



KERR-MCGEE CORPORATION

1001 EAST DEEP ROCK • CUSHING, OKLAHOMA 74023

February 18, 2005

Mr. Derek Widmayer
Low-Level Waste & Decommissioning Projects Branch
Division of Waste Management
Office of Nuclear Materials Safety & Safeguards
US Nuclear Regulatory Commission
Washington, DC 20555

Re: Docket No. 70-3073; License No. SNM-1999
Final Status Survey Reports for Sectors 2 and 3

Dear Mr. Widmayer:

Kerr-McGee (KM) encloses herein two copies of Sector 2 Final Status Survey Report and two copies of Sector 3 Final Status Survey Report for NRC review. KM has completed decommissioning of these sectors. These reports demonstrate that they now comply with the NRC-approved decommissioning criteria for the Cushing site.

These reports have been revised in accordance with NRC's comments on Sector 4 Final Status Survey Report. KM is not at this time requesting release of these sectors; a license amendment request for release for unrestricted use will be submitted for all unreleased sectors along with the submittal of the last final status survey report.

If you have questions or comments, please call me at (918) 223-2526.

Sincerely,

Karen Morgan
Radiation Safety Officer

Cc: NRC Public Document Room
Cushing Public Repository
Blair Spitzberg, NRC Region IV
Mike Broderick, DEQ Radiation Management Division

NMSSD1

NEXTEP Environmental

808 Lyndon Lane, Suite 201
Louisville, KY 40222

Phone: (502) 339-9767
Fax: (502) 339-9275
Email: nextep@nextep.cc

February 18, 2005

Ms. Karen Morgan
Kerr-McGee Corporation
Cushing Remediation Site
1001 E. Deep Rock Road
Cushing, Oklahoma 74023

Re: Submittal of Sectors 2 and 3 Final Status Survey Report

Dear Ms. Morgan:

The Sectors 2 and 3 Final Status Survey Report has been distributed to the following individuals:

1. Terry Keane/Nextep Environmental Cushing (Two Hard Copies)
2. NEXTEP Environmental/Corporate Offices, Louisville Ky. (Two Hard Copies)
3. NEXTEP Environmental/Cushing Site
4. Derek Widmayer/NRC (2 copies)
5. Blair Spitzberg/NRC (Hard copy)
6. Document Control Room/NRC (Original)
7. Michael Broderick/ODEQ (Plan only)

Sincerely,

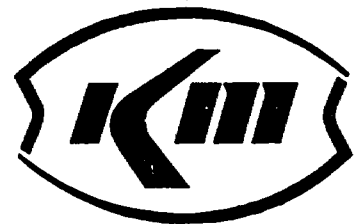


Treva Pearce
NEXTEP Environmental

FINAL STATUS SURVEY REPORT SECTOR 2

KERR-MCGEE CUSHING FACILITY
DECOMMISSIONING PROJECT

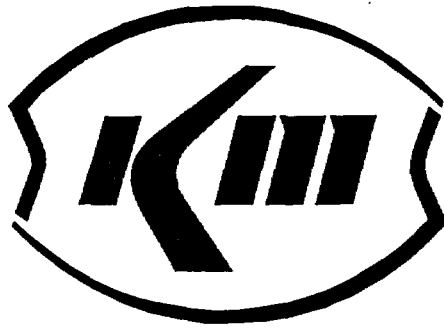
FEBRUARY 2005
REVISION 0



*Kerr-McGee Corporation
Oklahoma City, Oklahoma*

NEXTEP
ENVIRONMENTAL

808 Lyndon Lane, Suite 201
Louisville, Kentucky 40222
502/339-9767 (Voice)
502/339-9275 (Fax)



KERR-McGEE
CUSHING REFINERY SITE
DECOMMISSIONING PROJECT
SECTOR 2
FINAL STATUS SURVEY REPORT

PREPARED BY:

NEXTEP Environmental, Inc.



February 2005
Revision 0

SUBMITTED BY:
KERR-McGEE

APPROVAL PAGE

Approved by: H.J. Newman Date: 2/15/2005
H.J. Newman, CHP, NEXTEP Technical Director

Approved by: Karen Morgan Date: 2/17/05
K.A. Morgan, Kerr-McGee Radiation Safety Officer

Approved by: K. Moore Date: 2/18/05
K. Moore, Kerr-McGee Quality Assurance Coordinator

Approved by: J. Lutz Date: 02-17-05
J. Lutz, Kerr-McGee Cushing Project Manager

TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE.....	4
1.2	BACKGROUND.....	4
2	SCOPE OF THE FINAL STATUS SURVEY	6
2.1	SURVEY UNIT DESCRIPTION.....	6
2.2	PRE-EXISTING DATA.....	6
2.3	REPRESENTATIVE BACKGROUND REFERENCE AREAS	7
2.4	RESIDUAL RADIOACTIVITY LIMITS.....	7
2.5	MINIMUM DETECTABLE CONCENTRATIONS (MDC).....	9
2.6	ACTION THRESHOLDS FOR NAI SCANS.....	12
2.7	SURFACE AND VOLUMETRIC AVERAGING CRITERIA.....	12
2.8	QUALITY CONTROL	13
3	FINAL STATUS SURVEY METHODS.....	15
3.1	PROCEDURES	15
3.2	INSTRUMENTATION.....	15
3.3	GEOGRAPHICAL REFERENCE	16
3.4	SOIL SAMPLE SURVEYS	17
3.5	SOIL SCANS	18
3.6	EXPOSURE RATE MEASUREMENTS.....	18
3.7	ALPHA/BETA-GAMMA SURFACE MEASUREMENTS	19
3.8	RESPONSE TO ELEVATED READINGS.....	19
3.9	AVERAGING ELEVATED LOCATIONS	19
3.10	DATA COLLECTION FORMS.....	19
4	FINAL STATUS SURVEY RESULTS AND DISCUSSION.....	20
4.1	SECTOR 2 SOIL SAMPLES.....	21
4.2	GAMMA SCAN MEASUREMENTS ON SOIL SURFACES.....	24
4.3	SECTOR 2 EXPOSURE RATE MEASUREMENTS	25
4.4	SECTOR 2 WELL PAD SURFACES.....	25
5	CONCLUSIONS AND RECOMMENDATIONS.....	27
5.1	CONCLUSIONS.....	27
5.2	RECOMMENDATIONS	27
	APPENDIX A - FIGURES.....	28
	APPENDIX B - AREA AVERAGING WORKSHEETS.....	43
	APPENDIX C - CUSHING SITE GRID NUMBERING SYSTEM.....	50
	APPENDIX D - HOT SPOT EVALUATION PROTOCOL.....	52
	APPENDIX E - DATA TABLES.....	54

Kerr-McGee

CUSHING REFINERY SITE DECOMMISSIONING PROJECT

FINAL STATUS SURVEY REPORT

SECTOR 2

1 INTRODUCTION

1.1 PURPOSE

- 1.1.1 This Final Status Survey Report (FSSR) is being submitted by Kerr-McGee (KM) to the Nuclear Regulatory Commission (NRC) for the area on the KM Cushing Refinery Decommissioning Site (Cushing Site) designated as Sector 2. The location of Sector 2 on the Cushing Site is depicted in Appendix A, Figure 1.1. This FSSR demonstrates that the residual radioactivity in the sector complies with decommissioning criteria stipulated in License SNM-1999, the Site Decommissioning Plan (SDP), and NUREG/CR-5849.¹
- 1.1.2 Kerr-McGee requests a license amendment from NRC releasing Sector 2 from License SNM-1999.

1.2 BACKGROUND

- 1.2.1 The Cushing Site operated from approximately 1915 until 1972, when the oil refinery was closed and subsequently dismantled. KM operated the refinery at this site from 1956 to 1972 and processed nuclear fuel materials at the Cushing Site from 1963 to 1966 under two AEC² licenses, both terminated in 1966. A detailed description of the history of operations at the Cushing Site is presented in Section 2 of the SDP.
- 1.2.2 During operations at the Cushing Site, KM converted pure feed materials, primarily uranium and thorium concentrates and uranium hexafluoride (UF₆), into usable chemical and physical forms of nuclear fuel materials for use by customers.

¹ NRC Publication, *Manual for Conducting Radiological Surveys in Support of License Termination* (NUREG/CR-5849)

² Atomic Energy Commission.

- 1.2.3 As stated in Section 3 of the SDP, the radiological contaminants on the Cushing Site consist of natural thorium and isotopes of uranium (Th-228, Th-232, U-234, U-235, U-238). Since almost 40 years have passed since thorium process operations ceased at the site, the thorium series radionuclides have by now established equilibrium with Th-232.
- 1.2.4 Additional sources of contamination in Sector 2 are associated with subsequent decommissioning activities which took place at the Cushing Site in 1966 (original license termination with the AEC), 1972 (refinery closure), 1979-1982, and 1991-1993 (ODEQ³ consent order activities).
- 1.2.5 Characterization of Sector 2 was completed in 2003 and the results were published in the Radiological Characterization Report (RCR).⁴ Some of the materials earmarked for removal were excavated and disposed of as part of the ELLWaR⁵ project in 2003. Final decommissioning activities followed in the spring and summer of 2004 completing the removal of all licensed materials which exceeded the release criteria. The Final Status Survey (FSS) was performed from April thru October 2004 to demonstrate that Sector 2 complies with the release criteria.
- 1.2.6 The groundwater for the Cushing Site has been addressed separately in the *Radiological Groundwater Assessment Report*⁶ and is not dealt with in this FSSR.

³ Oklahoma Department of Environmental Quality.

⁴ *Sector 2 Radiological Characterization Report, Kerr-McGee Cushing Remediation Site*, NEXTEP and Burns & McDonnell, August 2003.

⁵ Expedited Low Level Waste Removal.

⁶ *Radiological Groundwater Assessment Report, Kerr-McGee Cushing Refinery Site*, Enercon Services, Inc., March 2003.

2 SCOPE OF THE FINAL STATUS SURVEY

2.1 SURVEY UNIT DESCRIPTION

- 2.1.1 Sector 2 consists of approximately 19.5 acres located along the north side of the Cushing Site as depicted in Appendix A, Figure 1.1. Sector 2 contains WP-24, WP-25, WP-26, WP-34, WP-36, WP-46, and WP-47.
- 2.1.2 The areas to be surveyed were divided into 13 survey units to facilitate planning and data analysis. Survey unit size was limited to less than 10,000 m² as prescribed by NUREG/CR-5849.⁷ A map of a portion of the Cushing Site showing Sector 2 and the Survey Unit boundaries is presented in Appendix A, Figure 2.1. The survey units are also listed in Table 2.1 below.
- 2.1.3 9 concrete well pad surfaces were identified for survey in Sector 2. A listing of the structural items surveyed is presented in Section 4, Table 4.5 and their geographic locations are presented in Appendix A, Figure 4.7.

Table 2.1
Defined FSS Survey Units for Sector 2

Survey Unit	Physical Description	Area (Sq. Meters)
201	Affected Area	7,623
202	WP-25 and WP-26	6,358
203	WP-24 and WP-36	5,376
204	Affected Area	5,167
205	Affected Area	5,237
206	Affected Area	5,588
207	Affected Area	5,897
208	Affected Area	4,167
209	UDA * (North of the road and small sliver in SW Sector 2)	4,996
210	UDA	6,462
211	UDA	9,299
212	UDA	5,057
213	WP-47, WP-34, and WP-46	5,998

* Undesignated Area

2.2 PRE-EXISTING DATA

- 2.2.1 Characterization of Sector 2 was performed from 1992 through 2003. During characterization, soil samples were collected on 5x5m grids in all areas except for Undesignated Areas (UDA), where soil samples were collected on 10x10m grids. Exposure rate measurements were taken at the location of each soil sample. 100% of the sector was scanned for gamma radiation with a 3x1/2" NaI instrument. All samples and measurements were taken in

⁷ Ibid.

accordance with the SDP, and the results of characterization were summarized in the RCR for Sector 2.⁸

- 2.2.2 Characterization soil samples which fell within the excavations performed during decommissioning have been removed from the data set as have samples from areas which have been sufficiently disturbed to warrant re-sampling.
- 2.2.3 The exposure rate (μR)⁹ data associated with soil points removed from the data set have been replaced.
- 2.2.4 Characterization scan data have been rejected for all excavation areas and areas which have been disturbed or altered enough to call the scans into question. 100% of rejected scan areas were rescanned during the final status survey.
- 2.2.5 All soil sample and μR characterization data not removed from the data set as described in the foregoing paragraphs are suitable for use in the FSS and were used in preparation of this report.
- 2.2.6 Throughout Sector 2, haul roads have been constructed and expanded to service the decommissioning efforts through the years. Because surface samples on top of the gravel roads were impracticable and would serve no purpose,¹⁰ no FSS surface grid samples are reported in the areas covered by the haul roads. Pre-existing soil data, however, do exist for areas underneath these roads and are reported separately in this report to confirm that the soil beneath them met the release criteria.

2.3 REPRESENTATIVE BACKGROUND REFERENCE AREAS

- 2.3.1 A summary of the background levels of radioactivity in soil and background exposure rate measurements is presented in Section 6 of the SDP.

2.4 RESIDUAL RADIOACTIVITY LIMITS

2.4.1 Release Criteria for Radionuclides in Soil

- 2.4.1.1 The release criteria for uranium and thorium contamination in soil are stipulated in license condition 11.N.
- 2.4.1.2 All nuclide activities are expressed in pCi/g. The limit for total uranium is 30 pCi/g and the limit for natural thorium is 10 pCi/g. These limits are net of background activity.
- 2.4.1.3 In order to compare soil sample activities with the criteria, the average of the background radioactivity for each nuclide was subtracted and a

⁸ Ibid.

⁹ Micro-Roentgen per hour data; these data were correlated to a pressurized ion chamber to establish a conversion factor for exposure rate. (See section 2.4.2)

¹⁰ Gravel used for the roads was purchased and brought in from off site. These roads subsequently were 100% scan surveyed for release as part of the FSS.

Fractional Maximum Permissible Concentration (FMPC) was calculated according to the following equation:

Equation 1

$$FMPC = \frac{[U^{235} + U^{238} + U^{234} - 2.77]}{30} + \frac{[2 * (Th^{232} - 0.96)]}{10}$$

- 2.4.1.4 For this FSS, Kerr-McGee's established practice of setting the value for U-234 equal to U-238 whenever U-235 or U-238 concentrations are below the Minimum Detectable Activity (MDA) level for the soil counter was followed. When concentrations of both U-235 and U-238 exceeded the MDA for the soil counter, the value for U-234 generated by the counter software was used. The software employs an algorithm interpreted from uranium isotopic ratios in uranium enriched by the gaseous diffusion process during the early 1960's. These methods produce results in statistical agreement with the NRC split samples analyzed by ORISE by both alpha and gamma spectroscopy.
- 2.4.1.5 All materials with concentrations less than 1.0 FMPC meet the soil release limit.
- 2.4.1.6 Materials with concentrations greater than 1.0 FMPC but less than 3.0 FMPC may be accepted if they meet the averaging criteria contained in License SNM-1999.
- 2.4.2 **Release Criteria for Gamma Exposure Rate**
- 2.4.2.1 The gamma exposure rate may not exceed 20 μ R/hr above background at one meter above the ground as measured by a Pressurized Ion Chamber (PIC) instrument. The exposure rate may not exceed 10 μ R/hr above background when averaged over 100m².
- 2.4.2.2 Exposure rates over soil taken in the field were compared with an adjusted exposure rate limit in order to compensate for the variance observed between field instruments and the PIC. Using the ratio of average background readings,¹¹ the exposure rate limit of 10 μ R/hr was adjusted by the following factor:

Equation 2

$$\frac{7.5}{8.4} = 0.89$$

- 2.4.2.3 Using an average background of 7.5 μ R/hr, the gross exposure rate thresholds for field measurements have been computed and are presented in Table 2.2.

¹¹ Exposure rate was measured at the center node of the sample locations for soil background samples using both a Ludlum Model 19 μ R meter and a Reuter Stokes Model RSS 112 PIC. Source of the data is *HP Technical Evaluation 02-002, Background Exposure Rate*, Enercon Services, Inc., April 2002.

Table 2.2
Maximum Exposure Rate

Measurement	Max Value
Averaged over 100m ²	16.4 µR/hr ^a
Maximum Exposure Rate	25.3 µR/hr

^a For field µR instruments over soil. Includes background.

2.4.2.4 Exposure rate data taken over concrete structural surfaces or within buildings were converted to PIC-equivalent values and recorded net of background. Therefore they should be compared with the basic limits (par. 2.4.2.1) not those listed in Table 2.2.

2.4.3 Release Criteria for Well Pad Surfaces

2.4.3.1 The well pads in the sector were surveyed for alpha and beta-gamma surface emissions using the Ludlum 43-89 detector (direct readings and scans). Criteria for release of these surfaces are given in Section 3 of the SDP and are summarized in Table 2.3. The most conservative release criteria (thorium) were used exclusively for the FSS.

Table 2.3
Alpha and Beta-Gamma Surface Release Criteria
For Scans, Direct Measurements, and Swipes

Nuclide	Average (dpm/100 cm ²)	Maximum (dpm/100 cm ²)	Removable (dpm/100 cm ²)
Uranium	5,000	15,000	1,000
Thorium	1,000	3,000	200

2.4.3.2 Removable contamination was not measured on these pads.
(See Section 3.2.3)

2.5 MINIMUM DETECTABLE CONCENTRATIONS (MDC)

2.5.1 Soil radioactivity was measured by collecting soil samples for HP laboratory analysis and by taking µR and Sodium Iodide (NaI) gamma scan readings in the field. The MDC for all the instrumentation used should, if practical, be less than 25% of the release limit.¹²

2.5.2 Soil Spectroscopy

2.5.2.1 Calculated MDC values for HP Lab equipment are compared to the desired MDC in Table 2.4.

¹² Cushing SDP Section 6.4.2

Table 2.4
Minimum Detectable Concentrations for Lab Gamma Spectroscopy (pCi/g)

	Natural Thorium	Total Uranium (U-238, U-235, U-234)	Count time (min.)
<i>Desired MDC (pCi/g)</i>	2.5	7.5	
HP Lab Soil Counters (typical)	0.3	4.8 ^a	7.5

^a The reported value represents the summation of the MDC for the three isotopes

2.5.3 Soil Gamma Scans

2.5.3.1 The Minimum Detectable Count Rate (MDCR) for NaI scans should be less than 100% of the corresponding soil release limit translated into counts per minute. Where practical, the MDCR should be less than 25% of the release limit.¹³ The scan thresholds are dependent upon the mix of nuclides in the soil. Table 2.5 shows the conversion factors¹⁴ used to convert the soil release limits for thorium and uranium into counts per minute (cpm) and the release limit in cpm, for both configurations of the 3"x1/2" NaI detector. The calculated MDCR¹⁵ for each detector configuration is also given in Table 2.5.

Table 2.5
NaI Scan Detector Release Limits^a and MDCR (cpm)

Nuclide	Conversion Factor (cpm/pCi/g)	Release Limit (cpm)
<i>6" Shielded</i> MDCR = 1,260 cpm		
Thorium	1,000	10,000
Uranium	49	1,470
<i>24" Unshielded</i> MDCR = 1,020 cpm		
Thorium	430	4,300
Uranium	20	600

^a net of background

¹³ The term "limit" as used in this section refers to the expected scan reading of the NaI detector when passed over soil contaminated at 1.0 FMPC levels. This "limit" is used only for purposes of calculating MDCR to determine if the detector is sensitive enough to identify soil contamination at or above the release limits expressed in the license.

¹⁴ NEXTEP TM 03-11, *NaI Scan Survey Thresholds for Uranium and Thorium in Soil at the KM Cushing Site, N. Zhang.*

¹⁵ NEXTEP TM 03-11, *Ibid.*

2.5.3.2 Comparison of the data in Table 2.5 reveals that, for the unshielded scan cart,¹⁶ the MDCR is less than 25% of the release limit for thorium but is considerably above the release limit for uranium.

2.5.3.3 To ensure that elevated concentrations of uranium coupled with low levels of thorium can be detected with the gamma detector, soil samples were screened for areas where the uranium component dominates the sample. Wherever a soil sample analysis indicates a net total uranium concentration above 20 pCi/g and a net natural thorium concentration below 1.5 pCi/g,¹⁷ the area surrounding that soil sample was scanned manually with the shielded detector at 6" height above ground using a lower threshold as specified in Appendix D. Table 2.5 shows that the shielded detector is capable of detecting uranium at the release limit.

2.5.4 Exposure Rate Measurements

2.5.4.1 The MDC for field μ R instruments should be less than 2.2 μ R/hr (25% of the averaged limit for the Ludlum 19). The MDC of the Ludlum 19 may be calculated from Equation 3 using a value of 0.5 μ R/hr for the standard deviation term (σ).¹⁸

Equation 3

$$MDC = 2.71 + 3.29\sigma = 4.4 \mu R / hr$$

2.5.4.2 The MDC for the field exposure rate instruments is less than 50% of the averaged release limit and is adequate to detect exposure rates in excess of the SDP limits.

2.5.5 Alpha/Beta-Gamma Surface Measurements

2.5.5.1 Concrete pad surfaces were surveyed and released using the Ludlum 43-89 (L43-89) alpha/beta scintillation detector. The MDC for this detector is calculated in accordance with NX-RO-340.¹⁹ For direct readings, the MDC should, if practicable, be less than 25% of the average limit for thorium listed in Table 2.3. For scan readings, the MDC should be less than 100% of the release limit. A comparison of the calculated MDC values for the L43-89 detector with the requirements is given in Table 2.6.

¹⁶ 24 inches above ground level. (See Section 3.2.2)

¹⁷ $(20 \text{ pCi/g U}) \cdot (20 \text{ cpm/pCi/g}) + (1.5 \text{ pCi/g Th}) \cdot (430 \text{ cpm/pCi/g}) = 1,045 \text{ cpm}$ at the unshielded detector 24" above ground.

¹⁸ *Final Radiation Survey of Four Unaffected Areas of the Cushing Refinery Site*, Morton Associates, April 1995, Table 12.

¹⁹ NX-RO-340, *Sample Activity Determination*.

Table 2.6
MDC Comparison for Alpha/Beta Detectors

Measurement Type	Instrument	MDC (dpm/100 cm ²)		Desired MDC (dpm/100 cm ²)
		Alpha	Beta	
Scan	L43-89	240	620	1,000
Direct	L43-89	46	430	250
Removable*	LB5100-W	3	7	50

* If required

2.5.5.2 All MDC values calculated for the L43-89 were less than the desired MDC except for direct beta which is less than 50% of the release limit. Since both alpha and beta measurements were gathered on concrete and structural surfaces, the L43-89 detector is adequate to detect surface radioactivity above the release limits.

2.6 ACTION THRESHOLDS FOR NaI SCANS

2.6.1 Action levels for each configuration of the NaI detector have been calculated²⁰ and are presented in Table 2.7.

Table 2.7
NaI Scan Thresholds^a

Configuration	Threshold (cpm)
Unshielded, 24"	12,500
Shielded, 6"	10,000

^a Gross cpm including background.

2.7 SURFACE AND VOLUMETRIC AVERAGING CRITERIA

2.7.1 Surface Averaging

2.7.1.1 Soil samples on the undisturbed surface or on the bottom surface of a disturbed area were averaged over square blocks of 100m² area in accordance with Section 6.5 of the SDP if they fell between 1.0 and 3.0 FMPC.

2.7.2 Volumetric Averaging

2.7.2.1 Sub-surface soil samples at or above 1.0 FMPC were averaged in accordance with the SDP²¹ and Section 11.N of the license. The methods

²⁰ NEXTEP TM 03-11, Ibid.

²¹ Section 6.5.

used were in accordance with NRC Methods²² and are detailed for this application in Technical Memorandum (TM) 04-21²³.

- 2.7.2.2 Section 11.N of the license states in relation to volumetric averaging, "When multiple radionuclides are present, the sum of the ratios of the concentration of each radionuclide to its respective limit must not exceed one." Therefore, composite release criteria (guideline values) expressed in terms of FMPC were calculated in TM 04-21.
- 2.7.2.3 TM 04-21 states that calculation of the allowable subsurface residual contamination at a particular location can be performed in practice by first evaluating soil sample results in the borehole of interest. If no subsurface samples are observed exceeding 1 FMPC, there is no need for volumetric averaging and the area is suitable for release in accordance with the guideline criteria.
- 2.7.2.4 In the case where samples are observed exceeding 1 FMPC, the first action should be to divide the borehole of interest into 3 foot layers, starting at ground surface. Averaging over the six, half-foot intervals included in each 3 foot layer is then performed. If the computed average in each 3 foot layer containing soil sample results exceeding 1 FMPC is less than 1 FMPC, the area meets the subsurface criteria for release and no further analysis is required.
- 2.7.2.5 For areas which fail the above test, further evaluation is required to determine if they meet the subsurface criteria as outlined in the NRC Method. The criteria defined in the NRC Method, as applied to Cushing, are elaborated in TM 04-21.²⁴

2.8 QUALITY CONTROL

2.8.1 Soil Sample Duplicates

- 2.8.1.1 In addition to the routine monitoring of the soil counters using in-process standards and calibration standards, the duplicate data pairs from the Sector 2 FSS were also analyzed using criteria described in TM 03-16.²⁵ The results are published in TM 04-17²⁶ and show that the data set for Sector 2 meets all the established quality control criteria of TM 03-16.

2.8.2 Statistical Test Calculations

- 2.8.2.1 After the data set for each survey unit was evaluated against the release criteria, further statistical calculations were performed in accordance with

²² NRC Paper, *Volumetric Averaging of Thorium Contaminated Subsurface Soils*, (NRC 1995), included with FSSR-4.

²³ NEXTEP TM 04-21, *Decommissioning Criteria for Subsurface Soils at Cushing*, N. Zhang, included with FSSR-4.

²⁴ NEXTEP TM 04-21, *Ibid.*

²⁵ NEXTEP TM 03-16, *Criteria for Soil Duplicate Sample Comparison Kerr-McGee - Cushing, Oklahoma Decommissioning Project*, H. Newman & S. Shelton.

²⁶ NEXTEP TM 04-17, *Evaluation of Cushing FSS Sector 2 Duplicate Samples*, N. Zhang.

Section 6.5 of the SDP to ensure that survey units, or groups of data with the same classification of contamination potential, provide a 95% confidence level that the true mean activity level meets the release criteria.

2.8.2.2 The following equation, from NUREG/CR-5849,²⁷ for testing data relative to a guideline value at a desired level of confidence, was applied to the soil sample and exposure rate data used for the FSS.

Equation 4

$$\mu_{\alpha} = \bar{x} + t_{1-\alpha,df} \left(\frac{\sigma}{\sqrt{n}} \right)$$

Where:

- μ_{α} = 95% confidence level mean of the data set.
- $t_{1-\alpha,df}$ = 95% confidence level, $t_{95\%}$, obtained from Appendix B, Table B-1 of NUREG/CR-5849 for df, the degrees of freedom = n-1.
- n = number of individual data points in the data set used to determine the average and standard deviation.
- σ = standard deviation of the data set.
- \bar{x} = calculated mean for the data set.

2.8.2.3 If μ_{α} is less than the release criterion, the area being tested meets the guideline at a 95% confidence level. This means that the probability is less than 5% that μ_{α} will pass the test, when the true mean activity level exceeds the guideline value.

²⁷ Ibid.

3 FINAL STATUS SURVEY METHODS

3.1 PROCEDURES

- 3.1.1 The Sector 2 Final Status Survey was implemented in conformance with all KM plans, procedures and other requirements.

3.2 INSTRUMENTATION

- 3.2.1 **Soil Sample Laboratory Analysis.** Analyses for the uranium and thorium series were performed using the gamma spectroscopy soil counters at the Cushing Site. Laboratory count time was sufficient to achieve the desired MDC as listed in Table 2.4.
- 3.2.2 **Soil Scanning Instrumentation.** Initial gamma scans were performed in accordance with NX-RO-370²⁸ using a 3" x ½" NaI detector operating in a gross counting mode in the unshielded configuration. The detector was mounted 24 inches above the ground on a vehicle equipped with a Global Positioning System (GPS) navigation system and a data logger and the vehicle was operated at speeds at or below 1 ft/sec. Measurements were recorded every two seconds. Where the terrain was too rough for the vehicle, a man-portable pack with the same equipment was used or manual scans were performed. When the scan threshold for unshielded scans was exceeded the local area was re-scanned by hand using the same type of detector in the shielded configuration elevated to approximately six inches above the ground.
- 3.2.3 **Alpha/Beta-Gamma Instrumentation.** Well pad surfaces were surveyed using a Ludlum 43-89 scintillation alpha/beta detector. It was paired with a Ludlum 2224 scaler /ratemeter for both alpha and beta/gamma measurements. Both integrated and scan measurements were taken in accordance with NX-RO-342.²⁹ Since no removable contamination measurements on concrete pads were required for free release surveys³⁰, no swipes were collected and counted.
- 3.2.4 **Exposure Rate (µR/hr) Instrumentation.** All µR data were taken using Ludlum Model 19 (L19) field instruments. For measurements over soil the release limits were adjusted to calibrate the field instrument to the PIC standard as described in Section 2.4.2. For measurements over structural surfaces, the data were adjusted to PIC-equivalent values for comparisons with the basic limits.³¹

²⁸ NX-RO-370, *Performing Radiological Soil Surveys.*

²⁹ NX-RO-342, *Contamination Surveys.*

³⁰ The well pads in the sector were installed in 2001, long after radiological operations ceased at the Cushing Site. Since these pads are recent additions and are exposed to the weathering effects of wind and rain, no removable contamination measurements were made pursuant to release of these surfaces. (See NUREG/CR-5849 Section 6.5.4).

³¹ See Appendix E, Table 4 for the conversion formula.

3.3 GEOGRAPHICAL REFERENCE

- 3.3.1 Well pad direct and exposure rate survey locations were laid out manually and are documented on the original data sheets on file at the Cushing Site. A GPS measurement was taken on each well pad and was recorded in order to show its location on a map of the sector.
- 3.3.2 Soil Sample, μ R, and scan locations were surveyed using GPS equipment. Scan locations were recorded using a Trimble PRO XRS Submeter GPS survey system either carried by the operator or mounted on a vehicle. Soil samples and μ R readings were located using a Trimble Model 4800 differential GPS surveying system consisting of a field unit coupled with a surveyed ground station to provide the needed accuracy. According to manufacturer's specifications scan locations are accurate to within one meter in X and Y (East and North), and soil sample locations are accurate to within two inches in three dimensions: X,Y and height above mean sea level (MSL).
- 3.3.3 **Reference Coordinate System.** The Cushing Site has an established block grid coordinate system with numbered blocks beginning at the NW corner of the property. Within each 100m by 100m block, locations are referenced in meters east and south starting at the northwest corner of the block (BES Format). In the process of developing the Radiation Database System (RDS) additional block numbers were added to the array to provide reference to off-site locations. The block numbers which are recognized within the data collection system are presented in Appendix C and are labeled in the figures in Appendix A.
- 3.3.4 The Cushing Site grid system is not aligned precisely with the Oklahoma State Plane (SP) Coordinate System but is rotated by a small angle. Since grid points were defined in the Cushing block grid system and the GPS equipment and mapping software used SP coordinates it is often necessary to transform one type of reference into the other. This transformation has been automated within the database software.
- 3.3.5 Each sample location is normally referenced by a locator ID (LocID) which conforms to the following standard format:
- BmmmEnnSnn**
- Where m is the block number and n is the distance to the nearest meter (East and South) from the NW corner of the block. To assist in differentiating survey data from other count records, the LocID always begins with "B".
- 3.3.6 When a sample location is surveyed, the GPS coordinates, LocID and μ R reading are all stored within the data logger and later downloaded to a file. GPS coordinates are expressed as X&Y in feet East and North of the State Plane origin plus Z in feet MSL. When sample locations have been surveyed and logged, the data logger file is uploaded into the database and checked for correlation between the LocID and the GPS coordinates. If a record for this location already exists, the samples are referenced to the existing location record. If not, one is created for it.

3.3.7 If a sample is offset relative to a certain grid location for some reason, the LocID is modified by adding a single letter at the end. In this case the system recognizes the LocID as a special location and records a separate locator record for it with the exact coordinates.³² Other non-standard LocID's entered into the database³³ are treated in the same way.

3.3.8 Soil samples collected as the result of elevated scan readings use the following standard LocID convention and are recorded as special locations:

BmmmSCnnn

Where nnn is a sequential number used to track the number of such locations in a block.

3.3.9 Sample identifiers (SIDs) normally consist of the LocID plus the depth in feet multiplied by ten and are normally of the form:

BmmmEnnSnnx-jjj DUP

Where x is the optional offset suffix and jjj consists of the depth in feet times ten. DUP, when present, denotes a QC duplicate sample and is applied automatically by the database software when the labels are produced. These are considered in the analysis data set along with the regular measurements.

3.3.10 Depth of the sample is expressed in feet and tenths from the local surface to the top of the composite sample. Thickness refers to the length of the core, proceeding down from the top of the sample, which has been mixed together to form a homogeneous sample, a portion of which is bottled and sent to the lab for analysis.

3.4 SOIL SAMPLE SURVEYS

3.4.1 Surface soil samples were obtained to complete the required grids in Sector 2. Characterization soil samples were used as described in Section 2.2. A five meter grid of surface samples was completed in all the affected areas and a 10 meter grid was completed in the UDA.

3.4.2 Bottom samples were collected in all the excavations to confirm completion of the remediation process. Sample density was equal to or greater than the surface FSS sample density. All bottom samples including the FSS data set were collected and analyzed upon completion of the remediation effort and were handled and processed with the same procedures and quality controls as surface grid samples. They are appropriately included in the report as FSS bottom surface data.

3.4.3 Backfill material samples were collected sufficient to characterize the material placed back into the excavated areas. Surface grid points were taken on the final backfilled surface to complete the required grids on the surface.

³² Offsets due to obstacles and some expansion patterns are examples of this kind of LocID.

³³ For example, bore holes in burial trenches in Sector 4 were designated "BT-nn" and were recorded as special LocID's so they could be sorted out separately.

- 3.4.4 Soil sample records taken from soil that was removed during excavation have been retained within the database but coded to denote that they have been removed and no longer apply to the data set for FSS.

3.5 SOIL SCANS

- 3.5.1 NaI gamma scans were completed to cover 100% of all survey units in Sector 2. Where excavation or surface disturbance of an area during the decommissioning phase warranted it, the existing scan data were deleted from the data set and new scans were performed during FSS. As with soil sample data, the old characterization scan data remain in the database but are coded to exclude them from the FSS data set of record.
- 3.5.2 Data logger files from the scanning equipment were uploaded into the RDS database system and processed using a utility which records the maximum and average values for each 10m x 10m square in order to provide a high level summary of the results. The raw scan data files were stored in a protected directory and indexed to the summary information in the database.
- 3.5.3 Data logger scan files presented for processing were in .dbf file format and the filenames conform to the following convention:

AnnnpppB.dbf

where A is the sector number (using the letters T and E for Sectors 10 and 11); nnn is the block number that contains most of the scan data; ppp is the julian day on which the scans were performed; and B is a letter designating the detector used for the scan. The filename always contains exactly eight characters.

- 3.5.4 Manual scan information was entered into the database as the maximum value in the area scanned.³⁴ For data analysis, manual scan data normally supersede the unshielded cart scan values since it is considered to be more exhaustive and thorough for exact pin-pointing of elevated measurement locations³⁵.

3.6 EXPOSURE RATE MEASUREMENTS

- 3.6.1 Exposure rate measurements were taken 1 meter above the surface of the ground at every systematic grid sample location as a minimum. Exposure rate measurements over soil were uploaded into the database as part of the GPS location survey files.

³⁴ The maximum area covered by a single manual scan was 100m².

³⁵ Manual scans were performed by an alert operator scanning a small portion of ground where the cart scans delivered a reading in excess of the threshold. Manual scans were used to thoroughly investigate the area using a shielded detector held only six inches from the ground. Table 2.5 shows that the MDCR of the detector used for manual scans was 10% of the release limit while the unshielded cart scan MDCR was 25% of the release limit. If a manual scan investigation of an elevated cart scan reading showed no contamination in excess of threshold, the cart scan reading was attributed to random noise which was due to the statistical nature of the detector.

