

REPORT OF RADIOLOGICAL CHARACTERIZATION AND CONFIRMATORY SURVEY RESULTS

for the

***SNAP ENVIRONMENTAL TEST FACILITY - BUILDING
4024***

November 2007

Appendix A

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Appendix A

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Appendix A

Section	Survey Package	Survey Unit Description
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1.1.1	G4024 401B1	A1 - Asphalt Results
1.1.2	G4024 401B1	C1 - Concrete Results
1.1.3	G4024 401B1	M1 - Metal Results
1.2	H4024 401B1	Environmental Soil Background Areas

Appendix A

Section	Survey Package	Survey Unit Description
1.0		Background Study
1.1	G4024 401B1	Structures Background Reference Area
1.1.1	G4024 401B1	A1 - Asphalt Results

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7/9/2007

Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

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7.0	Photographs
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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 1.0

Data Analysis Report Parameters

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Data Analysis Report Parameters

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Survey Group: G - Background Reference Survey for Surfaces & Structures
Survey Area: 4024 - Structural Background Reference Area for SETF Building 4024
Unit Classification: 4 - Non-Impacted Structure
MARSSIM FSS Survey Unit Size (M²): No Limit

Survey Unit:	01 - Structures Background Reference Area		
Survey Reason:	B1 - Background Survey		
Surface(s):	Code	Description	Survey Area (M ²)
	PA1	Asphalt Paved Areas	Total Area

Materials:	Code	Description
	A1	Asphalt

Report Information:

Report Pedigree:	Final Report
Detector Efficiency:	2-Pi
Material Background Evaluation:	Off (For This Report)
Survey Location:	LC6
Report Errors:	None

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 2.0

Annotated Drawings

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Data Analysis Report

Survey Area LC1: G4024 Package Type: Structure
Survey Area Name: Structural Background Reference Area for SETF Building
4024

Survey Package Number and Unit Name:

G4024 401B1 Structures Background Reference Area



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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 3.0

Direct Beta Measurement Results

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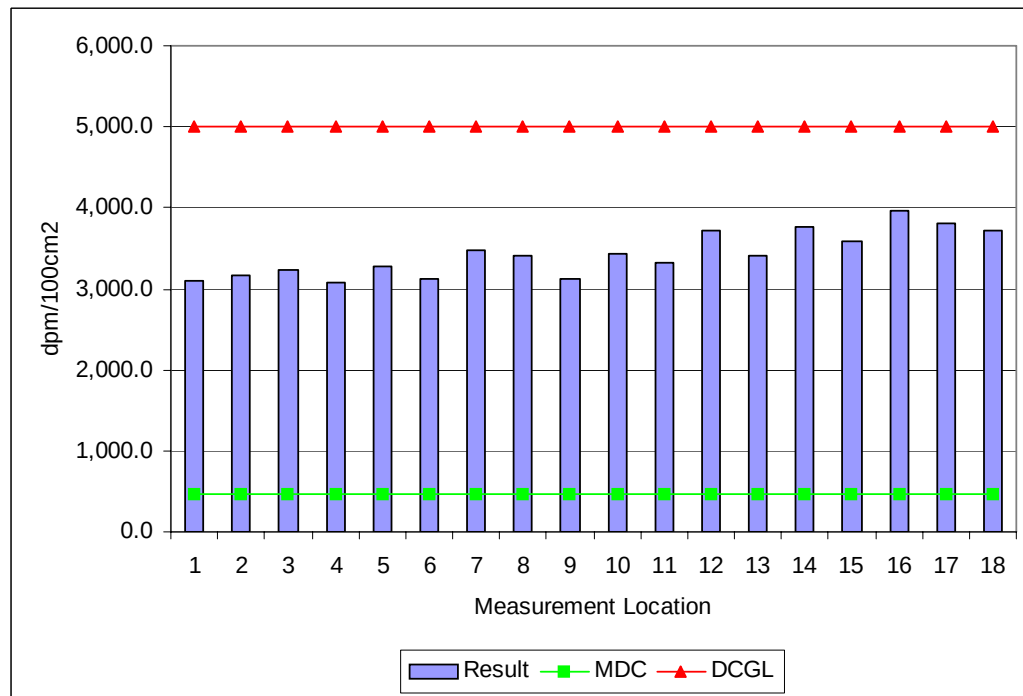
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Direct Beta Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building 4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	3,428.4	MDC Mean	464.9	Max MDC <50% DCGL	Yes
Median	3,416.0	MDC Minimum	464.9	Measurements <DCGL	Yes
Standard Deviation	273.7	MDC Maximum	464.9	Measurement Mean <DCGL	Yes
Range	874.7	DCGL	5,000	No. Measurements >DCGL	0
Minimum	3,082.7	Number of Measurements			
Maximum	3,957.3	No. Prescribed	18		
		No. Collected	18		



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Direct Beta Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building 4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Detector Type/Count Type LC4	Room or Item No. LC5	SML LC6	Ave or SP Background dpm/100cm2	Measurement MDC dpm/100cm2	Measurement Result dpm/100cm2	Test (DCGL-Result) dpm/100cm2
DL051007-003	5/10/2007	PA1A1	B02FA	A1	1	0.0	464.9	3,109.3	1,890.7
DL051007-003	5/10/2007	PA1A1	B02FA	A1	2	0.0	464.9	3,157.3	1,842.7
DL051007-003	5/10/2007	PA1A1	B02FA	A1	3	0.0	464.9	3,242.7	1,757.3
DL051007-003	5/10/2007	PA1A1	B02FA	A1	4	0.0	464.9	3,082.7	1,917.3
DL051007-003	5/10/2007	PA1A1	B02FA	A1	5	0.0	464.9	3,269.3	1,730.7
DL051007-003	5/10/2007	PA1A1	B02FA	A1	6	0.0	464.9	3,130.7	1,869.3
DL051007-003	5/10/2007	PA1A1	B02FA	A1	7	0.0	464.9	3,477.3	1,522.7
DL051007-003	5/10/2007	PA1A1	B02FA	A1	8	0.0	464.9	3,413.3	1,586.7
DL051007-003	5/10/2007	PA1A1	B02FA	A1	9	0.0	464.9	3,114.7	1,885.3
DL051007-003	5/10/2007	PA1A1	B02FA	A1	10	0.0	464.9	3,429.3	1,570.7
DL051007-003	5/10/2007	PA1A1	B02FA	A1	11	0.0	464.9	3,328.0	1,672.0
DL051007-003	5/10/2007	PA1A1	B02FA	A1	12	0.0	464.9	3,712.0	1,288.0
DL051007-003	5/10/2007	PA1A1	B02FA	A1	13	0.0	464.9	3,418.7	1,581.3
DL051007-003	5/10/2007	PA1A1	B02FA	A1	14	0.0	464.9	3,760.0	1,240.0
DL051007-003	5/10/2007	PA1A1	B02FA	A1	15	0.0	464.9	3,589.3	1,410.7
DL051007-003	5/10/2007	PA1A1	B02FA	A1	16	0.0	464.9	3,957.3	1,042.7
DL051007-003	5/10/2007	PA1A1	B02FA	A1	17	0.0	464.9	3,797.3	1,202.7
DL051007-003	5/10/2007	PA1A1	B02FA	A1	18	0.0	464.9	3,722.7	1,277.3

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Direct Beta Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building 4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL051007-003	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Material Background Contribution dpm/100cm2
LC3 P45				
A1	Asphalt	Asphalt Description	0.5	0.0

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 4.0

Direct Alpha Measurement Results

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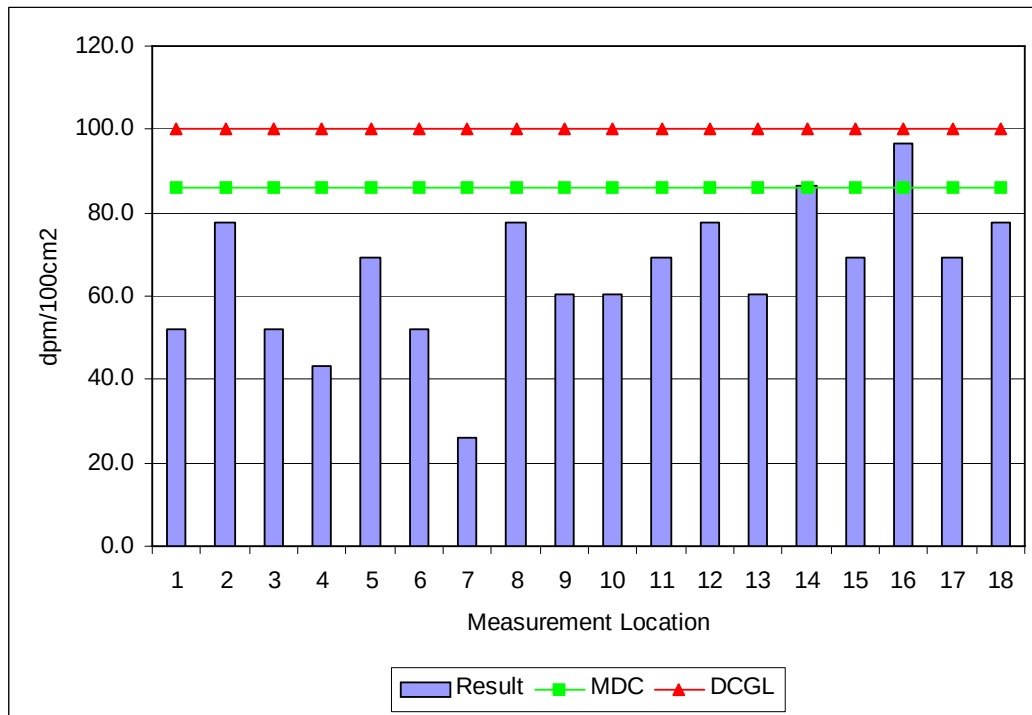
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Direct Alpha Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm ²		dpm/100cm ²		
Mean	65.4	MDC Mean	86.1	No. Collected >= Prescribed	Yes
Median	69.2	MDC Minimum	86.1	Max MDC <50% DCGL	No
Standard Deviation	17.7	MDC Maximum	86.1	Measurements < DCGL	Yes
Range	70.6	DCGL	100	Measurement Mean < DCGL	Yes
Minimum	25.9	Number of Measurements		No. Measurements >DCGL	0
Maximum	96.6	No. Prescribed	18		
		No. Collected	18		



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Direct Alpha Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building
 4024
Survey Package Number and Unit Name:
 G4024 401B1 Structures Background Reference Area

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Detector Type/Count Type LC4	Room or Item No. LC5	SML LC6	Ave or SP Background dpm/100cm ²	Measurement MDC dpm/100cm ²	Measurement Result dpm/100cm ²	Test (DCGL-Result) dpm/100cm ²
DL051007-001	5/10/2007	PA1A1	A03FA	A1	1	0.0	86.1	51.9	48.1
DL051007-001	5/10/2007	PA1A1	A03FA	A1	2	0.0	86.1	77.8	22.2
DL051007-001	5/10/2007	PA1A1	A03FA	A1	3	0.0	86.1	51.9	48.1
DL051007-001	5/10/2007	PA1A1	A03FA	A1	4	0.0	86.1	43.2	56.8
DL051007-001	5/10/2007	PA1A1	A03FA	A1	5	0.0	86.1	69.2	30.8
DL051007-001	5/10/2007	PA1A1	A03FA	A1	6	0.0	86.1	51.9	48.1
DL051007-001	5/10/2007	PA1A1	A03FA	A1	7	0.0	86.1	25.9	74.1
DL051007-001	5/10/2007	PA1A1	A03FA	A1	8	0.0	86.1	77.8	22.2
DL051007-001	5/10/2007	PA1A1	A03FA	A1	9	0.0	86.1	60.5	39.5
DL051007-001	5/10/2007	PA1A1	A03FA	A1	10	0.0	86.1	60.5	39.5
DL051007-001	5/10/2007	PA1A1	A03FA	A1	11	0.0	86.1	69.2	30.8
DL051007-001	5/10/2007	PA1A1	A03FA	A1	12	0.0	86.1	77.8	22.2
DL051007-001	5/10/2007	PA1A1	A03FA	A1	13	0.0	86.1	60.5	39.5
DL051007-001	5/10/2007	PA1A1	A03FA	A1	14	0.0	86.1	86.5	13.5
DL051007-001	5/10/2007	PA1A1	A03FA	A1	15	0.0	86.1	69.2	30.8
DL051007-001	5/10/2007	PA1A1	A03FA	A1	16	0.0	86.1	96.6	3.4
DL051007-001	5/10/2007	PA1A1	A03FA	A1	17	0.0	86.1	69.2	30.8
DL051007-001	5/10/2007	PA1A1	A03FA	A1	18	0.0	86.1	77.8	22.2

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Direct Alpha Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building
4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL051007-001	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Material Background Contribution dpm/100cm2
LC3 P45 A1	Asphalt	Asphalt Description	0.25	0.0

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

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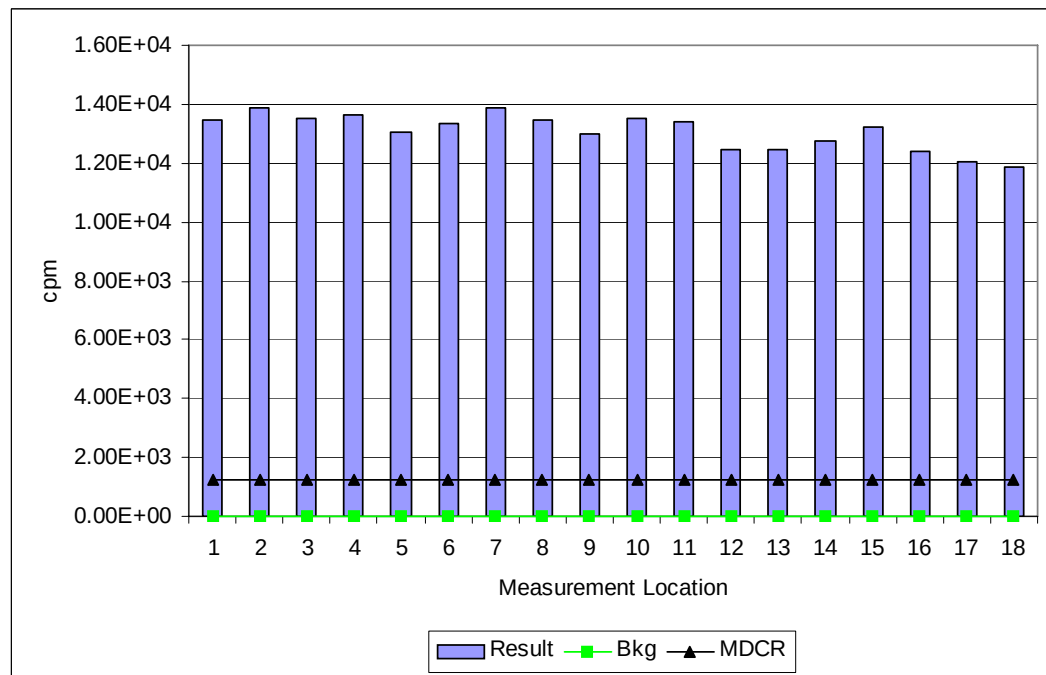
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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	13,072	Ave. Background	0	Ave. MDCR < 50% Bkg.	No
Median	13,300	Ave. Bkg. + 3 sigma	0	Measurements < Ave. Bkg.	No
Standard Deviation	612	Ave. Bkg. - 3 sigma	0	Measurement Mean < Ave. Bkg.	No
Range	2,050	Ave. MDCR	1,222	No. Measurements > Ave. Bkg.	18
Minimum	11,850	Number of Measurements			
Maximum	13,900	No. Prescribed	18		
		No. Collected	18		



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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL051007-002	5/10/2007	PA1A1	A1	1	0	1,222	13,450	-13,450
DL051007-002	5/10/2007	PA1A1	A1	2	0	1,222	13,900	-13,900
DL051007-002	5/10/2007	PA1A1	A1	3	0	1,222	13,500	-13,500
DL051007-002	5/10/2007	PA1A1	A1	4	0	1,222	13,650	-13,650
DL051007-002	5/10/2007	PA1A1	A1	5	0	1,222	13,050	-13,050
DL051007-002	5/10/2007	PA1A1	A1	6	0	1,222	13,350	-13,350
DL051007-002	5/10/2007	PA1A1	A1	7	0	1,222	13,850	-13,850
DL051007-002	5/10/2007	PA1A1	A1	8	0	1,222	13,450	-13,450
DL051007-002	5/10/2007	PA1A1	A1	9	0	1,222	13,000	-13,000
DL051007-002	5/10/2007	PA1A1	A1	10	0	1,222	13,500	-13,500
DL051007-002	5/10/2007	PA1A1	A1	11	0	1,222	13,400	-13,400
DL051007-002	5/10/2007	PA1A1	A1	12	0	1,222	12,450	-12,450
DL051007-002	5/10/2007	PA1A1	A1	13	0	1,222	12,450	-12,450
DL051007-002	5/10/2007	PA1A1	A1	14	0	1,222	12,750	-12,750
DL051007-002	5/10/2007	PA1A1	A1	15	0	1,222	13,250	-13,250
DL051007-002	5/10/2007	PA1A1	A1	16	0	1,222	12,400	-12,400
DL051007-002	5/10/2007	PA1A1	A1	17	0	1,222	12,050	-12,050
DL051007-002	5/10/2007	PA1A1	A1	18	0	1,222	11,850	-11,850

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL051007-002	98648	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background Subtract (cpm)
A1	Asphalt	Asphalt Description	0.0

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 6.0

1 Meter Gamma Exposure Rate Measurement Results

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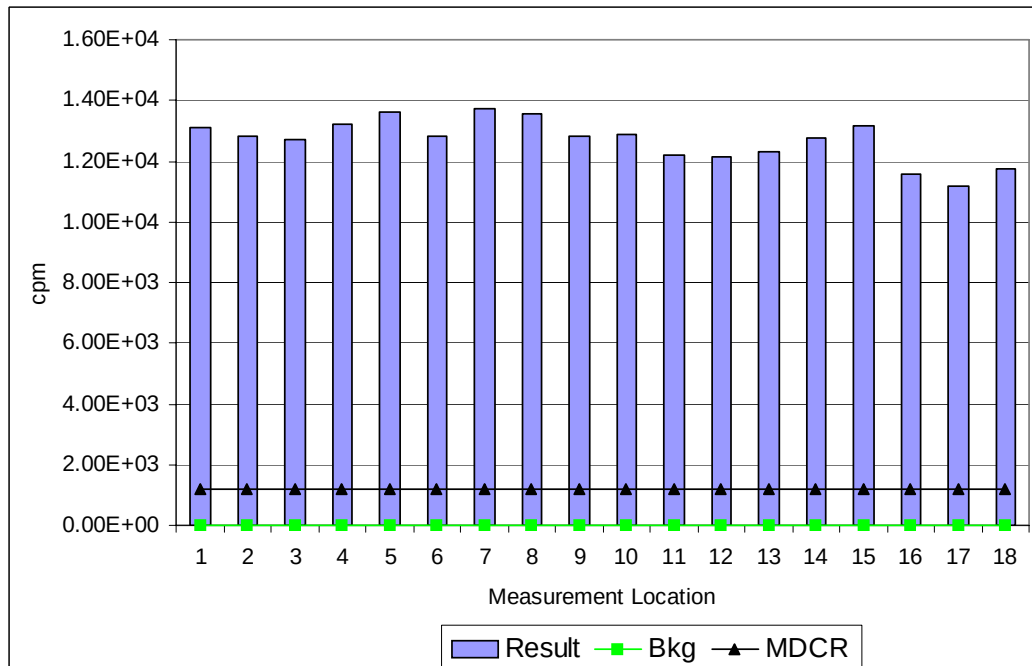
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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1: G4024 Package Type: Structure
 Survey Area Name: Structural Background Reference Area for SETF Building 4024
 Survey Package Number and Unit Name:
 G4024 401B1 Structures Background Reference Area

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	12,683	Ave. Background	0	Ave. MDCR < 50% Bkg.	No
Median	12,800	Ave. Bkg. + 3 sigma	0	Measurements < Ave. Bkg.	No
Standard Deviation	709	Ave. Bkg. - 3 sigma	0	Measurement Mean < Ave. Bkg.	No
Range	2,600	Ave. MDCR	1,204	No. Measurements > Ave. Bkg.	18
Minimum	11,150	Number of Measurements			
Maximum	13,750	No. Prescribed	18		
		No. Collected	18		



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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL051007-002	5/10/2007	PA1A1	A1	1	0	1,204	13,100	-13,100
DL051007-002	5/10/2007	PA1A1	A1	2	0	1,204	12,850	-12,850
DL051007-002	5/10/2007	PA1A1	A1	3	0	1,204	12,700	-12,700
DL051007-002	5/10/2007	PA1A1	A1	4	0	1,204	13,200	-13,200
DL051007-002	5/10/2007	PA1A1	A1	5	0	1,204	13,600	-13,600
DL051007-002	5/10/2007	PA1A1	A1	6	0	1,204	12,800	-12,800
DL051007-002	5/10/2007	PA1A1	A1	7	0	1,204	13,750	-13,750
DL051007-002	5/10/2007	PA1A1	A1	8	0	1,204	13,550	-13,550
DL051007-002	5/10/2007	PA1A1	A1	9	0	1,204	12,800	-12,800
DL051007-002	5/10/2007	PA1A1	A1	10	0	1,204	12,900	-12,900
DL051007-002	5/10/2007	PA1A1	A1	11	0	1,204	12,200	-12,200
DL051007-002	5/10/2007	PA1A1	A1	12	0	1,204	12,150	-12,150
DL051007-002	5/10/2007	PA1A1	A1	13	0	1,204	12,300	-12,300
DL051007-002	5/10/2007	PA1A1	A1	14	0	1,204	12,750	-12,750
DL051007-002	5/10/2007	PA1A1	A1	15	0	1,204	13,150	-13,150
DL051007-002	5/10/2007	PA1A1	A1	16	0	1,204	11,600	-11,600
DL051007-002	5/10/2007	PA1A1	A1	17	0	1,204	11,150	-11,150
DL051007-002	5/10/2007	PA1A1	A1	18	0	1,204	11,750	-11,750

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL051007-002	98648	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Gamma Background Subtract 1M (cpm)
A1	Asphalt	Asphalt Description	0.0

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 7.0

Photographs

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		



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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 8.0

Supplemental Information and/or Data

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

No additional Supplemental Information and/or Data

Appendix A

Section	Survey Package	Survey Unit Description
1.0		Background Study
1.1	G4024 401B1	Structures Background Reference Area
1.1.2	G4024 401B1	C1 - Concrete Results

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Direct Alpha Measurement Results
5.0	Contact Gamma Exposure Rate Measurement Results
6.0	1 Meter Gamma Exposure Rate Measurement Results
7.0	Photographs
8.0	Supplemental Information and/or Data

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 1.0

Data Analysis Report Parameters

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Data Analysis Report Parameters

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Survey Group: G - Background Reference Survey for Surfaces & Structures
Survey Area: 4024 - Structural Background Reference Area for SETF Building 4024
Unit Classification: 4 - Non-Impacted Structure
MARSSIM FSS Survey Unit Size (M²): No Limit

Survey Unit:	01 - Structures Background Reference Area		
Survey Reason:	B1 - Background Survey		
Surface(s):	Code	Description	Survey Area (M ²)
	FL1	Floor Surface	
			Total Area

Materials:	Code	Description
	C1	Concrete (Bare)

Report Information:

Report Pedigree:	Final Report
Detector Efficiency:	2-Pi
Material Background Evaluation:	Off (For This Report)
Survey Location:	LC6
Report Errors:	None

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 2.0

Annotated Drawings

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

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Data Analysis Report

Survey Area LC1: G4024 Package Type: Structure
Survey Area Name: Structural Background Reference Area for SETF Building
4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area



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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 3.0

Direct Beta Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

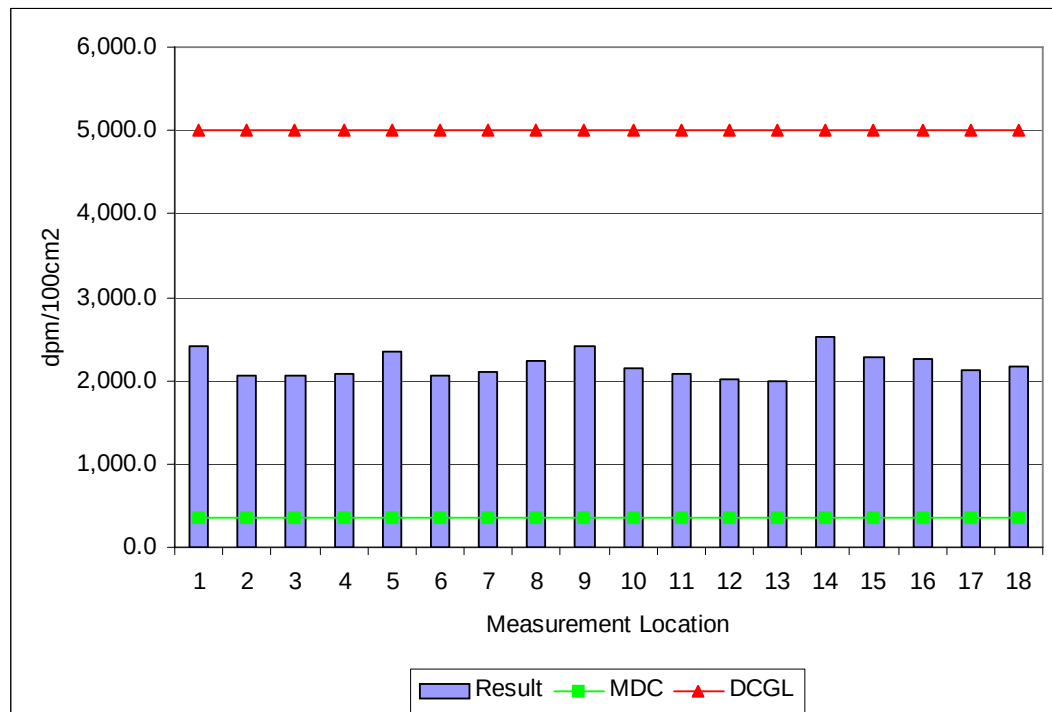
7/9/2007

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Direct Beta Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building 4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	2,185.5	MDC Mean	358.4	Max MDC <50% DCGL	Yes
Median	2,138.7	MDC Minimum	358.4	Measurements <DCGL	Yes
Standard Deviation	154.7	MDC Maximum	358.4	Measurement Mean <DCGL	Yes
Range	533.3	DCGL	5,000	No. Measurements >DCGL	0
Minimum	1,989.3	Number of Measurements			
Maximum	2,522.7	No. Prescribed	18		
		No. Collected	18		



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Direct Beta Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building 4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Detector Type/Count Type LC4	Room or Item No. LC5	SML LC6	Ave or SP Background dpm/100cm2	Measurement MDC dpm/100cm2	Measurement Result dpm/100cm2	Test (DCGL-Result) dpm/100cm2
DL050707-003	5/7/2007	FL1C1	B02FA	FL2	1	0.0	358.4	2,405.3	2594.7
DL050707-003	5/7/2007	FL1C1	B02FA	FL1	1	0.0	358.4	2,064.0	2936.0
DL050707-003	5/7/2007	FL1C1	B02FA	FL1	2	0.0	358.4	2,064.0	2936.0
DL050707-003	5/7/2007	FL1C1	B02FA	FL2	2	0.0	358.4	2,085.3	2914.7
DL050707-003	5/7/2007	FL1C1	B02FA	FL2	3	0.0	358.4	2,336.0	2664.0
DL050707-003	5/7/2007	FL1C1	B02FA	FL1	3	0.0	358.4	2,048.0	2952.0
DL050707-003	5/7/2007	FL1C1	B02FA	FL2	4	0.0	358.4	2,096.0	2904.0
DL050707-003	5/7/2007	FL1C1	B02FA	FL1	4	0.0	358.4	2,245.3	2754.7
DL050707-003	5/7/2007	FL1C1	B02FA	FL2	5	0.0	358.4	2,416.0	2584.0
DL050707-003	5/7/2007	FL1C1	B02FA	FL1	5	0.0	358.4	2,144.0	2856.0
DL050707-003	5/7/2007	FL1C1	B02FA	FL2	6	0.0	358.4	2,085.3	2914.7
DL050707-003	5/7/2007	FL1C1	B02FA	FL1	6	0.0	358.4	2,005.3	2994.7
DL050707-003	5/7/2007	FL1C1	B02FA	FL2	7	0.0	358.4	1,989.3	3010.7
DL050707-003	5/7/2007	FL1C1	B02FA	FL1	7	0.0	358.4	2,522.7	2477.3
DL050707-003	5/7/2007	FL1C1	B02FA	FL1	8	0.0	358.4	2,272.0	2728.0
DL050707-003	5/7/2007	FL1C1	B02FA	FL2	8	0.0	358.4	2,261.3	2738.7
DL050707-003	5/7/2007	FL1C1	B02FA	FL2	9	0.0	358.4	2,133.3	2866.7
DL050707-003	5/7/2007	FL1C1	B02FA	FL1	9	0.0	358.4	2,165.3	2834.7

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Direct Beta Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building 4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL050707-003	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Material Background Contribution dpm/100cm2
LC3 P45				
C1	Concrete (Bare)	Concrete (Bare) Description	0.5	0.0

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 4.0

Direct Alpha Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

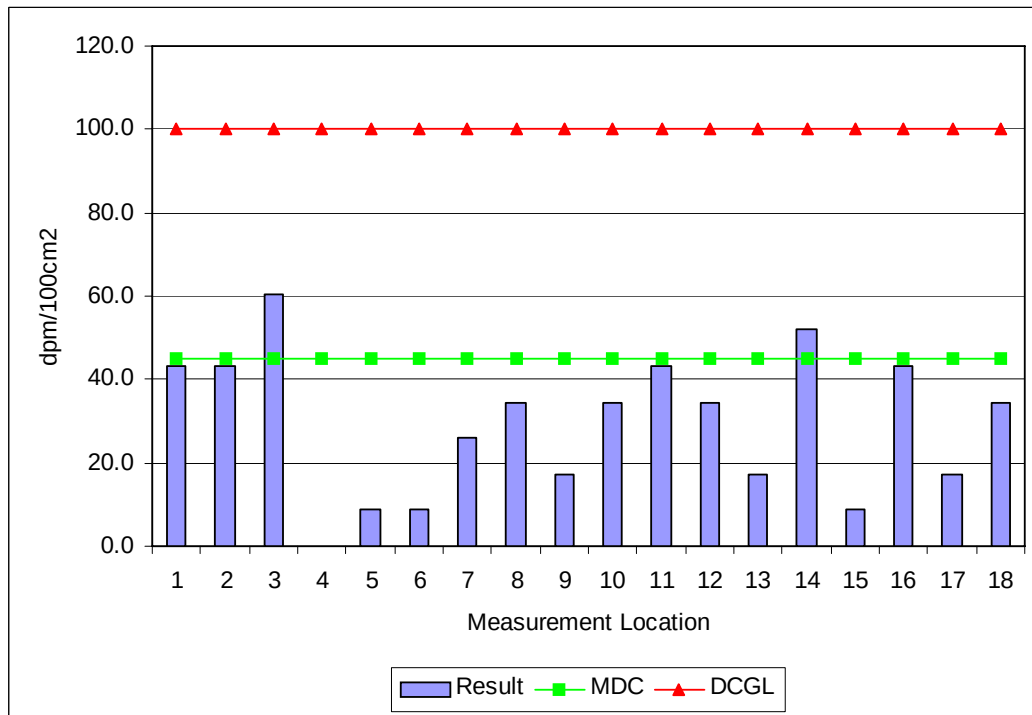
7/9/2007

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Direct Alpha Measurement Results

Survey Area LC1: G4024 Package Type: Structure
 Survey Area Name: Structural Background Reference Area for SETF Building 4024
 Survey Package Number and Unit Name:
 G4024 401B1 Structures Background Reference Area

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm ²		dpm/100cm ²		
Mean	29.3	MDC Mean	44.9	No. Collected >= Prescribed	Yes
Median	34.6	MDC Minimum	44.9	Max MDC <50% DCGL	Yes
Standard Deviation	17.1	MDC Maximum	44.9	Measurements < DCGL	Yes
Range	60.5	DCGL	100	Measurement Mean < DCGL	Yes
Minimum	0.0	Number of Measurements		No. Measurements >DCGL	0
Maximum	60.5	No. Prescribed	18		
		No. Collected	18		



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Direct Alpha Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building 4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Detector Type/Count Type LC4	Room or Item No. LC5	SML LC6	Ave or SP Background dpm/100cm2	Measurement MDC dpm/100cm2	Measurement Result dpm/100cm2	Test (DCGL-Result) dpm/100cm2
DL050707-001	5/7/2007	FL1C1	A03FA	FL2	1	0.0	44.9	43.2	56.8
DL050707-001	5/7/2007	FL1C1	A03FA	FL1	1	0.0	44.9	43.2	56.8
DL050707-001	5/7/2007	FL1C1	A03FA	FL1	2	0.0	44.9	60.5	39.5
DL050707-001	5/7/2007	FL1C1	A03FA	FL2	2	0.0	44.9	0.0	100.0
DL050707-001	5/7/2007	FL1C1	A03FA	FL2	3	0.0	44.9	8.6	91.4
DL050707-001	5/7/2007	FL1C1	A03FA	FL1	3	0.0	44.9	8.6	91.4
DL050707-001	5/7/2007	FL1C1	A03FA	FL2	4	0.0	44.9	25.9	74.1
DL050707-001	5/7/2007	FL1C1	A03FA	FL1	4	0.0	44.9	34.6	65.4
DL050707-001	5/7/2007	FL1C1	A03FA	FL2	5	0.0	44.9	17.3	82.7
DL050707-001	5/7/2007	FL1C1	A03FA	FL1	5	0.0	44.9	34.6	65.4
DL050707-001	5/7/2007	FL1C1	A03FA	FL2	6	0.0	44.9	43.2	56.8
DL050707-001	5/7/2007	FL1C1	A03FA	FL1	6	0.0	44.9	34.6	65.4
DL050707-001	5/7/2007	FL1C1	A03FA	FL2	7	0.0	44.9	17.3	82.7
DL050707-001	5/7/2007	FL1C1	A03FA	FL1	7	0.0	44.9	51.9	48.1
DL050707-001	5/7/2007	FL1C1	A03FA	FL1	8	0.0	44.9	8.6	91.4
DL050707-001	5/7/2007	FL1C1	A03FA	FL2	8	0.0	44.9	43.2	56.8
DL050707-001	5/7/2007	FL1C1	A03FA	FL2	9	0.0	44.9	17.3	82.7
DL050707-001	5/7/2007	FL1C1	A03FA	FL1	9	0.0	44.9	34.6	65.4

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Direct Alpha Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building
4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL050707-001	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Material Background Contribution dpm/100cm2
LC3 P45 C1	Concrete (Bare)	Concrete (Bare) Description	0.25	0.0

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

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CANOGA PARK, CALIFORNIA

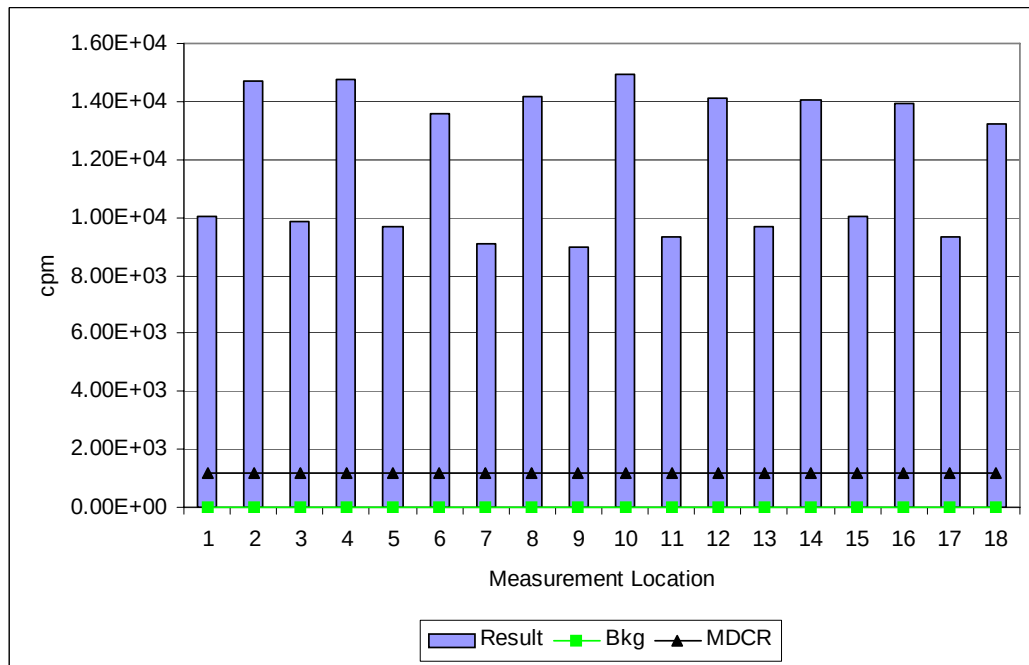
7/9/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	11,869	Ave. Background	0	Ave. MDCR < 50% Bkg.	No
Median	11,650	Ave. Bkg. + 3 sigma	0	Measurements < Ave. Bkg.	No
Standard Deviation	2,409	Ave. Bkg. - 3 sigma	0	Measurement Mean < Ave. Bkg.	No
Range	5,950	Ave. MDCR	1,165	No. Measurements > Ave. Bkg.	18
Minimum	9,000	Number of Measurements			
Maximum	14,950	No. Prescribed	18		
		No. Collected	18		



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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL050707-002	5/7/2007	FL1C1	FL1	1	0	1,165	10,050	-10,050
DL050707-002	5/7/2007	FL1C1	FL2	1	0	1,165	14,700	-14,700
DL050707-002	5/7/2007	FL1C1	FL1	2	0	1,165	9,850	-9,850
DL050707-002	5/7/2007	FL1C1	FL2	2	0	1,165	14,750	-14,750
DL050707-002	5/7/2007	FL1C1	FL1	3	0	1,165	9,700	-9,700
DL050707-002	5/7/2007	FL1C1	FL2	3	0	1,165	13,600	-13,600
DL050707-002	5/7/2007	FL1C1	FL1	4	0	1,165	9,100	-9,100
DL050707-002	5/7/2007	FL1C1	FL2	4	0	1,165	14,150	-14,150
DL050707-002	5/7/2007	FL1C1	FL1	5	0	1,165	9,000	-9,000
DL050707-002	5/7/2007	FL1C1	FL2	5	0	1,165	14,950	-14,950
DL050707-002	5/7/2007	FL1C1	FL1	6	0	1,165	9,350	-9,350
DL050707-002	5/7/2007	FL1C1	FL2	6	0	1,165	14,100	-14,100
DL050707-002	5/7/2007	FL1C1	FL1	7	0	1,165	9,700	-9,700
DL050707-002	5/7/2007	FL1C1	FL2	7	0	1,165	14,050	-14,050
DL050707-002	5/7/2007	FL1C1	FL1	8	0	1,165	10,050	-10,050
DL050707-002	5/7/2007	FL1C1	FL2	8	0	1,165	13,950	-13,950
DL050707-002	5/7/2007	FL1C1	FL1	9	0	1,165	9,350	-9,350
DL050707-002	5/7/2007	FL1C1	FL2	9	0	1,165	13,250	-13,250

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL050707-002	98648	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background Subtract (cpm)
C1	Concrete (Bare)	Concrete (Bare) Description	0.0

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 6.0

1 Meter Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

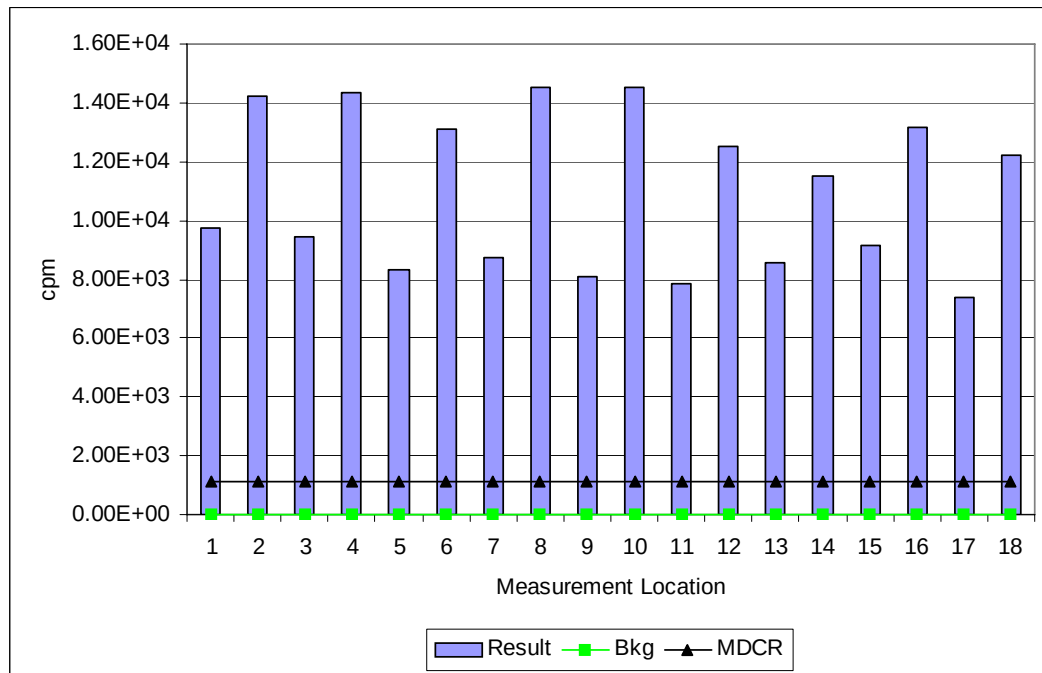
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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	10,972	Ave. Background	0	Ave. MDCR < 50% Bkg.	No
Median	10,625	Ave. Bkg. + 3 sigma	0	Measurements < Ave. Bkg.	No
Standard Deviation	2,618	Ave. Bkg. - 3 sigma	0	Measurement Mean < Ave. Bkg.	No
Range	7,150	Ave. MDCR	1,120	No. Measurements > Ave. Bkg.	18
Minimum	7,400	Number of Measurements			
Maximum	14,550	No. Prescribed	18		
		No. Collected	18		



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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL050707-002	5/7/2007	FL1C1	FL1	1	0	1,120	9,750	-9,750
DL050707-002	5/7/2007	FL1C1	FL2	1	0	1,120	14,250	-14,250
DL050707-002	5/7/2007	FL1C1	FL1	2	0	1,120	9,450	-9,450
DL050707-002	5/7/2007	FL1C1	FL2	2	0	1,120	14,350	-14,350
DL050707-002	5/7/2007	FL1C1	FL1	3	0	1,120	8,350	-8,350
DL050707-002	5/7/2007	FL1C1	FL2	3	0	1,120	13,100	-13,100
DL050707-002	5/7/2007	FL1C1	FL1	4	0	1,120	8,750	-8,750
DL050707-002	5/7/2007	FL1C1	FL2	4	0	1,120	14,500	-14,500
DL050707-002	5/7/2007	FL1C1	FL1	5	0	1,120	8,100	-8,100
DL050707-002	5/7/2007	FL1C1	FL2	5	0	1,120	14,550	-14,550
DL050707-002	5/7/2007	FL1C1	FL1	6	0	1,120	7,850	-7,850
DL050707-002	5/7/2007	FL1C1	FL2	6	0	1,120	12,500	-12,500
DL050707-002	5/7/2007	FL1C1	FL1	7	0	1,120	8,550	-8,550
DL050707-002	5/7/2007	FL1C1	FL2	7	0	1,120	11,500	-11,500
DL050707-002	5/7/2007	FL1C1	FL1	8	0	1,120	9,150	-9,150
DL050707-002	5/7/2007	FL1C1	FL2	8	0	1,120	13,150	-13,150
DL050707-002	5/7/2007	FL1C1	FL1	9	0	1,120	7,400	-7,400
DL050707-002	5/7/2007	FL1C1	FL2	9	0	1,120	12,250	-12,250

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL050707-002	98648	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Gamma Background Subtract 1M (cpm)
C1	Concrete (Bare)	Concrete (Bare) Description	0.0

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 7.0

Photographs

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		



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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 8.0

Supplemental Information and/or Data

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

There was no additional supplemental information and/or data.

Appendix A

Section	Survey Package	Survey Unit Description
1.0		Background Study
1.1	G4024 401B1	Structures Background Reference Area
1.1.3	G4024 401B1	M1 - Metal Results

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Direct Alpha Measurement Results
5.0	Contact Gamma Exposure Rate Measurement Results
6.0	1 Meter Gamma Exposure Rate Measurement Results
7.0	Photographs
8.0	Supplemental Information and/or Data

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 1.0

Data Analysis Report Parameters

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Data Analysis Report Parameters

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Survey Group: G - Background Reference Survey for Surfaces & Structures
Survey Area: 4024 - Structural Background Reference Area for SETF Building 4024
Unit Classification: 4 - Non-Impacted Structure
MARSSIM FSS Survey Unit Size (M²): No Limit

Survey Unit:	01 - Structures Background Reference Area		
Survey Reason:	B1 - Background Survey		
Surface(s):	Code	Description	Survey Area (M ²)
	WL1	Lower Wall Surfaces	Total Area

Materials:	Code	Description
	M1	Metal

Report Information:

Report Pedigree:	Final Report
Detector Efficiency:	2-Pi
Material Background Evaluation:	Off (For This Report)
Survey Location:	LC6
Report Errors:	None

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 2.0

Annotated Drawings

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Data Analysis Report

Survey Area LC1: G4024 Package Type: Structure
Survey Area Name: Structural Background Reference Area for SETF Building
4024

Survey Package Number and Unit Name:

G4024 401B1 Structures Background Reference Area



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 3.0

Direct Beta Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

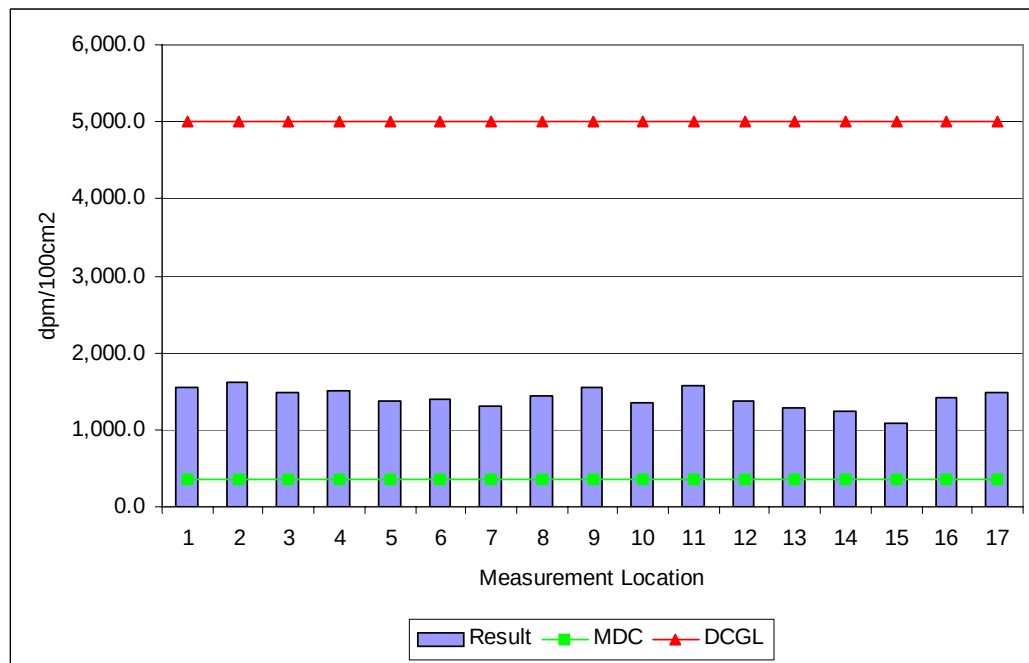
7/9/2007

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Direct Beta Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building 4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	1,422.2	MDC Mean	352.3	Max MDC <50% DCGL	Yes
Median	1,424.0	MDC Minimum	352.3	Measurements <DCGL	Yes
Standard Deviation	138.1	MDC Maximum	352.3	Measurement Mean <DCGL	Yes
Range	533.3	DCGL	5,000	No. Measurements >DCGL	0
Minimum	1,077.3	Number of Measurements			
Maximum	1,610.7	No. Prescribed	18		
		No. Collected	18		



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Direct Beta Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building 4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Detector Type/Count Type LC4	Room or Item No. LC5	SML LC6	Ave or SP Background dpm/100cm2	Measurement MDC dpm/100cm2	Measurement Result dpm/100cm2	Test (DCGL-Result) dpm/100cm2
DL050707-003	5/7/2007	WL1M1	B02FA	WL2	1	0.0	352.3	1,578.7	3,421.3
DL050707-003	5/7/2007	WL1M1	B02FA	WL1	1	0.0	352.3	1,552.0	3,448.0
DL050707-003	5/7/2007	WL1M1	B02FA	WL1	2	0.0	352.3	1,610.7	3,389.3
DL050707-003	5/7/2007	WL1M1	B02FA	WL2	2	0.0	352.3	1,493.3	3,506.7
DL050707-003	5/7/2007	WL1M1	B02FA	WL2	3	0.0	352.3	1,498.7	3,501.3
DL050707-003	5/7/2007	WL1M1	B02FA	WL1	3	0.0	352.3	1,381.3	3,618.7
DL050707-003	5/7/2007	WL1M1	B02FA	WL2	4	0.0	352.3	1,386.7	3,613.3
DL050707-003	5/7/2007	WL1M1	B02FA	WL1	4	0.0	352.3	1,312.0	3,688.0
DL050707-003	5/7/2007	WL1M1	B02FA	WL2	5	0.0	352.3	1,429.3	3,570.7
DL050707-003	5/7/2007	WL1M1	B02FA	WL1	5	0.0	352.3	1,557.3	3,442.7
DL050707-003	5/7/2007	WL1M1	B02FA	WL2	6	0.0	352.3	1,344.0	3,656.0
DL050707-003	5/7/2007	WL1M1	B02FA	WL1	6	0.0	352.3	1,568.0	3,432.0
DL050707-003	5/7/2007	WL1M1	B02FA	WL2	7	0.0	352.3	1,381.3	3,618.7
DL050707-003	5/7/2007	WL1M1	B02FA	WL1	7	0.0	352.3	1,290.7	3,709.3
DL050707-003	5/7/2007	WL1M1	B02FA	WL1	8	0.0	352.3	1,237.3	3,762.7
DL050707-003	5/7/2007	WL1M1	B02FA	WL2	8	0.0	352.3	1,077.3	3,922.7
DL050707-003	5/7/2007	WL1M1	B02FA	WL2	9	0.0	352.3	1,418.7	3,581.3
DL050707-003	5/7/2007	WL1M1	B02FA	WL1	9	0.0	352.3	1,482.7	3,517.3

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Direct Beta Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building 4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL050707-003	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Material Background Contribution dpm/100cm2
LC3 P45				
M1	Metal	Metal Description	0.5	0.0

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 4.0

Direct Alpha Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

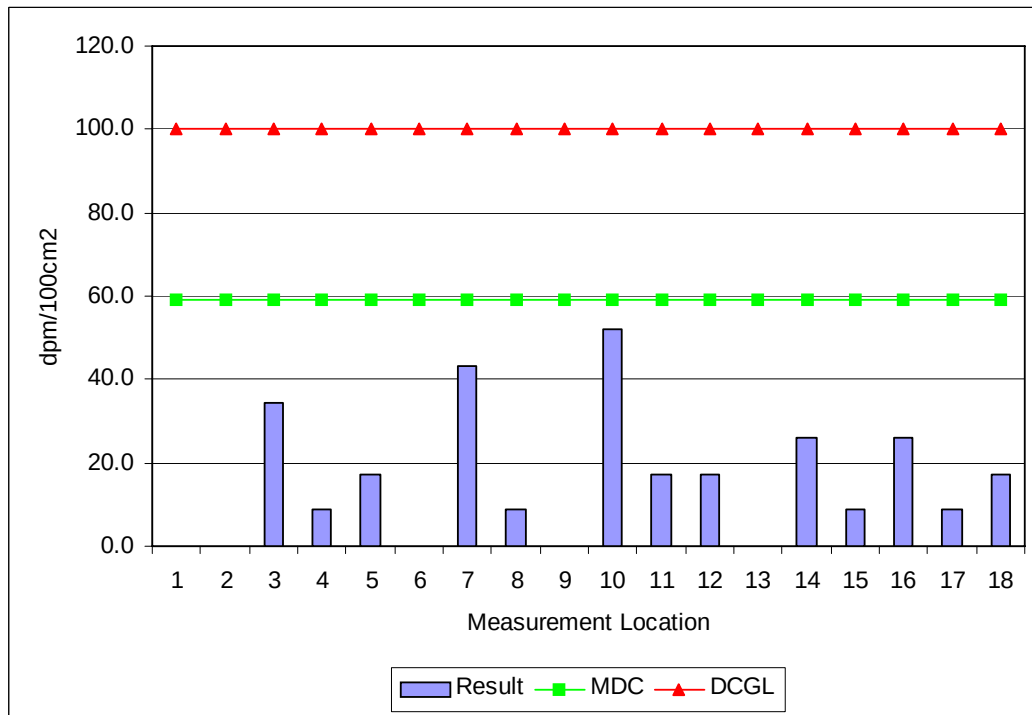
7/9/2007

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Direct Alpha Measurement Results

Survey Area LC1: G4024 Package Type: Structure
 Survey Area Name: Structural Background Reference Area for SETF Building 4024
 Survey Package Number and Unit Name:
 G4024 401B1 Structures Background Reference Area

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm2		dpm/100cm2		
Mean	15.9	MDC Mean	59.1	No. Collected >= Prescribed	Yes
Median	13.0	MDC Minimum	59.1	Max MDC <50% DCGL	No
Standard Deviation	15.5	MDC Maximum	59.1	Measurements < DCGL	Yes
Range	51.9	DCGL	100	Measurement Mean < DCGL	Yes
Minimum	0.0	Number of Measurements		No. Measurements >DCGL	0
Maximum	51.9	No. Prescribed	18		
		No. Collected	18		



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Direct Alpha Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building
 4024
Survey Package Number and Unit Name:
 G4024 401B1 Structures Background Reference Area

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Detector Type/Count Type LC4	Room or Item No. LC5	SML LC6	Ave or SP Background dpm/100cm2	Measurement MDC dpm/100cm2	Measurement Result dpm/100cm2	Test (DCGL-Result) dpm/100cm2
DL050707-001	5/7/2007	WL1M1	A03FA	WL2	1	0.0	59.1	0.0	100.0
DL050707-001	5/7/2007	WL1M1	A03FA	WL1	1	0.0	59.1	0.0	100.0
DL050707-001	5/7/2007	WL1M1	A03FA	WL1	2	0.0	59.1	34.6	65.4
DL050707-001	5/7/2007	WL1M1	A03FA	WL2	2	0.0	59.1	8.6	91.4
DL050707-001	5/7/2007	WL1M1	A03FA	WL2	3	0.0	59.1	17.3	82.7
DL050707-001	5/7/2007	WL1M1	A03FA	WL1	3	0.0	59.1	0.0	100.0
DL050707-001	5/7/2007	WL1M1	A03FA	WL2	4	0.0	59.1	43.2	56.8
DL050707-001	5/7/2007	WL1M1	A03FA	WL1	4	0.0	59.1	8.6	91.4
DL050707-001	5/7/2007	WL1M1	A03FA	WL2	5	0.0	59.1	0.0	100.0
DL050707-001	5/7/2007	WL1M1	A03FA	WL1	5	0.0	59.1	51.9	48.1
DL050707-001	5/7/2007	WL1M1	A03FA	WL2	6	0.0	59.1	17.3	82.7
DL050707-001	5/7/2007	WL1M1	A03FA	WL1	6	0.0	59.1	17.3	82.7
DL050707-001	5/7/2007	WL1M1	A03FA	WL2	7	0.0	59.1	0.0	100.0
DL050707-001	5/7/2007	WL1M1	A03FA	WL1	7	0.0	59.1	25.9	74.1
DL050707-001	5/7/2007	WL1M1	A03FA	WL1	8	0.0	59.1	8.6	91.4
DL050707-001	5/7/2007	WL1M1	A03FA	WL2	8	0.0	59.1	25.9	74.1
DL050707-001	5/7/2007	WL1M1	A03FA	WL2	9	0.0	59.1	8.6	91.4
DL050707-001	5/7/2007	WL1M1	A03FA	WL1	9	0.0	59.1	17.3	82.7

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Direct Alpha Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building
4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL050707-001	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Material Background Contribution dpm/100cm2
LC3 P45 M1	Metal	Metal Description	0.25	0.0

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

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CANOGA PARK, CALIFORNIA

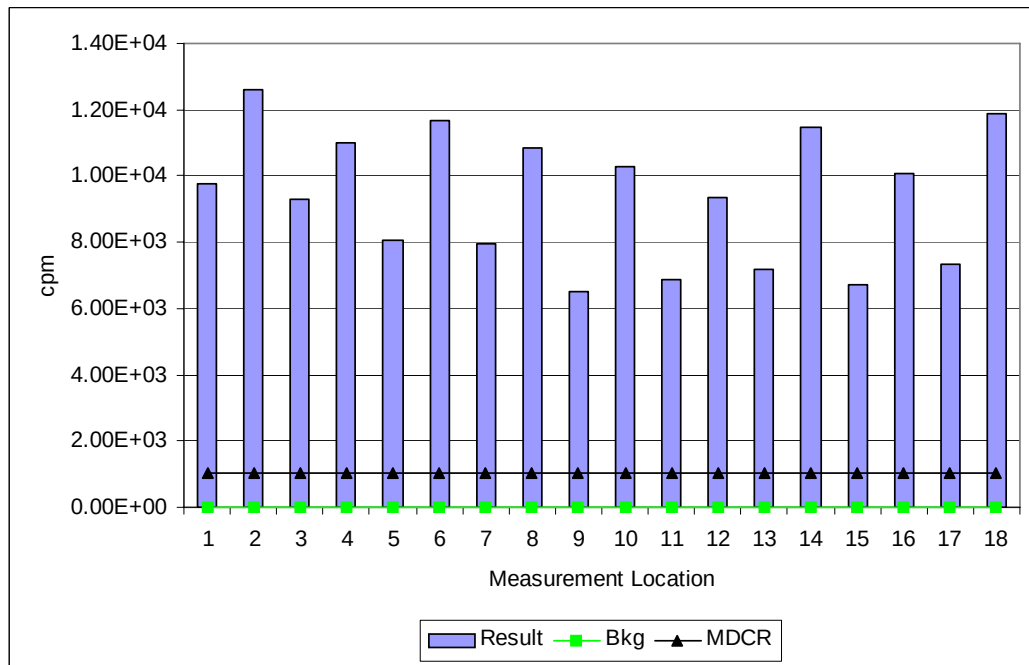
7/9/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	9,381	Ave. Background	0	Ave. MDCR < 50% Bkg.	No
Median	9,550	Ave. Bkg. + 3 sigma	0	Measurements < Ave. Bkg.	No
Standard Deviation	1,988	Ave. Bkg. - 3 sigma	0	Measurement Mean < Ave. Bkg.	No
Range	6,100	Ave. MDCR	1,035	No. Measurements > Ave. Bkg.	18
Minimum	6,500	Number of Measurements			
Maximum	12,600	No. Prescribed	18		
		No. Collected	18		



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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL050707-002	5/7/2007	WL1M1	WL1	1	0	1,035	9,750	-9,750
DL050707-002	5/7/2007	WL1M1	WL2	1	0	1,035	12,600	-12,600
DL050707-002	5/7/2007	WL1M1	WL1	2	0	1,035	9,300	-9,300
DL050707-002	5/7/2007	WL1M1	WL2	2	0	1,035	11,000	-11,000
DL050707-002	5/7/2007	WL1M1	WL1	3	0	1,035	8,050	-8,050
DL050707-002	5/7/2007	WL1M1	WL2	3	0	1,035	11,700	-11,700
DL050707-002	5/7/2007	WL1M1	WL1	4	0	1,035	7,950	-7,950
DL050707-002	5/7/2007	WL1M1	WL2	4	0	1,035	10,850	-10,850
DL050707-002	5/7/2007	WL1M1	WL1	5	0	1,035	6,500	-6,500
DL050707-002	5/7/2007	WL1M1	WL2	5	0	1,035	10,300	-10,300
DL050707-002	5/7/2007	WL1M1	WL1	6	0	1,035	6,850	-6,850
DL050707-002	5/7/2007	WL1M1	WL2	6	0	1,035	9,350	-9,350
DL050707-002	5/7/2007	WL1M1	WL1	7	0	1,035	7,200	-7,200
DL050707-002	5/7/2007	WL1M1	WL2	7	0	1,035	11,450	-11,450
DL050707-002	5/7/2007	WL1M1	WL1	8	0	1,035	6,700	-6,700
DL050707-002	5/7/2007	WL1M1	WL2	8	0	1,035	10,050	-10,050
DL050707-002	5/7/2007	WL1M1	WL1	9	0	1,035	7,350	-7,350
DL050707-002	5/7/2007	WL1M1	WL2	9	0	1,035	11,900	-11,900

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL050707-002	98648	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background Subtract (cpm)
C1	Concrete (Bare)	Concrete (Bare) Description	0.0

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 6.0

1 Meter Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

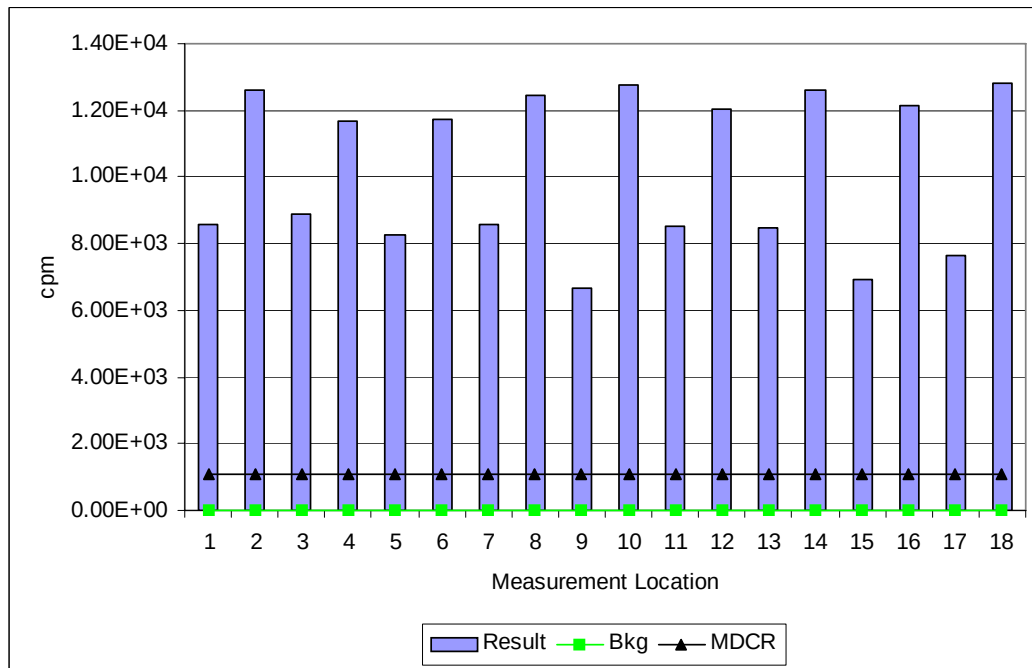
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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	10,181	Ave. Background	0	Ave. MDCR < 50% Bkg.	No
Median	10,275	Ave. Bkg. + 3 sigma	0	Measurements < Ave. Bkg.	No
Standard Deviation	2,279	Ave. Bkg. - 3 sigma	0	Measurement Mean < Ave. Bkg.	No
Range	6,150	Ave. MDCR	1,079	No. Measurements > Ave. Bkg.	18
Minimum	6,650	Number of Measurements			
Maximum	12,800	No. Prescribed	18		
		No. Collected	18		



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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL050707-002	5/7/2007	WL1M1	WL1	1	0	1,079	8,600	-8,600
DL050707-002	5/7/2007	WL1M1	WL2	1	0	1,079	12,600	-12,600
DL050707-002	5/7/2007	WL1M1	WL1	2	0	1,079	8,900	-8,900
DL050707-002	5/7/2007	WL1M1	WL2	2	0	1,079	11,650	-11,650
DL050707-002	5/7/2007	WL1M1	WL1	3	0	1,079	8,250	-8,250
DL050707-002	5/7/2007	WL1M1	WL2	3	0	1,079	11,750	-11,750
DL050707-002	5/7/2007	WL1M1	WL1	4	0	1,079	8,550	-8,550
DL050707-002	5/7/2007	WL1M1	WL2	4	0	1,079	12,450	-12,450
DL050707-002	5/7/2007	WL1M1	WL1	5	0	1,079	6,650	-6,650
DL050707-002	5/7/2007	WL1M1	WL2	5	0	1,079	12,750	-12,750
DL050707-002	5/7/2007	WL1M1	WL1	6	0	1,079	8,500	-8,500
DL050707-002	5/7/2007	WL1M1	WL2	6	0	1,079	12,050	-12,050
DL050707-002	5/7/2007	WL1M1	WL1	7	0	1,079	8,450	-8,450
DL050707-002	5/7/2007	WL1M1	WL2	7	0	1,079	12,600	-12,600
DL050707-002	5/7/2007	WL1M1	WL1	8	0	1,079	6,900	-6,900
DL050707-002	5/7/2007	WL1M1	WL2	8	0	1,079	12,150	-12,150
DL050707-002	5/7/2007	WL1M1	WL1	9	0	1,079	7,650	-7,650
DL050707-002	5/7/2007	WL1M1	WL2	9	0	1,079	12,800	-12,800

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1: G4024 **Package Type:** Structure
Survey Area Name: Structural Background Reference Area for SETF Building
4024
Survey Package Number and Unit Name:
G4024 401B1 Structures Background Reference Area

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL050707-002	98648	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Gamma Background Subtract 1M (cpm)
M1	Metal	Metal Description	0.0

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

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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 7.0

Photographs

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

7/9/2007

Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		



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Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

Section 8.0

Supplemental Information and/or Data

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

7/9/2007

Data Analysis Report

Survey Area LC1:	G4024	Package Type:	Structure
Survey Area Name:	Structural Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
G4024 401B1	Structures Background Reference Area		

There was no additional supplemental information and/or data.

Appendix A

Section	Survey Package	Survey Unit Description
1.0		Background Study
1.2	H4024 401B1	Environmental Soil Background Areas

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Contact Gamma Exposure Rate Measurement Results
4.0	1 Meter Gamma Exposure Rate Measurement Results
5.0	Sample Analysis Results
6.0	Photographs
7.0	Supplemental Information and/or Data

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Section 1.0

Data Analysis Report Parameters

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report Parameters

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Survey Group: H - Environmental Background Reference Areas
Survey Area: 4024 - Environmental Background Reference Area for SETF Building 4024
Unit Classification: 4 - Non-Impacted Environ
MARSSIM FSS Survey Unit Size (M²): No Limit
Survey Unit: 01 - Environmental Background Areas
Survey Reason: B1 - Background Survey
Surface(s): Code Description Survey Area (M²)
LA1 - Open Land Areas (general areas outside in the
environs)
Total Area

Materials: Code Description
S1 - Soil

Report Information:

Report Pedigree:	Final Report
Material Background Evaluation:	Off (For This Report)
Survey Location:	LC6
Report Errors:	None

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

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Data Analysis Report

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Section 2.0

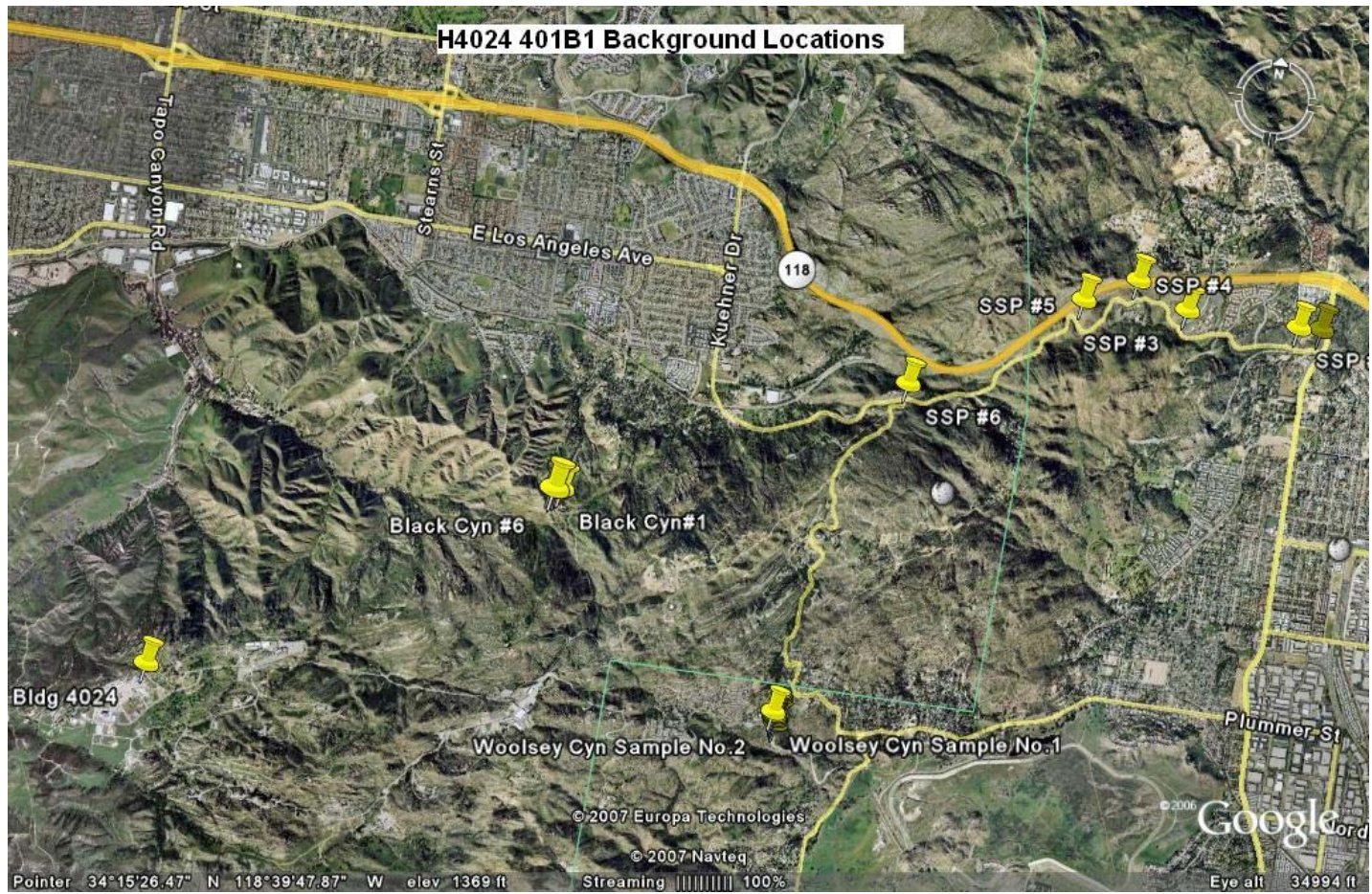
Annotated Drawings

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

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Data Analysis Report Parameters

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

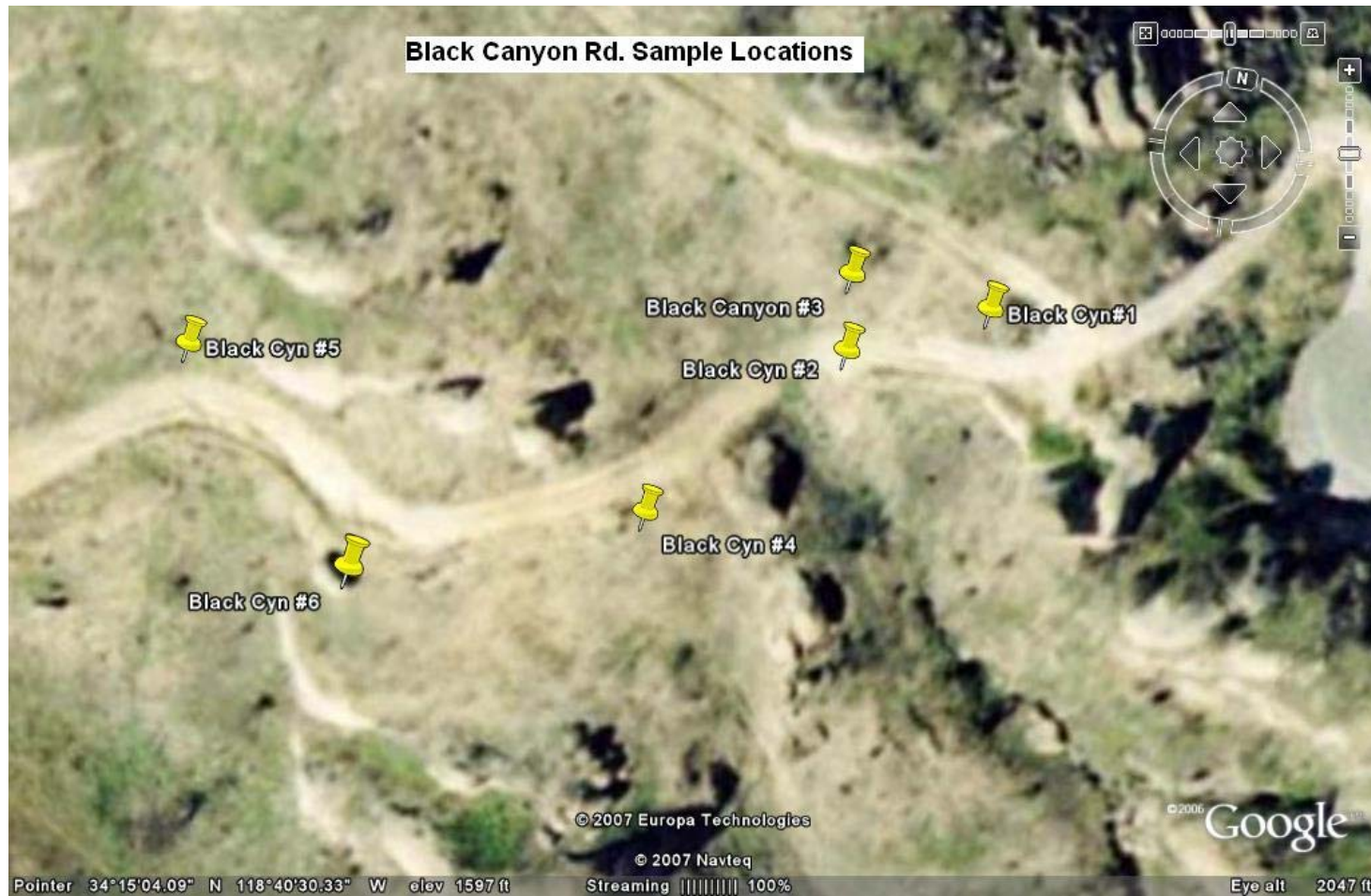


SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA

7/10/2007

Data Analysis Report Parameters

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

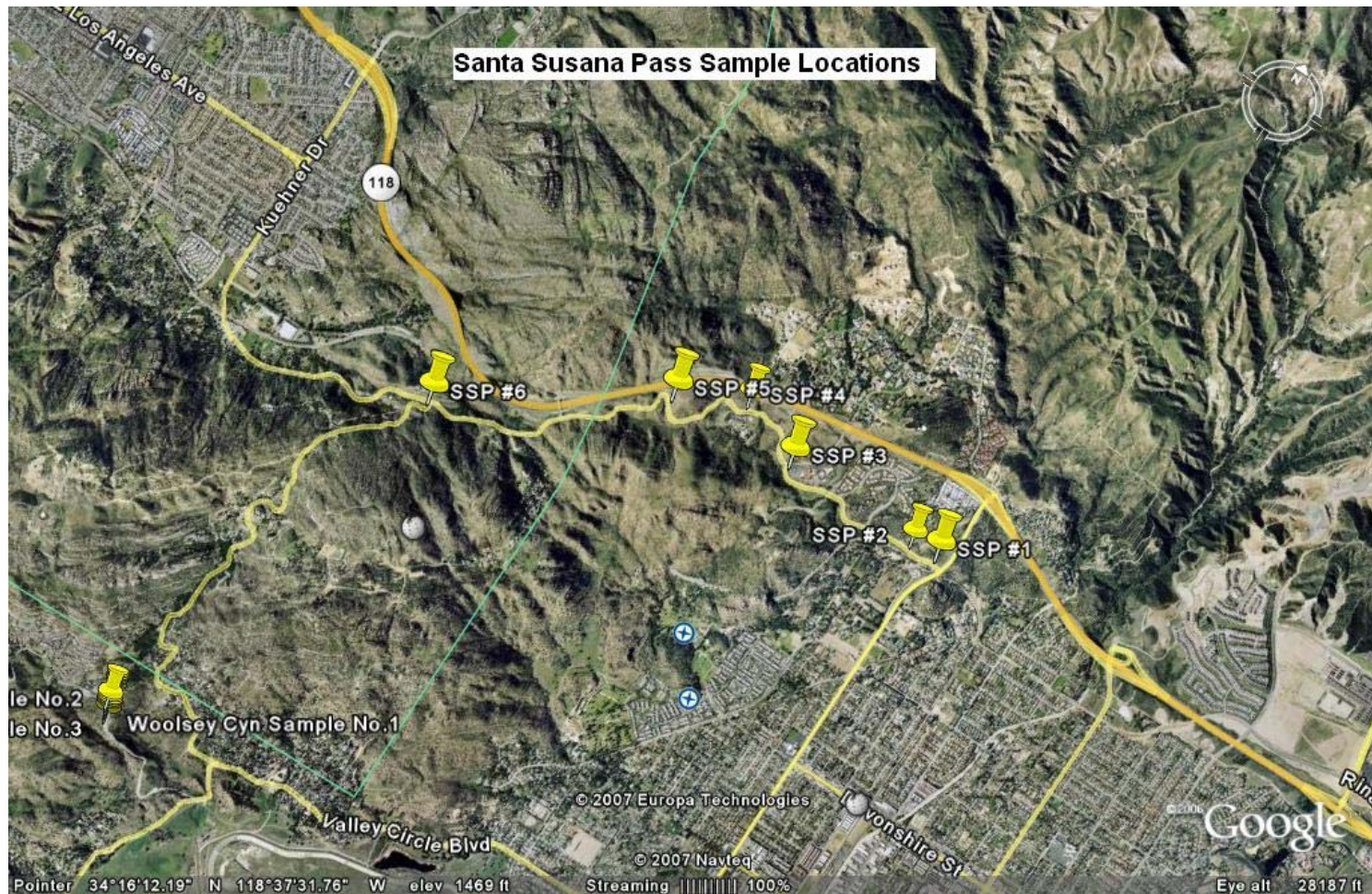


SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT CANOGA PARK, CALIFORNIA

7/10/2007

Data Analysis Report Parameters

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		



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

7/10/2007

Data Analysis Report Parameters

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		



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

7/10/2007

Data Analysis Report Parameters

Survey Area LC1: H4024 Package Type: Environ
Survey Area Name: Environmental Background Reference Area for SETF
Building 4024
Survey Package Number and Unit Name:
H4024 401B1 Environmental Background Areas

H4024 401B1 Offsite Soil Background Locations.xls

Location	Latitude	Longitude
Woolsey Canyon Rd. Sample No.1	34°14'11.00"N	118°39'6.67"W
Woolsey Canyon Rd. Sample No.2	34°14'10.50"N	118°39'6.41"W
Woolsey Canyon Rd. Sample No.3	34°14'10.00"N	118°39'6.08"W
Woolsey Canyon Rd. Sample No.4	34°14'9.48"N	118°39'5.92"W
Woolsey Canyon Rd. Sample No.5	34°14'9.00"N	118°39'5.65"W
Woolsey Canyon Rd. Sample No.6	34°14'8.00"N	118°39'5.23"W
Santa Susana Pass Sample No.1	34°16'21.14"N	118°36'19.88"W
Santa Susana Pass Sample No.2	34°16'20.75"N	118°36'27.63"W
Santa Susana Pass Sample No.3	34°16'20.61"N	118°37'7.25"W
Santa Susana Pass Sample No.4	34°16'26.75"N	118°37'25.75"W
Santa Susana Pass Sample No.5	34°16'18.71"N	118°37'43.73"W
Santa Susana Pass Sample No.6	34°15'48.21"N	118°38'38.30"W
Black Canyon Rd. Sample No.1	34°15'4.70"N	118°40'29.12"W
Black Canyon Rd. Sample No.2	34°15'4.47"N	118°40'29.73"W
Black Canyon Rd. Sample No.3	34°15'4.75"N	118°40'29.76"W
Black Canyon Rd. Sample No.4	34°15'3.76"N	118°40'30.52"W
Black Canyon Rd. Sample No.5	34°15'4.13"N	118°40'32.69"W
Black Canyon Rd. Sample No.6	34°15'3.36"N	118°40'31.86"W

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Data Analysis Report

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Section 3.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

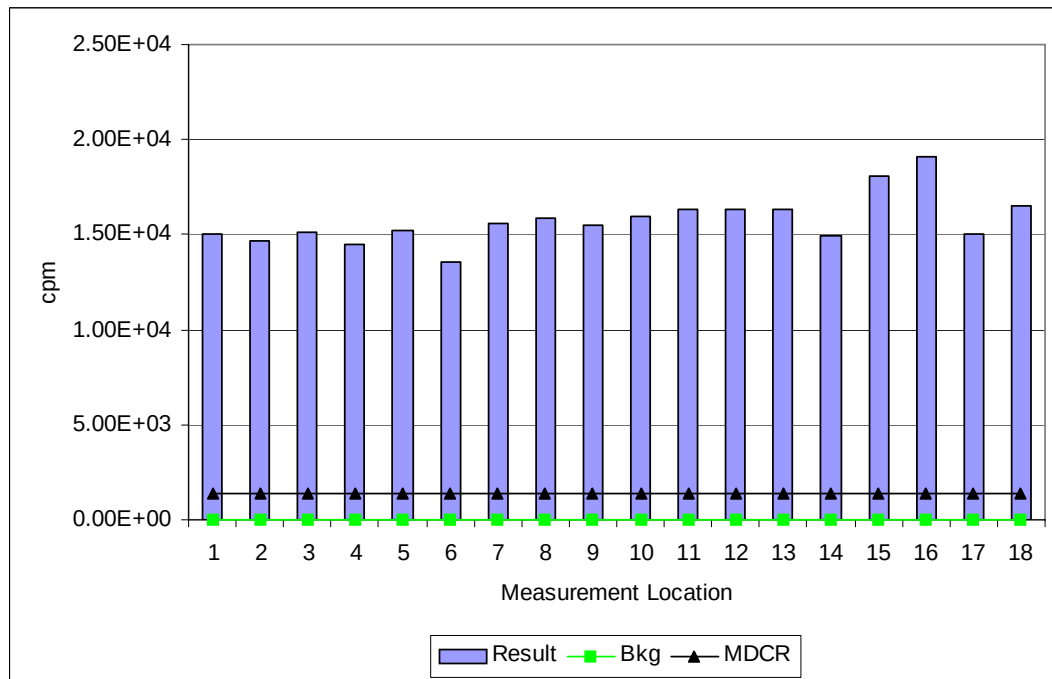
7/10/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	15,756	Ave. Background	0	Ave. MDCR < 50% Bkg.	No
Median	15,550	Ave. Bkg. + 3 sigma	0	Measurements < Ave. Bkg.	No
Standard Deviation	1,280	Ave. Bkg. - 3 sigma	0	Measurement Mean < Ave. Bkg.	No
Range	5,500	Ave. MDCR	1,342	No. Measurements > Ave. Bkg.	18
Minimum	13,550	Number of Measurements			
Maximum	19,050	No. Prescribed	18		
		No. Collected	18		



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

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL050407-001	5/4/2007	LA1S1	WC	1	0	1,342	15,000	-15,000
DL050407-001	5/4/2007	LA1S1	WC	2	0	1,342	14,650	-14,650
DL050407-001	5/4/2007	LA1S1	WC	3	0	1,342	15,150	-15,150
DL050407-001	5/4/2007	LA1S1	WC	4	0	1,342	14,500	-14,500
DL050407-001	5/4/2007	LA1S1	WC	5	0	1,342	15,200	-15,200
DL050407-001	5/4/2007	LA1S1	WC	6	0	1,342	13,550	-13,550
DL050807-001	5/8/2007	LA1S1	BC	1	0	1,342	15,600	-15,600
DL050807-001	5/8/2007	LA1S1	BC	2	0	1,342	15,900	-15,900
DL050807-001	5/8/2007	LA1S1	BC	3	0	1,342	15,500	-15,500
DL050807-001	5/8/2007	LA1S1	BC	4	0	1,342	16,000	-16,000
DL050807-001	5/8/2007	LA1S1	BC	5	0	1,342	16,300	-16,300
DL050807-001	5/8/2007	LA1S1	BC	6	0	1,342	16,350	-16,350
DL050907-001	5/9/2007	LA1S1	SSP	1	0	1,342	16,300	-16,300
DL050907-001	5/9/2007	LA1S1	SSP	2	0	1,342	14,950	-14,950
DL050907-001	5/9/2007	LA1S1	SSP	3	0	1,342	18,050	-18,050
DL050907-001	5/9/2007	LA1S1	SSP	4	0	1,342	19,050	-19,050
DL050907-001	5/9/2007	LA1S1	SSP	5	0	1,342	15,050	-15,050
DL050907-001	5/9/2007	LA1S1	SSP	6	0	1,342	16,500	-16,500

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL050407-001	98648	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742
DL050807-001	98648	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742
DL050907-001	98648	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background Subtract (cpm)
S1	Soil	Soil Description	0.0

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

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Data Analysis Report

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Section 4.0

1 Meter Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

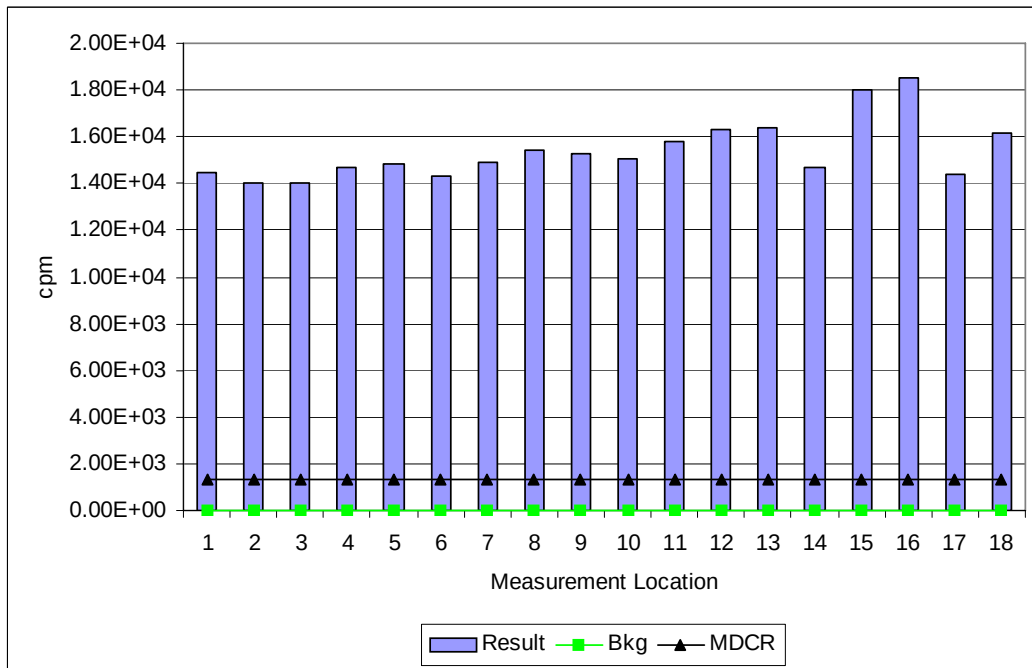
7/10/2007

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	15,406	Ave. Background	0	Ave. MDCR < 50% Bkg.	No
Median	14,975	Ave. Bkg. + 3 sigma	0	Measurements < Ave. Bkg.	No
Standard Deviation	1,278	Ave. Bkg. - 3 sigma	0	Measurement Mean < Ave. Bkg.	No
Range	4,550	Ave. MDCR	1,327	No. Measurements > Ave. Bkg.	18
Minimum	14,000	Number of Measurements			
Maximum	18,550	No. Prescribed	18		
		No. Collected	18		



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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL050407-001	5/4/2007	LA1S1	WC	1	0	1,327	14,500	-14,500
DL050407-001	5/4/2007	LA1S1	WC	2	0	1,327	14,000	-14,000
DL050407-001	5/4/2007	LA1S1	WC	3	0	1,327	14,050	-14,050
DL050407-001	5/4/2007	LA1S1	WC	4	0	1,327	14,650	-14,650
DL050407-001	5/4/2007	LA1S1	WC	5	0	1,327	14,800	-14,800
DL050407-001	5/4/2007	LA1S1	WC	6	0	1,327	14,350	-14,350
DL050807-001	5/8/2007	LA1S1	BC	1	0	1,327	14,900	-14,900
DL050807-001	5/8/2007	LA1S1	BC	2	0	1,327	15,450	-15,450
DL050807-001	5/8/2007	LA1S1	BC	3	0	1,327	15,300	-15,300
DL050807-001	5/8/2007	LA1S1	BC	4	0	1,327	15,050	-15,050
DL050807-001	5/8/2007	LA1S1	BC	5	0	1,327	15,800	-15,800
DL050807-001	5/8/2007	LA1S1	BC	6	0	1,327	16,300	-16,300
DL050907-001	5/9/2007	LA1S1	SSP	1	0	1,327	16,400	-16,400
DL050907-001	5/9/2007	LA1S1	SSP	2	0	1,327	14,650	-14,650
DL050907-001	5/9/2007	LA1S1	SSP	3	0	1,327	18,000	-18,000
DL050907-001	5/9/2007	LA1S1	SSP	4	0	1,327	18,550	-18,550
DL050907-001	5/9/2007	LA1S1	SSP	5	0	1,327	14,400	-14,400
DL050907-001	5/9/2007	LA1S1	SSP	6	0	1,327	16,150	-16,150

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL050407-001	98648	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742
DL050807-001	98648	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742
DL050907-001	98648	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Gamma Background Subtract 1M (cpm)
S1	Soil	Soil Description	0.0

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

7/10/2007

Data Analysis Report

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Section 5.0

Sample Analysis Results

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

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Data Analysis Report

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Survey Package Number: H4024 401B1
Unit Name: Environmental Background Areas

Isotope	Soil Concentration (pCi/g)					Comments		
	Mean	Std. Dev.	Range		Mean MDC			
			Minimum	Maximum				
						No. Results	No. Detect	No. Non-detect
Am-241	0.001	0.009	-0.006	0.022	0.059	18	0	18
Co-60	0.001	0.005	-0.011	0.010	0.021	18	0	18
Cs-134	-0.009	0.018	-0.063	0.012	0.028	18	0	18
Cs-137	0.027	0.030	-0.017	0.086	0.019	18	9	9
Eu-152	-0.012	0.015	-0.042	0.012	0.049	18	0	18
Eu-154	0.001	0.023	-0.025	0.055	0.070	18	0	18
Fe-55	-0.583	2.185	-3.900	4.700	6.661	18	0	18
H-3	-0.128	0.366	-0.900	0.400	1.661	18	0	18
K-40	21.294	1.028	19.540	23.190	0.183	18	18	0
Mn-54	0.006	0.008	-0.010	0.018	0.035	18	0	18
Na-22	-0.001	0.007	-0.012	0.016	0.026	18	0	18
Ni-63	-0.506	0.903	-1.800	1.400	4.078	18	0	18
Pu-238	0.002	0.007	-0.006	0.026	0.051	18	0	18
Pu-239/240	0.009	0.009	-0.004	0.028	0.057	18	0	18
Pu-241	-0.122	0.813	-2.000	1.300	3.167	18	0	18
Sr-90	0.009	0.025	-0.047	0.042	0.094	18	0	18
Th-228	0.002	0.201	-0.300	0.290	0.729	18	0	18
Th-232	0.067	0.024	0.030	0.114	0.030	18	17	1
U-234	0.618	0.111	0.390	0.810	0.025	18	18	0
U-235	0.041	0.021	0.006	0.076	0.026	18	12	6
U-238	0.581	0.101	0.410	0.750	0.022	18	18	0

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Section 6.0

Photographs

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

7/10/2007

Data Analysis Report

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Photographs were not taken.

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

7/10/2007

Data Analysis Report

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

Section 7.0

Supplemental Information and/or Data

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

7/10/2007

Data Analysis Report

Survey Area LC1:	H4024	Package Type:	Environ
Survey Area Name:	Environmental Background Reference Area for SETF Building 4024		
Survey Package Number and Unit Name:			
H4024 401B1	Environmental Background Areas		

There was no additional supplemental information and/or data.

