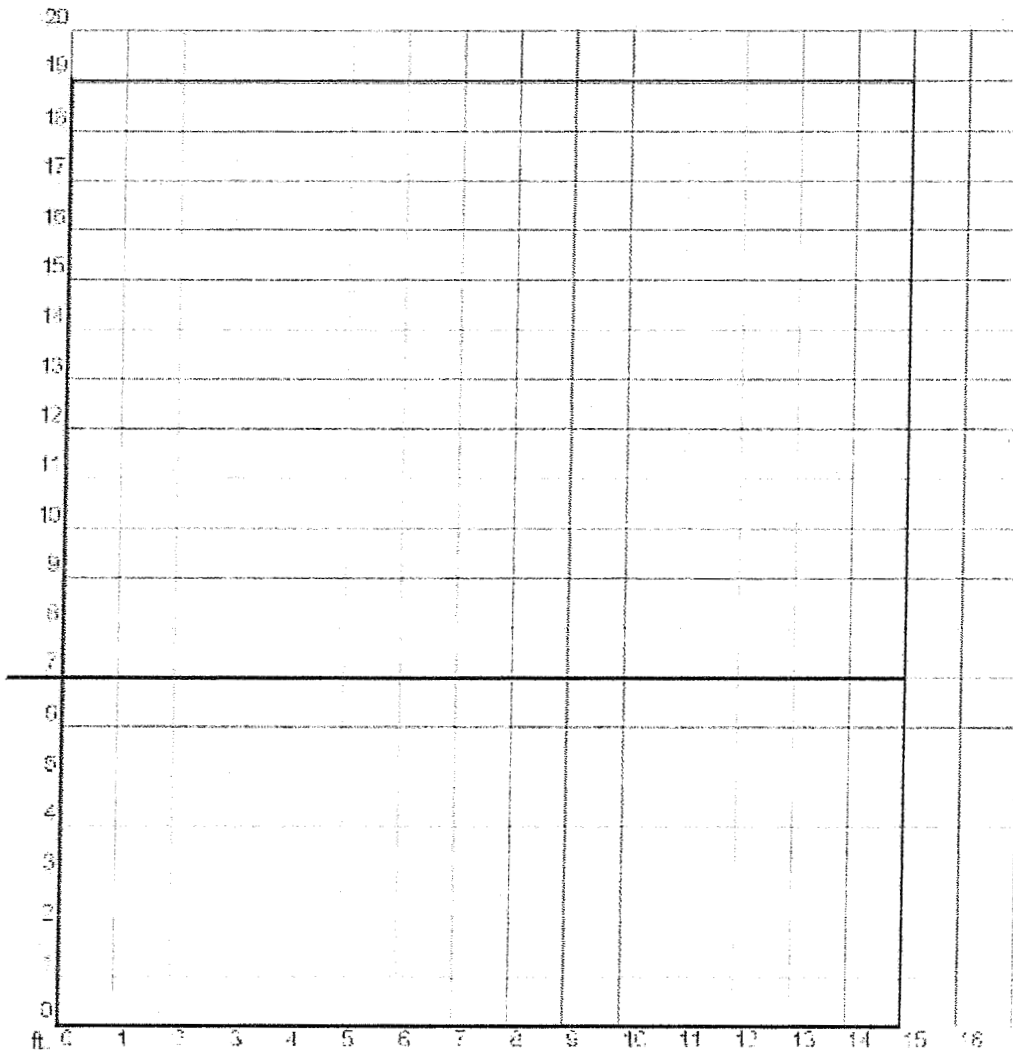
4/20/2007

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Survey Package Appendix A – Drawings

SGTCC Room B-102
West Wall (L5=WW)

4/20/2007



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CANOGA PARK, CALIFORNIA

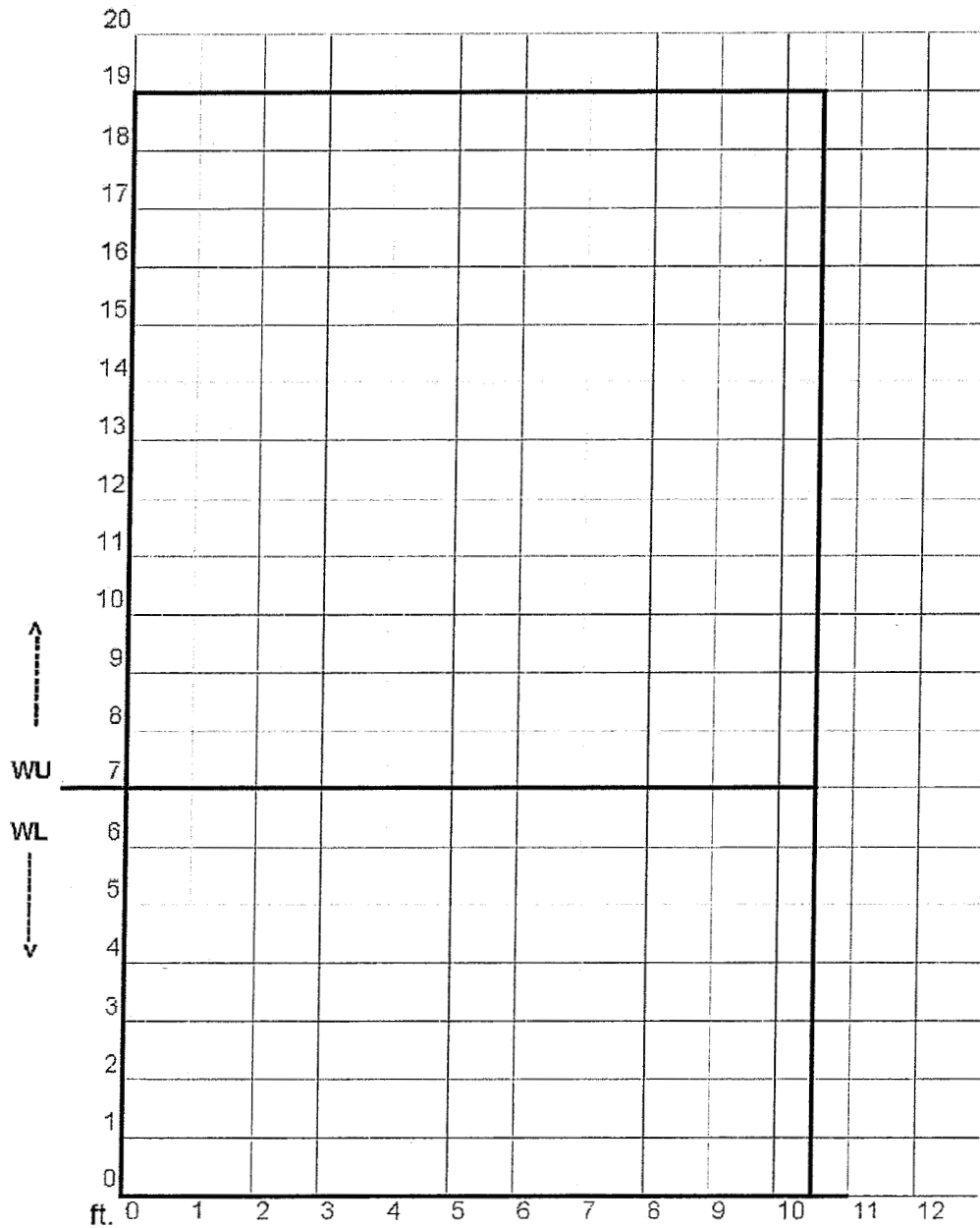
4/20/2007

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Survey Package Appendix A – Drawings

SGTCC Room B-102

Shield Wall (L5=SHW)



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CANOGA PARK, CALIFORNIA

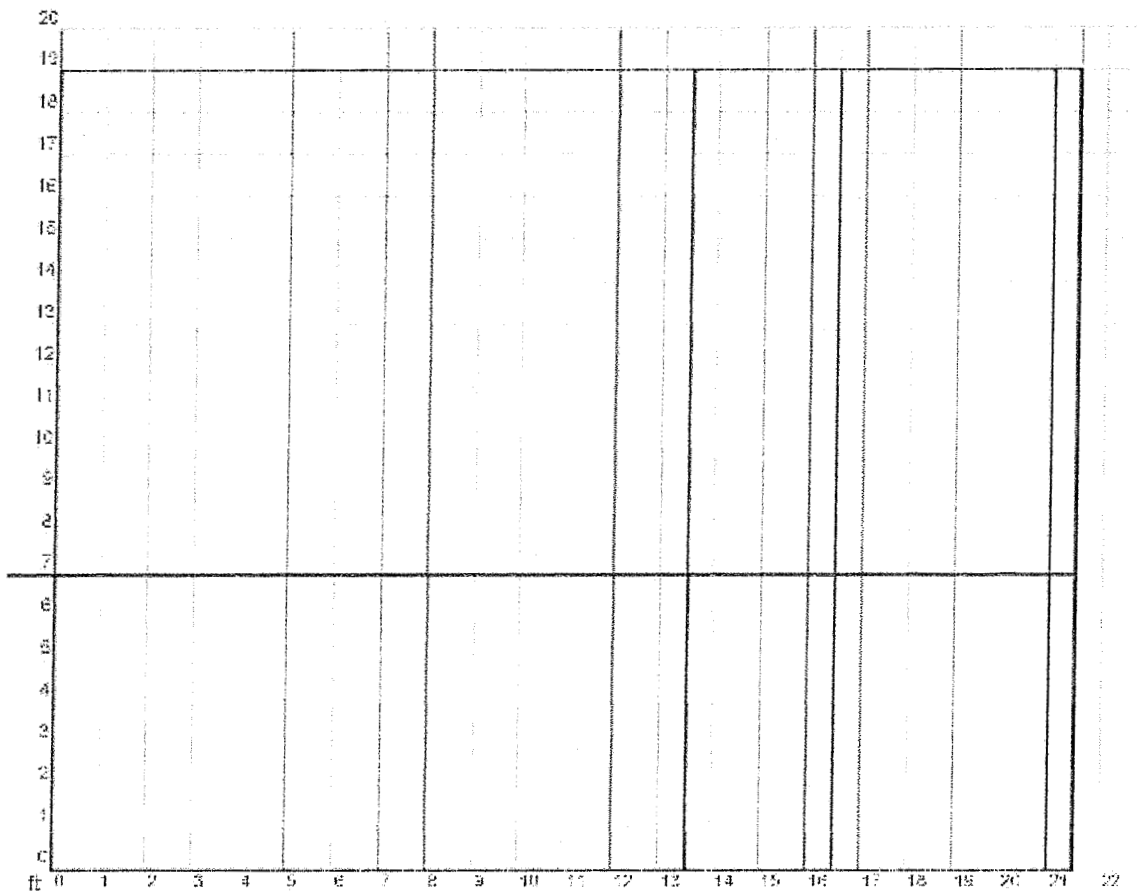
4/20/2007

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Survey Package Appendix A – Drawings