- 3.6.2 Exposure rate measurements were also collected one meter above the concrete pads that were surveyed for alpha/beta-gamma surface radioactivity. These data were manually recorded and were not uploaded into the RDS.

3.7 ALPHA/BETA-GAMMA SURFACE MEASUREMENTS

- 3.7.1 The well pads were surveyed for free release in accordance with NX-RO-342³⁶ and were scanned over 100% of their surfaces.
- 3.7.2 Direct measurements of alpha and beta-gamma surface contamination were performed at selected locations on each of the well pads. At least one direct data point was surveyed on each square meter of surface area.
- 3.7.3 No measurements of removable contamination on the well pads were required for free release and none were taken.³⁷

3.8 RESPONSE TO ELEVATED READINGS

- 3.8.1 When elevated readings above the limits for soils discussed in the preceding paragraphs were encountered either in the field or after analysis of soil sample results, action was taken in accordance with the Hot Spot Evaluation Protocol, Appendix D. No hot spots on the well pads were identified.

3.9 AVERAGING ELEVATED LOCATIONS

- 3.9.1 Soil samples on the undisturbed surface or on the bottom surface of a disturbed area were averaged over square blocks of 100m² area in accordance with Section 6.5 of the SDP if they fell between 1.0 and 3.0 FMPC.
- 3.9.2 Any samples in excess of 1.0 FMPC that were left in place below the surface are subject to the volumetric averaging rules described in Section 2.7.

3.10 DATA COLLECTION FORMS

- 3.10.1 The forms used for the FSS are listed in Table 3.1. Sample collection locations were filled out in accordance with the applicable procedures.
- 3.10.2 Free release surveys of well pad surfaces were documented in accordance with NX-RO-304.³⁸ These data were not recorded in the RDS.

³⁶ Ibid. Although "free-released" items are covered by the license and not normally subject to NRC approval under the FSS, the data are included in this report for completeness.

³⁷ See Section 3.2.3.

³⁸ NX-RO-304, *Survey Identification and Control*.

Table 3.1
Data Collection Forms

Form Number	Title	Purpose
235-1 (NX-RL-235)	Label Package Request	Controls GPS survey and collection of soil samples
Computer Equivalent (KM-SAP-113)	Chain of Custody	Generated by the database software. Controls receipt, transfer and custody of samples
0309-SP-007	Manual Scan Form	Manual scans are recorded on this form or its equivalent.

3.10.3 Since practically all of the soil activity, gamma scan and μ R data were recorded and downloaded automatically, no survey data forms outside of the logs and records called for in the procedures were required.

3.10.4 The RDS data tables are maintained on the main Cushing server as a POSTGRES SQL database named HPL_Data. The files containing the primary scan and GPS/ μ R data are maintained in directories as shown in Table 3.2.

Table 3.2
Data Locations

Data Files	Location ^a
Database Data Tables	DSN:CUDBSVR_PGSQL Database: HPL_Data
GPS Logger Files (after upload)	Q:\Barcode\GPSDone
Scan Logger Files (after upload)	Q:\Barcode\ScanDone

^a DSN is the name of the database server. Q: refers to the server directory reserved for the RDS source Data Files

3.11 ELECTRONIC DATA TABLES

3.11.1 All of the soil samples, μ R, and alpha/beta surface measurement data have been included in tables in Appendix E. Soil data in these tables has been limited to total uranium and natural thorium concentrations for the purpose of conserving space. These tables are also reproduced electronically in a Microsoft Excel file on the enclosed data CD. Soil sample data on the CD includes specific nuclide values and the system uncertainties (sigma values) in addition to the values reported in the tables.

4 FINAL STATUS SURVEY RESULTS AND DISCUSSION

4.1 SECTOR 2 SOIL SAMPLES

4.1.1 Analysis of the soil sample data is presented in this section beginning with the areas that have been excavated including the final decommissioning excavations performed in 2004. Bottom samples are documented and mapped and any required surface hot spot averaging data are presented. Samples underneath the gravel roads are documented to confirm that the ground surfaces prior to gravel placement meet the release criteria. Lastly, the final surface grid sample data set covering the entire sector as it existed after backfill and contouring is presented and summarized to show that the current surface grid samples meet the release criteria.

4.1.2 Final Decommissioning Excavations

4.1.2.1 During the ELLWaR program in 2002, and decommissioning activities in 2003, 500 cubic yards of material were removed from the excavated portions of Sector 2. NRC conducted confirmatory surveys in January 2004. The results of these surveys were documented as follows:

4.1.2.1.1 IR 03073/2004-001; January 5-27, 2004; 50 samples (19 from Sector 2) by NRC. Conclusions: "The NRC's confirmatory measurements supported the licensee's determination that total uranium and total thorium concentrations in soils met the criteria for unrestricted release. Results of confirmatory surveys and statistical comparison of soil sample analytical results performed by NRC were consistent with measurements taken by the licensee."

4.1.2.2 After determining that no licensed material exceeding the criteria remained in these areas, the excavations were filled with clean soil, and the areas were graded and contoured. 643 soil samples were collected on the bottom surface of the excavations and on the original surface covered as a result of grading and contouring³⁹. These sample locations are shown on a map of the sector in Figure 4.1⁴⁰, and a complete listing of the data is presented in Appendix E, Table 1.

4.1.2.3 A summary of the soil sample results for the decommissioning excavations is presented in Table 4.1 and shows that the maximum activity measured on the bottom surface was 1.27 FMPC, the average activity was 0.09 FMPC, and the 95% confidence level was 0.10 FMPC.

³⁹ Both kinds of samples which now exist underneath backfill material are depicted in the figures and listed in the tables as "bottom samples".

⁴⁰ Since all figures have been included in Appendix A, only the figure number will be referenced for the remainder of this report.

Table 4.1
Final Decommissioning Excavations Bottom Soil Samples Summary

Number of Samples	FMPC 95% Confidence (μ_a)	FMPC		Net U _{tot} (pCi/g)		Net Th _{nat} (pCi/g)	
		Max	Avg	Max	Avg	Max	Avg
643	0.10	1.27	0.09	5.35	-0.42	13.23	1.06

4.1.2.4 Two scan confirmation samples and one offset sample located on the bottom surface of the excavations were left in place at LocID's B053SC001, B053SC008, and B053E55S25A as shown in the expanded inserts of Figure 4.1. These samples are subject to surface averaging criteria since they show activity values between 1.0 and 3.0 FMPC. The averaging calculations for these soil samples are presented in the two corresponding worksheets in Appendix B. The worksheets show that the area-weighted averages were 0.19 and 0.35 FMPC and that the samples meet the criteria for area averaging.

4.1.2.5 One sample below the bottom surface of the excavation with activity in excess of 1.0 FMPC was left in place and is subject to the criteria for volumetric averaging. A listing of all the samples used in the averaging calculations and the results are presented on the corresponding worksheet in Appendix B. The calculations show that LocID B005E50S35 meets the criteria for volumetric averaging.

4.1.2.6 Since all the rest of the bottom and subsurface samples in the decommissioning excavations were less than 1.0 FMPC, all of the soil surfaces underneath backfill in the decommissioning excavations meet the criteria of the SDP for unconditional release.

4.1.3 FSS Surface Grid Samples

4.1.3.1 After backfill and contouring were complete, soil samples were collected on top of the disturbed areas to complete a FSS data set of 2,303 grid samples. These samples are shown on a map of the sector in Figure 4.2. A detailed listing of all the FSS surface grid samples is provided in Appendix E, Table 2.

4.1.3.2 Detailed maps of the survey units showing the location of each grid point and the values for FMPC, net total uranium, and net natural thorium are presented in Figures 4.3a through 4.3f.

4.1.3.3 A summary of the FSS surface grid samples for each survey unit in Sector 2 is presented in Table 4.2. The maximum 95% confidence level for any one survey unit was 0.10 FMPC.

4.1.3.4 Two grid samples, one offset sample, and one scan confirmation sample in excess of 1.0 FMPC were left in place and are shown in the expanded inserts of Figure 4.2.

Table 4.2
Sector 2 Final Surface Grid Soil Samples Summary

Survey Unit	# Samples	FMPC 95% Conf. (μ_a)	FMPC		Net U _{tot} (pCi/g)		Net Th _{nat} (pCi/g)	
			Max	Avg	Max	Avg	Max	Avg
SU-201	310	0.02	0.69	0.01	6.26	-0.58	5.55	0.29
SU-202	252	0.10	1.25	0.08	6.58	-0.43	10.66	0.98
SU-203	217	0.06	0.45	0.05	4.51	-0.12	3.65	0.54
SU-204	203	0.02	0.26	0.01	4.52	-0.50	1.72	0.30
SU-205	209	0.03	0.28	0.02	5.55	-0.59	2.03	0.42
SU-206	236	0.00	0.17	-0.01	4.12	-0.64	1.12	0.11
SU-207	230	0.07	0.68	0.05	3.85	-0.54	7.16	0.72
SU-208	165	0.05	0.82	0.03	8.54	-0.59	8.59	0.52
SU-209	47	0.09	0.37	0.06	3.68	0.00	4.49	0.64
SU-210	61	0.05	0.36	0.03	4.74	-0.78	4.13	0.58
SU-211	94	0.01	0.16	0.00	2.70	-0.96	1.23	0.31
SU-212	39	0.06	0.25	0.04	5.36	0.10	1.69	0.34
SU-213	240	0.09	0.53	0.08	12.17	-0.04	3.80	0.83

- 4.1.3.5 The grid samples at LocID B041E70S05 and B053E90S10 are located on the non-excavated surface of the sector and are subject to area averaging. The area averaging calculations for these soil samples are presented in the corresponding worksheets in Appendix B. They show that the area-weighted average activities were 0.25 and 0.23 FMPC respectively and that the samples meet the criteria for area averaging.
- 4.1.3.6 Two additional surface samples not shown on the 5x5m grid were left in place and are subject to surface averaging. These samples include one scan confirmation sample and one offset sample located on the undisturbed surface at LocIDs B053SC005 and B053E40S40A. The area averaging calculations for these soil samples are presented in the corresponding worksheet in Appendix B. It shows that the area-weighted average activity is 0.39 FMPC and that the samples meet the criteria for area averaging.
- 4.1.3.7 Since all the rest of the surface samples were less than 1.0 FMPC, all of the post-backfill soil surfaces meet the criteria of the SDP for unconditional release.
- 4.1.3.8 Surface samples on the gravel haul roads are not displayed in Figure 4.2 since the haul roads are covered with up to a foot of gravel brought in subsequent to the cessation of nuclear operations. Surface samples taken before the haul road system was installed are available from historical records. These samples are shown on a map of the sector in Figure 4.4 and are summarized in Table 4.3. No samples under the haul road exist which exceed 0.18 FMPC. A list of these data points is presented in Appendix E, Table 3.
- 4.1.3.9 Although these samples are not part of the final surface of the survey sector, they demonstrate that no indication exists of elevated radioactivity underneath the haul roads and are included in this report for completeness.

Table 4.3
Surface Soil Samples Summary
Beneath the Haul Roads

# Samples	FMPC 95% Conf. (μ_g)	FMPC		Net U _{tot} (pCi/g)		Net Th _{nat} (pCi/g)	
		Max	Avg	Max	Avg	Max	Avg
36	0.03	0.18	0.01	3.04	-0.53	0.99	0.27

4.2 GAMMA SCAN MEASUREMENTS ON SOIL SURFACES

- 4.2.1 Gamma scans were performed on 100% of the accessible areas of the sector as described in Section 3. The scan thresholds used for these surveys are presented in Table 2.7.
- 4.2.2 No soil sample data in Sector 2 met the criterion of Paragraph 2.5.3.3 for uranium dominance. Therefore no special scans for uranium contamination were conducted in Sector 2.
- 4.2.3 Obstacles such as trees, overgrowth, and hazardous conditions such as extremely steep slopes prevented the scanning of some areas of the sector. Where trees and overgrowth prevented scanning with the cart-mounted detectors, the area was scanned to the perimeter of the obstacle and manual scans were taken wherever possible within the obstacle. 100% coverage of the base of each steep slope was scanned and the slopes were scanned manually where possible. The hazards and obstacles which prevented scanning account for about 1% of the surface area of Sector 2.
- 4.2.4 Where scans exceeded the scan threshold, the area was manually rescanned, and soil samples were taken at the maximum scan readings.
- 4.2.5 A drawing of the areas scanned is presented in Figure 4.5 showing the average and maximum observed values summarized by 100m² blocks. The average value of all the scan data taken in Sector 2 was 7,448 cpm and one elevated scan reading (32,700 cpm) exceeded the scan threshold. The elevated area was manually scanned in accordance with the Hot Spot Evaluation Protocol (Appendix D).
- 4.2.6 The high scan reading resulted from Ra-226 observed at 32.4 pCi/g on the surface and 26.4 pCi/g at 0.5 ft depth. Both samples were measured at -0.2 FMPC with respect to licensed nuclides. The elevated scan block and the scan confirmation soil sample are shown in the expanded insert on Figure 4.5.
- 4.2.7 Since Ra-226 is NORM⁴¹, and is not covered by License SNM-1999, no further action was taken.

⁴¹ Naturally Occurring Radioactive Material.

4.2.8 There were no other areas in excess of the 12,500 cpm threshold. The scan data that were observed in Sector 2 revealed no areas of contamination in excess of the release limits.

4.3 SECTOR 2 EXPOSURE RATE MEASUREMENTS

4.3.1 Exposure rate measurements were collected at 100% of the accessible grid locations in the sector. A summary of the exposure rate measurements by survey unit is presented in Table 4.4. The maximum gross exposure rate measurement (13 $\mu\text{R/hr}$) is less than the 100m² average limit given in Table 2.2. A map of the exposure rate measurements taken in the sector is presented in Figure 4.6. No exposure rate measurements were observed in Sector 2 above the release criteria and the maximum 95% confidence level for each individual survey unit was 11.0 $\mu\text{R/hr}$.

Table 4.4
Sector 2 Exposure Rate Measurements Summary^a

Survey Unit	# of Measurements ⁴²	Maximum ($\mu\text{R/hr}$)	Average ($\mu\text{R/hr}$)	95% Conf. ($\mu\alpha$)
SU-201	309	11	9.6	9.7
SU-202	252	12	9.3	9.4
SU-203	217	12	9.2	9.3
SU-204	202	10	8.7	8.8
SU-205	207	11	8.5	8.6
SU-206	235	10	8.5	8.5
SU-207	227	11	9.1	9.2
SU-208	164	11	8.5	8.6
SU-209	67	12	10.8	11.0
SU-210	68	12	10.8	11.0
SU-211	94	13	10.4	10.6
SU-212	48	12	10.3	10.6
SU-213	240	12	9.2	9.2

^a Includes background.

4.4 SECTOR 2 WELL PAD SURFACES

4.4.1 Nine monitoring well pads⁴³ were surveyed for alpha and beta-gamma contamination as described in Section 3.7. Each item surveyed in Sector 2 was identified and given a number. A drawing showing the location of these surfaces is presented in Figure 4.7.

4.4.2 These pads were surveyed for free release. The surface and μR data points taken in connection with the well pads in Sector 2 are presented in Appendix E, Table 4 and they are summarized in Table 4.5. The table shows

⁴² Although an exposure rate reading was taken with every soil sample, the number of measurements in Table 4.4 will not always agree with the number in Table 4.2. Some older soil samples do not have a μR reading on record and trees, brush, or standing water make it impossible to take a reading now. Also, soil samples under the haul road do not appear in Table 4.2 but μR readings taken on the haul road do appear in Table 4.4

⁴³ These wells were installed in 2001, well after cessation of nuclear operations.

that all the direct measurements obtained were below the release criteria listed in Table 2.3.

- 4.4.3 All surfaces were scanned 100% for beta-gamma and no hot spots in excess of the release criteria were identified.
- 4.4.4 The data summary and statistical test results demonstrate that all the well pad surfaces in Sector 2 meet the criteria stipulated in the license and SDP for unconditional release.

Table 4.5
Sector 2 Well Pads
Alpha/Beta-Gamma and Exposure Rate Measurements Summary

Area Surveyed (ID)	Points	Contamination Component	Net Activity (dpm/100cm ²)			Max Net Exp Rate (uR/hr) ^a
			Min	Max	Avg	
9 Misc Small Pads (see App.E, Table 4)	9	Direct α	0	93	38	1
		Direct β	-232	205	-85	

^a Expressed in PIC-equivalent μ R/hr net of background.

5 CONCLUSIONS AND RECOMMENDATIONS

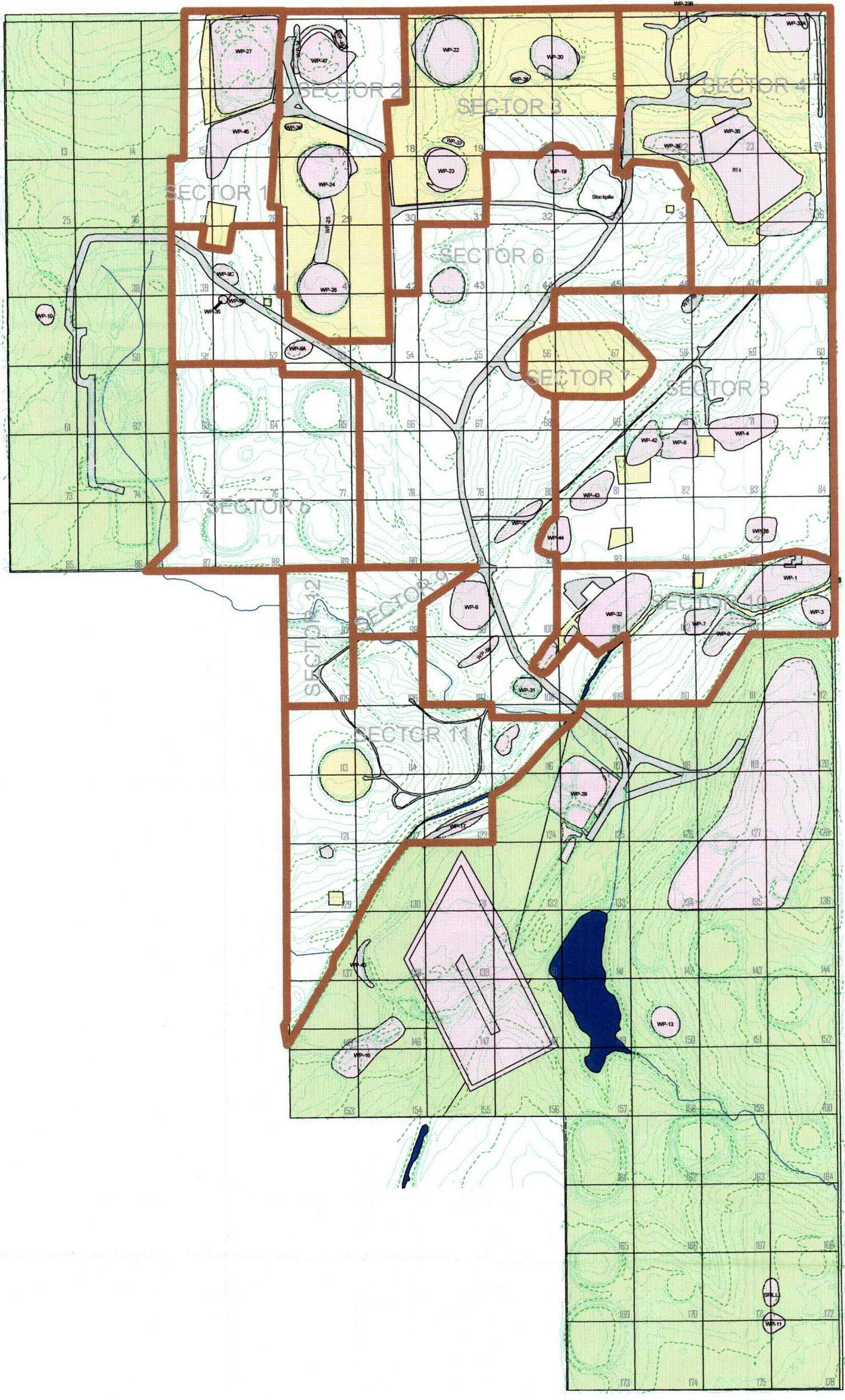
5.1 CONCLUSIONS

- 5.1.1 The soil samples in Sector 2 passed all the quality control requirements for duplicates. (Par. 2.8.1)
- 5.1.2 All of the soil surfaces underneath backfill in the final decommissioning excavations meet the release criteria of the SDP. (Par. 4.1.2.6)
- 5.1.3 All of the exposed soil surfaces meet the release criteria of the SDP. (Par. 4.1.3.7)
- 5.1.4 All of the soil samples on the surface of the ground underneath the haul roads in Sector 2 were less than or equal to 0.18 FMPC. (Par. 4.1.3.8)
- 5.1.5 The scan data that were observed revealed no areas of contamination in excess of the release criteria in Sector 2. (Par. 4.2.8)
- 5.1.6 No exposure rate measurements were observed in Sector 2 above the release criteria. (Par. 4.3.1)
- 5.1.7 None of the scan data measurements collected on well pad surfaces revealed contamination, and no direct measurement or exposure rate data on these surfaces were observed in Sector 2 above the release criteria. (Par. 4.4.4)
- 5.1.8 Sector 2 meets all conditions for release from license SNM-1999.

5.2 RECOMMENDATIONS

- 5.2.1 Sector 2 should be released from license SNM-1999.

APPENDIX A FIGURES



NEXTEP

- Affected Areas
- Survey Sectors
- Unaffected Areas
- Waste Pits
- Undesignated Areas
- Gravel Haul Roads



70 0 70 140 Meters

**Cushing Site Decommissioning
Project Sector 2 Final Status Survey**

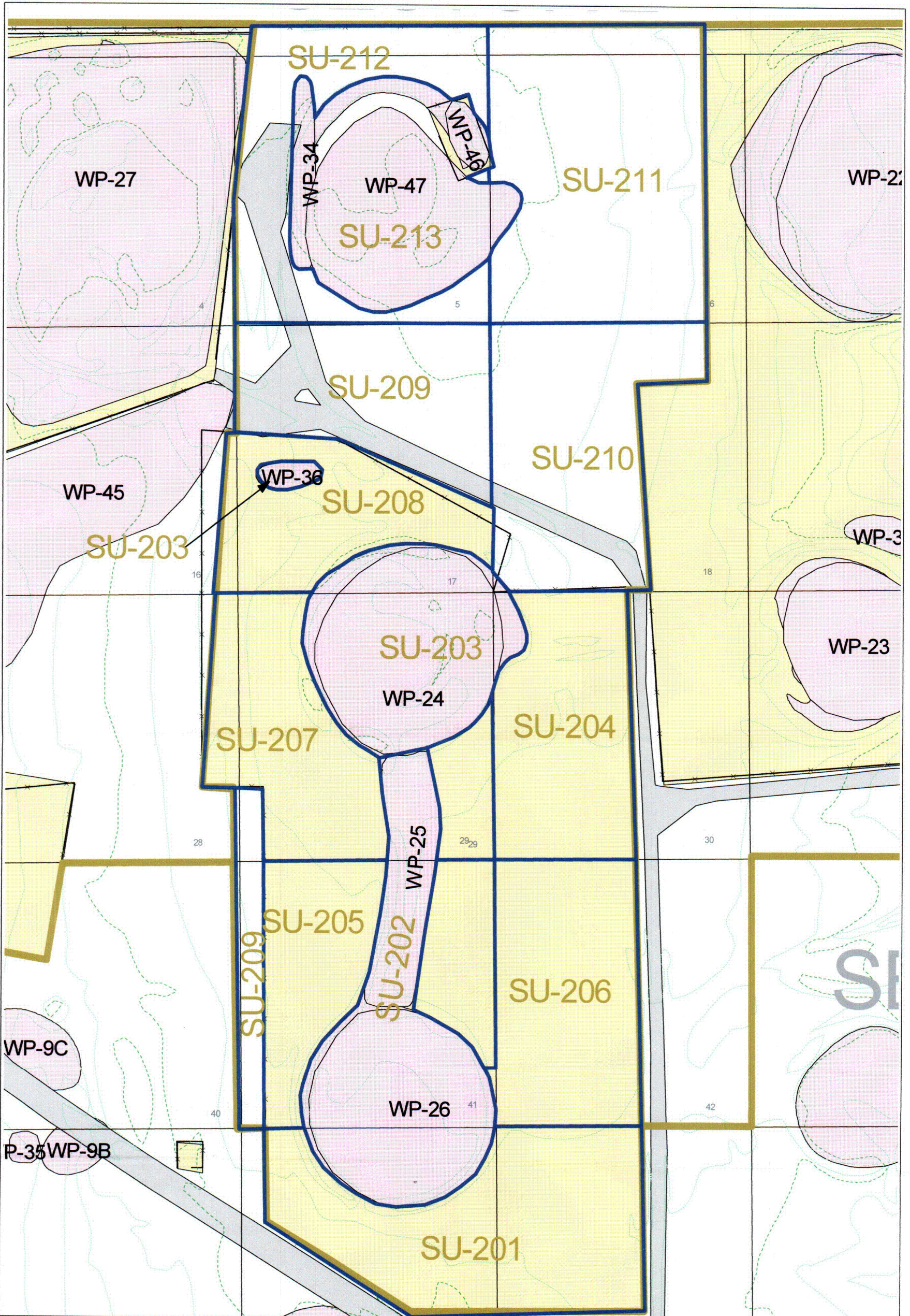
**Figure 1.1
Site Sector Map**

Cushing Site

Drawn by: DCW

Revision: 0

Date: 10/15/2004



NEXTEP

- Affected Areas
- Survey Units
- Waste Pits



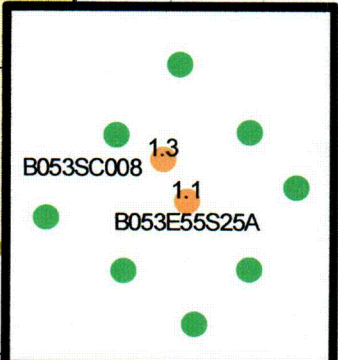
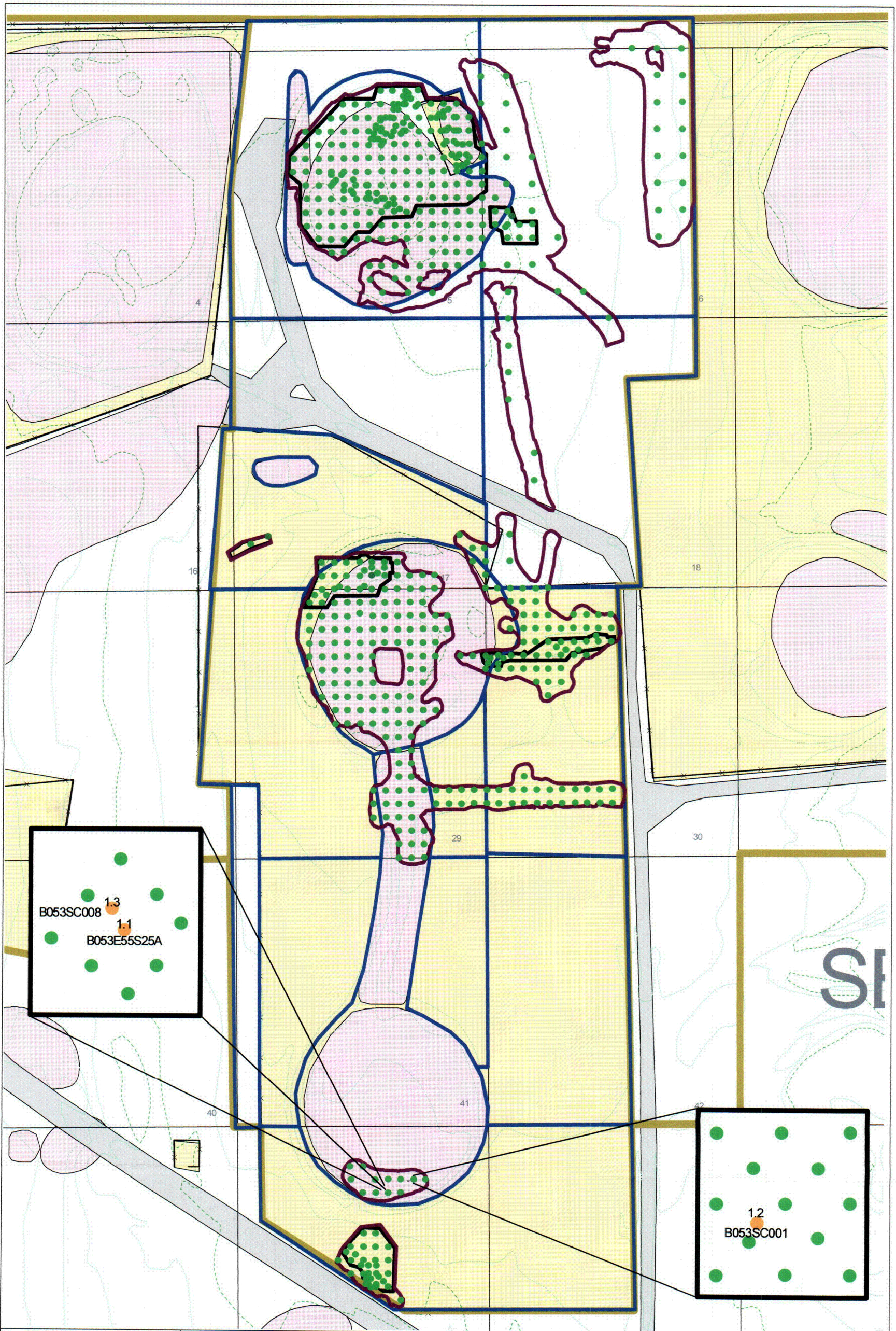
10 0 10 20 Meters

**Cushing Site Decommissioning
Project Sector 2 Final Status Survey**

**Figure 2.1
Sector 2 Survey Units**

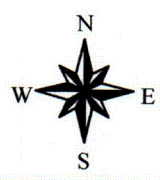
Cushing Site	Drawn by: DCW
Revision: 0	Date: 9/16/2004

002



NEXTEP

- Excavation Areas
- Disturbed Areas
- Soil Samples (FMPC)
 - < 0.75
 - 1.00 - 3.00
 - 0.75 - 1.00
 - > 3.00











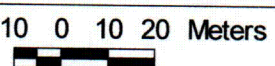
10 0 10 20 Meters

Cushing Site Decommissioning
Project Sector 2 Final Status Survey
Figure 4.1
Sector 2 Bottom Samples
and Areas for Surface Averaging

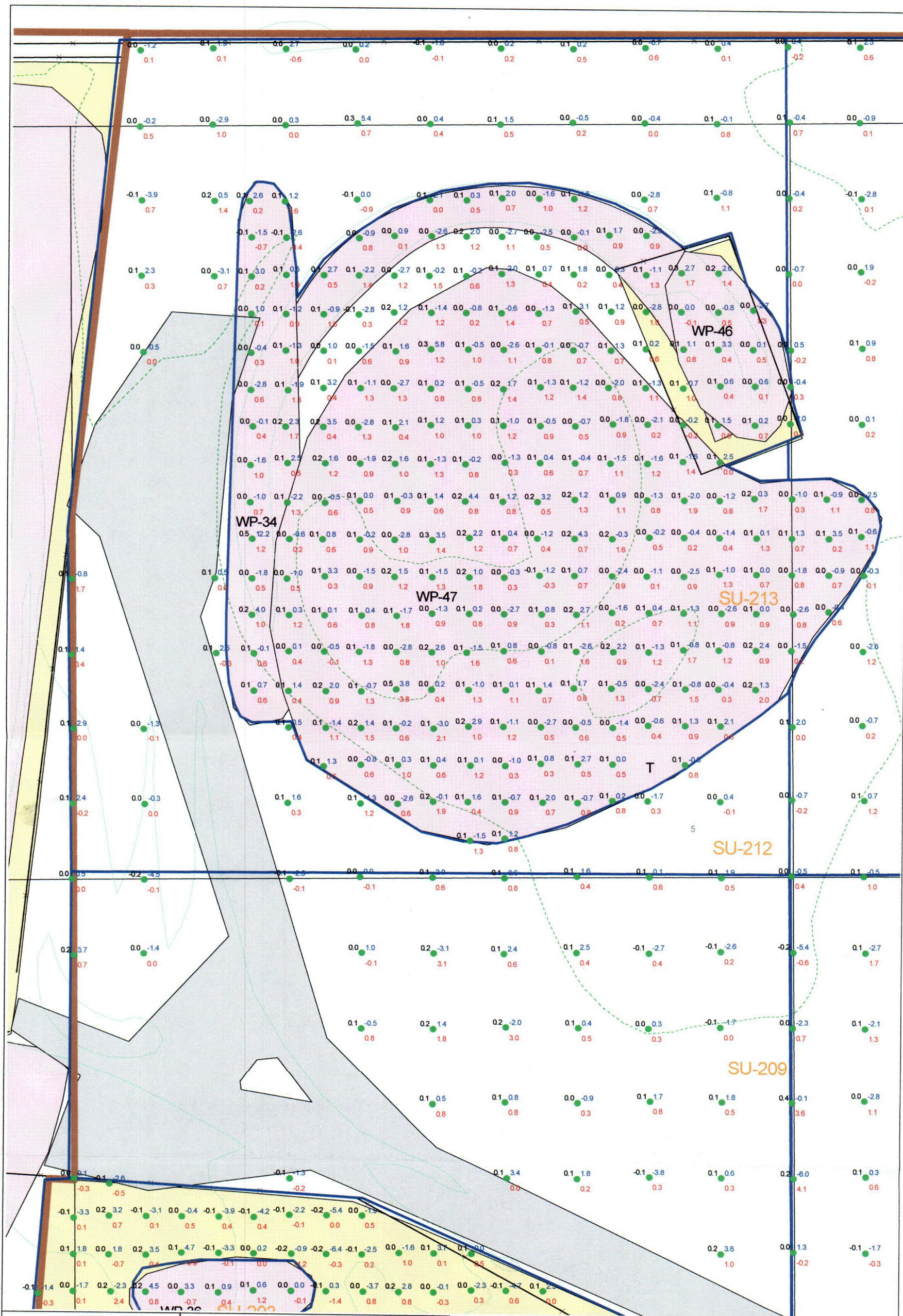
Cushing Site	Drawn by: DCW
Revision: 0	Date: 10/8/2004

003



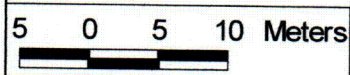
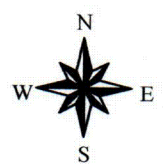
 	 Survey Units Soil Samples (FMPC)  < 0.75  0.75 - 1.00  1.00 - 3.00  > 3.00 T - Tree or Brush	  10 0 10 20 Meters	Cushing Site Decommissioning Project Sector 2 Final Status Survey Figure 4.2 Sector 2 Surface Grid Samples and Areas for Averaging	
			Cushing Site Revision: 0	Drawn by: DCW Date: 10/13/2004

CO4



NEXTEP

- Affected Areas
 - Survey Units
 - Soil Samples (FMPC)**
 - < 0.75
 - 0.75 - 1.00
 - 1.00 - 3.00
 - > 3.00
 - ### FMPC
 - ### Net U(tot)
 - ### Net Th(nat)
- } pCi/g T- Tree