Appendix A

Section	Survey Package	Survey Unit Description
2.0		SETF Environmental Soil Areas
2.1	A4024 301C1	Soil Areas Adjacent to Paved Areas
2.2	A4024 101C1	Buried Waste Tank/Vault Location

Appendix A

Section	Survey Package	Survey Unit Description
2.0		SETF Environmental Soil Areas
2.1	A4024 301C1	Soil Areas Adjacent to Paved Areas

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Contact Gamma Exposure Rate Measurement Results
4.0	1 Meter Gamma Exposure Rate Measurement Results
5.0	Sample Analysis Results
6.0	Photographs
7.0	Supplemental Information and/or Data

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Section 1.0

Data Analysis Report Parameters

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

7/11/2007

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Data Analysis Report Parameters

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Survey Group: A - Radiological Survey of Impacted Environmental Areas

Survey Area: 4024 - SETF Paved Yard and Adjacent Soil Areas

Unit Classification: 3 - Impacted Class 3 Environ

MARSSIM FSS Survey Unit Size (M²): No Limit

Survey Unit: 01 - Soil Areas Adjacent to Paved Areas

Survey Reason: C1 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	LA1	Open Land Areas (general areas outside in the environs)	

Total Area

Materials:	Code	Description
	S1	Soil

Report Information:

Report Pedigree: Final Report

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Section 2.0

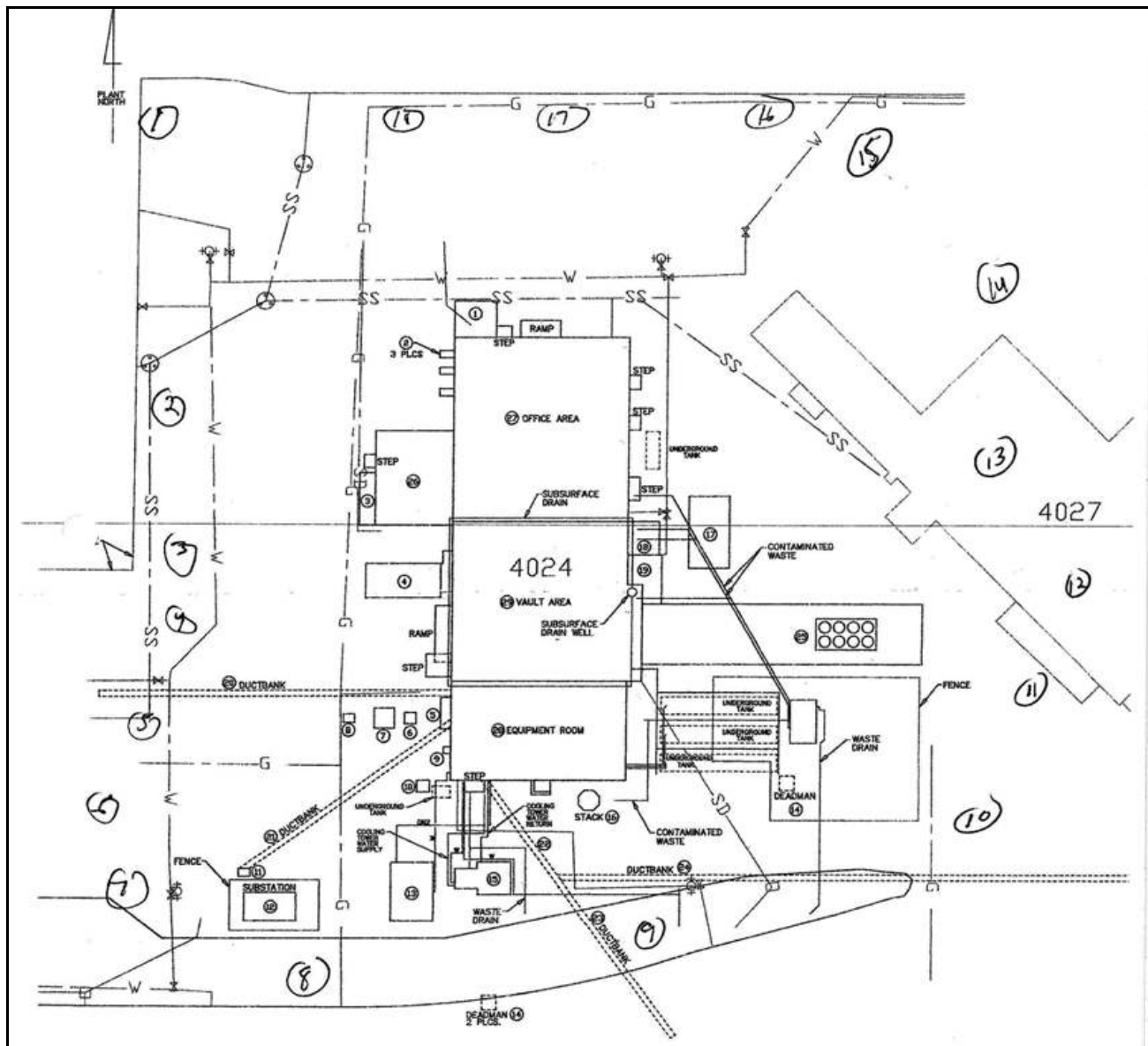
Annotated Drawings

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		



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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Section 3.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

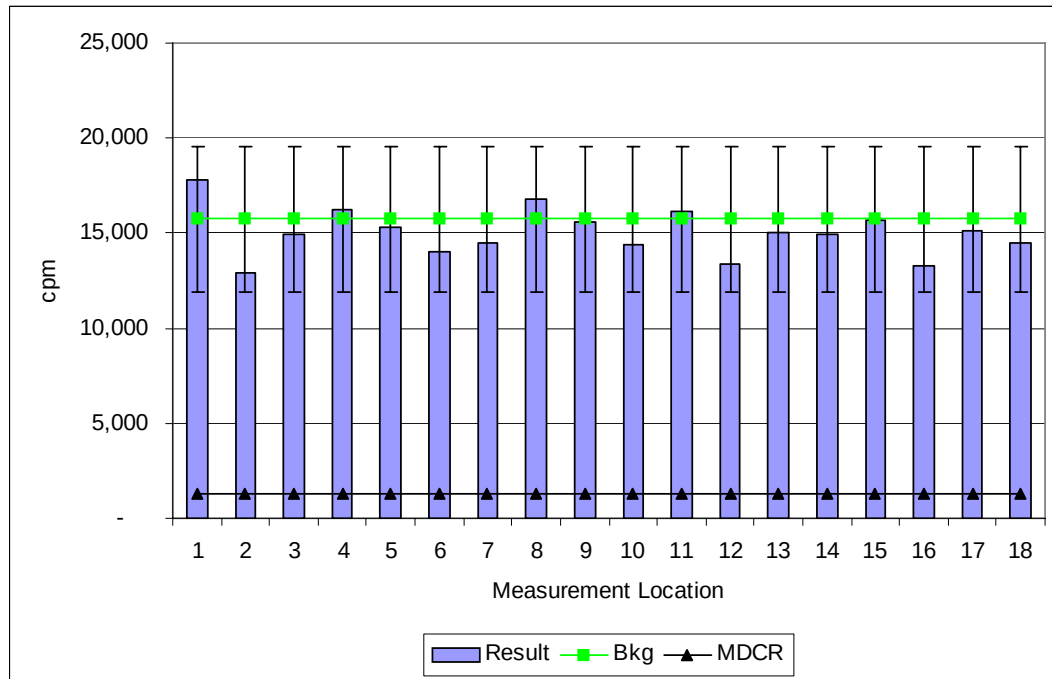
7/11/2007

Page 1 of 3

Contact Gamma Exposure Rate Measurement Results

Survey Area LC1: A4024 Package Type: Environ
 Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
 Survey Package Number and Unit Name:
 A4024 301C1 Soil Areas Adjacent to Paved Areas

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	15,025	Ave. Background	15,756	Ave. MDCR < 50% Bkg.	Yes
Median	14,975	Ave. Bkg. + 3 sigma	19,531	Measurements < Ave. Bkg.	No
Standard Deviation	1,259	Ave. Bkg. - 3 sigma	11,980	Measurement Mean < Ave. Bkg.	Yes
Range	4,950	Ave. MDCR	1,310	No. Measurements > Ave. Bkg.	4
Minimum	12,900	Number of Measurements			
Maximum	17,850	No. Prescribed	18		
		No. Collected	18		



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

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1: A4024 **Package Type:** Environ
Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
Survey Package Number and Unit Name:
A4024 301C1 Soil Areas Adjacent to Paved Areas

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL050307-001	5/3/2007	LA1S1	W	1	15,756	1,310	17,850	-2,094
DL050307-001	5/3/2007	LA1S1	S	1	15,756	1,310	12,900	2,856
DL050307-001	5/3/2007	LA1S1	E	1	15,756	1,310	14,900	856
DL050307-001	5/3/2007	LA1S1	N	1	15,756	1,310	16,250	-494
DL050307-001	5/3/2007	LA1S1	W	2	15,756	1,310	15,350	406
DL050307-001	5/3/2007	LA1S1	S	2	15,756	1,310	14,050	1,706
DL050307-001	5/3/2007	LA1S1	E	2	15,756	1,310	14,500	1,256
DL050307-001	5/3/2007	LA1S1	N	2	15,756	1,310	16,750	-994
DL050307-001	5/3/2007	LA1S1	W	3	15,756	1,310	15,550	206
DL050307-001	5/3/2007	LA1S1	E	3	15,756	1,310	14,350	1,406
DL050307-001	5/3/2007	LA1S1	N	3	15,756	1,310	16,100	-344
DL050307-001	5/3/2007	LA1S1	W	4	15,756	1,310	13,350	2,406
DL050307-001	5/3/2007	LA1S1	E	4	15,756	1,310	15,050	706
DL050307-001	5/3/2007	LA1S1	W	5	15,756	1,310	14,900	856
DL050307-001	5/3/2007	LA1S1	E	5	15,756	1,310	15,700	56
DL050307-001	5/3/2007	LA1S1	W	6	15,756	1,310	13,250	2,506
DL050307-001	5/3/2007	LA1S1	E	6	15,756	1,310	15,150	606
DL050307-001	5/3/2007	LA1S1	W	7	15,756	1,310	14,500	1,256

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

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL050307-001	98648	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
S1	Soil	Soil Description	15,756

Field Notes Summary

Download ID	Field Notes
DL050307-001	Post-use source check on DL050307-004

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Section 4.0

1 Meter Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

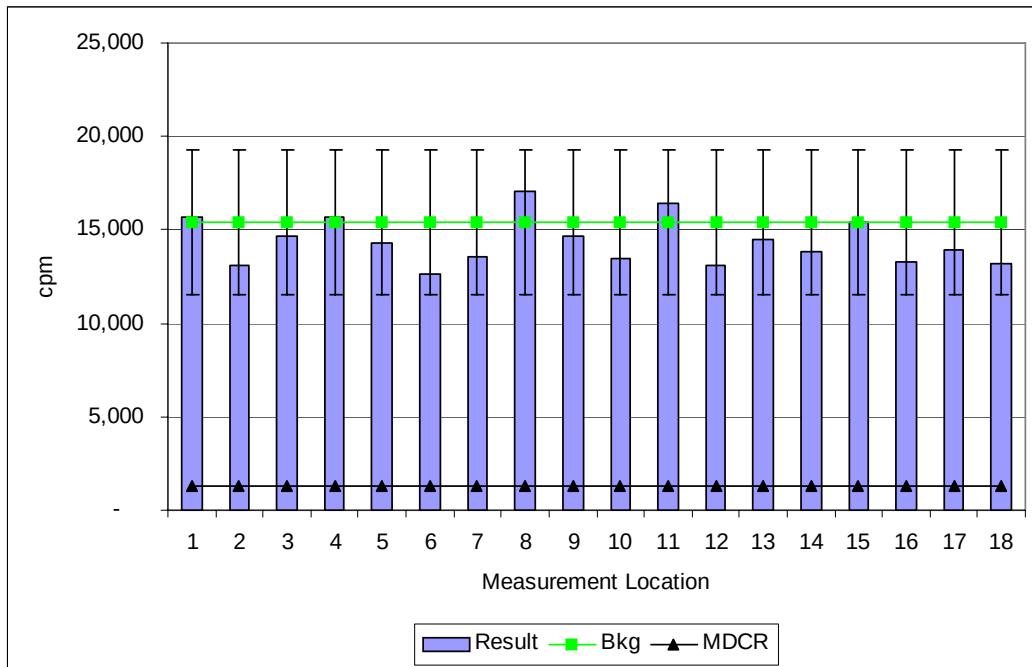
7/11/2007

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	14,361	Ave. Background	15,406	Ave. MDCR < 50% Bkg.	Yes
Median	14,125	Ave. Bkg. + 3 sigma	19,210	Measurements < Ave. Bkg.	No
Standard Deviation	1,268	Ave. Bkg. - 3 sigma	11,601	Measurement Mean < Ave. Bkg.	Yes
Range	4,450	Ave. MDCR	1,281	No. Measurements > Ave. Bkg.	5
Minimum	12,600	Number of Measurements			
Maximum	17,050	No. Prescribed	18		
		No. Collected	18		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL050307-001	5/3/2007	LA1S1	W	1	15,406	1,281	15,700	-294
DL050307-001	5/3/2007	LA1S1	S	1	15,406	1,281	13,100	2,306
DL050307-001	5/3/2007	LA1S1	E	1	15,406	1,281	14,650	756
DL050307-001	5/3/2007	LA1S1	N	1	15,406	1,281	15,700	-294
DL050307-001	5/3/2007	LA1S1	W	2	15,406	1,281	14,300	1,106
DL050307-001	5/3/2007	LA1S1	S	2	15,406	1,281	12,600	2,806
DL050307-001	5/3/2007	LA1S1	E	2	15,406	1,281	13,550	1,856
DL050307-001	5/3/2007	LA1S1	N	2	15,406	1,281	17,050	-1,644
DL050307-001	5/3/2007	LA1S1	W	3	15,406	1,281	14,650	756
DL050307-001	5/3/2007	LA1S1	E	3	15,406	1,281	13,450	1,956
DL050307-001	5/3/2007	LA1S1	N	3	15,406	1,281	16,450	-1,044
DL050307-001	5/3/2007	LA1S1	W	4	15,406	1,281	13,100	2,306
DL050307-001	5/3/2007	LA1S1	E	4	15,406	1,281	14,500	906
DL050307-001	5/3/2007	LA1S1	W	5	15,406	1,281	13,850	1,556
DL050307-001	5/3/2007	LA1S1	E	5	15,406	1,281	15,450	-44
DL050307-001	5/3/2007	LA1S1	W	6	15,406	1,281	13,250	2,156
DL050307-001	5/3/2007	LA1S1	E	6	15,406	1,281	13,950	1,456
DL050307-001	5/3/2007	LA1S1	W	7	15,406	1,281	13,200	2,206

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

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1: A4024 **Package Type:** Environ
Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
Survey Package Number and Unit Name:
A4024 301C1 Soil Areas Adjacent to Paved Areas

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL050307-001	98648	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	1M Gamma Background (cpm)
S1	Soil	Soil Description	15,406

Field Notes Summary

Download ID	Field Notes
DL050307-001	Post-use source check on DL050307-004

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Section 5.0

Sample Analysis Results

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Survey Package Number: A4024 301C1
Unit Name: SETF Environmental Soil Areas

Isotope	Soil Concentration (pCi/g)					Comments		
	Mean	Std. Dev.	Range		Mean MDC			
			Minimum	Maximum				
						No. Results	No. Detect	No. Non-detect
Am-241	-0.002	0.008	-0.018	0.018	0.077	18	0	18
Co-60	0.001	0.003	-0.005	0.007	0.017	18	0	18
Cs-134	-0.016	0.020	-0.048	0.006	0.034	18	0	18
Cs-137	0.075	0.183	-0.012	0.746	0.018	18	8	10
Eu-152	-0.007	0.015	-0.040	0.023	0.039	18	0	18
Eu-154	0.006	0.016	-0.038	0.030	0.065	18	0	18
Fe-55	-2.933	1.714	-6.700	-0.700	6.867	18	0	18
H-3	0.094	0.411	-0.900	1.000	1.694	18	0	18
K-40	22.681	2.168	20.410	27.720	0.140	18	18	0
Mn-54	0.006	0.007	-0.004	0.027	0.030	18	0	18
Na-22	0.001	0.007	-0.010	0.014	0.025	18	0	18
Ni-63	0.183	0.936	-1.300	2.100	3.978	18	0	18
Pu-238	-0.001	0.003	-0.004	0.012	0.058	18	0	18
Pu-239/240	0.007	0.013	-0.004	0.037	0.061	18	0	18
Pu-241	-1.178	2.574	-5.800	3.200	3.900	18	0	18
Sr-90	0.000	0.021	-0.034	0.038	0.093	18	0	18
Th-228	0.019	0.189	-0.370	0.410	0.727	18	0	18
Th-232	0.139	0.071	0.063	0.320	0.028	18	18	0
U-234	0.568	0.157	0.292	0.910	0.024	18	18	0
U-235	0.058	0.024	0.016	0.101	0.025	18	16	2
U-238	0.546	0.169	0.242	0.870	0.021	18	18	0

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Section 6.0

Photographs

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Photographs were not taken.

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 301C1	Soil Areas Adjacent to Paved Areas		

Section 7.0

Supplemental Information and/or Data

 ***** THE BOEING COMPANY *****
 ***** SANTA SUSANA FIELD LABORATORY *****
 ***** SHEA - RADIATION SAFETY LAB *****

 ***** GAMMA SPECTRUM ANALYSIS REPORT *****
 * *****

Report Generated On : 5/9/07 9:37:48 AM

Sample Identification : T24070002M
 Spectrum Description : 4024 O/S Soil Composite for Shipping
 MCA Number : Main System #1
 Sample Type : Soil
 Sample Geometry : 1

Peak Locate Threshold : 4.00
 Peak Locate Range (in channels) : 200 - 16384
 Peak Area Range (in channels) : 1 - 16384
 Identification Energy Tolerance : 1.000 keV

Sample Size : 6.050E+002 g

Sample Taken On : 5/3/07 10:00:00 AM
 Acquisition Started : 5/9/07 9:14:05 AM

Live Time : 1300.0 seconds
 Real Time : 1300.3 seconds

Energy Calibration Used Done On : 9/29/06
 Efficiency Calibration Used Done On : 9/29/06

Report Reviewed and
 Conforms to RS-00017

By: GR MEDINIS Date: 5-9-07

Radiation Safety

NOTE: COPY1

Acceptable for Non-radioactive Disposal
 (See Rocketdyne N001OP000034)

 ***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : T24070002M

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/g)	Wt mean Activity Uncertainty	Percent Total Act.	Nuclide MDA (pCi/g)
K-40	0.984	2.263E+001	2.104E+000	87.10%	9.488E-001
CS-137	0.913	6.536E-002	2.995E-002	0.25%	5.024E-002
Tl-208T	0.636	3.027E-001	5.025E-002	1.17%	4.052E-002
PB-212T @	0.752	8.963E-001	9.654E-002	3.45%	1.002E-001
PB-214U @	0.676	6.586E-001	7.766E-002	2.53%	8.784E-002
? RA-226U	0.934	1.346E+000	4.596E-001	5.18%	8.010E-001
? U-235 @	0.442	8.178E-002	2.804E-002	0.31%	4.865E-002

Total Sample Activity... 2.5981E+001 pCi/g

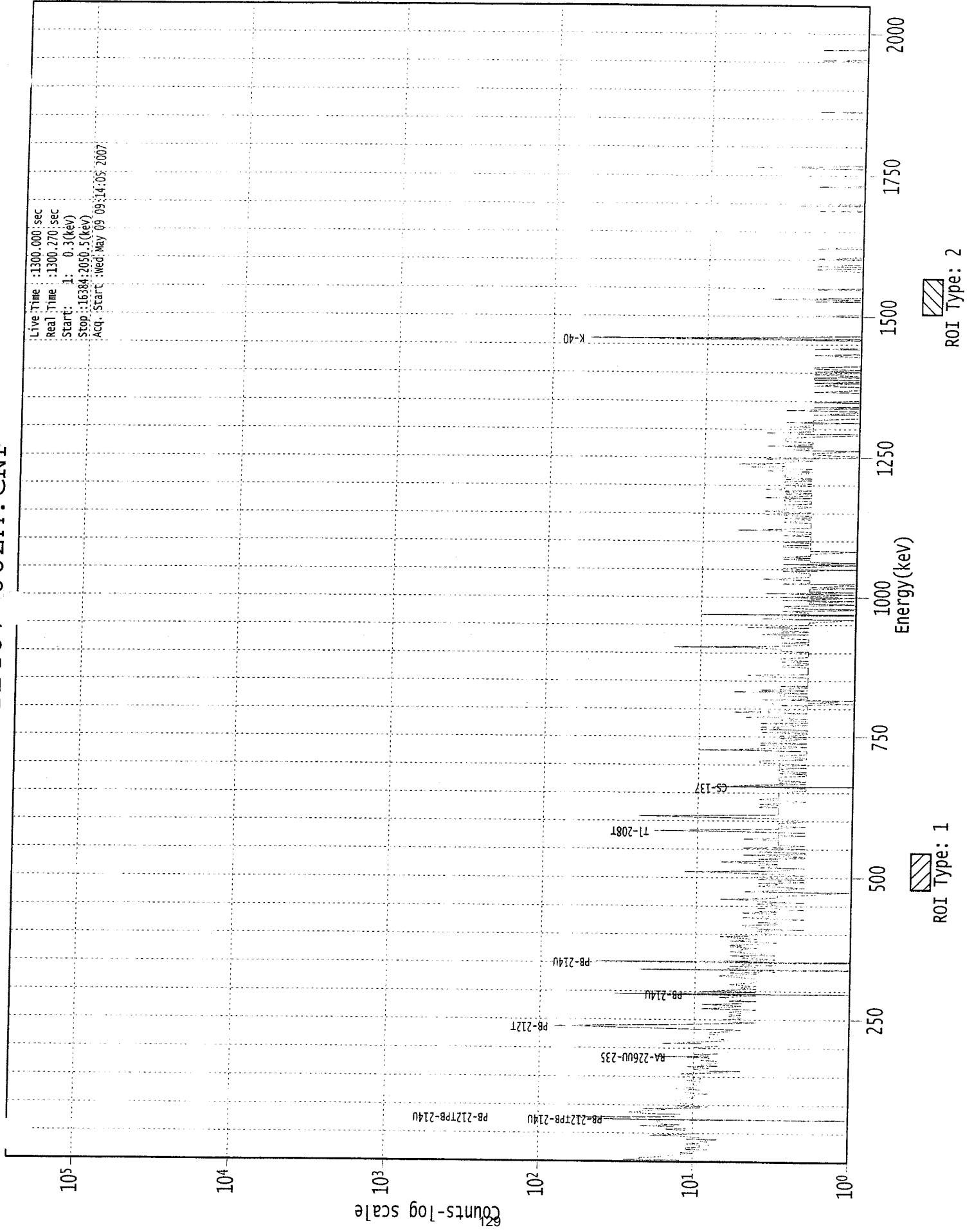
? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

T24070002M.CNF



Appendix A

Section	Survey Package	Survey Unit Description
2.0		SETF Environmental Soil Areas
2.2	A4024 101C1	Buried Waste Tank/Vault Location
2.2.1	A4024 101C1	Surface Soil Survey

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

7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Contact Gamma Exposure Rate Measurement Results
4.0	1 Meter Gamma Exposure Rate Measurement Results
5.0	Sample Analysis Results
6.0	Photographs
7.0	Supplemental Information and/or Data

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

7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Section 1.0

Data Analysis Report Parameters

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

7/10/2007

Page 1 of 1

Data Analysis Report Parameters

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Survey Group: A - Radiological Survey of Impacted Environmental Areas

Survey Area: 4024 - SETF Paved Yard and Adjacent Soil Areas

Unit Classification: 1 - Impacted Class 1 Environ

MARSSIM FSS Survey Unit Size (M²): 2,000

Survey Unit: 01 - Buried Waste Tank/Vault Location

Survey Reason: C1 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	SA1	Surface Soil Sample @ 0-15 cm Depth	198
		Total Area	198

Materials: Code Description
S1 - Soil

Report Information:

Report Pedigree: Final Report

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Section 2.0

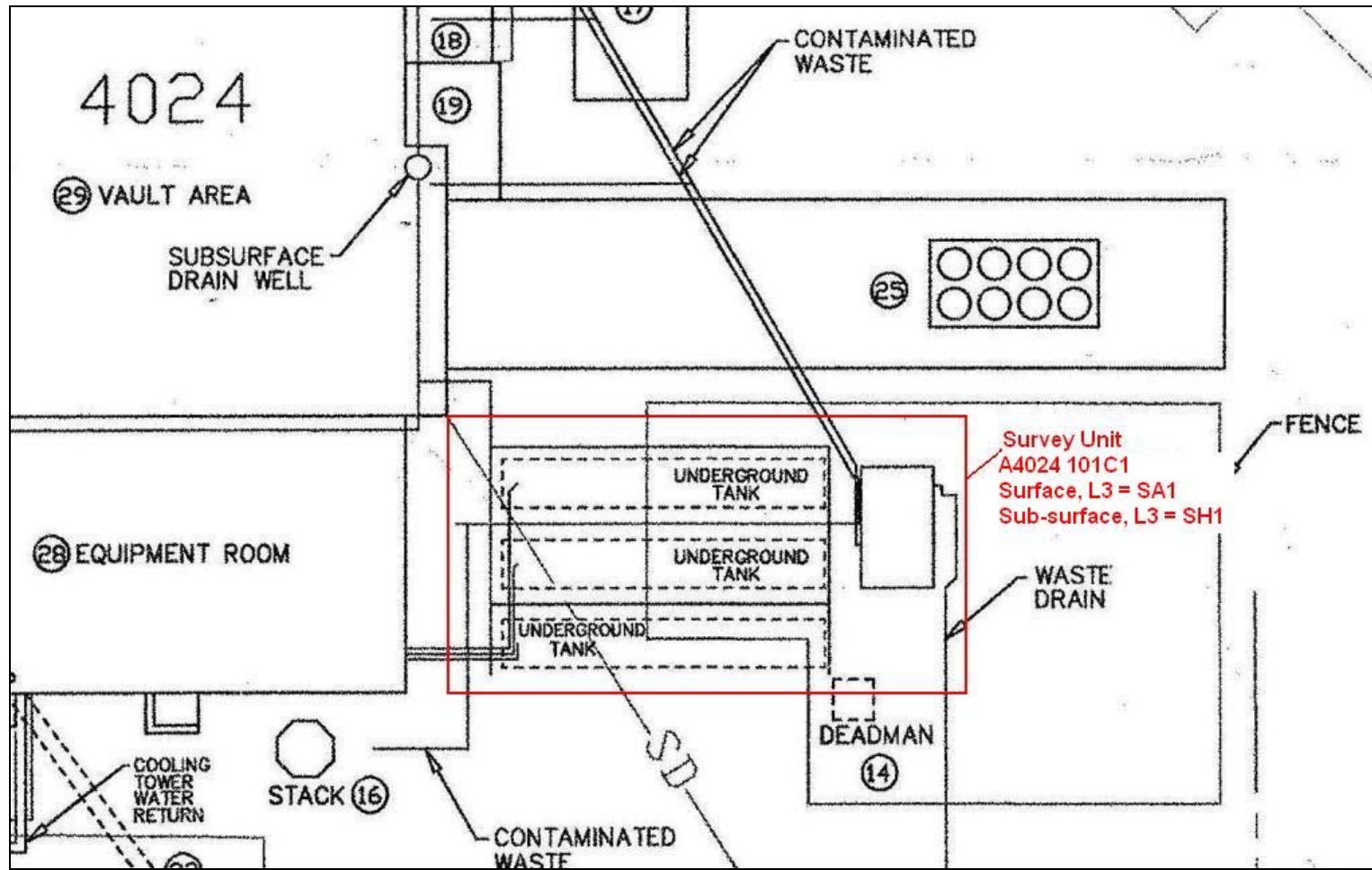
Annotated Drawings

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

7/10/2007

Data Analysis Report

Survey Area LC1: A4024 Package Type: Environ
Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
Survey Package Number and Unit Name:
A4024 101C1 Buried Waste Tank/Vault Location

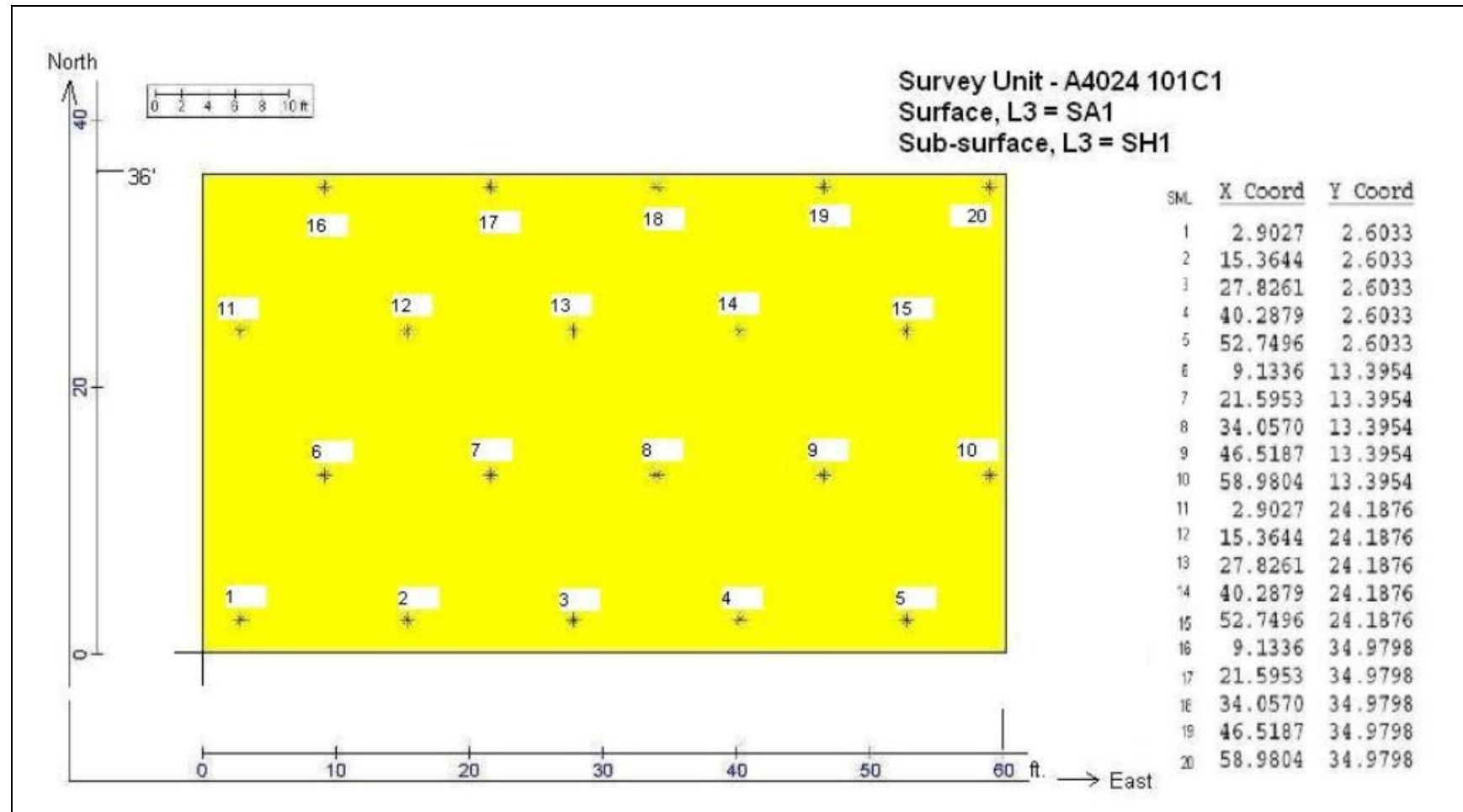


SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT **CANOGA PARK, CALIFORNIA**

7/10/2007

Data Analysis Report

Survey Area LC1: A4024 **Package Type:** Environ
Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
Survey Package Number and Unit Name:
A4024 101C1 Buried Waste Tank/Vault Location



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

7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Section 3.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

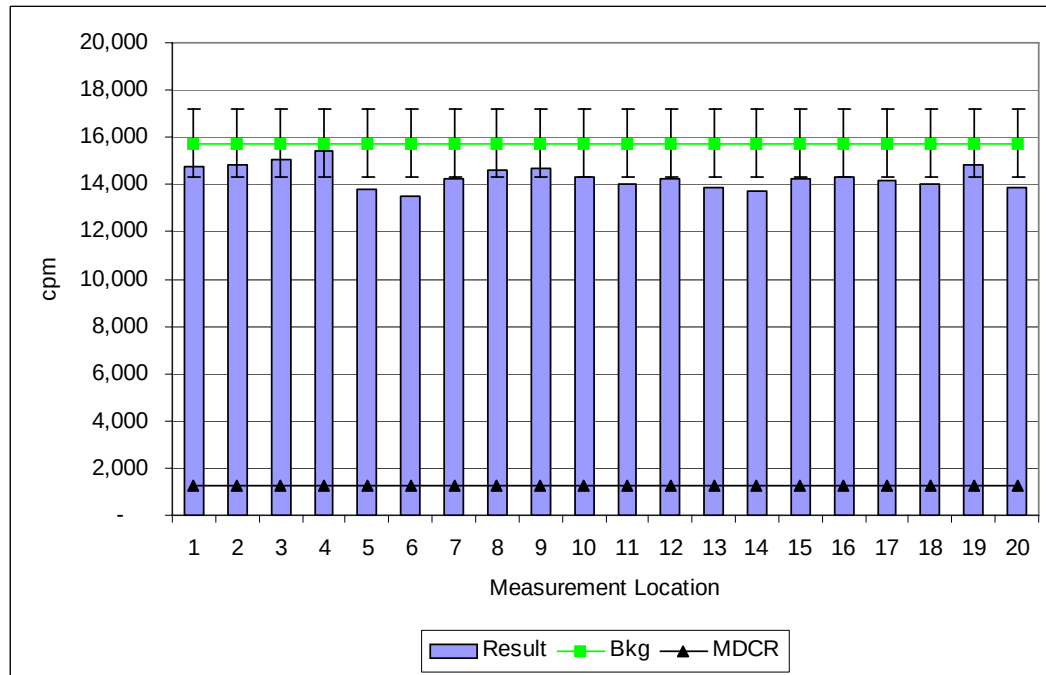
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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1: A4024 Package Type: Environ
 Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
 Survey Package Number and Unit Name:
 A4024 101C1 Buried Waste Tank/Vault Location

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	14,325	Ave. Background	15,756	Ave. MDCR < 50% Bkg.	Yes
Median	14,250	Ave. Bkg. + 3 sigma	17,218	Measurements < Ave. Bkg.	Yes
Standard Deviation	487	Ave. Bkg. - 3 sigma	14,294	Measurement Mean < Ave. Bkg.	Yes
Range	1,900	Ave. MDCR	1,279	No. Measurements > Ave. Bkg.	0
Minimum	13,500	Number of Measurements			
Maximum	15,400	No. Prescribed	18		
		No. Collected	20		



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

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1: A4024 **Package Type:** Environ
Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
Survey Package Number and Unit Name:
A4024 101C1 Buried Waste Tank/Vault Location

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL051407-003	5/14/2007	SA1S1	S1	1	15,756	1,279	14,750	1,006
DL051407-003	5/14/2007	SA1S1	S1	2	15,756	1,279	14,850	906
DL051407-003	5/14/2007	SA1S1	S1	3	15,756	1,279	15,050	706
DL051407-003	5/14/2007	SA1S1	S1	4	15,756	1,279	15,400	356
DL051407-003	5/14/2007	SA1S1	S1	5	15,756	1,279	13,800	1,956
DL051407-003	5/14/2007	SA1S1	S1	6	15,756	1,279	13,500	2,256
DL051407-003	5/14/2007	SA1S1	S1	7	15,756	1,279	14,250	1,506
DL051407-003	5/14/2007	SA1S1	S1	8	15,756	1,279	14,600	1,156
DL051407-003	5/14/2007	SA1S1	S1	9	15,756	1,279	14,650	1,106
DL051407-003	5/14/2007	SA1S1	S1	10	15,756	1,279	14,350	1,406
DL051407-003	5/14/2007	SA1S1	S1	11	15,756	1,279	14,000	1,756
DL051407-003	5/14/2007	SA1S1	S1	12	15,756	1,279	14,250	1,506
DL051407-003	5/14/2007	SA1S1	S1	13	15,756	1,279	13,850	1,906
DL051407-003	5/14/2007	SA1S1	S1	14	15,756	1,279	13,750	2,006
DL051407-003	5/14/2007	SA1S1	S1	15	15,756	1,279	14,250	1,506
DL051407-003	5/14/2007	SA1S1	S1	16	15,756	1,279	14,350	1,406
DL051407-003	5/14/2007	SA1S1	S1	17	15,756	1,279	14,150	1,606
DL051407-003	5/14/2007	SA1S1	S1	18	15,756	1,279	14,050	1,706
DL051407-003	5/14/2007	SA1S1	S1	19	15,406	1,240	13,100	956
DL051407-003	5/14/2007	SA1S1	S1	20	15,406	1,240	12,750	1,906

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL051407-003	98648	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
S1	Soil	Soil Description	15,756

Field Notes Summary

Download ID	Field Notes
None	

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

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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Section 4.0

1 Meter Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

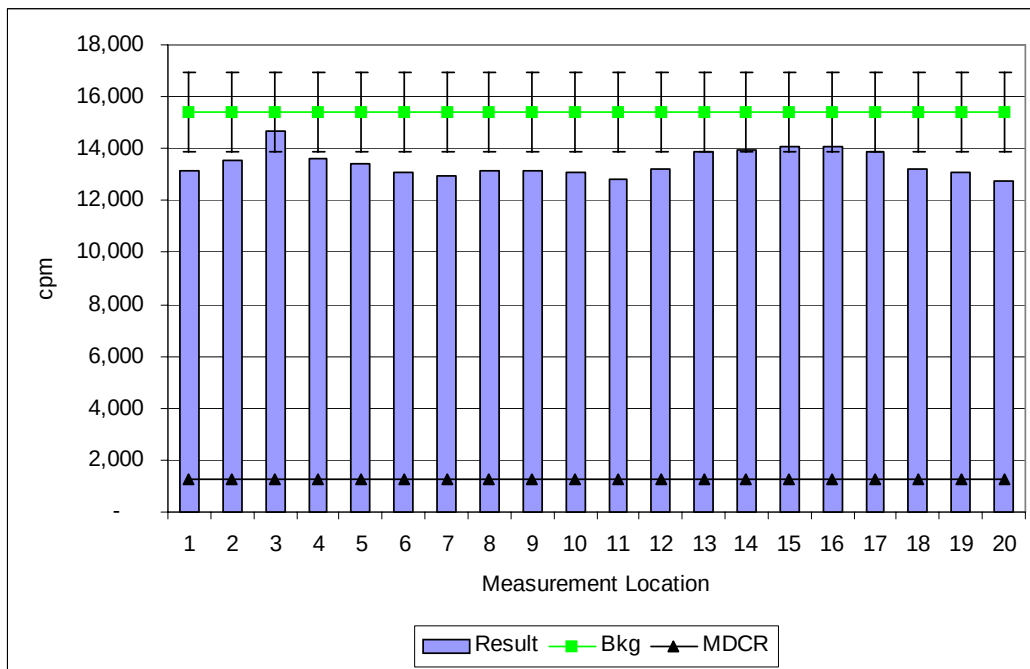
7/10/2007

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	13,448	Ave. Background	15,406	Ave. MDCR < 50% Bkg.	Yes
Median	13,250	Ave. Bkg. + 3 sigma	16,934	Measurements < Ave. Bkg.	Yes
Standard Deviation	510	Ave. Bkg. - 3 sigma	13,877	Measurement Mean < Ave. Bkg.	Yes
Range	1,950	Ave. MDCR	1,240	No. Measurements > Ave. Bkg.	0
Minimum	12,750	Number of Measurements			
Maximum	14,700	No. Prescribed	18		
		No. Collected	20		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL051407-003	5/14/2007	SA1S1	S1	1	15,406	1,240	13,150	2,256
DL051407-003	5/14/2007	SA1S1	S1	2	15,406	1,240	13,550	1,856
DL051407-003	5/14/2007	SA1S1	S1	3	15,406	1,240	14,700	706
DL051407-003	5/14/2007	SA1S1	S1	4	15,406	1,240	13,600	1,806
DL051407-003	5/14/2007	SA1S1	S1	5	15,406	1,240	13,450	1,956
DL051407-003	5/14/2007	SA1S1	S1	6	15,406	1,240	13,100	2,306
DL051407-003	5/14/2007	SA1S1	S1	7	15,406	1,240	12,950	2,456
DL051407-003	5/14/2007	SA1S1	S1	8	15,406	1,240	13,150	2,256
DL051407-003	5/14/2007	SA1S1	S1	9	15,406	1,240	13,150	2,256
DL051407-003	5/14/2007	SA1S1	S1	10	15,406	1,240	13,100	2,306
DL051407-003	5/14/2007	SA1S1	S1	11	15,406	1,240	12,800	2,606
DL051407-003	5/14/2007	SA1S1	S1	12	15,406	1,240	13,250	2,156
DL051407-003	5/14/2007	SA1S1	S1	13	15,406	1,240	13,900	1,506
DL051407-003	5/14/2007	SA1S1	S1	14	15,406	1,240	13,950	1,456
DL051407-003	5/14/2007	SA1S1	S1	15	15,406	1,240	14,100	1,306
DL051407-003	5/14/2007	SA1S1	S1	16	15,406	1,240	14,100	1,306
DL051407-003	5/14/2007	SA1S1	S1	17	15,406	1,240	13,850	1,556
DL051407-003	5/14/2007	SA1S1	S1	18	15,406	1,240	13,250	2,156
DL051407-003	5/14/2007	SA1S1	S1	19	15,406	1,240	13,100	2,306
DL051407-003	5/14/2007	SA1S1	S1	20	15,406	1,240	12,750	2,656

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL051407-003	98648	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	1M Gamma Background (cpm)
S1	Soil	Soil Description	15,406

Field Notes Summary

Download ID	Field Notes
None	

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

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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Section 5.0

Sample Analysis Results

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

7/10/2007

Data Analysis Report Survey Area LC1: A4024 Package Type: Environ
Survey Area Name: SETF Paved Yard and Adjacent Soil Areas Survey Package Number and Unit
Name:

A4024 101C1 Buried Waste Tank/Vault Location

Sample analysis results for A4024 101C1 are presented in section A4024 101C1.

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

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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Section 6.0

Photographs

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

7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



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

7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



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

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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



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CANOGA PARK, CALIFORNIA**

7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



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

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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



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

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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



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

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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



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

7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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7/10/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C1	Buried Waste Tank/Vault Location		

Section 7.0

Supplemental Information and/or Data

1. Job Hazard Assessment
2. ACM test result for coating material on excavated French Drain



JOB HAZARD ASSESSMENT

Project: Santa Susana Field Laboratory SETF Decommissioning

Specific Task: Characterization and Confirmatory Survey for Underground SNAP Storage tanks

Major Steps in the Job Task:

Survey the pavement above the area where the tanks were buried.

Remove the pavement above the tank obtain dose rates on the soil surface just below pavement (Dig Alert #A71300527 first).

Obtain dose rates at established depth during the excavation.

Collect composite samples.

Survey the soil that was below the bottom of the tanks.

Most Significant Hazards of the Activity:

The most significant hazards associated with this activity are; heavy equipment use (loader hoe/excavator), haul truck excavation and possibly trench hazards, environmental stress (i.e. sun and wind) and vehicle traffic. Earthquakes are known to occur in Southern California and could have significant consequences during excavation that's why it's important to stay clear of excavation edges and spoils piles. We will set up traffic detour during the activity around east end then north.

Injury Prevention Focus Areas:

Hand/Arm Hazards: Wear gloves if materials must be moved.

(Identify specific controls required to prevent

Back Injuries: Maintain proper posture if material must be lifted.

injuries in these frequent injury areas)

Tooling Hazards: Loader hoe/excavator, hand tools (i.e. shovels pails/buckets. (pinch points, guarding, rotating equipment)

HAZARD ITEM: <i>potential hazards to consider; not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
EYE & FACE HAZARDS: <i>flying particles, chemicals, temperatures, vapors, sparks, splash, particles</i>	☒	☐	Have personnel stand clear of the excavator while performing work. The potential energy from the excavator penetrating compacted soil could cause material to fly. Strong winds could whip up soils and debris. Suspend activity when winds exceed 40 mph	Always wear safety glasses with side shields, hard hats, sturdy leather Z41 work boots, and protect skin as required.
HAND HAZARDS: <i>sharps, temperatures, hazardous substances, pinch points, specify glove type required</i>	☒	☐	Organize material movement with multiple employees and/or equipment as appropriate.	Always wear gloves when moving material/Always wear gloves when using shovels and packaging materials in sample containers.
NOISE HAZARDS: <i>hand or power tools, equipment operating in area, compressors, cranes, ambient noise levels</i>	☒	☐	Equipment may be loud so maintain as much distance as possible.	Wear ear plugs as necessary.
HEAD HAZARDS: <i>falling objects, bump hazards, electrical</i>	☒	☐	Stay clear of excavator especially with the machine in an elevated position with material.	Wear hardhats for protection falling material and from the sun.
FOOT HAZARDS: <i>falling, rolling objects, sharp objects</i>	☒	☐	Stay clear of unstable slopes and equipment.	Uneven and unstable surfaces with the possibility of material sliding/rolling/movement.



JOB HAZARD ASSESSMENT

HAZARD ITEM: <i>potential hazards to consider; not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
FALL HAZARDS: <i>verify anchor points, prior to use inspection, floor/wall openings, uneven surfaces, trip hazards, written plan, working over water, ladder use</i>	☐	☒	None identified at this time however if we have unsloped excavation greater than 3.5' then some measures may have to be implemented.	Fall harness, guardrail as necessary.
MANUAL LIFTING and ERGONOMIC HAZARDS: <i>repeated motion, avoid awkward position, proper lifting techniques, back safety, two-person lifts</i>	☒	☐	Organize material movement with multiple employees and/or use excavator/equipment as appropriate.	Maintain proper posture, wear gloves.
CHEMICAL EXPOSURE HAZARDS: <i>review MSDS's, NFPA or HMIS labels, identify PPE required, spill control, waste generation, chemical use permit</i>	☐	☒		
RESPIRATORY HAZARDS: <i>dusts, fumes, oxygen deficient, toxic gas, weld fume, ozone</i>	☐	☒		
HAZARDOUS MATERIALS CHECKS: <i>PCB, lead, asbestos</i>	☐	☒		
VENTILATION REQUIREMENTS: <i>specify – local exhaust, area exhaust, general dilution, CFM requirements</i>	☐	☒		
AIR MONITORING REQUIRED: <i>industrial and radiological, area or personal air monitors, list hazards to be sampled</i>	☐	☒		
ACCESS HAZARDS: <i>walkways clear of hoses, leads, cords, and tools, review layout of work area, consider other work group access to work area</i>	☒	☐	Close area to vehicular traffic during survey if possible. Maintain housekeeping and clear trip hazards.	Wear high visibility clothing around equipment and vehicular traffic.
MECHANICAL MATERIAL HANDLING: <i>qualified forklift operator, pinch points</i>	☒	☐	Keep personnel a safe distance from the excavator haul truck and excavation edges. Keep spoils piles at least two feet from excavation.	Wear high visibility clothing around equipment and vehicular traffic.
CRANES and RIGGING: <i>qualified operator/rigger, prior to use inspections, rigging inspected, tag lines, designated load director, safe load path, hand signals or radio, headsets</i>	☐	☒		
SCAFFOLDING: <i>permit required, daily inspections, tagging, qualified erectors and inspectors</i>	☐	☒		
WEATHER HAZARDS: <i>heat/cold extremes, overhead/underfoot snow & ice, wet surfaces, storms, verify weather forecast</i>	☒	☐	Observe weather forecast and natural indications i.e. wind, rain, sun/heat	Dress appropriately and follow instructions
PRESSURIZED SYSTEMS: <i>pneumatic, hydraulic, pressure test, vacuum, hose/whip restraints</i>	☐	☒		



JOB HAZARD ASSESSMENT

HAZARD ITEM: <i>potential hazards to consider; not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
CONFINED SPACE HAZARDS: <i>confined space work permit required, rescue equipment and plan in place</i>	☐	☒	None Identified at this time.	Confined space consideration will be given if trenches exceed 3.5 feet and personnel have to enter.
HOUSEKEEPING: <i>prevent slips, trips, and falls, maintain area daily, control trash, debris and combustibles</i>	☒	☐	Clean as you go have path stabilized as necessary.	Supplemental PPE as necessary
RESCUE PLAN: <i>access to injured, layout, stage equipment for rescue, written plan required, coordination with control room and emergency team</i>	☒	☐	Site Plan and Emergency response	No unusual condition identified.
FIRE/COMBUSTIBLE HAZARDS: <i>hot work/combustible material permit, welding, grinding, combustible material storage, explosion hazards</i>	☐	☒		
WELDING, CUTTING, AND GRINDING: <i>chromium (VI) exposure control plan (see page 4), weld fume, ventilation, PPE requirements</i>	☐	☒		
ELECTRICAL HAZARDS: <i>energized electrical work permit, grounding protection, GFCI, power lines, cords, cable runs</i>	☐	☒		
LOCKOUT/TAGOUT: <i>electrical, hydraulic, pneumatic energy sources, pressurized systems, follow site requirements</i>	☐	☒		
COMMUNICATION DIFFICULTIES: <i>noise interference, radio use, hand signals, 3-way communication, phonetic alphabet</i>	☒	☐	Buddy system and radios issued	The excavation area is a short distance away from field office trailer. Radios may be required to communicate with office, as necessary.
TOOL HAZARDS: <i>guards, pinch and nip points, rotating parts, training required, authorization use only</i>	☐	☐		
WORK PRACTICES: <i>policy and procedure compliance</i>	☒	☐	Always observe safe work practices.	Supplemental PPE as necessary.
MULTI DEPARTMENT INTERFACE: <i>Security Impact, Radiation Protection Impact, Operations Impact, QA, Safety and Health</i>	☐	☒		
ENVIRONMENTAL HAZARD: <i>hazardous waste generation, environmental impact, water runoff, sampling needed</i>	☒	☐	A spill response team is available through Boeing	As directed however none of our personnel should require special PPE



JOB HAZARD ASSESSMENT

HAZARD ITEM: <i>potential hazards to consider; not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
RADIATION HAZARDS: <i>RWP required, ALARA review required, dose rates, contamination levels, reference RWP</i>	☐	☒	TBD	
POSTING NEEDED: <i>barricades, signs, barrier ribbons</i>	☐	☒	TBD	
FME PLAN REQUIRED: <i>written plan, log equipment and tools in/out, drop log, lanyards for tools and PPE, PPE restrictions</i>	☐	☒		

Additional Controls (add additional pages, if necessary)

Chromium (VI) Exposure Control Plan for Welding and Grinding Operations:

Welding Method: n/a	Base Metal: n/a	Electrode Type: n/a
Has air monitoring been previously performed for this activity?	YES NO	(If NO, Contact Safety Department to determine controls and specify below.)
If YES, list monitoring results: n/a		
If YES, was any special ventilation required?	YES NO	Specify ventilation type and flow rate: n/a
If YES, was respiratory protection required for this activity?	YES NO	Specify type of respirator: n/a
Is protective clothing required?	YES NO	Specify type of protective clothing: n/a
Have employees completed Chromium (VI) training?	YES NO	
Have employees completed Chromium (VI) medical surveillance?	YES NO	
Have employees completed respirator medical, training, and fit test?	YES NO	N/A
Others requirements: Dig Alert A71300527 Valid Mon May 14, 2007 @ 1000		

Industry Events, Operating Experience, and/or Lessons Learned Applicable to Work Activity or Site:



JOB HAZARD ASSESSMENT

Task Lead/Supervisor:

Handwritten signature of the Task Lead/Supervisor in black ink.

Date:

5/13/07

Safety Engineer:

Handwritten signature of the Safety Engineer in black ink.

Date:

5-14-07

Pre-Job Brief Attendance

Subject UST survey Date Given: 5/14/07
A4024 101C1

ATTENDEES:

[illegible]

Pre-Job Brief Attendance

Subject Excavate Soil from UST Area Date Given: 5-15-07
A 4024 101 C1

ATTENDEES:

[illegible]

COPY

EMS LABORATORIES, INC.
FAX MEMO
CONFIDENTIAL

NO. PAGES: 3

DATE: 5-21-07

ATTENTION: Dan Napier

COMPANY: _____

SUBMITTED BY: _____ VM

FAX NUMBER: 310-937-8642

SUBJECT: 113671

REMARKS: _____

RESPONSE REQUESTED: YES: _____

TELEPHONE NUMBER: 626-568-4072

FAX NUMBER: 626-796-5282

E-MAIL ADDRESS: vmolina@emslabs.com

Note: If a fax copy of a report or letter is requested by a client, EMS Laboratories, Inc., cannot guarantee confidentiality. It is the responsibility of the client to ensure that the confidentiality of the FAX message is appropriately protected.

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To: Bill Mustbach, Clauss Construction

05/21/2007 10:24 FAX 16267965282

EMS Labs

002

SUBMITTAL FORM/Laboratory Services

113671

PAGE 1 OF 1

TURNAROUND TIME: STD 48 HR. 24 HR. ☒
 <8 HR. WKND OTHER:

RELINQUISHED BY Dan Napier

CLIENT Dan Napier, CIT
 ADDRESS 111 N Sepulveda #855
 Manhattan Beach, CA 90266
 TELEPHONE 310-937-8630
 CONTACT

TIME / DATE
 DATE OF SHIPMENT
 CLIENT P.O. NO. Boring
 CLIENT JOB/PROJECT ID NO. (9)

RESULTS REQUESTED VIA VERBAL ☐ FAX ☒
 (NOTE: Complete written reports will follow all analyses, in addition to any prior transmitted verbal or fax results.)

PACKAGE SHIPPED FROM
 CLIENT FAX NO. 310-937-8642

DATE/TIME OF SAMPLE COLLECTION 5/18/07
 SAMPLE PRESERVATIVES WA
 NO. OF SAMPLES SENT 3
 TYPE: ☐ WATER ☐ WASTE WATER ☐ SOIL ☐ FILTER ☐ SORBENT TUBE ☐ IMPINGER ☐ OTHER

HOLDING TIMES
 SIGNATURE Dan Napier
 PRINTED Dan Napier

(FOR EMS ONLY)

EMS Sample No.

CLIENT SAMPLE NO.

DESCRIPTION/LOCATION/ANALYSIS

VOLUME/
TIME-WEIGHT
IF APPLICABLE

113671-1

518071

Roof Covering

ASBESTOS

PLM

2

518072

Elect Panel

PLM

3

518073

Pipe Cover

PLM

113671

Laboratory No.

Received By CHX

Time 11:00

Date of Package Delivery

5-18-07

Shipping Bill Retained: YES ☐ NONE ☒

Condition of Package on Receipt

OK

Condition of Custody Seal

None

(NOTE: If the package has sustained substantial damage or the custody seal is broken, stop and contact the project manager and the shipper.)

No. of Samples

3

Chain-of-Custody Signature

Date of Acceptance into Sample Bank

5-18-07

Misc. Info.

Disposition of Samples

EMS LABS

181

(SF 5/00)

FOR EMS ONLY

To: Bill Musbach, Clause Construction

05/21/2007 10:25 FAX 16267965282

EMS Labs

003

REPORT NO: 113671 CLIENT: DAN NAPIER, CIH
 DATE: May 21, 2007 111 N. SEPULVEDA BLVD., STE. 355
 DATE RECEIVED: May 18, 2007 ATTENTION: DAN NAPIER
 DATE ANALYZED: May 18, 2007 REFERENCE: BOEING
 DATE / TIME COLLECTED: 5/18/07 BY D. NAPIER

SUBJECT: Polarized Light Microscopy Analysis for Asbestos; 3 Samples

METHODOLOGY: "Method for Determination of Asbestos in Bulk Building Materials."
 EPA 600/R-93/116

ACCREDITED: National Institute of Standards and Technology (NVLAP) #101218

CERTIFIED: California Department of Health Services Environmental Testing Laboratory ELAP 1119,
 County Sanitation Districts of Los Angeles County, Laboratory Identification No. 10120

QUALITY CONTROL SAMPLE (SRM 1866 GLASS FIBERS AS THE BLANK): NONE DETECTED

SAMPLE ID NUMBER	SAMPLE LOCATION & DESCRIPTION	VISUAL DESCRIPTION	ASBESTIFORM MINERALS	OTHER FIBROUS MATERIALS
518071	NON-FRIABLE	WHITE PAINT YELLOW FOAM	NONE DETECTED	NONE DETECTED
518072	NON-FRIABLE	GRAY FIBROUS BROWN FIBROUS	NONE DETECTED	CELLULOSE 90%
518073	NON-FRIABLE	BLACK TAR LIKE BROWN GRANULAR	NONE DETECTED	NONE DETECTED

Optical Microscopist
 BMK/vm

B.M. Kolk, Laboratory Director

The EPA method is a semi quantitative procedure. The detection limit is between 1/10 to 1 percent by area and is dependent upon the size of the asbestos fibers, the means of sampling and the matrix of the sampled material.

The test results reported are for the sample or samples delivered to us and may not represent the entire material from which the sample was taken. The EPA recommends three samples or more be taken of a "homogeneous sampling area" within the material is considered non-asbestos-containing. These analyses were performed as a "screening" which is allowed by NVLAP, but omit some of the recommended QC of the method. "Negative floor the samples may contain significant amounts (>1%) of very thin asbestos fibers which cannot be detected by PLM. Confirmation by X-Ray diffraction or TEM is recommended by EPA (Federal Register Vol. 59, No. 146). This report from a NIST accredited laboratory through NVLAP, must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

NOTE: This report shall not be reproduced, except in full, without the written approval of EMS Laboratories, Inc.

PG 1

Appendix A

Section	Survey Package	Survey Unit Description
2.0		SETF Environmental Soil Areas
2.2	A4024 101C1	Buried Waste Tank/Vault Location
2.2.2	A4024 101C1	Subsurface Soil Survey

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Contact Gamma Exposure Rate Measurement Results
4.0	1 Meter Gamma Exposure Rate Measurement Results
5.0	Sample Analysis Results
6.0	Photographs
7.0	Supplemental Information and/or Data

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Section 1.0

Data Analysis Report Parameters

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

7/11/2007

Page 1 of 1

Data Analysis Report Parameters

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Survey Group: A - Radiological Survey of Impacted Environmental Areas

Survey Area: 4024 - SETF Paved Yard and Adjacent Soil Areas

Unit Classification: 1 - Impacted Class 1 Environ

MARSSIM FSS Survey Unit Size (M²): 2,000

Survey Unit: 01 - Buried Waste Tank/Vault Location

Survey Reason: C2 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	SH1	Subsurface Soil Sample @ Depth 2-3 meter	99
		Total Area	99

Materials: Code Description
S1 - Soil

Report Information:

Report Pedigree: Final Report

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Section 2.0

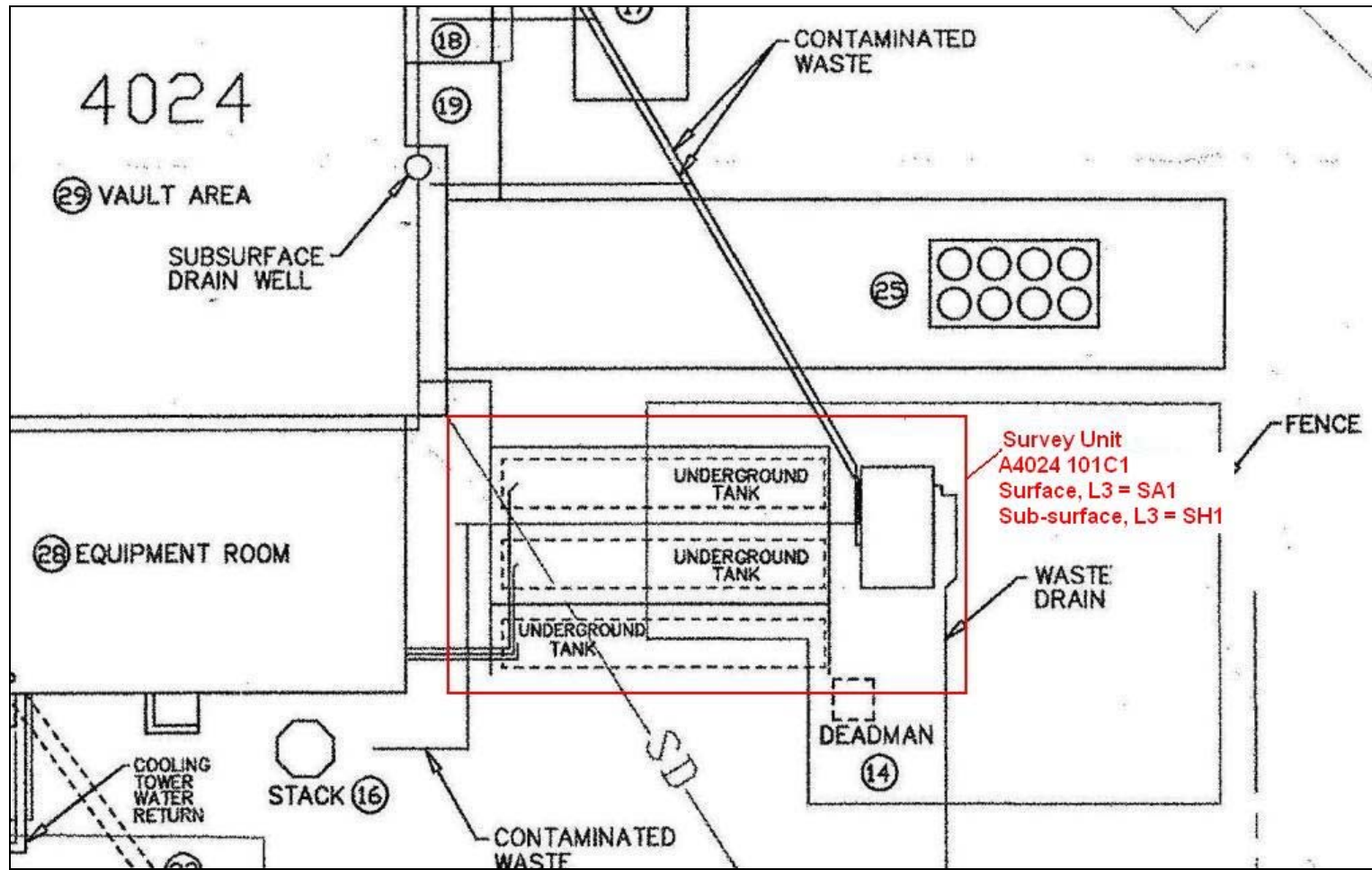
Annotated Drawings

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

7/11/2007

Data Analysis Report

Survey Area LC1: A4024 Package Type: Environ
Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
Survey Package Number and Unit Name:
A4024 101C2 Buried Waste Tank/Vault Location

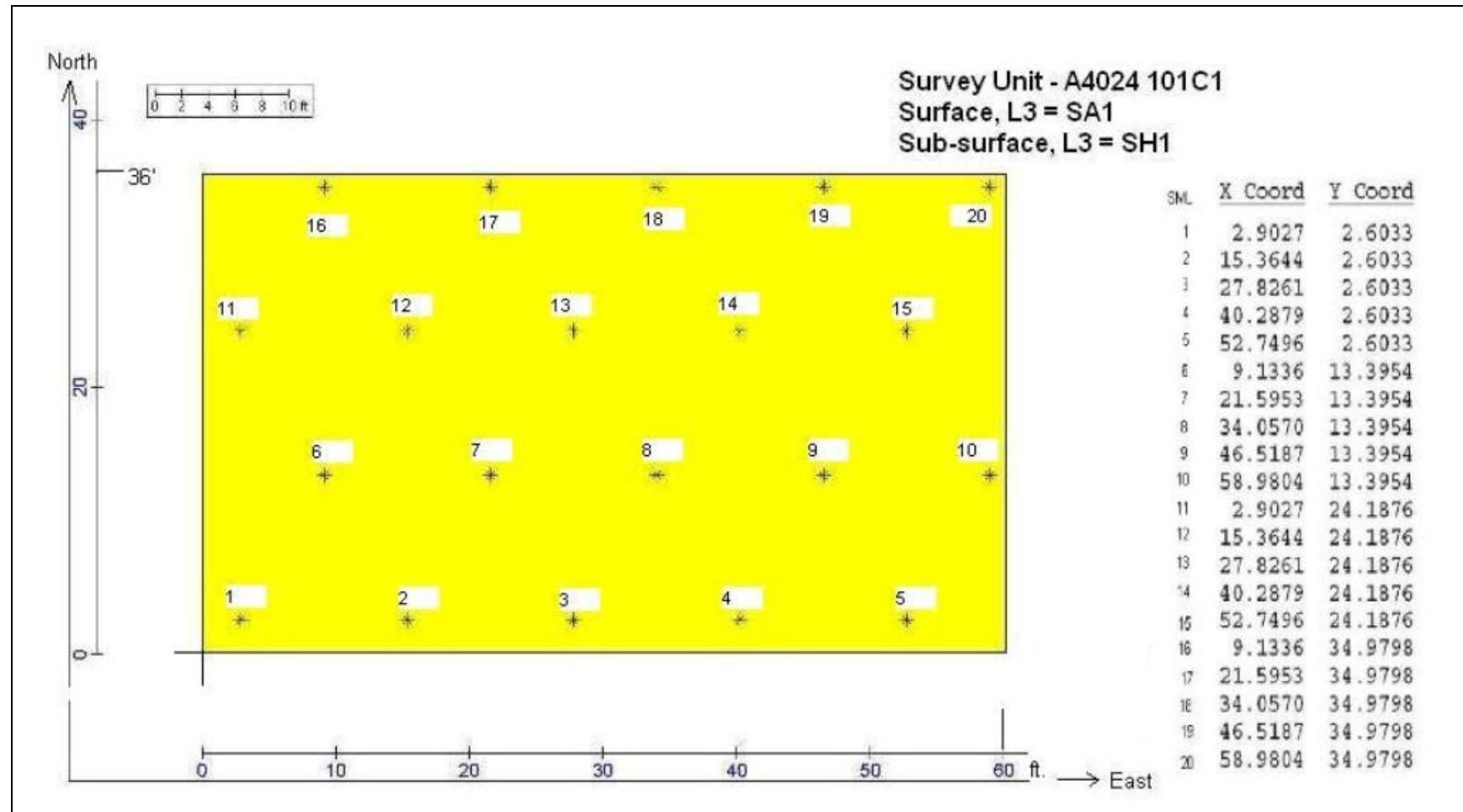


SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT **CANOGA PARK, CALIFORNIA**

7/11/2007

Data Analysis Report

Survey Area LC1: A4024 **Package Type:** Environ
Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
Survey Package Number and Unit Name:
A4024 101C2 Buried Waste Tank/Vault Location

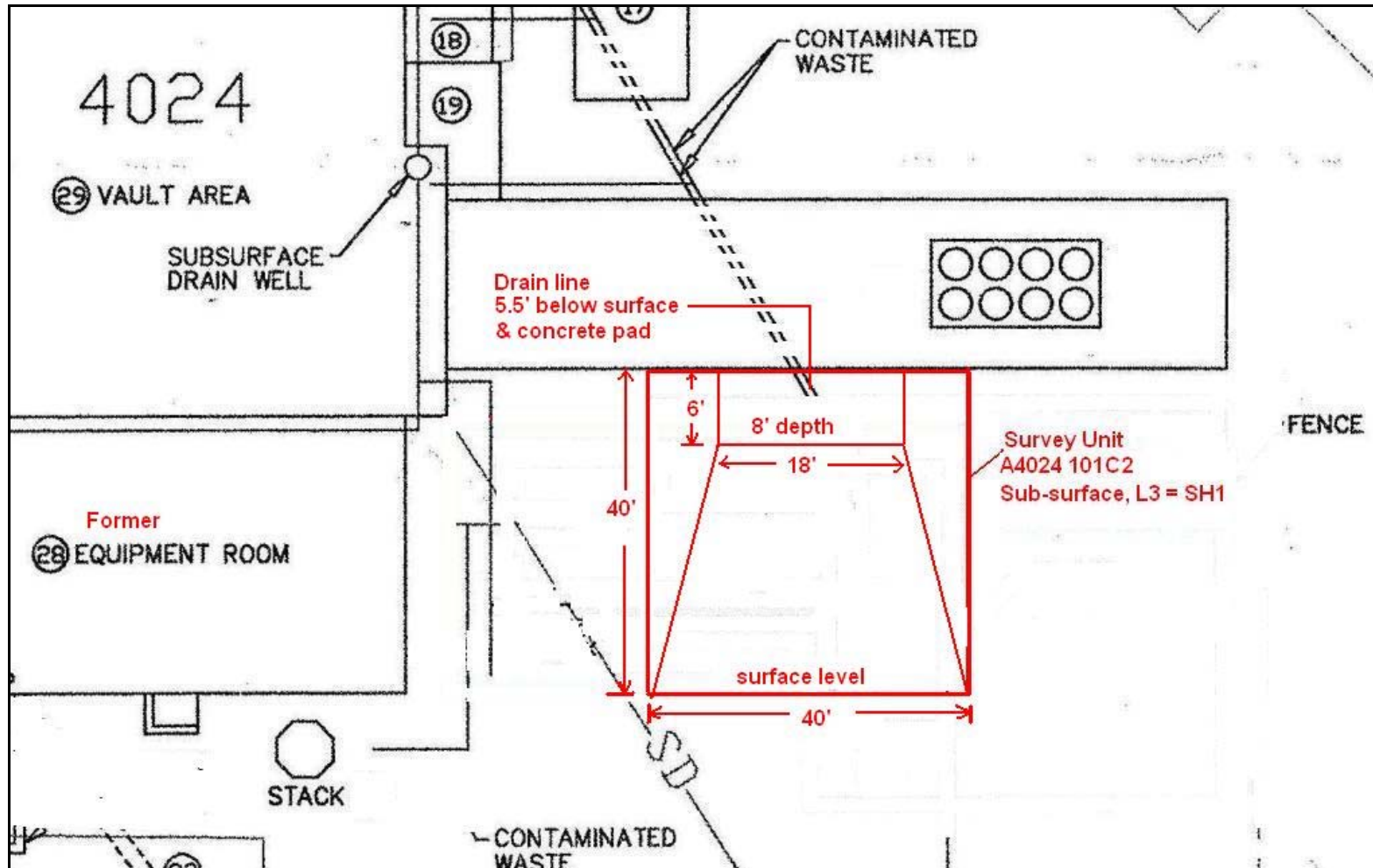


SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA

7/11/2007

Data Analysis Report

Survey Area LC1: A4024 Package Type: Environ
Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
Survey Package Number and Unit Name:
A4024 101C2 Buried Waste Tank/Vault Location



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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Section 3.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

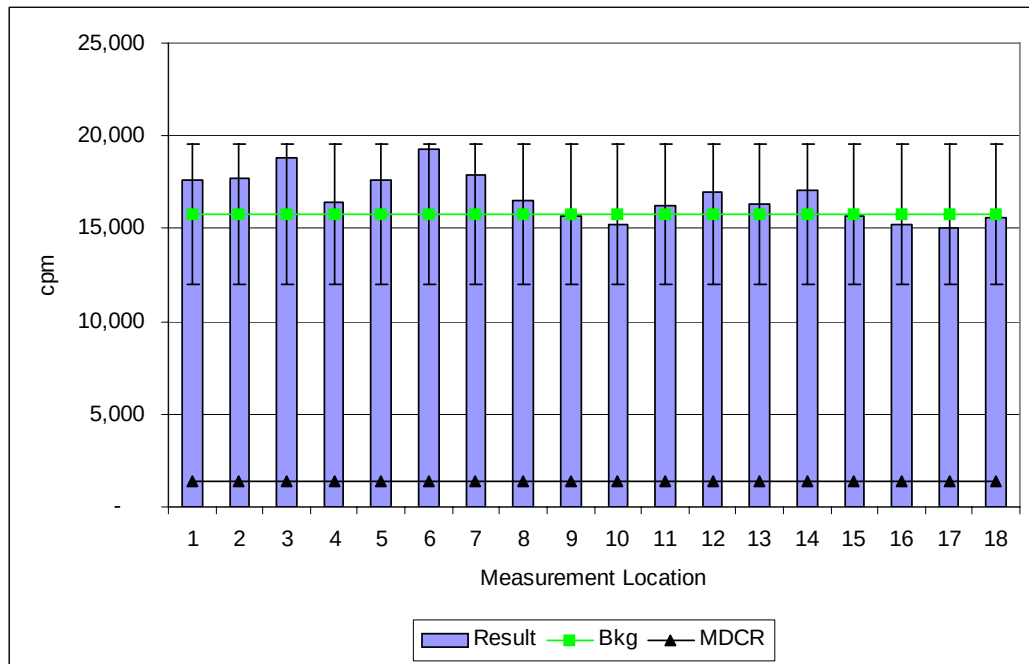
7/11/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	16,719	Ave. Background	15,756	Ave. MDCR < 50% Bkg.	Yes
Median	16,500	Ave. Bkg. + 3 sigma	19,533	Measurements < Ave. Bkg.	No
Standard Deviation	1,259	Ave. Bkg. - 3 sigma	11,978	Measurement Mean < Ave. Bkg.	No
Range	4,300	Ave. MDCR	1,382	No. Measurements > Ave. Bkg.	12
Minimum	15,000	Number of Measurements			
Maximum	19,300	No. Prescribed	18		
		No. Collected	18		



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

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1: A4024 **Package Type:** Environ
Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
Survey Package Number and Unit Name:
A4024 101C2 Buried Waste Tank/Vault Location

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL053107-001	5/30/2007	SH1S1	S1	1	15,756	1,382	17,600	-1,844
DL053107-001	5/30/2007	SH1S1	S1	2	15,756	1,382	17,750	-1,994
DL053107-001	5/30/2007	SH1S1	S1	3	15,756	1,382	18,850	-3,094
DL053107-001	5/30/2007	SH1S1	S1	4	15,756	1,382	16,450	-694
DL053107-001	5/30/2007	SH1S1	S1	5	15,756	1,382	17,600	-1,844
DL053107-001	5/30/2007	SH1S1	S1	6	15,756	1,382	19,300	-3,544
DL053107-001	5/30/2007	SH1S1	S1	7	15,756	1,382	17,900	-2,144
DL053107-001	5/30/2007	SH1S1	S1	8	15,756	1,382	16,550	-794
DL053107-001	5/30/2007	SH1S1	S1	9	15,756	1,382	15,700	56
DL053107-001	5/30/2007	SH1S1	S1	10	15,756	1,382	15,250	506
DL053107-001	5/30/2007	SH1S1	S1	11	15,756	1,382	16,200	-444
DL053107-001	5/30/2007	SH1S1	S1	12	15,756	1,382	17,000	-1,244
DL053107-001	5/30/2007	SH1S1	S1	13	15,756	1,382	16,300	-544
DL053107-001	5/30/2007	SH1S1	S1	14	15,756	1,382	17,100	-1,344
DL053107-001	5/30/2007	SH1S1	S1	15	15,756	1,382	15,650	106
DL053107-001	5/30/2007	SH1S1	S1	16	15,756	1,382	15,200	556
DL053107-001	5/30/2007	SH1S1	S1	17	15,756	1,382	15,000	756
DL053107-001	5/30/2007	SH1S1	S1	18	15,756	1,382	15,550	206

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

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL053107-001	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
S1	Soil	Soil Description	15,756

Field Notes Summary

Download ID	Field Notes
None	

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Section 4.0

1 Meter Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

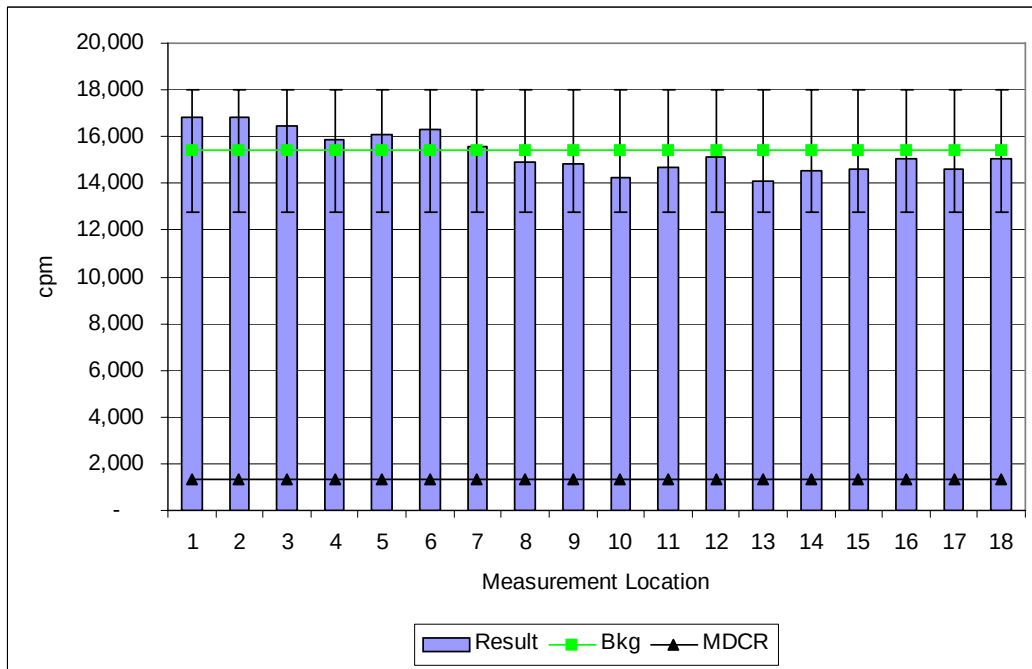
7/11/2007

Page 1 of 3

1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1: A4024 Package Type: Environ
 Survey Area Name: SETF Paved Yard and Adjacent Soil Areas
 Survey Package Number and Unit Name:
 A4024 101C2 Buried Waste Tank/Vault Location

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	15,311	Ave. Background	15,406	Ave. MDCR < 50% Bkg.	Yes
Median	15,050	Ave. Bkg. + 3 sigma	18,012	Measurements < Ave. Bkg.	No
Standard Deviation	869	Ave. Bkg. - 3 sigma	12,800	Measurement Mean < Ave. Bkg.	Yes
Range	2,700	Ave. MDCR	1,323	No. Measurements > Ave. Bkg.	7
Minimum	14,100	Number of Measurements			
Maximum	16,800	No. Prescribed	18		
		No. Collected	18		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

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Page 2 of 3

1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL053107-001	5/30/2007	SH1S1	S1	1	15,406	1,323	16,800	-1,394
DL053107-001	5/30/2007	SH1S1	S1	2	15,406	1,323	16,800	-1,394
DL053107-001	5/30/2007	SH1S1	S1	3	15,406	1,323	16,450	-1,044
DL053107-001	5/30/2007	SH1S1	S1	4	15,406	1,323	15,850	-444
DL053107-001	5/30/2007	SH1S1	S1	5	15,406	1,323	16,100	-694
DL053107-001	5/30/2007	SH1S1	S1	6	15,406	1,323	16,300	-894
DL053107-001	5/30/2007	SH1S1	S1	7	15,406	1,323	15,550	-144
DL053107-001	5/30/2007	SH1S1	S1	8	15,406	1,323	14,900	506
DL053107-001	5/30/2007	SH1S1	S1	9	15,406	1,323	14,800	606
DL053107-001	5/30/2007	SH1S1	S1	10	15,406	1,323	14,250	1,156
DL053107-001	5/30/2007	SH1S1	S1	11	15,406	1,323	14,700	706
DL053107-001	5/30/2007	SH1S1	S1	12	15,406	1,323	15,150	256
DL053107-001	5/30/2007	SH1S1	S1	13	15,406	1,323	14,100	1,306
DL053107-001	5/30/2007	SH1S1	S1	14	15,406	1,323	14,550	856
DL053107-001	5/30/2007	SH1S1	S1	15	15,406	1,323	14,600	806
DL053107-001	5/30/2007	SH1S1	S1	16	15,406	1,323	15,050	356
DL053107-001	5/30/2007	SH1S1	S1	17	15,406	1,323	14,600	806
DL053107-001	5/30/2007	SH1S1	S1	18	15,406	1,323	15,050	356

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

7/11/2007

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL053107-001	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	1M Gamma Background (cpm)
S1	Soil	Soil Description	15,406

Field Notes Summary

Download ID	Field Notes
None	

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Section 5.0

Sample Analysis Results

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

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

7/11/2007

Data Analysis Report Survey Area LC1: A4024 Package Type: Environ
Survey Area Name: SETF Paved Yard and Adjacent Soil Areas Survey Package Number and Unit
Name:

A4024 101C2 Buried Waste Tank/Vault Analysis results from Survey Package Number: A4024
101C1 Unit Name: SETF Environmental Soil Areas are presented in this section.

Survey Package Number: A4024 101C1
Unit Name: SETF Environmental Soil Areas

Isotope	Soil Concentration (pCi/g)					Comments		
	Mean	Std. Dev.	Range		Mean MDC			
			Minimum	Maximum				
						No. Results	No. Detect	No. Non-detect
Co-60	0.001	0.004	-0.008	0.007	0.017	18	0	18
Cs-134	-0.023	0.022	-0.058	0.007	0.042	18	0	18
Cs-137	0.003	0.021	-0.016	0.080	0.020	18	1	17
Eu-152	-0.002	0.015	-0.026	0.024	0.043	18	0	18
Eu-154	-0.004	0.018	-0.049	0.020	0.054	18	0	18
K-40	21.725	0.656	20.360	23.160	0.143	18	4	14
Mn-54	0.005	0.007	-0.004	0.025	0.042	18	0	18
Na-22	0.000	0.007	-0.017	0.012	0.020	18	0	18

Survey Package Number: A4024 101C1
Unit Name: SETF Environmental Soil Areas (composite)

Isotope	Soil Concentration (pCi/g)			Comments		
	Activity (pCi/g)	2 Sigma uncertainty	MDC			
				No. Results	No. Detect	No. Non-detect
Am-241	3.00E-03	3.40E-02	8.90E-02	1	0	1
Co-60	-4.80E-03	6.60E-03	1.50E-02	1	0	1
Cs-134	-3.50E-02	3.10E-02	5.10E-02	1	0	1
Cs-137	6.00E-03	1.40E-02	2.40E-02	1	0	1
Eu-152	-1.60E-02	2.20E-02	3.80E-02	1	0	1
Eu-154	-3.00E-03	5.30E-02	8.80E-02	1	0	1
Fe-55	6.00E+00	5.30E+00	8.40E+00	1	0	1
H-3	-3.00E-01	1.00E+00	1.60E+00	1	0	1
K-40	2.20E+01	3.90E-01	1.30E-01	1	1	0
Mn-54	4.10E-03	9.20E-03	1.50E-02	1	0	1
Na-22	1.00E-03	1.80E-02	3.10E-02	1	0	1
Ni-63	0.00E+00	5.20E+00	8.60E+00	1	0	1
Pu-238	0.00E+00	5.30E-04	4.60E-02	1	0	1
Pu-239/240	3.30E-02	4.80E-02	5.90E-02	1	0	1
Pu-241	6.10E-01	9.40E-01	1.50E+00	1	0	1
Sr-90	-6.90E-02	5.80E-02	1.00E-01	1	0	1
Th-228	9.80E-01	4.20E-01	6.80E-01	1	1	0
Th-232	1.08E+00	1.30E-01	3.40E-02	1	1	0
U-234	5.77E-01	4.10E-02	4.00E-03	1	1	0
U-235	4.60E-02	1.30E-02	4.90E-03	1	1	0
U-238	5.96E-01	4.10E-02	4.00E-03	1	1	0

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Section 6.0

Photographs

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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		



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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		



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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		



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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		



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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		



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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		



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

7/11/2007

Data Analysis Report

Survey Area LC1:	A4024	Package Type:	Environ
Survey Area Name:	SETF Paved Yard and Adjacent Soil Areas		
Survey Package Number and Unit Name:			
A4024 101C2	Buried Waste Tank/Vault Location		

Section 7.0

Supplemental Information and/or Data

APPENDIX A RADIOLOGICAL PROTECTION SURVEY FORM

Page 1 of 2

R.P. Tech (print): <u>J. Selinsky</u>			Location <u>A 4024 - 101C1</u>	RWP# <u>A-07-005</u>	
Instruments Used			Comments or Purpose of Survey	Date: <u>5/23/07</u>	
Model	S/N	Cal. Due	<u>SCAN OF SOIL during</u> <u>Excavation of A 4024 -</u> <u>101C1 down to 12 feet</u>	Time: <u>1500</u>	
<u>L-2350</u>	<u>95359</u> <u>162404</u>	<u>5-4-05</u> <u>3-6-08</u>		Survey # <u>016</u>	
<u>N/A</u>				Air Sample # <u>N/A</u>	
				Results: <u>N/A</u> $\mu\text{Ci/cc}$	
			All dose rates in mr/hr unless otherwise noted.	Survey Pt #	Contamination (dpm/100 cm ²)
Removal of soil From A 4024 - 101C1 during the period 5-16-07 to 5-23-07 down to a maximum depth of 12.5 feet scan of each Bucket of soil removed using L-2350 Meter with scintillation probe. Bkg was between 12 $\mu\text{R/hr}$ to 16 $\mu\text{R/hr}$ scan of soil showed no increase in activity above the background levels.			1	<u>N/A</u>	
			2		
			3		
			4		
			5		
			6		
			7		
			8		
			9		
			10		
			11		
			12		
			13		
			14		
			15		
			16		
			17		
			18		
			19		
			20		
			A/S - air sample # - Direct frisk	LAS - Large Area Smear	
			* contact/30cm xx - RCA Boundary	k = 1000	
			H Head Level F-foot level	O Smear Loc	

PERFORMED BY/DATE: J. Selinsky 5-23-07

REVIEWED BY / DATE: [Signature] 5/29/07

APPENDIX A RADIOLOGICAL PROTECTION SURVEY FORM

Page 1 of 2

R.P. Tech (print): <u>J. Seliński</u>			Location <u>A 4024-101C1</u>	RWP # <u>A-07-005</u>
Instruments Used			Comments or Purpose of Survey	Date: <u>5-23-07</u>
Model	S/N	Cal. Due	<u>Removal of Asphalt</u>	Time: <u>1515</u>
<u>Zecium Model #3</u>	<u>94570</u>	<u>8-9-07</u>		Survey # <u>017</u>
<u>N/A</u>				Air Sample # <u>N/A</u>
				Results: <u>N/A</u> $\mu\text{Ci/cc}$
			All dose rates in mR/hr unless otherwise noted.	Survey Pt #
Removal of Asphalt From A 4024-101C1 for Excavation and sub surface sampling of 18 points in area Scan of Asphalt using Model #3 showed no elevated activity above the background of 60 cpm Removed Asphalt turned over and scan showed no elevated activity above background per scan. Asphalt ^{separated} separated ₅₋₂₃₋₀₇ From soil and placed in waste containers			Contamination (dpm/100 cm ²)	
			1	
			2	
			3	
			4	
			5	
			6	
			7	
			8	
			9	
			10	
			11	
			12	
			13	
			14	
			15	
			16	
			17	
			18	
19				
20				
A/S - air sample			LAS - Large Area Smear	
# - Direct frisk				
* contact/30cm xx - RCA Boundary			k = 1000	
H Head Level			O Smear Loc	
F-foot level				

PERFORMED BY/DATE: J. Seliński / 5-23-07

REVIEWED BY / DATE: [Signature] / 5/24/07

 ***** THE BOEING COMPANY *****
 ***** SANTA SUSANA FIELD LABORATORY *****
 ***** SHEA - RADIATION SAFETY LAB *****

 ***** GAMMA SPECTRUM ANALYSIS REPORT *****

Report Generated On : 5/16/07 3:08:57 PM

Sample Identification : T24070006M
 Spectrum Description : Areva 4024 WQater from UST Vault
 MCA Number : Main System #1
 Sample Type : Water
 Sample Geometry : 1

Peak Locate Threshold : 4.00
 Peak Locate Range (in channels) : 200 - 16384
 Peak Area Range (in channels) : 1 - 16384
 Identification Energy Tolerance : 1.000 keV

Sample Size : 4.750E-001 L

Sample Taken On : 5/16/07 1:00:00 PM
 Acquisition Started : 5/16/07 2:37:20 PM

Live Time : 1200.0 seconds
 Real Time : 1391.8 seconds

Energy Calibration Used Done On : 9/29/06
 Efficiency Calibration Used Done On : 9/29/06

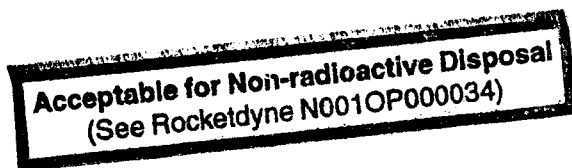
Report Reviewed and
 Conforms to RS-00017

By: ER MED

Date: 5-16-07

Radiation Safety

NOTE: COPY1



***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : T24070006M

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/L)	Wt mean Activity Uncertainty	Percent Total Act.	Nuclide MDA (pCi/L)
K-40	0.978	9.431E+002	5.645E+002	79.45%	8.239E+002
PB-212T @	0.558	2.440E+002	5.346E+001	20.55%	5.327E+001

Total Sample Activity... 1.1871E+003 pCi/L

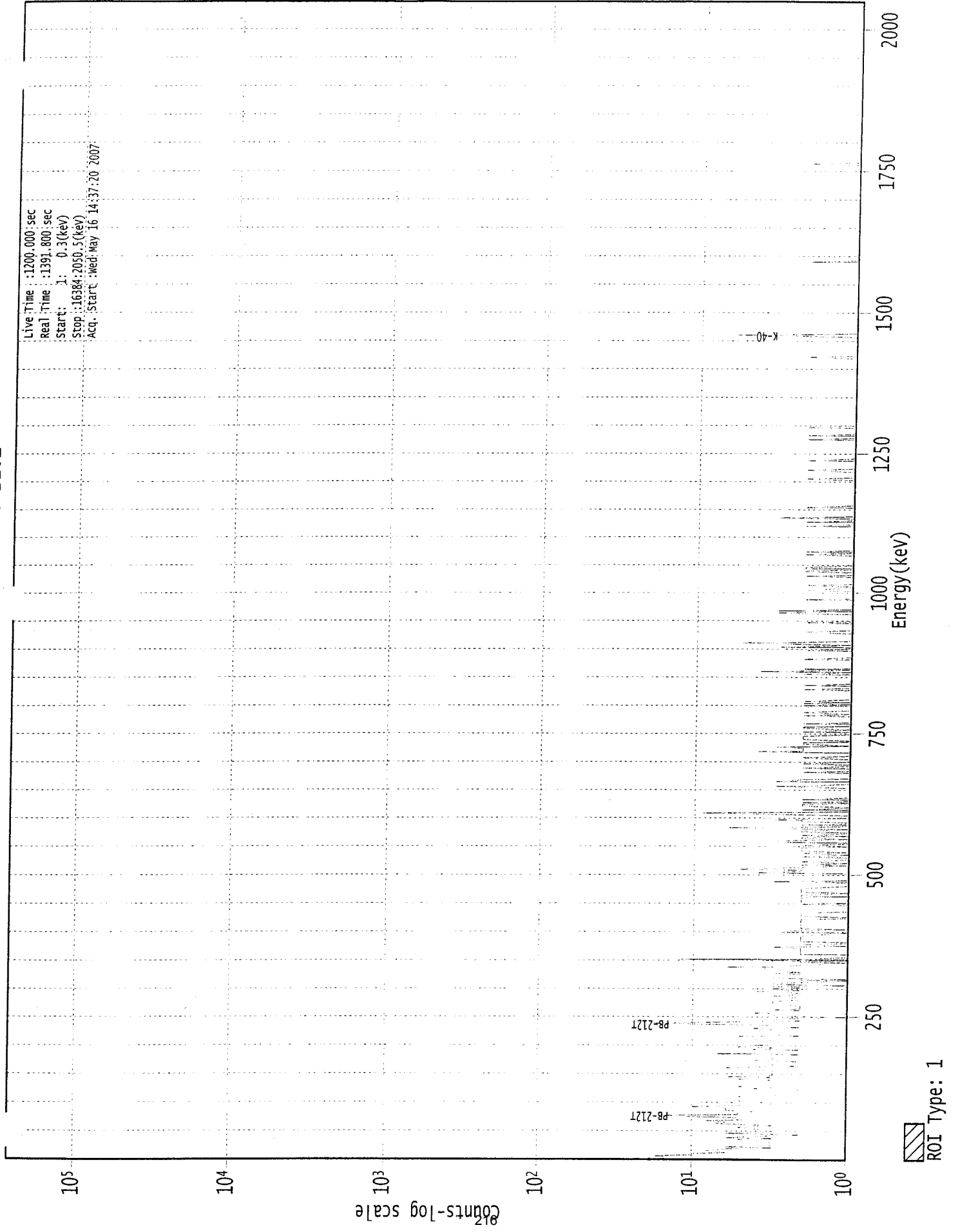
? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

T24070006M.CNF





JOB HAZARD ASSESSMENT

Project: Santa Susana Field Laboratory SETF Decommissioning

Specific Task: Characterization and Confirmatory Survey for Underground System Drain Lines Labeled as Contaminated

Major Steps in the Job Task:

Excavate near the gantry crane concrete pad (Valid Dig Alert #A71300527) where a severed drain line labeled as "contaminated" may be accessed by personnel, approximately 7 1/2' to 8' in depth.

Provide sloping or shoring of any unsupported edge of the excavation where personnel may be exposed to cave-in.

If sloping is used, then the soil must be considered class C and a 1.5: 1 (horizontal: vertical) slope must be maintained on all un-supported sides of the excavation. If shoring is used, approved shoring set forth in the standard or approved manufactured devices must be used following manufacturer's instructions.

Inspect the excavation for any signs of unstable conditions (i.e. cracks, water or uncontrolled hazards) and perform a confined space assessment of the excavation, prior to personnel entry. Providing that there are no uncontrolled hazards within the space, then the space may be down-graded to a non-permit confined space however, atmospheric test must be performed at a minimum. (This process must be performed each time the space is left unattended and re-entered by personnel; daily at the minimum). Provide appropriate assess/egress method for entry personnel (i.e. ladder or ramp).

Survey the drain line and collect samples necessary to characterize the drain line.

Most Significant Hazards of the Activity:

The most significant hazards associated with this activity are; heavy equipment use (loader hoe/excavator), the condition of the excavation including loose materials and assess/egress, and possibly confined space hazards, environmental stress (i.e. sun and wind) and vehicle traffic. Earthquakes are known to occur in Southern California and could have significant consequences during excavation that's why it's important to stay clear of excavation edges and spoils piles. We will maintain traffic detour during the activity around east end then north.

Injury Prevention Focus Areas:

Hand/Arm Hazards: Wear gloves if materials must be moved stay clear of loose material or stabilized the conditions where pinch points or struck-by condition exist.

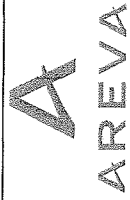
(Identify specific controls required to prevent injuries in these frequent injury areas)

Back Injuries: Maintain proper posture performing system survey and avoid lifting heavy material or get help and maintain good lifting techniques if material must be lifted.

(Identify specific controls required to prevent injuries in these frequent injury areas)

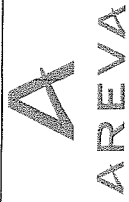
Tooling Hazards: Loader hoe/excavator, hand tools (i.e. shovels pails/buckets), (pinch points, guarding, rotating equipment)

HAZARD ITEM: potential hazards to consider, not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
EYE & FACE HAZARDS: flying particles, chemicals, temperatures, vapors, sparks, splash, particles	☒	☐	Have personnel stand clear of the excavator while performing work. The potential energy from the excavator penetrating compacted soil could cause material to fly. Strong winds could whip up soils and debris. Suspend activity when winds exceed 40 mph	Always wear safety glasses with side shields, (* minimum PPE equipment to include hard hats, sturdy leather Z41 work boots, each identified later).
HAND HAZARDS: sharps, temperatures, hazardous substances, pinch points, specify glove type required	☒	☐	Organize material movement with multiple employees and/or equipment as appropriate.	Always wear gloves when moving material/Always wear gloves when using shovels and packaging materials in sample containers.



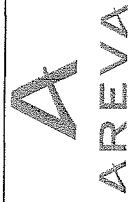
JOB HAZARD ASSESSMENT

HAZARD ITEM: potential hazards to consider, not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
NOISE HAZARDS: hand or power tools, equipment operating in area, compressors, cranes, ambient noise levels	☒	☐	Equipment may be loud so maintain as much distance as possible.	Wear ear plugs as necessary.
HEAD HAZARDS: falling objects, bump hazards, electrical	☒	☐	Stay clear of excavator especially with the machine in an elevated position with material.	Wear hardhats for protection falling material and from the sun.
FOOT HAZARDS: falling, rolling objects, sharp objects	☒	☐	Stay clear of unstable slopes and equipment.	Uneven and unstable surfaces with the possibility of material sliding/rolling/movement.
FALL HAZARDS: verify anchor points, prior to use inspection, floor/wall openings, uneven surfaces, trip hazards, written plan, working over water, ladder use	☒	☐	The edge of excavation along the gantry crane pad may have a potential fall hazards however, an exclusion area atleast six feet away from the edge will be established and controlled access implemented along this edge. Additional measures may have to be implemented if for some reason personnel needs to be working at the edge of excavation within the controlled area.	Fall harness, approved anchor point, guardrail as necessary.
MANUAL LIFTING and ERGONOMIC HAZARDS: repeated motion, avoid awkward position, proper lifting techniques, back safety, two-person lifts	☒	☐	Organize material movement with multiple employees and/or use excavator/equipment as appropriate.	Maintain proper posture, wear gloves.
CHEMICAL EXPOSURE HAZARDS: review MSDS's, NFPA or HMIS labels, identify PPE required, spill control, waste generation, chemical use permit	☐	☒		
RESPIRATORY HAZARDS: dusts, fumes, oxygen deficient, toxic gas, weld fume, ozone	☐	☒		
HAZARDOUS MATERIALS CHECKS: PCB, lead, asbestos	☐	☒		
VENTILATION REQUIREMENTS: specify - local exhaust, area exhaust, general dilution, CFM requirements	☐	☒		
AIR MONITORING REQUIRED: industrial and radiological, area or personal air monitors, list hazards to be sampled	☐	☒		
ACCESS HAZARDS: walkways clear of hoses, leads, cords, and tools, review layout of work area, consider other work group access to work area	☒	☐	The area will be closed to vehicular traffic during survey if possible. Maintain housekeeping and clear trip hazards.	Wear high visibility clothing around equipment and vehicular traffic.
MECHANICAL MATERIAL HANDLING: qualified forklift operator, pinch points	☒	☐	Keep personnel a safe distance from the excavator, swing radius and excavation edges. Keep spoils piles at least two feet from excavation.	Wear high visibility clothing around equipment and vehicular traffic.



JOB HAZARD ASSESSMENT

HAZARD ITEM: potential hazards to consider, not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
CRANES and RIGGING: qualified operator/rigger, prior to use inspections, rigging inspected, tag lines, designated load director, safe load path, hand signals or radio, headsets	☐	☒		
SCAFFOLDING: permit required, daily inspections, tagging, qualified erectors and inspectors	☐	☒		
WEATHER HAZARDS: heat/cold extremes, overhead/underfoot snow & ice, wet surfaces, storms, verify weather forecast	☒	☐	Observe weather forecast and natural indications i.e. wind, rain, sun/heat	Dress appropriately and follow instructions
PRESSURIZED SYSTEMS: pneumatic, hydraulic, pressure test, vacuum, hose/whip restraints	☐	☒		
CONFINED SPACE HAZARDS: confined space work permit required, rescue equipment and plan in place	☒	☐	Perform confined space assessment on the excavation is determined to be stable.	Confined space consideration will be given if excavations/trenches exceed 3.5 feet and personnel have to enter.
HOUSEKEEPING: prevent slips, trips, and falls, maintain area daily, control trash, debris and combustibles	☒	☐	Clean as you go and have access path stabilized as necessary.	
RESCUE PLAN: access to injured, layout, stage equipment for rescue, written plan required, coordination with control room and emergency team	☒	☐	Site Plan and Emergency response.	Contact Boeing Fire rescue following contact information posted in the field office.
FIRE/COMBUSTIBLE HAZARDS: hot work/combustible material permit, welding, grinding, combustible material storage, explosion hazards	☐	☒		
WELDING, CUTTING, AND GRINDING: chromium (VI) exposure control plan (see page 4), weld fume, ventilation, PPE requirements	☐	☒		
ELECTRICAL HAZARDS: energized electrical work permit, grounding protection, GFCI, power lines, cords, cable runs	☐	☒		
LOCKOUT/TAGOUT: electrical, hydraulic, pneumatic energy sources, pressurized systems, follow site requirements	☐	☒		
COMMUNICATION DIFFICULTIES: noise interference, radio use, hand signals, 3-way communication, phonetic alphabet	☒	☐	Buddy system and radios issued	The excavation area is a short distance away from field office trailer. Radios may be required to communicate with office, as necessary.



JOB HAZARD ASSESSMENT

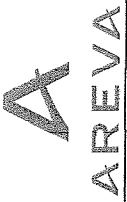
HAZARD ITEM: potential hazards to consider, not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
TOOL HAZARDS: guards, pinch and nip points, rotating parts, training required, authorization use only	☐	☐		
WORK PRACTICES: policy and procedure compliance	☒	☐	Always observe safe work practices.	Supplemental PPE as necessary.
MULTI DEPARTMENT INTERFACE: Security Impact, Radiation Protection Impact, Operations Impact, QA, Safety and Health	☐	☒		
ENVIRONMENTAL HAZARD: hazardous waste generation, environmental impact, water runoff, sampling needed	☒	☐	A spill response team is available through Boeing	As directed however none of our personnel should require special PPE
RADIATION HAZARDS: RWP required, ALARA review required, dose rates, contamination levels, reference RWP	☐	☒	TBD	
POSTING NEEDED: barricades, signs, barrier ribbons	☐	☒	TBD	
FME PLAN REQUIRED: written plan, log equipment and tools in/out, drop log, lanyards for tools and PPE, PPE restrictions	☐	☒		

Additional Controls (add additional pages, if necessary)

Chromium (VI) Exposure Control Plan for Welding and Grinding Operations:

Welding Method: n/a	Base Metal: n/a	Electrode Type: n/a
Has air monitoring been previously performed for this activity?	YES	NO
If YES, list monitoring results: n/a		
If YES, was any special ventilation required?	YES	NO
If YES, was respiratory protection required for this activity?	YES	NO
Is protective clothing required?	YES	NO
Have employees completed Chromium (VI) training?	YES	NO
Have employees completed Chromium (VI) medical surveillance?	YES	NO

AREVA NP Inc., an AREVA and Siemens company



JOB HAZARD ASSESSMENT

Have employees completed respirator medical, training, and fit test?	YES	NO	N/A
--	-----	----	-----

Others requirements: Dig Alert A71300527 Valid Mon May 14, 2007 @ 1000

Industry Events, Operating Experience, and/or Lessons Learned Applicable to Work Activity or Site:

Task Lead/Supervisor:

Date:

5/24/07

Safety Engineer:

Date:

5/24/07

ACTIVITY NOTIFICATION FORM
FOR HOLDERS OF ANNUAL PERMITS

Buildings/Structures, Scaffolding/Falsework, Demolition, Trenches/Excavations

THIS FORM SHALL BE FAXED TO THE NEAREST DOSH OFFICE TO COMPLY WITH THE 8 CCR 341.1(h).
PLEASE DO NOT MAIL DUPLICATE NOTIFICATION AS A FOLLOW-UP TO FAX NOTIFICATION.

FAX DATA: FAXED TO VAN NUYS DOSH DISTRICT OFFICE ON MAY 25 2007

DOSH FAX NO. (818) 901-5578 BY William Musbach

Company Name: CLAUSS CONSTRUCTION Field Phone: 818-466-8283

Annual Permit Number: 2007-906644 Office Phone: 619-390-4940

Issuing Region: 3 Issuing District: 2

Specific Activity Location: 5800 Woolsey Canyon RD Digs 24 Number of Employees: 6

Nearest Major Cross Street: Valley Circle Blvd Starting Date: 5-29-07

City: Canoga Park Anticipated Completion Date: 5-31-07

County: Ventura High Voltage Lines in Proximity? No X Yes

INSTRUCTIONS: The appropriate item(s) must be completed and signed by a person knowledgeable about the project for each activity covered by a permit. Please fill in or check off the blanks where appropriate.

Construction: Building _____ Structure _____ Type: Steel Frame _____ Tiered _____ Concrete _____ Tilt-up _____

Wood Frame _____ Curtain Wall _____ Precast _____ Slip Form _____ Depth _____ Height _____

Description: _____

Scaffolding: Height _____ Metal _____ Wood _____ Wood over 60 Feet _____ Metal over 125 Feet _____

Metal >125 Feet or Wood >60 Feet requires design by California Registered Civil Engineer & Plans at Site. (See 8 CCR 1644(c) (7))

Description: _____

Falsework/Vertical Shoring: Maximum Height _____ Maximum Span _____ Material _____

Description: _____

(See 8 CCR 1717)

Demolition of: Building _____ Structure _____ Height _____ No. of Stories _____ Type: Steel Frame _____

Wood Frame _____ Concrete _____ Demolition Ball _____ Clam _____ Explosives _____

Loader/Tractors _____ Other _____

Continued on back

CAL/OSHA 41-3 (Rev. 10/29/2006)

Trenches/Excavations: Depth Range (Min/Max) 6' / 8' Width Range (Min/Max) 18' / 40' Total Length 36' / 40'
Ground Protection Method: Shoring _____ Sloping 1/2 to 1 Trench Shield _____ Professional Engineer _____
Underground Services Alert (USA) Number 1-800-422-4133 (NORTH 1-800-642-2444/SOUTH 1-800-422-4133)

Soil Analysis to be done? Yes _____ No X If No, You Must Slope 1.5 to 1.

Competent Person: The holder of an Annual Permit who is notifying the District of the commencement of a Trench and/or Excavation project shall designate a competent person in accordance with the requirements of 8 CCR Section 1504, 1541, and 1541.1.

Description: Removal of soil to access & facilitate removal of 2 (two)
4 inch pipes. will remove & slope at 1.5 to 1 or better. Immediate
fill of excavation after removal.

* Ground protection methods for excavations deeper than 20 feet must be designed by a Registered Professional Engineer.
See 8 CCR 1541.1, Appendix F.

I hereby certify that to the best of my knowledge the above information and assertions are true and correct and that I/the applicant, have knowledge of and will comply with the foregoing.

Name: William Musbach
(Please Type or Print)

Signature: 

Title: Vice President

Date: 5-25-07

TRANSMISSION VERIFICATION REPORT

TIME : 05/25/2007 10:17
NAME : CLAUS CONSTRUCTION
FAX : 16193904944
TEL : 16193904940
SER.# : BROG6J504533

DATE, TIME	05/25 10:16
FAX NO./NAME	18189015578
DURATION	00:00:22
PAGE(S)	02
RESULT	OK
MODE	STANDARD
	ECM

No: **2007-906644**

PERMIT

Permit Issued To

(Insert Contractor/Project Administrator's Name, Address and Telephone No.)

Clauss Construction
8956 Winter Gardens Blvd
Lakeside CA 92040-4935

(619) 390-4940

No.

