ADDENDUM TO THE CERCLA/RCRA BACKGROUND SOIL STUDY

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

FERNALD, OHIO

FEBRUARY 2001

U. S. DEPARTMENT OF ENERGY

21120-RP-0003
REVISION 0
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INFORMATION ONLY

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LIST OF ACRONYMS

AES	Atomic Emission Spectrometry
ASL	analytical support level
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
COC	constituent of concern
CVAA	cold vapor atomic absorption
DL	detection limit
DOE	Department of Energy
DQO	data quality objectives
EPA	Environmental Protection Agency
FAL	Field Activity Log
FEMP	Fernald Environmental Management Project
FRL	final remediation level
GIS	Geographic Information System
GFAA	graphite-furnace atomic absorption spectrometry
HAMDC	highest allowable gamma spectroscopy
ICP	inductively coupled plasma
LCS	laboratory control sample
MDL	method detection limit
mg/kg	milligrams per kilogram
ml	milliliter
OU5	Operable Unit 5
pCi/g	picoCuries per gram
PSP	Project Specific Plan
QA/QC	quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
RI/FS	remedial investigation/feasibility study
SCQ	Sitewide CERCLA Quality Assurance Project Plan
SED	Sitewide Environmental Database
SEP	Sitewide Excavation Plan
SPL	Sample Processing Laboratory
USCS	Unified Soils Classification System

EXECUTIVE SUMMARY

In 1992, the U.S. Department of Energy (DOE) collected and analyzed off-property soil samples during the Operable Unit 5 (OU5) Remedial Investigation/Feasibility Study (RI/FS) process. Sampling results were used to determine representative background conditions, which were used to support development of the soil final remediation levels (FRLs) as well as initial delineation of the extent of soil contamination at the Fernald Environmental Management Project (FEMP) site.

The background study conducted in 1992 documented in the CERCLA/RCRA Background Soil Study report (DOE 1993) provided data for depth intervals of 0 to 6 inches, 36 to 42 inches, and 48 to 54 inches from areas uninfluenced by past FEMP emissions. However, the 12- to 36-inch interval in cultivated off-property areas surrounding the FEMP is also of concern during clean up evaluation and certification. Since background soil conditions in this interval were not obtained in the 1992 study, a supplemental background soil study was initiated in the summer of 2000 to determine the appropriateness of the previously developed representative background soil concentrations that were based on data from limited depth intervals.

The supplemental sampling was designed to assess the concentrations of selected constituents of concern (COCs) in farm fields having soil characteristics and past land uses similar to the two off-site properties to be certified. Analyzing for these COCs provided a complete set of new data for comparison purposes, and a complete analysis of the 12- to 36-inch depth interval, which was not targeted in the 1992 study.

The new set of background data indicates that concentrations of most inorganic COCs are higher in the subsurface interval (12-36 inches) than the surface interval (0-6 inches). The majority of radiological COCs are higher in the surface interval than the subsurface interval. Based on the new data, DOE concludes that the previously developed representative background soil concentrations are not appropriate as benchmarks for all depth intervals when determining vertical extent of FEMP-introduced soil contamination, especially inorganics in the 12- to 36-inch depth interval. The updated subsurface background soil database allows better delineation of the extent of FEMP-introduced contamination in the off-property, cultivated areas.

1.0 INTRODUCTION

The purpose of this addendum to the CERCLA/RCRA Background Soil Study report (DOE 1993) is to present supplemental background soil data collected in August 2000. The supplemental soil sampling was necessitated by a need to evaluate background soil levels of inorganics and radionuclides in a subsurface zone that was not previously investigated under the original background soil study. The supplemental sampling was performed in accordance with the Project-Specific Plan (PSP) for Supplemental Background Soil Sampling (DOE 2000) and amendments. This addendum report presents analytical data and statistical results indicating that the majority of inorganic constituent concentrations are highest in the subsurface intervals (12-36 inches) and the majority of radiological constituent concentrations are highest in the surface interval (0-6 inches) in the background study area that was also investigated for the 1993 report.

~~The supplemental soil study was undertaken as a result of detecting arsenic, beryllium and radium-226 in~~ subsurface soil in the Area 9, Phase I soil remediation area which were above the representative background levels presented in the 1992 background soil study. The Area 9, Phase I precertification sampling program targeted the constituents of concern (COCs) (uranium, thorium, radium, arsenic, beryllium and lead) in the 0 to 36-inch depth interval because of the soil blending that had occurred during cultivation and crop farming over many decades. In contrast, the CERCLA/RCRA Background Soil Study (DOE 1993) characterized potential contaminants in depth intervals 0 to 6 inches, 36 to 42 inches and 48 to 54 inches. Therefore, the background concentrations established during the original background study were based on soil samples collected from depth intervals above and below the soil layer (12-36 inches) of interest in cultivated areas adjacent to the FEMP. While the premise of the 1992 background study was appropriate for determining the natural soil weathering impacts through various soil zones and anthropogenic influences on surface soils (e.g., fallout from nuclear weapons testing, application of pesticides, lead emissions from automobile exhaust), both the new background subsurface data and the Area 9, Phase I data indicate that the original background results do not sufficiently characterize the inorganic and radium-226 levels 12 to 36 inches below the ground surface.

Therefore, it was necessary to develop a supplemental background sampling plan to investigate soil concentrations including the 12 to 36 inch depth interval in areas not affected by the FEMP that have been used for agricultural purposes, specifically crop production. The supplemental study results allowed for the complete background condition to be assessed and will be used to support remediation and certification decisions in similar agricultural areas surrounding the FEMP as necessary.

The scope of this addendum report includes the new background soil data presented in various formats, a statistical summary by analyte, summary of soil sampling and analytical methods, soil descriptions and field sampling documentation, and results of data validation and quality control assessments. In cases where sampling and analytical methods were modified from the original background study, an explanation of the differences and justification are included. This report also includes any field and analytical changes necessary during implementation that were documented through a PSP variance/change notice process.

2.0 SELECTION OF SAMPLING AREAS IN BACKGROUND STUDY AREA

2.1 LAND USE AND SOIL TYPE

The same background area defined under the original background study was sampled under the supplemental background program. The basis for selecting this general area to assess background soil concentrations is explained in detail in the 1993 report in terms of the area being unaffected by past FEMP operations. The supplemental sampling was conducted within an approximately five square mile area located north of the village of Shandon approximately three miles north of the FEMP as depicted in Figure 2-1. The scope of sampling outlined in the PSP (DOE 2000) included an extensive review of the CERCLA/RCRA Background Soil Study (DOE 1993) to identify locations having similarity in soil type and land-use characteristics with Area 9, Phase I land. The sampling was designed to assess the concentration of several COCs in the background area. The supplemental study was necessary to distinguish Fernald-related contamination from naturally occurring or other anthropogenic sources on cultivated and crop-producing lands.

Eleven of the 30 sampling areas were identified in the 1992 study had soil types analogous to the Area 9 property which is primarily classified by the U.S. Soil Conservation Service as a combination of Fincastle and Xenia classes. As of 1992, these 11 off-site areas were either in use as crop land or had been used for crops in the recent past. Currently, nearly all of the properties contain soybean, corn or hay crops.

2.2 SAMPLING STRATEGY

The sampling size for this supplemental study was based on the methods and sample size determined to be adequate for the original 1992 CERCLA/RCRA Background Study (DOE 1993), which involved the collection of 81 soil samples from 30 boring locations (designed to be 30 samples per depth interval collected). Given the common sampling area, soil type and land-use history, the supplemental study PSP (DOE 2000) specified a sample size of 165 samples (33 samples per depth interval designated for laboratory analysis) as adequate to meet the sampling objective of providing data on the intervals not previously sampled for background purposes. Additionally, 11 borings were planned and completed for archival of samples. This sample size (laboratory samples plus archived samples) provided the assurance of a sufficient number of samples in case the variability within discrete depths was higher than expected, or in the event some samples could not be collected using manual methods or if some data were not usable following validation due to unanticipated analytical problems.

The sample depths selected for the supplemental study were as follows: 0-6 inches, 6-12 inches (archived sample), 12-18 inches, 18-24 inches, 24-30 inches and 30-36 inches. These sample intervals were necessitated by the absence of background soil data in the subsurface intervals and to supplement the existing background surface soil data.

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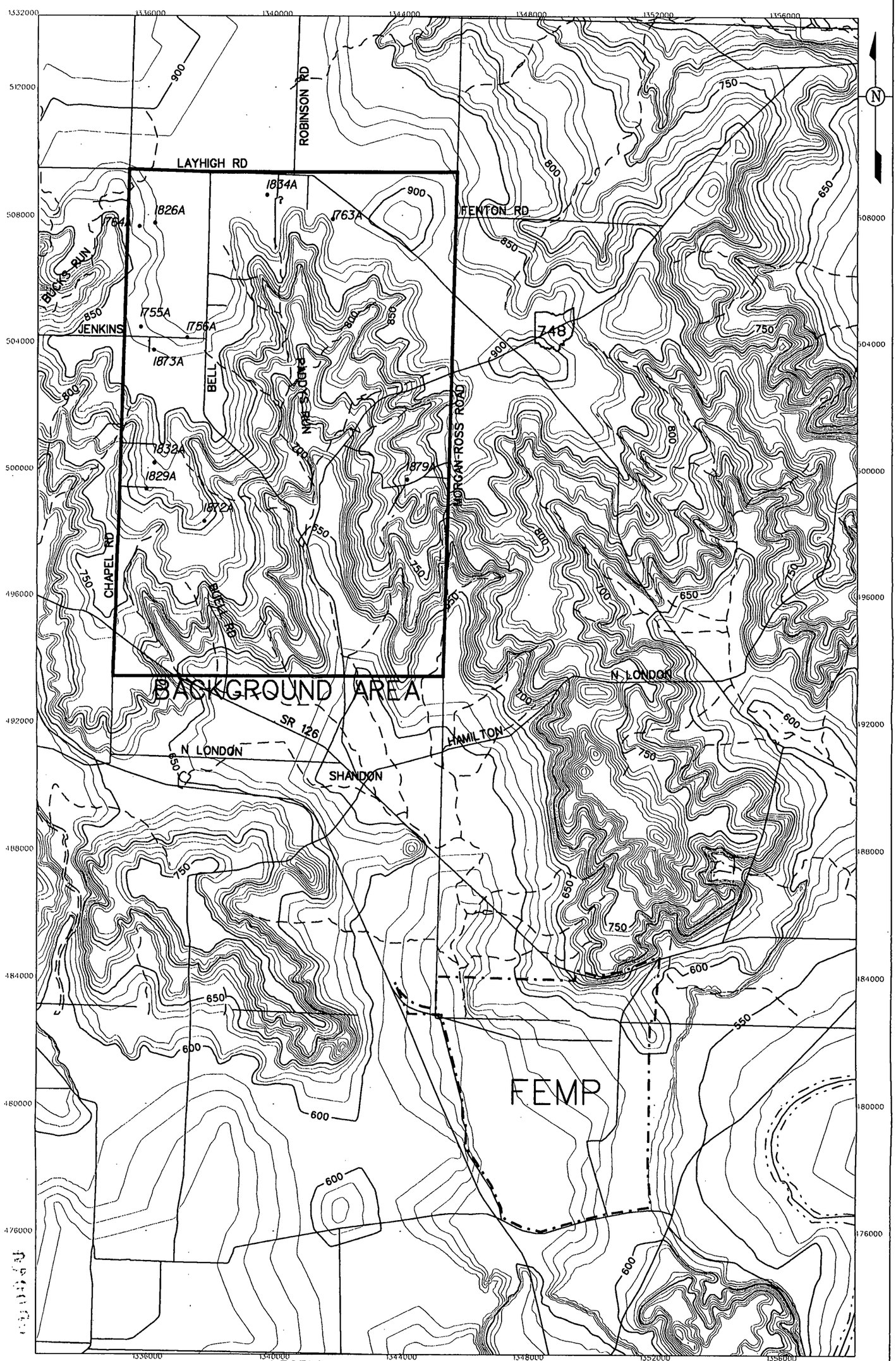

FIGURE 2-1. SUPPLEMENTAL BACKGROUND SOIL STUDY AREA

STATE PLANAR COORDINATE SYSTEM 1983

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Section 3.0

3.0 METHODS

3.1 SELECTION OF BORING LOCATIONS

The supplemental sampling plan involved the collection of soil samples from 11 private properties in the background study area used for agricultural purposes. For a basis of comparison, the 11 properties were selected based on the U.S. Soil Conservation Service soil classifications and historical land use being similar to the Area 9, Phase I property as described in Section 2.1.

On each of the 11 properties, four soil borings were completed, one of which was positioned at the location (within a few feet) of the original boring completed in 1992. This approach ensured consistency in soil types to support a statistical comparison to the 1992 data in order to evaluate the two data sets. The other three boring locations on each property were selected by dividing the agricultural field into four quadrants and determining the approximate center of each quadrant. This was accomplished using geographic information system (GIS) maps to designate a boring location prior to mobilization to the field (except for the quadrant containing the original 1992 boring location). This approach was selected after the initial PSP was issued (in July 2000) with the intent to simplify the field surveying process and lessen the potential bias in field-locating the borings. This approach is further discussed in Section 4.1.

Figure 3-1 illustrates the location of each soil boring completed in the background study area.

3.2 SAMPLING SUMMARY AND PROCEDURES

The following bullets summarize the number of borings, analytical samples and archive samples that were taken as part of the supplemental study:

- A total of 46 soil borings (four per property plus two alternates) were completed:
  - 11 boring locations at former 1992 boring locations
  - 33 borings were placed in the estimated center (based on GIS mapping) of 33 field quadrants (three center point borings for each of the 11 properties)
  - 2 additional borings were collected at alternate locations due to inaccessibility (eventually, access was gained to the planned center points and samples were collected resulting in the collection and analysis of 10 additional samples from the planned 165 as stated in Section 2.2)
- Of the 46 borings, 11 borings were collected for archive sample purposes
- Of the 46 borings, 35 borings were collected for laboratory analyses

- At each boring, the depth intervals collected were: 0 to 6, 6 to 12(archived), 12 to 18, 18 to 24, 24 to 30 and 30 to 36 inches

- Total number of samples taken was 276 (175 samples for analysis and 101 for archive). The increase from the planned 165 analytical samples is due to two alternate borings completed (see first bullet above).

Soil samples were collected according to FEMP procedure SMPL-01, Solids Sampling, using the macro-core sampler, which is a direct-push type sampler with an expendable plastic liner. Prior to sample collection, the field sampling technicians removed all surface vegetation as necessary within a 6-inch radius of the points. Soil borings were taken to a depth of three feet and the cores were laid out on clean plastic, then inspected by a field geologist. The geologist made a determination of the depth extent of the plowed or disturbed zone during soil classification and this information was recorded on the soil classification log. Each core was then evaluated by a geologist and then divided in appropriate 6-inch intervals. Since control of the soil depth intervals was critical, the geologist determined the extent of compaction, if any, had occurred and altered the sampling method as necessary to maintain a high level of confidence in correctly identifying the depth intervals. The surface sample (0 to 6 inches), in particular, was susceptible to compaction and was therefore closely observed to ensure representativeness. All soil slough was closely monitored and removed from the sample. Any loose surface soil surrounding the borehole was removed to prevent it from falling into the borehole and possibly cross-contaminating the lower intervals.

If surface or subsurface obstacles prevented sample collection at any of the locations adjacent to the original boring taken in 1992, then the sample point was allowed to be moved up to 3 feet in radius. The other three calculated borings were allowed to be moved up to 10 feet. The distance and direction moved were noted on the Field Activity Log (FAL), and the new coordinates were entered into the Sitewide Environmental Database (SED) with the associated results. If the new location was greater than the specified distance mentioned above, then the new location was re-surveyed and the change was documented on PSP Variance/Field Change Notice 21120-PSP-0002-2 and PSP Variance/Field Change Notice 21120-PSP-0002-4.

The field sampling teams completed field activity logs, sample collection logs, chain of custody/ request for analysis forms, soil visual classification forms and borehole abandonment logs at the time of field sample collection. All boreholes were backfilled with surrounding soil upon completion of sample

collection. After field processing the samples, they were taken to the clean side of the FEMP Sample Processing Laboratory (SPL) where they were logged into the on-site laboratory for analysis.

3.3 ANALYTICAL METHODS

The analytical methods utilized for the original background soil study were evaluated in preparation for the supplemental study in an attempt to apply the same methods where technically feasible. In some cases for inorganic analyses, more updated and improved methods are currently established as the standard method and therefore were selected for this study. For metals, the methods for nearly all of the analytes are equivalent to the original background study. The few metals analyses performed using a newer or alternate method include analyses for lead, potassium and selenium. The inorganic analytes, analytical methods and minimum detection levels are presented in Table 3-1.

For radiological analyses, gamma spectroscopy was utilized due to the limited constituents of interest for the supplemental study, primarily radium-226, which was likewise analyzed in the original background study. Those radionuclides analyzed in 1992 that were also readily available via the gamma spectroscopy process during the supplemental study are reported herein. Table 3-2 summarizes the radionuclides and associated Highest Allowable Minimum Detectable Concentrations (HAMDCs) analyzed and reported.

The following sections provide an updated description of the analytical methods utilized for this study which supercede the method descriptions in the original background report. All laboratory analyses were performed at the FEMP analytical laboratory, operated by Fluor Fernald, Inc.

3.3.1 Inorganic Analyses

This section provides a detailed description of the preparation and processing of inorganic samples which was also described in the original background report. This section has been updated for the supplemental study to reflect current analytical practices.

The CLP method requires that an aliquot (subsample) of defined mass, usually 1 to 1.5 grams, be removed from the sample container. The material in the sample container is well-mixed before the sample aliquot is removed. The aliquot that is removed is not selected according to grain size properties, but is as representative as possible. Even with the sample homogenization attempt, it is possible for individual aliquots from the same sample container to yield different analytical results due to possible sample heterogeneity effects. The analysis of laboratory duplicates often demonstrates some degree of heterogeneity for one or more analytes.

Non-homogeneous samples often result from settling of soil in a sample container during shipment to the laboratory but is considered to be very limited for this study due to the cohesiveness of the soil samples and relative limited transport of the samples. Sample analytical results were reported on a dry-weight basis. The samples were analyzed as received (with the entrained moisture content), and a separate representative aliquot was dried to obtain the moisture content, which was factored into the final analytical results.

The CLP method for inorganic analysis requires the sample aliquot to be digested. Since the original background study was performed, the U.S. Environmental Protection Agency (EPA) developed a better method for soil sample digestion, SW-846 Method 3010A. This method is similar to the ILMO4.0 digestion procedure, but is better at extracting a few of the analytes that historically resulted in lower extraction efficiencies for the CLP method. Because the suite of analytes was quite extensive, the laboratory used the 3010A method to provide the best possible results for all analytes, especially antimony and silicon. The laboratory used all the CLP-required QA/QC instrumental analysis requirements (including QA/QC) resulting in an Analytical Support Level (ASL) D analysis and data package deliverable.

For all elements except mercury, all soil sample aliquots are subjected to a digestion with nitric acid, hydrogen peroxide, and, for elements analyzed only on the Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP-AES), a hydrochloric acid reflux was utilized. The digestion occurs in a fume hood on a hot plate set at approximately 95° C. This digestion process extracts (and solubilizes) sorbed and organically bound metals, carbonate minerals (such as calcium and magnesium), as well as some elements bound up or occluded in oxides and secondary clay minerals. Breakdown of most silicate matrixes does not occur. The secondary and primary mineral lattices will remain largely intact.

Mercury is analyzed by oxidizing the organically bound mercury complexes to the divalent (+2) mercury ion through the use of mineral acids (such as sulfuric acid) and addition of potassium permanganate and potassium persulfate to approximately 0.2 grams of soil suspended in water. Some other amenable inorganic mercury compounds are also oxidized by this treatment. The resulting mercury divalent ion is then reduced to elemental mercury with stannous chloride and is then aerated out of the digestion solution and passed through the detection system of the instrument.

The inorganic samples were analyzed by methods established in the U.S. EPA Contract Laboratory Program Statement of Work for Inorganics Analysis, Multi-media, Multi-concentration, ILMO4.0 (1990).

Three instrumental methods were utilized for sample analysis for metal analytes: Graphite Furnace Atomic Absorption (GFAA) Spectrometry, Inductively Coupled Plasma- Atomic Emission (ICP-AES) Spectrometry, and Cold Vapor Atomic Absorption (CVAA) which is used for the analysis of mercury. The Flame Atomic Absorption spectrometric method was not utilized for the supplemental study because GFAA and ICP have become more sensitive and can detect all the metal analytes that were required at the required detection limits. The three instrumental methods that were utilized are summarized below.

Graphite Furnace Atomic Absorption (GFAA)

With GFAA, a small aliquot of the digested sample is placed inside of a graphite tube in a furnace. The furnace is heated to approximately 1000 °C, and the sample is atomized. The atoms of the element of interest absorb energy at a specific wavelength, and the detector senses this absorption. The amount of absorption is related to the concentration of the analyte in the sample. Correction of interferences is accomplished through the use of matrix modifiers and instrumental background correction (e.g., Zeeman method).

Inductively Coupled Plasma- Atomic Emission Spectrometry (ICP-AES)

The basis for this method is the measurement of atomic emission using argon plasma as an excitation source. The sample digestate is introduced into the plasma, and the sample is atomized. Characteristic atomic line spectra (at specific wavelengths for each metal analyte) are produced by the atomization/excitation process and are then dispersed through a grating spectrometer. Analyte concentration is determined by measuring the intensities of the spectra with photomultiplier tubes. Background correction and interelement correction factors are used to minimize the effect of any interferences that may be present.

Cold Vapor Atomic Absorption (CVAA)

Since mercury can exist in a free ground state at room temperature, a flameless Atomic Absorption method must be used. The organic mercury compounds are oxidized and the mercury is reduced to the elemental state and aerated from solution in a closed system. The mercury vapor passes through the light of an atomic absorption spectrophotometer and the absorbance is measured and quantified.

3.3.2 Radiological Analyses

All samples submitted for the determination of gamma emitting radionuclides were dried and ground before transferring to a 4 oz metal can which was then sealed and placed on a calibrated intrinsic

germanium detector. The detector efficiencies range from 40% to 100% and samples were counted for a sufficient time period to meet the required detection limits. Weighted average results were reported when more than one gamma spectral line was used to quantify a particular isotope. The weighted average was based on all of the prominent gamma lines from the isotope of interest. Exceptions to this practice were made if a given gamma line was absent from a spectrum. The weighting factor used by the laboratory in the computation of the weighted average is the reciprocal of the square of the absolute one sigma counting error. If a peak was identified at the characteristic energy, the software would compute an activity and counting error even in the case where the error was much larger than the result. The only instance where the laboratory would report "zero activity" as a result is when the characteristic photopeak was missing from the sample spectrum. The laboratory qualified the data as "U" (non-detect) if the result was below the detection limit of the counting system.

Under the assumption made by the project that thorium-232 is in secular equilibrium with thorium-228, the laboratory used gamma lines from the lead-212 and thallium-208 isotopes to quantify the thorium-228 and radium-224, and the photopeaks from the lead-212, actinium-228, and thallium-208 to report thorium-232 and radium-228. The laboratory applied the lines from the uranium-238 daughters (protactinium-234m and thorium-234), the radium-226 daughters (lead-214 and bismuth-214), the cesium-137 daughter (barium-137m), and the actinium-227 daughter (thorium-227) to quantify the parent isotopes. The uranium-238 concentration was also reported as total uranium activity. Since the photopeak of lead-210 is out of the calibration range and no other lines can be used to directly quantify it, the concentration of lead-214/bismuth-214 was used to report the lead-210 activity for a conservative consideration although lead-210 and bismuth-214 are not necessarily under equilibrium. A national reference material soil standard was used as the laboratory control sample (LCS).

3.4 QUALITY ASSURANCE AND QUALITY CONTROL METHODS

3.4.1 Quality Assurance

The project team instituted several quality assurance measures throughout the duration of the project to ensure quality results from the study. These included a comprehensive review of the PSP with comment resolution by all involved organizations (including a quality assurance expert), communication of the sampling and analysis objectives to the field and laboratory staff, field planning of property access and boring locations, designation and frequency requirements of quality control samples, development of a project-specific data quality objective document and independent validation of all field documents and analytical data. The FEMP Quality Assurance (QA) organization conducted three independent

assessments of work processes and operations in order to evaluate technical and procedural requirements of the PSP and the Sitewide CERCLA Quality Assurance Project Plan (SCQ) (DOE 1998). The results of these audits are documented in Appendix A, "Field Sampling Quality Assurance Audit Results" of this document.

3.4.2 Quality Control

The field quality control samples collected in accordance with the PSP and the data quality objective (DQO) document (number SL-058) are summarized below. Additional field quality control samples collected during the 1992 study were unnecessary for the current study due to the more limited scope, the use of certified sample containers and the limited value of some samples (reagent blanks for associated nitric acid used for field rinsates). The following quality control samples were collected:

- Eleven duplicate samples, one on each of the 11 properties. These samples were located within one foot of the boring it represented.
- Ten equipment rinsates of the macro-core shoe at the rate of one per sampling team per day, following the level II decontamination as defined in the Sitewide CERCLA Quality Assurance Plan (SCQ).

Appendix B contains summary analytical data and appropriate associations of the equipment rinsate data. Based on the rinsate data and validation results, there was no affect on the associated soil sample results.

TABLE 3-1

INORGANIC ANALYTE LIST

Metals	Method[a]	Minimum Detection Level (mg/kg)
Aluminum	ICP	1.73
Antimony	ICP	1.6
Arsenic	GFAA	0.32
Barium	ICP	0.03
Beryllium	ICP	0.025
Boron	ICP	1.24
Cadmium	ICP	0.13
Calcium	ICP	0.82
Chromium	ICP	0.14
Cobalt	ICP	0.16
Copper	ICP	0.13
Iron	ICP	0.38
Lead	ICP	0.58
Magnesium	ICP	1.64
Manganese	ICP	0.12
Mercury	CVAA	0.02
Molybdenum	ICP	0.61
Nickel	ICP	0.23
Potassium	ICP	33.8
Selenium	GFAA	0.1
Silicon	ICP	2.6
Silver	ICP	0.22
Sodium	ICP	1.77
Thallium	GFAA	0.3
Vanadium	ICP	1.57
Zinc	ICP	0.36

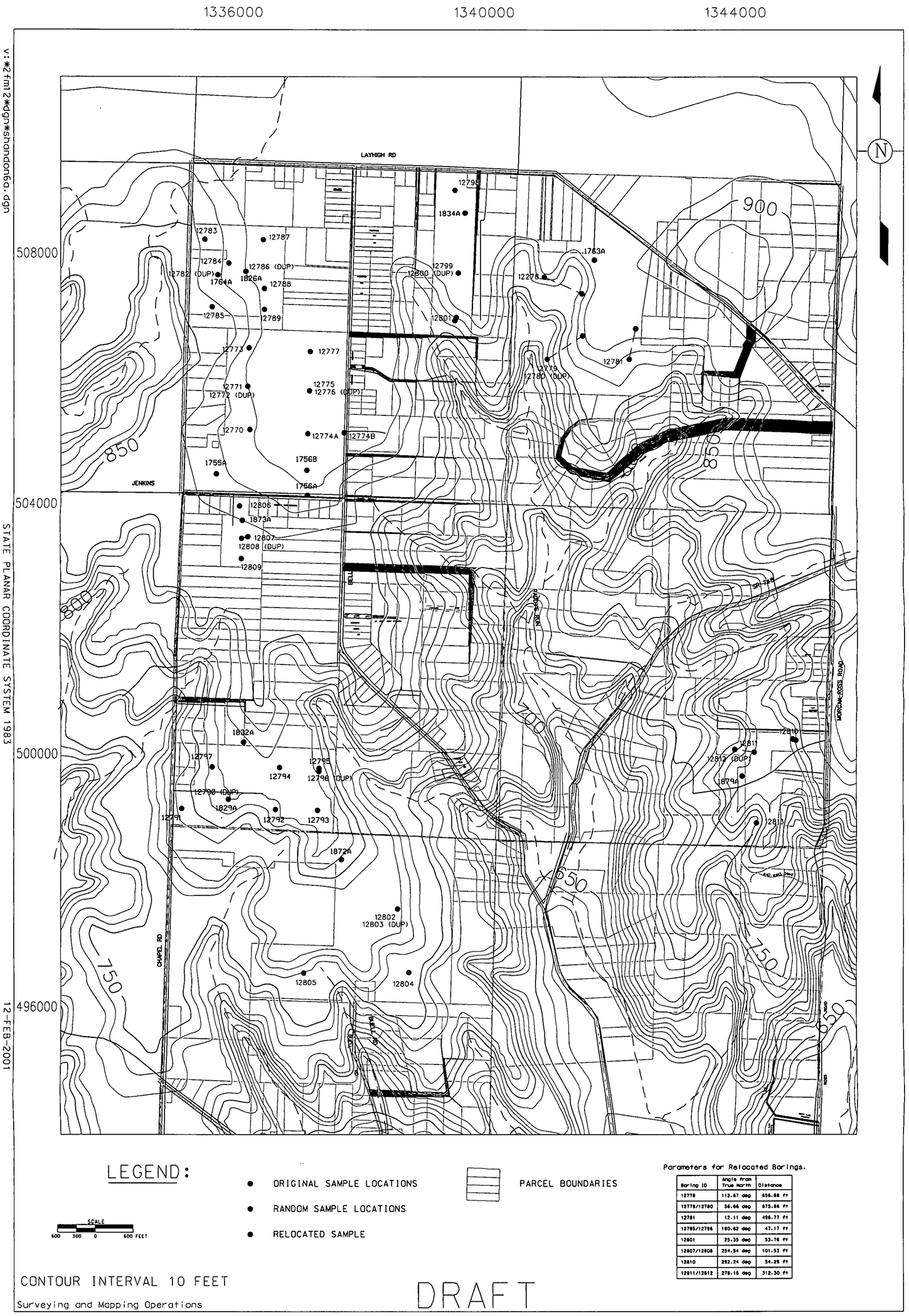
[a]GFAA - Graphite Furnace Atomic Absorption
ICP-AES - Inductively Coupled Plasma - Atomic Emission Spectrometry
CVAA - Cold Vapor Atomic Absorption
mg/kg = milligrams per kilogram

TABLE 3-2

RADIONUCLIDE ANALYTE LIST

Radionuclides via Gamma Spectroscopy – ASL D[a]	HAMDCs[b] (pCi/g)
Radium-226	0.2
Radium-228	0.2
Radium-224	1.0
Uranium-235	0.1
Uranium-238	3.0
Total Uranium	3.0
Thorium-228	0.15
Thorium-232	0.14
Thorium-227	0.7
Cesium-137	0.17
Lead-210	0.2
Potassium-40	1.0
Protactinium-231	3.0
Ruthenium-106	1.0

[a]ASL D = Analytical support Level D
[b]HAMDCs = Highest Allowable Minimum Detectable Concentrations
pCi/g = picocuries per gram



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STATE PLANAR COORDINATE SYSTEM 1983

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LEGEND:

- ORIGINAL SAMPLE LOCATIONS
- RANDOM SAMPLE LOCATIONS
- RELOCATED SAMPLE

PARCEL BOUNDARIES

SCALE 600 300 0 600 FEET

Parameters for Relocated Borings.

Boring ID	Angle from True North	Distance
12778	113.87 deg	656.88 ft
12779/12780	56.66 deg	675.86 ft
12781	12.11 deg	486.77 ft
12785/12786	180.62 deg	47.17 ft
12801	25.35 deg	53.76 ft
12807/12808	254.54 deg	101.53 ft
12810	292.24 deg	54.29 ft
12811/12812	278.15 deg	312.30 ft

CONTOUR INTERVAL 10 FEET

Surveying and Mapping Operations

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FIGURE 3-1. SUPPLEMENTAL BACKGROUND SOIL STUDY SAMPLE LOCATIONS

4.0 RESULTS

4.1 SAMPLING LOCATIONS, RECOVERY AND SOIL CLASSIFICATION

For practical and logistical reasons, the method of locating the random borings (three per property) for the supplemental study was modified from the revision 0 PSP issued in July 2000. The original intent was to resample at the 1992 boring location in addition to the sampling team selecting three boring locations on each of the eleven properties based upon a systematic grid (quadrant) approach. The other three boring locations were to be positioned in the approximate center (field estimation) of each of the remaining quadrants of the field using field maps, rough measurements, and professional judgement. The sampling team was to rely on property boundary plat maps, which include boundary measurements, to estimate the center area within each of the quadrants/sections.

The revised and improved approach involved designating the boring locations using GIS maps, including property boundaries, to determine the center point of each field quadrant using computer-aided methods by which the coordinates were determined prior to mobilization to the field. The intent of this approach was to simplify the field surveying process and lessen the potential bias in field-locating the borings. This approach is documented in PSP Variance/Field Change Notice 21120-PSP-0002-2. This process resulted in relocating eight of the 44 planned boring locations that were determined ahead of field mobilization using GIS maps. These relocations were necessary primarily due to the locations falling into wooded areas or near structures. The borings were relocated to the nearest farm or crop field on the same property. This information is also documented in the aforementioned PSP Variance/Field Change Notice.

The use of the macro-core tool sampling method resulted in reliable soil recovery and a relatively undisturbed soil core compared to other methods (hand auger). The continuous three-foot soil core was collected inside a plastic liner tube which facilitated soil classification and designation of the discrete six-inch depth intervals. All soil borings were completed to the designed 36-inch depth as planned with no subsurface refusal encountered that precluded sample collection with one exception. One of the planned borings (12810) had to be moved approximately 60 feet due to an obstruction two feet below the surface. The geologist determined the characteristics of the sample, including: compaction and recovery, unconfined consolidated strength using a pocket penetrometer, soil color using the Munsel chart, plasticity, grain size, and any other characteristics that were able to be determined (e.g., organic matter, rock fragments, iron nodules, etc.). From this information, the Unified Soils Classification System (USCS) was determined by the geologist.

As planned in the PSP (DOE 2000), one of the four borings completed on each of the 11 properties was sampled for archive purposes. Additionally, the 6-12 inch interval in all of the borings was collected for archive purposes. These samples were placed in a controlled storage area at the FEMP in case additional analyses need to be performed in the future.

Appendix C contains summary tables pertaining to soil description information for each boring location. Table A-1 summarizes each sample collected by boring location in terms of soil type, soil classification, land use and geographic coordinates. Table A-2 contains a description of the soil units sampled under the supplemental study as documented by the U.S. Soil Conservation Service. Appendix D contains the Visual Classification of Soils forms completed by the geologist describing the soil characteristics on the soil cores collected during sampling.

4.2 DATA VALIDATION PROCEDURES AND RESULTS

This section provides an updated summary of the data validation process documented in the original background report.

4.2.1 Data Validation Overview

The data validation process is an after-the-fact, independent, systematic process of evaluating data against previously established criteria to provide confirmation that the data is of technical quality to support a decision-making process. Validation processes review specific parameters associated with the data to determine whether they meet the DQOs of precision, accuracy, completeness, and comparability. These objectives are outlined in DQO number SL-058 titled "Supplemental Background Soil Sampling". To verify that these objectives are met, the validation process examines field measurements, sampling and handling procedures, laboratory analyses and reporting, and other quality indicators (such as nonconformances) to determine compliance with applicable procedures. Data qualifiers are assigned to the analytical data to alert the user to deviations from quality assurance/quality control (QA/QC) requirements. The level of quality required depends upon the intended use of the data. The data for this study was collected, analyzed, and reported at the highest possible ASL, as indicated in the supplemental background study PSP. The analytes were those specified in the target analyte lists in the PSP which are included in Table 3-1 and 3-2 of this addendum report as well. Additionally, a variance to the PSP was issued to change the required Method Detection Limits (MDLs) for some metals, and Highest Allowable Minimum Detectable Concentrations (HAMDCs) for some radionuclides. The ASLs applicable to this data set are ASL D for metals, and ASL E for radionuclides, as defined in FD-1000, Rev.1, the SCQ (DOE 1998).

ASL D - The data was evaluated using the applicable requirements of Section 11.3 of the SCQ (FD-1000), and the applicable limits contained in Table G-1 of Appendix G of the SCQ.

ASL E - The requirements for ASL E analyses are identical to those of ASL D for radionuclides, using the applicable requirements of Section 11.3 of the SCQ, and the applicable limits contained in Table G-4 of Appendix G of the SCQ, except for lower HAMDCs, as specified in DQO SL-058.

4.2.2 Validation Process and Procedures

The validation process occurred in two phases. The first phase considered the quality and completeness of field forms. The second phase dealt with the quality and accuracy of analytical results for the specified inorganics and radionuclides.

Phase I: Field Validation

This evaluation covers the documentation associated with the sampling event. Information reviewed includes all of the field logs including the chain of custody, request for analysis, and field activity logs. The information is reviewed to determine if the requirements of the SCQ, as indicated in the PSP (21120-PSP-0002, Rev. 0), were implemented, and the documentation completed. The validation team reviewed 100% of the field data forms. The data were found to be compliant with the validation checklists utilized for the validation procedure.

The following field sampling documents were reviewed:

- Field activity logs
- Sample collection logs
- Visual classification of soil logs
- Specific field forms for sample collection and handling
- Chain of custody
- Request for analysis
- Field personnel training
- PSP variances
- QA surveillances of field activities.

Phase II: Analytical Validation

The analytical data reviews were performed to determine compliance with the requirements of the PSP, and to determine any potential impact to data quality. The criteria for this review are those specified in the SCQ (Appendix D.2.4.1). As required in the DQO, all analytical data was validated to ASL D specifications.

As a result of the validation process, the qualifiers listed below were assigned to the data to define the confidence level in the data. None of the analytical results were rejected as a result of the validation. The qualifiers assigned to each analytical result are included in Appendix E and F for inorganic and radiological results, respectively.

Qualifier Code	Qualifier Explanation
-	The data validator has not assigned a qualifier code to the positive result, signifying that the result is confident as reported. (When an undetected result is not further qualified, the validator will enter the "U" qualifier in the qualifier column.)
J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample, but may not be consistent with the amount present in the environmental sample due to deficiencies in the sample collection or analysis process. he result is considered quantitatively estimated. Data are usable for making decisions.
U	Analyses were performed, but the analyte was not detected above the reported sample quantitation limit. Associated numerical value indicates the approximate concentration above which the analyte was determined not to be present.
UJ	The analyte was not detected above the quantitation limit. However, the reported quantitation limit is approximate, and may or may not represent the actual limit of quantitation necessary to precisely and accurately measure the analyte in the sample. This is a combination of the "U" and "J" qualifiers. The detection limit is considered estimated based on quality control (QC) considerations. If a decision requires quantitation of the analyte close to the numerical level, reanalysis or alternative analytical methods should be considered.

Note: For the evaluation of blank samples, the data was evaluated using the 5X and 10X rule for blanks. For samples that had a reported value greater than the instrument detection limit and the result was less than 5X the value in the associated blank, data were qualified as "U". For radiological samples, blanks were qualified as "U" if the associated blank result > sample result > minimum detectable concentration.

4.3 ANALYTICAL RESULTS

The analytical results from the supplemental study are presented in the Appendices of this report in several formats. Appendices G and H contain graphical illustrations of each analyte plotted as concentration versus depth interval for inorganics and radionuclides, respectively, which depicts all results for a single analyte over the entire depth interval. Appendices E and F contain tables of all analytical results organized by analyte for inorganics and radionuclides, respectively.

The analysis of the surface soil interval was common to both the original and supplemental background study. These two data sets indicate a high degree of consistency and cannot be differentiated based on statistical analyses.

4.4 SUMMARY STATISTICS

The 95th percentile of the subsurface soil (12-36 inch depth interval) concentrations of each analyte based on the results of newly collected samples are determined for this addendum. When necessary, other statistics can be developed to support project specific needs. In order to properly estimate the 95th percentile of the true background conditions of the various analytes two issues need to be addressed: treatment of non-detects in the sample data set and the assumption of the underlying distribution of population of background concentrations. Table 4-1 and 4-2 provide a summary of the statistical data for each analyte including the 95th percentile values for inorganics and radionuclides, respectively.

4.4.1 Treatment of Non-detect Results

"Non-detects" are results reported as below the analytical method's detection limit. The actual concentration of the specific analyte in the sample can not be reliably measured by the analytical method being employed so a method detection limit (MDL) or "less than" value is reported (i.e., the true result is something less than this detection limit.) The three most common ways of dealing with non-detects are to substitute either 0 (zero), one half of the MDL, or using the MDL as the result for statistical calculations. When the percentage of non-detects is small the impact on most statistical calculations is minimal. Using a zero value lowers the mean concentration but usually increases the variability while using the full MDL raises the mean but reduces the variability. These tend to somewhat offset each other. The most common treatment is to substitute one half of the MDL for all results reported as non-detects. This latter method was employed in this case as it is consistent with the methodology employed in soil certification as outlined in the SEP (DOE 1998).

4.4.2 Treatment of Field Duplicates

At some of the locations field duplicates were taken and analyzed and then reported in the database. These duplicates may be considered equally likely unbiased estimates of the true analyte concentration at that specific location. Because of this assertion duplicate results were averaged with the corresponding results to provide a better estimate of the 'true' conditions at the specific location. If one of the results was reported as a non-detect while the other was positively detected then the non-detect was divided by two (see above) before averaging the two values.

4.4.3 Data Distribution and Calculation of Summary Statistics

An essential element in the estimation of the 95th percentile, and indeed any population parameter, is the form of the underlying distribution of the data. The two most common distributions encountered in the analyses of environmental data are the normal distribution and the lognormal distribution. The calculation of the estimated 95th percentile is different dependent upon which distribution is assumed to best fit the sample data set. The estimation equations are rather robust to slight variation from the ideal normal or lognormal distribution. Consequently, the assumption of a specific data distribution is only rejected when there is sufficient evidence of divergence from ideal. In these cases when the sample distribution is too divergent from either the normal or lognormal distributions the data distribution will be assumed to be "undefined" and nonparametric estimation methods, which do not rely on a known underlying distribution, will be employed. Additionally, if a proportion of the sample results were reported as being below the detection limit (DL) then the distribution was assumed to be "undefined" since determination of an underlying distribution would be unduly influenced by the detection limits in lieu of the actual data results.

The assumed underlying distribution for each specific analyte was determined by the use of a hierarchy of distribution testing procedures based on their supposed reliability (see Madansky, 1988). The order of testing is 1) the Shapiro-Francia Test (the large sample size variation to the Shapiro-Wilk Test procedure recommended in the SEP), 2) the Kolmogorov-Smirnov Test with the Lilliefors data transformations, and 3) the Chi-Square Goodness-of-Fit Test. The use of multiple distribution test procedures is due to the Shapiro-Wilk based procedure's extreme sensitivity to even slight deviations from the ideal normal (or lognormal) distribution when sample sizes get large. It is believed that 95th percentile estimation procedures are robust to such small deviations from the ideal normal (or lognormal) distribution and should still be used if the somewhat less sensitive goodness-of-fit procedures (Kolmogorov-Smirnov and Chi-Square) do not reject the assumed distribution. Failures of the Shapiro-Francia test are noted in the summary tables. Failures of all three tests were deemed to be too divergent from the normal or lognormal distributions to reliably use calculations based on these distributions and were classified as "undefined" and nonparametric estimates of the 95th percentile were used in the tables.

It is beyond the scope of this addendum to present the somewhat complex methodology of the three distribution testing procedures. For this addendum, distribution testing was performed using Statgraphics for Windows 4.1 software (Manugistics, Inc.). For more information on these test procedures see Madansky, 1988 or Gilbert, 1987.

95th Percentile Estimation Formulas

Normally Distributed

For data sets which are assumed to be normally distributed the following equation is used to estimate the 95th percentile concentration.

$$95^{th} \text{ Percentile} = \bar{x} + Z_{.95}\, S_x$$

where

$\bar{x}$ = the mean (average) of the sample results,
S_x = the sample standard deviation of the sample results, and
$Z_{.95}$ = cummulative Standard Normal value for probability = .95.

Lognormally Distributed

For data sets which are assumed to be lognormally distributed the following equation is used to estimate the 95th percentile concentration.

$$95^{th} \text{ Percentile} = \bar{y} + Z_{.95}\, S_y$$

where

$\bar{y}$ = the mean (average) of the (natural) log-transformed sample results,
S_y = the sample standard deviation of the (natural) log-transformed sample results, and
$Z_{.95}$ = cummulative Standard Normal value for probability = .95.

Undefined Distributions

For data sets which can not be classified as either normal or lognormal the following procedure is used to estimate the nonparametric 95th percentile concentration.

First the data are sorted from low to high and ranked from 1 to n where n is the number of samples. Then the following equation is used upon the ranks of the data.

$$Rank_{.95} = 0.95 * n.$$

The nonparametric 95th percentile concentration is the result corresponding to the calculated $Rank_{.95}$. If $Rank_{.95}$ is not an integer then the 95th percentile is interpolated from results whose ranks are just above and below the calculated $Rank_{.95}$.

Additionally, if the $Rank_{.95}$ corresponds to a non-detect then nonparametric 95th percentile concentration is assigned the value of the lowest detected result greater than the non-detected result.

TABLE 4-1

SUMMARY OF STATISTICS FOR INORGANIC CONSTITUENTS

Parameter	Number of Analyses	Number of Detected Concentrations	Distribution	Minimum (mg/kg) [1]	Maximum (mg/kg) [1]	95th Percentile (mg/kg) [1]
Aluminum	140	140	Normal*	1660	22400	20030
Antimony	140	65	Undefined	0.56	3.74	2.87
Arsenic	140	138	Normal	0.69	15.8	12.4
Barium	140	140	Normal*	27.9	261	187
Beryllium	140	140	LogNormal	0.22	3.05	1.44
Boron	140	0	Undefined	0.96	1.28	2.56 (max DL)
Cadmium	140	128	LogNormal	0.215	1.77	0.989
Calcium	140	140	Undefined	1500	205000	134000
Chromium	140	140	Normal*	8.89	27.3	24.7
Cobalt	140	140	LogNormal*	4.49	73.1	21.4
Copper	140	140	LogNormal	9.6	42.8	31.3
Iron	140	140	Normal**	12800	43400	38500
Lead	140	140	Normal*	8.9	42	30.6
Magnesium	140	140	Undefined	2340	48000	37500
Manganese	140	140	LogNormal	85.7	3160	1330
Mercury	140	109	Undefined	0.005	0.1	0.07
Molybdenum	140	70	Undefined	0.195	6.35	5.24
Nickel	140	137	LogNormal*	6.9	83.6	45.6
Potassium	140	138	LogNormal	125.5	3060	1850
Selenium	140	3	Undefined	0.46	2.07	1.19
Silicon	140	135	LogNormal	157	3300	2300
Silver	140	79	Undefined	0.155	1.38	1.13
Sodium	140	114	Undefined	25.2	1720	1160
Thallium	140	13	Undefined	0.195	1.2	0.58
Vanadium	140	140	LogNormal*	12.1	43.5	41.4
Zinc	140	140	LogNormal	30.9	142	89.3

[1] One half the detection limit was used in the statistic for non-detects.

* Although this analyte failed the Shapiro-Francia test at the 5% level, it was assumed to be the designated distribution type based on Chi-Square and Kolmogorov-Smirnov test results.

** Although this analyte failed the Shapiro-Francia test at the 5% level, it was assumed to be the designated distribution type based on Kolmogorov-Smirnov test results.

TABLE 4-2

SUMMARY OF STATISTICS FOR RADIOLOGICAL CONSTITUENTS

Parameter	Number of Analyses	Number of Detected Concentrations	Distribution	Minimum (pCi/g) [1]	Maximum (pCi/g) [1]	95th Percentile (pCi/g) [1]
Actinium-227	140	1	Undefined	0.088	0.29	0.29
Cesium-137	140	2	Undefined	0.012	0.092	0.066
Lead-210	140	140	Undefined	0.515	1.69	1.56
Potassium-40	140	140	LogNormal	9.7	32.8	25.7
Protactinium-231	140	0	Undefined	0.421	0.86	1.72 (max DL)
Radium-224	140	140	Undefined	0.459	1.31	1.25
Radium-226	140	140	Undefined	0.515	1.69	1.56
Radium-228	140	140	Undefined	0.467	1.32	1.27
Ruthenium-106	140	2	Undefined	0.11	0.353	0.278
Thorium-228	140	140	Undefined	0.459	1.31	1.25
Thorium-232	140	140	Undefined	0.467	1.32	1.27
Uranium, Total	140	82	Undefined	0.792	8.82	4.56
Uranium-235	140	85	Undefined	0.021	0.148	0.127
Uranium-238	140	82	Undefined	0.267	2.97	1.53

[1] One half the detection limit was used in the statistic for non-detects. Total Uranium units are mg/kg.

5.0 CONCLUSIONS

The additional analytical data from the background area for the 12-36 inch depth interval allows better delineation of the extent of FEMP-introduced contamination in the off-property areas. The new background data indicates that the majority of inorganic constituent concentrations are highest in the subsurface interval (12-36 inches) and the majority of radiological constituent concentrations are highest in the surface interval (0-6 inches) in the background study area. Based on the updated background data, it is concluded that selected constituents detected in recent samples from off-property areas adjacent to the FEMP are equivalent to background concentrations for the same depth interval. An addendum to the Sitewide Excavation Plan (DOE 1998) will also be issued to provide the methodology for utilizing the updated background soil data for the certification process for off-property cultivated areas.