**Cushing Site Decommissioning
Project Sector 2 Final Status Survey
Figure 4.3a
Survey Unit 209, 212, 213
Grid Samples**

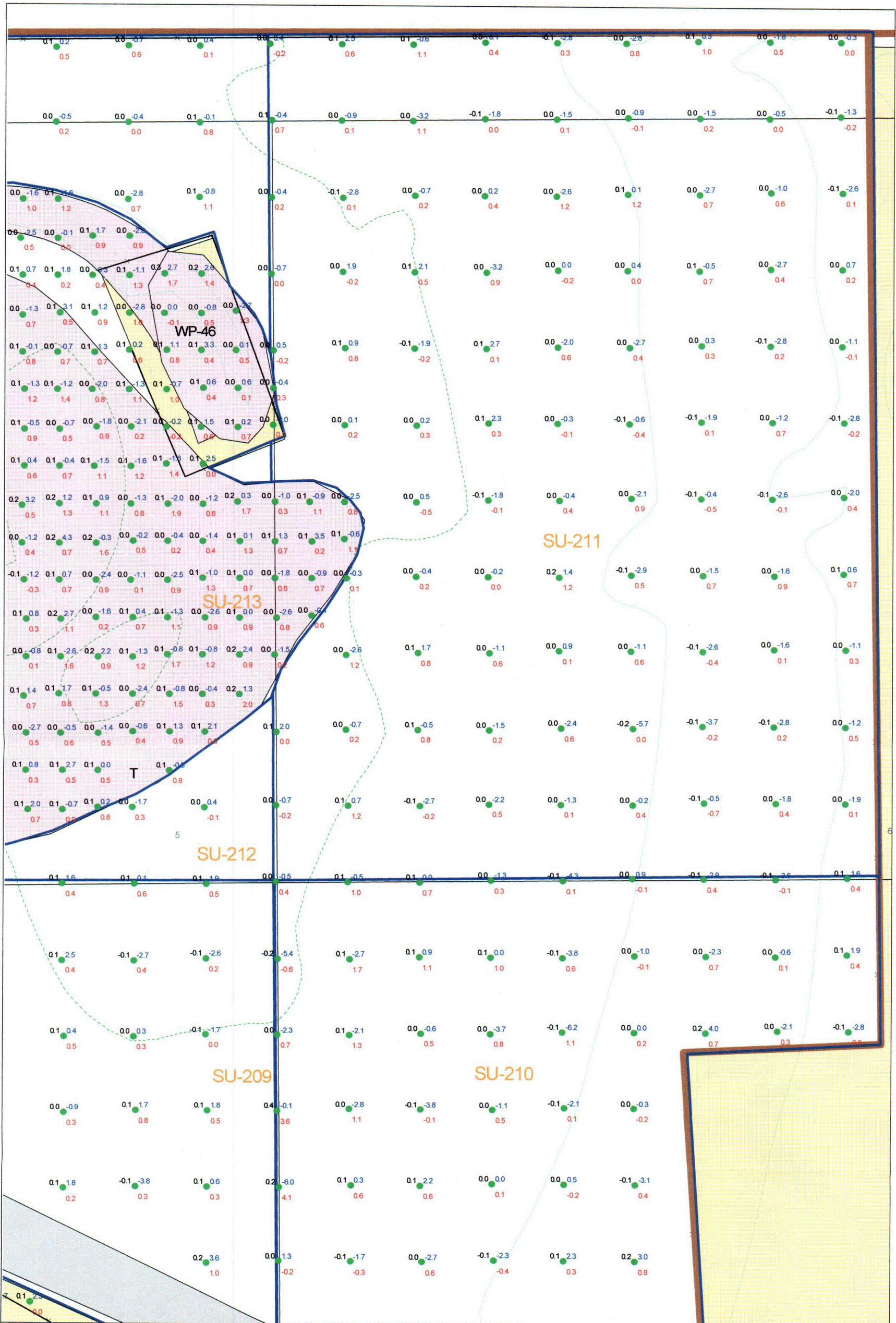
Cushing Site

Drawn by: DCW

Revision: 0

Date: 10/14/2004

C05



NEXTEP

Affected Areas
 Survey Units
Soil Samples (FMPC)
● < 0.75 ● 1.00 - 3.00
● 0.75 - 1.00 ● > 3.00
 ### FMPC
 ### Net U(tot)
 ### Net Th(nat) } pCi/g T- Tree

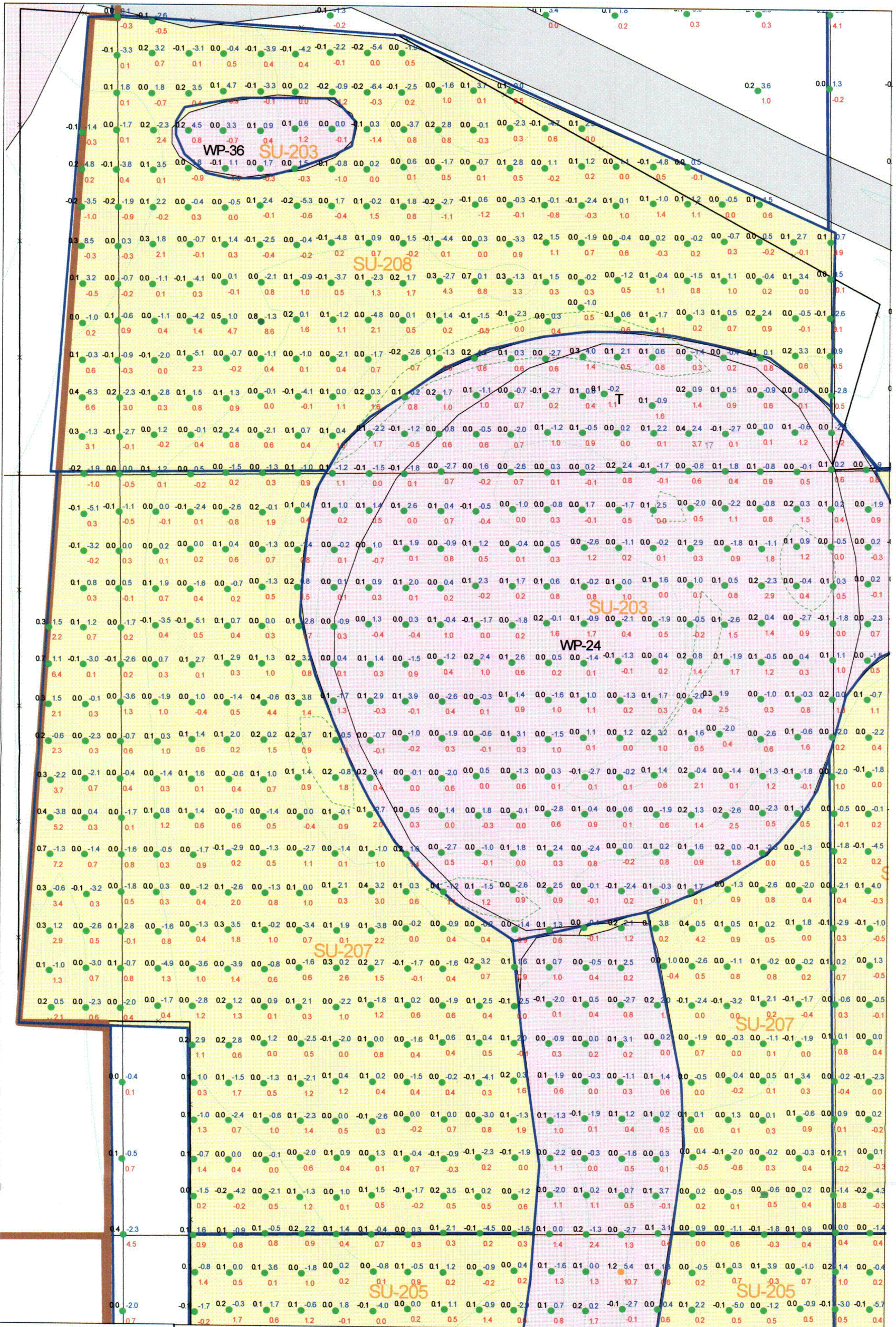


5 0 5 10 Meters

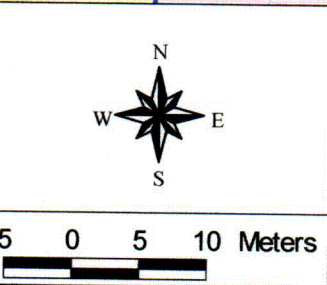
Cushing Site Decommissioning
Project Sector 2 Final Status Survey
Figure 4.3b
Survey Unit 210, 211, 212, 213
Grid Samples

Cushing Site	Drawn by: DCW
Revision: 0	Date: 10/14/2004

COG



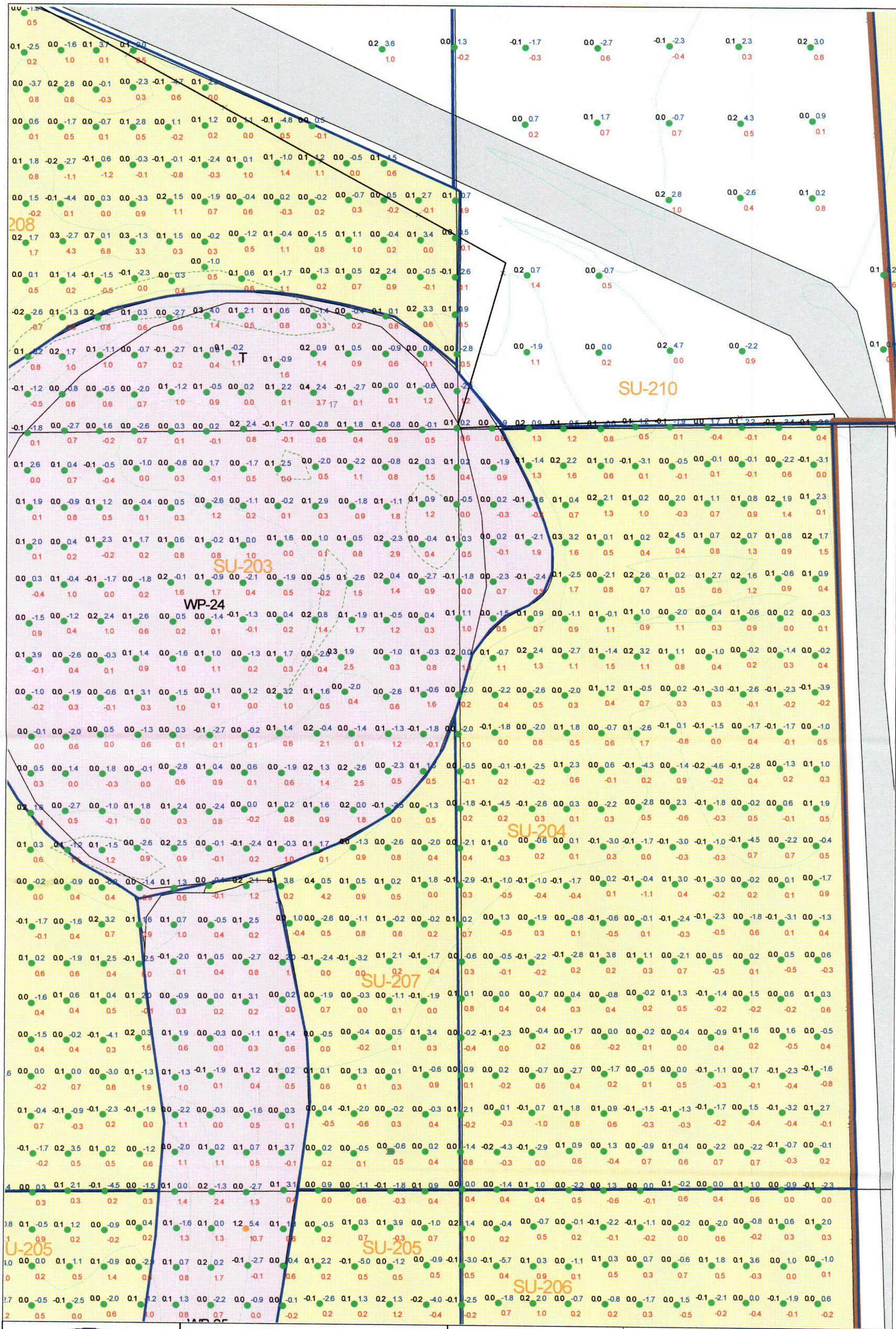
Affected Areas
 Survey Units
 Soil Samples (FMPC)
 ● < 0.75 ● 1.00 - 3.00
 ● 0.75 - 1.00 ● > 3.00
 ### FMPC
 ### Net U(tot)
 ### Net Th(net) } pCi/g T-Tree



**Cushing Site Decommissioning
 Project Sector 2 Final Status Survey**
 Figure 4.3c
 Survey Unit 203, 205, 207, 208, 209
 Grid Samples

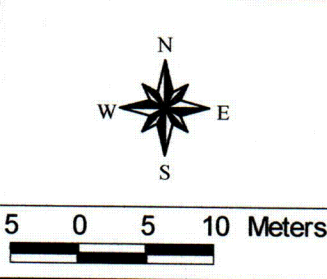
Cushing Site	Drawn by: DCW
Revision: 0	Date: 10/14/2004

C07



NEXTEP

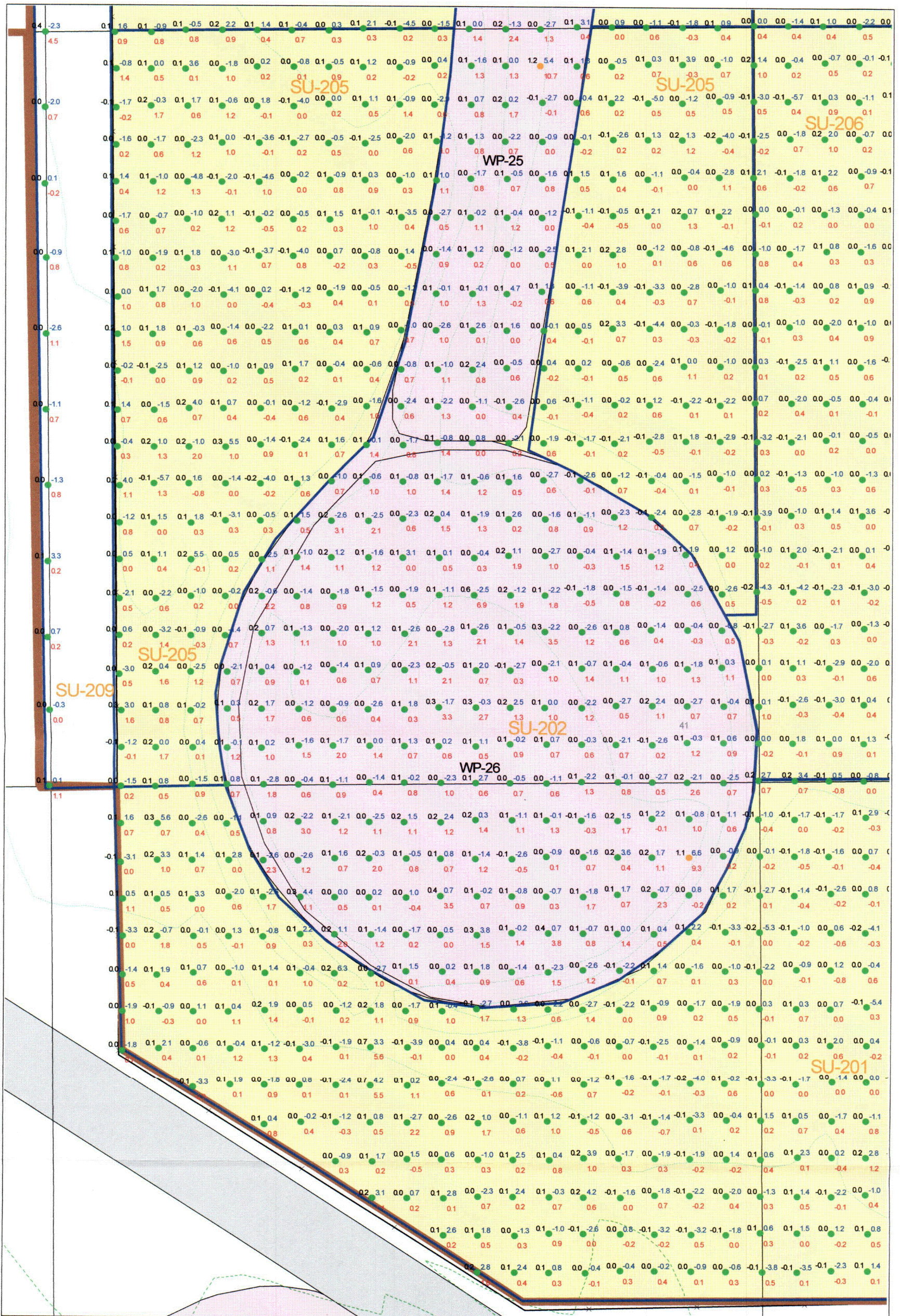
Affected Areas
 Survey Units
Soil Samples (FMPC)
● < 0.75 ● 1.00 - 3.00
● 0.75 - 1.00 ● > 3.00
 ### FMPC
 ### Net U(tot)
 ### Net Th(nat) } pCi/g T- Tree



Cushing Site Decommissioning
Project Sector 2 Final Status Survey
Figure 4.3d
Survey Unit 203, 204, 205, 206, 210
Grid Samples

Cushing Site	Drawn by: DCW
Revision: 0	Date: 10/14/2004

C08



NEXTEP

□ Affected Areas
 □ Survey Units
 ● Soil Samples (FMPC)
 ● < 0.75 ● 1.00 - 3.00
 ● 0.75 - 1.00 ● > 3.00
 ### FMPC
 ### Net U(tot)
 ### Net Th(nat) } pCi/g



5 0 5 10 Meters

Cushing Site Decommissioning
Project Sector 2 Final Status Survey
 Figure 4.3e
 Survey Unit 201, 202, 205, 206, 209
 Grid Samples

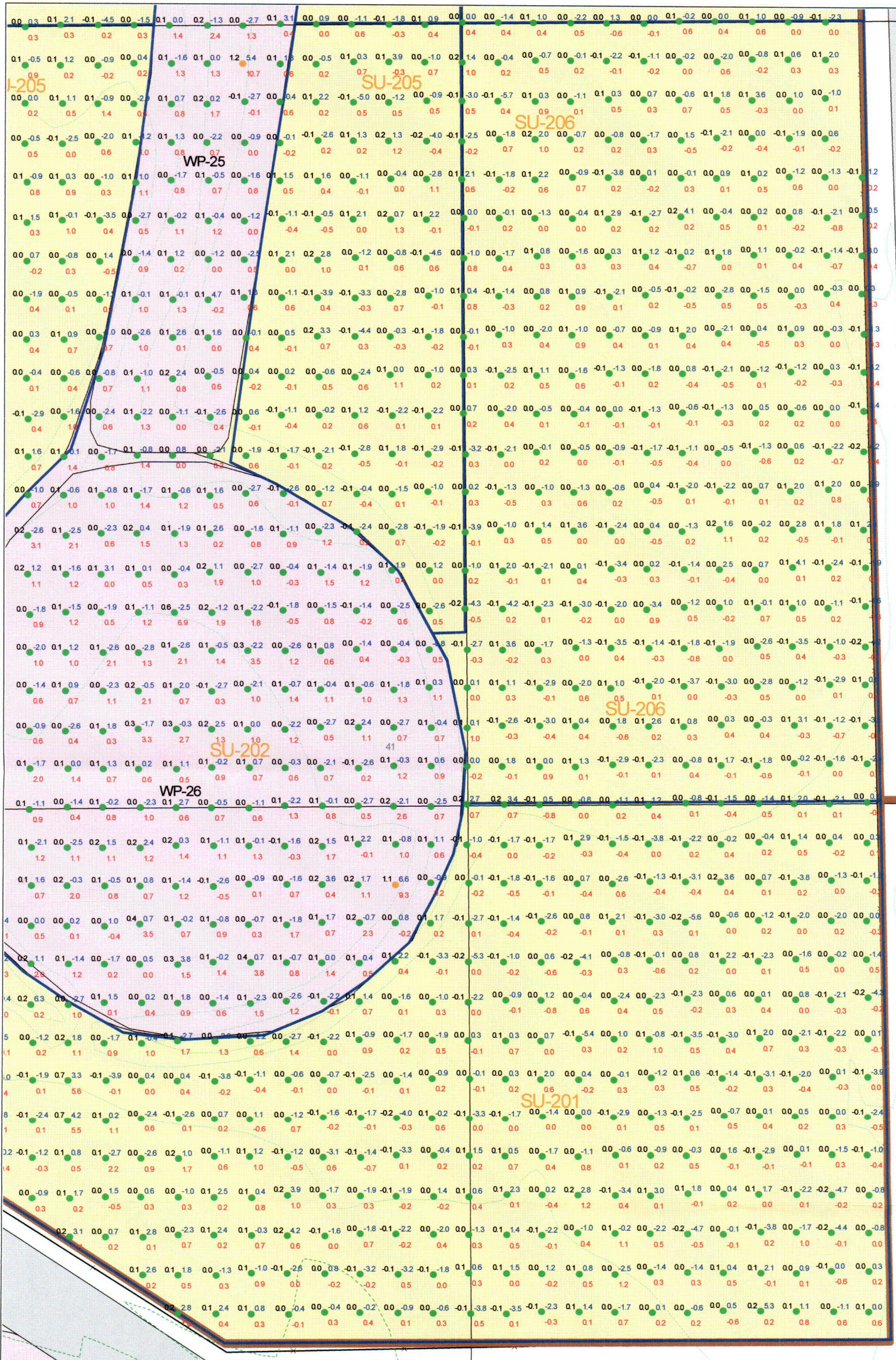
Cushing Site

Drawn by: DCW

Revision: 0

Date: 10/14/2004

609



NEXTEP

Affected Areas
 Survey Units
Soil Samples (FMPC)
● <math>< 0.75</math> ● $1.00 - 3.00$
● $0.75 - 1.00$ ● > 3.00
 ### FMPC
 ### Net U(tot) } pCi/g
 ### Net Th(nat) }



5 0 5 10 Meters

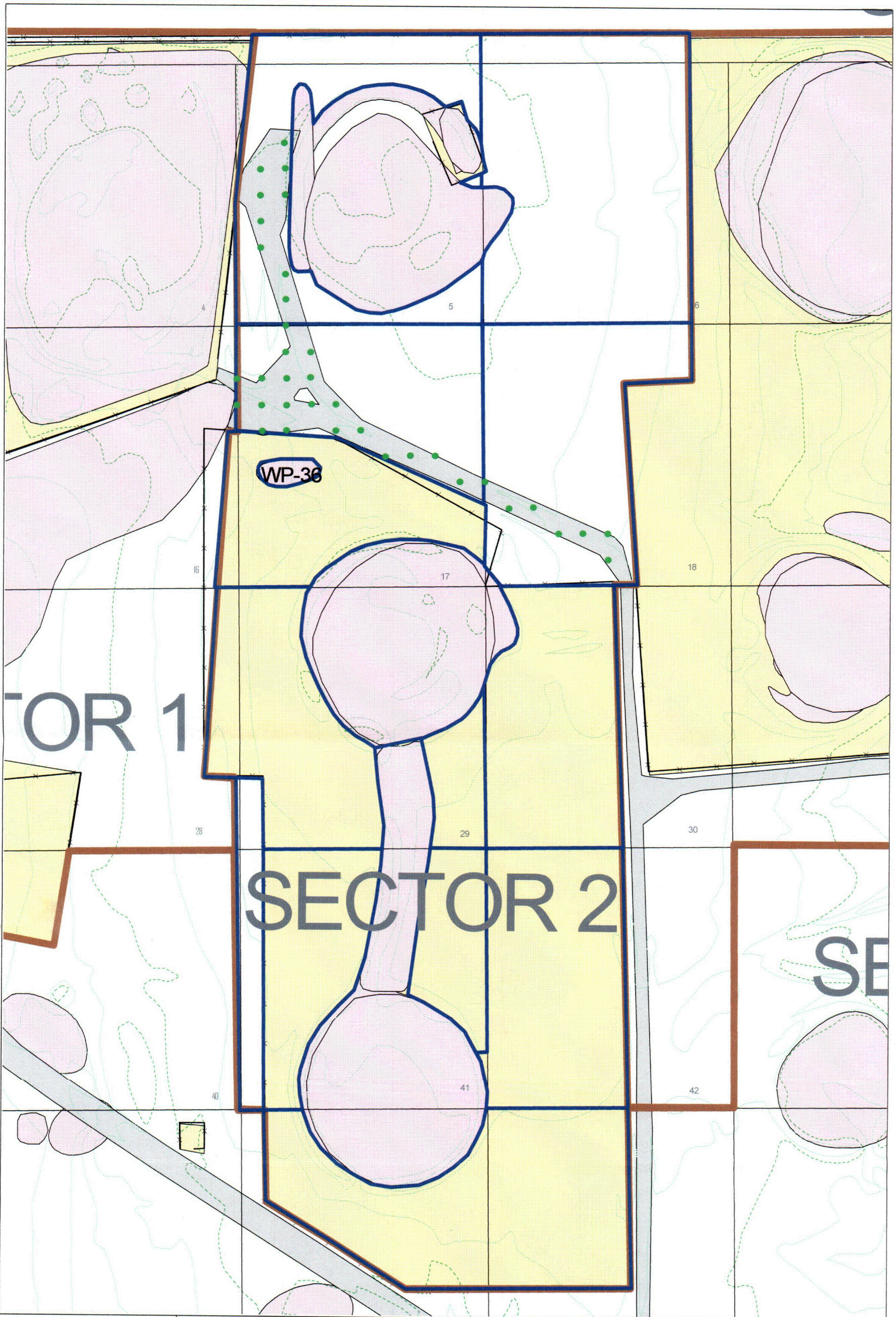
Cushing Site Decommissioning
Project Sector 2 Final Status Survey
 Figure 4.3f
 Survey Unit 201, 205, 206
 Grid Samples

Cushing Site

Drawn by: DCW

Revision: 0

Date: 10/14/2004



NEXTEP

- Haul Roads
- Soil Samples (FMPC)**
- < 0.75
- 0.75 - 1.00
- 1.00 - 3.00
- > 3.00



10 0 10 20 Meters

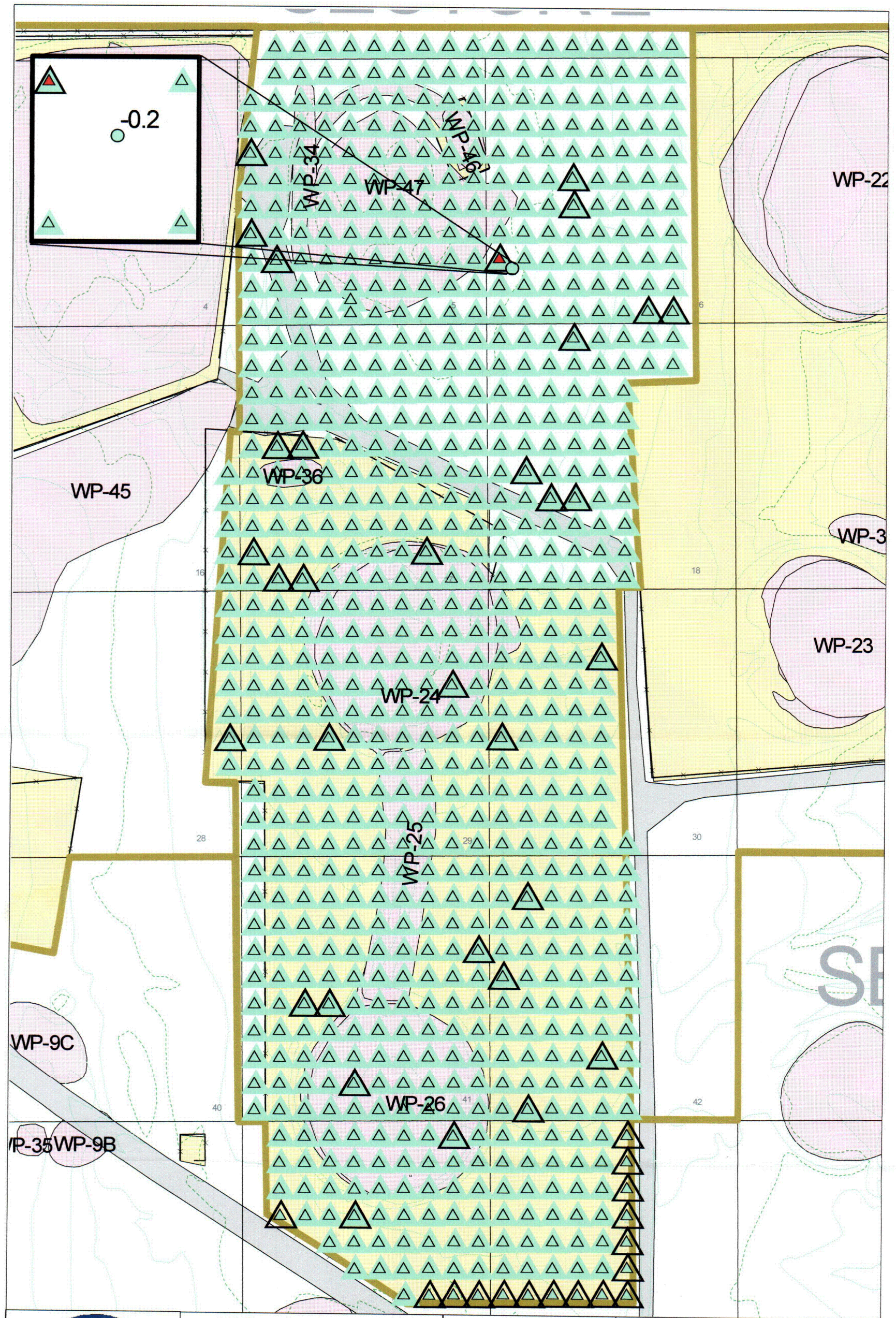
Cushing Site Decommissioning
Project Sector 2 Final Status Survey
Figure 4.4
Sector 2 Existing Soil Samples
Under Roadways




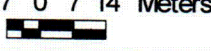
Cushing Site

Drawn by: DCW

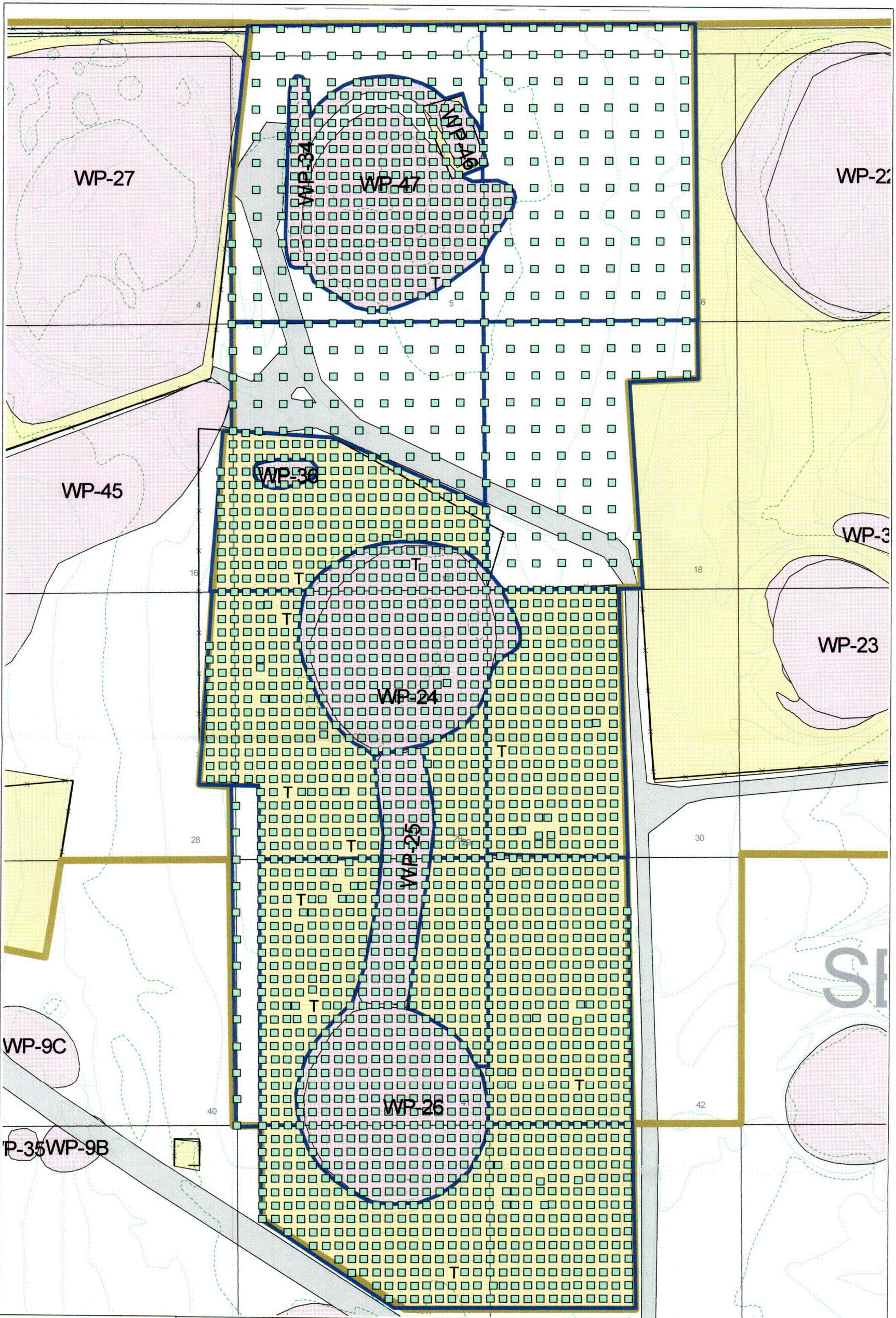
Revision: 0



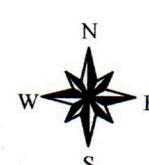
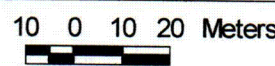
Date: 9/16/2004



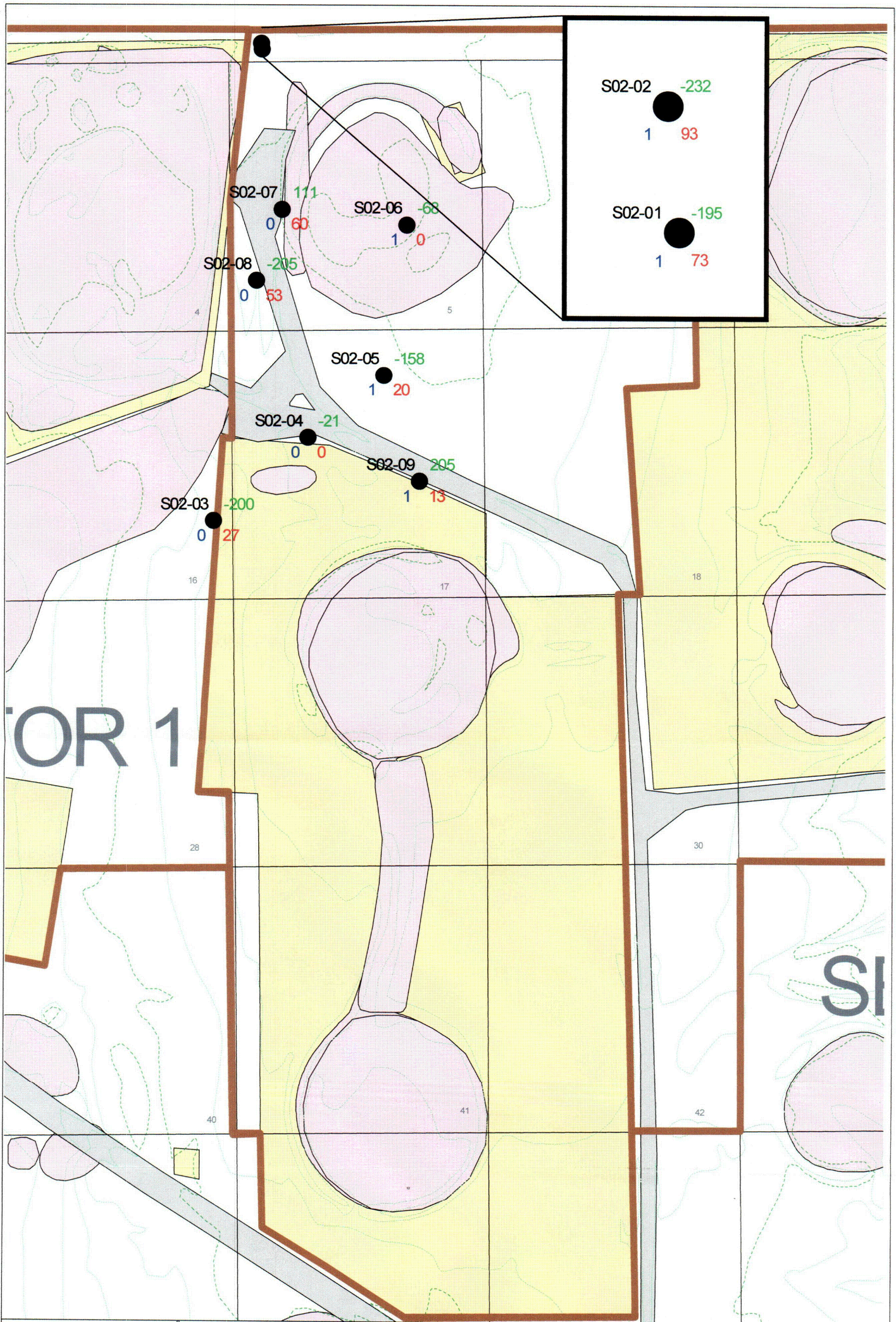
 	Nal Scans (cpm) Avg Max < 12,500 < 12,500 12.5k - 15k 12.5k - 15k 15k - 20k 15k - 20k > 20,000 > 20,000 ▲ Manual Scan	Soil Samples (FMPC) < 0.75 0.75 - 1.00 1.00 - 3.00 > 3.00 # FMPC	 7 0 7 14 Meters 	Cushing Site Decommissioning Project Sector 2 Final Status Survey Figure 4.5 Summarized Nal Gamma Scans	
				Cushing Site Revision: 0	Drawn by: DCW Date: 10/13/2004