Date **11/16/2006**

Region **3**

District **2**

Tel. **(619) 767-2280**

Type of Permit **T1-ANNUAL TRENCH/EXCAVATION**

Pursuant to Labor Code Sections 6500 and 6502, this Permit is issued to the above-named employer for the projects described below:

State Contractor's License Number		Permit Valid through		
630564		May 31, 2008		
Description of Project	Location Address	City and County	Anticipated Dates	
			Starting	Completion
Various	Statewide		Nov 16, 2006	May 31, 2008

This Permit is issued upon the following conditions:

1. That the work is performed by the same employer. If this is an annual permit the appropriate District Office shall be notified, in writing, of dates and location of job site prior to commencement.
2. The employer will comply with all occupational safety and health standards or orders applicable to the above projects, and any other lawful orders of the Division.
3. That if any unforeseen condition causes deviation from the plans or statements contained in the Permit Application Form the employer will notify the Division immediately.
4. Any variation from the specification and assertions of the Permit Application Form or violation of safety orders may be cause to revoke the permit.
5. This permit shall be posted at or near each place of employment as provided in 8 CCR 341.4

Received From Ed Grant	Received By Permit Unit
☐ Cash 005 3 0 0 0	Amount \$100.00
☒ Check 45153	Date 11/16/06

Investigated by

Approved by

Safety Engineer
Robert E. Lane
District Manager/Permit Unit
Date
11/17/2006

DEPARTMENT OF INDUSTRIAL RELATIONS
DIVISION OF OCCUPATIONAL SAFETY & HEALTH
PERMIT UNIT
1515 CLAY STREET, SUITE 1901
OAKLAND, CA 94612-1423
(510) 286-7022



ADDRESS REPLY TO:
PO BOX 420603
SAN FRANCISCO 94142-0603

Dear Annual Permit Holder:

Your Annual Activity Permit is enclosed. It will be effective from the first of January or the issue date, whichever occurs later. Due to the revision of permit regulations (8 CCR 341 et seq.), for the transition year 2007, the expiration date will be at least one year from date of issuance, please check the permit's expiration date. You will receive renewal information two months before the expiration date. If you do not receive a renewal letter, please contact me at (510) 286-7022. In year 2008 and after, the expiration date will be one year from the issue date.

In accordance with California Code of Regulations section 341.1(h)(2)(B), *'The permit holder shall notify the Division district office that has jurisdiction over the site of the project at least 24 hours prior (emphasis added) to the activity which is the subject of the notification...'*

To facilitate the notification process, please complete the enclosed Activity Notification Form and fax or mail it to the District Office nearest to the proposed work activity (see office directory on the back of this letter). Please make as many copies of the form as you need. You may also download the form from our website, <http://www.dir.ca.gov/DOSHPol/forms/cosh41-3.pdf>.

If you should have any questions about the activity notification process, please call me at (510) 286-7022 or your local Cal/OSHA District Office.

Sincerely,

A handwritten signature in black ink that reads 'Robert E. Low'. The signature is written in a cursive style with a large, stylized 'R' and 'L'.

Robert E. Low
Permit Unit

enc. Activity Notification Form for Holders of Annual Permits (Cal/OSHA 41-3)

Appendix A

Section	Survey Package	Survey Unit Description
3.0		SETF Structures and Surfaces
3.1	C4024 301C1	High Bay and First Floor DM Areas
3.2	C4024 302C1	Basement Floor and Mezzanine DM Areas
3.3	C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF

Appendix A

Section	Survey Package	Survey Unit Description
3.0		SETF Structures and Surfaces
3.1	C4024 301C1	High Bay and First Floor DM Areas

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Direct Alpha Measurement Results
5.0	Contact Gamma Exposure Rate Measurement Results
6.0	1 Meter Gamma Exposure Rate Measurement Results
7.0	Removable Alpha Smear Sample Analysis Results
8.0	Removable Beta Smear Sample Analysis Results
9.0	Sample Analysis Results
10.0	Photographs
11.0	Supplemental Information and/or Data

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section 1.0

Data Analysis Report Parameters

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

7/11/2007

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Data Analysis Report Parameters

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Survey Group: C - Radiological Survey of Impacted Facility Surfaces & Structures

Survey Area: 4024 - SETF, Building 4024

Unit Classification: 3 - Impacted Class 3 Structure

MARSSIM FSS Survey Unit Size (M²): No Limit

Survey Unit: 01 - High Bay and First Floor DM Areas

Survey Reason: C1 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	WU1	Upper Wall Surfaces	
	BI1	Interior Surfaces of Out Buildings	
	BE1	Exterior Surfaces of Out Buildings	

Total Area

Materials: Code Description

C1 - Concrete

M1 - Metal

Report Information:

Report Pedigree: Final Report

Detector Efficiency: 2-Pi

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section 2.0

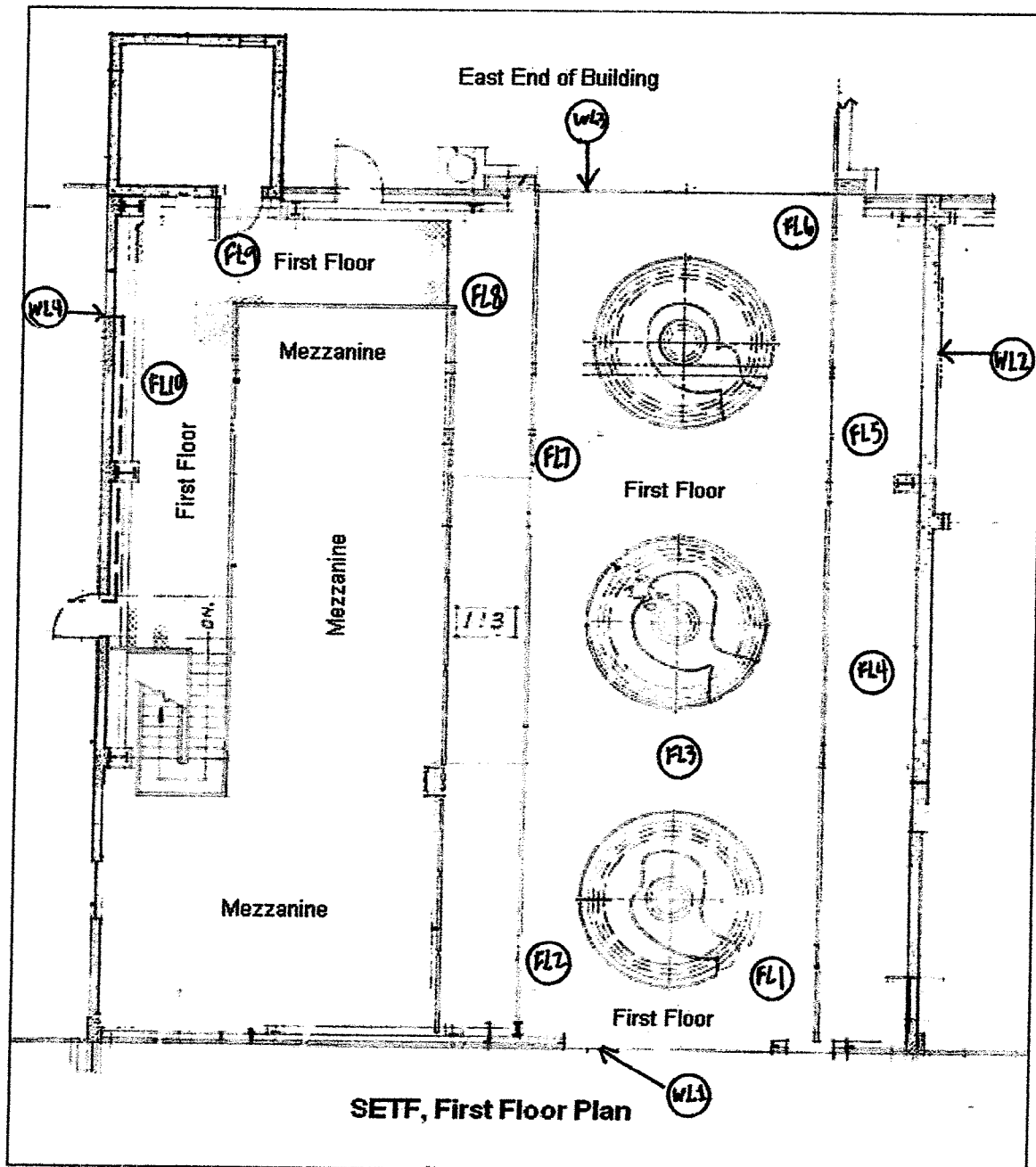
Annotated Drawings

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

4/14/2007

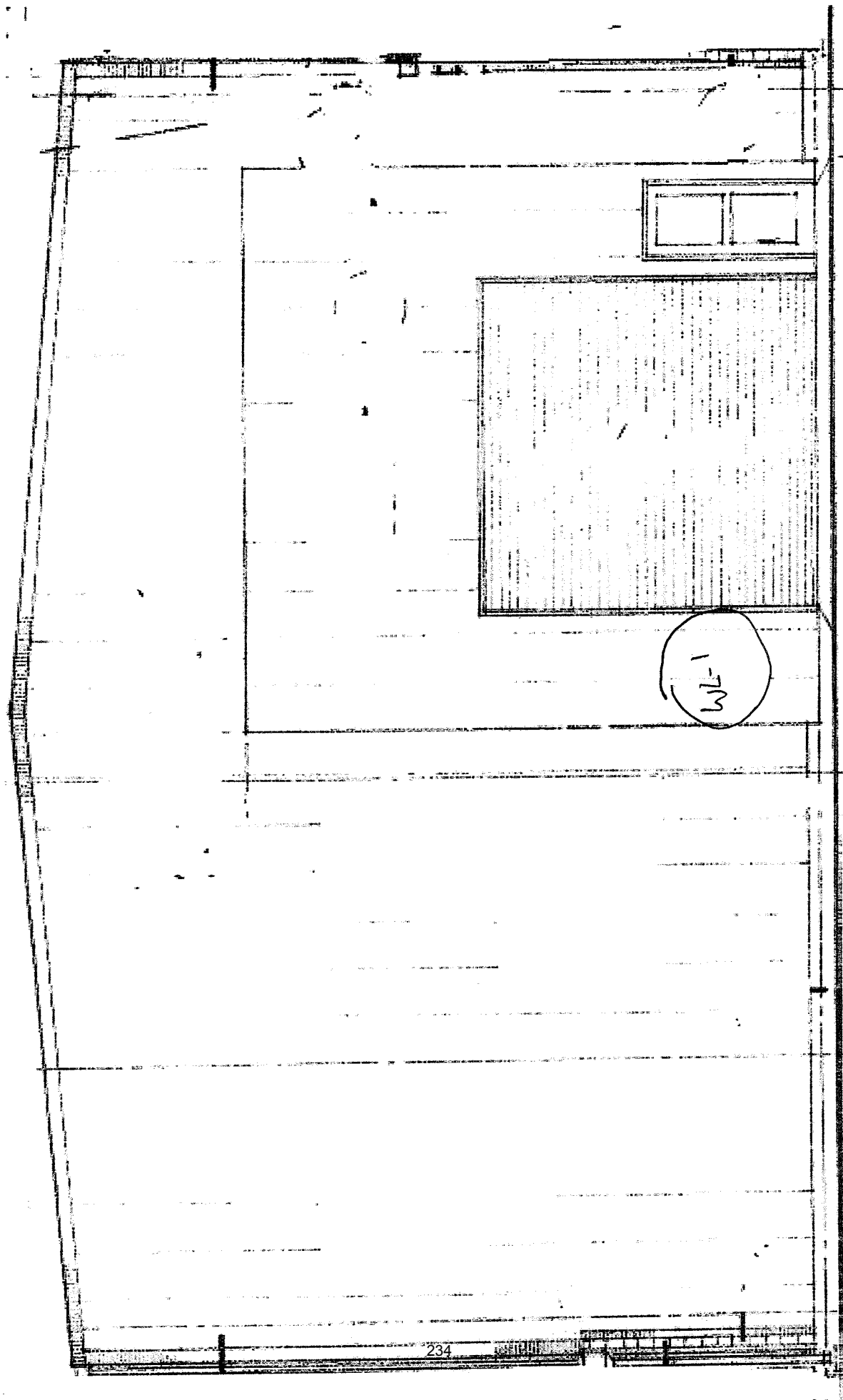
Page A-2 of 6

Survey Package Appendix A – Drawings



Reference dLO4 1307001
dLO4 1307002
dLO4 1307003

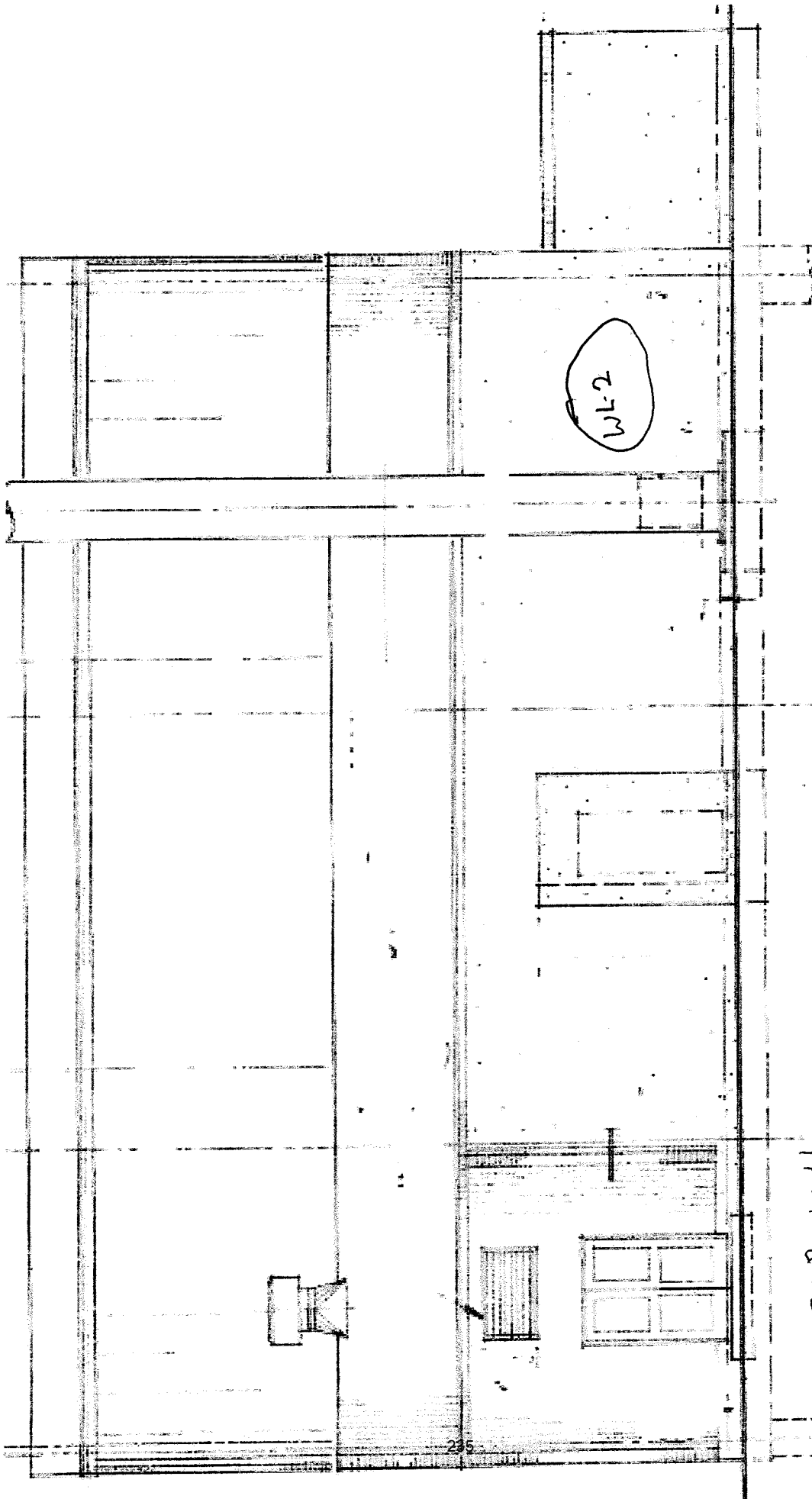
Survey package C4024-361C1



down load Id d1041107-001

West wall
scan + direct readings on west wall
Beta scan, Beta direct, alpha direct, gamma contact + 4 meter
smears Beta Alpha

W

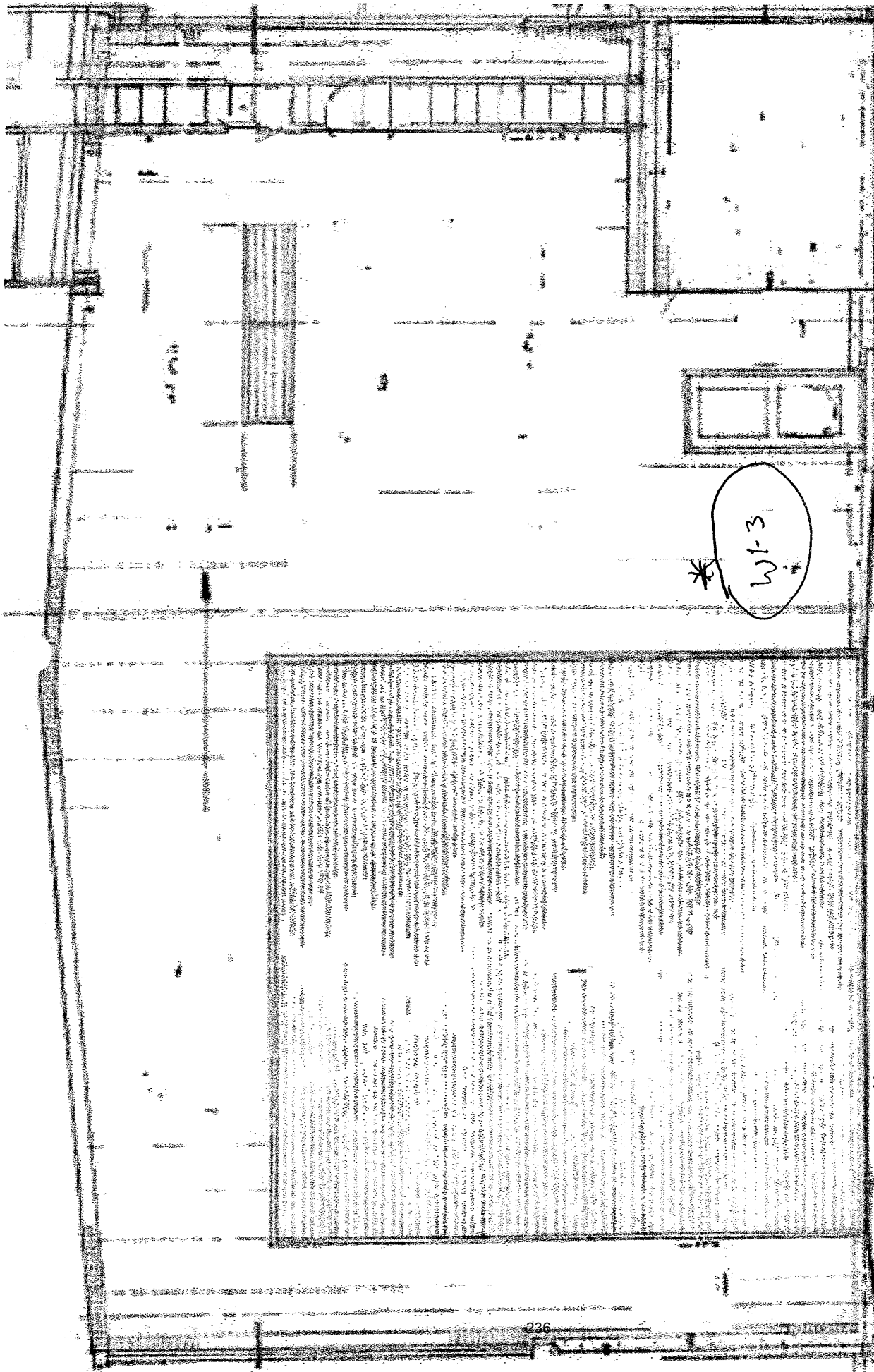


South Wall

Scan & direct Readings on South Wall down load Id - d6041107-001

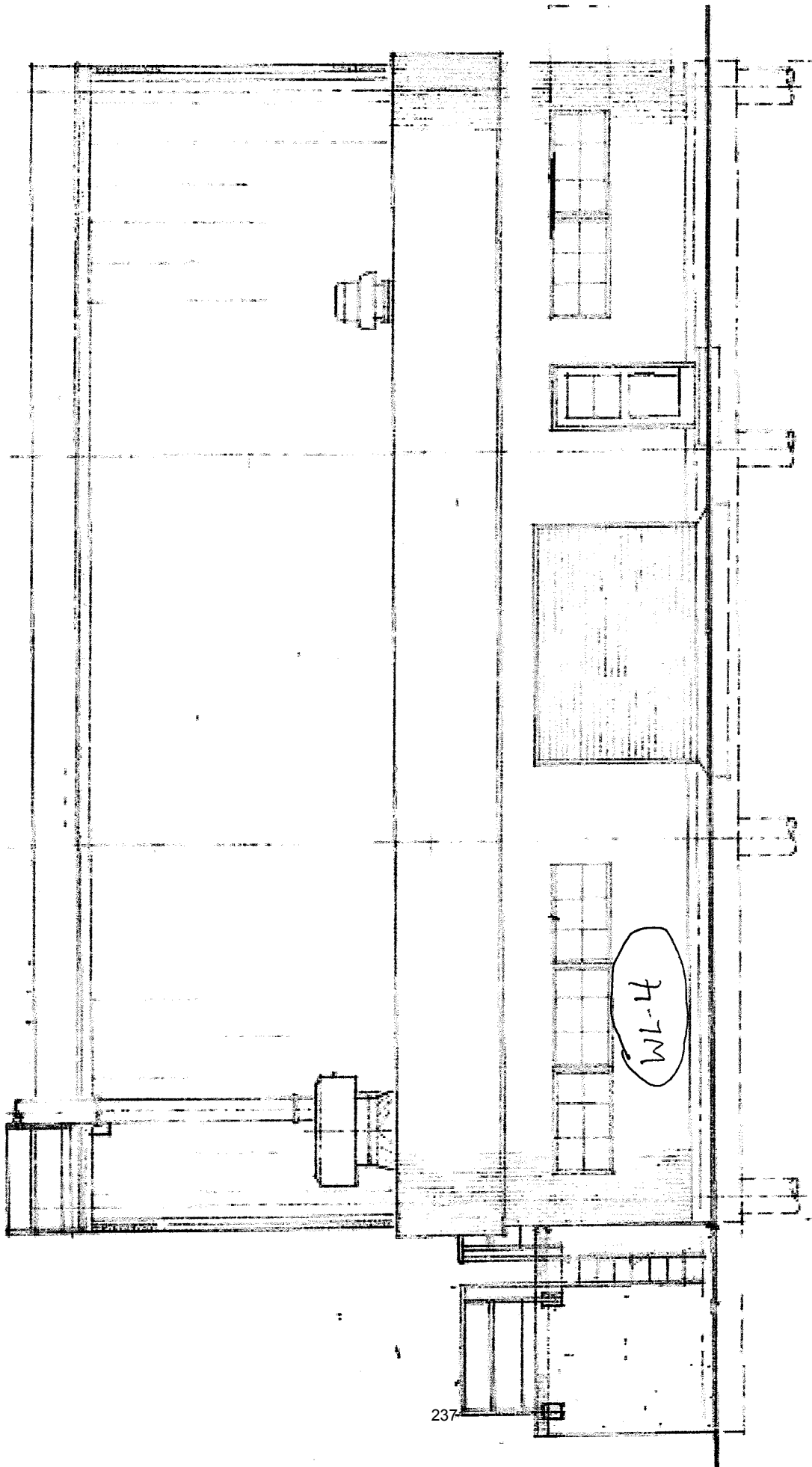
S

Beta scan, Beta direct, Alpha direct, Gamma center and 1 meter
 smear Beta & alpha



E S can direct Readings on east wall down load Id - d(041167-001)

Beta Scan, Beta direct, Alpha direct, Gamma counter and 1 meter smear Beta Alpha



237

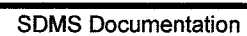
NORTH WALL

N

SEEN - direct readings on north wall down load Id - dL04 1107-001
 Beta seen, Beta direct, alpha direct, gamma center & meter
 Gamma Beta & gamma

4/14/2007

Survey Package Appendix A – Drawings



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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section 3.0

Direct Beta Measurement Results

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

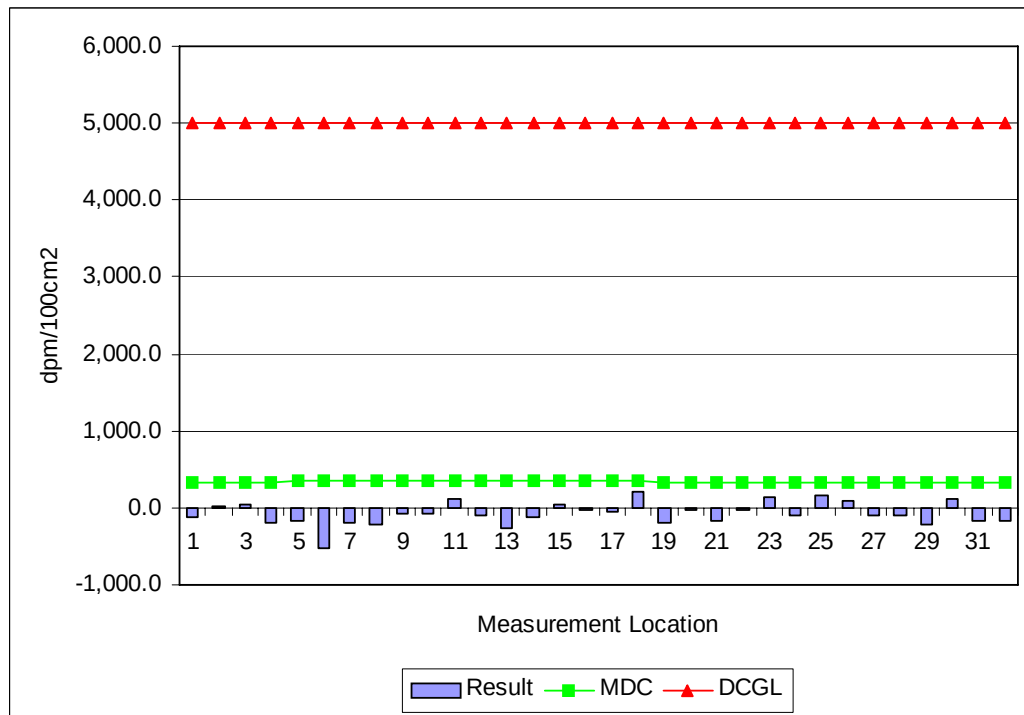
7/11/2007

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	-79.9	Ave. MDC	333.2	Ave. MDC < 50% DCGL	Yes
Median	-88.7	Ave. Background	1,684.3	Measurements < DCGL	Yes
Standard Deviation	150.9	Maximum Bkg.	2,185.0	Measurement Mean < DCGL	Yes
Range	752.3	DCGL	5000	No. Measurements > DCGL	0
Minimum	-531.7	Number of Measurements			
Maximum	220.7	No. Prescribed	32		
		No. Collected	32		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 301C1 High Bay and First Floor DM Areas

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL041107-001	4/11/2007	BE1M1	WL1	1	1,290.7	339.2	1,422.0	-131.3	5,131.3
DL041107-001	4/11/2007	BE1M1	WL2	2	1,450.7	339.2	1,422.0	28.7	4,971.3
DL041107-001	4/11/2007	BE1M1	WL3	3	1,456.0	339.2	1,422.0	34.0	4,966.0
DL041107-001	4/11/2007	BE1C1	WL4	4	1,984.0	339.2	2,185.0	-201.0	5,201.0
DL041307-001	4/13/2007	BI1M1	WL1	1	1,264.0	341.2	1,422.0	-158.0	5,158.0
DL041307-001	4/13/2007	BI1C1	WL2	1	1,653.3	341.2	2,185.0	-531.7	5,531.7
DL041307-001	4/13/2007	BI1M1	WL3	1	1,221.3	341.2	1,422.0	-200.7	5,200.7
DL041307-001	4/13/2007	BI1C1	WL4	1	1,957.3	341.2	2,185.0	-227.7	5,227.7
DL041307-001	4/13/2007	BI1C1	FL	1	2,112.0	341.2	2,185.0	-73.0	5,073.0
DL041307-001	4/13/2007	BI1C1	FL	2	2,117.3	341.2	2,185.0	-67.7	5,067.7
DL041307-001	4/13/2007	BI1C1	FL	3	2,293.3	341.2	2,185.0	108.3	4,891.7
DL041307-001	4/13/2007	BI1C1	FL	4	2,096.0	341.2	2,185.0	-89.0	5,089.0
DL041307-001	4/13/2007	BI1C1	FL	5	1,930.7	341.2	2,185.0	-254.3	5,254.3
DL041307-001	4/13/2007	BI1C1	FL	6	2,053.3	341.2	2,185.0	-131.7	5,131.7
DL041307-001	4/13/2007	BI1C1	FL	7	2,224.0	341.2	2,185.0	39.0	4,961.0
DL041307-001	4/13/2007	BI1C1	FL	8	2,160.0	341.2	2,185.0	-25.0	5,025.0
DL041307-001	4/13/2007	BI1M1	FL	9	1,360.0	341.2	1,422.0	-62.0	5,062.0
DL041307-001	4/13/2007	BI1M1	FL	10	1,642.7	341.2	1,422.0	220.7	4,779.3
DL050107-002	5/1/2007	WU1M1	S	1	1,221.3	323.4	1,422.0	-200.7	5,200.7
DL050107-002	5/1/2007	WU1M1	DUCT	1	1,386.7	323.4	1,422.0	-35.3	5,035.3
DL050107-002	5/1/2007	WU1M1	S	2	1,264.0	323.4	1,422.0	-158.0	5,158.0
DL050107-002	5/1/2007	WU1M1	DUCT	2	1,392.0	323.4	1,422.0	-30.0	5,030.0
DL050107-002	5/1/2007	WU1M1	DUCT	3	1,557.3	323.4	1,422.0	135.3	4,864.7
DL050107-002	5/1/2007	WU1M1	S	3	1,333.3	323.4	1,422.0	-88.7	5,088.7
DL050107-002	5/1/2007	WU1M1	S	4	1,594.7	323.4	1,422.0	172.7	4,827.3
DL050107-002	5/1/2007	WU1M1	DUCT	4	1,509.3	323.4	1,422.0	87.3	4,912.7
DL050107-002	5/1/2007	WU1M1	S	5	1,333.3	323.4	1,422.0	-88.7	5,088.7

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

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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure

Survey Area Name: SETF, Building 4024

Survey Package Number and Unit Name:

C4024 301C1 High Bay and First Floor DM Areas

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL050107-002	5/1/2007	WU1M1	W	1	1,322.7	323.4	1,422.0	-99.3	5,099.3
DL050107-002	5/1/2007	WU1M1	W	2	1,210.7	323.4	1,422.0	-211.3	5,211.3
DL050107-002	5/1/2007	WU1M1	E	1	1,546.7	323.4	1,422.0	124.7	4,875.3
DL050107-002	5/1/2007	WU1M1	E	2	1,248.0	323.4	1,422.0	-174.0	5,174.0
DL050107-002	5/1/2007	WU1M1	W	3	1,248.0	323.4	1,422.0	-174.0	5,174.0

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

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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 301C1 High Bay and First Floor DM Areas

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL041107-001	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742
DL041307-001	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742
DL050107-002	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.5	2,185
M1	Metal	Metal, Bare or Painted	0.5	1,422

Field Notes Summary

Download ID: Field Notes

DL041107-001 Survey of interior surfaces of Building 4024. (4) direct readings on walls and (10) direct readings on floor.

DL041307-001 Beta Scans and direct measurements of Mezzanine and Basement floor radiologically clean DM portions on walls up to (2) meters and floor. (1) direct reading taking in sump.

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section 4.0

Direct Alpha Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

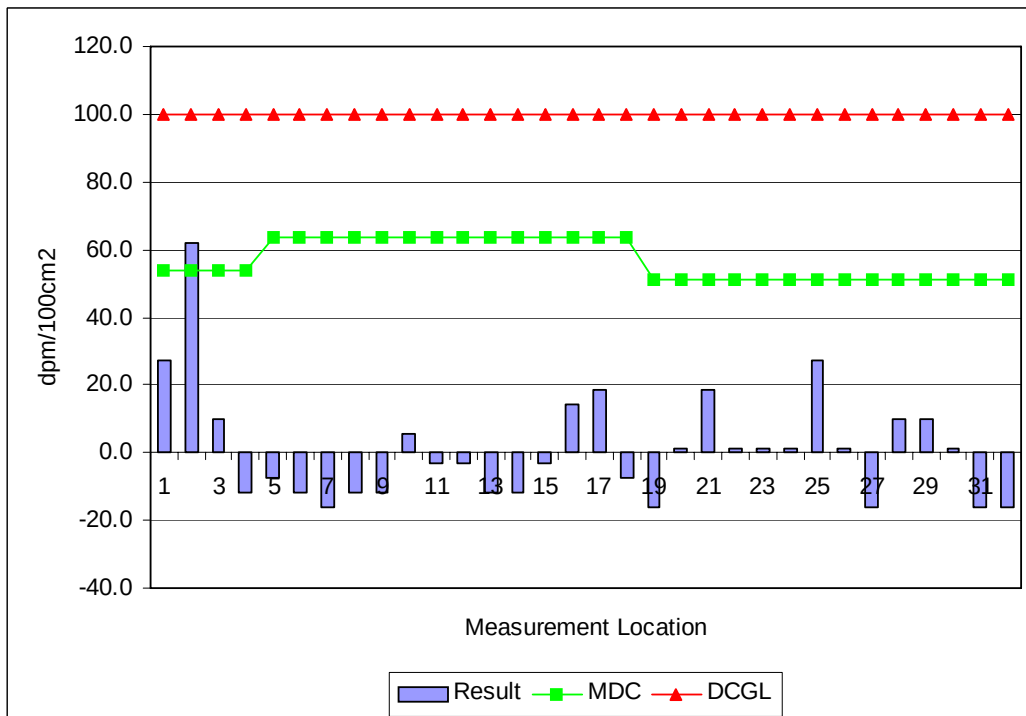
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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	1.2	Ave. MDC	56.9	Ave. MDC < 50% DCGL	No
Median	-0.9	Ave. Background	20.5	Measurements < DCGL	Yes
Standard Deviation	16.8	Maximum Bkg.	29.0	Measurement Mean < DCGL	Yes
Range	77.8	DCGL	100	No. Measurements > DCGL	0
Minimum	-16.0	Number of Measurements			
Maximum	61.8	No. Prescribed	32		
		No. Collected	32		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL041207-002	4/12/2007	BE1M1	WL1	1	43.2	54.0	16.0	27.2	72.8
DL041207-002	4/12/2007	BE1M1	WL2	2	77.8	54.0	16.0	61.8	38.2
DL041207-002	4/12/2007	BE1M1	WL3	3	25.9	54.0	16.0	9.9	90.1
DL041207-002	4/12/2007	BE1C1	WL4	4	17.3	54.0	29.0	-11.7	111.7
DL041307-002	4/13/2007	BI1M1	WL1	1	8.6	63.6	16.0	-7.4	107.4
DL041307-002	4/13/2007	BI1C1	WL2	1	17.3	63.6	29.0	-11.7	111.7
DL041307-002	4/13/2007	BI1M1	WL3	1	0.0	63.6	16.0	-16.0	116.0
DL041307-002	4/13/2007	BI1C1	WL4	1	17.3	63.6	29.0	-11.7	111.7
DL041307-002	4/13/2007	BI1C1	FL	1	17.3	63.6	29.0	-11.7	111.7
DL041307-002	4/13/2007	BI1C1	FL	2	34.6	63.6	29.0	5.6	94.4
DL041307-002	4/13/2007	BI1C1	FL	3	25.9	63.6	29.0	-3.1	103.1
DL041307-002	4/13/2007	BI1C1	FL	4	25.9	63.6	29.0	-3.1	103.1
DL041307-002	4/13/2007	BI1C1	FL	5	17.3	63.6	29.0	-11.7	111.7
DL041307-002	4/13/2007	BI1C1	FL	6	17.3	63.6	29.0	-11.7	111.7
DL041307-002	4/13/2007	BI1C1	FL	7	25.9	63.6	29.0	-3.1	103.1
DL041307-002	4/13/2007	BI1C1	FL	8	43.2	63.6	29.0	14.2	85.8
DL041307-002	4/13/2007	BI1M1	FL	9	34.6	63.6	16.0	18.6	81.4
DL041307-002	4/13/2007	BI1M1	FL	10	8.6	63.6	16.0	-7.4	107.4
DL050107-001	5/1/2007	WU1M1	S	1	0.0	51.0	16.0	-16.0	116.0
DL050107-001	5/1/2007	WU1M1	DUCT	1	17.3	51.0	16.0	1.3	98.7
DL050107-001	5/1/2007	WU1M1	S	2	34.6	51.0	16.0	18.6	81.4
DL050107-001	5/1/2007	WU1M1	DUCT	2	17.3	51.0	16.0	1.3	98.7
DL050107-001	5/1/2007	WU1M1	DUCT	3	17.3	51.0	16.0	1.3	98.7
DL050107-001	5/1/2007	WU1M1	S	3	17.3	51.0	16.0	1.3	98.7
DL050107-001	5/1/2007	WU1M1	S	4	43.2	51.0	16.0	27.2	72.8

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 301C1 High Bay and First Floor DM Areas

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL050107-001	5/1/2007	WU1M1	DUCT	4	17.3	51.0	16.0	1.3	98.7
DL050107-001	5/1/2007	WU1M1	S	5	0.0	51.0	16.0	-16.0	116.0
DL050107-001	5/1/2007	WU1M1	W	1	25.9	51.0	16.0	9.9	90.1
DL050107-001	5/1/2007	WU1M1	W	2	25.9	51.0	16.0	9.9	90.1
DL050107-001	5/1/2007	WU1M1	E	1	17.3	51.0	16.0	1.3	98.7
DL050107-001	5/1/2007	WU1M1	E	2	0.0	51.0	16.0	-16.0	116.0
DL050107-001	5/1/2007	WU1M1	W	3	0.0	51.0	16.0	-16.0	116.0

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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 301C1 High Bay and First Floor DM Areas

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL041207-002	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061
DL041307-002	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061
DL050107-001	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.25	29
M1	Metal	Metal, Bare or Painted	0.25	16

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

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

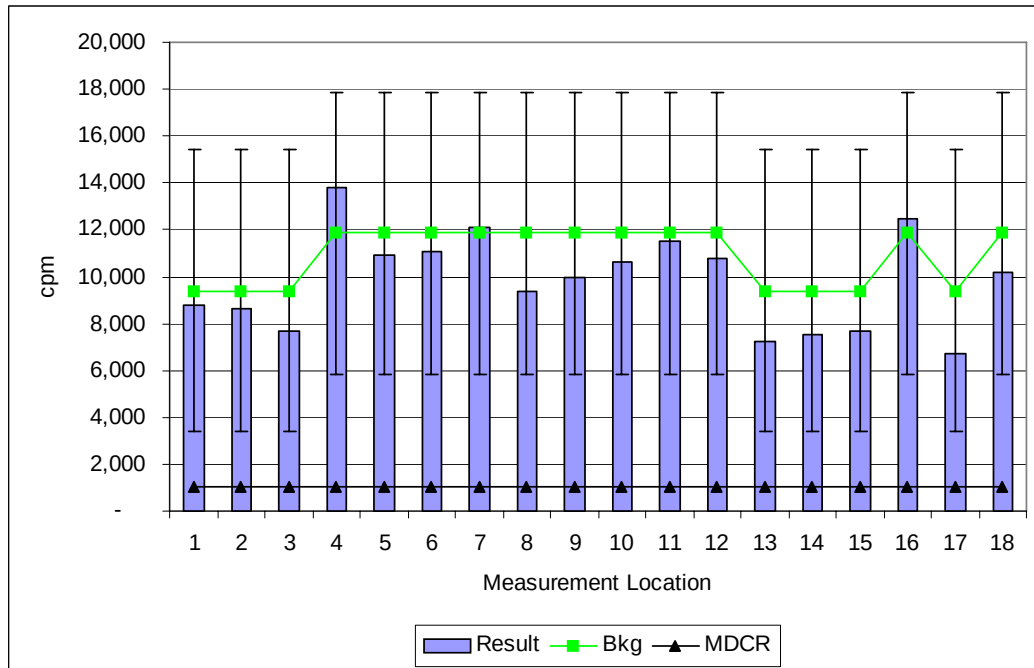
7/11/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	9,842	Ave. Background	10,901	Ave. MDCR < 50% Bkg.	Yes
Median	10,100	3 sigma Value	6,023	Measurements < Ave. Bkg.	No
Standard Deviation	2,008	Maximum Bkg.	11,869	Measurement Mean < Ave. Bkg.	Yes
Range	7,050	Ave. MDCR	1,060	No. Measurements > Ave. Bkg.	3
Minimum	6,750	Number of Measurements			
Maximum	13,800	No. Prescribed	18		
		No. Collected	18		



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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL041207-001	4/12/2007	BE1M1	WL1	1	9,381	1,060	8,750	631
DL041207-001	4/12/2007	BE1M1	WL2	2	9,381	1,060	8,650	731
DL041207-001	4/12/2007	BE1M1	WL3	3	9,381	1,060	7,650	1,731
DL041207-001	4/12/2007	BE1C1	WL4	4	11,869	1,060	13,800	-1,931
DL041307-003	4/13/2007	BI1C1	FL	1	11,869	1,060	10,900	969
DL041307-003	4/13/2007	BI1C1	FL	2	11,869	1,060	11,100	769
DL041307-003	4/13/2007	BI1C1	FL	3	11,869	1,060	12,100	-231
DL041307-003	4/13/2007	BI1C1	FL	4	11,869	1,060	9,350	2,519
DL041307-003	4/13/2007	BI1C1	FL	5	11,869	1,060	10,000	1,869
DL041307-003	4/13/2007	BI1C1	FL	6	11,869	1,060	10,650	1,219
DL041307-003	4/13/2007	BI1C1	FL	7	11,869	1,060	11,500	369
DL041307-003	4/13/2007	BI1C1	FL	8	11,869	1,060	10,800	1,069
DL041307-003	4/13/2007	BI1M1	FL	9	9,381	1,060	7,250	2,131
DL041307-003	4/13/2007	BI1M1	FL	10	9,381	1,060	7,550	1,831
DL041307-003	4/13/2007	BI1M1	WL1	1	9,381	1,060	7,700	1,681
DL041307-003	4/13/2007	BI1C1	WL2	1	11,869	1,060	12,450	-581
DL041307-003	4/13/2007	BI1M1	WL3	1	9,381	1,060	6,750	2,631
DL041307-003	4/13/2007	BI1C1	WL4	1	11,869	1,060	10,200	1,669

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL041207-001	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061
DL041307-003	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
C1	Concrete	Concrete, Bare or Painted	11,869
M1	Metal	Metal, Bare or Painted	9,381

Field Notes Summary

Download ID	Field Notes
DL041207-001	contact and (1) meter gamma readings at beta directs -walls
DL041307-003	contact and (1) meter gamma readings at direct Beta measurements on walls and floor

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section 6.0

1 Meter Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

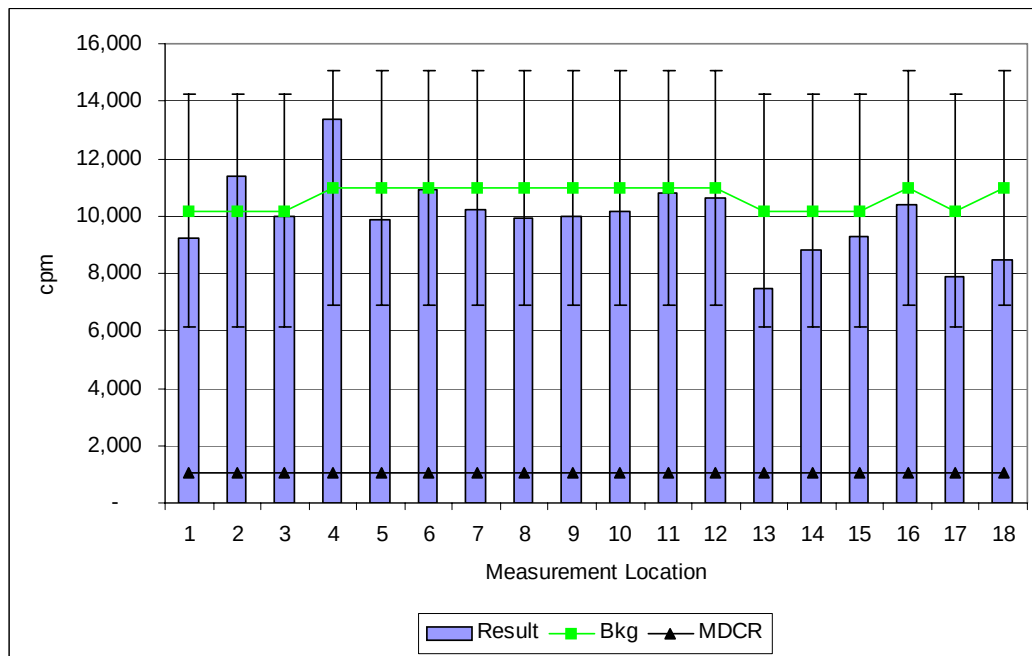
7/11/2007

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	9,931	Ave. Background	10,664	Ave. MDCR < 50% Bkg.	Yes
Median	10,000	3 sigma Value	4,076	Measurements < Ave. Bkg.	No
Standard Deviation	1,359	Maximum Bkg.	11,972	Measurement Mean < Ave. Bkg.	Yes
Range	5,950	Ave. MDCR	1,065	No. Measurements > Ave. Bkg.	2
Minimum	7,450	Number of Measurements			
Maximum	13,400	No. Prescribed	18		
		No. Collected	18		



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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL041207-001	4/12/2007	BE1M1	WL1	1	10,181	1,065	9,200	981
DL041207-001	4/12/2007	BE1M1	WL2	2	10,181	1,065	11,400	-1,219
DL041207-001	4/12/2007	BE1M1	WL3	3	10,181	1,065	10,000	181
DL041207-001	4/12/2007	BE1C1	WL4	4	10,972	1,065	13,400	-2,428
DL041307-003	4/13/2007	BI1C1	FL	1	10,972	1,065	9,850	1,122
DL041307-003	4/13/2007	BI1C1	FL	2	10,972	1,065	10,900	72
DL041307-003	4/13/2007	BI1C1	FL	3	10,972	1,065	10,200	772
DL041307-003	4/13/2007	BI1C1	FL	4	10,972	1,065	9,950	1,022
DL041307-003	4/13/2007	BI1C1	FL	5	10,972	1,065	10,000	972
DL041307-003	4/13/2007	BI1C1	FL	6	10,972	1,065	10,150	822
DL041307-003	4/13/2007	BI1C1	FL	7	10,972	1,065	10,800	172
DL041307-003	4/13/2007	BI1C1	FL	8	10,972	1,065	10,600	372
DL041307-003	4/13/2007	BI1M1	FL	9	10,181	1,065	7,450	2,731
DL041307-003	4/13/2007	BI1M1	FL	10	10,181	1,065	8,800	1,381
DL041307-003	4/13/2007	BI1M1	WL1	1	10,181	1,065	9,300	881
DL041307-003	4/13/2007	BI1C1	WL2	1	10,972	1,065	10,400	572
DL041307-003	4/13/2007	BI1M1	WL3	1	10,181	1,065	7,900	2,281
DL041307-003	4/13/2007	BI1C1	WL4	1	10,972	1,065	8,450	2,522

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL041207-001	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061
DL041307-003	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	1Meter Gamma Background (cpm)
C1	Concrete	Concrete, Bare or Painted	10,972
M1	Metal	Metal, Bare or Painted	10,181

Field Notes Summary

Download ID	Field Notes
DL041207-001	contact and (1) meter gamma readings at beta directs -walls
DL041307-003	contact and (1) meter gamma readings at direct Beta measurements on walls and floor

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section 7.0

Removable Alpha Smear Sample Analysis Results

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Removable Alpha Measurement Results

Survey Area LC1: C4024 Package Type: Structure
 Survey Area Name: SETF, Building 4024
 Survey Package Number and Unit Name: C4024 301C1 High Bay and First Floor DM Areas

Statistical Summary

	dpm/100cm2
Mean	0.9
Median	1.3
Standard Deviation	1.8
Range	6.8
Minimum	-1.0
Maximum	5.8

Measurement Sensitivity

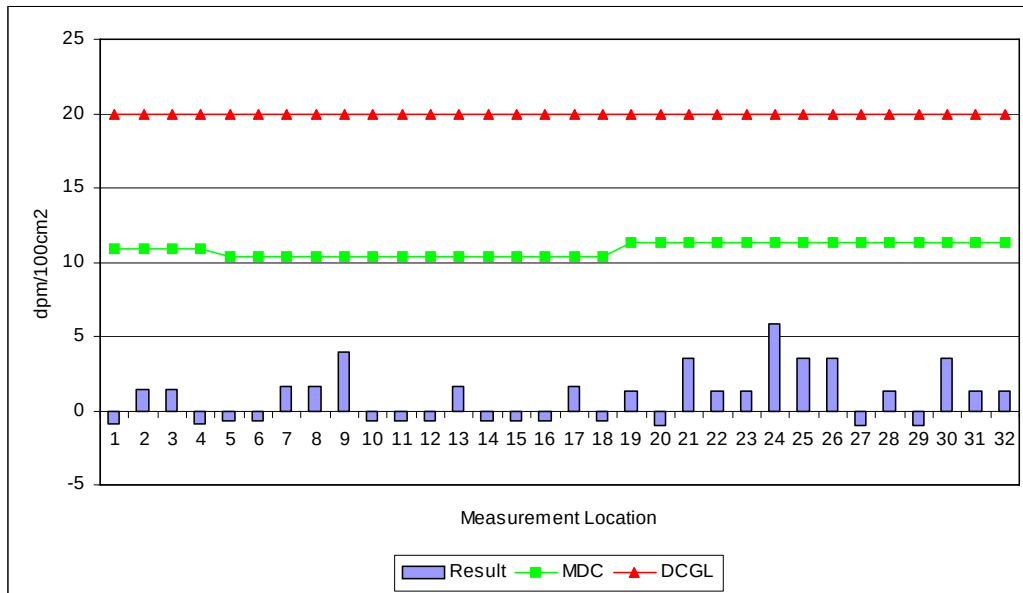
	dpm/100cm2
MDC Mean	10.9
MDC Minimum	10.4
MDC Maximum	11.3
DCGL	20.0

Number of Measurements

No. Prescribed	32
No. Collected	32

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 301C1 High Bay and First Floor DM Areas

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Alpha Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS041207-001	4/12/2007	BE1	WL2	2	10.9	-0.9	20.9
CS041207-001	4/12/2007	BE1	WL3	3	10.9	1.4	18.6
CS041207-001	4/12/2007	BE1	WL4	4	10.9	1.4	18.6
CS041207-001	4/12/2007	BE1	WL1	1	10.9	-0.9	20.9
CS041307-001	4/13/2007	BI1	FL	3	10.4	-0.7	20.7
CS041307-001	4/13/2007	BI1	FL	9	10.4	-0.7	20.7
CS041307-001	4/13/2007	BI1	FL	8	10.4	1.6	18.4
CS041307-001	4/13/2007	BI1	FL	7	10.4	1.6	18.4
CS041307-001	4/13/2007	BI1	FL	6	10.4	3.9	16.1
CS041307-001	4/13/2007	BI1	WL2	2	10.4	-0.7	20.7
CS041307-001	4/13/2007	BI1	FL	4	10.4	-0.7	20.7
CS041307-001	4/13/2007	BI1	WL3	3	10.4	-0.7	20.7
CS041307-001	4/13/2007	BI1	FL	2	10.4	1.6	18.4
CS041307-001	4/13/2007	BI1	FL	10	10.4	-0.7	20.7
CS041307-001	4/13/2007	BI1	FL	1	10.4	-0.7	20.7
CS041307-001	4/13/2007	BI1	FL	5	10.4	-0.7	20.7
CS041307-001	4/13/2007	BI1	WL4	4	10.4	1.6	18.4
CS041307-001	4/13/2007	BI1	WL1	1	10.4	-0.7	20.7
CS050107-001	5/1/2007	WU1	E2	13	11.3	1.3	18.7
CS050107-001	5/1/2007	WU1	W2	11	11.3	-1.0	21.0
CS050107-001	5/1/2007	WU1	W1	10	11.3	3.5	16.5
CS050107-001	5/1/2007	WU1	S5	9	11.3	1.3	18.7
CS050107-001	5/1/2007	WU1	S4	7	11.3	1.3	18.7
CS050107-001	5/1/2007	WU1	S3	6	11.3	5.8	14.2
CS050107-001	5/1/2007	WU1	S1	1	11.3	3.5	16.5
CS050107-001	5/1/2007	WU1	W3	14	11.3	3.5	16.5
CS050107-001	5/1/2007	WU1	E1	12	11.3	-1.0	21.0
CS050107-001	5/1/2007	WU1	DUCT4	8	11.3	1.3	18.7
CS050107-001	5/1/2007	WU1	DUCT3	5	11.3	-1.0	21.0
CS050107-001	5/1/2007	WU1	DUCT2	4	11.3	3.5	16.5
CS050107-001	5/1/2007	WU1	DUCT1	2	11.3	1.3	18.7
CS050107-001	5/1/2007	WU1	S2	3	11.3	1.3	18.7

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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 301C1 High Bay and First Floor DM Areas

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS041207-001	C4024 301C1 BE1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS041307-001	C4024 301C1 BI1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS050107-001	C4024 301C1 WU1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS041207-001	None
CS041307-001	None
CS050107-001	None

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section 8.0

Removable Beta Smear Sample Analysis Results

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Removable Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Statistical Summary

	dpm/100cm2
Mean	-11.8
Median	-6.2
Standard Deviation	22.7
Range	87.2
Minimum	-59.5
Maximum	27.7

Measurement Sensitivity

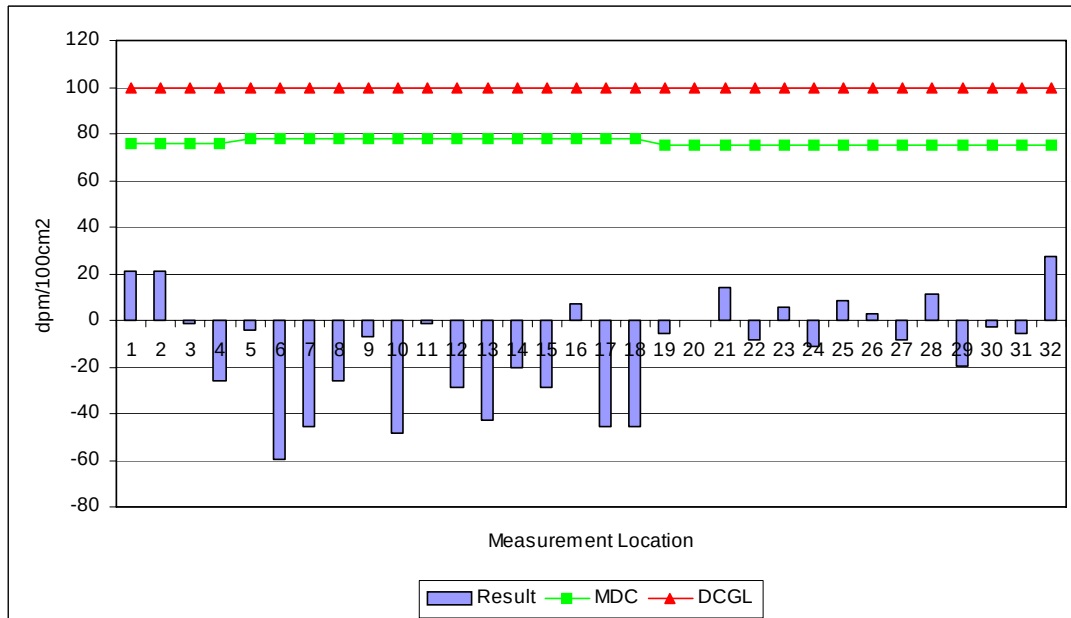
	dpm/100cm2
MDC Mean	76.3
MDC Minimum	74.9
MDC Maximum	77.8
DCGL	100.0

Number of Measurements

No. Prescribed	32
No. Collected	32

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 301C1 High Bay and First Floor DM Areas

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Beta Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS041207-001	4/12/2007	BE1	WL2	2	75.9	20.8	79
CS041207-001	4/12/2007	BE1	WL3	3	75.9	20.8	79
CS041207-001	4/12/2007	BE1	WL4	4	75.9	-1.4	101
CS041207-001	4/12/2007	BE1	WL1	1	75.9	-26.3	126
CS041307-001	4/13/2007	BI1	FL	3	77.8	-4.2	104
CS041307-001	4/13/2007	BI1	FL	9	77.8	-59.5	160
CS041307-001	4/13/2007	BI1	FL	8	77.8	-45.6	146
CS041307-001	4/13/2007	BI1	FL	7	77.8	-26.3	126
CS041307-001	4/13/2007	BI1	FL	6	77.8	-6.9	107
CS041307-001	4/13/2007	BI1	WL2	2	77.8	-48.4	148
CS041307-001	4/13/2007	BI1	FL	4	77.8	-1.4	101
CS041307-001	4/13/2007	BI1	WL3	3	77.8	-29.0	129
CS041307-001	4/13/2007	BI1	FL	2	77.8	-42.9	143
CS041307-001	4/13/2007	BI1	FL	10	77.8	-20.7	121
CS041307-001	4/13/2007	BI1	FL	1	77.8	-29.0	129
CS041307-001	4/13/2007	BI1	FL	5	77.8	6.9	93
CS041307-001	4/13/2007	BI1	WL4	4	77.8	-45.6	146
CS041307-001	4/13/2007	BI1	WL1	1	77.8	-45.6	146
CS050107-001	5/1/2007	WU1	E2	13	74.9	-5.5	106
CS050107-001	5/1/2007	WU1	W2	11	74.9	0.0	100
CS050107-001	5/1/2007	WU1	W1	10	74.9	13.8	86
CS050107-001	5/1/2007	WU1	S5	9	74.9	-8.3	108
CS050107-001	5/1/2007	WU1	S4	7	74.9	5.5	95
CS050107-001	5/1/2007	WU1	S3	6	74.9	-11.1	111
CS050107-001	5/1/2007	WU1	S1	1	74.9	8.3	92
CS050107-001	5/1/2007	WU1	W3	14	74.9	2.8	97
CS050107-001	5/1/2007	WU1	E1	12	74.9	-8.3	108
CS050107-001	5/1/2007	WU1	DUCT4	8	74.9	11.1	89
CS050107-001	5/1/2007	WU1	DUCT3	5	74.9	-19.4	119
CS050107-001	5/1/2007	WU1	DUCT2	4	74.9	-2.8	103
CS050107-001	5/1/2007	WU1	DUCT1	2	74.9	-5.5	106
CS050107-001	5/1/2007	WU1	S2	3	74.9	27.7	72

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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 301C1 High Bay and First Floor DM Areas

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS041207-001	C4024 301C1 BE1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS041307-001	C4024 301C1 BI1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS050107-001	C4024 301C1 WU1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS041207-001	None
CS041307-001	None
CS050107-001	None

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section 9.0

Sample Analysis Results

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

There were no samples collected for isotopic analysis.

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section 10.0

Photographs

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Photographs were not taken.

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

Section 11.0

Supplemental Information and/or Data

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 301C1	High Bay and First Floor DM Areas		

There was no additional supplemental information and/or data.

Appendix A

Section	Survey Package	Survey Unit Description
3.0		SETF Structures and Surfaces
3.2	C4024 302C1	Basement Floor and Mezzanine DM Areas

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Direct Alpha Measurement Results
5.0	Contact Gamma Exposure Rate Measurement Results
6.0	1 Meter Gamma Exposure Rate Measurement Results
7.0	Removable Alpha Smear Sample Analysis Results
8.0	Removable Beta Smear Sample Analysis Results
9.0	Sample Analysis Results
10.0	Photographs
11.0	Supplemental Information and/or Data

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section 1.0

Data Analysis Report Parameters

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

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Data Analysis Report Parameters

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Survey Group: C - Radiological Survey of Impacted Facility Surfaces & Structures

Survey Area: 4024 - SETF, Building 4024

Unit Classification: 3 - Impacted Class 3 Structure

MARSSIM FSS Survey Unit Size (M²): No Limit

Survey Unit: 02 - Basement Floor and Mezzanine DM Areas

Survey Reason: C1 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	WL1	Lower Wall Surfaces	
	FL1	Floor Surface	
			Total Area

Materials: Code Description

C1 - Concrete

M1 - Metal

Report Information:

Report Pedigree: Final Report

Detector Efficiency: 2-Pi

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section 2.0

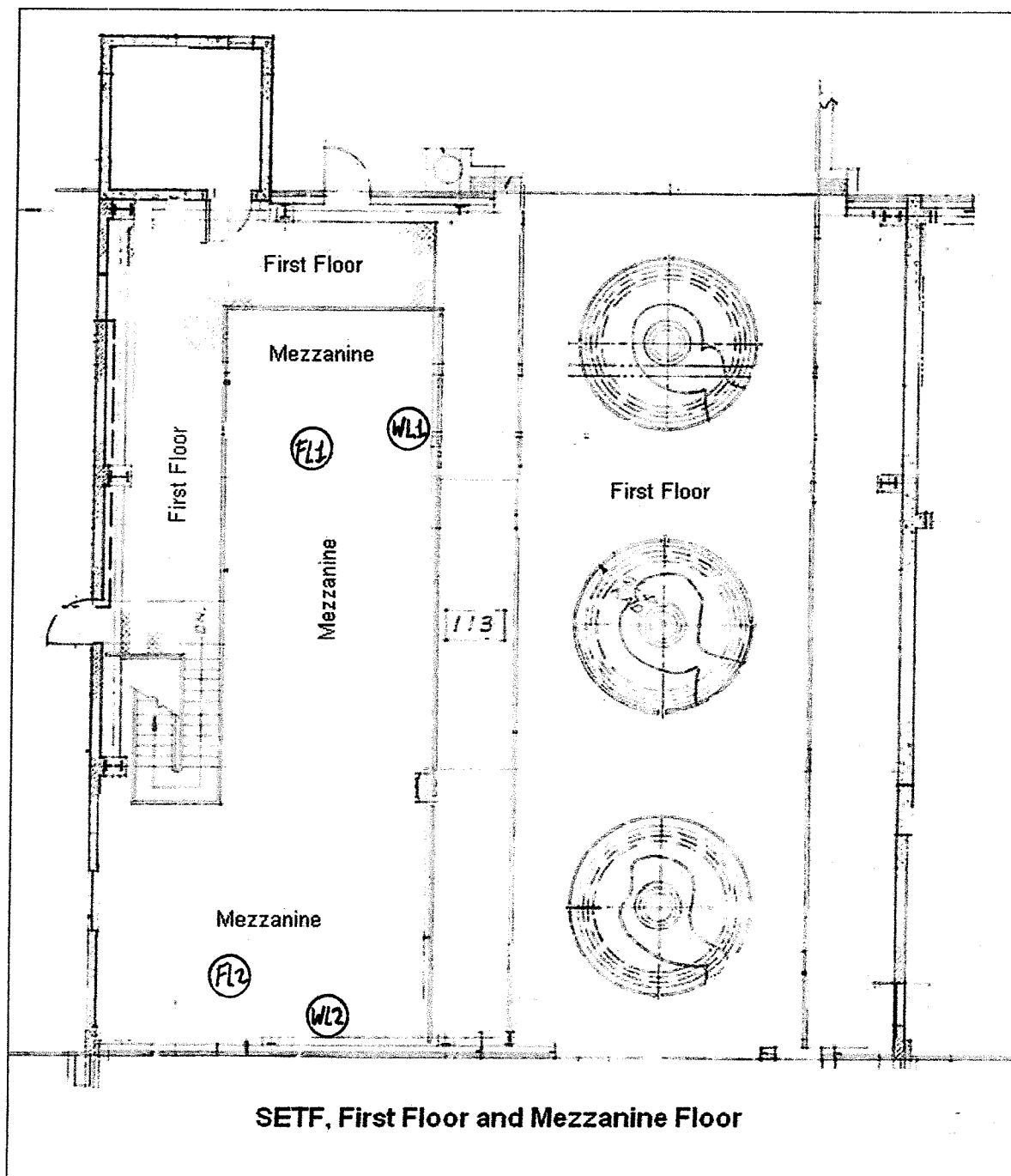
Annotated Drawings

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

4/14/2007

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Survey Package Appendix A – Drawings

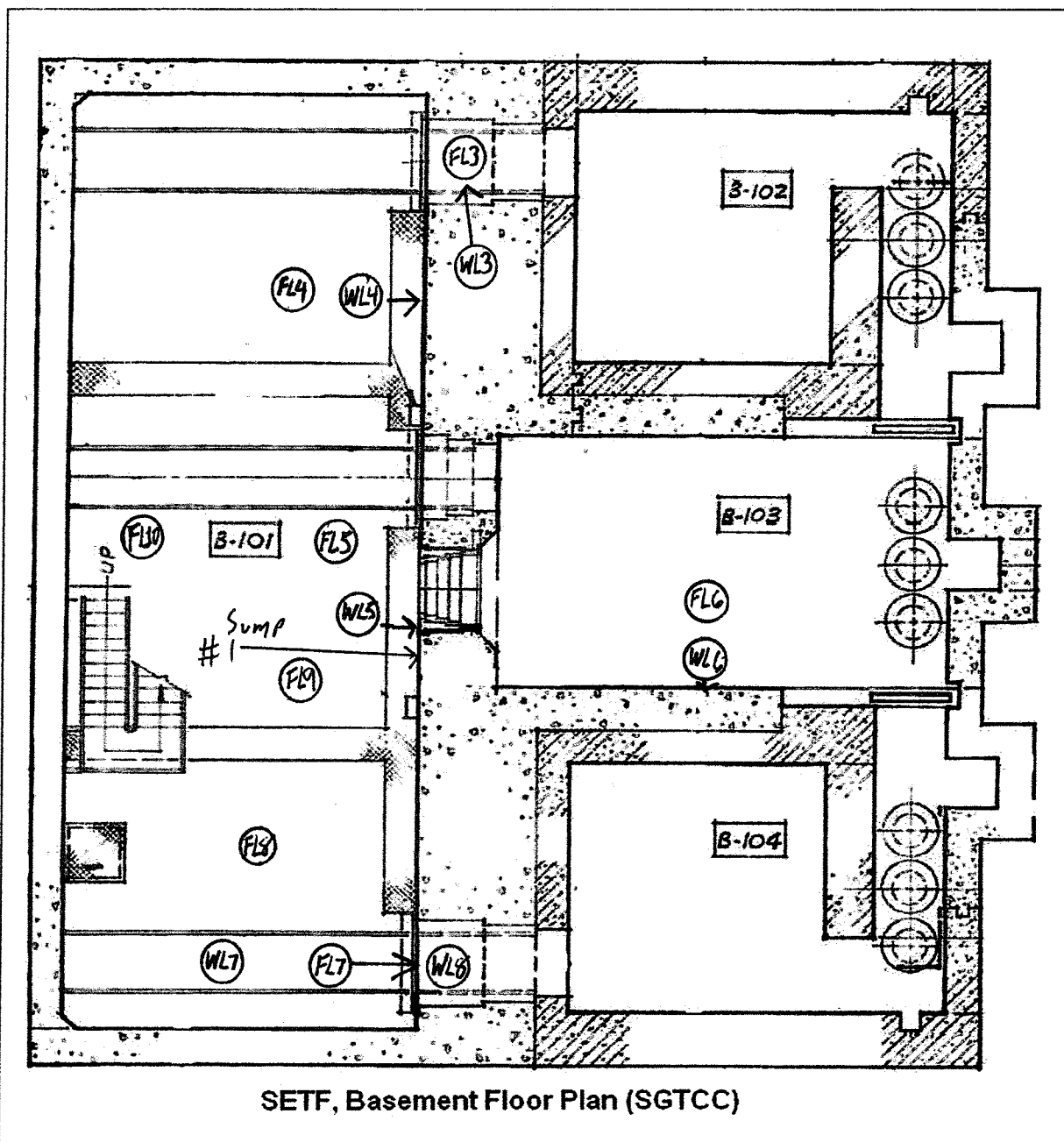


SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA

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Survey Package Appendix A – Drawings



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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section 3.0

Direct Beta Measurement Results

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

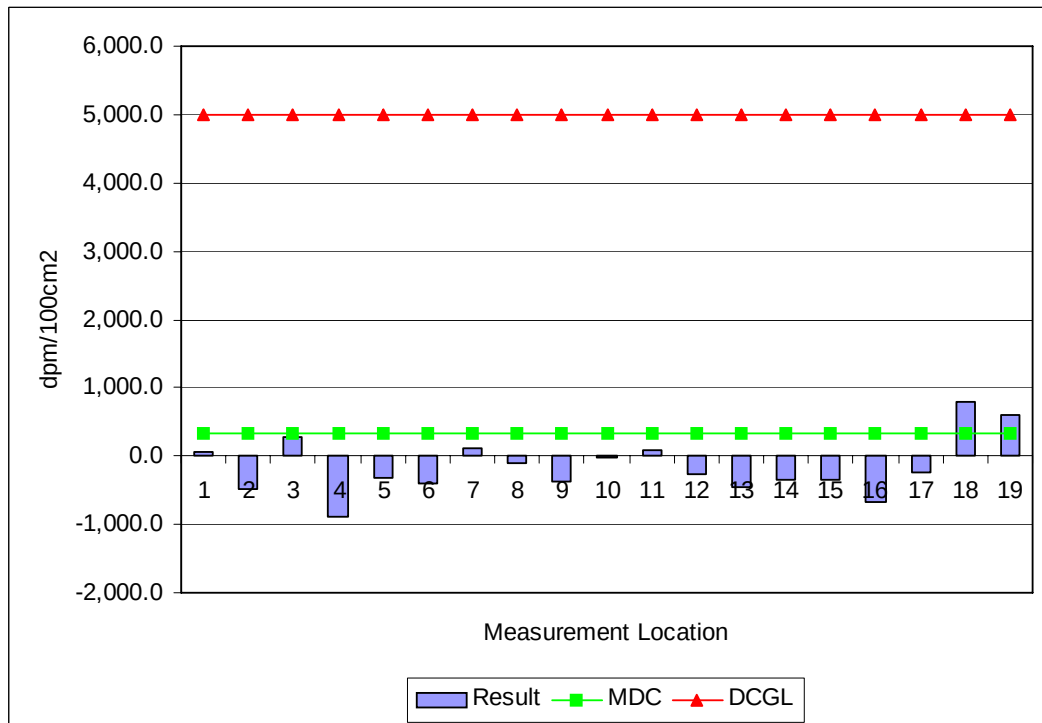
7/11/2007

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	-156.0	Ave. MDC	341.5	Ave. MDC < 50% DCGL	Yes
Median	-275.7	Ave. Background	2,024.4	Measurements < DCGL	Yes
Standard Deviation	412.1	Maximum Bkg.	2,185.0	Measurement Mean < DCGL	Yes
Range	1,664.3	DCGL	5000	No. Measurements > DCGL	0
Minimum	-878.3	Number of Measurements			
Maximum	786.0	No. Prescribed	18		
		No. Collected	19		



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

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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 302C1 Basement Floor and Mezzanine DM Areas

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL041607-001	4/16/2007	FL1C1	FL10	10	2,234.7	341.5	2,185.0	49.7	4,950.3
DL041607-001	4/16/2007	FL1C1	FL3	3	1,701.3	341.5	2,185.0	-483.7	5,483.7
DL041607-001	4/16/2007	FL1C1	FL4	4	2,464.0	341.5	2,185.0	279.0	4,721.0
DL041607-001	4/16/2007	FL1C1	FL5	5	1,306.7	341.5	2,185.0	-878.3	5,878.3
DL041607-001	4/16/2007	FL1C1	FL6	6	1,856.0	341.5	2,185.0	-329.0	5,329.0
DL041607-001	4/16/2007	FL1C1	FL7	7	1,781.3	341.5	2,185.0	-403.7	5,403.7
DL041607-001	4/16/2007	FL1C1	FL8	8	2,309.3	341.5	2,185.0	124.3	4,875.7
DL041607-001	4/16/2007	FL1C1	FL9	9	2,090.7	341.5	2,185.0	-94.3	5,094.3
DL041607-001	4/16/2007	FL1C1	SUMP1	1	1,802.7	341.5	2,185.0	-382.3	5,382.3
DL041607-001	4/16/2007	FL1M1	MZ	1	1,397.3	341.5	1,422.0	-24.7	5,024.7
DL041607-001	4/16/2007	FL1M1	MZ	2	1,514.7	341.5	1,422.0	92.7	4,907.3
DL041607-001	4/16/2007	WL1C1	MZ	1	1,909.3	341.5	2,185.0	-275.7	5,275.7
DL041607-001	4/16/2007	WL1C1	MZ	2	1,738.7	341.5	2,185.0	-446.3	5,446.3
DL041607-001	4/16/2007	WL1C1	WL4	4	1,845.3	341.5	2,185.0	-339.7	5,339.7
DL041607-001	4/16/2007	WL1C1	WL5	5	1,850.7	341.5	2,185.0	-334.3	5,334.3
DL041607-001	4/16/2007	WL1C1	WL6	6	1,525.3	341.5	2,185.0	-659.7	5,659.7
DL041607-001	4/16/2007	WL1C1	WL7	7	1,936.0	341.5	2,185.0	-249.0	5,249.0
DL041607-001	4/16/2007	WL1M1	WL3	3	2,208.0	341.5	1,422.0	786.0	4,214.0
DL041607-001	4/16/2007	WL1M1	WL8	8	2,026.7	341.5	1,422.0	604.7	4,395.3

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 302C1 Basement Floor and Mezzanine DM Areas

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL041607-001	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.5	2,185
M1	Metal	Metal, Bare or Painted	0.5	1,422

Field Notes Summary

Download ID: Field Notes
DL041607-001 Beta scans and direct measurements on concrete and asphalt.

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section 4.0

Direct Alpha Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

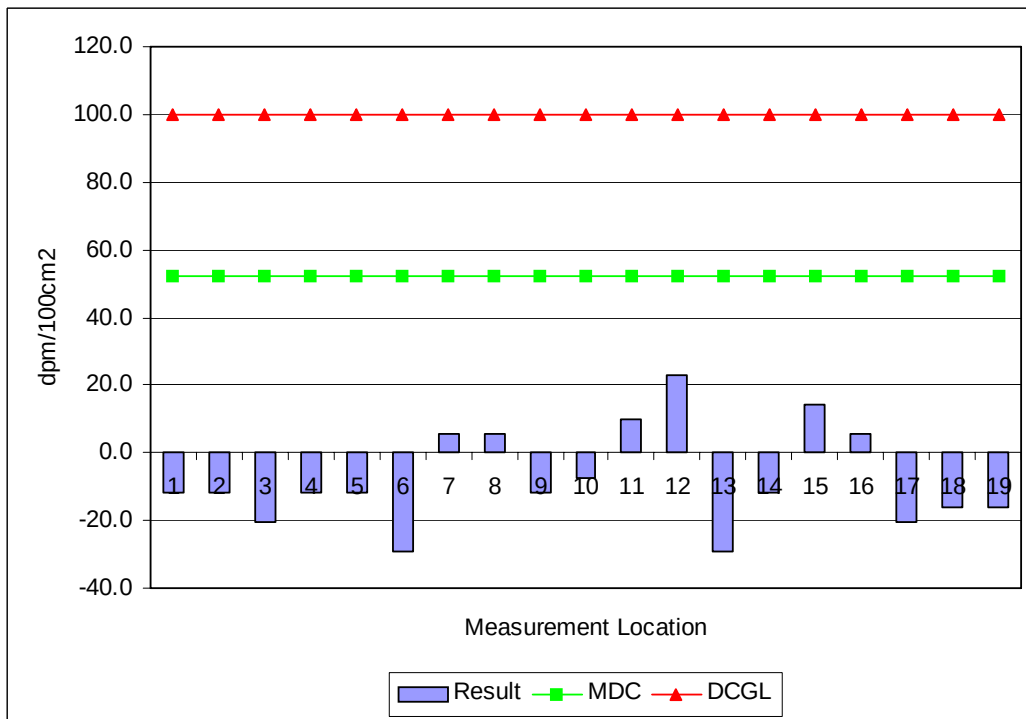
7/11/2007

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	-7.6	Ave. MDC	52.1	Ave. MDC < 50% DCGL	No
Median	-11.7	Ave. Background	26.3	Measurements < DCGL	Yes
Standard Deviation	14.4	Maximum Bkg.	29.0	Measurement Mean < DCGL	Yes
Range	51.9	DCGL	100	No. Measurements > DCGL	0
Minimum	-29.0	Number of Measurements			
Maximum	22.9	No. Prescribed	18		
		No. Collected	19		



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

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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 302C1 Basement Floor and Mezzanine DM Areas

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL041607-002	4/16/2007	FL1C1	FL10	10	17.3	52.1	29.0	-11.7	111.7
DL041607-002	4/16/2007	FL1C1	FL3	3	17.3	52.1	29.0	-11.7	111.7
DL041607-002	4/16/2007	FL1C1	FL4	4	8.6	52.1	29.0	-20.4	120.4
DL041607-002	4/16/2007	FL1C1	FL5	5	17.3	52.1	29.0	-11.7	111.7
DL041607-002	4/16/2007	FL1C1	FL6	6	17.3	52.1	29.0	-11.7	111.7
DL041607-002	4/16/2007	FL1C1	FL7	7	0.0	52.1	29.0	-29.0	129.0
DL041607-002	4/16/2007	FL1C1	FL8	8	34.6	52.1	29.0	5.6	94.4
DL041607-002	4/16/2007	FL1C1	FL9	9	34.6	52.1	29.0	5.6	94.4
DL041607-002	4/16/2007	FL1C1	SUMP	1	17.3	52.1	29.0	-11.7	111.7
DL041607-002	4/16/2007	FL1M1	MZ	1	8.6	52.1	16.0	-7.4	107.4
DL041607-002	4/16/2007	FL1M1	MZ	2	25.9	52.1	16.0	9.9	90.1
DL041607-002	4/16/2007	WL1C1	MZ	1	51.9	52.1	29.0	22.9	77.1
DL041607-002	4/16/2007	WL1C1	MZ	2	0.0	52.1	29.0	-29.0	129.0
DL041607-002	4/16/2007	WL1C1	WL4	4	17.3	52.1	29.0	-11.7	111.7
DL041607-002	4/16/2007	WL1C1	WL5	5	43.2	52.1	29.0	14.2	85.8
DL041607-002	4/16/2007	WL1C1	WL6	6	34.6	52.1	29.0	5.6	94.4
DL041607-002	4/16/2007	WL1C1	WL7	7	8.6	52.1	29.0	-20.4	120.4
DL041607-002	4/16/2007	WL1M1	WL3	3	0.0	52.1	16.0	-16.0	116.0
DL041607-002	4/16/2007	WL1M1	WL8	8	0.0	52.1	16.0	-16.0	116.0

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

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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 302C1 Basement Floor and Mezzanine DM Areas

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL041607-002	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JEJ5742

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.25	29
M1	Metal	Metal, Bare or Painted	0.25	16

Field Notes Summary

Download ID: Field Notes

DL041607-002 Alpha direct readings taken at all direct beta measurement locations. (1) direct alpha reading taken in sump room B-101

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

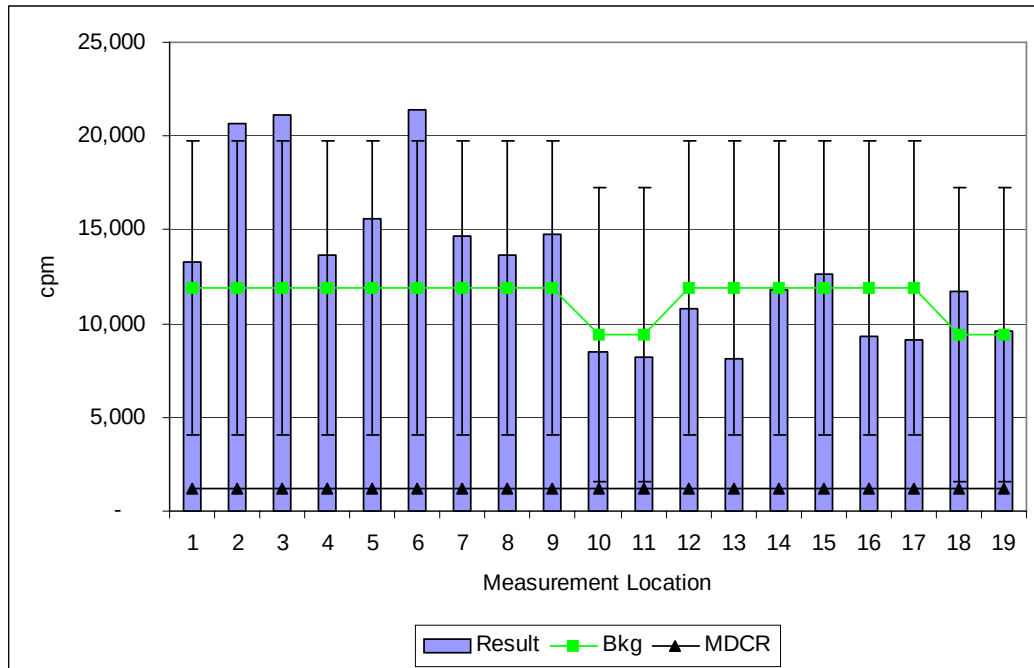
7/11/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	13,079	Ave. Background	11,345	Ave. MDCR < 50% Bkg.	Yes
Median	12,600	3 sigma Value	7,847	Measurements < Ave. Bkg.	No
Standard Deviation	4,246	Maximum Bkg.	11,869	Measurement Mean < Ave. Bkg.	No
Range	13,250	Ave. MDCR	1,222	No. Measurements > Ave. Bkg.	13
Minimum	8,150	Number of Measurements			
Maximum	21,400	No. Prescribed	18		
		No. Collected	19		



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CANOGA PARK, CALIFORNIA

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL041707-001	4/17/2007	FL1C1	FL10	10	11,869	1,222	13,250	-1,381
DL041707-001	4/17/2007	FL1C1	FL3	3	11,869	1,222	20,650	-8,781
DL041707-001	4/17/2007	FL1C1	FL4	4	11,869	1,222	21,150	-9,281
DL041707-001	4/17/2007	FL1C1	FL5	5	11,869	1,222	13,650	-1,781
DL041707-001	4/17/2007	FL1C1	FL6	6	11,869	1,222	15,550	-3,681
DL041707-001	4/17/2007	FL1C1	FL7	7	11,869	1,222	21,400	-9,531
DL041707-001	4/17/2007	FL1C1	FL8	8	11,869	1,222	14,700	-2,831
DL041707-001	4/17/2007	FL1C1	FL9	9	11,869	1,222	13,650	-1,781
DL041707-001	4/17/2007	FL1C1	SUMP	1	11,869	1,222	14,750	-2,881
DL041707-001	4/17/2007	FL1M1	MZ	1	9,381	1,222	8,450	931
DL041707-001	4/17/2007	FL1M1	MZ	2	9,381	1,222	8,200	1,181
DL041707-001	4/17/2007	WL1C1	MZ	1	11,869	1,222	10,800	1,069
DL041707-001	4/17/2007	WL1C1	MZ	2	11,869	1,222	8,150	3,719
DL041707-001	4/17/2007	WL1C1	WL4	4	11,869	1,222	11,850	19
DL041707-001	4/17/2007	WL1C1	WL5	5	11,869	1,222	12,600	-731
DL041707-001	4/17/2007	WL1C1	WL6	6	11,869	1,222	9,300	2,569
DL041707-001	4/17/2007	WL1C1	WL7	7	11,869	1,222	9,100	2,769
DL041707-001	4/17/2007	WL1M1	WL3	3	9,381	1,222	11,700	-2,319
DL041707-001	4/17/2007	WL1M1	WL8	8	9,381	1,222	9,600	-219

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CANOGA PARK, CALIFORNIA

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL041707-001	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
C1	Concrete	Concrete, Bare or Painted	11,869
M1	Metal	Metal, Bare or Painted	9,381

Field Notes Summary

Download ID	Field Notes
DL041707-001	Contact and (1) meter gamma readings at direct Beta measurement locations.

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

7/11/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section 6.0

1 Meter Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

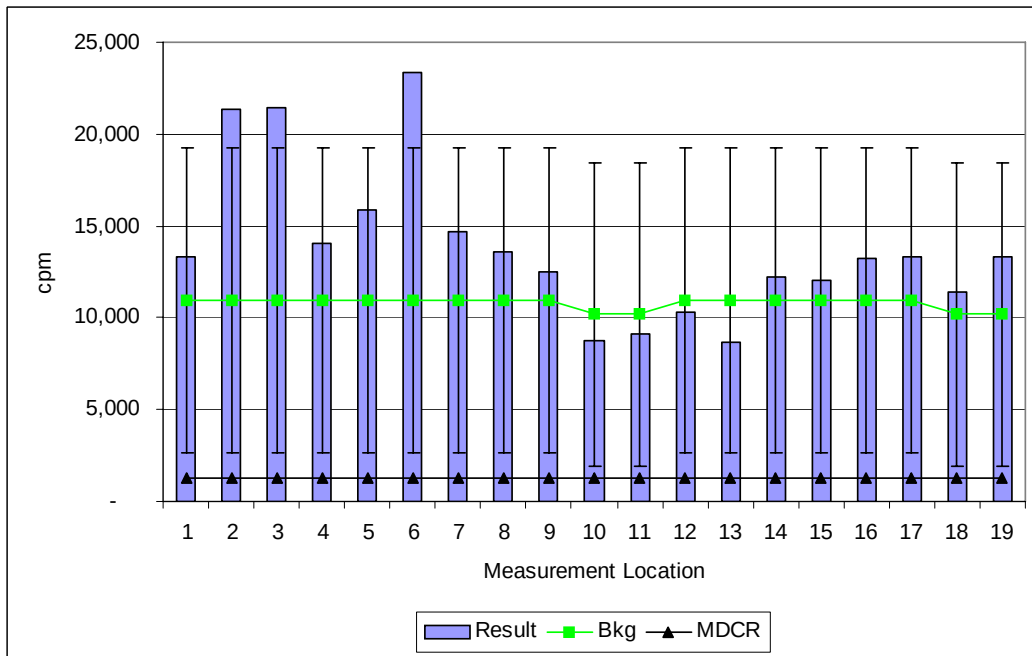
7/11/2007

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	13,813	Ave. Background	10,805	Ave. MDCR < 50% Bkg.	Yes
Median	13,300	3 sigma Value	8,288	Measurements < Ave. Bkg.	No
Standard Deviation	4,158	Maximum Bkg.	11,972	Measurement Mean < Ave. Bkg.	No
Range	14,700	Ave. MDCR	1,256	No. Measurements > Ave. Bkg.	15
Minimum	8,650	Number of Measurements			
Maximum	23,350	No. Prescribed	18		
		No. Collected	19		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL041707-001	4/17/2007	FL1C1	FL10	10	10,972	1,256	13,300	-2,328
DL041707-001	4/17/2007	FL1C1	FL3	3	10,972	1,256	21,350	-10,378
DL041707-001	4/17/2007	FL1C1	FL4	4	10,972	1,256	21,400	-10,428
DL041707-001	4/17/2007	FL1C1	FL5	5	10,972	1,256	14,050	-3,078
DL041707-001	4/17/2007	FL1C1	FL6	6	10,972	1,256	15,900	-4,928
DL041707-001	4/17/2007	FL1C1	FL7	7	10,972	1,256	23,350	-12,378
DL041707-001	4/17/2007	FL1C1	FL8	8	10,972	1,256	14,700	-3,728
DL041707-001	4/17/2007	FL1C1	FL9	9	10,972	1,256	13,550	-2,578
DL041707-001	4/17/2007	FL1C1	SUMP	1	10,972	1,256	12,500	-1,528
DL041707-001	4/17/2007	FL1M1	MZ	1	10,181	1,256	8,800	1,381
DL041707-001	4/17/2007	FL1M1	MZ	2	10,181	1,256	9,100	1,081
DL041707-001	4/17/2007	WL1C1	MZ	1	10,972	1,256	10,300	672
DL041707-001	4/17/2007	WL1C1	MZ	2	10,972	1,256	8,650	2,322
DL041707-001	4/17/2007	WL1C1	WL4	4	10,972	1,256	12,250	-1,278
DL041707-001	4/17/2007	WL1C1	WL5	5	10,972	1,256	12,050	-1,078
DL041707-001	4/17/2007	WL1C1	WL6	6	10,972	1,256	13,200	-2,228
DL041707-001	4/17/2007	WL1C1	WL7	7	10,972	1,256	13,300	-2,328
DL041707-001	4/17/2007	WL1M1	WL3	3	10,181	1,256	11,400	-1,219
DL041707-001	4/17/2007	WL1M1	WL8	8	10,181	1,256	13,300	-3,119

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL041707-001	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	1Meter Gamma Background (cpm)
C1	Concrete	Concrete, Bare or Painted	10,972
M1	Metal	Metal, Bare or Painted	10,181

Field Notes Summary

Download ID	Field Notes
DL041707-001	Contact and (1) meter gamma readings at direct Beta measurement locations.

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section 7.0

Removable Alpha Smear Sample Analysis Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

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Removable Alpha Measurement Results

Survey Area LC1: C4024 Package Type: Structure
 Survey Area Name: SETF, Building 4024
 Survey Package Number and Unit Name:
 C4024 302C1 Basement Floor and Mezzanine DM Areas

Statistical Summary

	dpm/100cm2
Mean	-0.5
Median	-1.4
Standard Deviation	1.4
Range	4.6
Minimum	-1.4
Maximum	3.2

Measurement Sensitivity

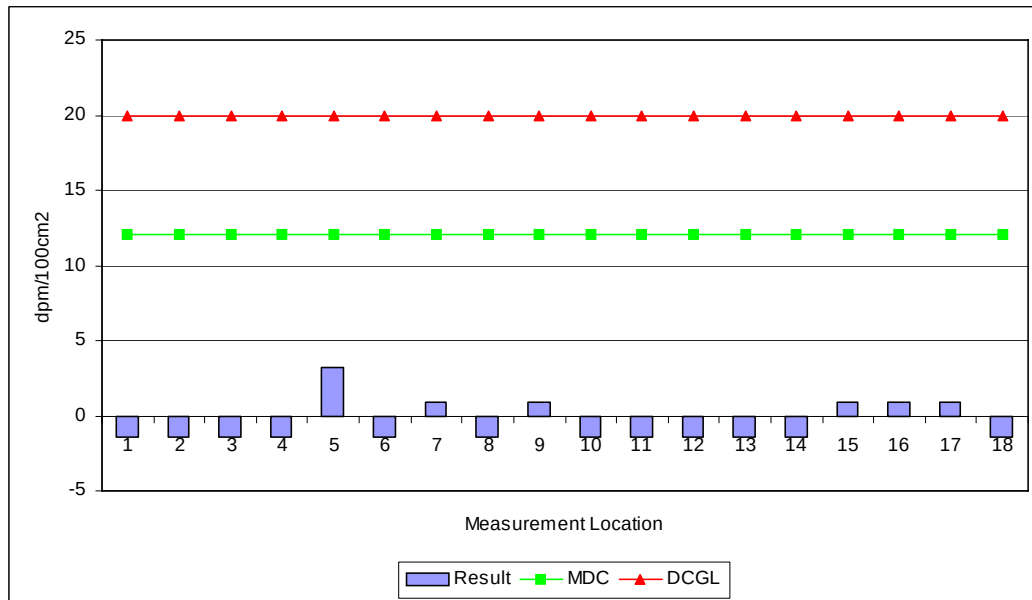
	dpm/100cm2
MDC Mean	12.1
MDC Minimum	12.1
MDC Maximum	12.1
DCGL	20.0

Number of Measurements

No. Prescribed	18
No. Collected	18

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 302C1 Basement Floor and Mezzanine DM Areas

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Alpha Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS041607-001	4/16/2007	FL1	MZ2	2	12.1	-1.4	21.4
CS041607-001	4/16/2007	FL1	FL3	3	12.1	-1.4	21.4
CS041607-001	4/16/2007	FL1	FL4	4	12.1	-1.4	21.4
CS041607-001	4/16/2007	FL1	FL5	5	12.1	-1.4	21.4
CS041607-001	4/16/2007	FL1	FL6	6	12.1	3.2	16.8
CS041607-001	4/16/2007	FL1	FL7	7	12.1	-1.4	21.4
CS041607-001	4/16/2007	FL1	FL8	8	12.1	0.9	19.1
CS041607-001	4/16/2007	FL1	FL10	10	12.1	-1.4	21.4
CS041607-001	4/16/2007	FL1	MZ1	1	12.1	0.9	19.1
CS041607-001	4/16/2007	FL1	FL9	9	12.1	-1.4	21.4
CS041607-002	4/16/2007	WL1	WL8	8	12.1	-1.4	21.4
CS041607-002	4/16/2007	WL1	MZ	1	12.1	-1.4	21.4
CS041607-002	4/16/2007	WL1	MZ	2	12.1	-1.4	21.4
CS041607-002	4/16/2007	WL1	WL3	3	12.1	-1.4	21.4
CS041607-002	4/16/2007	WL1	WL4	4	12.1	0.9	19.1
CS041607-002	4/16/2007	WL1	WL5	5	12.1	0.9	19.1
CS041607-002	4/16/2007	WL1	WL6	6	12.1	0.9	19.1
CS041607-002	4/16/2007	WL1	WL7	7	12.1	-1.4	21.4

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 302C1 Basement Floor and Mezzanine DM Areas

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS041607-001	C4024 302C1 FL1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS041607-002	C4024 302C1 WL1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS041607-001	No Field Notes
CS041607-002	No Field Notes

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section 8.0

Removable Beta Smear Sample Analysis Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

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Removable Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:	C4024 302C1	Basement Floor and Mezzanine DM Areas	

Statistical Summary

	dpm/100cm2
Mean	-15.5
Median	-15.2
Standard Deviation	17.6
Range	69.2
Minimum	-51.2
Maximum	18.0

Measurement Sensitivity

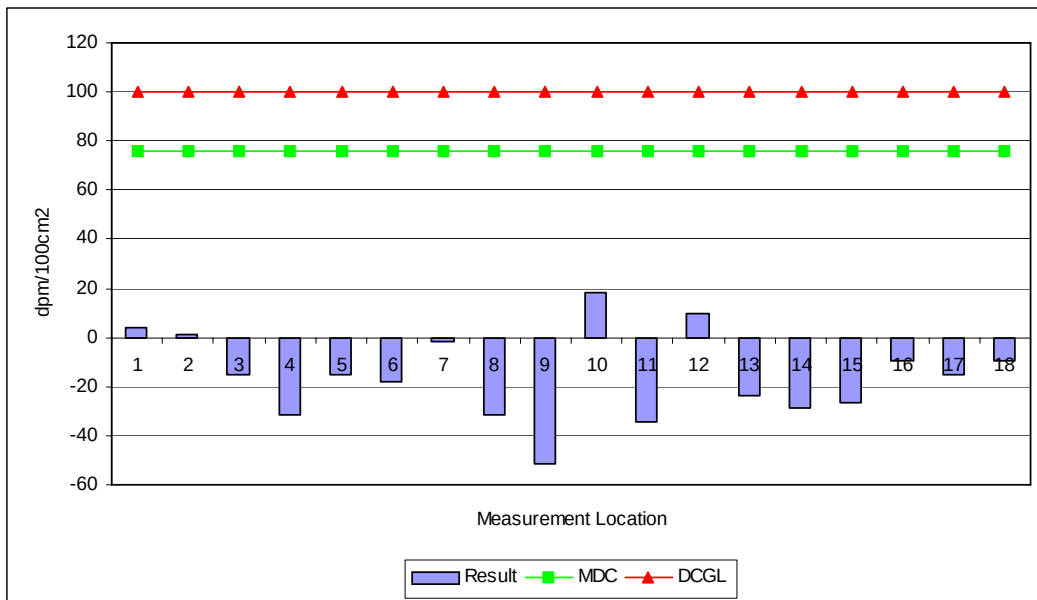
	dpm/100cm2
MDC Mean	75.9
MDC Minimum	75.9
MDC Maximum	75.9
DCGL	100.0

Number of Measurements

No. Prescribed	18
No. Collected	18

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 302C1 Basement Floor and Mezzanine DM Areas

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Beta Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS041607-001	4/16/2007	FL1	MZ2	2	75.9	4.2	96
CS041607-001	4/16/2007	FL1	FL3	3	75.9	1.4	99
CS041607-001	4/16/2007	FL1	FL4	4	75.9	-15.2	115
CS041607-001	4/16/2007	FL1	FL5	5	75.9	-31.8	132
CS041607-001	4/16/2007	FL1	FL6	6	75.9	-15.2	115
CS041607-001	4/16/2007	FL1	FL7	7	75.9	-18.0	118
CS041607-001	4/16/2007	FL1	FL8	8	75.9	-1.4	101
CS041607-001	4/16/2007	FL1	FL10	10	75.9	-31.8	132
CS041607-001	4/16/2007	FL1	MZ1	1	75.9	-51.2	151
CS041607-001	4/16/2007	FL1	FL9	9	75.9	18.0	82
CS041607-002	4/16/2007	WL1	WL8	8	75.9	-34.6	135
CS041607-002	4/16/2007	WL1	MZ	1	75.9	9.7	90
CS041607-002	4/16/2007	WL1	MZ	2	75.9	-23.5	124
CS041607-002	4/16/2007	WL1	WL3	3	75.9	-29.0	129
CS041607-002	4/16/2007	WL1	WL4	4	75.9	-26.3	126
CS041607-002	4/16/2007	WL1	WL5	5	75.9	-9.7	110
CS041607-002	4/16/2007	WL1	WL6	6	75.9	-15.2	115
CS041607-002	4/16/2007	WL1	WL7	7	75.9	-9.7	110

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 302C1 Basement Floor and Mezzanine DM Areas

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS041607-001	C4024 302C1 FL1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS041607-002	C4024 302C1 WL1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS041607-001	No Field Notes
CS041607-002	No Field Notes

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section 9.0

Sample Analysis Results

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

There were no samples collected for isotopic analysis.

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section 10.0

Photographs

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Photographs were not taken.

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

Section 11.0

Supplemental Information and/or Data

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CANOGA PARK, CALIFORNIA

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 302C1	Basement Floor and Mezzanine DM Areas		

There was no additional supplemental information and/or data.