References

REFERENCES

Gilbert, Richard O., 1987, "Statistical Methods for Environmental Pollution Monitoring," Van Nostrand Reinhold, New York.

Mandasky, Albert, 1988, "Prescriptions for Working Statisiticians," Springer-Verlag, New York.

U.S. Department of Energy, 1993, "CERCLA/RCRA Background Soils Study," Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1998, "Sitewide CERCLA Quality Assurance Project Plan," Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1998, "Sitewide Excavation Plan," Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 2000, "Project Specific Plan for Supplemental Background Soil Study," Revision 0, Fernald Environmental Project, DOE, Fernald Area Office, Cincinnati, OH.

Appendix A

APPENDIX A

FIELD SAMPLING QUALITY ASSURANCE AUDIT RESULTS

QUALITY EVALUATION PLAN

QEP No. 2004390 Rev. 0

1. Source ? Receiving ? Const./Remediation X Maint./Operations ? Waste Sampling ? Recycling ?

2. Item/Title/Description:

SOIL COLLECTION TO APPENDIX B TABLE

3. Project/Task:

PSP FOR SUPPLEMENTAL BACKGROUND SOIL STUDY

4. Specification/Drawing/PO/Req.:

21120-PSP-0002, REV. 0

5. Prepared By: R. FRISKE	Date: 9/13/00	6. Reviewed By: NA	Date: NA
7. NDE Level III: (When Required) NA	Date: NA	8. Approved By: (When Required) F. THOMPSON	Date: 9-14-00

9. Char. No.	10. Evaluation Characteristic (Code/Specification, Inspection/Test/Examination Techniques, Acceptance Criteria)	11. Status SAT	11. Status UNSAT	12. General Remarks
1	Verify that all samples listed in sample collection table (Appendix B) were collected.	09-13-00 RA		Reviewed all of the field packages for all eleven boring locations specified in Appendix B. Cross checked all of the COCs with the PSP sampling table to verify the collection of required samples(265). Determined that all of the regular samples, duplicates/rinsates, and archives samples were listed on the respective COCs and Sample Collection Logs. This indicates that all of the required samples were collected. For boring location 1756A, a second round of samples were taken to the originally specified coordinates. The initial borings were moved for better accessibility which was not approved by the agencies. A variance will document the changes. No other anomalies were identified in the assessement.
2	Technicians will complete a FAL, Sample Collection Log, COC, Request for Analysis, and Plugging and Abandonment Record.	09-13-00 RA		Each field data package was checked for completeness concerning the inclusion of the specified forms. Determined that each package contained FAL, COCs, Sample Collection Log, Request for Analysis, and Plugging and Abandonment Record.

13. QA Team Member (Printed Name): R. FRISKE (Signature)	Date: 09-13-00
14. QA Team Coach (Completed QEP): F. THOMPSON	Date: 09-14-00

15. Distribution: M. FRANK, T. BUHRLAGE, J. VANCE, J.D. CHIOU, F. THOMPSON, M. GODBER, R. FRISKE

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FS-F-4400
REV 1: 06/01/98

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QUALITY EVALUATION PLAN

QEP No. 2004391 Rev. 0

1. Source ? Receiving ? Const./Remediation X Maint./Operations ? Waste Sampling ? Recycling ?

2. Item/Title/Description:

SOIL SAMPLING AT LOCATION NUMBER 1872; BUEHL RD.

3. Project/Task:

PSP FOR SUPPLEMENTAL BACKGROUND SOIL STUDY

4. Specification/Drawing/PO/Req.:

21120-PSP-0002, REV. 0

5. Prepared By: R. FRISKE — Date: 8/29/00

6. Reviewed By: NA — Date: NA

7. NDE Level III: (When Required) NA — Date: NA

8. Approved By: (When Required) F. THOMPSON — Date: 9-12-00

9. Char. No.	10. Evaluation Characteristic (Code/Specification, Inspection/Test/Examination Techniques, Acceptance Criteria)	11. Status SAT	11. Status UNSAT	12. General Remarks
1	Prior to sample collection, all surface vegetation will be removed within a 6-inch radius of sample point (2.2).	8/29/00 RF		Observed that the boring surface was cleared of vegetation.
2	Borings will be taken to a depth of 3-feet(2.2).	8/29/00 RF		Borings 12802 and 12803 each were slam hammered using a 4-foot tube. The depth was marked to collect the required depth. Verification of depth was determined by measuring the open bore hold after core removal. Boring12802 measured 38-inches from surface to bottom; actual core material measured 35.5-inches. Boring 12803 measured 26-inches from surface to bottom; actual core material measured 23.5-inches. Boring 12083 was the duplicate interval at 18-24-inches.
3	The geologist will complete a visual soil classification log for each soil boring(2.2).	8/29/00 RF		Observed geologist completing soil classification description.
4	Each core will be divided into 6-inch intervals.	8/29/00 RF		A tape measure was placed along the length of the core after opening the core. The 6-inch intervals were marked for sample containerization.
5	The geologist will make a determination of the depth extent of the plowed or disturbed zone during soil classification..	8/29/00 RF		Observed the "plow zone" interval determination and document the description.

13. QA Team Member (Printed Name) R. FRISKE (Signature) — Date: 09-11-00

14. QA Team Coach (Completed QEP): F. THOMPSON — Date: 09-12-00

15. Distribution: M. FRANK, T. BUHRLAGE, J. VANCE, J.D. CHIOU, F. THOMPSON, M. GODBER, R. FRISKE

RECORD

FS-F-4400
REV 1: 06/01/98

QUALITY EVALUATION PLAN

QEP No. 2004392 Rev. 0

1. Source ? Receiving ? Const./Remediation X Maint./Operations ? Waste Sampling ? Recycling ?

2. Item/Title/Description:

SOIL SAMPLING AT LOCATION NUMBER 12789; HERMAN PROPERTY

3. Project/Task:

PSP FOR SUPPLEMENTAL BACKGROUND SOIL STUDY

4. Specification/Drawing/PO/Req.:

21120-PSP-0002, REV. 0

5. Prepared By: R. FRISKE — Date: 8/22/00

6. Reviewed By: NA — Date: NA

7. NDE Level III: (When Required) NA — Date: NA

8. Approved By: (When Required) F. THOMPSON — Date: 9-12-00

9. Char. No.	10. Evaluation Characteristic (Code/Specification, Inspection/Test/Examination Techniques, Acceptance Criteria)	11. Status SAT	11. Status UNSAT	12. General Remarks
1	Required MSDS sheets are available	8/22/00 RF		Verified MSDS documentation for "Roundup" herbicide. MSDS #11876.
2	Eyewash/Safety Inspection Sheet available and checked.	8/22/00 RF		Geoprobe truck eyewash station inspection sheet shows last inspection on 8-17-00.
3	Truck/equipment checklist filled out; form FS-F-2414, Rev. 7	8/22/00 RF		Geoprobe truck inspection checklist for E-55089 included 8/21/00 check at 2789mi.
4	Controlled sampling procedures at the field work station.	8/22/00 RF		Observed the controlled EM procedure manual was available to samplers; manual number. 77257.
4	Ohio Utilities called before placing borings; 1800-362-2764.	8/22/00 RF		Utilities notification documentation listed Ohio was last called on 8/15 for Buell Rd utilities.
5	Penetration Permit available.	8/22/00 RF		Penetration Permit #43562, 8/21/00 was in place for the sample borings.

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RECORD

13. QA Team Member (Printed Name): R. FRISKE (Signature) — Date: 09-11-00

14. QA Team Coach (Completed QEP): F. THOMPSON — Date: 09-12-00

15. Distribution: M. FRANK, T. BUHRLAGE, J. VANCE, J.D. CHIOU, F. THOMPSON, M. GODBER, R. FRISKE

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REV 1: 06/01/98

Appendix B

APPENDIX B

ANALYTICAL RESULTS FOR FIELD QUALITY CONTROL (RINSATE) SAMPLES

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TABLE B-1
AQUEOUS QUALITY CONTROL SAMPLES
SUPPLEMENTAL BACKGROUND SOIL STUDY

Sample ID	Sample Date	Description	Requested Analysis
SBS-1-1-X	8/23/00	Rinsate	TALs A, B[1]
SBS-2-1B-X	8/28/00	Rinsate	TALs A, B[1]
SBS-3-2-X	8/30/00	Rinsate	TALs A, B[1]
SBS-5-3-X	8/22/00	Rinsate	TALs A, B[1]
SBS-6-2-X	8/17/00	Rinsate	TALs A, B[1]
SBS-7-1-X	8/17/00	Rinsate	TALs A, B[1]
SBS-8-2-X	8/24/00	Rinsate	TALs A, B[1]
SBS-9-3-X	8/29/00	Rinsate	TALs A, B[1]
SBS-10-2-X	8/21/00	Rinsate	TALs A, B[1]
SBS-11-1-X	8/24/00	Rinsate	TALs A, B[1]

1 TAL: Target Analyte List
21120-PSP-002 TAL A includes inorganic parameters.
21120-PSP-002 TAL B includes radiological parameters.

TABLE B-2
RINSATES
SUPPLEMENTAL BACKGROUND SOIL STUDY

Boring	Sample Number	Applicable Rinsate
1755A	SBS-1-1-1RM	SBS-1-1-X
	SBS-1-1-3RM	
	SBS-1-1-4RM	
	SBS-1-1-5RM	
	SBS-1-1-6RM	
1756B	SBS-2-1B-1RM	SBS-2-1B-X
	SBS-2-1B-3RM	
	SBS-2-1B-4RM	
	SBS-2-1B-5RM	
	SBS-2-1B-6RM	
12778	SBS-3-2-1RM	SBS-3-2-X
	SBS-3-2-3RM	
	SBS-3-2-4RM	
	SBS-3-2-5RM	
	SBS-3-2-6RM	
12774A	SBS-2-2A-1RM	
	SBS-2-2A-3RM	
	SBS-2-2A-4RM	
	SBS-2-2A-5RM	
	SBS-2-2A-6RM	
12788	SBS-5-3-1RM	SBS-5-3-X
	SBS-5-3-3RM	
	SBS-5-3-4RM	
	SBS-5-3-5RM	
	SBS-5-3-6RM	
12791	SBS-6-2-1RM	SBS-6-2-X
	SBS-6-2-3RM	
	SBS-6-2-4RM	
	SBS-6-2-5RM	
	SBS-6-2-6RM	
1832A	SBS-7-1-1RM	SBS-7-1-X
	SBS-7-1-3RM	
	SBS-7-1-4RM	
	SBS-7-1-5RM	
	SBS-7-1-6RM	
12798	SBS-8-2-1RM	SBS-8-2-X
	SBS-8-2-3RM	
	SBS-8-2-4RM	
	SBS-8-2-5RM	
	SBS-8-2-6RM	
12804	SBS-9-3-1RM	SBS-9-3-X
	SBS-9-3-3RM	
	SBS-9-3-4RM	
	SBS-9-3-5RM	
	SBS-9-3-6RM	
12783	SBS-4-2-1RM	SBS-10-2-X
	SBS-4-2-3RM	
	SBS-4-2-4RM	
	SBS-4-2-5RM	
	SBS-4-2-6RM	
12806	SBS-10-2-1RM	
	SBS-10-2-3RM	
	SBS-10-2-4RM	
	SBS-10-2-5RM	
	SBS-10-2-6RM	
1879A	SBS-11-1-1RM	SBS-11-1-X
	SBS-11-1-2RM	
	SBS-11-1-3RM	
	SBS-11-1-4RM	
	SBS-11-1-5RM	
	SBS-11-1-6RM	

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TABLE B-3
SOIL DUPLICATE SAMPLES
SUPPLEMENTAL BACKGROUND STUDY

Boring Number	Date Collected	Duplicate Sample IDs
1826A	8/21/00	SBS-5-1-1RM, SBS-5-1-1RM-D
12771	8/23/00	SBS-1-3-1RM, SBS-1-3-1RM-D
12807	8/21/00	SBS-10-3-4RM, SBS-10-3-4RM-D
12811	8/24/00	SBS-11-3-5RM, SBS-11-3-5RM-D
12775	8/22/00	SBS-2-3-4RM, SBS-2-3-4RM-D
12779	8/30/00	SBS-3-3-1RM, SBS-3-3-1RM-D
1764A	8/21/00	SBS-4-1-4RM, SBS-4-1-4RM-D
1829A	8/17/00	SBS-6-1-6RM, SBS-6-1-6RM-D
12795	8/17/00	SBS-7-3-1RM, SBS-7-3-1RM-D
12799	8/24/00	SBS-8-3-5RM, SBS-8-3-5RM-D
12802	8/29/00	SBS-9-2-4RM, SBS-9-2-4RM-D

Note: Analytical data for original and duplicate samples is presented in Appendices F and G.

TABLE B-4
RINSATES - INORGANIC DATA
SUPPLEMENTAL BACKGROUND SOIL STUDY

SAMPLE ID	PARAMETER	RESULT	LAB QUALIFIER	VALIDATION QUALIFIER	UNITS
SBS-1-1-X	Aluminum	68		U	ug/L
SBS-1-1-X	Antimony	13	U	U	ug/L
SBS-1-1-X	Arsenic	3.07	U	U	ug/L
SBS-1-1-X	Barium	1.5		-	ug/L
SBS-1-1-X	Beryllium	0.4	U	U	ug/L
SBS-1-1-X	Boron	67		-	ug/L
SBS-1-1-X	Cadmium	1.1	U	U	ug/L
SBS-1-1-X	Calcium	582		U	ug/L
SBS-1-1-X	Chromium	2	U	U	ug/L
SBS-1-1-X	Cobalt	3.4	U	U	ug/L
SBS-1-1-X	Copper	2.7		-	ug/L
SBS-1-1-X	Iron	75.3		-	ug/L
SBS-1-1-X	Lead	51.1	U	U	ug/L
SBS-1-1-X	Magnesium	39.6		U	ug/L
SBS-1-1-X	Manganese	2.5	U	U	ug/L
SBS-1-1-X	Mercury	0.02	U	U	ug/L
SBS-1-1-X	Molybdenum	26.7	U	U	ug/L
SBS-1-1-X	Nickel	5.3	U	U	ug/L
SBS-1-1-X	Potassium	542	U	U	ug/L
SBS-1-1-X	Selenium	2.32	U	U	ug/L
SBS-1-1-X	Silicon	868		-	ug/L
SBS-1-1-X	Silver	2.9	U	U	ug/L
SBS-1-1-X	Sodium	477		-	ug/L
SBS-1-1-X	Thallium	0.99	U	U	ug/L
SBS-1-1-X	Vanadium	14.9	U	U	ug/L
SBS-1-1-X	Zinc	3.7		-	ug/L
SBS-2-1B-X	Aluminum	31.7		U	ug/L
SBS-2-1B-X	Antimony	13	U	U	ug/L
SBS-2-1B-X	Arsenic	3.07	U	U	ug/L
SBS-2-1B-X	Barium	1		-	ug/L
SBS-2-1B-X	Beryllium	0.4	U	U	ug/L
SBS-2-1B-X	Boron	69.4		-	ug/L
SBS-2-1B-X	Cadmium	1.1	U	U	ug/L
SBS-2-1B-X	Calcium	532		U	ug/L
SBS-2-1B-X	Chromium	2.5		-	ug/L
SBS-2-1B-X	Cobalt	3.4	U	U	ug/L
SBS-2-1B-X	Copper	3.4		-	ug/L
SBS-2-1B-X	Iron	59.6		-	ug/L
SBS-2-1B-X	Lead	51.1	U	U	ug/L
SBS-2-1B-X	Magnesium	23.4	U	U	ug/L
SBS-2-1B-X	Manganese	2.5	U	U	ug/L
SBS-2-1B-X	Mercury	0.02	U	U	ug/L
SBS-2-1B-X	Molybdenum	26.7	U	U	ug/L
SBS-2-1B-X	Nickel	5.3	U	U	ug/L
SBS-2-1B-X	Potassium	542	U	U	ug/L
SBS-2-1B-X	Selenium	2.32	U	U	ug/L
SBS-2-1B-X	Silicon	719		-	ug/L
SBS-2-1B-X	Silver	2.9	U	U	ug/L
SBS-2-1B-X	Sodium	414		-	ug/L
SBS-2-1B-X	Thallium	0.99	U	U	ug/L
SBS-2-1B-X	Vanadium	14.9	U	U	ug/L
SBS-2-1B-X	Zinc	3.9		-	ug/L
SBS-3-2-X	Aluminum	17.7	U	U	ug/L
SBS-3-2-X	Antimony	13	U	U	ug/L
SBS-3-2-X	Arsenic	3.07	U	U	ug/L
SBS-3-2-X	Barium	0.6		-	ug/L
SBS-3-2-X	Beryllium	0.4	U	U	ug/L
SBS-3-2-X	Boron	67.5		-	ug/L

TABLE B-4
RINSATES - INORGANIC DATA
SUPPLEMENTAL BACKGROUND SOIL STUDY

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SAMPLE ID	PARAMETER	RESULT	LAB QUALIFIER	VALIDATION QUALIFIER	UNITS
SBS-3-2-X	Cadmium	1.1	U	U	ug/L
SBS-3-2-X	Calcium	232		U	ug/L
SBS-3-2-X	Chromium	2	U	U	ug/L
SBS-3-2-X	Cobalt	3.4	U	U	ug/L
SBS-3-2-X	Copper	6.2		-	ug/L
SBS-3-2-X	Iron	45.8		-	ug/L
SBS-3-2-X	Lead	51.1	U	U	ug/L
SBS-3-2-X	Magnesium	23.4	U	U	ug/L
SBS-3-2-X	Manganese	2.5	U	U	ug/L
SBS-3-2-X	Mercury	0.02	U	U	ug/L
SBS-3-2-X	Molybdenum	26.7	U	U	ug/L
SBS-3-2-X	Nickel	5.3	U	U	ug/L
SBS-3-2-X	Potassium	542	U	U	ug/L
SBS-3-2-X	Selenium	2.32	UW	UJ	ug/L
SBS-3-2-X	Silicon	566		-	ug/L
SBS-3-2-X	Silver	2.9	U	U	ug/L
SBS-3-2-X	Sodium	279		-	ug/L
SBS-3-2-X	Thallium	0.99	U	U	ug/L
SBS-3-2-X	Vanadium	14.9	U	U	ug/L
SBS-3-2-X	Zinc	16.9		-	ug/L
SBS-5-3-X	Aluminum	89.5		U	ug/L
SBS-5-3-X	Antimony	13	U	U	ug/L
SBS-5-3-X	Arsenic	3.07	U	U	ug/L
SBS-5-3-X	Barium	17.8		-	ug/L
SBS-5-3-X	Beryllium	0.4	U	U	ug/L
SBS-5-3-X	Boron	181		-	ug/L
SBS-5-3-X	Cadmium	1.1	U	U	ug/L
SBS-5-3-X	Calcium	203		U	ug/L
SBS-5-3-X	Chromium	2.5		-	ug/L
SBS-5-3-X	Cobalt	3.4	U	U	ug/L
SBS-5-3-X	Copper	5.2		-	ug/L
SBS-5-3-X	Iron	67.8		-	ug/L
SBS-5-3-X	Lead	51.1	U	U	ug/L
SBS-5-3-X	Magnesium	23.4	U	U	ug/L
SBS-5-3-X	Manganese	2.5	U	U	ug/L
SBS-5-3-X	Mercury	0.02	U	U	ug/L
SBS-5-3-X	Molybdenum	80.9		-	ug/L
SBS-5-3-X	Nickel	5.3	U	U	ug/L
SBS-5-3-X	Potassium	542	U	U	ug/L
SBS-5-3-X	Selenium	2.32	U	U	ug/L
SBS-5-3-X	Silicon	767		-	ug/L
SBS-5-3-X	Silver	2.9	U	U	ug/L
SBS-5-3-X	Sodium	446		-	ug/L
SBS-5-3-X	Thallium	0.99	U	U	ug/L
SBS-5-3-X	Vanadium	14.9	U	U	ug/L
SBS-5-3-X	Zinc	14.6		-	ug/L
SBS-6-2-X	Aluminum	40.3		U	ug/L
SBS-6-2-X	Antimony	13	U	U	ug/L
SBS-6-2-X	Arsenic	3.07	U	U	ug/L
SBS-6-2-X	Barium	2.2		-	ug/L
SBS-6-2-X	Beryllium	0.4	U	U	ug/L
SBS-6-2-X	Boron	49.8		U	ug/L
SBS-6-2-X	Cadmium	1.1	U	U	ug/L
SBS-6-2-X	Calcium	638		U	ug/L
SBS-6-2-X	Chromium	2	U	U	ug/L
SBS-6-2-X	Cobalt	3.4	U	U	ug/L
SBS-6-2-X	Copper	4.2		-	ug/L
SBS-6-2-X	Iron	150		-	ug/L

TABLE B-4
RINSATES - INORGANIC DATA
SUPPLEMENTAL BACKGROUND SOIL STUDY

SAMPLE ID	PARAMETER	RESULT	LAB QUALIFIER	VALIDATION QUALIFIER	UNITS
SBS-6-2-X	Lead	51.1	U	U	ug/L
SBS-6-2-X	Magnesium	23.4	U	U	ug/L
SBS-6-2-X	Manganese	2.5	U	U	ug/L
SBS-6-2-X	Mercury	0.02	U	U	ug/L
SBS-6-2-X	Molybdenum	26.7	U	U	ug/L
SBS-6-2-X	Nickel	5.3	U	U	ug/L
SBS-6-2-X	Potassium	542	U	U	ug/L
SBS-6-2-X	Selenium	2.32	U	U	ug/L
SBS-6-2-X	Silicon	1420		-	ug/L
SBS-6-2-X	Silver	2.9	U	U	ug/L
SBS-6-2-X	Sodium	224		-	ug/L
SBS-6-2-X	Thallium	0.99	U	U	ug/L
SBS-6-2-X	Vanadium	14.9	U	U	ug/L
SBS-6-2-X	Zinc	5.6		-	ug/L
SBS-7-1-X	Aluminum	17.7	U	U	ug/L
SBS-7-1-X	Antimony	13	U	U	ug/L
SBS-7-1-X	Arsenic	3.07	U	U	ug/L
SBS-7-1-X	Barium	0.6		-	ug/L
SBS-7-1-X	Beryllium	0.4	U	U	ug/L
SBS-7-1-X	Boron	70.5		-	ug/L
SBS-7-1-X	Cadmium	1.1	U	U	ug/L
SBS-7-1-X	Calcium	189		U	ug/L
SBS-7-1-X	Chromium	2	U	U	ug/L
SBS-7-1-X	Cobalt	3.4	U	U	ug/L
SBS-7-1-X	Copper	2.7	U	U	ug/L
SBS-7-1-X	Iron	25.2		-	ug/L
SBS-7-1-X	Lead	51.1	U	U	ug/L
SBS-7-1-X	Magnesium	23.4	U	U	ug/L
SBS-7-1-X	Manganese	2.5	U	U	ug/L
SBS-7-1-X	Mercury	0.02	U	U	ug/L
SBS-7-1-X	Molybdenum	26.7	U	U	ug/L
SBS-7-1-X	Nickel	5.3	U	U	ug/L
SBS-7-1-X	Potassium	542	U	U	ug/L
SBS-7-1-X	Selenium	2.32	UW	UJ	ug/L
SBS-7-1-X	Silicon	477		-	ug/L
SBS-7-1-X	Silver	2.9	U	U	ug/L
SBS-7-1-X	Sodium	178	U	U	ug/L
SBS-7-1-X	Thallium	0.99	U	U	ug/L
SBS-7-1-X	Vanadium	14.9	U	U	ug/L
SBS-7-1-X	Zinc	3.1		-	ug/L
SBS-8-2-X	Aluminum	19.1		U	ug/L
SBS-8-2-X	Antimony	13	U	U	ug/L
SBS-8-2-X	Arsenic	3.07	U	U	ug/L
SBS-8-2-X	Barium	3.1		-	ug/L
SBS-8-2-X	Beryllium	0.4	U	U	ug/L
SBS-8-2-X	Boron	54.3		U	ug/L
SBS-8-2-X	Cadmium	1.1	U	U	ug/L
SBS-8-2-X	Calcium	238		U	ug/L
SBS-8-2-X	Chromium	3.3		-	ug/L
SBS-8-2-X	Cobalt	3.4	U	U	ug/L
SBS-8-2-X	Copper	2.7	U	U	ug/L
SBS-8-2-X	Iron	197		-	ug/L
SBS-8-2-X	Lead	51.1	U	U	ug/L
SBS-8-2-X	Magnesium	36.8		U	ug/L
SBS-8-2-X	Manganese	2.5	U	U	ug/L
SBS-8-2-X	Mercury	0.02	U	U	ug/L
SBS-8-2-X	Molybdenum	26.7	U	U	ug/L
SBS-8-2-X	Nickel	5.3	U	U	ug/L

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TABLE B-4
RINSATES - INORGANIC DATA
SUPPLEMENTAL BACKGROUND SOIL STUDY

SAMPLE ID	PARAMETER	RESULT	LAB QUALIFIER	VALIDATION QUALIFIER	UNITS
SBS-8-2-X	Potassium	542	U	U	ug/L
SBS-8-2-X	Selenium	2.32	U	UJ	ug/L
SBS-8-2-X	Silicon	2400		-	ug/L
SBS-8-2-X	Silver	2.9	U	U	ug/L
SBS-8-2-X	Sodium	399		-	ug/L
SBS-8-2-X	Thallium	0.99	U	U	ug/L
SBS-8-2-X	Vanadium	14.9	U	U	ug/L
SBS-8-2-X	Zinc	4.4		-	ug/L
SBS-9-3-X	Aluminum	17.7	U	U	ug/L
SBS-9-3-X	Antimony	13	U	U	ug/L
SBS-9-3-X	Arsenic	3.07	U	U	ug/L
SBS-9-3-X	Barium	1.4		-	ug/L
SBS-9-3-X	Beryllium	0.4	U	U	ug/L
SBS-9-3-X	Boron	66.8		-	ug/L
SBS-9-3-X	Cadmium	1.1	U	U	ug/L
SBS-9-3-X	Calcium	168		U	ug/L
SBS-9-3-X	Chromium	2	U	U	ug/L
SBS-9-3-X	Cobalt	3.4	U	U	ug/L
SBS-9-3-X	Copper	3.4		-	ug/L
SBS-9-3-X	Iron	96		-	ug/L
SBS-9-3-X	Lead	51.1	U	U	ug/L
SBS-9-3-X	Magnesium	23.4	U	U	ug/L
SBS-9-3-X	Manganese	2.5	U	U	ug/L
SBS-9-3-X	Mercury	0.02	U	U	ug/L
SBS-9-3-X	Molybdenum	26.7	U	U	ug/L
SBS-9-3-X	Nickel	5.3	U	U	ug/L
SBS-9-3-X	Potassium	542	U	U	ug/L
SBS-9-3-X	Selenium	2.32	UW	UJ	ug/L
SBS-9-3-X	Silicon	904		-	ug/L
SBS-9-3-X	Silver	2.9	U	U	ug/L
SBS-9-3-X	Sodium	334		-	ug/L
SBS-9-3-X	Thallium	0.99	U	U	ug/L
SBS-9-3-X	Vanadium	14.9	U	U	ug/L
SBS-9-3-X	Zinc	23.9		-	ug/L
SBS-10-2-X	Aluminum	17.7	U	U	ug/L
SBS-10-2-X	Antimony	13	U	U	ug/L
SBS-10-2-X	Arsenic	3.07	U	U	ug/L
SBS-10-2-X	Barium	2.9		-	ug/L
SBS-10-2-X	Beryllium	0.4	U	U	ug/L
SBS-10-2-X	Boron	88		-	ug/L
SBS-10-2-X	Cadmium	1.1	U	U	ug/L
SBS-10-2-X	Calcium	356		U	ug/L
SBS-10-2-X	Chromium	2	U	U	ug/L
SBS-10-2-X	Cobalt	3.4	U	U	ug/L
SBS-10-2-X	Copper	2.7	U	U	ug/L
SBS-10-2-X	Iron	124		-	ug/L
SBS-10-2-X	Lead	51.1	U	U	ug/L
SBS-10-2-X	Magnesium	37		U	ug/L
SBS-10-2-X	Manganese	2.5	U	U	ug/L
SBS-10-2-X	Mercury	0.02	U	U	ug/L
SBS-10-2-X	Molybdenum	26.7	U	U	ug/L
SBS-10-2-X	Nickel	5.3	U	U	ug/L
SBS-10-2-X	Potassium	542	U	U	ug/L
SBS-10-2-X	Selenium	2.32	U	U	ug/L
SBS-10-2-X	Silicon	1460		-	ug/L
SBS-10-2-X	Silver	2.9	U	U	ug/L
SBS-10-2-X	Sodium	218		-	ug/L
SBS-10-2-X	Thallium	0.99	U	U	ug/L

TABLE B-4
RINSATES - INORGANIC DATA
SUPPLEMENTAL BACKGROUND SOIL STUDY

SAMPLE ID	PARAMETER	RESULT	LAB QUALIFIER	VALIDATION QUALIFIER	UNITS
SBS-10-2-X	Vanadium	14.9	U	U	ug/L
SBS-10-2-X	Zinc	9.1		-	ug/L
SBS-11-1-X	Aluminum	25.7		U	ug/L
SBS-11-1-X	Antimony	13	U	U	ug/L
SBS-11-1-X	Arsenic	3.07	U	U	ug/L
SBS-11-1-X	Barium	1.1		-	ug/L
SBS-11-1-X	Beryllium	0.4	U	U	ug/L
SBS-11-1-X	Boron	3.8	U	U	ug/L
SBS-11-1-X	Cadmium	1.1	U	U	ug/L
SBS-11-1-X	Calcium	221		U	ug/L
SBS-11-1-X	Chromium	2	U	U	ug/L
SBS-11-1-X	Cobalt	3.4	U	U	ug/L
SBS-11-1-X	Copper	2.7	U	U	ug/L
SBS-11-1-X	Iron	67.1		-	ug/L
SBS-11-1-X	Lead	51.1	U	U	ug/L
SBS-11-1-X	Magnesium	36.4		U	ug/L
SBS-11-1-X	Manganese	2.5	U	U	ug/L
SBS-11-1-X	Mercury	0.02	U	U	ug/L
SBS-11-1-X	Molybdenum	26.7	U	U	ug/L
SBS-11-1-X	Nickel	5.3	U	U	ug/L
SBS-11-1-X	Potassium	542	U	U	ug/L
SBS-11-1-X	Selenium	2.32	U	U	ug/L
SBS-11-1-X	Silicon	463		-	ug/L
SBS-11-1-X	Silver	2.9	U	U	ug/L
SBS-11-1-X	Sodium	576		-	ug/L
SBS-11-1-X	Thallium	0.99	U	U	ug/L
SBS-11-1-X	Vanadium	14.9	U	U	ug/L
SBS-11-1-X	Zinc	4.2		-	ug/L

Qualifier

- \- Result was not qualified.
- U The analyte was not detected. The value listed as the result is the minimum detectable concentration.
- J Estimated.

TABLE B-5
RINSATES - RADIOLOGICAL DATA
SUPPLEMENTAL BACKGROUND SOIL STUDY

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SAMPLE ID	PARAMETER	RESULT	LAB QUALIFIER	VALIDATION QUALIFIER	UNITS
SBS-1-1-X	Actinium-227	0.043	U	U	pCi/mL
SBS-1-1-X	Cesium-137	0.007	U	UJ	pCi/mL
SBS-1-1-X	Lead-210	0.016		J	pCi/mL
SBS-1-1-X	Potassium-40	0.066	U	U	pCi/mL
SBS-1-1-X	Protactinium-231	0.219	U	U	pCi/mL
SBS-1-1-X	Radium-224	0.01	U	U	pCi/mL
SBS-1-1-X	Radium-226	0.016		J	pCi/mL
SBS-1-1-X	Radium-228	0.01	U	U	pCi/mL
SBS-1-1-X	Ruthenium-106	0.066	U	U	pCi/mL
SBS-1-1-X	Thorium-228	0.01	U	U	pCi/mL
SBS-1-1-X	Thorium-232	0.01	U	U	pCi/mL
SBS-1-1-X	Uranium, Total	0.521	U	UJ	ug/ml
SBS-1-1-X	Uranium-235	0.011	U	U	pCi/mL
SBS-1-1-X	Uranium-238	0.175	U	U	pCi/mL
SBS-2-1B-X	Actinium-227	0.043	U	U	pCi/mL
SBS-2-1B-X	Cesium-137	0.006	U	UJ	pCi/mL
SBS-2-1B-X	Lead-210	0.016	U	UJ	pCi/mL
SBS-2-1B-X	Potassium-40	0.034	U	U	pCi/mL
SBS-2-1B-X	Protactinium-231	0.206	U	U	pCi/mL
SBS-2-1B-X	Radium-224	0.013	U	U	pCi/mL
SBS-2-1B-X	Radium-226	0.016	U	U	pCi/mL
SBS-2-1B-X	Radium-228	0.035	U	UJ	pCi/mL
SBS-2-1B-X	Ruthenium-106	0.062	U	U	pCi/mL
SBS-2-1B-X	Thorium-228	0.013	U	U	pCi/mL
SBS-2-1B-X	Thorium-232	0.035	U	UJ	pCi/mL
SBS-2-1B-X	Uranium, Total	0.293	U	UJ	ug/ml
SBS-2-1B-X	Uranium-235	0.009	U	U	pCi/mL
SBS-2-1B-X	Uranium-238	0.099	U	U	pCi/mL
SBS-3-2-X	Actinium-227	0.044	U	U	pCi/mL
SBS-3-2-X	Cesium-137	0.007	U	UJ	pCi/mL
SBS-3-2-X	Lead-210	0.016		J	pCi/mL
SBS-3-2-X	Potassium-40	0.113	U	U	pCi/mL
SBS-3-2-X	Protactinium-231	0.218	U	U	pCi/mL
SBS-3-2-X	Radium-224	0.011	U	U	pCi/mL
SBS-3-2-X	Radium-226	0.016		J	pCi/mL
SBS-3-2-X	Radium-228	0.011	U	U	pCi/mL
SBS-3-2-X	Ruthenium-106	0.061	U	U	pCi/mL
SBS-3-2-X	Thorium-228	0.011	U	U	pCi/mL
SBS-3-2-X	Thorium-232	0.011	U	U	pCi/mL
SBS-3-2-X	Uranium, Total	0.888	U	UJ	ug/ml
SBS-3-2-X	Uranium-235	0.013	U	U	pCi/mL
SBS-3-2-X	Uranium-238	0.298	U	UJ	pCi/mL
SBS-5-3-X	Actinium-227	0.045	U	U	pCi/mL
SBS-5-3-X	Cesium-137	0.006	U	UJ	pCi/mL
SBS-5-3-X	Lead-210	0.015	U	UJ	pCi/mL
SBS-5-3-X	Potassium-40	0.051	U	U	pCi/mL
SBS-5-3-X	Protactinium-231	0.225	U	U	pCi/mL
SBS-5-3-X	Radium-224	0.014	U	U	pCi/mL
SBS-5-3-X	Radium-226	0.015	U	U	pCi/mL
SBS-5-3-X	Radium-228	0.014		J	pCi/mL
SBS-5-3-X	Ruthenium-106	0.06	U	U	pCi/mL
SBS-5-3-X	Thorium-228	0.014	U	U	pCi/mL
SBS-5-3-X	Thorium-232	0.014		J	pCi/mL
SBS-5-3-X	Uranium, Total	0.42	U	UJ	ug/ml
SBS-5-3-X	Uranium-235	0.01	U	U	pCi/mL
SBS-5-3-X	Uranium-238	0.141	U	U	pCi/mL
SBS-6-2-X	Actinium-227	0.046	U	U	pCi/mL
SBS-6-2-X	Cesium-137	0.007	U	UJ	pCi/mL
SBS-6-2-X	Lead-210	0.018	U	UJ	pCi/mL

TABLE B-5
RINSATES - RADIOLOGICAL DATA
SUPPLEMENTAL BACKGROUND SOIL STUDY

SAMPLE ID	PARAMETER	RESULT	LAB QUALIFIER	VALIDATION QUALIFIER	UNITS
SBS-6-2-X	Potassium-40	0.057	U	U	pCi/mL
SBS-6-2-X	Protactinium-231	0.213	U	U	pCi/mL
SBS-6-2-X	Radium-224	0.014	U	U	pCi/mL
SBS-6-2-X	Radium-226	0.018	U	U	pCi/mL
SBS-6-2-X	Radium-228	0.014	U	U	pCi/mL
SBS-6-2-X	Ruthenium-106	0.06	U	U	pCi/mL
SBS-6-2-X	Thorium-228	0.014	U	U	pCi/mL
SBS-6-2-X	Thorium-232	0.014	U	U	pCi/mL
SBS-6-2-X	Uranium, Total	0.332	U	UJ	ug/ml
SBS-6-2-X	Uranium-235	0.01	U	U	pCi/mL
SBS-6-2-X	Uranium-238	0.112	U	U	pCi/mL
SBS-7-1-X	Actinium-227	0.044	U	U	pCi/mL
SBS-7-1-X	Cesium-137	0.007	U	UJ	pCi/mL
SBS-7-1-X	Lead-210	0.016	U	UJ	pCi/mL
SBS-7-1-X	Potassium-40	0.122	U	U	pCi/mL
SBS-7-1-X	Protactinium-231	0.166	U	U	pCi/mL
SBS-7-1-X	Radium-224	0.01	U	U	pCi/mL
SBS-7-1-X	Radium-226	0.016	U	U	pCi/mL
SBS-7-1-X	Radium-228	0.01	U	U	pCi/mL
SBS-7-1-X	Ruthenium-106	0.061	U	U	pCi/mL
SBS-7-1-X	Thorium-228	0.01	U	U	pCi/mL
SBS-7-1-X	Thorium-232	0.01	U	U	pCi/mL
SBS-7-1-X	Uranium, Total	0.962	U	UJ	ug/ml
SBS-7-1-X	Uranium-235	0.009	U	U	pCi/mL
SBS-7-1-X	Uranium-238	0.323	U	UJ	pCi/mL
SBS-8-2-X	Actinium-227	0.044	U	U	pCi/mL
SBS-8-2-X	Cesium-137	0.006	U	UJ	pCi/mL
SBS-8-2-X	Lead-210	0.015	U	UJ	pCi/mL
SBS-8-2-X	Potassium-40	0.068	U	U	pCi/mL
SBS-8-2-X	Protactinium-231	0.207	U	U	pCi/mL
SBS-8-2-X	Radium-224	0.013	U	U	pCi/mL
SBS-8-2-X	Radium-226	0.015	U	U	pCi/mL
SBS-8-2-X	Radium-228	0.013	U	U	pCi/mL
SBS-8-2-X	Ruthenium-106	0.065	U	U	pCi/mL
SBS-8-2-X	Thorium-228	0.013	U	U	pCi/mL
SBS-8-2-X	Thorium-232	0.013	U	U	pCi/mL
SBS-8-2-X	Uranium, Total	0.307	U	UJ	ug/ml
SBS-8-2-X	Uranium-235	0.009	U	U	pCi/mL
SBS-8-2-X	Uranium-238	0.103	U	U	pCi/mL
SBS-9-3-X	Actinium-227	0.046	U	U	pCi/mL
SBS-9-3-X	Cesium-137	0.006	U	UJ	pCi/mL
SBS-9-3-X	Lead-210	0.013	U	UJ	pCi/mL
SBS-9-3-X	Potassium-40	0.079	U	U	pCi/mL
SBS-9-3-X	Protactinium-231	0.22	U	U	pCi/mL
SBS-9-3-X	Radium-224	0.013	U	U	pCi/mL
SBS-9-3-X	Radium-226	0.013	U	UJ	pCi/mL
SBS-9-3-X	Radium-228	0.013	U	U	pCi/mL
SBS-9-3-X	Ruthenium-106	0.06	U	U	pCi/mL
SBS-9-3-X	Thorium-228	0.013	U	U	pCi/mL
SBS-9-3-X	Thorium-232	0.013	U	U	pCi/mL
SBS-9-3-X	Uranium, Total	0.877	U	UJ	ug/ml
SBS-9-3-X	Uranium-235	0.009	U	U	pCi/mL
SBS-9-3-X	Uranium-238	0.295	U	UJ	pCi/mL
SBS-10-2-X	Actinium-227	0.043	U	U	pCi/mL
SBS-10-2-X	Cesium-137	0.007	U	UJ	pCi/mL
SBS-10-2-X	Lead-210	0.015	U	UJ	pCi/mL
SBS-10-2-X	Potassium-40	0.048		J	pCi/mL
SBS-10-2-X	Protactinium-231	0.216	U	U	pCi/mL
SBS-10-2-X	Radium-224	0.019	U	UJ	pCi/mL

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TABLE B-5
RINSATES - RADIOLOGICAL DATA
SUPPLEMENTAL BACKGROUND SOIL STUDY

SAMPLE ID	PARAMETER	RESULT	LAB QUALIFIER	VALIDATION QUALIFIER	UNITS
SBS-10-2-X	Radium-226	0.015	U	U	pCi/mL
SBS-10-2-X	Radium-228	0.019	U	U	pCi/mL
SBS-10-2-X	Ruthenium-106	0.057	U	U	pCi/mL
SBS-10-2-X	Thorium-228	0.019	U	UJ	pCi/mL
SBS-10-2-X	Thorium-232	0.019	U	U	pCi/mL
SBS-10-2-X	Uranium, Total	0.862	U	UJ	ug/ml
SBS-10-2-X	Uranium-235	0.009	U	U	pCi/mL
SBS-10-2-X	Uranium-238	0.29	U	UJ	pCi/mL
SBS-11-1-X	Actinium-227	0.045	U	U	pCi/mL
SBS-11-1-X	Cesium-137	0.006	U	UJ	pCi/mL
SBS-11-1-X	Lead-210	0.033	U	UJ	pCi/mL
SBS-11-1-X	Potassium-40	0.115	U	U	pCi/mL
SBS-11-1-X	Protactinium-231	0.219	U	U	pCi/mL
SBS-11-1-X	Radium-224	0.014	U	U	pCi/mL
SBS-11-1-X	Radium-226	0.033	U	UJ	pCi/mL
SBS-11-1-X	Radium-228	0.033		J	pCi/mL
SBS-11-1-X	Ruthenium-106	0.061	U	U	pCi/mL
SBS-11-1-X	Thorium-228	0.014	U	U	pCi/mL
SBS-11-1-X	Thorium-232	0.033		J	pCi/mL
SBS-11-1-X	Uranium, Total	1.084	U	UJ	ug/ml
SBS-11-1-X	Uranium-235	0.01	U	U	pCi/mL
SBS-11-1-X	Uranium-238	0.364	U	UJ	pCi/mL

Qualifier

- Result was not qualified.

U The analyte was not detected. The value listed as the result is the minimum detectable concentration.

J Estimated.