CI2



 	Exposure Rate Measurements ($\mu\text{R/hr}$) < 16 > 25 16 - 25 T - Tree or Brush	 	Cushing Site Decommissioning Project Sector 2 Final Status Survey Figure 4.6 Sector 2 Exposure Rate Measurements	
			Cushing Site Revision: 0	Drawn by: DCW Date: 10/13/2004

C13



OR 1

SI



NEXTEP

- Monitoring Wells
- S03-## Object ID
- # Max Direct Beta (dpm_B/100 cm²)
- # Max Direct Alpha (dpm_A/100 cm²)
- # Max Net Exposure Rate (μR/hr)



10 0 10 20 Meters

Cushing Site Decommissioning Project Sector 2 Final Status Survey

Figure 4.7
Sector 2 Well Pad Locations

Cushing Site

Drawn by: DCW

Revision: 0

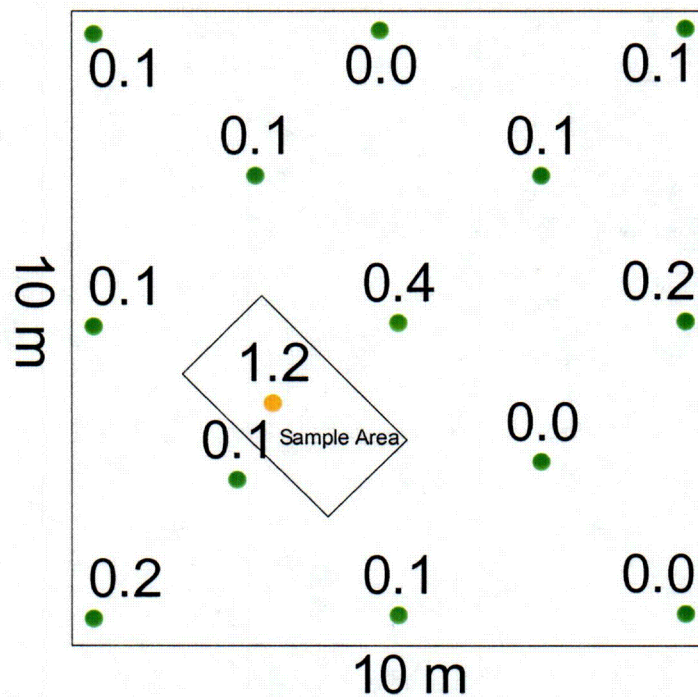
Date: 10/13/2004

C14

APPENDIX B
AREA AVERAGING WORKSHEETS

AREA AVERAGING WORKSHEET

Location B053SC001



Elevated sample activity: 1.2 FMPC

Area occupied by the elevated sample: 6.73 m²

Average of non-elevated activity measurements: 0.12

Weighted average calculation:⁴⁴

$$\bar{X}_w = 0.12 \left(\frac{100 - 6.73}{100} \right) + 1.2 \left(\frac{6.73}{100} \right) = 0.19 \text{ FMPC}$$

Maximum individual value calculation:⁴⁵

$$FMPC_{\max} = \sqrt{\frac{100}{6.73}} = 3.9$$

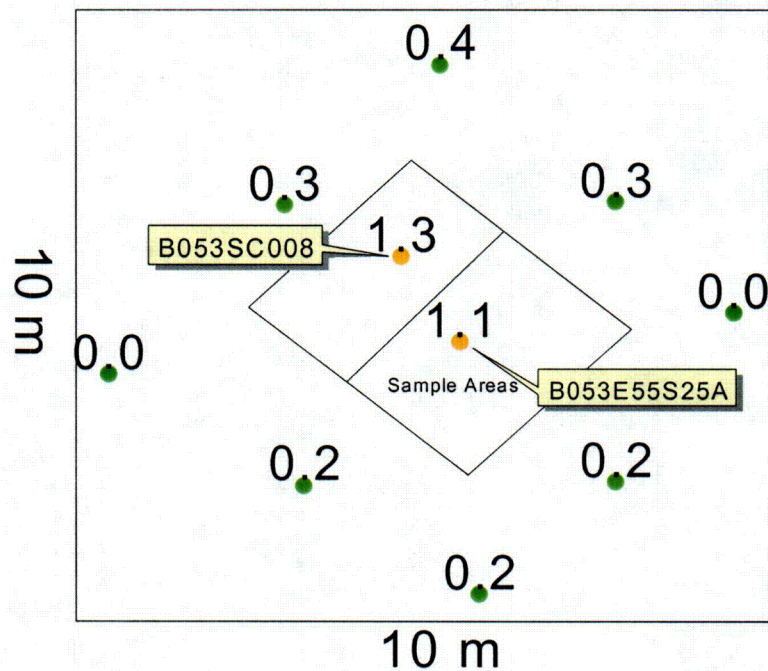
Meets Release Criteria

⁴⁴ Over 100 m². See NUREG/CR-5849, Section 8.5.2

⁴⁵ Per license condition 11.N, soil activity may not exceed 3.0 FMPC regardless of surface averaging considerations. Soil activity may exceed 3.0 FMPC under volumetric averaging criteria.

AREA AVERAGING WORKSHEET

Locations B053SC008 and B053E55S25A



Elevated sample activity: 1.3 FMPC

Area occupied by the elevated sample: 6.13 m²

Elevated sample activity: 1.1 FMPC

Area occupied by the elevated sample: 9.19 m²

Average of non-elevated activity measurements: 0.20

Weighted average calculation:⁴⁶

$$\bar{X}_w = 0.20 \left(\frac{100 - 6.13 - 9.19}{100} \right) + 1.3 \left(\frac{6.13}{100} \right) + 1.1 \left(\frac{9.19}{100} \right) = 0.35 \text{ FMPC}$$

Maximum individual value calculation:⁴⁷

$$FMPC_{\max} = \sqrt{\frac{100}{6.13 + 9.19}} = 2.6$$

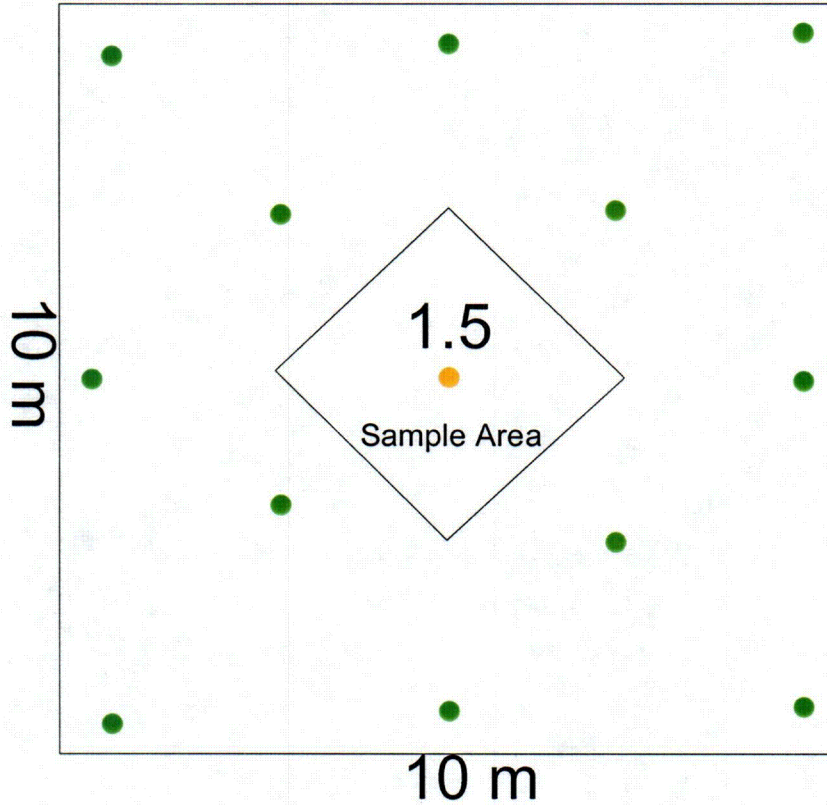
Meets Release Criteria

⁴⁶ Over 100 m². See NUREG/CR-5849, Section 8.5.2

⁴⁷ Per license condition 11.N, soil activity may not exceed 3.0 FMPC regardless of surface averaging considerations. Soil activity may exceed 3.0 FMPC under volumetric averaging criteria.

VOLUME AVERAGING WORKSHEET

Location B005E50S35; Current depth 0.5 ft



0 - 1 m Depth Composite Samples
Borehole B005E50S35

Layer	Sample Depth (ft)*	FMPC
0 - 1 m	0	0.24
	0.5	1.52
	1	0.68
	1.5	0.24
Average		0.67

**

*Depth to top of 6" sample.

** Maximum of 4 readings taken at the surface.

Elevated sample value: 1.5 FMPC

Layer containing the elevated sample: 0-1m

Maximum Value in layer: 1.52 FMPC

Average of composite samples: 0.67 FMPC

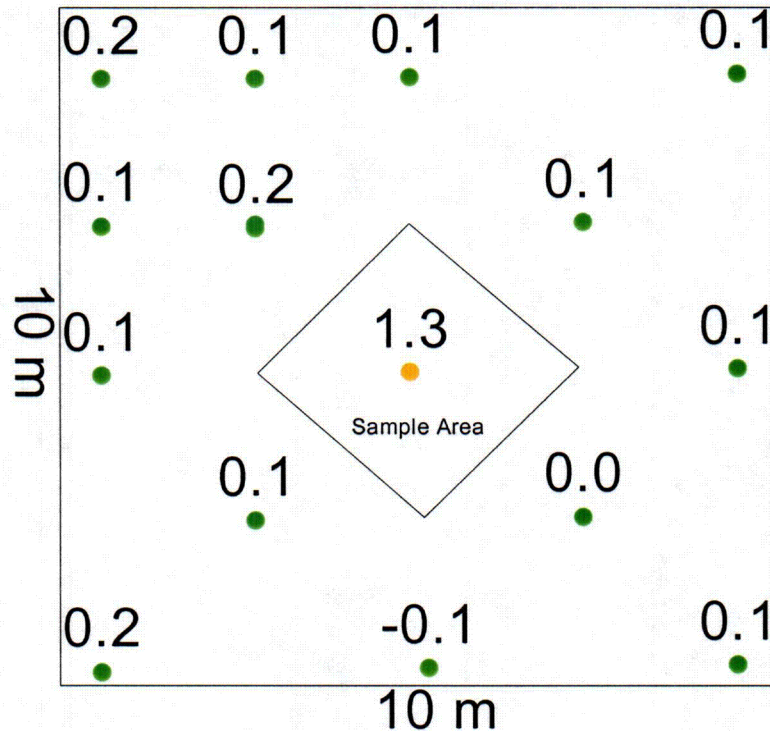
The one meter composite average within the borehole containing the elevated sample is less than 1.0 FMPC. Without further consideration the samples in borehole B005E50S35 meet the volumetric averaging criteria.

Meets Release Criteria

C17

AREA AVERAGING WORKSHEET

Location B041E70S05



Elevated sample activity: 1.3 FMPC

Area occupied by the elevated sample: 12.3 m²

Average of non-elevated activity measurements: 0.10

Weighted average calculation:⁴⁸

$$\bar{X}_w = 0.10 \left(\frac{100 - 12.3}{100} \right) + 1.3 \left(\frac{12.3}{100} \right) = 0.25 \text{ FMPC}$$

Maximum individual value calculation:⁴⁹

$$FMPC_{\max} = \sqrt{\frac{100}{12.3}} = 2.9$$

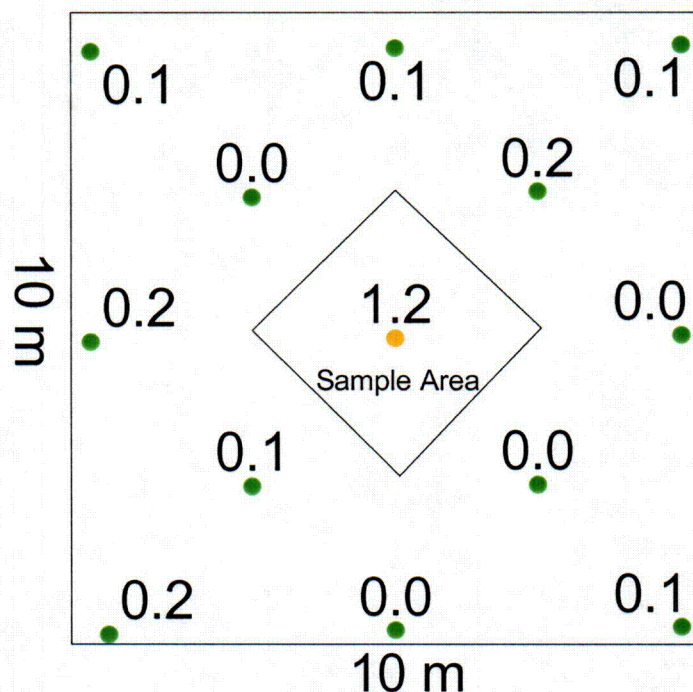
Meets Release Criteria

⁴⁸ Over 100 m². See NUREG/CR-5849, Section 8.5.2

⁴⁹ Per license condition 11.N, soil activity may not exceed 3.0 FMPC regardless of surface averaging considerations. Soil activity may exceed 3.0 FMPC under volumetric averaging criteria.

AREA AVERAGING WORKSHEET

Location B053E90S10



Elevated sample activity: 1.2 FMPC

Area occupied by the elevated sample: 12.3 m²

Average of non-elevated activity measurements: 0.09

Weighted average calculation:⁵⁰

$$\bar{X}_w = 0.09 \left(\frac{100 - 12.3}{100} \right) + 1.2 \left(\frac{12.3}{100} \right) = 0.23 \text{ FMPC}$$

Maximum individual value calculation:⁵¹

$$FMPC_{\max} = \sqrt{\frac{100}{12.3}} = 2.9$$

Meets Release Criteria

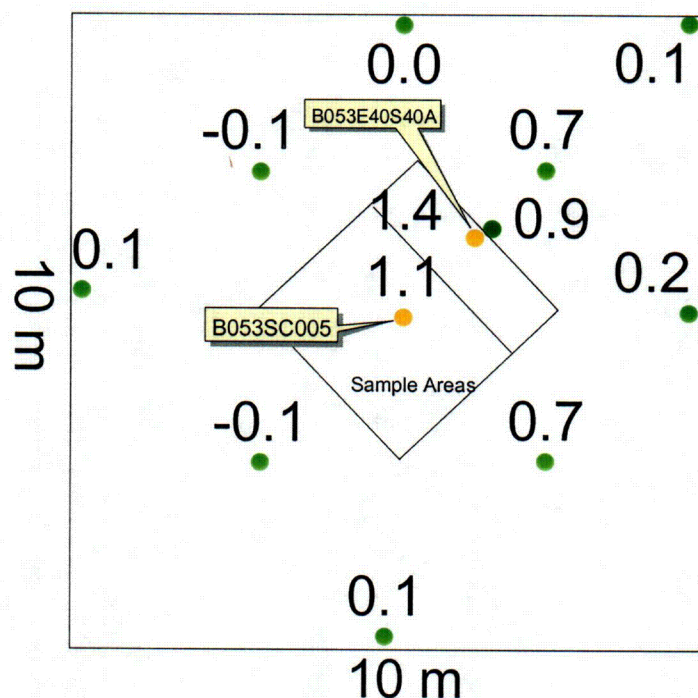
⁵⁰ Over 100 m². See NUREG/CR-5849, Section 8.5.2

⁵¹ Per license condition 11.N, soil activity may not exceed 3.0 FMPC regardless of surface averaging considerations. Soil activity may exceed 3.0 FMPC under volumetric averaging criteria.

C19

AREA AVERAGING WORKSHEET

Locations B053SC005 and B053E40S40A



Elevated sample activity: 1.1 FMPC

Area occupied by the elevated sample: 9.61 m²

Elevated sample activity: 1.4 FMPC

Area occupied by the elevated sample: 4.03 m²

Average of non-elevated activity measurements: 0.26

Weighted average calculation:⁵²

$$\bar{X}_w = 0.26 \left(\frac{100 - 4.03 - 9.61}{100} \right) + 1.1 \left(\frac{9.61}{100} \right) + 1.4 \left(\frac{4.03}{100} \right) = 0.39 \text{ FMPC}$$

Maximum individual value calculation:⁵³

$$FMPC_{\max} = \sqrt{\frac{100}{9.61 + 4.03}} = 2.71$$

Meets Release Criteria

⁵² Over 100 m². See NUREG/CR-5849, Section 8.5.2

⁵³ Per license condition 11.N, soil activity may not exceed 3.0 FMPC regardless of surface averaging considerations. Soil activity may exceed 3.0 FMPC under volumetric averaging criteria.

APPENDIX C
CUSHING SITE GRID NUMBERING SYSTEM

CUSHING SITE BLOCK COORDINATES

239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256
219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236
199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216
421	401	1	2	3	4	5	6	7	8	9	10	11	12	301	321	341	361
422	402	13	14	15	16	17	18	19	20	21	22	23	24	302	322	342	362
423	403	25	26	27	28	29	30	31	32	33	34	35	36	303	323	343	363
424	404	37	38	39	40	41	42	43	44	45	46	47	48	304	324	344	364
425	405	49	50	51	52	53	54	55	56	57	58	59	60	305	325	345	365
426	406	61	62	63	64	65	66	67	68	69	70	71	72	306	326	346	366
427	407	73	74	75	76	77	78	79	80	81	82	83	84	307	327	347	367
428	408	85	86	87	88	89	90	91	92	93	94	95	96	308	328	348	368
429	409	569	549	529	509	97	98	99	100	101	102	103	104	309	329	349	369
430	410	570	550	530	510	105	106	107	108	109	110	111	112	310	330	350	370
431	411	571	551	531	511	113	114	115	116	117	118	119	120	311	331	351	371
432	412	572	552	532	512	121	122	123	124	125	126	127	128	312	332	352	372
433	413	573	553	533	513	129	130	131	132	133	134	135	136	313	333	353	373
434	414	574	554	534	514	137	138	139	140	141	142	143	144	314	334	354	374
435	415	575	555	535	515	145	146	147	148	149	150	151	152	315	335	355	375
436	416	576	556	536	516	153	154	155	156	157	158	159	160	316	336	356	376
437	417	577	557	537	517	677	657	637	617	161	162	163	164	317	337	357	377
438	418	578	558	538	518	678	658	638	618	165	166	167	168	318	338	358	378
439	419	579	559	539	519	679	659	639	619	169	170	171	172	319	339	359	379
440	420	580	560	540	520	680	660	640	620	173	174	175	176	320	340	360	380
699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716
719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736
739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756

Note: The blocks shaded in yellow represent the original Cushing Site Block Grid numbers. The blocks in white represent the off-site blocks which have been added.

APPENDIX D
HOT SPOT EVALUATION PROTOCOL

HOT SPOT EVALUATION PROTOCOL

1 Scans

- 1.1 Scan information will be taken in the field using a cart-mounted, 3' x ½" unshielded NaI detector scanning at less than 1 ft. per sec. in accordance with NX-RO-370.⁵⁴ Cpm readings will be taken approximately every two seconds and will be recorded automatically in the data logger along with GPS location information. Raw data files will be examined by the HP analyst and areas containing readings in excess of the threshold will be rescanned manually using a shielded NaI detector to locate potential hot spots.
- 1.2 When manual scans are required to confirm an unshielded reading above the threshold, collect a soil sample at local maxima within each scanned region and survey its location using GPS. LocID and SID conventions will be as outlined in Section 3.3 of this FSSR.

2 Soil Samples Exceeding the Limit

- 2.1 When soil measurements exceed 1.0 FMPC, the analyst evaluating the data will issue a Supplemental Data Request to decrease the local grid spacing to 3.5 m or less and to further characterize the depth and lateral extent of elevated radioactivity. Consideration will be given to the requirements of surface averaging in requesting supplemental grid measurements.
- 2.2 Samples taken as part of any expansion pattern which does not fall on standard BES locations (even meters) will be identified with the LocID of the nearest hot spot with a single letter character at the end. These locations will be entered as offset location records in the database and their exact GPS coordinates will be recorded.

3 Soil Samples Indicating Predominantly Uranium Presence

- 3.1 Wherever a soil sample indicates a uranium concentration above 20 pCi/g and thorium less than 1.5 pCi/g, the entire area surrounding the sample will be manually scanned with a shielded 3"x1/2" NaI detector at 6" height above ground, and a scan threshold of 8,500 cpm will be used to determine where bias soil samples will be taken.

4 μ R Measurement above the Release Criteria.

- 4.1 Any μ R measurements that exceed the release criteria will be compared with surface soil sample results and surrounding scan data. Any failure of these values to correlate will be flagged and additional soil samples, scans, or μ R measurements will be collected as required to resolve the discrepancy.

⁵⁴ NX-RO-370, *ibid.*

APPENDIX E DATA TABLES

Table 1

Final Decommissioning Excavation Bottom Samples*

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B005E25S40	1.53	0.47	0.10
B005E25S45	-0.78	0.99	0.07
B005E30S30	-0.08	0.22	0.02
B005E30S35	0.11	0.25	0.03
B005E30S40	-0.68	0.26	0.00
B005E30S45	-0.97	0.46	0.01
B005E30S50	-1.72	1.04	0.05
B005E30S55	2.37	1.80	0.26
B005E30S60	1.78	0.93	0.15
B005E30S65	3.47	0.38	0.15
B005E35S30	1.00	0.26	0.06
B005E35S35	5.32	0.34	0.21
B005E35S40	-1.12	1.13	0.08
B005E35S45	1.35	0.67	0.11
B005E35S50	-2.73	1.02	0.01
B005E35S55	-2.69	0.73	-0.02
B005E35S60	-0.51	1.36	0.12
B005E35S65	3.02	1.34	0.23
B005E35S70	0.03	2.48	0.25
B005E40S25	0.82	0.47	0.07
B005E40S30	-2.27	0.20	-0.06
B005E40S35	0.18	0.51	0.06
B005E40S40	-1.53	1.18	0.07
B005E40S45	2.83	1.59	0.25
B005E40S46	4.17	1.48	0.29
B005E40S50	-2.65	1.55	0.07
B005E40S55	0.08	0.65	0.07
B005E40S60	1.04	1.52	0.19
B005E40S65	-0.04	1.04	0.10
B005E40S70	2.98	0.64	0.16
B005E40S75	-0.18	0.62	0.06
B005E41S49	-0.26	1.62	0.15
B005E42S48	1.65	0.77	0.13
B005E44S46	0.27	0.86	0.09
B005E45S20	-1.89	0.99	0.04
B005E45S25	-0.86	1.09	0.08
B005E45S30	-0.22	0.55	0.05
B005E45S35	1.74	1.12	0.17
B005E45S40	-0.13	1.23	0.12
B005E45S45	0.00	2.41	0.24
B005E45S50	-2.56	0.14	-0.07
B005E45S52	2.41	1.42	0.22
B005E45S55	-0.63	0.47	0.03
B005E45S60	-1.54	1.06	0.05
B005E45S65	-0.78	1.83	0.16

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B005E45S70	-2.71	1.26	0.04
B005E45S75	-2.59	0.99	0.01
B005E48S52	-0.39	0.47	0.03
B005E49S48	0.75	1.46	0.17
B005E49S53	-0.60	1.46	0.13
B005E50S20	-2.45	0.25	-0.06
B005E50S25	-1.37	0.42	0.00
B005E50S30	-1.27	1.05	0.06
B005E50S35	-2.50	1.50	0.07
B005E50S40	3.31	0.92	0.20
B005E50S45	-0.18	0.60	0.05
B005E50S50	-2.72	-0.54	-0.14
B005E50S55	-2.72	2.01	0.11
B005E50S60	-2.64	1.86	0.10
B005E50S65	-2.43	2.25	0.14
B005E50S70	0.87	2.79	0.31
B005E54S50	-2.77	0.65	-0.03
B005E54S55	1.08	0.17	0.05
B005E55S20	1.27	0.20	0.06
B005E55S25	-1.41	1.22	0.07
B005E55S30	-1.78	1.55	0.10
B005E55S35	0.49	1.21	0.14
B005E55S40	-0.22	1.46	0.14
B005E55S45	-1.01	0.31	0.00
B005E55S50	-2.68	0.54	-0.03
B005E55S53	-0.95	0.74	0.04
B005E55S55	-2.11	2.63	0.19
B005E55S60	-2.35	0.90	0.01
B005E55S65	-2.76	3.00	0.21
B005E55S70	-1.38	0.96	0.05
B005E55S80	-1.58	0.88	0.03
B005E55S85	-1.34	0.74	0.03
B005E56S33	-2.67	0.22	-0.07
B005E57S31	-0.17	2.09	0.20
B005E57S33	-1.72	0.44	-0.01
B005E58S28	0.99	1.45	0.18
B005E58S29	-0.98	1.21	0.09
B005E58S53	-1.16	-0.18	-0.06
B005E58S56	-0.60	-0.18	-0.04
B005E59S33	-2.67	1.60	0.07
B005E60S15	1.48	-0.06	0.04
B005E60S20	1.26	-0.06	0.04
B005E60S25	1.85	1.79	0.24
B005E60S26	-0.33	2.21	0.21
B005E60S29	-2.44	0.23	-0.06

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B005E60S30	2.22	1.07	0.18
B005E60S35	-0.68	1.35	0.11
B005E60S40	0.30	1.30	0.14
B005E60S45	2.72	1.96	0.29
B005E60S50	-1.61	0.99	0.05
B005E60S55	0.12	0.78	0.08
B005E60S60	-2.26	0.45	-0.03
B005E60S65	-1.76	0.98	0.04
B005E60S70	0.57	0.95	0.11
B005E60S80	-1.47	1.19	0.07
B005E60S85	-1.00	0.29	0.00
B005E60S90	-0.41	-0.15	-0.03
B005E61S34	-2.72	2.27	0.14
B005E61S55	-2.54	-0.01	-0.09
B005E62S25	0.34	2.48	0.26
B005E62S31	-0.28	1.34	0.12
B005E62S58	-0.67	0.42	0.02
B005E63S57	-1.32	1.51	0.11
B005E64S25	-0.33	0.80	0.07
B005E64S32	-0.58	1.42	0.12
B005E65S15	1.14	-0.04	0.03
B005E65S20	-2.68	1.47	0.06
B005E65S22	1.54	1.02	0.15
B005E65S25	-2.77	1.27	0.03
B005E65S30	1.54	1.38	0.19
B005E65S35	-0.69	2.25	0.20
B005E65S40	3.07	0.22	0.12
B005E65S45	0.88	0.38	0.07
B005E65S50	-1.06	1.14	0.08
B005E65S55	-1.27	1.23	0.08
B005E65S57	-0.45	1.31	0.12
B005E65S60	-0.15	0.28	0.02
B005E65S65	2.44	0.02	0.08
B005E65S70	-0.87	0.57	0.03
B005E65S80	0.24	0.45	0.05
B005E65S85	1.14	0.36	0.07
B005E66S28	-2.65	1.33	0.04
B005E67S20	-1.78	1.05	0.05
B005E67S22	-2.57	1.30	0.04
B005E67S59	-1.18	1.08	0.07
B005E68S31	-1.84	0.97	0.04
B005E69S17	0.59	1.38	0.16
B005E69S20	-0.86	1.03	0.07
B005E69S27	-0.86	1.39	0.11
B005E69S30	-2.66	0.97	0.01

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B005E70S15	1.33	0.24	0.07
B005E70S18	-2.56	0.83	0.00
B005E70S20	0.26	0.86	0.09
B005E70S25	-1.03	0.98	0.06
B005E70S30	-1.02	0.25	-0.01
B005E70S35	-1.15	1.23	0.08
B005E70S40	0.44	1.19	0.13
B005E70S45	-2.35	1.01	0.02
B005E70S50	-1.73	0.81	0.02
B005E70S55	-2.56	0.50	-0.04
B005E70S60	0.05	0.64	0.07
B005E70S65	0.95	1.08	0.14
B005E70S70	-0.34	0.50	0.04
B005E70S75	-2.26	1.52	0.08
B005E70S85	0.72	-0.04	0.02
B005E70S90	0.62	0.44	0.06
B005E71S16	0.23	1.28	0.14
B005E72S18	4.49	3.31	0.48
B005E72S28	0.59	1.92	0.21
B005E74S21	-1.79	0.39	-0.02
B005E75S15	-2.19	0.85	0.01
B005E75S20	-0.67	1.34	0.11
B005E75S25	-2.75	2.05	0.11
B005E75S30	0.53	0.69	0.09
B005E75S35	-1.83	1.50	0.09
B005E75S40	-0.08	1.01	0.10
B005E75S45	-0.80	1.37	0.11
B005E75S50	-2.61	0.90	0.00
B005E75S55	1.34	0.80	0.12
B005E75S60	2.91	1.01	0.20
B005E75S65	-2.74	1.20	0.03
B005E75S70	0.91	1.39	0.17
B005E75S80	0.15	1.24	0.13
B005E75S85	2.16	0.12	0.08
B005E80S20	-1.24	0.28	-0.01
B005E80S25	2.10	1.74	0.24
B005E80S30	-2.77	0.85	-0.01
B005E80S35	-1.13	0.52	0.01
B005E80S40	1.67	1.17	0.17
B005E80S45	-2.75	0.85	-0.01
B005E80S50	-2.77	0.42	-0.05
B005E80S55	0.21	2.04	0.21
B005E80S60	-1.10	1.07	0.07
B005E80S65	-2.70	0.69	-0.02
B005E80S70	2.47	-0.13	0.07

Table 1

Final Decommissioning Excavation Bottom Samples*

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B005E80S75	-1.57	0.59	0.01
B005E80S80	-1.18	0.69	0.03
B005E80S90	-4.35	-0.13	-0.16
B005E82S25	2.12	0.49	0.12
B005E83S24	0.00	0.80	0.08
B005E84S30	-2.39	0.83	0.00
B005E85S20	-0.98	1.18	0.09
B005E85S23	-2.16	0.53	-0.02
B005E85S25	0.71	1.26	0.15
B005E85S30	-0.65	1.44	0.12
B005E85S35	-2.07	1.55	0.09
B005E85S40	-1.07	0.26	-0.01
B005E85S45	-2.49	2.36	0.15
B005E85S50	1.22	1.09	0.15
B005E85S55	-1.51	0.28	-0.02
B005E85S60	-1.07	1.98	0.16
B005E85S65	-2.63	0.55	-0.03
B005E85S70	-2.70	0.75	-0.02
B005E85S75	0.69	0.19	0.04
B005E85S80	-0.16	0.13	0.01
B005E86S30	0.08	1.25	0.13
B005E86S34	-1.28	1.31	0.09
B005E87S22	-2.23	0.44	-0.03
B005E87S29	-0.13	0.65	0.06
B005E88S39	-2.36	1.20	0.04
B005E89S25	-0.82	0.80	0.05
B005E89S30	0.07	1.17	0.12
B005E89S34	-0.16	0.81	0.08
B005E90S20	-0.45	0.57	0.04
B005E90S25	-1.99	0.86	0.02
B005E90S30	-1.60	0.65	0.01
B005E90S35	-1.62	0.83	0.03
B005E90S40	-2.18	0.77	0.00
B005E90S43	2.11	0.27	0.10
B005E90S45	-2.28	0.67	-0.01
B005E90S50	-1.20	0.68	0.03
B005E90S55	-0.87	0.62	0.03
B005E90S60	-0.30	0.41	0.03
B005E90S65	-1.43	0.69	0.02
B005E90S70	2.14	0.39	0.11
B005E90S75	-1.33	0.66	0.02
B005E90S80	-0.09	1.21	0.12
B005E91S30	-0.75	0.48	0.02
B005E91S39	-2.52	0.26	-0.06
B005E92S43	-0.17	0.86	0.08

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B005E93S35	-2.06	0.48	-0.02
B005E93S43	0.96	0.62	0.09
B005E94S39	0.10	0.88	0.09
B005E94S42	-2.73	1.14	0.02
B005E95S25	-1.95	0.39	-0.03
B005E95S30	-2.57	0.74	-0.01
B005E95S35	-2.59	0.45	-0.04
B005E95S40	0.59	0.38	0.06
B005E95S45	-2.06	0.35	-0.03
B005E95S50	-1.49	-0.50	-0.10
B005E95S55	-0.33	0.57	0.05
B005E95S60	0.84	-0.19	0.01
B005E95S65	2.35	-0.60	0.02
B005E95S70	-1.47	1.44	0.10
B005E95S75	-0.06	0.26	0.02
B006E00S10	2.09	0.58	0.13
B006E00S20	-0.82	0.53	0.03
B006E00S35	-1.93	1.82	0.12
B006E00S40	-0.49	0.40	0.02
B006E00S45	-0.57	0.32	0.01
B006E00S50	-0.47	-0.04	-0.02
B006E00S55	-0.17	0.96	0.09
B006E00S60	-1.15	0.33	-0.01
B006E00S65	-0.23	0.44	0.04
B006E00S70	1.51	1.00	0.15
B006E00S80	-6.47	0.74	-0.14
B006E05S55	-2.37	0.66	-0.01
B006E05S60	-1.23	0.19	-0.02
B006E05S65	1.54	0.62	0.11
B006E09S66	1.80	5.01	0.56
B006E10S10	2.00	0.51	0.12
B006E10S20	-1.54	0.35	-0.02
B006E10S30	0.76	0.08	0.03
B006E10S40	2.43	0.17	0.10
B006E10S50	-0.94	0.42	0.01
B006E10S60	1.77	0.79	0.14
B006E10S65	0.56	0.28	0.05
B006E10S70	-0.67	1.26	0.10
B006E10S80	-0.05	-0.23	-0.02
B006E10S90	-1.88	2.62	0.20
B006E12S62	-2.32	9.51	0.87
B006E15S65	1.53	0.94	0.15
B006E15S70	0.25	0.43	0.05
B006E20S40	-1.54	0.39	-0.01
B006E20S50	0.82	0.84	0.11