Appendix A

Section	Survey Package	Survey Unit Description
3.0		SETF Structures and Surfaces
3.3	C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF
3.3.1	C4024 303C1	Initial Survey
3.3.2	C4024 303C2	Follow-up Survey of Elevated Locations on Slabs
3.3.3	C4024 303C2	Follow-up Survey of Asphalt covering USTs

Appendix A

Section	Survey Package	Survey Unit Description
3.0		SETF Structures and Surfaces
3.3	C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF
3.3.1	C4024 303C1	Initial Survey

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

7/12/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Direct Alpha Measurement Results
5.0	Contact Gamma Exposure Rate Measurement Results
6.0	1 Meter Gamma Exposure Rate Measurement Results
7.0	Removable Alpha Smear Sample Analysis Results
8.0	Removable Beta Smear Sample Analysis Results
9.0	Sample Analysis Results
10.0	Photographs
11.0	Supplemental Information and/or Data

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

7/12/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section 1.0

Data Analysis Report Parameters

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CANOGA PARK, CALIFORNIA

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Data Analysis Report Parameters

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Survey Group: C - Radiological Survey of Impacted Facility Surfaces & Structures

Survey Area: 4024 - SETF, Building 4024

Unit Classification: 3 - Impacted Class 3 Structure

MARSSIM FSS Survey Unit Size (M²): No Limit

Survey Unit: 03 - Paved Yard Area and Slabs Remaining Around SETF

Survey Reason: C1 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	PA1	Asphalt or Concrete Paved Areas	
	FL1	Floor Surface	
			Total Area

Materials: Code Description

A1 - Asphalt

C1 - Concrete

Report Information:

Report Pedigree: Final Report

Detector Efficiency: 2-Pi

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/12/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section 2.0

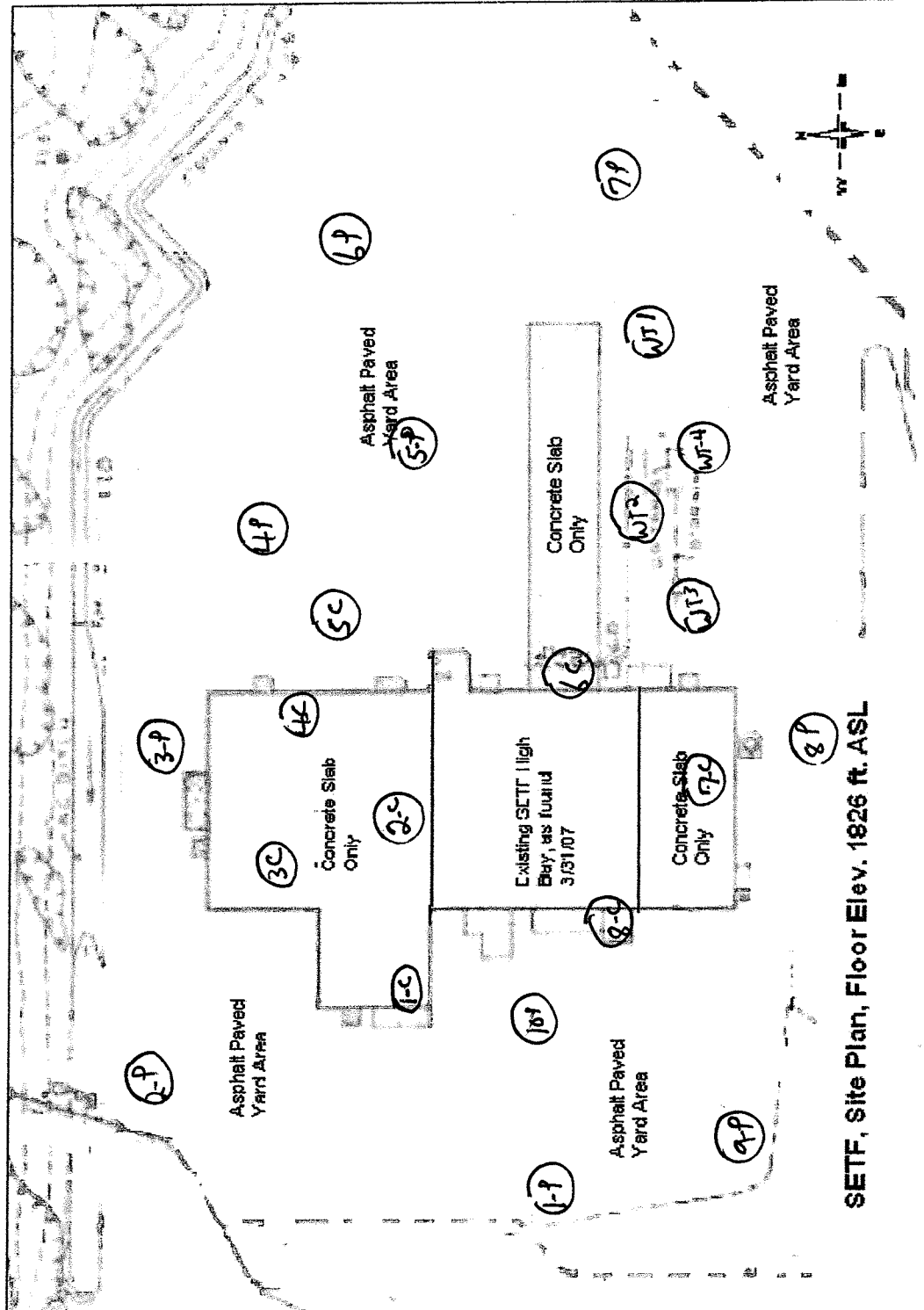
Annotated Drawings

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

4/14/2007

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Survey Package Appendix A - Drawings



SETF, Site Plan, Floor Elev. 1826 ft. ASL

AREVA NP Inc.

5/14/07 DL 041807-001 (5/14)
DL 041807-002 (P&I)

1C-7C (Painted Concrete)
8C (Base Concrete)
1P-10P (Paved Asphalt)

WT-1 - WT-4 (Paved Asphalt)
INVENTORY OF UNDERGROUND WORKS TABLE
DL 041807-001, DL 041807-002, DL 041807-003

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

7/12/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section 3.0

Direct Beta Measurement Results

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

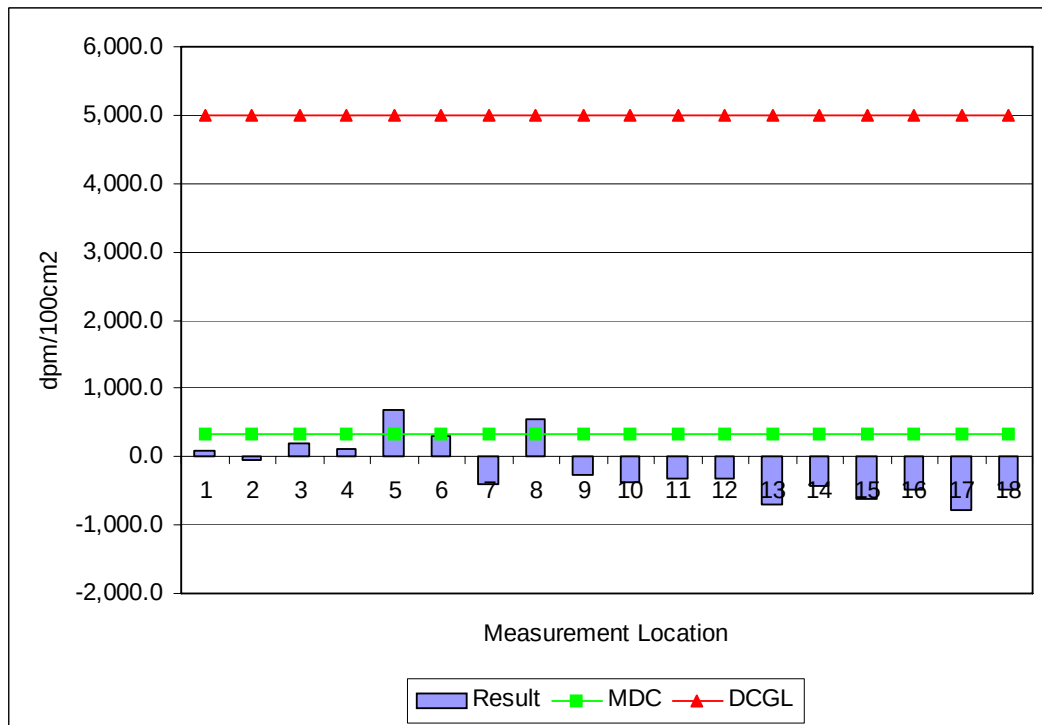
7/12/2007

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	-182.2	Ave. MDC	342.9	Ave. MDC < 50% DCGL	Yes
Median	-318.7	Ave. Background	2,875.6	Measurements < DCGL	Yes
Standard Deviation	425.1	Maximum Bkg.	3,428.0	Measurement Mean < DCGL	Yes
Range	1,467.0	DCGL	5000	No. Measurements > DCGL	0
Minimum	-782.7	Number of Measurements			
Maximum	684.3	No. Prescribed	18		
		No. Collected	18		



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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL041807-001	4/17/2007	FL1C1	FL1	1	2,282.7	342.9	2,185.0	97.7	4,902.3
DL041807-001	4/17/2007	FL1C1	FL2	2	2,144.0	342.9	2,185.0	-41.0	5,041.0
DL041807-001	4/17/2007	FL1C1	FL3	3	2,384.0	342.9	2,185.0	199.0	4,801.0
DL041807-001	4/17/2007	FL1C1	FL4	4	2,304.0	342.9	2,185.0	119.0	4,881.0
DL041807-001	4/17/2007	FL1C1	FL5	5	2,869.3	342.9	2,185.0	684.3	4,315.7
DL041807-001	4/17/2007	FL1C1	FL6	6	2,496.0	342.9	2,185.0	311.0	4,689.0
DL041807-001	4/17/2007	FL1C1	FL7	7	1,776.0	342.9	2,185.0	-409.0	5,409.0
DL041807-001	4/17/2007	FL1C1	FL8	8	2,736.0	342.9	2,185.0	551.0	4,449.0
DL041807-001	4/17/2007	PA1A1	PA1	1	3,162.7	342.9	3,428.0	-265.3	5,265.3
DL041807-001	4/17/2007	PA1A1	PA10	10	3,045.3	342.9	3,428.0	-382.7	5,382.7
DL041807-001	4/17/2007	PA1A1	PA2	2	3,114.7	342.9	3,428.0	-313.3	5,313.3
DL041807-001	4/17/2007	PA1A1	PA3	3	3,104.0	342.9	3,428.0	-324.0	5,324.0
DL041807-001	4/17/2007	PA1A1	PA4	4	2,720.0	342.9	3,428.0	-708.0	5,708.0
DL041807-001	4/17/2007	PA1A1	PA5	5	3,002.7	342.9	3,428.0	-425.3	5,425.3
DL041807-001	4/17/2007	PA1A1	PA6	6	2,810.7	342.9	3,428.0	-617.3	5,617.3
DL041807-001	4/17/2007	PA1A1	PA7	7	2,944.0	342.9	3,428.0	-484.0	5,484.0
DL041807-001	4/17/2007	PA1A1	PA8	8	2,645.3	342.9	3,428.0	-782.7	5,782.7
DL041807-001	4/17/2007	PA1A1	PA9	9	2,938.7	342.9	3,428.0	-489.3	5,489.3

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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C1 Paved Yard Area and Slabs Remaining Around SETF

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL041807-001	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
A1	Asphalt	Asphalt Roadway or Walkway	0.5	3,428
C1	Concrete	Concrete, Bare or Painted	0.5	2,185

Field Notes Summary

Download ID: Field Notes
DL041807-001 Beta scans and direct measurements on concrete and asphalt.

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section 4.0

Direct Alpha Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

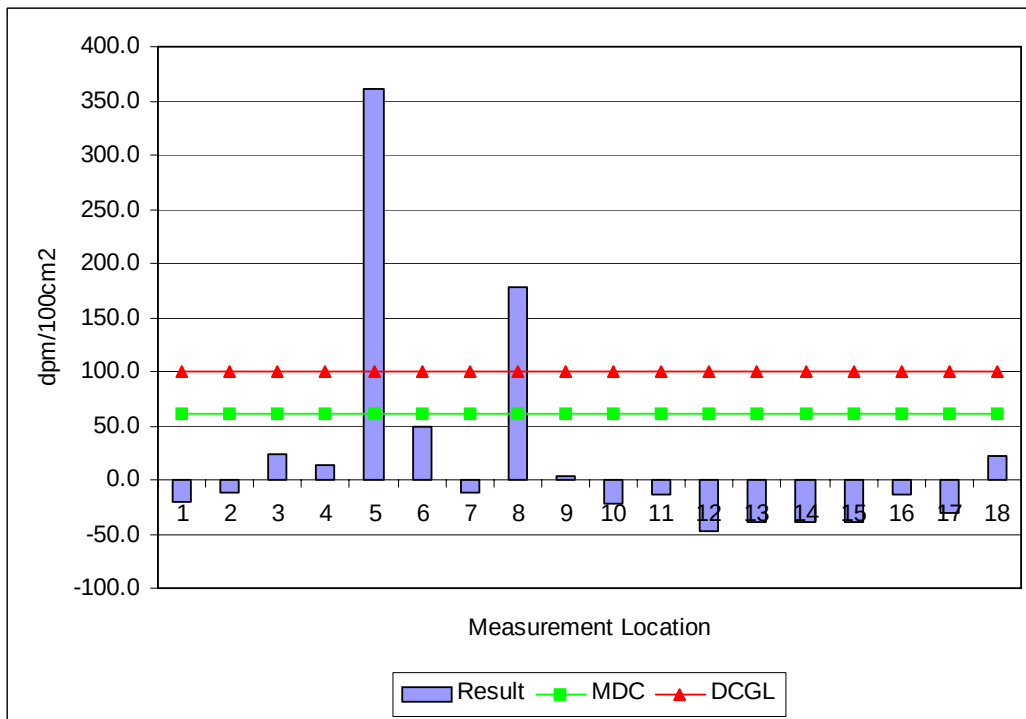
7/12/2007

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Direct Alpha Measurement Results

Survey Area LC1: C4024 Package Type: Structure
 Survey Area Name: SETF, Building 4024
 Survey Package Number and Unit Name:
 C4024 303C1 Paved Yard Area and Slabs Remaining Around SETF

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm ²		dpm/100cm ²		
Mean	20.2	Ave. MDC	60.4	No. Collected >= Prescribed	Yes
Median	-12.4	Ave. Background	49.0	Ave. MDC < 50% DCGL	No
Standard Deviation	99.2	Maximum Bkg.	65.0	Measurements < DCGL	No
Range	407.9	DCGL	100	Measurement Mean < DCGL	Yes
Minimum	-47.7	Number of Measurements		No. Measurements > DCGL	2
Maximum	360.2	No. Prescribed	18		
		No. Collected	18		



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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C1 Paved Yard Area and Slabs Remaining Around SETF

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL041707-002	4/17/2007	FL1C1	FL1	1	8.6	60.4	29.0	-20.4	120.4
DL041707-002	4/17/2007	FL1C1	FL2	2	17.3	60.4	29.0	-11.7	111.7
DL041707-002	4/17/2007	FL1C1	FL3	3	51.9	60.4	29.0	22.9	77.1
DL041707-002	4/17/2007	FL1C1	FL4	4	43.2	60.4	29.0	14.2	85.8
DL041707-002	4/17/2007	FL1C1	FL5	5	389.2	60.4	29.0	360.2	-260.2
DL041707-002	4/17/2007	FL1C1	FL6	6	77.8	60.4	29.0	48.8	51.2
DL041707-002	4/17/2007	FL1C1	FL7	7	17.3	60.4	29.0	-11.7	111.7
DL041707-002	4/17/2007	FL1C1	FL8	8	207.6	60.4	29.0	178.6	-78.6
DL041707-002	4/17/2007	PA1A1	PA1	1	69.2	60.4	65.0	4.2	95.8
DL041707-002	4/17/2007	PA1A1	PA10	10	43.2	60.4	65.0	-21.8	121.8
DL041707-002	4/17/2007	PA1A1	PA2	2	51.9	60.4	65.0	-13.1	113.1
DL041707-002	4/17/2007	PA1A1	PA3	3	17.3	60.4	65.0	-47.7	147.7
DL041707-002	4/17/2007	PA1A1	PA4	4	25.9	60.4	65.0	-39.1	139.1
DL041707-002	4/17/2007	PA1A1	PA5	5	25.9	60.4	65.0	-39.1	139.1
DL041707-002	4/17/2007	PA1A1	PA6	6	25.9	60.4	65.0	-39.1	139.1
DL041707-002	4/17/2007	PA1A1	PA7	7	51.9	60.4	65.0	-13.1	113.1
DL041707-002	4/17/2007	PA1A1	PA8	8	34.6	60.4	65.0	-30.4	130.4
DL041707-002	4/17/2007	PA1A1	PA9	9	86.5	60.4	65.0	21.5	78.5

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL041707-002	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
A1	Asphalt	Asphalt Roadway or Walkway	0.25	65
C1	Concrete	Concrete, Bare or Painted	0.25	29

Field Notes Summary

Download ID:	Field Notes
DL041707-002	Alpha direct readings taken at all direct beta measurement locations.

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

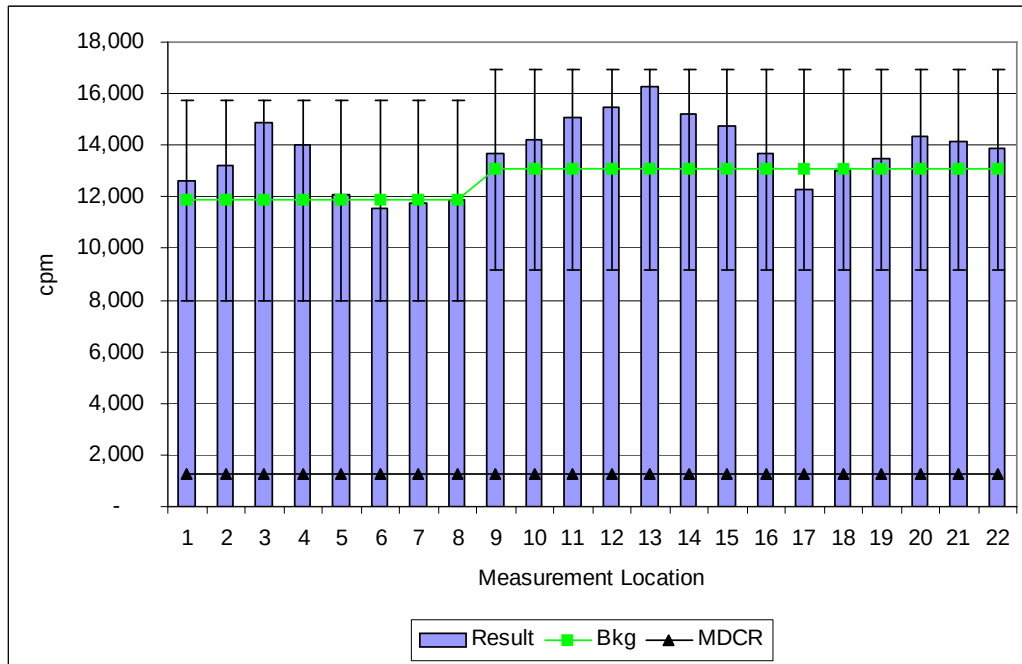
7/12/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	13,711	Ave. Background	12,635	Ave. MDCR < 50% Bkg.	Yes
Median	13,775	3 sigma Value	3,887	Measurements < Ave. Bkg.	No
Standard Deviation	1,296	Maximum Bkg.	13,072	Measurement Mean < Ave. Bkg.	No
Range	4,700	Ave. MDCR	1,252	No. Measurements > Ave. Bkg.	18
Minimum	11,550	Number of Measurements			
Maximum	16,250	No. Prescribed	18		
		No. Collected	22		



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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL041807-002	4/18/2007	FL1C1	FL1	1	11,869	1,252	12,650	-781
DL041807-002	4/18/2007	FL1C1	FL2	2	11,869	1,252	13,250	-1,381
DL041807-002	4/18/2007	FL1C1	FL3	3	11,869	1,252	14,900	-3,031
DL041807-002	4/18/2007	FL1C1	FL4	4	11,869	1,252	14,000	-2,131
DL041807-002	4/18/2007	FL1C1	FL5	5	11,869	1,252	12,100	-231
DL041807-002	4/18/2007	FL1C1	FL6	6	11,869	1,252	11,550	319
DL041807-002	4/18/2007	FL1C1	FL7	7	11,869	1,252	11,750	119
DL041807-002	4/18/2007	FL1C1	FL8	8	11,869	1,252	11,900	-31
DL041807-002	4/18/2007	PA1A1	PA1	1	13,072	1,252	13,700	-628
DL041807-002	4/18/2007	PA1A1	PA10	10	13,072	1,252	14,200	-1,128
DL041807-002	4/18/2007	PA1A1	PA2	2	13,072	1,252	15,100	-2,028
DL041807-002	4/18/2007	PA1A1	PA3	3	13,072	1,252	15,450	-2,378
DL041807-002	4/18/2007	PA1A1	PA4	4	13,072	1,252	16,250	-3,178
DL041807-002	4/18/2007	PA1A1	PA5	5	13,072	1,252	15,200	-2,128
DL041807-002	4/18/2007	PA1A1	PA6	6	13,072	1,252	14,750	-1,678
DL041807-002	4/18/2007	PA1A1	PA7	7	13,072	1,252	13,700	-628
DL041807-002	4/18/2007	PA1A1	PA8	8	13,072	1,252	12,300	772
DL041807-002	4/18/2007	PA1A1	PA9	9	13,072	1,252	13,050	22
DL041807-002	4/18/2007	PA1A1	PAWT1	1	13,072	1,252	13,500	-428
DL041807-002	4/18/2007	PA1A1	PAWT2	2	13,072	1,252	14,350	-1,278
DL041807-002	4/18/2007	PA1A1	PAWT3	3	13,072	1,252	14,150	-1,078
DL041807-002	4/18/2007	PA1A1	PAWT4	4	13,072	1,252	13,850	-778

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL041807-002	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
A1	Asphalt	Asphalt Roadway or Walkway	13,072
C1	Concrete	Concrete, Bare or Painted	11,869

Field Notes Summary

Download ID	Field Notes
DL041807-002	Contact and (1) meter gamma readings taken at each direct beta measurement also (4) additional contact and (1) meter readings taken over waste tank area on south east side of bldg.

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section 6.0

1 Meter Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

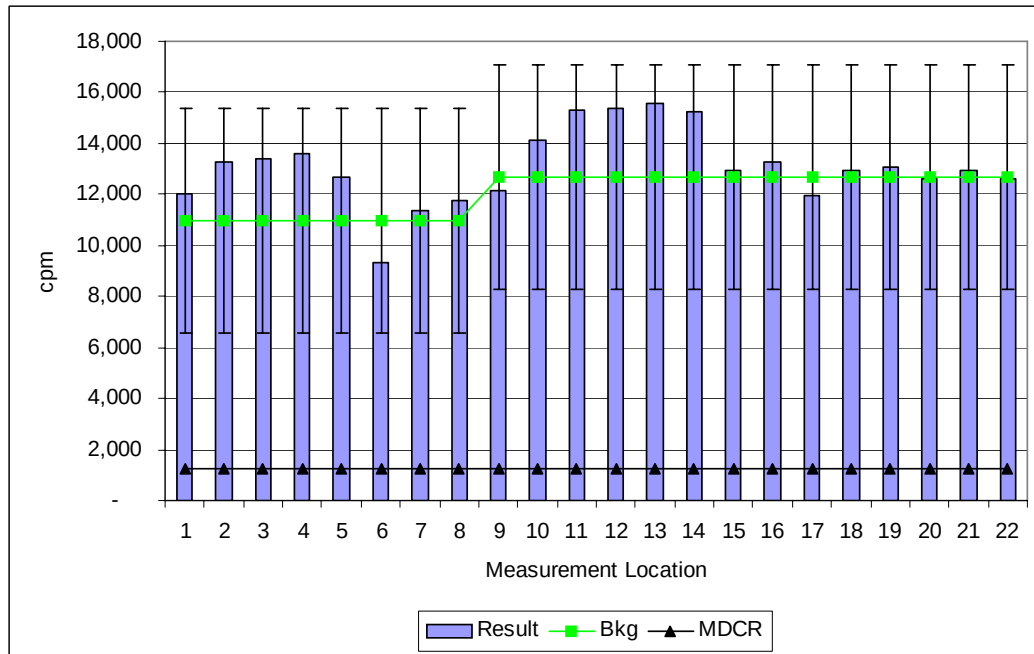
7/12/2007

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	13,068	Ave. Background	12,061	Ave. MDCR < 50% Bkg.	Yes
Median	12,950	3 sigma Value	4,430	Measurements < Ave. Bkg.	No
Standard Deviation	1,477	Maximum Bkg.	12,683	Measurement Mean < Ave. Bkg.	No
Range	6,300	Ave. MDCR	1,222	No. Measurements > Ave. Bkg.	17
Minimum	9,300	Number of Measurements			
Maximum	15,600	No. Prescribed	18		
		No. Collected	22		



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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL041807-002	4/18/2007	FL1C1	FL1	1	10,972	1,222	12,050	-1,078
DL041807-002	4/18/2007	FL1C1	FL2	2	10,972	1,222	13,250	-2,278
DL041807-002	4/18/2007	FL1C1	FL2	3	10,972	1,222	13,400	-2,428
DL041807-002	4/18/2007	FL1C1	FL2	4	10,972	1,222	13,600	-2,628
DL041807-002	4/18/2007	FL1C1	FL2	5	10,972	1,222	12,650	-1,678
DL041807-002	4/18/2007	FL1C1	FL2	6	10,972	1,222	9,300	1,672
DL041807-002	4/18/2007	FL1C1	FL2	7	10,972	1,222	11,350	-378
DL041807-002	4/18/2007	FL1C1	FL2	8	10,972	1,222	11,750	-778
DL041807-002	4/18/2007	PA1A1	PA1	1	12,683	1,222	12,150	533
DL041807-002	4/18/2007	PA1A1	PA10	10	12,683	1,222	14,100	-1,417
DL041807-002	4/18/2007	PA1A1	PA2	2	12,683	1,222	15,300	-2,617
DL041807-002	4/18/2007	PA1A1	PA3	3	12,683	1,222	15,400	-2,717
DL041807-002	4/18/2007	PA1A1	PA4	4	12,683	1,222	15,600	-2,917
DL041807-002	4/18/2007	PA1A1	PA5	5	12,683	1,222	15,250	-2,567
DL041807-002	4/18/2007	PA1A1	PA6	6	12,683	1,222	12,950	-267
DL041807-002	4/18/2007	PA1A1	PA7	7	12,683	1,222	13,250	-567
DL041807-002	4/18/2007	PA1A1	PA8	8	12,683	1,222	11,950	733
DL041807-002	4/18/2007	PA1A1	PA9	9	12,683	1,222	12,950	-267
DL041807-002	4/18/2007	PA1A1	PAWT1	1	12,683	1,222	13,100	-417
DL041807-002	4/18/2007	PA1A1	PAWT2	2	12,683	1,222	12,600	83
DL041807-002	4/18/2007	PA1A1	PAWT3	3	12,683	1,222	12,950	-267
DL041807-002	4/18/2007	PA1A1	PAWT4	4	12,683	1,222	12,600	83

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL041807-002	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	1Meter Gamma Background (cpm)
A1	Asphalt	Asphalt Roadway or Walkway	12,683
C1	Concrete	Concrete, Bare or Painted	10,972

Field Notes Summary

Download ID	Field Notes
DL041807-002	Contact and (1) meter gamma readings taken at each direct beta measurement also (4) additional contact and (1) meter readings taken over waste tank area on south east side of bldg.

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section 7.0

Removable Alpha Smear Sample Analysis Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

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Removable Alpha Measurement Results

Survey Area LC1: C4024 Package Type: Structure
 Survey Area Name: SETF, Building 4024
 Survey Package Number and Unit Name:
 C4024 303C1 Paved Yard Area and Slabs Remaining Around SETF

Statistical Summary

dpm/100cm2

Mean	0.6
Median	0.2
Standard Deviation	1.8
Range	4.5
Minimum	-1.0
Maximum	3.5

Measurement Sensitivity

dpm/100cm2

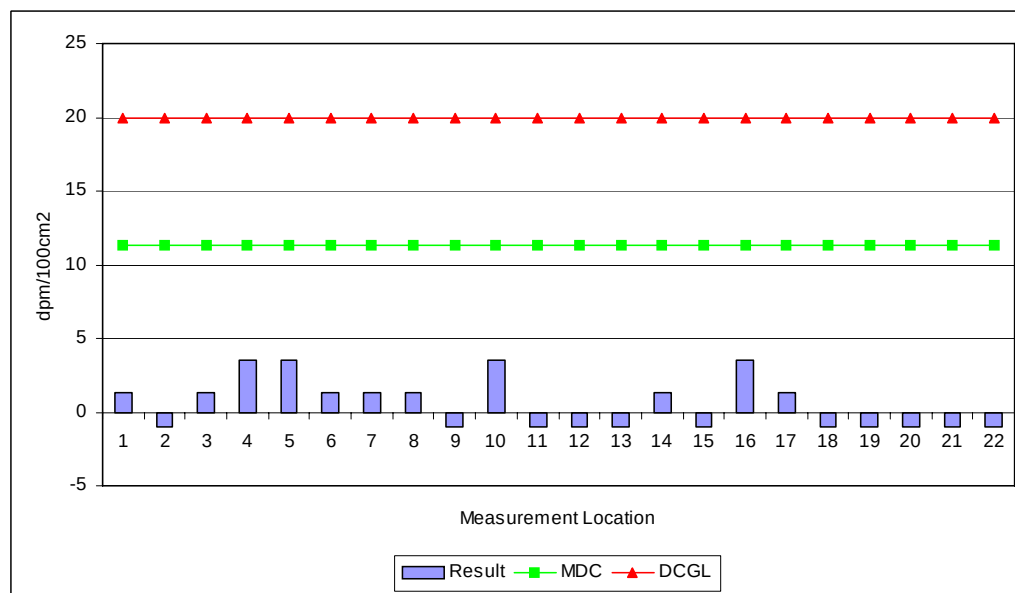
MDC Mean	11.3
MDC Minimum	11.3
MDC Maximum	11.3
DCGL	20.0

Number of Measurements

No. Prescribed	18
No. Collected	22

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C1 Paved Yard Area and Slabs Remaining Around SETF

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Alpha Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS041807-001	4/18/2007	FL1	FL1	2	11.3	1.3	18.7
CS041807-001	4/18/2007	FL1	FL1	3	11.3	-1.0	21.0
CS041807-001	4/18/2007	FL1	FL1	4	11.3	1.3	18.7
CS041807-001	4/18/2007	FL1	FL1	5	11.3	3.5	16.5
CS041807-001	4/18/2007	FL1	FL1	6	11.3	3.5	16.5
CS041807-001	4/18/2007	FL1	FL1	7	11.3	1.3	18.7
CS041807-001	4/18/2007	FL1	FL1	8	11.3	1.3	18.7
CS041807-001	4/18/2007	FL1	FL1	1	11.3	1.3	18.7
CS041807-002	4/18/2007	PA1	PA	12	11.3	-1.0	21.0
CS041807-002	4/18/2007	PA1	PA	1	11.3	3.5	16.5
CS041807-002	4/18/2007	PA1	PA	11	11.3	-1.0	21.0
CS041807-002	4/18/2007	PA1	PA	9	11.3	-1.0	21.0
CS041807-002	4/18/2007	PA1	PA	13	11.3	-1.0	21.0
CS041807-002	4/18/2007	PA1	PA	14	11.3	1.3	18.7
CS041807-002	4/18/2007	PA1	PA	2	11.3	-1.0	21.0
CS041807-002	4/18/2007	PA1	PA	3	11.3	3.5	16.5
CS041807-002	4/18/2007	PA1	PA	4	11.3	1.3	18.7
CS041807-002	4/18/2007	PA1	PA	5	11.3	-1.0	21.0
CS041807-002	4/18/2007	PA1	PA	6	11.3	-1.0	21.0
CS041807-002	4/18/2007	PA1	PA	7	11.3	-1.0	21.0
CS041807-002	4/18/2007	PA1	PA	8	11.3	-1.0	21.0
CS041807-002	4/18/2007	PA1	PA	10	11.3	-1.0	21.0

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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C1 Paved Yard Area and Slabs Remaining Around SETF

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS041807-001	C4024 303C1 FL1-1r1.xls	Ludlum	M2929	118419	3/5/2008	JEJ5742
CS041807-002	C4024 303C1 PA-1r1.xls	Ludlum	M2929	118419	3/5/2008	JEJ5742

Field Notes Summary

Sample ID	Field Notes
CS041807-001	No Field Notes
CS041807-002	(14) Smears taken on Asphalt surrounding bldg 4024. 11-14 taken on asphalt above underground storage tanks.

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section 8.0

Removable Beta Smear Sample Analysis Results

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CANOGA PARK, CALIFORNIA

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Removable Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary

	dpm/100cm2
Mean	-7.7
Median	-9.7
Standard Deviation	16.7
Range	60.8
Minimum	-30.4
Maximum	30.4

Number of Measurements

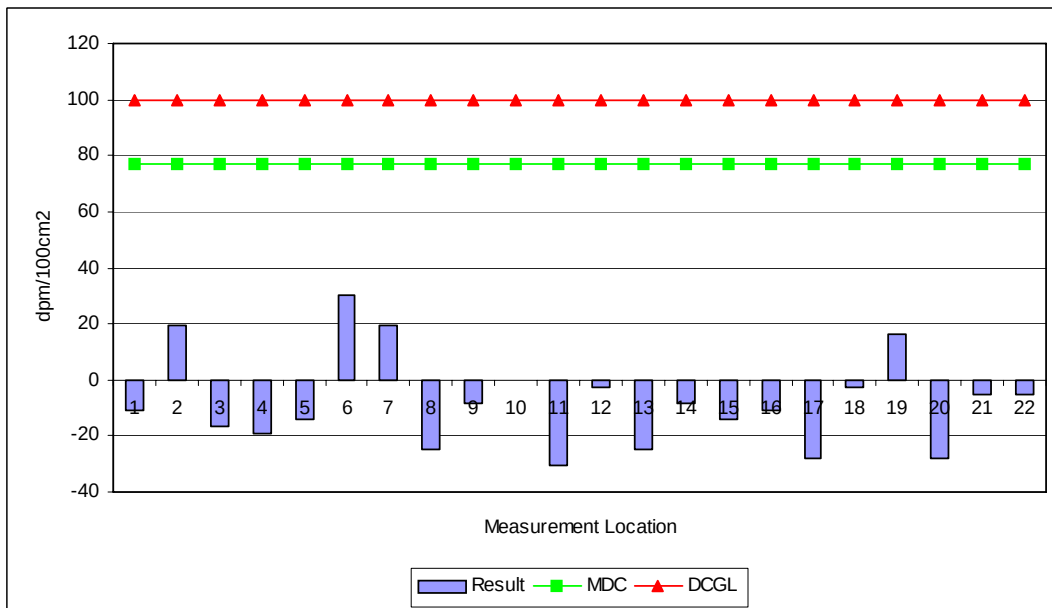
No. Prescribed	18
No. Collected	22

Measurement Sensitivity

	dpm/100cm2
MDC Mean	76.8
MDC Minimum	76.8
MDC Maximum	76.8
DCGL	100.0

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



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CANOGA PARK, CALIFORNIA

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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C1 Paved Yard Area and Slabs Remaining Around SETF

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Beta Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS041807-001	4/18/2007	FL1	FL1	2	76.8	-11.1	111
CS041807-001	4/18/2007	FL1	FL1	3	76.8	19.4	81
CS041807-001	4/18/2007	FL1	FL1	4	76.8	-16.6	117
CS041807-001	4/18/2007	FL1	FL1	5	76.8	-19.4	119
CS041807-001	4/18/2007	FL1	FL1	6	76.8	-13.8	114
CS041807-001	4/18/2007	FL1	FL1	7	76.8	30.4	70
CS041807-001	4/18/2007	FL1	FL1	8	76.8	19.4	81
CS041807-001	4/18/2007	FL1	FL1	1	76.8	-24.9	125
CS041807-002	4/18/2007	PA1	PA	12	76.8	-8.3	108
CS041807-002	4/18/2007	PA1	PA	1	76.8	0.0	100
CS041807-002	4/18/2007	PA1	PA	11	76.8	-30.4	130
CS041807-002	4/18/2007	PA1	PA	9	76.8	-2.8	103
CS041807-002	4/18/2007	PA1	PA	13	76.8	-24.9	125
CS041807-002	4/18/2007	PA1	PA	14	76.8	-8.3	108
CS041807-002	4/18/2007	PA1	PA	2	76.8	-13.8	114
CS041807-002	4/18/2007	PA1	PA	3	76.8	-11.1	111
CS041807-002	4/18/2007	PA1	PA	4	76.8	-27.7	028
CS041807-002	4/18/2007	PA1	PA	5	76.8	-2.8	103
CS041807-002	4/18/2007	PA1	PA	6	76.8	16.6	83
CS041807-002	4/18/2007	PA1	PA	7	76.8	-27.7	128
CS041807-002	4/18/2007	PA1	PA	8	76.8	-5.5	106
CS041807-002	4/18/2007	PA1	PA	10	76.8	-5.5	106

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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C1 Paved Yard Area and Slabs Remaining Around SETF

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS041807-001	C4024 303C1 FL1-1r1.xls	Ludlum	M2929	118419	3/5/2008	JEJ5742
CS041807-002	C4024 303C1 PA-1r1.xls	Ludlum	M2929	118419	3/5/2008	JEJ5742

Field Notes Summary

Sample ID	Field Notes
CS041807-001	No Field Notes
CS041807-002	(14) Smears taken on Asphalt surrounding bldg 4024. 11-14 taken on asphalt above underground storage tanks

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section 9.0

Sample Analysis Results

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

There were no samples collected for isotopic analysis.

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

7/12/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section 10.0

Photographs

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

7/12/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Photographs were not taken.

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

Section 11.0

Supplemental Information and/or Data

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

7/12/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF		

There was no additional supplemental information and/or data.

Appendix A

Section	Survey Package	Survey Unit Description
3.0		SETF Structures and Surfaces
3.3	C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF
3.3.2	C4024 303C2	Follow-up Survey of Elevated Locations on Slabs

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Direct Alpha Measurement Results
5.0	Contact Gamma Exposure Rate Measurement Results
6.0	1 Meter Gamma Exposure Rate Measurement Results
7.0	Removable Alpha Smear Sample Analysis Results
8.0	Removable Beta Smear Sample Analysis Results
9.0	Sample Analysis Results
10.0	Photographs
11.0	Supplemental Information and/or Data

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

7/12/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 1.0

Data Analysis Report Parameters

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Data Analysis Report Parameters

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Survey Group: C - Radiological Survey of Impacted Facility Surfaces & Structures

Survey Area: 4024 - SETF, Building 4024

Unit Classification: 3 - Impacted Class 3 Structure

MARSSIM FSS Survey Unit Size (M²): No Limit

Survey Unit: 03 - Paved Yard Area and Slabs Remaining Around SETF

Survey Reason: C2 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	FL2	Floor Surface	
	FL1	Floor Surface	

Total Area

Materials: Code Description
C1 - Concrete

Report Information:

Report Pedigree: Final Report

Detector Efficiency: 2-Pi

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 2.0

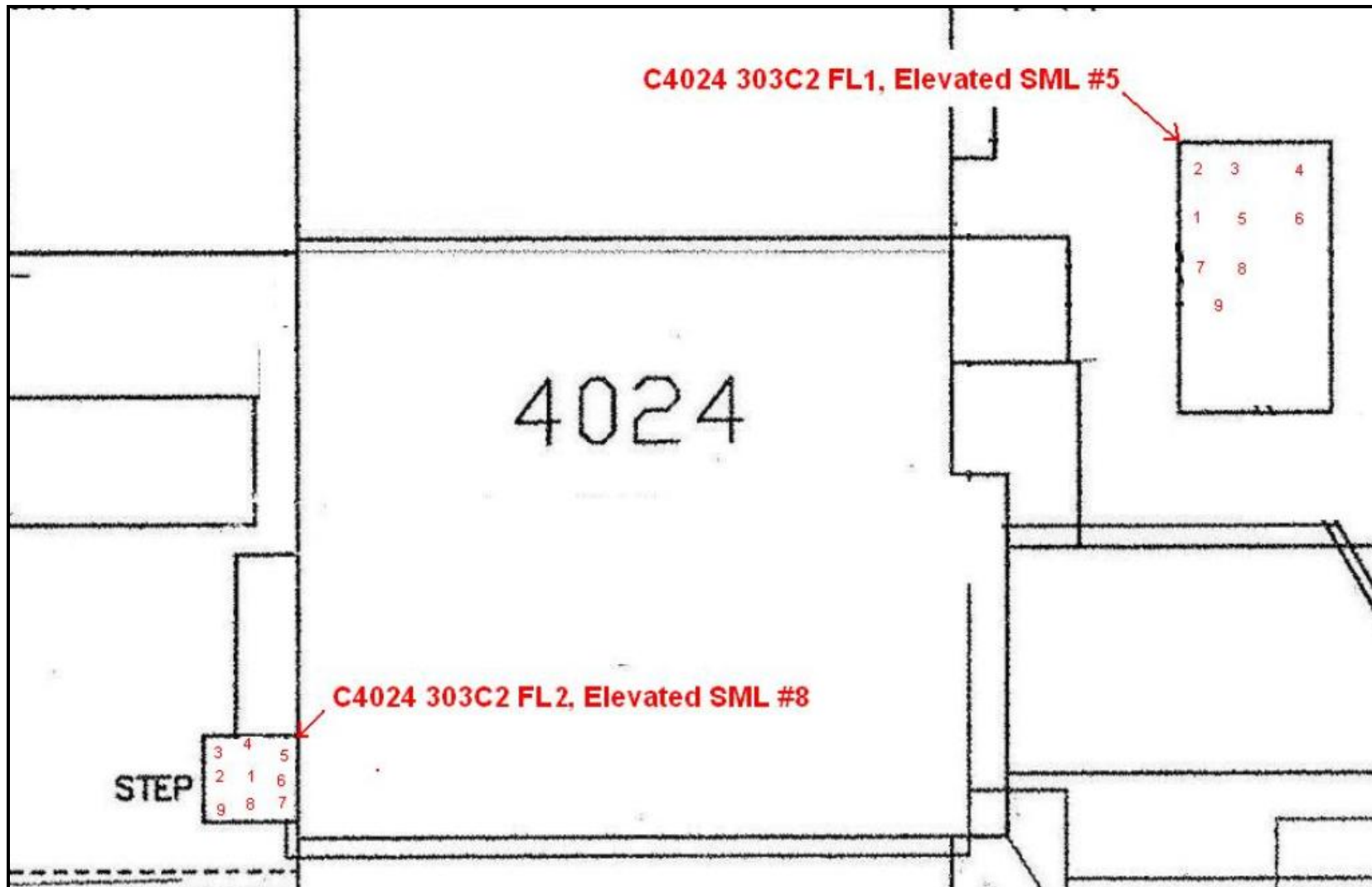
Annotated Drawings

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

5/10/2007

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Survey Package Appendix A – Drawings



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 3.0

Direct Beta Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

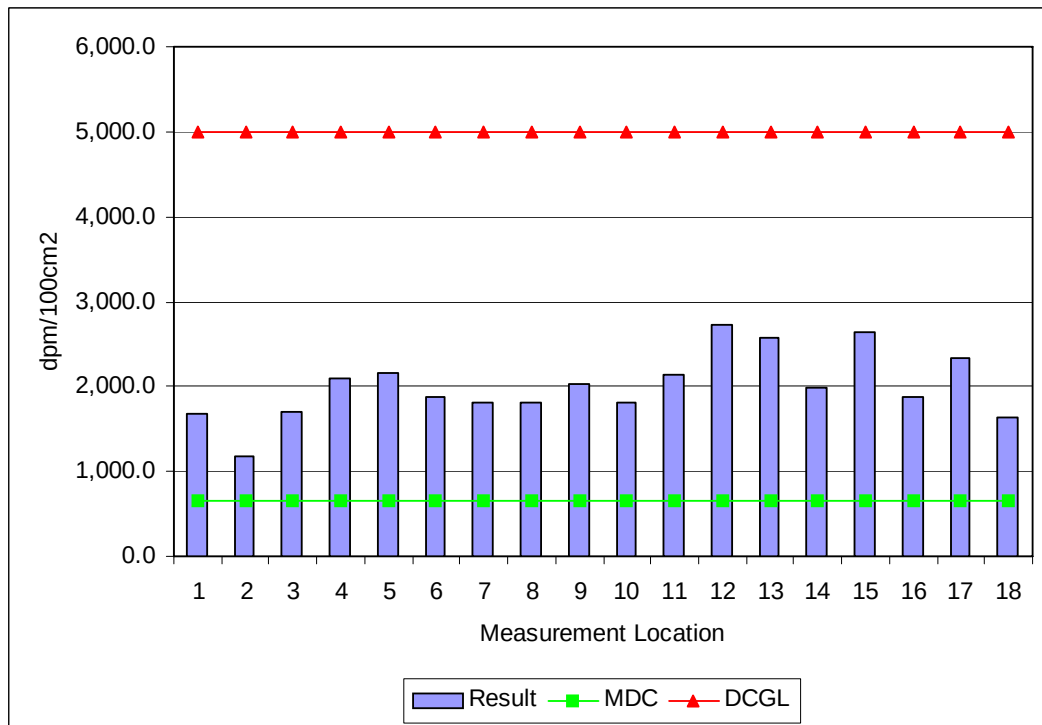
7/12/2007

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	1,999.7	Ave. MDC	644.2	Ave. MDC < 50% DCGL	Yes
Median	1,926.3	Ave. Background	2,185.0	Measurements < DCGL	Yes
Standard Deviation	388.9	Maximum Bkg.	2,185.0	Measurement Mean < DCGL	Yes
Range	1,544.3	DCGL	5000	No. Measurements > DCGL	0
Minimum	1,175.0	Number of Measurements			
Maximum	2,719.3	No. Prescribed	18		
		No. Collected	18		



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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL051407-001	5/14/2007	FL1C1	S5	1	3,860.9	644.2	2,185.0	1,675.9	3,324.1
DL051407-001	5/14/2007	FL1C1	S5	2	3,360.0	644.2	2,185.0	1,175.0	3,825.0
DL051407-001	5/14/2007	FL1C1	S5	3	3,881.7	644.2	2,185.0	1,696.7	3,303.3
DL051407-001	5/14/2007	FL1C1	S5	4	4,285.2	644.2	2,185.0	2,100.2	2,899.8
DL051407-001	5/14/2007	FL1C1	S5	5	4,347.8	644.2	2,185.0	2,162.8	2,837.2
DL051407-001	5/14/2007	FL1C1	S5	6	4,055.7	644.2	2,185.0	1,870.7	3,129.3
DL051407-001	5/14/2007	FL1C1	S5	7	3,986.1	644.2	2,185.0	1,801.1	3,198.9
DL051407-001	5/14/2007	FL1C1	S5	8	4,000.0	644.2	2,185.0	1,815.0	3,185.0
DL051407-001	5/14/2007	FL1C1	S5	9	4,208.7	644.2	2,185.0	2,023.7	2,976.3
DL051407-001	5/14/2007	FL2C1	S8	1	3,986.1	644.2	2,185.0	1,801.1	3,198.9
DL051407-001	5/14/2007	FL2C1	S8	2	4,313.0	644.2	2,185.0	2,128.0	2,872.0
DL051407-001	5/14/2007	FL2C1	S8	3	4,904.3	644.2	2,185.0	2,719.3	2,280.7
DL051407-001	5/14/2007	FL2C1	S8	4	4,751.3	644.2	2,185.0	2,566.3	2,433.7
DL051407-001	5/14/2007	FL2C1	S8	5	4,160.0	644.2	2,185.0	1,975.0	3,025.0
DL051407-001	5/14/2007	FL2C1	S8	6	4,827.8	644.2	2,185.0	2,642.8	2,357.2
DL051407-001	5/14/2007	FL2C1	S8	7	4,062.6	644.2	2,185.0	1,877.6	3,122.4
DL051407-001	5/14/2007	FL2C1	S8	8	4,514.8	644.2	2,185.0	2,329.8	2,670.2
DL051407-001	5/14/2007	FL2C1	S8	9	3,819.1	644.2	2,185.0	1,634.1	3,365.9

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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL051407-001	126195	7/18/2007	43-89B	199355B	3/7/2008	125.0	0.230	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45 C1	Concrete	Concrete, Bare or Painted	0.5	2,185

Field Notes Summary

Download ID: Field Notes
DL041807-001 Beta scans and direct measurements on concrete and asphalt.

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

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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 4.0

Direct Alpha Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

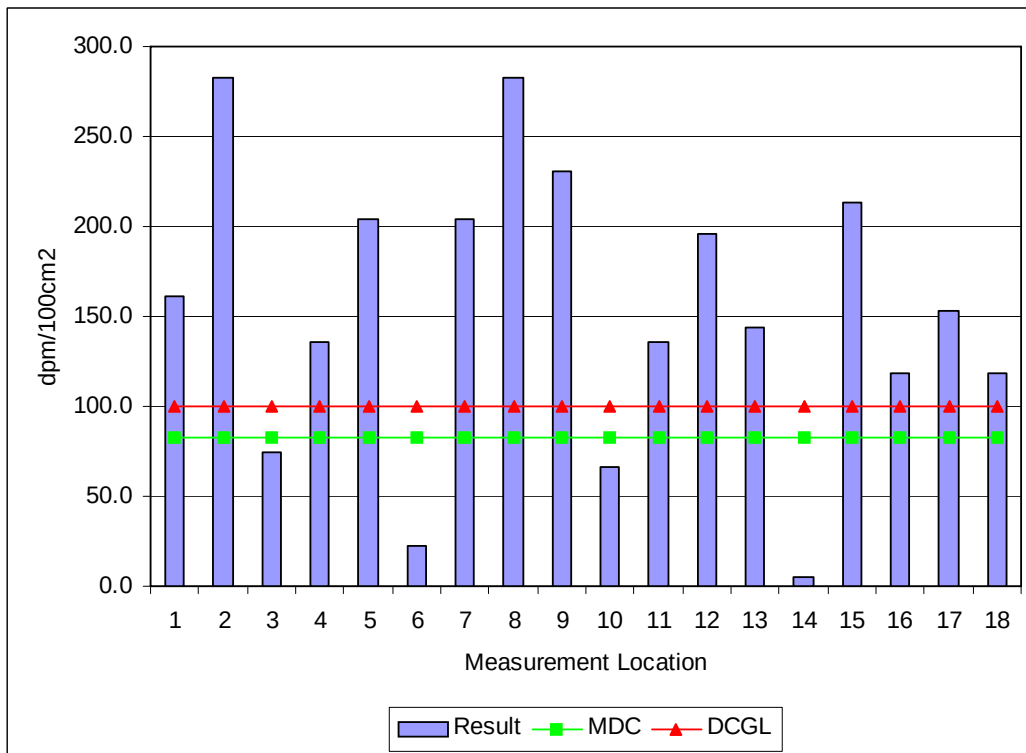
7/12/2007

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	152.6	Ave. MDC	82.9	Ave. MDC < 50% DCGL	No
Median	148.3	Ave. Background	29.0	Measurements < DCGL	No
Standard Deviation	78.9	Maximum Bkg.	29.0	Measurement Mean < DCGL	No
Range	276.8	DCGL	100	No. Measurements > DCGL	14
Minimum	5.6	Number of Measurements			
Maximum	282.4	No. Prescribed	18		
		No. Collected	18		



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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL051107-001	5/11/2007	FL1C1	S5	1	190.3	82.9	29.0	161.3	-61.3
DL051107-001	5/11/2007	FL1C1	S5	2	311.4	82.9	29.0	282.4	-182.4
DL051107-001	5/11/2007	FL1C1	S5	3	103.8	82.9	29.0	74.8	25.2
DL051107-001	5/11/2007	FL1C1	S5	4	164.3	82.9	29.0	135.3	-35.3
DL051107-001	5/11/2007	FL1C1	S5	5	233.5	82.9	29.0	204.5	-104.5
DL051107-001	5/11/2007	FL1C1	S5	6	51.9	82.9	29.0	22.9	77.1
DL051107-001	5/11/2007	FL1C1	S5	7	233.5	82.9	29.0	204.5	-104.5
DL051107-001	5/11/2007	FL1C1	S5	8	311.4	82.9	29.0	282.4	-182.4
DL051107-001	5/11/2007	FL1C1	S5	9	259.5	82.9	29.0	230.5	-130.5
DL051107-001	5/11/2007	FL2C1	S8	1	95.1	82.9	29.0	66.1	33.9
DL051107-001	5/11/2007	FL2C1	S8	2	164.3	82.9	29.0	135.3	-35.3
DL051107-001	5/11/2007	FL2C1	S8	3	224.9	82.9	29.0	195.9	-95.9
DL051107-001	5/11/2007	FL2C1	S8	4	173.0	82.9	29.0	144.0	-44.0
DL051107-001	5/11/2007	FL2C1	S8	5	34.6	82.9	29.0	5.6	94.4
DL051107-001	5/11/2007	FL2C1	S8	6	242.2	82.9	29.0	213.2	-113.2
DL051107-001	5/11/2007	FL2C1	S8	7	147.0	82.9	29.0	118.0	-18.0
DL051107-001	5/11/2007	FL2C1	S8	8	181.6	82.9	29.0	152.6	-52.6
DL051107-001	5/11/2007	FL2C1	S8	9	147.0	82.9	29.0	118.0	-18.0

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL051107-001	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.25	29

Field Notes Summary

Download ID:	Field Notes
DL051107-001	None

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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

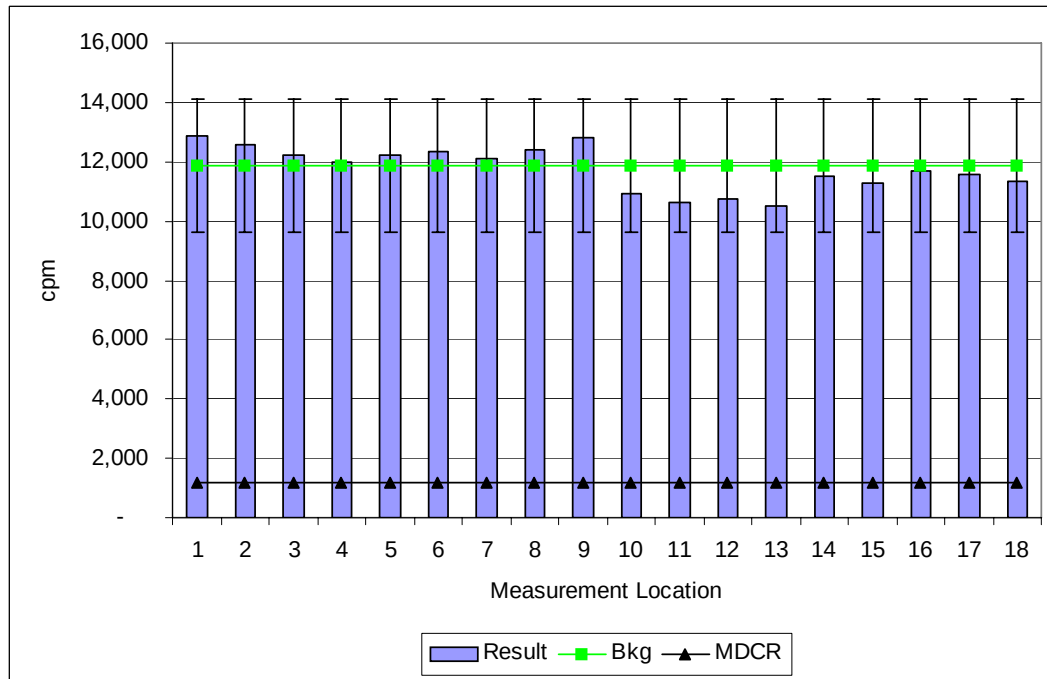
7/12/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	11,764	Ave. Background	11,869	Ave. MDCR < 50% Bkg.	Yes
Median	11,850	3 sigma Value	2,258	Measurements < Ave. Bkg.	No
Standard Deviation	753	Maximum Bkg.	11,869	Measurement Mean < Ave. Bkg.	Yes
Range	2,400	Ave. MDCR	1,159	No. Measurements > Ave. Bkg.	9
Minimum	10,500	Number of Measurements			
Maximum	12,900	No. Prescribed	18		
		No. Collected	18		



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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL051107-002	5/11/2007	FL1C1	S5	1	11,869	1,159	12,900	-1,031
DL051107-002	5/11/2007	FL1C1	S5	2	11,869	1,159	12,550	-681
DL051107-002	5/11/2007	FL1C1	S5	3	11,869	1,159	12,250	-381
DL051107-002	5/11/2007	FL1C1	S5	4	11,869	1,159	12,000	-131
DL051107-002	5/11/2007	FL1C1	S5	5	11,869	1,159	12,250	-381
DL051107-002	5/11/2007	FL1C1	S5	6	11,869	1,159	12,350	-481
DL051107-002	5/11/2007	FL1C1	S5	7	11,869	1,159	12,100	-231
DL051107-002	5/11/2007	FL1C1	S5	8	11,869	1,159	12,400	-531
DL051107-002	5/11/2007	FL1C1	S5	9	11,869	1,159	12,800	-931
DL051107-002	5/11/2007	FL2C1	S8	1	11,869	1,159	10,900	969
DL051107-002	5/11/2007	FL2C1	S8	2	11,869	1,159	10,600	1,269
DL051107-002	5/11/2007	FL2C1	S8	3	11,869	1,159	10,750	1,119
DL051107-002	5/11/2007	FL2C1	S8	4	11,869	1,159	10,500	1,369
DL051107-002	5/11/2007	FL2C1	S8	5	11,869	1,159	11,500	369
DL051107-002	5/11/2007	FL2C1	S8	6	11,869	1,159	11,250	619
DL051107-002	5/11/2007	FL2C1	S8	7	11,869	1,159	11,700	169
DL051107-002	5/11/2007	FL2C1	S8	8	11,869	1,159	11,600	269
DL051107-002	5/11/2007	FL2C1	S8	9	11,869	1,159	11,350	519

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL051107-002	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
C1	Concrete	Concrete, Bare or Painted	11,869

Field Notes Summary

Download ID	Field Notes
DL051107-002	None

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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 6.0

1 Meter Gamma Exposure Rate Measurement Results

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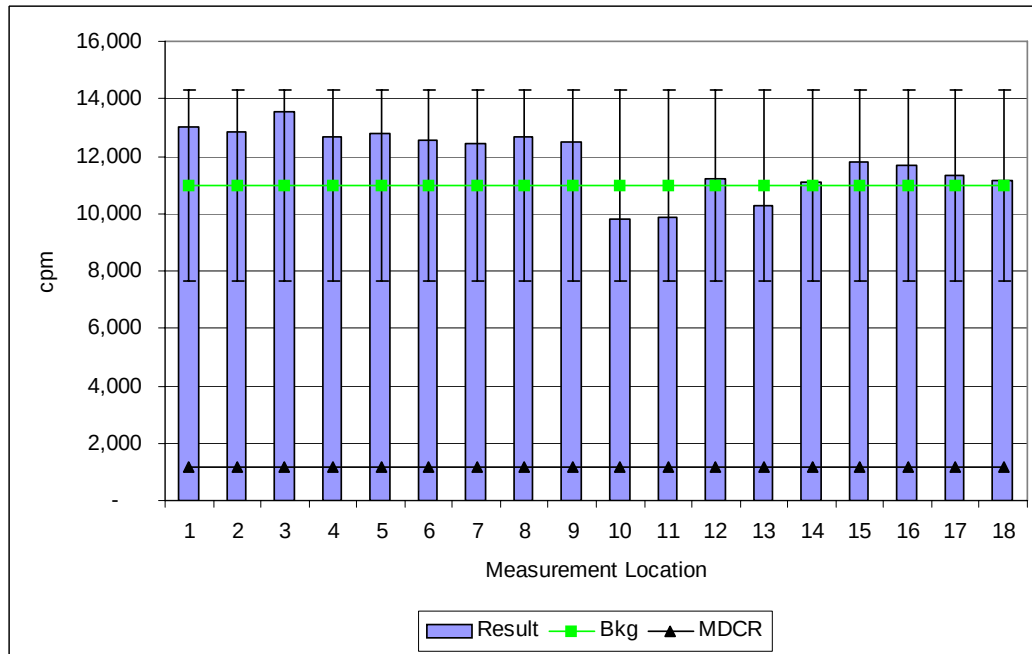
7/12/2007

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	11,844	Ave. Background	10,972	Ave. MDCR < 50% Bkg.	Yes
Median	12,125	3 sigma Value	3,348	Measurements < Ave. Bkg.	No
Standard Deviation	1,116	Maximum Bkg.	10,972	Measurement Mean < Ave. Bkg.	No
Range	3,750	Ave. MDCR	1,163	No. Measurements > Ave. Bkg.	15
Minimum	9,800	Number of Measurements			
Maximum	13,550	No. Prescribed	18		
		No. Collected	18		



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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL051107-002	5/11/2007	FL1C1	S5	1	10,972	1,163	13,000	-2,028
DL051107-002	5/11/2007	FL1C1	S5	2	10,972	1,163	12,850	-1,878
DL051107-002	5/11/2007	FL1C1	S5	3	10,972	1,163	13,550	-2,578
DL051107-002	5/11/2007	FL1C1	S5	4	10,972	1,163	12,700	-1,728
DL051107-002	5/11/2007	FL1C1	S5	5	10,972	1,163	12,800	-1,828
DL051107-002	5/11/2007	FL1C1	S5	6	10,972	1,163	12,550	-1,578
DL051107-002	5/11/2007	FL1C1	S5	7	10,972	1,163	12,450	-1,478
DL051107-002	5/11/2007	FL1C1	S5	8	10,972	1,163	12,650	-1,678
DL051107-002	5/11/2007	FL1C1	S5	9	10,972	1,163	12,500	-1,528
DL051107-002	5/11/2007	FL2C1	S8	1	10,972	1,163	9,800	1,172
DL051107-002	5/11/2007	FL2C1	S8	2	10,972	1,163	9,850	1,122
DL051107-002	5/11/2007	FL2C1	S8	3	10,972	1,163	11,200	-228
DL051107-002	5/11/2007	FL2C1	S8	4	10,972	1,163	10,300	672
DL051107-002	5/11/2007	FL2C1	S8	5	10,972	1,163	11,100	-128
DL051107-002	5/11/2007	FL2C1	S8	6	10,972	1,163	11,800	-828
DL051107-002	5/11/2007	FL2C1	S8	7	10,972	1,163	11,650	-678
DL051107-002	5/11/2007	FL2C1	S8	8	10,972	1,163	11,300	-328
DL051107-002	5/11/2007	FL2C1	S8	9	10,972	1,163	11,150	-178

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL051107-002	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	1Meter Gamma Background (cpm)
C1	Concrete	Concrete, Bare or Painted	10,972

Field Notes Summary

Download ID	Field Notes
DL051107-002	None

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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 7.0

Removable Alpha Smear Sample Analysis Results

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Removable Alpha Measurement Results

Survey Area LC1: C4024 Package Type: Structure
 Survey Area Name: SETF, Building 4024
 Survey Package Number and Unit Name:
 C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Statistical Summary

	dpm/100cm2
Mean	0.7
Median	-0.7
Standard Deviation	2.0
Range	4.6
Minimum	-0.7
Maximum	3.9

Measurement Sensitivity

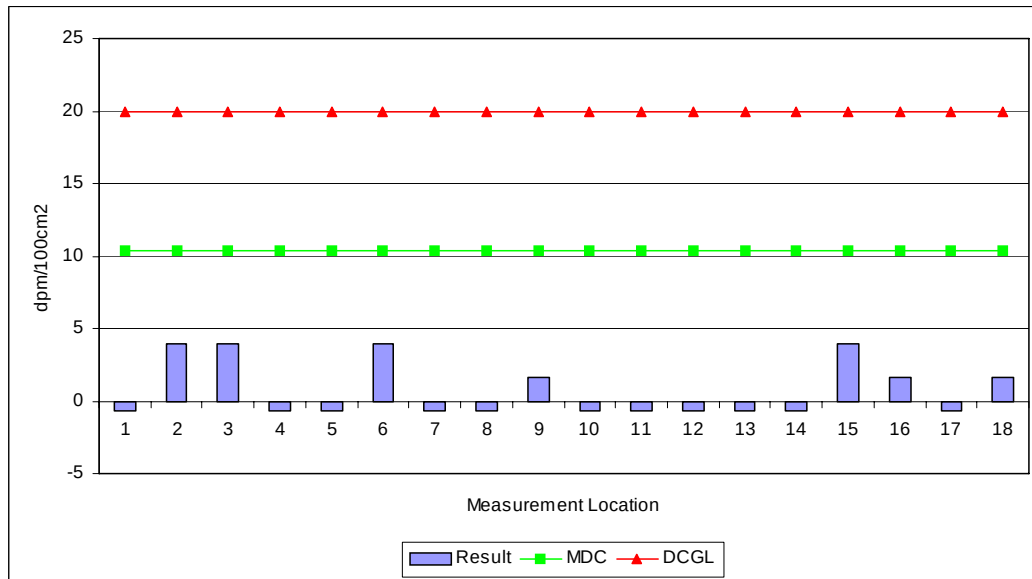
	dpm/100cm2
MDC Mean	10.4
MDC Minimum	10.4
MDC Maximum	10.4
DCGL	20.0

Number of Measurements

No. Prescribed	18
No. Collected	18

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Alpha Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS051107-001	5/11/2007	FL1	FL1	9	10.4	-0.7	20.7
CS051107-001	5/11/2007	FL1	FL1	2	10.4	3.9	16.1
CS051107-001	5/11/2007	FL1	FL1	3	10.4	3.9	16.1
CS051107-001	5/11/2007	FL1	FL1	4	10.4	-0.7	20.7
CS051107-001	5/11/2007	FL1	FL1	5	10.4	-0.7	20.7
CS051107-001	5/11/2007	FL1	FL1	6	10.4	3.9	16.1
CS051107-001	5/11/2007	FL1	FL1	7	10.4	-0.7	20.7
CS051107-001	5/11/2007	FL1	FL1	1	10.4	-0.7	20.7
CS051107-001	5/11/2007	FL1	FL1	8	10.4	1.6	18.4
CS051107-002	5/11/2007	FL2	FL2	9	10.4	-0.7	20.7
CS051107-002	5/11/2007	FL2	FL2	2	10.4	-0.7	20.7
CS051107-002	5/11/2007	FL2	FL2	3	10.4	-0.7	20.7
CS051107-002	5/11/2007	FL2	FL2	4	10.4	-0.7	20.7
CS051107-002	5/11/2007	FL2	FL2	5	10.4	-0.7	20.7
CS051107-002	5/11/2007	FL2	FL2	6	10.4	3.9	16.1
CS051107-002	5/11/2007	FL2	FL2	7	10.4	1.6	18.4
CS051107-002	5/11/2007	FL2	FL2	8	10.4	-0.7	20.7
CS051107-002	5/11/2007	FL2	FL2	1	10.4	1.6	18.4

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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS051107-001	C4024 303C2 FL1C1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS051107-002	C4024 303C2 FL2C1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS051107-001	No Field Notes
CS051107-002	No Field Notes

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 8.0

Removable Beta Smear Sample Analysis Results

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Removable Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary

	dpm/100cm2
Mean	-13.7
Median	-11.1
Standard Deviation	18.3
Range	58.0
Minimum	-45.6
Maximum	12.4

Number of Measurements

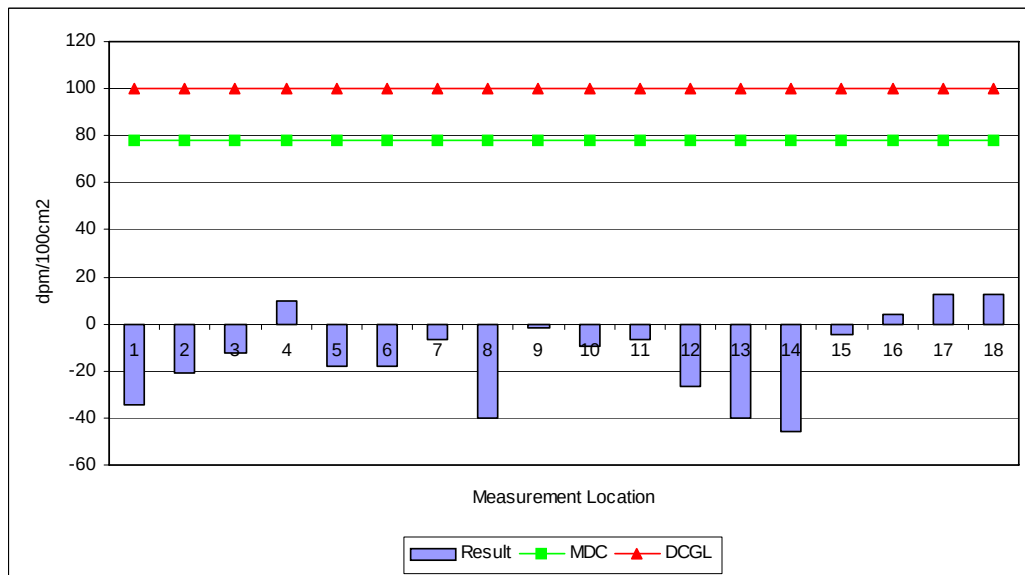
No. Prescribed	18
No. Collected	18

Measurement Sensitivity

	dpm/100cm2
MDC Mean	77.8
MDC Minimum	77.8
MDC Maximum	77.8
DCGL	100.0

Tests Performed

No. Collected $\geq$ Prescribed	Yes
Max MDC $<$ 50% DCGL	No
Measurements $<$ DCGL	Yes
Measurement Mean $<$ DCGL	Yes
No. Measurements $>$ DCGL	0



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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure

Survey Area Name: SETF, Building 4024

Survey Package Number and Unit Name:

C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Beta Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS051107-001	5/11/2007	FL1	FL1	9	77.8	-34.6	135
CS051107-001	5/11/2007	FL1	FL1	2	77.8	-20.7	121
CS051107-001	5/11/2007	FL1	FL1	3	77.8	-12.4	112
CS051107-001	5/11/2007	FL1	FL1	4	77.8	9.7	90
CS051107-001	5/11/2007	FL1	FL1	5	77.8	-18.0	118
CS051107-001	5/11/2007	FL1	FL1	6	77.8	-18.0	118
CS051107-001	5/11/2007	FL1	FL1	7	77.8	-6.9	107
CS051107-001	5/11/2007	FL1	FL1	1	77.8	-40.1	140
CS051107-001	5/11/2007	FL1	FL1	8	77.8	-1.4	101
CS051107-002	5/11/2007	FL2	FL2	9	77.8	-9.7	110
CS051107-002	5/11/2007	FL2	FL2	2	77.8	-6.9	107
CS051107-002	5/11/2007	FL2	FL2	3	77.8	-26.3	126
CS051107-002	5/11/2007	FL2	FL2	4	77.8	-40.1	140
CS051107-002	5/11/2007	FL2	FL2	5	77.8	-45.6	146
CS051107-002	5/11/2007	FL2	FL2	6	77.8	-4.2	104
CS051107-002	5/11/2007	FL2	FL2	7	77.8	4.2	96
CS051107-002	5/11/2007	FL2	FL2	8	77.8	12.4	88
CS051107-002	5/11/2007	FL2	FL2	1	77.8	12.4	88

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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS051107-001	C4024 303C2 FL1C1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS051107-002	C4024 303C2 FL2C1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS051107-001	No Field Notes
CS051107-002	No Field Notes

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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 9.0

Sample Analysis Results

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Survey Package Number: C4024 303C2
Unit Name: SETF Structures and Surfaces

Isotope	Soil Concentration (pCi/g)					Comments		
	Mean	Std. Dev.	Range		Mean MDC			
			Minimum	Maximum				
						No. Results	No. Detect	No. Non-detect
Am-241	0.009	0.005	0.005	0.012	0.064	2	0	2
Co-60	0.186	0.232	0.022	0.350	0.138	2	1	1
Cs-134	0.049	0.059	0.007	0.090	0.155	2	0	2
Cs-137	0.470	0.395	0.190	0.749	0.126	2	1	1
Eu-152	1.124	1.452	0.097	2.150	0.159	2	2	0
Eu-154	0.095	0.078	0.040	0.150	0.135	2	0	2
Fe-55	-4.750	2.758	-6.700	-2.800	14.500	2	0	2
H-3	2.170	2.899	0.120	4.220	0.940	2	1	1
K-40	15.080	1.669	13.900	16.260	1.410	2	2	0
Mn-54	0.028	0.045	-0.004	0.060	0.123	2	0	2
Na-22	0.021	0.013	0.011	0.030	0.130	2	0	2
Ni-63	2.250	3.323	-0.100	4.600	6.800	2	0	2
Pu-238	-0.003	0.002	-0.004	-0.001	0.048	2	0	2
Pu-239/240	0.018	0.012	0.009	0.026	0.036	2	0	2
Pu-241	-0.150	0.212	-0.300	0.000	2.550	2	0	2
Sr-90	0.168	0.019	0.154	0.181	0.093	2	2	0
Th-228	0.540	0.156	0.430	0.650	0.250	2	2	0
Th-232	0.450	0.085	0.390	0.510	0.069	2	2	0
U-234	0.394	0.059	0.352	0.435	0.008	2	2	0
U-235	0.047	0.007	0.042	0.052	0.010	2	2	0
U-238	0.378	0.060	0.335	0.420	0.009	2	2	0

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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 10.0

Photographs

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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7/12/2007

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Photographs were not taken.

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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7/12/2007

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 11.0

Supplemental Information and/or Data



JOB HAZARD ASSESSMENT

Project: Santa Susana Field Laboratory SETF Decommissioning
Specific Task: Use Concrete Chipping/Demo Hammer to Collect Concrete Samples from Areas with Elevated Dose Rates for Laboratory Analysis.

Major Steps in the Job Task:

Identify locations of the area (s) where the Concrete will be obtained

Use DEWALT @ Chipping Hammer D25900 to remove out surface of concrete where elevated dose rates were obtained during background confirmation survey activities.

Use vacuum as local exhaust to collect airborne dust and granular concrete for analysis.

Establish electrical power source for both the Chipping Hammer and Vacuum.

Install a pre-filter collect bag on the inside of the vacuum to collect fines and granular chips then place in containers for radiological analysis and if the volume allows bulk analysis for Crystalline Quartz and Cristobalite (silica exposure determination)

Operation of Chipping Hammer power tool, potential flying debris, potentially loud noise, environmental stress like sun and wind.

Hand/Arm Hazards: Keep unprotected skin, hands, arms and body parts away from point of operation and rotating equipment. Wear gloves when handling material. Vibrations will cause hand to fatigue and may cause damage to the hands so wear gloves to minimize vibrations and take frequent breaks (before fatigue sets in). Wear face shield and hearing protection during hammer and possibly hearing protection during vacuum operation.

Back Injuries: Maintain good posture and don't over reach and/or twist with load carried.

Tooling Hazards: Concrete core drill, wet saw, electrical use including extension cords, some hand tools (Pinch points, guarding, and rotating equipment)

HAZARD ITEM: potential hazards to consider, not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
EYE & FACE HAZARDS: flying particles, chemicals, temperatures, vapors, sparks, splash, particles	☒	☐	Keep unprotected skin at a safe distance from the point of operation of the chipping hammer.	Wear face shield and safety glasses during chipping hammer operation to protect face and eyes from concrete spalls/chips off during both chipping operations.
HAND HAZARDS: sharps, temperatures, hazardous substances, pinch points, specify glove type required	☒	☐	Avoid points of operation and sharp edges created by equipment.	Wear glove to minimize vibration of equipment.
NOISE HAZARDS: hand or power tools, equipment operating in area, compressors, cranes, ambient noise levels	☒	☐	Mitigate loud noise as best we can and minimize time near the equipment.	Ear plugs during chipping hammer and vacuum operation.
HEAD HAZARDS: falling objects, bump hazards, electrical	☒	☐	Although minimal hazards by maintaining good control of equipment and materials	Laways wear hard hat.
FOOT HAZARDS: falling, rolling objects, sharp objects	☒	☐	Keep area clean and feet away from pinch points	Wear sturdy leather work boot.



JOB HAZARD ASSESSMENT

HAZARD ITEM: potential hazards to consider; not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
FALL HAZARDS: verify anchor points, prior to use inspection, floor/wall openings, uneven surfaces, trip hazards, written plan, working over water, ladder use	☒	☒		
MANUAL LIFTING and ERGONOMIC HAZARDS: repeated motion, avoid awkward position, proper lifting techniques, back safety, two-person lifts	☒	☐	maintain good posture and use help from other personnel of from equipment i.e. cranes and forklifts.	Gloves and secure loads properly.
CHEMICAL EXPOSURE HAZARDS: review MSDS's, NFPA or HMIS labels, identify PPE required, spill control, waste generation, chemical use permit	☐	☒		
RESPIRATORY HAZARDS: dusts, fumes, oxygen deficient, toxic gas, weld fume, ozone	☐	☒	Wet method and/or local exhaust for possible silica exposure.	Respiratory postection when necessary.
HAZARDOUS MATERIALS CHECKS: PCB, lead, asbestos	☐	☒		
VENTILATION REQUIREMENTS: specify – local exhaust, area exhaust, general dilution, CFM requirements	☐	☒		
AIR MONITORING REQUIRED: industrial and radiological, area or personal air monitors, list hazards to be sampled	☐	☒		
ACCESS HAZARDS: walkways clear of hoses, leads, cords, and tools, review layout of work area, consider other work group access to work area	☐	☒	Possible, but maintaining areas clean and following good housekeeping practice	
MECHANICAL MATERIAL HANDLING: qualified forklift operator, pinch points	☐	☒	None identified at this time	
CRANES and RIGGING: qualified operator/rigger, prior to use inspections, rigging inspected, tag lines, designated load director, safe load path, hand signals or radio, headsets	☐	☒	None identified at this time	
SCAFFOLDING: permit required, daily inspections, tagging, qualified erectors and inspectors	☐	☒		
WEATHER HAZARDS: heat/cold extremes, overhead/underfoot snow & ice, wet surfaces, storms, verify weather forecast	☒	☐	Possible but not likely because cell area is well protected and under cover but outside weather can be unpredictable.	Dress appropriately for weather conditions
PRESSURIZED SYSTEMS: pneumatic, hydraulic, pressure test, vacuum, hose/whip restraints	☐	☒	none identified at this time	
CONFINED SPACE HAZARDS: confined space work permit required, rescue equipment and plan in place	☐	☒	None for this activity hve been identified	



JOB HAZARD ASSESSMENT

HAZARD ITEM: potential hazards to consider; not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
HOUSEKEEPING: prevent slips, trips, and falls, maintain area daily, control trash, debris and combustibles	☒	☐	Clean as you go and don't allow to much accumulation of materials.	Wear glove when handling debris and material.
RESCUE PLAN: access to injured, layout, stage equipment for rescue, written plan required, coordination with control room and emergency team	☒	☐	Contact Boeing Fire/security in extreme emergency.	
FIRE/COMBUSTIBLE HAZARDS: hot work/combustible material permit, welding, grinding, combustible material storage, explosion hazards	☐	☒	None identified at this time.	
WELDING, CUTTING, AND GRINDING: chromium (VI) exposure control plan (see page 4), weld fume, ventilation, PPE requirements	☐	☒	None identified at this time.	
ELECTRICAL HAZARDS: energized electrical work permit, grounding protection, GFCI, power lines, cords, cable runs	☒	☐	Proper placement of cord and equipment and inspect devices each time it is used and use a minimum 12 awg electrical cord for 14 amp chipping tool	Keeps cords protected out of harms way.
LOCKOUT/TAGOUT: electrical, hydraulic, pneumatic energy sources, pressurized systems, follow site requirements	☐	☒	None identified at this time. Boeing will perform LOTO for facility equipment and AREVA will do their own equipment as necessary	
COMMUNICATION DIFFICULTIES: noise interference, radio use, hand signals, 3-way communication, phonetic alphabet	☐	☒	Possible but not likely at this time but we may have to	TBD
TOOL HAZARDS: guards, pinch and nip points, rotating parts, training required, authorization use only	☒	☐	Possible, however we should be able to avoid pinch points and "caught by/into" situations	Maintain/assure the tool is in good condition wear sturdy leather work boots.
WORK PRACTICES: policy and procedure compliance	☒	☐	Always use industry safe work practices.	Provide thorough and comprehensive job briefs
MULTI DEPARTMENT INTERFACE: Security Impact, Radiation Protection Impact, Operations Impact, QA, Safety and Health	☐	☒		
ENVIRONMENTAL HAZARD: hazardous waste generation, environmental impact, water runoff, sampling needed	☐	☒		
RADIATION HAZARDS: RWP required, ALARA review required, dose rates, contamination levels, reference RWP	☒	☐	Practice ALARA, keeping exposure As Low As Reasonably Achievable.	



JOB HAZARD ASSESSMENT

HAZARD ITEM: <i>potential hazards to consider, not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
POSTING NEEDED: <i>barricades, signs, barrier ribbons</i>	☐	☒	Attempt to limit exposure As Low As Reasonably Achievable.	Radiation and noise posting and protective measures possible
FME PLAN REQUIRED: <i>written plan, log equipment and tools in/out, drop log, lanyards for tools and PPE, PPE restrictions</i>	☐	☒		

Additional Controls (add additional rows, if necessary)

Additional Controls (add additional pages, if necessary)

Chromium (VI) Exposure Control Plan for Welding and Grinding Operations:

Welding Method: n/a			Base Metal: n/a			Electrode Type: n/a		
Has air monitoring been previously performed for this activity?								
YES			NO			(If NO, Contact Safety Department to determine controls and specify below.)		
If YES, list monitoring results: no								
If YES, was any special ventilation required?								
YES			NO			Specify ventilation type and flow rate: TBD		
If YES, was respiratory protection required for this activity?								
YES			NO			Specify type of respirator: TBD		
Is protective clothing required?								
YES			NO			Specify type of protective clothing: TBD		
Have employees completed Chromium (VI) training?								
YES			NO					
Have employees completed Chromium (VI) medical surveillance?								
YES			NO					
Have employees completed respirator medical, training, and fit test?								
YES			NO			N/A		
Others requirements: TBD								

Industry Events, Operating Experience, and/or Lessons Learned Applicable to Work Activity or Site:



JOB HAZARD ASSESSMENT

Task Lead/Supervisor:	Date: 5/11/07
Safety Engineer:	Date: 5/11/07

[Handwritten signature] *[Handwritten signature]*

 ***** THE BOEING COMPANY *****
 ***** SANTA SUSANA FIELD LABORATORY *****
 ***** SHEA - RADIATION SAFETY LAB *****

 ***** GAMMA SPECTRUM ANALYSIS REPORT *****

Report Generated On : 5/16/07 11:05:08 AM

Sample Identification : T24070003M
 Spectrum Description : Areva 4024 Concrete Dust FL1C1 SL#5
 MCA Number : Main System #1
 Sample Type : Concrete
 Sample Geometry : 2

Peak Locate Threshold : 4.00
 Peak Locate Range (in channels) : 200 - 16384
 Peak Area Range (in channels) : 1 - 16384
 Identification Energy Tolerance : 1.000 keV

Sample Size : 1.630E+002 g

Sample Taken On : 5/11/07 1:00:00 PM
 Acquisition Started : 5/16/07 10:46:08 AM

Live Time : 1000.0 seconds
 Real Time : 1000.1 seconds

Energy Calibration Used Done On : 9/29/06
 Efficiency Calibration Used Done On : 9/29/06

Report Reviewed and
 Conforms to RS-00017

By:

ER MED

Date:

5-16-07

Radiation Safety

NOTE: COPY1

Cs-137 0.8 pCi/g

***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : T24070003M

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/g)	Wt mean Activity Uncertainty	Percent Total Act.	Nuclide MDA (pCi/g)
K-40	0.975	1.131E+001	4.187E+000	93.33%	5.335E+000
CS-137	0.944	8.084E-001	2.578E-001	6.67%	2.354E-001

Total Sample Activity... 1.2119E+001 pCi/g

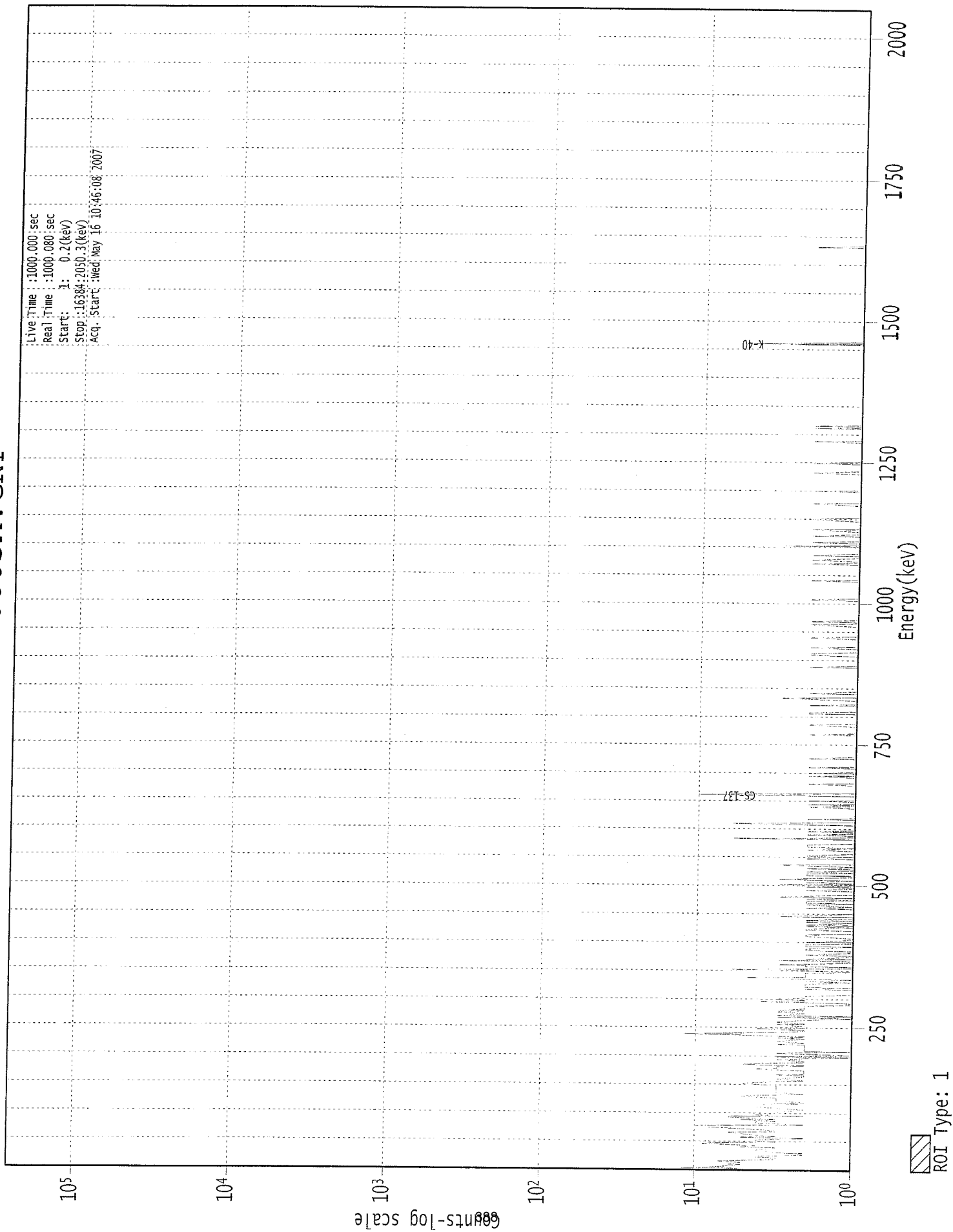
? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

T24070003M.CNF



 ***** THE BOEING COMPANY *****
 ***** SANTA SUSANA FIELD LABORATORY *****
 ***** SHEA - RADIATION SAFETY LAB *****

 ***** GAMMA SPECTRUM ANALYSIS REPORT *****

Report Generated On : 5/16/07 12:20:31 PM

Sample Identification : T24070004M
 Spectrum Description : Areva 4024 Concrete Dust FL2C1 SL#8
 MCA Number : Main System #1
 Sample Type : Concrete
 Sample Geometry : 2

Peak Locate Threshold : 4.00
 Peak Locate Range (in channels) : 200 - 16384
 Peak Area Range (in channels) : 1 - 16384
 Identification Energy Tolerance : 1.000 keV

Sample Size : 7.000E+001 g

Sample Taken On : 5/11/07 1:00:00 PM
 Acquisition Started : 5/16/07 11:04:39 AM

Live Time : 1000.0 seconds
 Real Time : 1000.1 seconds

Energy Calibration Used Done On : 9/29/06
 Efficiency Calibration Used Done On : 9/29/06

Report Reviewed and
 Conforms to RS-00017

By: ER M. Summer Date: 5-16-07

Radiation Safety

NOTE: COPY 1

Eu-152 3.04 pCi/g

***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : T24070004M

	Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/g)	Wt mean Activity Uncertainty	Percent Total Act.	Nuclide MDA (pCi/g)
X	Co-57	0.797				2.487E-007
	EU-152	0.613	3.038E+000	5.560E-001	69.83%	6.889E-001
	PB-212T @	0.534	1.313E+000	4.740E-001	30.17%	5.984E-001

Total Sample Activity... 4.3509E+000 pCi/g

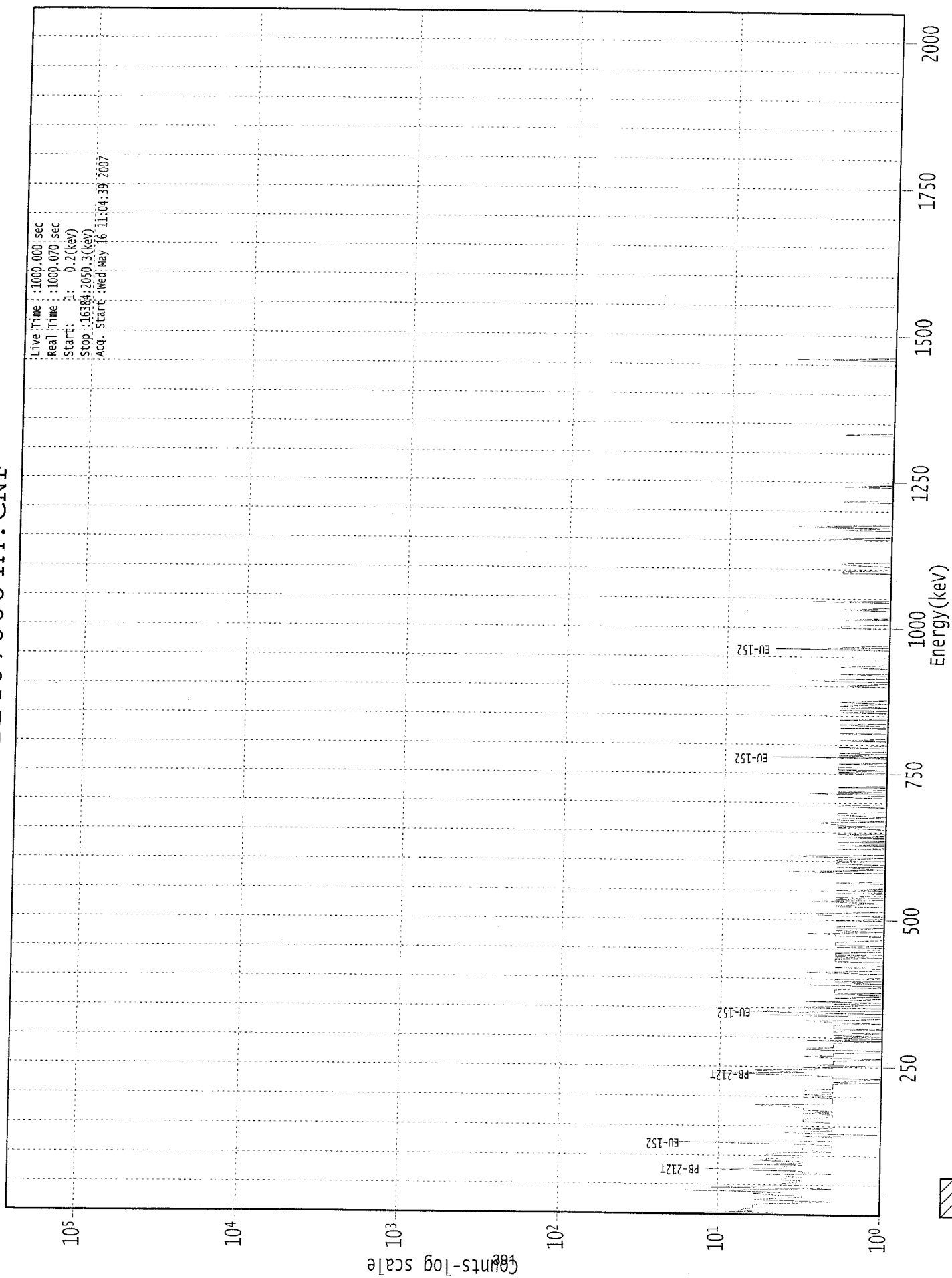
? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

T24070004M.CNF



Appendix A

Section	Survey Package	Survey Unit Description
3.0		SETF Structures and Surfaces
3.3	C4024 303C1	Paved Yard Area and Slabs Remaining Around SETF
3.3.3	C4024 303C2	Follow-up Survey of Asphalt covering USTs

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

7/12/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Direct Alpha Measurement Results
5.0	Contact Gamma Exposure Rate Measurement Results
6.0	1 Meter Gamma Exposure Rate Measurement Results
7.0	Removable Alpha Smear Sample Analysis Results
8.0	Removable Beta Smear Sample Analysis Results
9.0	Sample Analysis Results
10.0	Photographs
11.0	Supplemental Information and/or Data

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

7/12/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 1.0

Data Analysis Report Parameters

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

7/12/2007

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Data Analysis Report Parameters

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Survey Group: C - Radiological Survey of Impacted Facility Surfaces & Structures

Survey Area: 4024 - SETF, Building 4024

Unit Classification: 3 - Impacted Class 3 Structure

MARSSIM FSS Survey Unit Size (M²): No Limit

Survey Unit: 03 - Paved Yard Area and Slabs Remaining Around SETF

Survey Reason: C2 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	PA1	Asphalt or Concrete Paved Areas	201
	Total Area		201

Materials: Code Description
A1 - Asphalt

Report Information:

Report Pedigree: Final Report

Detector Efficiency: 2-Pi

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/12/2007

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 2.0

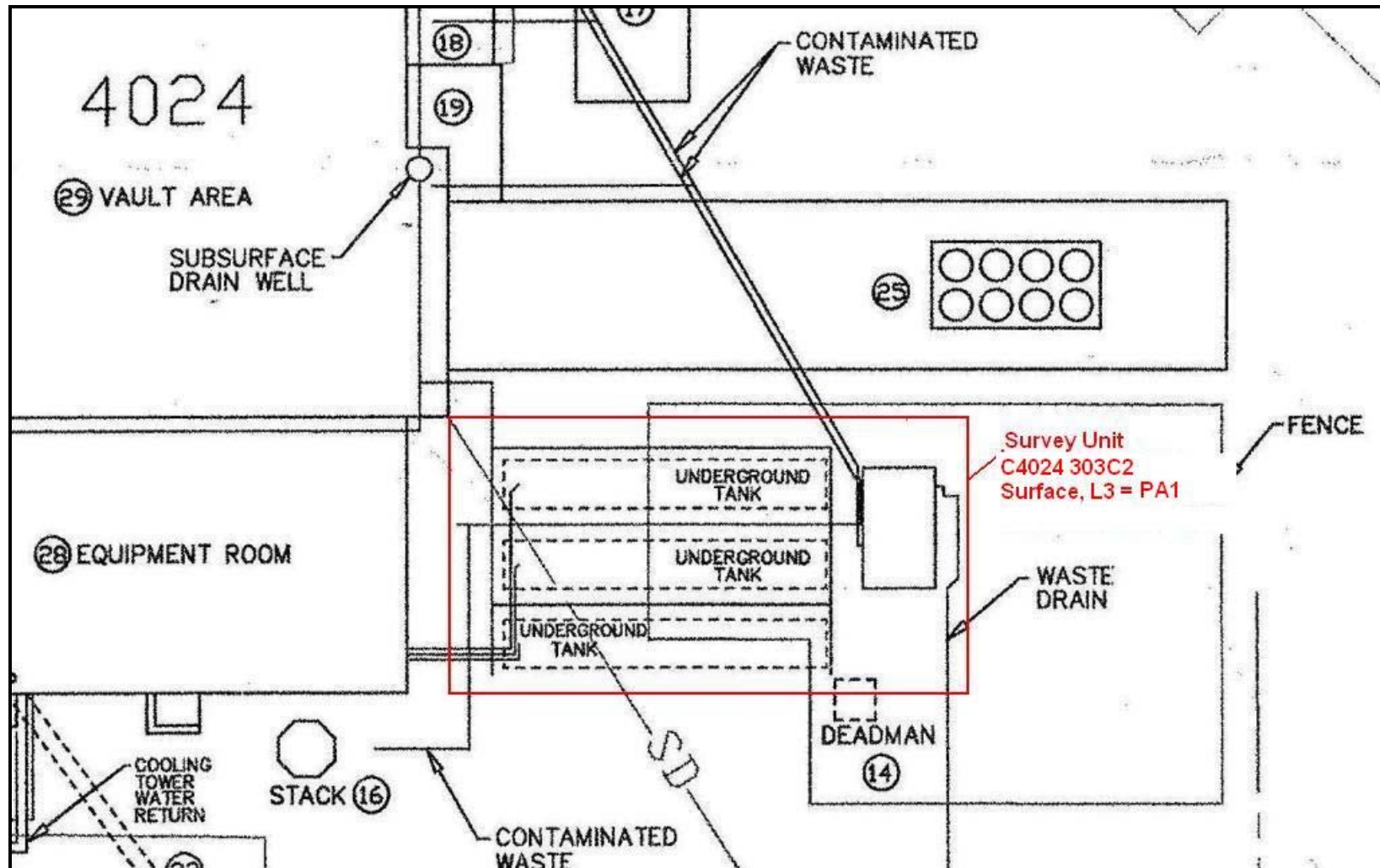
Annotated Drawings

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

5/10/2007

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Survey Package Appendix A – Drawings

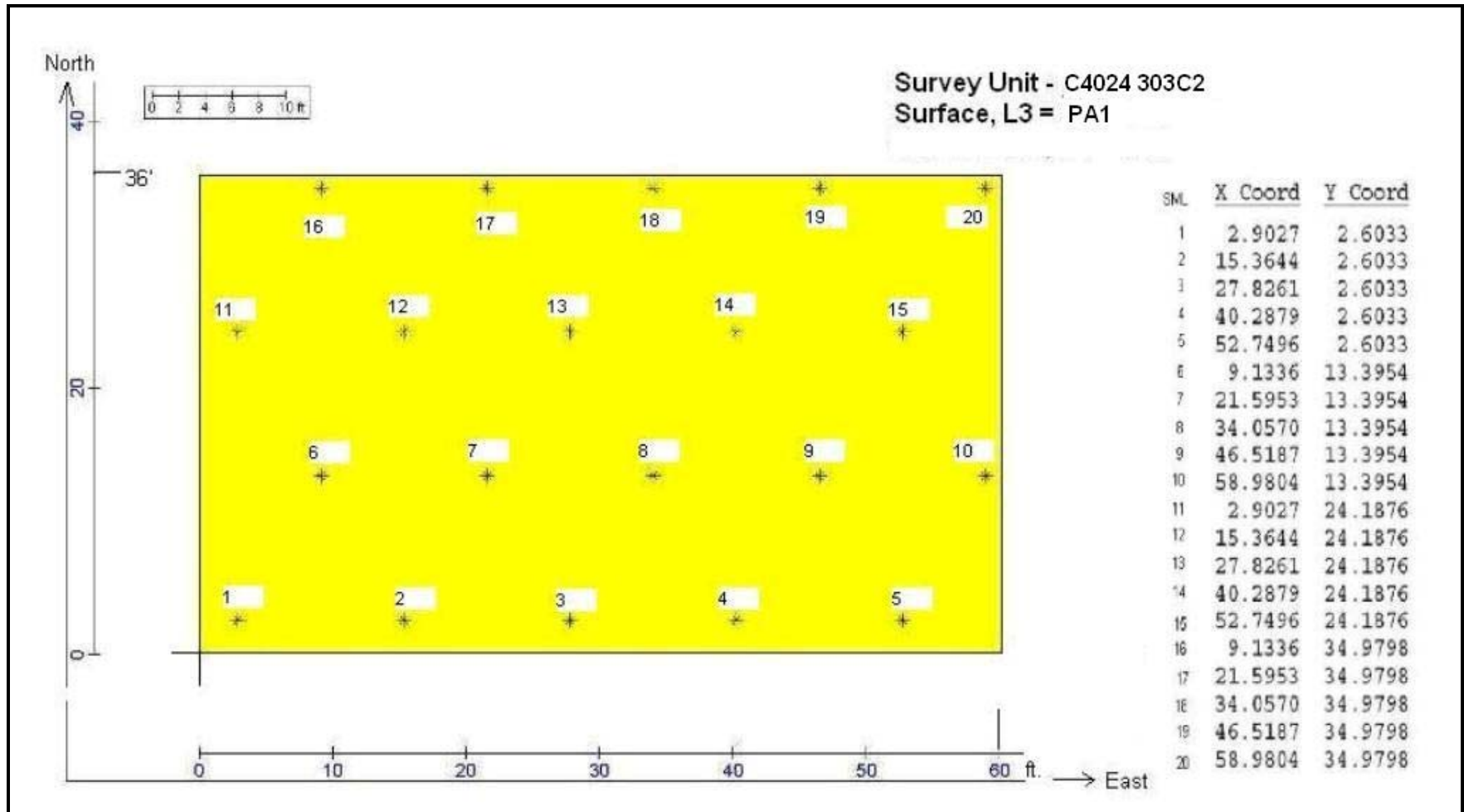


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Survey Package Appendix A – Drawings