APPENDIX C

SUMMARY OF BORING LOCATIONS , SOIL TYPES AND LAND USES

(Table C-1: Summary of Boring Locations, Soil Types and Land Uses
Table C-2: Characteristics of Soil Units Sampled)

TABLE C-1
SUMMARY OF BORING LOCATIONS, SOIL TYPES, AND LAND USES

Boring Number	Boring Name	State Planar Coordinates Northing	State Planar Coordinates Easting	Ground Surface Elevation	Top Depth (inches)	Bottom Depth (inches)	Soil Conservation Service Soil Classification[1]	Sample ID	Soil Classification[2]	Description of Location
1755A	SBS-1-1	504471.00	1335763.00	800.8	0.000	0.500	ML	SBS-1-1-1RM	FdA	Located east of Chapel road and north of Jenkins road, in a swale within a gently rolling farm field. Gently sloping, moderate surface drainage.
					1.000	1.500	ML/CL	SBS-1-1-3RM		
					1.500	2.000	CL	SBS-1-1-4RM		
					2.000	2.500	CL	SBS-1-1-5RM		
					2.500	3.000	CL	SBS-1-1-6RM		
12770	SBS-1-2	505188.42	1336298.46	878.5	0.000	0.500	ML/CL	SBS-1-2-1RM	Ra	Located east of Chapel, west of Bell, and north of Jenkins roads. Gently rolling farm field with sloping, moderate suface drainage.
					1.000	1.500	CL	SBS-1-2-3RM		
					1.500	2.000	CL	SBS-1-2-4RM		
					2.000	2.500	CL	SBS-1-2-5RM		
					2.500	3.000	CL	SBS-1-2-6RM		
12771	SBS-1-3	505880.42	1336270.46	881.8	0.000	0.500	ML	SBS-1-3-1RM	RwB2	Located east of Chapel, west of Bell, and north of Jenkins roads. Gently rolling farm field with gently sloping, moderate suface drainage.
					0.000	0.500	CL	SBS-1-3-1RM-D		
					1.000	1.500	CL	SBS-1-3-3RM		
					1.500	2.000	CL	SBS-1-3-4RM		
					2.000	2.500	CL	SBS-1-3-5RM		
					2.500	3.000	CL	SBS-1-3-6RM		
1756A	SBS-2-1	504130.88	1337222.39	890.0	0.000	0.500	ML	SBS-2-1-1RM	FdA	Located just north of Jenkins Road in a gently rolling farm field with sloping, good surface drainage.
					1.000	1.500	CL	SBS-2-1-3RM		
					1.500	2.000	CL	SBS-2-1-4RM		
					2.000	2.500	CL	SBS-2-1-5RM		
					2.500	3.000	CL	SBS-2-1-6RM		
1756B	SBS-2-1B	504531.48	1337212.02	890.3	0.000	0.500	ML	SBS-2-1B-1RM	FdA	Located north of Jenkins Road, at the top of a slight rise in a gently rolling farm field with sloping, good surface drainage.
					1.000	1.500	ML	SBS-2-1B-3RM		
					1.500	2.000	CL	SBS-2-1B-4RM		
					2.000	2.500	CL	SBS-2-1B-5RM		
					2.500	3.000	CL	SBS-2-1B-6RM		
12774B	SBS-2-2	505137.62	1337809.00	890.0	0.000	0.500	ML	SBS-2-2-1RM	RwB2	Located east of Chapel, west of Bell, and north of Jenkins roads. Gently rolling farm field with sloping, moderate suface drainage.
					1.000	1.500	CL	SBS-2-2-3RM		
					1.500	2.000	CL	SBS-2-2-4RM		
					2.000	2.500	CL	SBS-2-2-5RM		
					2.500	3.000	CL	SBS-2-2-6RM		
12774A	SBS-2-2A	505122.62	1337228.32	893.0	0.000	0.500	ML	SBS-2-2A-1RM	FdA	Located east of Chapel, west of Bell, and north of Jenkins roads. Gently rolling farm field with gently sloping, low to moderate suface drainage.
					1.000	1.500	CL	SBS-2-2A-3RM		
					1.500	2.000	CL	SBS-2-2A-4RM		
					2.000	2.500	CL	SBS-2-2A-5RM		
					2.500	3.000	CL	SBS-2-2A-6RM		

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TABLE C-1
SUMMARY OF BORING LOCATIONS, SOIL TYPES, AND LAND USES

Boring Number	Boring Name	State Planar Coordinates Northing	State Planar Coordinates Easting	Ground Surface Elevation	Top Depth (inches)	Bottom Depth (inches)	Soil Conservation Service Soil Classification[1]	Sample ID	Soil Classification[2]	Description of Location
12775	SBS-2-3	505807.45	1337256.46	886.7	0.000	0.500	ML	SBS-2-3-1RM	FdA	Located east of Chapel, west of Bell, and north of Jenkins roads. Gently rolling farm field with gently sloping, low to moderate suface drainage.
					1.000	1.500	CL	SBS-2-3-3RM		
					1.500	2.000	CL	SBS-2-3-4RM		
					1.500	2.000	CL	SBS-2-3-4RM-D		
					2.000	2.500	CL	SBS-2-3-5RM		
					2.500	3.000	CL	SBS-2-3-6RM		
1763A	SBS-3-1	507890.01	1341801.36	800.7	0.000	0.500	ML	SBS-3-1-1RM	XfB	Located south of Layhigh road and east of Bell road in farm field. Gently sloping, moderate surface drainage.
					1.000	1.500	CL	SBS-3-1-3RM		
					1.500	2.000	CL	SBS-3-1-4RM		
					2.000	2.500	CL	SBS-3-1-5RM		
					2.500	3.000	ML	SBS-3-1-6RM		
12778	SBS-3-2	507353.61	1341602.07	873.9	0.000	0.500	ML	SBS-3-2-1RM	EcE2/WyC2	Located south of Layhigh road and east of Bell road in farm field. Gently sloping, moderate surface drainage.
					1.000	1.500	ML	SBS-3-2-3RM		
					1.500	2.000	CL	SBS-3-2-4RM		
					2.000	2.500	CL	SBS-3-2-5RM		
					2.500	3.000	CL	SBS-3-2-6RM		
12779	SBS-3-3	506681.50	1341610.96	892.6	0.000	0.500	ML/CL	SBS-3-3-1RM	RwB	Located south of Layhigh road and east of Bell road in farm field. Gently sloping, moderate surface drainage.
					0.000	0.500	ML/CL	SBS-3-3-1RM-D		
					1.000	1.500	CL	SBS-3-3-3RM		
					1.500	2.000	CL	SBS-3-3-4RM		
					2.000	2.500	CL	SBS-3-3-5RM		
					2.500	3.000	CL	SBS-3-3-6RM		
1764A	SBS-4-1	507658.10	1335722.41	866.0	0.000	0.500	ML	SBS-4-1-1RM	XeB	A hay field located east of Chapel road, north of Jenkins Road. Nearly level, poor sufrace drainage.
					1.000	1.500	CL	SBS-4-1-3RM		
					1.500	2.000	CL	SBS-4-1-4RM		
					1.500	2.000	CL	SBS-4-1-4RM-D		
					2.000	2.500	CL	SBS-4-1-5RM		
					2.500	3.000	CL	SBS-4-1-6RM		
12783	SBS-4-2	508222.46	1335582.42	862.4	0.000	0.500	ML	SBS-4-2-1RM	RvB2	A hay field located east of Chapel road, north of Jenkins road. Nearly level, poor sufrace drainage.
					1.000	1.500	CL	SBS-4-2-3RM		
					1.500	2.000	CL	SBS-4-2-4RM		
					2.000	2.500	CL	SBS-4-2-5RM		
					2.500	3.000	CL	SBS-4-2-6RM		

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TABLE C-1
SUMMARY OF BORING LOCATIONS, SOIL TYPES, AND LAND USES

Boring Number	Boring Name	State Planar Coordinates Northing	State Planar Coordinates Easting	Ground Surface Elevation	Top Depth (inches)	Bottom Depth (inches)	Soil Conservation Service Soil Classification[1]	Sample ID	Soil Classification[2]	Description of Location
12784	SBS-4-3	507842.46	1335962.42	873.5	0.000	0.500	ML	SBS-4-3-1RM	XeB	A hay field located east of Chapel road, north of Jenkins road. Nearly level, poor sufrace drainage.
					1.000	1.500	CL	SBS-4-3-3RM		
					1.500	2.000	CL	SBS-4-3-4RM		
					2.000	2.500	CL	SBS-4-3-5RM		
					2.500	3.000	CL	SBS-4-3-6RM		
1826A	SBS-5-1	507768.94	1336209.80	880.1	0.000	0.500	ML	SBS-5-1-1RM	XeB	A hay field located east of Chapel road, north of Jenkins road. Nearly level, poor sufrace drainage.
					0.000	0.500	ML/CL	SBS-5-1-1RM-D		
					1.000	1.500	CL	SBS-5-1-3RM		
					1.500	2.000	CL	SBS-5-1-4RM		
					2.000	2.500	CL	SBS-5-1-5RM		
					2.500	3.000	CL	SBS-5-1-6RM		
12787	SBS-5-2	508216.46	1336513.42	883.0	0.000	0.500	ML	SBS-5-2-1RM	FcA	A hay field located east of Chapel road, north of Jenkins. Nearly level, poor sufrace drainage.
					1.000	1.500	ML	SBS-5-2-3RM		
					1.500	2.000	CL	SBS-5-2-4RM		
					2.000	2.500	CL	SBS-5-2-5RM		
					2.500	3.000	CL	SBS-5-2-6RM		
12788	SBS-5-3	507434.46	1336533.42	881.3	0.000	0.500	ML	SBS-5-3-1RM	RvB2	A hay field located east of Chapel road, north of Jenkins. Nearly level, poor sufrace drainage.
					1.000	1.500	CL	SBS-5-3-3RM		
					1.500	2.000	CL	SBS-5-3-4RM		
					2.000	2.500	CL	SBS-5-3-5RM		
					2.500	3.000	CL	SBS-5-3-6RM		
1829A	SBS-6-1	499360.54	1335942.55	820.0	0.000	0.500	ML	SBS-6-1-1RM	XfB	Located east of Chapel, south of Jenkins, and west of Bell roads. A topographically high location within a gently rolling farm field with sloping, moderate surface drainage.
					1.000	1.500	ML	SBS-6-1-3RM		
					1.500	2.000	ML	SBS-6-1-4RM		
					2.000	2.500	CL	SBS-6-1-5RM		
					2.500	3.000	CL	SBS-6-1-6RM		
					2.500	3.000	CL	SBS-6-1-6RM-D		
12791	SBS-6-2	499142.38	1335213.52	791.8	0.000	0.500	ML	SBS-6-2-1RM	RwB2	Located east of Chapel, south of Jenkins, and west of Bell roads. A gently rolling farm field with sloping, moderate surface drainage.
					1.000	1.500	ML	SBS-6-2-3RM		
					1.500	2.000	CL	SBS-6-2-4RM		
					2.000	2.500	CL	SBS-6-2-5RM		
					2.500	3.000	CL	SBS-6-2-6RM		

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TABLE C-1
SUMMARY OF BORING LOCATIONS, SOIL TYPES, AND LAND USES

Boring Number	Boring Name	State Planar Coordinates Northing	State Planar Coordinates Easting	Ground Surface Elevation	Top Depth (inches)	Bottom Depth (inches)	Soil Conservation Service Soil Classification[1]	Sample ID	Soil Classification[2]	Description of Location
12792	SBS-6-3	499130.38	1336713.52	817.6	0.000	0.500	ML	SBS-6-3-1RM	RwB	Located east of Chapel, south of Jenkins, and west of Bell roads. A gently rolling farm field with sloping, moderate surface drainage.
					1.000	1.500	CL	SBS-6-3-3RM		
					1.500	2.000	CL	SBS-6-3-4RM		
					2.000	2.500	CL	SBS-6-3-5RM		
					2.500	3.000	CL	SBS-6-3-6RM		
1832A	SBS-7-1	500191.00	1336195.00	800.9	0.000	0.500	ML	SBS-7-1-1RM	FdA	Located east of Chapel, south of Jenkins, and west of Bell roads. A gently rolling farm field with sloping, moderate surface drainage.
					1.000	1.500	CL	SBS-7-1-3RM		
					1.500	2.000	CL	SBS-7-1-4RM		
					2.000	2.500	CL	SBS-7-1-5RM		
					2.500	3.000	CL	SBS-7-1-6RM		
12794	SBS-7-2	499792.39	1336778.51	826.6	0.000	0.500	ML	SBS-7-2-1RM	XfB	Located east of Chapel, south of Jenkins, and west of Bell roads. A gently rolling farm field with sloping, moderate surface drainage.
					1.000	1.500	CL	SBS-7-2-3RM		
					1.500	2.000	CL	SBS-7-2-4RM		
					2.000	2.500	CL	SBS-7-2-5RM		
					2.500	3.000	CL	SBS-7-2-6RM		
12795	SBS-7-3	499733.22	1337408.00	816.3	0.000	0.500	ML	SBS-7-3-1RM	MsD2	Located east of Chapel, south of Jenkins, and west of Bell roads. On edge of gently rolling farm field with sloping, moderate surface drainage.
					0.000	0.500	ML	SBS-7-3-1RM-D		
					1.500	2.000	CL	SBS-7-3-3RM		
					1.000	1.500	CL	SBS-7-3-4RM		
					2.000	2.500	CL	SBS-7-3-5RM		
					2.500	3.000	CL	SBS-7-3-6RM		
1834A	SBS-8-1	508643.33	1339734.22	912.5	0.000	0.500	ML	SBS-8-1-1RM	FcA	Located just south of Layhigh road and east of Bell road. Nearly level, poor surface drainage.
					1.000	1.500	CL	SBS-8-1-3RM		
					1.500	2.000	CL	SBS-8-1-4RM		
					2.000	2.500	CL	SBS-8-1-5RM		
					2.500	3.000	CL	SBS-8-1-6RM		
12798	SBS-8-2	509009.60	1339574.67	915.7	0.000	0.500	ML	SBS-8-2-1RM	FcA	Located just south of Layhigh road and east of Bell road. Nearly level, poor surface drainage.
					1.000	1.500	CL	SBS-8-2-3RM		
					1.500	2.000	CL	SBS-8-2-4RM		
					2.000	2.500	CL	SBS-8-2-5RM		
					2.500	3.000	CL	SBS-8-2-6RM		

000053

TABLE C-1
SUMMARY OF BORING LOCATIONS, SOIL TYPES, AND LAND USES

Boring Number	Boring Name	State Planar Coordinates Northing	State Planar Coordinates Easting	Ground Surface Elevation	Top Depth (inches)	Bottom Depth (inches)	Soil Conservation Service Soil Classification[1]	Sample ID	Soil Classification[2]	Description of Location
12799	SBS-8-3	507681.15	1339627.02	910.9	0.000	0.500	ML	SBS-8-3-1RM	XfB	Located south of Layhigh road and east of Bell road. Nearly level, poor surface drainage.
					1.000	1.500	CL	SBS-8-3-3RM		
					1.500	2.000	CL	SBS-8-3-4RM		
					2.000	2.500	CL	SBS-8-3-5RM		
					2.000	2.500	CL	SBS-8-3-5RM-D		
					2.500	3.000	CL	SBS-8-3-6RM		
1872A	SBS-9-1	498338.39	1337765.54	801.0	0.000	0.500	ML	SBS-9-1-1RM	XfB	Located between Chapel and Bell Roads. Alfalfa hay field with gently sloping, moderate surface drainage.
					1.000	1.500	CL	SBS-9-1-3RM		
					1.500	2.000	CL	SBS-9-1-4RM		
					2.000	2.500	CL	SBS-9-1-5RM		
					2.500	3.000	CL	SBS-9-1-6RM		
12802	SBS-9-2	496536.51	1337165.16	781.1	0.000	0.500	ML	SBS-9-2-1RM	MtC2	Located off end of Buell road in a crop field. Gently sloping, moderate surface drainage.
					1.000	1.500	CL	SBS-9-2-3RM		
					1.500	2.000	CL	SBS-9-2-4RM		
					1.500	2.000	CL	SBS-9-2-4RM-D		
					2.000	2.500	CL	SBS-9-2-5RM		
					2.500	3.000	CL	SBS-9-2-6RM		
12804	SBS-9-3	497558.39	1338661.54	754.4	0.000	0.500	CL	SBS-9-3-1RM	EcE2	Located off end of Buell road on the edge of a field. Genly sloping, moderate surface drainage.
					1.000	1.500	CL	SBS-9-3-3RM		
					1.500	2.000	CL	SBS-9-3-4RM		
					2.000	2.500	CL	SBS-9-3-5RM		
					2.500	3.000	CL	SBS-9-3-6RM		
1873A	SBS-10-1	503732.00	1336178.00	800.9	0.000	0.500	ML	SBS-10-1-1RM	FdA	Located east of Chapel road and just south of Jenkins road. Farm land is nearly level, poor to moderate surface drainage.
					1.000	1.500	CL	SBS-10-1-3RM		
					1.500	2.000	CL	SBS-10-1-4RM		
					2.000	2.500	CL	SBS-10-1-5RM		
					2.500	3.000	CL	SBS-10-1-6RM		
12806	SBS-10-2	503963.42	1336135.47	864.5	0.000	0.500	ML	SBS-10-2-1RM	Ra	Located east of Chapel road and just south of Jenkins road. Farm land is nearly level, poor to moderate surface drainage.
					1.000	1.500	CL	SBS-10-2-3RM		
					1.500	2.000	CL	SBS-10-2-4RM		
					2.000	2.500	CL	SBS-10-2-5RM		
					2.500	3.000	CL	SBS-10-2-6RM		

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TABLE C-1
SUMMARY OF BORING LOCATIONS, SOIL TYPES, AND LAND USES

Boring Number	Boring Name	State Planar Coordinates Northing	State Planar Coordinates Easting	Ground Surface Elevation	Top Depth (inches)	Bottom Depth (inches)	Soil Conservation Service Soil Classification[1]	Sample ID	Soil Classification[2]	Description of Location
12807	SBS-10-3	503472.48	1336269.33	863.1	0.000	0.500	ML	SBS-10-3-1RM	FdA	Located east of Chapel road and just south of Jenkins road. Farm land is nearly level, poor to moderate surface drainage.
					1.000	1.500	ML	SBS-10-3-3RM		
					1.500	2.000	ML	SBS-10-3-4RM		
					1.500	2.000	ML	SBS-10-3-4RM-D		
					2.000	2.500	ML	SBS-10-3-5RM		
					2.500	3.000	CL	SBS-10-3-6RM		
1879A	SBS-11-1	499657.00	1344160.00	800.9	0.000	0.500	ML	SBS-11-1-1RM	XfB	Located west of Morgan-Ross road. Farm field atop a ridge. Gently sloping, moderate surface drainage.
					1.000	1.500	ML	SBS-11-1-3RM		
					1.500	2.000	CL	SBS-11-1-4RM		
					2.000	2.500	CL	SBS-11-1-5RM		
					2.500	3.000	CL	SBS-11-1-6RM		
12810	SBS-11-2	500246.10	1344965.19		0.000	0.500	OL/CL	SBS-11-2-1RM	EcE2	Located west of Morgan-Ross road. Farm field atop a ridge. Gently sloping, moderate surface drainage.
					1.000	1.500	CL	SBS-11-2-3RM		
					1.500	2.000	CL	SBS-11-2-4RM		
					2.000	2.500	CL	SBS-11-2-5RM		
					2.500	3.000	CL	SBS-11-2-6RM		
12811	SBS-11-3	500036.11	1344352.78	797.0	0.000	0.500	CL	SBS-11-3-1RM	EcE2	Located west of Morgan-Ross road. Farm field atop a ridge. Gently sloping, moderate surface drainage.
					1.000	1.500	CL	SBS-11-3-3RM		
					1.500	2.000	CL	SBS-11-3-4RM		
					2.000	2.500	CL	SBS-11-3-5RM		
					2.000	2.500	CL	SBS-11-3-5RM-D		
					2.500	3.000	C	SBS-11-3-6RM		

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[1] The symbols of this column are USCS symbols as follows:

CL Inorganic clays of low to medium plasticity, gravely clays, sandy clays, silty clays, lean clays
ML Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, clayey silts with slight plasticity
OL Organic silts and organic silty clays of low plasticity

[2] Soil classifications are according to maps of the Butler County Soil Survey, U.S. Soil Conservation Servic
of letters or of letters and a number. The first capital letter and lower case letter represent the map unit name. The second capital letter indicates the class of slope: A for 0 to 2 percent, B for 2 to 6 percent, and C for 6 to 12 percent. Symbols without a slope letter are for nearly levels soils or miscellaneous areas. A final numl of 2 indicates that the soil is moderately eroded.

TABLE C-2

CHARACTERISTICS OF SOIL UNITS SAMPLED*

Map Symbol of Soils Encountered in this Study	Soil Series	Characterisitics of the Soil and the Material in Which it Formed
EcE2	Eden silty clay loam	The Eden series consists of moderately deep, well drained, slowly permeable soils on hillsides. These soils formed in residuum weathered from interbedded calcareous shale and limestone. Bedrock is at a depth of 20 and 40 inches. Slope ranges from 15 to 50 percent. Eden soils are similar to Miamian and Wynn soils. Miamian soils are deep and formed almost entirely in glacial till; they have a thin loess mantle. Wynn soils formed partly in till and commonly have thin loess mantle.
FcA	Fincastle silt loam	The Fincastle series consists of deep, somewhat poorly drained soils on uplands and in till filled valleys. These soils formed in a mantle of loess and in the underlying calcareous loam or clay loam glacial till of Wisconsin age. Permeability is slow or moderately slow in the subsoil and slow in the underlying till. Slope ranges from 0 to 6 percent. Fincastle soils are commonly adjacent to Russell and Xenia soils. Russell and Xenia soils are not dominantly 2 in chroma below the Ap horizon.
FdA	Fincastle silt loam with bedrock substratum	Same as above, but with a bedrock substratum.
MsD2	Miami-Russell silt loam	The Miamian series consists of deep, well drained, moderately slowly permeable soils on till plains, end moraines, and till filled valleys. These soils formed in a thin layer of loess and the underlying loamy till. Slope ranges from 2 to 50 percent. Miamian soils are commonly adjacent to Celina soils and are mapped in a complex with Hennepin and Russell soils. Celina soils have 2-chroma mottles in the upper 10 inches of the argillic horizon. Hennepin soils are shallow to till and Russell soils formed in a mantle of loess more than 18 inches thick.
MtC2	Miamian-Russell silt loam with bedrock substratum	Same as above, but with a bedrock substratum.
Ra	Ragsdale silty clay loam	The Ragsdale series consists of deep, very poorly drained soils that have slow permeability. These soils formed in calcareous or neutral, silty deposits. They are in depressions on the Wisconsin glacial till plain. Slope is 0 to 2 percent. Ragsdale soils are commonly adjacent to somewhat poorly drained Fincastle and moderately well drained Xenia soils. Ragsdale soils have a darker colored A horizon than either of theses soils.
RvB2	Russell-Miamian silt loams	The Russell series consists of deep, well drained soils on uplands and in till filled valleys. These soils have moderate permeability in the upper part of the subsoil and moderately slow in the lower part of the subsoils and in the substratum. They formed in loess and in the underlying calcareous glacial till of Wisconsin age. Slope ranges from 2 to 18 percent. Russell soils are similar to Uniontown soils and commonly are adjacent to Fincastle and Xenia soils. Uniontown soils formed in lacustrine material. Russell soils do not have mottles that are 2 in chroma as is characteristic of the Fincastle and Xenia soils.
RwB and RwB2	Russell-Miami silt loam with bedrock substratum	Same as above, but with a bedrock substratum.

TABLE C-2
(Continued)

Map Symbol of Soils Encountered in this Study	Soil Series	Characterisitics of the Soil and the Material in Which it Formed
WyC2	Wynn silt loam	The Wynn series consists of moderately deep, well drained soils on uplands. These soils have moderately slow or slow permeability. They formed in a thin layer of loess, in glacial till, and the underlying residuum from calcareous clay shale and limestone bedrock. Slope is 2 to 18 percent. Wynn soils are commonly adjacent to Eden soils. Wynn soils differ from Eden soils because part or all of the B horizon of Wynn soils developed in glacial till and the B horizon of Eden soils developed in residuum of clay shale and limestone. Wynn soils are also commonly adjacent to Miamian-Russell, bedrock substratum, soils on similar positions on the landscape. In addition, Miamian and Russell soils commonly have a thicker mantle of loess.
XeB	Xenia silt loam	The Xenia series consists of deep, moderately well drained soils on glacial till plains and in till filled valleys. These soils formed in a mantle of loess and the underlying calcareous glacial till over Ordovician bedrock in many areas. They have moderately slow permeability. Slope is 0 to 6 percent.
XfB	Xenia silt loam with bedrock substratum	Same as above, but with a bedrock substratum.

*Soil descriptions and names were taken directly from the U.S. Soil Conservation Service Soil Survey of Butler County.

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APPENDIX D

VISUAL CLASSIFICATION OF SOIL FORMS

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: N Becker / 8-29-00

PAGE 1 OF 1

CONTROL NO.: SMMP 449-12-22

PROJECT NAME/NO.: Supplemental Background Study / 21120-PSP-0002

3502

LOCATION/ID: 1755A SBS-1-1

DATE BOREHOLE STARTED: 8/23/00

BOREHOLE COMPLETION DATE: 8/23/00

COORDINATES NAD: 1983 ☑ 1927 ☐

NORTHING: 504471.00 EASTING: 1335763.00

BOREHOLE DIAMETER (in): 2 1/8

SURFACE ELEVATION (ft. MSL): 800.83

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER/GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 Inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1335 8-23-00 SBS-1-1-1RM	NA	6	(10YR, 4/2) Dark Grayish Brown Silt with clay and trace roots moist, non-plastic	ML	NA	
.5	1335 8-23-00 SBS-1-1-2V	NA	6	SAA	ML	NA	
1.0	1335 8-23-00 SBS-1-1-3RM	NA	1 / 5	SAA / (10YR, 3/1) Very dark Gray Clay with silt and trace iron staining, moist, non-plastic	ML / CL	NA	Plow zone 13"
1.5	1335 8-23-00 SBS-1-1-4RM	NA	6	SAA	CL	NA	
2.0	1335 8-23-00 SBS-1-1-5RM	NA	6	SAA	CL	NA	
2.5	1335 8-23-00 SBS-1-1-6RM	NA	6	SAA	CL	NA	
3.0	KE 9/13/00			Bottom of Boring 3.0'			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA	8-23-00		TYPE OF SAMPLER: Macro-Core	
ALPHA				DIAMETER OF SAMPLER: 2 1/8"	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3681-1.

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VZ 9/18

FS-F-3681 (REV2 8/3/99)

VISUAL CLASSIFICATION OF SOILS

Keith Rayne

PAGE 1 OF 1

CONTROL NO.: SMMP 449-13-22

PROJECT NAME/NO.: Supplemental Background Soil Study / 2112Φ-PSP-ΦΦΦ2

LOCATION/ID: 1277Φ SBS-1-2

DATE BOREHOLE STARTED: 8/23/00

BOREHOLE COMPLETION DATE: 8/23/00

COORDINATES — NAD: 1983 ☒ 1927 ☐

BOREHOLE DIAMETER: 2.Φ in

NORTHING: 505188.42 EASTING: 1336298.46

SURFACE ELEVATION (ft. MSL): 878.50

GROUNDWATER LEVEL: NA — DATE: NA — TIME: NA

GROUNDWATER LEVEL: NA — DATE: NA — TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: B. Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA G

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	SBS-1-2-1RM 8/23/00 1332	NA	6	10YR5/4 Yellowish Brown stiff, low Plas. silty clay, clayey silt w/organics (roots) MOIST	ML / CL	.5 / 1.75	friable
.5			1	See above	CL	1.75	Plow Zone @ 7" BGS.
1.0	SBS-1-2-2V 8/23/00 1332	NA	5	10YR6/3 Pale Brown Hard, low Plas., silty Gravelly Clay w/ sand (medium) DRY	CL	4.25	friable
1.5	SBS-1-2-3RM 8/23/00 1332	NA	6	SAA DRY	CL	4.5	
2.0	SBS-1-2-4RM 8/23/00 1332	NA	6	SAA except: hard DRY	CL	>4.5	
2.5	SBS-1-2-5RM 8/23/00 1332	NA	6	SAA DRY	CL	4.25	Fe, mg Nodules
3.0	SBS-1-2-6RM 8/23/00 1332	NA	6	SAA DRY	CL	>4.5	Fe, mg Nodules
3.5				Bottom of Borehole @ 3.Φ ft BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA / NB	
BETA/GAMMA		8/17/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' macro-core { Hand Driven

DIAMETER OF SAMPLER: 2.0 in

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

RECORD

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), "FS-F-3631".

FS-F-3631 FS 2 7 99

VZ 9/

VISUAL CLASSIFICATION OF SOILS

Keith Hayne 7-5-00

PAGE 1 OF 1

CONTROL NO.: Smmp 449-14-22

PROJECT NAME/NO.: Supplemental Background Soil Study / 2112Φ-PSP-ΦΦΦ2 - 3502

BORE/WELL NO.: 12771 SBS-1-3

DATE BOREHOLE STARTED: 8/23/00

BOREHOLE COMPLETION DATE: 8/23/00

COORDINATES NAD: 1983 ☑ 1927 ☐

BOREHOLE DIAMETER (in): 2.0 in.

NORTHING: 505880.42 EASTING: 1336270.46

SURFACE ELEVATION (ft. MSL): 881.76

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: B. Manges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
.5	SBS-1-3-1RM 8/23/00 1410	NA	6	10YR 5/4 Yellowish Brown Stiff, low plas. clayey silt w/ organics (roots) MOIST	ML	1.75	friable
1.0	SBS-1-3-2V 8/23/00 1410	NA	3	10YR 5/4 Yellowish Brown very stiff, med plas., silty clay w/organics MOIST	CL	2.5	Plow Zone @ 9" BGS
			3	10YR 5/4 Yellowish Brown Hard, med. plas., silty clay w/organics MOIST	CL	4.25	Fe, Mg Nodules, Blocky, texture
1.5	SBS-1-3 3RM 8/23/00 1410	NA	6	SAA except less moisture & harder MOIST	CL	>4.5	
2.0	SBS-1-3 4RM 8/23/00 1410	NA	2	2.5Y 3/2 Very Dark Grayish Brown silty clay Hard w/organics MOIST	CL	>4.5	Fe, Mg nodules
			4	2.5Y 5/3 Light olive Brown Hard, low plas., silty clay, gravelly (fine, sub-rounded) MOIST	CL	>4.5	Fe, Mg Nodules
2.5	SBS-1-3 5RM 8/23/00 1410	NA	6	2.5Y 5/6 Light olive Brown w/10% med. sand (sub-rounded) otherwise same as above (SAA) MOIST	CL	>4.5	increasing sand & gravel
3.0	SBS-1-3 6RM 8/23/00 1410	NA	6	SAA MOIST/DRY	CL	>4.5	
3.5				Bottom of Borehole @ 3.0 ft BGS.			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID				TYPE OF SAMPLER: 4' Macro-Core { Hand Driven	plas. = plasticity.
ALPHA		NA NB		DIAMETER OF SAMPLER: 2.0 in.	
BETA/GAMMA		8/17/00		WEIGHT OF HAMMER: NA	

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per Minute.

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3831-1.

RECORD

VZ 9/18

FS-F-3831 FS 12 1 98

000061

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8-29-00

PAGE 1 OF 1

CONTROL NO.: SMMP 449-15-22

PROJECT NAME/NO.: Supplemental Background Study / 20855-00 21120-PSP-0002

LOCATION/ID: 12773 SBS-1-4

DATE BOREHOLE STARTED: 8/23/00

BOREHOLE COMPLETION DATE: 8/23/00

COORDINATES NAD: 1983 ☒ 1927 ☐

NORTHING: 5060488.42 EASTING: 1336290.46

BOREHOLE DIAMETER (in): 2 1/8"

SURFACE ELEVATION (ft. MSL): 876.47

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME:

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER/GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0.5	1430 8/23/00 SBS-1-4 -1 RMV KP 8-23-00	NA	6	(10YR, 4/2) Dark Grayish Brown Silt with clay, non-plastic, moist, and roots	ML	NA	
1.0	1430 8/23/00 SBS-1-4 -2	NA	6	SAA	ML	NA	
1.5	1430 8/23/00 SBS-1-4 -3 RMV KP 8-23-00	NA	6	SAA	ML	NA	Plow Zone 18"
2.0	1430 8/23/00 SBS-1-4 -4 RMV KP 8-23-00	NA	6	(10YR, 4/4) Dark Yellowish Brown Silty clay with trace roots, moist, non-plastic	CL	NA	
2.5	1430 8/23/00 SBS-1-4 -5 RMV KP 8-23-00	NA	6	SAA	CL	NA	
3.0	1430 8/23/00 SBS-1-4 -6 RMV KP 8-23-00	NA	6	SAA	CL	NA	
				Bottom of Boring 3.0			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA KP 8-23-00			TYPE OF SAMPLER: Macro-core	
ALPHA				DIAMETER OF SAMPLER: 2 1/8"	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

000062

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts P

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3621-1.

VZ 9/1

VISUAL CLASSIFICATION OF SOILS

Keith Payne 8-22-00

PAGE 1 OF 1

CONTROL NO.: SBWP443-05/21

PROJECT NAME/NO.: [redacted] Supplemental Background Soil Study / 2112Φ-PSP-ΦΦ2

8502

LOCATION: 1756A

DATE BOREHOLE STARTED: 8/22/00

BOREHOLE COMPLETION DATE: 8/22/00

COORDINATES — NAD: 1983 ☒ 1927 ☐

NORTHING: 504531.48 (130-8 1-17-01)

EASTING: 1337212.02 (22.39 KR 1-17-01)

BOREHOLE DIAMETER (in): 2.0 in

SURFACE ELEVATION (ft. MSL): 890.30 (KR 1/7/01)

GROUNDWATER LEVEL: NA — DATE: NA — TIME: NA

GROUNDWATER LEVEL: NA — DATE: NA — TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: B. Mingus

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA G.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	SBS-2-1-1Rm 8/22/00 1424	NA	6	10YR5/4 Yellowish Brown stiff, low plas., clayey silt, w/organics (grassy roots). MOIST	ML	1.75	friable
.5	SBS-2-1-2V 8/22/00 1424	NA	4	SAA	ML	1.75	friable — Increase Clay
1.0			2	See below MOIST	CL	2.75	Plow zone @ 11" BGS
[redacted] 1.5	SBS-2-1-3Rm 8/22/00 1424	NA	6	10YR6/4 Light Yellowish Brown very stiff, med/low plas., silty clay some organics (roots) MOIST	CL	2.75	Fe, mg nodules Blocky structure
2.0	SBS-2-1-4Rm 8/22/00 1424	NA	6	SAA except: less moisture / more stiff MOIST	CL	3.5	Decreasing moisture content
2.5	SBS-2-1-5Rm 8/22/00 1424	NA	3	SAA MOIST/DRY	CL	3.75	
			3	See below DRY			
3.0	SBS-2-1-6Rm 8/22/00 1424	NA	6	2.5Y6/4 Light Yellowish Brown Hard, low plas. silty clay w/ 1% med sand (sub-rounded) and 5% fine gravel (sub-rounded). DRY	CL	4.5	
3.5				Bottom of Borehole @ 3.0 ft BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA NB	
BETA/GAMMA		8/17/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' macro-core { Hand Driven

DIAMETER OF SAMPLER: 2.0 in.

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per Minute.

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-*.

RECORD

000063 VZ 9/14/00

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8-29-00

PAGE 1 OF 1

CONTROL NO.: SMMP451-004/014

PROJECT NAME/NO.: Supplemental Background Study / 21120-PSP-0002

LOCATION/ID: ~~1756A~~ SBS-2-1B 1756B

DATE BOREHOLE STARTED: 8/28/00

BOREHOLE COMPLETION DATE: 8/28/00

COORDINATES: 1337212.02 NAD: 1983 ☑ 1927 ☐

BOREHOLE DIAMETER (in): 2 1/8

NORTHING: 504531.48 ~~504501~~ KRG-11-00

EASTING: 1368679 KRG-11-00

SURFACE ELEVATION (ft. MSL):	GROUNDWATER LEVEL:	DATE:	TIME:	GROUNDWATER LEVEL:	DATE:	TIME:
890.30	NA	NA	NA	NA	NA	N

GEOLOGIST:	DRILLING CONTRACTOR:	DRILLING EQUIPMENT:	DRILLER/GEOPROBE OPERATOR:
Keith Payne	Fluor Fernald	Slam Hammer	Bob Minges

WATER USED DURING DRILLING:	WATER RECOVERED DURING DRILLING:	WATER LOST DURING DRILLING:
NA GAL.	NA GAL.	NA

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	1410 8/28/00 SBS-2 -1B-1RM	NA	6	(10YR, 5/4) Yellowish Brown Silt with clay, moist, non-plastic	ML	NA	
.5	1410 8/28/00 SBS-2 -1B-2V	NA	6	SAA	ML	NA	Bottom of Plow Zone
1.0	1410 8/28/00 SBS-2 -1B-3RM	NA	6	(10YR, 5/4) Yellowish Brown Clayey Silt with trace roots and iron staining, Dry, non-plastic	ML	NA	
1.5	1410 8/28/00 SBS-2 -1B-4RM	NA	6	(10YR, 5/3) Brown Silty clay with trace roots and iron staining, Dry, non-plastic	CL	NA	
2.0	1410 8/28/00 SBS-2 -1B-5RM	NA	6	SAA	CL	NA	
2.5	1410 8/28/00 SBS-2 -1B-6RM	NA	6	SAA	CL	NA	
3.0				Bottom of Boring 3.0 ft			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA	KP 8-24-00		TYPE OF SAMPLER: Macro-core	
ALPHA				DIAMETER OF SAMPLER: 2 1/8"	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

000064

RECORD

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/19/00

KR

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8-29-00

PAGE 1 OF 1

CONTROL NO.: MMP451-005/014

PROJECT NAME/NO.: Supplemental Background Study / 21120-PSP-0002 3502

LOCATION/ID: 12774A SBS-2-2A

DATE BOREHOLE STARTED: 8/28/00

BOREHOLE COMPLETION DATE: 8/28/00

COORDINATES NAD: 1983 ✓ 1927 ☐

BOREHOLE DIAMETER (in.): 2 1/8

NORTHING: 505122.62 EASTING: 1337228.32

SURFACE ELEVATION (ft. MSL): 893.04

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: N

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER/GEOPROBE OPERATOR: Bob Mings

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
.5	1357 8-28-00 SBS-2 -2A-1RM	NA	6	(10YR, 4/2) Dark Grayish Brown silt with clay and roots Dry, non-plastic	ML	NA	
1.0	1357 8-28-00 SBS-2 -2A-2V	NA	4	SAA	ML	NA	Bottom of Plow Zone
			2	(10YR, 4/1) Dark Gray, silty clay with trace Iron staining, Dry non-plastic	CL	NA	
1.5	1357 8-28-00 SBS-2 -2A-3RM	NA	6	SAA	CL	NA	
2.0	1357 8-28-00 SBS-2 -2A-4RM	NA	6	SAA	CL	NA	
2.5	1357 8-28-00 SBS-2 -2A-5RM	NA	6	(10YR, 5/1) Gray, Clay with silt, Iron staing, trace manganese, Moist, non-plastic	CL	NA	
3.0	1357 8-28-00 SBS-2 -2A-6RM	NA	6	SAA	CL	NA	
				Bottom of Boring 3.0 ft			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA	KP 8-24-00		TYPE OF SAMPLER: Macro core	
ALPHA				DIAMETER OF SAMPLER: 2 1/8"	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

000065

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3621-1.

VZ 9/19/00

KR

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8/22/00

PAGE 1 OF 1

CONTROL NO.: SMMP443-06/21

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002

LOCATION ID: 127740 KR

DATE BOREHOLE STARTED: 8/22/00 1/17/01 KR

BOREHOLE COMPLETION DATE: 8/22/00

COORDINATES NAD: 1983 ☐ 1927 ☐

NORTHING: 505122.62 37 1/17/01

EASTING: 1337228.32 809

BOREHOLE DIAMETER (in): 2 1/5

SURFACE ELEVATION (ft. MSL): 893.08 1/17/01

GROUNDWATER LEVEL: NA

DATE: NA

TIME: NA

GROUNDWATER LEVEL: NA

DATE: NA

TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Stern Hammer

DRILLER GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1410 8-22-00 SB5-2-2-1RM	NA	6	(10YR, 4/3) Brown Silt with clay and trace roots, moist non-plastic	ML	NA	
.5				Plow Zone 7" SAA	ML		
	1410 8-22-00 SB5-2-2-2N	NA	6	Silty Clay with sand trace roots, Dry, non-plastic, and Iron staining	CL	NA	
1.0	1410 8-22-00 SB5-2-2-3RM	NA	6	SAA	CL	NA	
1.5	1410 8-22-00 SB5-2-2-4RM	NA	6	SAA KP 8-22-00	CL	NA	
2.0	1410 8-22-00 SB5-2-2-5RM	NA	6	~~(6/1)~~ (5Y, 6/1) Gray, Silty clay with 15-20% medium sand, non-plastic Dry, and Iron staining	CL	NA	From 26-27" a (5Y, 6/1) Gray, Clay 30-40% medium sand 5% gravel 15-25 mm dry, non-plastic
2.5	1410 8-22-00 SB5-2-2-6RM	— NA	6	(2.5Y, 6/3) light yellowish Brown Silty Clay with 5-10% medium sub rounded sand, Dry non-plastic	CL	NA	
3.0				Bottom of Boring 3.0'			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA		KP 8-17-00		DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

000066

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3331-1.

VZ 9/1

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: N. Becker / 8/22/00

PAGE 1 OF 1

CONTROL NO.: 18443-07/21

PROJECT NAME/NO.: Supplemental Background Soil Study / 21120-PSP-0002

3502

LOCATION/ID: 12775

DATE BOREHOLE STARTED: 8-22-00

BOREHOLE COMPLETION DATE: 8-22-00

BOREHOLE DIAMETER (in): 2/8

COORDINATES NAD: 1983 ☐ 1927 ☐

NORTHING: 505807.45 EASTING: 1337256.46

SURFACE ELEVATION (ft. MSL): 886.71

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: FLUOR Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER/GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1512 8-22-00 SBS-2-3-1RM	NA	6 NA 8-22-00	(10YR, 5/3) Brown silt with clay and trace roots, Dry non plastic	ML	NA	
.5	1512 8-22-00 SBS-2-3-2V	NA	6 NA 8-22-00 KP	SAA 11"	ML	NA	Bottom of Plow Zone
				Same as Below	CL		
.0	1512 8-22-00 SBS-2-3-3RM	NA	6 NA 8-22-00 KP	(10YR, 4/1) Dart Gray Clay with silt trace roots, moist, non-plastic	CL	NA	
1.5	1512 8-22-00 SBS2-3-4RM	NA	6 NA 8-22-00 KP	(10YR, 5/1) Gray & medium sandy clay with silt iron staining, Dry, non plastic	CL	NA	12776 SBS-2-3-4RM-C
2.0	1512 8-22-00 SBS-2-3-5RM	NA	6 NA 8-22-00 KP	SAA	CL	NA	
2.5	1512 8-22-00 SBS2-3-6RM	NA	6	SAA	CL	NA	
3.0				Bottom of Boring 3.0'			

METER	BKGD	DATE	TIME
PID	NA	8/22/00	
ALPHA			
BETA/GAMMA			

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: Macro-core

DIAMETER OF SAMPLER: 2/8" O.D.

WEIGHT OF HAMMER: NA

NOTES:

RECORD

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3681-1.

000067 VZ 9/1

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: Keith Payne 8/22/00

PAGE 1 OF 1

CONTROL NO.: SWMP443-08/21

PROJECT NAME/NO.: Supplemental Background Soil Studies / 2112Φ-PSP-ΦΦΦ2

LOCATION/ID: 12777

DATE BOREHOLE STARTED: 8/22/00

BOREHOLE COMPLETION DATE: 8/22/00

COORDINATES — NAD: 1983 ☐ 1927 ☐

NORTHING: 506431.45 EASTING: 1337268.46

BOREHOLE DIAMETER (in): 2.0in

SURFACE ELEVATION (ft. MSL): 886.86

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Floor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: B. Mings

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
.5	SBS-2-4-1 ~~BRK~~ V NB 8/22/00 8/22/00 1454	NA	6	10YR 6/2 light Brownish Gray stiff, low plas., clayey silt w/organics (roots) MOIST	ML	1.75	friable
			.5	See above			PLOW ZONE @ 6.5" BGS.
1.0	SBS-2-4-2 V 8/22/00 1454	NA	5.5	10YR 6/3 Pale Brown very stiff, med plas., silty clay some organics (roots) MOIST	CL	3.5	Fe, Mg Nodules Blocky structure.
1.5	SBS-2-4-3 ~~BRK~~ V NB 8/22/00 8/22/00 1454	NA	6	SAA except: decreasing moisture and Hard MOIST/DRY	CL	>4.5	Sand (med, subangular) Layer 1'2" BGS to 1'2.1" BGS Fe, Mg Nodules Blocky Structure
2.0	SBS-2-4-4 ~~BRK~~ V NB 8/22/00 8/22/00 1454 ~~BRK~~ NB 8/22/00	NA	6	2.5 7/6 Yellow mottled w/ 2.5Y 6/3 Light yellowish Brown Hard, low plas., silty clay w/ organics (roots) DRY	CL	>4.5	Fe, Mg Nodules Blocky
2.5	SBS-2-4-5 ~~BRK~~ V NB 8/22/00 8/22/00 1454	NA	5	SAA DRY 2.5Y 6/6 Olive Yellow very stiff clayey silt/silty clay w/ 15% coarse sand (sub rounded) and 20% ~~[illegible]~~ fine gravel (sub-rounded) 8/22/00 DRY	CL / ML / CL	4.5 / 2.0 / 3.5	friable
3.0	SBS-2-4-6 ~~BRK~~ V NB 8/22/00 8/22/00 1454	NA	6	SAA except all silty clay DRY	CL	4.25	
3.5				Bottom of Borehole @ 3.0 ft BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA NB	
BETA/GAMMA		8/17/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' macro-core { Hand Driven

DIAMETER OF SAMPLER: 2.0in.

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

000068

VE 9/14/00

RECORD

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY: DATE: Keith Payne 9/5/00

PAGE 1 OF 1

CONTROL NO.: SMMP453-005/023

3502

PROJECT NAME/NO.: Supplemental Background Soil Study / 21120-PSP-002

LOCATION ID: 1763A SBS-3-1

DATE BOREHOLE STARTED: 8/30/00

BOREHOLE COMPLETION DATE: 8/30/00

COORDINATES: 341801.36 NAD: 1983 ☑ 1927 ☐

BOREHOLE DIAMETER (in): 2.0 in

NORTHING: 5078446 90°RR 9/8/00

EASTING: 1373308

SURFACE ELEVATION (ft. MSL):	GROUNDWATER LEVEL:	DATE:	TIME:	GROUNDWATER LEVEL:	DATE:	TIME:
800.71	NA	NG	8/29/00			

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Geo-Probe

DRILLER/GEOPROBE OPERATOR: B. Mauges

WATER USED DURING DRILLING: GAL.

WATER RECOVERED DURING DRILLING: NA NG 8/29/00 GAL.

WATER LOST DURING DRILLING:

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	SBS-3-1-1RM 8/30/00 1111	NA	6	10YR 7/3 very pale brown med stiff, low plas., clayey silt w/ organics (roots, grass) DRY	ML	.75	loose
.5	SBS-3-1-2V 8/30/00 1111	NA	6	SAA except: stiff DRY	ML	1.75	loose Increasing clay content
1.0	SBS-3-1-3RM 8/30/00 1111	NA	4	10YR5/6 Yellowish Brown stiff low plas., silty clay w/ organics (roots). DRY	CL	1.75	loose PLOW ZONE @ 16" BGS
1.5			2	see below DRY	CL	>4.5	
2.0	SBS-3-1-4RM 8/30/00 1111	NA	6	10YR5/4 Yellowish Brown hard, med, plas, silty clay w/ med sand (sub-angular) and organics (roots). DRY	CL	>4.5	Blocky structure Fe, mn nodules Increase sand content
2.5	SBS-3-1-5RM 8/30/00 1111	NA	4	SAA DRY	CL	>4.5	Blocky structure Fe, mn nodules
			2	see below DRY	ML	>.25	loose
3.0	SBS-3-1-6RM 8/30/00 1111	NA	6	2.5Y Pale yellow (7/4) very soft, non-plastic clayey silt, sandy w/ coarse sand (angular) and 5% fine/med gravel (sub-angular) DRY	ML	>.25	loose
3.5				Bottom of Borehole @ 3.0 ft. BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA	
BETA/GAMMA		NG 8/29/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' Macro-Core {Hand Driven}

DIAMETER OF SAMPLER: 2.0 in

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

RECORD

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3881-1.

000069 VZ 9/18/00

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY DATE: Keith Payne 9/5/00 (KP 9/14/00)

PAGE 1 OF 1

CONTROL NO.: SMMP453-0016/023

PROJECT NAME/NO.: Supplemental Background Soil Study / 21120-PSP-0002

LOCATION/ID: 12778 SBS-3-2

DATE BOREHOLE STARTED: 8/30/00

BOREHOLE COMPLETION DATE: 8/30/00

COORDINATES — NAD: 1983 ☑ 1927 ☐

BOREHOLE DIAMETER (i: 2.0 in

NORTHING: 507353.61 EASTING: 1341602.07

SURFACE ELEVATION (ft. MSL): 873.91

GROUNDWATER LEVEL: NA — DATE: HB 8/29/00 — TIME:

GROUNDWATER LEVEL: — DATE: — TIME:

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Geo-Probe

DRILLER/GEOPROBE OPERATOR: B. Minges

WATER USED DURING DRILLING: — GAL

WATER RECOVERED DURING DRILLING: NA HB 8/29/00 GAL.

WATER LOST DURING DRILLING:

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
0.5	SBS-3-2-1RM 8/30/00 1435	NA	6	10YR 7/4 very pale brown very stiff, low plas, clayey silt w/ organics (roots) DRY	ML	2.5	friable
1.0	SBS-3-2-2RM 8/30/00 1435	NA	2	SAA DRY	ML	2.0	BLOW ZONE @ 3.0" BGS
			4	10YR 5/4 Yellowish Brown med. plas., very stiff, silty clay w/ 5% rounded fine gravel/coarse sand DRY	CL	2.75	Fe, Mg nodules — Incr clay con
1.5	SBS-3-2-3RM 8/30/00 1435	NA	6	10YR 4/4 Dark Yellowish Brown very stiff, med. plas., silty clay w/ <5% med. sand (sub-rounded) 5% organics (roots) MOIST	CL	3.0	MOISTURE Increases — Fe, Mg Nodules
2.0	SBS-3-2-4RM 8/30/00 1435	NA	2	SAA MOIST	CL	~~3.0~~ NG 8/30/00	Fe, Mg Nodules
			4	2.5Y 5/4 Light olive yellow Hard, low plas, silty, gravelly (fine/med.-sub angular) clay w/ Fe staining MOIST	CL	>4.5	Fe staining
2.5	SBS-3-2-5RM 8/30/00 1435	NA	6	SAA DRY	CL	>4.5	
3.0	SBS-3-2-6RM 8/30/00 1435	NA	6	SAA except: ① mottled w/ 5YC/2 light olive gray and gravel decreases to 6% fine only DRY	CL	>4.5	
3.5				Bottom of Borehole @ 3.0 ft. BGS.			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID				TYPE OF SAMPLER: 4' Macro-Core {Hand Driven}	plas. = plasticity
ALPHA		NA		DIAMETER OF SAMPLER: 2.0 in	
BETA/GAMMA		HB 8/29/00		WEIGHT OF HAMMER: NA	

RECORD

000070

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3681-1.

VZ 9/18/0

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY: Keith Payne DATE: 9/5/00

PAGE 1 OF 1

CONTROL NO.: MP453-007/023

PROJECT NAME/NO.: Supplemental Background Soil Study / 21120-PSP-0002 - 3502

LOCATION/ID: 12779 SBS-3-3

DATE BOREHOLE STARTED: 8/30/00

BOREHOLE COMPLETION DATE: 8/30/00

COORDINATES NAD: 1983 ☒ 1927 ☐

BOREHOLE DIAMETER (in): 2.0 in

NORTHING: 506681.50 EASTING: 1341610.96

SURFACE ELEVATION (ft. MSL): 892.61

GROUNDWATER LEVEL: NA

DATE:	TIME:	GROUNDWATER LEVEL:	DATE:	TIME:
HB 8/29/00				

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Geo-Probe

DRILLER/GEOPROBE OPERATOR: B. Mizes

WATER USED DURING DRILLING: GAL.

WATER RECOVERED DURING DRILLING: NA HB 8/29/00 GAL.

WATER LOST DURING DRILLING:

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	SBS-3-3-1RM 8/30/00 1451	NA	6	10YR 5/4 Yellowish Brown Low plas, very stiff, very silty clay (sometimes clayey silt) w/ organics (roots) MOIST	CL/ML	2.25	Loose
.5	SBS-3-3-2W 8/30/00 1451	NA	3	SAA MOIST	CL	2.5	PLOW ZONE @ 9.0" BGS
1.0			3	10YR 6/4 Light Yellowish Brown very stiff, med plas. silty clay w/ some organics (roots) MOIST	CL	2.5	
1.5	SBS-3-3-3RM 8/30/00 1451	NA	6	SAA MOIST	CL	2.5	Fe staining Fe, mg nodules
2.0	SBS-3-3-4RM 8/30/00 1451	NA	3	SAA MOIST	CL	2.75	Fe, mg nodules
			3	2.5Y 4/4 Olive Brown very stiff, med. plas. clay, silty MOIST	CL	3.75	
2.5	SBS-3-3-5RM 8/30/00 1451	NA	6	SAA except: HARD MOIST	CL	4.25	Fe, mg nodules
3.0	SBS-3-3-6RM 8/30/00 1451	NA	6	5Y 5/3 Olive very stiff, med. plas., clay w/ 5% med gravel (sub-angular) MOIST	CL	2.75	w/ Limestone Flagstone @ 3
3.5				Bottom of Borehole @ 3.0 ft. BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA	
BETA/GAMMA		HB 8/29/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' Macro-Core Hand Driven

DIAMETER OF SAMPLER: 2.0 in

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

RECORD

000071

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3681-1.