SGTCC Room B-102
South Wall (L5=SW)

4/20/2007



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Survey Package Appendix B – Photographs

Survey Package: C4024 101C1

Package: Structure

Survey Area Name: SETF, Building 4024

Survey Unit Name: SGTCC Test Cell B-102

Survey Package Appendix B - Photographs

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CANOGA PARK, CALIFORNIA**

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Survey Package Appendix B – Photographs

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Survey Package Appendix C – Survey Results

Survey Package: C4024 101C1
Survey Area Name: SETF, Building 4024
Survey Unit Name: SGTCC Test Cell B-102

Package: Structure

Section	Title	Total Pages
1.0	Annotated Drawings	<u>5</u>
2.0	Measurement Results – Direct Beta Measurements	<u>6</u>
3.0	Measurement Results – Direct Alpha Measurements	<u>5</u>
4.0	Measurement Results – Exposure Rate Measurements	<u>3</u>
5.0	Sample Analysis Results – Alpha/Beta Counter	<u>9</u>
6.0	Sample Analysis Results – Gamma Spectroscopy	<u>φ</u>
7.0	Sample Analysis Results – Alpha Spectroscopy	<u>φ</u>

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA**

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Survey Package Appendix C – Survey Results

Survey Package: C4024 101C1
Survey Area Name: SETF, Building 4024
Survey Unit Name: SGTCC Test Cell B-102

Package: Structure

**Section 1.0
Annotated Drawings
5 Pages**

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CANOGA PARK, CALIFORNIA

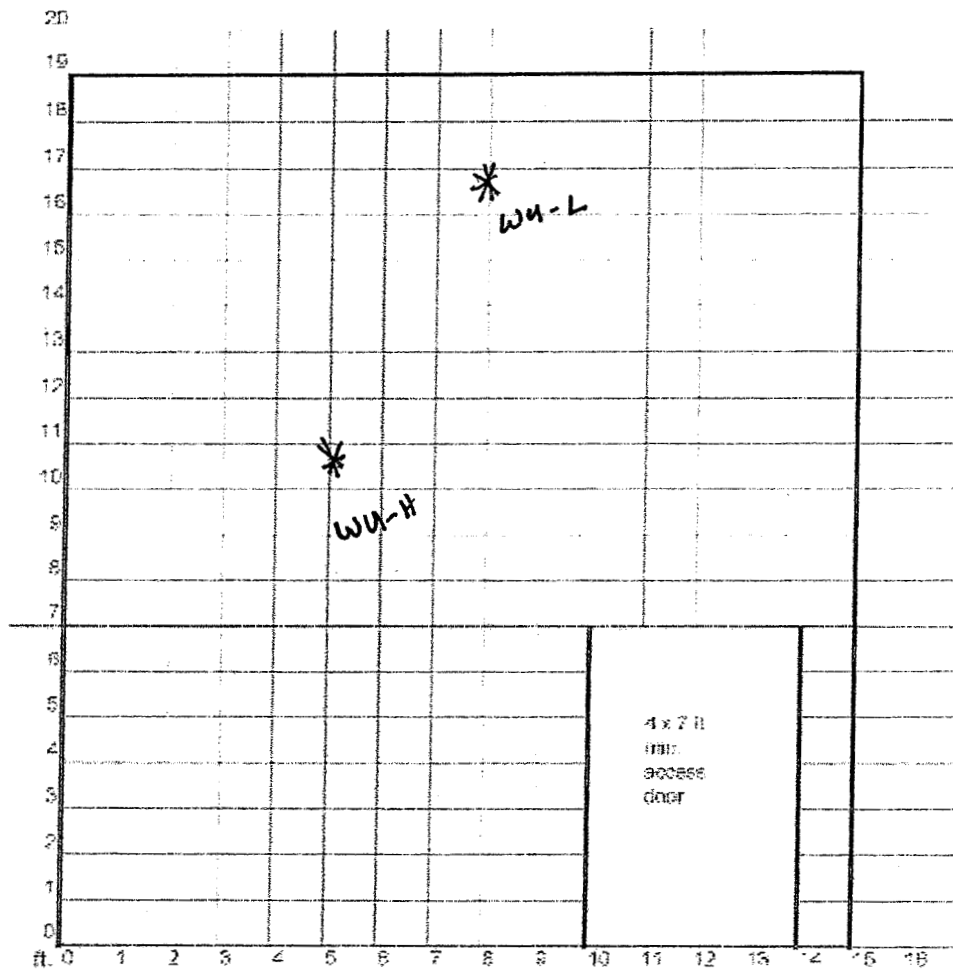
4/20/2007

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Survey Package Appendix A – Drawings

SGTCC Room B-102
North Wall (L5=NW)

4/20/2007



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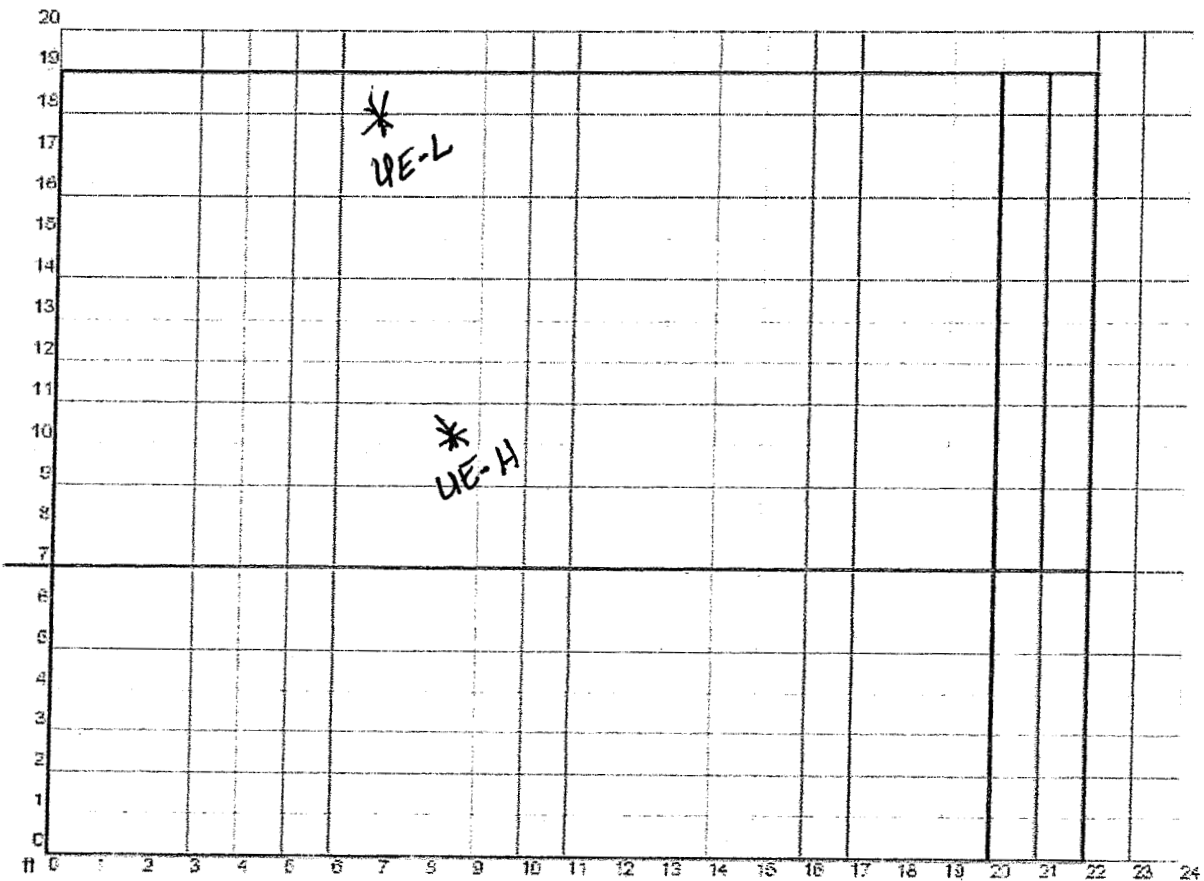
4/20/2007

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Survey Package Appendix A – Drawings

SGTCC Room B-102
East Wall (L5=EW)