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

7/12/2007

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 3.0

Direct Beta Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

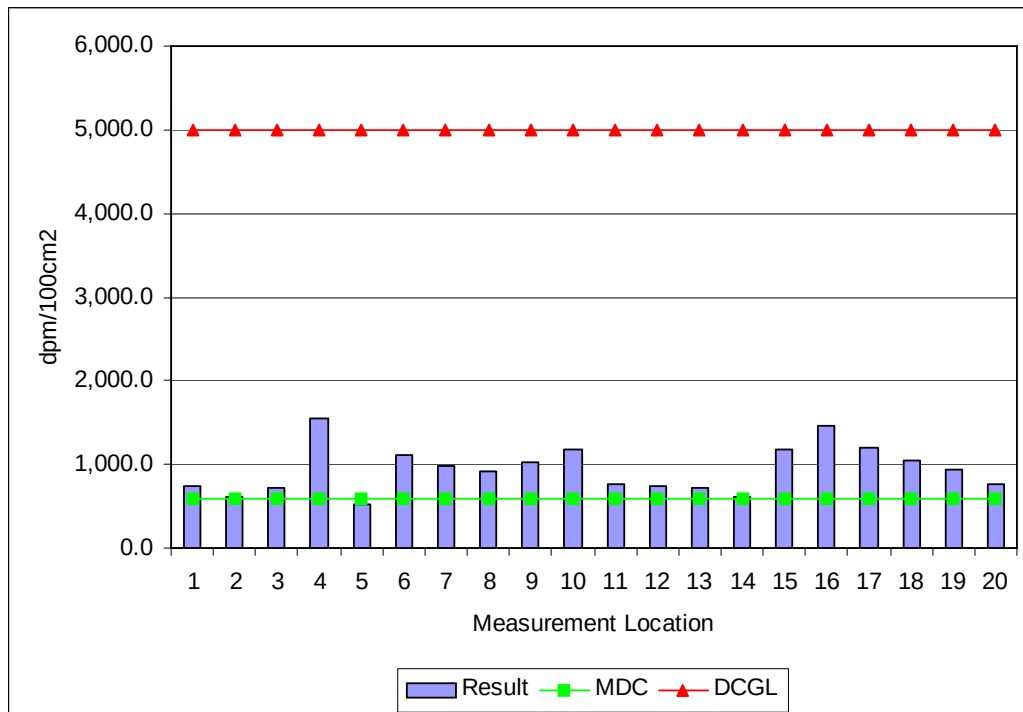
7/12/2007

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	938.6	Ave. MDC	583.6	Ave. MDC < 50% DCGL	Yes
Median	923.3	Ave. Background	3,428.0	Measurements < DCGL	Yes
Standard Deviation	279.6	Maximum Bkg.	3,428.0	Measurement Mean < DCGL	Yes
Range	1,029.6	DCGL	5000	No. Measurements > DCGL	0
Minimum	516.3	Number of Measurements			
Maximum	1,545.9	No. Prescribed	18		
		No. Collected	20		



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

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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL051407-001	5/14/2007	PA1A1	UST	1	4,173.9	583.6	3,428.0	745.9	4,254.1
DL051407-001	5/14/2007	PA1A1	UST	2	4,048.7	583.6	3,428.0	620.7	4,379.3
DL051407-001	5/14/2007	PA1A1	UST	3	4,153.0	583.6	3,428.0	725.0	4,275.0
DL051407-001	5/14/2007	PA1A1	UST	4	4,973.9	583.6	3,428.0	1,545.9	3,454.1
DL051407-001	5/14/2007	PA1A1	UST	5	3,944.3	583.6	3,428.0	516.3	4,483.7
DL051407-001	5/14/2007	PA1A1	UST	6	4,542.6	583.6	3,428.0	1,114.6	3,885.4
DL051407-001	5/14/2007	PA1A1	UST	7	4,410.4	583.6	3,428.0	982.4	4,017.6
DL051407-001	5/14/2007	PA1A1	UST	8	4,340.9	583.6	3,428.0	912.9	4,087.1
DL051407-001	5/14/2007	PA1A1	UST	9	4,445.2	583.6	3,428.0	1,017.2	3,982.8
DL051407-001	5/14/2007	PA1A1	UST	10	4,598.3	583.6	3,428.0	1,170.3	3,829.7
DL051407-001	5/14/2007	PA1A1	UST	11	4,194.8	583.6	3,428.0	766.8	4,233.2
DL051407-001	5/14/2007	PA1A1	UST	12	4,160.0	583.6	3,428.0	732.0	4,268.0
DL051407-001	5/14/2007	PA1A1	UST	13	4,153.0	583.6	3,428.0	725.0	4,275.0
DL051407-001	5/14/2007	PA1A1	UST	14	4,048.7	583.6	3,428.0	620.7	4,379.3
DL051407-001	5/14/2007	PA1A1	UST	15	4,598.3	583.6	3,428.0	1,170.3	3,829.7
DL051407-001	5/14/2007	PA1A1	UST	16	4,890.4	583.6	3,428.0	1,462.4	3,537.6
DL051407-001	5/14/2007	PA1A1	UST	17	4,633.0	583.6	3,428.0	1,205.0	3,795.0
DL051407-001	5/14/2007	PA1A1	UST	18	4,473.0	583.6	3,428.0	1,045.0	3,955.0
DL051407-001	5/14/2007	PA1A1	UST	19	4,361.7	583.6	3,428.0	933.7	4,066.3
DL051407-001	5/14/2007	PA1A1	UST	20	4,187.8	583.6	3,428.0	759.8	4,240.2

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

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL051407-001	126195	7/18/2007	43-89B	199355B	3/7/2008	125.0	0.230	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
A1	Asphalt	Asphalt Roadway or Walkway	0.5	3,428

Field Notes Summary

Download ID:	Field Notes
DL051407-001	None

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

7/12/2007

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 4.0

Direct Alpha Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

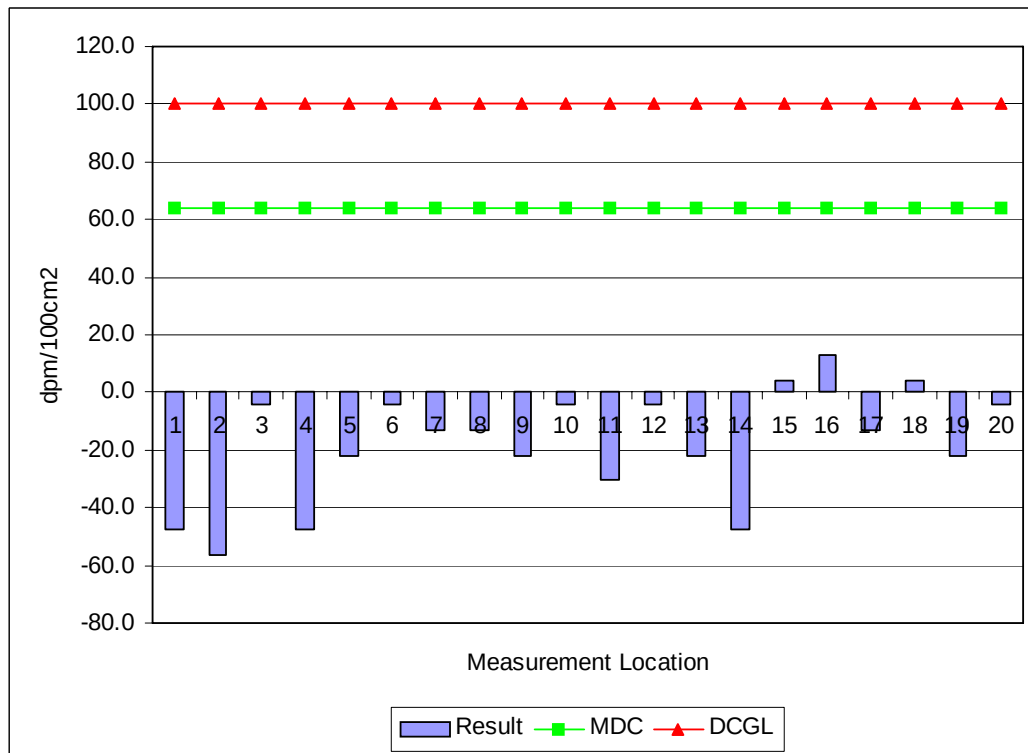
7/12/2007

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	-17.9	Ave. MDC	63.9	Ave. MDC < 50% DCGL	No
Median	-13.1	Ave. Background	65.0	Measurements < DCGL	Yes
Standard Deviation	19.5	Maximum Bkg.	65.0	Measurement Mean < DCGL	Yes
Range	69.2	DCGL	100	No. Measurements > DCGL	0
Minimum	-56.4	Number of Measurements			
Maximum	12.8	No. Prescribed	18		
		No. Collected	20		



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

7/12/2007

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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL051107-001	5/11/2007	PA1A1	A1	1	17.3	63.9	65.0	-47.7	147.7
DL051107-001	5/11/2007	PA1A1	A1	2	8.6	63.9	65.0	-56.4	156.4
DL051107-001	5/11/2007	PA1A1	A1	3	60.5	63.9	65.0	-4.5	104.5
DL051107-001	5/11/2007	PA1A1	A1	4	17.3	63.9	65.0	-47.7	147.7
DL051107-001	5/11/2007	PA1A1	A1	5	43.2	63.9	65.0	-21.8	121.8
DL051107-001	5/11/2007	PA1A1	A1	6	60.5	63.9	65.0	-4.5	104.5
DL051107-001	5/11/2007	PA1A1	A1	7	51.9	63.9	65.0	-13.1	113.1
DL051107-001	5/11/2007	PA1A1	A1	8	51.9	63.9	65.0	-13.1	113.1
DL051107-001	5/11/2007	PA1A1	A1	9	43.2	63.9	65.0	-21.8	121.8
DL051107-001	5/11/2007	PA1A1	A1	10	60.5	63.9	65.0	-4.5	104.5
DL051107-001	5/11/2007	PA1A1	A1	11	34.6	63.9	65.0	-30.4	130.4
DL051107-001	5/11/2007	PA1A1	A1	12	60.5	63.9	65.0	-4.5	104.5
DL051107-001	5/11/2007	PA1A1	A1	13	43.2	63.9	65.0	-21.8	121.8
DL051107-001	5/11/2007	PA1A1	A1	14	17.3	63.9	65.0	-47.7	147.7
DL051107-001	5/11/2007	PA1A1	A1	15	69.2	63.9	65.0	4.2	95.8
DL051107-001	5/11/2007	PA1A1	A1	16	77.8	63.9	65.0	12.8	87.2
DL051107-001	5/11/2007	PA1A1	A1	17	51.9	63.9	65.0	-13.1	113.1
DL051107-001	5/11/2007	PA1A1	A1	18	69.2	63.9	65.0	4.2	95.8
DL051107-001	5/11/2007	PA1A1	A1	19	43.2	63.9	65.0	-21.8	121.8
DL051107-001	5/11/2007	PA1A1	A1	20	60.5	63.9	65.0	-4.5	104.5

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

7/12/2007

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL051107-001	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
A1	Asphalt	Asphalt Roadway or Walkway	0.25	65

Field Notes Summary

Download ID:	Field Notes
DL051107-001	None

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

7/12/2007

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

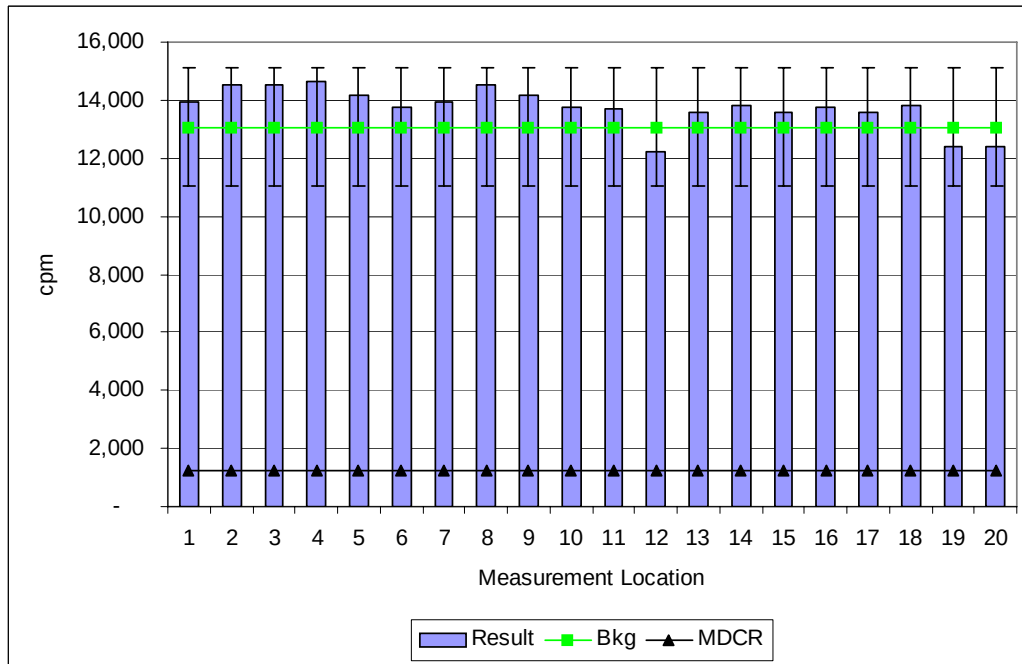
7/12/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	13,738	Ave. Background	13,072	Ave. MDCR < 50% Bkg.	Yes
Median	13,775	3 sigma Value	2,060	Measurements < Ave. Bkg.	No
Standard Deviation	687	Maximum Bkg.	13,072	Measurement Mean < Ave. Bkg.	No
Range	2,400	Ave. MDCR	1,253	No. Measurements > Ave. Bkg.	17
Minimum	12,250	Number of Measurements			
Maximum	14,650	No. Prescribed	18		
		No. Collected	20		



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

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL051107-002	5/11/2007	PA1A1	PA1	1	13,072	1,253	13,950	-878
DL051107-002	5/11/2007	PA1A1	PA1	2	13,072	1,253	14,500	-1,428
DL051107-002	5/11/2007	PA1A1	PA1	3	13,072	1,253	14,550	-1,478
DL051107-002	5/11/2007	PA1A1	PA1	4	13,072	1,253	14,650	-1,578
DL051107-002	5/11/2007	PA1A1	PA1	5	13,072	1,253	14,150	-1,078
DL051107-002	5/11/2007	PA1A1	PA1	6	13,072	1,253	13,750	-678
DL051107-002	5/11/2007	PA1A1	PA1	7	13,072	1,253	13,950	-878
DL051107-002	5/11/2007	PA1A1	PA1	8	13,072	1,253	14,500	-1,428
DL051107-002	5/11/2007	PA1A1	PA1	9	13,072	1,253	14,150	-1,078
DL051107-002	5/11/2007	PA1A1	PA1	10	13,072	1,253	13,750	-678
DL051107-002	5/11/2007	PA1A1	PA1	11	13,072	1,253	13,700	-628
DL051107-002	5/11/2007	PA1A1	PA1	12	13,072	1,253	12,250	822
DL051107-002	5/11/2007	PA1A1	PA1	13	13,072	1,253	13,600	-528
DL051107-002	5/11/2007	PA1A1	PA1	14	13,072	1,253	13,800	-728
DL051107-002	5/11/2007	PA1A1	PA1	15	13,072	1,253	13,600	-528
DL051107-002	5/11/2007	PA1A1	PA1	16	13,072	1,253	13,750	-678
DL051107-002	5/11/2007	PA1A1	PA1	17	13,072	1,253	13,550	-478
DL051107-002	5/11/2007	PA1A1	PA1	18	13,072	1,253	13,800	-728
DL051107-002	5/11/2007	PA1A1	PA1	19	13,072	1,253	12,400	672
DL051107-002	5/11/2007	PA1A1	PA1	20	13,072	1,253	12,400	672

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL051107-002	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
A1	Asphalt	Asphalt Roadway or Walkway	13,072

Field Notes Summary

Download ID	Field Notes
DL051107-002	None

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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 6.0

1 Meter Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

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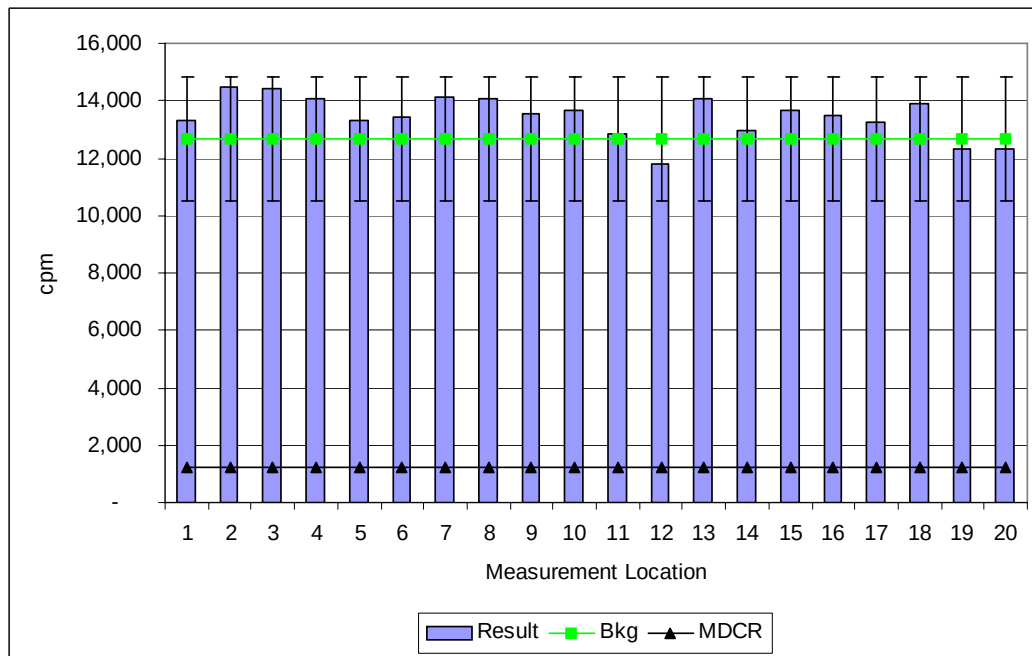
7/12/2007

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	13,450	Ave. Background	12,683	Ave. MDCR < 50% Bkg.	Yes
Median	13,525	3 sigma Value	2,157	Measurements < Ave. Bkg.	No
Standard Deviation	719	Maximum Bkg.	12,683	Measurement Mean < Ave. Bkg.	No
Range	2,700	Ave. MDCR	1,240	No. Measurements > Ave. Bkg.	17
Minimum	11,800	Number of Measurements			
Maximum	14,500	No. Prescribed	18		
		No. Collected	20		



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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	1M Result (cpm)	Test (Bkg. - Result) cpm
DL051107-002	5/11/2007	PA1A1	PA1	1	12,683	1,240	13,300	-617
DL051107-002	5/11/2007	PA1A1	PA1	2	12,683	1,240	14,500	-1,817
DL051107-002	5/11/2007	PA1A1	PA1	3	12,683	1,240	14,400	-1,717
DL051107-002	5/11/2007	PA1A1	PA1	4	12,683	1,240	14,050	-1,367
DL051107-002	5/11/2007	PA1A1	PA1	5	12,683	1,240	13,300	-617
DL051107-002	5/11/2007	PA1A1	PA1	6	12,683	1,240	13,450	-767
DL051107-002	5/11/2007	PA1A1	PA1	7	12,683	1,240	14,150	-1,467
DL051107-002	5/11/2007	PA1A1	PA1	8	12,683	1,240	14,050	-1,367
DL051107-002	5/11/2007	PA1A1	PA1	9	12,683	1,240	13,550	-867
DL051107-002	5/11/2007	PA1A1	PA1	10	12,683	1,240	13,650	-967
DL051107-002	5/11/2007	PA1A1	PA1	11	12,683	1,240	12,850	-167
DL051107-002	5/11/2007	PA1A1	PA1	12	12,683	1,240	11,800	883
DL051107-002	5/11/2007	PA1A1	PA1	13	12,683	1,240	14,050	-1,367
DL051107-002	5/11/2007	PA1A1	PA1	14	12,683	1,240	12,950	-267
DL051107-002	5/11/2007	PA1A1	PA1	15	12,683	1,240	13,650	-967
DL051107-002	5/11/2007	PA1A1	PA1	16	12,683	1,240	13,500	-817
DL051107-002	5/11/2007	PA1A1	PA1	17	12,683	1,240	13,250	-567
DL051107-002	5/11/2007	PA1A1	PA1	18	12,683	1,240	13,900	-1,217
DL051107-002	5/11/2007	PA1A1	PA1	19	12,683	1,240	12,350	333
DL051107-002	5/11/2007	PA1A1	PA1	20	12,683	1,240	12,300	383

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1 Meter Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL051107-002	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	1Meter Gamma Background (cpm)
A1	Asphalt	Asphalt Roadway or Walkway	12,683

Field Notes Summary

Download ID	Field Notes
DL051107-002	None

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 7.0

Removable Alpha Smear Sample Analysis Results

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Removable Alpha Measurement Results

Survey Area LC1: C4024 Package Type: Structure
 Survey Area Name: SETF, Building 4024
 Survey Package Number and Unit Name:
 C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Statistical Summary

	dpm/100cm2
Mean	0.7
Median	1.6
Standard Deviation	1.4
Range	4.6
Minimum	-0.7
Maximum	3.9

Measurement Sensitivity

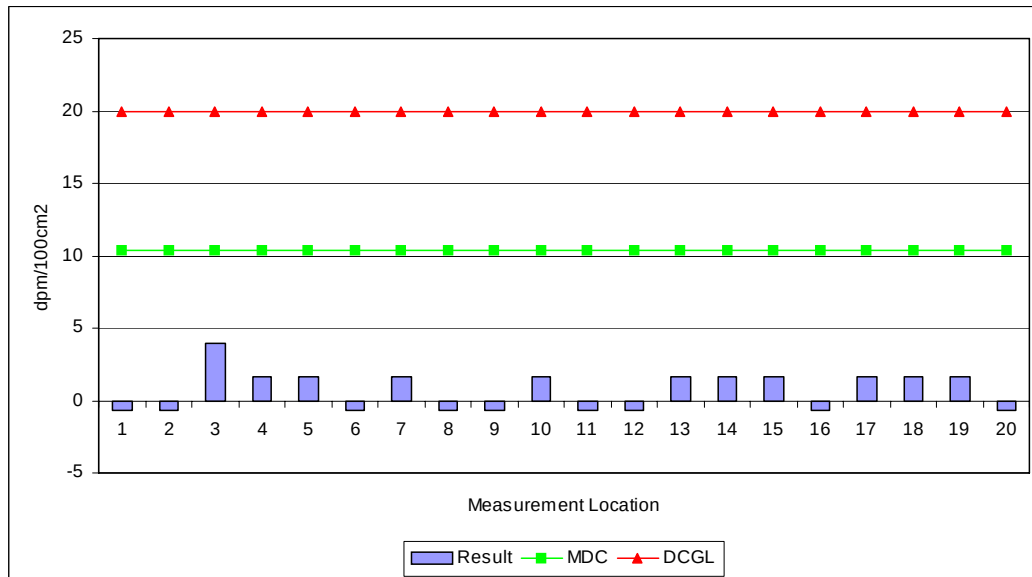
	dpm/100cm2
MDC Mean	10.4
MDC Minimum	10.4
MDC Maximum	10.4
DCGL	20.0

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0

Number of Measurements

No. Prescribed	20
No. Collected	20



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Alpha Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS051107-003	5/11/2007	PA1	PA1	19	10.4	-0.7	20.7
CS051107-003	5/11/2007	PA1	PA1	10	10.4	-0.7	20.7
CS051107-003	5/11/2007	PA1	PA1	11	10.4	3.9	16.1
CS051107-003	5/11/2007	PA1	PA1	12	10.4	1.6	18.4
CS051107-003	5/11/2007	PA1	PA1	13	10.4	1.6	18.4
CS051107-003	5/11/2007	PA1	PA1	14	10.4	-0.7	20.7
CS051107-003	5/11/2007	PA1	PA1	15	10.4	1.6	18.4
CS051107-003	5/11/2007	PA1	PA1	16	10.4	-0.7	20.7
CS051107-003	5/11/2007	PA1	PA1	1	10.4	-0.7	20.7
CS051107-003	5/11/2007	PA1	PA1	18	10.4	1.6	18.4
CS051107-003	5/11/2007	PA1	PA1	9	10.4	-0.7	20.7
CS051107-003	5/11/2007	PA1	PA1	2	10.4	-0.7	20.7
CS051107-003	5/11/2007	PA1	PA1	20	10.4	1.6	18.4
CS051107-003	5/11/2007	PA1	PA1	3	10.4	1.6	18.4
CS051107-003	5/11/2007	PA1	PA1	4	10.4	1.6	18.4
CS051107-003	5/11/2007	PA1	PA1	5	10.4	-0.7	20.7
CS051107-003	5/11/2007	PA1	PA1	6	10.4	1.6	18.4
CS051107-003	5/11/2007	PA1	PA1	7	10.4	1.6	18.4
CS051107-003	5/11/2007	PA1	PA1	8	10.4	1.6	18.4
CS051107-003	5/11/2007	PA1	PA1	17	10.4	-0.7	20.7

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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS051107-003	C4024 303C2 PA1A1-1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS051107-003	No Field Notes

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

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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 8.0

Removable Beta Smear Sample Analysis Results

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Removable Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Statistical Summary

	dpm/100cm2
Mean	-16.3
Median	-15.2
Standard Deviation	21.4
Range	77.4
Minimum	-53.9
Maximum	23.5

Number of Measurements

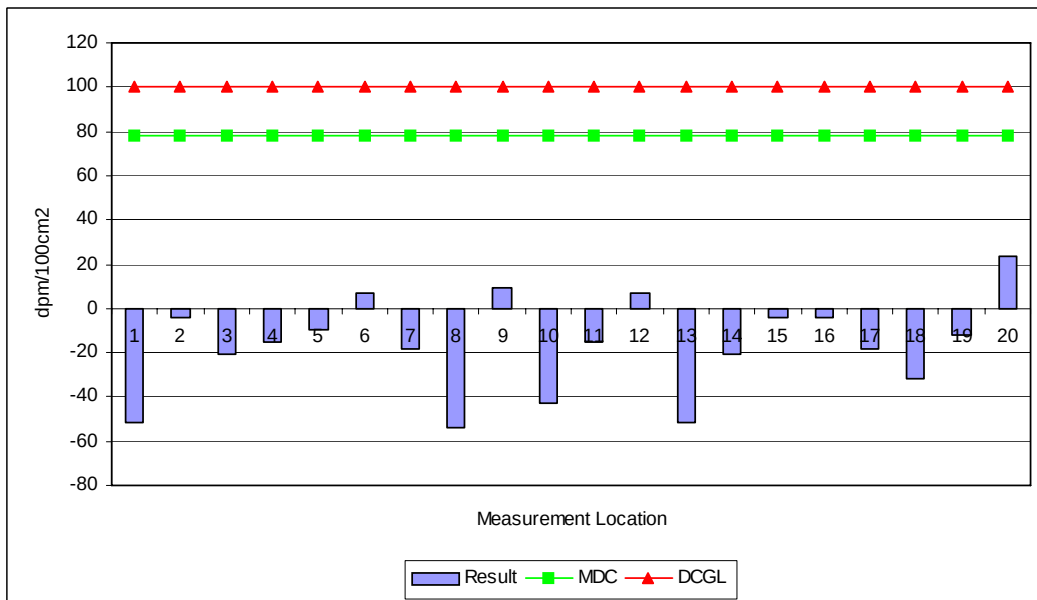
No. Prescribed	20
No. Collected	20

Measurement Sensitivity

	dpm/100cm2
MDC Mean	77.8
MDC Minimum	77.8
MDC Maximum	77.8
DCGL	100.0

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Beta Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS051107-003	5/11/2007	PA1	PA1	19	77.8	-51.2	151
CS051107-003	5/11/2007	PA1	PA1	10	77.8	-4.2	104
CS051107-003	5/11/2007	PA1	PA1	11	77.8	-20.7	121
CS051107-003	5/11/2007	PA1	PA1	12	77.8	-15.2	115
CS051107-003	5/11/2007	PA1	PA1	13	77.8	-9.7	110
CS051107-003	5/11/2007	PA1	PA1	14	77.8	6.9	93
CS051107-003	5/11/2007	PA1	PA1	15	77.8	-18.0	118
CS051107-003	5/11/2007	PA1	PA1	16	77.8	-53.9	154
CS051107-003	5/11/2007	PA1	PA1	1	77.8	9.7	90
CS051107-003	5/11/2007	PA1	PA1	18	77.8	-42.9	143
CS051107-003	5/11/2007	PA1	PA1	9	77.8	-15.2	115
CS051107-003	5/11/2007	PA1	PA1	2	77.8	6.9	93
CS051107-003	5/11/2007	PA1	PA1	20	77.8	-51.2	151
CS051107-003	5/11/2007	PA1	PA1	3	77.8	-20.7	121
CS051107-003	5/11/2007	PA1	PA1	4	77.8	-4.2	104
CS051107-003	5/11/2007	PA1	PA1	5	77.8	-4.2	104
CS051107-003	5/11/2007	PA1	PA1	6	77.8	-18.0	118
CS051107-003	5/11/2007	PA1	PA1	7	77.8	-31.8	132
CS051107-003	5/11/2007	PA1	PA1	8	77.8	-12.4	112
CS051107-003	5/11/2007	PA1	PA1	17	77.8	23.5	77

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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 303C2 Paved Yard Area and Slabs Remaining Around SETF

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS051107-003	C4024 303C2 PA1A1-1.xls	Ludlum	M2929	118419	3/5/2007	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS051107-003	No Field Notes

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

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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 9.0

Sample Analysis Results

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

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Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Survey Package Number: C4024 303C2
Unit Name: SETF Structures and Surfaces

Isotope	Soil Concentration (pCi/g)					Comments		
	Mean	Std. Dev.	Range		Mean MDC			
			Minimum	Maximum				
						No. Results	No. Detect	No. Non-detect
Am-241	0.009	0.005	0.005	0.012	0.064	2	0	2
Co-60	0.186	0.232	0.022	0.350	0.138	2	1	1
Cs-134	0.049	0.059	0.007	0.090	0.155	2	0	2
Cs-137	0.470	0.395	0.190	0.749	0.126	2	1	1
Eu-152	1.124	1.452	0.097	2.150	0.159	2	2	0
Eu-154	0.095	0.078	0.040	0.150	0.135	2	0	2
Fe-55	-4.750	2.758	-6.700	-2.800	14.500	2	0	2
H-3	2.170	2.899	0.120	4.220	0.940	2	1	1
K-40	15.080	1.669	13.900	16.260	1.410	2	2	0
Mn-54	0.028	0.045	-0.004	0.060	0.123	2	0	2
Na-22	0.021	0.013	0.011	0.030	0.130	2	0	2
Ni-63	2.250	3.323	-0.100	4.600	6.800	2	0	2
Pu-238	-0.003	0.002	-0.004	-0.001	0.048	2	0	2
Pu-239/240	0.018	0.012	0.009	0.026	0.036	2	0	2
Pu-241	-0.150	0.212	-0.300	0.000	2.550	2	0	2
Sr-90	0.168	0.019	0.154	0.181	0.093	2	2	0
Th-228	0.540	0.156	0.430	0.650	0.250	2	2	0
Th-232	0.450	0.085	0.390	0.510	0.069	2	2	0
U-234	0.394	0.059	0.352	0.435	0.008	2	2	0
U-235	0.047	0.007	0.042	0.052	0.010	2	2	0
U-238	0.378	0.060	0.335	0.420	0.009	2	2	0

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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7/12/2007

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 10.0

Photographs

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

7/12/2007

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		



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

7/12/2007

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

Section 11.0

Supplemental Information and/or Data

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

7/12/2007

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 303C2	Paved Yard Area and Slabs Remaining Around SETF		

There was no additional supplemental information and/or data.

Appendix A

Section	Survey Package	Survey Unit Description
4.0		SETF Activated Test Cells
4.1	C4024 102C1	SGTCC Test Cell B-104
4.2	C4024 101C1	SGTCC Test Cell B-102

Appendix A

Section	Survey Package	Survey Unit Description
4.0		SETF Activated Test Cells
4.1	C4024 102C1	SGTCC Test Cell B-104
4.1.1	C4024 102C1	Survey Results for SGTCC Test Cell B-104
4.1.2	C4024 102C1	Survey Results for Core Bore Samples
4.1.3	C4024 102C1	Survey Results for Storage Tubes and Sumps

Appendix A

Section	Survey Package	Survey Unit Description
4.0		SETF Activated Test Cells
4.1	C4024 102C1	SGTCC Test Cell B-104
4.1.1	C4024 102C1	Survey Results for SGTCC Test Cell B-104

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Direct Alpha Measurement Results
5.0	Contact Gamma Exposure Rate Measurement Results
6.0	Removable Alpha Smear Sample Analysis Results
7.0	Removable Beta Smear Sample Analysis Results
8.0	Sample Analysis Results
9.0	Photographs
10.0	Supplemental Information and/or Data

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 1.0

Data Analysis Report Parameters

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

7/13/2007

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Data Analysis Report Parameters

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Survey Group: C - Radiological Survey of Impacted Facility Surfaces & Structures

Survey Area: 4024 - SETF, Building 4024

Unit Classification: 1 - Impacted Class 1 Structure

MARSSIM FSS Survey Unit Size (M²): 100

Survey Unit: 02 - SGTCC Test Cell B-104

Survey Reason: C1 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	WU1	Upper Wall Surfaces	
	WL1	Lower Wall Surfaces	
	FL1	Floor Surface	
	CL1	Ceiling surfaces (including back surfaces)	
		Total Area	

Materials: Code Description

C1 - Concrete

M1 - Metal

Report Information:

Report Pedigree: Final Report

Detector Efficiency: 2-Pi

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 2.0

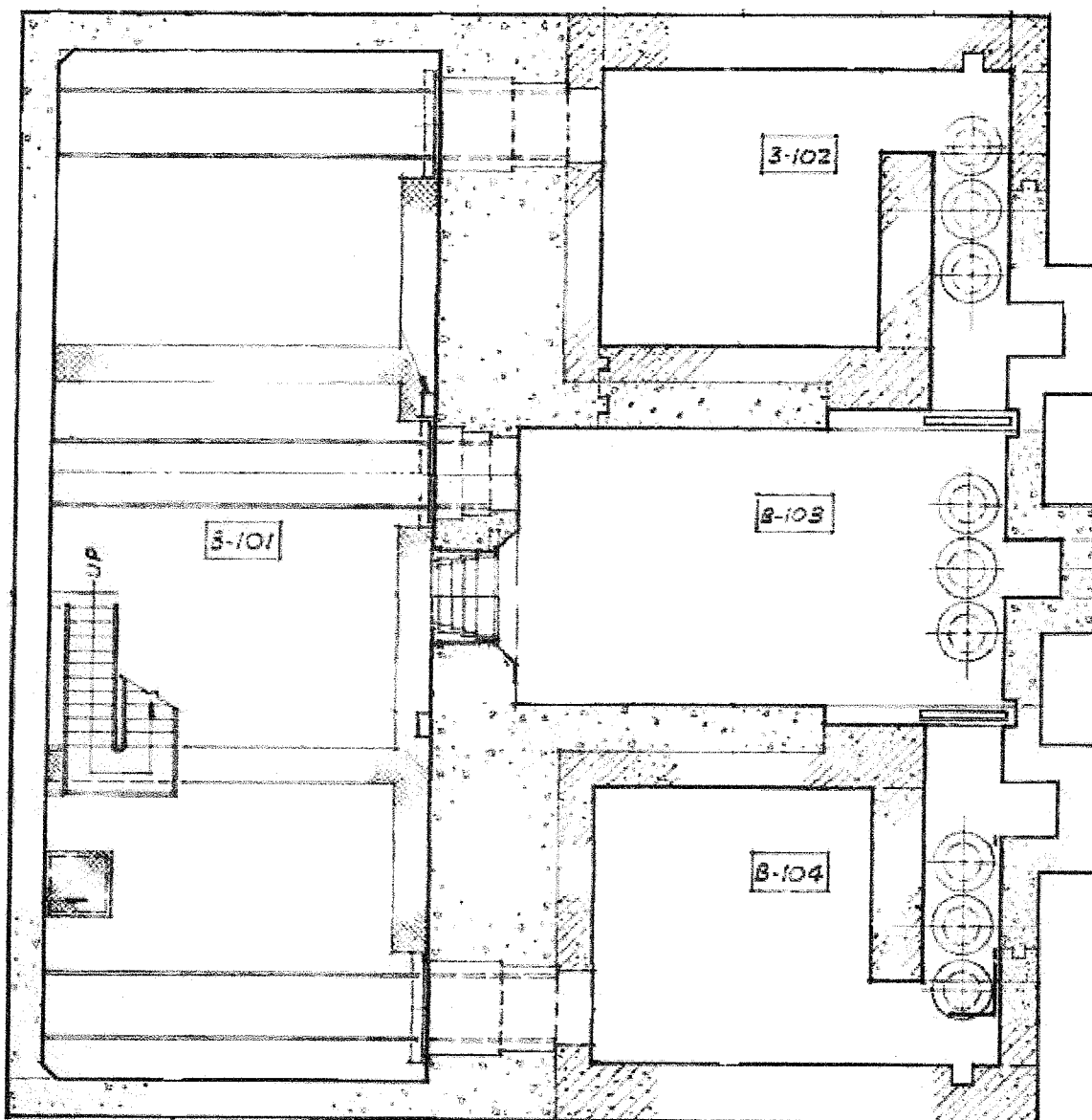
Annotated Drawings

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

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Survey Package Appendix A – Drawings



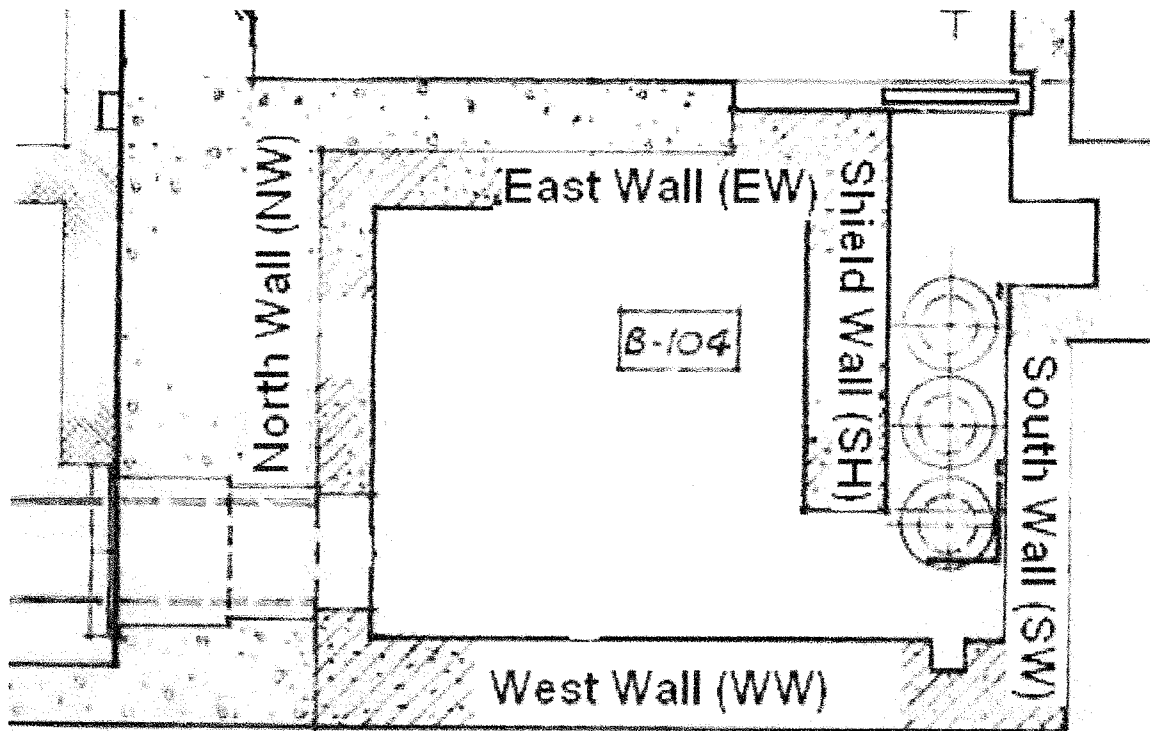
SETF, Basement Floor Plan (SGTCC)

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Survey Package Appendix A – Drawings

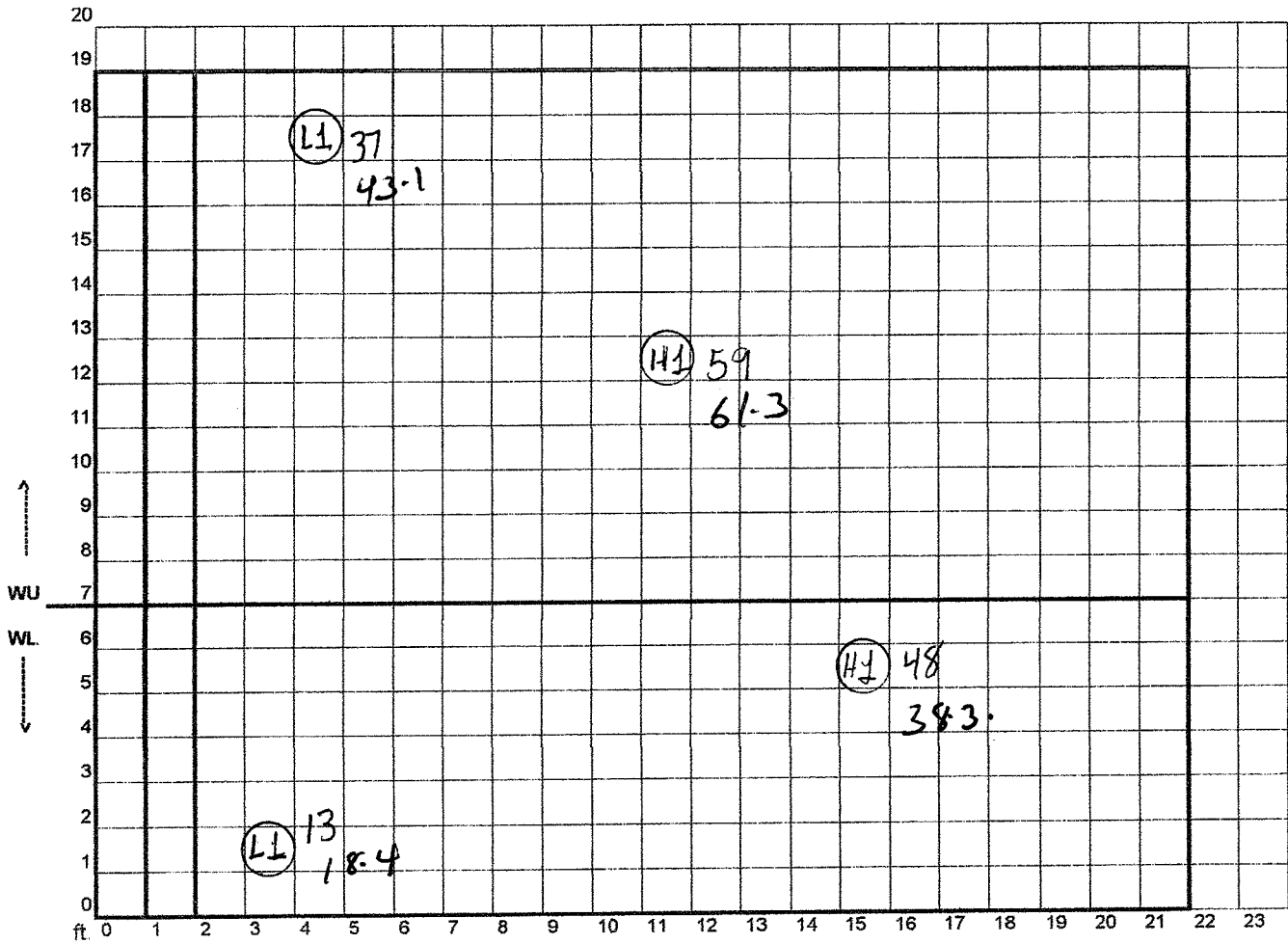


SGTCC Room B-104
West Wall (L5=WW)

4/23/2007

SGTCC Room B-104

West Wall (L5=WW)



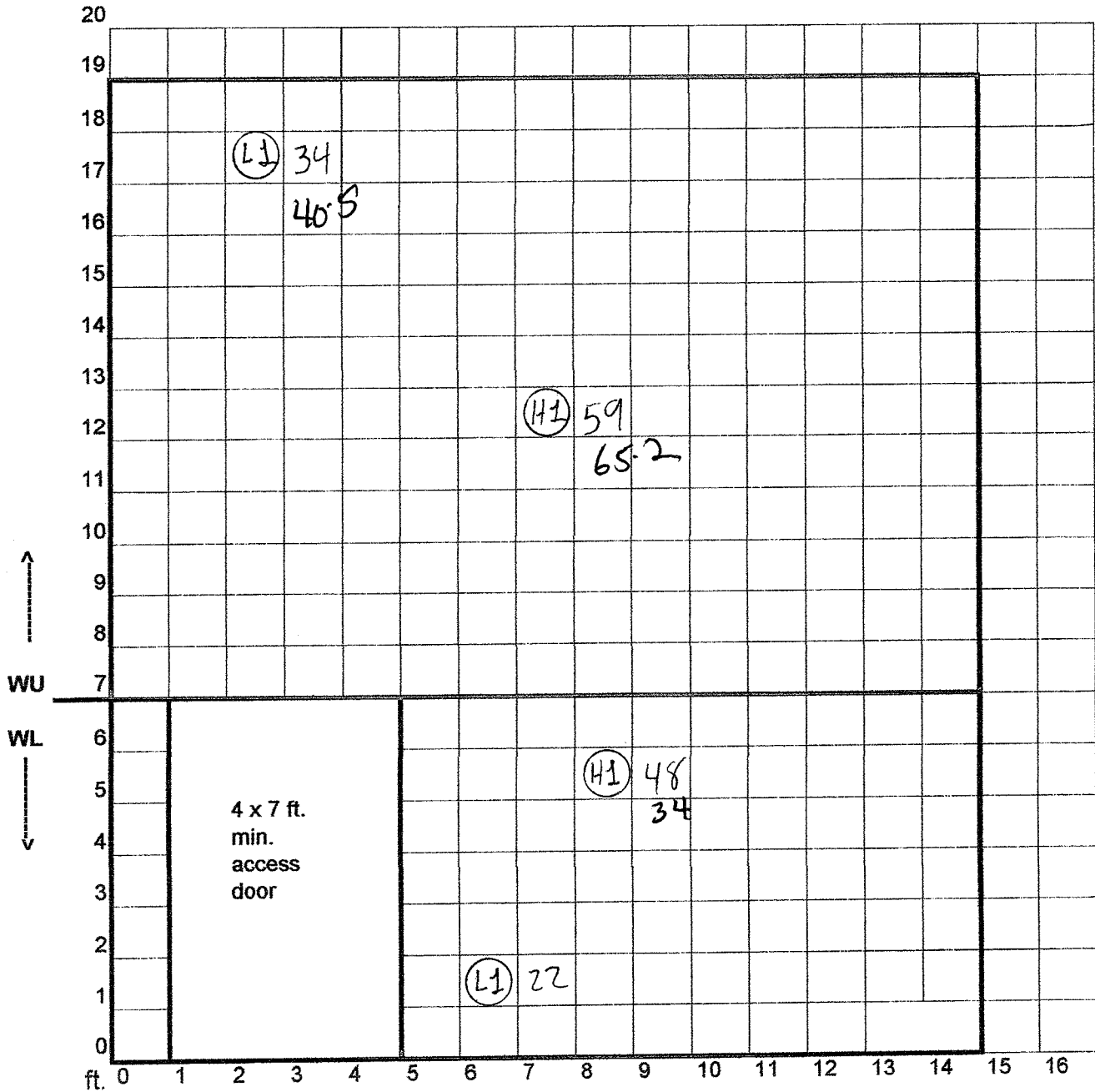
Note all readings
are $\mu R/hr$

SGTCC Room B-104
North Wall (L5=NW)

4/23/2007

SGTCC Room B-104

North Wall (L5=NW)



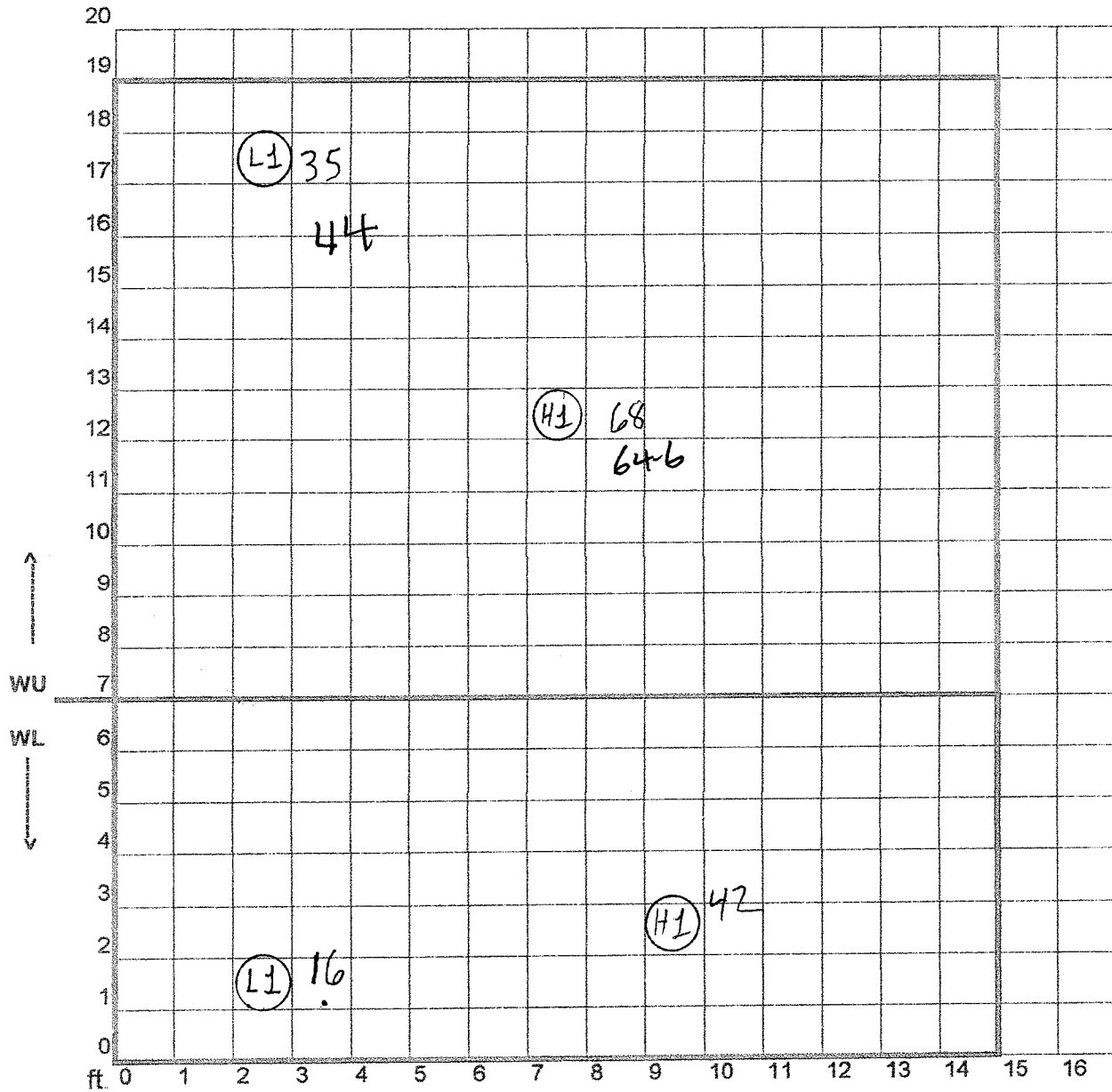
Note all readings
are $\nu R/hr$

SGTCC Room B-104
East Wall (L5=EW)

4/26/2007

SGTCC Room B-104

East Wall (L5=EW)

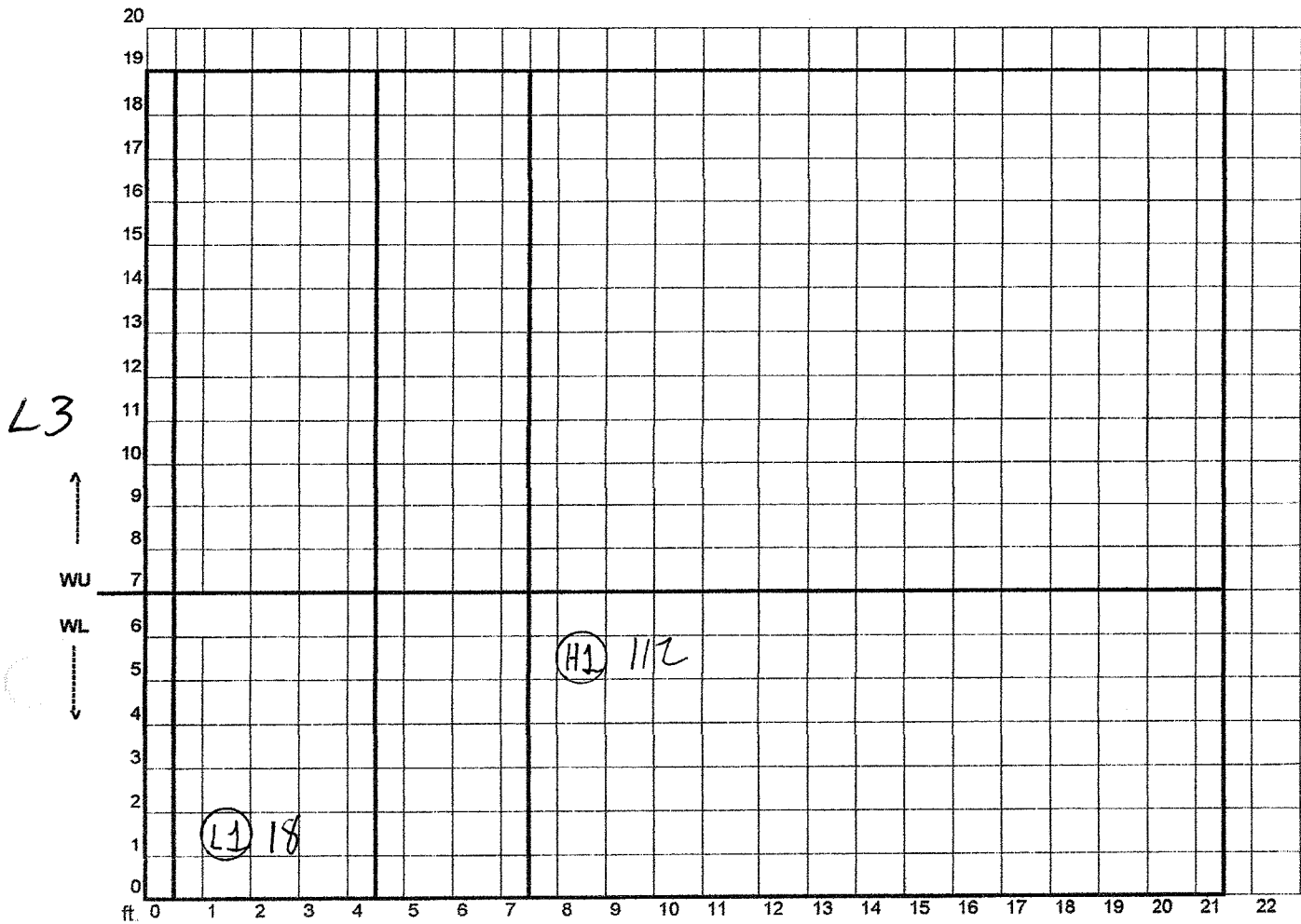


Note all readings
are $\mu R/hr$

SGTCC Room B-104
South Wall (L5=SW)

4/23/2007

SGTCC Room B-104
South Wall (L5=SW)



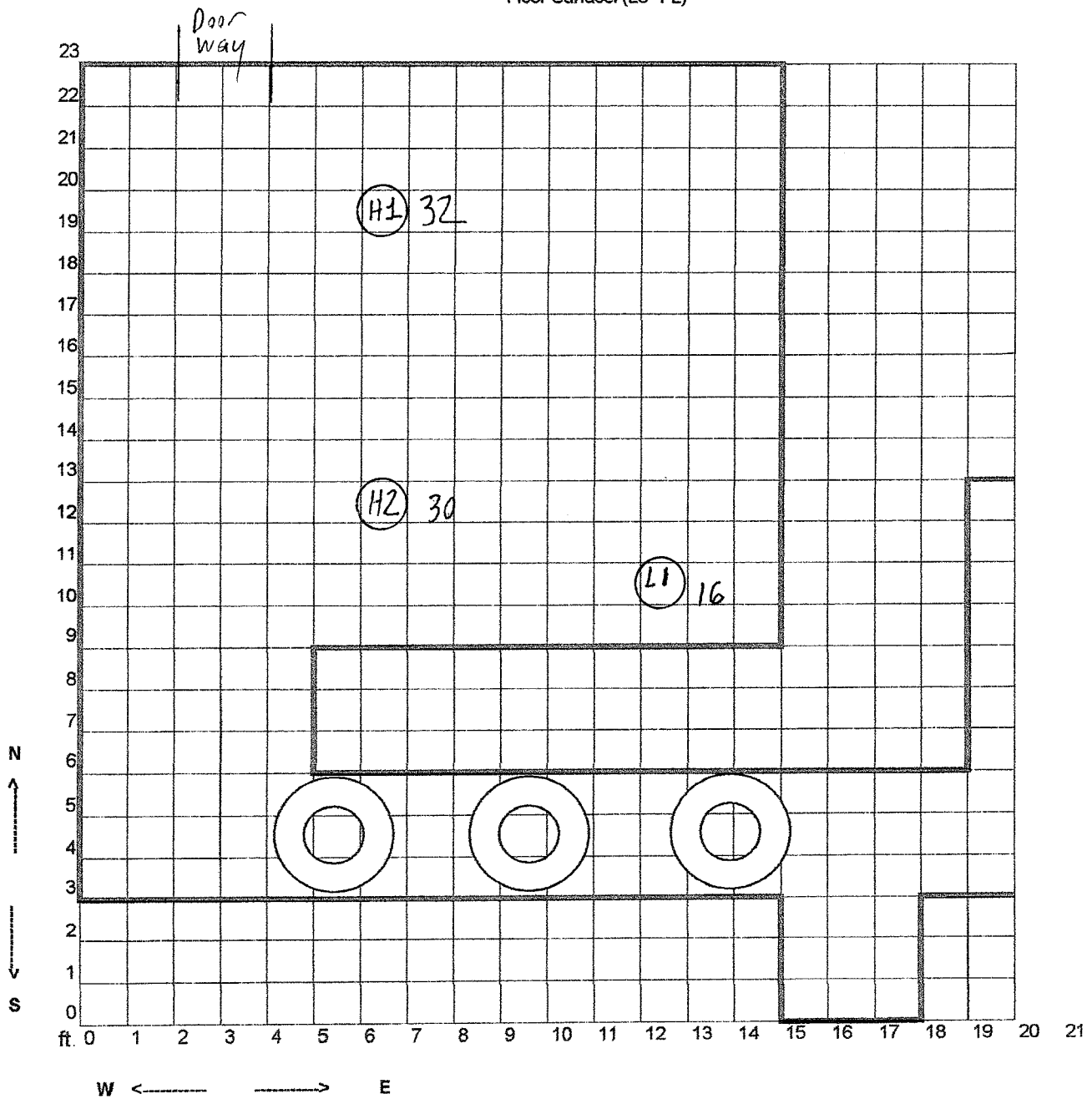
Note all readings
are $\mu R/hr$

SGTCC Room B-104
Floor Surface (L5=FL)

4/23/2007

SGTCC Room B-104

Floor Surface (L5=FL)

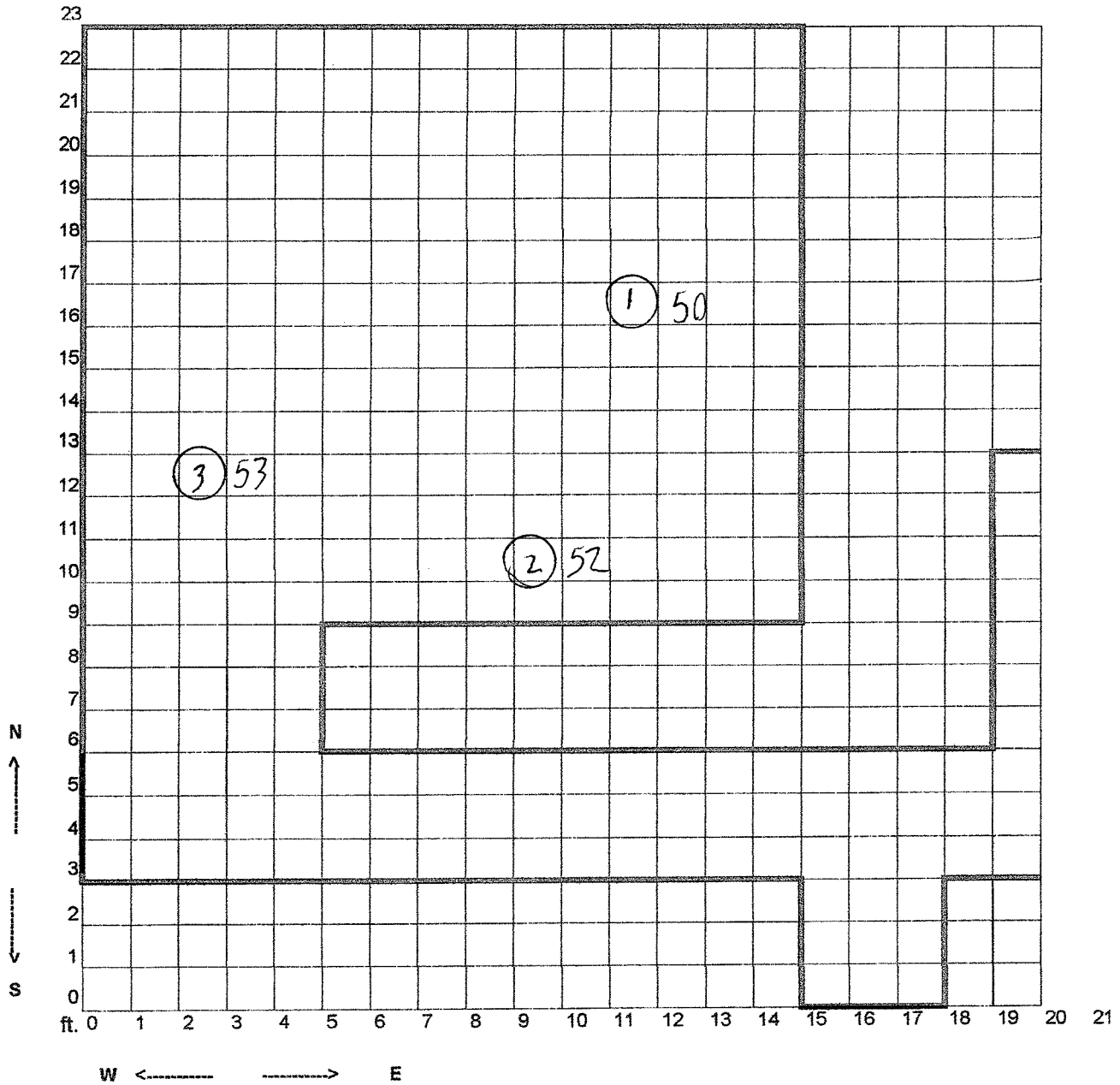


SGTCC Room B-104
Ceiling Surface (L5=CL)

4/23/2007

SGTCC Room B-104

Ceiling Surface (L5=CL)



All readings are
uR/hr

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 3.0

Direct Beta Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

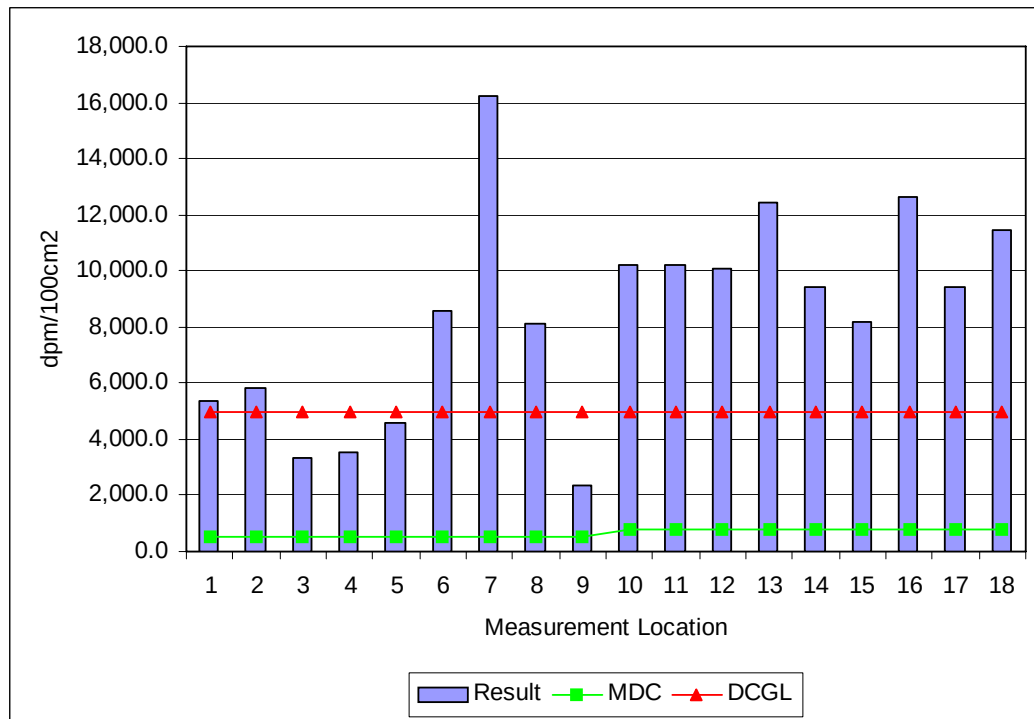
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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	8,439.3	Ave. MDC	652.2	Ave. MDC < 50% DCGL	Yes
Median	8,978.0	Ave. Background	1,422.0	Measurements < DCGL	No
Standard Deviation	3,702.4	Maximum Bkg.	1,422.0	Measurement Mean < DCGL	No
Range	13,904.0	DCGL	5000	No. Measurements > DCGL	14
Minimum	2,327.3	Number of Measurements			
Maximum	16,231.3	No. Prescribed	18		
		No. Collected	18		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL042507-002	4/23/2007	FL1M1	H1	1	6,773.3	544.8	1,422.0	5,351.3	-351.3
DL042507-002	4/23/2007	FL1M1	H1	2	7,253.3	544.8	1,422.0	5,831.3	-831.3
DL042507-002	4/23/2007	FL1M1	L1	3	4,768.0	544.8	1,422.0	3,346.0	1,654.0
DL042507-002	4/23/2007	WL1M1	EWL1	7	4,933.3	544.8	1,422.0	3,511.3	1,488.7
DL042507-002	4/23/2007	WL1M1	EWL2	8	6,026.7	544.8	1,422.0	4,604.7	395.3
DL042507-002	4/23/2007	WL1M1	NWH1	5	9,973.3	544.8	1,422.0	8,551.3	-3,551.3
DL042507-002	4/23/2007	WL1M1	SHW1	6	17,653.3	544.8	1,422.0	16,231.3	-11,231.3
DL042507-002	4/23/2007	WL1M1	WWH1	4	9,546.7	544.8	1,422.0	8,124.7	-3,124.7
DL042507-002	4/23/2007	WL1M1	WWL1	9	3,749.3	544.8	1,422.0	2,327.3	2,672.7
DL042507-006	4/25/2007	CL1M1	CL1	1	11,626.7	759.7	1,422.0	10,204.7	-5,204.7
DL042507-006	4/25/2007	CL1M1	CL1	2	11,626.7	759.7	1,422.0	10,204.7	-5,204.7
DL042507-006	4/25/2007	CL1M1	ECL	1	11,520.0	759.7	1,422.0	10,098.0	-5,098.0
DL042507-006	4/25/2007	WU1M1	EW	1	13,866.7	759.7	1,422.0	12,444.7	-7,444.7
DL042507-006	4/25/2007	WU1M1	EW	2	10,826.7	759.7	1,422.0	9,404.7	-4,404.7
DL042507-006	4/25/2007	WU1M1	NW	1	9,600.0	759.7	1,422.0	8,178.0	-3,178.0
DL042507-006	4/25/2007	WU1M1	NW	2	14,026.7	759.7	1,422.0	12,604.7	-7,604.7
DL042507-006	4/25/2007	WU1M1	WW	1	10,826.7	759.7	1,422.0	9,404.7	-4,404.7
DL042507-006	4/25/2007	WU1M1	WW	2	12,906.7	759.7	1,422.0	11,484.7	-6,484.7

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL042507-002	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742
DL042507-006	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.5	2,185
M1	Metal	Metal, Bare or Painted	0.5	1,422

Field Notes Summary

Download ID: Field Notes
DL042507-002 Replacement download for DL042307-002
DL042507-006 None

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 4.0

Direct Alpha Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

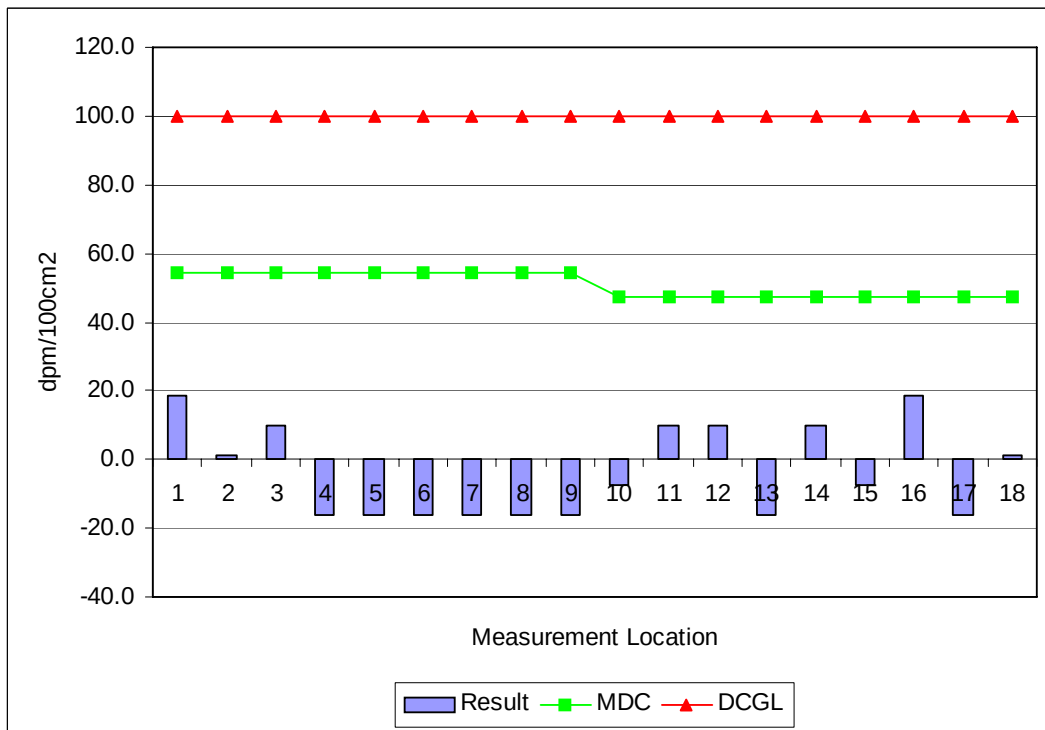
713/2007

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	-3.5	Ave. MDC	50.7	Ave. MDC < 50% DCGL	No
Median	-7.4	Ave. Background	16.0	Measurements < DCGL	Yes
Standard Deviation	13.3	Maximum Bkg.	16.0	Measurement Mean < DCGL	Yes
Range	34.6	DCGL	100	No. Measurements > DCGL	0
Minimum	-16.0	Number of Measurements			
Maximum	18.6	No. Prescribed	18		
		No. Collected	18		



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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL042507-001	4/23/2007	FL1M1	H1	1	34.6	54.2	16.0	18.6	81.4
DL042507-001	4/23/2007	FL1M1	H2	1	17.3	54.2	16.0	1.3	98.7
DL042507-001	4/23/2007	FL1M1	L1	1	25.9	54.2	16.0	9.9	90.1
DL042507-001	4/23/2007	WL1M1	EWL1	1	0.0	54.2	16.0	-16.0	116.0
DL042507-001	4/23/2007	WL1M1	EWL2	2	0.0	54.2	16.0	-16.0	116.0
DL042507-001	4/23/2007	WL1M1	NWH1	1	0.0	54.2	16.0	-16.0	116.0
DL042507-001	4/23/2007	WL1M1	SHWL1	1	0.0	54.2	16.0	-16.0	116.0
DL042507-001	4/23/2007	WL1M1	WWH1	1	0.0	54.2	16.0	-16.0	116.0
DL042507-001	4/23/2007	WL1M1	WWL	1	0.0	54.2	16.0	-16.0	116.0
DL042507-004	4/24/2007	CL1M1	CLE1	1	8.6	47.3	16.0	-7.4	107.4
DL042507-004	4/24/2007	CL1M1	CLS1	1	25.9	47.3	16.0	9.9	90.1
DL042507-004	4/24/2007	CL1M1	CLW1	1	25.9	47.3	16.0	9.9	90.1
DL042507-004	4/24/2007	WU1M1	EWH1	1	0.0	47.3	16.0	-16.0	116.0
DL042507-004	4/24/2007	WU1M1	EWL1	1	25.9	47.3	16.0	9.9	90.1
DL042507-004	4/24/2007	WU1M1	NWH1	1	8.6	47.3	16.0	-7.4	107.4
DL042507-004	4/24/2007	WU1M1	NWL1	1	34.6	47.3	16.0	18.6	81.4
DL042507-004	4/24/2007	WU1M1	WWH1	1	0.0	47.3	16.0	-16.0	116.0
DL042507-004	4/24/2007	WU1M1	WWL1	1	17.3	47.3	16.0	1.3	98.7

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL042507-001	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061
DL042507-004	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.25	29
M1	Metal	Metal, Bare or Painted	0.25	16

Field Notes Summary

Download ID:	Field Notes
DL042507-001	Replacement download for DL042307-001
DL042507-004	Survey performed on 4/24/07, Instrument downloaded 4/25/07.

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

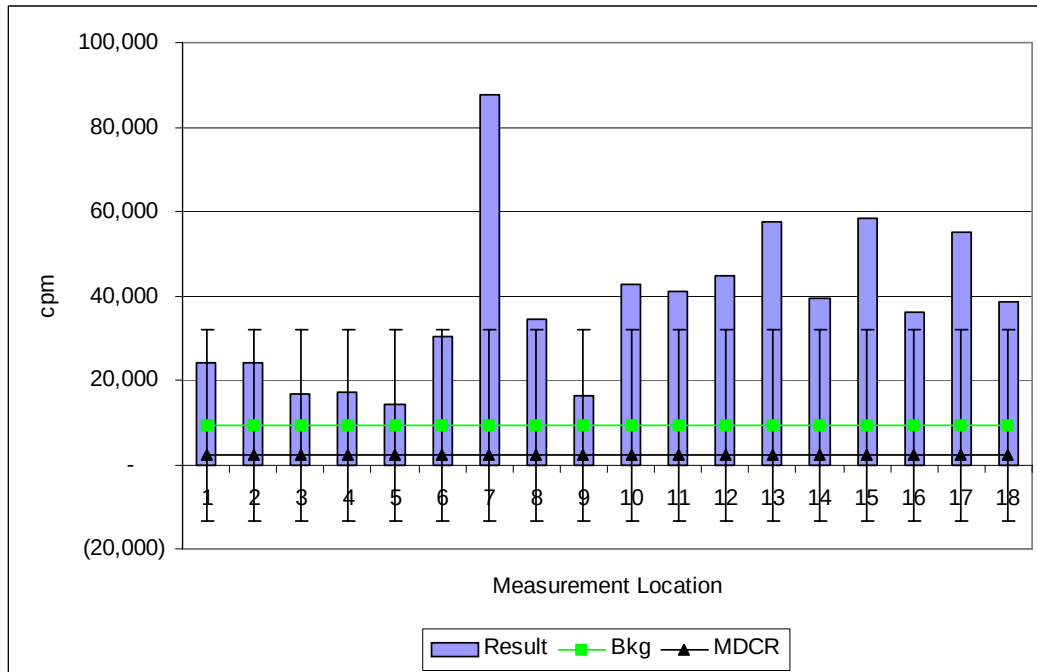
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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	37,669	Ave. Background	9,381	Ave. MDCR < 50% Bkg.	Yes
Median	37,350	3 sigma Value	22,602	Measurements < Ave. Bkg.	No
Standard Deviation	18,789	Maximum Bkg.	9,381	Measurement Mean < Ave. Bkg.	No
Range	73,400	Ave. MDCR	2,075	No. Measurements > Ave. Bkg.	18
Minimum	14,100	Number of Measurements			
Maximum	87,500	No. Prescribed	18		
		No. Collected	18		



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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL042507-003	4/23/2007	FL1M1	H1	1	9,381	2,075	23,950	-14,569
DL042507-003	4/23/2007	FL1M1	H2	2	9,381	2,075	23,950	-14,569
DL042507-003	4/23/2007	FL1M1	L1	1	9,381	2,075	16,900	-7,519
DL042507-003	4/23/2007	WL1M1	EWL1	1	9,381	2,075	17,150	-7,769
DL042507-003	4/23/2007	WL1M1	EWL1	2	9,381	2,075	14,100	-4,719
DL042507-003	4/23/2007	WL1M1	NWH1	1	9,381	2,075	30,400	-21,019
DL042507-003	4/23/2007	WL1M1	SHW1	1	9,381	2,075	87,500	-78,119
DL042507-003	4/23/2007	WL1M1	WWH1	1	9,381	2,075	34,250	-24,869
DL042507-003	4/23/2007	WL1M1	WWL1	1	9,381	2,075	16,450	-7,069
DL042507-005	4/24/2007	CL1M1	CLE1	1	9,381	2,075	42,750	-33,369
DL042507-005	4/24/2007	CL1M1	CLS1	1	9,381	2,075	40,950	-31,569
DL042507-005	4/24/2007	CL1M1	CLW1	1	9,381	2,075	44,700	-35,319
DL042507-005	4/24/2007	WU1M1	EWL1	1	9,381	2,075	57,500	-48,119
DL042507-005	4/24/2007	WU1M1	EWL1	1	9,381	2,075	39,300	-29,919
DL042507-005	4/24/2007	WU1M1	NWH1	1	9,381	2,075	58,500	-49,119
DL042507-005	4/24/2007	WU1M1	NWL1	1	9,381	2,075	36,200	-26,819
DL042507-005	4/24/2007	WU1M1	WWH1	1	9,381	2,075	55,000	-45,619
DL042507-005	4/24/2007	WU1M1	WWL1	1	9,381	2,075	38,500	-29,119

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL042507-003	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061
DL042507-005	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
M1	Metal	Metal, Bare or Painted	9,381

Field Notes Summary

Download ID	Field Notes
DL042507-003	Replacement download for DL042307-003
DL042507-005	Survey performed on 4/24/07, Instrument downloaded 4/25/07.

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 6.0

Removable Alpha Smear Sample Analysis Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

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Removable Alpha Measurement Results

Survey Area LC1: C4024 Package Type: Structure
 Survey Area Name: SETF, Building 4024
 Survey Package Number and Unit Name:
 C4024 102C1 SGTCC Test Cell B-104

Statistical Summary

dpm/100cm2

Mean	-0.4
Median	-1.0
Standard Deviation	1.1
Range	2.3
Minimum	-1.0
Maximum	1.3

Measurement Sensitivity

dpm/100cm2

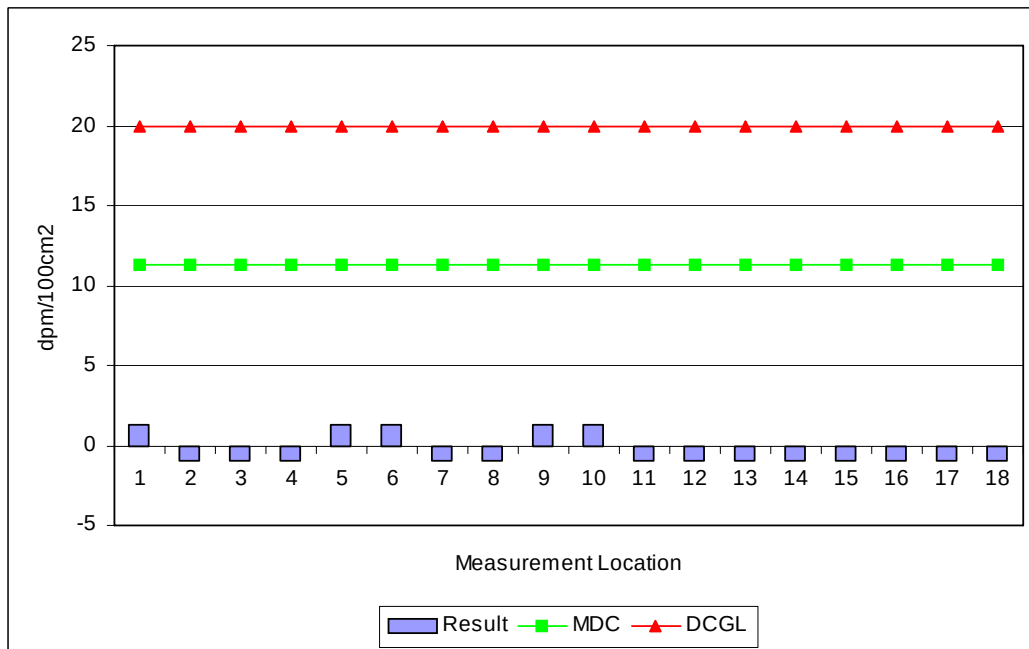
MDC Mean	11.3
MDC Minimum	11.3
MDC Maximum	11.3
DCGL	20.0

Number of Measurements

No. Prescribed	18
No. Collected	18

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Alpha Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS042307-001	4/23/2007	FL1	FL1	H1	11.3	1.3	18.7
CS042307-001	4/23/2007	FL1	FL2	H2	11.3	-1.0	21.0
CS042307-001	4/23/2007	FL1	FL3	L1	11.3	-1.0	21.0
CS042307-002	4/23/2007	WL1	SWL	H1	11.3	-1.0	21.0
CS042307-002	4/23/2007	WL1	EWL	L1	11.3	1.3	18.7
CS042307-002	4/23/2007	WL1	NWL	H1	11.3	1.3	18.7
CS042307-002	4/23/2007	WL1	WWL	H1	11.3	-1.0	21.0
CS042307-002	4/23/2007	WL1	WWL	L1	11.3	-1.0	21.0
CS042307-002	4/23/2007	WL1	EWL	L2	11.3	1.3	18.7
CS043007-001	4/24/2007	WU1	EW	H1	11.3	1.3	18.7
CS043007-001	4/24/2007	WU1	EW	L1	11.3	-1.0	21.0
CS043007-001	4/24/2007	WU1	NW	H1	11.3	-1.0	21.0
CS043007-001	4/24/2007	WU1	NW	L1	11.3	-1.0	21.0
CS043007-001	4/24/2007	WU1	WW	H1	11.3	-1.0	21.0
CS043007-001	4/24/2007	WU1	WW	L1	11.3	-1.0	21.0
CS043007-002	4/24/2007	CL1	CL3	3	11.3	-1.0	21.0
CS043007-002	4/24/2007	CL1	CL1	1	11.3	-1.0	21.0
CS043007-002	4/24/2007	CL1	CL2	2	11.3	-1.0	21.0

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

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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS042307-001	C4024 102C1 FL1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS042307-002	C4024 102C1 WL1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS043007-001	C4024 102C1 WU1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS043007-002	C4024 102C1 CL1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS042307-001	No Field Notes
CS042307-002	No Field Notes
CS043007-001	No Field Notes
CS043007-002	No Field Notes

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 7.0

Removable Beta Smear Sample Analysis Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

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Removable Beta Measurement Results

Survey Area LC1: C4024 Package Type: Structure
 Survey Area Name: SETF, Building 4024
 Survey Package Number and Unit Name:
 C4024 102C1 SGTCC Test Cell B-104

Statistical Summary

	dpm/100cm2
Mean	-10.6
Median	-8.3
Standard Deviation	16.4
Range	63.6
Minimum	-34.6
Maximum	29.0

Number of Measurements

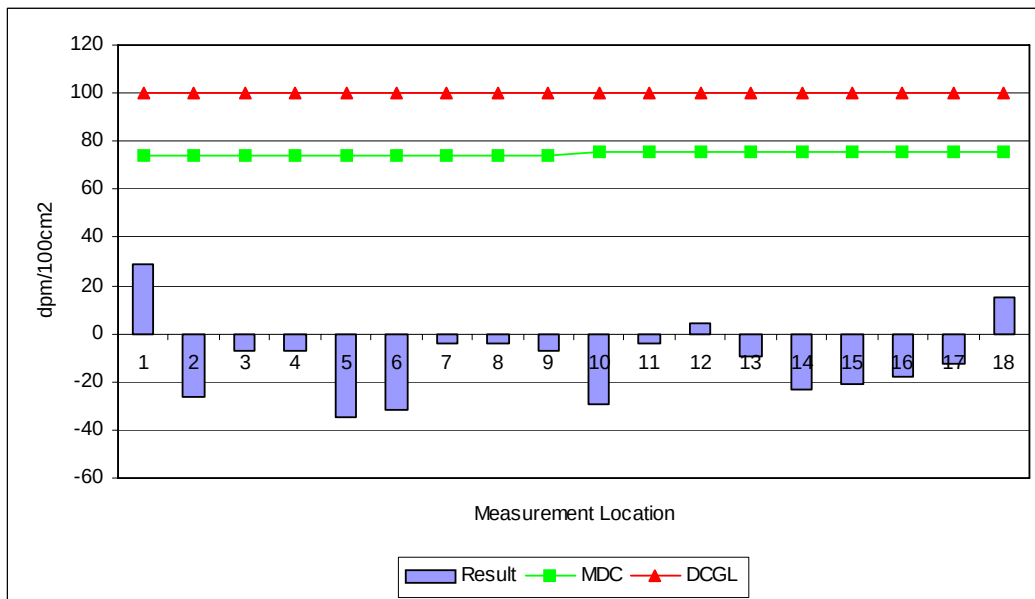
No. Prescribed	18
No. Collected	18

Measurement Sensitivity

	dpm/100cm2
MDC Mean	74.9
MDC Minimum	74.9
MDC Maximum	75.9
DCGL	100.0

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Beta Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS042307-001	4/23/2007	FL1	FL1	H1	73.9	29.0	71
CS042307-001	4/23/2007	FL1	FL2	H2	73.9	-26.3	126
CS042307-001	4/23/2007	FL1	FL3	L1	73.9	-6.9	107
CS042307-002	4/23/2007	WL1	SWL	H1	73.9	-6.9	107
CS042307-002	4/23/2007	WL1	EWL	L1	73.9	-34.6	135
CS042307-002	4/23/2007	WL1	NWL	H1	73.9	-31.8	132
CS042307-002	4/23/2007	WL1	WWL	H1	73.9	-4.2	104
CS042307-002	4/23/2007	WL1	WWL	L1	73.9	-4.2	104
CS042307-002	4/23/2007	WL1	EWL	L2	73.9	-6.9	107
CS043007-001	4/24/2007	WU1	EW	H1	75.9	-29.0	129
CS043007-001	4/24/2007	WU1	EW	L1	75.9	-4.2	104
CS043007-001	4/24/2007	WU1	NW	H1	75.9	4.2	96
CS043007-001	4/24/2007	WU1	NW	L1	75.9	-9.7	110
CS043007-001	4/24/2007	WU1	WW	H1	75.9	-23.5	124
CS043007-001	4/24/2007	WU1	WW	L1	75.9	-20.7	121
CS043007-002	4/24/2007	CL1	CL3	3	75.9	-18.0	118
CS043007-002	4/24/2007	CL1	CL1	1	75.9	-12.4	112
CS043007-002	4/24/2007	CL1	CL2	2	75.9	15.2	85

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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS042307-001	C4024 102C1 FL1.xls	Ludlum	M2929	118419	3/5/2007	JLM3848
CS042307-002	C4024 102C1 WL1.xls	Ludlum	M2929	118419	3/5/2007	JLM3848
CS043007-001	C4024 102C1 WU1.xls	Ludlum	M2929	118419	3/5/2007	JLM3848
CS043007-002	C4024 102C1 CL1.xls	Ludlum	M2929	118419	3/5/2007	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS042307-001	No Field Notes
CS042307-002	No Field Notes
CS043007-001	No Field Notes
CS043007-002	No Field Notes

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 8.0

Sample Analysis Results

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Refer to core sample evaluation section for isotopic analysis results.

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 9.0

Photographs

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		



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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		



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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

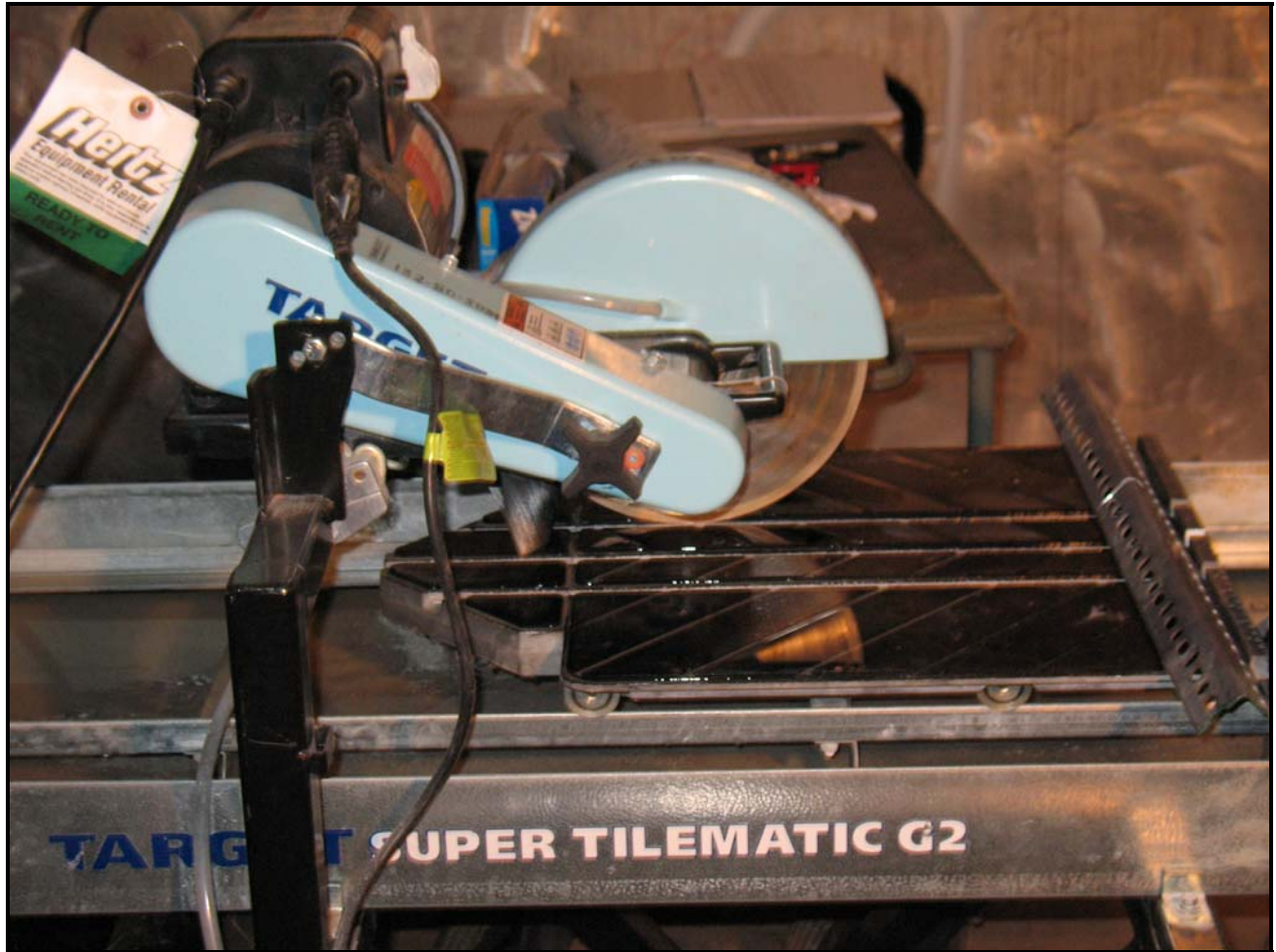


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CANOGA PARK, CALIFORNIA**

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		



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7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		



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7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:	C4024 102C1	SGTCC Test Cell B-104	

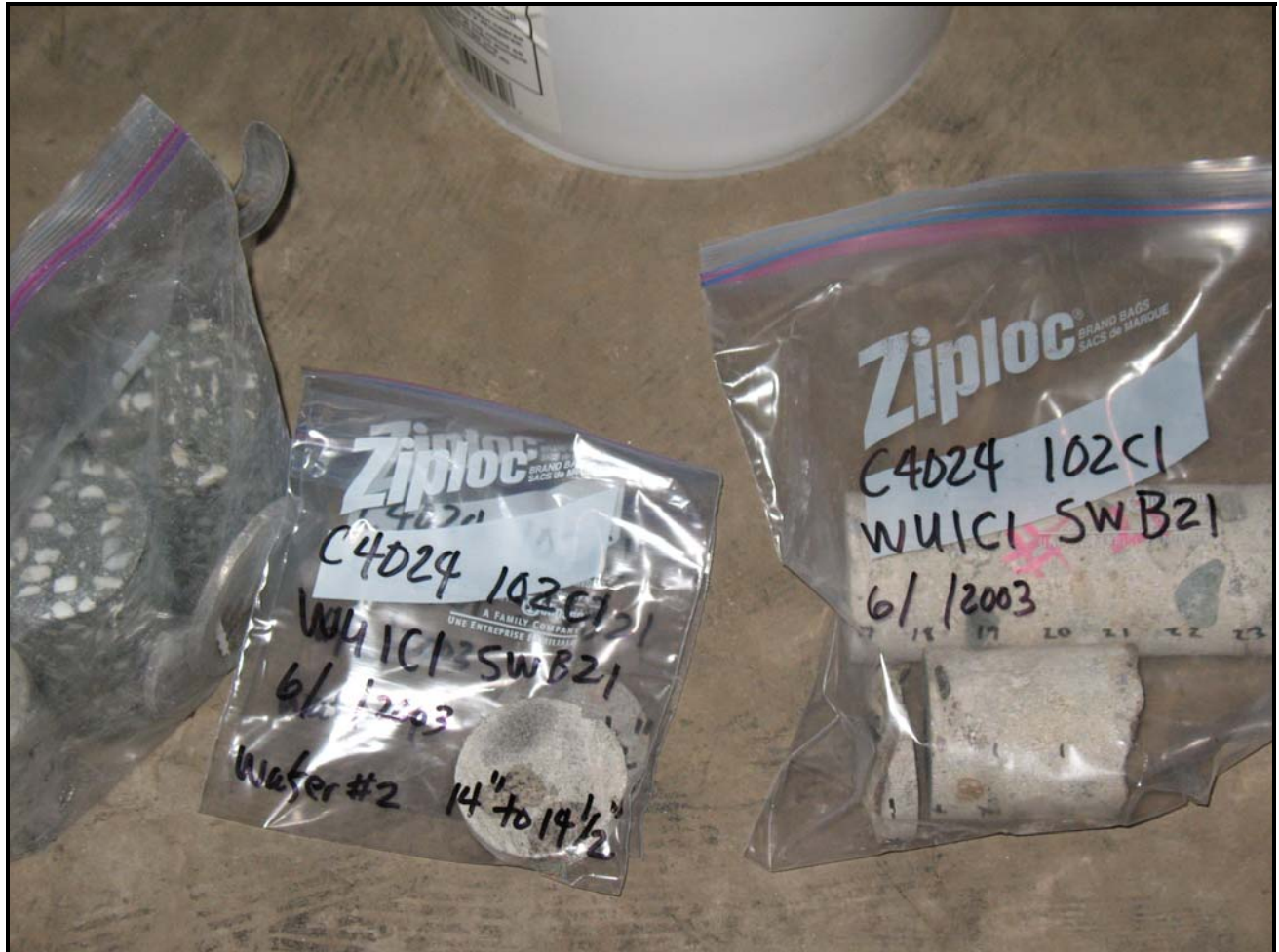


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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		



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

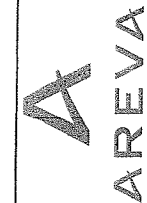
7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 10.0

Supplemental Information and/or Data



JOB HAZARD ASSESSMENT

Project: Santa Susana Field Laboratory SETF Decommissioning

Specific Task: Confirmatory Survey in Cell Area

Major Steps in the Job Task:

Obtain existing core samples from previous concrete cores drilled within the two reactor test cells, and slice cores into wafers.

Perform additional core samples by drilling in area necessary to establish activation depth and characterization of the cells and slice newly drilled cores into wafers at specified thicknesses.

Move and setting up of equipment; wet saw, core drill, the cores themselves and elevated work platform.

Scissor lift(s) or scaffolding may be utilized to access to elevated areas.

Most Significant Hazards of the Activity:

Operation of power tools and possible elevated work platform areas

Injury Prevention Focus Areas:

Hand/Arm Hazards: keep hands, arms and body parts away from point of operation and rotating equipment. Wear gloves when handling material

(Identify specific controls required to prevent

Back Injuries: Maintain good posture and don't over reach and/or twist with load carried.

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injuries in these frequent injury areas)

Tooling Hazards: Concrete core drill, wet saw, electrical use including extension cords, some hand tools (pinch points, guarding, rotating equipment)

HAZARD ITEM: potential hazards to consider; not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
EYE & FACE HAZARDS: flying particles, chemicals, temperatures, vapors, sparks, splash, particles	☒	☐	keep safe distance from core drill and wet saw	Wear face shield in case core drill cup fractures or concrete spalls/flakes off during both cutting operations.
HAND HAZARDS: sharps, temperatures, hazardous substances, pinch points, specify glove type required	☒	☐	Avoid points of operation and sharp edges created by equipment.	Wear gloves but avoid rotating equipment.
NOISE HAZARDS: hand or power tools, equipment operating in area, compressors, cranes, ambient noise levels	☒	☐	Mitigate loud noise as best we can and perform sound level monitoring. minimize time near the equipment, maximize distance when possible and use sound deadening shielding.	Ear plugs as necessary, post areas over 85 dB.
HEAD HAZARDS: falling objects, bump hazards, electrical	☒	☐	Although minimal hazards by maintaining good control of equipment and materials	Laways wear hard hat.
FOOT HAZARDS: falling, rolling objects, sharp objects	☒	☐	Keep area clean and feet away from pinch points	Wear sturdy leather work boot.
FALL HAZARDS: verify anchor points, prior to use inspection, floor/wall openings, uneven surfaces, trip hazards, written plan, working over water, ladder use	☒	☐	Ensure standard guardrail is properly installed and maintained	Fall harness with rescue plan are last resorts and must have written plan



JOB HAZARD ASSESSMENT

HAZARD ITEM: potential hazards to consider; not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
MANUAL LIFTING and ERGONOMIC HAZARDS: repeated motion, avoid awkward position, proper lifting techniques, back safety, two-person lifts	☒	☐	maintain good posture and use help from other personnel of from equipment i.e. cranes and forklifts.	Gloves and secure loads properly.
CHEMICAL EXPOSURE HAZARDS: review MSDS's, NFPA or HMIS labels, identify PPE required, spill control, waste generation, chemical use permit	☐	☒		
RESPIRATORY HAZARDS: dusts, fumes, oxygen deficient, toxic gas, weld fume, ozone	☒	☐	Wet method and/or local exhaust for possible silica exposure.	Respiratory protection when necessary.
HAZARDOUS MATERIALS CHECKS: PCB, lead, asbestos	☐	☒		
VENTILATION REQUIREMENTS: specify – local exhaust, area exhaust, general dilution, CFM requirements	☐	☒	Negative pressure enclosure, local exhaust.	Respiratory protection when necessary and follow good hygiene practices.
AIR MONITORING REQUIRED: industrial and radiological, area or personal air monitors, list hazards to be sampled	☒	☐	Possible for both radiological and silica potential hazards	Respiratory protection when necessary when negative assessments are needed
ACCESS HAZARDS: walkways clear of hoses, leads, cords, and tools, review layout of work area, consider other work group access to work area	☒	☐	Possible, but maintaining areas clean and following good housekeeping practice	
MECHANICAL MATERIAL HANDLING: qualified forklift operator, pinch points	☐	☒	None identified at this time	
CRANES and RIGGING: qualified operator/rigger, prior to use inspections, rigging inspected, tag lines, designated load director, safe load path, hand signals or radio, headsets	☐	☒	None identified at this time	
SCAFFOLDING: permit required, daily inspections, tagging, qualified erectors and inspectors	☒	☐	Possible for elevated work, use scissor lift when possible.	Fall harness with rescue plan are last resorts and must have written plan
WEATHER HAZARDS: heat/cold extremes, overhead/underfoot snow & ice, wet surfaces, storms, verify weather forecast	☒	☐	Possible but not likely because cell area is well protected and under cover but outside weather can be unpredictable.	Dress appropriately for weather conditions
PRESSURIZED SYSTEMS: pneumatic, hydraulic, pressure test, vacuum, hose/whip restraints	☐	☒	None Identified at this time	
CONFINED SPACE HAZARDS: confined space work permit required, rescue equipment and plan in place	☐	☒	None for this activity have been identified	
HOUSEKEEPING: prevent slips, trips, and falls, maintain area daily, control trash, debris and combustibles	☒	☐	Clean as you go and don't allow excess accumulation of materials.	Wear gloves when handling debris and material.