VZ 9/18

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY DATE: Keith Payne 9/5/00

PAGE 1 OF 1

CONTROL NO.: SMMP453-008/023

PROJECT NAME/NO.: Supplemental Background Soil Study / 21120-PSP-0002

LOCATION/ID: 12781 SBS-3-4

DATE BOREHOLE STARTED: 8/30/00

BOREHOLE COMPLETION DATE: 8/30/00

COORDINATES NAD: 1983 ☑ 1927 ☐

BOREHOLE DIAMETER (in): 2.0 in

NORTHING: 506795.72 EASTING: 1342461.62

SURFACE ELEVATION (ft. MSL): 887.57

GROUNDWATER LEVEL: NA

DATE:	TIME:	GROUNDWATER LEVEL:	DATE:	TIME:
HB 8/29/00				

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Geo-Probe

DRILLER/GEOPROBE OPERATOR: B. Minges

WATER USED DURING DRILLING: GAL

WATER RECOVERED DURING DRILLING: NA HB 8/29/00 GAL

WATER LOST DURING DRILLING:

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	SBS-3-4-1V 8/30/00 1520	NA	6	10YR 3/3 very pale brown Non-plas, med stiff/soft, clayey silt w/ organics (roots) DRY	ML	.75	loose & friable
.5	SBS-3-4-2V 8/30/00 1520	NA	6	SAA except: increasing clay content to silty clay DRY	ML / CL	1.25	loose & friable — increasing clay content
1.0	SBS-3-4-3V 8/30/00 1520	NA	2	SAA	CL	1.25	PLOW ZONE @ 14
1.5			4	10YR 5/6 Yellowish Brown Low plas., very stiff, silty clay w/ organics (roots) DRY	CL	2.25	Blocky structure, Fe, mg nodules
2.0	SBS-3-4-4V 8/30/00 1520	NA	6	10YR 4/4 Dark Yellowish Brown Low plas., Hard, silty clay w/ a little organics (roots) DRY/moist	CL	>4.5	Fe, mg nodules
2.5	SBS-3-4-5V 8/30/00 1520	NA	6	SAA except: 5% med gravel (rounded) DRY	CL	>4.5	
3.0	SBS-3-4-6V 8/30/00 1520	NA	6	10YR 5/3 light olive Brown Low plas., Hard, silty clay sandy w/ med/coarse sand (sub-angular) DRY	CL	4.0	
3.5				Bottom of Borehole @ 3.0 ft. BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA	
BETA/GAMMA		HB 8/29/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' Macro-Core Stand & Driver

DIAMETER OF SAMPLER: 2.0 in

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

RECORD

000072

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Count

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/18/

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: N. Becker 8/22/00

PAGE 1 OF 1

CONTROL NO.: 447-18-23

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002 **3502**

LOCATION/ID: 1764A SBS-4-1

DATE BOREHOLE STARTED: 8/21/00

BOREHOLE COMPLETION DATE: 8/21/00

COORDINATES: NAD: 1983 ☑ 1927 ☐

BOREHOLE DIAMETER (in): 2 1/8

NORTHING: 5076~~22~~ 58.0 KR 9/5/00

EASTING: ~~1367255~~ 1335722.41

SURFACE ELEVATION (ft. MSL):	GROUNDWATER LEVEL:	DATE:	TIME:	GROUNDWATER LEVEL:	DATE:	TIME:
866.00	NA	NA	NA	NA	NA	NA

GEOLOGIST:	DRILLING CONTRACTOR:	DRILLING EQUIPMENT:	DRILLER/GEOPROBE OPERATOR:
Keith Payne	Fluor Fernald	Slam Hammer	Bob Minges

WATER USED DURING DRILLING:	WATER RECOVERED DURING DRILLING:	WATER LOST DURING DRILLING:
NA GAL.	NA GAL.	NA G.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1351 08/21/00 SBS-4-1-1-RM	NA	6	(10YR, 5/3) Brown, silt with roots, dry, non-plastic	ML	NA	
					ML	NA	Bottom of Plow Zone 8.0
.5	1351 08/21/00 SBS-4-1-2-V	NA	6	SAA (2.5Y, 5/3) light olive brown silty clay ~~mottled with~~ KR 9-21-00 with roots, dry, non-plastic	CL	NA	
1.0	1351 08/21/00 SBS-4-1-3-RM	NA	6	(2.5Y, 6/4) light yellowish brown clay with silt and trace oxidation, dry, non-plastic	CL	NA	
1.5	1351 8/21/00 SBS-4-1-4RM	NA	6	SAA	CL	NA	12782 Dup. Sample SBS-4-1-4RM-D
2.0	1351 8/21/00 SBS-4-1-5RM	NA	6	(2.5Y, 6/4) light yellowish brown clay with silt and sand, trace roots, dry non-plastic oxidation	CL	NA	
2.5	1351 8/21/00 SBS-4-1-6RM	NA	6	(2.5Y, 6/4) light yellowish brown clay with sand and trace silt, dry, non-plastic	CL	NA	
3.0				Bottom of Boring 3.0 ft			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA	KP 8-17-00			DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

000073

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per Minute.
Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3391-1.

VZ 9/11

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: N. Becker / 8/22/00

PAGE 1 OF 1

CONTROL NO.: 447-19-23

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002

LOCATION/ID: 12783 SBS-4-2

DATE BOREHOLE STARTED: 8/21/00

BOREHOLE COMPLETION DATE: 8/21/00

COORDINATES NAD: 1983 ☑ 1927 ☐

NORTHING: 508222.46 EASTING: 1335582.42

BOREHOLE DIAMETER (in): 2 1/8

SURFACE ELEVATION (ft. MSL): 862.39

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA G.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1505 8-21-00 SBS-4-2-1RM	NA	6	(2.5Y, 5/4) light olive brown silt with trace sand and trace roots, Dry, Non-plastic	ML	NA	
.5	1505 8-21-00 SBS-4-2-2	NA	6	SAA	ML	NA	Bottom of Plow Zone 10"
				Same as below	CL		
1.0	1505 8-21-00 SBS-4-2-3RM	NA	6	(2.5Y, 7/4) pale yellow Sandy ~~silt~~ clay (CP 8-22-00) with medium to large (35mm) gravel, Dry nonplastic	CL	NA	
1.5	1505 8-21-00 SBS-4-2-4RM	NA	6	SAA	CL	NA	
2.0	1505 8-21-00 SBS-4-2-5RM	NA	6	SAA	CL	NA	
2.5	1505 8-21-00 SBS4-2-6RM	NA	6	~~Bottom of Boring~~ 3.0 (CP 8-21-00) SAA	CL	NA	
3.0				Bottom of Boring 3.0			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA	KP	8-17-00		DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

000074

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3881-1.

RECORD

VZ 9/14/

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8/22/00

PAGE 1 OF 1

CONTROL NO.: 447-20-23

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002 - 3502

LOCATION/ID: 12784 SBS-4-3

DATE BOREHOLE STARTED: 8-21-00

BOREHOLE COMPLETION DATE: 8-21-00

COORDINATES NAD: 1983 ☐ 1927 ☐

BOREHOLE DIAMETER (in): 2 1/8

NORTHING: 507842.46 EASTING: 1335962.42

SURFACE ELEVATION (ft. MSL): 873.45

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1414 8-21-00 SBS-4-3-1RM	NA	6	(2.5Y, 5/3) light olive brown silt with clay and roots Dry, non-plastic	ML	NA	
.5	1414 8-21-00 SBS-4-3-2RM	NA	6	SAA	ML	NA	
				Same as bleloW	CL		
	1414 8-21-00 SBS-4-3-3RM	NA	6	(2.5Y, 6/3) light olive brown silty clay with trace root, moist, non-plastic	CL	NA	
1.5	1414 8-21-00 SBS-4-3-4RM	NA	6	SAA	CL	NA	
2.0	1414 8-21-00 SBS-4-3-5RM	NA	6	SAA	CL	NA	
2.5	1414 8-21-00 SBS-4-3-6RM	NA	6	SAA	CL	NA	
3.0				Bottom of Boring 3.0'			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA	KP	8-17-00		DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3591-1.

000075

VZ 9/14

VISUAL CLASSIFICATION OF SOILS

Keith Payne

PAGE 1 OF 1

CONTROL NO.: 447-21-23

PROJECT NAME/NO.: Supplemental Background Soil Study / 2112Φ-PSP-ΦΦΦ2

LOCATION/ID: 12785 SBS-4-4

DATE BOREHOLE STARTED: 8/21/00

BOREHOLE COMPLETION DATE: 8/21/00

BOREHOLE DIAMETER (in.): 2.0 in.

COORDINATES — NAD: 1983 ☒ 1927 ☐

NORTHING: 507138.46 EASTING: 1335698.42

SURFACE ELEVATION (ft. MSL): 858.16

GROUNDWATER LEVEL: NA — DATE: NA — TIME: NA

GROUNDWATER LEVEL: NA — DATE: NA — TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: B. Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	SBS-4-4-1 ~~B~~ V NB 8/21/00 8/21/00 1404	NA	6	10YR4/4 Dark Yellowish Brown Med plas., stiff silty Clay w/ organics (roots) MOIST	CL	1.75	
.5							
1.0	SBS-4-4-2V 8/21/00 1404	NA	6	SAA MOIST	CL	1.75	NB 8/21/00 ~~Fe, Mg Nodules~~ Plow Zone ends @ 1.0 ft BGS Decreasing silt content
1.5	SBS-4-4-3 ~~B~~ V NB 8/21/00 8/21/00 1404	NA	6	10YR4/4 Brown med. plas., stiff, clay w/ organics and 5% fine sand (sub-rounded). MOIST	CL	1.75	Fe, Mg Nodules
2.0	SBS-4-4-4 ~~B~~ V NB 8/21/00 8/21/00 1404	NA	6	10YR4/6 Dark Yellowish Brown low plas, very stiff clay, sandy/silty w/ coarse sand sub-rounded. MOIST	CL	2.25	Fe, Mg Nodules.
2.5	SBS-4-4-5 ~~B~~ V NB 8/21/00 8/21/00 1404	NA	6	10YR6/3 pale brown w/ 10YR 6/8 Brownish Yellow. MOIST Med/High Plas silty clay, sandy w/ Med./Coarse Sand sub angular.	CL/CH	1.0	Fe, Mg Nodules Increasing silt content
3.0	SBS-4-4-6 ~~B~~ V NB 8/21/00 8/21/00 1404	NA		SAA	CL/CH	1.0	
3.5				Bottom of Borehole @ 3.0 ft BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA NB	
BETA/GAMMA		8/17/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' Macro-Core { Hand driven

DIAMETER OF SAMPLER: 2.0 in.

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per Minute.

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

RECORD

VZ 9/14/

FS-F-3631-1 FS 2.1.2.99

VISUAL CLASSIFICATION OF SOILS

Keith Payne 8/22/00

PAGE 1 OF 1

CONTROL NO.: SMMP446-22-29

PROJECT NAME/NO.: Supplemental Background Soil Study / 2112Φ-PSP-ΦΦΦ2

3502

LOCATION NO.: KR 9/8/00 SBS-5-1 ~~12786~~ 1826A

DATE BOREHOLE STARTED: 8/21/00

BOREHOLE COMPLETION DATE: 8/21/00

3502

COORDINATES NAD: 1983 ☒ 1927 ☐

BOREHOLE DIAMETER (in.): 2.0 in.

NORTHING: 507768.94 EASTING: 1336209.80

SURFACE ELEVATION (ft. MSL): 880.09

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Geoprobe

DRILLER/GEOPROBE OPERATOR: B. Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA G

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (for 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
.5	SBS-5-1 -1Rm 8/21/00 1559	NA	6	10YR 5/4 Yellowish Brown mod. stiff, low plas, clayey silt w/ organics (roots) MOIST	ML	1.0	friable
1.0	SBS-5-1 -2V 8/21/00 1559	NA	6	SAA MOIST	ML	1.0	friable & Brown Zone @ 1.0' BGS
			2	SAA MOIST/DRY	ML	1.0	
1.5	SBS-5-1 -3Rm 8/21/00 1559	NA	4	10YR 5/4 Yellowish Brown stiff, low plas., silty clay organics (roots, grass) DRY/MOIST	CL	2.5	Blocky structure Mg, Fe nodules
			1	SAA	CL	3.0	
2.0	SBS-5-1 -4-Rm 8/21/00 1559	NA	5	2.5 Y 5/3 Light olive Brown MOIST Hard, low plas. gravelly clay w/ 25-30% fossiliferous limestone (med/fine, sub-angular/angular)	CL	>4.5	Fe, Mg nodules
2.5	SBS-5-1 -5-Rm 8/21/00 1559	NA	6	SAA DRY/MOIST	CL	>4.5	Fe, Mg Nodules.
3.0	SBS-5-1 -6-Rm 8/21/00 1559	NA	6	SAA MOIST	CL	>4.5	Fe, Mg Nodules.
3.5				Bottom of Borehole @ 3.0 ft BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA NB	
BETA/GAMMA		8/17/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' macro-core {Hand driven

DIAMETER OF SAMPLER: 2.0 in.

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per Minute.

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

000077 VZ 9/14/00

FS-F-3631 FS 2 1 2 99

KL

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8/22/00

PAGE 1 OF 1

CONTROL NO.: SMMP 448-23-29

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002

LOCATION/ID: 12787 SBS-5-2

DATE BOREHOLE STARTED: 8-21-00

BOREHOLE COMPLETION DATE: 8-21-00

COORDINATES NAD: 1983 ☑ 1927 ☐

NORTHING: 508216.46 EASTING: 1336513.42

BOREHOLE DIAMETER (in): 2 1/8

SURFACE ELEVATION (ft. MSL): 883.01

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER GEOPROBE OPERATOR: S. Mingo

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1544 8-21-00 SBS-5-2-1RM	NA	6	(10YR, 4/1) Dark Grey clayey silt with roots, slightly moist, non-plastic	ML	NA	
.5	1544 8-21-00 SBS-5-2-2V	NA	6	(10YR, 4/1) Dark Grey clayey silt with roots, trace oxidation, moist, non-plastic	ML	NA	
1.0	1544 8-21-00 SBS-5-2-3RM	NA	6	(10YR, 4/1) Dark Grey clayey silt with roots, trace oxidation, moist, nonplastic	ML	NA	Bottom of ~~B~~ Plow Zone 8-21-00
1.5	1544 8-21-00 SBS-5-2-4RM	NA	6	(10YR, 4/2) Dark Greyish Brown silty clay with oxidation and trace roots, moist. nonplastic	CL	NA	
2.0	1544 8-21-00 SBS-5-2-5RM	NA	6	(10YR, 4/2) Dark Greyish Brown silty clay with trace oxidation and trace roots, moist. non-plastic	CL	NA	
2.5	1544 8-21-00 SBS-5-2-6RM	NA	6	SAA	CL	NA	
3.0				Bottom of Boring 3.0'			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-core	
ALPHA	KP	8-17-00		DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

000078

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3591-1.

VZ 9/14/0

VL

VISUAL CLASSIFICATION OF SOILS

Keith Payne 8/22/00

PAGE 1 OF 1

CONTROL NO.: SMMP448-24-29

3502

PROJECT NAME/NO.: Supplemental Background Soil Studies / 2112Φ-PSP-ΦΦΦ2

[redacted] NO.: 12788 SBS-5-3

DATE BOREHOLE STARTED: 8/22/00

BOREHOLE COMPLETION DATE: 8/22/00

COORDINATES NAD: 1983 ☒ 1927 ☐

BOREHOLE DIAMETER (in): 2.0 in

NORTHING: 507434.46 EASTING: 1336533.42

SURFACE ELEVATION (ft. MSL): 881.27

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Floor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: B. Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA G.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
.5	SBS-5-3-1 Am 8/22/00 1006	NA	6	10YR 5/4 Yellowish Brown med. stiff, low plas., clayey silt w/ organics (roots). MOIST	ML	1.0	friable
1.0	SBS-5-3-2V 8/22/00 1006	NA	5	SAA MOIST	ML	1.25	friable Fe, mg nodules Plow zone @ 11" BGS. Increasing clay content
				See below	CL		
1.5	SBS-5-3-3Rm 8/22/00 1006	NA	6	10YR 5/3 Brown Stiff, med. plas. silty clay w/ organics (roots) MOIST	CL	3.0	Fe, Mg Nodules Blocky
2.0	SBS-5-3-4Rm 8/22/00 1006	NA	6	SAA MOIST	CL	4.0 >4.5	
2.5	SBS-5-3-5Rm 8/22/00 1006	NA	6	SAA MOIST ~~Sat~~ WB 8/22/00	CL	>4.5	Decreasing moisture
3.0	SBS-5-3-6Rm 8/22/00 1006	NA	6	10YR 6/4 Light Yellowish Brown med. stiff, med. plas. clay w/ 10% sand (med., sub-rounded) and gravelly (fine-sub-rounded)	CL	1.25	Increasing moisture WB 8/22/00
3.5				Bottom of Borehole @ 3.0 ft BGS.			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES: plas. = plasticity
PID				TYPE OF SAMPLER: 4' Macro-Core { Hand Driven	
[redacted]LPHA		NA WB		DIAMETER OF SAMPLER: 2.0 in	
BETA/GAMMA		8/17/00		WEIGHT OF HAMMER: NA	

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3681-1.

FS-F-3681 [illegible]

000079

VZ 9/14/[illegible]

VISUAL CLASSIFICATION OF SOILS

Keith Payne 8/22/00

PAGE 1 OF 1

CONTROL NO.: SMMP448-25-29

PROJECT NAME/NO.: Supplemental Background Soil Study / 2112Φ-PSP-ΦΦΦ2

LOCATION/ID: 12789 SBS-5-4

DATE BOREHOLE STARTED: 8/22/00

BOREHOLE COMPLETION DATE: 8/22/00

COORDINATES NAD: 1983 ☒ 1927 ☐

NORTHING: 507098.46 EASTING: 1336533.42

BOREHOLE DIAMETER (in): 2.0 in.

SURFACE ELEVATION (ft. MSL): 880.76

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: B. Mingus

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
.5	SBS-5-4-1V 8/22/00 0938	NA	6	10YR 5/3 Brown Stiff, low. plas., clayey silt w/ organic (grass roots) MOIST	ML	1.25	friable
							Abrupt boundary betw SM and Clay
							PLOW ZONE @ 6.5" BGS.
1.0	SBS-5-4-2V 8/22/00 0938	NA	6	10YR 6/4 light yellowish Brown Stiff, med. plas., silty clay w/organics (grass roots) MOIST	CL	2.0	friable
1.5	SBS-5-4-3V 8/22/00 0938	NA	6	10YR 4/6 Dark yellowish Brown MOIST very stiff, hard, med. plas silty clay w/organics (roots) DRY	CL	2.5 / >4.5	Fe, mg Nodules Blocky structure
2.0	SBS-5-4-4V 8/22/00 0938	NA	6	SAA	CL	>4.5	
2.5	SBS-5-4-5V 8/22/00 0938	NA	6	10 YR 6/4 light yellowish Brown Hard, low Plas., 5% med. sand sub-angular, gravelly (lighter, sub-rounded) silty clay DRY	CL	>4.5	
3.0	SBS-5-4-6V 8/22/00 0938	NA	6	SAA	CL	>4.5	
3.5				Bottom of Borehole @ 3.0 ft BGS.			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID				TYPE OF SAMPLER: 4' Macro-Core { Hand Driven	plas. = plasticity
ALPHA		NA / NB		DIAMETER OF SAMPLER: 2.0 in	
BETA/GAMMA		8/17/00		WEIGHT OF HAMMER: NA	

000080

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per M

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-*.

VZ 9/14/0

FS-F-3631

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8/22/00

PAGE 1 OF 1

CONTROL NO.: mp445-07/04

3502

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002

LOCATION/ID: 1829 A 12790 SBS-6-1

DATE BOREHOLE STARTED: 8/17/00

BOREHOLE COMPLETION DATE: 8/17/00

COORDINATES NAD: 1983 ☑ 1927 ☐

NORTHING: 499360.54 EASTING: 1335942.55

BOREHOLE DIAMETER (in): 2 1/8

SURFACE ELEVATION (ft. MSL): 819.95

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA G

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1358 8/17/00 SBS-6-1-1RA	NA	6	(10YR, 4/3) Brown Clayey Silt with roots, low plasticity, moist	ML	NA	
.5	1358 8/17/00 SBS-6-1-2V	NA	6	(10YR, 4/4) Dark Yellowish Brown Silt with clay and roots, moist, non-plastic	ML	NA	Bottom of Plow Zone
1.0	1358 8/17/00 SBS-6-1-3RA	NA	6	(10YR, 4/4) Dark Yellowish Brown clayey silt with trace roots and trace oxidation, moist, non-plastic	ML	NA	
1.5	1358 8/17/00 SBS-6-1-4RA	NA	6	(10YR, 5/2) Grayish Brown Clayey with trace roots and trace oxidation, moist, non-plastic	ML	NA	~~Bottom of Plow Zone~~
2.0	1358 8/17/00 SBS-6-1-5RA	NA	6	(10YR, 5/3) Brown, Silty clay with oxidation and trace sand and trace 10 mm gravel, moist, non-plastic	CL	NA	
2.5	1358 8/17/00 SBS-6-1-6RA	NA	6	(10YR, 5/4) Yellowish Brown Silty clay with coarse sand and oxidation, moist, non-plastic	CL	NA	
3.0				Bottom of Boring 3.0'			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA		KP 8-17-00		DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

000081

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3891-1.

VZ 9/14/00

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VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: N. Becker / 8/22/00

PAGE 1 OF 1

CONTROL NO.: SMMP445-08/24

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002

LOCATION/ID: 12791 SBS-6-2

DATE BOREHOLE STARTED: 8/17/00

BOREHOLE COMPLETION DATE: 8/17/00

COORDINATES NAD: 1983 ☑ 1927 ☐

BOREHOLE DIAMETER (in): 2 1/8

NORTHING: 499142.38 EASTING: 1335213.52

SURFACE ELEVATION (ft. MSL): 791.84

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA G.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1058 8/17/00 SBS-6-2-1RA	NA	6	(10YR, 4/3) Brown, Clayey Silt with roots, slightly moist, non-plastic	ML	NA	
.5	1058 8/17/00 SBS-6-2-2RA	NA	6	(10YR, 4/3) Brown, Clayey Silt with roots, slightly moist, non-plastic	ML	NA	Bottom of Plow Zone
1.0	1058 8/17/00 SBS-6-2-3RA	NA	6	(10YR, 4/3) Brown, Clayey Silt with roots, slightly moist, non-plastic	ML	NA	
1.5	1058 8/17/00 SBS-6-2-4RA	NA	6	(10YR, 4/3) Brown, clayey silt with roots & corn leaves and slight	ML	NA	~~Bottom of Plow Zone~~ KP
2.0	1058 8/17/00 SBS-6-2-5RA	NA	6	(10YR, 4/4) Dark Yellowish Brown Silty Clay with trace sand and roots, some oxidation, slightly moist, non-plastic	CL	NA	
2.5	1058 8/17/00 SBS-6-2-6RA	NA	6	(10YR, 4/4) Dark Yellowish Brown Silty Clay with trace sand and trace medium gravel, slightly moist, non-plastic ~~some oxidation~~	CL	NA	
3.0				Bottom of Borehole 2.0'			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA	KP	8-17-00		DIAMETER OF SAMPLER: 2 1/8 O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

000082

Aboreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Pe

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3381-1.

VZ 9/14/00

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VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8/22/00

PAGE 1 OF 1

CONTROL NO.: [redacted]MP445-09/24

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002 — 3502

LOCATION/ID: 12792 SBS-6-3

DATE BOREHOLE STARTED: 8/17/00

BOREHOLE COMPLETION DATE: 8/17/00

COORDINATES — NAD: 1983 ☑ 1927 ☐

BOREHOLE DIAMETER (in): 2 1/8

NORTHING: 499130.38 EASTING: 1336713.52

SURFACE ELEVATION (ft. MSL): 817.56

GROUNDWATER LEVEL: NA — DATE: NA — TIME: NA

GROUNDWATER LEVEL: NA — DATE: NA — TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER/GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1446 8/17/00 SBS-6-3-1RA	NA	6	(10YR, 4/2) Dark Grayish Brown Clayey Silt with trace sand roots, moist, low plasticity	ML	NA	
.5	1446 8/17/00 SBS-6-3-2V	NA	6	(10YR, 5/4) Yellowish Brown Clayey Silt with trace sand trace roots, trace oxidation, moist low plasticity	ML	NA	Plow Zone Bottom
	1446 8/17/00 SBS-6-3-3RA	NA	6	(10YR, 5/4) Yellowish Brown Silty Clay with medium sand and trace fine gravel moist, non-plastic	CL	NA	~~Plow Zone 18 inches~~ KP 8-21-00
1.5	1446 8/17/00 SBS-6-3-4RM	NA	6	(10YR, 5/2) Greyish Brown Silty Clay with sand and trace subangular gravel to 15mm, moist, non-plastic KP 8-17-00	CL	NA	
2.0	1446 8/17/00 SBS-6-3-5RM	NA	6	(10YR, 5/2) Greyish Brown Silty Clay with trace sand and trace medium gravel moist, non-plastic	CL	NA	
2.5	1446 8/17/00 SBS-6-3-6RM	NA	6	(10YR, 5/2) Greyish Brown Silty Clay with trace sand and trace gravel to 10mm (subangular), moist, non-plastic	CL	NA	
3.0				Bottom of Boring 3.0'			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA		KP 8-17-00		DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

000083

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3391-1.

VZ 9/14/00

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VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE:

PAGE 1 OF 1

CONTROL NO.: SMMP445-10/24

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002

LOCATION/ID: 12793 SBS-6-4

DATE BOREHOLE STARTED: 8/17/00

BOREHOLE COMPLETION DATE: 8/17/00

COORDINATES NAD: 1983 ☑ 1927 ☐

BOREHOLE DIAMETER (in): 2 1/8

NORTHING: 499118.38 EASTING: 1337385.52

SURFACE ELEVATION (ft. MSL): 820.09

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1509 8-17-00 SBS-6-4-1V	NA	6	(10YR, 4/3) Brown Clayey Silt, Roots moist, medium plasticity KP 8/17/00	ML	NA	
.5	1509 8-17-00 SBS-6-4-2V	NA	6	(10YR, 5/4) light yellowish brown silty clay with sand and trace oxidation, moist, non-plastic	CL	NA	KP 8/17/00 Bottom of ~~Blow~~ Plow Zone
1.0	1509 8-17-00 SBS-6-4-3V	NA	6	(10YR, 6/4) light yellowish brown silty clay with sand and trace oxidation, moist, non-plastic	CL	NA	
1.5	1509 8-17-00 SBS-6-4-4V	NA	6	(2.5Y, 5/4) light olive brown silty clay with trace sand and trace oxidation, moist, non-plastic	CL	NA	
2.0	1509 8-17-00 SBS-6-4-5V	NA	6	(2.5Y, 6/2) light brownish gray silty clay with trace sand and trace gravel (up to 5-10 mm)	CL	NA	
2.5	1509 8-17-00 SBS-6-4-6V	NA	6	(2.5Y, 6/2) light brownish gray silty clay with trace sand moist, non-plastic	CL	NA	
3.0				Bottom of Boring 3.0'			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA		KP 8-17-00		DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

000084

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3391-1.

VZ 9/14/0

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY: Keith Payne 8/22/00

PAGE 1 OF 1

CONTROL NO.: SMMP444-11/25

3502

PROJECT NAME/NO.: Supplemental Background Soil Study / 2112Φ-PSP-ΦΦΦ2

LOCATION/ID: 1832A SBS-7-1

DATE BOREHOLE STARTED: 8/17/00

BOREHOLE COMPLETION DATE: 8/17/00

COORDINATES NAD: 1983 ☑ 1927 ☐

BOREHOLE DIAMETER (in): 2.0"

NORTHING: 500191.00 EASTING: 1336195.00

SURFACE ELEVATION (ft. MSL): 800.94

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: Tom Platter

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA G

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	1440 8/17/00 SBS-7-1-1-RM	NA	6	10YR 6/3 pale brown Low Plas, organic silt w/ clay & thin roots * DRY	ML	.75	*Top 3 inches is black and mod. plas. Dry is friable
.5	1440 8/17/00 SBS-7-1-2V	NA	3	SAA except: increasing clay content DRY	ML	1.5	~~plow zone at 4~~ NA HB 8/17/
1.0			3	10YR5/4 Yellowish Brown Low. Plas. silty clay w/ organics, stiff DRY	CL	2.5	
1.5	1440 8/17/00 SBS-7-1-3RM	NA	6	10YR 5/3 Brown Low/mod Plas, very stiff (silty clay) w/ organics (roots). MOIST	CL	3.5 4.0	→ Plow zone at 1'2" BGS Fe/Mn nodules
	1440 8/17/00 SBS-7-1-4RM	NA	2	SAA MOIST	CL	4.5	
2.0			4	10YR 7/4 pale yellow mottled w/ 10YR 8/2 pale yellow Low Plas./Hard silty clay DRY	CL	>4.5	friable, blocky
2.5	1440 8/17/00 SBS-7-1-5RM	NA	6	15-15% fine gravel/ coarse sand sub-angular. SAA DRY	CL	>4.5	
	1440 8/17/00 SBS-7-1-6RM	NA	4	2.5Y 7/6 Yellow Non-plast/Low plas. clayey silt, stiff DRY	ML	2.5	friable
3.0			2	(same as 1'8" to 2'6") DRY	CL	>4.5	Friable/blocky
3.5				Bottom of Borehole @ 3.0 ft BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA HB	
BETA/GAMMA		8/17/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' Macrocore, Hand driven

DIAMETER OF SAMPLER: 2.0 in.

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

RECORD

000085

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/18

VISUAL CLASSIFICATION OF SOILS

Keith Payne 8/22/00

PAGE 1 OF 1

CONTROL NO.: SMMP444-08/25

PROJECT NAME/NO.: Supplemental Background Soil Study / 2112Φ-PSP-ΦΦΦ2

LOCATION/ID: 12794 SBS-7-2

DATE BOREHOLE STARTED: 8/17/00

BOREHOLE COMPLETION DATE: 8/17/00

COORDINATES NAD: 1983 ☑ 1927 ☐

NORTHING: 499792.39 EASTING: 1336778.51

BOREHOLE DIAMETER (in): 2.0 in

SURFACE ELEVATION (ft. MSL): 826.59

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: T. Platter

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	1527 8/17/00 SBS-7-2-1Rm	NA	6	10YR 6/4 Yellowish Brown low. plas, med. stiff clayey silt w/ organics (roots) DRY	ML	1.0	friable top 3" is moist,
.5	1527 8/17/00 SBS-7-2-2V	NA	4	SAA DRY	ML	1.5	Increasing clay
1.0			2	see below	CL	2.25	
1.5	1527 8/17/00 SBS-7-2-3Rm	NA	6	10YR 5/4 Yellowish Brown med. plas, stiff, silty clay w/organics (roots) DRY	CL	2.5	Blocky → Plow zone @ 1' 2.5"
2.0	1527 8/17/00 SBS-7-2-4Rm	NA	6	10YR 4/3 Brown med. plas., Hard, clay some organics (small roots). DRY	CL/CH	4.5	Fe/mg Nodules
2.5	1527 8/17/00 SBS-7-2-5Rm	NA	6	10YR 5/4 Yellowish Brown med plas, very stiff, trace silt, clay DRY	CL	4.0	Fe/mg Nodules.
3.0	1527 8/17/00 SBS-7-2-6Rm	NA	6	10YR 5/4 Yellowish Brown med plas., stiff, clay MOIST	CL	2.0	Fe/mg nodules
3.5				Bottom of Borehole @ 3.0 ft BGS.			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID				TYPE OF SAMPLER: 4' Macro-Core { Hand driven	plas. = plasticity
ALPHA		NA NB		DIAMETER OF SAMPLER: 2.0 in.	
BETA/GAMMA		8/17/00		WEIGHT OF HAMMER: NA	

RECORD

000086

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per Minute.
Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/18/00

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VISUAL CLASSIFICATION OF SOILS

REVIEWED BY, DATE: Keith Payne 8/22/00

PAGE 1 OF 1

CONTROL NO.: SMMP444-09/25

3502

PROJECT NAME/NO.: Supplemental Background Soil Study / 2112Φ-PSP-ΦΦΦ2

LOCATION/NO.: 12795 SBS-7-3

DATE BOREHOLE STARTED: 8/17/00

BOREHOLE COMPLETION DATE: 8/17/00

COORDINATES — NAD: 1983 ☑ 1927 ☐

NORTHING: 499733.22 EASTING: 1337408.00

BOREHOLE DIAMETER (in): 2.0 in.

SURFACE ELEVATION (ft. MSL): 816.27

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Geoprobe

DRILLER/GEOPROBE OPERATOR: T. Platter

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
.5	SBS-7-3 -1Rm 8/17/00 1500	NA	6	10YR 7/4 very pale brown non plastic/low plas. clayey silt, soft, organics (roots) DRY	ML	.5	friable
1.0	SBS-7-3 -2V 8/17/00 1500 H. Becker	NA	4	SAA except: increasing clay content DRY	ML	1.0	← Plow zone @ 10" BGS.
			2	see below. DRY	CL	2.75	Blocky
1.5	SBS-7-3 -3Rm 8/17/00 1500 H. Becker	NA	6	10YR 5/6 Yellowish Brown low plas., very stiff, silty clay DRY	CL	2.75	friable / blocky
2.0	SBS-7-3 -4Rm 8/17/00 1500 H. Becker	NA	5	SAA except: mottled w/ 10YR 7/2 light gray and Hard. DRY	CL	>4.5	
			1	see below DRY	CL	>4.5	Fe/mg nodules
2.5	SBS-7-3 -5Rm 8/17/00 1500 H. Becker	NA	3	10YR 5/6 Yellowish Brown low plas, Hard, silty clay.	CL	>4.5	Fe/mg nodules blocky
			3	2.5Y 5/4 light olive Brown low plas, Hard, silty clay w/organics (roots) DRY	CL	>4.5	w/some med rounded sand mixed in soil (≈5%)
3.0	SBS-7-3 -6Rm 8/17/00 1500 H. Becker	NA		SAA DRY	CL	>4.5	
				2.5Y 6/6 olive Yellow Hard, low plas, silty clay w/ subangular coarse sand & gravel. DRY	CL	>4.5	friable.
3.5				Bottom of Borehole @ 3.0 ft BGS.			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID				TYPE OF SAMPLER: Macro Core { Hand driven	plas. = plasticity.
ALPHA		NA NB		DIAMETER OF SAMPLER: 2.0 in.	
BETA/GAMMA		8/17/00		WEIGHT OF HAMMER: NA	

RECORD

000087

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/18/

FS-F-3631 FS 0 1 0 99

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY: Keith Payne 8/22/00

PAGE 1 OF 1

CONTROL NO.: SMMP444-10/25

PROJECT NAME/NO.: Supplemental Background Soil Studies / 2112Φ-PSP-ΦΦΦ2

LOCATION/ID: 12797 SBS-7-4

DATE BOREHOLE STARTED: 8/17/00

BOREHOLE COMPLETION DATE: 8/17/00

COORDINATES NAD: 1983 ☒ 1927 ☐

NORTHING: 499800.39 EASTING: 1335698.51

BOREHOLE DIAMETER (in): 2.Φ

SURFACE ELEVATION (ft. MSL): 813.22

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: T. Platter

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA G

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	1110 8/17/00 SBS-7-4-1V	NA	6	10YR 6/2 light Brownish Gray Low Plasticity, stiff, silt w/ organics (grassy roots) DRY	ML	2.5	granular texture, friable
.5	1110 8/17/00 SBS-7-4-2V	NA	6	SAA except: increasing clay content (clayey silt). DRY	ML	2.25	texture goes fr ~~blocky~~ to blocky granular
1.0	1110 8/17/00 SBS-7-4-3V	NA	6	10YR 6/6 Brownish Yellow. Low Plasticity, stiff, silty clay w/ organics (grassy roots). DRY	CL	2.5	Depth of plow zo = 1.5' BGS. friable.
1.5	1110 8/17/00 SBS-7-4-4V	NA	6	7.5YR 5/3 Brown. Low Plas./Med. Plas., silty clay ~~Low Plasticity~~ NA HB 8/17/00, Hard, organics (roots). DRY	CL	>4.5	Fe Nodules => fine sand layer.
2.0	1110 8/17/00 SBS-7-4-5V	NA	4	SAA DRY	CL	>4.5	
			2	2.5Y 6/4 Light Yellowish Brown mottled w/ 2.5Y 6/2 Light Brownish Gray	CL	>4.5	
2.5	1110 8/17/00 SBS-7-4-6V	NA	6	w/ fine gravel, sub angular SAA DRY	CL	>4.5	~ Flagstone: limestone Cobble
3.0				Bottom of Borehole @ 3.Φ ft BGS.			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES: plasticity = plas.
PID				TYPE OF SAMPLER: 4ft Macro Core { Hand Driven	
ALPHA		NA HB		DIAMETER OF SAMPLER: 2.0"	
BETA/GAMMA		8/17/00		WEIGHT OF HAMMER: NA	

RECORD

000088

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per Minute.
Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/18/

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8-29-00

PAGE 1 OF 1

CONTROL NO.: MP450-04/22

PROJECT NAME/NO.: Supplemental Background Study / 21120-PSP-0002 **3502**

LOCATION/ID: ~~1834A~~ SB5-8-1 1834A

DATE BOREHOLE STARTED: 8-24-00

BOREHOLE COMPLETION DATE: 8-24-00

COORDINATES NAD: 1983 ☑ 1927 ☐

NORTHING: 508674.33 KR 9/8/00

EASTING: 1371242 1339234.22

BOREHOLE DIAMETER (in): 2 1/8

SURFACE ELEVATION (ft. MSL):	GROUNDWATER LEVEL:	DATE:	TIME:	GROUNDWATER LEVEL:	DATE:	TIME:
912.52	NA	NA	NA	NA	NA	NA

GEOLOGIST:	DRILLING CONTRACTOR:	DRILLING EQUIPMENT:	DRILLER/GEOPROBE OPERATOR:
Keith Payne	Fluor Fernald	Slam Hammer	Bob Minges

WATER USED DURING DRILLING:	WATER RECOVERED DURING DRILLING:	WATER LOST DURING DRILLING:
NA GAL.	NA GAL.	NA

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
.5	1513 8-24-00 SB5-8-1-1m	NA	6	(10YR 5/3) Brown, silt with roots, Dry, non-plastic	ML	NA	
	1513 8-24-00 SB5-8-1-2K	NA	5	SAA	ML	NA	Bottom of Plow Zone
1.0			1	SAME AS BELOW	CL	NA	
1.5	1513 8-24-00 SB5-8-1-3RM	NA	6	(10YR, 6/3) Pale Brown clay with silt and trace manganese with trace manganese moist, nonplastic	CL	NA	
2.0	1513 8-24-00 SB5-8-1-4RM + 4RMD	NA	6	(10YR, 6/3) Pale Brown clay with silt and iron staining trace manganese moist, low plasticity	CL	NA	
2.5	1513 8-24-00 SB5-8-1-5R	NA	6	(10YR, 6/3) Pale Brown clay with silt and iron staining trace manganese moist, medium plasticity	CL	NA	
3.0	1513 8-24-00 SB5-8-1-6RM	NA	6	(10YR, 6/3) Pale Brown clay with silt and iron staining trace manganese moist, high plasticity	CL	NA	
				Bottom of Boring 3.0 ft			

RECORD

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA	8-24-00		TYPE OF SAMPLER: Macro core	
ALPHA				DIAMETER OF SAMPLER: 2 1/8"	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

000089

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Pe

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/18/00

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VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8/29/00

PAGE 1 OF 1

CONTROL NO.: SMMP450-05/22

PROJECT NAME/NO.: Supplemental Background Study / 21120-PSP-0002

LOCATION/ID: 12798 SBS-8-2

DATE BOREHOLE STARTED: 8-24-00

BOREHOLE COMPLETION DATE: 8-24-00

COORDINATES — NAD: 1983 ☑ 1927 ☐

NORTHING: 509009.60 EASTING: 1339574.67

BOREHOLE DIAMETER (in): 2 1/8

SURFACE ELEVATION (ft. MSL): 915.72

GROUNDWATER LEVEL: NA — DATE: NA — TIME: NA

GROUNDWATER LEVEL: NA — DATE: NA — TIME: N.

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER/GEOPROBE OPERATOR: Bob Minger

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
.5	1457 8-24-00 SBS-8-2 -1RM	NA	6	(10YR, 5/3) Brown clayey silt with trace roots, non-plastic, moist	ML	NA	
1.0	1457 8-24-00 SBS-8-2 -2V	NA	6	SAA	ML	NA	Bottom of Plow Zone 11"
				Same as Below	CL	NA	
1.5	1457 8-24-00 ~~SBS-8-2~~ SBS-8-2-3RM	NA	6	(10YR, 6/1) gray silty clay with trace medium sand, moist, non-plastic	CL	NA	
2.0	1457 8-24-00 SBS-8-2 -4RM	NA	6	(10YR, 6/1) gray silty clay with trace medium sand with iron staining and trace manganese moist, non-plastic	CL	NA	
2.5	1457 8-24-00 SBS-8 -2-5RM	NA	6	(10YR, 6/1) Gray Clay with silt iron staining and trace roots moist, slight plasticity	CL	NA	
3.0	1457 8-24-00 SBS-8-2 -6RM	NA	6	SAA	CL	NA	
				Bottom of Boring 3.0 ft			

RECORD

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA	8-24-00		TYPE OF SAMPLER: Macro Core	
ALPHA				DIAMETER OF SAMPLER: 2 1/8"	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

000090

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts P

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/18/00

KL

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8-29-00

PAGE 1 OF 1

CONTROL NO.: MP450-06/22

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002

3502

LOCATION/ID: 12799 SBS-8-3

DATE BOREHOLE STARTED: 8/24/00

BOREHOLE COMPLETION DATE: 8/24/00

COORDINATES: NAD: 1983 ☑ 1927 ☐

NORTHING: 507681.15 EASTING: ~~1339627.54~~ KL 9/8/00 1339627.02

BOREHOLE DIAMETER (in): 2 1/8

SURFACE ELEVATION (ft. MSL): KL 9/8/00 ~~882~~ 880.85

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER GEOPROBE OPERATOR: Bob Mings

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA G.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0 KP 8-24-00	~~1342~~ 08/24/00 1340 SBS-8-3 -1RM	NA	6	(10YR, 5/3) Brown, Silt with clay and roots, moist, non-plastic	ML	NA	
0.5 KP 8-24-00	~~1342~~ 1340 08/24/00 SBS-8-3 -2V	NA	6	(10YR, 5/3) Brown, Silt with clay, trace medium sand, moist, non-plastic	ML	NA	Bottom of Plow Zone 12"
1.0 KP 8-24-00	~~1342~~ 1340 08/24/00 SBS-8-3 -3RM	NA	6	(10YR, 5/4) Yellowish Brown, Sandy (fine to coarse) sand with clay moist, non-plastic	ML	NA	
1.5 KP 8-24-00	~~1342~~ 1340 8/24/00 SBS-8-3 -4RM	NA	6	SAA	ML	NA	
2.0 KP 8-24-00	~~1342~~ 1340 8/24/00 SBS-8-3 -5RM	NA	6	(10YR, 7/2) light gray, fine sandy silt with trace medium gravel, Dry, Non-plastic	ML	NA	
2.5 KP 8-24-00	~~1342~~ 1340 8/24/00 SBS-8-3 -6RM	NA	6	SAA	ML	NA	
3.0				Bottom of Boring 3.0'			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA		KP 8-17-00		DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

000091

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3581-1.

VZ 9/18/00

KR

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H Becker / 8-29-0

PAGE 1 OF 1

CONTROL NO.: SMMP450-02/22

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002

LOCATION/ID: 12801 SBS-8-4

DATE BOREHOLE STARTED: 8/24/00

BOREHOLE COMPLETION DATE: 8/24/00

COORDINATES NAD: 1983 ☑ 1927 ☐

NORTHING: 506970.07 EASTING: 1339593.77

BOREHOLE DIAMETER (in): 2 1/8

SURFACE ELEVATION (ft. MSL): 887.91

GROUNDWATER LEVEL: NA

DATE: NA TIME: NA

GROUNDWATER LEVEL: NA

DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GA

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
KP 8-24-00	~~1325~~ 1327 8-24-00 SBS-8-4 -1V	NA	6	(10YR, 5/3) Brown, silt with clay and roots, moist, non-plastic	ML	NA	
.5 KP 8-24-00	~~1325~~ 8-24-00 1327 SBS-8-4 -2V	NA	6	(10YR, 6/6) Brownish yellow, clayey silt with trace roots, moist,	ML	NA	
1.0 KP 8-24-00	~~1325~~ 8-24-00 1327 SBS-8-4 -3V	NA	6	SAA	ML	NA	Bottom of Plow Zone 18"
1.5 KP 8-24-00	~~1325~~ 8-24-00 1327 SBS-8-4 -4V	NA	6	(10YR, 6/3) Pale Brown, medium coarse sandy silt with clay, Iron staining, manganese present, moist, non-plastic	ML	NA	
2.0 KP 8-24-00	~~1325~~ 8-24-00 1327 SBS-8-4 -5V	NA	6	SAA	ML	NA	
2.5 KP 8-24-00	~~1325~~ 8-24-00 1327 SBS-8-4 -6V	NA	6	(10YR, 5/3) Brown, Medium Sandy silt with clay and trace medium gravel, moist, non-plastic	ML	NA	
3.0				Bottom of Boring 3.0'		NA	
3.5							

RECORD

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA		KP 8-17-00		DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

000092

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3891-1.

VZ 9/18/00

KK

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY, DATE: Keith Payne / 8-29-00

PAGE 1 OF 1

CONTROL NO.: SMMP454-19-26

PROJECT NAME/NO.: Supplemental Background Soil Study / 21120-PSP-0002

3502

LOCATION/ID: SBS-9-1 ~~1527~~ 1872-A HB 8/29/00

DATE BOREHOLE STARTED: 8/29/00

BOREHOLE COMPLETION DATE: 8/29/00

COORDINATES — NAD: 1983 ☑ 1927 ☐

BOREHOLE DIAMETER (in): 2.0 in

NORTHING: 498338.39 EASTING: 1337765.54

SURFACE ELEVATION (ft. MSL): 800.98

GROUNDWATER LEVEL: NA — DATE: HB 8/29/00 — TIME:

GROUNDWATER LEVEL: — DATE: — TIME:

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: F... Fernald

DRILLING EQUIPMENT: Geo-Probe

DRILLER/GEOPROBE OPERATOR: B Mingus

WATER USED DURING DRILLING: GAL.

WATER RECOVERED DURING DRILLING: NA HB 8/29/00 GAL.

WATER LOST DURING DRILLING: G

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
.5	SBS-9-1-1RM 8/29/00 1527	NA	6	10YR6/4 light Yellowish Brown stiff, low plas Clayey silt w/ SBS roots & organics DRY	ML	2.25	
1.0	SBS-9-1-2U 8/29/00 1527	NA	6	SAA DRY	ML	2.0	Increasing clay content
1.5	SBS-9-1-3RM 8/29/00 1527	NA	6	10YR5/6 Yellowish Brown ~~clay~~ very stiff, low plas., silty clay, w/ organics (roots) DRY	CL	3.0 / 4.25	PLOW ZONE @ 16 in. BGS Fe, Mg nodules.
2.0	SBS-9-1-4RM 8/29/00 1527	NA	6	SAA except: 10% Fine/med. gravel sub-angular. MOIST/DRY	CL	3.5	
2.5	SBS-9-1-5RM 8/29/00 1527	NA	6	10YR5/6 Yellowish Brown MOIST very stiff, med. plas., silty clay, gravelly (med. gravel/fine gravel, sub-angular) 10% med. sand, sub-angular PR 8/29/00	CL	2.5	Increasing gravel and sand
3.0	SBS-9-1-6RM 8/29/00 1527	NA	3 / 3	SAA MOIST / 10YR5/4 Yellowish Brown stiff ~~[illegible]~~ med. plas., silty clay w/ low med. sand, sub-angular. MOIST	CL / CL	2.0 / 1.25	<500 Grav[illegible] med. rounded sand[illegible] 33" BGS.
3.5				Bottom of Borehole @ 3.0 ft. BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA	
BETA/GAMMA		HB 8/29/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' Macro-Core {Hand Driven}

DIAMETER OF SAMPLER: 2.0 in

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

RECORD

000093

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3681-1.

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FS-F-3681 [illegible]

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8/29/00

PAGE 1 OF 1

CONTROL NO.: SMMP 454-22-26

PROJECT NAME/NO.: Supplemental Background Study / 21120-PSP-0002

LOCATION/ID: 12802 SBS-9-2

DATE BOREHOLE STARTED: 8/29/00

BOREHOLE COMPLETION DATE: 8/29/00

COORDINATES — NAD: 1983 ☑ 1927 ☐

NORTHING: 496536.51 EASTING: 1337165.16

BOREHOLE DIAMETER (in): 2 1/8

SURFACE ELEVATION (ft. MSL): 781.15

GROUNDWATER LEVEL: NA — DATE: NA — TIME: NA

GROUNDWATER LEVEL: NA — DATE: NA — TIME: N/

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER/GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
.5	1456 8-29-00 SBS-9 -2-1RM	NA	6	(10YR, 5/3) Brown, Silt with Clay and Roots, Dry, non-plastic	ML	NA	
1.0	1456 8-29-00 SBS-9 -2-2V	NA	6	(10YR, 4/3) Brown, Clayey Silt and trace roots, Dry, non-plastic trace iron staining	ML	NA	12" Plow Zone
1.5	1456 8-29-00 SBS-9 -2-3RM	NA	6	(10YR, 4/3) Brown Silty Clay trace medium sand and roots, slightly moist, non-plastic	CL	NA	
2.0	1456 8-29-00 SBS-9 -2-4RM	NA	6	(10YR, 5/4) Yellowish Brown Silty Clay with trace fine sand, Iron Staing, slightly moist, non-plastic	CL	NA	
2.5	1456 8-29-00 SBS-9 -2-5RM	NA	6	SAA	CL	NA	
3.0	1456 8-29-00 SBS-9 -2-6RM	NA	6	(10YR, 5/4) Yellowish Brown Silty Clay with trace medium sand, Iron Stainings, slightly moist, non-plastic	CL	NA	
				Bottom of Boring ~~80 ft~~ 38" 8-29-00			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA	KP 8-24-00		TYPE OF SAMPLER: Macro Core	
ALPHA				DIAMETER OF SAMPLER: 2 1/8"	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

RECORD

000094

VZ 9/18/

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3621-1.