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B006E20S60	-0.77	0.93	0.07
B006E20S65	-0.81	1.12	0.08
B006E20S70	0.46	0.78	0.09
B006E20S80	1.20	0.71	0.11
B006E30S70	-3.40	0.04	-0.11
B006E30S90	-1.45	0.53	0.00
B006E40S90	0.82	-0.03	0.02
B006E60S00	1.52	-0.31	0.02
B006E70S00	1.43	0.39	0.09
B006E70S10	-0.98	-0.40	-0.07
B006E70S20	-0.71	0.95	0.07
B006E70S30	-1.91	0.27	-0.04
B006E70S40	-1.82	0.25	-0.04
B006E70S50	-1.04	1.03	0.07
B006E70S60	-2.15	-0.63	-0.14
B006E70S70	1.53	0.34	0.09
B006E80S00	-2.02	0.72	0.00
B006E80S10	-0.53	0.39	0.02
B006E80S20	-2.54	0.34	-0.05
B006E80S30	1.10	0.22	0.06
B006E80S40	-1.10	0.90	0.05
B006E80S50	1.36	-0.10	0.04
B006E80S60	-1.82	1.39	0.08
B017E07S83	-0.90	1.83	0.15
B017E14S80	-2.45	10.55	0.97
B017E35S90	1.27	0.61	0.10
B017E35S95	5.35	2.50	0.43
B017E40S90	-2.54	2.46	0.16
B017E40S95	3.25	3.27	0.44
B017E42S99	3.79	1.10	0.24
B017E45S90	2.15	0.80	0.15
B017E45S95	-1.83	1.51	0.09
B017E50S90	-2.06	1.07	0.04
B017E50S95	-1.67	5.41	0.49
B017E52S93	0.22	3.46	0.35
B017E52S99	0.56	0.73	0.09
B017E55S90	-0.79	1.17	0.09
B017E55S92	-0.90	1.13	0.08
B017E55S95	1.92	8.55	0.92
B017E57S94	0.31	1.14	0.12
B017E60S90	-2.77	2.41	0.15
B017E60S92	-2.64	1.53	0.07
B017E60S95	1.76	2.94	0.35
B017E65S90	-1.98	1.93	0.13
B017E65S95	1.35	2.17	0.26

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B017E70S95	-2.14	1.88	0.12
B017E75S95	2.00	1.07	0.17
B017E80S95	-0.58	1.32	0.11
B017E90S80	-2.69	0.51	-0.04
B017E95S85	-2.01	0.51	-0.02
B017E95S90	-0.47	0.35	0.02
B018E00S85	-0.26	-0.04	-0.01
B018E00S90	1.36	1.05	0.15
B018E00S95	0.65	0.43	0.07
B018E10S00	1.05	1.62	0.20
B018E10S10	-1.74	2.08	0.15
B018E10S20	-0.78	1.96	0.17
B018E10S30	-2.55	0.32	-0.05
B018E10S80	0.42	0.27	0.04
B018E10S90	2.53	1.33	0.22
B018E20S50	0.87	0.96	0.13
B018E20S60	1.22	0.29	0.07
B018E50S00	-0.17	-0.15	-0.02
B029E30S05	3.01	0.70	0.17
B029E30S10	-0.27	0.92	0.08
B029E30S15	-2.69	1.20	0.03
B029E30S20	0.19	0.29	0.04
B029E30S25	-2.68	1.32	0.04
B029E30S30	1.19	1.06	0.15
B029E32S02	1.20	1.27	0.17
B029E35S00	4.16	1.69	0.31
B029E35S05	3.20	0.98	0.21
B029E35S10	-2.66	1.18	0.03
B029E35S15	-1.62	1.69	0.12
B029E35S20	-2.59	1.84	0.10
B029E35S25	-1.37	0.66	0.02
B029E35S30	-2.03	1.28	0.06
B029E35S35	-0.09	0.78	0.08
B029E35S40	-2.67	1.21	0.03
B029E37S02	-2.05	0.65	0.00
B029E40S00	-2.66	3.34	0.25
B029E40S05	3.59	0.36	0.16
B029E40S10	-0.82	1.40	0.11
B029E40S15	-2.61	0.38	-0.05
B029E40S20	-2.35	1.90	0.11
B029E40S25	1.09	1.84	0.22
B029E40S30	0.44	2.08	0.22
B029E40S35	-2.12	1.40	0.07
B029E40S40	0.67	0.93	0.12
B029E40S45	-2.27	0.70	-0.01

Table 1

Final Decommissioning Excavation Bottom Samples*

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B029E40S50	-0.02	1.71	0.17
B029E45S00	0.21	2.16	0.22
B029E45S05	0.55	0.64	0.08
B029E45S10	-1.89	0.68	0.00
B029E45S15	1.16	1.20	0.16
B029E45S20	3.76	0.45	0.17
B029E45S25	-0.29	1.13	0.10
B029E45S30	-2.60	1.53	0.07
B029E45S35	-2.18	1.23	0.05
B029E45S40	-2.66	3.43	0.25
B029E45S45	0.41	0.83	0.10
B029E45S50	2.25	0.88	0.16
B029E50S00	0.99	1.06	0.14
B029E50S05	-0.25	0.51	0.04
B029E50S09	2.32	1.18	0.20
B029E50S15	0.47	1.11	0.13
B029E50S20	1.24	0.36	0.08
B029E50S25	-1.69	0.70	0.01
B029E50S30	-1.76	0.63	0.00
B029E50S35	-1.62	1.27	0.07
B029E50S40	-2.28	1.11	0.04
B029E50S45	-0.12	0.26	0.02
B029E50S50	0.30	0.98	0.11
B029E55S00	2.89	1.63	0.26
B029E55S05	-0.77	0.65	0.04
B029E55S10	-2.31	0.94	0.02
B029E55S15	-1.19	0.90	0.05
B029E55S20	1.90	0.58	0.12
B029E55S25	2.27	0.79	0.15
B029E55S30	-0.39	0.85	0.07
B029E55S35	-0.92	1.11	0.08
B029E55S40	1.07	4.33	0.47
B029E55S45	-0.26	0.99	0.09
B029E55S50	-0.07	0.19	0.02
B029E55S75	-3.25	0.37	-0.07
B029E55S80	-1.91	0.91	0.03
B029E55S85	1.96	2.31	0.30
B029E60S00	-0.18	1.40	0.13
B029E60S05	3.61	0.81	0.20
B029E60S10	0.27	0.85	0.09
B029E60S15	0.05	0.47	0.05
B029E60S20	-0.93	1.00	0.07
B029E60S40	1.65	0.58	0.11
B029E60S45	1.13	3.01	0.34
B029E60S50	2.76	0.69	0.16

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B029E60S55	-0.18	1.23	0.12
B029E60S75	-2.64	1.04	0.02
B029E60S80	-0.53	1.05	0.09
B029E60S85	-2.65	0.69	-0.02
B029E65S00	1.16	0.87	0.13
B029E65S05	-2.75	0.95	0.00
B029E65S10	-1.32	0.88	0.04
B029E65S15	-0.27	0.03	-0.01
B029E65S20	0.25	0.48	0.06
B029E65S40	2.30	0.51	0.13
B029E65S45	-1.40	0.72	0.03
B029E65S50	-2.61	1.29	0.04
B029E65S55	1.25	0.54	0.10
B029E65S60	1.60	1.29	0.18
B029E65S65	0.87	0.31	0.06
B029E65S70	2.98	0.93	0.19
B029E65S75	-0.05	0.64	0.06
B029E65S80	-2.45	1.75	0.09
B029E65S85	-2.08	1.07	0.04
B029E65S90	2.82	0.78	0.17
B029E65S95	-1.09	0.59	0.02
B029E70S00	0.97	0.73	0.11
B029E70S05	-0.61	0.08	-0.01
B029E70S10	-0.04	-0.02	0.00
B029E70S15	1.34	0.81	0.13
B029E70S20	-0.23	0.76	0.07
B029E70S25	0.90	0.62	0.09
B029E70S30	-2.64	0.78	-0.01
B029E70S35	-2.58	0.29	-0.06
B029E70S40	-0.62	0.63	0.04
B029E70S45	-2.59	0.85	0.00
B029E70S50	-0.61	1.56	0.14
B029E70S55	-1.11	0.34	0.00
B029E70S60	-2.35	0.52	-0.03
B029E70S65	-0.31	1.12	0.10
B029E70S70	1.66	0.93	0.15
B029E70S75	-2.34	-0.80	-0.16
B029E70S80	-0.43	-0.20	-0.03
B029E70S85	-0.32	1.71	0.16
B029E70S90	-2.77	0.59	-0.03
B029E70S95	-2.70	0.71	-0.02
B029E75S00	-2.24	1.22	0.05
B029E75S05	-2.10	1.10	0.04
B029E75S10	-1.79	0.50	-0.01
B029E75S15	1.05	0.29	0.06

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B029E75S20	-1.15	0.73	0.03
B029E75S25	0.35	0.02	0.01
B029E75S30	-1.00	1.64	0.13
B029E75S35	-0.29	0.87	0.08
B029E75S45	-2.63	0.55	-0.03
B029E75S50	-2.66	0.50	-0.04
B029E75S75	-1.75	-0.27	-0.09
B029E75S90	-1.57	0.04	-0.05
B029E75S95	-0.99	0.51	0.02
B029E80S00	0.87	0.78	0.11
B029E80S10	0.27	1.81	0.19
B029E80S15	-1.05	1.24	0.09
B029E80S20	-1.01	2.12	0.18
B029E80S25	0.76	0.89	0.11
B029E80S45	-2.57	2.99	0.21
B029E80S75	1.35	-0.19	0.03
B029E80S80	-2.04	0.39	-0.03
B029E85S10	0.65	0.34	0.06
B029E85S15	2.07	1.09	0.18
B029E85S75	-0.20	0.43	0.04
B029E85S80	-1.48	0.24	-0.02
B029E90S25	-0.90	1.64	0.13
B029E90S75	-2.21	0.14	-0.06
B029E90S80	-0.56	-0.23	-0.04
B029E95S25	-0.43	-0.27	-0.04
B029E95S75	0.36	-0.22	-0.01
B029E95S80	0.38	-0.46	-0.03
B030E00S00	0.18	0.74	0.08
B030E00S25	0.47	1.89	0.21
B030E00S30	2.69	0.85	0.17
B030E00S75	1.18	0.09	0.05
B030E00S80	-1.20	0.95	0.06
B030E01S28	0.63	1.19	0.14
B030E02S26	-2.72	0.77	-0.01
B030E05S00	0.82	1.19	0.15
B030E05S25	-1.47	1.03	0.05
B030E05S28	-2.38	6.70	0.59
B030E05S30	-2.63	0.81	-0.01
B030E05S75	-0.86	0.39	0.01
B030E05S80	-1.38	0.12	-0.03
B030E07S26	-0.06	1.42	0.14
B030E10S00	-1.31	0.42	0.00
B030E10S05	-0.19	0.34	0.03
B030E10S15	0.51	-0.25	-0.01
B030E10S25	-1.63	0.76	0.02

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B030E10S30	-0.76	0.06	-0.02
B030E10S75	-1.04	0.70	0.04
B030E10S80	-2.03	0.58	-0.01
B030E15S00	2.62	1.04	0.19
B030E15S05	-0.44	1.14	0.10
B030E15S10	-2.03	2.91	0.22
B030E15S15	-1.84	0.74	0.01
B030E15S20	3.64	1.02	0.22
B030E15S25	1.74	0.30	0.09
B030E15S30	0.01	0.54	0.05
B030E15S70	-1.86	-0.49	-0.11
B030E15S75	-3.83	0.27	-0.10
B030E15S80	0.24	-0.14	-0.01
B030E20S00	-1.19	-0.62	-0.10
B030E20S05	-2.10	0.08	-0.06
B030E20S10	-0.83	4.51	0.42
B030E20S15	2.38	4.21	0.50
B030E20S20	0.32	4.36	0.45
B030E20S25	1.89	1.76	0.24
B030E20S30	-0.38	0.31	0.02
B030E20S35	-1.47	-0.21	-0.07
B030E20S75	-2.23	0.28	-0.05
B030E20S80	-1.00	0.39	0.01
B030E25S00	-2.41	0.22	-0.06
B030E25S10	-0.85	-0.54	-0.08
B030E25S15	-0.90	0.05	-0.03
B030E25S20	3.66	4.61	0.58
B030E25S25	0.07	1.36	0.14
B030E25S30	-0.65	0.96	0.07
B030E25S35	0.74	-0.26	0.00
B030E25S40	-0.53	0.63	0.05
B030E25S75	-2.20	0.04	-0.07
B030E25S80	-1.81	-0.14	-0.07
B030E28S22	0.73	4.29	0.45
B030E30S15	-1.75	0.34	-0.02
B030E30S20	1.35	1.50	0.19
B030E30S25	-0.75	0.76	0.05
B030E30S30	0.12	-0.50	-0.05
B030E30S35	2.39	-0.01	0.08
B030E30S75	-0.15	-0.22	-0.03
B030E30S80	2.68	0.33	0.12
B030E32S23	2.14	1.24	0.19
B030E35S10	0.91	0.30	0.06
B030E35S15	0.29	2.21	0.23
B030E35S20	-0.07	1.76	0.17

Table 1

Final Decommissioning Excavation Bottom Samples*

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B030E35S25	0.75	0.12	0.04
B030E35S75	1.32	0.45	0.09
B030E35S80	-1.48	-0.02	-0.05
B030E37S23	-0.12	1.65	0.16
B030E40S10	4.14	-0.04	0.13
B030E40S15	0.24	4.11	0.42
B030E40S20	-0.72	1.20	0.10
B030E40S25	-3.81	0.35	-0.09
B030E40S75	-0.09	-0.48	-0.05
B030E40S80	1.06	-0.63	-0.03
B030E44S18	-2.04	1.09	0.04
B030E45S10	0.62	1.19	0.14
B030E45S15	-1.90	1.36	0.07
B030E45S20	2.02	0.89	0.16
B030E45S75	-0.15	-0.07	-0.01
B030E45S80	-1.97	-0.12	-0.08
B030E50S10	0.66	0.83	0.10
B030E50S15	0.81	1.00	0.13
B030E50S20	0.24	-0.52	-0.04
B030E50S75	-1.68	0.15	-0.04
B030E50S80	0.10	-0.25	-0.02
B041E65S00	1.12	1.31	0.17
B041E70S00	-2.40	1.92	0.11
B041E75S00	-1.97	0.11	-0.06
B053E40S50	0.28	-0.35	-0.03
B053E43S47	0.01	1.56	0.16
B053E45S15	-1.80	0.69	0.01
B053E45S20	1.06	-0.58	-0.02
B053E45S45	0.21	0.55	0.06
B053E45S50	0.29	0.73	0.08
B053E45S55	-2.02	-0.02	-0.07
B053E47S48	0.20	1.51	0.16
B053E49S52	1.63	3.71	0.42
B053E50S15	-1.28	1.17	0.07
B053E50S25	-1.19	0.54	0.01
B053E50S40	1.30	0.72	0.12
B053E50S45	1.33	4.92	0.54
B053E50S50	4.50	1.12	0.26
B053E50S55	-2.29	0.70	-0.01
B053E51S57	-1.13	1.41	0.10
B053E51S59	0.20	1.40	0.15
B053E52S23	-1.54	0.50	0.00
B053E52S52	-2.56	0.78	-0.01
B053E52S55	0.96	1.21	0.15
B053E52S59	-2.55	3.56	0.27

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B053E53S57	-0.25	1.09	0.10
B053E53S60	1.34	0.41	0.09
B053E55S20	1.13	2.67	0.30
B053E55S20	1.13	2.67	0.30
B053E55S20	0.51	0.04	0.02
B053E55S20A	3.42	3.31	0.44
B053E55S25	-2.02	2.88	0.22
B053E55S25	0.21	0.36	0.04
B053E55S25	-2.02	2.88	0.22
B053E55S25	-2.37	0.30	-0.05
B053E55S25A	0.06	11.04	1.11
B053E55S40	1.83	0.65	0.13
B053E55S45	-2.74	1.49	0.06
B053E55S50	0.66	1.22	0.14
B053E55S52	-2.66	0.92	0.00
B053E55S55	-2.72	1.64	0.07
B053E55S59	-2.30	0.47	-0.03
B053E55S60	-1.40	0.75	0.03
B053E56S56	-0.66	0.15	-0.01
B053E58S27	2.24	1.01	0.18
B053E58S58	1.66	0.41	0.10
B053E60S20	-1.04	1.83	0.15
B053E60S20	-1.04	1.83	0.15
B053E60S20	3.77	1.52	0.28
B053E60S25	1.78	0.89	0.15
B053E60S25	-1.32	0.05	-0.04
B053E60S25	-1.32	0.05	-0.04
B053E60S45	0.42	1.13	0.13
B053E60S50	2.29	0.67	0.14
B053E60S55	-0.91	0.52	0.02
B053E60S60	0.35	0.64	0.08
B053E62S22	0.27	0.17	0.03
B053E65S15	-0.81	0.92	0.06
B053E65S20	-2.57	2.14	0.13
B053E65S20	-2.57	2.14	0.13
B053E65S20	-0.22	1.39	0.13
B053E65S25	0.75	1.40	0.17
B053E65S25	-1.37	0.60	0.01
B053E65S25	0.75	1.40	0.17
B053E65S65	-1.43	0.03	-0.04
B053E70S15	-0.72	0.31	0.01
B053E70S20	-2.61	4.18	0.33
B053E70S20	1.19	1.18	0.16
B053E70S20	2.60	1.12	0.20
B053E70S20	-2.61	4.18	0.33

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC
B053E70S20	0.74	3.81	0.41
B053E70S20A	-0.31	1.46	0.14
B053E70S20C	0.22	0.83	0.09
B053E70S20E	-2.65	1.25	0.04
B053E70S20F	0.10	0.61	0.06
B053E70S25	-2.34	1.50	0.07
B053E75S15	-1.84	1.67	0.11
B053E75S20	-1.78	2.21	0.16
B053E75S20	-1.78	2.21	0.16
B053E75S20	-0.70	0.80	0.06
B053E75S25	-2.61	1.18	0.03
B053SC001	-0.57	12.47	1.23
B053SC008	-1.58	13.23	1.27

* Includes samples taken from the bottom of decommissioning excavations and samples taken on the surfaces of the sector now covered with backfill material.

Table 2
FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
SU-201				
B053E10S00	-1.45	0.16	-0.03	9
B053E10S05	1.57	0.71	0.12	9
B053E10S10	-3.11	0.02	-0.10	8
B053E10S15	0.47	1.11	0.13	8
B053E10S20	-3.32	0.02	-0.11	9
B053E10S25	-1.37	0.45	0.00	9
B053E10S30	-1.94	0.98	0.03	9
B053E10S35	-1.78	0.68	0.01	8
B053E15S00	0.79	0.46	0.07	9
B053E15S05	5.58	0.68	0.25	9
B053E15S10	3.30	0.99	0.21	9
B053E15S15	0.48	0.48	0.06	9
B053E15S20	-0.74	1.80	0.16	9
B053E15S25	1.87	0.37	0.10	9
B053E15S30	-0.91	-0.25	-0.06	9
B053E15S35	2.12	0.42	0.11	9
B053E20S00	-1.48	0.88	0.04	9
B053E20S05	-2.60	0.40	-0.05	9
B053E20S10	1.42	0.74	0.12	9
B053E20S15	3.30	0.01	0.11	9
B053E20S20	-0.06	0.50	0.05	9
B053E20S25	0.72	0.65	0.09	9
B053E20S30	1.13	0.00	0.04	9
B053E20S35	-0.64	0.10	-0.01	9
B053E20S40	-3.26	0.04	-0.11	9
B053E25S05	-1.15	0.51	0.01	9
B053E25S10	2.77	0.01	0.09	9
B053E25S15	-2.01	0.60	-0.01	9
B053E25S20	1.34	-0.13	0.03	9
B053E25S25	-0.96	0.06	-0.03	9
B053E25S30	0.41	1.13	0.13	8
B053E25S35	-0.42	1.23	0.11	9
B053E25S40	1.88	0.15	0.08	9
B053E30S15	-2.63	1.73	0.09	9
B053E30S20	-0.80	0.88	0.06	9
B053E30S25	1.36	0.14	0.06	9
B053E30S30	1.94	1.37	0.20	9
B053E30S35	-1.23	1.30	0.09	9
B053E30S40	-1.81	0.88	0.03	9
B053E30S45	0.36	0.75	0.09	8
B053E35S20	2.23	0.29	0.10	10
B053E35S25	-0.39	0.98	0.09	10
B053E35S30	0.55	-0.07	0.01	9
B053E35S35	-3.02	0.43	-0.06	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B053E35S40	0.76	0.07	0.03	9
B053E35S45	-0.22	0.42	0.04	9
B053E40S25	6.26	0.24	0.23	9
B053E40S30	-1.22	0.19	-0.02	9
B053E40S35	-1.88	0.12	-0.05	9
B053E40S40	-2.38	0.08	-0.07	9
B053E40S45	-1.24	-0.25	-0.07	9
B053E40S50	-0.91	0.34	0.00	8
B053E45S25	-2.73	0.99	0.01	10
B053E45S30	1.83	1.14	0.18	10
B053E45S35	3.29	5.55	0.66	11
B053E45S40	4.19	5.47	0.69	10
B053E45S45	0.84	0.53	0.08	9
B053E45S50	1.72	0.15	0.07	8
B053E45S55	3.06	1.11	0.21	8
B053E50S30	-1.74	0.90	0.03	10
B053E50S35	-3.87	-0.11	-0.14	9
B053E50S40	0.19	1.10	0.12	10
B053E50S45	-2.65	2.16	0.13	9
B053E50S50	1.51	-0.47	0.00	9
B053E50S55	0.70	0.25	0.05	8
B053E55S30	-0.36	0.97	0.08	10
B053E55S35	0.40	0.04	0.02	9
B053E55S40	-2.44	0.56	-0.03	8
B053E55S45	-2.60	0.92	0.01	10
B053E55S50	0.61	0.27	0.05	9
B053E55S55	2.81	0.11	0.10	8
B053E55S60	2.65	0.15	0.10	8
B053E60S30	-2.72	1.70	0.08	10
B053E60S35	0.38	0.36	0.05	9
B053E60S40	-2.61	0.07	-0.08	9
B053E60S45	0.95	1.69	0.20	10
B053E60S50	-0.96	0.28	0.00	9
B053E60S55	-2.29	0.67	-0.01	9
B053E60S60	1.83	0.53	0.11	9
B053E60S65	2.76	0.99	0.19	9
B053E65S30	-2.59	1.31	0.04	9
B053E65S35	-3.82	-0.22	-0.15	9
B053E65S40	0.72	0.18	0.04	9
B053E65S45	-1.07	0.61	0.03	9
B053E65S50	2.54	0.20	0.10	9
B053E65S55	2.37	0.22	0.10	9
B053E65S60	-1.33	0.28	-0.02	9
B053E65S65	2.43	0.43	0.12	9
B053E70S30	-2.24	0.59	-0.02	10

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B053E70S35	-1.13	-0.36	-0.07	9
B053E70S40	1.06	-0.62	-0.03	8
B053E70S45	1.16	1.01	0.14	9
B053E70S50	0.38	0.77	0.09	9
B053E70S55	-0.34	0.74	0.06	9
B053E70S60	-1.00	0.94	0.06	8
B053E70S65	0.78	0.28	0.05	9
B053E75S30	-2.75	1.36	0.04	10
B053E75S35	-0.56	-0.13	-0.03	8
B053E75S40	-1.22	0.73	0.03	8
B053E75S45	-1.18	-0.46	-0.08	8
B053E75S50	3.88	0.99	0.23	8
B053E75S55	4.16	0.56	0.19	9
B053E75S60	-2.61	-0.04	-0.09	9
B053E75S65	-0.42	-0.11	-0.03	9
B053E80S30	-2.18	-0.02	-0.07	10
B053E80S35	-0.73	-0.02	-0.03	10
B053E80S40	-1.62	-0.19	-0.07	10
B053E80S45	-3.11	0.58	-0.05	11
B053E80S50	-1.67	0.26	-0.03	11
B053E80S55	-1.60	0.00	-0.05	11
B053E80S60	0.80	-0.20	0.01	10
B053E80S65	-0.44	0.35	0.02	10
B053E85S25	1.35	0.73	0.12	9
B053E85S30	-0.94	0.90	0.06	11
B053E85S35	-2.55	-0.06	-0.09	10
B053E85S40	-1.71	-0.10	-0.07	11
B053E85S45	-1.35	-0.66	-0.11	11
B053E85S50	-1.86	0.33	-0.03	10
B053E85S55	-1.84	0.66	0.01	Tree
B053E85S60	-3.19	-0.19	-0.12	9
B053E85S65	-0.16	0.38	0.03	10
B053E90S20	2.22	0.38	0.11	9
B053E90S25	-1.55	0.08	-0.04	10
B053E90S30	-1.70	0.21	-0.04	10
B053E90S35	-1.39	0.06	-0.04	10
B053E90S40	-4.02	-0.28	-0.16	10
B053E90S45	-3.27	0.09	-0.10	10
B053E90S50	-1.90	-0.18	-0.08	10
B053E90S55	-2.20	-0.16	-0.09	10
B053E90S60	-3.17	0.49	-0.06	10
B053E90S65	-0.95	0.11	-0.02	10
B053E95S15	1.69	0.20	0.08	10
B053E95S20	-3.27	-0.10	-0.12	11
B053E95S25	-0.96	0.26	-0.01	11

Table 2
FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B053E95S30	-1.92	0.50	-0.01	11
B053E95S35	-0.93	0.21	-0.01	10
B053E95S40	-0.21	0.64	0.06	10
B053E95S45	-0.44	0.23	0.01	10
B053E95S50	1.37	-0.18	0.03	11
B053E95S55	-2.03	0.44	-0.02	10
B053E95S60	-1.79	0.02	-0.06	11
B053E95S65	-0.60	0.29	0.01	9
B054E00S00	2.71	0.68	0.16	9
B054E00S05	-1.04	-0.36	-0.07	10
B054E00S10	-0.14	-0.16	-0.02	10
B054E00S15	-2.74	0.09	-0.08	10
B054E00S20	-5.29	0.03	-0.17	8
B054E00S25	-2.22	-0.02	-0.08	10
B054E00S30	0.30	-0.09	0.00	10
B054E00S35	-0.11	-0.11	-0.01	10
B054E00S40	-3.33	0.02	-0.11	10
B054E00S45	1.52	0.18	0.07	10
B054E00S50	0.56	0.36	0.05	9
B054E00S55	-1.28	0.26	-0.02	10
B054E00S60	0.56	0.33	0.05	10
B054E00S65	-3.83	0.51	-0.08	10
B054E05S00	3.36	0.65	0.18	10
B054E05S05	-1.66	0.02	-0.05	10
B054E05S10	-1.75	-0.54	-0.11	10
B054E05S15	-1.42	-0.37	-0.08	10
B054E05S20	-1.00	-0.24	-0.06	10
B054E05S25	-0.88	-0.08	-0.04	10
B054E05S30	0.26	0.73	0.08	8
B054E05S35	0.31	0.16	0.03	10
B054E05S40	-1.71	0.01	-0.06	10
B054E05S45	0.53	0.69	0.09	10
B054E05S50	2.31	0.07	0.08	10
B054E05S55	1.40	0.54	0.10	10
B054E05S60	1.46	0.03	0.05	10
B054E05S65	-3.46	0.13	-0.10	10
B054E10S00	0.48	-0.77	-0.06	10
B054E10S05	-1.68	-0.16	-0.07	10
B054E10S10	-1.60	-0.15	-0.07	10
B054E10S15	-2.58	-0.24	-0.11	10
B054E10S20	0.64	-0.59	-0.04	10
B054E10S25	1.15	-0.78	-0.04	11
B054E10S30	0.66	0.04	0.03	10
B054E10S35	1.96	0.57	0.12	10
B054E10S40	-1.45	0.03	-0.04	10

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B054E10S45	-1.70	0.40	-0.02	10
B054E10S50	0.24	-0.44	-0.04	10
B054E10S55	-2.22	-0.07	-0.08	10
B054E10S60	1.20	-0.17	0.02	10
B054E10S65	-2.34	-0.27	-0.11	10
B054E15S00	-0.84	-0.02	-0.03	11
B054E15S05	2.89	-0.30	0.07	10
B054E15S10	0.66	-0.40	-0.02	11
B054E15S15	0.78	-0.12	0.01	11
B054E15S20	-4.06	-0.29	-0.16	10
B054E15S25	-0.38	0.59	0.05	11
B054E15S30	-5.41	0.34	-0.15	10
B054E15S35	0.37	-0.21	-0.01	10
B054E15S40	0.00	-0.03	0.00	10
B054E15S45	-1.10	0.83	0.05	11
B054E15S50	2.78	1.19	0.21	10
B054E15S55	-0.99	0.41	0.01	10
B054E15S60	0.81	0.51	0.08	10
B054E15S65	1.37	0.12	0.06	10
B054E20S00	-1.13	0.21	-0.02	11
B054E20S05	-1.50	-0.36	-0.09	11
B054E20S10	-2.62	0.61	-0.03	10
B054E20S15	2.12	0.09	0.08	8
B054E20S20	-0.80	0.29	0.00	8
B054E20S25	-2.43	0.36	-0.05	11
B054E20S30	0.96	0.17	0.05	11
B054E20S35	-0.12	0.26	0.02	8
B054E20S40	-2.86	0.10	-0.09	11
B054E20S45	-0.63	0.08	-0.01	11
B054E20S50	-3.37	0.40	-0.07	11
B054E20S55	-0.15	1.14	0.11	11
B054E20S60	-2.55	1.21	0.04	10
B054E20S65	-1.68	0.69	0.01	8
B054E25S00	1.20	0.38	0.08	10
B054E25S05	-3.80	-0.03	-0.13	9
B054E25S10	-1.33	-0.36	-0.08	10
B054E25S15	-3.00	0.34	-0.07	10
B054E25S20	-0.12	-0.58	-0.06	10
B054E25S25	-2.33	0.47	-0.03	10
B054E25S30	-0.79	0.98	0.07	11
B054E25S35	-1.16	0.32	-0.01	11
B054E25S40	-1.31	0.51	0.01	11
B054E25S45	-0.85	0.22	-0.01	11
B054E25S50	3.03	0.10	0.11	10
B054E25S55	-2.20	0.54	-0.02	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B054E25S60	-1.42	0.29	-0.02	9
B054E25S65	0.15	0.21	0.03	9
B054E30S00	-0.82	0.08	-0.02	10
B054E30S05	-2.20	0.20	-0.05	10
B054E30S10	-3.14	-0.38	-0.14	10
B054E30S15	-5.59	0.07	-0.18	10
B054E30S20	0.76	0.24	0.05	11
B054E30S25	-2.35	-0.21	-0.10	10
B054E30S30	-3.54	0.51	-0.07	11
B054E30S35	0.62	0.46	0.07	10
B054E30S40	-2.54	0.12	-0.07	11
B054E30S45	-0.29	0.49	0.04	11
B054E30S50	1.84	-0.06	0.06	10
B054E30S55	-4.66	-0.49	-0.20	10
B054E30S60	-1.43	0.33	-0.01	10
B054E30S65	-0.57	0.17	0.00	10
B054E35S00	-1.48	-0.36	-0.09	9
B054E35S05	-0.24	0.42	0.03	9
B054E35S10	3.59	0.39	0.16	9
B054E35S15	-0.62	-0.01	-0.02	9
B054E35S20	2.19	-0.05	0.07	9
B054E35S25	0.56	0.27	0.05	9
B054E35S30	-3.05	0.39	-0.06	9
B054E35S35	-1.42	-0.22	-0.07	9
B054E35S40	-0.70	0.55	0.03	9
B054E35S45	1.58	-0.14	0.04	9
B054E35S50	0.35	0.16	0.03	9
B054E35S55	-0.14	-0.09	-0.01	10
B054E35S60	0.40	0.53	0.07	10
B054E35S65	0.47	-0.61	-0.05	9
B054E40S00	-1.45	0.51	0.00	9
B054E40S05	-0.42	0.21	0.01	10
B054E40S10	0.67	0.14	0.04	10
B054E40S15	-1.16	0.24	-0.01	9
B054E40S20	-2.30	0.14	-0.06	10
B054E40S25	0.13	0.38	0.04	10
B054E40S30	1.99	0.69	0.13	10
B054E40S35	-3.13	0.29	-0.08	10
B054E40S40	0.06	0.42	0.04	10
B054E40S45	-2.94	-0.12	-0.11	10
B054E40S50	1.73	0.01	0.06	10
B054E40S55	-3.83	0.16	-0.11	11
B054E40S60	2.11	-0.14	0.06	9
B054E40S65	5.32	0.19	0.20	10
B054E45S00	1.99	0.10	0.08	10

Table 2

FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B054E45S05	1.43	0.49	0.10	10
B054E45S10	-3.85	0.24	-0.10	10
B054E45S15	-2.03	0.04	-0.06	9
B054E45S20	-1.60	0.52	0.00	10
B054E45S25	0.81	0.04	0.03	10
B054E45S30	-2.08	0.27	-0.04	9
B054E45S35	-1.98	-0.38	-0.10	8
B054E45S40	0.46	0.16	0.03	10
B054E45S45	0.13	-0.12	-0.01	10
B054E45S50	-2.18	0.07	-0.07	10
B054E45S55	-1.69	1.03	0.05	10
B054E45S60	0.92	0.10	0.04	9
B054E45S65	1.07	0.85	0.12	10
B054E50S00	-2.08	0.13	-0.06	9
B054E50S05	0.44	-0.23	-0.01	9
B054E50S10	-1.28	-0.01	-0.04	9
B054E50S15	-2.05	0.21	-0.05	10
B054E50S20	-0.18	0.03	0.00	10
B054E50S25	-2.12	-0.29	-0.10	10
B054E50S30	-2.20	-0.33	-0.11	10
B054E50S35	0.13	-0.28	-0.02	10
B054E50S40	-0.04	0.34	0.03	10
B054E50S45	-1.54	0.26	-0.03	10
B054E50S50	-4.75	-0.21	-0.18	10
B054E50S55	-4.40	-0.10	-0.16	10
B054E50S60	0.01	-0.58	-0.06	10
B054E50S65	-1.09	0.59	0.02	9
B054E55S00	0.27	-0.28	-0.02	9
B054E55S05	0.28	0.11	0.02	9
B054E55S10	-1.47	-0.16	-0.07	9
B054E55S15	0.02	-0.30	-0.03	9
B054E55S20	-1.38	0.52	0.01	10
B054E55S25	-4.34	-0.23	-0.17	9
B054E55S30	0.09	-0.09	-0.01	9
B054E55S35	-3.91	0.04	-0.13	10
B054E55S40	-2.39	-0.54	-0.13	9
B054E55S45	-0.99	-0.37	-0.07	9
B054E55S50	-0.80	0.23	0.00	10
B054E55S55	-0.82	0.00	-0.03	9
B054E55S60	0.32	0.19	0.03	9
B054E55S65	-0.04	0.63	0.06	10
SU-202				
B029E60S65	0.66	1.04	0.13	10
B029E60S70	-2.04	0.08	-0.06	10
B029E60S75	-0.91	0.33	0.00	8

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B029E60S80	1.91	0.60	0.12	9
B029E60S85	-1.33	0.95	0.05	9
B029E60S90	-2.17	1.05	0.03	10
B029E60S95	-2.01	1.11	0.04	9
B029E65S60	-0.41	-0.09	-0.02	9
B029E65S65	-0.46	0.38	0.02	8
B029E65S70	0.55	0.42	0.06	9
B029E65S75	0.02	0.21	0.02	8
B029E65S80	-0.27	0.03	-0.01	8
B029E65S85	-1.92	0.12	-0.05	9
B029E65S90	-0.27	-0.01	-0.01	9
B029E65S95	0.24	1.08	0.12	9
B029E70S60	2.15	1.18	0.19	9
B029E70S65	2.47	0.22	0.10	8
B029E70S70	-2.68	0.80	-0.01	8
B029E70S75	3.11	0.20	0.12	8
B029E70S80	-1.10	0.28	-0.01	8
B029E70S85	1.18	0.39	0.08	8
B029E70S90	-1.63	0.50	0.00	8
B029E70S95	0.70	0.54	0.08	8
B029E75S70	2.00	1.08	0.18	9
B029E75S75	0.19	0.02	0.01	9
B029E75S80	1.45	0.63	0.11	9
B029E75S85	0.19	0.46	0.05	7
B029E75S90	0.31	0.13	0.02	8
B029E75S95	3.67	-0.05	0.12	8
B041E25S85	-2.07	0.73	0.00	9
B041E25S90	0.28	0.53	0.06	9
B041E25S95	-0.05	1.21	0.12	9
B041E30S75	-0.61	2.24	0.20	10
B041E30S80	0.66	1.35	0.16	11
B041E30S85	0.40	0.87	0.10	11
B041E30S90	1.69	1.75	0.23	11
B041E30S95	0.16	1.03	0.11	11
B041E35S65	1.51	0.48	0.10	8
B041E35S70	-0.96	1.42	0.11	9
B041E35S75	-1.42	0.82	0.03	10
B041E35S80	-1.33	1.05	0.06	10
B041E35S85	-1.22	0.09	-0.03	10
B041E35S90	-1.22	0.62	0.02	10
B041E35S95	-1.57	1.52	0.10	10
B041E40S60	-1.00	0.73	0.04	9
B041E40S65	-2.59	3.13	0.23	10
B041E40S70	1.24	1.10	0.15	10
B041E40S75	-1.76	0.91	0.03	10