JOB HAZARD ASSESSMENT

HAZARD ITEM: potential hazards to consider; not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
RESCUE PLAN: access to injured, layout, stage equipment for rescue, written plan required, coordination with control room and emergency team	☒	☐	Use of stairs and contact Boeing Fire/security in extreme emergency.	Will be determined, always bring flashlight into the pit in case of power outage and maintain buddy system
FIRE/COMBUSTIBLE HAZARDS: hot work/combustible material permit, welding, grinding, combustible material storage, explosion hazards	☐	☒	None identified at this time.	
WELDING, CUTTING, AND GRINDING: chromium (VI) exposure control plan (see page 4), weld fume, ventilation, PPE requirements	☐	☒	None identified at this time.	
ELECTRICAL HAZARDS: energized electrical work permit, grounding protection, GFCI, power lines, cords, cable runs	☒	☐	Proper placement of cord and equipment and inspect devices each time it is used	Electrical trees/stands to keep cord off the ground and out of harms way.
LOCKOUT/TAGOUT: electrical, hydraulic, pneumatic energy sources, pressurized systems, follow site requirements	☐	☒	None identified at this time. Boeing will perform LOTO for facility equipment and AREVA will do their own equipment as necessary	
COMMUNICATION DIFFICULTIES: noise interference, radio use, hand signals, 3-way communication, phonetic alphabet	☒	☐	Possible but not likely at this time but we may have to	TBD
TOOL HAZARDS: guards, pinch and nip points, rotating parts, training required, authorization use only	☒	☐	Possible, however we should be able to avoid pinch points and "caught by/into" situations	Maintain guards and tools in good condition including dead men switches as necessary.
WORK PRACTICES: policy and procedure compliance	☒	☐	Always use industry safe work practices.	Provide thorough and comprehensive job briefs
MULTI DEPARTMENT INTERFACE: Security Impact, Radiation Protection Impact, Operations Impact, QA, Safety and Health	☐	☒		
ENVIRONMENTAL HAZARD: hazardous waste generation, environmental impact, water runoff, sampling needed	☐	☒		
RADIATION HAZARDS: RWP required, ALARA review required, dose rates, contamination levels, reference RWP	☒	☐	Practice ALARA, keeping exposure As Low As Reasonably Achievable.	
POSTING NEEDED: barricades, signs, barrier ribbons	☒	☐	Attempt to limit exposure As Low As Reasonably Achievable.	Radiation and noise posting and protective measures possible

JOB HAZARD ASSESSMENT

HAZARD ITEM: <i>potential hazards to consider; not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
FME PLAN REQUIRED: <i>written plan, log equipment and tools in/out, drop log, lanyards for tools and PPE, PPE restrictions</i>	☐	☒		
Additional Controls (add additional pages, if necessary)				

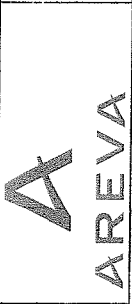
Additional Controls (add additional pages, if necessary)

Chromium (VI) Exposure Control Plan for Welding and Grinding Operations: N/A

Welding Method: n/a	Base Metal: n/a	Electrode Type: n/a
Has air monitoring been previously performed for this activity?	YES	NO
If YES, list monitoring results: no		(If NO, Contact Safety Department to determine controls and specify below.)
If YES, was any special ventilation required?	YES	NO
If YES, was respiratory protection required for this activity?	YES	NO
Is protective clothing required?	YES	NO
Have employees completed Chromium (VI) training?	YES	NO
Have employees completed Chromium (VI) medical surveillance?	YES	NO
Have employees completed respirator medical, training, and fit test?	YES	NO
Others requirements: TBD		N/A

Industry Events, Operating Experience, and/or Lessons Learned Applicable to Work Activity or Site:

[illegible]



JOB HAZARD ASSESSMENT

[Handwritten signature]

Task Lead/Supervisor:

Date:

4/23/07

[Handwritten signature]

Safety Engineer:

Date:

4-23-07

Pre-Job Brief Attendance

Subject Survey Package C4024 101C1 Date Given: 4/23/07

ATTENDEES:

[illegible]



JOB HAZARD ASSESSMENT

Project: Santa Susana Field Laboratory SETF Decommissioning

Specific Task: Obtain Additional Core Samples

Major Steps in the Job Task:

Set up core drill to obtain additional concrete cores samples from within the two reactor test cells.

Perform additional core samples by drilling in area necessary to establish activation depth and characterization of the cells and slice newly drilled cores into wafers at specified thicknesses.

Set up enclosure work area within cells.

Set up water collection berm/dam.

Move core samples into enclosure.

Most Significant Hazards of the Activity:

Installation and operation of Core Drill with safety cable retainer. Material and equipment handling, including cores. Electrical hazard potential because the cells are aluminum lined and the saw will use water. Loss of power (i.e. breaker trip, accidental disconnect, power failure/outage) could drop the core drill and base from the wall or ceiling if it's early in the plunge of the bit. Later, when the core bit is in deep, loss of power (i.e. breaker trip, accidental disconnect, power failure/outage) would allow the vacuum base to come loose and spin around the bit until the motor stops. Additionally a loss of lighting would an expected outcome from loss of power. It is essential that supplemental battery source lighting is immediately available. The first thing during loss of lighting is stay still and don't panic until it is safe to do so. Place area the area in a safe condition, notify supervision (if they are unaware) and follow instruction.

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Injury Prevention Focus Areas:

Hand/Arm Hazards: Keep hands, arms, body parts and loose clothing away rotating shaft of drill. Keep clear of point of operation and the core bit drum may become very hot. Wear gloves when handling material and equipment and always use safety cable retainer when drilling on walls or ceilings and stay clear of the vacuum base in case it comes loose (walls, ceiling and floors). Special care in setting up electrical equipment and supply/extension cords. Always disconnect drill motor from power supply when working on the tool. If personnel need to place their face within 3 feet (arms length) they must wear a face shield to protect personnel from the potential of flying material (i.e. concrete/aggregate pieces, core cup fracture/failure).

(Identify specific controls required to prevent

Back Injuries: Maintain good posture and don't over reach and/or twist with load carried.

injuries in these frequent injury areas)

Tooling Hazards: Concrete core drill including vacuum pump and water pump supplemental lighting, electrical use including extension cords.

(Pinch points, guarding, and rotating equipment)

HAZARD ITEM: <i>potential hazards to consider; not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
EYE & FACE HAZARDS: <i>flying particles, chemicals, temperatures, vapors, sparks, splash, particles</i>	☒	☐	Keep unprotected skin and face a safe distance from drill bit and cup during operation.	Wear face shield and guard skins (i.e. gloves, long sleeves) if the unprotected areas of the body are within three feet off the point of operation, while core drill is in operation cutting.
HAND HAZARDS: <i>sharps, temperatures, hazardous substances, pinch points, specify glove type required</i>	☒	☐	Avoid points of operation and sharp edges. Drill bit and cup will become hot during drilling/cutting of concrete cores.	Wear work gloves but avoid rotating equipment.



JOB HAZARD ASSESSMENT

HAZARD ITEM: potential hazards to consider; not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
NOISE HAZARDS: hand or power tools, equipment operating in area, compressors, cranes, ambient noise levels	☐	☒	Loud noise in not anticipated during core drilling operation, how ever should it prove to be louder than expected we will mitigate loud noise as best we can and minimize time near the equipment, maximize distance when possible.	Ear plugs as necessary, post areas over 85 dB. Anytime you need to raise your voice to be heard
HEAD HAZARDS: falling objects, bump hazards, electrical	☒	☐	Although minimal hazards by maintaining good control of equipment and materials	Always wear hard hat.
FOOT HAZARDS: falling, rolling objects, sharp objects	☒	☐	Keep area clean and feet away from pinch points	Wear sturdy leather work boot.
FALL HAZARDS: verify anchor points, prior to use inspection, floor/wall openings, uneven surfaces, trip hazards, written plan, working over water, ladder use	☒	☐	Fall hazards are a potential because some coring activities will require elevated work however, we will use aerial lift as extensively as possible.	Always stay within platform guardrail and if the activity can not be performed from the aerial lift,
MANUAL LIFTING and ERGONOMIC HAZARDS: repeated motion, avoid awkward position, proper lifting techniques, back safety, two-person lifts	☒	☐	Maintain good posture and use help from other personnel of from equipment i.e. cranes and forklifts.	Gloves and secure loads properly.
CHEMICAL EXPOSURE HAZARDS: review MSDS's, NFPA or HMIS labels, identify PPE required, spill control, waste generation, chemical use permit	☐	☒		
RESPIRATORY HAZARDS: dusts, fumes, oxygen deficient, toxic gas, weld fume, ozone	☒	☐	Wet method should mitigate possible silica exposure. Local exhaust as necessary may also be employed if the dust proves to be excessive to further reduce possible silica exposure.	Respiratory protection when necessary.
HAZARDOUS MATERIALS CHECKS: PCB, lead, asbestos	☐	☒		
VENTILATION REQUIREMENTS: specify – local exhaust, area exhaust, general dilution, CFM requirements	☐	☒	Negative pressure enclosure, local exhaust only as necessary.	Respiratory postection when necessary and follow good hygiene practices.
AIR MONITORING REQUIRED: industrial and radiological, area or personal air monitors, list hazards to be sampled	☒	☐	Possible for both radiological and silica potential hazards. Initially Low volume area samples.	Respiratory postection only when necessary.
ACCESS HAZARDS: walkways clear of hoses, leads, cords, and tools, review layout of work area, consider other work group access to work area	☒	☐	Possible, but maintaining areas clean and following good houskeeping practice	
MECHANICAL MATERIAL HANDLING: qualified forklift operator, pinch points	☐	☒	None identified at this time	



JOB HAZARD ASSESSMENT

HAZARD ITEM: potential hazards to consider; not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
CRANES and RIGGING: qualified operator/rigger, prior to use inspections, rigging inspected, tag lines, designated load director, safe load path, hand signals or radio, headsets	☐	☒	None identified at this time	
SCAFFOLDING: permit required, daily inspections, tagging, qualified erectors and inspectors	☒	☐	Possible for elevated work, use scissor lift when possible.	Fall harness with rescue plan as necessary
WEATHER HAZARDS: heat/cold extremes, overhead/underfoot snow & ice, wet surfaces, storms, verify weather forecast	☒	☐	Possible but not likely because cell area is well protected and under cover but outside weather can be unpredictable.	Dress appropriately for weather conditions
PRESSURIZED SYSTEMS: pneumatic, hydraulic, pressure test, vacuum, hose/whip restraints	☐	☒	none identified at this time	
CONFINED SPACE HAZARDS: confined space work permit required, rescue equipment and plan in place	☐	☒	None for this activity have been identified	
HOUSEKEEPING: prevent slips, trips, and falls, maintain area daily, control trash, debris and combustibles	☒	☐	Clean as you go and don't allow to much accumulation of materials.	Wear glove when handling debris and material.
RESCUE PLAN: access to injured, layout, stage equipment for rescue, written plan required, coordination with control room and emergency team	☒	☐	Rescue plan in place of stairs and contact Boeing Fire/security in extreme emergency.	Will be determined, always bring flashlight into the pit in case of power outage and maintain buddy system
FIRE/COMBUSTIBLE HAZARDS: hot work/combustible material permit, welding, grinding, combustible material storage, explosion hazards	☐	☒	None identified at this time.	
WELDING, CUTTING, AND GRINDING: chromium (VI) exposure control plan (see page 4), weld fume, ventilation, PPE requirements	☐	☒	None identified at this time.	
ELECTRICAL HAZARDS: energized electrical work permit, grounding protection, GFCI, power lines, cords, cable runs	☒	☐	Proper placement of cord and equipment and inspect devices each time it is used	Electrical trees/stands to keeps cord off the ground and out of harms way.
LOCKOUT/TAGOUT: electrical, hydraulic, pneumatic energy sources, pressurized systems, follow site requirements	☐	☒	None identified at this time. Boeing will perform LOTO for facility equipment and AREVA will do their own equipment as necessary	
COMMUNICATION DIFFICULTIES: noise interference, radio use, hand signals, 3-way communication, phonetic alphabet	☒	☐	Possible but not likely at this time but we may have to employ alternate	The buddy system and immediate assess to a radio to initiate assistance/emergency response additional actions TBD.



JOB HAZARD ASSESSMENT

HAZARD ITEM: potential hazards to consider; not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
TOOL HAZARDS: guards, pinch and nip points, rotating parts, training required, authorization use only	☒	☐	Possible, however we should be able to avoid pinch points and "caught by/into" situations	Maintain guards and tools in good condition including dead men switches as necessary.
WORK PRACTICES: policy and procedure compliance	☒	☐	Always use industry safe work practices.	Provide thorough and comprehensive job briefs
MULTI DEPARTMENT INTERFACE: Security Impact, Radiation Protection Impact, Operations Impact, QA, Safety and Health	☐	☒		
ENVIRONMENTAL HAZARD: hazardous waste generation, environmental impact, water runoff, sampling needed	☐	☒		
RADIATION HAZARDS: RWP required, ALARA review required, dose rates, contamination levels, reference RWP	☒	☐	Practice ALARA, keeping exposure As Low As Reasonably Achievable, read and sign Radiation Work Permit (RWP).	As Instructed
POSTING NEEDED: barricades, signs, barrier ribbons	☒	☐	Attempt to limit exposure As Low As Reasonably Achievable.	Radiation and noise posting and protective measures possible
FME PLAN REQUIRED: written plan, log equipment and tools in/out, drop log, lanyards for tools and PPE, PPE restrictions	☐	☒		

Additional Controls (add additional pages, if necessary)

Chromium (VI) Exposure Control Plan for Welding and Grinding Operations:

Welding Method: n/a	Base Metal: n/a	Electrode Type: n/a
Has air monitoring been previously performed for this activity?	YES	NO
If YES, list monitoring results: no		
If YES, was any special ventilation required?	YES	NO
If YES, was respiratory protection required for this activity?	YES	NO
Is protective clothing required?	YES	NO
Have employees completed Chromium (VI) training?	YES	NO
Have employees completed Chromium (VI) medical surveillance?	YES	NO

JOB HAZARD ASSESSMENT

Others requirements: TBD

Industry Events, Operating Experience, and/or Lessons Learned Applicable to Work Activity or Site:

Don McLean

4/26/07



4-26-07

Pre-Job Brief Attendance

Subject Core Drilling Additional Samples Date Given: 4-26-07

ATTENDEES:

ATTENDEES:

Bridge II

[illegible]

APPENDIX B RADIATION WORK PERMIT

RWP Number: AREVA-07-002		REV. 01		Requested by: McGehee	
Work to be Performed: Characterization of SGTCC, direct surveys, core boring and sectioning of cores					
Location: Facility: Building: 4024 Room: Test Cells Area: interior surfaces					
Training Requirements: ☒ GET ☒ Rad Worker ☐ Respiratory Protection ☐ Other _____					
Bioassay Requirements: ☐ <i>In Vivo</i> (WBC) ☐ <i>In Vitro</i> ☐ fecal ☒ urinalysis					
HP Support: ☐ Initial (pre-job) ☒ Intermittent ☐ Continuous ☐ Other					
Required Radiological Surveillance: ☒ Contamination ☒ Exposure ☐ Other ☒ Airborne (specify type) ☐ BZA ☒ general area ☐ gooseneck BZA ☐ Other					
Radiological Conditions					
Contamination (dpm/100cm ²)		Airborne		Radiation (mrem/hr)	
alpha: avg. <20 max. survey # Historical Data	beta/gamma: avg. <100 max. survey # Historical Data	μ Ci/ml α μ Ci/ml β survey #	General area: .005-.012 survey # 07-01 thru 07-04	Highest Contact: 0.7 survey # 07-01 thru 07-04	
PPE and Monitoring Requirements					
☐ Hood ☐ Skull Cap ☐ Other _____		Shoe Covers ☐ Rubber ☒ Disposable ⁽¹⁾ ☐ Cotton		Respiratory ☐ Full Face (APR) ☐ Air Line ☐ PAPR ☐ BZA ☐ Other Note:	
Coveralls ☐ Cotton ☐ Plastic ☐ Tyvek ☒ Pro-tec ⁽¹⁾ ☐ Other _____		Gloves ☒ Surgical ⁽¹⁾ ☐ Rubber ☒ Other ⁽²⁾		Dosimetry ☒ TLD ☐ SRD ☐ ED ED Alarm Setpoints: Rate mRem/hr Total mRem ☐ Extremity (location(s)):	
Special Instructions: ⁽¹⁾ Required for core boring and sectioning cores. Core boring and sectioning of cores to be performed in posted CA and access limited to individuals working under this RWP. Area(s) to be surveyed for loose contamination after coring/cutting operations are complete and posted accordingly. Intermittent air samples to be collected. ⁽²⁾ Work Gloves					
RWP Hold Point(s) (Work will be suspended if any of the following conditions are encountered): Contamination is found outside of posted area(s) and /or airborne activity >0.25 DAC.					
ALARA Review Required: ☐ YES ☒ NO RP Supervisor (print) Pete Huntley (signature)					
Estimated Person-Hours: 200			Estimated Person-Rem: <0.1		
Prepared by: (print) Don McGee (signature)			Date: 04/23/07		
Approved by: (print) Pete Huntley (signature)			Date: 04/23/07		
			Date:		
Effective Date: 04/23/07			Expiration Date: 05/31/07		
Terminated by: (print) (signature)			Date:		

Table 3: Europium-152 Results

Core	Location	Sample #	Ending Depth Inches	Isotope	Activity pCi/g	Error pCi/g	MDA pCi/g	Detect
1	East Cell, East Wall-1992	024030001A	1	Eu-152	3.451E+01	1.462E+00	7.26E-01	
1	East Cell, East Wall-1992	024030001B	1	Eu-152	3.231E+01	1.344E+00	5.11E-01	
1	East Cell, East Wall-1992	024030002A	16	Eu-152	1.165E-01	N/A	2.33E-01	ND
1	East Cell, East Wall-1992	024030003A	30	Eu-152	4.390E-02	N/A	8.78E-02	ND
1	East Cell, East Wall-1992	024030003B	30	Eu-152	4.955E-02	N/A	9.91E-02	ND
1	East Cell, East Wall-1992	024030003B	30	Eu-152	3.615E-02	N/A	7.23E-02	ND
1	Behind East Cell, East Wall-1992	024030004	38	Eu-152	5.700E-02	N/A	1.14E-01	ND
1	Behind East Cell, East Wall-1992	024030004C	38	Eu-152	1.304E-01	N/A	5.80E-03	
1	East Cell, East Wall-1992	024030002B	16	Eu-152	1.075E-01	N/A	2.15E-01	ND
1	East Cell, East Wall-1992	024030002C	16	Eu-152	4.113E-01	2.318E-02	2.54E-02	
2	East Cell, Floor	024030005A	1	Eu-152	2.260E+01	9.18E-01	4.04E-01	
2	East Cell, Floor	024030005B	1	Eu-152	3.723E+01	1.51E+00	7.72E-01	
3	East Cell, North Wall-High	024030009A	1	Eu-152	1.688E+01	8.072E-01	4.751E-01	
3	East Cell, North Wall-High	024030009B	1	Eu-152	1.625E+01	7.862E-01	4.646E-01	
4	East Cell, South Wall-High	024030012A	1	Eu-152	3.023E+00	1.281E+00	6.11E-01	
4	East Cell, South Wall-High	024030012B	1	Eu-152	2.705E+00	1.169E+00	7.19E-01	
5	East Cell, Ceiling	024030015A	1	Eu-152	1.388E+01	6.857E-01	4.02E-01	
5	East Cell, Ceiling	024030015B	1	Eu-152	1.387E+01	6.942E-01	4.329E-01	
6	West Cell, West Wall-1992	024030018A	1	Eu-152	2.973E+01	1.260E+00	6.76E-01	
6	West Cell, West Wall-1992	024030018B	1	Eu-152	2.556E+01	1.113E+01	5.098E-01	
6	Behind West Cell, West Wall-1992	024030021	38	Eu-152	6.400E-02	N/A	1.28E-01	ND
7	West Cell, Floor	024030022A	1	Eu-152	2.194E+01	9.943E-01	5.455E-01	
7	West Cell, Floor	024030022B	1	Eu-152	1.834E+01	8.769E-01	5.36E-01	
8	West Cell, South Wall - High	024030026A	1	Eu-152	7.4510E+01	2.805E+00	9.249E-01	
8	West Cell, South Wall - High	024030026B	1	Eu-152	7.758E+01	2.91E+00	1.049E+00	
8	West Cell, South Wall - High	024030027	16	Eu-152	1.480E-01	N/A	2.960E-01	ND
9	West Cell, North Wall - High	024030029A	1	Eu-152	4.566E+01	1.830E+00	7.460E-01	
9	West Cell, North Wall - High	024030029B	1	Eu-152	4.535E+01	1.817E+00	7.620E-01	
9	West Cell, North Wall - High	024030030	16	Eu-152	1.665E-01	N/A	3.330E-01	ND
10	West Cell, Ceiling Shield Plug	024030032A	1	Eu-152	6.750E-02	N/A	1.35E-01	ND
11	Decon Gallery, South Wall	024030035A	1	Eu-152	1.080E-01	N/A	2.16E-01	ND
12	Decon Gallery, Floor	024030038A	1	Eu-152	1.040E-01	N/A	2.08E-01	ND
13	Decon Gallery Floor	024030041	1	Eu-152	1.035E-01	N/A	2.07E-01	ND
14	Decon Gallery, East Wall	024030044	1	Eu-152	9.750E-02	N/A	1.95E-01	ND
15	Decon Gallery, West Wall	024030047	1	Eu-152	1.025E-01	N/A	2.05E-01	ND
16	Operating Gallery Floor	024030050	1	Eu-152	8.400E-02	N/A	1.68E-01	ND
17	Operating Gallery Floor	024030051	1	Eu-152	8.050E-02	N/A	1.61E-01	ND
18	Operating Gallery, North Wall	024030052	1	Eu-152	8.350E-02	N/A	1.67E-01	ND
19	Service Gallery, Floor	024030053	1	Eu-152	8.800E-02	N/A	1.76E-01	ND
20	East Cell Hallway, South Wall	024030054A	1	Eu-152	6.229E+01	2.40E+00	1.11E+00	
20	East Cell Hallway, South Wall	024030054B	1	Eu-152	7.490E+01	2.81E+00	1.06E+00	
20	East Cell Hallway, South Wall	024030055	16	Eu-152	1.110E-01	N/A	2.22E-01	ND
20	East Cell Hallway, South Wall	024030056	27	Eu-152	8.150E-02	N/A	1.63E-01	ND
21	West Cell Hallway, South Wall	024030057A	1	Eu-152	9.452E+01	3.406E+00	1.09E+00	
21	West Cell Hallway, South Wall	024030057B	1	Eu-152	1.051E+02	3.750E+00	9.50E-01	
21	West Cell Hallway, South Wall	024030058	16	Eu-152	3.678E+00	3.076E-01	2.10E-01	
21	West Cell Hallway, South Wall	024030059	24	Eu-152	1.040E-01	N/A	2.08E-01	ND
21	Behind West Cell Hallway, South Wall	024030060	30	Eu-152	2.202E-01	1.290E-02	2.65E-02	2.65E-02

min	3.615E-02		5.800E-03	
max	1.051E+02		3.330E-01	
average	1.823E+01		1.746E-01	

NA in error column indicates sample was < MDA (results entered as 0.5*MDA).

ND = Non-detect.

A = front side, B = backside. There were no significant differences between the two sides, so that method was abandoned.

LC = Long Count time.

1992 in the "Location" column indicates the sample was taken adjacent to one of the hotter 1992 samples.

Eu-152 DCGL = 4.51 pCi/g (Reference 4). MAX MDA < 10% DCGL.

Table 2: Cobalt-60 Results

Core	Location	Sample #	Ending Depth Inches	Isotope	Activity pCi/g	Error pCi/g	MDA pCi/g	Detect
1	East Cell, East Wall-1992	0'024030001A	1	Co-60	2.418E+00	2.581E-01	1.71E-01	
1	East Cell, East Wall-1992	0'024030001B	1	Co-60	2.460E+00	2.533E-01	1.31E-01	
1	East Cell, East Wall-1992	0'024030002A	16	Co-60	7.050E-02	N/A	1.41E-01	ND
1	East Cell, East Wall-1992	0'024030003A	30	Co-60	3.840E-02	N/A	7.68E-02	ND
1	East Cell, East Wall-1992	0'024030003B	30	Co-60	5.050E-02	N/A	1.01E-01	ND
1	Behind East Cell, East Wall-1992	0'024030004	38	Co-60	2.580E-02	N/A	5.16E-02	ND
1	Behind East Cell, East Wall-1992	0'024030004L	38	Co-60	1.965E-03	N/A	3.93E-03	ND
1	East Cell, East Wall-1992	0'024030002B	16	Co-60	6.100E-02	N/A	1.22E-01	ND
1	East Cell, East Wall-1992	0'024030002C	16	Co-60	2.820E-02	6.147E-03	1.36E-02	
2	East Cell, Floor	0'024030005A	1	Co-60	2.135E+00	1.852E-01	1.19E-01	
2	East Cell, Floor	0'024030005B	1	Co-60	3.661E+00	3.204E-01	1.857E+01	ND
3	East Cell, North Wall-High	0'024030009A	1	Co-60	1.310E+00	1.821E-01	1.559E-01	
3	East Cell, North Wall-High	0'024030009B	1	Co-60	1.025E+00	1.781E-01	1.572E-01	
4	East Cell, South Wall-High	0'024030012A	1	Co-60	2.272E+00	2.491E+00	2.23E-01	
4	East Cell, South Wall-High	0'024030012B	1	Co-60	2.155E+00	2.405E+00	2.04E-01	
5	East Cell, Ceiling	0'024030015A	1	Co-60	1.069E+00	1.565E+00	1.58E-01	
5	East Cell, Ceiling	0'024030015B	1	Co-60	9.332E-01	1.489E-01	1.747E-01	
6	West Cell, West Wall-1992	0'024030018A	1	Co-60	2.792E+00	2.78E-01	1.88E-01	
6	West Cell, West Wall-1992	0'024030018B	1	Co-60	2.271E+00	0.02467	1.46E-01	
6	Behind West Cell, West Wall-1992	0'024030021	38	Co-60	3.665E-02	N/A	7.33E-02	ND
7	West Cell, Floor	024030022A	1	Co-60	2.276E+00	2.500E-01	1.518E-01	
7	West Cell, Floor	024030022B	1	Co-60	1.740E+00	2.184E-01	1.87E-01	
8	West Cell, South Wall - High	024030026A	1	Co-60	9.121E+00	6.138E-01	1.568E-01	
8	West Cell, South Wall - High	024030026B	1	Co-60	9.392E+00	6.27E-01	3.04E+00	
8	West Cell, South Wall - High	024030027	16	Co-60	1.040E-01	N/A	2.08E-01	ND
9	West Cell, North Wall - High	024030029A	1	Co-60	5.018E+00	4.107E-01	2.503E-01	
9	West Cell, North Wall - High	024030029B	1	Co-60	4.996E+00	4.068E-01	2.255E-01	
9	West Cell, North Wall - High	024030030	16	Co-60	1.095E-01	N/A	2.190E-01	ND
10	West Cell, Ceiling Shield Plug	024030032A	1	Co-60	7.150E-02	N/A	1.43E-01	ND
11	Decon Gallery, South Wall	024030035A	1	Co-60	7.300E-02	N/A	1.46E-01	ND
12	Decon Gallery, Floor	024030038A	1	Co-60	7.550E-02	N/A	1.51E-01	ND
13	Decon Gallery, Floor	024030041	1	Co-60	7.000E-02	N/A	1.40E-01	ND
14	Decon Gallery, East Wall	024030044	1	Co-60	5.850E-02	N/A	1.17E-01	ND
15	Decon Gallery, West Wall	024030047	1	Co-60	7.750E-02	N/A	1.55E-01	ND
16	Operating Gallery Floor	024030050	1	Co-60	5.850E-02	N/A	1.17E-01	ND
17	Operating Gallery Floor	024030051	1	Co-60	8.250E-02	N/A	1.65E-01	ND
18	Operating Gallery, North Wall	024030052	1	Co-60	7.150E-02	N/A	1.43E-01	ND
19	Service Gallery, Floor	024030053	1	Co-60	7.250E-02	N/A	1.45E-01	ND
20	East Cell Hallway, South Wall	024030054A	1	Co-60	1.350E+00	2.055E-01	1.79E-01	
20	East Cell Hallway, South Wall	024030054B	1	Co-60	1.620E+00	2.28E-01	2.92E-01	
20	East Cell Hallway, South Wall	024030055	16	Co-60	6.950E-02	N/A	1.39E-01	ND
20	East Cell Hallway, South Wall	024030056	27	Co-60	3.905E-02	N/A	7.81E-02	ND
21	West Cell Hallway, South Wall	024030057A	1	Co-60	3.878E+00	3.36E-01	1.95E-01	
21	West Cell Hallway, South Wall	024030057B	1	Co-60	4.002E+00	3.413E-01	1.71E-01	
21	West Cell Hallway, South Wall	024030058	16	Co-60	1.025E-01	N/A	2.05E-01	ND
21	West Cell Hallway, South Wall	024030059	24	Co-60	8.200E-02	N/A	1.64E-01	ND
21	Behind West Cell Hallway, South Wall	024030060	30	Co-60	8.950E-03	N/A	1.79E-02	ND

min	1.965E-03		3.930E-03
max	9.392E+00		2.190E-01
average	1.477E+00		1.259E-01

NA in error column indicates sample was < MDA (results entered as 0.5*MDA).

ND = Non-detect.

A = front side, B = backside. There were no significant differences between the two sides, so that method was abandoned.

LC = Long Count time.

1992 in the "Location" column indicates the sample was taken adjacent to one of the hotter 1992 samples.

Co-60 DCGL = 1.94 pCi/g (Reference 4). MAX MDA ~ 10% DGGL.

Table 1: Core Tracking Log

U = Up (from floor) N=North W=West R=Right LOC = grid locator

Core #	Location	Sample #	Ending Depth Inches	Tracking Numbers	LOC A ft	LOC B ft	Date	Sample Sliced By	Comments
1	East Cell, East Wall-1992	024-03-0001	1	0-1	7' 9" R	5' 1" U	6/19/2003	Rocky Serena	
1	East Cell, East Wall-1992	024-03-0002	16	15.0-16	7' 9" R	5' 1" U	6/19/2003	Rocky Serena	
1	East Cell, East Wall-1992	024-03-0003	30	29-30.0	7' 9" R	5' 1" U	6/19/2003	Rocky Serena	
1	Behind East Cell, East Wall-1992	024-03-0004	38	37-38.0	7' 9" R	5' 1" U	6/19/2003	Rocky Serena	Bedrock/Soil
2	East Cell, Floor	024-03-0005	1	0-1	14' 1" N	9' 1" W	6/19/2003	Rocky Serena	
2	East Cell, Floor	024-03-0006	16	15.0-16	14' 1" N	9' 1" W	6/19/2003	Rocky Serena	
2	East Cell, Floor	024-03-0007	30	29-30.0	14' 1" N	9' 1" W	6/19/2003	Rocky Serena	
2	Under East Cell, Floor	024-03-0008	92	91-92.0	14' 1" N	9' 1" W	6/19/2003	Rocky Serena	Bedrock/Soil
3	East Cell, North Wall - High	024-03-0009	1	0-1	2' 3" R	11' 5" U	6/19/2003	Rocky Serena	
3	East Cell, North Wall - High	024-03-0010	16	15.0-16	2' 3" R	11' 5" U	6/19/2003	Rocky Serena	
3	East Cell, North Wall - High	024-03-0011	29.5	28.5-29.5	2' 3" R	11' 5" U	6/19/2003	Rocky Serena	
4	East Cell, South Wall - High	024-03-0012	1	0-1	12' 7" R	7' 11" U	6/19/2003	Rocky Serena	
4	East Cell, South Wall - High	024-03-0013	16	15.0-16	12' 7" R	7' 11" U	6/19/2003	Rocky Serena	

Core #	Location	Sample #	Ending Depth Inches	Tracking Numbers	LOC A ft	LOC B ft	Date	Sampled By	Comments
4	East Cell, South Wall - High	024-03-0014	30	29-30.0	12' 7" R	7' 11" U	6/19/2003	Rocky Serena	
5	East Cell, Ceiling	024-03-0015	1	0-1	15' 8" N	5' 7" W	6/19/2003	Rocky Serena	
5	East Cell, Ceiling	024-03-0016	16	15.0-16	15' 8" N	5' 7" W	6/19/2003	Rocky Serena	
5	East Cell, Ceiling	024-03-0017	30	29-30.0	15' 8" N	5' 7" W	6/19/2003	Rocky Serena	
6	West Cell, West Wall-1992	024-03-0018	1	0-1	17' 7" R	4' 10" U	6/19/2003	Rocky Serena	
6	West Cell, West Wall-1992	024-03-0019	12	11-12.0	17' 7" R	4' 10" U	6/19/2003	Rocky Serena	
6	West Cell, West Wall-1992	024-03-0020	30	29-30.0	17' 7" R	4' 10" U	6/19/2003	Rocky Serena	
6	Behind West Cell, West Wall-1992	024-03-0021	38	37-38.0	17' 7" R	4' 10" U	6/19/2003	Rocky Serena	Bedrock/Soil
7	West Cell, Floor	024-03-0022	1	0-1	11' 8" N	9' 8" W	6/19/2003	Rocky Serena	
7	West Cell, Floor	024-03-0023	15	14-15.0	11' 8" N	9' 8" W	6/19/2003	Rocky Serena	
7	West Cell, Floor	024-03-0024	30	29-30.0	11' 8" N	9' 8" W	6/19/2003	Rocky Serena	
7	Under West Cell, Floor	024-03-0025	82	81-82.0	11' 8" N	9' 8" W	6/19/2003	Rocky Serena	Bedrock/Soil
8	West Cell, South Wall - High	024-03-0026	1	0-1	11' 10" R	12' 9" U	6/19/2003	Rocky Serena	
8	West Cell, South Wall - High	024-03-0027	16	15.0-16	11' 10" R	12' 9" U	6/19/2003	Rocky Serena	

Core #	Location	Sample #	Ending Depth Inches	Tracking Numbers	LOC A ft	LOC B ft	Date	Sampled By	Comments
8	West Cell, South Wall - High	024-03-0028	30	29-30.0	11' 10" R	12' 9" U	6/19/2003	Rocky Serena	
9	West Cell, North Wall - High	024-03-0029	1	0-1	12' 2" R	12' 9" U	6/19/2003	Rocky Serena	
9	West Cell, North Wall - High	024-03-0030	16	15.0-16	12' 2" R	12' 9" U	6/19/2003	Rocky Serena	
9	West Cell, North Wall - High	024-03-0031	30	29-30.0	12' 2" R	12' 9" U	6/19/2003	Rocky Serena	
10	West Cell, Ceiling Shield Plug	024-03-0032	1	0-1	11' 11"	12' 5"	6/19/2003	Rocky Serena	
10	West Cell, Ceiling Shield Plug	024-03-0033	15	14-15.0	11' 11"	12' 5"	6/19/2003	Rocky Serena	
10	West Cell, Ceiling Shield Plug	024-03-0034	29	28-29.0	11' 11"	12' 5"	6/19/2003	Rocky Serena	
11	Decon Gallery, South Wall	024-03-0035	1	0-1	12' 5" R	10' 4" U	6/19/2003	Rocky Serena	
11	Decon Gallery, South Wall	024-03-0036	16	15.0-16	12' 5" R	10' 4" U	6/19/2003	Rocky Serena	
11	Decon Gallery, South Wall	024-03-0037	27	26-27.0	12' 5" R	10' 4" U	6/19/2003	Rocky Serena	
12	Decon Gallery, Floor	024-03-0038	1	0-1	5' 7" N	11' 6" W	6/19/2003	Rocky Serena	
12	Decon Gallery, Floor	024-03-0039	16	15.0-16	5' 7" N	11' 6" W	6/19/2003	Rocky Serena	
12	Decon Gallery, Floor	024-03-0040	30	29-30.0	5' 7" N	11' 6" W	6/19/2003	Rocky Serena	
13	Decon Gallery, Floor	024-03-0041	1	0-1	23' 0" N	8' 0" W	6/19/2003	Rocky Serena	

Core #	Location	Sample #	Ending Depth Inches	Tracking Numbers	LOC A ft	LOC B ft	Date	Sampled By	Comments
13	Decon Gallery, Floor	024-03-0042	15	14-15.0	23' 0" N	8' 0" W	6/19/2003	Rocky Serena	
13	Decon Gallery, Floor	024-03-0043	30	29-30.0	23' 0" N	8' 0" W	6/19/2003	Rocky Serena	
14	Decon Gallery, East Wall	024-03-0044	1	0-1	20' 2" R	12' 1" U	6/19/2003	Rocky Serena	
14	Decon Gallery, East Wall	024-03-0045	15	14-15.0	20' 2" R	12' 1" U	6/19/2003	Rocky Serena	
14	Decon Gallery, East Wall	024-03-0046	30	29-30.0	20' 2" R	12' 1" U	6/19/2003	Rocky Serena	
15	Decon Gallery, West Wall	024-03-0047	1	0-1	19' 3" R	10' 2" U	6/19/2003	Rocky Serena	
15	Decon Gallery, West Wall	024-03-0048	15	14-15.0	19' 3" R	10' 2" U	6/19/2003	Rocky Serena	
15	Decon Gallery, West Wall	024-03-0049	30	29-30.0	19' 3" R	10' 2" U	6/19/2003	Rocky Serena	
16	Operating Gallery Floor	024-03-0050	1	0-1	14' 10" N	8' 4" W	6/19/2003	Rocky Serena	
17	Operating Gallery Floor	024-03-0051	1	0-1	14' 7" N	14' 3" W	6/19/2003	Rocky Serena	
18	Operating Gallery, North Wall	024-03-0052	1	0-1	33' 2" R	4' 2" U	6/19/2003	Rocky Serena	
19	Service Gallery, Floor	024-03-0053	1	0-1	5' 10" N	3' 8" W	6/19/2003	Rocky Serena	
20	East Cell Hallway, South Wall	024-03-0054	1	0-1	7' 5" R	10' 1/2" U	6/19/2003	Rocky Serena	
20	East Cell Hallway, South Wall	024-03-0055	16	15.0-16	7' 5" R	10' 1/2" U	6/19/2003	Rocky Serena	

Core #	Location	Sample #	Ending Depth Inches	Tracking Numbers	LOC A ft	LOC B ft	Date	Sampled By	Comments
20	East Cell Hallway, South Wall	024-03-0056	27	26-27.0	7' 5"R	10' 1 1/2"U	6/19/2003	Rocky Serena	
21	West Cell Hallway, South Wall	024-03-0057	1	0-1	10' 7"R	14' 3"U	6/19/2003	Rocky Serena	
21	West Cell Hallway, South Wall	024-03-0058	16	15.0-16	10' 7"R	10' 7"U	6/19/2003	Rocky Serena	
21	West Cell Hallway, South Wall	024-03-0059	24.25	23.25-24.25	10' 7"R	10' 7"U	6/19/2003	Rocky Serena	
21	West Cell Hallway, South Wall	024-03-0060	24.25	23.25-24.25	10' 7" R	10' 7"U	6/19/2003	Rocky Serena	Soil Sample

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*****
*****      T H E   B O E I N G   C O M P A N Y      *****
*****      S A N T A   S U S A N A   F I E L D   L A B O R A T O R Y      *****
*****      S H E A -   R A D I A T I O N   S A F E T Y   L A B      *****
*****
*****      G A M M A   S P E C T R U M   A N A L Y S I S   R E P O R T      *****
*      *****

```

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Report Generated On      : 5/4/07    11:37:46 AM

Sample Identification    : T24070001M
Spectrum Description    : 4024 West Cell Concrete Core Bore Water
MCA Number              : Main System #1
Sample Type             : Water
Sample Geometry         : 3

Peak Locate Threshold   : 4.00
Peak Locate Range (in channels) : 200 - 16384
Peak Area Range (in channels) : 1 - 16384
Identification Energy Tolerance : 1.000 keV

Sample Size             : 5.150E-001 L

Sample Taken On         : 5/4/07    7:00:00 AM
Acquisition Started     : 5/4/07    11:07:40 AM

Live Time               : 1000.0 seconds
Real Time               : 1000.1 seconds

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Energy Calibration Used Done On      : 9/29/06
Efficiency Calibration Used Done On   : 9/29/06

```

Report Reviewed and
Conforms to RS-00017

By: GR MED Date: 5-4-07

Radiation Safety

NOTE: COPY1

Acceptable for Non-radioactive Disposal
(See Rocketdyne N001OP000034)

***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : T24070001M

Nuclide Name	Nuclide Id	Wt mean Activity (pCi/L	Wt mean Activity Uncertainty	Percent Total Act.	Nuclide MDA (pCi/L
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Total Sample Activity... 0.0000E+000 pCi/L

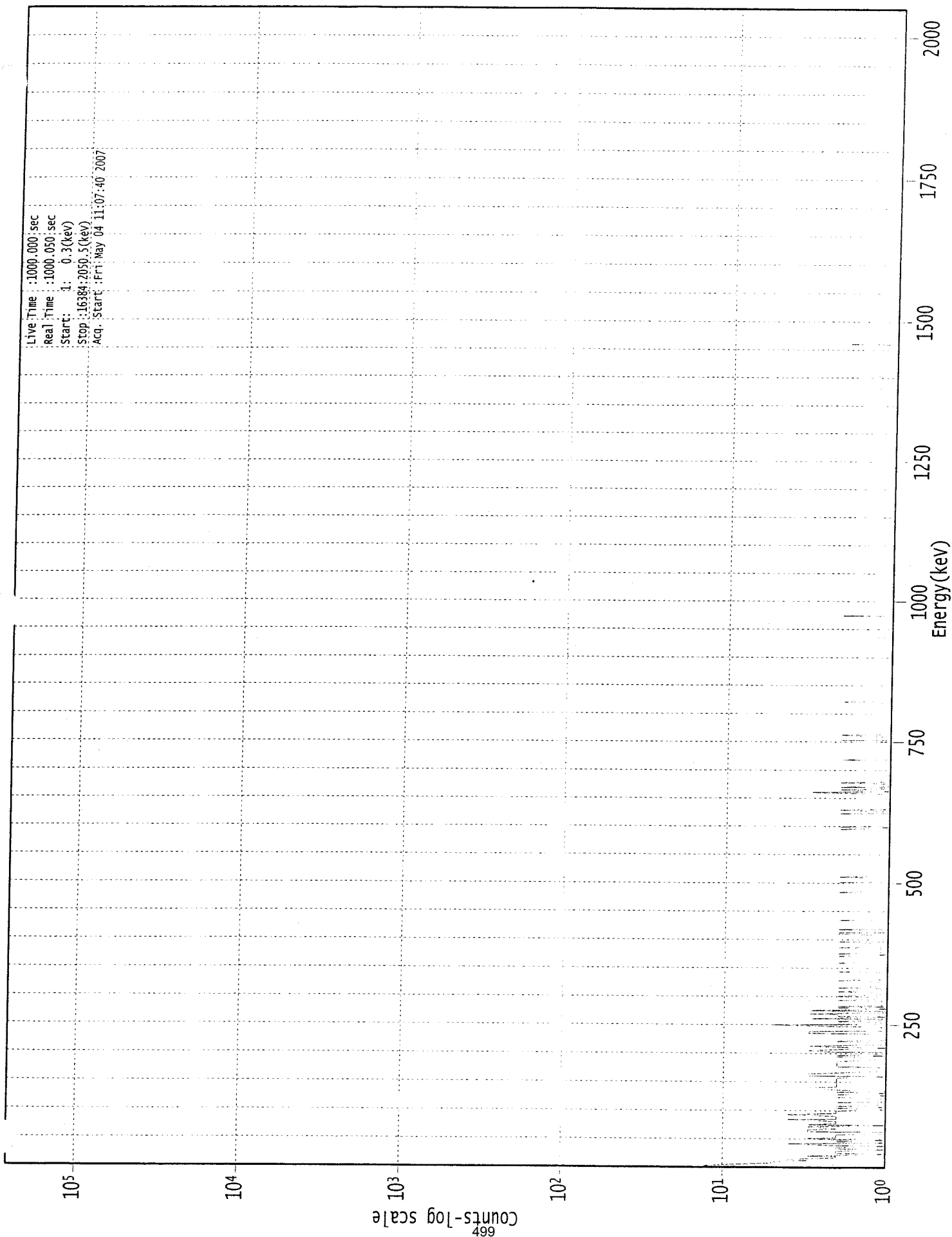
? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

T24070001M.CNF



Appendix A

Section	Survey Package	Survey Unit Description
4.0		SETF Activated Test Cells
4.1	C4024 102C1	SGTCC Test Cell B-104
4.1.2	C4024 102C1	Survey Results for Core Bore Samples

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Direct Alpha Measurement Results
5.0	Contact Gamma Exposure Rate Measurement Results
6.0	Sample Analysis Results
7.0	Supplemental Information and/or Data

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 1.0

Data Analysis Report Parameters

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

7/17/2007

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Data Analysis Report Parameters

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Survey Group: C - Radiological Survey of Impacted Facility Surfaces & Structures

Survey Area: 4024 - SETF, Building 4024

Unit Classification: 1 - Impacted Class 1 Structure

MARSSIM FSS Survey Unit Size (M²): 100

Survey Unit: 02 - SGTCC Test Cell B-104

Survey Reason: C1 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	CS1	Core Bore Sample Surface of Wafers	Total Area

Materials: Code Description
C1 - Concrete

Report Information:

Report Pedigree: Final Report

Detector Efficiency: 2-Pi

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 2.0

Annotated Drawings

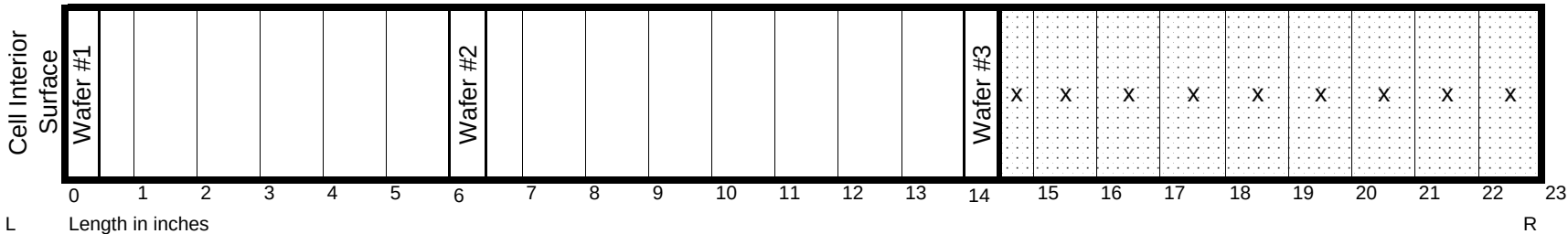
SGTCC Room B-104

Core Sample Survey Results

Survey Package ID: C4024 102C1 Location Code (LC5): FL1C1

Concrete Core Diameter: 3 inches Wafer Surface Area: 46 cm² Core Sample Length: 15 inches

Axial Gamma Measurements (cpm) Background: 2,540 cpm

[illegible]

Measurements of Wafer and Core Surfaces

Gamma (cpm) Background: 3,325 cpm

[illegible]

Beta (cpm/46cm²) Background: 250 cpm

[illegible]

Alpha (cpm/46cm²) Background: 1.3 cpm

[illegible]

At 0.0" depth on wafer	At 0.5" depth on wafer	L end of core at 0.5" depth	At 6" depth on wafer	At 6.5" depth on wafer	L end of core at 6.5" depth	At 14" depth on wafer	At 14.5" depth on wafer	R end of core at 14" depth
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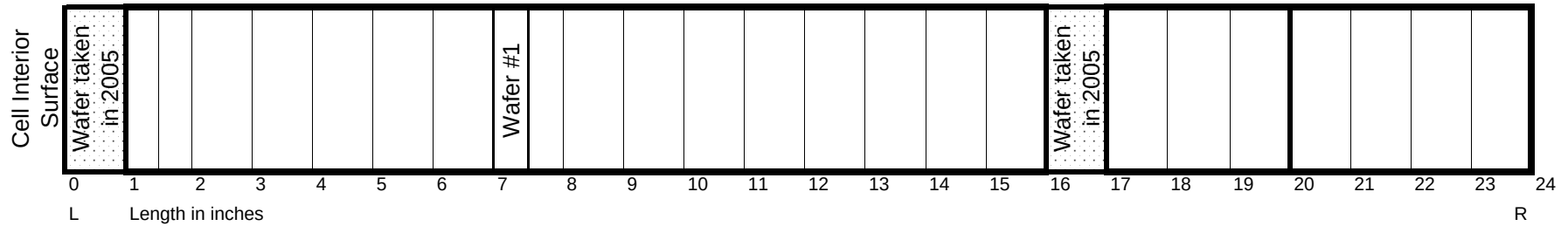
SGTCC Room B-104 Core Sample Survey Results

Survey Package ID: C4024 102C1 Location Code (LC5): NWB9 Note: Collected by Boeing in 2005

Concrete Core Diameter: 3 inches Wafer Surface Area: 46 cm² Core Sample Length: 24 inches

Axial Gamma Measurements (cpm) Background: 2,540 cpm

3,265	3,245	3,075	3,040	2,965	2,705	2,700	2,585	2,515	2,510	2,465	2,440	2,440	2,440	2,425	x	2,415	2,400	2,370	2,290	2,255	2,195	2,180
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Measurements of Wafer and Core Surfaces

Gamma (cpm) Background: 3,325 cpm

9,100						4,495	4,325	4,300	3,595						3,370		3,050		2,995	2,970		
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Beta (cpm/46cm²) Background: 250 cpm

508						347	332	323	319						304		286		270	236		
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Alpha (cpm/46cm²) Background: 1.3 cpm

0.0						3.0	2.0	0.0	1.0						1.0		2.0		0.0	3.0		
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L end of core at 1" depth
L end of core at 7.5" depth
At 7.5" depth on wafer
R end of core at 7" depth
L end of core at 20" depth
R end of core at 20" depth
L end of core at 17" depth
R end of core at 16" depth

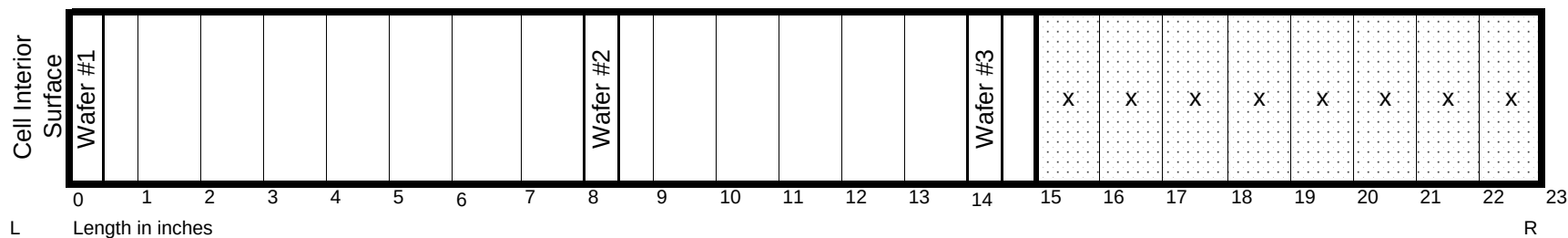
SGTCC Room B-104

Core Sample Survey Results

Survey Package ID: C4024 102C1 Location Code (LC5): NWH1

Concrete Core Diameter: 3 inches Wafer Surface Area: 46 cm² Core Sample Length: 15 inches

Axial Gamma Measurements (cpm) Background: 2,540 cpm

[illegible]

Measurements of Wafer and Core Surfaces

Gamma (cpm)	Background:	3,325 cpm
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[illegible]

Beta (cpm/46cm²) Background: 250 cpm

[illegible]

Alpha (cpm/46cm²) Background: 1.3 cpm

[illegible]

		L end of core at 0.5" depth			L end of core at 8.5" depth			
	At 0.5" depth on wafer			At 8.5" depth on wafer			At 14.5" depth on wafer	
At 0.0" depth on wafer			R end of core at 8" depth			R end of core at 14" depth		

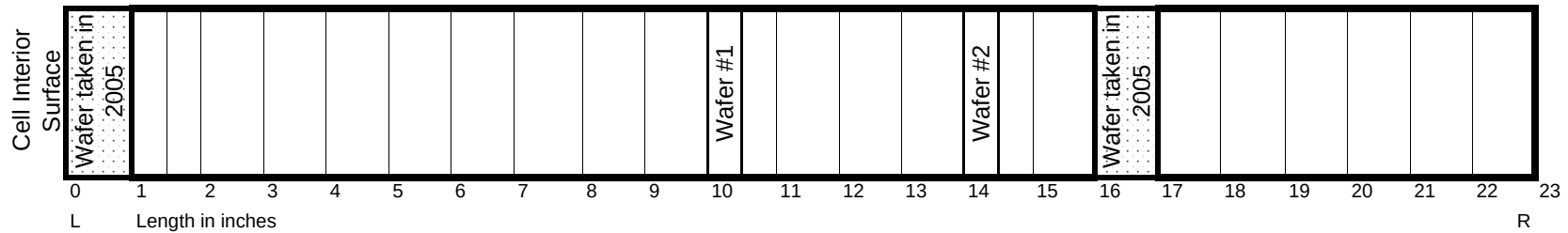
SGTCC Room B-104 Core Sample Survey Results

Survey Package ID: C4024 102C1 Location Code (LC5): SWB21 Note: Collected by Boeing in 2005

Concrete Core Diameter: 3 inches Wafer Surface Area: 46 cm² Core Samle Length: 23 inches

Axial Gamma Measurements (cpm) Background: 2,540 cpm

8,250	8,000	6,800	6,250	5,450	4,510	3,850	3,750	3,310	2,995	2,830	2,755	2,685	2,680	2,680	2,655	2,640	2,635	2,500	2,485	2,430	-
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Measurements of Wafer and Core Surfaces

Gamma (cpm) Background: 3,325 cpm

31,550								9,200	5,700	4,985	4,760		4,720	4,015	4,000	3,865			3,390			
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Beta (cpm/46cm²) Background: 250 cpm

1,220								591	589	522	384		361	356	350	319			285			
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Alpha (cpm/46cm²) Background: 1.3 cpm

2.0								7.0	2.0	0.0	2.0		1.0	3.0	0	1			3.0			
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L end of core at 1" depth

At 10.5" depth on wafer

At 10" depth on wafer

R end of core at 10" depth

L end of core at 10.5" depth

At 14.5" depth on wafer

At 14" depth on wafer

R end of core at 14" depth

L end of core at 14.5" depth

R end of core at 16" depth

SGTCC Room B-104

Core Sample Survey Results

Survey Package ID: C4024 102C1 Location Code (LC5): SWH1

Concrete Core Diameter: 3 inches Wafer Surface Area: 46 cm² Core Sample Length: 4 inches

Axial Gamma Measurements (cpm) Background: 2,540 cpm

[illegible]

The diagram illustrates a cell interior surface layout. It consists of a horizontal bar divided into 23 vertical segments. The first segment (0 to 1 inch) is labeled 'Wafer #1'. The next three segments (1 to 4 inches) are also labeled 'Wafer #1'. The next three segments (4 to 7 inches) are labeled 'Wafer #2'. The remaining 17 segments (7 to 23 inches) are marked with an 'X' and a grid of dots, indicating a specific surface treatment or material. The x-axis is labeled 'Length in inches' and ranges from 0 to 23.

Measurements of Wafer and Core Surfaces

Gamma (cpm) Background: 3,325 cpm

[illegible]

Beta (cpm/46cm²) Background: 250 cpm

[illegible]

Alpha (cpm/46cm²) Background: 1.3 cpm

[illegible]

	L end of core at 0.5" depth	At 3.5" depth on wafer
At 0.5" depth on wafer		At 3" depth on wafer
At 0.0" depth on wafer	R end of core at 3" depth	

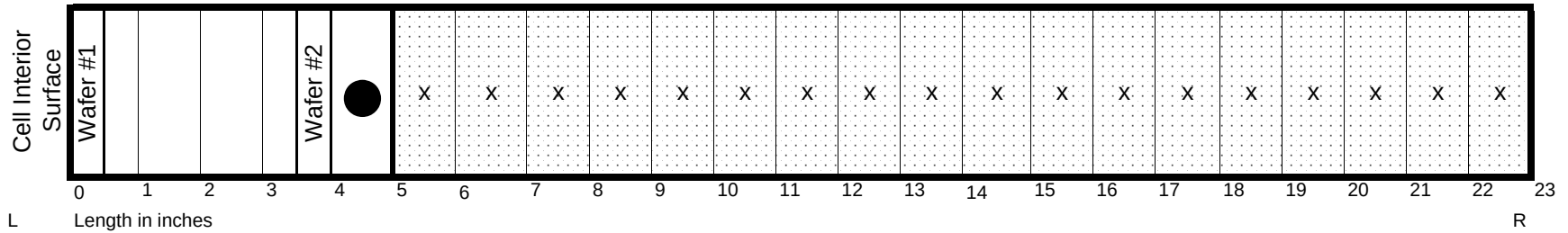
SGTCC Room B-104

Core Sample Survey Results

Survey Package ID: C4024 102C1 Location Code (LC5): SWL1

Concrete Core Diameter: 3 inches Wafer Surface Area: 46 cm² Core Sample Length: 5 inches

Axial Gamma Measurements (cpm) Background: 2,540 cpm

[illegible]

Measurements of Wafer and Core Surfaces

Note: ● = rebar

Gamma (cpm)	Background:	3,325 cpm
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[illegible]

Beta (cpm/46cm ²)	Background:	250 cpm
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[illegible]

Alpha (cpm/46cm ²)	Background:	1.3 cpm
--------------------------------	-------------	---------

[illegible]

	L end of core at 0.5" depth	At 3.5" depth on wafer
At 0.5" depth on wafer		At 3" depth on wafer
At 0.0" depth on wafer	R end of core at 3" depth	

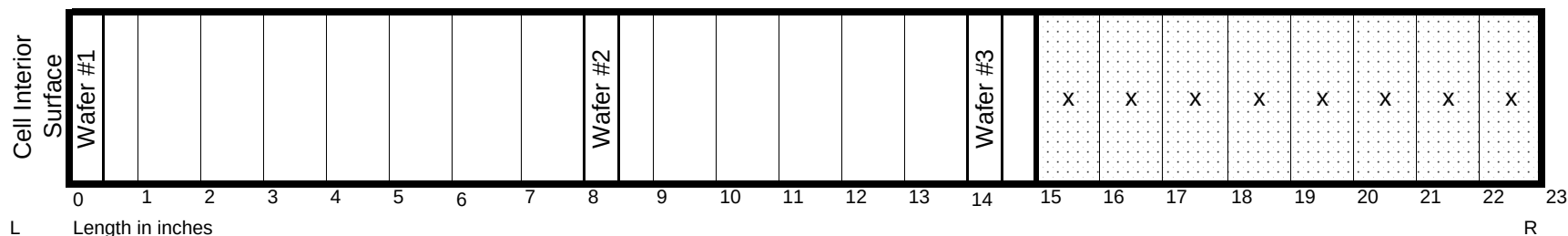
SGTCC Room B-104 Core Sample Survey Results

Survey Package ID: C4024 102C1 Location Code (LC5): WWH1

Concrete Core Diameter: 3 inches Wafer Surface Area: 46 cm² Core Samle Length: 15 inches

Axial Gamma Measurements (cpm) Background: 2,540 cpm

4,275	4,135	4,000	3,475	3,015	2,900	2,815	2,815	2,810	2,735	2,725	2,605	2,600	2,595	2,580	-								
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Measurements of Wafer and Core Surfaces

Gamma (cpm) Background: 3,325 cpm

11,050	8,250	7,850				5,350	4,685	3,750	3,510					3,465	3,275	3,020							
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Beta (cpm/46cm²) Background: 250 cpm

587	536	506				335	310	301	259					258	249	243							
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Alpha (cpm/46cm²) Background: 1.3 cpm

0.0	1.0	1.0				0.0	1.0	2.0	1.0					0.0	2.0	0.0							
-----	-----	-----	--	--	--	-----	-----	-----	-----	--	--	--	--	-----	-----	-----	--	--	--	--	--	--	--

At 0.0" depth on wafer

At 0.5" depth on wafer

At 8" depth on wafer

At 8.5" depth on wafer

At 14" depth on wafer

At 14.5" depth on wafer

R end of core at 8" depth

R end of core at 14" depth

L end of core at 0.5" depth

L end of core at 8.5" depth

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 3.0

Direct Beta Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

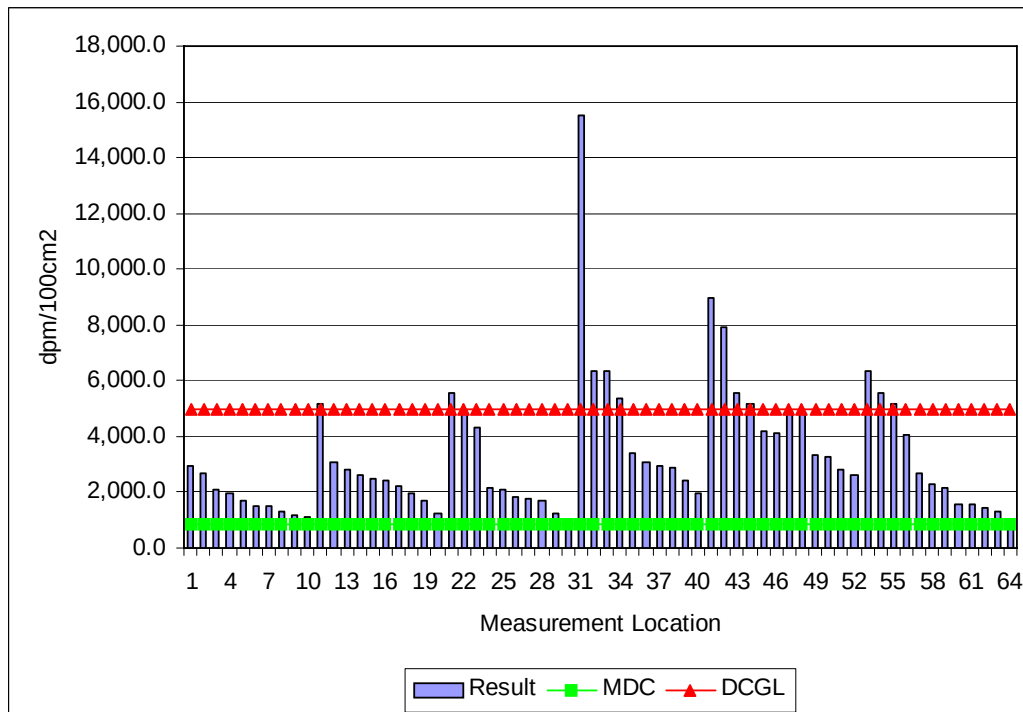
7/18/2007

Page 1 of 5

Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	3,38.3	Ave. MDC	857.8	Ave. MDC < 50% DCGL	Yes
Median	2,648.3	Ave. Background	2,185.0	Measurements < DCGL	No
Standard Deviation	2,365.3	Maximum Bkg.	2,185.0	Measurement Mean < DCGL	Yes
Range	14,492.8	DCGL	5000	No. Measurements > DCGL	13
Minimum	1,003.4	Number of Measurements			
Maximum	15,496.2	No. Prescribed	64		
		No. Collected	64		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

7/18/2007

Page 2 of 5

Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL050307-003	5/3/2007	CS1C1	FL1C1	1	5,130.4	857.8	2,185.0	2,945.4	2,054.6
DL050307-003	5/3/2007	CS1C1	FL1C1	2	4,884.1	857.8	2,185.0	2,699.1	2,300.9
DL050307-003	5/3/2007	CS1C1	FL1C1	3	4,289.9	857.8	2,185.0	2,104.9	2,895.1
DL050307-003	5/3/2007	CS1C1	FL1C1	4	4,115.9	857.8	2,185.0	1,930.9	3,069.1
DL050307-003	5/3/2007	CS1C1	FL1C1	5	3,869.6	857.8	2,185.0	1,684.6	3,315.4
DL050307-003	5/3/2007	CS1C1	FL1C1	6	3,681.2	857.8	2,185.0	1,496.2	3,503.8
DL050307-003	5/3/2007	CS1C1	FL1C1	7	3,666.7	857.8	2,185.0	1,481.7	3,518.3
DL050307-003	5/3/2007	CS1C1	FL1C1	8	3,478.3	857.8	2,185.0	1,293.3	3,706.7
DL050307-003	5/3/2007	CS1C1	FL1C1	9	3,391.3	857.8	2,185.0	1,206.3	3,793.7
DL050307-003	5/3/2007	CS1C1	FL1C1	10	3,318.8	857.8	2,185.0	1,133.8	3,866.2
DL050307-003	5/3/2007	CS1C1	NWB9	1	7,362.3	857.8	2,185.0	5,177.3	-177.3
DL050307-003	5/3/2007	CS1C1	NWB9	2	5,275.4	857.8	2,185.0	3,090.4	1,909.6
DL050307-003	5/3/2007	CS1C1	NWB9	3	5,029.0	857.8	2,185.0	2,844.0	2,156.0
DL050307-003	5/3/2007	CS1C1	NWB9	4	4,811.6	857.8	2,185.0	2,626.6	2,373.4
DL050307-003	5/3/2007	CS1C1	NWB9	5	4,681.2	857.8	2,185.0	2,496.2	2,503.8
DL050307-003	5/3/2007	CS1C1	NWB9	6	4,623.2	857.8	2,185.0	2,438.2	2,561.8
DL050307-003	5/3/2007	CS1C1	NWB9	7	4,405.8	857.8	2,185.0	2,220.8	2,779.2
DL050307-003	5/3/2007	CS1C1	NWB9	8	4,144.9	857.8	2,185.0	1,959.9	3,040.1
DL050307-003	5/3/2007	CS1C1	NWB9	9	3,913.0	857.8	2,185.0	1,728.0	3,272.0
DL050307-003	5/3/2007	CS1C1	NWB9	10	3,420.3	857.8	2,185.0	1,235.3	3,764.7
DL050307-003	5/3/2007	CS1C1	NWH1	1	7,753.6	857.8	2,185.0	5,568.6	-568.6
DL050307-003	5/3/2007	CS1C1	NWH1	2	7,101.4	857.8	2,185.0	4,916.4	83.6
DL050307-003	5/3/2007	CS1C1	NWH1	3	6,536.2	857.8	2,185.0	4,351.2	648.8
DL050307-003	5/3/2007	CS1C1	NWH1	4	4,362.3	857.8	2,185.0	2,177.3	2,822.7
DL050307-003	5/3/2007	CS1C1	NWH1	5	4,304.3	857.8	2,185.0	2,119.3	2,880.7
DL050307-003	5/3/2007	CS1C1	NWH1	6	4,043.5	857.8	2,185.0	1,858.5	3,141.5
DL050307-003	5/3/2007	CS1C1	NWH1	7	3,942.0	857.8	2,185.0	1,757.0	3,243.0

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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL050307-003	5/3/2007	CS1C1	NWH1	8	3,884.1	857.8	2,185.0	1,699.1	3,300.9
DL050307-003	5/3/2007	CS1C1	NWH1	9	3,420.3	857.8	2,185.0	1,235.3	3,764.7
DL050307-003	5/3/2007	CS1C1	NWH1	10	3,188.4	857.8	2,185.0	1,003.4	3,996.6
DL050307-003	5/3/2007	CS1C1	SWB21	1	17,681.2	857.8	2,185.0	15,496.2	-10,496.2
DL050307-003	5/3/2007	CS1C1	SWB21	2	8,565.2	857.8	2,185.0	6,380.2	-1,380.2
DL050307-003	5/3/2007	CS1C1	SWB21	3	8,536.2	857.8	2,185.0	6,351.2	-1,351.2
DL050307-003	5/3/2007	CS1C1	SWB21	4	7,565.2	857.8	2,185.0	5,380.2	-380.2
DL050307-003	5/3/2007	CS1C1	SWB21	5	5,565.2	857.8	2,185.0	3,380.2	1,619.8
DL050307-003	5/3/2007	CS1C1	SWB21	6	5,231.9	857.8	2,185.0	3,046.9	1,953.1
DL050307-003	5/3/2007	CS1C1	SWB21	7	5,159.4	857.8	2,185.0	2,974.4	2,025.6
DL050307-003	5/3/2007	CS1C1	SWB21	8	5,072.5	857.8	2,185.0	2,887.5	2,112.5
DL050307-003	5/3/2007	CS1C1	SWB21	9	4,623.2	857.8	2,185.0	2,438.2	2,561.8
DL050307-003	5/3/2007	CS1C1	SWB21	10	4,130.4	857.8	2,185.0	1,945.4	3,054.6
DL050307-003	5/3/2007	CS1C1	SWH1	1	11,144.9	857.8	2,185.0	8,959.9	-3,959.9
DL050307-003	5/3/2007	CS1C1	SWH1	2	10,115.9	857.8	2,185.0	7,930.9	-2,930.9
DL050307-003	5/3/2007	CS1C1	SWH1	3	7,724.6	857.8	2,185.0	5,539.6	-539.6
DL050307-003	5/3/2007	CS1C1	SWH1	4	7,333.3	857.8	2,185.0	5,148.3	-148.3
DL050307-003	5/3/2007	CS1C1	SWH1	5	6,347.8	857.8	2,185.0	4,162.8	837.2
DL050307-003	5/3/2007	CS1C1	SWH1	6	6,318.8	857.8	2,185.0	4,133.8	866.2
DL050307-003	5/3/2007	CS1C1	SWL1	1	7,072.5	857.8	2,185.0	4,887.5	112.5
DL050307-003	5/3/2007	CS1C1	SWL1	2	7,014.5	857.8	2,185.0	4,829.5	170.5
DL050307-003	5/3/2007	CS1C1	SWL1	3	5,550.7	857.8	2,185.0	3,365.7	1,634.3
DL050307-003	5/3/2007	CS1C1	SWL1	4	5,463.8	857.8	2,185.0	3,278.8	1,721.2
DL050307-003	5/3/2007	CS1C1	SWL1	5	5,000.0	857.8	2,185.0	2,815.0	2,185.0
DL050307-003	5/3/2007	CS1C1	SWL1	6	4,782.6	857.8	2,185.0	2,597.6	2,402.4
DL050307-003	5/3/2007	CS1C1	WWH1	1	8,507.2	857.8	2,185.0	6,322.2	-1,322.2
DL050307-003	5/3/2007	CS1C1	WWH1	2	7,768.1	857.8	2,185.0	5,583.1	-583.1
DL050307-003	5/3/2007	CS1C1	WWH1	3	7,333.3	857.8	2,185.0	5,148.3	-148.3
DL050307-003	5/3/2007	CS1C1	WWH1	4	6,260.9	857.8	2,185.0	4,075.9	924.1

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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL050307-003	5/3/2007	CS1C1	WWH1	5	4,855.1	857.8	2,185.0	2,670.1	2,329.9
DL050307-003	5/3/2007	CS1C1	WWH1	6	4,492.8	857.8	2,185.0	2,307.8	2,692.2
DL050307-003	5/3/2007	CS1C1	WWH1	7	4,362.3	857.8	2,185.0	2,177.3	2,822.7
DL050307-003	5/3/2007	CS1C1	WWH1	8	3,753.6	857.8	2,185.0	1,568.6	3,431.4
DL050307-003	5/3/2007	CS1C1	WWH1	9	3,739.1	857.8	2,185.0	1,554.1	3,445.9
DL050307-003	5/3/2007	CS1C1	WWH1	10	3,608.7	857.8	2,185.0	1,423.7	3,576.3
DL050307-003	5/3/2007	CS1C1	WWH1	11	3,521.7	857.8	2,185.0	1,336.7	3,663.3
DL050307-003	5/3/2007	CS1C1	WWH1	12	3,260.9	857.8	2,185.0	1,075.9	3,924.1

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL050307-003	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.5	2,185

Field Notes Summary

Download ID:	Field Notes
DL050307-003	None

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 4.0

Direct Alpha Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

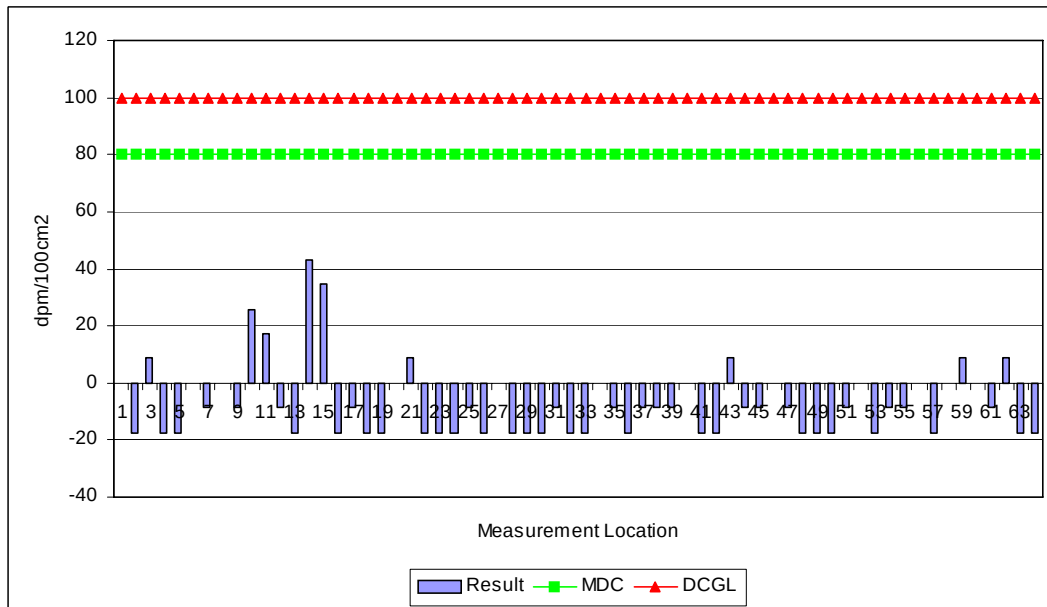
6/26/2007

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Direct Alpha Measurement Results

Survey Area LC1: C4024 Package Type: Structure
 Survey Area Name: SETF, Building 4024
 Survey Package Number and Unit Name:
 C4024 102C1 SGTCC Test Cell B-104

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm2		dpm/100cm2		
Mean	-6.8	MDC Mean	80.3	No. Collected >= Prescribed	Yes
Median	-8.6	MDC Minimum	80.3	Max MDC <50% DCGL	No
Standard Deviation	12.9	MDC Maximum	80.3	Measurements < DCGL	Yes
Range	60.5	DCGL	100	Measurement Mean < DCGL	Yes
Minimum	-17.3	Number of Measurements		No. Measurements >DCGL	0
Maximum	43.2	No. Prescribed	64		
		No. Collected	64		



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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
 C4024 102C1 SGTCC Test Cell B-104

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Detector Type/Count Type LC4	Room or Item No. LC5	SML LC6	Ave or SP Background dpm/100cm2	Measurement MDC dpm/100cm2	Measurement Result dpm/100cm2	Test (DCGL-Result) dpm/100cm2
DL050307-002	5/3/2007	CS1C1	A03FA	SWB21	00001	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00001	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0SWH1	00001	17.3	80.3	8.6	91.4
DL050307-002	5/3/2007	CS1C1	A03FA	FL1C1	00001	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0NWB9	00001	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0NWH1	00001	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	0SWL1	00001	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0NWH1	00002	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	FL1C1	00002	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0SWL1	00002	17.3	80.3	25.9	74.1
DL050307-002	5/3/2007	CS1C1	A03FA	0SWH1	00002	17.3	80.3	17.3	82.7
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00002	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0NWB9	00002	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	SWB21	00002	17.3	80.3	43.2	56.8
DL050307-002	5/3/2007	CS1C1	A03FA	0SWL1	00003	17.3	80.3	34.6	65.4
DL050307-002	5/3/2007	CS1C1	A03FA	0SWH1	00003	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00003	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	FL1C1	00003	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0NWH1	00003	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	SWB21	00003	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	0NWB9	00003	17.3	80.3	8.6	91.4
DL050307-002	5/3/2007	CS1C1	A03FA	0NWH1	00004	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0SWH1	00004	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	SWB21	00004	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0SWL1	00004	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00004	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0NWB9	00004	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	FL1C1	00004	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0SWL1	00005	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0NWH1	00005	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0SWH1	00005	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0NWB9	00005	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00005	17.3	80.3	-17.3	117.3

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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
 C4024 102C1 SGTCC Test Cell B-104

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Detector Type/Count Type LC4	Room or Item No. LC5	SML LC6	Ave or SP Background dpm/100cm2	Measurement MDC dpm/100cm2	Measurement Result dpm/100cm2	Test (DCGL-Result) dpm/100cm2
DL050307-002	5/3/2007	CS1C1	A03FA	SWB21	00005	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	FL1C1	00005	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0NWH1	00006	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00006	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	SWB21	00006	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0NWB9	00006	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0SWH1	00006	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	0SWL1	00006	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	FL1C1	00006	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	SWB21	00007	17.3	80.3	8.6	91.4
DL050307-002	5/3/2007	CS1C1	A03FA	0NWB9	00007	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0NWH1	00007	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00007	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	FL1C1	00007	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0NWH1	00008	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	SWB21	00008	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	FL1C1	00008	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00008	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0NWB9	00008	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	0NWB9	00009	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	SWB21	00009	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	FL1C1	00009	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	0NWH1	00009	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00009	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00010	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	0NWB9	00010	17.3	80.3	8.6	91.4
DL050307-002	5/3/2007	CS1C1	A03FA	FL1C1	00010	17.3	80.3	0.0	100.0
DL050307-002	5/3/2007	CS1C1	A03FA	0NWH1	00010	17.3	80.3	-8.6	108.6
DL050307-002	5/3/2007	CS1C1	A03FA	SWB21	00010	17.3	80.3	8.6	91.4
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00011	17.3	80.3	-17.3	117.3
DL050307-002	5/3/2007	CS1C1	A03FA	0WWH1	00012	17.3	80.3	-17.3	117.3

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL050307-002	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Material Background Contribution dpm/100cm2
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.25	26.4

Field Notes Summary

Download ID:	Field Notes
DL050307-002	None

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

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

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Statistical Summary

	uR/hr
Mean	4.6
Median	3.5
Standard Deviation	3.5
Range	32.9
Minimum	2.4
Maximum	35.3

Number of Measurements

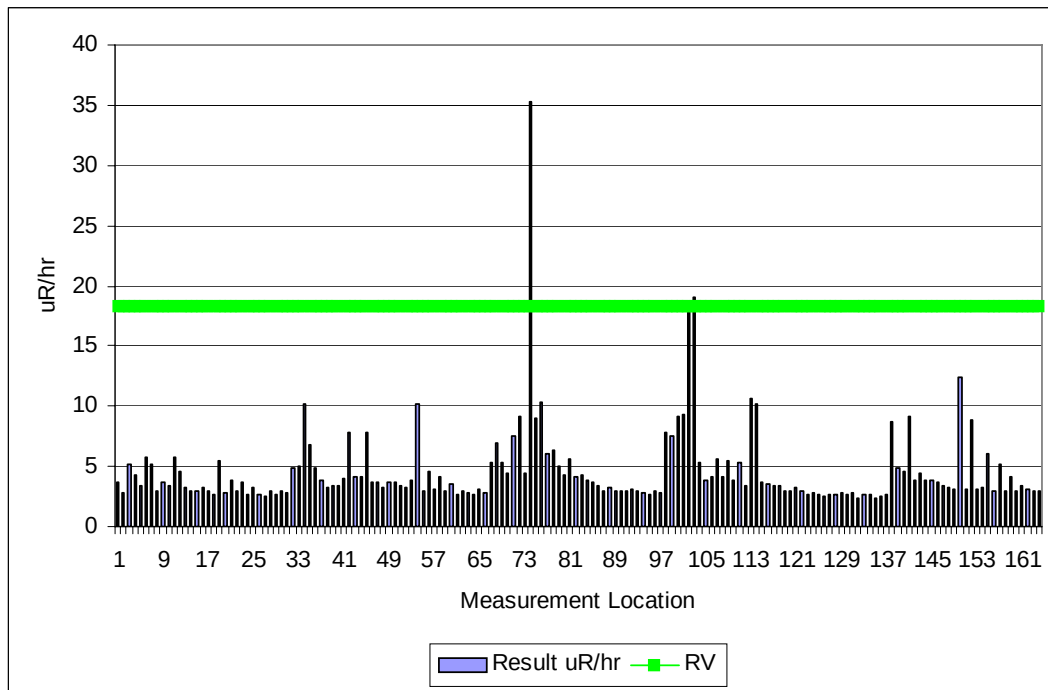
No. Prescribed	164
No. Collected	164

Material Background

	uR/hr
Mean	13.3
Minimum	13.3
Maximum	13.3
Reference Value (RV) Mean	18.3

Tests Performed

No. Collected >= Prescribed	Yes
Measurement Mean < RV	Yes
Measurements < RV	No
No. Measurements > RV	2



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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Measurement Results Listing by Download File

Download ID	Survey Date	LC3	LC5	LC6	Reference Value (uR/hr)	Contact (C) Result (uR/hr)	Reference - C (uR/hr)
DL050307-004	5/3/2007	CS1C1	BKG	1	18.3	3.7	14.6
DL050107-003	5/1/2007	CS1C1	BKG1	1	18.3	2.8	15.5
DL050307-004	5/3/2007	CS1C1	FL1C1	1	18.3	5.2	13.1
DL050107-003	5/1/2007	CS1C1	FL1C1	1	18.3	4.3	14.0
DL050107-003	5/1/2007	CS1C1	FL1C1	1	18.3	3.4	14.9
DL050107-003	5/1/2007	CS1C1	FL1C1	2	18.3	5.7	12.6
DL050307-004	5/3/2007	CS1C1	FL1C1	2	18.3	5.1	13.2
DL050107-003	5/1/2007	CS1C1	FL1C1	2	18.3	2.9	15.4
DL050307-004	5/3/2007	CS1C1	FL1C1	3	18.3	3.7	14.6
DL050107-003	5/1/2007	CS1C1	FL1C1	3	18.3	3.4	14.9
DL050107-003	5/1/2007	CS1C1	FL1C1	3	18.3	5.8	12.5
DL050107-003	5/1/2007	CS1C1	FL1C1	4	18.3	4.6	13.7
DL050307-004	5/3/2007	CS1C1	FL1C1	4	18.3	3.3	15.0
DL050107-003	5/1/2007	CS1C1	FL1C1	4	18.3	2.9	15.4
DL050107-003	5/1/2007	CS1C1	FL1C1	5	18.3	2.9	15.4
DL050307-004	5/3/2007	CS1C1	FL1C1	5	18.3	3.3	15.0
DL050307-004	5/3/2007	CS1C1	FL1C1	6	18.3	3.0	15.3
DL050107-003	5/1/2007	CS1C1	FL1C1	6	18.3	2.7	15.6
DL050307-004	5/3/2007	CS1C1	FL1C1	7	18.3	5.4	12.9
DL050107-003	5/1/2007	CS1C1	FL1C1	7	18.3	2.8	15.5
DL050307-004	5/3/2007	CS1C1	FL1C1	8	18.3	3.8	14.5
DL050107-003	5/1/2007	CS1C1	FL1C1	8	18.3	2.9	15.4
DL050307-004	5/3/2007	CS1C1	FL1C1	9	18.3	3.7	14.6
DL050107-003	5/1/2007	CS1C1	FL1C1	9	18.3	2.7	15.6

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Measurement Results Listing by Download File

Download ID	Survey Date	LC3	LC5	LC6	Reference Value (uR/hr)	Contact (C) Result (uR/hr)	Reference - C (uR/hr)
DL050307-004	5/3/2007	CS1C1	FL1C1	10	18.3	3.2	15.1
DL050107-003	5/1/2007	CS1C1	FL1C1	10	18.3	2.7	15.6
DL050107-003	5/1/2007	CS1C1	FL1C1	11	18.3	2.5	15.8
DL050107-003	5/1/2007	CS1C1	FL1C1	12	18.3	2.9	15.4
DL050107-003	5/1/2007	CS1C1	FL1C1	13	18.3	2.6	15.7
DL050107-003	5/1/2007	CS1C1	FL1C1	14	18.3	2.9	15.4
DL050107-003	5/1/2007	CS1C1	FL1C1	15	18.3	2.8	15.5
DL050307-004	5/3/2007	CS1C1	NWB9	1	18.3	4.8	13.5
DL050307-004	5/3/2007	CS1C1	NWB9	2	18.3	5.0	13.3
DL050307-004	5/3/2007	CS1C1	NWB9	3	18.3	10.2	8.1
DL050307-004	5/3/2007	CS1C1	NWB9	4	18.3	6.8	11.5
DL050307-004	5/3/2007	CS1C1	NWB9	5	18.3	4.8	13.5
DL050307-004	5/3/2007	CS1C1	NWB9	6	18.3	3.8	14.5
DL050307-004	5/3/2007	CS1C1	NWB9	7	18.3	3.3	15.0
DL050307-004	5/3/2007	CS1C1	NWB9	8	18.3	3.4	14.9
DL050307-004	5/3/2007	CS1C1	NWB9	9	18.3	3.4	14.9
DL050307-004	5/3/2007	CS1C1	NWB9	10	18.3	4.0	14.3
DL050307-004	5/3/2007	CS1C1	NWH1	1	18.3	7.8	10.5
DL050107-003	5/1/2007	CS1C1	NWH1	1	18.3	4.1	14.2
DL050107-003	5/1/2007	CS1C1	NWH1	2	18.3	4.2	14.1
DL050307-004	5/3/2007	CS1C1	NWH1	2	18.3	7.8	10.5
DL050107-003	5/1/2007	CS1C1	NWH1	3	18.3	3.7	14.6
DL050307-004	5/3/2007	CS1C1	NWH1	3	18.3	3.7	14.6
DL050107-003	5/1/2007	CS1C1	NWH1	4	18.3	3.3	15.0

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Measurement Results Listing by Download File

Download ID	Survey Date	LC3	LC5	LC6	Reference Value (uR/hr)	Contact (C) Result (uR/hr)	Reference - C (uR/hr)
DL050307-004	5/3/2007	CS1C1	NWH1	4	18.3	3.7	14.6
DL050107-003	5/1/2007	CS1C1	NWH1	5	18.3	3.7	14.6
DL050307-004	5/3/2007	CS1C1	NWH1	5	18.3	3.4	14.9
DL050107-003	5/1/2007	CS1C1	NWH1	6	18.3	3.2	15.1
DL050307-004	5/3/2007	CS1C1	NWH1	6	18.3	3.9	14.4
DL050307-004	5/3/2007	CS1C1	NWH1	7	18.3	10.2	8.1
DL050107-003	5/1/2007	CS1C1	NWH1	7	18.3	3.0	15.3
DL050307-004	5/3/2007	CS1C1	NWH1	8	18.3	4.6	13.7
DL050107-003	5/1/2007	CS1C1	NWH1	8	18.3	3.1	15.2
DL050307-004	5/3/2007	CS1C1	NWH1	9	18.3	4.1	14.2
DL050107-003	5/1/2007	CS1C1	NWH1	9	18.3	3.0	15.3
DL050307-004	5/3/2007	CS1C1	NWH1	10	18.3	3.6	14.7
DL050107-003	5/1/2007	CS1C1	NWH1	10	18.3	2.6	15.7
DL050107-003	5/1/2007	CS1C1	NWH1	11	18.3	2.9	15.4
DL050107-003	5/1/2007	CS1C1	NWH1	12	18.3	2.8	15.5
DL050107-003	5/1/2007	CS1C1	NWH1	13	18.3	2.7	15.6
DL050107-003	5/1/2007	CS1C1	NWH1	14	18.3	3.1	15.2
DL050107-003	5/1/2007	CS1C1	NWH1	15	18.3	2.8	15.5
DL050307-004	5/3/2007	CS1C1	SWB21	1	18.3	5.3	13.0
DL050107-003	5/1/2007	CS1C1	SWB21	2	18.3	7.0	11.3
DL050307-004	5/3/2007	CS1C1	SWB21	2	18.3	5.3	13.0
DL050307-004	5/3/2007	CS1C1	SWB21	3	18.3	4.5	13.8
DL050107-003	5/1/2007	CS1C1	SWB21	3	18.3	7.6	10.7
DL050107-003	5/1/2007	CS1C1	SWB21	4	18.3	9.2	9.1

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Measurement Results Listing by Download File

Download ID	Survey Date	LC3	LC5	LC6	Reference Value (uR/hr)	Contact (C) Result (uR/hr)	Reference - C (uR/hr)
DL050307-004	5/3/2007	CS1C1	SWB21	4	18.3	4.5	13.8
DL050307-004	5/3/2007	CS1C1	SWB21	5	18.3	35.3	-17.0
DL050107-003	5/1/2007	CS1C1	SWB21	5	18.3	9.0	9.3
DL050307-004	5/3/2007	CS1C1	SWB21	6	18.3	10.3	8.0
DL050107-003	5/1/2007	CS1C1	SWB21	6	18.3	6.1	12.2
DL050307-004	5/3/2007	CS1C1	SWB21	7	18.3	6.4	11.9
DL050107-003	5/1/2007	CS1C1	SWB21	7	18.3	5.0	13.3
DL050107-003	5/1/2007	CS1C1	SWB21	8	18.3	4.3	14.0
DL050307-004	5/3/2007	CS1C1	SWB21	8	18.3	5.6	12.7
DL050107-003	5/1/2007	CS1C1	SWB21	9	18.3	4.2	14.1
DL050307-004	5/3/2007	CS1C1	SWB21	9	18.3	4.3	14.0
DL050307-004	5/3/2007	CS1C1	SWB21	10	18.3	3.8	14.5
DL050107-003	5/1/2007	CS1C1	SWB21	10	18.3	3.7	14.6
DL050107-003	5/1/2007	CS1C1	SWB21	11	18.3	3.4	14.9
DL050107-003	5/1/2007	CS1C1	SWB21	12	18.3	3.0	15.3
DL050107-003	5/1/2007	CS1C1	SWB21	13	18.3	3.2	15.1
DL050107-003	5/1/2007	CS1C1	SWB21	14	18.3	2.9	15.4
DL050107-003	5/1/2007	CS1C1	SWB21	15	18.3	3.0	15.3
DL050107-003	5/1/2007	CS1C1	SWB21	17	18.3	3.0	15.3
DL050107-003	5/1/2007	CS1C1	SWB21	18	18.3	3.1	15.2
DL050107-003	5/1/2007	CS1C1	SWB21	19	18.3	3.0	15.3
DL050107-003	5/1/2007	CS1C1	SWB21	20	18.3	2.8	15.5
DL050107-003	5/1/2007	CS1C1	SWB21	21	18.3	2.7	15.6
DL050107-003	5/1/2007	CS1C1	SWB21	22	18.3	3.0	15.3

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CANOGA PARK, CALIFORNIA**

6/26/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Measurement Results Listing by Download File

Download ID	Survey Date	LC3	LC5	LC6	Reference Value (uR/hr)	Contact (C) Result (uR/hr)	Reference - C (uR/hr)
DL050107-003	5/1/2007	CS1C1	SWB21	23	18.3	2.8	15.5
DL050307-004	5/3/2007	CS1C1	SWH1	1	18.3	7.8	10.5
DL050307-004	5/3/2007	CS1C1	SWH1	2	18.3	7.6	10.7
DL050307-004	5/3/2007	CS1C1	SWH1	3	18.3	9.1	9.2
DL050307-004	5/3/2007	CS1C1	SWH1	4	18.3	9.3	9.0
DL050307-004	5/3/2007	CS1C1	SWH1	5	18.3	17.8	0.5
DL050307-004	5/3/2007	CS1C1	SWH1	6	18.3	19.1	-0.8
DL050307-004	5/3/2007	CS1C1	SWL1	1	18.3	5.3	13.0
DL050107-003	5/1/2007	CS1C1	SWL1	1	18.3	3.8	14.5
DL050107-003	5/1/2007	CS1C1	SWL1	2	18.3	4.2	14.1
DL050307-004	5/3/2007	CS1C1	SWL1	2	18.3	5.6	12.7
DL050107-003	5/1/2007	CS1C1	SWL1	3	18.3	4.2	14.1
DL050307-004	5/3/2007	CS1C1	SWL1	3	18.3	5.4	12.9
DL050107-003	5/1/2007	CS1C1	SWL1	4	18.3	3.9	14.4
DL050307-004	5/3/2007	CS1C1	SWL1	4	18.3	5.3	13.0
DL050107-003	5/1/2007	CS1C1	SWL1	5	18.3	3.4	14.9
DL050307-004	5/3/2007	CS1C1	SWL1	5	18.3	10.7	7.6
DL050307-004	5/3/2007	CS1C1	SWL1	6	18.3	10.2	8.1
DL050107-003	5/1/2007	CS1C1	WWB9	1	18.3	3.7	14.6
DL050107-003	5/1/2007	CS1C1	WWB9	2	18.3	3.6	14.7
DL050107-003	5/1/2007	CS1C1	WWB9	3	18.3	3.4	14.9
DL050107-003	5/1/2007	CS1C1	WWB9	4	18.3	3.4	14.9
DL050107-003	5/1/2007	CS1C1	WWB9	5	18.3	3.0	15.3
DL050107-003	5/1/2007	CS1C1	WWB9	6	18.3	3.0	15.3

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Measurement Results Listing by Download File

Download ID	Survey Date	LC3	LC5	LC6	Reference Value (uR/hr)	Contact (C) Result (uR/hr)	Reference - C (uR/hr)
DL050107-003	5/1/2007	CS1C1	WWB9	7	18.3	3.3	15.0
DL050107-003	5/1/2007	CS1C1	WWB9	8	18.3	2.9	15.4
DL050107-003	5/1/2007	CS1C1	WWB9	9	18.3	2.7	15.6
DL050107-003	5/1/2007	CS1C1	WWB9	10	18.3	2.8	15.5
DL050107-003	5/1/2007	CS1C1	WWB9	11	18.3	2.7	15.6
DL050107-003	5/1/2007	CS1C1	WWB9	12	18.3	2.5	15.8
DL050107-003	5/1/2007	CS1C1	WWB9	13	18.3	2.7	15.6
DL050107-003	5/1/2007	CS1C1	WWB9	14	18.3	2.6	15.7
DL050107-003	5/1/2007	CS1C1	WWB9	16	18.3	2.8	15.5
DL050107-003	5/1/2007	CS1C1	WWB9	17	18.3	2.7	15.6
DL050107-003	5/1/2007	CS1C1	WWB9	18	18.3	2.8	15.5
DL050107-003	5/1/2007	CS1C1	WWB9	19	18.3	2.4	15.9
DL050107-003	5/1/2007	CS1C1	WWB9	20	18.3	2.7	15.6
DL050107-003	5/1/2007	CS1C1	WWB9	21	18.3	2.7	15.6
DL050107-003	5/1/2007	CS1C1	WWB9	22	18.3	2.4	15.9
DL050107-003	5/1/2007	CS1C1	WWB9	23	18.3	2.5	15.8
DL050107-003	5/1/2007	CS1C1	WWB9	24	18.3	2.7	15.6
DL050307-004	5/3/2007	CS1C1	WWH1	1	18.3	8.7	9.6
DL050107-003	5/1/2007	CS1C1	WWH1	1	18.3	4.8	13.5
DL050107-003	5/1/2007	CS1C1	WWH1	2	18.3	4.6	13.7
DL050307-004	5/3/2007	CS1C1	WWH1	2	18.3	9.2	9.1
DL050307-004	5/3/2007	CS1C1	WWH1	3	18.3	3.9	14.4
DL050107-003	5/1/2007	CS1C1	WWH1	3	18.3	4.5	13.8
DL050307-004	5/3/2007	CS1C1	WWH1	4	18.3	3.9	14.4

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Measurement Results Listing by Download File

Download ID	Survey Date	LC3	LC5	LC6	Reference Value (uR/hr)	Contact (C) Result (uR/hr)	Reference - C (uR/hr)
DL050107-003	5/1/2007	CS1C1	WWH1	4	18.3	3.9	14.4
DL050307-004	5/3/2007	CS1C1	WWH1	5	18.3	3.7	14.6
DL050107-003	5/1/2007	CS1C1	WWH1	5	18.3	3.4	14.9
DL050307-004	5/3/2007	CS1C1	WWH1	6	18.3	3.3	15.0
DL050107-003	5/1/2007	CS1C1	WWH1	6	18.3	3.1	15.2
DL050307-004	5/3/2007	CS1C1	WWH1	7	18.3	12.4	5.9
DL050107-003	5/1/2007	CS1C1	WWH1	7	18.3	3.1	15.2
DL050307-004	5/3/2007	CS1C1	WWH1	8	18.3	8.8	9.5
DL050107-003	5/1/2007	CS1C1	WWH1	8	18.3	3.1	15.2
DL050107-003	5/1/2007	CS1C1	WWH1	9	18.3	3.2	15.1
DL050307-004	5/3/2007	CS1C1	WWH1	9	18.3	6.0	12.3
DL050107-003	5/1/2007	CS1C1	WWH1	10	18.3	2.9	15.4
DL050307-004	5/3/2007	CS1C1	WWH1	10	18.3	5.2	13.1
DL050107-003	5/1/2007	CS1C1	WWH1	11	18.3	2.9	15.4
DL050307-004	5/3/2007	CS1C1	WWH1	11	18.3	4.2	14.1
DL050107-003	5/1/2007	CS1C1	WWH1	12	18.3	3.0	15.3
DL050307-004	5/3/2007	CS1C1	WWH1	12	18.3	3.4	14.9
DL050107-003	5/1/2007	CS1C1	WWH1	13	18.3	3.1	15.2
DL050107-003	5/1/2007	CS1C1	WWH1	14	18.3	2.9	15.4
DL050107-003	5/1/2007	CS1C1	WWH1	15	18.3	2.9	15.4

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL050107-003	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061
DL050307-004	98648	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (uR/hr)
C1	Concrete	Concrete, Bare or Painted	13.3

Field Notes Summary

Download ID	Field Notes
DL050107-003	None
DL050307-004	None

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 6.0

Sample Analysis Results

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 7.0

Supplemental Information and/or Data

 ***** THE BOEING COMPANY *****
 ***** SANTA SUSANA FIELD LABORATORY *****
 ***** SHEA - RADIATION SAFETY LAB *****

 ***** GAMMA SPECTRUM ANALYSIS REPORT *****

Report Generated On : 5/16/07 12:30:27 PM

Sample Identification : T24070005M
 Spectrum Description : Areva 4024 Concrete Disc WU1C1 WN H-1
 MCA Number : Main System #1
 Sample Type : Concrete
 Sample Geometry : 2

Peak Locate Threshold : 4.00
 Peak Locate Range (in channels) : 200 - 16384
 Peak Area Range (in channels) : 1 - 16384
 Identification Energy Tolerance : 1.000 keV