KL

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY: Keith Payne DATE: 8-29-00

PAGE 1 OF 1

CONTROL NO.: SMMP454-20-26

PROJECT NAME/NO.: Supplemental Background Soil Study / 21120-PSP-0002

3502

LOCATION ID: SBS-9-3 1280 ~~84~~ HB 8/29/00 A

DATE BOREHOLE STARTED: 8/29/00

BOREHOLE COMPLETION DATE: 8/29/00

COORDINATES NAD: 1983 ☒ 1927 ☐

NORTHING: 497558.39 EASTING: 1338661.54

BOREHOLE DIAMETER (in): 2.0 in

SURFACE ELEVATION (ft. MSL): 754.43

GROUNDWATER LEVEL: NA DATE: HB 8/29/00 TIME:

GROUNDWATER LEVEL: DATE: TIME:

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Geo-Probe

DRILLER/GEOPROBE OPERATOR: B Minges

WATER USED DURING DRILLING: GAL.

WATER RECOVERED DURING DRILLING: NA HB 8/29/00 GAL.

WATER LOST DURING DRILLING: GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (Inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
.5	SBS-9-3-1Rm 8/29/00 1107	NA	6	10YR5/3 Brown Low Plas, Hard, gravelly (fine-sub-rounded) organic silty clay. ⊥ (roots) DRY	CL	>4.5	PLOW ZONE @ 3.0" BGS.
1.0	SBS-9-3-2V 8/29/00 1107	NA	6	10YR6/4 light Yellowish Brown Low Plas, very stiff, w/5% gravel (fine-sub-rounded) silty clay DRY	CL	3.75	Increasing Hardness
1.5	SBS-9-3-3Rm 8/29/00 1107	NA	6	SAA DRY	CL	4.25	
2.0	SBS-9-3-4Rm 8/29/00 1107	NA	6	SAA DRY	CL	4.25	Limestone Flagstone @ 2.0 ft to 2.2 ft BGS.
2.5	SBS-9-3-5Rm 8/29/00 1107	NA	6	SAA DRY	CL	4.5	
3.0	SBS-9-3-6Rm 8/29/00 1107	NA	6	SAA DRY	CL	4.5	
3.5				Bottom of Borehole @ 3.0 ft. BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA	
BETA/GAMMA		HB 8/29/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' Macro-Core Hand Driven

DIAMETER OF SAMPLER: 2.0 in

WEIGHT OF HAMMER: NA

NOTES: plas. = plastic

RECORD

000095

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-

VZ 9/18

KK

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY, DATE: Keith Payne / 8-29-00

PAGE 1 OF 1

CONTROL NO.: 9mmP4/54-21-26

PROJECT NAME/NO.: Supplemental Background Soil Study / 21120-PSP-0002

LOCATION/ID: 12805 SBS-9-4

DATE BOREHOLE STARTED: 8/29/00

BOREHOLE COMPLETION DATE: 8/29/00

COORDINATES — NAD: 1983 ☑ 1927 ☐

NORTHING: 496546.39 EASTING: 1338841.54

BOREHOLE DIAMETER (in): 2.0 in

SURFACE ELEVATION (ft. MSL): 759.92

GROUNDWATER LEVEL: NA

DATE:	TIME:	GROUNDWATER LEVEL:	DATE:	TIME:
HB 8/29/00				

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Geo-Probe

DRILLER/GEOPROBE OPERATOR: B. Minges

WATER USED DURING DRILLING: GAL.

WATER RECOVERED DURING DRILLING: NA HB 8/29/00 GAL.

WATER LOST DURING DRILLING: G

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	SBS-9-4-1V 8/29/00 1348	NA	6	10YR 4/6 Dark Yellowish Brown Low Plas., stiff, clayey organic silt (roots & grass rootlets). DRY	ML	2.25	
.5	SBS-9-4-2V 8/29/00 1348	NA	6	SAA DRY	ML	1.0	Increasing clay
1.0	SBS-9-4-3V 8/29/00 1348	NA	6	10YR 5/8 Yellowish Brown Low Plas., stiff, silty clay w/ grass roots DRY	CL	1.75	
1.5	SBS-9-4-4V 8/29/00 1348	NA	5	SAA except more stiff DRY	CL	2.75	
2.0			2	See below	CL	4.0	PLOW ZONE = 22 inches
2.5	SBS-9-4-5V 8/29/00 1348	NA	6	10YR 5/4 Yellowish Brown Hard, low Plas, silty clay some organics (roots) DRY/MOIST	CL	>4.5	Fe, mg nodules
3.0	SBS-9-4-6V 8/29/00 1348	NA	6	10YR 4/4 Dark Yellowish Brown Hard, Low Plas, silty clay w/ 5% fine/med gravel (sub-angular) and roots DRY	CL	>4.5	
3.5				Bottom of Borehole @ 3.0 ft. BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA	
BETA/GAMMA		HB 8/29/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' Macro-Core Hand Driven

DIAMETER OF SAMPLER: 2.0 in

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

RECORD

000096

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts P.

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3851-1.

VZ 9/18

FS-F-3851 [illegible]

KR

VISUAL CLASSIFICATION OF SOILS

REVIEWED: Keith Hayne 8/22/00

PAGE 1 OF 1

CONTROL NO.: 446-16-22

PROJECT NAME/NO.: Supplemental Background Soil Studies / 2112Φ-PSP-ΦΦΦ2 **3502**

[redacted] ON/ID: 1873A SBS-10-1

DATE BOREHOLE STARTED: 8/21/00

BOREHOLE COMPLETION DATE: 8/21/00

COORDINATES NAD: 1983 ☒ 1927 ☐

BOREHOLE DIAMETER (in): 2.0 in.

NORTHING: 503732.00 EASTING: 1336178.00

SURFACE ELEVATION (ft. MSL): 800.85

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: B. Mingus

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA G

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	SBS-10-1-1RM 8/21/00 0943	NA	6	10YR5/3 Brown stiff, low plas. clayey silt w/ organics (grass roots) MOIST	ML	1.5	
.5	SBS-10-1-2RM 8/21/00 0943	NA	6	SAA MOIST	ML	1.75	Increasing C Bottom of Plow Zone 1" BGS.
1.0				SAA MOIST	ML	1.75	
	SBS-10-1-3RM 8/21/00 0943	NA	5	10YR5/4 Yellowish Brown very stiff, med. plas., silty clay, w/ organics (grass roots) MOIST	CL	3.25	Blocky Structure
1.5	SBS-10-1-4RM 8/21/00 0943	NA	6	SAA MOIST	CL	3.75	Fe, mg Nodules and trace med sand (sub-rounded)
2.0	SBS-10-1-5RM 8/21/00 0943	NA	6	SAA MOIST	CL	2.75	Fe, mg nodules } Increasing silt & moisture content
2.5	SBS-10-1-6RM 8/21/00 0943	NA	6	10YR5/4 Yellowish Brown MOIST stiff, med. plas., silty clay w/ (sub-rounded) organics (grass roots), and 15% med sand	CL	2.0	Fe, mg Nodules.
3.0				Bottom of Borehole @ 3.0 ft BGS.			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES: plasticity = plas
PID				TYPE OF SAMPLER: 4' macro-core { Hand Driven	
[redacted]ALPHA		NA NB		DIAMETER OF SAMPLER: 2.0 in.	
BETA/GAMMA		8/17/00		WEIGHT OF HAMMER: NA	

000097

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/18/01

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker 8/22/00

PAGE 1 OF 1

CONTROL NO.: 446-17-22

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002

LOCATION/ID: 12806 SBS-10-2

DATE BOREHOLE STARTED: 8/21/00

BOREHOLE COMPLETION DATE: 8/21/00

COORDINATES NAD: 1983 ☑ 1927 ☐

NORTHING: 503963.42 EASTING: 1336135.47

BOREHOLE DIAMETER (in): 2 1/8

SURFACE ELEVATION (ft. MSL): 864.53

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER GEOPROBE OPERATOR: Bob Minges

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	0929 8/21/00 SBS-10-2-1	NA	6	(10YR, 4/2) Dark Greyish Brown clayey silt with trace roots, non-plastic, moist	ML	NA	Bottom of Plow Zone .5'
.5	0929 8/21/00 SBS-10-2-2	NA	6	(10YR, 5/4) Yellowish Brown Silty clay with trace roots, moist, low plasticity	CL	NA	
1.0	0929 8/21/00 SBS-10-2-3	NA	6	~~(10YR, 4/2)~~ (10YR, 4/4) Dark Yellowish Brown, Silty clay, low plasticity	CL	NA	
1.5	0929 8/21/00 SBS-10-2-4	NA	6	(10YR, 4/4) Dark Yellowish Brown, silty clay with ~~trace with~~ trace roots and oxidation, moist, low plasticity	CL	NA	
2.0	0929 8/21/00 SBS-10-2-5	NA	6	(10YR, 4/4) Dark Yellowish Brown, Silty clay with trace medium sand and trace roots, moist, low plasticity, some oxidation	CL	NA	
2.5	0929 8/21/00 SBS-10-2-6	NA	6	(10YR, 4/4) Dark Yellowish Brown, silty clay with trace medium sand and oxidation present in trace amounts, low plasticity, moist	CL	NA	
3.0				Bottom of Boring 3.0'			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA		KP 8-17-00		DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

000098

* Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per
Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-2881-1.

VZ 9/18/

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY/DATE: H. Becker / 8/22/00

PAGE 1 OF 1

CONTROL NO.: MMP446-18-22

3502

PROJECT NAME/NO.: Supplemental Background Soil Study/21120-PSP-0002

LOCATION/ID: 12807 SBS-10-3

DATE BOREHOLE STARTED: 08-21-00

BOREHOLE COMPLETION DATE: 08-21-00

COORDINATES NAD: 1983 ☒ 1927 ☐

NORTHING: 503472.48 EASTING: 1336269.33

BOREHOLE DIAMETER (in): 2 1/8

SURFACE ELEVATION (ft. MSL): 863.09

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: Keith Payne

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Slam Hammer

DRILLER GEOPROBE OPERATOR: Bob Minger

WATER USED DURING DRILLING: NA GAL

WATER RECOVERED DURING DRILLING: NA GAL

WATER LOST DURING DRILLING: NA GAL

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
	1012 08-21-00 10:31 RM SBS-3-1 RM 8/21/00	NA	6	(10YR, 4/2) Dark Grayish Brown Silt with clay and trace roots, moist, non-plastic	ML	NA	~~Dup Sample~~ SBS-10 8-21-00
.5	1012 08-21-00 10:37 SBS-3-2 RM 8/21/00	NA	6	(10YR, 4/4) Dark Yellowish Brown clayey silt with trace roots, moist, non-plastic	ML	NA	Plow Depth 2"
1.0	1012 08-21-00 10:37 SBS-3-3 RM 8/21/00	NA	6	(10YR, 5/4) Yellowish Brown clayey silt with trace oxidation, trace medium sand & trace roots, moist, non-plastic	ML	NA	
1.5	1012 08-21-00 10:37 SBS-3-4 RM 8/21/00	NA	6	SAA	ML	NA	
2.0	1012 08-21-00 10:37 SBS-3-5 RM 8/21/00	NA	4	(10YR, 5/4) Yellowish Brown Fine Sandy silt with trace clay, trace roots, trace oxidation	ML	NA	non-plastic, moist SBS-10-3-4RM-D for Dup
2.5-2.6 inches			2	(10YR, 5/4) silty medium gravel with sand			non-plastic, moist
2.5	1012 08-21-00 10:37 SBS-3-6 RM	NA	6	(10YR, 6/1) Gray Silty Clay with trace sand, Iron staining, slightly moist nonplastic	CL	NA	
3.0				Bottom of Boring 3.0'			
3.5							

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES:
PID	NA			TYPE OF SAMPLER: Macro-Core	
ALPHA		KP 8-17-00		DIAMETER OF SAMPLER: 2 1/8" O.D.	
BETA/GAMMA				WEIGHT OF HAMMER: NA	

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CPM/W" = Counts Per Minute/Watt.
Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3831-1.

000039

VZ 9/18/00

VISUAL CLASSIFICATION OF SOILS

Keith Payne 8/22/00

PAGE 1 OF 1

CONTROL NO.: 446-19-22

PROJECT NAME/NO.: Supplemental Background Soil Studies / 2112Φ-PSP-ΦΦΦ2

LOCATION/ID: 12809 SBS-10-4

DATE BOREHOLE STARTED: 8/21/00

BOREHOLE COMPLETION DATE: 8/21/00

COORDINATES NAD: 1983 ☒ 1927 ☐

NORTHING: 503123.42 EASTING: 1336171.47

BOREHOLE DIAMETER (in): 2.Φ in.

SURFACE ELEVATION (ft. MSL): 8576.17

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: B. Mingas

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
.5	SBS10-4-1V 8/21/00 1021	NA	6	10YR5/3 Brown Stiff, med. plas., clayey silt w/organics (grass roots) MOIST	ML	1.75	
1.0	SBS-10-4-2V 8/21/00 1021	NA	6	SAA MOIST	ML	2.2	← End of plow zone @10" BGS
1.5	SBS-10-4-3V 8/21/00 1021	NA	6	10YR5/6 Yellowish Brown Hard/very stiff, low-med plas., silty clay. organics (grass roots) DRY	CL	4.5	Inc Clay
2.0	SBS-10-4-4V 8/21/00 1021	NA	6	10YR6/4 Light Yellowish Brown Hard, low plas, silty clay organics (grass roots) DRY	CL	>4.5 ↓ 4.5	Blocky structure
2.5	SBS-10-4-5V 8/21/00 1021	NA	6	SAA except: very stiff and 10YR coarse sand/fine gravel (sub-rounded) DRY	CL	3.0	Blocky structure Incl silt and coarse-fine gr
3.0	SBS-10-4-6V 8/21/00 1021	NA	6	SAA	CL	3.0	
3.5				Bottom of Borehole @ 3.Φ ft BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA NB	
BETA/GAMMA		8/17/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' macro-core { Hand Driven

DIAMETER OF SAMPLER: 2.Φ in

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

000100

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts Per Minute.

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/18

FS-F-3631 FS 12 12 99

VISUAL CLASSIFICATION OF SOILS

Bob Minges 76151 9/5/00

PAGE 1 OF 1

CONTROL NO.: SMMP452-08/31

3502

PROJECT NAME/NO.: Supplemental Background Soil Study / 2112Φ-PSP-ΦΦ2

LOCATION/ID: 1879 A SBS-11-1

DATE BOREHOLE STARTED: 8/24/00

BOREHOLE COMPLETION DATE: 8/24/00

COORDINATES: 1344160.00 NAD: 1983 ☒ 1927 ☐

NORTHING: ~~499627~~ 499557.00 KL 9/8/00

EASTING: ~~1375627~~ KL 9/8/00

BOREHOLE DIAMETER (in): 2.0 in.

SURFACE ELEVATION (ft. MSL): 800.91

GROUNDWATER LEVEL: NA | DATE: NA | TIME: NA

GROUNDWATER LEVEL: NA | DATE: NA | TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Geoprobe

DRILLER/GEOPROBE OPERATOR: J. DeHo

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
.5	SBS-11-1-1RM 8/24/00 1047	NA	6	10YR 6/4 light Yellowish Brown very stiff, low. plas, clayey silt w/ organics to silty clay w/ organics (roots) MOIST	ML/CL	2.25	friable
	SBS-11-1-2V 8/24/00 1047	NA	3	SAA	CL	2.25	
1.0			3	10YR 5/4 Yellowish Brown very stiff, med. Plas, silty clay w/ few organics MOIST	CL	2.75	PLOW ZONE @10" BGS
1.5	SBS-11-1-3RM 8/24/00 1047	NA	6	SAA except: increasing med. sand (sub-rounded)	CL	3.25	Fe, mg Nodules; sand increas to 5%
2.0	SBS-11-1-4RM 8/24/00 1047	NA	6	2.5Y 5/4 light olive Brown stiff, med Plas., clay w/ 5% med. gravel (rounded) and 5% med sand (sub-rounded) MOIST	CL	2.0	MOISTUR INCREAS
2.5	SBS-11-1-5RM 8/24/00 1047	NA	6	SAA except: gravel increases to 15% MOIST	CL	3.5	Gravel Increases; MOISTUR DECREAS
3.0	SBS-11-1-6RM 8/24/00 1047	NA	3	SAA MOIST	CL	5.5 4.5	
			3	8/24/00 2.5YR 7/6 Yellow mottled w/ 2.5Y 6/2 to Bornish gray. Hard, Low Plas, silty clay DRY	CL	>4.5	
3.5				Bottom of Borehole @ 3.0 ft BGS.			

METER	BKGD	DATE	TIME	SAMPLING EQUIPMENT:	NOTES: plas. = plasticity
PID				TYPE OF SAMPLER: 4' macro-core { Hand Driven	
ALPHA		NA NB		DIAMETER OF SAMPLER: 2.0 in.	
BETA/GAMMA		8/17/00		WEIGHT OF HAMMER: NA	

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts P

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3651-1.

RECORD

000101

VZ 9/18/00

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY. DATE: B. Williams 76951 9/5/00

PAGE 1 OF 1

CONTROL NO.: SMMP452-09/31

PROJECT NAME/NO.: Supplemental Background Soil Study / 2112Ø-PSP-0002

LOCATION/ID: SBS-11-2 12810 ~~E~~ 9/8/00

DATE BOREHOLE STARTED: 6/24/00

BOREHOLE COMPLETION DATE: 6/24/00

COORDINATES NAD: 1983 ☒ 1927 ☐

BOREHOLE DIAMETER (in): 2.0 in.

NORTHING: 5002446.10 EASTING: 1344965.19

SURFACE ELEVATION (ft. MSL): 842.67

GROUNDWATER LEVEL: / DATE: TIME: GROUNDWATER LEVEL: NA HB 8/24/00 DATE: TIME:

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Floor Fernald

DRILLING EQUIPMENT: Geo-Probe

DRILLER/GEOPROBE OPERATOR: J. DeMto

WATER USED DURING DRILLING: / GAL.

WATER RECOVERED DURING DRILLING: NA HB 8/24/00 GAL.

WATER LOST DURING DRILLING: G.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	SBS-11-2-1RM 8/24/00 1535	NA	6	10YR5/3 Brown very soft, med plas, clay w/ silty and organics at top w/ roots at bottom MOIST	OL / CL	.75	
.5			2	SAA MOIST	CL	.75	
1.0	SBS-11-2-2R 8/24/00 1535	NA	4	2.5Y 5/4 Light olive brown med. stiff med plas. clay w/ organics and 5% med/coarse sand sub-rounded MOIST	CL	1.25	PLOW ZONE @10" BGS
1.5	SBS-11-2-3RM 8/24/00 1535	NA	6	SAA except: 10% coarse sand/ fine gravel (sub-angular). MOIST	CL	1.5	Increase Fine gra[illegible] coarse sa[illegible]
2.0	SBS-11-2-4RM 8/24/00 1535	NA	6	SAA MOIST	CL	1.75	
2.5	SBS-11-2-5RM 8/24/00 1535	NA	6	2.5Y 6/4 light yellowish Brown med plas., very stiff clay w/ ~~interbedded~~ gravelly (25% med limestone, sub-angular) MOIST HB 8/24/00	CL	2.75 / 4.0	
3.0	SBS-11-2-6RM 8/24/00 1535	NA	6	SAA	CL	3.5	} 2" Limestone Flagstone
3.5	SBS-11-2			Bottom of Borehole @ 3.0 ft. BGS.			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA HB 8/24/00	
BETA/GAMMA			

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' Macro-Core { Hand Driven

DIAMETER OF SAMPLER: 2.0 in

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

000102

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts [illegible]

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/18/[illegible]

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY: Bob Minge 76951 DATE: 9/5/00

PAGE 1 OF 1

CONTROL NO.: SBMP452-10/32

3502

PROJECT NAME/NO.: Supplemental Background Soil Study / 21120-PSP-0002

LOCATION/ID: 12811 SBS-11-3

DATE BOREHOLE STARTED: 8/24/00

BOREHOLE COMPLETION DATE: 8/24/00

BOREHOLE DIAMETER (in): 2.0 in

COORDINATES NAD: 1983 ☒ 1927 ☐

NORTHING: 500080.37 EASTING: 1344043.63

SURFACE ELEVATION (ft. MSL): 807.25

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GROUNDWATER LEVEL: NA DATE: NA TIME: NA

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: GeoProbe

DRILLER/GEOPROBE OPERATOR: J. DeHo

WATER USED DURING DRILLING: NA GAL.

WATER RECOVERED DURING DRILLING: NA GAL.

WATER LOST DURING DRILLING: NA GAL.

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0	SBS-11-3-1RM 8/24/00 1329	NA	6	10YR5/3 Brown very stiff, low plas silty clay w/ organics (roots) MOIST	CL	3.0	Blocky
.5	SBS-11-3-2V 8/24/00 1329	NA	6	SAA except: 5% fine/med gravel (subrounded) at bottom interval MOIST	CL	2.5	Plow zone @ 1.0' BGS.
1.0	SBS-11-3-3RM 8/24/00 1329	NA	6	10YR5/4 Yellowish Brown very stiff, med. plas, clay w/ organics (roots) MOIST	CL	2.75	Fe, Mg Nodules.
1.5	SBS-11-3-4RM 8/24/00 1329	NA	1 / 5	SAA / 2.5Y 5/3 light olive brown very stiff, low plas. clay w/ 5% fine gravel (sub-angular) MOIST	CL / CL	2.75 / 2.25	packet of fine sand at 19" BGS / pieces of coarse gravel sub-rounded at 20"
2.0	SBS-11-3-5RM 8/24/00 1329	NA	6	SAA	CL	3.0	MOIST zone w/ silty clay @ 29" BGS.
2.5	SBS-11-3-6RM 8/24/00 1329	NA	6	SAA	CL	2.75	
3.0				Bottom of Borehole @ 3.0 ft BGS.			
3.5							

METER	BKGD	DATE	TIME
PID			
ALPHA		NA / NB	
BETA/GAMMA		8/17/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' Macro-core Hand Driven

DIAMETER OF SAMPLER: 2.0 in

WEIGHT OF HAMMER: NA

NOTES: plas. = plasticity

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts P.

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3651-1.

000103

VZ 9/18/00

VISUAL CLASSIFICATION OF SOILS

REVIEWED BY, DATE: Bob Minger 76951 9/5/00

PAGE 1 OF 1

CONTROL NO.: SMMD452-11/21

PROJECT NAME/NO.: Supplemental Background Soil Study / 21120-PSP-0002

LOCATION/ID: 12813 SBS-11-4

DATE BOREHOLE STARTED: 8/24/00

BOREHOLE COMPLETION DATE: 8/24/00

COORDINATES NAD: 1983 ☐ 1927 ☐

NORTHING: 498919.76 EASTING: 1344386.59

BOREHOLE DIAMETER (in): 2.0 in.

SURFACE ELEVATION (ft. MSL): 790.33

GROUNDWATER LEVEL: / DATE: TIME: NA

GROUNDWATER LEVEL: NO 8/24/00 DATE: TIME:

GEOLOGIST: H. Becker

DRILLING CONTRACTOR: Fluor Fernald

DRILLING EQUIPMENT: Geo-Probe

DRILLER/GEOPROBE OPERATOR: J. DeHo

WATER USED DURING DRILLING: / GAL.

WATER RECOVERED DURING DRILLING: NA NR 8/24/00 GAL.

WATER LOST DURING DRILLING:

DEPTH (FEET)	SAMPLE TIME, DATE, AND NUMBER	BLOWS (per 6 inch)	RECOVERY (inches)	DESCRIPTION (Colors identified per Munsell Color Chart)	USCS SYMBOL	UCS (TSF)	REMARKS
0							
.5	SBS-11-4-1V 8/24/00 1609	NA		10YR5/4 Yellowish Brown Stiff, low. plas, clayey silt w/ organics (roots/plant parts) MOIST	ML	2.25	friable
1.0	SBS-11-4-2V 8/24/00 1609	NA		10YR5/6 Yellowish Brown med stiff, low plas, silty clay w/ organics (roots, plant parts) MOIST	CL	1.5	loose structure
1.5	SBS-11-4-3V 8/24/00 1609	NA		SAA MOIST	CL	1.25	loose structure
2.0	SBS-11-4-4V 8/24/00 1609	NA		10YR4/6 Dark Yellowish Brown very stiff, med. plas, clay w/ plant roots MOIST	CL	3.25	→ PLOW ZONE @ 19" BGS Fe, Mg Nodules
2.5	SBS-11-4-5V 8/24/00 1609	NA		SAA except: 5% med sand (sub-angular) MOIST	CL	3.5	Fe, Mg Nodules
3.0	SBS-11-4-6V 8/24/00 1609	NA		SAA / 2.5Y5/6 Light olive brown very stiff clay, silty w/ med gravel < 5% (sub-angular) MOIST	CL	3.0	Fe, Mg Nodules Increasing fine gravel up to 5%
3.5				Bottom of Borehole @ 3.0 ft. BGS			

METER	BKGD	DATE	TIME
PID			
ALPHA		NA	
BETA/GAMMA		NR 8/24/00	

SAMPLING EQUIPMENT:

TYPE OF SAMPLER: 4' Macro-Core { Hand Driven

DIAMETER OF SAMPLER: 2.0 in

WEIGHT OF HAMMER: NA

NOTES: plas = plasticity

000104

Abbreviations: "NA" = Not Applicable, "NK" = Not Known, "SAA" = Same As Above, "PPM" = Parts Per Million, "CPM" = Counts Per Minute, and "CCPM" = Corrected Counts

Note: If more space is required, complete Visual Classification of Soils (Continuation Page), FS-F-3631-1.

VZ 9/18/00

FS-F-3631 FS 2 2 2 99

Appendix E

APPENDIX E

SUMMARY TABLES OF INORGANIC RESULTS BY ANALYTE AND DEPTH

APPENDIX E

CONCENTRATION OF ALUMINUM AT 0-6 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
21000		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
19900		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
16200		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
15700		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
15600		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
13900		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
13800		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
13700		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
13700		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
12500		-	SBS-6-3-1RM	12792	ML	crop field	RwB
12000		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
11700		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
11700		-	SBS-5-2-1RM	12787	ML	hay field	FcA
11600		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
11400		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
11200		J	SBS-4-2-1RM	12783	ML	hay field	RvB2
10700		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
10200		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
0000		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
9860		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
9780	J	J	SBS-7-1-1RM	1832A	ML	crop field	FdA
9630		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
9520		-	SBS-8-3-1RM	12799	ML	crop field	XfB
8690	J	J	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
8530		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
8320		-	SBS-8-2-1RM	12798	ML	crop field	FcA
8230	J	J	SBS-7-3-1RM	12795	ML	crop field	MsD2
8110		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
8010		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
7990		J	SBS-4-1-1RM	1764A	ML	hay field	XeB
7840		-	SBS-10-2-1RM	12806	ML	hay field	Ra
7510		-	SBS-2-3-1RM	12775	ML	crop field	FdA
7440		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
7050		-	SBS-10-3-1RM	12807	ML	hay field	FdA
6740		J	SBS-4-3-1RM	12784	ML	hay field	XeB
6720		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
6550	J	J	SBS-7-2-1RM	12794	ML	crop field	XfB
6130		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
5700		-	SBS-10-1-1RM	1873A	ML	hay field	FdA

000106

APPENDIX E

CONCENTRATION OF ALUMINUM AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
20300		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
20200		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
19900		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
19100	J	J	SBS-7-2-3RM	12794	CL	crop field	XfB
18900		-	SBS-3-3-3RM	12779	CL	crop field	RwB
18800		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
18800		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
18400		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
18200		J	SBS-4-3-3RM	12784	CL	hay field	XeB
18200		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
18200		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
17000		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
16600		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
16400		-	SBS-6-3-3RM	12792	CL	crop field	RwB
16000		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
15900		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
15300	J	J	SBS-7-1-3RM	1832A	CL	crop field	FdA
14700		-	SBS-8-2-3RM	12798	CL	crop field	FcA
14400		-	SBS-10-2-3RM	12806	CL	hay field	Ra
14400		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
14300		-	SBS-2-3-3RM	12775	CL	crop field	FdA
14100		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
13600		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
13400		-	SBS-1-2-3RM	12770	CL	crop field	Ra
13300		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
13300		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
12800		-	SBS-5-2-3RM	12787	ML	hay field	FcA
12500		J	SBS-4-2-3RM	12783	CL	hay field	RvB2
12400	J	J	SBS-7-3-3RM	12795	CL	crop field	MsD2
12100		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
11100		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
10300		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
9950		-	SBS-10-3-3RM	12807	ML	hay field	FdA
8270		-	SBS-8-3-3RM	12799	CL	crop field	XfB
1660		J	SBS-4-1-3RM	1764A	CL	hay field	XeB

APPENDIX E

CONCENTRATION OF ALUMINUM AT 18-24 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
22400		-	SBS-3-3-4RM	12779	CL	crop field	RwB
20700		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
19800		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
18500		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
18100		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
18100		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
18000		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
17500		J	SBS-4-3-4RM	12784	CL	hay field	XeB
17300		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
16300		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
16200		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
15500		-	SBS-5-2-4RM	12787	CL	hay field	FcA
15400		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
15000		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
14900		-	SBS-2-3-4RM	12775	CL	crop field	FdA
14800		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
14800		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
14600		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
14400		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
14300		J	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
14200		-	SBS-10-2-4RM	12806	CL	hay field	Ra
14200	J	J	SBS-7-1-4RM	1832A	CL	crop field	FdA
14100		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
14000	J	J	SBS-7-2-4RM	12794	CL	crop field	XfB
13900		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
13400		J	SBS-4-1-4RM	1764A	CL	hay field	XeB
13200		-	SBS-8-2-4RM	12798	CL	crop field	FcA
12700	J	J	SBS-7-3-4RM	12795	CL	crop field	MsD2
11800		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
11400		-	SBS-1-2-4RM	12770	CL	crop field	Ra
11200		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
10800		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
10500		J	SBS-10-3-4RM	12807	ML	hay field	FdA
10400		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
9810		-	SBS-6-3-4RM	12792	CL	crop field	RwB
8750		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
7800		J	SBS-4-2-4RM	12783	CL	hay field	RvB2
6720		J	SBS-10-3-4RM-D	12807	ML	hay field	FdA
6420		-	SBS-8-3-4RM	12799	CL	crop field	XfB

APPENDIX E

CONCENTRATION OF ALUMINUM AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
20600		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
19700		-	SBS-3-3-5RM	12779	CL	crop field	RwB
18100		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
17500		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
16600		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
16100		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
16100		-	SBS-8-2-5RM	12798	CL	crop field	FcA
15800		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
15300		J	SBS-4-3-5RM	12784	CL	hay field	XeB
15000		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
14500		-	SBS-6-3-5RM	12792	CL	crop field	RwB
14400		-	SBS-5-2-5RM	12787	CL	hay field	FcA
14300		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
13700		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
13100		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
12700		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
12200		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
12000		-	SBS-2-3-5RM	12775	CL	crop field	FdA
11800		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
11800	J	J	SBS-7-3-5RM	12795	CL	crop field	MsD2
11600	J	J	SBS-7-2-5RM	12794	CL	crop field	XfB
10800		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
10100		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
9660		-	SBS-10-2-5RM	12806	CL	hay field	Ra
9370		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
8730		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
8570		-	SBS-1-2-5RM	12770	CL	crop field	Ra
8450		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
8150		J	SBS-4-1-5RM	1764A	CL	hay field	XeB
7880		J	SBS-4-2-5RM	12783	CL	hay field	RvB2
7480		-	SBS-10-3-5RM	12807	ML	hay field	FdA
7360	J	J	SBS-7-1-5RM	1832A	CL	crop field	FdA
6960		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
5530		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
5360		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
5350		-	SBS-8-3-5RM	12799	CL	crop field	XfB
1800		-	SBS-1-3-5RM	12771	CL	crop field	RwB2

APPENDIX E

CONCENTRATION OF ALUMINUM AT 30-36 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
17300		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
16900		-	SBS-3-3-6RM	12779	CL	crop field	RwB
16800		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
16300		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
14600		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
14600		-	SBS-5-2-6RM	12787	CL	hay field	FcA
14100		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
13700		J	SBS-4-3-6RM	12784	CL	hay field	XeB
13700		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
13600		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
13500		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
12500		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
11600		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
11500		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
11200		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
11200	J	J	SBS-7-2-6RM	12794	CL	crop field	XfB
10800		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
9460		-	SBS-1-2-6RM	12770	CL	crop field	Ra
9240	J	J	SBS-7-3-6RM	12795	CL	crop field	MsD2
8690		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
8390		-	SBS-8-2-6RM	12798	CL	crop field	FcA
8290		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
8060		J	SBS-4-1-6RM	1764A	CL	hay field	XeB
7240		J	SBS-4-2-6RM	12783	CL	hay field	RvB2
7180		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
7150		-	SBS-10-3-6RM	12807	CL	hay field	FdA
6880		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
6830		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
6600		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
6600	J	J	SBS-7-1-6RM	1832A	CL	crop field	FdA
6570		-	SBS-6-3-6RM	12792	CL	crop field	RwB
6420		-	SBS-10-2-6RM	12806	CL	hay field	Ra
5810		-	SBS-2-3-6RM	12775	CL	crop field	FdA
5350		-	SBS-8-3-6RM	12799	CL	crop field	XfB
5160		-	SBS-11-3-6RM	12811	C	crop field	EcE2
5000		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2

APPENDIX E

CONCENTRATION OF ANTIMONY AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3.07		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
2.54		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
2.24		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
2.11		-	SBS-6-3-1RM	12792	ML	crop field	RwB
2.03		J	SBS-4-2-1RM	12783	ML	hay field	RvB2
1.95		J	SBS-4-1-1RM	1764A	ML	hay field	XeB
1.64	U	U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1.62		J	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1.62		U	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1.6	U	U	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
1.6	U	U	SBS-8-1-1RM	1834A	ML	crop field	FcA
1.58	U	U	SBS-2-1-1RM	1756A	ML	crop field	FdA
1.57	U	U	SBS-10-3-1RM	12807	ML	hay field	FdA
1.57	U	UJ	SBS-4-3-1RM	12784	ML	hay field	XeB
1.56	U	U	SBS-7-2-1RM	12794	ML	crop field	XfB
1.56	U	U	SBS-7-1-1RM	1832A	ML	crop field	FdA
1.55	U	U	SBS-6-1-1RM	1829A	ML	crop field	XfB
1.54	U	U	SBS-1-1-1RM	1755A	ML	crop field	FdA
1.54	U	U	SBS-5-1-1RM	1826A	ML	hay field	XeB
1.54	U	U	SBS-2-2-1RM	12774B	ML	crop field	RwB2
1.54	U	U	SBS-5-3-1RM	12788	ML	hay field	RvB2
1.53	U	UJ	SBS-1-3-1RM	12771	ML	crop field	RwB2
1.52	U	U	SBS-10-1-1RM	1873A	ML	hay field	FdA
1.51	U	U	SBS-5-2-1RM	12787	ML	hay field	FcA
1.51	U	U	SBS-2-3-1RM	12775	ML	crop field	FdA
1.51	U	U	SBS-11-1-1RM	1879A	ML	crop field	XfB
1.5	U	U	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1.5	U	U	SBS-10-2-1RM	12806	ML	hay field	Ra
1.5	U	U	SBS-9-1-1RM	1872A	ML	hay field	XfB
1.48	U	U	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
1.48	U	U	SBS-8-2-1RM	12798	ML	crop field	FcA
1.45	U	U	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
1.43	U	U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
1.43	U	U	SBS-6-2-1RM	12791	ML	crop field	RwB2
1.43	U	U	SBS-8-3-1RM	12799	ML	crop field	XfB
1.42	U	U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
1.39	U	U	SBS-3-1-1RM	1763A	ML	crop field	XfB
1.38	U	U	SBS-9-2-1RM	12802	ML	crop field	MtC2
1.36	U	U	SBS-7-3-1RM	12795	ML	crop field	MsD2

APPENDIX E

CONCENTRATION OF ANTIMONY AT 12-18 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3.38		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
2.67		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
2.62		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
2.59		U	SBS-2-1B-3RM	1756B	ML	crop field	FdA
2.45		J	SBS-4-3-3RM	12784	CL	hay field	XeB
2.25		J	SBS-4-2-3RM	12783	CL	hay field	RvB2
2.09		-	SBS-10-3-3RM	12807	ML	hay field	FdA
1.74		J	SBS-4-1-3RM	1764A	CL	hay field	XeB
1.74		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
1.74	U	U	SBS-6-2-3RM	12791	ML	crop field	RwB2
1.7		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
1.65		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
1.61		-	SBS-8-3-3RM	12799	CL	crop field	XfB
1.6	U	U	SBS-2-1-3RM	1756A	CL	crop field	FdA
1.6	U	U	SBS-6-1-3RM	1829A	ML	crop field	XfB
1.58	U	U	SBS-7-2-3RM	12794	CL	crop field	XfB
1.57	U	U	SBS-11-1-3RM	1879A	ML	crop field	XfB
1.56	U	U	SBS-10-1-3RM	1873A	CL	hay field	FdA
1.55	U	U	SBS-2-3-3RM	12775	CL	crop field	FdA
1.54	U	U	SBS-5-3-3RM	12788	CL	hay field	RvB2
1.54	U	U	SBS-8-2-3RM	12798	CL	crop field	FcA
1.53	U	U	SBS-2-2A-3RM	12774A	CL	crop field	FdA
1.51	U	U	SBS-10-2-3RM	12806	CL	hay field	Ra
1.5	U	U	SBS-1-3-3RM	12771	CL	crop field	RwB2
1.49	U	U	SBS-7-1-3RM	1832A	CL	crop field	FdA
1.48	U	U	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1.46	U	U	SBS-5-2-3RM	12787	ML	hay field	FcA
1.45	U	U	SBS-9-1-3RM	1872A	CL	hay field	XfB
1.43	U	U	SBS-6-3-3RM	12792	CL	crop field	RwB
1.43	U	U	SBS-8-1-3RM	1834A	CL	crop field	FcA
1.4	U	U	SBS-1-2-3RM	12770	CL	crop field	Ra
1.4	U	U	SBS-9-2-3RM	12802	CL	crop field	MtC2
1.39	U	U	SBS-3-3-3RM	12779	CL	crop field	RwB
1.39	U	U	SBS-3-1-3RM	1763A	CL	crop field	XfB
1.36	U	U	SBS-7-3-3RM	12795	CL	crop field	MsD2

APPENDIX E

CONCENTRATION OF ANTIMONY AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3.13		-	SBS-1-2-4RM	12770	CL	crop field	Ra
3.05		J	SBS-9-2-4RM	12802	CL	crop field	MtC2
3.03		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
2.96		J	SBS-4-2-4RM	12783	CL	hay field	RvB2
2.94		-	SBS-6-3-4RM	12792	CL	crop field	RwB
2.8		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
2.71		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
2.56		J	SBS-4-3-4RM	12784	CL	hay field	XeB
2.28		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
2.24		J	SBS-4-1-4RM	1764A	CL	hay field	XeB
2.21		J	SBS-2-3-4RM-D	12775	CL	crop field	FdA
2.14		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
1.93		-	SBS-7-2-4RM	12794	CL	crop field	XfB
1.78		-	SBS-3-3-4RM	12779	CL	crop field	RwB
1.77		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
1.61	U	U	SBS-10-2-4RM	12806	CL	hay field	Ra
1.6	U	U	SBS-8-1-4RM	1834A	CL	crop field	FcA
1.59		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
1.57		J	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
1.56	U	U	SBS-10-1-4RM	1873A	CL	hay field	FdA
1.55	U	U	SBS-2-1B-4RM	1756B	CL	crop field	FdA
1.55	U	U	SBS-5-2-4RM	12787	CL	hay field	FcA
1.53	U	U	SBS-5-3-4RM	12788	CL	hay field	RvB2
1.53	U	U	SBS-8-2-4RM	12798	CL	crop field	FcA
1.51	U	U	SBS-3-1-4RM	1763A	CL	crop field	XfB
1.51	U	U	SBS-2-1-4RM	1756A	CL	crop field	FdA
1.5	U	UJ	SBS-2-3-4RM	12775	CL	crop field	FdA
1.5	U	U	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.49	U	U	SBS-11-1-4RM	1879A	CL	crop field	XfB
1.48	U	U	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.48	U	U	SBS-10-3-4RM	12807	ML	hay field	FdA
1.47		U	SBS-2-2A-4RM	12774A	CL	crop field	FdA
1.47	U	U	SBS-5-1-4RM	1826A	CL	hay field	XeB
1.43	U	U	SBS-10-3-4RM-D	12807	ML	hay field	FdA
1.41	U	U	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
1.4	U	UJ	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
1.4	U	U	SBS-9-1-4RM	1872A	CL	hay field	XfB
1.35	U	U	SBS-8-3-4RM	12799	CL	crop field	XfB
1.34	U	U	SBS-7-3-4RM	12795	CL	crop field	MsD2

APPENDIX E

CONCENTRATION OF ANTIMONY AT 24-30 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3.74		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
3.48		U	SBS-2-2A-5RM	12774A	CL	crop field	FdA
2.82		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
2.76		-	SBS-6-3-5RM	12792	CL	crop field	RwB
2.73		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
2.66		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
2.46		U	SBS-2-1B-5RM	1756B	CL	crop field	FdA
2.44		J	SBS-4-1-5RM	1764A	CL	hay field	XeB
2.42		J	SBS-4-2-5RM	12783	CL	hay field	RvB2
2.15		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
2.12		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
2.1		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
2.05		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
2.03		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
1.94		-	SBS-3-3-5RM	12779	CL	crop field	RwB
1.93		J	SBS-8-3-5RM-D	12799	CL	crop field	XfB
1.78		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
1.78		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
1.76		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
1.76		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
1.61		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
1.58	U	UJ	SBS-4-3-5RM	12784	CL	hay field	XeB
1.57	U	U	SBS-8-1-5RM	1834A	CL	crop field	FcA
1.51	U	U	SBS-8-2-5RM	12798	CL	crop field	FcA
1.49	U	U	SBS-5-3-5RM	12788	CL	hay field	RvB2
1.47	U	U	SBS-1-3-5RM	12771	CL	crop field	RwB2
1.45	U	U	SBS-2-3-5RM	12775	CL	crop field	FdA
1.45	U	U	SBS-1-1-5RM	1755A	CL	crop field	FdA
1.45	U	U	SBS-10-2-5RM	12806	CL	hay field	Ra
1.42	U	U	SBS-5-1-5RM	1826A	CL	hay field	XeB
1.42	U	UJ	SBS-8-3-5RM	12799	CL	crop field	XfB
1.41	U	U	SBS-5-2-5RM	12787	CL	hay field	FcA
1.41	U	U	SBS-2-2-5RM	12774B	CL	crop field	RwB2
1.41	U	U	SBS-7-2-5RM	12794	CL	crop field	XfB
1.37	U	U	SBS-10-3-5RM	12807	ML	hay field	FdA
1.34	U	U	SBS-1-2-5RM	12770	CL	crop field	Ra
1.12	U	U	SBS-10-1-5RM	1873A	CL	hay field	FdA

APPENDIX E

CONCENTRATION OF ANTIMONY AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3.5		J	SBS-4-2-6RM	12783	CL	hay field	RvB2
3.39		U	SBS-2-2A-6RM	12774A	CL	crop field	FdA
2.64		-	SBS-10-3-6RM	12807	CL	hay field	FdA
2.63		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
2.58		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
2.38		J	SBS-4-1-6RM	1764A	CL	hay field	XeB
2.31		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
2.29		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
2.26		J	SBS-4-3-6RM	12784	CL	hay field	XeB
2.22		-	SBS-1-2-6RM	12770	CL	crop field	Ra
2.05		J	SBS-6-1-6RM	1829A	CL	crop field	XfB
1.95		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
1.94		-	SBS-6-3-6RM	12792	CL	crop field	RwB
1.86		-	SBS-11-3-6RM	12811	C	crop field	EcE2
1.85		-	SBS-3-3-6RM	12779	CL	crop field	RwB
1.78		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
1.76		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
1.73		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
1.7		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
1.54		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
1.52	U	U	SBS-1-1-6RM	1755A	CL	crop field	FdA
1.5	U	U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
1.5	U	U	SBS-9-3-6RM	12804	CL	crop field	EcE2
1.49		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
1.48	U	UJ	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
1.48	U	U	SBS-8-1-6RM	1834A	CL	crop field	FcA
1.48	U	U	SBS-7-2-6RM	12794	CL	crop field	XfB
1.47	U	U	SBS-8-2-6RM	12798	CL	crop field	FcA
1.45	U	U	SBS-5-1-6RM	1826A	CL	hay field	XeB
1.44	U	U	SBS-10-2-6RM	12806	CL	hay field	Ra
1.41	U	U	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
1.41	U	U	SBS-5-2-6RM	12787	CL	hay field	FcA
1.4	U	U	SBS-2-2-6RM	12774B	CL	crop field	RwB2
1.4	U	U	SBS-3-1-6RM	1763A	ML	crop field	XfB
1.4	U	U	SBS-8-3-6RM	12799	CL	crop field	XfB
1.34	U	U	SBS-2-3-6RM	12775	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF ARSENIC AT 0-6 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
10.3		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
9.86	W	J	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
9.7	W	J	SBS-4-2-1RM	12783	ML	hay field	RvB2
9.62		-	SBS-6-3-1RM	12792	ML	crop field	RwB
9.33		J	SBS-10-1-1RM	1873A	ML	hay field	FdA
9.11		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
9.06		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
9.04		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
8.92		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
8.29		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
8.11		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
8.05		J	SBS-5-2-1RM	12787	ML	hay field	FcA
7.41		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
7.38		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
7.37		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
6.95		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
6.84		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
6.8		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
6.7		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
6.7		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
6.69		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
6.62		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
6.58		-	SBS-2-3-1RM	12775	ML	crop field	FdA
6.4		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
6.19		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
6.07		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
5.95		J	SBS-2-1B-1RM	1756B	ML	crop field	FdA
5.94		J	SBS-10-3-1RM	12807	ML	hay field	FdA
5.76		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
5.64		J	SBS-10-2-1RM	12806	ML	hay field	Ra
5.4		-	SBS-8-2-1RM	12798	ML	crop field	FcA
5.17		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
5.01		-	SBS-4-3-1RM	12784	ML	hay field	XeB
4.94		J	SBS-5-3-1RM	12788	ML	hay field	RvB2
4.67		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
4.52		-	SBS-8-3-1RM	12799	ML	crop field	XfB
4.48		-	SBS-7-2-1RM	12794	ML	crop field	XfB
3.41		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
2.28		J	SBS-2-2A-1RM	12774A	ML	crop field	FdA

000116

APPENDIX E

CONCENTRATION OF ARSENIC AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
13.2		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
12.6		J	SBS-6-1-3RM	1829A	ML	crop field	XfB
12.5		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
12.3	W	J	SBS-4-3-3RM	12784	CL	hay field	XeB
12.3		J	SBS-7-2-3RM	12794	CL	crop field	XfB
12.3		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
11.5		-	SBS-3-3-3RM	12779	CL	crop field	RwB
11.3		J	SBS-10-3-3RM	12807	ML	hay field	FdA
11		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
11		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
10.7		J	SBS-2-1B-3RM	1756B	ML	crop field	FdA
10.5		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
10		J	SBS-5-3-3RM	12788	CL	hay field	RvB2
9.96		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
9.86		-	SBS-2-3-3RM	12775	CL	crop field	FdA
9.77		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
9.73		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
9.52	W	J	SBS-4-2-3RM	12783	CL	hay field	RvB2
8.29		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/Wy
8.08	W	J	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
8.06		J	SBS-5-1-3RM	1826A	CL	hay field	XeB
8.04		-	SBS-6-3-3RM	12792	CL	crop field	RwB
7.72		J	SBS-10-1-3RM	1873A	CL	hay field	FdA
7.52		-	SBS-8-2-3RM	12798	CL	crop field	FcA
6.99		-	SBS-1-2-3RM	12770	CL	crop field	Ra
6.67		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
6.57		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
6.43		J	SBS-10-2-3RM	12806	CL	hay field	Ra
5.55	W	J	SBS-1-3-3RM	12771	CL	crop field	RwB2
5.07		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
4.82		-	SBS-8-3-3RM	12799	CL	crop field	XfB
4.45		J	SBS-2-2A-3RM	12774A	CL	crop field	FdA
3.62		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
1.46		U	SBS-5-2-3RM	12787	ML	hay field	FcA
1.38	UW	U	SBS-11-3-3RM	12811	CL	crop field	EcE2

APPENDIX E

3502

CONCENTRATION OF ARSENIC AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
13.8		-	SBS-3-3-4RM	12779	CL	crop field	RwB
12.8		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
12.6		J	SBS-2-1B-4RM	1756B	CL	crop field	FdA
11.7		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
11.6		J	SBS-6-1-4RM	1829A	ML	crop field	XfB
11		J	SBS-10-3-4RM	12807	ML	hay field	FdA
10.7		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
9.96		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
9.86		-	SBS-7-2-4RM	12794	CL	crop field	XfB
9.8	W	J	SBS-1-1-4RM	1755A	CL	crop field	FdA
9.54		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
9.17		J	SBS-5-3-4RM	12788	CL	hay field	RvB2
9.14		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
9.07		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
8.63		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
8.47		J	SBS-10-3-4RM-D	12807	ML	hay field	FdA
8.11		J	SBS-10-2-4RM	12806	CL	hay field	Ra
8.06		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
7.61		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
7.53	W	J	SBS-4-3-4RM	12784	CL	hay field	XeB
7.42		-	SBS-8-2-4RM	12798	CL	crop field	FcA
7.22		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
7.22		J	SBS-10-1-4RM	1873A	CL	hay field	FdA
7.03	W	J	SBS-1-2-4RM	12770	CL	crop field	Ra
6.96		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
6.93		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
6.74		-	SBS-6-3-4RM	12792	CL	crop field	RwB
6.51		J	SBS-5-2-4RM	12787	CL	hay field	FcA
5.81		-	SBS-2-3-4RM	12775	CL	crop field	FdA
5.61		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
5.43		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
5.32	W	J	SBS-4-2-4RM	12783	CL	hay field	RvB2
5.3		J	SBS-5-1-4RM	1826A	CL	hay field	XeB
4.89	W	J	SBS-1-3-4RM	12771	CL	crop field	RwB2
4.73		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
4.06		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
3.57		-	SBS-8-3-4RM	12799	CL	crop field	XfB
3.5		J	SBS-2-2A-4RM	12774A	CL	crop field	FdA
3.02		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2