4/20/2007



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CANOGA PARK, CALIFORNIA

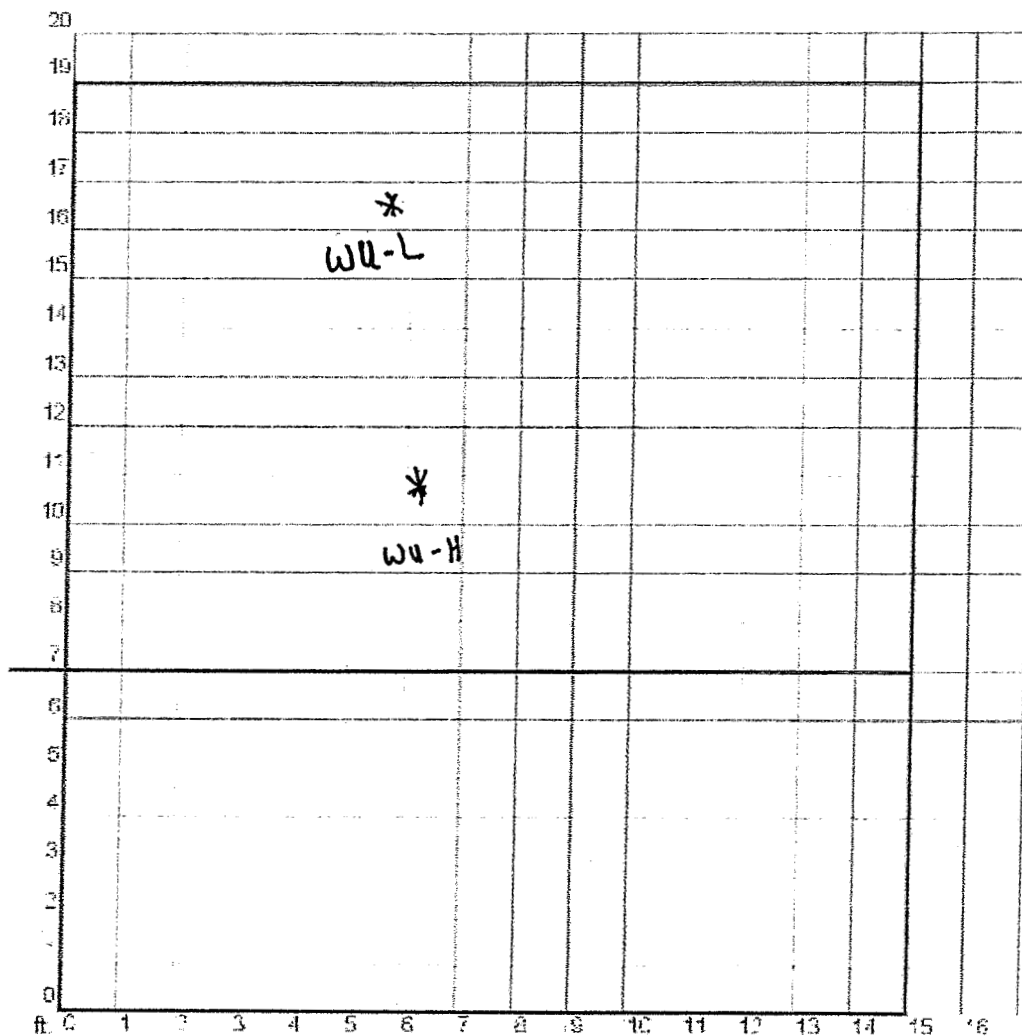
4/20/2007

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Survey Package Appendix A – Drawings

SGTCC Room B-102
West Wall (L5=WW)

4/20/2007

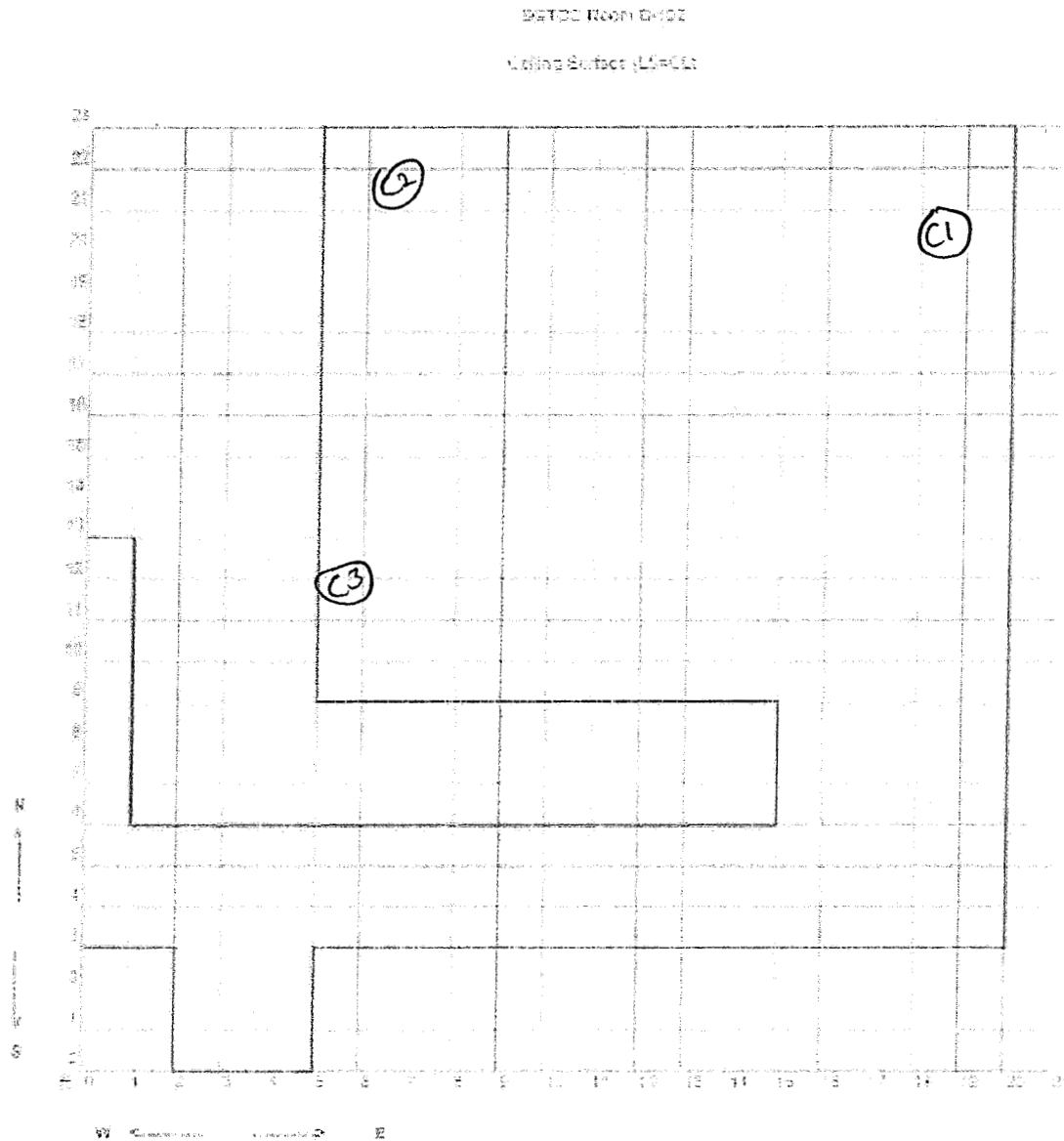


SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Survey Package Appendix A – Drawings



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Survey Package Appendix C – Survey Results

Survey Package: C4024 101C1
Survey Area Name: SETF, Building 4024
Survey Unit Name: SGTCC Test Cell B-102