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B041E40S80	-1.96	1.02	0.04	9
B041E40S85	-1.42	0.63	0.02	10
B041E40S90	-0.95	0.55	0.02	10
B041E40S95	-1.73	2.02	0.14	10
B041E45S55	-0.13	1.39	0.13	9
B041E45S60	-0.59	0.99	0.08	9
B041E45S65	-2.55	2.11	0.13	9
B041E45S70	-1.55	1.19	0.07	9
B041E45S75	-1.49	1.15	0.07	9
B041E45S80	1.17	1.05	0.14	9
B041E45S85	0.91	0.68	0.10	10
B041E45S90	-2.64	0.41	-0.05	10
B041E45S95	-0.02	1.43	0.14	11
B041E50S45	-0.77	0.75	0.05	9
B041E50S50	-2.37	0.62	-0.02	9
B041E50S55	-1.71	0.84	0.03	10
B041E50S60	-0.80	1.00	0.07	10
B041E50S65	-2.26	0.60	-0.02	9
B041E50S70	3.12	0.04	0.11	9
B041E50S75	-1.88	0.55	-0.01	9
B041E50S80	-2.57	2.11	0.13	10
B041E50S85	-2.30	1.09	0.03	10
B041E50S90	1.75	0.29	0.09	10
B041E50S95	1.29	0.68	0.11	9
B041E55S20	0.97	1.10	0.14	9
B041E55S25	-2.68	0.45	-0.04	10
B041E55S30	-1.43	0.92	0.04	9
B041E55S35	-0.09	0.97	0.09	9
B041E55S40	-2.58	0.99	0.01	9
B041E55S45	-0.97	1.14	0.08	9
B041E55S50	-2.17	1.28	0.06	9
B041E55S55	-0.77	1.42	0.12	9
B041E55S60	-1.73	1.39	0.08	9
B041E55S65	0.37	1.51	0.16	9
B041E55S70	0.13	0.51	0.06	9
B041E55S75	-1.13	1.16	0.08	10
B041E55S80	-2.77	1.30	0.04	10
B041E55S85	-0.47	2.11	0.20	10
B041E55S90	-1.71	3.34	0.28	11
B041E55S95	0.24	0.56	0.06	10
B041E60S00	0.00	1.42	0.14	9
B041E60S05	-1.55	1.31	0.08	9
B041E60S10	0.68	0.81	0.10	9
B041E60S15	1.27	0.77	0.12	9
B041E60S20	-1.70	0.78	0.02	9

Table 2

FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B041E60S25	-0.25	1.14	0.11	9
B041E60S30	1.25	0.21	0.06	9
B041E60S35	-0.13	1.26	0.12	9
B041E60S40	2.58	0.15	0.10	9
B041E60S45	2.45	0.79	0.16	9
B041E60S50	-1.07	0.00	-0.04	9
B041E60S55	0.76	0.04	0.03	9
B041E60S60	-0.60	1.23	0.10	10
B041E60S65	-1.91	1.25	0.06	9
B041E60S70	-0.35	0.27	0.01	9
B041E60S75	-2.52	6.93	0.61	9
B041E60S80	-2.60	2.11	0.12	10
B041E60S85	2.04	0.74	0.14	10
B041E60S90	-0.34	2.74	0.26	11
B041E60S95	1.08	0.53	0.09	10
B041E65S00	-1.29	2.36	0.19	10
B041E65S05	0.04	1.32	0.13	9
B041E65S10	0.19	1.70	0.18	10
B041E65S15	-2.20	0.71	0.00	9
B041E65S20	-0.47	0.73	0.06	9
B041E65S25	-0.42	1.23	0.11	9
B041E65S30	-1.21	0.04	-0.04	10
B041E65S35	4.67	-0.18	0.14	9
B041E65S40	1.62	-0.02	0.05	8
B041E65S45	-0.45	0.58	0.04	9
B041E65S50	-2.61	0.35	-0.05	9
B041E65S55	-2.11	0.21	-0.05	9
B041E65S60	1.60	0.46	0.10	8
B041E65S65	2.64	0.20	0.11	9
B041E65S70	1.14	1.94	0.23	9
B041E65S75	-1.23	1.94	0.15	9
B041E65S80	-0.47	1.42	0.13	10
B041E65S85	-2.69	0.26	-0.06	10
B041E65S90	2.48	1.31	0.21	10
B041E65S95	-0.24	0.94	0.09	9
B041E70S00	-2.70	1.30	0.04	9
B041E70S05	5.43	10.66	1.25	10
B041E70S10	-2.71	-0.13	-0.10	9
B041E70S15	-0.92	0.01	-0.03	7
B041E70S20	-1.58	0.83	0.03	9
B041E70S25	-1.23	0.02	-0.04	7
B041E70S30	-2.52	0.51	-0.03	10
B041E70S35	1.27	0.56	0.10	10
B041E70S40	-0.09	0.42	0.04	9
B041E70S60	-2.68	0.58	-0.03	10

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B041E70S65	-1.62	0.76	0.02	10
B041E70S70	-2.66	1.02	0.01	10
B041E70S75	-2.17	1.80	0.11	10
B041E70S80	-2.18	3.55	0.28	11
B041E70S85	-2.09	1.02	0.03	10
B041E70S90	0.03	0.96	0.10	11
B041E70S95	0.65	0.68	0.09	9
B041E75S00	3.11	0.40	0.14	8
B041E75S05	1.84	0.63	0.12	9
B041E75S10	-0.36	0.60	0.05	9
B041E75S60	-2.64	-0.12	-0.10	9
B041E75S65	-1.07	0.95	0.06	10
B041E75S70	-0.37	-0.25	-0.04	8
B041E75S75	-1.82	-0.50	-0.11	10
B041E75S80	-2.63	1.17	0.03	10
B041E75S85	-0.66	1.38	0.12	10
B041E75S90	-2.20	1.20	0.05	10
B041E75S95	-0.32	0.59	0.05	10
B041E80S65	-2.34	1.17	0.04	9
B041E80S70	-1.38	1.48	0.10	8
B041E80S75	-1.49	0.84	0.03	8
B041E80S80	0.75	0.55	0.08	10
B041E80S85	-0.38	1.06	0.09	9
B041E80S90	-2.73	0.52	-0.04	9
B041E80S95	-2.12	0.74	0.00	9
B041E85S65	-2.44	0.19	-0.06	8
B041E85S70	-1.93	1.20	0.06	8
B041E85S75	-1.43	-0.17	-0.06	8
B041E85S80	-1.37	0.38	-0.01	8
B041E85S85	-0.57	1.02	0.08	9
B041E85S90	2.45	1.07	0.19	8
B041E85S95	-2.64	0.24	-0.06	8
B041E90S70	1.89	0.43	0.11	8
B041E90S75	-2.52	0.59	-0.03	9
B041E90S80	-0.41	-0.26	-0.04	8
B041E90S85	-1.82	1.25	0.06	9
B041E90S90	-2.74	0.66	-0.03	8
B041E90S95	-0.34	1.18	0.11	8
B041E95S80	-0.80	0.50	0.02	8
B041E95S85	0.31	1.09	0.12	9
B041E95S90	-0.38	0.65	0.05	8
B041E95S95	0.58	0.94	0.11	8
B053E25S00	0.75	0.74	0.10	10
B053E30S00	-2.77	1.80	0.09	10
B053E30S05	0.86	0.84	0.11	10

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B053E30S10	-2.63	2.25	0.14	10
B053E35S00	-0.42	0.63	0.05	11
B053E35S05	-2.19	2.97	0.22	11
B053E35S10	-2.59	1.22	0.04	9
B053E35S15	4.45	1.06	0.25	10
B053E40S00	-1.06	0.91	0.06	10
B053E40S05	-2.13	1.21	0.05	11
B053E40S10	1.62	0.71	0.12	10
B053E40S15	-0.02	0.47	0.05	9
B053E40S20	1.15	2.05	0.24	9
B053E45S00	-1.39	0.41	-0.01	9
B053E45S05	-2.48	1.14	0.03	11
B053E45S10	-0.30	2.03	0.19	9
B053E45S15	0.21	0.10	0.02	9
B053E45S20	-1.39	1.16	0.07	9
B053E50S00	-0.21	0.84	0.08	10
B053E50S05	1.51	1.13	0.16	10
B053E50S10	-0.46	0.83	0.07	10
B053E50S15	1.01	-0.44	-0.01	9
B053E50S20	-1.74	0.19	-0.04	9
B053E50S25	1.54	0.12	0.06	9
B053E55S00	-2.33	0.98	0.02	10
B053E55S05	2.37	1.15	0.19	10
B053E55S10	0.83	0.66	0.09	9
B053E55S15	0.73	3.46	0.37	9
B053E55S20	0.51	0.04	0.02	9
B053E55S25	0.21	0.36	0.04	9
B053E60S00	2.74	0.56	0.15	9
B053E60S05	0.33	1.41	0.15	10
B053E60S10	-1.43	1.22	0.07	9
B053E60S15	-0.22	0.73	0.07	9
B053E60S20	3.77	1.52	0.28	9
B053E60S25	1.78	0.89	0.15	9
B053E65S00	-0.52	0.67	0.05	10
B053E65S05	-1.10	1.12	0.08	9
B053E65S10	-2.63	-0.46	-0.13	9
B053E65S15	-0.81	0.92	0.06	9
B053E65S20	-0.22	1.39	0.13	10
B053E65S25	-1.37	0.60	0.01	9
B053E70S00	-1.12	0.57	0.02	11
B053E70S05	-0.07	1.31	0.13	10
B053E70S10	-0.93	0.11	-0.02	10
B053E70S15	-0.72	0.31	0.01	10
B053E70S20	0.74	3.81	0.41	12
B053E70S25	-2.34	1.50	0.07	11

**Table 2
FSS Surface Grid Samples**

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B053E75S00	-2.19	1.26	0.05	10
B053E75S05	-1.56	-0.33	-0.08	9
B053E75S10	-1.56	0.72	0.02	9
B053E75S15	-1.84	1.67	0.11	10
B053E75S20	-0.70	0.80	0.06	11
B053E75S25	-2.61	1.18	0.03	10
B053E80S00	-0.08	0.79	0.08	10
B053E80S05	1.52	1.70	0.22	9
B053E80S10	3.64	0.38	0.16	10
B053E80S15	1.72	0.69	0.13	11
B053E80S20	-0.04	1.40	0.14	10
B053E80S25	-2.19	-0.06	-0.08	9
B053E85S00	-2.68	0.48	-0.04	10
B053E85S05	2.24	-0.12	0.06	10
B053E85S10	1.69	1.12	0.17	10
B053E85S15	-0.70	2.30	0.21	11
B053E85S20	0.42	0.48	0.06	9
B053E90S00	-2.10	2.55	0.19	11
B053E90S05	-0.81	0.98	0.07	11
B053E90S10	6.58	9.26	1.15	11
B053E90S15	0.83	-0.17	0.01	9
B053E95S00	-2.55	0.72	-0.01	9
B053E95S05	1.11	0.64	0.10	10
B053E95S10	-0.88	0.20	-0.01	9
SU-203				
B017E10S55	4.51	0.76	0.23	9
B017E15S55	3.31	-0.68	0.04	7
B017E15S60	1.14	-1.00	-0.06	7
B017E20S55	0.90	0.45	0.07	7
B017E20S60	1.74	-0.31	0.03	7
B017E25S55	0.61	1.17	0.14	8
B017E25S60	1.50	-0.31	0.02	7
B017E30S55	-0.02	-0.10	-0.01	7
B017E35S95	-2.20	1.66	0.09	9
B017E40S90	-0.24	0.80	0.07	9
B017E40S95	-1.21	-0.54	-0.09	9
B017E45S90	1.67	1.02	0.16	9
B017E45S95	-0.83	0.62	0.03	9
B017E50S85	4.16	0.84	0.22	9
B017E50S90	-1.12	0.98	0.06	10
B017E50S95	-0.46	0.57	0.04	9
B017E55S85	0.29	0.55	0.06	9
B017E55S90	-0.75	0.71	0.05	10
B017E55S95	-2.02	0.71	0.00	9
B017E60S85	-2.71	0.58	-0.03	10

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B017E60S90	-2.67	0.18	-0.07	9
B017E60S95	-1.21	1.05	0.06	10
B017E65S85	4.02	1.40	0.27	10
B017E65S90	0.75	0.36	0.06	10
B017E65S95	-0.46	0.86	0.07	10
B017E70S85	2.07	0.46	0.12	9
B017E70S90X	-0.22	1.12	0.11	10
B017E70S95	0.19	-0.01	0.01	10
B017E75S85	0.61	0.83	0.10	9
B017E75S90X	-0.89	1.61	0.13	10
B017E75S95	2.15	0.10	0.08	10
B017E80S85	-1.37	0.29	-0.02	10
B017E80S90	0.92	1.37	0.17	9
B017E80S95	2.40	3.65	0.45	12
B017E85S85	-0.43	0.22	0.01	9
B017E85S90	0.54	0.87	0.11	10
B017E85S95	-2.74	0.14	-0.08	10
B017E90S85	0.09	0.83	0.09	9
B017E90S90	-0.89	0.60	0.03	10
B017E90S95	0.03	0.05	0.01	10
B017E95S90	0.77	0.13	0.04	10
B017E95S95	-0.64	1.20	0.10	9
B018E00S95	-2.33	1.25	0.05	11
B029E30S00	-1.21	1.14	0.07	9
B029E30S05	1.03	0.20	0.05	10
B029E30S10	-0.20	0.13	0.01	10
B029E30S15	0.09	0.06	0.01	10
B029E30S20	-0.87	0.31	0.00	10
B029E30S25	0.45	0.14	0.03	10
B029E30S30	-1.74	1.27	0.07	8
B029E35S00	-1.50	-0.04	-0.05	9
B029E35S05	1.36	0.47	0.09	9
B029E35S10	0.96	-0.71	-0.04	10
B029E35S15	0.94	0.26	0.06	9
B029E35S20	1.35	-0.44	0.00	9
B029E35S25	1.43	0.35	0.08	10
B029E35S30	2.93	-0.29	0.07	10
B029E35S35	-0.73	-0.09	-0.03	10
B029E35S40	3.40	0.42	0.16	10
B029E40S00	-1.83	0.08	-0.05	10
B029E40S05	2.58	-0.03	0.08	10
B029E40S10	1.95	0.07	0.07	10
B029E40S15	1.98	0.14	0.08	9
B029E40S20	0.31	-0.41	-0.03	9
B029E40S25	-1.53	0.88	0.04	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B029E40S30	3.90	-0.08	0.12	10
B029E40S35	-0.99	-0.16	-0.05	10
B029E40S40	-0.07	0.01	0.00	10
B029E40S45	0.54	0.30	0.05	10
B029E40S50	1.57	1.36	0.19	11
B029E45S00	-2.74	0.70	-0.02	9
B029E45S05	0.35	0.69	0.08	9
B029E45S10	-0.92	0.76	0.05	9
B029E45S15	0.36	0.24	0.04	9
B029E45S20	-0.44	0.97	0.08	9
B029E45S25	-1.21	0.40	0.00	10
B029E45S30	-2.65	0.45	-0.04	10
B029E45S35	-1.93	0.26	-0.04	10
B029E45S40	-2.01	0.59	-0.01	10
B029E45S45	1.44	-0.05	0.04	9
B029E45S50	-2.73	0.49	-0.04	10
B029E45S55	-1.21	1.15	0.07	9
B029E50S00	1.59	-0.17	0.04	8
B029E50S05	-0.50	-0.40	-0.06	9
B029E50S10	1.16	0.46	0.09	9
B029E50S15	2.29	-0.18	0.06	8
B029E50S20	-1.71	-0.04	-0.06	8
B029E50S25	2.43	1.02	0.18	10
B029E50S30	-0.26	0.09	0.00	9
B029E50S35	-0.60	-0.12	-0.03	9
B029E50S40	0.47	0.02	0.02	9
B029E50S45	1.79	-0.32	0.03	9
B029E50S50	-0.98	-0.12	-0.04	9
B029E50S55	-1.51	1.21	0.07	10
B029E55S00	-2.57	0.66	-0.02	9
B029E55S05	-0.96	0.00	-0.03	9
B029E55S10	-0.36	0.11	0.00	8
B029E55S15	1.65	0.19	0.07	8
B029E55S20	-1.77	0.23	-0.04	9
B029E55S25	2.59	0.59	0.14	9
B029E55S30	1.35	0.91	0.14	9
B029E55S35	3.12	0.34	0.14	8
B029E55S40	-1.28	0.58	0.02	8
B029E55S45	-0.12	-0.04	-0.01	8
B029E55S50	1.82	-0.03	0.06	9
B029E55S55	-2.62	0.94	0.01	10
B029E55S60	-1.37	0.87	0.04	9
B029E60S00	0.31	0.07	0.02	9
B029E60S05	-0.81	0.30	0.00	9
B029E60S10	0.53	0.30	0.05	9

**Table 2
FSS Surface Grid Samples**

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B029E60S15	0.56	0.84	0.10	9
B029E60S20	-0.10	1.64	0.16	9
B029E60S25	0.55	0.20	0.04	8
B029E60S30	-1.60	0.95	0.04	8
B029E60S35	-1.46	0.96	0.05	8
B029E60S40	0.29	0.08	0.02	9
B029E60S45	-2.77	0.59	-0.03	9
B029E60S50	2.39	0.31	0.11	9
B029E60S55	2.51	0.85	0.17	9
B029E60S60	1.34	0.60	0.10	10
B029E65S00	0.17	-0.08	0.00	9
B029E65S05	1.69	-0.10	0.05	9
B029E65S10	-2.61	1.21	0.03	9
B029E65S15	-0.21	0.81	0.07	9
B029E65S20	-0.94	1.66	0.13	9
B029E65S25	-1.44	0.08	-0.04	8
B029E65S30	1.03	1.13	0.15	8
B029E65S35	1.05	0.07	0.04	8
B029E65S40	-2.72	0.10	-0.08	9
B029E65S45	0.41	0.93	0.11	9
B029E65S50	-2.36	0.79	0.00	8
B029E65S55	-0.13	-0.15	-0.02	9
B029E70S00	2.45	0.83	0.16	8
B029E70S05	-1.74	0.46	-0.01	8
B029E70S10	-1.08	0.20	-0.02	8
B029E70S15	0.03	1.01	0.10	9
B029E70S20	-2.07	0.45	-0.02	9
B029E70S25	-1.28	-0.10	-0.05	8
B029E70S30	-1.35	0.18	-0.03	9
B029E70S35	1.24	-0.04	0.04	9
B029E70S40	-0.19	0.08	0.00	9
B029E70S45	0.62	0.13	0.03	9
B029E70S50	0.01	-0.19	-0.02	9
B029E70S55	-2.39	0.16	-0.06	9
B029E75S00	-1.65	-0.09	-0.06	8
B029E75S05	2.52	-0.05	0.08	9
B029E75S10	-0.22	0.15	0.01	8
B029E75S15	1.58	-0.02	0.05	9
B029E75S20	-1.85	0.46	-0.02	9
B029E75S25	0.44	0.19	0.03	9
B029E75S30	1.74	0.27	0.09	9
B029E75S35	3.20	1.01	0.21	9
B029E75S40	1.43	0.64	0.11	8
B029E75S45	-1.89	0.64	0.00	9
B029E75S50	0.24	0.81	0.09	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B029E75S55	-0.27	0.97	0.09	10
B029E80S00	-0.76	0.58	0.03	9
B029E80S05	-1.98	0.52	-0.01	8
B029E80S10	2.90	0.25	0.12	9
B029E80S15	0.96	0.07	0.04	8
B029E80S20	-0.52	-0.21	-0.04	9
B029E80S25	0.79	1.40	0.17	10
B029E80S30	-2.04	0.44	-0.02	9
B029E80S35	1.56	0.50	0.10	10
B029E80S40	-0.38	2.11	0.20	9
B029E80S45	1.28	1.38	0.18	10
B029E80S50	1.65	0.86	0.14	10
B029E80S55	1.69	0.11	0.07	10
B029E85S00	1.84	0.39	0.10	9
B029E85S05	-2.19	1.07	0.03	9
B029E85S10	-1.79	0.90	0.03	9
B029E85S15	0.45	0.75	0.09	9
B029E85S20	-2.60	1.54	0.07	8
B029E85S25	-1.92	1.68	0.10	9
B029E85S30X	1.89	2.48	0.31	10
B029E85S35X	-2.00	0.41	-0.03	9
B029E85S40	-1.39	0.14	-0.03	12
B029E85S45	-2.62	2.50	0.16	11
B029E85S50	-0.03	1.77	0.18	10
B029E90S00	-0.77	0.89	0.06	9
B029E90S05	-0.78	0.76	0.05	9
B029E90S10	-1.07	1.84	0.15	9
B029E90S15	-2.26	2.92	0.22	11
B029E90S20	0.37	1.41	0.15	8
B029E90S25	-0.47	1.16	0.10	9
B029E90S30	-1.05	0.28	-0.01	10
B029E90S35	-2.55	0.56	-0.03	10
B029E90S40	-1.30	1.23	0.08	10
B029E90S45	-2.25	0.49	-0.03	10
B029E90S50	-2.54	0.04	-0.08	9
B029E95S00	-0.08	0.50	0.05	9
B029E95S05	0.29	1.49	0.16	10
B029E95S10	0.91	1.17	0.15	11
B029E95S15	-0.41	0.38	0.02	8
B029E95S20	-2.69	0.87	0.00	8
B029E95S25	0.44	0.29	0.04	9
B029E95S30	-0.33	0.79	0.07	9
B029E95S35	-0.60	1.56	0.14	9
B029E95S40	-1.83	-0.11	-0.07	9
B029E95S45	1.64	0.48	0.10	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B030E00S00	0.25	0.65	0.07	9
B030E00S05	0.22	0.43	0.05	9
B030E00S10	-0.50	-0.03	-0.02	9
B030E00S15	0.31	0.47	0.06	10
B030E00S20	-1.80	0.02	-0.06	9
B030E00S25	1.15	0.96	0.13	9
B030E00S30	-0.02	1.80	0.18	9
B030E00S35	-1.99	0.24	-0.04	10
B030E05S00	-1.87	0.85	0.02	9
B030E05S05	-1.90	0.86	0.02	9
B030E05S10	0.16	-0.27	-0.02	9
B030E05S15	0.21	-0.14	-0.01	10
B030E05S20	-2.33	0.67	-0.01	11
B030E05S25	-1.45	0.50	0.00	9
B030E10S10	-0.61	-0.31	-0.05	9
B030E10S15	-2.08	1.88	0.12	9
B030E10S20	-2.37	0.29	-0.05	9
SU-204				
B030E00S40	-2.03	0.99	0.03	10
B030E00S45	-0.51	-0.12	-0.03	9
B030E00S50	-1.77	0.23	-0.04	9
B030E00S55	-2.12	0.41	-0.03	9
B030E00S60	-2.88	0.25	-0.07	9
B030E00S65	0.17	0.69	0.07	8
B030E00S70	-0.65	0.35	0.01	9
B030E00S75	0.08	0.76	0.08	8
B030E00S80	-0.16	-0.40	-0.04	8
B030E00S85	0.92	0.13	0.04	8
B030E00S90	2.09	-0.18	0.05	8
B030E00S95	-1.36	0.77	0.03	8
B030E05S30	-0.66	1.14	0.09	9
B030E05S35	-2.22	0.37	-0.04	9
B030E05S40	-1.79	-0.01	-0.06	9
B030E05S45	-0.08	0.23	0.02	9
B030E05S50	-4.53	0.22	-0.13	8
B030E05S55	3.99	-0.34	0.10	8
B030E05S60	-1.04	-0.52	-0.09	Tree
B030E05S65	1.25	-0.49	-0.01	8
B030E05S70	-0.51	-0.05	-0.02	8
B030E05S75	0.03	0.44	0.05	8
B030E05S80	-2.28	0.04	-0.07	9
B030E05S85	0.21	-0.24	-0.02	8
B030E05S90	0.09	-0.30	-0.03	8
B030E05S95	-4.34	-0.32	-0.18	8
B030E10S00	0.90	1.31	0.16	9

Table 2

FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B030E10S05	-1.42	1.32	0.09	9
B030E10S25	0.90	0.75	0.10	9
B030E10S30	2.44	1.34	0.21	9
B030E10S35	-2.63	0.48	-0.04	9
B030E10S40	-1.99	0.77	0.01	8
B030E10S45	-2.51	-0.18	-0.10	8
B030E10S50	-2.64	0.32	-0.06	8
B030E10S55	-0.58	0.25	0.01	9
B030E10S60	-1.01	-0.36	-0.07	8
B030E10S65	-1.86	0.28	-0.03	8
B030E10S70	-2.18	-0.23	-0.10	8
B030E10S75	-0.72	0.36	0.01	8
B030E10S80	-0.37	0.18	0.01	9
B030E10S85	-0.72	0.56	0.03	8
B030E10S90	0.68	-1.03	-0.08	8
B030E10S95	-2.94	0.04	-0.09	8
B030E15S00	-0.49	1.24	0.11	9
B030E15S05	2.18	1.56	0.23	9
B030E15S10	0.39	0.72	0.08	9
B030E15S15	3.18	1.56	0.26	9
B030E15S20	-2.53	1.68	0.08	9
B030E15S25	-1.12	0.86	0.05	9
B030E15S30	-2.66	1.06	0.02	9
B030E15S35	-2.04	0.30	-0.04	9
B030E15S40	1.76	0.45	0.10	8
B030E15S45	2.32	0.56	0.13	8
B030E15S50	0.32	0.07	0.02	8
B030E15S55	0.10	0.13	0.02	9
B030E15S60	-1.66	-0.35	-0.09	10
B030E15S65	-0.78	0.12	-0.01	7
B030E15S70	-2.77	0.20	-0.07	9
B030E15S75	0.41	0.28	0.04	8
B030E15S80	-1.66	0.62	0.01	8
B030E15S85	-2.69	0.41	-0.05	8
B030E15S90	1.82	0.78	0.14	8
B030E15S95	0.87	0.60	0.09	8
B030E20S00	-0.63	0.84	0.06	9
B030E20S05	1.02	0.64	0.10	9
B030E20S10	2.14	1.32	0.20	9
B030E20S15	0.09	0.54	0.06	9
B030E20S20	-2.12	0.84	0.01	9
B030E20S25	-0.14	1.05	0.10	9
B030E20S30	-1.42	1.47	0.10	9
B030E20S35	1.21	0.43	0.08	9
B030E20S40	-0.70	0.64	0.04	8

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B030E20S45	0.63	-0.15	0.01	8
B030E20S50	-2.21	0.28	-0.05	8
B030E20S55	-2.96	0.27	-0.07	8
B030E20S60	0.19	0.09	0.02	8
B030E20S65	-0.64	-0.55	-0.08	8
B030E20S70	3.77	0.19	0.15	9
B030E20S75	-0.75	0.38	0.01	8
B030E20S80	-0.02	-0.21	-0.02	8
B030E20S85	-1.72	0.21	-0.04	8
B030E20S90	0.95	0.56	0.09	8
B030E20S95	1.31	-0.41	0.00	8
B030E25S00	1.24	0.51	0.09	9
B030E25S05	-3.05	0.08	-0.09	8
B030E25S10	0.22	1.04	0.11	9
B030E25S15	0.18	0.45	0.05	9
B030E25S20	2.61	0.73	0.16	9
B030E25S25	0.97	0.89	0.12	9
B030E25S30	3.17	1.07	0.21	9
B030E25S35	-0.53	0.70	0.05	9
B030E25S40	-2.64	1.72	0.08	9
B030E25S45	-4.31	0.23	-0.12	9
B030E25S50	-2.83	0.53	-0.04	9
B030E25S55	-1.71	0.01	-0.06	9
B030E25S60	-0.44	-1.06	-0.12	9
B030E25S65	-0.15	0.14	0.01	9
B030E25S70	1.07	0.32	0.07	8
B030E25S75	-0.22	0.22	0.01	8
B030E25S80	-0.19	0.10	0.00	9
B030E25S85	-0.54	0.09	-0.01	9
B030E25S90	-1.49	-0.29	-0.08	9
B030E25S95	-0.91	0.66	0.04	9
B030E30S00	-1.93	0.11	-0.05	9
B030E30S05	-0.50	-0.12	-0.03	9
B030E30S10	1.96	-0.28	0.04	9
B030E30S15	4.52	0.37	0.19	9
B030E30S20	0.24	0.46	0.05	9
B030E30S25	-1.97	1.12	0.05	9
B030E30S30	1.14	0.76	0.11	9
B030E30S35	0.17	0.31	0.04	9
B030E30S40	0.12	-0.78	-0.07	9
B030E30S45	-1.41	0.88	0.04	9
B030E30S50	2.26	-0.61	0.01	9
B030E30S55	-2.99	-0.30	-0.13	9
B030E30S60	3.01	0.37	0.14	9
B030E30S65	-2.42	-0.26	-0.11	8

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B030E30S70	-2.07	0.65	0.00	9
B030E30S75	1.30	0.53	0.10	9
B030E30S80	-0.36	0.05	-0.01	9
B030E30S85	0.00	0.46	0.05	9
B030E30S90	-1.30	-0.33	-0.08	9
B030E30S95	0.35	0.56	0.07	9
B030E35S00	1.66	-0.39	0.02	9
B030E35S05	-0.11	0.06	0.00	9
B030E35S10	1.08	0.75	0.11	9
B030E35S15	0.73	0.81	0.11	9
B030E35S20	2.67	0.56	0.15	9
B030E35S25	0.41	0.34	0.05	9
B030E35S30	-1.03	0.35	0.00	9
B030E35S35	-2.97	0.29	-0.07	9
B030E35S40	-1.52	-0.01	-0.05	9
B030E35S45	-4.65	-0.23	-0.18	9
B030E35S50	-1.83	-0.27	-0.09	9
B030E35S55	-1.01	-0.33	-0.07	9
B030E35S60	-3.03	-0.19	-0.12	9
B030E35S65	-2.33	-0.49	-0.13	9
B030E35S70	0.49	-0.48	-0.03	9
B030E35S75	-1.42	-0.21	-0.07	8
B030E35S80	-0.91	0.37	0.01	8
B030E35S85	-1.09	-0.29	-0.06	9
B030E35S90	-1.69	-0.20	-0.08	9
B030E35S95	-2.19	0.74	0.00	9
B030E40S00	2.22	-0.11	0.06	9
B030E40S05	-0.08	-0.12	-0.01	9
B030E40S10	0.83	0.86	0.11	10
B030E40S15	0.74	1.30	0.15	9
B030E40S20	1.58	1.21	0.17	9
B030E40S25	-0.60	0.90	0.07	8
B030E40S30	-0.18	0.21	0.02	9
B030E40S35	-2.59	-0.10	-0.10	9
B030E40S40	-1.73	0.42	-0.02	9
B030E40S45	-2.76	0.35	-0.06	9
B030E40S50	-0.20	0.51	0.04	9
B030E40S55	-4.52	0.73	-0.08	8
B030E40S60	-0.21	0.24	0.02	9
B030E40S65	-1.85	0.62	0.00	9
B030E40S70	0.22	0.10	0.02	9
B030E40S75	1.46	-0.25	0.02	8
B030E40S80	1.58	0.20	0.07	7
B030E40S85	1.66	-0.13	0.04	9
B030E40S90	1.55	-0.38	0.01	9

Table 2
FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B030E40S95	-2.16	0.73	0.00	8
B030E45S00	-3.42	0.40	-0.07	9
B030E45S05	-2.23	0.57	-0.02	9
B030E45S10	1.87	1.37	0.20	10
B030E45S15	0.83	0.90	0.12	9
B030E45S20	-0.55	0.89	0.07	9
B030E45S25	0.19	-0.03	0.00	9
B030E45S30	-1.41	0.27	-0.02	9
B030E45S35	-2.34	-0.24	-0.10	9
B030E45S40	-1.68	-0.13	-0.07	9
B030E45S45	-1.30	0.19	-0.02	9
B030E45S50	0.57	-0.13	0.01	9
B030E45S55	-2.15	0.67	0.00	9
B030E45S60	0.09	0.09	0.01	9
B030E45S65	-3.14	0.14	-0.09	9
B030E45S70	0.54	-0.54	-0.04	9
B030E45S75	0.59	-0.19	0.00	8
B030E45S80	1.64	-0.51	0.00	8
B030E45S85	-2.28	-0.37	-0.11	9
B030E45S90	-3.25	-0.36	-0.14	9
B030E45S95	-0.73	-0.28	-0.05	9
B030E50S00	-3.77	0.40	-0.09	9
B030E50S05	-3.11	-0.02	-0.11	9
B030E50S10	2.33	0.13	0.09	9
B030E50S15	1.73	1.53	0.21	9
B030E50S20	0.86	0.44	0.07	9
B030E50S25	-0.29	0.10	0.00	9
B030E50S30	-0.23	0.41	0.03	9
B030E50S35	-3.89	-0.18	-0.15	9
B030E50S40	-1.01	0.49	0.01	9
B030E50S45	0.96	0.30	0.06	9
B030E50S50	1.93	0.49	0.11	9
B030E50S55	-0.37	0.55	0.04	9
B030E50S60	-1.68	0.88	0.03	9
B030E50S65	-1.32	0.37	-0.01	9
B030E50S70	0.63	-0.26	-0.01	9
B030E50S75	0.26	0.60	0.07	7
B030E50S80	-0.49	0.44	0.03	8
B030E50S85	-1.60	-0.81	-0.13	9
B030E50S90	2.73	-0.13	0.08	9
B030E50S95	-0.08	0.22	0.02	9
SU-205				
B041E10S00	1.64	0.93	0.15	8
B041E10S05	-0.84	1.42	0.11	8
B041E10S10	-1.67	-0.21	-0.08	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B041E10S15	-1.59	0.18	-0.04	8
B041E10S20	1.44	0.42	0.09	8
B041E10S25	-1.67	0.58	0.00	8
B041E10S30	-0.99	0.83	0.05	9
B041E10S35	-0.03	1.02	0.10	9
B041E10S40	0.97	1.45	0.18	8
B041E10S45	-0.19	-0.11	-0.02	8
B041E10S50	1.42	0.70	0.12	8
B041E10S55	-0.40	0.31	0.02	8
B041E10S60	4.04	1.11	0.25	8
B041E10S65	-1.19	0.77	0.04	11
B041E10S70	0.45	-0.05	0.01	9
B041E10S75	-2.15	0.52	-0.02	10
B041E10S80	0.56	0.24	0.04	10
B041E10S85	-3.02	0.51	-0.05	8
B041E10S90	3.04	1.63	0.26	8
B041E10S95	-1.16	-0.13	-0.05	10
B041E15S00	-0.94	0.82	0.05	8
B041E15S05	0.03	0.55	0.06	9
B041E15S10	-0.32	1.71	0.16	9
B041E15S15	-1.75	0.55	0.00	9
B041E15S20	-1.05	1.25	0.09	9
B041E15S25	-0.71	0.67	0.04	8
B041E15S30	-1.87	0.24	-0.04	9
B041E15S35	1.68	0.81	0.14	8
B041E15S40	1.77	0.86	0.15	8
B041E15S45	-2.50	0.00	-0.08	8
B041E15S50	-1.53	0.63	0.01	8
B041E15S55	1.01	1.29	0.16	8
B041E15S60	-5.72	1.25	-0.07	9
B041E15S65	1.47	0.02	0.05	11
B041E15S70	1.06	0.44	0.08	8
B041E15S75	-2.17	0.60	-0.01	8
B041E15S80	-3.18	1.37	0.03	9
B041E15S85	0.35	1.61	0.17	9
B041E15S90	0.79	0.85	0.11	8
B041E15S95	-0.02	1.66	0.17	8
B041E20S00	-0.48	0.85	0.07	9
B041E20S05	3.57	0.14	0.13	8
B041E20S10	1.73	0.59	0.12	8
B041E20S15	-2.34	1.18	0.04	8
B041E20S20	-4.79	1.30	-0.03	9
B041E20S25	-0.95	0.24	-0.01	8
B041E20S30	1.78	0.35	0.09	8
B041E20S35	-2.02	1.00	0.03	8