APPENDIX E

CONCENTRATION OF ARSENIC AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
15.8	W	J	SBS-9-1-5RM	1872A	CL	hay field	XfB
13.4		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
12		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
11.3	W	J	SBS-1-3-5RM	12771	CL	crop field	RwB2
11.1		-	SBS-7-2-5RM	12794	CL	crop field	XfB
10		J	SBS-5-3-5RM	12788	CL	hay field	RvB2
9.85		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
9.67		-	SBS-3-3-5RM	12779	CL	crop field	RwB
9.46		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
9.36		J	SBS-10-2-5RM	12806	CL	hay field	Ra
8.9	W	J	SBS-1-1-5RM	1755A	CL	crop field	FdA
8.44		J	SBS-5-2-5RM	12787	CL	hay field	FcA
8.29		-	SBS-4-3-5RM	12784	CL	hay field	XeB
7.86		-	SBS-2-3-5RM	12775	CL	crop field	FdA
7.66		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
7.62		-	SBS-8-2-5RM	12798	CL	crop field	FcA
7.39		J	SBS-10-3-5RM	12807	ML	hay field	FdA
7.34		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
7.14	W	J	SBS-1-2-5RM	12770	CL	crop field	Ra
6.53		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
6.44		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
6.07		-	SBS-6-3-5RM	12792	CL	crop field	RwB
5.95		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
5.76		J	SBS-2-2A-5RM	12774A	CL	crop field	FdA
5.72		J	SBS-5-1-5RM	1826A	CL	hay field	XeB
5.48		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
5.3		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
5.09		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
5.06		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
4.97		J	SBS-10-1-5RM	1873A	CL	hay field	FdA
4.87		-	SBS-8-3-5RM	12799	CL	crop field	XfB
4.51		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
4.25		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
3.92		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
3.4		J	SBS-2-1B-5RM	1756B	CL	crop field	FdA
3.17		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
1.73		-	SBS-11-2-5RM	12810	CL	crop field	EcE2

APPENDIX E

CONCENTRATION OF ARSENIC AT 30-36 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
11.9		-	SBS-7-2-6RM	12794	CL	crop field	XfB
11.2		J	SBS-5-2-6RM	12787	CL	hay field	FcA
11.1		-	SBS-4-3-6RM	12784	CL	hay field	XeB
11		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
10.2		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
8.65		-	SBS-2-3-6RM	12775	CL	crop field	FdA
8.28		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
7.9		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
7.82		J	SBS-5-3-6RM	12788	CL	hay field	RvB2
7.74		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
7.43		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
7.4	W	J	SBS-1-2-6RM	12770	CL	crop field	Ra
7.24		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
7		J	SBS-2-2A-6RM	12774A	CL	crop field	FdA
6.42		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
6.37		J	SBS-10-2-6RM	12806	CL	hay field	Ra
6.32		J	SBS-10-3-6RM	12807	CL	hay field	FdA
6.24		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
6.15		-	SBS-6-3-6RM	12792	CL	crop field	RwB
6.12		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
6.02		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
5.95		J	SBS-5-1-6RM	1826A	CL	hay field	XeB
5.55		-	SBS-8-2-6RM	12798	CL	crop field	FcA
5.14		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
4.96		J	SBS-2-1B-6RM	1756B	CL	crop field	FdA
4.67		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
4.53		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
4.51		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
4.44		-	SBS-11-3-6RM	12811	C	crop field	EcE2
4.41		-	SBS-8-3-6RM	12799	CL	crop field	XfB
3.85	W	J	SBS-1-3-6RM	12771	CL	crop field	RwB2
3.8		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
3.36		J	SBS-10-1-6RM	1873A	CL	hay field	FdA
3.16		-	SBS-3-3-6RM	12779	CL	crop field	RwB
2.69		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
2.54		-	SBS-11-1-6RM	1879A	CL	crop field	XfB

APPENDIX E

CONCENTRATION OF BARIUM AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
492		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
170		J	SBS-2-2A-1RM	12774A	ML	crop field	FdA
162		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
120		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
115		-	SBS-5-1-1RM	1826A	ML	hay field	XeB
115		-	SBS-6-3-1RM	12792	ML	crop field	RwB
113		J	SBS-10-3-1RM	12807	ML	hay field	FdA
112		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
108		-	SBS-5-2-1RM	12787	ML	hay field	FcA
107		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
103		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
102		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
101		-	SBS-8-3-1RM	12799	ML	crop field	XfB
88.5		-	SBS-8-2-1RM	12798	ML	crop field	FcA
86.9		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
84.9		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
83.4		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
79.4		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
77.5		J	SBS-10-2-1RM	12806	ML	hay field	Ra
75.1		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
73.3		J	SBS-2-1B-1RM	1756B	ML	crop field	FdA
71.5		J	SBS-10-1-1RM	1873A	ML	hay field	FdA
71.1		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
71		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
69.8		-	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
68.9		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
67.6		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
66.7		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
66.1		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
63.4		-	SBS-2-3-1RM	12775	ML	crop field	FdA
62.8		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
62.2		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
61.4		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
58.8		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
57.2		-	SBS-4-3-1RM	12784	ML	hay field	XeB
57		-	SBS-7-2-1RM	12794	ML	crop field	XfB
55.4		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
53.3		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
52.6		-	SBS-9-1-1RM	1872A	ML	hay field	XfB

APPENDIX E

3502

CONCENTRATION OF BARIUM AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
248		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
202		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
197		-	SBS-6-3-3RM	12792	CL	crop field	RwB
179		-	SBS-8-2-3RM	12798	CL	crop field	FcA
177		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
167		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
166		-	SBS-7-2-3RM	12794	CL	crop field	XfB
152		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
146		J	SBS-2-2A-3RM	12774A	CL	crop field	FdA
135		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
122		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
121		-	SBS-5-2-3RM	12787	ML	hay field	FcA
119		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
117		J	SBS-2-1B-3RM	1756B	ML	crop field	FdA
117		J	SBS-10-1-3RM	1873A	CL	hay field	FdA
116		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
114		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
114		J	SBS-10-2-3RM	12806	CL	hay field	Ra
106		J	SBS-10-3-3RM	12807	ML	hay field	FdA
105		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
97		-	SBS-2-3-3RM	12775	CL	crop field	FdA
89.1		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
88.8		-	SBS-1-2-3RM	12770	CL	crop field	Ra
86.4		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
82.1		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
80.3		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
80		-	SBS-4-3-3RM	12784	CL	hay field	XeB
77.6		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
70		-	SBS-3-3-3RM	12779	CL	crop field	RwB
69.5		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
68.3		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
66.2		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
61.4		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
60.4		-	SBS-8-3-3RM	12799	CL	crop field	XfB
56.2		-	SBS-9-2-3RM	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF BARIUM AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
225		-	SBS-8-2-4RM	12798	CL	crop field	FcA
209		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
183		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
180		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
179		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
168		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
160		J	SBS-2-2A-4RM	12774A	CL	crop field	FdA
158		J	SBS-2-1B-4RM	1756B	CL	crop field	FdA
156		-	SBS-7-2-4RM	12794	CL	crop field	XfB
154		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
153		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
151		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
150		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
134		J	SBS-10-2-4RM	12806	CL	hay field	Ra
131		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
130		-	SBS-5-2-4RM	12787	CL	hay field	FcA
130		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
130		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
128		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
126		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
123		-	SBS-2-3-4RM	12775	CL	crop field	FdA
123		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
117		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
113		-	SBS-4-3-4RM	12784	CL	hay field	XeB
109		J	SBS-10-3-4RM	12807	ML	hay field	FdA
107		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
106		J	SBS-10-1-4RM	1873A	CL	hay field	FdA
95.5		-	SBS-3-3-4RM	12779	CL	crop field	RwB
91.1		-	SBS-6-3-4RM	12792	CL	crop field	RwB
82.8		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
76.6		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
76.1		-	SBS-1-2-4RM	12770	CL	crop field	Ra
67.2		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
61		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
57.1		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
52.1		J	SBS-10-3-4RM-D	12807	ML	hay field	FdA
47.5		-	SBS-8-3-4RM	12799	CL	crop field	XfB
41.6		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
37.2		-	SBS-9-3-4RM	12804	CL	crop field	EcE2

APPENDIX E

CONCENTRATION OF BARIUM AT 24-30 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
261		-	SBS-3-3-5RM	12779	CL	crop field	RwB
200		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
188		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
184		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
180		-	SBS-8-2-5RM	12798	CL	crop field	FcA
176		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
173		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
141		-	SBS-7-2-5RM	12794	CL	crop field	XfB
141		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
137		J	SBS-2-1B-5RM	1756B	CL	crop field	FdA
136		J	SBS-2-2A-5RM	12774A	CL	crop field	FdA
127		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
126		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
116		J	SBS-10-1-5RM	1873A	CL	hay field	FdA
112		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
106		-	SBS-5-2-5RM	12787	CL	hay field	FcA
103		-	SBS-6-3-5RM	12792	CL	crop field	RwB
102		-	SBS-4-3-5RM	12784	CL	hay field	XeB
102		-	SBS-2-3-5RM	12775	CL	crop field	FdA
99.7		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
96.1		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
84.1		J	SBS-10-2-5RM	12806	CL	hay field	Ra
82.5		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
71.5		J	SBS-10-3-5RM	12807	ML	hay field	FdA
68		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
63.7		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
59.8		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
55.1		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
53.2		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
51.8		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
45.3		-	SBS-1-2-5RM	12770	CL	crop field	Ra
43.1		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
42.8		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
41.3		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
40.7		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
40.3		-	SBS-8-3-5RM	12799	CL	crop field	XfB
27.9		-	SBS-4-2-5RM	12783	CL	hay field	RvB2

APPENDIX E

CONCENTRATION OF BARIUM AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
192		-	SBS-7-2-6RM	12794	CL	crop field	XfB
145		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
127		-	SBS-4-3-6RM	12784	CL	hay field	XeB
122		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
117		-	SBS-5-2-6RM	12787	CL	hay field	FcA
112		J	SBS-10-1-6RM	1873A	CL	hay field	FdA
111		-	SBS-3-3-6RM	12779	CL	crop field	RwB
107		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
105		J	SBS-2-1B-6RM	1756B	CL	crop field	FdA
102		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
93.5		-	SBS-2-3-6RM	12775	CL	crop field	FdA
92.5		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
90.4		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
89.9		J	SBS-2-2A-6RM	12774A	CL	crop field	FdA
89.1		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
83.5		-	SBS-8-2-6RM	12798	CL	crop field	FcA
80		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
71.2		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
64.5		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
61.2		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
60.3		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
54.3		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
54		-	SBS-1-2-6RM	12770	CL	crop field	Ra
53.8		J	SBS-10-3-6RM	12807	CL	hay field	FdA
48.2		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
46.7		-	SBS-6-3-6RM	12792	CL	crop field	RwB
44		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
43.6		J	SBS-10-2-6RM	12806	CL	hay field	Ra
43.2		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
39.2		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
39.1		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
37.5		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
36.9		-	SBS-8-3-6RM	12799	CL	crop field	XfB
35.9		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
32.2		-	SBS-11-3-6RM	12811	C	crop field	EcE2
30.1		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2

APPENDIX E

CONCENTRATION OF BERYLLIUM AT 0-6 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.97		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
0.92		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
0.91		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
0.91		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
0.88		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
0.86		-	SBS-6-3-1RM	12792	ML	crop field	RwB
0.79		-	SBS-5-2-1RM	12787	ML	hay field	FcA
0.78		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
0.72		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
0.71		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
0.7		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
0.7		-	SBS-8-3-1RM	12799	ML	crop field	XfB
0.69		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
0.69		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
0.64		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
0.63		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
0.62		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
0.61		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
0.58		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
0.57		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
0.56		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.52		-	SBS-10-3-1RM	12807	ML	hay field	FdA
0.51		-	SBS-10-2-1RM	12806	ML	hay field	Ra
0.51		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
0.51		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.51		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
0.5		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.47		-	SBS-8-2-1RM	12798	ML	crop field	FcA
0.46		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
0.43		-	SBS-4-3-1RM	12784	ML	hay field	XeB
0.43		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.43		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
0.42		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
0.42		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
0.42		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
0.38		-	SBS-2-3-1RM	12775	ML	crop field	FdA
0.37		-	SBS-7-2-1RM	12794	ML	crop field	XfB
0.35		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.33		-	SBS-7-1-1RM	1832A	ML	crop field	FdA

APPENDIX E

CONCENTRATION OF BERYLLIUM AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3.05		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
1.64		-	SBS-7-2-3RM	12794	CL	crop field	XfB
1.42		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
1.27		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
1.23		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1.12		-	SBS-10-2-3RM	12806	CL	hay field	Ra
1.11		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
1.1		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
1.07		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
1.07		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
1.04		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
0.97		-	SBS-6-3-3RM	12792	CL	crop field	RwB
0.96		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
0.95		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.88		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
0.86		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
0.86		-	SBS-8-2-3RM	12798	CL	crop field	FcA
0.82		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.81		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
0.79		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
0.76		-	SBS-10-3-3RM	12807	ML	hay field	FdA
0.75		-	SBS-5-2-3RM	12787	ML	hay field	FcA
0.72		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
0.72		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
0.7		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
0.68		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.62		-	SBS-3-3-3RM	12779	CL	crop field	RwB
0.61		-	SBS-1-2-3RM	12770	CL	crop field	Ra
0.56		-	SBS-4-3-3RM	12784	CL	hay field	XeB
0.56		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
0.54		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
0.45		-	SBS-8-3-3RM	12799	CL	crop field	XfB
0.42		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.38		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
0.37		-	SBS-2-3-3RM	12775	CL	crop field	FdA

APPENDIX E

3502

CONCENTRATION OF BERYLLIUM AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.4		-	SBS-4-3-4RM	12784	CL	hay field	XeB
1.4		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
1.39		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.36		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
1.3		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.22		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
1.19		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
1.16		-	SBS-10-2-4RM	12806	CL	hay field	Ra
1.11		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
1.04		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
1.04		-	SBS-7-2-4RM	12794	CL	crop field	XfB
0.99		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.98		-	SBS-3-3-4RM	12779	CL	crop field	RwB
0.93		-	SBS-2-3-4RM	12775	CL	crop field	FdA
0.93		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
0.89		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.88		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
0.87		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
0.86		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.84		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
0.78		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
0.77		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
0.76		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.75		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.73		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
0.72		-	SBS-10-3-4RM	12807	ML	hay field	FdA
0.72		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.7		-	SBS-5-2-4RM	12787	CL	hay field	FcA
0.7		-	SBS-8-2-4RM	12798	CL	crop field	FcA
0.62		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
0.6		-	SBS-1-2-4RM	12770	CL	crop field	Ra
0.6		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.59		-	SBS-6-3-4RM	12792	CL	crop field	RwB
0.56		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.49		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.48		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.43		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.37		-	SBS-8-3-4RM	12799	CL	crop field	XfB
0.37		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF BERYLLIUM AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.75		-	SBS-4-3-5RM	12784	CL	hay field	XeB
1.6		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
1.14		-	SBS-3-3-5RM	12779	CL	crop field	RwB
1		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.98		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.98		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
0.97		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
0.86		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
0.85		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
0.83		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
0.82		-	SBS-7-2-5RM	12794	CL	crop field	XfB
0.82		-	SBS-6-3-5RM	12792	CL	crop field	RwB
0.8		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.76		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.76		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.75		-	SBS-8-2-5RM	12798	CL	crop field	FcA
0.74		-	SBS-5-2-5RM	12787	CL	hay field	FcA
0.74		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
0.72		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
0.68		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/Wy
0.68		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.63		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
0.61		-	SBS-10-2-5RM	12806	CL	hay field	Ra
0.6		-	SBS-2-3-5RM	12775	CL	crop field	FdA
0.57		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.51		-	SBS-10-3-5RM	12807	ML	hay field	FdA
0.5		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.49		-	SBS-1-2-5RM	12770	CL	crop field	Ra
0.48		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.47		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.45		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.39		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.36		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.34		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.3		-	SBS-8-3-5RM	12799	CL	crop field	XfB
0.29		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.26		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2

APPENDIX E

CONCENTRATION OF BERYLLIUM AT 30-36 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.99		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
0.88		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.85		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
0.85		-	SBS-3-3-6RM	12779	CL	crop field	RwB
0.82		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.81		-	SBS-4-3-6RM	12784	CL	hay field	XeB
0.8		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.8		-	SBS-5-2-6RM	12787	CL	hay field	FcA
0.77		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.76		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.74		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.71		-	SBS-7-2-6RM	12794	CL	crop field	XfB
0.65		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.64		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.62		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.61		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.57		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.56		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.54		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.53		-	SBS-1-2-6RM	12770	CL	crop field	Ra
0.5		-	SBS-8-2-6RM	12798	CL	crop field	FcA
0.49		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.48		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.47		-	SBS-10-3-6RM	12807	CL	hay field	FdA
0.45		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.44		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.42		-	SBS-6-3-6RM	12792	CL	crop field	RwB
0.41		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.41		-	SBS-2-3-6RM	12775	CL	crop field	FdA
0.37		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.35		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.34		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.33		-	SBS-10-2-6RM	12806	CL	hay field	Ra
0.3		-	SBS-8-3-6RM	12799	CL	crop field	XfB
0.24		-	SBS-11-3-6RM	12811	C	crop field	EcE2
0.22		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2

APPENDIX E

CONCENTRATION OF BORON AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2.39	U	U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
2.38	U	U	SBS-6-3-1RM	12792	ML	crop field	RwB
2.36	U	U	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
2.34	U	U	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
2.33	U	U	SBS-8-1-1RM	1834A	ML	crop field	FcA
2.31	U	U	SBS-2-1-1RM	1756A	ML	crop field	FdA
2.3	U	U	SBS-10-3-1RM	12807	ML	hay field	FdA
2.29	U	U	SBS-4-3-1RM	12784	ML	hay field	XeB
2.28	U	U	SBS-4-1-1RM	1764A	ML	hay field	XeB
2.28	U	U	SBS-7-2-1RM	12794	ML	crop field	XfB
2.28	U	U	SBS-7-1-1RM	1832A	ML	crop field	FdA
2.26	U	U	SBS-1-1-1RM	1755A	ML	crop field	FdA
2.26	U	U	SBS-6-1-1RM	1829A	ML	crop field	XfB
2.25	U	U	SBS-2-2-1RM	12774B	ML	crop field	RwB2
2.25	U	U	SBS-5-3-1RM	12788	ML	hay field	RvB2
2.25	U	U	SBS-5-1-1RM	1826A	ML	hay field	XeB
2.25	U	U	SBS-11-1-1RM	1879A	ML	crop field	XfB
2.24	U	U	SBS-4-2-1RM	12783	ML	hay field	RvB2
2.23	U	U	SBS-1-3-1RM	12771	ML	crop field	RwB2
2.23	U	U	SBS-10-1-1RM	1873A	ML	hay field	FdA
2.2	U	U	SBS-5-2-1RM	12787	ML	hay field	FcA
2.2	U	U	SBS-2-2A-1RM	12774A	ML	crop field	FdA
2.2	U	U	SBS-10-2-1RM	12806	ML	hay field	Ra
2.2	U	U	SBS-2-3-1RM	12775	ML	crop field	FdA
2.19	U	U	SBS-9-1-1RM	1872A	ML	hay field	XfB
2.18	U	U	SBS-9-3-1RM	12804	CL	crop field	EcE2
2.16	U	U	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
2.16	U	U	SBS-8-2-1RM	12798	ML	crop field	FcA
2.13	U	U	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
2.12	U	U	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
2.1	U	U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
2.09	U	U	SBS-6-2-1RM	12791	ML	crop field	RwB2
2.09	U	U	SBS-11-3-1RM	12811	CL	crop field	EcE2
2.09	U	U	SBS-8-3-1RM	12799	ML	crop field	XfB
2.08	U	U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
2.04	U	U	SBS-2-1B-1RM	1756B	ML	crop field	FdA
2.03	U	U	SBS-3-1-1RM	1763A	ML	crop field	XfB
2.02	U	U	SBS-9-2-1RM	12802	ML	crop field	MtC2
1.99	U	U	SBS-7-3-1RM	12795	ML	crop field	MsD2

APPENDIX E

CONCENTRATION OF BORON AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2.56		U	SBS-10-1-3RM	1873A	CL	hay field	FdA
2.35	U	U	SBS-6-1-3RM	1829A	ML	crop field	XfB
2.34	U	U	SBS-2-1-3RM	1756A	CL	crop field	FdA
2.32	U	U	SBS-8-1-3RM	1834A	CL	crop field	FcA
2.31	U	U	SBS-4-3-3RM	12784	CL	hay field	XeB
2.3	U	U	SBS-7-2-3RM	12794	CL	crop field	XfB
2.26	U	U	SBS-5-3-3RM	12788	CL	hay field	RvB2
2.26	U	U	SBS-2-3-3RM	12775	CL	crop field	FdA
2.26	U	U	SBS-11-3-3RM	12811	CL	crop field	EcE2
2.25	U	U	SBS-8-2-3RM	12798	CL	crop field	FcA
2.23	U	U	SBS-2-2A-3RM	12774A	CL	crop field	FdA
2.23	U	U	SBS-4-1-3RM	1764A	CL	hay field	XeB
2.22	U	U	SBS-5-1-3RM	1826A	CL	hay field	XeB
2.22	U	U	SBS-2-1B-3RM	1756B	ML	crop field	FdA
2.21	U	U	SBS-10-2-3RM	12806	CL	hay field	Ra
2.19	U	U	SBS-1-3-3RM	12771	CL	crop field	RwB2
2.19	U	U	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
2.19	U	U	SBS-11-1-3RM	1879A	ML	crop field	XfB
2.18	U	U	SBS-7-1-3RM	1832A	CL	crop field	FdA
2.17	U	U	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
2.17	U	U	SBS-10-3-3RM	12807	ML	hay field	FdA
2.16	U	U	SBS-4-2-3RM	12783	CL	hay field	RvB2
2.15	U	U	SBS-2-2-3RM	12774B	CL	crop field	RwB2
2.15	U	U	SBS-6-2-3RM	12791	ML	crop field	RwB2
2.13	U	U	SBS-11-2-3RM	12810	CL	crop field	EcE2
2.13	U	U	SBS-5-2-3RM	12787	ML	hay field	FcA
2.12	U	U	SBS-9-1-3RM	1872A	CL	hay field	XfB
2.09	U	U	SBS-6-3-3RM	12792	CL	crop field	RwB
2.05	U	U	SBS-9-3-3RM	12804	CL	crop field	EcE2
2.04	U	U	SBS-1-2-3RM	12770	CL	crop field	Ra
2.04	U	U	SBS-9-2-3RM	12802	CL	crop field	MtC2
2.03	U	U	SBS-3-3-3RM	12779	CL	crop field	RwB
2.03	U	U	SBS-3-1-3RM	1763A	CL	crop field	XfB
2.03	U	U	SBS-8-3-3RM	12799	CL	crop field	XfB
1.99	U	U	SBS-7-3-3RM	12795	CL	crop field	MsD2

APPENDIX E

CONCENTRATION OF BORON AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2.36	U	U	SBS-10-2-4RM	12806	CL	hay field	Ra
2.34	U	U	SBS-8-1-4RM	1834A	CL	crop field	FcA
2.32	U	U	SBS-3-3-4RM	12779	CL	crop field	RwB
2.28	U	U	SBS-10-1-4RM	1873A	CL	hay field	FdA
2.26	U	U	SBS-5-2-4RM	12787	CL	hay field	FcA
2.26	U	U	SBS-2-1B-4RM	1756B	CL	crop field	FdA
2.25	U	U	SBS-7-2-4RM	12794	CL	crop field	XfB
2.24	U	U	SBS-1-3-4RM	12771	CL	crop field	RwB2
2.24	U	U	SBS-5-3-4RM	12788	CL	hay field	RvB2
2.24	U	U	SBS-8-2-4RM	12798	CL	crop field	FcA
2.23	U	U	SBS-4-3-4RM	12784	CL	hay field	XeB
2.21	U	U	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
2.21	U	U	SBS-2-1-4RM	1756A	CL	crop field	FdA
2.21	U	U	SBS-3-1-4RM	1763A	CL	crop field	XfB
2.21	U	U	SBS-6-2-4RM	12791	CL	crop field	RwB2
2.19	U	U	SBS-6-1-4RM	1829A	ML	crop field	XfB
2.19	U	U	SBS-1-1-4RM	1755A	CL	crop field	FdA
2.19	U	U	SBS-2-3-4RM	12775	CL	crop field	FdA
2.18	U	U	SBS-11-1-4RM	1879A	CL	crop field	XfB
2.16	U	U	SBS-10-3-4RM	12807	ML	hay field	FdA
2.14	U	U	SBS-5-1-4RM	1826A	CL	hay field	XeB
2.13	U	U	SBS-2-2A-4RM	12774A	CL	crop field	FdA
2.11	U	U	SBS-6-3-4RM	12792	CL	crop field	RwB
2.1	U	U	SBS-10-3-4RM-D	12807	ML	hay field	FdA
2.09	U	U	SBS-4-1-4RM	1764A	CL	hay field	XeB
2.09	U	U	SBS-2-3-4RM-D	12775	CL	crop field	FdA
2.06	U	U	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
2.06	U	U	SBS-2-2-4RM	12774B	CL	crop field	RwB2
2.06	U	U	SBS-9-2-4RM	12802	CL	crop field	MtC2
2.05	U	U	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
2.04	U	U	SBS-9-1-4RM	1872A	CL	hay field	XfB
2.02	U	U	SBS-11-2-4RM	12810	CL	crop field	EcE2
1.99	U	U	SBS-7-1-4RM	1832A	CL	crop field	FdA
1.98	U	U	SBS-11-3-4RM	12811	CL	crop field	EcE2
1.97	U	U	SBS-4-2-4RM	12783	CL	hay field	RvB2
1.97	U	U	SBS-9-3-4RM	12804	CL	crop field	EcE2
1.97	U	U	SBS-8-3-4RM	12799	CL	crop field	XfB
1.96		U	SBS-7-3-4RM	12795	CL	crop field	MsD2
1.94	U	U	SBS-1-2-4RM	12770	CL	crop field	Ra

APPENDIX E

CONCENTRATION OF BORON AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2.31	U	U	SBS-4-3-5RM	12784	CL	hay field	XeB
2.3	U	U	SBS-3-3-5RM	12779	CL	crop field	RwB
2.29	U	U	SBS-8-1-5RM	1834A	CL	crop field	FcA
2.23	U	U	SBS-2-2A-5RM	12774A	CL	crop field	FdA
2.23	U	U	SBS-3-1-5RM	1763A	CL	crop field	XfB
2.23	U	U	SBS-11-3-5RM	12811	CL	crop field	EcE2
2.21	U	U	SBS-6-2-5RM	12791	CL	crop field	RwB2
2.21	U	U	SBS-8-2-5RM	12798	CL	crop field	FcA
2.18	U	U	SBS-2-1-5RM	1756A	CL	crop field	FdA
2.17	U	U	SBS-5-3-5RM	12788	CL	hay field	RvB2
2.17	U	U	SBS-2-1B-5RM	1756B	CL	crop field	FdA
2.15	U	U	SBS-1-3-5RM	12771	CL	crop field	RwB2
2.14	U	U	SBS-9-3-5RM	12804	CL	crop field	EcE2
2.14	U	U	SBS-7-3-5RM	12795	CL	crop field	MsD2
2.12	U	U	SBS-10-2-5RM	12806	CL	hay field	Ra
2.12	U	U	SBS-2-3-5RM	12775	CL	crop field	FdA
2.12	U	U	SBS-1-1-5RM	1755A	CL	crop field	FdA
2.12	U	U	SBS-10-1-5RM	1873A	CL	hay field	FdA
2.11	U	U	SBS-6-3-5RM	12792	CL	crop field	RwB
2.09	U	U	SBS-4-1-5RM	1764A	CL	hay field	XeB
2.08	U	U	SBS-5-1-5RM	1826A	CL	hay field	XeB
2.08	U	U	SBS-8-3-5RM	12799	CL	crop field	XfB
2.07	U	U	SBS-5-2-5RM	12787	CL	hay field	FcA
2.07	U	U	SBS-7-1-5RM	1832A	CL	crop field	FdA
2.07	U	U	SBS-7-2-5RM	12794	CL	crop field	XfB
2.06	U	U	SBS-2-2-5RM	12774B	CL	crop field	RwB2
2.06	U	U	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
2.06	U	U	SBS-9-1-5RM	1872A	CL	hay field	XfB
2.05	U	U	SBS-6-1-5RM	1829A	CL	crop field	XfB
2.03	U	U	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
2.01	U	U	SBS-10-3-5RM	12807	ML	hay field	FdA
2	U	U	SBS-8-3-5RM-D	12799	CL	crop field	XfB
1.98	U	U	SBS-11-1-5RM	1879A	CL	crop field	XfB
1.97	U	U	SBS-11-2-5RM	12810	CL	crop field	EcE2
1.96	U	U	SBS-1-2-5RM	12770	CL	crop field	Ra
1.94	U	U	SBS-4-2-5RM	12783	CL	hay field	RvB2
1.93	U	U	SBS-9-2-5RM	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF BORON AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2.36	U	U	SBS-4-3-6RM	12784	CL	hay field	XeB
2.31	U	U	SBS-2-2A-6RM	12774A	CL	crop field	FdA
2.23	U	U	SBS-1-1-6RM	1755A	CL	crop field	FdA
2.22	U	U	SBS-10-1-6RM	1873A	CL	hay field	FdA
2.19	U	U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
2.19	U	U	SBS-9-3-6RM	12804	CL	crop field	EcE2
2.18	U	U	SBS-5-3-6RM	12788	CL	hay field	RvB2
2.17	U	U	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
2.16	U	U	SBS-8-1-6RM	1834A	CL	crop field	FcA
2.16	U	U	SBS-7-2-6RM	12794	CL	crop field	XfB
2.16	U	U	SBS-8-2-6RM	12798	CL	crop field	FcA
2.14	U	U	SBS-6-3-6RM	12792	CL	crop field	RwB
2.12	U	U	SBS-5-1-6RM	1826A	CL	hay field	XeB
2.1	U	U	SBS-10-2-6RM	12806	CL	hay field	Ra
2.09	U	U	SBS-2-1-6RM	1756A	CL	crop field	FdA
2.08	U	U	SBS-6-2-6RM	12791	CL	crop field	RwB2
2.07	U	U	SBS-10-3-6RM	12807	CL	hay field	FdA
2.07	U	U	SBS-4-1-6RM	1764A	CL	hay field	XeB
2.06	U	U	SBS-5-2-6RM	12787	CL	hay field	FcA
2.06	U	U	SBS-11-1-6RM	1879A	CL	crop field	XfB
2.06	U	U	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
2.06	U	U	SBS-7-3-6RM	12795	CL	crop field	MsD2
2.05	U	U	SBS-2-2-6RM	12774B	CL	crop field	RwB2
2.05	U	U	SBS-3-1-6RM	1763A	ML	crop field	XfB
2.04	U	U	SBS-11-2-6RM	12810	CL	crop field	EcE2
2.04	U	U	SBS-3-3-6RM	12779	CL	crop field	RwB
2.04	U	U	SBS-9-2-6RM	12802	CL	crop field	MtC2
2.04	U	U	SBS-8-3-6RM	12799	CL	crop field	XfB
2.03	U	U	SBS-6-1-6RM	1829A	CL	crop field	XfB
2.03	U	U	SBS-4-2-6RM	12783	CL	hay field	RvB2
2.02	U	U	SBS-7-1-6RM	1832A	CL	crop field	FdA
2.02	U	U	SBS-9-1-6RM	1872A	CL	hay field	XfB
2	U	U	SBS-2-3-6RM	12775	CL	crop field	FdA
1.99	U	U	SBS-1-3-6RM	12771	CL	crop field	RwB2
1.94	U	U	SBS-1-2-6RM	12770	CL	crop field	Ra
1.92	U	U	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX E

3502

CONCENTRATION OF CADMIUM AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.82		U	SBS-5-1-1RM	1826A	ML	hay field	XeB
0.78		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
0.74		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
0.73		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
0.72		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
0.7		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
0.68		-	SBS-8-3-1RM	12799	ML	crop field	XfB
0.67		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
0.66		U	SBS-5-3-1RM	12788	ML	hay field	RvB2
0.65		J	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
0.6		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
0.6		U	SBS-5-2-1RM	12787	ML	hay field	FcA
0.59		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.59		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
0.57		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
0.57		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
0.56		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
0.55		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
0.54		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.53		U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
0.52		-	SBS-10-3-1RM	12807	ML	hay field	FdA
0.51		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
0.5		-	SBS-6-3-1RM	12792	ML	crop field	RwB
0.49		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
0.48		-	SBS-4-3-1RM	12784	ML	hay field	XeB
0.48		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
0.45		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
0.45		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
0.44		-	SBS-2-3-1RM	12775	ML	crop field	FdA
0.43		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.43		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.4		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
0.4		-	SBS-7-2-1RM	12794	ML	crop field	XfB
0.37		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
0.36		-	SBS-8-2-1RM	12798	ML	crop field	FcA
0.35		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.34		-	SBS-10-2-1RM	12806	ML	hay field	Ra
0.34		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
0.14	U	UJ	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB

APPENDIX E

CONCENTRATION OF CADMIUM AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.19		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
1.16		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
1.13		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
0.9		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
0.77		-	SBS-7-2-3RM	12794	CL	crop field	XfB
0.76		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
0.75		U	SBS-5-3-3RM	12788	CL	hay field	RvB2
0.75		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
0.73		-	SBS-4-3-3RM	12784	CL	hay field	XeB
0.66		U	SBS-5-2-3RM	12787	ML	hay field	FcA
0.66		U	SBS-5-1-3RM	1826A	CL	hay field	XeB
0.66		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
0.65		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
0.65		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
0.64		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
0.63		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.63		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
0.62		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.62		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
0.6		-	SBS-8-3-3RM	12799	CL	crop field	XfB
0.59		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
0.59		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
0.57		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
0.57		-	SBS-10-3-3RM	12807	ML	hay field	FdA
0.56		-	SBS-3-3-3RM	12779	CL	crop field	RwB
0.55		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
0.55		-	SBS-8-2-3RM	12798	CL	crop field	FcA
0.54		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
0.53		-	SBS-1-2-3RM	12770	CL	crop field	Ra
0.52		-	SBS-6-3-3RM	12792	CL	crop field	RwB
0.52		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.49		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
0.43		-	SBS-10-2-3RM	12806	CL	hay field	Ra
0.39		-	SBS-2-3-3RM	12775	CL	crop field	FdA
0.37		-	SBS-8-1-3RM	1834A	CL	crop field	FcA

APPENDIX E

CONCENTRATION OF CADMIUM AT 18-24 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.77		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.11		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
0.92		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
0.88		U	SBS-5-3-4RM	12788	CL	hay field	RvB2
0.87		U	SBS-5-2-4RM	12787	CL	hay field	FcA
0.84		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
0.81		U	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.81		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.81		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
0.78		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
0.78		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.73		-	SBS-3-3-4RM	12779	CL	crop field	RwB
0.73		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
0.7		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
0.69		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.68		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.67		-	SBS-4-3-4RM	12784	CL	hay field	XeB
0.65		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
0.65		-	SBS-10-3-4RM	12807	ML	hay field	FdA
0.64		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.62		-	SBS-8-2-4RM	12798	CL	crop field	FcA
0.61		-	SBS-7-2-4RM	12794	CL	crop field	XfB
0.6		-	SBS-10-2-4RM	12806	CL	hay field	Ra
0.6		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
0.6		-	SBS-6-3-4RM	12792	CL	crop field	RwB
0.59		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.57		-	SBS-1-2-4RM	12770	CL	crop field	Ra
0.57		-	SBS-8-3-4RM	12799	CL	crop field	XfB
0.56		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.55		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
0.54		-	SBS-2-3-4RM	12775	CL	crop field	FdA
0.52		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
0.52		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.49		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
0.48		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
0.45		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
0.45		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.44		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.42		-	SBS-9-3-4RM	12804	CL	crop field	EcE2

APPENDIX E

CONCENTRATION OF CADMIUM AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.32		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
1.14		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
1		-	SBS-3-3-5RM	12779	CL	crop field	RwB
0.89		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.88		-	SBS-4-3-5RM	12784	CL	hay field	XeB
0.86		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
0.83		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
0.77		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
0.74		U	SBS-5-3-5RM	12788	CL	hay field	RvB2
0.71		U	SBS-5-2-5RM	12787	CL	hay field	FcA
0.68		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.66		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
0.65		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
0.64		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.64		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.62		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.6		U	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.59		-	SBS-7-2-5RM	12794	CL	crop field	XfB
0.58		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.58		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.57		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.57		-	SBS-6-3-5RM	12792	CL	crop field	RwB
0.56		-	SBS-10-3-5RM	12807	ML	hay field	FdA
0.49		-	SBS-8-3-5RM	12799	CL	crop field	XfB
0.48		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
0.47		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
0.47		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.46		-	SBS-10-2-5RM	12806	CL	hay field	Ra
0.45		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.44		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.44		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.43		-	SBS-2-3-5RM	12775	CL	crop field	FdA
0.42		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.4		-	SBS-1-2-5RM	12770	CL	crop field	Ra
0.4		-	SBS-8-2-5RM	12798	CL	crop field	FcA
0.35		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.31		-	SBS-4-2-5RM	12783	CL	hay field	RvB2

APPENDIX E

CONCENTRATION OF CADMIUM AT 30-36 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.98		U	SBS-5-2-6RM	12787	CL	hay field	FcA
0.94		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.88		-	SBS-7-2-6RM	12794	CL	crop field	XfB
0.78		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
0.74		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
0.74		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.73		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.7		-	SBS-3-3-6RM	12779	CL	crop field	RwB
0.65		-	SBS-8-2-6RM	12798	CL	crop field	FcA
0.62		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.62		-	SBS-4-3-6RM	12784	CL	hay field	XeB
0.62		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.6		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.6		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.59		-	SBS-10-3-6RM	12807	CL	hay field	FdA
0.58		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.57		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.56		-	SBS-6-3-6RM	12792	CL	crop field	RwB
0.55		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.54		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.52		U	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.52		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.51		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.49		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.48		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.48		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.48		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.43		-	SBS-1-2-6RM	12770	CL	crop field	Ra
0.43		U	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.42		-	SBS-8-3-6RM	12799	CL	crop field	XfB
0.39		-	SBS-2-3-6RM	12775	CL	crop field	FdA
0.39		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.37		-	SBS-11-3-6RM	12811	C	crop field	EcE2
0.34		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.3		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.24		-	SBS-10-2-6RM	12806	CL	hay field	Ra

APPENDIX E

CONCENTRATION OF CALCIUM AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
21200		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
19000		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
7720		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
5240		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
3990		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
3590		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
3560		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
3450		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
3210		-	SBS-6-3-1RM	12792	ML	crop field	RwB
3140		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
3020		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
2990		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
2910		-	SBS-10-3-1RM	12807	ML	hay field	FdA
2670		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
2620		-	SBS-5-2-1RM	12787	ML	hay field	FcA
2480		-	SBS-8-3-1RM	12799	ML	crop field	XfB
2420		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
2310		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
2210		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
2010		-	SBS-8-2-1RM	12798	ML	crop field	FcA
1950		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
1890		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
1800		-	SBS-2-3-1RM	12775	ML	crop field	FdA
1680		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
1670		-	SBS-10-2-1RM	12806	ML	hay field	Ra
1620		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
1550		-	SBS-4-3-1RM	12784	ML	hay field	XeB
1470		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1410		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
1410		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
1360		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1260		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
1220		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
1180		-	SBS-7-2-1RM	12794	ML	crop field	XfB
1020		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
1000		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
976		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
969		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
854		-	SBS-3-1-1RM	1763A	ML	crop field	XfB

APPENDIX E

CONCENTRATION OF CALCIUM AT 12-18 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
172000		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
114000		-	SBS-8-3-3RM	12799	CL	crop field	XfB
88300		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
85600		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
74200		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
56400		-	SBS-1-2-3RM	12770	CL	crop field	Ra
7120		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
7020		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
6650		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
6180		-	SBS-6-3-3RM	12792	CL	crop field	RwB
5460		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
4330		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
4090		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
3800		-	SBS-8-2-3RM	12798	CL	crop field	FcA
3710		-	SBS-10-3-3RM	12807	ML	hay field	FdA
3640		-	SBS-3-3-3RM	12779	CL	crop field	RwB
3570		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
3490		-	SBS-7-2-3RM	12794	CL	crop field	XfB
3440		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
3350		-	SBS-10-2-3RM	12806	CL	hay field	Ra
3290		-	SBS-5-2-3RM	12787	ML	hay field	FcA
3240		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
3080		-	SBS-2-3-3RM	12775	CL	crop field	FdA
2950		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
2890		-	SBS-4-3-3RM	12784	CL	hay field	XeB
2840		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
2750		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
2620		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
2560		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
2460		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
2420		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
2390		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
1700		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
1580		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
1500		-	SBS-3-1-3RM	1763A	CL	crop field	XfB

APPENDIX E

CONCENTRATION OF CALCIUM AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
187000		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
127000		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
122000		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
112000		-	SBS-8-3-4RM	12799	CL	crop field	XfB
105000		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
102000		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
99900		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
85100		-	SBS-6-3-4RM	12792	CL	crop field	RwB
84900		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
79700		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
65700		-	SBS-1-2-4RM	12770	CL	crop field	Ra
36200		J	SBS-10-3-4RM-D	12807	ML	hay field	FdA
35900		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
13000		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
9830		J	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
9690		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
5060		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
4920		J	SBS-10-3-4RM	12807	ML	hay field	FdA
4680		J	SBS-4-1-4RM	1764A	CL	hay field	XeB
4660		-	SBS-8-2-4RM	12798	CL	crop field	FcA
4540		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
4520		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
3930		-	SBS-2-3-4RM	12775	CL	crop field	FdA
3650		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
3560		-	SBS-5-2-4RM	12787	CL	hay field	FcA
3510		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
3470		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
3460		-	SBS-4-3-4RM	12784	CL	hay field	XeB
3310		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
3310		-	SBS-10-2-4RM	12806	CL	hay field	Ra
3300		-	SBS-3-3-4RM	12779	CL	crop field	RwB
3170		-	SBS-7-2-4RM	12794	CL	crop field	XfB
3130		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
3100		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
3090		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
3060		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
2970		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
2760		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
2730		-	SBS-6-1-4RM	1829A	ML	crop field	XfB

APPENDIX E

CONCENTRATION OF CALCIUM AT 24-30 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
167000		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
157000		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
146000		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
132000		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
131000		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
130000		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
123000		-	SBS-8-3-5RM	12799	CL	crop field	XfB
119000		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
114000		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
113000		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
109000		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
106000		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
102000		-	SBS-1-2-5RM	12770	CL	crop field	Ra
100000		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
98500		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
58500		-	SBS-10-3-5RM	12807	ML	hay field	FdA
42100		-	SBS-6-3-5RM	12792	CL	crop field	RwB
39200		-	SBS-10-2-5RM	12806	CL	hay field	Ra
19200		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
15800		-	SBS-2-3-5RM	12775	CL	crop field	FdA
8640		-	SBS-3-3-5RM	12779	CL	crop field	RwB
8060		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
7380		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
5470		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
5450		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
5430		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
4840		-	SBS-8-2-5RM	12798	CL	crop field	FcA
4470		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
4220		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
4110		-	SBS-5-2-5RM	12787	CL	hay field	FcA
3880		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
3740		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
3340		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
3330		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
3120		-	SBS-4-3-5RM	12784	CL	hay field	XeB
3030		-	SBS-7-2-5RM	12794	CL	crop field	XfB
2640		-	SBS-8-1-5RM	1834A	CL	crop field	FcA

APPENDIX E

CONCENTRATION OF CALCIUM AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
205000		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
198000		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
163000		-	SBS-11-3-6RM	12811	C	crop field	EcE2
134000		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
132000		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
123000		-	SBS-8-3-6RM	12799	CL	crop field	XfB
121000		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
117000		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
110000		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
109000		-	SBS-10-3-6RM	12807	CL	hay field	FdA
108000		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
106000		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
105000		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
103000		-	SBS-10-2-6RM	12806	CL	hay field	Ra
99600		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
97500		-	SBS-6-3-6RM	12792	CL	crop field	RwB
97200		-	SBS-1-2-6RM	12770	CL	crop field	Ra
88200		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
82400		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
78700		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
75100		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/Wy
61700		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
61400		-	SBS-8-2-6RM	12798	CL	crop field	FcA
58300		-	SBS-2-3-6RM	12775	CL	crop field	FdA
53300		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
46800		-	SBS-3-3-6RM	12779	CL	crop field	RwB
45800		J	SBS-6-1-6RM	1829A	CL	crop field	XfB
33800		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
21300		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
20000		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
16600		J	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
6390		-	SBS-7-2-6RM	12794	CL	crop field	XfB
4900		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
4540		-	SBS-5-2-6RM	12787	CL	hay field	FcA
3720		-	SBS-4-3-6RM	12784	CL	hay field	XeB
3650		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF CHROMIUM AT 0-6 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
22.8		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
20.8		J	SBS-5-2-1RM	12787	ML	hay field	FcA
20.7		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
20.3		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
19.4		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
19.1		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
18.1		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
18		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
17.8		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
16.2		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
15.8		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
15.7		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
15.7		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
15.5		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
15.2		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
14.8		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
14.4		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
14.4		-	SBS-6-3-1RM	12792	ML	crop field	RwB
14.3		-	SBS-8-3-1RM	12799	ML	crop field	XfB
13.6		J	SBS-5-3-1RM	12788	ML	hay field	RvB2
13.5		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
13.4		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
13.2		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
12.4		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
12.4		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
12.2		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
12		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
11.2		-	SBS-10-2-1RM	12806	ML	hay field	Ra
11.2		-	SBS-8-2-1RM	12798	ML	crop field	FcA
10.9		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
10.7		-	SBS-10-3-1RM	12807	ML	hay field	FdA
10.4		-	SBS-2-3-1RM	12775	ML	crop field	FdA
10.1		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
10		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
9.69		-	SBS-7-2-1RM	12794	ML	crop field	XfB
9.5		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
9.34		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
9.22		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
9.13		-	SBS-4-3-1RM	12784	ML	hay field	XeB

APPENDIX E

CONCENTRATION OF CHROMIUM AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
26.2		J	SBS-5-3-3RM	12788	CL	hay field	RvB2
24.3		J	SBS-5-2-3RM	12787	ML	hay field	FcA
24		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
23.4		-	SBS-3-3-3RM	12779	CL	crop field	RwB
23.4		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
23.3		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
23.2		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
22.7		-	SBS-7-2-3RM	12794	CL	crop field	XfB
22.6		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
22.2		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
22.2		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
22		-	SBS-4-3-3RM	12784	CL	hay field	XeB
20.7		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
20.5		-	SBS-10-2-3RM	12806	CL	hay field	Ra
20.4		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
20.4		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
19.8		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
19.8		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
18.5		-	SBS-1-2-3RM	12770	CL	crop field	Ra
18.2		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
18		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
18		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
17.5		J	SBS-5-1-3RM	1826A	CL	hay field	XeB
17.4		-	SBS-6-3-3RM	12792	CL	crop field	RwB
17.2		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
17		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
16.3		-	SBS-8-2-3RM	12798	CL	crop field	FcA
16.2		-	SBS-10-3-3RM	12807	ML	hay field	FdA
15.7		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
15.3		-	SBS-2-3-3RM	12775	CL	crop field	FdA
14.9		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
14.3		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
13.5		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
13.3		-	SBS-8-3-3RM	12799	CL	crop field	XfB
12.8		-	SBS-9-2-3RM	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF CHROMIUM AT 18-24 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
27.3		J	SBS-5-2-4RM	12787	CL	hay field	FcA
25.9		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
25.6		-	SBS-3-3-4RM	12779	CL	crop field	RwB
24.3		J	SBS-5-3-4RM	12788	CL	hay field	RvB2
23.4		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
22.9		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
22.8		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
22.6		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
21.6		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
21.6		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
20.8		J	SBS-5-1-4RM	1826A	CL	hay field	XeB
19.9		-	SBS-10-2-4RM	12806	CL	hay field	Ra
19.4		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
19.2		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
19.2		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
19.1		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
19		-	SBS-4-3-4RM	12784	CL	hay field	XeB
18.6		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
18.6		-	SBS-7-2-4RM	12794	CL	crop field	XfB
18.5		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
18.5		-	SBS-8-2-4RM	12798	CL	crop field	FcA
18.3		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
18.3		-	SBS-6-3-4RM	12792	CL	crop field	RwB
17.9		-	SBS-2-3-4RM	12775	CL	crop field	FdA
17.8		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
17.5		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
16.8		-	SBS-1-2-4RM	12770	CL	crop field	Ra
16.7		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
16		-	SBS-10-3-4RM	12807	ML	hay field	FdA
15.9		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
15.7		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
15.7		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
14.1		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
14.1		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
13.7		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
13		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
11.6		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
11.1		-	SBS-8-3-4RM	12799	CL	crop field	XfB
11		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA

APPENDIX E

CONCENTRATION OF CHROMIUM AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
26.3		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
24.5		-	SBS-3-3-5RM	12779	CL	crop field	RwB
24.3		J	SBS-5-3-5RM	12788	CL	hay field	RvB2
24.1		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
24		J	SBS-5-2-5RM	12787	CL	hay field	FcA
23.4		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
22.1		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
20.7		-	SBS-8-2-5RM	12798	CL	crop field	FcA
20		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
18.9		-	SBS-4-3-5RM	12784	CL	hay field	XeB
18.6		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
18		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
17.8		-	SBS-6-3-5RM	12792	CL	crop field	RwB
17.4		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
17.2		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
16.9		-	SBS-7-2-5RM	12794	CL	crop field	XfB
16.8		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
16.7		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
16.6		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
16.2		-	SBS-2-3-5RM	12775	CL	crop field	FdA
15		-	SBS-10-2-5RM	12806	CL	hay field	Ra
15		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
14.8		J	SBS-5-1-5RM	1826A	CL	hay field	XeB
14.4		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
14		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
13.6		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
13.3		-	SBS-1-2-5RM	12770	CL	crop field	Ra
12.5		-	SBS-10-3-5RM	12807	ML	hay field	FdA
12.4		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
12.3		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
11.9		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
11.8		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
11.6		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
11.2		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
10.3		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
10.2		-	SBS-8-3-5RM	12799	CL	crop field	XfB
10.1		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2

APPENDIX E

3502

CONCENTRATION OF CHROMIUM AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
24.4		J	SBS-5-2-6RM	12787	CL	hay field	FcA
21.4		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
21.1		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
21.1		-	SBS-3-3-6RM	12779	CL	crop field	RwB
20.2		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
19.6		J	SBS-5-3-6RM	12788	CL	hay field	RvB2
19.3		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
18.8		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
18.1		-	SBS-4-3-6RM	12784	CL	hay field	XeB
18.1		-	SBS-6-3-6RM	12792	CL	crop field	RwB
17.9		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
17.8		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
17.7		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
17.7		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
16.3		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
16.2		-	SBS-7-2-6RM	12794	CL	crop field	XfB
15.2		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
14.3		-	SBS-1-2-6RM	12770	CL	crop field	Ra
14		-	SBS-8-2-6RM	12798	CL	crop field	FcA
13.9		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
13.9		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
13.8		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
13.3		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
12.8		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
12.4		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
11.8		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
11.7		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
11.6		-	SBS-10-3-6RM	12807	CL	hay field	FdA
11.4		J	SBS-5-1-6RM	1826A	CL	hay field	XeB
11.3		-	SBS-10-2-6RM	12806	CL	hay field	Ra
11.1		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
10.8		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
10.6		-	SBS-8-3-6RM	12799	CL	crop field	XfB
10.1		-	SBS-2-3-6RM	12775	CL	crop field	FdA
9.63		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
8.89		-	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX E

CONCENTRATION OF COBALT AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
23.8		J	SBS-8-1-1RM	1834A	ML	crop field	FcA
22.7		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
21		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
20.2		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
18.8		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
17.4		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
15.5		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
15.1		-	SBS-5-2-1RM	12787	ML	hay field	FcA
14.4		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
14.4		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
14.2		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
14.1		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
14.1		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
13.7		-	SBS-10-3-1RM	12807	ML	hay field	FdA
13.4		J	SBS-8-3-1RM	12799	ML	crop field	XfB
13.2		-	SBS-6-3-1RM	12792	ML	crop field	RwB
13.2		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
12.5		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
12.5		-	SBS-5-1-1RM	1826A	ML	hay field	XeB
12.2		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
12.2		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
12		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
11.3		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
11.2		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
10.7		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
10.6		-	SBS-10-2-1RM	12806	ML	hay field	Ra
10.6		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
10.5		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
10.3		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
10.1		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
10.1		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
9.8		-	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
8.68		-	SBS-4-3-1RM	12784	ML	hay field	XeB
8.07		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
7.8		-	SBS-7-2-1RM	12794	ML	crop field	XfB
7.43		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
6.67		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
5.98		-	SBS-2-3-1RM	12775	ML	crop field	FdA
5.33		J	SBS-8-2-1RM	12798	ML	crop field	FcA

APPENDIX E

3502

CONCENTRATION OF COBALT AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
73.1		J	SBS-8-2-3RM	12798	CL	crop field	FcA
62.4		J	SBS-8-1-3RM	1834A	CL	crop field	FcA
44.9		-	SBS-7-2-3RM	12794	CL	crop field	XfB
27.9		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
27		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
21.3		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
20.1		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
17.1		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
16.1		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
15.2		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
13.9		-	SBS-5-2-3RM	12787	ML	hay field	FcA
12.2		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
11.9		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
11.1		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
10.1		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
10		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
9.72		-	SBS-6-3-3RM	12792	CL	crop field	RwB
9.67		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
9.05		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
9.02		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
8.97		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
8.96		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
8.36		-	SBS-1-2-3RM	12770	CL	crop field	Ra
7.93		-	SBS-10-3-3RM	12807	ML	hay field	FdA
7.76		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
7.62		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
7.15		J	SBS-8-3-3RM	12799	CL	crop field	XfB
6.98		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
6.72		-	SBS-10-2-3RM	12806	CL	hay field	Ra
5.95		-	SBS-3-3-3RM	12779	CL	crop field	RwB
5.68		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
5.5		-	SBS-4-3-3RM	12784	CL	hay field	XeB
5.04		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
5		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
4.5		-	SBS-2-3-3RM	12775	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF COBALT AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
29.2		J	SBS-8-1-4RM	1834A	CL	crop field	FcA
20.7		-	SBS-3-3-4RM	12779	CL	crop field	RwB
18.6		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
17.7		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
16.5		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
15.8		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
15.5		-	SBS-5-2-4RM	12787	CL	hay field	FcA
15.4		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
14.2		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
14.2		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
13.7		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
13.5		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
13.4		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
12.4		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
11.4		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
10.8		-	SBS-10-3-4RM	12807	ML	hay field	FdA
10.8		J	SBS-8-2-4RM	12798	CL	crop field	FcA
10.4		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
10.4		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
10.2		-	SBS-2-3-4RM	12775	CL	crop field	FdA
9.96		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
9.52		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
9.48		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
8.82		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
8.73		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
8.66		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
8.52		-	SBS-6-3-4RM	12792	CL	crop field	RwB
8.45		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
7.93		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
7.66		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
7.53		J	SBS-8-3-4RM	12799	CL	crop field	XfB
7.38		-	SBS-1-2-4RM	12770	CL	crop field	Ra
7.15		-	SBS-10-2-4RM	12806	CL	hay field	Ra
7.09		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
6.97		-	SBS-4-3-4RM	12784	CL	hay field	XeB
6.16		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
5.4		-	SBS-7-2-4RM	12794	CL	crop field	XfB
5.35		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
4.71		-	SBS-10-1-4RM	1873A	CL	hay field	FdA

APPENDIX E

CONCENTRATION OF COBALT AT 24-30 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
14.5		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
14.2		-	SBS-3-3-5RM	12779	CL	crop field	RwB
14.1		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
12.8		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
12.6		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
12.4		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
11.9		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
11.8		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
11.5		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
11.1		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
11		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
11		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
10.4		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
9.69		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
9.57		-	SBS-10-3-5RM	12807	ML	hay field	FdA
9.39		J	SBS-8-1-5RM	1834A	CL	crop field	FcA
9.05		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
8.94		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
8.91		-	SBS-7-2-5RM	12794	CL	crop field	XfB
8.63		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
8.35		-	SBS-5-2-5RM	12787	CL	hay field	FcA
8.02		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
7.96		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
7.85		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
7.82		J	SBS-8-3-5RM	12799	CL	crop field	XfB
7.8		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
7.79		-	SBS-1-2-5RM	12770	CL	crop field	Ra
7.68		-	SBS-10-2-5RM	12806	CL	hay field	Ra
7.33		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
7.13		-	SBS-6-3-5RM	12792	CL	crop field	RwB
6.85		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
6.37		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
6.24		J	SBS-8-3-5RM-D	12799	CL	crop field	XfB
6.13		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
5.52		J	SBS-8-2-5RM	12798	CL	crop field	FcA
4.84		-	SBS-4-3-5RM	12784	CL	hay field	XeB
4.49		-	SBS-2-3-5RM	12775	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF COBALT AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
17.1		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
16.7		-	SBS-5-2-6RM	12787	CL	hay field	FcA
16.3		-	SBS-7-2-6RM	12794	CL	crop field	XfB
14.9		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
14.5		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
13.9		-	SBS-3-3-6RM	12779	CL	crop field	RwB
13.8		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
12.2		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
11.9		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
11		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
10.7		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
10.1		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
9.86		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
9.72		-	SBS-1-2-6RM	12770	CL	crop field	Ra
8.85		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
8.21		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
7.86		J	SBS-8-2-6RM	12798	CL	crop field	FcA
7.79		-	SBS-10-3-6RM	12807	CL	hay field	FdA
7.75		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
7.67		-	SBS-4-3-6RM	12784	CL	hay field	XeB
7.64		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
7.56		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
7.16		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
7.1		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
7.02		-	SBS-6-3-6RM	12792	CL	crop field	RwB
6.83		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
6.78		J	SBS-8-1-6RM	1834A	CL	crop field	FcA
6.7		J	SBS-8-3-6RM	12799	CL	crop field	XfB
6.69		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
6.57		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
6.46		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
5.78		-	SBS-10-2-6RM	12806	CL	hay field	Ra
5.72		-	SBS-2-3-6RM	12775	CL	crop field	FdA
5.62		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
5.4		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
5		-	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX E

CONCENTRATION OF COPPER AT 0-6 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
24		-	SBS-6-3-1RM	12792	ML	crop field	RwB
23.8		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
19.9		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
18		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
17.7		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
17.5		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
17.5		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
16.6		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
16.3		-	SBS-8-3-1RM	12799	ML	crop field	XfB
16.2		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
15.8		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
15.7		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
15.4		J	SBS-5-3-1RM	12788	ML	hay field	RvB2
15.3		-	SBS-10-3-1RM	12807	ML	hay field	FdA
15.1		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
14.9		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
14.3		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
13.4		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
12.8		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
12.7		J	SBS-5-2-1RM	12787	ML	hay field	FcA
11.8		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
11.7		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
11		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
10.4		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
10.4		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
10.3		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
10.2		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
10		-	SBS-10-2-1RM	12806	ML	hay field	Ra
9.62		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
9.29		-	SBS-8-2-1RM	12798	ML	crop field	FcA
9.13		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
8.97		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
8.56		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
8.42		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
8.08		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
7.84		-	SBS-2-3-1RM	12775	ML	crop field	FdA
7.76		-	SBS-7-2-1RM	12794	ML	crop field	XfB
7.46		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
7.08		-	SBS-4-3-1RM	12784	ML	hay field	XeB

APPENDIX E

CONCENTRATION OF COPPER AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
35.5		-	SBS-6-3-3RM	12792	CL	crop field	RwB
28.7		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
28.2		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
27.2		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
26.5		-	SBS-8-2-3RM	12798	CL	crop field	FcA
25.7		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
25.5		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
25.1		-	SBS-7-2-3RM	12794	CL	crop field	XfB
24		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
23.4		-	SBS-10-2-3RM	12806	CL	hay field	Ra
23.2		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
23.2		-	SBS-10-3-3RM	12807	ML	hay field	FdA
22.4		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
22.2		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
22.2		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
22.1		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
21.6		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
20.9		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
20.9		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
19.9		J	SBS-5-3-3RM	12788	CL	hay field	RvB2
19.2		-	SBS-4-3-3RM	12784	CL	hay field	XeB
19.1		-	SBS-1-2-3RM	12770	CL	crop field	Ra
18.7		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
18.2		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
17.8		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
17.7		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
17.1		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
16.6		-	SBS-3-3-3RM	12779	CL	crop field	RwB
16.4		-	SBS-8-3-3RM	12799	CL	crop field	XfB
16.4		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
14.9		-	SBS-2-3-3RM	12775	CL	crop field	FdA
14.7		J	SBS-5-2-3RM	12787	ML	hay field	FcA
14.7		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
13.4		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
9.6		J	SBS-5-1-3RM	1826A	CL	hay field	XeB

APPENDIX E

3502

CONCENTRATION OF COPPER AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
41.8		-	SBS-6-3-4RM	12792	CL	crop field	RwB
38.9		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
30.2		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
28.7		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
27		-	SBS-8-2-4RM	12798	CL	crop field	FcA
26.9		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
24.8		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
24.7		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
24.4		-	SBS-3-3-4RM	12779	CL	crop field	RwB
24.1		-	SBS-10-3-4RM	12807	ML	hay field	FdA
24.1		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
23.9		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
23.5		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
22.8		-	SBS-10-2-4RM	12806	CL	hay field	Ra
22.8		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
22.6		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
22.6		-	SBS-4-3-4RM	12784	CL	hay field	XeB
21.6		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
21.6		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
21.4		J	SBS-5-1-4RM	1826A	CL	hay field	XeB
21		-	SBS-2-3-4RM	12775	CL	crop field	FdA
20.9		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
20.7		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
20		J	SBS-5-3-4RM	12788	CL	hay field	RvB2
19.6		-	SBS-1-2-4RM	12770	CL	crop field	Ra
19.5		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
19.3		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
19.2		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
18.9		J	SBS-5-2-4RM	12787	CL	hay field	FcA
18.9		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
18.8		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
18.8		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
18.3		-	SBS-7-2-4RM	12794	CL	crop field	XfB
18.2		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
18.2		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
17.8		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
16.7		-	SBS-8-3-4RM	12799	CL	crop field	XfB
13.2		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
13.2		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF COPPER AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
42.8		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
32.8		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
30.6		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
28.4		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
27.3		-	SBS-6-3-5RM	12792	CL	crop field	RwB
26.4		-	SBS-8-2-5RM	12798	CL	crop field	FcA
25.7		-	SBS-3-3-5RM	12779	CL	crop field	RwB
25.4		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
24.9		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
24.5		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
24.4		J	SBS-5-3-5RM	12788	CL	hay field	RvB2
21.7		-	SBS-10-3-5RM	12807	ML	hay field	FdA
21.6		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
21		-	SBS-4-3-5RM	12784	CL	hay field	XeB
20.8		-	SBS-10-2-5RM	12806	CL	hay field	Ra
20.7		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
20.2		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
20.2		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
20.1		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
20		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
19.9		-	SBS-7-2-5RM	12794	CL	crop field	XfB
19.2		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
18.4		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
18.3		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
17.9		-	SBS-2-3-5RM	12775	CL	crop field	FdA
17.7		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
17.6		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
17.5		J	SBS-5-1-5RM	1826A	CL	hay field	XeB
17.2		J	SBS-5-2-5RM	12787	CL	hay field	FcA
17		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
16.9		-	SBS-1-2-5RM	12770	CL	crop field	Ra
16.2		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
15.9		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
15.5		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
15.5		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
15.2		-	SBS-8-3-5RM	12799	CL	crop field	XfB
13.2		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB

APPENDIX E

CONCENTRATION OF COPPER AT 30-36 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
41		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
40.4		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
39.9		-	SBS-6-3-6RM	12792	CL	crop field	RwB
35		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
27		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
26.5		J	SBS-5-2-6RM	12787	CL	hay field	FcA
26.5		-	SBS-7-2-6RM	12794	CL	crop field	XfB
26.2		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
20.9		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
20.4		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
20.3		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
20.1		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
20		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
19.9		-	SBS-3-3-6RM	12779	CL	crop field	RwB
19.4		J	SBS-5-3-6RM	12788	CL	hay field	RvB2
19.2		-	SBS-8-2-6RM	12798	CL	crop field	FcA
19.1		-	SBS-4-3-6RM	12784	CL	hay field	XeB
19		-	SBS-1-2-6RM	12770	CL	crop field	Ra
18.9		-	SBS-10-3-6RM	12807	CL	hay field	FdA
18.4		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
17.7		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
17.6		-	SBS-2-3-6RM	12775	CL	crop field	FdA
17.4		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
17.4		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
17.3		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
17.1		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
17.1		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
16.8		J	SBS-5-1-6RM	1826A	CL	hay field	XeB
16.6		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
16.6		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
16.5		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
15.5		-	SBS-10-2-6RM	12806	CL	hay field	Ra
14.1		-	SBS-8-3-6RM	12799	CL	crop field	XfB
13.8		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
12.9		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
12.8		-	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX E

CONCENTRATION OF IRON AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
36000		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
33300		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
28100		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
27900		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
26900		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
26300		-	SBS-5-2-1RM	12787	ML	hay field	FcA
26300		-	SBS-6-3-1RM	12792	ML	crop field	RwB
25900		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
25200		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
25100		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
24700		J	SBS-4-2-1RM	12783	ML	hay field	RvB2
24700		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
24500		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
23900		-	SBS-8-3-1RM	12799	ML	crop field	XfB
23800		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
23000		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
23000		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
22100		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
19400		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
19200		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
18500		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
17900		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
17500		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
17200		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
17100		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
17000		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
16900		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
16900		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
16700		-	SBS-10-3-1RM	12807	ML	hay field	FdA
16600		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
15900		-	SBS-10-2-1RM	12806	ML	hay field	Ra
15600		-	SBS-8-2-1RM	12798	ML	crop field	FcA
14900		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
14500		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
13800		J	SBS-4-1-1RM	1764A	ML	hay field	XeB
13600		-	SBS-7-2-1RM	12794	ML	crop field	XfB
13500		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
13400		-	SBS-2-3-1RM	12775	ML	crop field	FdA
12400		J	SBS-4-3-1RM	12784	ML	hay field	XeB

APPENDIX E

CONCENTRATION OF IRON AT 12-18 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
41500		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
37100		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
36200		-	SBS-3-3-3RM	12779	CL	crop field	RwB
35800		-	SBS-7-2-3RM	12794	CL	crop field	XfB
35400		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
35100		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
34800		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
33900		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
33700		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
33300		-	SBS-6-3-3RM	12792	CL	crop field	RwB
33300		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
32500		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
32500		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
32400		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
32300		-	SBS-10-2-3RM	12806	CL	hay field	Ra
32100		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
31100		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
30800		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
30400		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
30400		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
30200		J	SBS-4-1-3RM	1764A	CL	hay field	XeB
29900		J	SBS-4-3-3RM	12784	CL	hay field	XeB
27700		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
27400		-	SBS-10-3-3RM	12807	ML	hay field	FdA
26600		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
25900		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
25900		-	SBS-5-2-3RM	12787	ML	hay field	FcA
25700		-	SBS-2-3-3RM	12775	CL	crop field	FdA
25300		J	SBS-4-2-3RM	12783	CL	hay field	RvB2
25200		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
24600		-	SBS-1-2-3RM	12770	CL	crop field	Ra
24400		-	SBS-8-2-3RM	12798	CL	crop field	FcA
22300		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
18100		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
17600		-	SBS-8-3-3RM	12799	CL	crop field	XfB

APPENDIX E

CONCENTRATION OF IRON AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
40200		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
39600		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
35900		-	SBS-3-3-4RM	12779	CL	crop field	RwB
35700		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
34800		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
34400		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
34300		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
33700		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
33100		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
32700		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
32600		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
32300		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
31900		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
31600		-	SBS-10-2-4RM	12806	CL	hay field	Ra
30900		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
30300		J	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
29400		-	SBS-5-2-4RM	12787	CL	hay field	FcA
29100		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
28600		J	SBS-4-1-4RM	1764A	CL	hay field	XeB
28100		-	SBS-10-3-4RM	12807	ML	hay field	FdA
27900		-	SBS-8-2-4RM	12798	CL	crop field	FcA
27400		J	SBS-4-3-4RM	12784	CL	hay field	XeB
27300		-	SBS-7-2-4RM	12794	CL	crop field	XfB
27200		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
26700		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
26500		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
25800		-	SBS-2-3-4RM	12775	CL	crop field	FdA
24200		-	SBS-1-2-4RM	12770	CL	crop field	Ra
23300		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
23000		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
22800		J	SBS-4-2-4RM	12783	CL	hay field	RvB2
21600		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
21600		-	SBS-6-3-4RM	12792	CL	crop field	RwB
20800		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
19600		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
18800		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
17400		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
15300		-	SBS-8-3-4RM	12799	CL	crop field	XfB
14000		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2

APPENDIX E

3502

CONCENTRATION OF IRON AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
43400		-	SBS-3-3-5RM	12779	CL	crop field	RwB
38000		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
34900		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
34300		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
33500		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
33200		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
33100		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
31800		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
31500		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
30500		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
30400		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
29900		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
27700		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
27300		-	SBS-7-2-5RM	12794	CL	crop field	XfB
27100		-	SBS-5-2-5RM	12787	CL	hay field	FcA
27100		-	SBS-8-2-5RM	12798	CL	crop field	FcA
27000		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
26700		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
26300		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
26000		J	SBS-4-3-5RM	12784	CL	hay field	XeB
24800		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
24800		-	SBS-6-3-5RM	12792	CL	crop field	RwB
23400		-	SBS-10-2-5RM	12806	CL	hay field	Ra
23300		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
22700		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
21100		-	SBS-10-3-5RM	12807	ML	hay field	FdA
21000		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
20000		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
19600		J	SBS-4-2-5RM	12783	CL	hay field	RvB2
17900		-	SBS-1-2-5RM	12770	CL	crop field	Ra
17200		J	SBS-4-1-5RM	1764A	CL	hay field	XeB
16600		-	SBS-2-3-5RM	12775	CL	crop field	FdA
16000		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
16000		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
14200		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
14000		-	SBS-8-3-5RM	12799	CL	crop field	XfB
13100		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2

APPENDIX E

CONCENTRATION OF IRON AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
39300		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
38300		-	SBS-3-3-6RM	12779	CL	crop field	RwB
35400		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
32800		-	SBS-5-2-6RM	12787	CL	hay field	FcA
32600		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
32000		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
31400		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
30600		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
29700		-	SBS-7-2-6RM	12794	CL	crop field	XfB
27900		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
27800		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
27000		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
26000		J	SBS-4-3-6RM	12784	CL	hay field	XeB
25600		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
24200		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
24000		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
23600		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
22000		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
20100		-	SBS-10-3-6RM	12807	CL	hay field	FdA
19400		-	SBS-1-2-6RM	12770	CL	crop field	Ra
19000		J	SBS-4-2-6RM	12783	CL	hay field	RvB2
18800		-	SBS-6-3-6RM	12792	CL	crop field	RwB
18700		-	SBS-8-2-6RM	12798	CL	crop field	FcA
18600		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
18200		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
17800		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
16800		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
16200		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
16000		J	SBS-4-1-6RM	1764A	CL	hay field	XeB
15600		-	SBS-10-2-6RM	12806	CL	hay field	Ra
15200		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
15100		-	SBS-11-3-6RM	12811	C	crop field	EcE2
14600		-	SBS-8-3-6RM	12799	CL	crop field	XfB
14400		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
13700		-	SBS-2-3-6RM	12775	CL	crop field	FdA
12800		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2

APPENDIX E

3502

CONCENTRATION OF LEAD AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
36.4		-	SBS-10-3-1RM	12807	ML	hay field	FdA
35.6		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
32.1		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
32.1		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
30.8		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
29.5		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
29.4		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
29.3		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
29.2		-	SBS-5-2-1RM	12787	ML	hay field	FcA
28.8		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
28.6		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
28		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
27.3		-	SBS-10-2-1RM	12806	ML	hay field	Ra
27.1		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
27		-	SBS-8-3-1RM	12799	ML	crop field	XfB
26.8		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
26.1		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
26		-	SBS-2-3-1RM	12775	ML	crop field	FdA
26		-	SBS-5-1-1RM	1826A	ML	hay field	XeB
25.8		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
25.8		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
25.6		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
25.6		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
25.3		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
25.3		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
24.8		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
24.3		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
23.9		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
23.6		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
23.5		-	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
22.4		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
22.3		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
21.9		-	SBS-7-2-1RM	12794	ML	crop field	XfB
21.6		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
21.3		-	SBS-6-3-1RM	12792	ML	crop field	RwB
20.6		-	SBS-4-3-1RM	12784	ML	hay field	XeB
20.2		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
19.7		-	SBS-8-2-1RM	12798	ML	crop field	FcA
19.6		-	SBS-6-2-1RM	12791	ML	crop field	RwB2

APPENDIX E

CONCENTRATION OF LEAD AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
42		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
37.7		-	SBS-8-2-3RM	12798	CL	crop field	FcA
36.9		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
34.7		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
32.7		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
32.4		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
31.4		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
29.2		-	SBS-7-2-3RM	12794	CL	crop field	XfB
28.6		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
27.9		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
26.3		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
25.4		-	SBS-2-3-3RM	12775	CL	crop field	FdA
25.4		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
25.3		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
24.7		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
24.7		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
24.2		-	SBS-5-2-3RM	12787	ML	hay field	FcA
23.9		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
23.8		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
23.5		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
22.5		-	SBS-10-3-3RM	12807	ML	hay field	FdA
22.3		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
21.9		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
21.8		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
21.7		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
21.3		-	SBS-4-3-3RM	12784	CL	hay field	XeB
20.8		-	SBS-10-2-3RM	12806	CL	hay field	Ra
20.1		-	SBS-3-3-3RM	12779	CL	crop field	RwB
19.8		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
17.6		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
15.6		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
15.2		-	SBS-1-2-3RM	12770	CL	crop field	Ra
14.9		-	SBS-8-3-3RM	12799	CL	crop field	XfB
14		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
13.4		-	SBS-6-3-3RM	12792	CL	crop field	RwB

APPENDIX E

CONCENTRATION OF LEAD AT 18-24 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
33.2		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
31.7		-	SBS-3-3-4RM	12779	CL	crop field	RwB
29.2		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
27.6		-	SBS-7-2-4RM	12794	CL	crop field	XfB
27.4		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
26.3		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
26.1		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
25.5		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
25.2		-	SBS-8-2-4RM	12798	CL	crop field	FcA
24.7		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
24.6		-	SBS-10-2-4RM	12806	CL	hay field	Ra
24.6		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
23.8		-	SBS-6-3-4RM	12792	CL	crop field	RwB
23.4		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
23.3		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
23.2		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
23.1		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
22.6		-	SBS-10-3-4RM	12807	ML	hay field	FdA
22.3		-	SBS-2-3-4RM	12775	CL	crop field	FdA
22		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
21.4		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
21.4		-	SBS-4-3-4RM	12784	CL	hay field	XeB
21.3		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
21.3		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
19.9		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
19.6		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
19.4		-	SBS-5-2-4RM	12787	CL	hay field	FcA
19.3		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
18.4		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
16.7		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
15.5		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
15.1		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
14.3		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
14.1		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
13.8		-	SBS-1-2-4RM	12770	CL	crop field	Ra
13.4		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
12.1		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
11.8		-	SBS-8-3-4RM	12799	CL	crop field	XfB
11.5		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF LEAD AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
26.2		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
24.7		-	SBS-3-3-5RM	12779	CL	crop field	RwB
24.4		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
23.3		-	SBS-7-2-5RM	12794	CL	crop field	XfB
23.2		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
23		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
22.9		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
22.7		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
22.4		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
22.2		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
20.4		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
19.1		-	SBS-8-2-5RM	12798	CL	crop field	FcA
18.9		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
18.6		-	SBS-6-3-5RM	12792	CL	crop field	RwB
18.4		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
18.2		-	SBS-4-3-5RM	12784	CL	hay field	XeB
18.2		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
18		-	SBS-5-2-5RM	12787	CL	hay field	FcA
17.5		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
16.7		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
16.4		-	SBS-10-3-5RM	12807	ML	hay field	FdA
16.1		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
15.9		-	SBS-10-2-5RM	12806	CL	hay field	Ra
14.5		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
14.5		-	SBS-2-3-5RM	12775	CL	crop field	FdA
14.5		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
13.9		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
13.9		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
13.1		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
13		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
13		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
11.4		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
11.2		-	SBS-1-2-5RM	12770	CL	crop field	Ra
11.2		-	SBS-8-3-5RM	12799	CL	crop field	XfB
11		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
10.3		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
9.33		-	SBS-4-2-5RM	12783	CL	hay field	RvB2

APPENDIX E

CONCENTRATION OF LEAD AT 30-36 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
27.2		-	SBS-7-2-6RM	12794	CL	crop field	XfB
25		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
24.5		-	SBS-6-3-6RM	12792	CL	crop field	RwB
23.6		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
23.4		-	SBS-5-2-6RM	12787	CL	hay field	FcA
21.6		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
21.3		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
19.4		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
19.3		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
19.2		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
19.1		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
18.7		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
18.4		-	SBS-3-3-6RM	12779	CL	crop field	RwB
18.3		-	SBS-8-2-6RM	12798	CL	crop field	FcA
17.4		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
17.2		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
16.7		-	SBS-4-3-6RM	12784	CL	hay field	XeB
16.7		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
16.5		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
15.5		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
13.2		-	SBS-10-3-6RM	12807	CL	hay field	FdA
13.1		-	SBS-8-3-6RM	12799	CL	crop field	XfB
12.7		-	SBS-1-2-6RM	12770	CL	crop field	Ra
12.6		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
12.2		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
12.1		-	SBS-2-3-6RM	12775	CL	crop field	FdA
12		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
11.2		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
11.1		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
10.9		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
10.7		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
10.3		-	SBS-10-2-6RM	12806	CL	hay field	Ra
10		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
9.9		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
9.66		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
8.9		-	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX E

CONCENTRATION OF MAGNESIUM AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
5520		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
4970		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
4350		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
4230		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
3330		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
3230		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
3200		-	SBS-6-3-1RM	12792	ML	crop field	RwB
2930		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
2630		-	SBS-8-3-1RM	12799	ML	crop field	XfB
2610		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
2550		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
2510		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
2360		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
2360		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
2300		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
2280		-	SBS-5-2-1RM	12787	ML	hay field	FcA
2120		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1950		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
1800		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
1760		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
1740	J	J	SBS-7-1-1RM	1832A	ML	crop field	FdA
1720		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
1700		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
1650	J	J	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
1630		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1580		-	SBS-8-2-1RM	12798	ML	crop field	FcA
1560		-	SBS-10-3-1RM	12807	ML	hay field	FdA
1560		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
1550	J	J	SBS-7-3-1RM	12795	ML	crop field	MsD2
1540		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1530		-	SBS-10-2-1RM	12806	ML	hay field	Ra
1340	J	J	SBS-7-2-1RM	12794	ML	crop field	XfB
1330		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
1300		-	SBS-2-3-1RM	12775	ML	crop field	FdA
1250		-	SBS-4-3-1RM	12784	ML	hay field	XeB
1200		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
1140		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
1120		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
1000		-	SBS-10-1-1RM	1873A	ML	hay field	FdA

APPENDIX E

CONCENTRATION OF MAGNESIUM AT 12-18 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
37200		-	SBS-8-3-3RM	12799	CL	crop field	XfB
33100		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
32200		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
29200		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
26600		-	SBS-1-2-3RM	12770	CL	crop field	Ra
6150		-	SBS-6-3-3RM	12792	CL	crop field	RwB
5870		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
5650		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
5610		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
5340		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
4660	J	J	SBS-7-1-3RM	1832A	CL	crop field	FdA
4420		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
4200		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
4110		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
4060		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
3860		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
3840	J	J	SBS-7-2-3RM	12794	CL	crop field	XfB
3790		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
3420		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
3230		-	SBS-10-2-3RM	12806	CL	hay field	Ra
3200		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
3180		-	SBS-4-3-3RM	12784	CL	hay field	XeB
3180		-	SBS-3-3-3RM	12779	CL	crop field	RwB
3100		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
2930		-	SBS-8-2-3RM	12798	CL	crop field	FcA
2900		-	SBS-2-3-3RM	12775	CL	crop field	FdA
2830	J	J	SBS-7-3-3RM	12795	CL	crop field	MsD2
2820		-	SBS-10-3-3RM	12807	ML	hay field	FdA
2800		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
2780		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
2730		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
2660		-	SBS-5-2-3RM	12787	ML	hay field	FcA
2500		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
2430		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
2340		-	SBS-6-2-3RM	12791	ML	crop field	RwB2

APPENDIX E

CONCENTRATION OF MAGNESIUM AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
33100		-	SBS-8-3-4RM	12799	CL	crop field	XfB
31600		-	SBS-6-3-4RM	12792	CL	crop field	RwB
31200		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
28500		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
23700		-	SBS-1-2-4RM	12770	CL	crop field	Ra
23500		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
20700		J	SBS-10-3-4RM-D	12807	ML	hay field	FdA
17700		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
17300		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
10100		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
9450		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
8510	J	J	SBS-7-1-4RM	1832A	CL	crop field	FdA
6560		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
6450		J	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
6140		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
5480		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
4920		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
4920	J	J	SBS-7-3-4RM	12795	CL	crop field	MsD2
4680		-	SBS-2-3-4RM	12775	CL	crop field	FdA
4520		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
4470		-	SBS-8-2-4RM	12798	CL	crop field	FcA
4290		J	SBS-4-1-4RM	1764A	CL	hay field	XeB
4240		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
4190		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
4160		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
4110		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
4070		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
3980		-	SBS-3-3-4RM	12779	CL	crop field	RwB
3940		-	SBS-4-3-4RM	12784	CL	hay field	XeB
3840	J	J	SBS-7-2-4RM	12794	CL	crop field	XfB
3800		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
3670		J	SBS-10-3-4RM	12807	ML	hay field	FdA
3650		-	SBS-10-2-4RM	12806	CL	hay field	Ra
3650		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
3410		-	SBS-5-2-4RM	12787	CL	hay field	FcA
3400		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
3340		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
3290		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
3200		-	SBS-2-1-4RM	1756A	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF MAGNESIUM AT 24-30 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
43200	J	J	SBS-7-1-5RM	1832A	CL	crop field	FdA
36900		-	SBS-8-3-5RM	12799	CL	crop field	XfB
33400		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
31800		-	SBS-10-3-5RM	12807	ML	hay field	FdA
31800		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
30400		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
29400		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
24400		-	SBS-1-2-5RM	12770	CL	crop field	Ra
24000		-	SBS-10-2-5RM	12806	CL	hay field	Ra
22400		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
21300		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
19700		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
19100		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
17000		-	SBS-6-3-5RM	12792	CL	crop field	RwB
16300		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
16200		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
11200		-	SBS-2-3-5RM	12775	CL	crop field	FdA
8150		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
6660		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
6430	J	J	SBS-7-3-5RM	12795	CL	crop field	MsD2
6040		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
5980		-	SBS-3-3-5RM	12779	CL	crop field	RwB
5920		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
5850		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
5600		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
5280		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
5040		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
5000		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
4890		-	SBS-8-2-5RM	12798	CL	crop field	FcA
4170		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
3950		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
3890		-	SBS-5-2-5RM	12787	CL	hay field	FcA
3850		-	SBS-4-3-5RM	12784	CL	hay field	XeB
3840	J	J	SBS-7-2-5RM	12794	CL	crop field	XfB
3790		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
3660		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
3270		-	SBS-8-1-5RM	1834A	CL	crop field	FcA

APPENDIX E

CONCENTRATION OF MAGNESIUM AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
48000		-	SBS-11-3-6RM	12811	C	crop field	EcE2
40600		-	SBS-10-2-6RM	12806	CL	hay field	Ra
40300		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
40200		-	SBS-8-3-6RM	12799	CL	crop field	XfB
38600		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
37700		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
37100		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
35800	J	J	SBS-7-1-6RM	1832A	CL	crop field	FdA
35500		-	SBS-8-2-6RM	12798	CL	crop field	FcA
33600		-	SBS-2-3-6RM	12775	CL	crop field	FdA
31100		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
30000		-	SBS-6-3-6RM	12792	CL	crop field	RwB
28600		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
27500		J	SBS-6-1-6RM	1829A	CL	crop field	XfB
27000		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
25700		-	SBS-10-3-6RM	12807	CL	hay field	FdA
23100		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
23100	J	J	SBS-7-3-6RM	12795	CL	crop field	MsD2
22200		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
19100		-	SBS-1-2-6RM	12770	CL	crop field	Ra
18400		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
14000		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
12100		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
12100		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
12000		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
8140		J	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
8090		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
7660		-	SBS-3-3-6RM	12779	CL	crop field	RwB
6760		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
6510		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
6030		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
5290		-	SBS-4-3-6RM	12784	CL	hay field	XeB
5210	J	J	SBS-7-2-6RM	12794	CL	crop field	XfB
5010		-	SBS-5-2-6RM	12787	CL	hay field	FcA
4660		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
4480		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF MANGANESE AT 0-6 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
4340		J	SBS-5-3-1RM	12788	ML	hay field	RvB2
2540		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
2410		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
1550		-	SBS-10-3-1RM	12807	ML	hay field	FdA
1360		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1310		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1100		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
1070		J	SBS-5-2-1RM	12787	ML	hay field	FcA
1010		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
988		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
987		-	SBS-8-3-1RM	12799	ML	crop field	XfB
956		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
952		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
942		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
856		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
855		-	SBS-4-3-1RM	12784	ML	hay field	XeB
846		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
803		-	SBS-6-3-1RM	12792	ML	crop field	RwB
769		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
762		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
732		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
732		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
710		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
699		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
676		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
656		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
643		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
640		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
597		-	SBS-10-2-1RM	12806	ML	hay field	Ra
593		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
586		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
578		-	SBS-2-3-1RM	12775	ML	crop field	FdA
572		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
570		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
569		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
539		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
504		-	SBS-7-2-1RM	12794	ML	crop field	XfB
409		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
334		-	SBS-8-2-1RM	12798	ML	crop field	FcA

APPENDIX E

CONCENTRATION OF MANGANESE AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1970		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
1720		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
1540		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
1490		-	SBS-8-2-3RM	12798	CL	crop field	FcA
1160		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
1150		-	SBS-7-2-3RM	12794	CL	crop field	XfB
1130		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
981		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
933		J	SBS-5-2-3RM	12787	ML	hay field	FcA
920		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
772		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
738		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
568		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
554		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
542		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
536		J	SBS-5-1-3RM	1826A	CL	hay field	XeB
442		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
405		-	SBS-10-3-3RM	12807	ML	hay field	FdA
390		-	SBS-6-3-3RM	12792	CL	crop field	RwB
375		-	SBS-8-3-3RM	12799	CL	crop field	XfB
373		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
357		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
319		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
286		-	SBS-1-2-3RM	12770	CL	crop field	Ra
284		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
284		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
272		-	SBS-10-2-3RM	12806	CL	hay field	Ra
259		J	SBS-5-3-3RM	12788	CL	hay field	RvB2
174		-	SBS-2-3-3RM	12775	CL	crop field	FdA
172		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
166		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
148		-	SBS-4-3-3RM	12784	CL	hay field	XeB
118		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
108		-	SBS-3-3-3RM	12779	CL	crop field	RwB
107		-	SBS-2-1-3RM	1756A	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF MANGANESE AT 18-24 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3160		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
1350		J	SBS-5-1-4RM	1826A	CL	hay field	XeB
1320		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
1140		J	SBS-5-2-4RM	12787	CL	hay field	FcA
1010		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
978		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
945		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
870		-	SBS-8-2-4RM	12798	CL	crop field	FcA
849		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
787		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
688		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
672		-	SBS-10-3-4RM	12807	ML	hay field	FdA
625		-	SBS-2-3-4RM	12775	CL	crop field	FdA
594		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
581		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
574		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
538		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
533		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
517		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
512		J	SBS-5-3-4RM	12788	CL	hay field	RvB2
490		-	SBS-8-3-4RM	12799	CL	crop field	XfB
453		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
422		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
402		-	SBS-6-3-4RM	12792	CL	crop field	RwB
394		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
374		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
368		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
356		-	SBS-3-3-4RM	12779	CL	crop field	RwB
324		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
309		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
263		-	SBS-1-2-4RM	12770	CL	crop field	Ra
259		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
215		-	SBS-4-3-4RM	12784	CL	hay field	XeB
210		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
188		-	SBS-10-2-4RM	12806	CL	hay field	Ra
183		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
154		-	SBS-7-2-4RM	12794	CL	crop field	XfB
129		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
93.4		-	SBS-10-1-4RM	1873A	CL	hay field	FdA

APPENDIX E

CONCENTRATION OF MANGANESE AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1634		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
1070		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
761		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
690		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
689		-	SBS-10-3-5RM	12807	ML	hay field	FdA
642		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
618		-	SBS-3-3-5RM	12779	CL	crop field	RwB
615		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
582		J	SBS-5-1-5RM	1826A	CL	hay field	XeB
556		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
546		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
544		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
520		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
517		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
507		J	SBS-5-3-5RM	12788	CL	hay field	RvB2
502		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
496		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
466		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
442		-	SBS-1-2-5RM	12770	CL	crop field	Ra
424		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
399		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
397		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
394		-	SBS-8-3-5RM	12799	CL	crop field	XfB
383		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
365		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
357		J	SBS-5-2-5RM	12787	CL	hay field	FcA
338		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
322		-	SBS-10-2-5RM	12806	CL	hay field	Ra
322		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
313		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
287		-	SBS-7-2-5RM	12794	CL	crop field	XfB
261		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
223		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
201		-	SBS-4-3-5RM	12784	CL	hay field	XeB
197		-	SBS-6-3-5RM	12792	CL	crop field	RwB
124		-	SBS-8-2-5RM	12798	CL	crop field	FcA
85.7		-	SBS-2-3-5RM	12775	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF MANGANESE AT 30-36 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1420		J	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
1350		J	SBS-5-2-6RM	12787	CL	hay field	FcA
1320		-	SBS-7-2-6RM	12794	CL	crop field	XfB
938		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
764		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
722		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
704		J	SBS-5-1-6RM	1826A	CL	hay field	XeB
704		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
692		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
650		-	SBS-1-2-6RM	12770	CL	crop field	Ra
576		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
528		J	SBS-6-1-6RM	1829A	CL	crop field	XfB
526		-	SBS-10-3-6RM	12807	CL	hay field	FdA
475		-	SBS-3-3-6RM	12779	CL	crop field	RwB
437		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
423		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
410		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
397		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
372		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
368		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
363		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
354		-	SBS-11-3-6RM	12811	C	crop field	EcE2
343		-	SBS-8-3-6RM	12799	CL	crop field	XfB
342		-	SBS-8-2-6RM	12798	CL	crop field	FcA
341		-	SBS-6-3-6RM	12792	CL	crop field	RwB
321		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
316		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
291		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
291		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
267		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
254		-	SBS-10-2-6RM	12806	CL	hay field	Ra
249		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
231		-	SBS-4-3-6RM	12784	CL	hay field	XeB
218		-	SBS-2-3-6RM	12775	CL	crop field	FdA
202		J	SBS-5-3-6RM	12788	CL	hay field	RvB2
152		-	SBS-9-1-6RM	1872A	CL	hay field	XfB

APPENDIX E

CONCENTRATION OF MERCURY AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.05		-	SBS-6-3-1RM	12792	ML	crop field	RwB
0.04		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
0.04		-	SBS-5-2-1RM	12787	ML	hay field	FcA
0.04		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
0.03		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
0.03		-	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
0.03		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
0.03		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
0.03		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
0.03		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.03		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
0.03		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
0.025		-	SBS-10-2-1RM	12806	ML	hay field	Ra
0.02		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
0.02		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
0.02		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
0.02		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.02		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
0.02		-	SBS-5-1-1RM	1826A	ML	hay field	XeB
0.02		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
0.02		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
0.02		-	SBS-8-2-1RM	12798	ML	crop field	FcA
0.02		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.02		-	SBS-8-3-1RM	12799	ML	crop field	XfB
0.015		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.012	U	U	SBS-10-3-1RM	12807	ML	hay field	FdA
0.01		-	SBS-4-3-1RM	12784	ML	hay field	XeB
0.01		-	SBS-2-3-1RM	12775	ML	crop field	FdA
0.01	U	U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
0.01	U	U	SBS-11-1-1RM	1879A	ML	crop field	XfB
0.01	U	U	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.01		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
0.01	U	U	SBS-2-1-1RM	1756A	ML	crop field	FdA
0.01		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
0.01		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
0.01		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
0.01	U	U	SBS-7-1-1RM	1832A	ML	crop field	FdA
0.01	U	U	SBS-7-3-1RM	12795	ML	crop field	MsD2
0.01	U	U	SBS-7-2-1RM	12794	ML	crop field	XfB

APPENDIX E

3502

CONCENTRATION OF MERCURY AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.1		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
0.09		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
0.07		-	SBS-4-3-3RM	12784	CL	hay field	XeB
0.07		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
0.06		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
0.06		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
0.06		-	SBS-8-2-3RM	12798	CL	crop field	FcA
0.05		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
0.05		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
0.05		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
0.05		-	SBS-6-3-3RM	12792	CL	crop field	RwB
0.05		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
0.05		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
0.04		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
0.04		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
0.04		-	SBS-3-3-3RM	12779	CL	crop field	RwB
0.04		-	SBS-7-2-3RM	12794	CL	crop field	XfB
0.036		-	SBS-10-3-3RM	12807	ML	hay field	FdA
0.035		-	SBS-10-2-3RM	12806	CL	hay field	Ra
0.03		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
0.03		-	SBS-5-2-3RM	12787	ML	hay field	FcA
0.03		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
0.03		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
0.03		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
0.03		-	SBS-8-3-3RM	12799	CL	crop field	XfB
0.02		-	SBS-2-3-3RM	12775	CL	crop field	FdA
0.02		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.02		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
0.02		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.02		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.02		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
0.01		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.01	U	U	SBS-3-1-3RM	1763A	CL	crop field	XfB
0.01	U	U	SBS-11-2-3RM	12810	CL	crop field	EcE2
0.01		-	SBS-1-2-3RM	12770	CL	crop field	Ra

APPENDIX E

CONCENTRATION OF MERCURY AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.08		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
0.08		-	SBS-4-3-4RM	12784	CL	hay field	XeB
0.08		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
0.06		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
0.06		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
0.06		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
0.05		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
0.05		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
0.05		-	SBS-5-2-4RM	12787	CL	hay field	FcA
0.05		-	SBS-8-2-4RM	12798	CL	crop field	FcA
0.04		-	SBS-3-3-4RM	12779	CL	crop field	RwB
0.04		-	SBS-2-3-4RM	12775	CL	crop field	FdA
0.04		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
0.04		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.04		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
0.04		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
0.04		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.04		-	SBS-7-2-4RM	12794	CL	crop field	XfB
0.039		-	SBS-10-3-4RM	12807	ML	hay field	FdA
0.036		-	SBS-10-2-4RM	12806	CL	hay field	Ra
0.035		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
0.03		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.03		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
0.03		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.03		-	SBS-6-3-4RM	12792	CL	crop field	RwB
0.02		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
0.02		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.02		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.02		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.02		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.02		-	SBS-8-3-4RM	12799	CL	crop field	XfB
0.01	U	U	SBS-1-2-4RM	12770	CL	crop field	Ra
0.01	U	U	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.01	U	U	SBS-11-2-4RM	12810	CL	crop field	EcE2
0.01	U	U	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.01		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.01	U	U	SBS-4-2-4RM	12783	CL	hay field	RvB2
0.01		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.01	U	U	SBS-7-3-4RM	12795	CL	crop field	MsD2