Sample Size : 1.540E+002 g

Sample Taken On : 4/27/07 1:00:00 PM
 Acquisition Started : 5/16/07 12:10:37 PM

Live Time : 1000.0 seconds
 Real Time : 1001.6 seconds

Energy Calibration Used Done On : 9/29/06
 Efficiency Calibration Used Done On : 9/29/06

Report Reviewed and
 Conforms to RS-00017

By: ER McKinnis

Date: 5-16-07

Radiation Safety

NOTE: COPY1

Co-60 15.7 pCi/g
 Eu-152 195 pCi/g
 Eu-154 15.9 pCi/g

***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : T24070005M

	Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/g)	Wt mean Activity Uncertainty	Percent Total Act.	Nuclide MDA (pCi/g)
X	NA-22	0.936				9.266E-007
X	Co-57	0.799				5.582E-007
	CO-60	0.953	1.574E+001	1.157E+000	5.40%	8.884E-001
	EU-152	0.960	1.947E+002	6.117E+000	66.74%	1.605E+000
	EU-154	0.557	1.594E+001	1.042E+000	5.46%	9.604E-001
	PB-210U	0.999	6.535E+001	8.208E+000	22.40%	8.445E+000

Total Sample Activity... 2.9171E+002 pCi/g

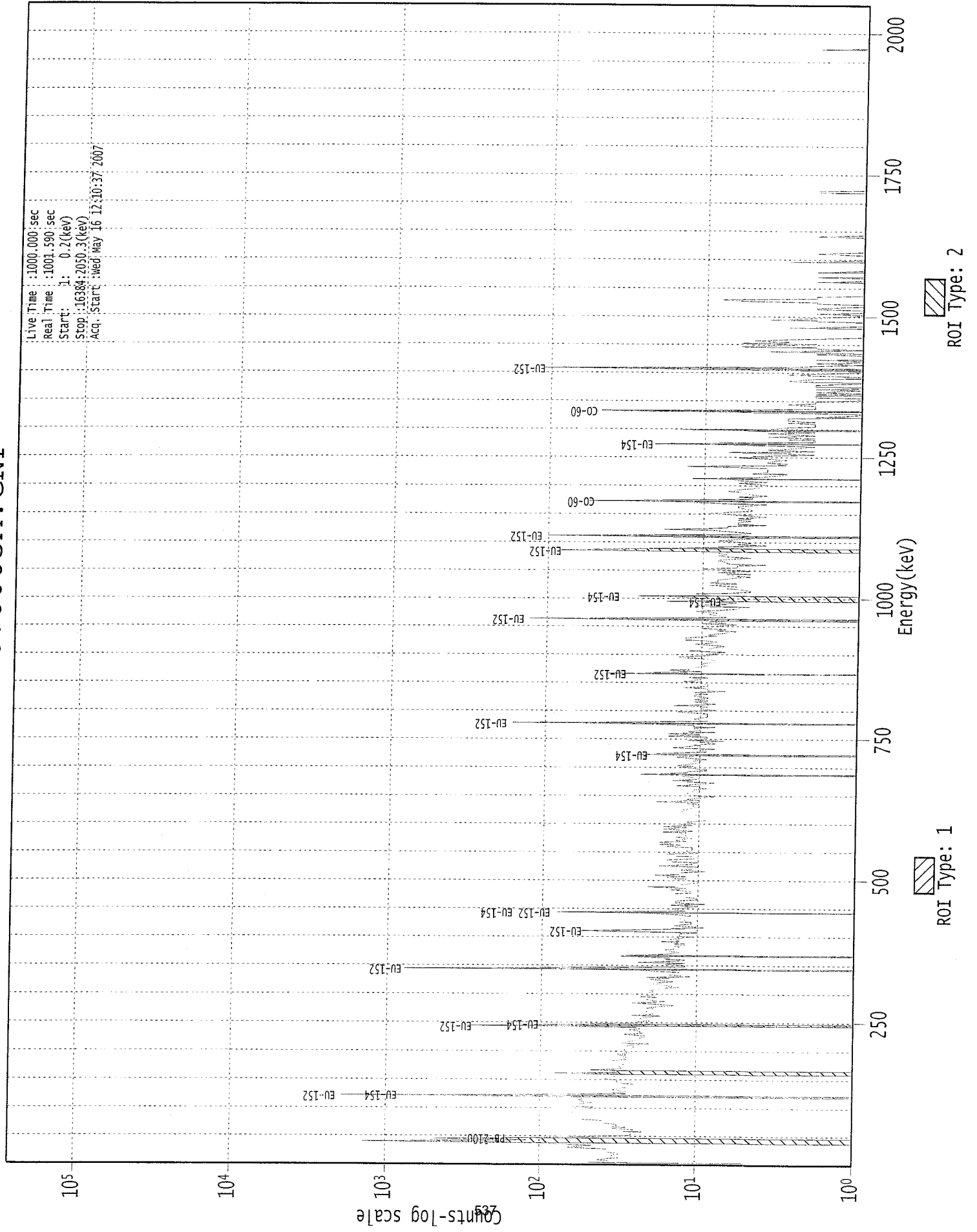
? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

Live Time	:1000.000:sec
Real Time	:1001.590:sec
Start	1: 0.2(kev)
Stop	:16384:2050.3(kev)
Acq. Start	Wed May 16 12:10:37 2007



Appendix A

Section	Survey Package	Survey Unit Description
4.0		SETF Activated Test Cells
4.1	C4024 102C1	SGTCC Test Cell B-104
4.1.3	C4024 102C1	Survey Results for Storage Tubes and Sumps

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Direct Alpha Measurement Results
5.0	Contact Gamma Exposure Rate Measurement Results
6.0	Removable Alpha Smear Sample Analysis Results
7.0	Removable Beta Smear Sample Analysis Results
8.0	Supplemental Information and/or Data

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 1.0

Data Analysis Report Parameters

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

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Data Analysis Report Parameters

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Survey Group: C - Radiological Survey of Impacted Facility Surfaces & Structures

Survey Area: 4024 - SETF, Building 4024

Unit Classification: 1 - Impacted Class 1 Structure

MARSSIM FSS Survey Unit Size (M²): 100

Survey Unit: 02 - SGTCC Test Cell B-104

Survey Reason: C1 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	SM1	Sump or Storage Tubes	

Total Area

Materials: Code Description

C1 - Concrete

M1 - Metal

Report Information:

Report Pedigree: Final Report

Detector Efficiency: 2-Pi

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 2.0

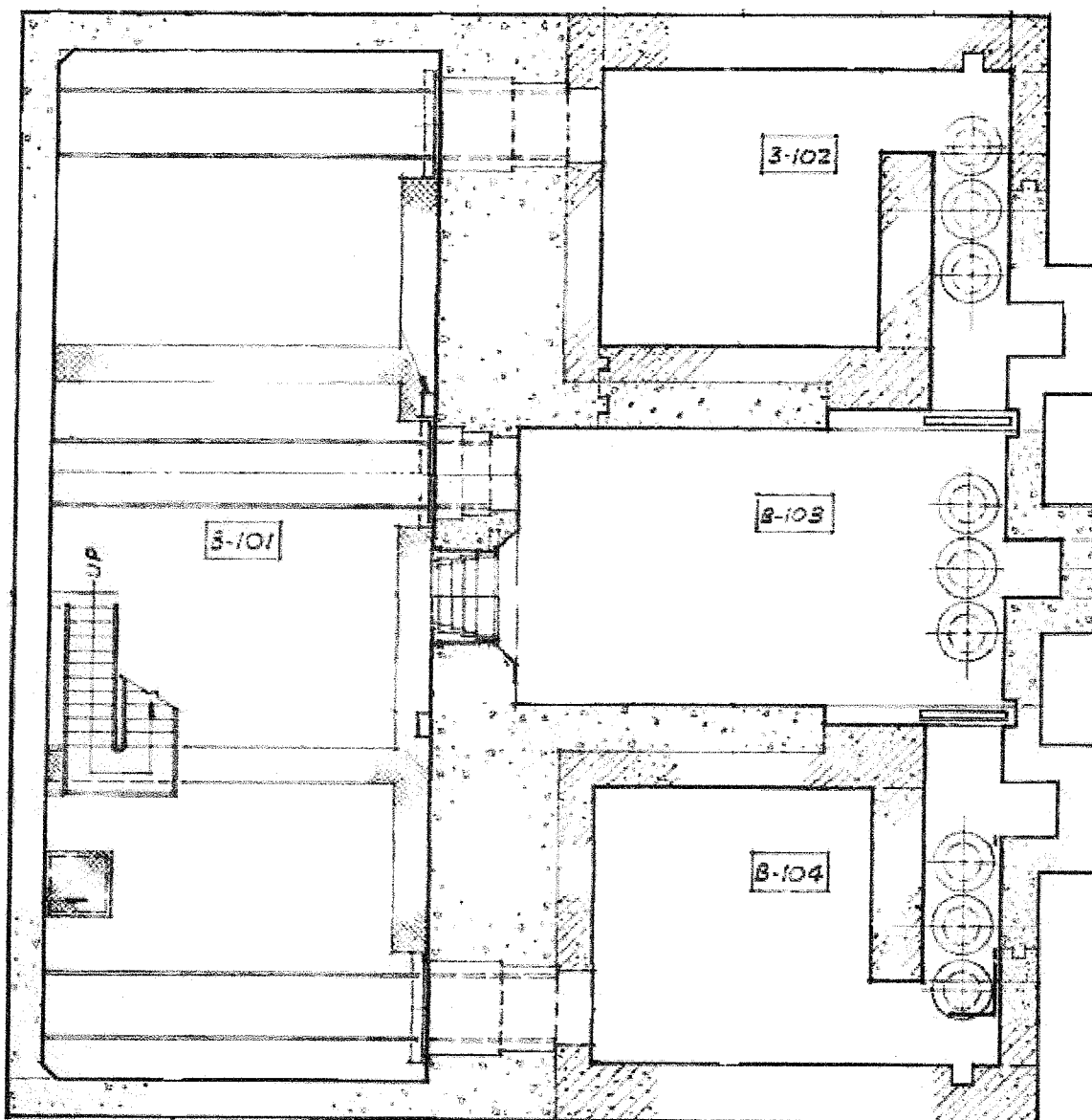
Annotated Drawings

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

4/20/2007

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Survey Package Appendix A – Drawings



SETF, Basement Floor Plan (SGTCC)

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 3.0

Direct Beta Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

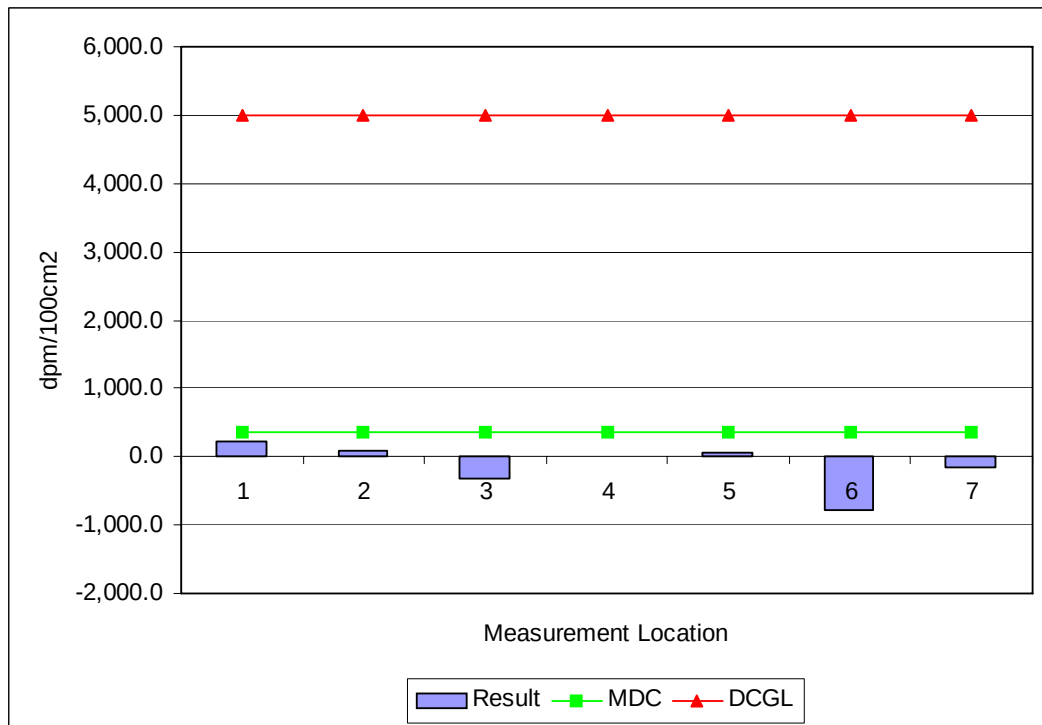
7/17/2007

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	-126.2	Ave. MDC	348.9	Ave. MDC < 50% DCGL	Yes
Median	12.3	Ave. Background	1,858.0	Measurements < DCGL	Yes
Standard Deviation	336.1	Maximum Bkg.	2,185.0	Measurement Mean < DCGL	Yes
Range	997.0	DCGL	5000	No. Measurements > DCGL	0
Minimum	-776.7	Number of Measurements			
Maximum	220.3	No. Prescribed	7		
		No. Collected	7		



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

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL042507-002	4/23/2007	SM1C1	SUMP	1	2,405.3	348.9	2,185.0	220.3	4,779.7
DL042507-002	4/23/2007	SM1C1	SUMP	2	2,277.3	348.9	2,185.0	92.3	4,907.7
DL042507-002	4/23/2007	SM1C1	SUMP	3	1,872.0	348.9	2,185.0	-313.0	5,313.0
DL042507-002	4/23/2007	SM1C1	SUMP	4	2,197.3	348.9	2,185.0	12.3	4,987.7
DL042507-002	4/23/2007	SM1M1	WST1	1	1,472.0	348.9	1,422.0	50.0	4,950.0
DL042507-002	4/23/2007	SM1M1	WST2	2	645.3	348.9	1,422.0	-776.7	5,776.7
DL042507-002	4/23/2007	SM1M1	WST3	3	1,253.3	348.9	1,422.0	-168.7	5,168.7

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

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Direct Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL042507-002	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.5	2,185
M1	Metal	Metal, Bare or Painted	0.5	1,422

Field Notes Summary

Download ID: Field Notes
DL042507-002 Replacement download for DL042307-002

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 4.0

Direct Alpha Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

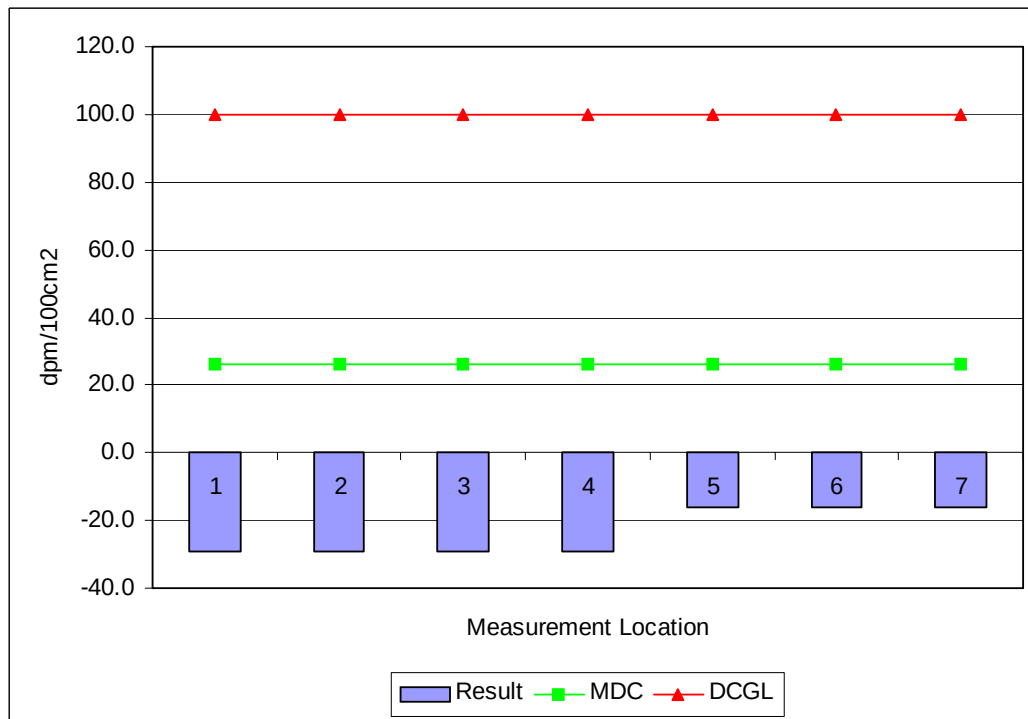
7/17/2007

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	-23.4	Ave. MDC	25.9	Ave. MDC < 50% DCGL	Yes
Median	-29.0	Ave. Background	23.4	Measurements < DCGL	Yes
Standard Deviation	6.9	Maximum Bkg.	29.0	Measurement Mean < DCGL	Yes
Range	13.0	DCGL	100	No. Measurements > DCGL	0
Minimum	-29.0	Number of Measurements			
Maximum	-16.0	No. Prescribed	7		
		No. Collected	7		



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CANOGA PARK, CALIFORNIA

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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL042507-001	4/23/2007	SM1C1	SUMP	1	0.0	25.9	29.0	-29.0	129.0
DL042507-001	4/23/2007	SM1C1	SUMP	2	0.0	25.9	29.0	-29.0	129.0
DL042507-001	4/23/2007	SM1C1	SUMP	3	0.0	25.9	29.0	-29.0	129.0
DL042507-001	4/23/2007	SM1C1	SUMP	4	0.0	25.9	29.0	-29.0	129.0
DL042507-001	4/23/2007	SM1M1	WST1	1	0.0	25.9	16.0	-16.0	116.0
DL042507-001	4/23/2007	SM1M1	WST2	2	0.0	25.9	16.0	-16.0	116.0
DL042507-001	4/23/2007	SM1M1	WST3	3	0.0	25.9	16.0	-16.0	116.0

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL042507-001	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.25	29
M1	Metal	Metal, Bare or Painted	0.25	16

Field Notes Summary

Download ID: Field Notes

DL042507-001 Replacement download for DL042307-001

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

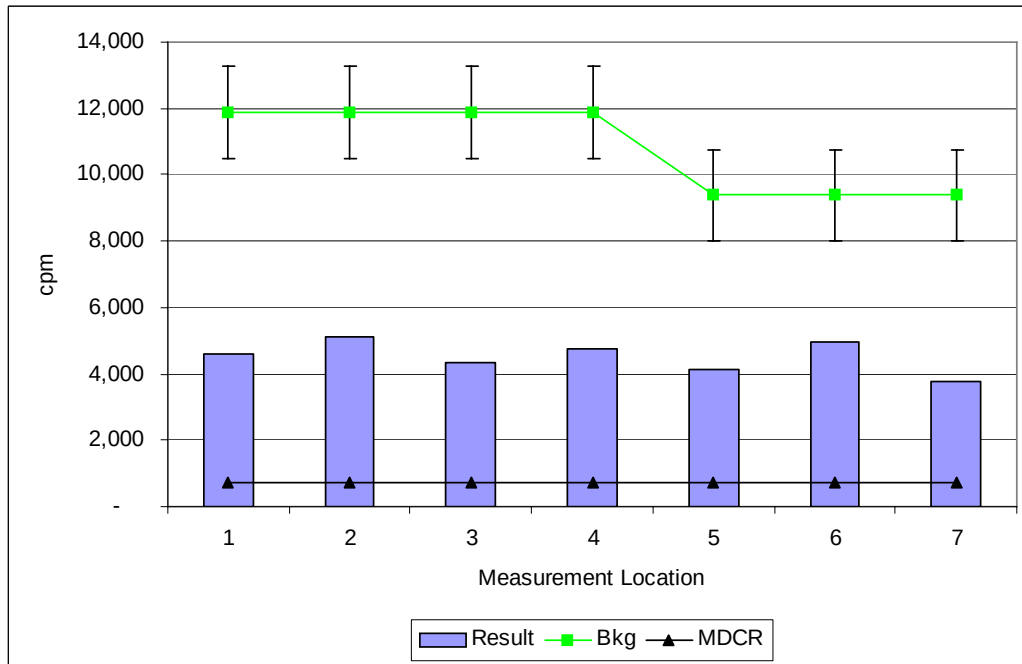
7/17/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	4,527	Ave. Background	10,803	Ave. MDCR < 50% Bkg.	Yes
Median	4,595	3 sigma Value	1,388	Measurements < Ave. Bkg.	Yes
Standard Deviation	463	Maximum Bkg.	11,869	Measurement Mean < Ave. Bkg.	Yes
Range	1,310	Ave. MDCR	719	No. Measurements > Ave. Bkg.	0
Minimum	3,790	Number of Measurements			
Maximum	5,100	No. Prescribed	7		
		No. Collected	7		



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

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL042507-003	4/23/2007	SM1C1	SUMP1	1	11,869	719	4,595	7,274
DL042507-003	4/23/2007	SM1C1	SUMP1	2	11,869	719	5,100	6,769
DL042507-003	4/23/2007	SM1C1	SUMP1	3	11,869	719	4,365	7,504
DL042507-003	4/23/2007	SM1C1	SUMP1	4	11,869	719	4,760	7,109
DL042507-003	4/23/2007	SM1M1	WST1	1	9,381	719	4,135	5,246
DL042507-003	4/23/2007	SM1M1	WST2	2	9,381	719	4,945	4,436
DL042507-003	4/23/2007	SM1M1	WST3	3	9,381	719	3,790	5,591

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

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL042507-003	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
C1	Concrete	Concrete, Bare or Painted	11,869
M1	Metal	Metal, Bare or Painted	9,381

Field Notes Summary

Download ID	Field Notes
DL042507-003	Replacement download for DL042307-003

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 6.0

Removable Alpha Smear Sample Analysis Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

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Removable Alpha Measurement Results

Survey Area LC1: C4024 Package Type: Structure
 Survey Area Name: SETF, Building 4024
 Survey Package Number and Unit Name:
 C4024 102C1 SGTCC Test Cell B-104

Statistical Summary

	dpm/100cm2
Mean	-0.7
Median	-1.0
Standard Deviation	0.9
Range	2.3
Minimum	-1.0
Maximum	1.3

Measurement Sensitivity

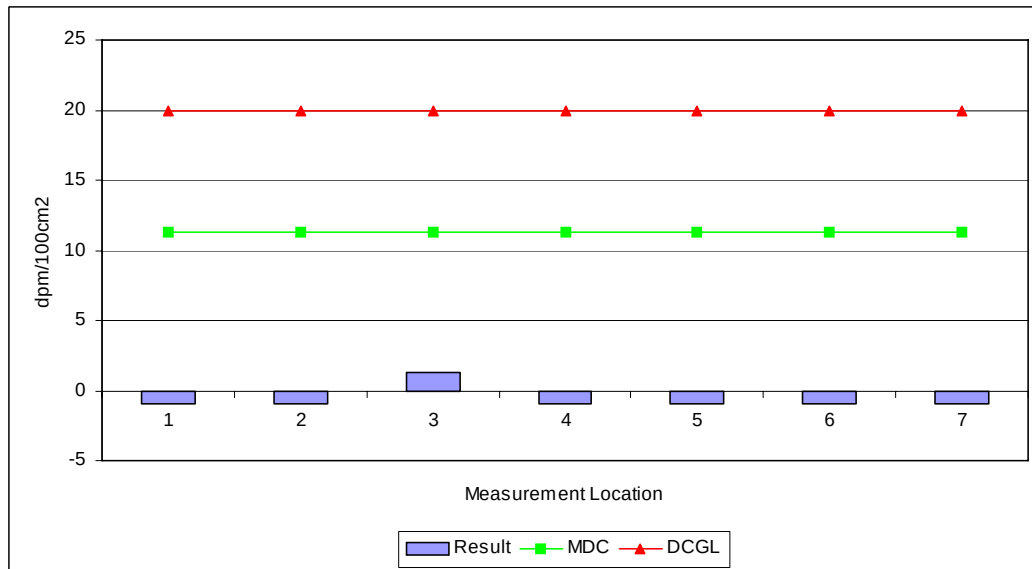
	dpm/100cm2
MDC Mean	11.3
MDC Minimum	11.3
MDC Maximum	11.3
DCGL	20.0

Number of Measurements

No. Prescribed	7
No. Collected	7

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



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CANOGA PARK, CALIFORNIA

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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Alpha Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS042307-001	4/23/2007	SM1	St1	1	11.3	-1	21
CS042307-001	4/23/2007	SM1	St2	2	11.3	-1	21
CS042307-001	4/23/2007	SM1	St3	3	11.3	1.3	18.7
CS042307-001	4/23/2007	SM1	S-1	1	11.3	-1	21
CS042307-001	4/23/2007	SM1	S-2	2	11.3	-1	21
CS042307-001	4/23/2007	SM1	S-3	3	11.3	-1	21
CS042307-001	4/23/2007	SM1	S-4	4	11.3	-1	21

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

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Removable Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS042307-001	C4024 102C1 FL1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS042307-001	No Field Notes

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 7.0

Removable Beta Smear Sample Analysis Results

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CANOGA PARK, CALIFORNIA

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Removable Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Statistical Summary

	dpm/100cm2
Mean	-3.3
Median	-6.9
Standard Deviation	14.3
Range	38.7
Minimum	-23.5
Maximum	15.2

Number of Measurements

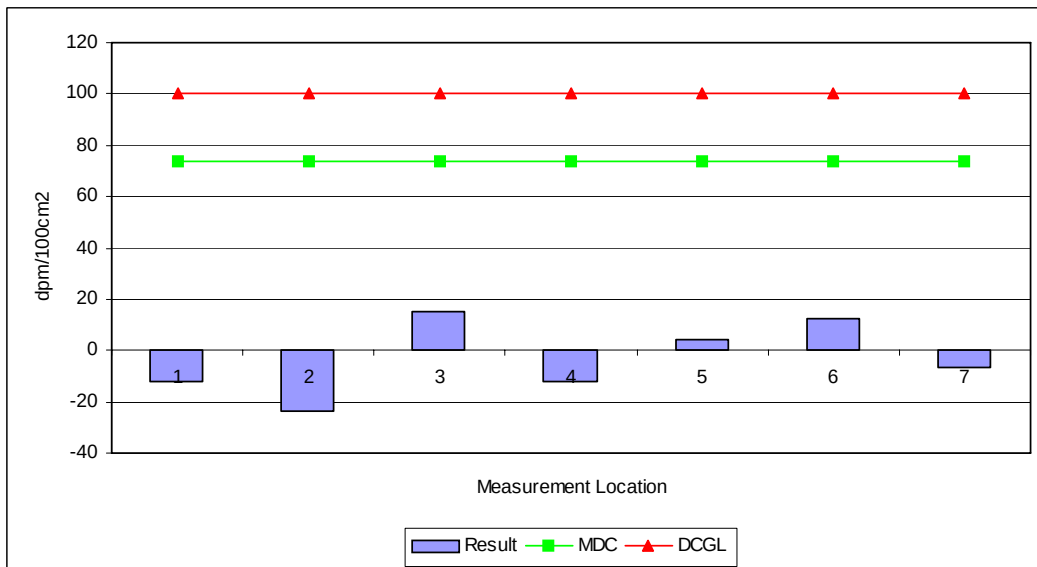
No. Prescribed	7
No. Collected	7

Measurement Sensitivity

	dpm/100cm2
MDC Mean	73.9
MDC Minimum	73.9
MDC Maximum	73.9
DCGL	100.0

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



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

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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Beta Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS042307-001	4/23/2007	SM1	St1	1	73.9	-12.4	112.4
CS042307-001	4/23/2007	SM1	St2	2	73.9	-23.5	123.5
CS042307-001	4/23/2007	SM1	St3	3	73.9	15.2	84.8
CS042307-001	4/23/2007	SM1	S-1	1	73.9	-12.4	112.4
CS042307-001	4/23/2007	SM1	S-2	2	73.9	4.2	95.8
CS042307-001	4/23/2007	SM1	S-3	3	73.9	12.4	87.6
CS042307-001	4/23/2007	SM1	S-4	4	73.9	-6.9	106.9

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

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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 102C1 SGTCC Test Cell B-104

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS042307-001	C4024 102C1 FL1.xls	Ludlum	M2929	118419	3/5/2007	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS042307-001	No Field Notes

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

7/17/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 102C1	SGTCC Test Cell B-104		

Section 8.0

Supplemental Information and/or Data

```

*****
*****      T H E   B O E I N G   C O M P A N Y      *****
*****      S A N T A   S U S A N A   F I E L D   L A B O R A T O R Y      *****
*****      S H E A -   R A D I A T I O N   S A F E T Y   L A B      *****
*****
*****      G A M M A   S P E C T R U M   A N A L Y S I S   R E P O R T      *****
*      *****

```

```

Report Generated On           : 4/26/07  10:49:26 AM

Sample Identification         : ENV070041M
Spectrum Description        : 4024 Basement Storage Tube Water
MCA Number                   : Main System #1
Sample Type                  : Water
Sample Geometry              : 3

Peak Locate Threshold        : 4.00
Peak Locate Range (in channels) : 200 - 16384
Peak Area Range (in channels)  : 1 - 16384
Identification Energy Tolerance : 1.000 keV

Sample Size                   : 8.240E-001 L

Sample Taken On              : 4/25/07  7:00:00 AM
Acquisition Started          : 4/25/07  10:40:30 AM

Live Time                    : 20000.0 seconds
Real Time                     : 20001.0 seconds

```

```

Energy Calibration Used Done On : 9/29/06
Efficiency Calibration Used Done On : 9/29/06

```

Report Reviewed and
Conforms to RS-00017

By: Ray McSinnis Date: 4-26-07
Radiation Safety

NOTE: COPY1

Acceptable for Non-radioactive Disposal
(See Rocketdyne N001OP000034)

***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : ENV070041M

Nuclide	Nuclide	Wt mean	Wt mean		Nuclide
Name	Id	Activity	Activity	Percent	MDA
	Confidence	(pCi/L	) Uncertainty	Total Act.	(pCi/L
					)

Total Sample Activity... 0.0000E+000 pCi/L

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

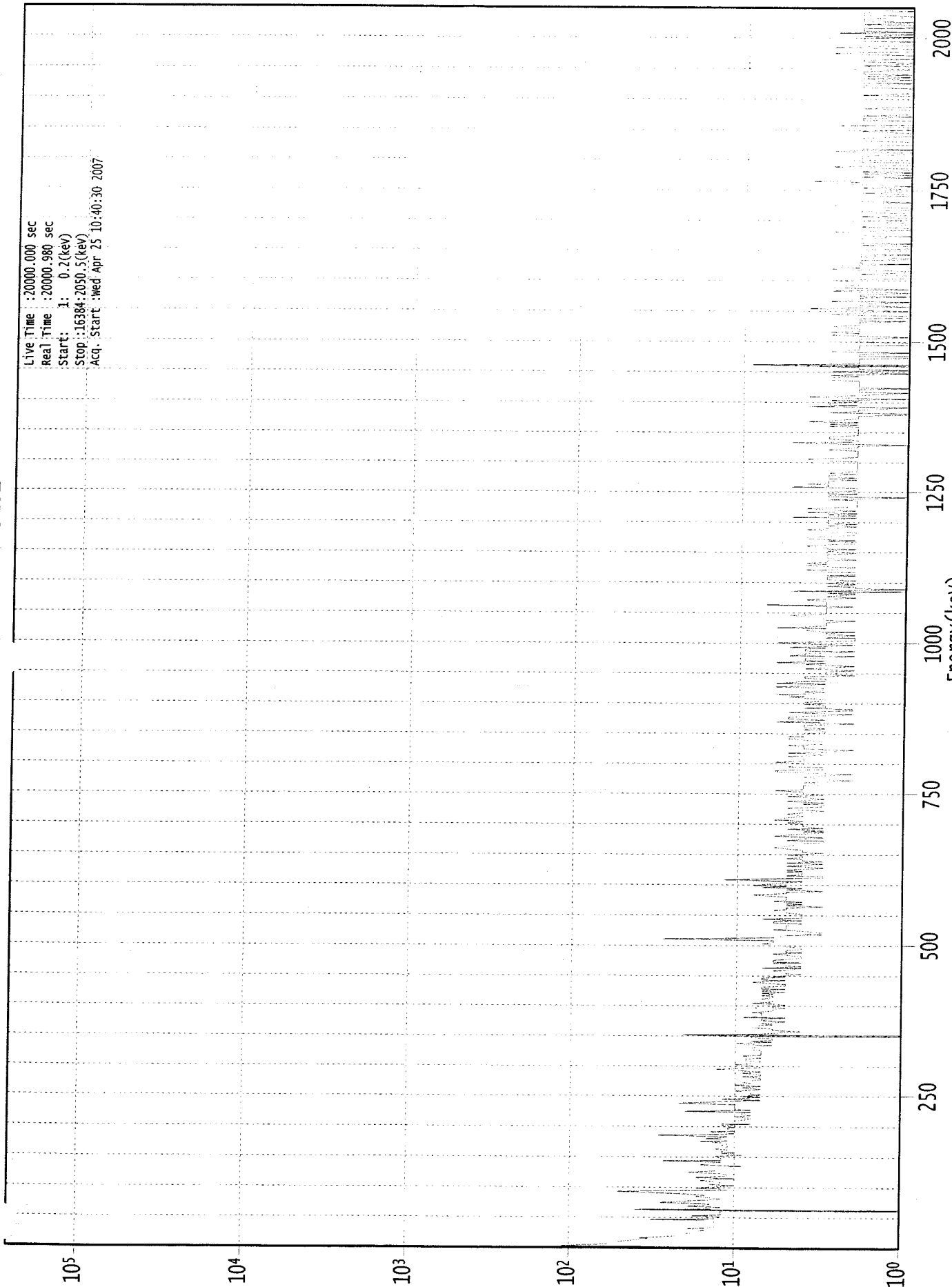
ENVO7^041M.CNF

Live Time : 20000.000 sec
 Real Time : 20000.980 sec
 Start: 1: 0.2(kev)
 Stop: 16384:2050.5(kev)
 Acq. Start: wed Apr 25 10:40:30 2007

Counts-log scale

Energy(kev)

ROI Type: 1



Appendix A

Section	Survey Package	Survey Unit Description
4.0		SETF Activated Test Cells
4.2	C4024 101C1	SGTCC Test Cell B-102

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Direct Alpha Measurement Results
5.0	Contact Gamma Exposure Rate Measurement Results
6.0	Removable Alpha Smear Sample Analysis Results
7.0	Removable Beta Smear Sample Analysis Results
8.0	Sample Analysis Results
9.0	Photographs
10.0	Supplemental Information and/or Data

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Section 1.0

Data Analysis Report Parameters

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

7/13/2007

Page 1 of 1

Data Analysis Report Parameters

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Survey Group: C - Radiological Survey of Impacted Facility Surfaces & Structures

Survey Area: 4024 - SETF, Building 4024

Unit Classification: 1 - Impacted Class 1 Structure

MARSSIM FSS Survey Unit Size (M²): 100

Survey Unit: 01 - SGTCC Test Cell B-102

Survey Reason: C1 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	WU1	Upper Wall Surfaces	
	WL1	Lower Wall Surfaces	
	FL1	Floor Surface	
	CL1	Ceiling surfaces (including back surfaces)	
		Total Area	

Materials: Code Description

C1 - Concrete

M1 - Metal

Report Information:

Report Pedigree: Final Report

Detector Efficiency: 2-Pi

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Section 2.0

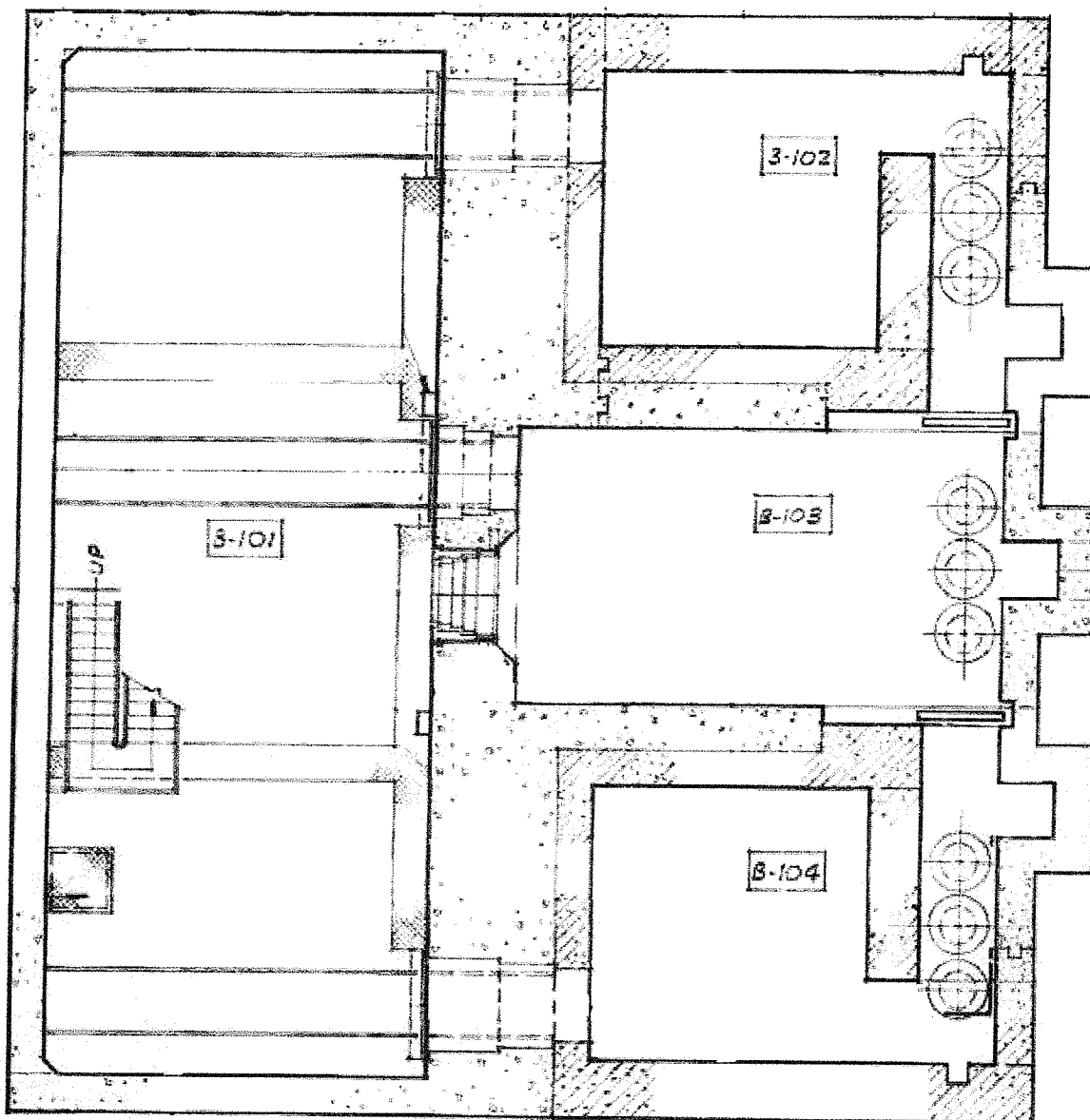
Annotated Drawings

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

4/20/2007

Page A-2 of 10

Survey Package Appendix A – Drawings



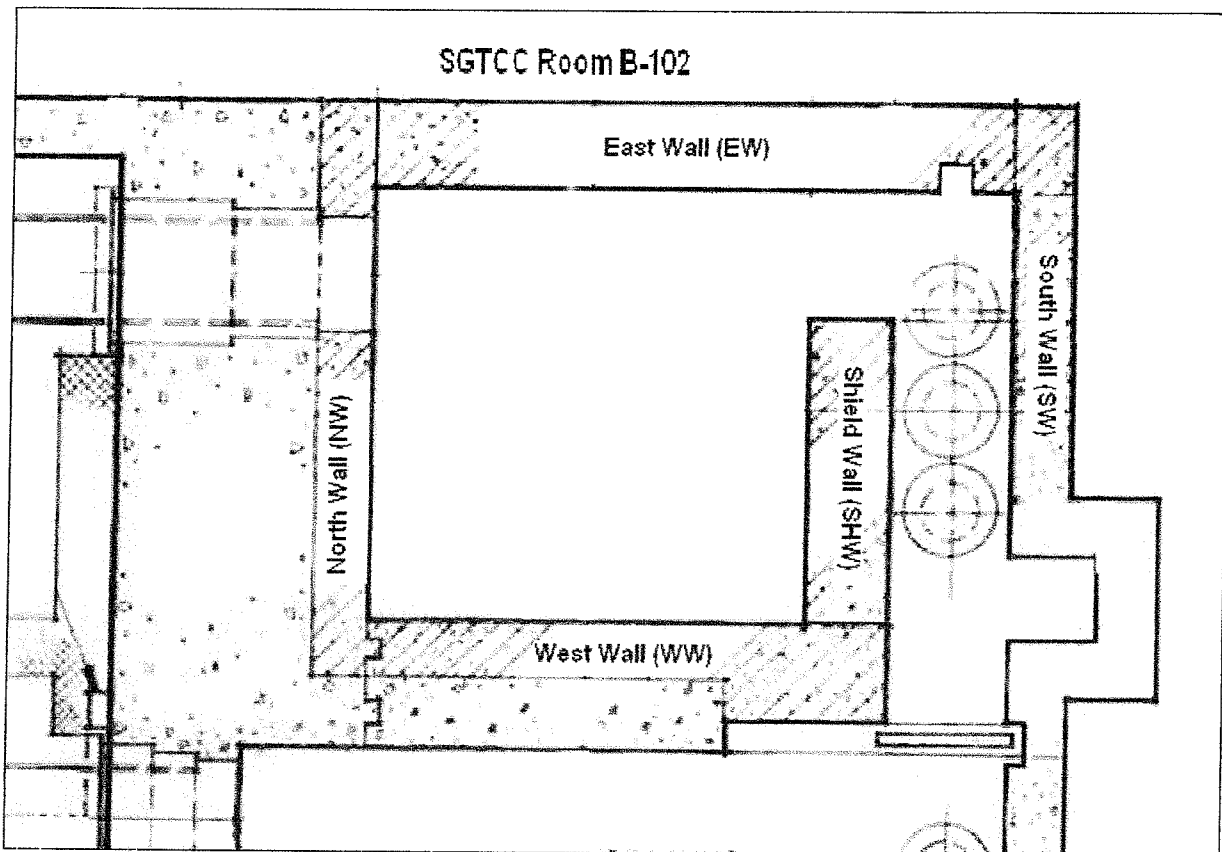
SETF, Basement Floor Plan (SGTCC)

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

4/20/2007

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Survey Package Appendix A – Drawings



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

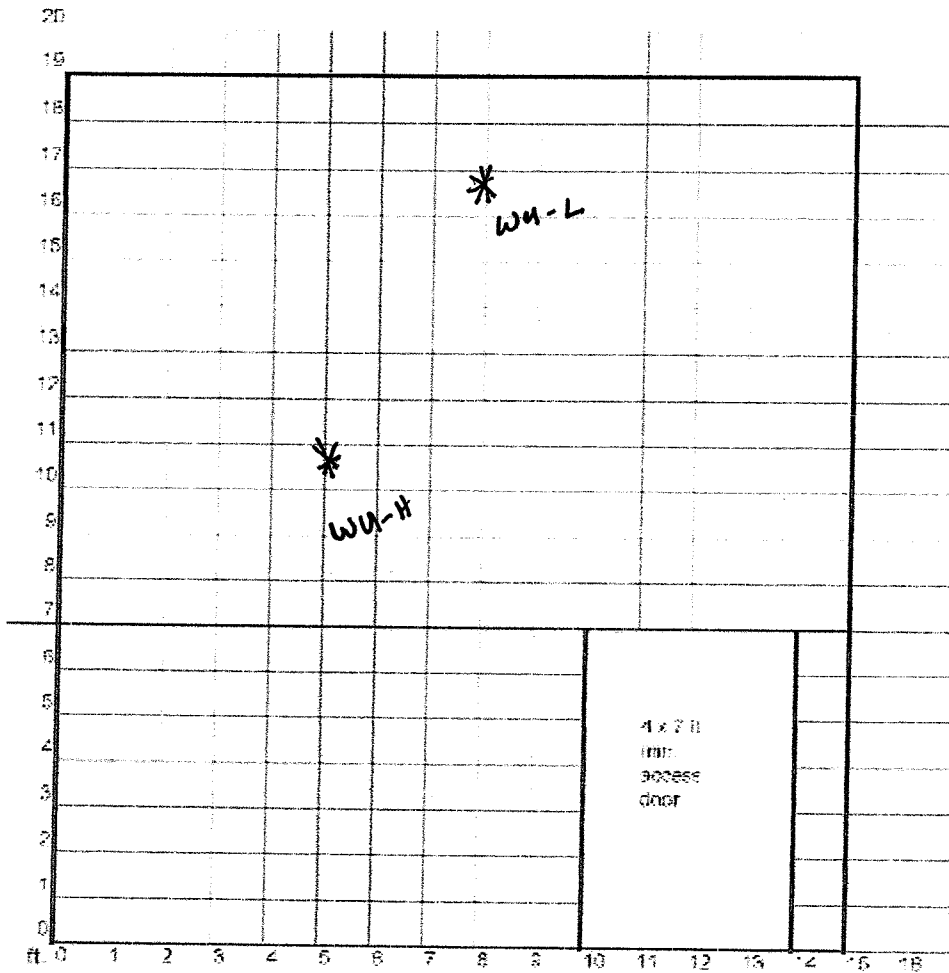
4/20/2007

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Survey Package Appendix A – Drawings

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

4/20/2007



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

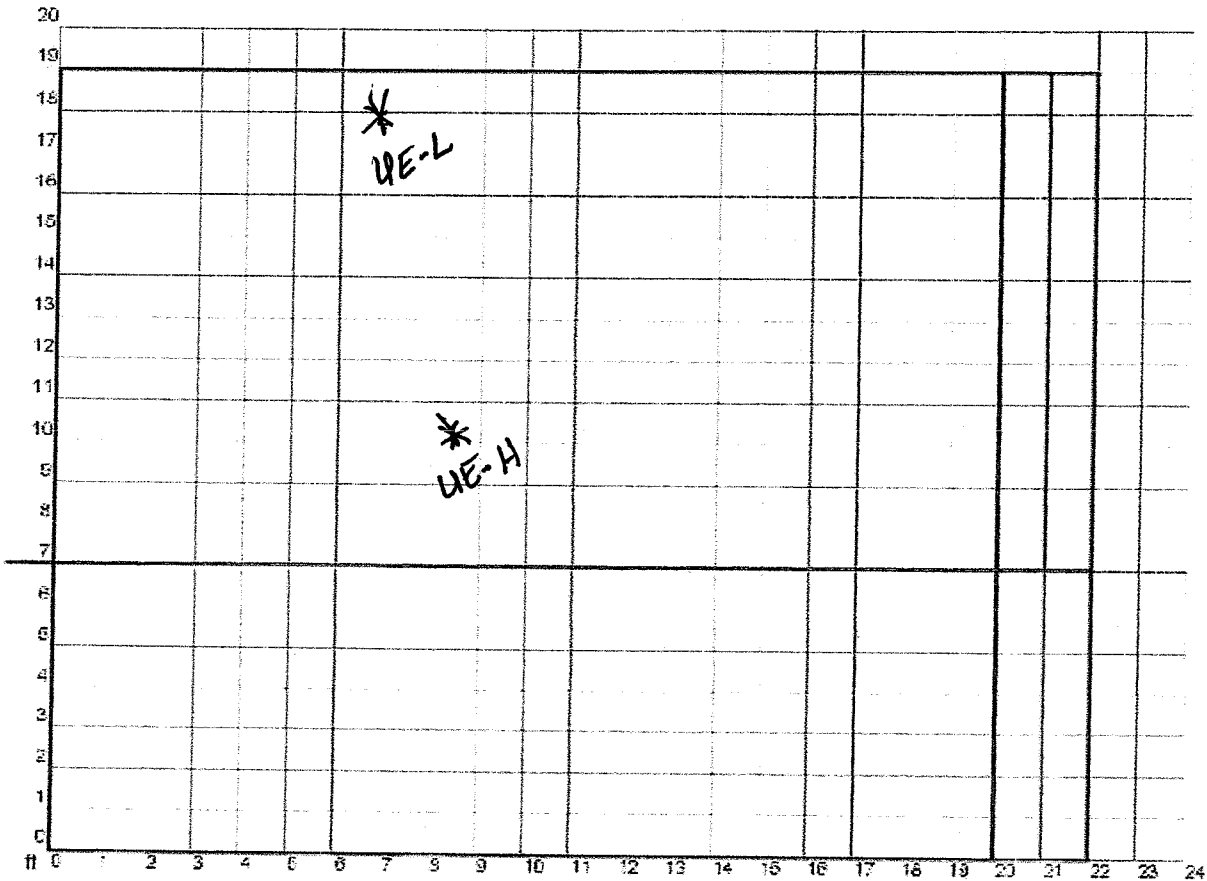
4/20/2007

Page A-4 of 10

Survey Package Appendix A – Drawings

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

4/20/2007



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

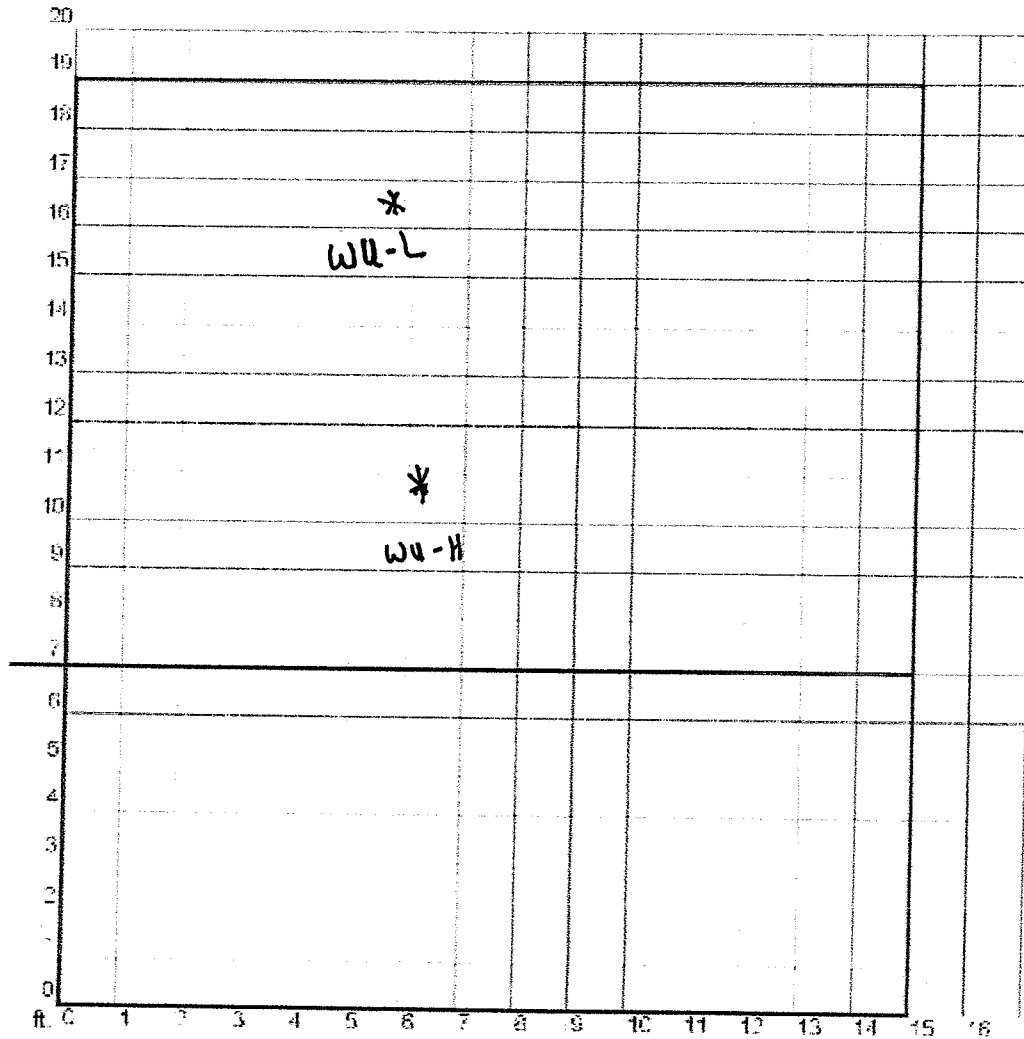
4/20/2007

Page A-6 of 10

Survey Package Appendix A – Drawings

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

4/20/2007

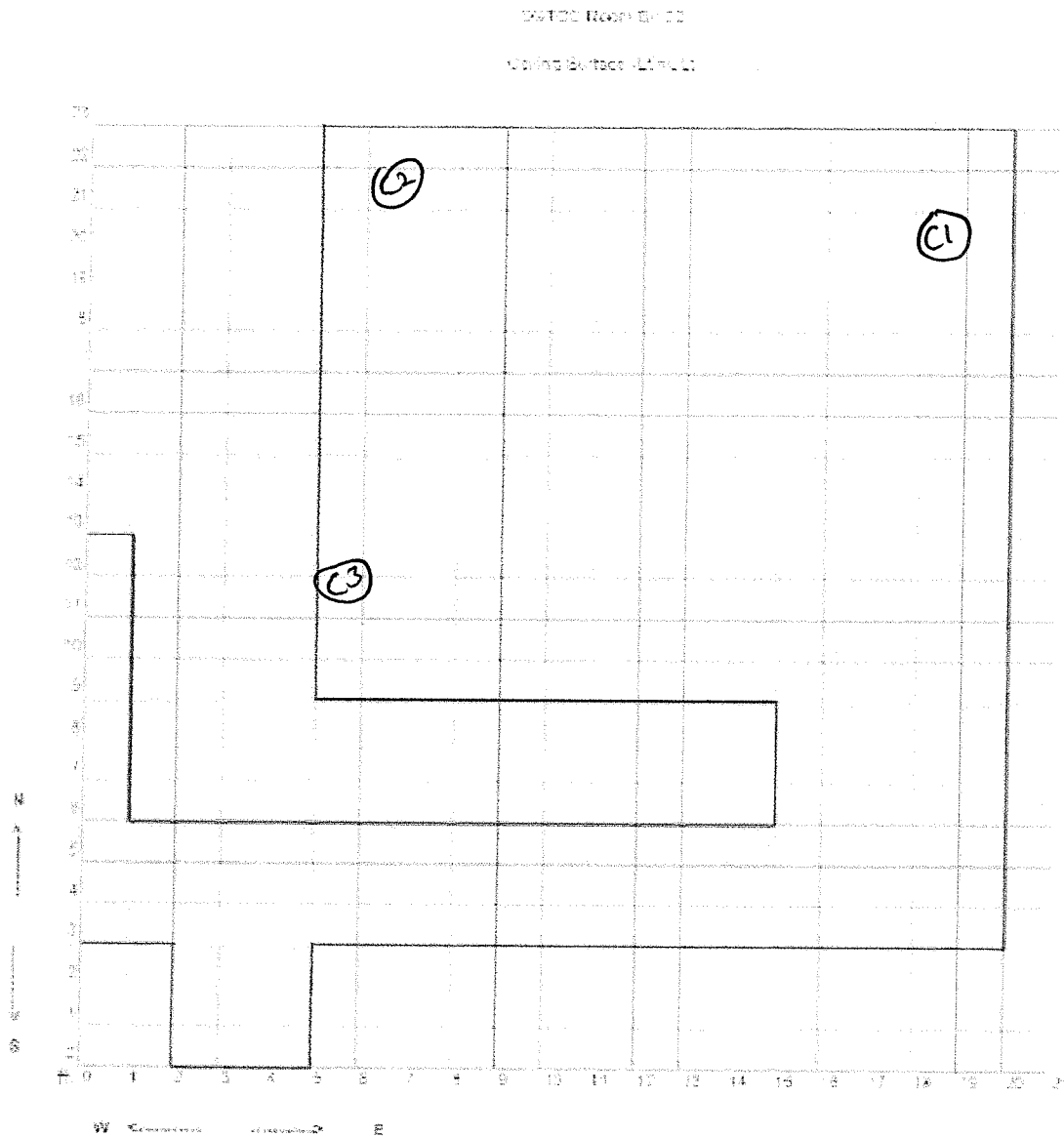


SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA

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Survey Package Appendix A – Drawings



Ceiling Surface

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Section 3.0

Direct Beta Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

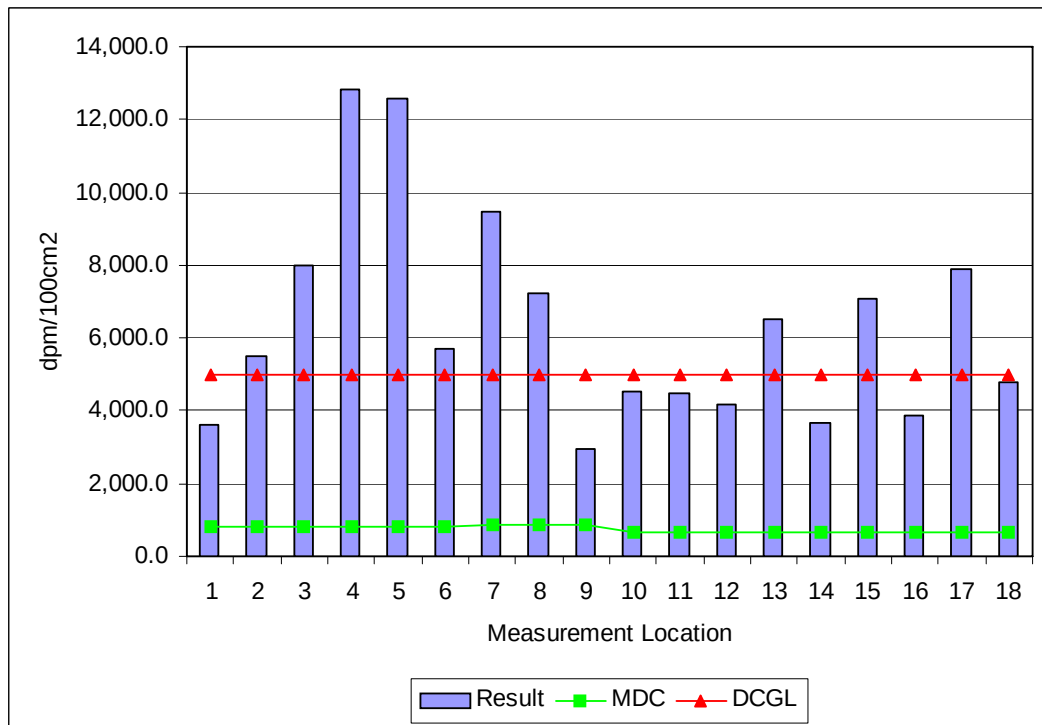
7/13/2007

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	6,385.7	Ave. MDC	742.8	Ave. MDC < 50% DCGL	Yes
Median	5,618.0	Ave. Background	1,422.0	Measurements < DCGL	No
Standard Deviation	2,905.4	Maximum Bkg.	1,422.0	Measurement Mean < DCGL	No
Range	9,850.7	DCGL	5000	No. Measurements > DCGL	10
Minimum	2,967.3	Number of Measurements			
Maximum	12,818.0	No. Prescribed	18		
		No. Collected	18		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

7/13/2007

Page 2 of 3

Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL042007-001	4/20/2007	WL1M1	EL1	1	5,050.7	796.7	1,422.0	3,628.7	1,371.3
DL042007-001	4/20/2007	WL1M1	EL2	2	6,933.3	796.7	1,422.0	5,511.3	-511.3
DL042007-001	4/20/2007	WL1M1	NH1	1	9,440.0	796.7	1,422.0	8,018.0	-3,018.0
DL042007-001	4/20/2007	WL1M1	SH1	1	14,240.0	796.7	1,422.0	12,818.0	-7,818.0
DL042007-001	4/20/2007	WL1M1	WH1	1	13,973.3	796.7	1,422.0	12,551.3	-7,551.3
DL042007-001	4/20/2007	WL1M1	WL1	1	7,146.7	796.7	1,422.0	5,724.7	-724.7
DL042007-003	4/20/2007	FL1M1	H1	1	10,880.0	880.7	1,422.0	9,458.0	-4,458.0
DL042007-003	4/20/2007	FL1M1	H2	2	8,640.0	880.7	1,422.0	7,218.0	-2,218.0
DL042007-003	4/20/2007	FL1M1	L1	3	4,389.3	880.7	1,422.0	2,967.3	2,032.7
DL043007-003	4/30/2007	CL1M1	CL1	1	5,973.3	660.9	1,422.0	4,551.3	448.7
DL043007-003	4/30/2007	CL1M1	CL2	1	5,920.0	660.9	1,422.0	4,498.0	502.0
DL043007-003	4/30/2007	CL1M1	CL3	1	5,600.0	660.9	1,422.0	4,178.0	822.0
DL043007-003	4/30/2007	WU1M1	EWB	1	7,946.7	660.9	1,422.0	6,524.7	-1,524.7
DL043007-003	4/30/2007	WU1M1	EWL	1	5,093.3	660.9	1,422.0	3,671.3	1,328.7
DL043007-003	4/30/2007	WU1M1	NWB	1	8,480.0	660.9	1,422.0	7,058.0	-2,058.0
DL043007-003	4/30/2007	WU1M1	NWL	1	5,312.0	660.9	1,422.0	3,890.0	1,110.0
DL043007-003	4/30/2007	WU1M1	WWB	1	9,333.3	660.9	1,422.0	7,911.3	-2,911.3
DL043007-003	4/30/2007	WU1M1	WWL	1	6,186.7	660.9	1,422.0	4,764.7	235.3

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

7/13/2007

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Direct Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL042007-001	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742
DL042007-003	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JEJ5742
DL043007-003	98648	3/5/2008	44-116	222981	3/6/2008	125.0	0.300	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.5	2,185
M1	Metal	Metal, Bare or Painted	0.5	1,422

Field Notes Summary

Download ID:	Field Notes
DL042007-001	BETA DIRECT MEASUREMENTS TAKEN ON (3) FLOOR LOCATIONS AND (6) LOWER WALL LOCATIONS .
DL042007-003	(3) DIRECT BETA READINGS ON FLOOR.
DL043007-003	None

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Section 4.0

Direct Alpha Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

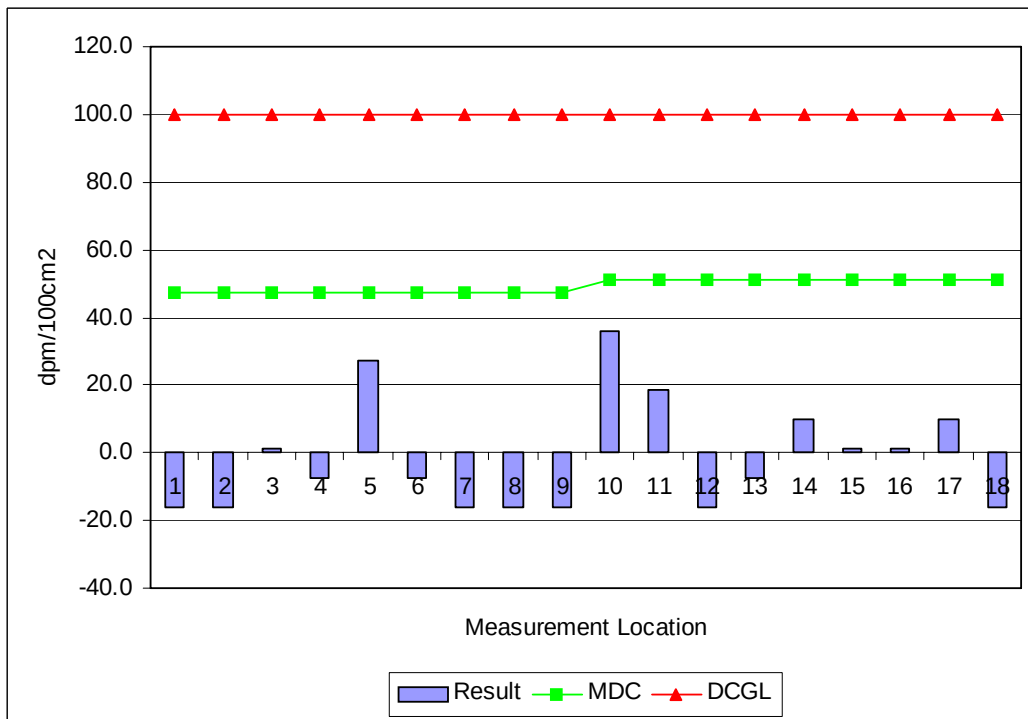
7/13/2007

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Statistical Summary		Measurement		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	-1.6	Ave. MDC	49.2	Ave. MDC < 50% DCGL	Yes
Median	-7.4	Ave. Background	16.0	Measurements < DCGL	Yes
Standard Deviation	16.2	Maximum Bkg.	16.0	Measurement Mean < DCGL	Yes
Range	51.9	DCGL	100	No. Measurements > DCGL	0
Minimum	-16.0	Number of Measurements			
Maximum	35.9	No. Prescribed	18		
		No. Collected	18		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

7/13/2007

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Direct Alpha Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL042007-004	4/20/2007	WL1M1	EWL1	1	0.0	47.3	16.0	-16.0	116.0
DL042007-004	4/20/2007	WL1M1	EWL2	2	0.0	47.3	16.0	-16.0	116.0
DL042007-004	4/20/2007	FL1M1	H1	1	17.3	47.3	16.0	1.3	98.7
DL042007-004	4/20/2007	FL1M1	H2	1	8.6	47.3	16.0	-7.4	107.4
DL042007-004	4/20/2007	FL1M1	L1	1	43.2	47.3	16.0	27.2	72.8
DL042007-004	4/20/2007	WL1M1	NWH	1	8.6	47.3	16.0	-7.4	107.4
DL042007-004	4/20/2007	WL1M1	SHW	1	0.0	47.3	16.0	-16.0	116.0
DL042007-004	4/20/2007	WL1M1	WWH	1	0.0	47.3	16.0	-16.0	116.0
DL042007-004	4/20/2007	WL1M1	WWL	1	0.0	47.3	16.0	-16.0	116.0
DL043007-001	4/30/2007	CL1M1	CL	1	51.9	51.0	16.0	35.9	64.1
DL043007-001	4/30/2007	CL1M1	CL	1	34.6	51.0	16.0	18.6	81.4
DL043007-001	4/30/2007	CL1M1	CL1	1	0.0	51.0	16.0	-16.0	116.0
DL043007-001	4/30/2007	WU1M1	EWL	1	8.6	51.0	16.0	-7.4	107.4
DL043007-001	4/30/2007	WU1M1	EWL	1	25.9	51.0	16.0	9.9	90.1
DL043007-001	4/30/2007	WU1M1	NWH	1	17.3	51.0	16.0	1.3	98.7
DL043007-001	4/30/2007	WU1M1	NWL	1	17.3	51.0	16.0	1.3	98.7
DL043007-001	4/30/2007	WU1M1	WWH	1	25.9	51.0	16.0	9.9	90.1
DL043007-001	4/30/2007	WU1M1	WWL	1	0.0	51.0	16.0	-16.0	116.0

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

7/13/2007

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Direct Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 101C1 SGTCC Test Cell B-102

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL042007-004	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061
DL043007-001	126195	7/18/2007	43-90	249011	3/6/2008	125.0	0.370	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Alpha Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
C1	Concrete	Concrete, Bare or Painted	0.25	29
M1	Metal	Metal, Bare or Painted	0.25	16

Field Notes Summary

Download ID: Field Notes
DL042007-004 Alpha direct readings taken on (6) lower wall and (3) floor locations
DL043007-001 None

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Section 5.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

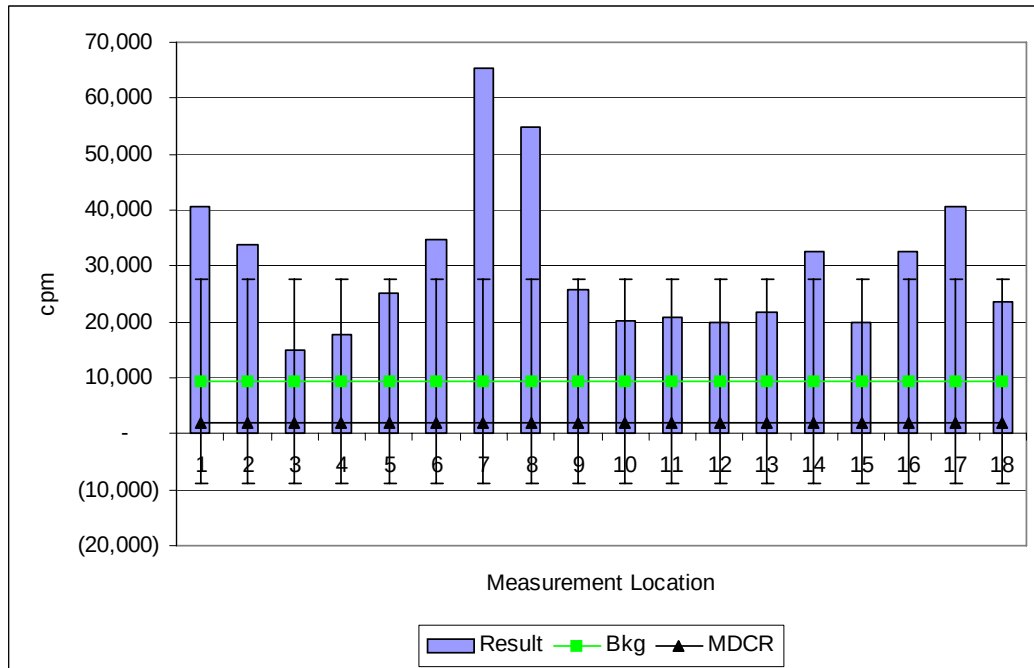
7/13/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	30,308	Ave. Background	9,381	Ave. MDCR < 50% Bkg.	Yes
Median	25,450	3 sigma Value	18,185	Measurements < Ave. Bkg.	No
Standard Deviation	13,433	Maximum Bkg.	9,381	Measurement Mean < Ave. Bkg.	No
Range	50,600	Ave. MDCR	1,861	No. Measurements > Ave. Bkg.	18
Minimum	14,900	Number of Measurements			
Maximum	65,500	No. Prescribed	18		
		No. Collected	18		



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

7/13/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL042007-002	4/20/2007	FL1M1	FL1H1	1	9,381	1,861	40,750	-31,369
DL042007-002	4/20/2007	FL1M1	FL1H2	2	9,381	1,861	33,800	-24,419
DL042007-002	4/20/2007	FL1M1	FL1L1	1	9,381	1,861	14,900	-5,519
DL042007-002	4/20/2007	WL1M1	EWL1	1	9,381	1,861	17,750	-8,369
DL042007-002	4/20/2007	WL1M1	EWL2	2	9,381	1,861	25,150	-15,769
DL042007-002	4/20/2007	WL1M1	NWH1	1	9,381	1,861	34,750	-25,369
DL042007-002	4/20/2007	WL1M1	SHW1	1	9,381	1,861	65,500	-56,119
DL042007-002	4/20/2007	WL1M1	WWH1	1	9,381	1,861	55,000	-45,619
DL042007-002	4/20/2007	WL1M1	WWL1	1	9,381	1,861	25,750	-16,369
DL043007-002	4/30/2007	CL1M1	CL1	1	9,381	1,861	20,100	-10,719
DL043007-002	4/30/2007	CL1M1	CL2	2	9,381	1,861	20,900	-11,519
DL043007-002	4/30/2007	CL1M1	CL3	3	9,381	1,861	20,050	-10,669
DL043007-002	4/30/2007	CL1M1	NWL	1	9,381	1,861	21,850	-12,469
DL043007-002	4/30/2007	WU1M1	EWL	1	9,381	1,861	32,550	-23,169
DL043007-002	4/30/2007	WU1M1	EWL	1	9,381	1,861	19,900	-10,519
DL043007-002	4/30/2007	WU1M1	NWH	1	9,381	1,861	32,650	-23,269
DL043007-002	4/30/2007	WU1M1	WWH	1	9,381	1,861	40,500	-31,119
DL043007-002	4/30/2007	WU1M1	WWL	1	9,381	1,861	23,700	-14,319

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL042007-002	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061
DL043007-002	98638	3/5/2008	44-10	162404	3/6/2008	5.36E+10	JLW1061

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
M1	Metal	Metal, Bare or Painted	9,381

Field Notes Summary

Download ID	Field Notes
DL042007-002	(3) CONTACT READINGS ON FLOOR AND (6) ON LOWER WALLS
DL043007-002	None

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Section 6.0

Removable Alpha Smear Sample Analysis Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

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Removable Alpha Measurement Results

Survey Area LC1: C4024 Package Type: Structure
 Survey Area Name: SETF, Building 4024
 Survey Package Number and Unit Name:
 C4024 101C1 SGTCC Test Cell B-102

Statistical Summary

dpm/100cm2

Mean	0.3
Median	-1.0
Standard Deviation	1.6
Range	4.5
Minimum	-1.0
Maximum	3.5

Measurement Sensitivity

dpm/100cm2

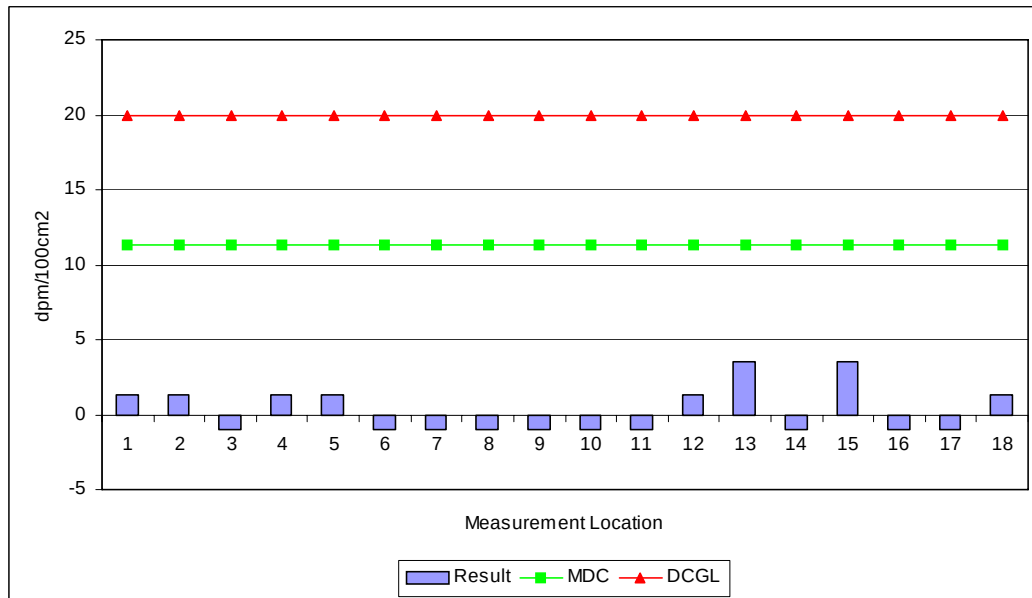
MDC Mean	11.3
MDC Minimum	11.3
MDC Maximum	11.3
DCGL	20.0

Number of Measurements

No. Prescribed	18
No. Collected	18

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



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

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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 101C1 SGTCC Test Cell B-102

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Alpha Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS042007-001	4/20/2007	WL1	EW	L2	11.3	1.3	18.7
CS042007-001	4/20/2007	WL1	NW	H1	11.3	1.3	18.7
CS042007-001	4/20/2007	WL1	SHW	L1	11.3	-1.0	21.0
CS042007-001	4/20/2007	WL1	WW	H1	11.3	1.3	18.7
CS042007-001	4/20/2007	WL1	WW	L1	11.3	1.3	18.7
CS042007-001	4/20/2007	WL1	EW	L1	11.3	-1.0	21.0
CS042007-002	4/20/2007	FL1	FL1	H3	11.3	-1.0	21.0
CS042007-002	4/20/2007	FL1	FL1	H1	11.3	-1.0	21.0
CS042007-002	4/20/2007	FL1	FL1	H2	11.3	-1.0	21.0
CS043007-003	4/30/2007	CL1	CL1	2	11.3	-1.0	21.0
CS043007-003	4/30/2007	CL1	CL1	3	11.3	-1.0	21.0
CS043007-003	4/30/2007	CL1	CL1	1	11.3	1.3	18.7
CS043007-004	4/30/2007	WU1	WU1	6	11.3	3.5	16.5
CS043007-004	4/30/2007	WU1	WU1	1	11.3	-1.0	21.0
CS043007-004	4/30/2007	WU1	WU1	2	11.3	3.5	16.5
CS043007-004	4/30/2007	WU1	WU1	3	11.3	-1.0	21.0
CS043007-004	4/30/2007	WU1	WU1	4	11.3	-1.0	21.0
CS043007-004	4/30/2007	WU1	WU1	5	11.3	1.3	18.7

**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Removable Alpha Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 101C1 SGTCC Test Cell B-102

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS042007-001	C4024 101C1 WL1.xls	Ludlum	M2929	118419	3/5/2008	JEJ5742
CS042007-002	C4024 101C1 FL1.xls	Ludlum	M2929	118419	3/5/2008	JEJ5742
CS043007-003	C4024 101C1 CL1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS043007-004	C4024 101C1 WU1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS042007-001	No Field Notes
CS042007-002	No Field Notes
CS043007-003	No Field Notes
CS043007-004	No Field Notes

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Section 7.0

Removable Beta Smear Sample Analysis Results

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CANOGA PARK, CALIFORNIA

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Removable Beta Measurement Results

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:	C4024 101C1		SGTCC Test Cell B-102

Statistical Summary

	dpm/100cm2
Mean	-5.1
Median	-5.6
Standard Deviation	16.0
Range	52.6
Minimum	-34.6
Maximum	18.0

Number of Measurements

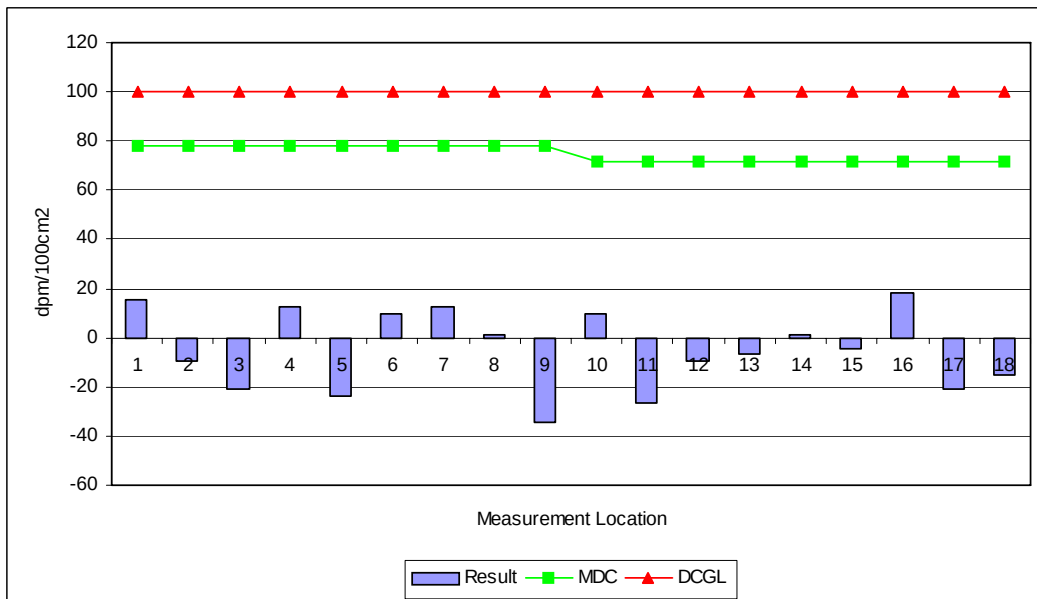
No. Prescribed	18
No. Collected	18

Measurement Sensitivity

	dpm/100cm2
MDC Mean	74.8
MDC Minimum	71.8
MDC Maximum	77.8
DCGL	100.0

Tests Performed

No. Collected >= Prescribed	Yes
Max MDC < 50% DCGL	No
Measurements < DCGL	Yes
Measurement Mean < DCGL	Yes
No. Measurements > DCGL	0



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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 101C1 SGTCC Test Cell B-102

Measurement Results Listing by Sample ID, Surface and SML

SampleID	Sample Collection Date	LC3	LC5	LC6	MDC (dpm/100cm2)	Net Beta Result (dpm/100cm2)	Test DCGL-Result (dpm/100cm2)
CS042007-001	4/20/2007	WL1	EW	L2	77.8	15.2	85
CS042007-001	4/20/2007	WL1	NW	H1	77.8	-9.7	110
CS042007-001	4/20/2007	WL1	SHW	L1	77.8	-20.7	121
CS042007-001	4/20/2007	WL1	WW	H1	77.8	12.4	88
CS042007-001	4/20/2007	WL1	WW	L1	77.8	-23.5	124
CS042007-001	4/20/2007	WL1	EW	L1	77.8	9.7	90
CS042007-002	4/20/2007	FL1	FL1	H3	77.8	12.4	88
CS042007-002	4/20/2007	FL1	FL1	H1	77.8	1.4	99
CS042007-002	4/20/2007	FL1	FL1	H2	77.8	-34.6	135
CS043007-003	4/30/2007	CL1	CL1	2	71.8	9.7	90
CS043007-003	4/30/2007	CL1	CL1	3	71.8	-26.3	126
CS043007-003	4/30/2007	CL1	CL1	1	71.8	-9.7	110
CS043007-004	4/30/2007	WU1	WU1	6	71.8	-6.9	107
CS043007-004	4/30/2007	WU1	WU1	1	71.8	1.4	99
CS043007-004	4/30/2007	WU1	WU1	2	71.8	-4.2	104
CS043007-004	4/30/2007	WU1	WU1	3	71.8	18.0	82
CS043007-004	4/30/2007	WU1	WU1	4	71.8	-20.7	121
CS043007-004	4/30/2007	WU1	WU1	5	71.8	-15.2	115

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Removable Beta Measurement Results

Survey Area LC1: C4024 **Package Type:** Structure
Survey Area Name: SETF, Building 4024
Survey Package Number and Unit Name:
C4024 101C1 SGTCC Test Cell B-102

Sample ID, Excel File, Instrumentation Calibration Summary and Survey Technician

Sample ID	ExcelFilename	A/B Counter	Model Number	Serial Number	Cal Due Date	Survey Technician
CS042007-001	C4024 101C1 WL1.xls	Ludlum	M2929	118419	3/5/2008	JEJ5742
CS042007-002	C4024 101C1 FL1.xls	Ludlum	M2929	118419	3/5/2008	JEJ5742
CS043007-003	C4024 101C1 CL1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848
CS043007-004	C4024 101C1 WU1.xls	Ludlum	M2929	118419	3/5/2008	JLM3848

Field Notes Summary

Sample ID	Field Notes
CS042007-001	No Field Notes
CS042007-002	No Field Notes
CS043007-003	No Field Notes
CS043007-004	No Field Notes

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Section 8.0

Sample Analysis Results

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

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Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Refer to Section 4.1.2 Test Cell B-104 core sample evaluation and isotopic analysis results

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Section 9.0

Photographs

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Photographs were not taken.

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

7/13/2007

Data Analysis Report

Survey Area LC1:	C4024	Package Type:	Structure
Survey Area Name:	SETF, Building 4024		
Survey Package Number and Unit Name:			
C4024 101C1	SGTCC Test Cell B-102		

Section 10.0

Supplemental Information and/or Data



JOB HAZARD ASSESSMENT

Project: Santa Susana Field Laboratory SETF Decommissioning

Specific Task: Confirmatory Survey in Cell Area

Major Steps in the Job Task:

Obtain existing core samples from previous concrete cores drilled within the two reactor test cells, and slice cores into wafers.

Perform additional core samples by drilling in area necessary to establish activation depth and characterization of the cells and slice newly, drilled cores into wafers at specified thicknesses.

Move and setting up of equipment; wet saw, core drill, the cores themselves and elevated work platform.

Scissor lift(s) or scaffolding may be utilized to access to elevated areas.

Most Significant Hazards of the Activity:

Operation of power tools and possible elevated work platform areas

Injury Prevention Focus Areas:

Hand/Arm Hazards: keep hands, arms and body parts away from point of operation and rotating equipment. Wear gloves when handling material

(Identify specific controls required to prevent

Back Injuries: Maintain good posture and don't over reach and/or twist with load carried.

injuries in these frequent injury areas)

Tooling Hazards: Concrete core drill, wet saw, electrical use including extension cords, some hand tools (pinch points, guarding, rotating equipment)

HAZARD ITEM: <i>potential hazards to consider; not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
EYE & FACE HAZARDS: <i>flying particles, chemicals, temperatures, vapors, sparks, splash, particles</i>	☒	☐	keep safe distance from core drill and wet saw	Wear face shield in case core drill cup fractures or concrete spalls/fly off during both cutting operations.
HAND HAZARDS: <i>sharps, temperatures, hazardous substances, pinch points, specify glove type required</i>	☒	☐	Avoid points of operation and sharp edges created by equipment.	Wear gloves but avoid rotating equipment.
NOISE HAZARDS: <i>hand or power tools, equipment operating in area, compressors, cranes, ambient noise levels</i>	☒	☐	Mitigate loud noise as best we can and perform sound level monitoring. minimize time near the equipment, maximize distance when possible and use sound deadening shielding.	Ear plugs as necessary, post areas over 85 dB.
HEAD HAZARDS: <i>falling objects, bump hazards, electrical</i>	☒	☐	Although minimal hazards by maintaining good control of equipment and materials	Always wear hard hat.
FOOT HAZARDS: <i>falling, rolling objects, sharp objects</i>	☒	☐	Keep area clean and feet away from pinch points	Wear sturdy leather work boot.
FALL HAZARDS: <i>verify anchor points, prior to use inspection, floor/wall openings, uneven surfaces, trip hazards, written plan, working over water, ladder use</i>	☒	☐	Ensure standard guardrail is properly installed and maintained	Fall harness with rescue plan are last resorts and must have written plan



JOB HAZARD ASSESSMENT

HAZARD ITEM: <i>potential hazards to consider; not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
MANUAL LIFTING and ERGONOMIC HAZARDS: <i>repeated motion, avoid awkward position, proper lifting techniques, back safety, two-person lifts</i>	☒	☐	maintain good posture and use help from other personnel or from equipment i.e. cranes and forklifts.	Gloves and secure loads properly.
CHEMICAL EXPOSURE HAZARDS: <i>review MSDS's, NFPA or HMIS labels, identify PPE required, spill control, waste generation, chemical use permit</i>	☐	☒		
RESPIRATORY HAZARDS: <i>dusts, fumes, oxygen deficient, toxic gas, weld fume, ozone</i>	☒	☐	Wet method and/or local exhaust for possible silica exposure.	Respiratory protection when necessary.
HAZARDOUS MATERIALS CHECKS: <i>PCB, lead, asbestos</i>	☐	☒		
VENTILATION REQUIREMENTS: <i>specify – local exhaust, area exhaust, general dilution, CFM requirements</i>	☐	☒	Negative pressure enclosure, local exhaust.	Respiratory protection when necessary and follow good hygiene practices.
AIR MONITORING REQUIRED: <i>industrial and radiological, area or personal air monitors, list hazards to be sampled</i>	☒	☐	Possible for both radiological and silica potential hazards	Respiratory protection when necessary when negative assessments are needed
ACCESS HAZARDS: <i>walkways clear of hoses, leads, cords, and tools, review layout of work area, consider other work group access to work area</i>	☒	☐	Possible, but maintaining areas clean and following good housekeeping practice	
MECHANICAL MATERIAL HANDLING: <i>qualified forklift operator, pinch points</i>	☐	☒	None identified at this time	
CRANES and RIGGING: <i>qualified operator/rigger, prior to use inspections, rigging inspected, tag lines, designated load director, safe load path, hand signals or radio, headsets</i>	☐	☒	None identified at this time	
SCAFFOLDING: <i>permit required, daily inspections, tagging, qualified erectors and inspectors</i>	☒	☐	Possible for elevated work, use scissor lift when possible.	Fall harness with rescue plan are last resorts and must have written plan
WEATHER HAZARDS: <i>heat/cold extremes, overhead/underfoot snow & ice, wet surfaces, storms, verify weather forecast</i>	☒	☐	Possible but not likely because cell area is well protected and under cover but outside weather can be unpredictable.	Dress appropriately for weather conditions
PRESSURIZED SYSTEMS: <i>pneumatic, hydraulic, pressure test, vacuum, hose/whip restraints</i>	☐	☒	None identified at this time	
CONFINED SPACE HAZARDS: <i>confined space work permit required, rescue equipment and plan in place</i>	☐	☒	None for this activity have been identified	
HOUSEKEEPING: <i>prevent slips, trips, and falls, maintain area daily, control trash, debris and combustibles</i>	☒	☐	Clean as you go and don't allow excess accumulation of materials.	Wear gloves when handling debris and material.



JOB HAZARD ASSESSMENT

HAZARD ITEM: <i>potential hazards to consider; not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
RESCUE PLAN: <i>access to injured, layout, stage equipment for rescue, written plan required, coordination with control room and emergency team</i>	☒	☐	Use of stairs and contact Boeing Fire/security in extreme emergency.	Will be determined, always bring flashlight into the pit in case of power outage and maintain buddy system
FIRE/COMBUSTIBLE HAZARDS: <i>hot work/combustible material permit, welding, grinding, combustible material storage, explosion hazards</i>	☐	☒	None identified at this time.	
WELDING, CUTTING, AND GRINDING: <i>chromium (VI) exposure control plan (see page 4), weld fume, ventilation, PPE requirements</i>	☐	☒	None identified at this time.	
ELECTRICAL HAZARDS: <i>energized electrical work permit, grounding protection, GFCI, power lines, cords, cable runs</i>	☒	☐	Proper placement of cord and equipment and inspect devices each time it is used	Electrical trees/stands to keeps cord off the ground and out of harms way.
LOCKOUT/TAGOUT: <i>electrical, hydraulic, pneumatic energy sources, pressurized systems, follow site requirements</i>	☐	☒	None identified at this time. Boeing will perform LOTO for facility equipment and AREVA will do their own equipment as necessary	
COMMUNICATION DIFFICULTIES: <i>noise interference, radio use, hand signals, 3-way communication, phonetic alphabet</i>	☒	☐	Possible but not likely at this time but we may have to	TBD
TOOL HAZARDS: <i>guards, pinch and nip points, rotating parts, training required, authorization use only</i>	☒	☐	Possible, however we should be able to avoid pinch points and "caught by/info" situations	Maintain guards and tools in good condition including dead men switches as necessary.
WORK PRACTICES: <i>policy and procedure compliance</i>	☒	☐	Always use industry safe work practices.	Provide thorough and comprehensive job briefs
MULTI DEPARTMENT INTERFACE: <i>Security Impact, Radiation Protection Impact, Operations Impact, QA, Safety and Health</i>	☐	☒		
ENVIRONMENTAL HAZARD: <i>hazardous waste generation, environmental impact, water runoff, sampling needed</i>	☐	☒		
RADIATION HAZARDS: <i>RWP required, ALARA review required, dose rates, contamination levels, reference RWP</i>	☒	☐	Practice ALARA, keeping exposure As Low As Reasonably Achievable.	
POSTING NEEDED: <i>barricades, signs, barrier ribbons</i>	☒	☐	Attempt to limit exposure As Low As Reasonably Achievable.	Radiation and noise posting and protective measures possible

HAZARD ITEM: <i>potential hazards to consider; not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
FME PLAN REQUIRED: <i>written plan, log equipment and tools in/out, drop log, lanyards for tools and PPE, PPE restrictions</i>	☐	☒		
Additional Controls (add additional rows if necessary)				

Welding Method: n/a	Base Metal: n/a	Electrode Type: n/a
Has air monitoring been previously performed for this activity?	YES NO	(If NO, Contact Safety Department to determine controls and specify below.)
If YES, list monitoring results: no		
If YES, was any special ventilation required?	YES NO	Specify ventilation type and flow rate: TBD
If YES, was respiratory protection required for this activity?	YES NO	Specify type of respirator: TBD
Is protective clothing required?	YES NO	Specify type of protective clothing: TBD
Have employees completed Chromium (VI) training?	YES NO	
Have employees completed Chromium (VI) medical surveillance?	YES NO	
Have employees completed respirator medical, training, and fit test?	YES NO	N/A
Others requirements: TBD		

[illegible]



JOB HAZARD ASSESSMENT

Task Lead/Supervisor:

A handwritten signature in black ink, appearing to read 'J. McEhee'.

Date:

4/23/07

Safety Engineer:

A handwritten signature in black ink, appearing to read 'D. [unclear]'.