Package: Structure

**Section 2.0
Measurement Results – Direct Beta Measurements
6 Pages**

Measurement Database Download Report

Direct Beta Measurements

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4/25/2007

Download ID	Station Number	User ID	Download Date	Download Time	Survey Package ID	Detector Model Number	Detector Serial Number	4 pi Beta Efficiency	ActiveArea (cm2)												
DL042007-001	1	JEJ5742	4/20/2007	11:51 AM	C4024 101C1	44-116	222981	0.146	125												
Package ID	M2350 Serial Number	User ID	Detector Serial Number	Detector Setup Number	Sample No	Date	Time	Logged Count	Count Time (secs)	Logging Mode	Window On/Off	Scaler Alarm	LC1	LC2	LC3	LC4	LC5	LC6	L7	Measurement Location Number	Gross Beta (dpm/100cm2)
EZ259 DRT01	98648	JEJ5742	222981	0	0	4/20/2007	8:46:24 AM	2.45E+03	600	1	0	22	EZ259	DRT01	WL1M1	B02AA	LAB01	1		0	1344
EZ259 DRT01	98648	JEJ5742	222981	0	1	4/20/2007	9:10:50 AM	3.48E+03	60	1	0	22	EZ259	DRT01	WL1M1	B02BA	LAB01	1		0	19079
EZ259 DRT01	98648	JEJ5742	222981	0	2	4/20/2007	9:12:20 AM	3.65E+03	60	1	0	22	EZ259	DRT01	WL1M1	B02BA	LAB01	2		0	20011
EZ259 DRT01	98648	JEJ5742	222981	0	3	4/20/2007	9:14:08 AM	3.40E+03	60	1	0	22	EZ259	DRT01	WL1M1	B02BA	LAB01	3		0	18608
40243 101C1	98648	JEJ5742	222981	3	4	4/20/2007	10:06:08 AM	1.71E+03	60	1	0	22	4024	101C1	WL1M1	B02GA	WL1	1		0	9359
40243 101C1	98648	JEJ5742	222981	3	5	4/20/2007	10:07:18 AM	1.67E+03	60	1	0	22	4024	101C1	WL1M1	B02GA	WL1	2		0	9123
40243 101C1	98648	JEJ5742	222981	3	6	4/20/2007	10:08:48 AM	1.64E+03	60	1	0	22	4024	101C1	WL1M1	B02GA	WL1	3		0	8964
40243 101C1	98648	JEJ5742	222981	3	7	4/20/2007	10:11:52 AM	2.62E+03	60	1	0	22	4024	101C1	WL1M1	B02FA	WH1	1		0	14362
40243 101C1	98648	JEJ5742	222981	3	8	4/20/2007	10:14:02 AM	1.77E+03	60	1	0	22	4024	101C1	WL1M1	B02FA	NH1	1		0	9704
40243 101C1	98648	JEJ5742	222981	3	9	4/20/2007	10:17:04 AM	2.67E+03	60	1	0	22	4024	101C1	WL1M1	B02FA	SH1	1		0	14636
40243 101C1	98648	JEJ5742	222981	3	10	4/20/2007	10:18:56 AM	1.34E+03	60	1	0	22	4024	101C1	WL1M1	B02FA	WL1	1		0	7315
40243 101C1	98648	JEJ5742	222981	3	11	4/20/2007	10:21:24 AM	9.47E+02	60	1	0	22	4024	101C1	WL1M1	B02FA	EL1	1		0	5189
40243 101C1	98648	JEJ5742	222981	3	12	4/20/2007	10:23:12 AM	1.30E+03	60	1	0	22	4024	101C1	WL1M1	B02FA	EL2	2		0	7118
40243 101C1	98648	JEJ5742	222981	3	13	4/20/2007	10:26:24 AM	1.74E+03	60	1	0	22	4024	101C1	WL1M1	B02GA	WL1	1		0	9512
40243 101C1	98648	JEJ5742	222981	3	14	4/20/2007	10:27:56 AM	1.66E+03	60	1	0	22	4024	101C1	WL1M1	B02GA	WL1	2		0	9090
40243 101C1	98648	JEJ5742	222981	3	15	4/20/2007	10:29:14 AM	1.76E+03	60	1	0	22	4024	101C1	WL1M1	B02GA	WL1	3		0	9638
EZ259 DRT02	98648	JEJ5742	222981	3	17	4/20/2007	11:05:36 AM	2.37E+03	600	1	0	22	EZ259	DRT02	WL1M1	B02CA	LAB01	1		0	1298
EZ259 DRT02	98648	JEJ5742	222981	0	18	4/20/2007	11:14:48 AM	3.34E+03	60	1	0	22	EZ259	DRT02	WL1M1	B02DA	LAB01	1		0	18318

Measurement Database Download Report

Direct Beta Measurements

4/25/2007

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Download ID	Station Number	User ID	Download Date	Download Time	Survey Package ID	Detector Model Number	Detector Serial Number	4 pi Beta Efficiency	ActiveArea (cm2)												
DL042007-001	1	JEJ5742	4/20/2007	11:51 AM	C4024 101C1	44-116	222981	0.146	125												
Package ID	M2350 Serial Number	User ID	Detector Serial Number	Detector Setup Number	Sample No	Date	Time	Logged Count	Count Time (secs)	Logging Mode	Window On/Off	Scaler Alarm	LC1	LC2	LC3	LC4	LC5	LC6	L7	Measurement Location Number	Gross Beta (dpm/100cm2)
EZ259 DRT02	98648	JEJ5742	222981	0	19	4/20/2007	11:16:16 AM	3.71E+03	60	1	0	22	EZ259	DRT02	WL1M1	B02DA	LAB01	2		0	20323
EZ259 DRT02	98648	JEJ5742	222981	0	20	4/20/2007	11:17:44 AM	3.32E+03	60	1	0	22	EZ259	DRT02	WL1M1	B02DA	LAB01	3		0	18214

Reviewed By: J. JohnsonDate: 4/26/07Approved By: [Signature]Date: 4/26/07

Measurement Database Download Report

Direct Beta Measurements

4/25/2007

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Download ID	Station Number	User ID	Download Date	Download Time	Survey Package ID	Detector Model Number	Detector Serial Number	4 pi Beta Efficiency	ActiveArea (cm2)												
DL042007-003	1	JEJ5742	4/20/2007	2:45 PM	C4024 101C1	44-116	222981	0.146	125												
Package ID	M2350 Serial Number	User ID	Detector Serial Number	Detector Setup Number	Sample No	Date	Time	Logged Count	Count Time (secs)	Logging Mode	Window On/Off	Scaler Alarm	LC1	LC2	LC3	LC4	LC5	LC6	L7	Measurement Location Number	Gross Beta (dpm/100cm2)
EZ259 DRT01	98648	JEJ5742	222981	3	0	4/20/2007	1:03:06 PM	2.38E+03	600	1	0	24	EZ259	DRT01	FL1M1	B02AA	LAB01	1		0	1304
EZ259 DRT01	98648	JEJ5742	222981	3	1	4/20/2007	1:13:02 PM	3.31E+03	60	1	0	24	EZ259	DRT01	FL1M1	B02BA	LAB01	1		0	18115
EZ259 DRT01	98648	JEJ5742	222981	3	2	4/20/2007	1:15:16 PM	3.51E+03	60	1	0	24	EZ259	DRT01	FL1M1	B02BA	LAB01	2		0	19227
EZ259 DRT01	98648	JEJ5742	222981	3	3	4/20/2007	1:16:46 PM	3.33E+03	60	1	0	24	EZ259	DRT01	FL1M1	B02BA	LAB01	3		0	18236
C4024 101C1	98648	JEJ5742	222981	3	4	4/20/2007	1:33:50 PM	2.09E+03	60	1	0	24	C4024	101C1	FL1M1	B02GA	FL1	1		0	11430
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C4024 101C1	98648	JEJ5742	222981	3	6	4/20/2007	1:36:24 PM	2.02E+03	60	1	0	24	C4024	101C1	FL1M1	B02GA	FL1	3		0	11090
C4024 101C1	98648	JEJ5742	222981	3	7	4/20/2007	1:39:02 PM	2.04E+03	60	1	0	24	C4024	101C1	FL1M1	B02FA	FL1H1	1		0	11156
C4024 101C1	98648	JEJ5742	222981	3	8	4/20/2007	1:41:32 PM	1.62E+03	60	1	0	24	C4024	101C1	FL1M1	B02FA	FL1H2	2		0	8849
C4024 101C1	98648	JEJ5742	222981	3	9	4/20/2007	1:44:02 PM	8.23E+02	60	1	0	24	C4024	101C1	FL1M1	B02FA	FL1L1	3		0	4510
C4024 101C1	98648	JEJ5742	222981	3	10	4/20/2007	1:47:28 PM	2.13E+03	60	1	0	24	C4024	101C1	FL1M1	B02GA	FL1	4		0	11644
C4024 101C1	98648	JEJ5742	222981	3	11	4/20/2007	1:48:44 PM	2.06E+03	60	1	0	24	C4024	101C1	FL1M1	B02GA	FL1	5		0	11282
C4024 101C1	98648	JEJ5742	222981	3	12	4/20/2007	1:50:00 PM	2.20E+03	60	1	0	24	C4024	101C1	FL1M1	B02GA	FL1	6		0	12044
EZ259 DRT02	98648	JEJ5742	222981	3	13	4/20/2007	2:23:00 PM	2.38E+03	600	1	0	24	EZ259	DRT02	FL1M1	B02CA	LAB01	1		0	1306
EZ259 DRT02	98648	JEJ5742	222981	3	14	4/20/2007	2:31:08 PM	3.42E+03	60	1	0	24	EZ259	DRT02	FL1M1	B02DA	LAB01	1		0	18740
EZ259 DRT02	98648	JEJ5742	222981	3	15	4/20/2007	2:32:40 PM	3.51E+03	60	1	0	24	EZ259	DRT02	FL1M1	B02DA	LAB01	2		0	19255
EZ259 DRT02	98648	JEJ5742	222981	3	16	4/20/2007	2:34:12 PM	3.26E+03	60	1	0	24	EZ259	DRT02	FL1M1	B02DA	LAB01	3		0	17847

Reviewed By: J Johnson

Date: 4/26/07

Approved By:

J. M. G. G. G.

Date:

4/26/07

Measurement Database Download Report

Direct Beta Measurements

5/1/2007

Download ID	Station Number	User ID	Download Date	Download Time	Survey Package ID	Detector Model Number	Detector Serial Number	4 pi Beta Efficiency	ActiveArea (cm2)
DL043007-003	2	JLM3848	4/30/2007	4:39 PM	C4024 101C1	44-116	222981	0.146	125

Package ID	M1250 Serial Number	User ID	Detector Serial Number	Detector Setup Number	Sample No	Date	Time	Logged Count	Count Time (sec)	Logging Mode	Window On/Off Alarm	LC1	LC2	LC3	LC4	LC5	LC6	LC7	Measurement Location Number	Gross Beta (dpm/100cm2)
------------	---------------------	---------	------------------------	-----------------------	-----------	------	------	--------------	------------------	--------------	---------------------	-----	-----	-----	-----	-----	-----	-----	-----------------------------	-------------------------