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B041E20S40	-0.30	0.64	0.05	8
B041E20S45	1.23	0.87	0.13	9
B041E20S50	4.04	0.69	0.20	9
B041E20S55	-1.05	2.03	0.17	9
B041E20S60	1.60	-0.75	-0.02	11
B041E20S65	1.75	0.30	0.09	11
B041E20S70	5.50	-0.14	0.17	9
B041E20S75	-1.00	0.15	-0.02	8
B041E20S80	-0.86	-0.31	-0.06	8
B041E20S85	-2.47	1.21	0.04	10
B041E20S90	-0.17	0.67	0.06	9
B041E20S95	0.41	0.07	0.02	9
B041E25S00	2.19	0.91	0.16	9
B041E25S05	-1.84	0.98	0.04	9
B041E25S10	-0.56	1.20	0.10	9
B041E25S15	-0.01	1.03	0.10	Tree
B041E25S20	-2.04	-0.07	-0.08	9
B041E25S25	1.09	1.17	0.15	9
B041E25S30	-2.95	1.09	0.01	9
B041E25S35	-4.15	0.02	-0.14	8
B041E25S40	-1.40	0.59	0.01	8
B041E25S45	-1.00	0.24	-0.01	9
B041E25S50	0.65	0.45	0.07	8
B041E25S55	5.55	0.95	0.28	8
B041E25S60	-1.37	0.02	-0.04	9
B041E25S65	-3.05	0.31	-0.07	8
B041E25S70	0.46	0.19	0.03	8
B041E25S75	-0.17	-0.04	-0.01	7
B041E25S80	-1.42	0.66	0.02	8
B041E30S00	1.37	0.42	0.09	8
B041E30S05	0.24	0.25	0.03	8
B041E30S10	1.81	-0.12	0.05	9
B041E30S15	-3.64	-0.06	-0.13	8
B041E30S20	-4.62	0.96	-0.06	8
B041E30S25	-0.18	-0.52	-0.06	9
B041E30S30	-3.69	0.70	-0.05	8
B041E30S35	0.18	-0.36	-0.03	9
B041E30S40	-2.18	0.45	-0.03	9
B041E30S45	0.91	0.53	0.08	9
B041E30S50	-0.13	-0.39	-0.04	9
B041E30S55	-1.38	0.87	0.04	Tree
B041E30S60	-4.02	-0.20	-0.15	8
B041E30S65	-0.49	0.28	0.01	9
B041E30S70	-2.55	1.06	0.02	10
B041E35S00	-0.40	0.68	0.05	8

Table 2
FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B041E35S05	-0.77	0.08	-0.02	9
B041E35S10	-4.03	0.02	-0.13	8
B041E35S15	-2.74	0.18	-0.07	8
B041E35S20	-0.22	0.04	0.00	8
B041E35S25	-0.52	0.23	0.01	8
B041E35S30	-4.02	0.79	-0.06	9
B041E35S35	-1.22	-0.31	-0.07	8
B041E35S40	0.12	0.62	0.07	8
B041E35S45	1.72	0.17	0.07	9
B041E35S50	-1.17	0.61	0.02	8
B041E35S55	-2.43	0.11	-0.07	8
B041E35S60	1.25	0.60	0.10	8
B041E40S00	0.34	0.32	0.04	10
B041E40S05	-0.47	0.86	0.07	9
B041E40S10	0.03	0.22	0.02	8
B041E40S15	-0.50	0.54	0.04	9
B041E40S20	-0.87	0.79	0.05	8
B041E40S25	1.53	0.30	0.08	8
B041E40S30	0.66	-0.21	0.00	8
B041E40S35	-1.93	0.39	-0.03	8
B041E40S40	0.28	0.38	0.05	9
B041E40S45	-0.44	0.13	0.00	9
B041E40S50	-2.85	0.38	-0.06	9
B041E40S55	1.58	0.67	0.12	9
B041E45S00	2.09	0.26	0.10	10
B041E45S05	1.21	0.21	0.06	9
B041E45S10	1.13	0.47	0.08	9
B041E45S15	-2.52	-0.01	-0.08	8
B041E45S20	0.25	0.87	0.10	9
B041E45S25	-0.09	0.96	0.09	8
B041E45S30	-0.77	0.32	0.01	8
B041E45S35	-0.46	0.14	0.00	8
B041E45S40	0.88	0.65	0.09	9
B041E45S45	-0.63	0.37	0.02	9
B041E45S50	-1.57	0.98	0.05	9
B041E50S00	-4.47	0.19	-0.13	8
B041E50S05	-0.91	-0.18	-0.05	9
B041E50S10	-0.94	1.42	0.11	9
B041E50S15	-1.98	0.60	-0.01	8
B041E50S20	-0.97	0.26	-0.01	9
B041E50S25	-3.51	0.37	-0.08	9
B041E50S30	1.37	-0.53	-0.01	9
B041E50S35	-1.22	0.58	0.02	8
B041E50S40	-1.04	0.66	0.03	10
B041E55S00	-1.54	0.26	-0.03	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B041E55S05	0.40	0.22	0.04	8
B041E55S10	-2.85	0.62	-0.03	8
B041E55S15	-1.23	0.97	0.06	8
B041E70S45	0.44	-0.20	-0.01	10
B041E70S50	0.60	-0.12	0.01	9
B041E70S55	-1.87	0.61	0.00	10
B041E75S15	-0.13	-0.25	-0.03	9
B041E75S20	1.52	0.45	0.10	10
B041E75S25	-1.12	-0.35	-0.07	8
B041E75S30	2.07	-0.01	0.07	8
B041E75S35	-1.06	0.59	0.02	8
B041E75S40	0.54	-0.06	0.01	8
B041E75S45	0.19	-0.12	-0.01	8
B041E75S50	-1.08	-0.43	-0.08	8
B041E75S55	-1.73	-0.05	-0.06	9
B041E80S00	0.87	0.00	0.03	7
B041E80S05	-0.50	0.15	0.00	11
B041E80S10	2.23	0.23	0.10	8
B041E80S15	-2.63	0.20	-0.07	9
B041E80S20	1.60	0.41	0.09	8
B041E80S25	-0.48	-0.48	-0.06	9
B041E80S30	2.81	1.05	0.20	8
B041E80S35	-3.86	0.44	-0.08	8
B041E80S40	3.31	0.75	0.19	8
B041E80S45	-0.61	0.50	0.03	8
B041E80S50	-0.21	0.19	0.01	9
B041E80S55	-2.14	0.16	-0.06	8
B041E80S60	-1.18	0.72	0.03	9
B041E85S00	-1.10	0.57	0.02	8
B041E85S05	0.28	0.74	0.08	8
B041E85S10	-5.03	0.55	-0.11	9
B041E85S15	1.27	0.25	0.07	9
B041E85S20	-1.14	-0.09	-0.05	9
B041E85S25	2.07	0.01	0.07	9
B041E85S30	-1.22	0.13	-0.03	8
B041E85S35	-3.29	-0.35	-0.14	8
B041E85S40	-4.39	0.32	-0.11	9
B041E85S45	-2.39	0.63	-0.02	8
B041E85S50	1.19	0.56	0.10	8
B041E85S55	-2.76	-0.50	-0.14	8
B041E85S60	-0.43	-0.44	-0.06	8
B041E90S00	-1.77	-0.29	-0.09	8
B041E90S05	3.90	-0.33	0.10	8
B041E90S10	-1.17	0.53	0.01	8
B041E90S15	1.25	1.21	0.16	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B041E90S20	-0.40	0.04	-0.01	8
B041E90S25	0.70	1.28	0.15	9
B041E90S30	-0.76	0.61	0.04	9
B041E90S35	-2.83	0.73	-0.02	9
B041E90S40	-0.29	-0.34	-0.04	8
B041E90S45	0.00	1.12	0.11	8
B041E90S50	-2.16	0.11	-0.06	8
B041E90S55	1.84	-0.11	0.05	9
B041E90S60	-1.53	0.06	-0.05	8
B041E90S65	-2.75	0.68	-0.02	8
B041E95S00	0.92	0.45	0.08	9
B041E95S05	-1.03	0.67	0.03	8
B041E95S10	-0.86	0.45	0.02	8
B041E95S15	-4.00	-0.41	-0.17	8
B041E95S20	-2.85	1.10	0.01	8
B041E95S25	2.17	-0.05	0.07	8
B041E95S30	-4.65	0.57	-0.10	8
B041E95S35	-1.04	-0.06	-0.04	8
B041E95S40	-1.79	-0.22	-0.08	8
B041E95S45	-0.99	0.22	-0.01	8
B041E95S50	-2.16	0.13	-0.06	8
B041E95S55	-2.86	-0.20	-0.12	8
B041E95S60	-1.01	-0.07	-0.04	8
B041E95S65	-1.95	-0.18	-0.08	8
B041E95S70	1.17	-0.03	0.04	8
B041E95S75	-2.62	0.49	-0.04	9
SU-206				
B042E00S00	0.00	0.44	0.04	9
B042E00S05	1.40	1.05	0.15	9
B042E00S10	-3.04	0.46	-0.06	8
B042E00S15	-2.53	-0.24	-0.11	10
B042E00S20	2.13	0.60	0.13	10
B042E00S25	0.03	-0.05	0.00	10
B042E00S30	-1.04	0.76	0.04	9
B042E00S35	0.42	0.81	0.10	9
B042E00S40	-0.09	-0.07	-0.01	9
B042E00S45	0.33	0.08	0.02	8
B042E00S50	0.68	0.20	0.04	9
B042E00S55	-3.19	0.33	-0.07	8
B042E00S60	0.18	0.34	0.04	9
B042E00S65	-3.88	-0.07	-0.14	8
B042E00S70	-0.99	0.16	-0.02	9
B042E00S75	-4.31	-0.52	-0.20	8
B042E00S80	-2.72	-0.34	-0.12	8
B042E00S85	0.14	-0.01	0.00	9

Table 2

FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B042E00S90	0.12	0.96	0.10	9
B042E00S95	0.00	-0.22	-0.02	9
B042E05S00	-1.42	0.43	0.00	9
B042E05S05	-0.35	0.16	0.00	9
B042E05S10	-5.66	0.44	-0.15	9
B042E05S15	-1.83	0.68	0.01	9
B042E05S20	-1.80	-0.24	-0.08	9
B042E05S25	-0.07	0.17	0.01	10
B042E05S30	-1.66	0.42	-0.01	9
B042E05S35	-1.40	-0.31	-0.08	9
B042E05S40	-1.00	0.32	0.00	9
B042E05S45	-2.54	0.16	-0.07	8
B042E05S50	-1.95	0.36	-0.03	8
B042E05S55	-2.09	-0.03	-0.07	9
B042E05S60	-1.29	-0.47	-0.09	8
B042E05S65	-0.97	0.27	-0.01	8
B042E05S70	1.98	-0.11	0.05	8
B042E05S75	-4.21	0.18	-0.12	8
B042E05S80	3.61	-0.21	0.10	9
B042E05S85	1.07	0.32	0.07	8
B042E05S90	-2.62	-0.32	-0.12	9
B042E05S95	1.83	-0.13	0.05	8
B042E10S00	1.01	0.39	0.07	9
B042E10S05	-0.70	0.54	0.03	9
B042E10S10	0.27	0.93	0.10	8
B042E10S15	2.02	1.04	0.17	9
B042E10S20	2.22	0.60	0.13	9
B042E10S25	-1.30	0.01	-0.04	9
B042E10S30	0.79	0.32	0.06	8
B042E10S35	0.81	0.22	0.05	9
B042E10S40	-2.03	0.39	-0.03	9
B042E10S45	1.13	0.51	0.09	9
B042E10S50	-0.55	0.11	-0.01	9
B042E10S55	-0.08	0.17	0.01	8
B042E10S60	-1.03	0.32	0.00	8
B042E10S65	1.38	0.52	0.10	9
B042E10S70	-2.12	0.07	-0.06	8
B042E10S75	-2.34	0.06	-0.07	9
B042E10S80	-1.67	0.32	-0.02	9
B042E10S85	-2.93	-0.10	-0.11	8
B042E10S90	-2.95	-0.35	-0.13	8
B042E10S95	-0.02	0.93	0.09	9
B042E15S00	-2.19	0.50	-0.02	10
B042E15S05	-0.06	0.20	0.02	9
B042E15S10	-1.15	0.06	-0.03	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B042E15S15	-0.74	0.20	-0.01	9
B042E15S20	-0.91	0.72	0.04	10
B042E15S25	-0.36	-0.03	-0.02	9
B042E15S30	-1.63	0.28	-0.03	9
B042E15S35	0.88	0.88	0.12	9
B042E15S40	-1.00	0.88	0.06	8
B042E15S45	-1.64	0.59	0.00	9
B042E15S50	-0.43	-0.07	-0.02	8
B042E15S55	-0.54	0.00	-0.02	9
B042E15S60	-1.33	0.59	0.01	9
B042E15S65	3.63	-0.02	0.12	9
B042E15S70	0.08	0.41	0.04	9
B042E15S75	-3.01	-0.16	-0.12	9
B042E15S80	-1.34	0.00	-0.04	8
B042E15S85	-1.98	0.58	-0.01	9
B042E15S90	0.40	0.37	0.05	9
B042E15S95	1.26	0.10	0.05	9
B042E20S00	1.34	-0.60	-0.02	10
B042E20S05	-2.23	-0.13	-0.09	9
B042E20S10	0.27	0.49	0.06	9
B042E20S15	-0.79	0.21	-0.01	9
B042E20S20	-3.83	0.18	-0.11	9
B042E20S25	2.91	0.21	0.12	9
B042E20S30	0.27	0.30	0.04	10
B042E20S35	-2.06	0.11	-0.06	9
B042E20S40	-0.73	0.40	0.02	9
B042E20S45	-1.32	-0.12	-0.06	9
B042E20S50	0.02	-0.11	-0.01	9
B042E20S55	-0.90	-0.11	-0.04	8
B042E20S60	-0.63	0.24	0.00	8
B042E20S65	-2.41	0.04	-0.08	8
B042E20S70	-3.35	-0.30	-0.14	8
B042E20S75	-2.03	-0.01	-0.07	9
B042E20S80	-3.47	0.37	-0.08	8
B042E20S85	1.04	0.50	0.08	9
B042E20S90	1.80	-0.59	0.00	9
B042E20S95	-2.85	-0.09	-0.10	9
B042E25S00	-0.01	-0.07	-0.01	9
B042E25S05	-1.07	-0.16	-0.05	9
B042E25S10	0.65	0.27	0.05	9
B042E25S15	-1.67	0.27	-0.03	9
B042E25S20	0.14	-0.17	-0.01	9
B042E25S25	-2.71	0.17	-0.07	10
B042E25S30	1.19	0.43	0.08	10
B042E25S35	-0.47	0.22	0.01	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B042E25S40	-0.90	0.14	-0.02	9
B042E25S45	-1.83	0.19	-0.04	9
B042E25S50	-1.30	-0.09	-0.05	8
B042E25S55	-1.68	-0.50	-0.11	9
B042E25S60	0.41	-0.48	-0.03	8
B042E25S65	0.35	-0.49	-0.04	9
B042E25S70	0.23	0.32	0.04	8
B042E25S75	-3.35	0.93	-0.02	9
B042E25S80	-1.44	-0.31	-0.08	9
B042E25S85	-1.98	0.13	-0.05	8
B042E25S90	2.62	0.21	0.11	8
B042E25S95	-2.32	0.06	-0.07	8
B042E30S00	-0.19	0.60	0.05	9
B042E30S05	-0.19	-0.03	-0.01	9
B042E30S10	-0.64	0.68	0.05	9
B042E30S15	1.48	-0.48	0.00	9
B042E30S20	-0.09	0.31	0.03	8
B042E30S25	4.12	0.15	0.15	8
B042E30S30	0.19	-0.66	-0.06	9
B042E30S35	-0.16	-0.50	-0.06	8
B042E30S40	1.97	0.42	0.11	8
B042E30S45	0.83	-0.43	-0.02	8
B042E30S50	-0.64	-0.12	-0.03	8
B042E30S55	-1.13	-0.43	-0.08	7
B042E30S60	-1.98	0.14	-0.05	8
B042E30S65	-1.29	0.16	-0.03	8
B042E30S70	-1.45	-0.08	-0.06	8
B042E30S75	-1.20	0.54	0.01	8
B042E30S80	-1.80	-0.78	-0.14	8
B042E30S85	-3.70	0.03	-0.12	8
B042E30S90	0.83	0.26	0.05	9
B042E30S95	-0.83	0.40	0.01	9
B042E35S00	-0.02	0.36	0.04	9
B042E35S05	-1.96	0.56	-0.01	9
B042E35S10	1.83	0.47	0.11	9
B042E35S15	-2.13	-0.16	-0.09	8
B042E35S20	0.89	0.12	0.04	8
B042E35S25	-0.39	0.46	0.03	9
B042E35S30	1.77	-0.03	0.06	8
B042E35S35	-2.77	0.48	-0.04	10
B042E35S40	-2.07	0.42	-0.03	9
B042E35S45	-2.07	-0.48	-0.12	8
B042E35S50	-1.31	-0.31	-0.07	8
B042E35S55	-0.51	-0.01	-0.02	8
B042E35S60	-2.17	-0.06	-0.08	8

Table 2
FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B042E35S65	1.62	1.12	0.17	8
B042E35S70	2.51	-0.42	0.04	8
B042E35S75	1.02	-0.17	0.02	8
B042E35S80	-1.89	0.01	-0.06	8
B042E35S85	-3.05	-0.31	-0.13	Tree
B042E35S90	0.34	0.36	0.05	8
B042E35S95	1.72	-0.05	0.05	8
B042E40S00	1.00	0.63	0.10	8
B042E40S05	-0.77	-0.22	-0.05	8
B042E40S10	3.62	-0.29	0.09	8
B042E40S15	0.02	-0.44	-0.04	8
B042E40S20	0.21	0.50	0.06	8
B042E40S25	0.24	0.11	0.02	9
B042E40S30	1.12	0.11	0.05	8
B042E40S35	-1.48	0.50	0.00	8
B042E40S40	0.43	-0.47	-0.03	7
B042E40S45	-1.22	0.13	-0.03	8
B042E40S50	0.45	0.15	0.03	8
B042E40S55	-1.31	-0.56	-0.10	7
B042E40S60	0.74	0.08	0.03	8
B042E40S65	-0.25	0.23	0.01	8
B042E40S70	0.72	0.02	0.03	8
B042E40S75	-0.07	0.73	0.07	8
B042E40S80	-2.59	0.47	-0.04	8
B042E40S85	-2.77	0.54	-0.04	8
B042E40S90	-0.28	0.44	0.03	8
B042E40S95	-1.81	-0.59	-0.12	8
B042E45S00	-0.88	-0.03	-0.03	8
B042E45S05	0.65	0.33	0.05	8
B042E45S10	0.97	0.03	0.03	8
B042E45S15	-1.87	-0.14	-0.08	9
B042E45S20	-1.18	0.56	0.02	8
B042E45S25	0.84	-0.19	0.01	8
B042E45S30	-0.25	0.42	0.03	8
B042E45S35	-0.03	-0.29	-0.03	8
B042E45S40	0.85	0.30	0.06	8
B042E45S45	-1.17	-0.25	-0.06	8
B042E45S50	-0.58	0.15	0.00	8
B042E45S55	0.63	0.17	0.04	8
B042E45S60	1.98	0.17	0.08	8
B042E45S65	2.82	-0.49	0.05	8
B042E45S70	4.12	0.12	0.15	8
B042E45S75	1.04	0.45	0.08	8
B042E45S80	-3.55	0.45	-0.07	8
B042E45S85	-1.18	-0.03	-0.04	8

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B042E45S90	3.10	-0.34	0.07	8
B042E45S95	-0.18	-0.08	-0.01	8
B042E50S00	-2.27	0.00	-0.08	8
B042E50S05	1.96	0.27	0.09	8
B042E50S10	-1.02	0.05	-0.03	8
B042E50S15	0.56	-0.16	0.00	9
B042E50S20	-1.30	0.02	-0.04	8
B042E50S25	-2.11	-0.78	-0.15	8
B042E50S30	-1.35	-0.66	-0.11	8
B042E50S35	-0.34	0.44	0.03	9
B042E50S40	-0.27	0.04	0.00	8
B042E50S45	0.34	-0.30	-0.02	8
B042E50S50	0.03	0.02	0.00	8
B042E50S55	-2.16	-0.70	-0.14	7
B042E50S60	1.97	0.80	0.15	8
B042E50S65	1.82	-0.09	0.05	8
B042E50S70	-2.42	0.16	-0.06	8
B042E50S75	-1.07	0.18	-0.02	8
B042E50S80	-1.05	-0.34	-0.07	8
B042E50S85	-2.95	0.11	-0.09	8
B042E50S90	-1.17	-0.65	-0.10	7
B042E50S95	-1.62	0.03	-0.05	8
B042E55S20	-1.15	-0.22	-0.06	7
B042E55S25	-0.52	-0.17	-0.03	8
B042E55S30	-3.03	-0.37	-0.14	8
B042E55S35	0.25	-0.30	-0.02	8
B042E55S40	-1.34	-0.33	-0.08	8
B042E55S45	-3.16	-0.37	-0.14	8
B042E55S50	-3.43	0.34	-0.08	7
B042E55S55	-4.16	-0.37	-0.18	8
B042E55S60	-2.94	0.88	-0.01	8
B042E55S65	2.02	0.44	0.11	8
B042E55S70	-1.87	0.01	-0.06	8
B042E55S75	-1.64	-0.29	-0.08	8
B042E55S80	-4.17	-0.42	-0.18	8
B042E55S85	0.03	0.87	0.09	7
B042E55S90	-3.23	-0.35	-0.14	8
B042E55S95	-2.09	0.10	-0.06	8
SU-207				
B028E90S20	1.51	2.16	0.27	9
B028E90S25	1.06	6.42	0.68	9
B028E90S30	1.48	2.10	0.26	9
B028E90S35	-0.56	2.35	0.22	9
B028E90S40	-2.21	3.71	0.30	10
B028E90S45	-3.76	5.23	0.40	11

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B028E90S50	-1.31	7.16	0.67	11
B028E90S55	-0.56	3.42	0.32	11
B028E90S60	1.16	2.88	0.33	10
B028E90S65	-0.95	1.33	0.10	9
B028E90S70	0.48	2.06	0.22	10
B028E95S00	-1.87	-1.02	-0.16	7
B028E95S05	-5.09	0.31	-0.14	7
B028E95S10	-3.24	-0.16	-0.12	8
B028E95S15	0.75	0.34	0.06	8
B028E95S20	1.16	0.69	0.11	8
B028E95S25	-2.98	0.15	-0.08	8
B028E95S30	-0.09	0.30	0.03	8
B028E95S35	-2.28	0.33	-0.04	8
B028E95S40	-2.07	0.71	0.00	8
B028E95S45	0.39	0.26	0.04	8
B028E95S50	-1.36	0.66	0.02	9
B028E95S55	-3.21	0.33	-0.07	9
B028E95S60	-2.61	0.53	-0.03	8
B028E95S65	-2.97	0.75	-0.02	8
B028E95S70	-2.26	0.55	-0.02	9
B029E00S00	0.02	-0.46	-0.04	8
B029E00S05	-1.10	-0.48	-0.08	8
B029E00S10	0.00	0.35	0.03	8
B029E00S15	0.49	-0.09	0.01	8
B029E00S20	-1.70	0.18	-0.04	8
B029E00S25	-2.58	0.16	-0.07	8
B029E00S30	-3.62	1.25	0.00	8
B029E00S35	-0.70	0.64	0.04	9
B029E00S40	-0.40	0.42	0.03	8
B029E00S45	-1.67	0.07	-0.05	8
B029E00S50	-1.56	0.82	0.03	9
B029E00S55	-1.83	0.51	-0.01	8
B029E00S60	2.83	-0.15	0.08	8
B029E00S65	-0.72	0.81	0.06	7
B029E00S70	-2.00	0.40	-0.03	8
B029E05S00	1.21	0.10	0.05	8
B029E05S05	-0.04	-0.11	-0.01	9
B029E05S10	0.24	0.10	0.02	9
B029E05S15	1.91	0.70	0.13	9
B029E05S20	-3.45	0.44	-0.07	9
B029E05S25	0.66	0.28	0.05	9
B029E05S30	-1.94	0.98	0.03	10
B029E05S35	0.28	0.98	0.11	10
B029E05S40	-1.42	0.31	-0.02	9
B029E05S45	0.83	1.18	0.15	9

Table 2
FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B029E05S50	-0.47	0.34	0.02	9
B029E05S55	0.26	0.30	0.04	9
B029E05S60	-1.60	0.80	0.03	10
B029E05S65	-4.87	1.26	-0.04	9
B029E05S70	-1.67	0.40	-0.02	9
B029E10S00	0.54	-0.20	0.00	9
B029E10S05	-2.45	0.13	-0.07	10
B029E10S10	-0.03	0.25	0.02	9
B029E10S15	-1.58	0.43	-0.01	9
B029E10S20	-5.08	0.45	-0.12	9
B029E10S25	2.71	0.11	0.10	9
B029E10S30	1.00	-0.38	0.00	9
B029E10S35	1.36	0.65	0.11	10
B029E10S40	1.57	0.10	0.06	10
B029E10S45	1.42	0.58	0.11	10
B029E10S50	-1.65	0.92	0.04	10
B029E10S55	-1.23	0.43	0.00	10
B029E10S60	-1.26	0.38	0.00	9
B029E10S65	-3.57	0.97	-0.02	9
B029E10S70	-2.82	1.22	0.03	9
B029E10S75	2.86	1.10	0.20	11
B029E10S80	0.99	0.26	0.06	10
B029E10S85	-0.97	1.32	0.10	9
B029E10S90	-0.66	1.41	0.12	10
B029E10S95	-1.48	0.19	-0.03	9
B029E15S00	-1.47	0.18	-0.03	10
B029E15S05	-2.65	0.83	0.00	10
B029E15S10	0.38	0.57	0.07	9
B029E15S15	-0.66	0.23	0.00	11
B029E15S20	0.72	0.45	0.07	9
B029E15S25	2.90	0.27	0.12	10
B029E15S30	-1.44	0.49	0.00	9
B029E15S35	2.01	0.21	0.09	10
B029E15S40	-0.63	0.38	0.02	10
B029E15S45	-0.97	0.58	0.03	10
B029E15S50	-2.94	0.19	-0.08	10
B029E15S55	-2.61	2.00	0.11	10
B029E15S60	3.45	1.80	0.29	10
B029E15S65	-3.94	1.44	0.01	9
B029E15S70	1.23	1.30	0.17	9
B029E15S75	2.81	0.62	0.16	9
B029E15S80	-1.50	1.66	0.12	10
B029E15S85	-2.36	0.71	-0.01	10
B029E15S90	-0.03	0.36	0.04	9
B029E15S95	-4.16	-0.19	-0.16	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B029E20S00	-1.27	0.34	-0.01	9
B029E20S05	-0.09	1.88	0.19	9
B029E20S10	-1.28	0.70	0.03	Tree
B029E20S15	-1.29	0.45	0.00	10
B029E20S20	-0.01	0.28	0.03	10
B029E20S25	1.31	0.99	0.14	10
B029E20S30	-0.57	4.39	0.42	11
B029E20S35	0.25	1.51	0.16	11
B029E20S40	1.01	0.66	0.10	10
B029E20S45	-1.37	0.53	0.01	9
B029E20S50	-1.31	0.54	0.01	10
B029E20S55	-1.34	0.82	0.04	10
B029E20S60	-0.16	0.99	0.09	10
B029E20S65	-0.80	0.58	0.03	9
B029E20S70	0.93	0.12	0.04	9
B029E20S75	1.21	0.00	0.04	Tree
B029E20S80	-1.33	0.53	0.01	9
B029E20S85	-0.58	0.96	0.08	9
B029E20S90	-0.09	0.02	0.00	8
B029E20S95	-2.07	0.48	-0.02	10
B029E25S00	-1.00	0.90	0.06	9
B029E25S05	0.41	0.42	0.06	9
B029E25S10	-1.44	0.82	0.03	9
B029E25S15	0.77	1.48	0.17	11
B029E25S20	-2.76	1.67	0.07	10
B029E25S25	3.19	0.79	0.19	8
B029E25S30	3.85	1.42	0.27	9
B029E25S35	3.68	0.88	0.21	9
B029E25S40	1.39	0.94	0.14	10
B029E25S45	0.03	-0.37	-0.04	10
B029E25S50	-2.68	1.10	0.02	8
B029E25S55	0.02	1.04	0.10	10
B029E25S60	-3.36	0.74	-0.04	9
B029E25S65	-1.65	0.58	0.00	9
B029E25S70	2.15	0.29	0.10	10
B029E25S75	-2.53	0.50	-0.03	10
B029E25S80	-2.07	1.21	0.05	10
B029E25S85	-2.27	1.37	0.06	9
B029E25S90	-2.04	0.63	-0.01	9
B029E25S95	-1.31	1.21	0.08	9
B029E30S35	-0.48	1.56	0.14	10
B029E30S40	-0.78	1.77	0.15	10
B029E30S45	-0.08	0.86	0.08	9
B029E30S50	-1.38	0.14	-0.03	9
B029E30S55	2.07	0.30	0.10	10

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B029E30S60	1.95	0.13	0.08	9
B029E30S65	0.17	2.61	0.27	11
B029E30S70	-2.25	0.96	0.02	10
B029E30S75	-1.98	0.01	-0.07	9
B029E30S80	0.38	1.22	0.14	10
B029E30S85	0.05	0.46	0.05	10
B029E30S90	0.85	0.38	0.07	9
B029E30S95	1.04	0.13	0.05	9
B029E35S45	-2.66	2.05	0.12	10
B029E35S50	-1.00	0.98	0.06	10
B029E35S55	3.22	3.04	0.41	10
B029E35S60	-3.80	2.20	0.09	10
B029E35S65	2.67	1.47	0.24	10
B029E35S70	-1.85	1.19	0.06	9
B029E35S75	-0.02	0.80	0.08	10
B029E35S80	0.21	0.44	0.05	9
B029E35S85	-2.61	0.31	-0.06	9
B029E35S90	1.32	0.05	0.05	9
B029E35S95	1.48	0.52	0.10	9
B029E40S55	0.27	0.64	0.07	9
B029E40S60	-0.18	0.02	0.00	10
B029E40S65	-1.69	-0.07	-0.06	10
B029E40S70	0.21	0.61	0.07	9
B029E40S75	-1.65	0.42	-0.01	10
B029E40S80	-1.48	0.45	0.00	9
B029E40S85	0.00	-0.18	-0.02	10
B029E40S90	-0.39	0.71	0.06	8
B029E40S95	-1.74	-0.21	-0.08	10
B029E45S60	-0.89	0.38	0.01	10
B029E45S65	-1.61	0.40	-0.01	10
B029E45S70	-1.92	0.56	-0.01	9
B029E45S75	0.61	0.40	0.06	9
B029E45S80	-0.20	0.36	0.03	10
B029E45S85	0.03	0.67	0.07	9
B029E45S90	-0.88	-0.29	-0.06	9
B029E45S95	3.45	0.47	0.16	Tree
B029E50S60	-0.20	0.36	0.03	9
B029E50S65	3.19	0.69	0.18	9
B029E50S70	2.46	0.43	0.12	9
B029E50S75	0.42	0.49	0.06	10
B029E50S80	-4.09	0.27	-0.11	9
B029E50S85	-3.00	0.79	-0.02	10
B029E50S90	-2.29	0.24	-0.05	9
B029E50S95	0.20	0.48	0.05	9
B029E55S65	1.61	0.89	0.14	9

Table 2
FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B029E55S70	-2.47	0.00	-0.08	10
B029E55S75	2.02	-0.14	0.05	9
B029E55S80	0.27	1.55	0.16	9
B029E55S85	-1.34	1.86	0.14	10
B029E55S90	-1.88	0.02	-0.06	10
B029E55S95	-1.22	0.58	0.02	10
B029E75S60	3.78	0.20	0.15	8
B029E75S65X	1.04	-0.40	-0.01	8
B029E80S60	0.46	4.16	0.43	9
B029E80S65	-2.60	0.46	-0.04	9
B029E80S70	-2.36	0.04	-0.07	6
B029E80S75	-1.88	0.71	0.01	8
B029E80S80	-0.47	0.02	-0.01	8
B029E80S85	0.08	0.58	0.06	6
B029E80S90	0.41	-0.54	-0.04	7
B029E80S95	0.20	0.24	0.03	7
B029E85S55	-1.30	0.91	0.05	9
B029E85S60	0.51	0.85	0.10	8
B029E85S65	-1.11	0.78	0.04	9
B029E85S70	-3.19	0.05	-0.10	7
B029E85S75	-0.30	-0.04	-0.01	8
B029E85S80	-0.43	-0.24	-0.04	8
B029E85S85	1.33	0.05	0.05	7
B029E85S90	-2.05	-0.57	-0.13	8
B029E85S95	-0.54	0.15	0.00	8
B029E90S55	-2.62	0.79	-0.01	9
B029E90S60	0.18	0.50	0.06	9
B029E90S65	-0.19	0.79	0.07	8
B029E90S70	2.10	0.21	0.09	7
B029E90S75	-1.07	0.13	-0.02	8
B029E90S80	0.49	0.09	0.03	8
B029E90S85	0.11	0.30	0.03	8
B029E90S90	-0.17	0.33	0.03	8
B029E90S95	-0.62	0.48	0.03	8
B029E95S50	-1.32	0.48	0.00	10
B029E95S55	-2.04	0.41	-0.03	9
B029E95S60	1.75	-0.05	0.05	8
B029E95S65	-0.24	0.25	0.02	7
B029E95S70	-1.69	-0.42	-0.10	8
B029E95S75	-1.90	0.05	-0.06	8
B029E95S80	3.39	0.28	0.14	8
B029E95S85	-0.56	0.88	0.07	8
B029E95S90	-0.28	0.44	0.03	8
B029E95S95	0.22	0.37	0.04	8
SU-208				

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B016E95S55	-1.37	-0.29	-0.07	8
B016E95S60	4.75	0.22	0.18	8
B016E95S65	-3.50	-1.02	-0.22	7
B016E95S70	8.54	-0.29	0.26	6
B016E95S75	3.23	-0.54	0.05	8
B016E95S80	-1.00	0.16	-0.02	8
B016E95S85	-0.29	0.62	0.05	9
B016E95S90	-6.32	6.58	0.45	11
B016E95S95	-1.33	3.10	0.27	11
B017E00S40	0.11	-0.27	-0.02	8
B017E00S45	-3.32	0.12	-0.10	8
B017E00S50	1.78	0.14	0.07	7
B017E00S55	-1.67	0.08	-0.05	7
B017E00S60	-3.80	0.42	-0.08	7
B017E00S65	-1.94	-0.90	-0.15	7
B017E00S70	0.34	-0.28	-0.02	7
B017E00S75	-0.70	-0.22	-0.04	7
B017E00S80	-0.56	0.85	0.07	9
B017E00S85	-0.87	-0.29	-0.06	8
B017E00S90	-2.28	2.97	0.22	8
B017E00S95	-2.74	-0.11	-0.10	9
B017E05S40	-2.64	-0.46	-0.13	8
B017E05S45	3.20	0.70	0.18	8
B017E05S50	1.84	-0.73	-0.01	8
B017E05S55	-2.25	2.37	0.16	7
B017E05S60	3.48	0.14	0.13	9
B017E05S65	2.22	-0.18	0.06	8
B017E05S70	1.84	2.08	0.27	8
B017E05S75	-1.13	0.13	-0.03	9
B017E05S80	-1.05	0.44	0.01	9
B017E05S85	-2.02	0.00	-0.07	7
B017E05S90	-2.81	0.34	-0.06	10
B017E05S95	1.25	-0.22	0.02	9
B017E10S45	-3.12	0.14	-0.09	8
B017E10S50	3.48	0.43	0.16	8
B017E10S60	1.77	-0.95	-0.04	8
B017E10S65	-0.35	0.32	0.02	8
B017E10S70	-0.70	-0.13	-0.04	8
B017E10S75	-4.10	0.34	-0.10	9
B017E10S80	-4.24	1.37	0.00	10
B017E10S85	-5.13	2.34	0.06	10
B017E10S90	1.53	0.77	0.13	9
B017E10S95	-0.11	0.35	0.03	10
B017E15S45	-0.43	0.46	0.03	8
B017E15S50	4.65	-0.90	0.06	8