Date:

4/23/07

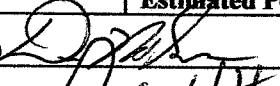
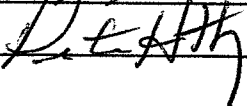
Pre-Job Brief Attendance

Subject Survey Package C4624 102 C1 Date Given: 4/23/67

ATTENDEES:

[illegible]

APPENDIX B RADIATION WORK PERMIT

RWP Number: AREVA-07-002		REV. 01		Requested by: McGehee	
Work to be Performed: Characterization of SGTCC, direct surveys, core boring and sectioning of cores					
Location: Facility: Building: 4024 Room: Test Cells Area: interior surfaces					
Training Requirements: ☒ GET ☒ Rad Worker ☐ Respiratory Protection ☐ Other _____					
Bioassay Requirements: ☐ In Vivo (WBC) ☐ In Vitro ☐ fecal ☒ urinalysis					
HP Support: ☐ Initial (pre-job) ☒ Intermittent ☐ Continuous ☐ Other					
Required Radiological Surveillance: ☒ Contamination ☒ Exposure ☐ Other					
☒ Airborne (specify type) ☐ BZA ☒ general area ☐ gooseneck BZA ☐ Other					
Radiological Conditions					
Contamination (dpm/100cm ²)		Airborne		Radiation (mrem/hr)	
alpha: avg. <20 max. survey # Historical Data	beta/gamma: avg. <100 max. survey # Historical Data	$\mu\text{Ci/ml } \alpha$ $\mu\text{Ci/ml } \beta\gamma$ survey #	General area: .005-.012 survey # 07-01 thru 07-04	Highest Contact: 0.7 survey # 07-01 thru 07-04	
PPE and Monitoring Requirements					
☐ Hood ☐ Skull Cap ☐ Other		Shoe Covers ☐ Rubber ☒ Disposable ⁽¹⁾ ☐ Cotton		Respiratory ☐ Full Face (APR) ☐ Air Line ☐ PAPR ☐ BZA ☐ Other Note:	
Coveralls ☐ Cotton ☐ Plastic ☐ Tyvek ☒ Pro-tec ⁽¹⁾ ☐ Other _____		Gloves ☒ Surgical ⁽¹⁾ ☐ Rubber ☒ Other ⁽²⁾		Dosimetry ☒ TLD ☐ SRD ☐ ED ED Alarm Setpoints: Rate mRem/hr Total mRem ☐ Extremity (location(s)):	
Special Instructions: ⁽¹⁾ Required for core boring and sectioning cores. Core boring and sectioning of cores to be performed in posted CA and access limited to individuals working under this RWP. Area(s) to be surveyed for loose contamination after coring/cutting operations are complete and posted accordingly. Intermittent air samples to be collected. ⁽²⁾ Work Gloves					
RWP Hold Point(s) (Work will be suspended if any of the following conditions are encountered): Contamination is found outside of posted area(s) and /or airborne activity >0.25 DAC.					
ALARA Review Required: ☐ YES ☒ NO RP Supervisor (print) Pete Huntley (signature)					
Estimated Person-Hours: 200			Estimated Person-Rem: <0.1		
Prepared by: (print) Don McGee (signature) 			Date: 04/23/07		
Approved by: (print) Pete Huntley (signature) 			Date: 04/23/07		
			Date:		
Effective Date: 04/23/07			Expiration Date: 05/31/07		
Terminated by: (print) (signature)			Date:		

Appendix A

Section	Survey Package	Survey Unit Description
5.0		SETF Systems
5.1	E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage
5.1.1	E4024 101C1	Survey Results for Floor Drain System
5.1.2	E4024 101C1	Survey Results for Gas and Liquid Waste System
5.1.3	E4024 101C1	Survey Results Solid Waste Storage System

Appendix A

Section	Survey Package	Survey Unit Description
5.0		SETF Systems
5.1	E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage
5.1.1	E4024 101C1	Survey Results for Floor Drain System

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Contact Gamma Exposure Rate Measurement Results
5.0	Removable Alpha and Beta Smear Sample Analysis Results
6.0	Sample Analysis Results
7.0	Photographs
8.0	Supplemental Information and/or Data

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 1.0

Data Analysis Report Parameters

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Data Analysis Report Parameters

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Survey Group: E - Radiological Survey of Impacted Facility Systems

Survey Area: 4024 - SETF Drains and Waste Storage Systems

Unit Classification: 1 - Impacted System

MARSSIM FSS Survey Unit Size (M²): 100

Survey Unit: 01 - Liquid Waste, Floor Drains, and Solid Waste Storage

Survey Reason: C1 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	DF1	Interior of floor drain	

Total Area

Materials:	Code	Description
	M1	Metal

Report Information:

Report Pedigree: Final Report

Detector Efficiency: 2-Pi

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 2.0

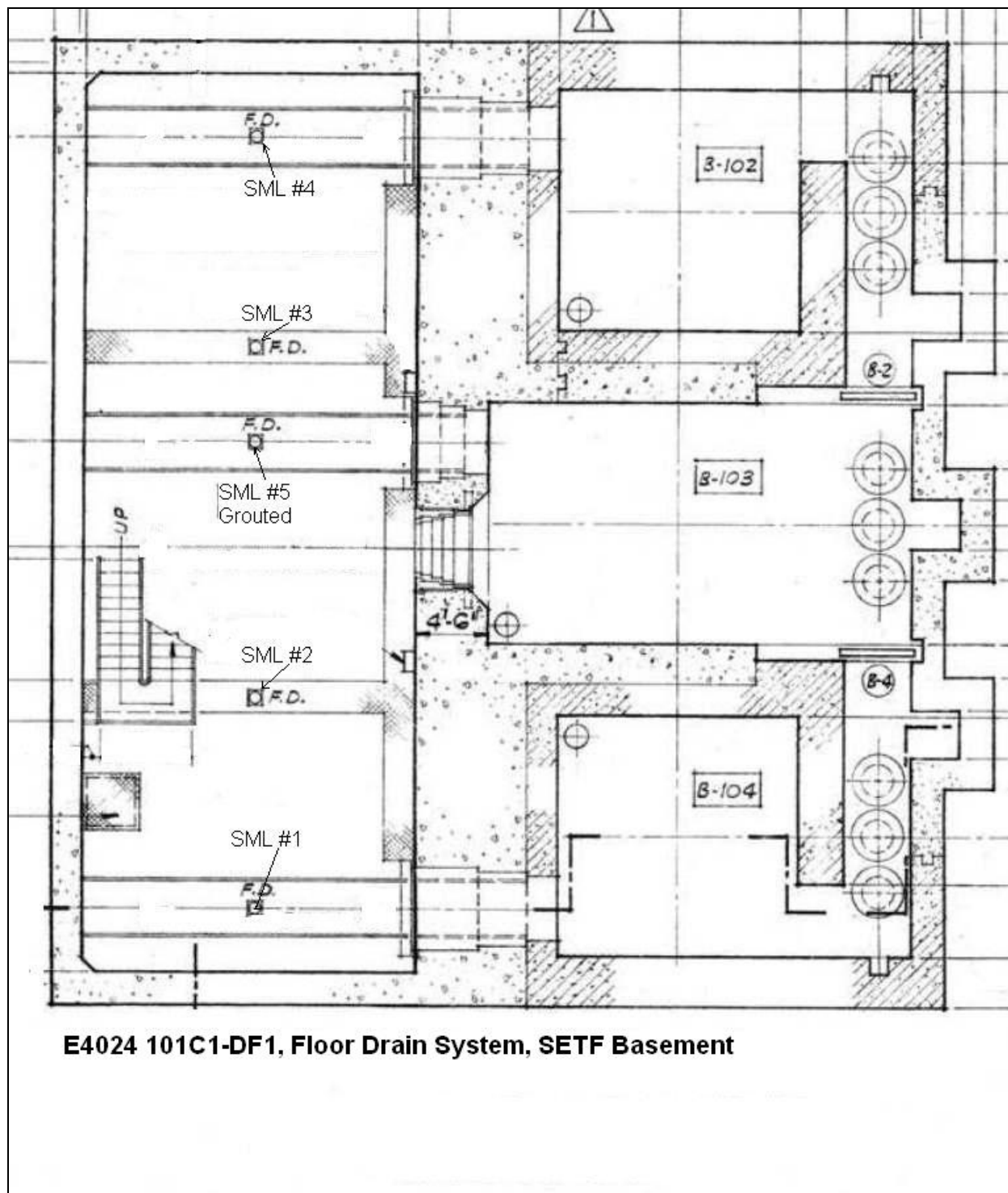
Annotated Drawings

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Survey Package Appendix A – Drawings



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Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 3.0

Direct Beta Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

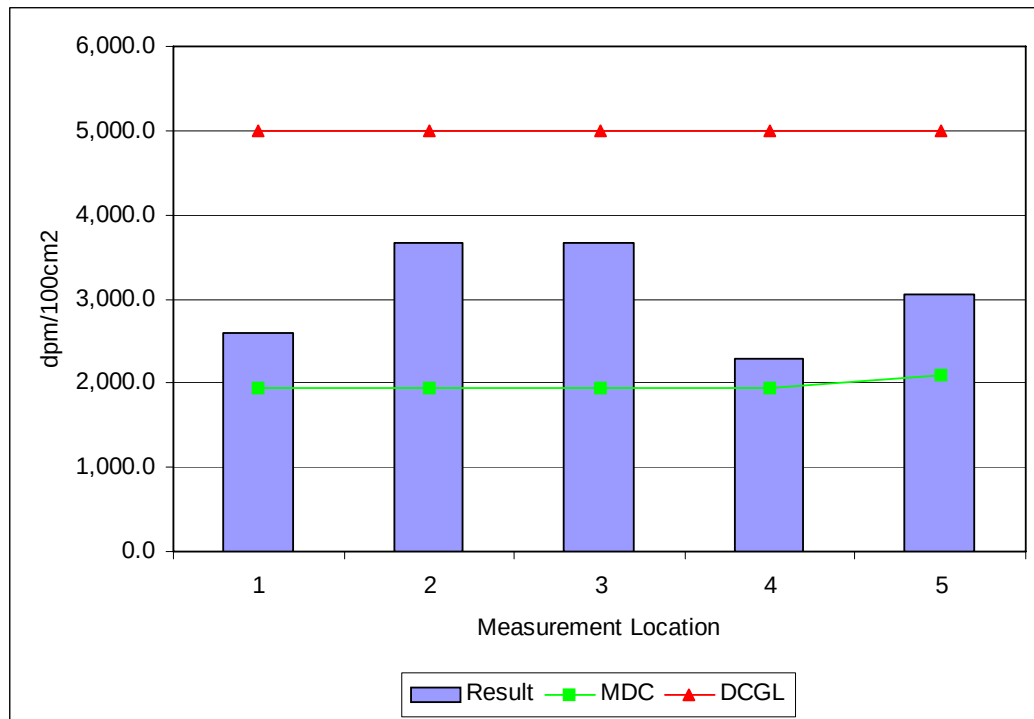
7/13/2007

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Direct Beta Measurement Results

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	3,056.2	Ave. MDC	1,979.1	Ave. MDC < 50% DCGL	Yes
Median	3,056.2	Ave. Background	1,422.0	Measurements < DCGL	Yes
Standard Deviation	616.6	Maximum Bkg.	1,422.0	Measurement Mean < DCGL	Yes
Range	1,366.2	DCGL	5000	No. Measurements > DCGL	0
Minimum	2,297.2	Number of Measurements			
Maximum	3,663.4	No. Prescribed	5		
		No. Collected	5		



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

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Direct Beta Measurement Results

Survey Area LC1: E4024 **Package Type:** System
Survey Area Name: SETF Drains and Waste Storage Systems
Survey Package Number and Unit Name:
E4024 101C1 Liquid Waste, Floor Drains, and Solid Waste Storage

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL052407-002	5/24/2007	DF1M1	DF1	1	4,022.8	1,949.8	1,422.0	2,600.8	2,399.2
DL052407-002	5/24/2007	DF1M1	DF1	2	5,085.4	1,949.8	1,422.0	3,663.4	1,336.6
DL052407-002	5/24/2007	DF1M1	DF1	4	5,085.4	1,949.8	1,422.0	3,663.4	1,336.6
DL052407-002	5/24/2007	DF1M1	DF1	5	3,719.2	1,949.8	1,422.0	2,297.2	2,702.8
DL052507-002	5/25/2007	DF1M1	DF1	3	4,478.2	2,096.4	1,422.0	3,056.2	1,943.8

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Direct Beta Measurement Results

Survey Area LC1: E4024 **Package Type:** System
Survey Area Name: SETF Drains and Waste Storage Systems
Survey Package Number and Unit Name:
E4024 101C1 Liquid Waste, Floor Drains, and Solid Waste Storage

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL052407-002	126195	7/18/2007	44-40	125876	3/6/2008	15.5	0.170	JLW1061
DL052507-002	126195	7/18/2007	44-40	125876	3/6/2008	15.5	0.170	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
M1	Metal	Metal, Bare or Painted	0.5	1,422

Field Notes Summary

Download ID: Field Notes

DL052407-002 None
DL052507-002 None

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

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Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 4.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

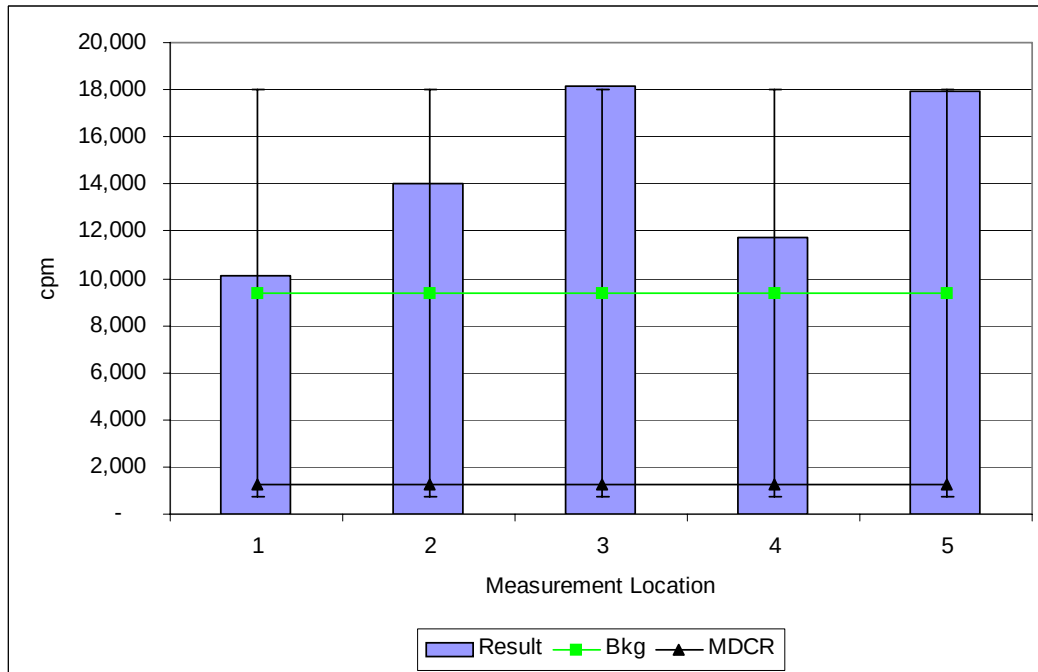
7/13/2007

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	14,380	Ave. Background	9,381	Ave. MDCR < 50% Bkg.	Yes
Median	14,050	3 sigma Value	8,628	Measurements < Ave. Bkg.	No
Standard Deviation	3,613	Maximum Bkg.	9,381	Measurement Mean < Ave. Bkg.	No
Range	8,050	Ave. MDCR	1,282	No. Measurements > Ave. Bkg.	5
Minimum	10,100	Number of Measurements			
Maximum	18,150	No. Prescribed	5		
		No. Collected	5		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1: E4024 **Package Type:** System
Survey Area Name: SETF Drains and Waste Storage Systems
Survey Package Number and Unit Name:
E4024 101C1 Liquid Waste, Floor Drains, and Solid Waste Storage

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL052407-001	5/24/2007	DF1M1	DF1	1	9,381	1,282	10,100	-719
DL052407-001	5/24/2007	DF1M1	DF1	2	9,381	1,282	14,050	-4,669
DL052407-001	5/24/2007	DF1M1	DF1	4	9,381	1,282	18,150	-8,769
DL052507-001	5/25/2007	DF1M1	DF1	3	9,381	1,282	11,700	-2,319
DL062707-001	5/24/2007	DF1M1	DF1	5	9,381	1,282	17,900	-8,519

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL052407-001	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742
DL052507-001	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742
DL062707-001	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
M1	Metal	Metal, Bare or Painted	9,381

Field Notes Summary

Download ID	Field Notes
DL052407-001	None
DL052507-001	None
DL062707-001	Correcting download.

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

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Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 5.0

Removable Alpha and Beta Smear Sample Analysis Results

APPENDIX A RADIOLOGICAL PROTECTION SURVEY FORM

Page 1 of 2

R.P. Tech (print): <u>J. Selinsky</u>			Location <u>E4024 - 101C1</u>	RWP # <u>A-07-0005</u>	
Instruments Used			Comments or Purpose of Survey	Date: <u>5-25-07</u>	
Model	S/N	Cal. Due	<u>SWIPES TAKEN FROM INSIDE</u> <u>LIQUID WASTE LINES &</u> <u>FLOOR DRAINS I/S BLDG</u>	Time: <u>1200</u>	
<u>L-2929</u>	<u>118419</u>	<u>3-5-08</u>		Survey # <u>019</u>	
<u>N/A</u>				Air Sample # <u>N/A</u>	
				Results: <u>N/A</u> $\mu\text{Ci/cc}$	
			All dose rates in mR/hr unless otherwise noted.	Survey Pt #	Contamination (dpm/100 cm ²)
SWIPES TAKEN INSIDE OF WASTE LINES (SP) & INSIDE OF FLOOR DRAINS (DF) IN BASEMENT OF 4024 BLDG. α BKG: .3cpm β BKG: 39cpm			1 (SP1)	<200	<100 B
			2 (SP2)	<200	<100 B
			3 (SP5)	<200	<100 B
			4 (SP7)	<200	<100 B
			5 (SP8)	<200	<100 B
			6 (DF1)	<200	<100 B
			7 (DF2)	<200	<100 B
			8 (DF3)	<200	<100 B
			9 (DF4)	<200	<100 B
			10 (DF5)	<200	<100 B
			11	<u>NIA</u>	
			12		
			13		
			14		
			15		
			16		
			17		
			18		
			19		
			20		
			A/S - air sample	LAS - Large Area Smear	
			# - Direct frisk		
			* contact/30cm xx - RCA Boundary	k = 1000	
			H Head Level	O Smear Loc	
			F-foot level		
PERFORMED BY/DATE: <u>J. Selinsky</u> / <u>5-25-07</u>					
REVIEWED BY / DATE: <u>[Signature]</u> / <u>5/31/07</u>					

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 6.0

Sample Analysis Results

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

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Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Survey Package Number: E4024 101C1 DF1R1-1
Unit Name: SETF Systems Drain

	Activity (pCi/g)	2 Sigma uncertainty	MDC	No. Results	No. Detect	No. Non- detect
Am-241	-6.00E-03	1.20E-02	5.80E-02	1	0	1
Co-60	6.00E-02	2.10E-02	3.80E-02	1	1	0
Cs-134	-2.00E-03	1.60E-02	2.70E-02	1	0	1
Cs-137	2.22E+00	4.80E-02	3.50E-02	1	1	0
Eu-152	4.20E-02	4.30E-02	7.00E-02	1	0	1
Eu-154	-1.20E-02	4.90E-02	8.50E-02	1	0	1
Fe-55	-5.00E+00	1.10E+01	1.90E+01	1	0	1
H-3	-6.00E-02	8.40E-01	1.20E+00	1	0	1
K-40	7.95E+00	4.30E-01	4.60E-01	1	1	0
Mn-54	8.00E-03	1.60E-02	2.70E-02	1	0	1
Na-22	-5.00E-03	1.80E-02	3.10E-02	1	0	1
Ni-63	1.00E+00	5.40E+00	8.70E+00	1	0	1
Pu-238	0.00E+00	2.80E-04	2.30E-02	1	0	1
Pu-239/240	-6.00E-04	1.30E-03	3.00E-02	1	0	1
Pu-241	-5.00E-01	1.40E+00	2.30E+00	1	0	1
Sr-90	2.00E-02	5.20E-02	8.60E-02	1	0	1
Th-228	1.40E+00	2.80E+00	4.60E+00	1	0	1
Th-232	2.98E+00	5.20E-01	1.20E-01	1	1	0
U-234	1.47E+00	2.10E-01	5.20E-02	1	1	0
U-235	1.22E-01	7.50E-02	8.00E-02	1	1	0
U-238	1.37E+00	2.10E-01	7.00E-02	1	1	0

Survey Package Number: E4024 101C1 SP1R1-1
Unit Name: SETF Systems Solid Waste

	Activity (pCi/g)	2 Sigma uncertainty	MDC	No. Results	No. Detect	No. Non- detect
Am-241	1.10E-02	3.80E-02	9.00E-02	1	0	1
Co-60	4.70E-03	6.00E-03	1.30E-02	1	0	1
Cs-134	-9.00E-03	2.90E-02	4.70E-02	1	0	1
Cs-137	5.92E-01	1.50E-02	1.50E-02	1	1	0
Eu-152	-7.00E-03	2.00E-02	3.40E-02	1	0	1
Eu-154	1.00E-03	2.30E-02	3.80E-02	1	0	1
Fe-55	2.00E+00	9.20E+00	1.60E+01	1	0	1
H-3	-1.30E-01	6.40E-01	9.60E-01	1	0	1
K-40	2.09E+01	3.00E-01	1.80E-01	1	1	0
Mn-54	7.00E-04	8.60E-03	1.40E-02	1	0	1
Na-22	-5.00E-04	8.30E-03	1.40E-02	1	0	1
Ni-59	1.50E+02	7.40E+02	1.20E+03	1	0	1
Ni-63	-1.00E+00	5.20E+00	8.60E+00	1	0	1
Pu-238	6.00E-03	2.10E-02	5.00E-02	1	0	1
Pu-239/240	5.00E-03	2.10E-02	5.40E-02	1	0	1
Pu-241	-1.50E+00	1.40E+00	2.30E+00	1	0	1
Sr-90	0.00E+00	4.00E-02	6.70E-02	1	0	1
Th-228	0.65	0.31	0.51	1	1	0
Th-232	0.876	0.046	4.5	1	0	1
U-234	1.28	0.1	0.0098	1	1	0
U-235	0.062	0.023	0.0093	1	1	0
U-238	1.28	0.1	0.011	1	1	0

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

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Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 10.0

Photographs

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Photographs were not taken.

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 11.0

Supplemental Information and/or Data

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

There was no additional supplemental information and/or data.

Appendix A

Section	Survey Package	Survey Unit Description
5.0		SETF Systems
5.1	E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage
5.1.2	E4024 101C1	Survey Results for Gas and Liquid Waste System

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section	Title
1.0	Data Analysis Report Parameters
2.0	Annotated Drawings
3.0	Direct Beta Measurement Results
4.0	Contact Gamma Exposure Rate Measurement Results
5.0	Removable Alpha and Beta Smear Sample Analysis Results
6.0	Sample Analysis Results
7.0	Photographs
8.0	Supplemental Information and/or Data

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 1.0

Data Analysis Report Parameters

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

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Data Analysis Report Parameters

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Survey Group: E - Radiological Survey of Impacted Facility Systems

Survey Area: 4024 - SETF Drains and Waste Storage Systems

Unit Classification: 1 - Impacted System

MARSSIM FSS Survey Unit Size (M²): 100

Survey Unit: 01 - Liquid Waste, Floor Drains, and Solid Waste Storage

Survey Reason: C1 - Characterization Survey

Surface(s):	Code	Description	Survey Area (M ²)
	SP1	- System Piping	

Total Area

Materials: Code Description

M1 - Metal

R1 - Sediment

Report Information:

Report Pedigree: Final Report

Detector Efficiency: 2-Pi

Material Background Evaluation: On

Survey Location: LC6

Report Errors: None

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 2.0

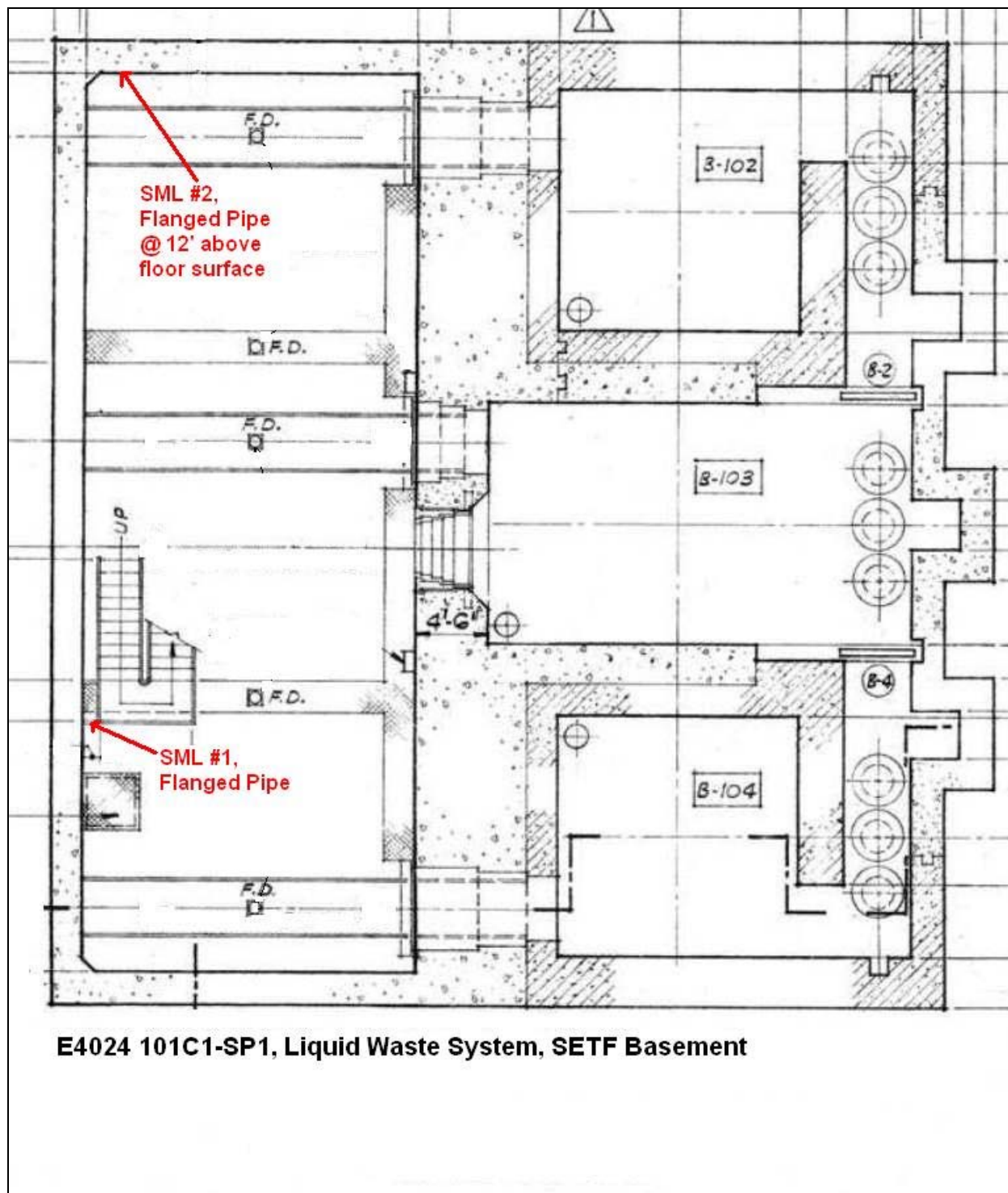
Annotated Drawings

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

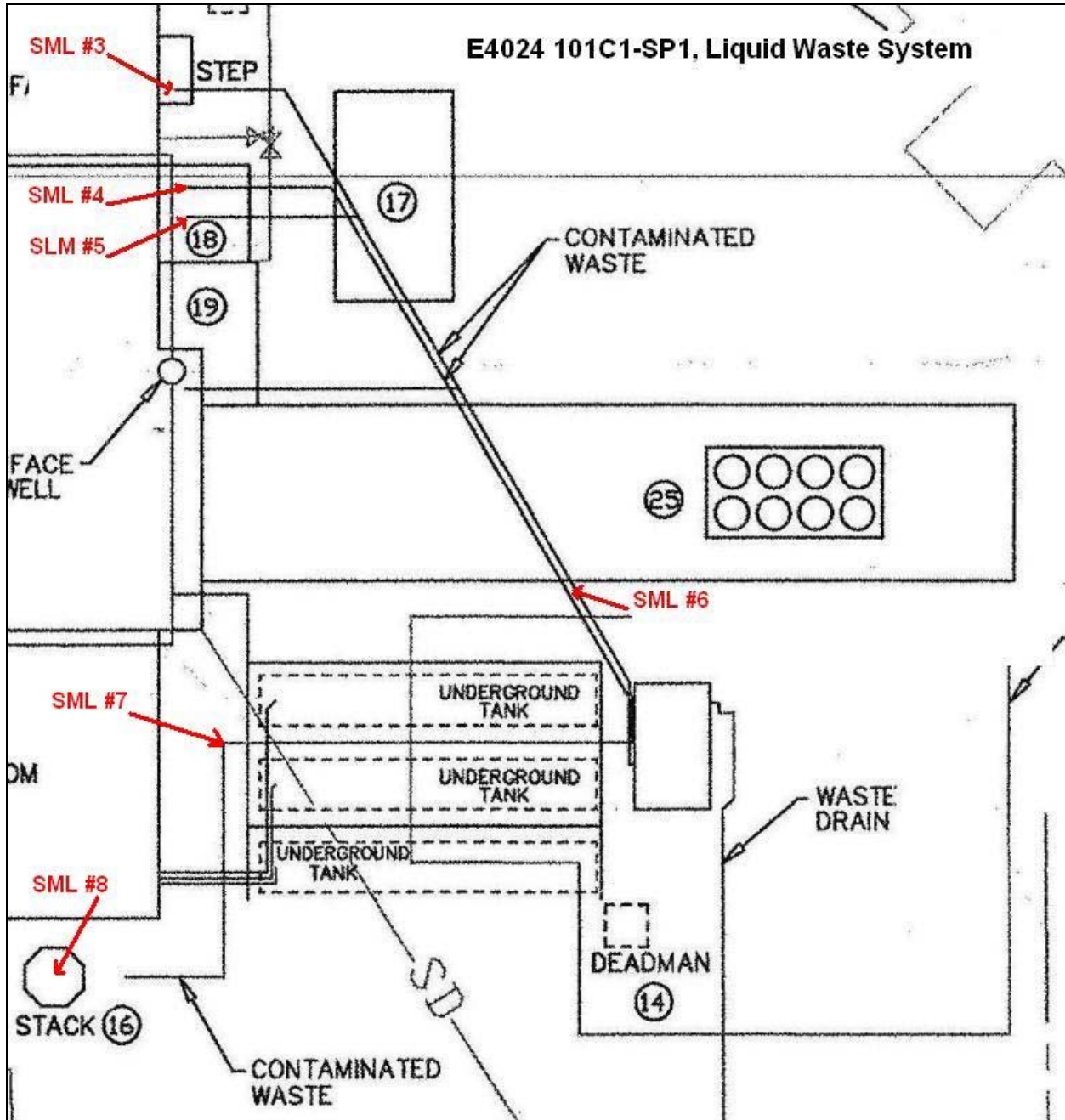


SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Survey Package Appendix A – Drawings



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

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Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 3.0

Direct Beta Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

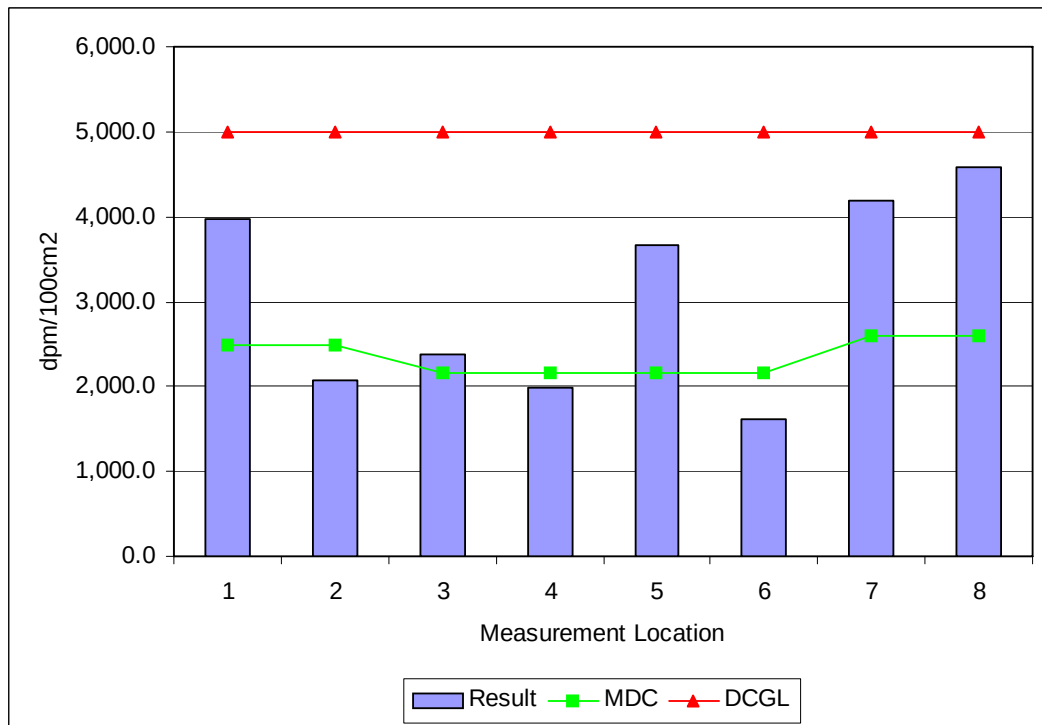
7/13/2007

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Direct Beta Measurement Results

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	dpm/100cm ²		dpm/100cm ²	No. Collected >= Prescribed	Yes
Mean	3,056.2	Ave. MDC	2,347.1	Ave. MDC < 50% DCGL	Yes
Median	3,018.2	Ave. Background	1,422.0	Measurements < DCGL	Yes
Standard Deviation	1,161.8	Maximum Bkg.	1,422.0	Measurement Mean < DCGL	Yes
Range	2,960.2	DCGL	5000	No. Measurements > DCGL	0
Minimum	1,614.1	Number of Measurements			
Maximum	4,574.2	No. Prescribed	8		
		No. Collected	8		



SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

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Direct Beta Measurement Results

Survey Area LC1: E4024 **Package Type:** System
Survey Area Name: SETF Drains and Waste Storage Systems
Survey Package Number and Unit Name:
E4024 101C1 Liquid Waste, Floor Drains, and Solid Waste Storage

Survey Measurement Results by Download File, Surface/Material, Room/Item and SML

Download ID	Date	Surface/ Material LC3	Location or Item No. LC5	SML LC6	Gross Result dpm/100cm ²	MDC dpm/100cm ²	Ave. Material Bkg dpm/100cm ²	Net Result dpm/100cm ²	Test (DCGL- Result) dpm/100cm ²
DL052307-003	5/23/2007	SP1M1	SP1	7	5,389.0	2,479.0	1,422.0	3,967.0	1,033.0
DL052307-003	5/23/2007	SP1M1	SP1	8	3,491.5	2,479.0	1,422.0	2,069.5	2,930.5
DL052407-002	5/24/2007	SP1M1	SP1	1	3,795.1	2,154.8	1,422.0	2,373.1	2,626.9
DL052407-002	5/24/2007	SP1M1	SP1	2	3,415.6	2,154.8	1,422.0	1,993.6	3,006.4
DL052407-002	5/24/2007	SP1M1	SP1	3	5,085.4	2,154.8	1,422.0	3,663.4	1,336.6
DL052407-002	5/24/2007	SP1M1	SP1	5	3,036.1	2,154.8	1,422.0	1,614.1	3,385.9
DL053107-003	5/30/2007	SP1M1	SP1	6	5,616.7	2,599.6	1,422.0	4,194.7	805.3
DL053107-003	5/30/2007	SP1M1	SP16A	6	5,996.2	2,599.6	1,422.0	4,574.2	425.8

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Direct Beta Measurement Results

Survey Area LC1: E4024 **Package Type:** System
Survey Area Name: SETF Drains and Waste Storage Systems
Survey Package Number and Unit Name:
E4024 101C1 Liquid Waste, Floor Drains, and Solid Waste Storage

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det Cal Due	Detector Area	Efficiency	Survey Technician
DL052307-003	126195	7/18/2007	44-40	125876	3/6/2008	15.5	0.170	JLW1061
DL052407-002	126195	7/18/2007	44-40	125876	3/6/2008	15.5	0.170	JLW1061
DL053107-003	126195	7/18/2007	44-40	125876	3/6/2008	15.5	0.170	JLW1061

Material Background Summary

Material	Material Description	Material Surface Description	Material Surface - Beta Source Efficiency	Ave. Material Background Contribution dpm/100cm ²
LC3 P45				
M1	Metal	Metal, Bare or Painted	0.5	1,422

Field Notes Summary

Download ID:	Field Notes
DL052307-003	None
DL052407-002	None
DL053107-003	None

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 4.0

Contact Gamma Exposure Rate Measurement Results

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT

CANOGA PARK, CALIFORNIA

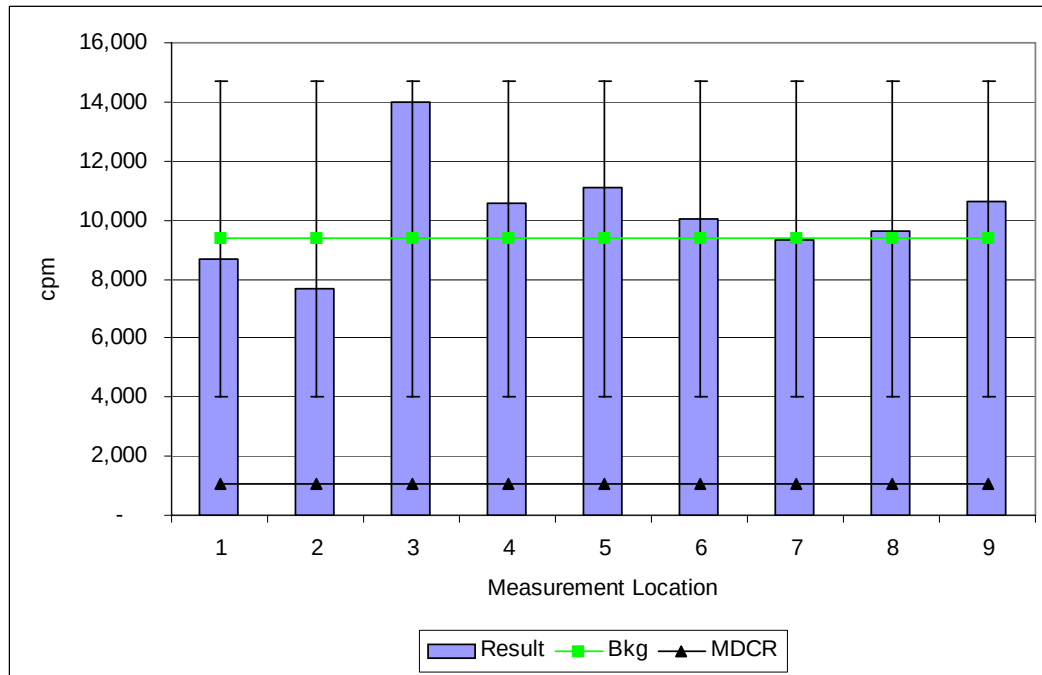
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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Statistical Summary		Measurement Sensitivity		Tests Performed	
	cpm		cpm	No. Collected >= Prescribed	Yes
Mean	10,183	Ave. Background	9,381	Ave. MDCR < 50% Bkg.	Yes
Median	10,050	3 sigma Value	5,349	Measurements < Ave. Bkg.	No
Standard Deviation	1,783	Maximum Bkg.	9,381	Measurement Mean < Ave. Bkg.	No
Range	6,350	Ave. MDCR	1,079	No. Measurements > Ave. Bkg.	6
Minimum	7,650	Number of Measurements			
Maximum	14,000	No. Prescribed	8		
		No. Collected	9		



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

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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1: E4024 **Package Type:** System
Survey Area Name: SETF Drains and Waste Storage Systems
Survey Package Number and Unit Name:
E4024 101C1 Liquid Waste, Floor Drains, and Solid Waste Storage

Measurement Results Listing by Download File

Download ID	Date	LC3	Location or Item No. LC5	SML LC6	Background Value (cpm)	MDCR (cpm)	Contact Result (cpm)	Test (Bkg. - Result) cpm
DL052307-002	5/23/2007	SP1M1	SP1	7	9,381	1,079	8,700	681
DL052307-002	5/23/2007	SP1M1	SP1	8	9,381	1,079	7,650	1,731
DL052407-001	5/24/2007	SP1M1	SP1	1	9,381	1,079	14,000	-4,619
DL052407-001	5/24/2007	SP1M1	SP1	2	9,381	1,079	10,550	-1,169
DL052407-001	5/24/2007	SP1M1	SP1	3	9,381	1,079	11,100	-1,719
DL052407-001	5/24/2007	SP1M1	SP1	4	9,381	1,079	10,050	-669
DL052407-001	5/24/2007	SP1M1	SP1	5	9,381	1,079	9,350	31
DL053107-002	5/30/2007	SP1M1	SP1	6	9,381	1,079	9,600	-219

SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
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Contact Gamma Exposure Rate Measurement Results

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Download File, Instrumentation Calibration Summary and Survey Technician

Download ID	M2350 SN	M2350 Cal Due	Det Model	Detector SN	Det. Cal Due	Gamma Cal Factor	Survey Technician
DL052307-002	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742
DL052407-001	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742
DL053107-002	95359	5/8/2008	44-10	162404	3/6/2008	5.36E+10	JEJ5742

Material Background Summary

Material LC3_P45	Material Description	Material Surface Description	Contact Gamma Background (cpm)
M1	Metal	Metal, Bare or Painted	9,381

Field Notes Summary

Download ID	Field Notes
DL052307-002	None
DL052407-001	None
DL053107-002	None

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

7/13/2007

Data Analysis Report

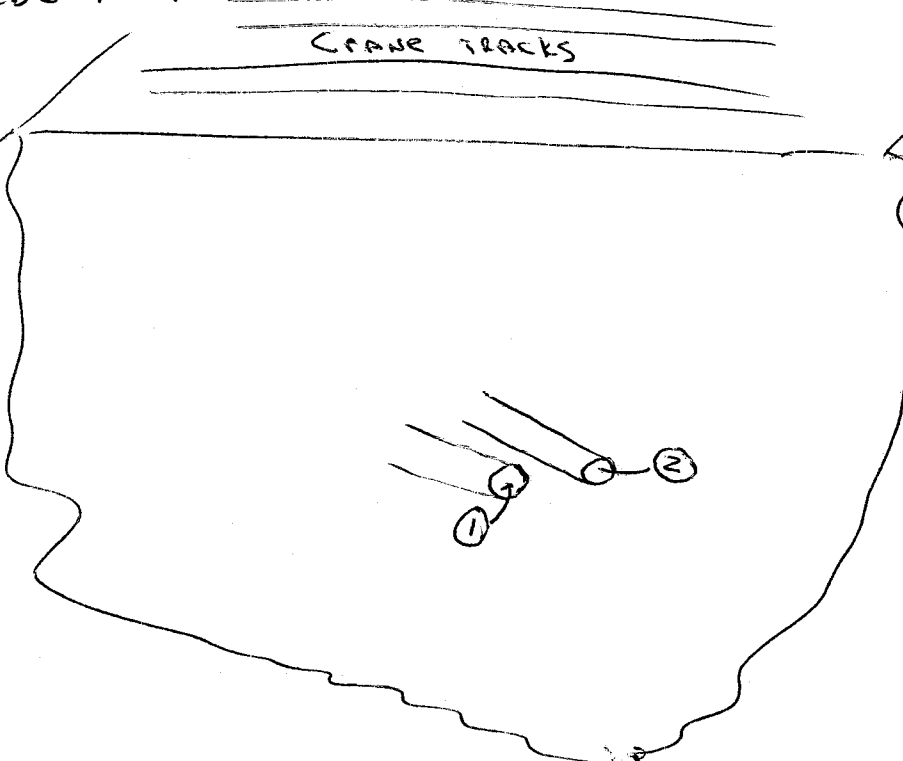
Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 5.0

Removable Alpha and Beta Smear Sample Analysis Results

APPENDIX A RADIOLOGICAL PROTECTION SURVEY FORM

Page 1 of 2

R.P. Tech (print): <u>J. Selinsky</u>			Location <u>4024 - 101C1</u>	RWP# <u>A-07-0005</u>
Instruments Used			Comments or Purpose of Survey <u>Swipes</u>	Date: <u>5-30-07</u>
Model	S/N	Cal. Due	<u>Taken 1/5 of Excavated</u> <u>RAD WASTE LINE S 1/2</u> <u>Feet below surface</u> All dose rates in mr/hr unless otherwise noted.	Time: <u>1300</u>
<u>L-2929</u>	<u>118419</u>	<u>3-5-08</u>		Survey # <u>022</u>
<u>NIA</u>				Air Sample # <u>NIA</u>
				Results: <u>NIA</u> $\mu\text{Ci/cc}$
<u>BLDG 4024</u> 			Survey Pt #	Contamination (dpm/100 cm ²)
			<u>1(L66)</u>	<u><200</u> <u><100B</u>
			<u>2(L66A)</u>	<u><200</u> <u><100B</u>
			<u>3 NIA</u>	
			<u>4</u>	
			<u>5</u>	
			<u>6</u>	
			<u>7</u>	
			<u>8</u>	
			<u>9</u>	
			<u>10</u>	
			<u>11</u>	
			<u>12</u>	
			<u>13</u>	
			<u>14</u>	
			<u>15</u>	
			<u>16</u>	
			<u>17</u>	
			<u>18</u>	
			<u>19</u>	
<u>20</u>				
			A/S - air sample	LAS - Large Area Smear
			# - Direct frisk	
			* contact/30cm xx - RCA Boundary	k = 1000
			H Head Level	O Smear Loc
			F-foot level	
PERFORMED BY/DATE: <u>J. Selinsky</u> / <u>5-30-07</u>				
REVIEWED BY / DATE: <u>[Signature]</u> / <u>5/30/07</u>				

APPENDIX A RADIOLOGICAL PROTECTION SURVEY FORM

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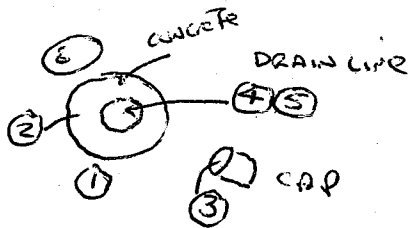
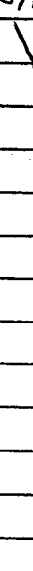
R.P. Tech (print): <u>J. Selinsky</u>			Location <u>E4024 - 101C1</u>	RWP # <u>A-07-0005</u>	
Instruments Used			Comments or Purpose of Survey	Date: <u>5-25-07</u>	
Model	S/N	Cal. Due	<u>SWIPES TAKEN FROM INSIDE</u> <u>LIQUID WASTE LINES &</u> <u>FLOOR DRAINS I/S BLDG</u>	Time: <u>1200</u>	
<u>L-2929</u>	<u>118419</u>	<u>3-5-08</u>		Survey # <u>019</u>	
<u>N/A</u>				Air Sample # <u>N/A</u>	
				Results: <u>N/A</u> $\mu\text{Ci/cc}$	
			All dose rates in mR/hr unless otherwise noted.	Survey Pt #	Contamination (dpm/100 cm ²)
SWIPES TAKEN INSIDE OF WASTE LINES (SP) & INSIDE OF FLOOR DRAINS (DF) IN BASEMENT OF 4024 BLDG. α BKG: .3cpm β BKG: 39cpm			1 (SP1)	<200	<100 B
			2 (SP2)	<200	<100 B
			3 (SP5)	<200	<100 B
			4 (SP7)	<200	<100 B
			5 (SP8)	<200	<100 B
			6 (DF1)	<200	<100 B
			7 (DF2)	<200	<100 B
			8 (DF3)	<200	<100 B
			9 (DF4)	<200	<100 B
			10 (DF5)	<200	<100 B
			11	N/A	
			12		
			13		
			14		
			15		
			16		
			17		
			18		
			19		
			20		
			A/S - air sample	LAS - Large Area Smear	
			# - Direct frisk		
			* contact/30cm xx - RCA Boundary	k = 1000	
			H Head Level	O Smear Loc	
			F-foot level		

PERFORMED BY/DATE: J. Selinsky / 5-25-07

REVIEWED BY / DATE: [Signature] / 5/31/07

APPENDIX A **RADIOLOGICAL PROTECTION SURVEY FORM**

Page 1 of 2

R.P. Tech (print): <u>J. Selinsky</u>			Location <u>SLAB AT BLDG 4024</u>	RWP# <u>A-07-005</u>
Instruments Used			Comments or Purpose of Survey	Date: <u>5-22-07</u>
Model	S/N	Cal. Due	INITIAL SURVEY OF TOP OF DRAW LINE AFTER CAP WAS REMOVED. SWIPES TAKEN I/S P.P.R. TO 4 INCHES IN DEPTH	Time: <u>0840</u>
Ludlum 2929	118419	3-5-08		Survey # <u>015</u>
Model #3	94567	8-10-07		Air Sample # <u>N/A</u>
L-2350 ⁹⁴⁻¹⁰	95359	5-4-08		Results: <u>N/A</u> $\mu\text{Ci/cc}$
All dose rates in mR/hr unless otherwise noted.				Survey Pt #
INITIAL SURVEY OF DRAW LINE AFTER CAP WAS REMOVED OUTSIDE ON SLAB  BLDG 4024 Rollup Door SCAN of TOP SURFACES USING Model #3 WAS 60 cpm BKG. NO elevated ACTIVITY noted ABOVE BACKGROUND SCAN of TOP OF DRAW USING 2350 showed NO elevated ACTIVITY ABOVE ≈ 100 cpm/hr BKG. SWIPES TAKEN I/S to 4" depth on pipe			1	<200 <100 B
			2	<200 <100 B
			3	<200 <100 B
			4	<200 <100 B
			5	<200 <100 B
			6	<200 <100 B
			7	N/A
			8	
			9	
			10	
			11	
			12	
			13	
			14	
			15	
			16	
			17	
			18	
			19	
			20	
A/S - air sample			LAS - Large Area Smear	
# - Direct frisk				
* contact/30cm xx - RCA Boundary			k = 1000	
H Head Level			O Smear Loc	
F-foot level				

PERFORMED BY/DATE: J. Selinsky 5-22-07
 REVIEWED BY / DATE: [Signature] 5/31/07

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 6.0

Sample Analysis Results

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Survey Package Number: E4024 101C1 DF1R1-1
Unit Name: SETF Systems Drain

	Activity (pCi/g)	2 Sigma uncertainty	MDC	No. Results	No. Detect	No. Non- detect
Am-241	-6.00E-03	1.20E-02	5.80E-02	1	0	1
Co-60	6.00E-02	2.10E-02	3.80E-02	1	1	0
Cs-134	-2.00E-03	1.60E-02	2.70E-02	1	0	1
Cs-137	2.22E+00	4.80E-02	3.50E-02	1	1	0
Eu-152	4.20E-02	4.30E-02	7.00E-02	1	0	1
Eu-154	-1.20E-02	4.90E-02	8.50E-02	1	0	1
Fe-55	-5.00E+00	1.10E+01	1.90E+01	1	0	1
H-3	-6.00E-02	8.40E-01	1.20E+00	1	0	1
K-40	7.95E+00	4.30E-01	4.60E-01	1	1	0
Mn-54	8.00E-03	1.60E-02	2.70E-02	1	0	1
Na-22	-5.00E-03	1.80E-02	3.10E-02	1	0	1
Ni-63	1.00E+00	5.40E+00	8.70E+00	1	0	1
Pu-238	0.00E+00	2.80E-04	2.30E-02	1	0	1
Pu-239/240	-6.00E-04	1.30E-03	3.00E-02	1	0	1
Pu-241	-5.00E-01	1.40E+00	2.30E+00	1	0	1
Sr-90	2.00E-02	5.20E-02	8.60E-02	1	0	1
Th-228	1.40E+00	2.80E+00	4.60E+00	1	0	1
Th-232	2.98E+00	5.20E-01	1.20E-01	1	1	0
U-234	1.47E+00	2.10E-01	5.20E-02	1	1	0
U-235	1.22E-01	7.50E-02	8.00E-02	1	1	0
U-238	1.37E+00	2.10E-01	7.00E-02	1	1	0

Survey Package Number: E4024 101C1 SP1R1-1
Unit Name: SETF Systems Solid Waste

	Activity (pCi/g)	2 Sigma uncertainty	MDC	No. Results	No. Detect	No. Non- detect
Am-241	1.10E-02	3.80E-02	9.00E-02	1	0	1
Co-60	4.70E-03	6.00E-03	1.30E-02	1	0	1
Cs-134	-9.00E-03	2.90E-02	4.70E-02	1	0	1
Cs-137	5.92E-01	1.50E-02	1.50E-02	1	1	0
Eu-152	-7.00E-03	2.00E-02	3.40E-02	1	0	1
Eu-154	1.00E-03	2.30E-02	3.80E-02	1	0	1
Fe-55	2.00E+00	9.20E+00	1.60E+01	1	0	1
H-3	-1.30E-01	6.40E-01	9.60E-01	1	0	1
K-40	2.09E+01	3.00E-01	1.80E-01	1	1	0
Mn-54	7.00E-04	8.60E-03	1.40E-02	1	0	1
Na-22	-5.00E-04	8.30E-03	1.40E-02	1	0	1
Ni-59	1.50E+02	7.40E+02	1.20E+03	1	0	1
Ni-63	-1.00E+00	5.20E+00	8.60E+00	1	0	1
Pu-238	6.00E-03	2.10E-02	5.00E-02	1	0	1
Pu-239/240	5.00E-03	2.10E-02	5.40E-02	1	0	1
Pu-241	-1.50E+00	1.40E+00	2.30E+00	1	0	1
Sr-90	0.00E+00	4.00E-02	6.70E-02	1	0	1
Th-228	0.65	0.31	0.51	1	1	0
Th-232	0.876	0.046	4.5	1	0	1
U-234	1.28	0.1	0.0098	1	1	0
U-235	0.062	0.023	0.0093	1	1	0
U-238	1.28	0.1	0.011	1	1	0

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 10.0

Photographs

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

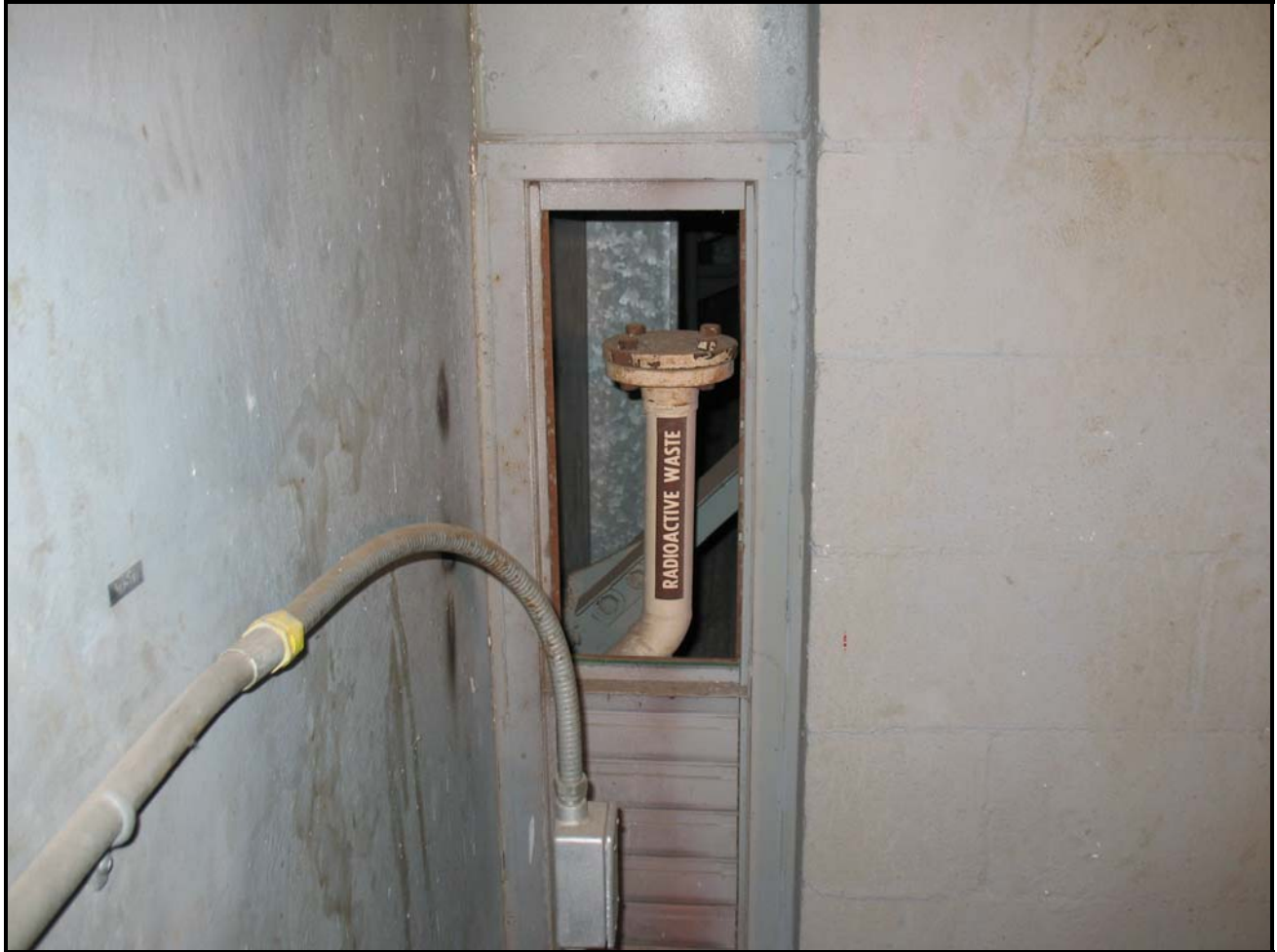


**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA**

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

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Section 11.0

Supplemental Information and/or Data



JOB HAZARD ASSESSMENT

Project: Santa Susana Field Laboratory SETF Decommissioning

Specific Task: Characterization and Confirmatory Survey for Underground System Drain Lines Labeled as Contaminated

Major Steps in the Job Task:

Excavate near the gantry crane concrete pad (Valid Dig Alert #A71300527) where a severed drain line labeled as "contaminated" may be accessed by personnel, approximately 7 1/2' to 8' in depth.

Provide sloping or shoring of any unsupported edge of the excavation where personnel may be exposed to cave-in.

If sloping is used, then the soil must be considered class C and a 1.5: 1 (horizontal: vertical) slope must be maintained on all un-supported sides of the excavation. If shoring is used, approved shoring set forth in the standard or approved manufactured devices must be used following manufacturer's instructions.

Inspect the excavation for any signs of unstable conditions (i.e. cracks, water or uncontrolled hazards) and perform a confined space assessment of the excavation, prior to personnel entry. Providing that there are no uncontrolled hazards within the space, then the space may be down-graded to a non-permit confined space however, atmospheric test must be performed at a minimum. (This process must be performed each time the space is left unattended and re-entered by personnel; daily at the minimum). Provide appropriate assess/egress method for entry personnel (i.e. ladder or ramp).

Survey the drain line and collect samples necessary to characterize the drain line.

Most Significant Hazards of the Activity:

The most significant hazards associated with this activity are; heavy equipment use (loader hoe/excavator), the condition of the excavation including loose materials and assess/egress, and possibly confined space hazards, environmental stress (i.e. sun and wind) and vehicle traffic. Earthquakes are known to occur in Southern California and could have significant consequences during excavation that's why it's important to stay clear of excavation edges and spoils piles. We will maintain traffic detour during the activity around east end then north.

Injury Prevention Focus Areas:

Hand/Arm Hazards: Wear gloves if materials must be moved stay clear of loose material or stabilized the conditions where pinch points or struck-by condition exist.

(Identify specific controls required to prevent injuries in these frequent injury areas)

Back Injuries: Maintain proper posture performing system survey and avoid lifting heavy material or get help and maintain good lifting techniques if material must be lifted.

injuries in these frequent injury areas)

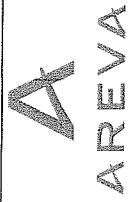
Tooling Hazards: Loader hoe/excavator, hand tools (i.e. shovels pails/buckets), (pinch points, guarding, rotating equipment)

HAZARD ITEM: potential hazards to consider, not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
EYE & FACE HAZARDS: flying particles, chemicals, temperatures, vapors, sparks, splash, particles	☒	☐	Have personnel stand clear of the excavator while performing work. The potential energy from the excavator penetrating compacted soil could cause material to fly. Strong winds could whip up soils and debris. Suspend activity when winds exceed 40 mph	Always wear safety glasses with side shields, (* minimum PPE equipment to include hard hats, sturdy leather Z41 work boots, each identified later).
HAND HAZARDS: sharps, temperatures, hazardous substances, pinch points, specify glove type required	☒	☐	Organize material movement with multiple employees and/or equipment as appropriate.	Always wear gloves when moving material/Always wear gloves when using shovels and packaging materials in sample containers.



JOB HAZARD ASSESSMENT

HAZARD ITEM: potential hazards to consider, not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
NOISE HAZARDS: hand or power tools, equipment operating in area, compressors, cranes, ambient noise levels	☒	☐	Equipment may be loud so maintain as much distance as possible.	Wear ear plugs as necessary.
HEAD HAZARDS: falling objects, bump hazards, electrical	☒	☐	Stay clear of excavator especially with the machine in an elevated position with material.	Wear hardhats for protection falling material and from the sun.
FOOT HAZARDS: falling, rolling objects, sharp objects	☒	☐	Stay clear of unstable slopes and equipment.	Uneven and unstable surfaces with the possibility of material sliding/rolling/movement.
FALL HAZARDS: verify anchor points, prior to use inspection, floor/wall openings, uneven surfaces, trip hazards, written plan, working over water, ladder use	☒	☐	The edge of excavation along the gantry crane pad may have a potential fall hazards however, an exclusion area atleast six feet away from the edge will be established and controlled access implemented along this edge. Additional measures may have to be implemented if for some reason personnel needs to be working at the edge of excavation within the controlled area.	Fall harness, approved anchor point, guardrail as necessary.
MANUAL LIFTING and ERGONOMIC HAZARDS: repeated motion, avoid awkward position, proper lifting techniques, back safety, two-person lifts	☒	☐	Organize material movement with multiple employees and/or use excavator/equipment as appropriate.	Maintain proper posture, wear gloves.
CHEMICAL EXPOSURE HAZARDS: review MSDS's, NFPA or HMIS labels, identify PPE required, spill control, waste generation, chemical use permit	☐	☒		
RESPIRATORY HAZARDS: dusts, fumes, oxygen deficient, toxic gas, weld fume, ozone	☐	☒		
HAZARDOUS MATERIALS CHECKS: PCB, lead, asbestos	☐	☒		
VENTILATION REQUIREMENTS: specify - local exhaust, area exhaust, general dilution, CFM requirements	☐	☒		
AIR MONITORING REQUIRED: industrial and radiological, area or personal air monitors, list hazards to be sampled	☐	☒		
ACCESS HAZARDS: walkways clear of hoses, leads, cords, and tools, review layout of work area, consider other work group access to work area	☒	☐	The area will be closed to vehicular traffic during survey if possible. Maintain housekeeping and clear trip hazards.	Wear high visibility clothing around equipment and vehicular traffic.
MECHANICAL MATERIAL HANDLING: qualified forklift operator, pinch points	☒	☐	Keep personnel a safe distance from the excavator, swing radius and excavation edges. Keep spoils piles at least two feet from excavation.	Wear high visibility clothing around equipment and vehicular traffic.



JOB HAZARD ASSESSMENT

HAZARD ITEM: potential hazards to consider, not inclusive	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
CRANES and RIGGING: qualified operator/rigger, prior to use inspections, rigging inspected, tag lines, designated load director, safe load path, hand signals or radio, headsets	☐	☒		
SCAFFOLDING: permit required, daily inspections, tagging, qualified erectors and inspectors	☐	☒		
WEATHER HAZARDS: heat/cold extremes, overhead/underfoot snow & ice, wet surfaces, storms, verify weather forecast	☒	☐	Observe weather forecast and natural indications i.e. wind, rain, sun/heat	Dress appropriately and follow instructions
PRESSURIZED SYSTEMS: pneumatic, hydraulic, pressure test, vacuum, hose/whip restraints	☐	☒		
CONFINED SPACE HAZARDS: confined space work permit required, rescue equipment and plan in place	☒	☐	Perform confined space assessment on the excavation is determined to be stable.	Confined space consideration will be given if excavations/trenches exceed 3.5 feet and personnel have to enter.
HOUSEKEEPING: prevent slips, trips, and falls, maintain area clearly, control trash, debris and combustibles	☒	☐	Clean as you go and have access path stabilized as necessary.	
RESCUE PLAN: access to injured, layout, stage equipment for rescue, written plan required, coordination with control room and emergency team	☒	☐	Site Plan and Emergency response.	Contact Boeing Fire rescue following contact information posted in the field office.
FIRE/COMBUSTIBLE HAZARDS: hot work/combustible material permit, welding, grinding, combustible material storage, explosion hazards	☐	☒		
WELDING, CUTTING, AND GRINDING: chromium (VI) exposure control plan (see page 4), weld fume, ventilation, PPE requirements	☐	☒		
ELECTRICAL HAZARDS: energized electrical work permit, grounding protection, GFCI, power lines, cords, cable runs	☐	☒		
LOCKOUT/TAGOUT: electrical, hydraulic, pneumatic energy sources, pressurized systems, follow site requirements	☐	☒		
COMMUNICATION DIFFICULTIES: noise interference, radio use, hand signals, 3-way communication, phonetic alphabet	☒	☐	Buddy system and radios issued	The excavation area is a short distance away from field office trailer. Radios may be required to communicate with office, as necessary.



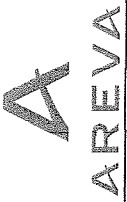
JOB HAZARD ASSESSMENT

HAZARD ITEM: <i>potential hazards to consider, not inclusive</i>	Y	N	ENGINEERING AND ADMINISTRATIVE CONTROLS	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
TOOL HAZARDS: <i>guards, pinch and nip points, rotating parts, training required, authorization use only</i>	☐	☐		
WORK PRACTICES: <i>policy and procedure compliance</i>	☒	☐	Always observe safe work practices.	Supplemental PPE as necessary.
MULTI DEPARTMENT INTERFACE: <i>Security Impact, Radiation Protection Impact, Operations Impact, QA, Safety and Health</i>	☐	☒		
ENVIRONMENTAL HAZARD: <i>hazardous waste generation, environmental impact, water runoff, sampling needed</i>	☒	☐	A spill response team is available through Boeing	As directed however none of our personnel should require special PPE
RADIATION HAZARDS: <i>RWP required, ALARA review required, dose rates, contamination levels, reference RWP</i>	☐	☒	TBD	
POSTING NEEDED: <i>barricades, signs, barrier ribbons</i>	☐	☒	TBD	
FME PLAN REQUIRED: <i>written plan, log equipment and tools in/out, drop log, lanyards for tools and PPE, PPE restrictions</i>	☐	☒		

Additional Controls (add additional pages, if necessary)

Chromium (VI) Exposure Control Plan for Welding and Grinding Operations:

Welding Method: n/a	Base Metal: n/a	YES	NO	Electrode Type: n/a
Has air monitoring been previously performed for this activity?				
If YES, list monitoring results: n/a				
If YES, was any special ventilation required?				
If YES, was respiratory protection required for this activity?				
Is protective clothing required?				
Have employees completed Chromium (VI) training?				
Have employees completed Chromium (VI) medical surveillance?				



(10/01c) c-01077

Others requirements: Dig Alert A71300527 Valid Mon May 14, 2007 @ 1000

Industry Events, Operating Experience, and/or Lessons Learned Applicable to Work Activity or Site:

678

5/24/07

Q Mr. Dor Phil Maynard

5/24/07

ACTIVITY NOTIFICATION FORM
FOR HOLDERS OF ANNUAL PERMITS

Buildings/Structures, Scaffolding/Falsework, Demolition, Trenches/Excavations

THIS FORM SHALL BE FAXED TO THE NEAREST DOSH OFFICE TO COMPLY WITH THE 8 CCR 341.1(h).
PLEASE DO NOT MAIL DUPLICATE NOTIFICATION AS A FOLLOW-UP TO FAX NOTIFICATION.

FAX DATA: FAXED TO VAN NUYS DOSH DISTRICT OFFICE ON MAY 25 2007

DOSH FAX NO. (818) 901-5578 BY William Musbach

Company Name: CLAUSS CONSTRUCTION Field Phone: 818-466-8283

Annual Permit Number: 2007-906644 Office Phone: 619-390-4940

Issuing Region: 3 Issuing District: 2

Specific Activity Location: 5800 Woolsey Canyon RD Digs 24 Number of Employees: 6

Nearest Major Cross Street: Valley Circle Blvd Starting Date: 5-29-07

City: Canoga Park Anticipated Completion Date: 5-31-07

County: Ventura High Voltage Lines in Proximity? No X Yes

INSTRUCTIONS: The appropriate item(s) must be completed and signed by a person knowledgeable about the project for each activity covered by a permit. Please fill in or check off the blanks where appropriate.

Construction: Building _____ Structure _____ Type: Steel Frame _____ Tiered _____ Concrete _____ Tilt-up _____

Wood Frame _____ Curtain Wall _____ Precast _____ Slip Form _____ Depth _____ Height _____

Description: _____

Scaffolding: Height _____ Metal _____ Wood _____ Wood over 60 Feet _____ Metal over 125 Feet _____

Metal >125 Feet or Wood >60 Feet requires design by California Registered Civil Engineer & Plans at Site. (See 8 CCR 1644(c) (7))

Description: _____

Falsework/Vertical Shoring: Maximum Height _____ Maximum Span _____ Material _____

Description: _____

(See 8 CCR 1717)

Demolition of: Building _____ Structure _____ Height _____ No. of Stories _____ Type: Steel Frame _____

Wood Frame _____ Concrete _____ Demolition Ball _____ Clam _____ Explosives _____

Loader/Tractors _____ Other _____

Continued on back

CAL/OSHA 41-3 (Rev. 10/29/2006)

Trenches/Excavations: Depth Range (Min/Max) 6' / 8' Width Range (Min/Max) 18' / 40' Total Length 36' / 40'
Ground Protection Method: Shoring _____ Sloping 1/2 to 1 Trench Shield _____ Professional Engineer _____
Underground Services Alert (USA) Number 1-800-422-4133 (NORTH 1-800-642-2444/SOUTH 1-800-422-4133)

Soil Analysis to be done? Yes _____ No X If No, You Must Slope 1.5 to 1.

Competent Person: The holder of an Annual Permit who is notifying the District of the commencement of a Trench and/or Excavation project shall designate a competent person in accordance with the requirements of 8 CCR Section 1504, 1541, and 1541.1.

Description: Removal of soil to access & facilitate removal of 2 (two)
4 inch pipes. will remove & slope at 1.5 to 1 or better. Immediate
fill of excavation after removal.

* Ground protection methods for excavations deeper than 20 feet must be designed by a Registered Professional Engineer.
See 8 CCR 1541.1, Appendix F.

I hereby certify that to the best of my knowledge the above information and assertions are true and correct and that I/the applicant, have knowledge of and will comply with the foregoing.

Name: William Musbach
(Please Type or Print)

Signature: 

Title: Vice President

Date: 5-25-07

TRANSMISSION VERIFICATION REPORT

TIME : 05/25/2007 10:17
NAME : CLAUSS CONSTRUCTION
FAX : 16193904944
TEL : 16193904940
SER.# : BROG6J504533

DATE, TIME	05/25 10:16
FAX NO./NAME	18189015578
DURATION	00:00:22
PAGE(S)	02
RESULT	OK
MODE	STANDARD
	ECM

No: **2007-906644**

PERMIT

Permit Issued To

(Insert Contractor/Project Administrator's Name, Address and Telephone No.)

Clauss Construction
8956 Winter Gardens Blvd
Lakeside CA 92040-4935

(619) 390-4940

No.

Date **11/16/2006**

Region **3**

District **2**

Tel. **(619) 767-2280**

Type of Permit **T1-ANNUAL TRENCH/EXCAVATION**

Pursuant to Labor Code Sections 6500 and 6502, this Permit is issued to the above-named employer for the projects described below:

State Contractor's License Number		Permit Valid through		
630564		May 31, 2008		
Description of Project	Location Address	City and County	Anticipated Dates	
			Starting	Completion
Various	Statewide		Nov 16, 2006	May 31, 2008

This Permit is issued upon the following conditions:

1. That the work is performed by the same employer. If this is an annual permit the appropriate District Office shall be notified, in writing, of dates and location of job site prior to commencement.
2. The employer will comply with all occupational safety and health standards or orders applicable to the above projects, and any other lawful orders of the Division.
3. That if any unforeseen condition causes deviation from the plans or statements contained in the Permit Application Form the employer will notify the Division immediately.
4. Any variation from the specification and assertions of the Permit Application Form or violation of safety orders may be cause to revoke the permit.
5. This permit shall be posted at or near each place of employment as provided in 8 CCR 341.4

Received From Ed Grant	Received By Permit Unit
☐ Cash	Amount \$100.00
☒ Check 45153	Date 11/16/06

Investigated by

Approved by

Safety Engineer

Date

District Manager/Permit Unit

Date

DEPARTMENT OF INDUSTRIAL RELATIONS

DIVISION OF OCCUPATIONAL SAFETY & HEALTH

PERMIT UNIT

1515 CLAY STREET, SUITE 1901
OAKLAND, CA 94612-1423
(510) 286-7022



ADDRESS REPLY TO:
PO BOX 420603
SAN FRANCISCO 94142-0603

Dear Annual Permit Holder:

Your Annual Activity Permit is enclosed. It will be effective from the first of January or the issue date, whichever occurs later. Due to the revision of permit regulations (8 CCR 341 et seq.), for the transition year 2007, the expiration date will be at least one year from date of issuance, please check the permit's expiration date. You will receive renewal information two months before the expiration date. If you do not receive a renewal letter, please contact me at (510) 286-7022. In year 2008 and after, the expiration date will be one year from the issue date.

In accordance with California Code of Regulations section 341.1(h)(2)(B), *'The permit holder shall notify the Division district office that has jurisdiction over the site of the project at least 24 hours prior (emphasis added) to the activity which is the subject of the notification...'*

To facilitate the notification process, please complete the enclosed Activity Notification Form and fax or mail it to the District Office nearest to the proposed work activity (see office directory on the back of this letter). Please make as many copies of the form as you need. You may also download the form from our website, <http://www.dir.ca.gov/DOSHPol/forms/cosh41-3.pdf>.

If you should have any questions about the activity notification process, please call me at (510) 286-7022 or your local Cal/OSHA District Office.

Sincerely,

Robert E. Low
Permit Unit

enc. Activity Notification Form for Holders of Annual Permits (Cal/OSHA 41-3)

Appendix A

Section	Survey Package	Survey Unit Description
5.0		SETF Systems
5.1	E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage
5.1.3	E4024 101C1	Survey Results Solid Waste Storage System

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section	Title
1.0	Annotated Drawings
2.0	Radiological Control Survey Results
3.0	Sample Analysis Results
4.0	Photographs
5.0	Supplemental Information and/or Data

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

7/13/2007

Data Analysis Report

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Section 1.0

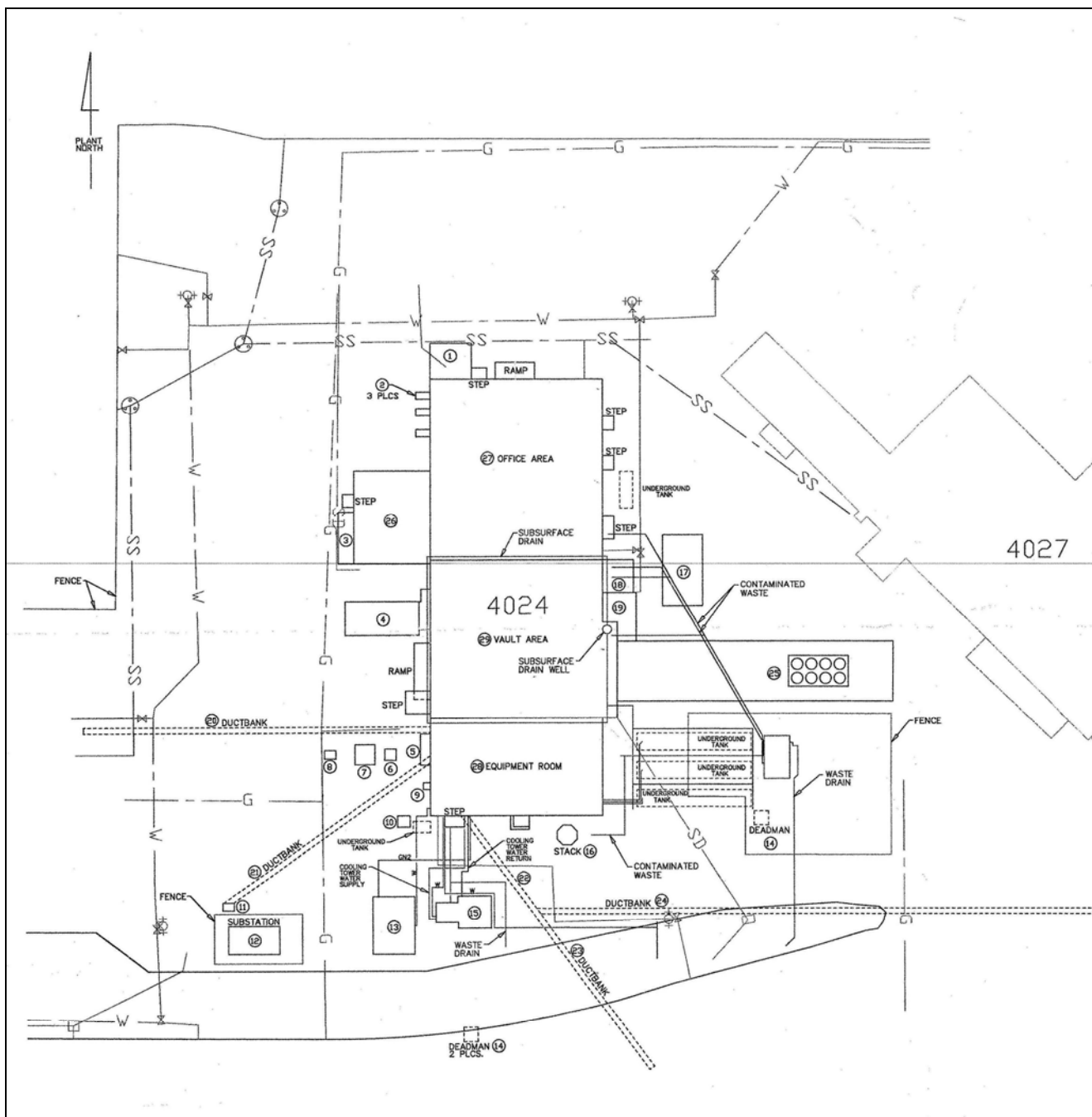
Annotated Drawings

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

5/22/2007

Page A-2 of 6

Survey Package Appendix A – Drawings

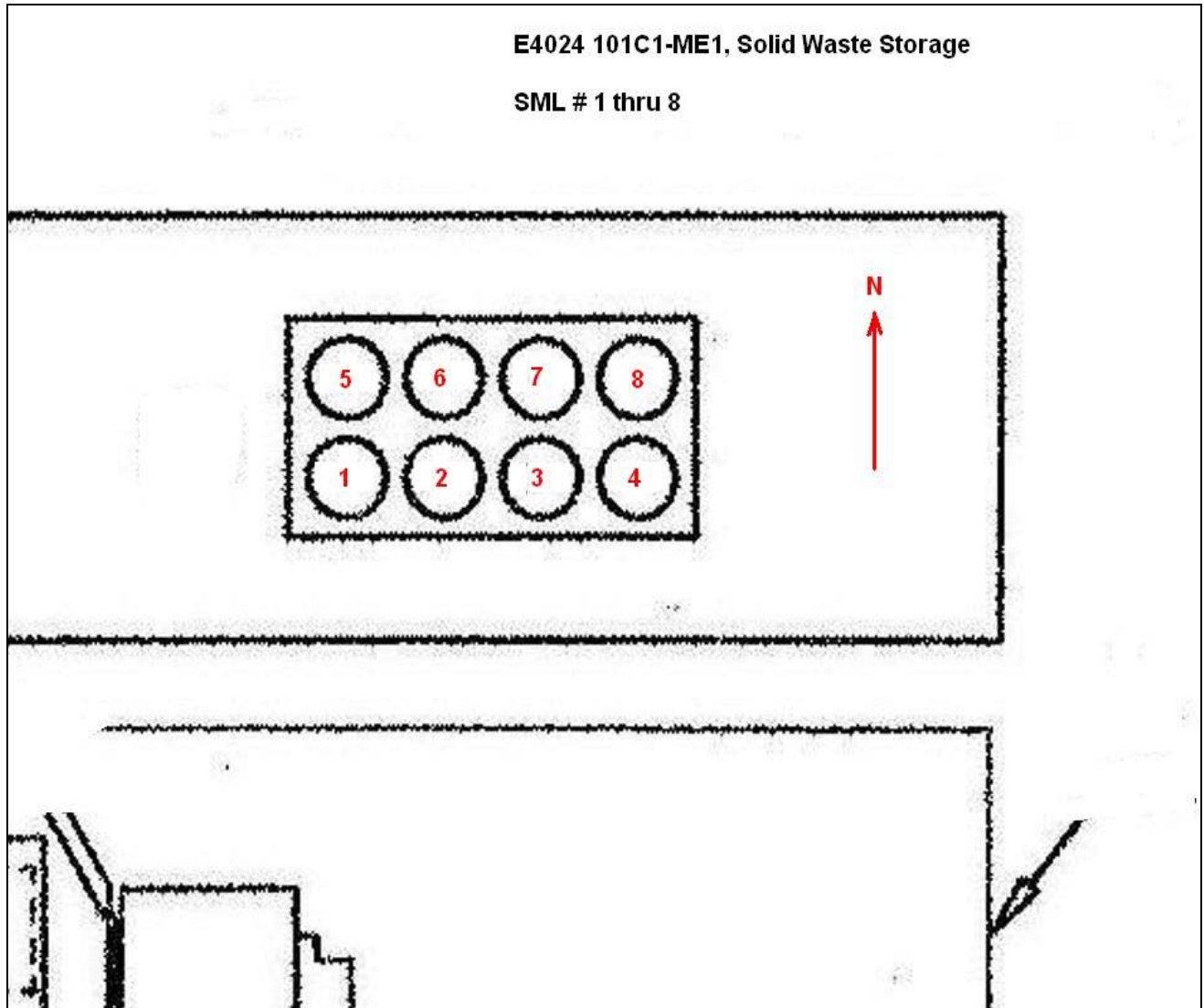


SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA

5/22/2007

Page A-4 of 6

Survey Package Appendix A – Drawings



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

7/13/2007

Data Analysis Report

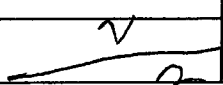
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Section 2.0

Radiological Control Survey Results

APPENDIX A RADIOLOGICAL PROTECTION SURVEY FORM

Page 1 of 2

R.P. Tech (print): <u>J. Worley / J. Johnson</u>			Location <u>Bldg 4024</u>		RWP # <u>N/A</u>	
Instruments Used			Comments or Purpose of Survey		Date: <u>5-29-07</u>	
Model	S/N	Cal. Due	<u>Survey solid waste storage</u> <u>PLVSS # 4 d # 8</u>		Time: <u>1315</u>	
<u>2929</u>	<u>118419</u>	<u>3/5/08</u>			Survey # <u>07-020</u>	
<u>M-3</u>	<u>94570</u>	<u>8/9/07</u>			Air Sample # <u>N/A</u>	
					Results: <u>N/A</u> $\mu\text{Ci/cc}$	
			All dose rates in mr/hr unless otherwise noted.			
See attached sheet			Survey Pt #	Contamination (dpm/100 cm ²)		
			1	<u><20 d</u>	<u><100 B8</u>	
			2			
			3			
			4			
			5			
			6			
			7			
			8			
			9			
			10			
			11			
			12			
			13			
			14			
			15			
			16			
			17	<u>N/A</u>		
			18			
			19			
20						
			A/S - air sample		LAS - Large Area Smear	
			# - Direct frisk			
			* contact/30cm xx - RCA Boundary		k = 1000	
			H Head Level		O Smear Loc	
			F-foot level			

PERFORMED BY/DATE: J. Worley / J. Johnson / 5-29-07

REVIEWED BY / DATE: [Signature] / 5/29/07

RADIATION SURVEY REPORT

FACILITY: 4024			
LOCATION: Solid waste storage tubes plus #4 & 8			
SAMPLE NUMBER	DATE SAMPLED	DATE ANALYZED	PURPOSE: Smears & direct scan
1	5-24-07	5-24-07	Solid waste storage tube plus #4
2			
3			
4			
91			
UNITS LIMIT DESCRIPTION			
		2525	2525
		118419	118419
		3-5-08	3-5-08
		0.25	35
		29.4	24.1
		90 Secs	90 Secs
			11.7
			M2
			2 of 2

COMMENTS: Survey of solid waste storage tubes plus #4 & 8 after removal direct scans with m-3 (BT) all scans $\leq$ B49

LAS $\leq$ B49 (BT) with m-3

SAMPLED BY: J. Wiley

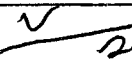
REVIEWED BY: J. Wiley

ANALYZED BY: J. Wiley

DATE: 5/29/07

APPENDIX A RADIOLOGICAL PROTECTION SURVEY FORM

Page 1 of 2

R.P. Tech (print): <u>James Johnson</u>			Location <u>Bldg 4024 (outside)</u>		RWP # <u>N/A</u>	
Instruments Used			Comments or Purpose of Survey		Date: <u>5-24-07</u>	
Model	S/N	Cal. Due	<u>Survey of Solid Waste</u> <u>Storage Pails After</u> <u>Removal</u>		Time: <u>1430</u>	
<u>2525</u>	<u>118415</u>	<u>3/5/08</u>			Survey # <u>07-018</u>	
<u>M-3</u>	<u>94570</u>	<u>8/9/07</u>			Air Sample # <u>N/A</u>	
					Results: <u>N/A</u> $\mu\text{Ci/cc}$	
			All dose rates in mR/hr unless otherwise noted.			
See attached sheet					Survey Pt #	Contamination (dpm/100 cm ²)
					1	<u>< 20 d</u> <u>< 100 Bq</u>
					2	
					3	
					4	
					5	
					6	
					7	
					8	
					9	
					10	
					11	
					12	
					13	
					14	
					15	
					16	
					17	<u>N/A</u>
					18	
					19	
20						
A/S - air sample					LAS - Large Area Smear	
# - Direct frisk						
* contact/30cm xx - RCA Boundary					k = 1000	
H Head Level					O Smear Loc	
F.-foot level						
PERFORMED BY/DATE: <u>James Johnson, 5/24/07</u> REVIEWED BY / DATE: <u>[Signature], 5/24/07</u>						

RADIATION SURVEY REPORT

FACILITY: Bldg 4024			
LOCATION: Solid waste storage plus			
SAMPLE NUMBER	DATE SAMPLED	DATE ANALYZED	PURPOSE:
1	5-24-07	5-24-07	Shield plus 1
2			1
3			2
4			3
5			3
6			3
7			4
8			4
9			5
10			5
11			6
12			6
833			
COMMENTS: Survey of solid waste storage plus other removal plus scanned with m-3 (at) all scans $\leq$ BSS			
SAMPLED BY: James Johnson REVIEWED BY: [Signature]			
ANALYZED BY: Joe Johnson DATE: 5/24/07			
INSTRUMENT		IDENTIFICATION	
2925		118415	
CALIBRATION DUE		315/08	
BACKGROUND		0.2	
EFFICIENCY		25.4	
COUNT TIME		90 SEC	
UNITS		LIMIT	
2525		118415	
315/08		32	
24.1		11.7	
90 SEC		51 SEC	
M-3		94570	
8/9/07		60	
N/A		N/A	
Page 2		of 2	

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 3.0

Sample Analysis Results

 ***** THE BOEING COMPANY *****
 ***** SANTA SUSANA FIELD LABORATORY *****
 ***** SHEA - RADIATION SAFETY LAB *****

 ***** GAMMA SPECTRUM ANALYSIS REPORT *****

Report Generated On : 5/30/07 3:39:01 PM

Sample Identification : T24070014M
 Spectrum Description : Water from T24 solid waste storage tube
 MCA Number : Main System #1
 Sample Type : Water
 Sample Geometry : 2

Peak Locate Threshold : 4.00
 Peak Locate Range (in channels) : 200 - 16384
 Peak Area Range (in channels) : 1 - 16384
 Identification Energy Tolerance : 1.000 keV

Sample Size : 3.940E-001 L

Sample Taken On : 5/24/07 12:00:00 PM
 Acquisition Started : 5/30/07 3:02:20 PM

Live Time : 1800.0 seconds
 Real Time : 2087.9 seconds

Energy Calibration Used Done On : 9/29/06
 Efficiency Calibration Used Done On : 9/29/06

Report Reviewed and
 Conforms to RS-00017

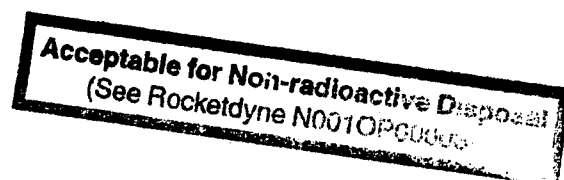
By: _____

[Signature]

Radiation Safety

Date: _____

5/30/07



***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample Identification: T24070014M

Nuclide Library Used: C:\GENIE2K\CAMFILES\LIBRARY0.NLB

..... IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/L)	Activity) Uncertainty	Activity (GPS)	GPS Uncert.
-----------------	------------------	-----------------	--------------	---------------------	---------------------------	-------------------	----------------

* = Energy line found in the spectrum.

@ = Energy line not used for Weighted Mean Activity

Energy Tolerance : 1.000 keV

Nuclide confidence index threshold = 0.30

Errors quoted at 2.000 sigma

```

*****
*****      T H E   B O E I N G   C O M P A N Y      *****
*****      S A N T A   S U S A N A   F I E L D   L A B O R A T O R Y      *****
*****      S H E A -   R A D I A T I O N   S A F E T Y   L A B      *****
*****
*****      G A M M A   S P E C T R U M   A N A L Y S I S   R E P O R T      *****
*****
/  *****

```

```

Report Generated On           : 5/30/07    3:02:51 PM

Sample Identification         : T24070013M
Spectrum Description        : Water from T24 solid waste storage tube
MCA Number                   : Main System #1
Sample Type                  : Water
Sample Geometry              : 2

Peak Locate Threshold        : 4.00
Peak Locate Range (in channels) : 200 - 16384
Peak Area Range (in channels) : 1 - 16384
Identification Energy Tolerance : 1.000 keV

Sample Size                   : 4.200E-001 L

Sample Taken On              : 5/24/07    12:00:00 PM
Acquisition Started          : 5/29/07    5:21:48 PM

Live Time                     : 10000.0 seconds
Real Time                     : 10000.4 seconds

```

```

Energy Calibration Used Done On      : 9/29/06
Efficiency Calibration Used Done On   : 9/29/06

```

Report Reviewed and
Conforms to RS-00017

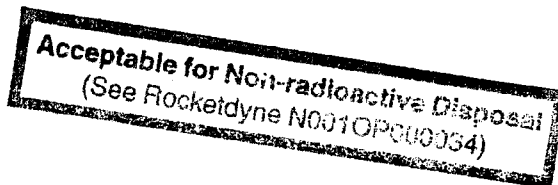
By:



Date:

5/30/07

Radiation Safety



***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : T24070013M

Nuclide	Nuclide	Wt mean	Wt mean		Nuclide
Name	Id	Activity	Activity	Percent	MDA
	Confidence	(pCi/L	) Uncertainty	Total Act.	(pCi/L
					)

Total Sample Activity... 0.0000E+000 pCi/L

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

 ***** THE BOEING COMPANY *****
 ***** SANTA SUSANA FIELD LABORATORY *****
 ***** SHEA - RADIATION SAFETY LAB *****

 ***** GAMMA SPECTRUM ANALYSIS REPORT *****

Report Generated On : 5/29/07 4:14:30 PM

Sample Identification : T24070012M
 Spectrum Description : Water from T24 solid waste storage tube
 MCA Number : Main System #1
 Sample Type : Water
 Sample Geometry : 1

Peak Locate Threshold : 4.00
 Peak Locate Range (in channels) : 200 - 16384
 Peak Area Range (in channels) : 1 - 16384
 Identification Energy Tolerance : 1.000 keV

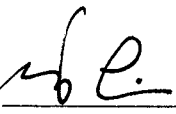
Sample Size : 5.420E-001 L

Sample Taken On : 5/24/07 12:00:00 PM
 Acquisition Started : 5/29/07 3:44:16 PM

Live Time : 1200.0 seconds
 Real Time : 1299.7 seconds

Energy Calibration Used Done On : 9/29/06
 Efficiency Calibration Used Done On : 9/29/06

Report Reviewed and
 Conforms to RS-00017

By: 
 Radiation Safety

Date: 5/29/07

Acceptable for Non-radioactive Disposal
 (See Rocketdyne N001OP000034)

***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : T24070012M

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/L	Wt mean Activity) Uncertainty	Percent Total Act.	Nuclide MDA (pCi/L	)
-----------------	-----------------------------	-------------------------------	--------------------------------------	-----------------------	--------------------------	---

Total Sample Activity... 0.0000E+000 pCi/L

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : T24070011M

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/L	Wt mean Activity Uncertainty	Percent Total Act.	Nuclide MDA (pCi/L
-----------------	-----------------------------	-------------------------------	------------------------------------	-----------------------	--------------------------

Total Sample Activity... 0.0000E+000 pCi/L

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

 ***** THE BOEING COMPANY *****
 ***** SANTA SUSANA FIELD LABORATORY *****
 ***** SHEA - RADIATION SAFETY LAB *****

 ***** GAMMA SPECTRUM ANALYSIS REPORT *****

Report Generated On : 5/29/07 4:36:56 PM

Sample Identification : T24070010M

Spectrum Description : Water from T24 solid waste storage tube

MCA Number : Main System #1

Sample Type : Water

Sample Geometry : 3

Peak Locate Threshold : 4.00

Peak Locate Range (in channels) : 200 - 16384

Peak Area Range (in channels) : 1 - 16384

Identification Energy Tolerance : 1.000 keV

Sample Size : 9.860E-001 L

Sample Taken On : 5/24/07 12:00:00 PM

Acquisition Started : 5/29/07 4:16:00 PM

Live Time : 1200.0 seconds

Real Time : 1200.1 seconds

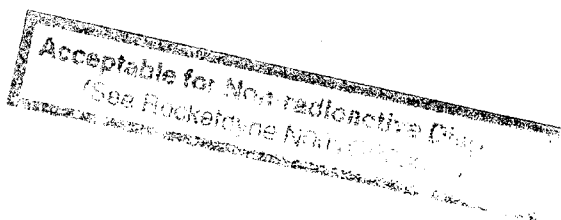
Energy Calibration Used Done On : 9/29/06

Efficiency Calibration Used Done On : 9/29/06

Report Reviewed and
 Conforms to RS-00017

By: RL
 Radiation Safety

Date: 5/29/07



***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 1 *****

Sample Identification : T24070010M

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/L	Wt mean Activity Uncertainty	Percent Total Act.	Nuclide MDA (pCi/L
-----------------	-----------------------------	-------------------------------	------------------------------------	-----------------------	--------------------------

Total Sample Activity... 0.0000E+000 pCi/L

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

No peak search results available for nuclide analysis.

```

*****
*****      T H E   B O E I N G   C O M P A N Y      *****
*****      S A N T A   S U S A N A   F I E L D   L A B O R A T O R Y      *****
*****      S H E A -   R A D I A T I O N   S A F E T Y   L A B      *****
*****
*****      G A M M A   S P E C T R U M   A N A L Y S I S   R E P O R T      *****
*      *****

```

```

Report Generated On           : 5/29/07    3:41:30 PM

Sample Identification         : T24070009M
Spectrum Description        : Water from T24 solid waste storage tube
MCA Number                  : Main System #1
Sample Type                 : Water
Sample Geometry             : 1

Peak Locate Threshold       : 4.00
Peak Locate Range (in channels) : 200 - 16384
Peak Area Range (in channels) : 1 - 16384
Identification Energy Tolerance : 1.000 keV

Sample Size                 : 4.500E-001 L

Sample Taken On             : 5/24/07    12:00:00 PM
Acquisition Started        : 5/29/07    3:12:37 PM

Live Time                  : 1200.0 seconds
Real Time                  : 1383.5 seconds

```

```

Energy Calibration Used Done On      : 9/29/06
Efficiency Calibration Used Done On   : 9/29/06

```

Report Reviewed and
Conforms to RS-00017

By: 16L Date: 5/29/07
Radiation Safety

Acceptable for Release
(See Rocket)

***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : T24070009M

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/L	Wt mean Activity Uncertainty	Percent Total Act.	Nuclide MDA (pCi/L
-----------------	-----------------------------	-------------------------------	------------------------------------	-----------------------	--------------------------

Total Sample Activity... 0.0000E+000 pCi/L

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

707

***** I N T E R F E R E N C E C O R R E C T E D R E P O R T 2 *****

Sample Identification : T24070008M

Nuclide	Nuclide	Wt mean	Wt mean		Nuclide
Name	Id	Activity	Activity	Percent	MDA
	Confidence	(pCi/L	) Uncertainty	Total Act.	(pCi/L

Total Sample Activity... 0.0000E+000 pCi/L

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

```

*****
*****      T H E   B O E I N G   C O M P A N Y      *****
*****      S A N T A   S U S A N A   F I E L D   L A B O R A T O R Y      *****
*****      S H E A -   R A D I A T I O N   S A F E T Y   L A B      *****
*****
*****      G A M M A   S P E C T R U M   A N A L Y S I S   R E P O R T      *****
*      *****

```

```

Report Generated On           : 5/29/07    2:42:51 PM

Sample Identification         : T24070007M
Spectrum Description         : Water from T24 solid waste storage tube
MCA Number                   : Main System #1
Sample Type                   : Water
Sample Geometry               : 1

Peak Locate Threshold        : 4.00
Peak Locate Range (in channels) : 200 - 16384
Peak Area Range (in channels)  : 1 - 16384
Identification Energy Tolerance : 1.000 keV

Sample Size                   : 4.960E-001 L

Sample Taken On              : 5/24/07    12:00:00 PM
Acquisition Started          : 5/29/07    11:56:14 AM

Live Time                     : 1200.0 seconds
Real Time                     : 1200.1 seconds

```

```

Energy Calibration Used Done On      : 9/29/06
Efficiency Calibration Used Done On   : 9/29/06

```

Report Reviewed and
Conforms to RS-00017

By: *mbc*
Radiation Safety

Date: 5/29/07

NDA

Acceptable for Non-radioactive Disposal
(See Rocketdyne N001CP000034)

***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample Identification: T24070007M

Nuclide Library Used: C:\GENIE2K\CAMFILES\LIBRARY0.NLB

..... IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/L	Activity) Uncertainty
-----------------	------------------	-----------------	--------------	--------------------	---------------------------

* = Energy line found in the spectrum.

Energy Tolerance : 1.000 keV

Nuclide confidence index threshold = 0.30

Errors quoted at 2.000 sigma

No peak search results available for nuclide analysis.

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 4.0

Photographs

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

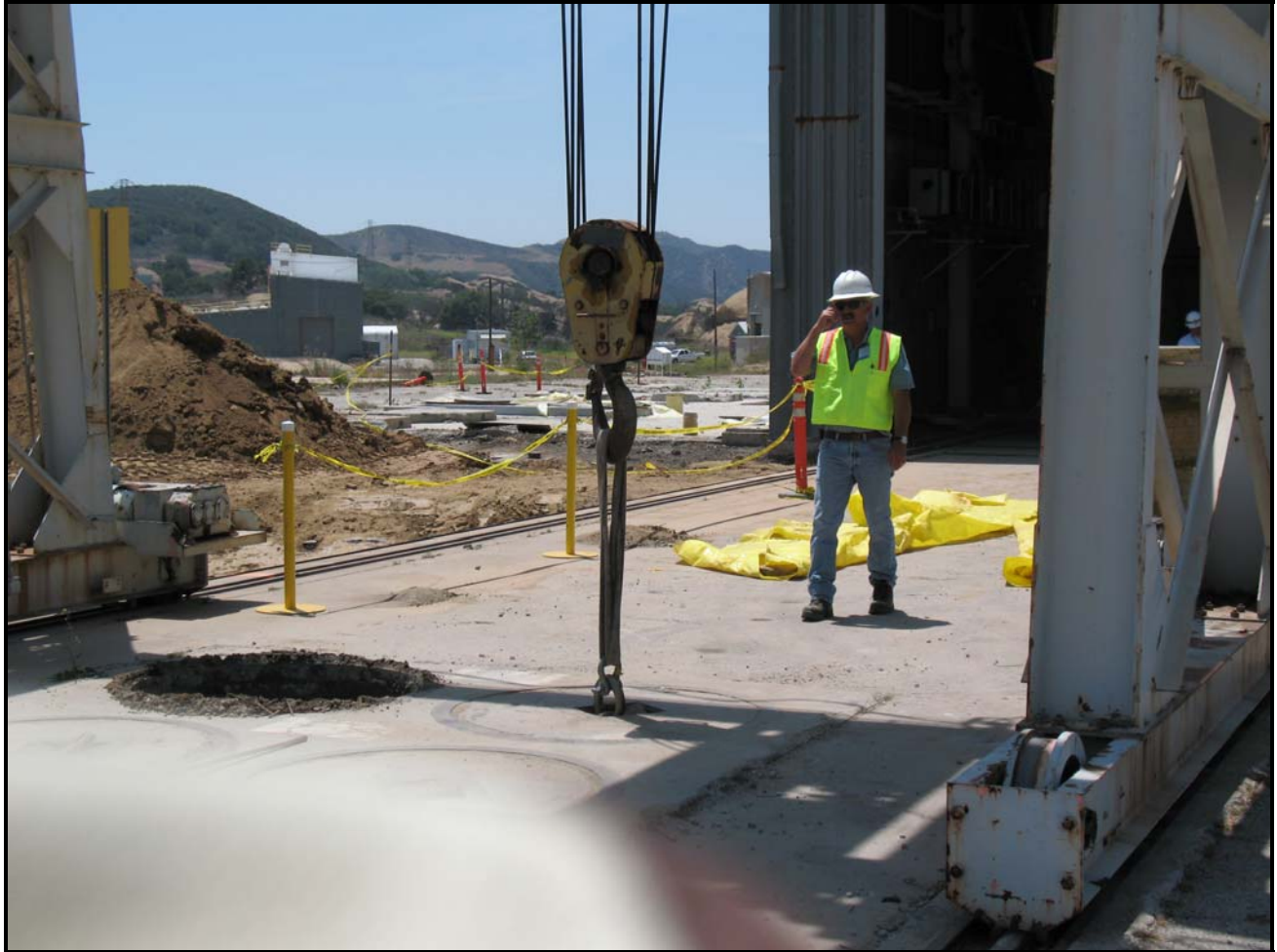


**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA**

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

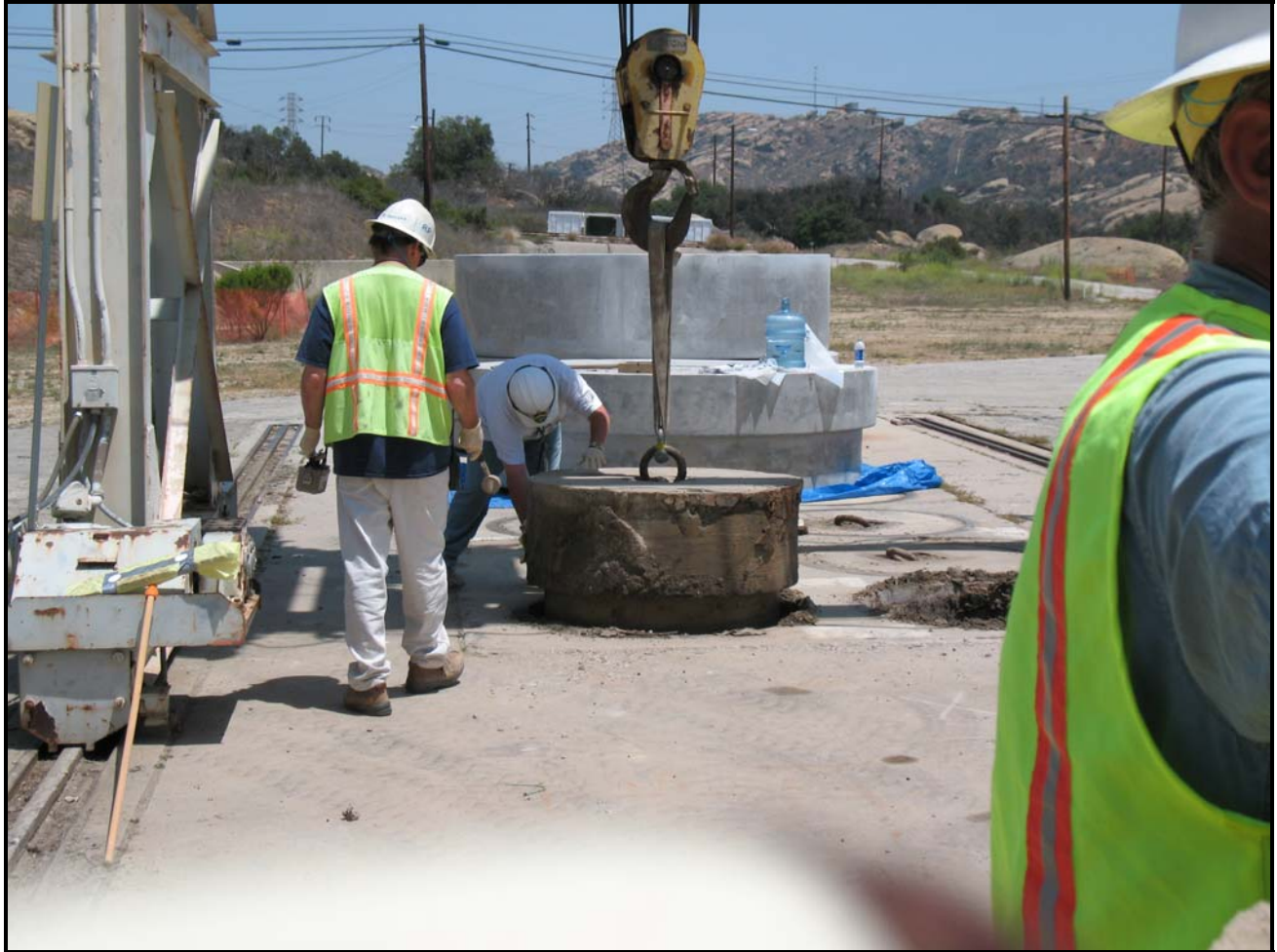


**SNAP ENVIRONMENTAL TEST FACILITY D&D PROJECT
CANOGA PARK, CALIFORNIA**

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		



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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

Section 5.0

Supplemental Information and/or Data

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

7/13/2007

Data Analysis Report

Survey Area LC1:	E4024	Package Type:	System
Survey Area Name:	SETF Drains and Waste Storage Systems		
Survey Package Number and Unit Name:			
E4024 101C1	Liquid Waste, Floor Drains, and Solid Waste Storage		

There is no additional supplemental information and/or data.