EZ259 DRT01	98648	JLW1061	222981	0	1	4/30/2007	10:57:44 AM	2,50E+03	600	1	0	35	EZ259	DRT01	WU1M1	B02AA	LAB01	1	0	1369
EZ259 DRT01	98648	JLW1061	222981	0	1	4/30/2007	11:33:46 AM	3,34E+03	60	1	0	35	EZ259	DRT01	WU1M1	B02BA	LAB01	1	0	18290
EZ259 DRT01	98648	JLW1061	222981	0	2	4/30/2007	11:35:40 AM	3,56E+03	60	1	0	35	EZ259	DRT01	WU1M1	B02BA	LAB01	2	0	19490
EZ259 DRT01	98648	JLW1061	222981	0	3	4/30/2007	11:37:12 AM	3,26E+03	60	1	0	35	EZ259	DRT01	WU1M1	B02BA	LAB01	3	0	17874
C40241 101C1	98648	JLW1061	222981	0	4	4/30/2007	12:32:16 PM	1,06E+03	60	1	0	35	C4024	101C1	CL1M1	B02GS	CL1	1	0	5781
C40241 101C1	98648	JLW1061	222981	0	5	4/30/2007	12:34:36 PM	1,12E+03	60	1	0	35	C4024	101C1	CL1M1	B02FS	CL1	1	0	6153
C40241 101C1	98648	JLW1061	222981	0	6	4/30/2007	12:45:20 PM	1,06E+03	60	1	0	35	C4024	101C1	WU1M1	B02GS	NWL	1	0	5781
C40241 101C1	98648	JLW1061	222981	0	7	4/30/2007	12:47:18 PM	9,96E+02	60	1	0	35	C4024	101C1	WU1M1	B02FS	NWL	1	0	5458
C40241 101C1	98648	JLW1061	222981	0	8	4/30/2007	1:11:02 PM	1,52E+03	60	1	0	35	C4024	101C1	WU1M1	B02GS	NWH	1	0	8318
C40241 101C1	98648	JLW1061	222981	0	9	4/30/2007	1:12:32 PM	1,59E+03	60	1	0	35	C4024	101C1	WU1M1	B02FS	NWH	1	0	8729
C40241 101C1	98648	JLW1061	222981	0	10	4/30/2007	1:21:40 PM	1,73E+03	60	1	0	35	C4024	101C1	WU1M1	B02GS	WWH	1	0	9474
C40241 101C1	98648	JLW1061	222981	0	11	4/30/2007	1:23:00 PM	1,75E+03	60	1	0	35	C4024	101C1	WU1M1	B02FS	WWH	1	0	9567
C40241 101C1	98648	JLW1061	222981	0	12	4/30/2007	1:30:52 PM	1,15E+03	60	1	0	35	C4024	101C1	WU1M1	B02GS	WWL	1	0	6323
C40241 101C1	98648	JLW1061	222981	0	13	4/30/2007	1:32:16 PM	1,16E+03	60	1	0	35	C4024	101C1	WU1M1	B02FS	WWL	1	0	6351
C40241 101C1	98648	JLW1061	222981	0	14	4/30/2007	1:39:34 PM	1,07E+03	60	1	0	35	C4024	101C1	CL1M1	B02GS	CL2	1	0	5847
C40241 101C1	98648	JLW1061	222981	0	15	4/30/2007	1:41:02 PM	1,11E+03	60	1	0	35	C4024	101C1	CL1M1	B02FS	CL2	1	0	6077
C40241 101C1	98648	JLW1061	222981	0	16	4/30/2007	1:54:00 PM	1,37E+03	60	1	0	35	C4024	101C1	WU1M1	B02GS	EVH	1	0	7496
C40241 101C1	98648	JLW1061	222981	0	17	4/30/2007	1:55:30 PM	1,49E+03	60	1	0	35	C4024	101C1	WU1M1	B02FS	EVH	1	0	8181
C40241 101C1	98648	JLW1061	222981	0	18	4/30/2007	2:06:26 PM	1,03E+03	60	1	0	35	C4024	101C1	WU1M1	B02GS	EWL	1	0	5633

Measurement Database Download Report

Direct Beta Measurements

5/1/2007

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Download ID	Station Number	User ID	Download Date	Download Time	Survey Package ID	Detector Model Number	Detector Serial Number	4 pi Beta Efficiency	ActiveArea (cm2)												
DL043007-003	2	JLM3848	4/30/2007	4:39 PM	C4024 101C1	44-116	222981	0.146	125												
Package ID	M2350 Serial Number	User ID	Detector Serial Number	Detector Setup Number	Sample No	Date	Time	Logged Count	Count Time (secs)	Logging Mode	Window On/Off	Scaler Alarm	LC1	LC2	LC3	LC4	LC5	LC6	L7	Measurement Location Number	Gross Beta (dpm/100cm2)
C40241 101C1	98648	JLW1061	222981	0	19	4/30/2007	2:07:56 PM	9.55E+02	60	1	0	35	C4024	101C1	WU1M1	B02FS	EWL	1		0	5233
C40241 101C1	98648	JLW1061	222981	0	20	4/30/2007	2:18:24 PM	9.52E+02	60	1	0	35	C4024	101C1	CL1M1	B02GS	CL3	1		0	5216
C40241 101C1	98648	JLW1061	222981	0	21	4/30/2007	2:19:50 PM	1.05E+03	60	1	0	35	C4024	101C1	CL1M1	B02FS	CL3	1		0	5775
EZ259 DRT02	98648	JLW1061	222981	0	22	4/30/2007	3:08:56 PM	2.73E+03	600	1	0	35	EZ259	DRT02	WU1M1	B02CA	LAB01	1		0	1496
EZ259 DRT02	98648	JLW1061	222981	0	23	4/30/2007	3:12:46 PM	3.19E+03	60	1	0	35	EZ259	DRT02	WU1M1	B02DA	LAB01	1		0	17485
EZ259 DRT02	98648	JLW1061	222981	0	24	4/30/2007	3:14:26 PM	3.55E+03	60	1	0	35	EZ259	DRT02	WU1M1	B02DA	LAB01	2		0	19425
EZ259 DRT02	98648	JLW1061	222981	0	25	4/30/2007	3:16:20 PM	3.26E+03	60	1	0	35	EZ259	DRT02	WU1M1	B02DA	LAB01	3		0	17852

Reviewed By: *Joe Long* Date: 5-1-07 Approved By: *John M. Gilm* Date: 5/1/07

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Survey Package Appendix C – Survey Results

Survey Package: C4024 101C1

Package: Structure

Survey Area Name: SETF, Building 4024

Survey Unit Name: SGTCC Test Cell B-102

**Section 3.0
Measurement Results – Direct Alpha Measurements
5 Pages**

Measurement Database Download Report

Direct Alpha Measurements

4/25/2007

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Download ID	Station	User	Download Date	Download Time	Survey Package ID	Detector Model	Detector Serial	4 pi Alpha Efficiency	Active Area (cm2)
DI042007-004	I	JLW1061	4/20/2007	2:56 PM	C4024 101C1		249011	0.173	125

Package ID	M2350 Serial Number	User ID	Detector Serial Number	Detector Setup Number	Sample No	Date	Time	Logged Count	Count Time (secs)	Logging Mode	Window	Scaler	LC1	LC2	LC3	LC4	LC5	LC6	L7	Measurement Location Number	Gross Alpha (dpm/100cm2)
------------	---------------------	---------	------------------------	-----------------------	-----------	------	------	--------------	-------------------	--------------	--------	--------	-----	-----	-----	-----	-----	-----	----	-----------------------------	--------------------------

FS440 DRT01	126195	JLW1061	249011	0	0	4/20/2007	4:17:02 PM	9.00E+00	600	1	0	25	FS440	DRT01	WL1M1	A03AA	IAB01	1	0	0	4
FS440 DRT01	126195	JLW1061	249011	0	0	4/20/2007	4:22:20 PM	3.30E+03	60	1	0	25	FS440	DRT01	WL1M1	A03BA	IAB01	1	0	0	15274
FS440 DRT01	126195	JLW1061	249011	0	0	4/20/2007	4:24:12 PM	3.30E+03	60	1	0	25	FS440	DRT01	WL1M1	A03BA	IAB01	2	0	0	15242
FS440 DRT01	126195	JLW1061	249011	0	0	4/20/2007	4:25:46 PM	3.26E+03	60	1	0	25	FS440	DRT01	WL1M1	A03BA	IAB01	3	0	0	15089
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	4:47:50 PM	1.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03GA	WL1	1	0	0	5
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	4:49:14 PM	0.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03GA	WL1	1	0	0	0
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	4:50:26 PM	0.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03GA	WL1	3	0	0	0
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	4:55:04 PM	0.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03FA	WWH	1	0	0	0
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	4:57:14 PM	1.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03FA	NWH	1	0	0	5
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	4:59:14 PM	0.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03FA	SHW	1	0	0	0
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	5:02:30 PM	0.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03FA	WWL	1	0	0	0
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	5:04:18 PM	0.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03FA	EWL1	1	0	0	0
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	5:06:14 PM	0.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03FA	EWL2	2	0	0	0
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	5:08:00 PM	2.00E+00	60	1	0	25	C4024	101C1	FL1M1	A03FA	H1	1	0	0	9
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	5:09:46 PM	1.00E+00	60	1	0	25	C4024	101C1	FL1M1	A03FA	H2	1	0	0	5
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	5:11:24 PM	5.00E+00	60	1	0	25	C4024	101C1	FL1M1	A03FA	L1	1	0	0	23
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	5:13:38 PM	1.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03GA	WL1	1	0	0	5
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	5:14:48 PM	1.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03GA	WL1	2	0	0	5
C4024 101C1	126195	JLW1061	249011	0	0	4/20/2007	5:15:58 PM	0.00E+00	60	1	0	25	C4024	101C1	WL1M1	A03GA	WL1	3	0	0	0