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B017E15S65	-0.51	0.05	-0.01	8
B017E15S70	1.36	0.31	0.08	8
B017E15S75	0.09	-0.08	0.00	8
B017E15S80	0.98	4.70	0.50	11
B017E15S85	-0.65	-0.21	-0.04	10
B017E15S90	1.35	0.89	0.13	9
B017E15S95	2.44	0.78	0.16	10
B017E20S45	-3.91	0.39	-0.09	7
B017E20S50	-3.27	-0.13	-0.12	8
B017E20S65	2.40	-0.06	0.07	6
B017E20S70	-2.53	-0.44	-0.13	7
B017E20S75	-2.07	0.77	0.01	8
B017E20S80	-1.30	8.59	0.82	11
B017E20S85	-1.13	0.39	0.00	8
B017E20S90	-0.13	0.00	0.00	8
B017E20S95	-2.06	0.60	-0.01	8
B017E25S45	-4.21	0.43	-0.10	8
B017E25S50	0.16	0.00	0.01	7
B017E25S65	-5.32	-0.63	-0.24	7
B017E25S70	-0.41	-0.18	-0.03	7
B017E25S75	-0.90	0.96	0.07	8
B017E25S80	0.06	1.57	0.16	8
B017E25S85	-1.00	0.12	-0.02	8
B017E25S90	-4.08	-0.08	-0.14	8
B017E25S95	0.66	0.41	0.06	Tree
B017E30S45	-2.21	-0.07	-0.08	7
B017E30S50	-0.91	-1.23	-0.15	7
B017E30S60	-0.82	-0.96	-0.12	7
B017E30S65	1.67	-0.44	0.01	8
B017E30S70	-4.78	0.23	-0.14	8
B017E30S75	-3.67	0.52	-0.07	8
B017E30S80	-1.24	1.13	0.07	9
B017E30S85	-2.14	0.41	-0.03	8
B017E30S90	0.02	1.13	0.11	8
B017E30S95	0.38	1.30	0.14	10
B017E35S45	-5.42	0.01	-0.18	7
B017E35S50	-6.36	-0.33	-0.24	7
B017E35S55	0.31	-1.41	-0.13	6
B017E35S60	0.16	0.04	0.01	8
B017E35S65	-0.20	1.45	0.14	9
B017E35S70	0.93	0.68	0.10	8
B017E35S75	-2.34	1.30	0.05	9
B017E35S80	-4.85	2.09	0.05	10
B017E35S85	-1.65	0.66	0.01	9
B017E35S90	0.26	1.55	0.16	9

Table 2
FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B017E40S45	-1.91	0.49	-0.01	8
B017E40S50	-2.49	0.25	-0.06	7
B017E40S55	-3.70	0.75	-0.05	8
B017E40S60	0.59	0.11	0.03	7
B017E40S65	1.79	0.80	0.14	9
B017E40S70	1.52	-0.24	0.03	8
B017E40S75	1.72	1.67	0.22	10
B017E40S80	0.06	0.46	0.05	9
B017E40S85	-2.57	-0.68	-0.15	9
B017E45S50	-1.65	1.00	0.05	8
B017E45S55	2.84	0.82	0.18	8
B017E45S60	-1.67	0.49	-0.01	8
B017E45S65	-2.74	-1.08	-0.20	9
B017E45S70	-4.39	0.08	-0.14	8
B017E45S75	-2.67	4.29	0.34	10
B017E45S80	1.36	0.16	0.06	10
B017E45S85	-1.34	1.57	0.11	10
B017E50S50	3.70	0.09	0.13	8
B017E50S55	-0.07	-0.29	-0.03	8
B017E50S60	-0.73	0.08	-0.02	9
B017E50S65	0.64	-1.17	-0.10	7
B017E50S70	0.34	0.02	0.01	8
B017E50S75	0.11	6.81	0.68	11
B017E50S80	-1.47	-0.53	-0.10	9
B017E55S50	0.03	0.51	0.05	7
B017E55S55	-2.26	0.32	-0.04	8
B017E55S60	2.80	0.49	0.14	8
B017E55S65	-0.34	-0.10	-0.02	8
B017E55S70	-3.31	0.91	-0.02	9
B017E55S75	-1.28	3.25	0.28	10
B017E55S80	-2.25	0.05	-0.07	9
B017E60S55	-4.67	0.63	-0.09	8
B017E60S60	1.09	-0.20	0.02	8
B017E60S65	-0.07	-0.79	-0.08	8
B017E60S70	1.45	1.06	0.15	9
B017E60S75	1.55	0.27	0.08	10
B017E60S80X	0.25	0.35	0.04	8
B017E65S55	2.28	-0.05	0.07	8
B017E65S60	1.24	0.20	0.06	8
B017E65S65	-2.41	-0.26	-0.11	8
B017E65S70	-1.86	0.72	0.01	10
B017E65S75	-0.23	0.33	0.03	10
B017E65S80X	-1.01	0.46	0.01	10
B017E70S60	1.06	-0.04	0.03	9
B017E70S65	0.06	1.00	0.10	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B017E70S70	-0.42	0.56	0.04	8
B017E70S75	-1.17	0.52	0.01	9
B017E70S80	0.64	0.55	0.08	9
B017E75S60	-4.78	0.47	-0.11	8
B017E75S65	-1.03	1.43	0.11	9
B017E75S70	0.25	-0.26	-0.02	8
B017E75S75	-0.41	1.06	0.09	9
B017E75S80	-1.75	1.12	0.05	9
B017E80S60	0.50	-0.09	0.01	8
B017E80S65	1.21	1.05	0.15	9
B017E80S70	-0.24	0.15	0.01	9
B017E80S75	-1.48	0.82	0.03	9
B017E80S80	-1.33	0.24	-0.02	10
B017E85S65	-0.51	0.04	-0.01	9
B017E85S70	-0.71	0.33	0.01	9
B017E85S75	1.10	1.00	0.14	9
B017E85S80	0.46	0.73	0.09	10
B017E90S65	1.53	0.59	0.11	8
B017E90S70	0.50	-0.24	-0.01	8
B017E90S75	-0.35	0.15	0.00	9
B017E90S80	2.37	0.92	0.17	10
B017E95S70	2.65	-0.15	0.07	8
B017E95S75	3.44	0.05	0.12	9
B017E95S80	-0.55	-0.06	-0.02	8
B017E95S85	3.28	0.63	0.17	11
B018E00S70	-0.72	0.91	0.07	7
B018E00S75	0.47	-0.09	0.01	9
B018E00S80	-2.60	0.11	-0.08	9
B018E00S85	0.95	0.50	0.08	10
B018E00S90	-2.77	0.49	-0.04	10
SU-209				
B017E00S00	0.55	0.01	0.02	8
B017E00S10	3.68	0.72	0.19	10
B017E10S00	-4.48	-0.07	-0.16	10
B017E10S10	-1.41	0.03	-0.04	10
B017E30S00	-2.52	-0.09	-0.09	12
B017E30S40	-1.25	-0.18	-0.06	8
B017E40S00	0.95	-0.13	0.02	12
B017E40S10	0.99	-0.11	0.02	12
B017E40S20	-0.52	0.76	0.06	11
B017E50S00	2.02	0.63	0.13	12
B017E50S10	-3.12	3.11	0.21	11
B017E50S20	1.42	1.78	0.23	11
B017E50S30	0.45	0.80	0.09	11
B017E60S00	0.63	0.76	0.10	12

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B017E60S10	2.38	0.65	0.14	11
B017E60S20	-2.01	3.00	0.23	11
B017E60S30	0.82	0.84	0.11	11
B017E60S40	3.44	-0.05	0.11	12
B017E70S00	1.65	0.39	0.09	11
B017E70S10	2.55	0.42	0.13	12
B017E70S20	0.44	0.52	0.07	11
B017E70S30	-0.92	0.32	0.00	11
B017E70S40	1.82	0.16	0.08	11
B017E80S00	0.14	0.60	0.06	11
B017E80S10	-2.69	0.37	-0.05	11
B017E80S20	0.33	0.32	0.04	11
B017E80S30	1.74	0.78	0.14	11
B017E80S40	-3.76	0.31	-0.09	11
B017E90S00	1.91	0.53	0.12	10
B017E90S10	-2.55	0.23	-0.06	10
B017E90S20	-1.67	0.03	-0.05	10
B017E90S30	1.82	0.49	0.11	10
B017E90S40	0.57	0.31	0.05	10
B017E90S50	3.55	0.98	0.22	10
B029E00S80	-0.37	0.08	0.00	12
B029E00S90	-0.49	0.67	0.05	11
B041E00S00	-2.27	4.49	0.37	11
B041E00S10	-1.99	0.73	0.01	11
B041E00S20	0.10	-0.18	-0.01	11
B041E00S30	-0.94	0.79	0.05	12
B041E00S40	-2.58	1.14	0.03	10
B041E00S50	-1.14	0.73	0.04	11
B041E00S60	-1.30	0.84	0.04	11
B041E00S70	3.33	0.20	0.13	11
B041E00S80	0.71	0.16	0.04	11
B041E00S90	-0.25	0.00	-0.01	11
B053E00S00	0.07	1.15	0.12	9
SU-210				
B018E00S00	-0.51	0.36	0.02	11
B018E00S10	-5.45	-0.59	-0.24	11
B018E00S20	-2.25	0.73	0.00	11
B018E00S30	-0.12	3.62	0.36	12
B018E00S40	-5.99	4.13	0.21	12
B018E00S50	1.30	-0.22	0.02	12
B018E10S00	-0.50	1.02	0.09	11
B018E10S10	-2.73	1.67	0.08	11
B018E10S20	-2.08	1.26	0.06	10
B018E10S30	-2.77	1.07	0.01	9
B018E10S40	0.30	0.63	0.07	11

**Table 2
FSS Surface Grid Samples**

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B018E10S50	-1.68	-0.27	-0.08	11
B018E10S60	0.73	0.20	0.04	11
B018E10S80	0.68	1.38	0.16	10
B018E10S90	-1.91	1.09	0.05	10
B018E20S00	-0.02	0.73	0.07	11
B018E20S10	0.89	1.09	0.14	11
B018E20S20	-0.56	0.53	0.03	11
B018E20S30	-3.79	-0.14	-0.14	11
B018E20S40	2.16	0.65	0.14	11
B018E20S50	-2.69	0.61	-0.03	9
B018E20S60	1.66	0.67	0.12	9
B018E20S80	-0.73	0.49	0.02	11
B018E20S90	-0.02	0.22	0.02	11
B018E30S00	-1.31	0.32	-0.01	11
B018E30S10	0.02	0.99	0.10	11
B018E30S20	-3.66	0.77	-0.05	11
B018E30S30	-1.10	0.54	0.02	11
B018E30S40	0.04	0.11	0.01	11
B018E30S50	-2.28	-0.36	-0.11	11
B018E30S60	-0.72	0.70	0.05	11
B018E30S70	2.79	0.97	0.19	11
B018E30S90	4.74	0.01	0.16	11
B018E40S00	-4.29	0.12	-0.13	11
B018E40S10	-3.82	0.64	-0.06	11
B018E40S20	-6.16	1.05	-0.10	12
B018E40S30	-2.07	0.07	-0.06	11
B018E40S40	0.50	-0.19	0.00	11
B018E40S50	2.34	0.31	0.11	11
B018E40S60	4.30	0.51	0.19	12
B018E40S70	-2.58	0.39	-0.05	11
B018E40S90	-2.19	0.85	0.01	11
B018E50S00	0.93	-0.10	0.02	9
B018E50S10	-1.05	-0.09	-0.04	11
B018E50S20	-0.01	0.19	0.02	11
B018E50S30	-0.27	-0.23	-0.03	11
B018E50S40	-3.12	0.44	-0.06	11
B018E50S50	3.02	0.84	0.18	11
B018E50S60	0.90	0.10	0.04	11
B018E50S70	0.25	0.81	0.09	11
B018E60S00	-2.92	0.43	-0.05	11
B018E60S10	-2.32	0.71	-0.01	11
B018E60S20	4.04	0.72	0.21	11
B018E60S80	0.20	0.63	0.07	9
B018E60S90	0.00	0.67	0.07	9
B018E70S00	-3.57	-0.12	-0.13	10

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B018E70S10	-0.62	0.07	-0.01	11
B018E70S20	-2.12	0.34	-0.04	12
B018E80S00	1.61	0.40	0.09	11
B018E80S10	1.93	0.43	0.11	10
B018E80S20	-2.83	0.32	-0.06	11
SU-211				
B006E00S00	-0.40	0.71	0.06	11
B006E00S10	-0.40	0.21	0.01	9
B006E00S20	-0.67	0.03	-0.02	10
B006E00S30	0.47	-0.25	-0.01	12
B006E00S80	2.03	-0.01	0.07	9
B006E00S90	-0.66	-0.17	-0.04	12
B006E10S00	-0.88	0.10	-0.02	12
B006E10S10	-2.77	0.10	-0.08	9
B006E10S20	1.92	-0.23	0.04	8
B006E10S30	0.93	0.75	0.11	9
B006E10S40	0.06	0.20	0.02	9
B006E10S60	-0.34	0.11	0.00	9
B006E10S70	-2.63	1.23	0.04	9
B006E10S80	-0.65	0.25	0.00	11
B006E10S90	0.74	1.17	0.14	10
B006E20S00	-3.20	1.08	0.00	12
B006E20S10	-0.68	0.24	0.00	12
B006E20S20	2.14	0.51	0.12	12
B006E20S30	-1.89	-0.20	-0.08	12
B006E20S40	0.22	0.35	0.04	9
B006E20S50	0.49	-0.45	-0.03	9
B006E20S60	-0.41	0.23	0.01	9
B006E20S70	1.75	0.84	0.14	9
B006E20S80	-0.54	0.80	0.06	9
B006E20S90	-2.69	-0.16	-0.11	12
B006E30S00	-1.76	0.04	-0.05	11
B006E30S10	0.18	0.41	0.05	11
B006E30S20	-3.21	0.89	-0.02	12
B006E30S30	2.70	0.06	0.10	11
B006E30S40	2.29	0.32	0.11	11
B006E30S50	-1.84	-0.11	-0.07	11
B006E30S60	-0.18	0.00	-0.01	12
B006E30S70	-1.08	0.64	0.03	9
B006E30S80	-1.54	0.23	-0.03	11
B006E30S90	-2.24	0.51	-0.02	9
B006E40S00	-1.55	0.09	-0.04	11
B006E40S10	-2.63	1.17	0.03	11
B006E40S20	0.05	-0.16	-0.01	12
B006E40S30	-1.97	0.64	0.00	12

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B006E40S40	-0.31	-0.12	-0.02	12
B006E40S50	-0.36	0.41	0.03	11
B006E40S60	1.36	1.16	0.16	12
B006E40S70	0.89	0.14	0.04	12
B006E40S80	-2.41	0.60	-0.02	12
B006E40S90	-1.29	0.12	-0.03	9
B006E50S00	-0.85	-0.09	-0.04	12
B006E50S10	0.06	1.22	0.12	11
B006E50S20	0.35	-0.04	0.01	11
B006E50S30	-2.72	0.44	-0.05	12
B006E50S40	-0.62	-0.41	-0.06	11
B006E50S50	-2.10	0.90	0.02	11
B006E50S60	-2.92	0.46	-0.05	11
B006E50S70	-1.12	0.64	0.03	12
B006E50S80	-5.75	0.00	-0.19	11
B006E50S90	-0.20	0.36	0.03	12
B006E60S00	-1.52	0.18	-0.03	8
B006E60S10	-2.65	0.68	-0.02	12
B006E60S20	-0.46	0.66	0.05	12
B006E60S30	0.32	0.28	0.04	12
B006E60S40	-1.88	0.11	-0.05	12
B006E60S50	-0.42	-0.50	-0.06	11
B006E60S60	-1.50	0.70	0.02	11
B006E60S70	-2.65	-0.41	-0.13	11
B006E60S80	-3.71	-0.23	-0.15	12
B006E60S90	-0.51	-0.70	-0.09	12
B006E70S00	-0.47	0.05	-0.01	9
B006E70S10	-0.97	0.60	0.03	8
B006E70S20	-2.71	0.44	-0.05	9
B006E70S30	-2.77	0.18	-0.07	9
B006E70S40	-1.20	0.73	0.03	8
B006E70S50	-2.59	-0.06	-0.09	8
B006E70S60	-1.56	0.89	0.04	8
B006E70S70	-1.55	0.07	-0.04	9
B006E70S80	-2.84	0.21	-0.07	12
B006E70S90	-1.78	0.41	-0.02	12
B006E80S00	-1.32	-0.16	-0.06	8
B006E80S10	-2.63	0.12	-0.08	9
B006E80S20	0.74	0.23	0.05	8
B006E80S30	-1.06	-0.11	-0.05	8
B006E80S40	-2.77	-0.21	-0.11	8
B006E80S50	-1.95	0.45	-0.02	8
B006E80S60	0.60	0.73	0.09	9
B006E80S70	-1.13	0.29	-0.01	12
B006E80S80	-1.23	0.49	0.01	13

**Table 2
FSS Surface Grid Samples**

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B006E80S90	-1.86	0.14	-0.05	12
B206E00S90	0.35	-0.18	-0.01	9
B206E10S90	2.53	0.58	0.14	10
B206E20S90	-0.57	1.08	0.09	9
B206E30S90	0.05	0.43	0.04	9
B206E40S90	-2.77	0.29	-0.06	10
B206E50S90	-2.77	0.77	-0.02	9
B206E60S90	0.27	1.04	0.11	10
B206E70S90	-1.76	0.46	-0.01	9
B206E80S90	-0.27	0.04	-0.01	10
SU-212				
B005E00S60	-0.79	1.69	0.14	8
B005E00S70	1.45	0.38	0.09	8
B005E00S80	2.91	0.04	0.10	8
B005E00S90	2.38	-0.22	0.06	7
B005E10S00	-0.24	0.47	0.04	10
B005E10S10	-3.89	0.68	-0.06	11
B005E10S20	2.30	0.27	0.10	11
B005E10S30	-0.52	-0.05	-0.02	11
B005E10S80	-1.26	-0.05	-0.05	11
B005E10S90	-0.31	0.01	-0.01	10
B005E20S00	-2.92	1.05	0.01	10
B005E20S10	0.45	1.39	0.15	10
B005E20S20	-3.09	0.70	-0.03	10
B005E20S60	0.52	0.64	0.08	12
B005E20S70	2.54	-0.29	0.06	12
B005E30S00	0.29	0.02	0.01	10
B005E30S80	0.54	0.38	0.06	8
B005E30S90	1.57	0.30	0.08	10
B005E40S00	5.36	0.74	0.25	11
B005E40S10	0.00	-0.90	-0.09	11
B005E40S90	-1.32	1.17	0.07	9
B005E50S00	0.36	0.36	0.05	11
B005E60S00	1.52	0.54	0.10	11
B005E70S00	-0.52	0.20	0.00	12
B005E80S00	-0.43	0.02	-0.01	12
B005E80S10	-2.76	0.67	-0.02	12
B005E80S90	-1.66	0.31	-0.02	9
B005E90S00	-0.09	0.81	0.08	12
B005E90S10	-0.84	1.12	0.08	12
B005E90S90	0.39	-0.12	0.00	12
B205E10S90	-1.21	0.10	-0.03	9
B205E20S90	1.91	0.05	0.07	9
B205E30S90	2.69	-0.56	0.03	9
B205E40S90	0.21	-0.03	0.00	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B205E50S90	-1.80	-0.08	-0.07	10
B205E60S90	0.24	0.23	0.03	8
B205E70S90	0.21	0.45	0.05	11
B205E80S90	-0.70	0.63	0.04	10
B205E90S90	0.40	0.14	0.03	10
SU-213				
B005E25S10	2.60	0.22	0.11	7
B005E25S15	-1.46	-0.66	-0.11	7
B005E25S20	2.96	0.22	0.12	7
B005E25S25	1.05	0.11	0.05	7
B005E25S30	-0.43	0.26	0.01	9
B005E25S35	-2.75	0.65	-0.03	9
B005E25S40	-0.11	0.37	0.03	8
B005E25S45	-1.56	1.01	0.05	8
B005E25S50	-0.97	0.70	0.04	8
B005E25S55	12.17	1.20	0.53	9
B005E25S60	-1.83	0.48	-0.01	9
B005E25S65	4.01	1.05	0.24	9
B005E25S70	-0.08	0.62	0.06	10
B005E25S75	0.69	0.57	0.08	9
B005E30S10	1.22	0.64	0.10	11
B005E30S15	-2.56	-0.39	-0.12	9
B005E30S20	0.55	0.97	0.12	12
B005E30S25	-1.16	0.92	0.05	9
B005E30S30	-1.34	0.96	0.05	8
B005E30S35	-1.88	1.33	0.07	9
B005E30S40	2.31	1.73	0.25	9
B005E30S45	2.54	0.48	0.13	9
B005E30S50	-2.21	1.26	0.05	9
B005E30S55	-0.64	0.24	0.00	8
B005E30S60	-0.95	0.53	0.02	9
B005E30S65	0.34	1.16	0.13	9
B005E30S70	0.06	0.36	0.04	10
B005E30S75	1.40	0.44	0.09	10
B005E35S20	2.72	0.45	0.14	9
B005E35S25	-0.91	1.56	0.13	10
B005E35S30	0.98	0.07	0.04	9
B005E35S35	3.25	0.41	0.15	9
B005E35S40	3.54	0.44	0.16	9
B005E35S45	1.65	1.17	0.17	9
B005E35S50	-0.48	0.56	0.04	9
B005E35S55	0.77	0.62	0.09	9
B005E35S60	3.27	0.30	0.14	9
B005E35S65	0.12	0.57	0.06	9
B005E35S70	-0.46	-0.10	-0.02	8

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B005E35S75	2.03	0.88	0.16	10
B005E35S80	-1.36	1.09	0.06	9
B005E35S85	1.27	0.48	0.09	10
B005E40S15	-0.93	0.75	0.04	10
B005E40S20	-2.20	1.40	0.07	9
B005E40S25	-2.77	0.29	-0.06	9
B005E40S30	-1.46	0.55	0.01	9
B005E40S35	-1.12	1.29	0.09	9
B005E40S40	-2.77	1.29	0.04	9
B005E40S45	-1.94	0.86	0.02	9
B005E40S50	-0.03	0.55	0.05	10
B005E40S55	-0.16	0.90	0.08	9
B005E40S60	-1.45	0.88	0.04	9
B005E40S65	0.43	0.79	0.09	9
B005E40S70	-1.81	1.32	0.07	9
B005E40S75	-0.69	1.30	0.11	10
B005E40S80	1.39	1.52	0.20	10
B005E40S85	-0.82	0.58	0.03	10
B005E45S15	0.86	0.14	0.04	9
B005E45S20	-2.73	1.19	0.03	9
B005E45S25	1.19	1.20	0.16	9
B005E45S30	1.63	0.90	0.14	9
B005E45S35	-2.70	1.27	0.04	9
B005E45S40	2.11	0.42	0.11	9
B005E45S45	1.58	1.03	0.16	9
B005E45S50	-0.31	0.88	0.08	9
B005E45S55	-2.77	0.97	0.00	9
B005E45S60	1.52	1.19	0.17	9
B005E45S65	-1.66	1.84	0.13	9
B005E45S70	-2.77	0.79	-0.01	10
B005E45S75	3.78	3.80	0.51	9
B005E45S80	-0.17	0.59	0.05	11
B005E45S85	0.30	0.97	0.11	9
B005E45S90	-2.60	0.62	-0.02	10
B005E50S10	2.06	-0.03	0.07	12
B005E50S15	-2.56	1.32	0.05	10
B005E50S20	-0.20	1.53	0.15	9
B005E50S25	-1.43	1.20	0.07	9
B005E50S30	5.79	1.25	0.32	9
B005E50S35	0.22	0.80	0.09	9
B005E50S40	1.19	1.01	0.14	10
B005E50S45	-1.26	1.34	0.09	10
B005E50S50	1.37	0.57	0.10	9
B005E50S55	3.46	1.39	0.25	9
B005E50S60	-1.51	1.33	0.08	9

Table 2
FSS Surface Grid Samples

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B005E50S65	-1.26	0.87	0.05	9
B005E50S70	2.58	1.05	0.19	10
B005E50S75	0.22	0.42	0.05	9
B005E50S80	-2.98	2.07	0.11	9
B005E50S85	0.37	0.58	0.07	10
B005E50S90	-0.08	1.91	0.19	9
B005E55S10	0.34	0.51	0.06	10
B005E55S15	2.01	1.22	0.19	9
B005E55S20	-0.23	0.58	0.05	8
B005E55S25	-0.77	0.19	-0.01	9
B005E55S30	-0.46	1.05	0.09	8
B005E55S35	-0.46	0.77	0.06	9
B005E55S40	0.32	0.99	0.11	10
B005E55S45	-0.24	0.81	0.07	9
B005E55S50	4.37	0.78	0.22	9
B005E55S55	2.19	1.23	0.20	9
B005E55S60	0.95	1.76	0.21	9
B005E55S65	0.24	0.80	0.09	10
B005E55S70	-1.54	1.57	0.11	9
B005E55S75	-0.99	1.34	0.10	9
B005E55S80	2.91	1.03	0.20	9
B005E55S85	0.06	1.17	0.12	9
B005E55S90	1.59	0.43	0.10	9
B005E55S95	-1.50	1.34	0.08	9
B005E60S10	1.97	0.73	0.14	10
B005E60S15	-2.73	1.10	0.02	9
B005E60S20	-1.97	1.35	0.07	9
B005E60S25	-0.57	1.42	0.12	9
B005E60S30	-2.58	1.07	0.02	9
B005E60S35	1.75	1.40	0.20	9
B005E60S40	-1.05	1.22	0.09	9
B005E60S45	-1.33	0.32	-0.01	10
B005E60S50	1.25	0.78	0.12	9
B005E60S55	0.44	0.72	0.09	9
B005E60S60	-0.30	0.34	0.02	9
B005E60S65	-2.66	0.89	0.00	9
B005E60S70	0.84	0.58	0.09	9
B005E60S75	0.12	1.11	0.11	8
B005E60S80	-1.10	1.24	0.09	9
B005E60S85	-1.00	0.29	0.00	11
B005E60S90	-0.72	0.85	0.06	9
B005E60S95	1.20	0.85	0.12	9
B005E65S10	-1.60	0.98	0.05	9
B005E65S15	-2.53	0.55	-0.03	9
B005E65S20	0.70	0.35	0.06	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B005E65S25	-1.35	0.71	0.03	9
B005E65S30	-0.13	0.77	0.07	9
B005E65S35	-1.26	1.20	0.08	9
B005E65S40	-0.49	0.88	0.07	9
B005E65S45	0.36	0.62	0.07	9
B005E65S50	3.21	0.50	0.16	8
B005E65S55	-1.15	0.41	0.00	9
B005E65S60	-1.15	-0.27	-0.07	9
B005E65S65	0.82	0.28	0.06	10
B005E65S70	-0.81	0.05	-0.02	9
B005E65S75	1.36	0.73	0.12	8
B005E65S80	-2.73	0.49	-0.04	9
B005E65S85	0.82	0.25	0.05	9
B005E65S90	1.98	0.69	0.13	10
B005E70S10	-1.65	1.17	0.06	12
B005E70S15	-0.06	0.03	0.00	10
B005E70S20	1.82	0.17	0.08	9
B005E70S25	3.13	0.45	0.15	9
B005E70S30	-0.72	0.72	0.05	9
B005E70S35	-1.20	1.37	0.10	9
B005E70S40	-0.71	0.50	0.03	9
B005E70S45	-0.38	0.69	0.06	8
B005E70S50	1.25	1.32	0.17	8
B005E70S55	4.29	0.66	0.21	9
B005E70S60	0.72	0.72	0.10	9
B005E70S65	2.70	1.14	0.20	9
B005E70S70	-2.65	1.63	0.07	10
B005E70S75	1.70	0.81	0.14	9
B005E70S80	-0.53	0.62	0.04	9
B005E70S85	2.69	0.51	0.14	9
B005E70S90	-0.72	0.94	0.07	9
B005E75S15	1.74	0.90	0.15	9
B005E75S20	-0.31	0.42	0.03	9
B005E75S25	1.20	0.92	0.13	9
B005E75S30	1.27	0.75	0.12	9
B005E75S35	-2.04	0.82	0.01	9
B005E75S40	-1.79	0.88	0.03	9
B005E75S45	-1.45	1.13	0.06	10
B005E75S50	0.94	1.15	0.15	9
B005E75S55	-0.29	1.65	0.16	9
B005E75S60	-2.42	0.91	0.01	9
B005E75S65	-1.58	0.19	-0.03	9
B005E75S70	2.15	0.95	0.17	10
B005E75S75	-0.48	1.26	0.11	10
B005E75S80	-1.44	0.45	0.00	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B005E75S85	-0.01	0.53	0.05	9
B005E75S90	0.17	0.85	0.09	8
B005E80S15	-2.77	0.93	0.00	9
B005E80S20	-1.05	1.30	0.09	9
B005E80S25	-2.77	1.02	0.01	9
B005E80S30	0.22	0.64	0.07	10
B005E80S35	-1.31	1.12	0.07	10
B005E80S40	-2.13	0.25	-0.05	9
B005E80S45	-1.61	1.18	0.06	9
B005E80S50	-1.32	0.77	0.03	9
B005E80S55	-0.22	0.51	0.04	10
B005E80S60	-1.12	0.07	-0.03	10
B005E80S65	0.37	0.68	0.08	10
B005E80S70	-1.34	1.19	0.07	10
B005E80S75	-2.42	0.72	-0.01	10
B005E80S80	-0.59	0.38	0.02	9
B005E85S20	2.68	1.72	0.26	9
B005E85S25	-0.03	-0.10	-0.01	9
B005E85S30	1.10	0.85	0.12	9
B005E85S35	-0.75	1.01	0.08	9
B005E85S40	-0.22	-0.21	-0.03	9
B005E85S45	-1.58	1.40	0.09	9
B005E85S50	-2.04	1.92	0.12	10
B005E85S55	-0.40	0.16	0.00	10
B005E85S60	-2.47	0.91	0.01	9
B005E85S65	-1.25	1.09	0.07	10
B005E85S70	-0.77	1.70	0.14	9
B005E85S75	-0.79	1.52	0.13	9
B005E85S80	1.32	0.94	0.14	9
B005E85S85	-0.77	0.76	0.05	9
B005E90S20	2.63	1.44	0.23	9
B005E90S25	-0.82	0.52	0.02	9
B005E90S30	3.26	0.39	0.15	10
B005E90S35	0.62	0.41	0.06	9
B005E90S40	1.46	0.56	0.10	9
B005E90S45	2.53	0.05	0.09	9
B005E90S50	-1.22	0.85	0.04	10
B005E90S55	-1.40	0.36	-0.01	10
B005E90S60	-0.97	1.29	0.10	10
B005E90S65	-2.57	0.94	0.01	9
B005E90S70	-0.82	1.24	0.10	9
B005E90S75	-0.37	0.30	0.02	9
B005E90S80	2.05	0.76	0.14	9
B005E95S25	-2.69	1.34	0.04	8
B005E95S30	0.11	0.46	0.05	9

**Table 2
FSS Surface Grid Samples**

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B005E95S35	0.63	0.13	0.03	9
B005E95S40	0.16	0.70	0.08	8
B005E95S50	0.31	1.70	0.18	9
B005E95S55	0.10	1.30	0.13	9
B005E95S60	0.04	0.65	0.07	8
B005E95S65	-0.04	0.94	0.09	10
B005E95S70	2.35	0.89	0.17	10
B005E95S75	1.28	1.99	0.24	10

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B006E00S35	-0.40	0.34	0.02	9
B006E00S40	-2.00	0.49	-0.02	9
B006E00S50	-0.99	0.31	0.00	10
B006E00S55	1.30	0.68	0.11	9
B006E00S60	-1.82	0.75	0.01	9
B006E00S65	-2.61	0.77	-0.01	9
B006E00S70	-1.50	0.25	-0.03	9
B006E05S50	-0.92	1.11	0.08	9

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr) ^a
B006E05S55	3.46	0.17	0.13	9
B006E05S60	-0.90	0.69	0.04	10
B006E05S65	-0.39	0.60	0.05	9
B006E10S50	-2.53	0.80	0.00	9
B006E10S55	-0.56	1.07	0.09	10

^a field μR data including background.

**Table 3
Samples Under the Haul Road**

LocID	Net Utot (pCi/g)	Net Thnat (pCi/g)	FMPC	Exposure Rate (μR/hr)
B005E10S40	-2.60	-0.52	-0.14	11
B005E10S50	-0.18	0.04	0.00	11
B005E10S60	3.04	0.07	0.11	10
B005E10S70	-0.56	-0.63	-0.08	10
B005E20S30	2.11	0.05	0.08	11
B005E20S40	-1.13	0.56	0.02	11
B005E20S50	1.36	0.75	0.12	12
B005E20S80	-0.10	0.30	0.03	11
B005E20S90	1.87	0.71	0.13	11
B017E00S20	-3.07	-0.62	-0.16	9
B017E00S30	-0.74	0.05	-0.02	10
B017E10S20	-0.02	0.97	0.10	11
B017E10S30	-0.98	0.39	0.01	11
B017E10S40	-1.22	0.50	0.01	9
B017E20S00	0.89	-0.24	0.01	11
B017E20S10	-2.38	0.17	-0.06	11
B017E20S20	-0.43	-0.10	-0.02	11
B017E20S30	-3.00	0.09	-0.09	10
B017E20S40	-1.14	-0.46	-0.08	11
B017E30S10	-3.77	0.26	-0.10	12
B017E30S20	-3.00	0.99	0.00	12
B017E30S30	-0.78	0.49	0.02	12
B017E40S30	2.49	0.99	0.18	11
B017E40S40	2.56	0.22	0.11	10
B017E50S40	-2.86	0.86	-0.01	10
B017E60S50	-0.73	0.17	-0.01	11
B017E70S50	-2.37	0.19	-0.06	10
B017E80S50	-0.42	0.32	0.02	12
B017E90S60	-4.65	0.50	-0.11	11
B018E00S60	-0.46	0.75	0.06	12
B018E10S70	-0.75	-0.67	-0.09	9
B018E20S70	1.69	0.91	0.15	11
B018E30S80	0.38	0.38	0.05	10
B018E40S80	0.79	0.34	0.06	10
B018E50S80	1.76	0.42	0.10	12
B018E50S90	-0.69	0.62	0.04	11

Table 4
Alpha/Beta-Gamma and Exposure Rate Measurements on Well Pads

Grid Point	Net Direct (dpm/100 cm ²)		Net Exp. Rate (μR/hr)	Survey Reference	ID
	Alpha	Beta			
MISC SMALL PADS				0404-SP-002	
1	73	-195	1	UVMW 50	S04-01
2	93	-232	1	UVMW 50.1	S04-02
3	27	-200	0	UVMW 102	S04-03
4	0	-21	0	UVMW 103	S04-04
5	20	-158	1	UVMW 104	S04-05
6	0	-68	1	UVMW 105	S04-06
7	60	111	0	UVMW 106	S04-07
8	53	-205	0	UVMW 107	S04-08
9	13	205	1	UVMW 113	S04-09

NOTE:

1. Exposure rate expressed in PIC-equivalent μR/hr. (μR/hr * 1.12) – 8.4 (PE site background.)
2. Well pad surfaces were 100% scanned for beta-gamma and no hot spots exceeding the release criteria were identified.