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Direct Alpha Measurements

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Download ID	Station Number	User ID	Download Date	Download Time	Survey Package ID	Detector Model Number	Detector Serial Number	4 pi Alpha Efficiency	ActiveArea (cm2)												
DL042007-004	1	JLW1061	4/20/2007	2:56 PM	C4024 101C1	43-90	249011	0.173	125												
Package ID	M2350 Serial Number	User ID	Detector Serial Number	Detector Setup Number	Sample No	Date	Time	Logged Count	Count Time (secs)	Logging Mode	Window On/Off	Scaler Alarm	LC1	LC2	LC3	LC4	LC5	LC6	L7	Measurement Location Number	Gross Alpha (dpm/100cm2)
C4024 101C1	126195	JLW1061	249011	0	19	4/20/2007	5:19:02 PM	1.00E+00	120	i	0	25	C4024	101C1	WL1M1	A03GA	WL1	i		0	2
FS440 DRT02	126195	JLW1061	249011	0	20	4/20/2007	5:37:34 PM	8.00E+00	600	i	0	25	FS440	DRT02	WL1M1	A03CA	LAB01	i		0	4
FS440 DRT02	126195	JLW1061	249011	0	21	4/20/2007	5:52:28 PM	3.17E+03	60	i	0	25	FS440	DRT02	WL1M1	A02DA	LAB01	i		0	14673
FS440 DRT02	126195	JLW1061	249011	0	22	4/20/2007	5:54:02 PM	3.20E+03	60	i	0	25	FS440	DRT02	WL1M1	A02DA	LAB01	2		0	14775
FS440 DRT02	126195	JLW1061	249011	0	23	4/20/2007	5:55:28 PM	3.25E+03	60	i	0	25	FS440	DRT02	WL1M1	A02DA	LAB01	3		0	15024

Reviewed By:

Joe Long

Date:

4-26-07

Approved By:

Joe Long

Date:

4/26/07

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Direct Alpha Measurements

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Download ID	Station Number	User ID	Download Date	Download Time	Survey Package ID	Detector Model Number	Detector Serial Number	4 pi Alpha Efficiency	ActiveArea (cm2)												
DL043007-001	1	JLM3848	4/30/2007	4:05 PM	C4024 101C1	43-90	249011	0.173	125												
Package ID	M2350 Serial Number	User ID	Detector Serial Number	Detector Setup Number	Sample No	Date	Time	Logged Count	Count Time (secs)	Logging Mode	Window On/Off	Scaler Alarm	LC1	LC2	LC3	LC4	LC5	LC6	L7	Measurement Location Number	Gross Alpha (dpm/100cm2)
FS440 DRT01	126195	JLW1061	249011	0	0	4/30/2007	2:10:06 PM	4.00E+00	600	1	0	33	FS440	DRT01	WU1M1	A03AA	LAB01	1		0	2
FS440 DRT01	126195	JLW1061	249011	0	1	4/30/2007	2:34:44 PM	3.30E+03	60	1	0	33	FS440	DRT01	WU1M1	A03BA	LAB01	1		0	13269
FS440 DRT01	126195	JLW1061	249011	0	2	4/30/2007	2:36:04 PM	3.26E+03	60	1	0	33	FS440	DRT01	WU1M1	A03BA	LAB01	2		0	15066
FS440 DRT01	126195	JLW1061	249011	0	3	4/30/2007	2:37:32 PM	3.09E+03	60	1	0	33	FS440	DRT01	WU1M1	A03BA	LAB01	3		0	14303
C40241 101C1	126195	JLW1061	249011	0	4	4/30/2007	3:29:12 PM	1.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03GA	WU1	1		0	5
C40241 101C1	126195	JLW1061	249011	0	5	4/30/2007	3:30:42 PM	0.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03GA	WU1	2		0	0
C40241 101C1	126195	JLW1061	249011	0	6	4/30/2007	3:31:58 PM	0.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03GA	WU1	3		0	0
C40241 101C1	126195	JLW1061	249011	0	7	4/30/2007	3:44:14 PM	0.00E+00	60	1	0	33	C4024	101C1	CL1M1	A03FA	CL1	1		0	0
C40241 101C1	126195	JLW1061	249011	0	8	4/30/2007	3:56:22 PM	2.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03FA	NWL	1		0	9
C40241 101C1	126195	JLW1061	249011	0	9	4/30/2007	4:29:34 PM	2.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03FA	NWH	1		0	9
C40241 101C1	126195	JLW1061	249011	0	10	4/30/2007	4:39:10 PM	3.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03FA	WWH	1		0	14
C40241 101C1	126195	JLW1061	249011	0	11	4/30/2007	4:49:18 PM	0.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03FA	WWL	1		0	0
C40241 101C1	126195	JLW1061	249011	0	12	4/30/2007	4:57:50 PM	6.00E+00	60	1	0	33	C4024	101C1	CL1M1	A03FA	CL	1		0	28
C40241 101C1	126195	JLW1061	249011	0	13	4/30/2007	5:12:42 PM	1.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03FA	EWL	1		0	5
C40241 101C1	126195	JLW1061	249011	0	14	4/30/2007	5:25:26 PM	3.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03FA	EWL	1		0	14
C40241 101C1	126195	JLW1061	249011	0	15	4/30/2007	5:36:32 PM	4.00E+00	60	1	0	33	C4024	101C1	CL1M1	A03FA	CL	1		0	18
C40241 101C1	126195	JLW1061	249011	0	16	4/30/2007	5:46:42 PM	2.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03GA	WU1	1		0	9
C40241 101C1	126195	JLW1061	249011	0	17	4/30/2007	5:48:02 PM	1.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03GA	WU1	2		0	5
C40241 101C1	126195	JLW1061	249011	0	18	4/30/2007	5:49:16 PM	0.00E+00	60	1	0	33	C4024	101C1	WU1M1	A03GA	WU1	3		0	0

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Direct Alpha Measurements

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Download ID	Station Number	User ID	Download Date	Download Time	Survey Package ID	Detector Model Number	Detector Serial Number	4 pi Alpha Efficiency	Active Area (cm2)												
DL043007-001	1	JLM3848	4/30/2007	4:05 PM	C4024 101C1	43-90	249011	0.173	125												
Package ID	M2350 Serial Number	User ID	Detector Serial Number	Detector Setup Number	Sample No	Date	Time	Logged Count	Count Time (secs)	Logging Mode	Window On/Off	Scaler Alarm	LC1	LC2	LC3	LC4	LC5	LC6	L7	Measurement Location Number	Gross Alpha (dpm/100cm2)
FS440 DRT02	126195	JLW1061	249011	0	19	4/30/2007	6:25:28 PM	7.00E+00	600	1	0	33	FS440	DRT02	WU1M1	A03CA	LAB01	1		0	3
FS440 DRT02	126195	JLW1061	249011	0	20	4/30/2007	6:30:08 PM	3.26E+03	60	1	0	33	FS440	DRT02	WU1M1	A03DA	LAB01	1		0	15084
FS440 DRT02	126195	JLW1061	249011	0	21	4/30/2007	6:31:38 PM	3.33E+03	60	1	0	33	FS440	DRT02	WU1M1	A03DA	LAB01	2		0	15394
FS440 DRT02	126195	JLW1061	249011	0	22	4/30/2007	6:34:28 PM	3.21E+03	60	1	0	33	FS440	DRT02	WU1M1	A03DA	LAB01	3		0	14821

Reviewed By:

Joe Long

Date:

5-1-07

Approved By:

Joe Long

Date:

5/1/07

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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4/20/2007

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Survey Package Appendix C – Survey Results

Survey Package: C4024 101C1

Package: Structure

Survey Area Name: SETF, Building 4024

Survey Unit Name: SGTCC Test Cell B-102

**Section 4.0
Measurement Results – Exposure Rate Measurements
3 Pages**

Measurement Database Download Report
Exposure Rate Measurements

4/25/2007

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Download ID	Station Number	User ID	Download Date	Download Time	Survey Package ID	Detector Model Number	Detector Serial Number	Gamma Cal Factor													
DL042007-002	1	JLW1061	4/20/2007	12:31 PM	C4024 101C1	44-10	162404	5.36E+10													
Package ID	M2350 Serial Number	User ID	Detector Serial Number	Detector Setup Number	Sample No	Date	Time	Logged Count	Count Time (secs)	Logging Mode	Window On/Croff	Scaler Alarm	LC1	LC2	LC3	LC4	LC5	LC6	L7	Measurement Location Number	Exposure Rate uR/hr
CS313 DRT01	98638	JLW1061	162404	0	0	4/20/2007	8:45:30 AM	1.19E+05	600	1	0	23	CS313	DRT01	FL1M1	G01AA	LAB01	1		0	1.33E+01
CS313 DRT01	98638	JLW1061	162404	0	1	4/20/2007	8:48:38 AM	5.84E+05	30	1	0	23	CS313	DRT01	FL1M1	G01BA	LAB01	1		0	1.31E+03
CS313 DRT01	98638	JLW1061	162404	0	2	4/20/2007	8:50:48 AM	2.93E+04	30	1	0	23	CS313	DRT01	FL1M1	G01BA	LAB01	2		0	6.56E+01
CS313 DRT01	98638	JLW1061	162404	0	3	4/20/2007	8:52:22 AM	1.85E+04	30	1	0	23	CS313	DRT01	FL1M1	G01BA	LAB01	3		0	4.14E+01
C4024 101C1	98638	JLW1061	162404	3	4	4/20/2007	9:36:06 AM	8.15E+03	12	1	0	23	C4024	101C1	FL1M1	G01FA	FL1H1	1		0	4.56E+01
C4024 101C1	98638	JLW1061	162404	3	5	4/20/2007	9:37:30 AM	6.76E+03	12	1	0	23	C4024	101C1	FL1M1	G01FA	FL1H2	2		0	3.78E+01
C4024 101C1	98638	JLW1061	162404	3	6	4/20/2007	9:39:12 AM	2.98E+03	12	1	0	23	C4024	101C1	FL1M1	G01FA	FL1L1	1		0	1.66E+01
C4024 101C1	98638	JLW1061	162404	3	7	4/20/2007	9:45:40 AM	1.10E+04	12	1	0	23	C4024	101C1	FL1M1	G01FA	WWH1	1		0	6.18E+01
C4024 101C1	98638	JLW1061	162404	3	8	4/20/2007	9:47:04 AM	6.95E+03	12	1	0	23	C4024	101C1	WL1M1	G01FA	NWH1	1		0	3.89E+01
C4024 101C1	98638	JLW1061	162404	3	9	4/20/2007	9:48:40 AM	1.31E+04	12	1	0	23	C4024	101C1	WL1M1	G01FA	SHW1	1		0	7.30E+01
C4024 101C1	98638	JLW1061	162404	3	10	4/20/2007	9:52:34 AM	5.15E+03	12	1	0	23	C4024	101C1	WL1M1	G01FA	WWL1	1		0	2.88E+01
C4024 101C1	98638	JLW1061	162404	3	13	4/20/2007	9:55:50 AM	3.55E+03	12	1	0	23	C4024	101C1	WL1M1	G01FA	EWL1	1		0	1.98E+01
C4024 101C1	98638	JLW1061	162404	3	14	4/20/2007	9:57:48 AM	5.03E+03	12	1	0	23	C4024	101C1	WL1M1	G01FA	EWL2	2		0	2.81E+01
CS313 DRT02	98638	JLW1061	162404	3	16	4/20/2007	11:36:58 AM	1.06E+05	600	1	0	23	CS313	DRT02	WL1M1	G01CA	LAB01	1		0	1.19E+01
CS313 DRT02	98638	JLW1061	162404	0	17	4/20/2007	12:26:12 PM	5.79E+05	30	1	0	23	CS313	DRT02	WL1M1	G01DA	LAB01	1		0	1.30E+03
CS313 DRT02	98638	JLW1061	162404	0	18	4/20/2007	12:28:40 PM	2.90E+04	30	1	0	23	CS313	DRT02	WL1M1	G01DA	LAB01	2		0	6.49E+01
CS313 DRT02	98638	JLW1061	162404	0	20	4/20/2007	12:31:22 PM	1.71E+04	30	1	0	23	CS313	DRT02	WL1M1	G01DA	LAB01	3		0	3.83E+01

Reviewed By: Joe Long Date: 4-26-07 Approved By: Joe Long Date: 4/26/07

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Exposure Rate Measurements

4/30/2007

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Download ID	Station Number	User ID	Download Date	Download Time	Survey Package ID	Detector Model Number	Detector Serial Number	Gamma Cal Factor													
DL043007-002	2	JLM3848	4/30/2007	4:26 PM	C4024 101C1	44-10	162404	5.36E+10													
Package ID	M2350 Serial Number	User ID	Detector Serial Number	Detector Setup Number	Sample No	Date	Time	Logged Count	Count Time (secs)	Logging Mode	Window On/Off	Scaler Alarm	LC1	LC2	LC3	LC4	LC5	LC6	L7	Measurement Location Number	Exposure Rate uR/hr
CS313 DRT01	98638	JLW1061	162404	0	0	4/30/2007	6:56:10 AM	1.18E+05	600	1	0	34	CS313	DRT01	WU1M1	G01AA	LAB01	1		0	1.32E+01
CS313 DRT01	98638	JLW1061	162404	0	1	4/30/2007	7:09:22 AM	6.12E+05	30	1	0	34	CS313	DRT01	WU1M1	G01BA	LAB01	1		0	1.37E+03
CS313 DRT01	98638	JLW1061	162404	0	2	4/30/2007	7:11:14 AM	2.86E+04	30	1	0	34	CS313	DRT01	WU1M1	G01BA	LAB01	2		0	6.41E+01
CS313 DRT01	98638	JLW1061	162404	0	3	4/30/2007	7:13:08 AM	1.62E+04	30	1	0	34	CS313	DRT01	WU1M1	G01BA	LAB01	3		0	3.63E+01
C40241 101C1	98638	JLW1061	162404	3	4	4/30/2007	12:29:40 PM	4.02E+03	12	1	0	34	C4024	101C1	CL1M1	G01FA	CL1	1		0	2.25E+01
C40241 101C1	98638	JLW1061	162404	3	5	4/30/2007	12:41:08 PM	4.37E+03	12	1	0	34	C4024	101C1	CL1M1	G01FA	NWL	1		0	2.44E+01
C40241 101C1	98638	JLW1061	162404	3	6	4/30/2007	12:53:20 PM	6.53E+03	12	1	0	34	C4024	101C1	WU1M1	G01FA	NWH	1		0	3.65E+01
C40241 101C1	98638	JLW1061	162404	3	7	4/30/2007	1:21:16 PM	8.10E+03	12	1	0	34	C4024	101C1	WU1M1	G01FA	WWH	1		0	4.53E+01
C40241 101C1	98638	JLW1061	162404	3	8	4/30/2007	1:29:50 PM	4.74E+03	12	1	0	34	C4024	101C1	WU1M1	G01FA	WWL	1		0	2.65E+01
C40241 101C1	98638	JLW1061	162404	3	9	4/30/2007	1:39:46 PM	4.18E+03	12	1	0	34	C4024	101C1	CL1M1	G01FA	CL2	2		0	2.34E+01
C40241 101C1	98638	JLW1061	162404	3	10	4/30/2007	1:53:04 PM	6.51E+03	12	1	0	34	C4024	101C1	WU1M1	G01FA	EWL	1		0	3.64E+01
C40241 101C1	98638	JLW1061	162404	3	11	4/30/2007	2:04:42 PM	3.98E+03	12	1	0	34	C4024	101C1	WU1M1	G01FA	EWL	1		0	2.22E+01
C40241 101C1	98638	JLW1061	162404	3	12	4/30/2007	2:17:06 PM	4.01E+03	12	1	0	34	C4024	101C1	CL1M1	G01FA	CL3	3		0	2.24E+01
CS313 DRT02	98638	JLW1061	162404	0	13	4/30/2007	3:12:32 PM	1.19E+05	600	1	0	34	CS313	DRT02	CL1M1	G01CA	LAB01	1		0	1.34E+01
CS313 DRT02	98638	JLW1061	162404	0	14	4/30/2007	3:26:04 PM	5.59E+05	30	1	0	34	CS313	DRT02	CL1M1	G01DA	LAB01	1		0	1.25E+03
CS313 DRT02	98638	JLW1061	162404	0	15	4/30/2007	3:28:52 PM	2.90E+04	30	1	0	34	CS313	DRT02	CL1M1	G01DA	LAB01	2		0	6.50E+01
CS313 DRT02	98638	JLW1061	162404	0	16	4/30/2007	3:30:14 PM	1.69E+04	30	1	0	34	CS313	DRT02	CL1M1	G01DA	LAB01	3		0	3.78E+01

Reviewed By:

J. Long

Date:

5-1-07

Approved By:

John McKeel

Date:

5/1/07

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Survey Package Appendix C – Survey Results

Survey Package: C4024 101C1
Survey Area Name: SETF, Building 4024
Survey Unit Name: SGTCC Test Cell B-102

Package: Structure

**Section 5.0
Sample Analysis Results – Alpha/Beta Counter**
9 Pages

DATA M2929 SN 118419

SN	PROGRAM_NAME	SAMPLE_ID	DATE	TIME	BG Count Time (min)	Sample (min) Count Time	Alpha gross cts	Alpha BKG CPM	Alpha Alpha EFF DPM	Alpha MDC	Beta gross cts	Beta BKG CPM	Beta Beta EFF	Beta DPM	Beta MDC	
1	ALPHA/BETA SMEARS	FL1-H1	4/20/2007	10:30:00 AM	20	1.5	0	0.3	0.29	-1.02	11.33	56	37	0.24	1.38	77.79
2	ALPHA/BETA SMEARS	FL1-H2	4/20/2007	10:30:00 AM	20	1.5	0	0.3	0.29	-1.02	11.33	43	37	0.24	-34.58	77.79
3	ALPHA/BETA SMEARS	FL1-H3	4/20/2007	10:30:00 AM	20	1.5	0	0.3	0.29	-1.02	11.33	60	37	0.24	12.45	77.79

101

C4024301C1

Technician: J Johnson

F11

Technician: J Johnson

Ludlum Model 2929

Serial No: 118419

alpha

 bkg cpm = 37

bkg count time (min) = 20 bkg cpm = 0.3

eff. beta= 0.241

sample count time (min) = 1.5		eff. alpha= 0.294
A	ADPM	AMDC

[illegible]

101CL
C4024301KLI

Technician: FI Worley

042007-002

DATA M2929 SN 118419

SN	PROGRAM_NAME	SAMPLE_ID	DATE	TIME	BG Count Time (min)	Sample (min) Count Time	Alpha gross cts	Alpha BKG CPM	Alpha Alpha EFF DPM	Alpha MDC	Beta gross cts	Beta BKG CPM	Beta EFF	Beta DPM	Beta MDC	
1	ALPHA/BETA SMEARS	VW-H1	4/20/2007	10:30:00 AM	20	1.5	1	0.3	0.29	1.25	11.33	60	37	0.24	12.45	77.79
2	ALPHA/BETA SMEARS	SHW-L1	4/20/2007	10:30:00 AM	20	1.5	0	0.3	0.29	-1.02	11.33	48	37	0.24	-20.75	77.79
3	ALPHA/BETA SMEARS	NW-H1	4/20/2007	10:30:00 AM	20	1.5	1	0.3	0.29	1.25	11.33	52	37	0.24	-9.68	77.79
4	ALPHA/BETA SMEARS	VW-L1	4/20/2007	10:30:00 AM	20	1.5	1	0.3	0.29	1.25	11.33	47	37	0.24	-23.51	77.79
5	ALPHA/BETA SMEARS	EW-L1	4/20/2007	10:30:00 AM	20	1.5	0	0.3	0.29	-1.02	11.33	59	37	0.24	9.68	77.79
6	ALPHA/BETA SMEARS	EW-L2	4/20/2007	10:30:00 AM	20	1.5	1	0.3	0.29	1.25	11.33	61	37	0.24	15.21	77.79

Survey Package ID: C4024-10/C1/WL Collection Date: 4/20/07 Time: 1030
L3 Code: WL2 Technician: J Johnson
Instrument Model No: Ludlum Model 2929 Serial No: 118419

alpha

bkg count time (min) = 20 bkg cpm = 0.3

sample count time (min) = 1.5 eff. alpha= 0.294

[illegible]

Upload Filename: C4024101C2WL Upload Date: 4/20/07 Time: 1430
Sample Database ID: 042002-001 Technician: J. W. W.

DATA M2929 SN 118419

SN	PROGRAM_NAME	SAMPLE_ID	DATE	TIME	BG Count Time (min)	Sample (min) Count Time	Alpha gross cts	Alpha BKG CPM	Alpha Alpha EFF DPM	Alpha MDC	Beta gross cts	Beta BKG CPM	Beta EFF	Beta DPM	Beta MDC	
1	ALPHA/BETA SMEARS	WU1-1	4/30/2007	3:05:00 PM	20	1.5	0	0.3	0.29	-1.02	11.33	47	31	0.24	1.38	71.84
2	ALPHA/BETA SMEARS	WU1-2	4/30/2007	3:05:00 PM	20	1.5	2	0.3	0.29	3.51	11.33	45	31	0.24	-4.15	71.84
3	ALPHA/BETA SMEARS	WU1-3	4/30/2007	3:05:00 PM	20	1.5	0	0.3	0.29	-1.02	11.33	53	31	0.24	17.98	71.84
4	ALPHA/BETA SMEARS	WU1-4	4/30/2007	3:05:00 PM	20	1.5	0	0.3	0.29	-1.02	11.33	39	31	0.24	-20.75	71.84
5	ALPHA/BETA SMEARS	WU1-5	4/30/2007	3:05:00 PM	20	1.5	1	0.3	0.29	1.25	11.33	41	31	0.24	-15.21	71.84
6	ALPHA/BETA SMEARS	WU1-6	4/30/2007	3:05:00 PM	20	1.5	2	0.3	0.29	3.51	11.33	44	31	0.24	-6.92	71.84

B-102 EAST CELL

Removable Contamination Results

Survey Package ID: C 4024-101C1 Collection Date: 4-30-07 Time: 1505
L3 Code: WU1 Technician: J Worley
Instrument Model No: Ludlum Model 2929 Serial No: 118419

beta				alpha		
bkg count time (min) = 20		bkg cpm = 31		bkg count time (min) = 20		bkg cpm = 0.3
sample count time (min) = 1.5		eff. beta = 0.241		sample count time (min) = 1.5		eff. alpha = 0.294
SAMPLE_ID (L5 - L6 Code)	B (counts)	BDPM (calculated)	BMDC (calculated)	A (counts)	ADPM (calculated)	AMDC (calculated)
WU1-1	47			0		
WU1-2	45			2		
WU1-3	53			0		
WU1-4	39			0		
WU1-5	41			1		
WU1-6	44			2		
See Report						
J Worley						

Upload Filename: C4024 101C1 WU1 Upload Date: 4/30/07 Time: 1900
Sample Database ID: C5043007-004 Technician: J Worley

DATA M2929 SN 118419

SN	PROGRAM_NAME	SAMPLE_ID	DATE	TIME	BG Count Time (min)	Sample (min) Count Time	Alpha gross cts	Alpha BKG CPM	Alpha Alpha EFF DPM	Alpha MDC	Beta gross cts	Beta BKG CPM	Beta EFF	Beta DPM	Beta MDC	
1	ALPHA/BETA SMEARS	CL1-1	4/30/2007	1:05:00 PM	20	1.5	1	0.3	0.29	1.25	11.33	43	31	0.24	-9.68	71.84
2	ALPHA/BETA SMEARS	CL1-2	4/30/2007	1:05:00 PM	20	1.5	0	0.3	0.29	-1.02	11.33	50	31	0.24	9.68	71.84
3	ALPHA/BETA SMEARS	CL1-3	4/30/2007	1:05:00 PM	20	1.5	0	0.3	0.29	-1.02	11.33	37	31	0.24	-26.28	71.84

8-102 east cell

Removable Contamination Results

Survey Package ID: C46024-10121 Collection Date: 4-30-07 Time: 1505

L3 Code: CL1 Technician: J Warden

Instrument Model No: Ludlum Model 2929 Serial No: 118419

beta

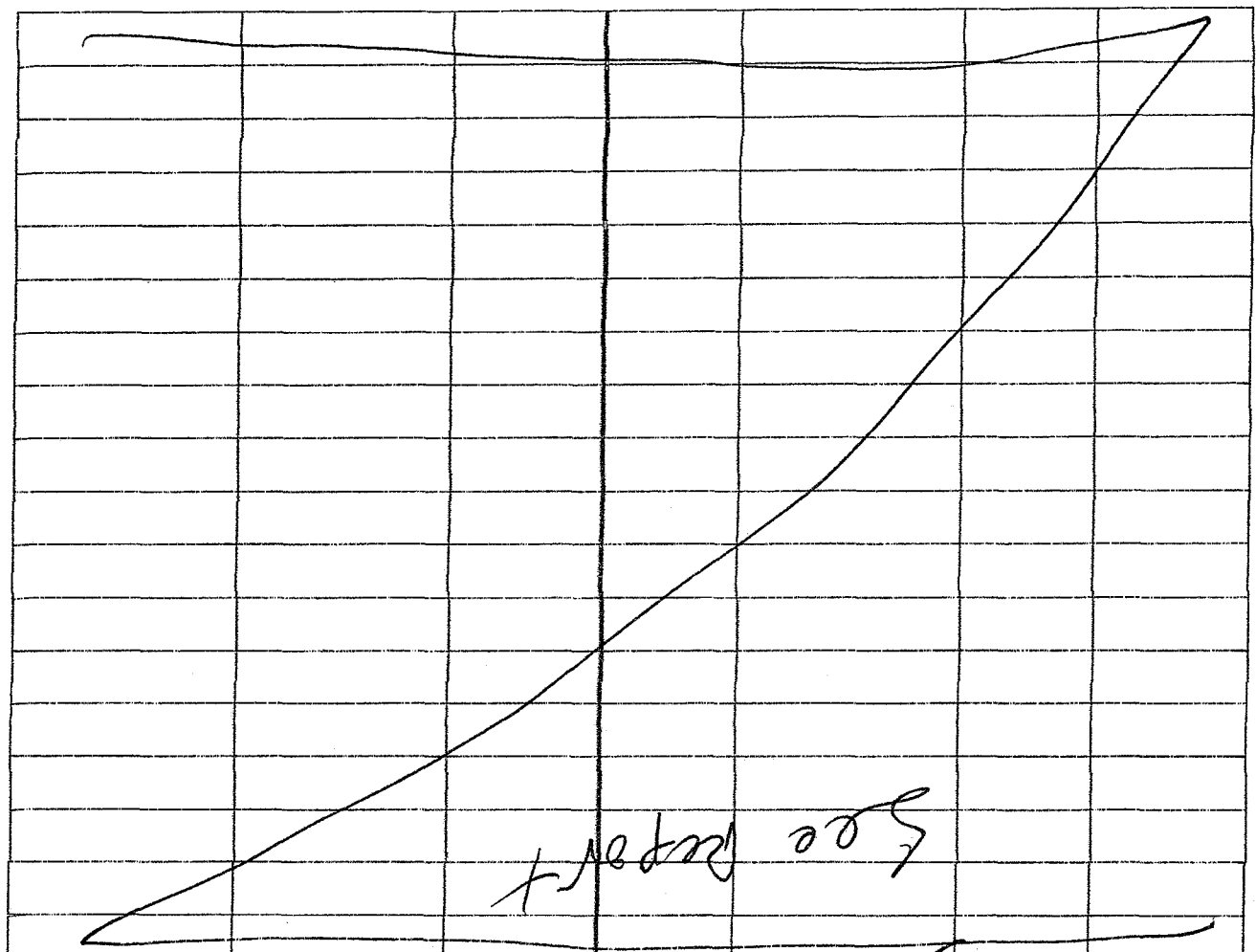
alpha

bkg count time (min) = 20 bkg cpm = 31 bkg count time (min) = 20 bkg cpm = 0.3

SAMPLE_ID	B	BDPM	BMDC	A	ADPM	AMDC
sample count time (min) =	1.5	eff. beta =	0.241	sample count time (min) =	1.5	eff. alpha = 0.294
(counts)	(calculated)	(calculated)	(counts)	(calculated)	(calculated)	(calculated)

CL1-1 43
CL1-2 50
CL1-3 37

See Report



Upload Filename: C4602410121 CL1 Upload Date: 4/30/07 Time: 1505
Sample Database ID: C5043007-003 Technician: J Warden

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Survey Package Appendix C – Survey Results

Survey Package:	C4024 101C1	Package: Structure
Survey Area Name:	SETF, Building 4024	
Survey Unit Name:	SGTCC Test Cell B-102	

Section 6.0
Sample Analysis Results – Gamma Spectroscopy
0 Pages

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Survey Package Appendix C – Survey Results

Survey Package: C4024 101C1 Package: Structure
Survey Area Name: SETF, Building 4024
Survey Unit Name: SGTCC Test Cell B-102

**Section 7.0
Sample Analysis Results – Alpha Spectroscopy**
4 Pages