APPENDIX E

3502

CONCENTRATION OF MERCURY AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.07		-	SBS-4-3-5RM	12784	CL	hay field	XeB
0.05		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
0.05		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.05		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
0.05		-	SBS-8-2-5RM	12798	CL	crop field	FcA
0.04		-	SBS-5-2-5RM	12787	CL	hay field	FcA
0.04		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
0.04		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.04		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
0.04		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
0.032		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
0.031		-	SBS-10-2-5RM	12806	CL	hay field	Ra
0.03		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.03		-	SBS-2-3-5RM	12775	CL	crop field	FdA
0.03		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
0.03		-	SBS-3-3-5RM	12779	CL	crop field	RwB
0.03		-	SBS-6-3-5RM	12792	CL	crop field	RwB
0.026		-	SBS-10-3-5RM	12807	ML	hay field	FdA
0.02		-	SBS-1-2-5RM	12770	CL	crop field	Ra
0.02		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.02		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.02		-	SBS-7-2-5RM	12794	CL	crop field	XfB
0.02		-	SBS-8-3-5RM	12799	CL	crop field	XfB
0.02		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
0.02		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.01	U	U	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.01	U	U	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.01	U	U	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.01	U	U	SBS-2-1-5RM	1756A	CL	crop field	FdA
0.01	U	U	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.01	U	U	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.01		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.01	U	U	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.01	U	U	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.01	U	U	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.01		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.01	U	U	SBS-7-1-5RM	1832A	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF MERCURY AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.06		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.06		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
0.05		-	SBS-5-2-6RM	12787	CL	hay field	FcA
0.05		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
0.048		-	SBS-10-2-6RM	12806	CL	hay field	Ra
0.04		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.04		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.03		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.03		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.03		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.02		-	SBS-1-2-6RM	12770	CL	crop field	Ra
0.02		-	SBS-4-3-6RM	12784	CL	hay field	XeB
0.02		-	SBS-2-3-6RM	12775	CL	crop field	FdA
0.02		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.02		-	SBS-8-2-6RM	12798	CL	crop field	FcA
0.02		-	SBS-6-3-6RM	12792	CL	crop field	RwB
0.02		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.012	U	U	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.011	U	U	SBS-10-3-6RM	12807	CL	hay field	FdA
0.01	U	U	SBS-11-3-6RM	12811	C	crop field	EcE2
0.01	U	U	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.01		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.01	U	U	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.01		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.01	U	U	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.01	U	U	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.01	U	U	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.01	U	U	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.01	U	U	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.01	U	U	SBS-3-3-6RM	12779	CL	crop field	RwB
0.01	U	U	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.01	U	U	SBS-7-2-6RM	12794	CL	crop field	XfB
0.01		-	SBS-8-3-6RM	12799	CL	crop field	XfB
0.01	U	U	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.01		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.01		-	SBS-9-2-6RM	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF MOLYBDENUM AT 0-6 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
5.32		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
4.73		-	SBS-5-1-1RM	1826A	ML	hay field	XeB
4.43		U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
4.39		U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
4.06		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
3.85		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
3.83		-	SBS-10-3-1RM	12807	ML	hay field	FdA
3.77		-	SBS-5-2-1RM	12787	ML	hay field	FcA
3.41		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
3.29	U	U	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
3.28	U	U	SBS-8-1-1RM	1834A	ML	crop field	FcA
3.27	U	U	SBS-4-3-1RM	12784	ML	hay field	XeB
3.26		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
3.24	U	U	SBS-2-1-1RM	1756A	ML	crop field	FdA
3.23		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
3.21	U	U	SBS-7-2-1RM	12794	ML	crop field	XfB
3.17	U	U	SBS-2-2-1RM	12774B	ML	crop field	RwB2
3.16		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
3.13	U	U	SBS-1-3-1RM	12771	ML	crop field	RwB2
3.13		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
3.12	U	U	SBS-7-1-1RM	1832A	ML	crop field	FdA
3.1	U	U	SBS-11-1-1RM	1879A	ML	crop field	XfB
3.1	U	U	SBS-2-3-1RM	12775	ML	crop field	FdA
3.09	U	U	SBS-10-2-1RM	12806	ML	hay field	Ra
3.08	U	U	SBS-9-1-1RM	1872A	ML	hay field	XfB
3.07	U	U	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
3.06	U	U	SBS-9-3-1RM	12804	CL	crop field	EcE2
3.05	U	U	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
3.04	U	U	SBS-7-3-1RM	12795	ML	crop field	MsD2
3.03	U	U	SBS-8-2-1RM	12798	ML	crop field	FcA
2.95	U	U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
2.93	U	U	SBS-8-3-1RM	12799	ML	crop field	XfB
2.91	U	U	SBS-4-2-1RM	12783	ML	hay field	RvB2
2.87	U	U	SBS-2-1B-1RM	1756B	ML	crop field	FdA
2.86	U	U	SBS-3-1-1RM	1763A	ML	crop field	XfB
2.84	U	U	SBS-9-2-1RM	12802	ML	crop field	MtC2
1.28		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
1.27		-	SBS-6-3-1RM	12792	ML	crop field	RwB
1.17		-	SBS-6-2-1RM	12791	ML	crop field	RwB2

APPENDIX E

CONCENTRATION OF MOLYBDENUM AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
6.35		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
5.51		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
5.41		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
5.29		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
4.99		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
4.75		-	SBS-5-2-3RM	12787	ML	hay field	FcA
4.62		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
4.5		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
4.26		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
4.08		-	SBS-1-2-3RM	12770	CL	crop field	Ra
4.02		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
3.81		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
3.73		U	SBS-3-1-3RM	1763A	CL	crop field	XfB
3.59		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
3.56		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
3.55		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
3.48		-	SBS-7-2-3RM	12794	CL	crop field	XfB
3.46		-	SBS-10-3-3RM	12807	ML	hay field	FdA
3.31		-	SBS-8-2-3RM	12798	CL	crop field	FcA
3.26	U	U	SBS-8-1-3RM	1834A	CL	crop field	FcA
3.23		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
3.2	U	U	SBS-3-3-3RM	12779	CL	crop field	RwB
3.18	U	U	SBS-2-3-3RM	12775	CL	crop field	FdA
3.17		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
3.11	U	U	SBS-4-3-3RM	12784	CL	hay field	XeB
3.1	U	U	SBS-10-2-3RM	12806	CL	hay field	Ra
3.08	U	U	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
3.03	U	U	SBS-2-2-3RM	12774B	CL	crop field	RwB2
2.98	U	U	SBS-9-1-3RM	1872A	CL	hay field	XfB
2.88	U	U	SBS-9-3-3RM	12804	CL	crop field	EcE2
2.87	U	U	SBS-9-2-3RM	12802	CL	crop field	MtC2
2.85	U	U	SBS-8-3-3RM	12799	CL	crop field	XfB
2.41		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
1.7		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
0.42		-	SBS-6-3-3RM	12792	CL	crop field	RwB

APPENDIX E

3502

CONCENTRATION OF MOLYBDENUM AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
5.69		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
5.28		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
5.19		-	SBS-5-2-4RM	12787	CL	hay field	FcA
4.93		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
4.66		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
4.07		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
4.04		-	SBS-1-2-4RM	12770	CL	crop field	Ra
3.96		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
3.95		-	SBS-10-3-4RM	12807	ML	hay field	FdA
3.63		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
3.54		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
3.32	U	U	SBS-10-2-4RM	12806	CL	hay field	Ra
3.32	U	U	SBS-4-3-4RM	12784	CL	hay field	XeB
3.28	U	U	SBS-8-1-4RM	1834A	CL	crop field	FcA
3.26	U	U	SBS-3-3-4RM	12779	CL	crop field	RwB
3.22	U	U	SBS-7-2-4RM	12794	CL	crop field	XfB
3.21	U	U	SBS-10-1-4RM	1873A	CL	hay field	FdA
3.15	U	U	SBS-8-2-4RM	12798	CL	crop field	FcA
3.14	U	U	SBS-5-3-4RM	12788	CL	hay field	RvB2
3.12	U	U	SBS-11-2-4RM	12810	CL	crop field	EcE2
3.11	U	U	SBS-3-1-4RM	1763A	CL	crop field	XfB
3.1	U	U	SBS-4-1-4RM	1764A	CL	hay field	XeB
3.07	U	U	SBS-2-3-4RM	12775	CL	crop field	FdA
2.98	U	U	SBS-7-3-4RM	12795	CL	crop field	MsD2
2.95	U	U	SBS-10-3-4RM-D	12807	ML	hay field	FdA
2.94	U	U	SBS-2-3-4RM-D	12775	CL	crop field	FdA
2.91	U	U	SBS-7-1-4RM	1832A	CL	crop field	FdA
2.9	U	U	SBS-2-2-4RM	12774B	CL	crop field	RwB2
2.9	U	U	SBS-9-2-4RM	12802	CL	crop field	MtC2
2.89	U	U	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
2.88	U	U	SBS-11-3-4RM	12811	CL	crop field	EcE2
2.88	U	U	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
2.87	U	U	SBS-9-1-4RM	1872A	CL	hay field	XfB
2.79	U	U	SBS-4-2-4RM	12783	CL	hay field	RvB2
2.77	U	U	SBS-8-3-4RM	12799	CL	crop field	XfB
2.76	U	U	SBS-9-3-4RM	12804	CL	crop field	EcE2
1.54		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.17		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
0.54		-	SBS-6-3-4RM	12792	CL	crop field	RwB

APPENDIX E

CONCENTRATION OF MOLYBDENUM AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
5.33		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
5.19		U	SBS-3-3-5RM	12779	CL	crop field	RwB
4.84		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
4.83		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
4.32		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
3.54		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
3.46		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
3.42		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
3.34		-	SBS-7-2-5RM	12794	CL	crop field	XfB
3.27		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
3.22	U	U	SBS-8-1-5RM	1834A	CL	crop field	FcA
3.14	U	U	SBS-2-2A-5RM	12774A	CL	crop field	FdA
3.14	U	U	SBS-3-1-5RM	1763A	CL	crop field	XfB
3.13	U	U	SBS-11-3-5RM	12811	CL	crop field	EcE2
3.12		-	SBS-5-2-5RM	12787	CL	hay field	FcA
3.11	U	U	SBS-8-2-5RM	12798	CL	crop field	FcA
3.06	U	U	SBS-5-3-5RM	12788	CL	hay field	RvB2
3.06	U	U	SBS-2-1-5RM	1756A	CL	crop field	FdA
3.04	U	U	SBS-11-1-5RM	1879A	CL	crop field	XfB
3.02	U	U	SBS-1-3-5RM	12771	CL	crop field	RwB2
3.01	U	U	SBS-9-3-5RM	12804	CL	crop field	EcE2
2.98	U	U	SBS-10-2-5RM	12806	CL	hay field	Ra
2.98	U	U	SBS-4-3-5RM	12784	CL	hay field	XeB
2.97	U	U	SBS-2-3-5RM	12775	CL	crop field	FdA
2.95		-	SBS-1-2-5RM	12770	CL	crop field	Ra
2.92	U	U	SBS-5-1-5RM	1826A	CL	hay field	XeB
2.92	U	U	SBS-8-3-5RM	12799	CL	crop field	XfB
2.9	U	U	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
2.9	U	U	SBS-9-1-5RM	1872A	CL	hay field	XfB
2.89	U	U	SBS-4-2-5RM	12783	CL	hay field	RvB2
2.86	U	U	SBS-7-3-5RM	12795	CL	crop field	MsD2
2.82	U	U	SBS-10-3-5RM	12807	ML	hay field	FdA
2.82		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
2.72	U	U	SBS-9-2-5RM	12802	CL	crop field	MtC2
2.27		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.67		-	SBS-6-3-5RM	12792	CL	crop field	RwB
0.41	U	U	SBS-6-2-5RM	12791	CL	crop field	RwB2

APPENDIX E

3502

CONCENTRATION OF MOLYBDENUM AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
5.01		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
4.53		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
4.52		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
4.48		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
4.47		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
4.44		-	SBS-1-2-6RM	12770	CL	crop field	Ra
4.42		-	SBS-7-2-6RM	12794	CL	crop field	XfB
4.41		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
4.19		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
4		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
3.83		U	SBS-3-1-6RM	1763A	ML	crop field	XfB
3.64		-	SBS-5-2-6RM	12787	CL	hay field	FcA
3.48		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
3.35		-	SBS-11-3-6RM	12811	C	crop field	EcE2
3.21		-	SBS-10-3-6RM	12807	CL	hay field	FdA
3.13	U	U	SBS-1-1-6RM	1755A	CL	crop field	FdA
3.07	U	U	SBS-9-3-6RM	12804	CL	crop field	EcE2
3.06	U	U	SBS-4-3-6RM	12784	CL	hay field	XeB
3.04		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
3.03	U	U	SBS-8-1-6RM	1834A	CL	crop field	FcA
3.03	U	U	SBS-8-2-6RM	12798	CL	crop field	FcA
2.97		-	SBS-8-3-6RM	12799	CL	crop field	XfB
2.95	U	U	SBS-10-2-6RM	12806	CL	hay field	Ra
2.93	U	U	SBS-2-1-6RM	1756A	CL	crop field	FdA
2.9		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
2.9	U	U	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
2.88	U	U	SBS-2-2-6RM	12774B	CL	crop field	RwB2
2.87	U	U	SBS-3-3-6RM	12779	CL	crop field	RwB
2.84	U	U	SBS-9-1-6RM	1872A	CL	hay field	XfB
2.83	U	U	SBS-4-2-6RM	12783	CL	hay field	RvB2
2.81	U	U	SBS-2-3-6RM	12775	CL	crop field	FdA
2.8	U	U	SBS-1-3-6RM	12771	CL	crop field	RwB2
1.08		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
1.03		-	SBS-6-3-6RM	12792	CL	crop field	RwB
0.98		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.39	U	U	SBS-6-2-6RM	12791	CL	crop field	RwB2

APPENDIX E

CONCENTRATION OF NICKEL AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
28		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
26.6		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
24.4		-	SBS-5-2-1RM	12787	ML	hay field	FcA
21.7		-	SBS-5-1-1RM	1826A	ML	hay field	XeB
20.3		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
19.6		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
19.4		-	SBS-6-3-1RM	12792	ML	crop field	RwB
19		-	SBS-8-3-1RM	12799	ML	crop field	XfB
18.9		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
18.7		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
18.3		U	SBS-5-3-1RM	12788	ML	hay field	RvB2
16.8		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
15.6		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
14.1		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
13.6		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
13.6		U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
13.6		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
13		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
12.2		-	SBS-10-3-1RM	12807	ML	hay field	FdA
11.8		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
11		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
10.7		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
10.7		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
10.5		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
10.2		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
9.85		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
9.56		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
8.97		-	SBS-10-2-1RM	12806	ML	hay field	Ra
8.79		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
7.76		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
7.49		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
7.34		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
7.25		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
7		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
6.86		-	SBS-8-2-1RM	12798	ML	crop field	FcA
6.71		-	SBS-4-3-1RM	12784	ML	hay field	XeB
6.46		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
6.44		-	SBS-7-2-1RM	12794	ML	crop field	XfB
6.25		-	SBS-2-3-1RM	12775	ML	crop field	FdA

APPENDIX E

CONCENTRATION OF NICKEL AT 12-18 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
82.2		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
81.7		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
46.2		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
34.3		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
30.4		-	SBS-6-3-3RM	12792	CL	crop field	RwB
28.1		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
28.1		-	SBS-5-2-3RM	12787	ML	hay field	FcA
27.9		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
26		-	SBS-10-3-3RM	12807	ML	hay field	FdA
25.6		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
24.4		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
23.8		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
23.7		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
22.7		-	SBS-7-2-3RM	12794	CL	crop field	XfB
22.6		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
21.1		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
20.4		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
20.4		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
20		-	SBS-10-2-3RM	12806	CL	hay field	Ra
19.5		-	SBS-8-2-3RM	12798	CL	crop field	FcA
19.1		-	SBS-1-2-3RM	12770	CL	crop field	Ra
18.9		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
18.4		-	SBS-8-3-3RM	12799	CL	crop field	XfB
18.1		U	SBS-5-1-3RM	1826A	CL	hay field	XeB
17.3		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
15.6		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
15.6		-	SBS-4-3-3RM	12784	CL	hay field	XeB
15.1		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
15		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
15		-	SBS-3-3-3RM	12779	CL	crop field	RwB
14.6		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
14.1		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
12.5		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
11.2		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
8.76		-	SBS-2-3-3RM	12775	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF NICKEL AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
83.6		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
45		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
44.4		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
40.9		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
38.2		-	SBS-5-2-4RM	12787	CL	hay field	FcA
37.6		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
37.5		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
36.8		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
32.4		-	SBS-8-2-4RM	12798	CL	crop field	FcA
32.1		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
32		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
30.1		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
28.5		-	SBS-2-3-4RM	12775	CL	crop field	FdA
28.2		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
27.4		-	SBS-10-2-4RM	12806	CL	hay field	Ra
27.2		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
27		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
27		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
26.6		-	SBS-10-3-4RM	12807	ML	hay field	FdA
25.8		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
25		-	SBS-7-2-4RM	12794	CL	crop field	XfB
24.2		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
24		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
23.2		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
23		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
22.9		-	SBS-4-3-4RM	12784	CL	hay field	XeB
21.9		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
21.3		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
20.9		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
20.7		-	SBS-6-3-4RM	12792	CL	crop field	RwB
20.2		-	SBS-3-3-4RM	12779	CL	crop field	RwB
20.2		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
18.1		-	SBS-8-3-4RM	12799	CL	crop field	XfB
18.1		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
18		-	SBS-1-2-4RM	12770	CL	crop field	Ra
17.4		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
17.4		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
17.1		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
14.2		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA

APPENDIX E

CONCENTRATION OF NICKEL AT 24-30 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
61.9		-	SBS-3-3-5RM	12779	CL	crop field	RwB
60.4		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
58.6		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
47.7		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
36		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
31.9		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
31.4		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
31.3		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
30.7		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
28.6		-	SBS-5-2-5RM	12787	CL	hay field	FcA
28.3		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
26.5		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
26.5		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
26		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
24.4		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
24.1		-	SBS-4-3-5RM	12784	CL	hay field	XeB
22		-	SBS-7-2-5RM	12794	CL	crop field	XfB
21.9		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
21.7		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
21.4		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
21.4		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
21.2		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
21		-	SBS-10-3-5RM	12807	ML	hay field	FdA
20.6		-	SBS-6-3-5RM	12792	CL	crop field	RwB
20.3		-	SBS-8-2-5RM	12798	CL	crop field	FcA
20		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
19.8		-	SBS-10-2-5RM	12806	CL	hay field	Ra
18.7		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
16.8		-	SBS-1-2-5RM	12770	CL	crop field	Ra
16.5		-	SBS-8-3-5RM	12799	CL	crop field	XfB
16.2		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
16		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
15.5		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
15.4		-	SBS-2-3-5RM	12775	CL	crop field	FdA
14.5		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
14.5		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
13.2		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB

APPENDIX E

CONCENTRATION OF NICKEL AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
47.5		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
46.2		-	SBS-5-2-6RM	12787	CL	hay field	FcA
33.6		-	SBS-7-2-6RM	12794	CL	crop field	XfB
30.8		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
30.2		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
30		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
28.9		-	SBS-3-3-6RM	12779	CL	crop field	RwB
27.3		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
27.1		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
23		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
22.8		-	SBS-1-2-6RM	12770	CL	crop field	Ra
22.7		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
22.7		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
21.9		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
21.8		-	SBS-4-3-6RM	12784	CL	hay field	XeB
20.8		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
20.2		U	SBS-5-3-6RM	12788	CL	hay field	RvB2
19.8		-	SBS-10-3-6RM	12807	CL	hay field	FdA
19.5		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
19		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
18.1		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
17.2		-	SBS-6-3-6RM	12792	CL	crop field	RwB
17.2		-	SBS-8-2-6RM	12798	CL	crop field	FcA
16.4		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
16.4		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
16.2		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
15.6		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
15.4		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
15.4		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
15.4		-	SBS-8-3-6RM	12799	CL	crop field	XfB
14.4		-	SBS-10-2-6RM	12806	CL	hay field	Ra
14.2		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
13.8		U	SBS-5-1-6RM	1826A	CL	hay field	XeB
13.8		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
13.4		-	SBS-2-3-6RM	12775	CL	crop field	FdA
10		-	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX E

CONCENTRATION OF POTASSIUM AT 0-6 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1970		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
1470		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
1250		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
1210		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1200		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
1160		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1110		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
1110		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
1050		-	SBS-6-3-1RM	12792	ML	crop field	RwB
1040		-	SBS-5-1-1RM	1826A	ML	hay field	XeB
941		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
928		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
851		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
816		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
810		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
810		-	SBS-5-2-1RM	12787	ML	hay field	FcA
777		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
734		-	SBS-8-3-1RM	12799	ML	crop field	XfB
722		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
600		-	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
561		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
547		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
542		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
540		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
538		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
520		-	SBS-10-3-1RM	12807	ML	hay field	FdA
502		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
436		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
432		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
428		-	SBS-7-2-1RM	12794	ML	crop field	XfB
419		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
403		-	SBS-8-2-1RM	12798	ML	crop field	FcA
397		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
373		-	SBS-4-3-1RM	12784	ML	hay field	XeB
365		-	SBS-2-3-1RM	12775	ML	crop field	FdA
355		-	SBS-10-2-1RM	12806	ML	hay field	Ra
284		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
276		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
194		-	SBS-10-1-1RM	1873A	ML	hay field	FdA

APPENDIX E

CONCENTRATION OF POTASSIUM AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2210		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
1690		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1430		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
1390		-	SBS-1-2-3RM	12770	CL	crop field	Ra
1350		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
1200		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
1140		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
1130		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
1060		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
1010		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
1000		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
968		-	SBS-6-3-3RM	12792	CL	crop field	RwB
925		-	SBS-3-3-3RM	12779	CL	crop field	RwB
827		-	SBS-8-3-3RM	12799	CL	crop field	XfB
822		-	SBS-5-2-3RM	12787	ML	hay field	FcA
810		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
791		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
780		-	SBS-7-2-3RM	12794	CL	crop field	XfB
759		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
712		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
710		-	SBS-4-3-3RM	12784	CL	hay field	XeB
707		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
689		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
632		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
616		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
610		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
577		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
546		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
537		-	SBS-10-2-3RM	12806	CL	hay field	Ra
492		-	SBS-10-3-3RM	12807	ML	hay field	FdA
467		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
416		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
370		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
358		-	SBS-8-2-3RM	12798	CL	crop field	FcA
287		U	SBS-2-3-3RM	12775	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF POTASSIUM AT 18-24 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3060		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
1630		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
1510		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
1440		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
1280		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
1270		-	SBS-3-3-4RM	12779	CL	crop field	RwB
1250		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
1240		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
1240		-	SBS-1-2-4RM	12770	CL	crop field	Ra
1230		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
1160		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
1120		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
1070		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
1030		-	SBS-6-3-4RM	12792	CL	crop field	RwB
1020		-	SBS-5-2-4RM	12787	CL	hay field	FcA
986		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
926		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
903		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
869		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
822		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
803		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
713		-	SBS-7-2-4RM	12794	CL	crop field	XfB
692		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
687		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
671		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
663		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
645		-	SBS-10-2-4RM	12806	CL	hay field	Ra
620		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
554		-	SBS-2-3-4RM	12775	CL	crop field	FdA
548		-	SBS-10-3-4RM	12807	ML	hay field	FdA
534		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
529		-	SBS-4-3-4RM	12784	CL	hay field	XeB
528		-	SBS-8-3-4RM	12799	CL	crop field	XfB
524		-	SBS-8-2-4RM	12798	CL	crop field	FcA
501		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
497		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
480		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
472		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
441		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF POTASSIUM AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2070		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
1790		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
1760		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
1670		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
1420		-	SBS-3-3-5RM	12779	CL	crop field	RwB
1380		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
1320		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
1150		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
1140		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
1120		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
1100		-	SBS-6-3-5RM	12792	CL	crop field	RwB
1060		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
1050		-	SBS-1-2-5RM	12770	CL	crop field	Ra
1030		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
1020		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
985		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
979		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
953		-	SBS-5-2-5RM	12787	CL	hay field	FcA
945		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
932		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
912		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
808		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
795		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
794		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
655		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
645		-	SBS-10-3-5RM	12807	ML	hay field	FdA
643		-	SBS-10-2-5RM	12806	CL	hay field	Ra
638		-	SBS-4-3-5RM	12784	CL	hay field	XeB
588		-	SBS-8-2-5RM	12798	CL	crop field	FcA
564		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
540		-	SBS-7-2-5RM	12794	CL	crop field	XfB
539		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
533		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
522		-	SBS-2-3-5RM	12775	CL	crop field	FdA
489		-	SBS-8-3-5RM	12799	CL	crop field	XfB
448		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
313		-	SBS-8-1-5RM	1834A	CL	crop field	FcA

APPENDIX E

CONCENTRATION OF POTASSIUM AT 30-36 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2080		-	SBS-3-3-6RM	12779	CL	crop field	RwB
1920		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
1840		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
1770		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
1750		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
1380		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
1380		-	SBS-5-2-6RM	12787	CL	hay field	FcA
1260		-	SBS-1-2-6RM	12770	CL	crop field	Ra
1200		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
1180		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
1110		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
1100		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
1080		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
1070		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
1020		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
957		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
949		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
889		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
816		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
808		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
766		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
741		-	SBS-10-3-6RM	12807	CL	hay field	FdA
730		-	SBS-6-3-6RM	12792	CL	crop field	RwB
723		-	SBS-7-2-6RM	12794	CL	crop field	XfB
690		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
685		-	SBS-10-2-6RM	12806	CL	hay field	Ra
679		-	SBS-11-3-6RM	12811	C	crop field	EcE2
629		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
624		-	SBS-4-3-6RM	12784	CL	hay field	XeB
608		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
598		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
594		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
594		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
575		-	SBS-8-3-6RM	12799	CL	crop field	XfB
517		-	SBS-8-2-6RM	12798	CL	crop field	FcA
251		U	SBS-2-3-6RM	12775	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF SELENIUM AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.16	U	U	SBS-6-3-1RM	12792	ML	crop field	RwB
1.14	U	U	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
1.13	U	U	SBS-10-1-1RM	1873A	ML	hay field	FdA
1.12	U	U	SBS-5-3-1RM	12788	ML	hay field	RvB2
1.12	U	U	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
1.12	U	U	SBS-7-2-1RM	12794	ML	crop field	XfB
1.11	U	U	SBS-10-2-1RM	12806	ML	hay field	Ra
1.11	U	U	SBS-6-1-1RM	1829A	ML	crop field	XfB
1.1	U	U	SBS-11-1-1RM	1879A	ML	crop field	XfB
1.09	U	U	SBS-10-3-1RM	12807	ML	hay field	FdA
1.09	U	U	SBS-8-1-1RM	1834A	ML	crop field	FcA
1.09	UW	U	SBS-9-2-1RM	12802	ML	crop field	MtC2
1.09	U	U	SBS-7-1-1RM	1832A	ML	crop field	FdA
1.08	U	U	SBS-2-3-1RM	12775	ML	crop field	FdA
1.07	U	U	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
1.07	U	U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1.07	U	U	SBS-8-3-1RM	12799	ML	crop field	XfB
1.07	U	U	SBS-8-2-1RM	12798	ML	crop field	FcA
1.06	U	U	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1.06	U	U	SBS-4-2-1RM	12783	ML	hay field	RvB2
1.06	U	U	SBS-4-1-1RM	1764A	ML	hay field	XeB
1.06	U	U	SBS-7-3-1RM	12795	ML	crop field	MsD2
1.05	U	U	SBS-1-1-1RM	1755A	ML	crop field	FdA
1.05	UW	UJ	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1.05	U	U	SBS-6-2-1RM	12791	ML	crop field	RwB2
1.04	U	U	SBS-2-2-1RM	12774B	ML	crop field	RwB2
1.04	U	U	SBS-2-1-1RM	1756A	ML	crop field	FdA
1.04	UW	U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
1.03	U	U	SBS-5-2-1RM	12787	ML	hay field	FcA
1.03	U	U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
1.03	U	U	SBS-4-3-1RM	12784	ML	hay field	XeB
1.01	UW	UJ	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1.01	U	U	SBS-3-1-1RM	1763A	ML	crop field	XfB
1.01	U	U	SBS-1-3-1RM	12771	ML	crop field	RwB2
1.01	U	U	SBS-9-3-1RM	12804	CL	crop field	EcE2
1.01	U	U	SBS-9-1-1RM	1872A	ML	hay field	XfB
1	U	U	SBS-5-1-1RM	1826A	ML	hay field	XeB
1	U	U	SBS-11-3-1RM	12811	CL	crop field	EcE2
0.99	U	U	SBS-7-3-1RM-D	12795	ML	crop field	MsD2

APPENDIX E

CONCENTRATION OF SELENIUM AT 12-18 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2.07	W	J	SBS-9-1-3RM	1872A	CL	hay field	XfB
1.18	UW	U	SBS-8-1-3RM	1834A	CL	crop field	FcA
1.16	U	U	SBS-4-3-3RM	12784	CL	hay field	XeB
1.15	U	U	SBS-2-2A-3RM	12774A	CL	crop field	FdA
1.15	U	U	SBS-6-2-3RM	12791	ML	crop field	RwB2
1.15	U	U	SBS-10-1-3RM	1873A	CL	hay field	FdA
1.14	U	U	SBS-10-2-3RM	12806	CL	hay field	Ra
1.12	U	U	SBS-2-3-3RM	12775	CL	crop field	FdA
1.12	U	U	SBS-2-1-3RM	1756A	CL	crop field	FdA
1.12	U	U	SBS-7-1-3RM	1832A	CL	crop field	FdA
1.11	U	U	SBS-11-1-3RM	1879A	ML	crop field	XfB
1.11	U	U	SBS-5-2-3RM	12787	ML	hay field	FcA
1.1	U	U	SBS-4-1-3RM	1764A	CL	hay field	XeB
1.09	U	U	SBS-2-1B-3RM	1756B	ML	crop field	FdA
1.09	U	U	SBS-1-3-3RM	12771	CL	crop field	RwB2
1.09	U	U	SBS-10-3-3RM	12807	ML	hay field	FdA
1.09	U	U	SBS-3-1-3RM	1763A	CL	crop field	XfB
1.09	U	U	SBS-6-1-3RM	1829A	ML	crop field	XfB
1.09	UW	U	SBS-5-3-3RM	12788	CL	hay field	RvB2
1.09	U	U	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
1.08	U	U	SBS-8-2-3RM	12798	CL	crop field	FcA
1.06	U	U	SBS-3-3-3RM	12779	CL	crop field	RwB
1.05	U	U	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1.05	U	U	SBS-5-1-3RM	1826A	CL	hay field	XeB
1.04	U	U	SBS-11-3-3RM	12811	CL	crop field	EcE2
1.04	U	U	SBS-4-2-3RM	12783	CL	hay field	RvB2
1.04	U	U	SBS-11-2-3RM	12810	CL	crop field	EcE2
1.03	U	U	SBS-7-2-3RM	12794	CL	crop field	XfB
1.02	UW	UJ	SBS-8-3-3RM	12799	CL	crop field	XfB
1.01	U	U	SBS-6-3-3RM	12792	CL	crop field	RwB
0.99	U	U	SBS-9-3-3RM	12804	CL	crop field	EcE2
0.98	U	UJ	SBS-7-3-3RM	12795	CL	crop field	MsD2
0.97	U	U	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.95	UW	U	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.93	U	U	SBS-1-2-3RM	12770	CL	crop field	Ra

APPENDIX E

CONCENTRATION OF SELENIUM AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.34	W	J	SBS-8-1-4RM	1834A	CL	crop field	FcA
1.15	U	U	SBS-10-2-4RM	12806	CL	hay field	Ra
1.15	U	UJ	SBS-4-3-4RM	12784	CL	hay field	XeB
1.13	U	U	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.13	U	U	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.13	U	U	SBS-3-3-4RM	12779	CL	crop field	RwB
1.12	U	U	SBS-7-2-4RM	12794	CL	crop field	XfB
1.11	U	U	SBS-2-1-4RM	1756A	CL	crop field	FdA
1.1	U	U	SBS-2-3-4RM	12775	CL	crop field	FdA
1.09	U	U	SBS-2-3-4RM-D	12775	CL	crop field	FdA
1.09	U	U	SBS-5-2-4RM	12787	CL	hay field	FcA
1.08	U	U	SBS-4-1-4RM	1764A	CL	hay field	XeB
1.07	U	U	SBS-10-1-4RM	1873A	CL	hay field	FdA
1.07	U	U	SBS-8-2-4RM	12798	CL	crop field	FcA
1.06	U	U	SBS-6-2-4RM	12791	CL	crop field	RwB2
1.06	U	U	SBS-2-2A-4RM	12774A	CL	crop field	FdA
1.06	U	U	SBS-5-1-4RM	1826A	CL	hay field	XeB
1.04	U	U	SBS-11-3-4RM	12811	CL	crop field	EcE2
1.04	U	U	SBS-2-2-4RM	12774B	CL	crop field	RwB2
1.04	U	U	SBS-7-3-4RM	12795	CL	crop field	MsD2
1.04	U	U	SBS-9-1-4RM	1872A	CL	hay field	XfB
1.03	U	UJ	SBS-10-3-4RM	12807	ML	hay field	FdA
1.03	U	U	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
1.03	UW	U	SBS-9-2-4RM	12802	CL	crop field	MtC2
1.02	U	U	SBS-8-3-4RM	12799	CL	crop field	XfB
1.01	U	U	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
1.01	U	U	SBS-5-3-4RM	12788	CL	hay field	RvB2
1.01	UW	UJ	SBS-3-1-4RM	1763A	CL	crop field	XfB
1	UW	UJ	SBS-2-1B-4RM	1756B	CL	crop field	FdA
1	U	U	SBS-11-1-4RM	1879A	CL	crop field	XfB
1	U	U	SBS-1-3-4RM	12771	CL	crop field	RwB2
1	U	U	SBS-11-2-4RM	12810	CL	crop field	EcE2
1	U	U	SBS-7-1-4RM	1832A	CL	crop field	FdA
1	U	U	SBS-6-3-4RM	12792	CL	crop field	RwB
1	U	U	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.99	U	U	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.98	UW	UJ	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.97	U	U	SBS-1-2-4RM	12770	CL	crop field	Ra
0.92	U	U	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX E

CONCENTRATION OF SELENIUM AT 24-30 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.15	U	U	SBS-8-2-5RM	12798	CL	crop field	FcA
1.13	UW	U	SBS-8-1-5RM	1834A	CL	crop field	FcA
1.12	U	U	SBS-1-1-5RM	1755A	CL	crop field	FdA
1.12	U	U	SBS-3-3-5RM	12779	CL	crop field	RwB
1.11	U	U	SBS-2-3-5RM	12775	CL	crop field	FdA
1.09	U	U	SBS-3-1-5RM	1763A	CL	crop field	XfB
1.08	U	U	SBS-5-3-5RM	12788	CL	hay field	RvB2
1.08	U	U	SBS-6-2-5RM	12791	CL	crop field	RwB2
1.08	U	U	SBS-5-2-5RM	12787	CL	hay field	FcA
1.08	U	U	SBS-6-1-5RM	1829A	CL	crop field	XfB
1.07	UW	UJ	SBS-2-2A-5RM	12774A	CL	crop field	FdA
1.07	UW	UJ	SBS-2-1B-5RM	1756B	CL	crop field	FdA
1.06	U	UJ	SBS-10-3-5RM	12807	ML	hay field	FdA
1.06	UW	UJ	SBS-11-2-5RM	12810	CL	crop field	EcE2
1.06	U	U	SBS-7-2-5RM	12794	CL	crop field	XfB
1.05	U	U	SBS-4-3-5RM	12784	CL	hay field	XeB
1.05	U	U	SBS-9-3-5RM	12804	CL	crop field	EcE2
1.04	UW	UJ	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
1.04	U	U	SBS-11-1-5RM	1879A	CL	crop field	XfB
1.01	U	U	SBS-10-1-5RM	1873A	CL	hay field	FdA
1.01	UW	U	SBS-4-1-5RM	1764A	CL	hay field	XeB
1	UW	U	SBS-2-1-5RM	1756A	CL	crop field	FdA
1	U	U	SBS-10-2-5RM	12806	CL	hay field	Ra
1	U	U	SBS-7-3-5RM	12795	CL	crop field	MsD2
0.99	UW	UJ	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.99	U	U	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.99	U	U	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.98	U	U	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.98	UW	UJ	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.98	U	U	SBS-6-3-5RM	12792	CL	crop field	RwB
0.98	U	U	SBS-8-3-5RM	12799	CL	crop field	XfB
0.97	U	U	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.96	U	U	SBS-1-2-5RM	12770	CL	crop field	Ra
0.95	U	U	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.94	UW	UJ	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.94	U	U	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.94	UW	U	SBS-9-2-5RM	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF SELENIUM AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.19	W	J	SBS-9-2-6RM	12802	CL	crop field	MtC2
1.14	U	U	SBS-1-1-6RM	1755A	CL	crop field	FdA
1.12	U	U	SBS-7-2-6RM	12794	CL	crop field	XfB
1.09	U	U	SBS-2-2A-6RM	12774A	CL	crop field	FdA
1.09	U	U	SBS-4-3-6RM	12784	CL	hay field	XeB
1.09	U	U	SBS-8-2-6RM	12798	CL	crop field	FcA
1.08	U	U	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
1.06	U	U	SBS-6-1-6RM	1829A	CL	crop field	XfB
1.06	U	U	SBS-10-1-6RM	1873A	CL	hay field	FdA
1.06	U	U	SBS-8-1-6RM	1834A	CL	crop field	FcA
1.05	U	U	SBS-5-2-6RM	12787	CL	hay field	FcA
1.04	U	U	SBS-8-3-6RM	12799	CL	crop field	XfB
1.04	UW	UJ	SBS-9-3-6RM	12804	CL	crop field	EcE2
1.03	U	U	SBS-5-1-6RM	1826A	CL	hay field	XeB
1.03	U	U	SBS-11-2-6RM	12810	CL	crop field	EcE2
1.03	UW	U	SBS-9-1-6RM	1872A	CL	hay field	XfB
1.02	U	U	SBS-6-2-6RM	12791	CL	crop field	RwB2
1.02	U	U	SBS-5-3-6RM	12788	CL	hay field	RvB2
1.01	UW	UJ	SBS-4-2-6RM	12783	CL	hay field	RvB2
1.01	U	U	SBS-6-3-6RM	12792	CL	crop field	RwB
1	U	U	SBS-11-1-6RM	1879A	CL	crop field	XfB
1	U	U	SBS-1-3-6RM	12771	CL	crop field	RwB2
1	U	U	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.99	UW	UJ	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.98	U	U	SBS-2-3-6RM	12775	CL	crop field	FdA
0.98	U	U	SBS-10-2-6RM	12806	CL	hay field	Ra
0.98	U	U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.98	U	U	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.97	U	U	SBS-11-3-6RM	12811	C	crop field	EcE2
0.97	U	U	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.96	U	U	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.95	U	UJ	SBS-10-3-6RM	12807	CL	hay field	FdA
0.95	U	U	SBS-3-3-6RM	12779	CL	crop field	RwB
0.94	U	U	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.93	U	U	SBS-1-2-6RM	12770	CL	crop field	Ra
0.93	U	UJ	SBS-7-1-6RM	1832A	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF SILICON AT 0-6 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3170		J	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
2970		J	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
2740		J	SBS-11-3-1RM	12811	CL	crop field	EcE2
2630		J	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
2420		J	SBS-3-1-1RM	1763A	ML	crop field	XfB
2210		J	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
1690		J	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1640		J	SBS-11-1-1RM	1879A	ML	crop field	XfB
1510		J	SBS-2-3-1RM	12775	ML	crop field	FdA
1510		J	SBS-2-2-1RM	12774B	ML	crop field	RwB2
1380		J	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1310		J	SBS-7-2-1RM	12794	ML	crop field	XfB
1230		J	SBS-2-1-1RM	1756A	ML	crop field	FdA
1120		J	SBS-10-1-1RM	1873A	ML	hay field	FdA
1110		J	SBS-1-3-1RM	12771	ML	crop field	RwB2
1076		J	SBS-7-1-1RM	1832A	ML	crop field	FdA
1020		J	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1020		J	SBS-7-3-1RM	12795	ML	crop field	MsD2
1010		J	SBS-10-2-1RM	12806	ML	hay field	Ra
948		J	SBS-10-3-1RM	12807	ML	hay field	FdA
916		J	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
859		J	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
674		J	SBS-1-1-1RM	1755A	ML	crop field	FdA
655		J	SBS-9-2-1RM	12802	ML	crop field	MtC2
654		J	SBS-9-1-1RM	1872A	ML	hay field	XfB
633		J	SBS-8-1-1RM	1834A	ML	crop field	FcA
624		J	SBS-5-3-1RM	12788	ML	hay field	RvB2
624		J	SBS-4-1-1RM	1764A	ML	hay field	XeB
618		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
592		J	SBS-9-3-1RM	12804	CL	crop field	EcE2
567		J	SBS-4-3-1RM	12784	ML	hay field	XeB
557		J	SBS-4-2-1RM	12783	ML	hay field	RvB2
546		UJ	SBS-8-2-1RM	12798	ML	crop field	FcA
524		J	SBS-8-3-1RM	12799	ML	crop field	XfB
515		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
483		J	SBS-5-2-1RM	12787	ML	hay field	FcA
439		J	SBS-6-2-1RM	12791	ML	crop field	RwB2
416		J	SBS-6-3-1RM	12792	ML	crop field	RwB
376		J	SBS-6-1-1RM	1829A	ML	crop field	XfB

APPENDIX E

CONCENTRATION OF SILICON AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2810		J	SBS-11-2-3RM	12810	CL	crop field	EcE2
2390		J	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
1930		J	SBS-11-3-3RM	12811	CL	crop field	EcE2
1790		J	SBS-2-2-3RM	12774B	CL	crop field	RwB2
1710		J	SBS-3-3-3RM	12779	CL	crop field	RwB
1620		J	SBS-11-1-3RM	1879A	ML	crop field	XfB
1510		J	SBS-7-2-3RM	12794	CL	crop field	XfB
1480		J	SBS-2-1-3RM	1756A	CL	crop field	FdA
1420		J	SBS-2-1B-3RM	1756B	ML	crop field	FdA
1260		J	SBS-2-2A-3RM	12774A	CL	crop field	FdA
1170		J	SBS-3-1-3RM	1763A	CL	crop field	XfB
1147		J	SBS-7-1-3RM	1832A	CL	crop field	FdA
913		J	SBS-1-3-3RM	12771	CL	crop field	RwB2
806		J	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
790		J	SBS-10-3-3RM	12807	ML	hay field	FdA
789		J	SBS-2-3-3RM	12775	CL	crop field	FdA
710		J	SBS-5-3-3RM	12788	CL	hay field	RvB2
688		J	SBS-10-1-3RM	1873A	CL	hay field	FdA
678		J	SBS-7-3-3RM	12795	CL	crop field	MsD2
674		J	SBS-4-2-3RM	12783	CL	hay field	RvB2
672		J	SBS-1-2-3RM	12770	CL	crop field	Ra
590		J	SBS-9-3-3RM	12804	CL	crop field	EcE2
579		J	SBS-9-2-3RM	12802	CL	crop field	MtC2
504		J	SBS-4-3-3RM	12784	CL	hay field	XeB
503		J	SBS-9-1-3RM	1872A	CL	hay field	XfB
486		J	SBS-10-2-3RM	12806	CL	hay field	Ra
462		J	SBS-4-1-3RM	1764A	CL	hay field	XeB
459		J	SBS-5-1-3RM	1826A	CL	hay field	XeB
429		J	SBS-5-2-3RM	12787	ML	hay field	FcA
419		J	SBS-8-3-3RM	12799	CL	crop field	XfB
378		J	SBS-6-3-3RM	12792	CL	crop field	RwB
375		J	SBS-8-1-3RM	1834A	CL	crop field	FcA
326		J	SBS-6-1-3RM	1829A	ML	crop field	XfB
324		UJ	SBS-8-2-3RM	12798	CL	crop field	FcA
257		J	SBS-6-2-3RM	12791	ML	crop field	RwB2

APPENDIX E

CONCENTRATION OF SILICON AT 18-24 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2820		J	SBS-3-3-4RM	12779	CL	crop field	RwB
2690		J	SBS-11-2-4RM	12810	CL	crop field	EcE2
1930		J	SBS-2-2A-4RM	12774A	CL	crop field	FdA
1550		J	SBS-2-1B-4RM	1756B	CL	crop field	FdA
1540		J	SBS-2-2-4RM	12774B	CL	crop field	RwB2
1540		J	SBS-3-1-4RM	1763A	CL	crop field	XfB
1250		J	SBS-11-3-4RM	12811	CL	crop field	EcE2
1160		J	SBS-11-1-4RM	1879A	CL	crop field	XfB
1100		J	SBS-2-3-4RM-D	12775	CL	crop field	FdA
1020		J	SBS-1-3-4RM	12771	CL	crop field	RwB2
1020		J	SBS-10-3-4RM-D	12807	ML	hay field	FdA
963		J	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
937		J	SBS-10-2-4RM	12806	CL	hay field	Ra
914		J	SBS-7-3-4RM	12795	CL	crop field	MsD2
873		J	SBS-1-1-4RM	1755A	CL	crop field	FdA
861		J	SBS-2-1-4RM	1756A	CL	crop field	FdA
790		J	SBS-7-1-4RM	1832A	CL	crop field	FdA
727		J	SBS-5-3-4RM	12788	CL	hay field	RvB2
712		J	SBS-1-2-4RM	12770	CL	crop field	Ra
710		J	SBS-2-3-4RM	12775	CL	crop field	FdA
676		J	SBS-9-3-4RM	12804	CL	crop field	EcE2
673		J	SBS-10-3-4RM	12807	ML	hay field	FdA
607		J	SBS-9-2-4RM	12802	CL	crop field	MtC2
582		J	SBS-7-2-4RM	12794	CL	crop field	XfB
553		J	SBS-4-2-4RM	12783	CL	hay field	RvB2
550		J	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
514		J	SBS-5-2-4RM	12787	CL	hay field	FcA
506		J	SBS-9-1-4RM	1872A	CL	hay field	XfB
501		J	SBS-4-3-4RM	12784	CL	hay field	XeB
461		J	SBS-4-1-4RM	1764A	CL	hay field	XeB
453		J	SBS-6-1-4RM	1829A	ML	crop field	XfB
432		J	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
427		J	SBS-5-1-4RM	1826A	CL	hay field	XeB
396		J	SBS-8-1-4RM	1834A	CL	crop field	FcA
383		J	SBS-10-1-4RM	1873A	CL	hay field	FdA
369		J	SBS-8-3-4RM	12799	CL	crop field	XfB
314		UJ	SBS-8-2-4RM	12798	CL	crop field	FcA
292		J	SBS-6-2-4RM	12791	CL	crop field	RwB2
239		J	SBS-6-3-4RM	12792	CL	crop field	RwB

APPENDIX E

CONCENTRATION OF SILICON AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2440		J	SBS-3-3-5RM	12779	CL	crop field	RwB
2230		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
2060		J	SBS-11-1-5RM	1879A	CL	crop field	XfB
1860		J	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
1720		J	SBS-7-3-5RM	12795	CL	crop field	MsD2
1710		J	SBS-11-2-5RM	12810	CL	crop field	EcE2
1640		J	SBS-2-1B-5RM	1756B	CL	crop field	FdA
1530		J	SBS-7-1-5RM	1832A	CL	crop field	FdA
1400		J	SBS-10-3-5RM	12807	ML	hay field	FdA
1260		J	SBS-2-2-5RM	12774B	CL	crop field	RwB2
1240		J	SBS-2-2A-5RM	12774A	CL	crop field	FdA
1140		J	SBS-3-1-5RM	1763A	CL	crop field	XfB
1100		J	SBS-2-3-5RM	12775	CL	crop field	FdA
1070		J	SBS-7-2-5RM	12794	CL	crop field	XfB
1010		J	SBS-1-3-5RM	12771	CL	crop field	RwB2
945		J	SBS-4-1-5RM	1764A	CL	hay field	XeB
904		J	SBS-4-2-5RM	12783	CL	hay field	RvB2
867		J	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
849		J	SBS-2-1-5RM	1756A	CL	crop field	FdA
847		J	SBS-10-1-5RM	1873A	CL	hay field	FdA
783		J	SBS-1-1-5RM	1755A	CL	crop field	FdA
774		J	SBS-1-2-5RM	12770	CL	crop field	Ra
753		J	SBS-9-3-5RM	12804	CL	crop field	EcE2
599		J	SBS-10-2-5RM	12806	CL	hay field	Ra
545		J	SBS-9-1-5RM	1872A	CL	hay field	XfB
531		J	SBS-4-3-5RM	12784	CL	hay field	XeB
499		J	SBS-5-1-5RM	1826A	CL	hay field	XeB
452		J	SBS-5-2-5RM	12787	CL	hay field	FcA
447		J	SBS-5-3-5RM	12788	CL	hay field	RvB2
426		J	SBS-8-3-5RM-D	12799	CL	crop field	XfB
418		J	SBS-6-1-5RM	1829A	CL	crop field	XfB
415		J	SBS-8-3-5RM	12799	CL	crop field	XfB
412		J	SBS-9-2-5RM	12802	CL	crop field	MtC2
382		UJ	SBS-8-2-5RM	12798	CL	crop field	FcA
354		J	SBS-6-3-5RM	12792	CL	crop field	RwB
302		J	SBS-8-1-5RM	1834A	CL	crop field	FcA
291		J	SBS-6-2-5RM	12791	CL	crop field	RwB2

APPENDIX E

CONCENTRATION OF SILICON AT 30-36 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3300		J	SBS-3-3-6RM	12779	CL	crop field	RwB
2720		J	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
2650		J	SBS-2-1B-6RM	1756B	CL	crop field	FdA
2290		J	SBS-11-2-6RM	12810	CL	crop field	EcE2
2250		J	SBS-2-1-6RM	1756A	CL	crop field	FdA
1780		J	SBS-11-1-6RM	1879A	CL	crop field	XfB
1670		J	SBS-2-2A-6RM	12774A	CL	crop field	FdA
1400		J	SBS-1-2-6RM	12770	CL	crop field	Ra
1280		J	SBS-11-3-6RM	12811	C	crop field	EcE2
1120		J	SBS-1-3-6RM	12771	CL	crop field	RwB2
1090		J	SBS-3-1-6RM	1763A	ML	crop field	XfB
1070		J	SBS-10-2-6RM	12806	CL	hay field	Ra
1060		J	SBS-10-1-6RM	1873A	CL	hay field	FdA
983		J	SBS-7-2-6RM	12794	CL	crop field	XfB
951		J	SBS-1-1-6RM	1755A	CL	crop field	FdA
916		J	SBS-7-1-6RM	1832A	CL	crop field	FdA
825		J	SBS-10-3-6RM	12807	CL	hay field	FdA
774		J	SBS-9-3-6RM	12804	CL	crop field	EcE2
763		J	SBS-7-3-6RM	12795	CL	crop field	MsD2
730		J	SBS-2-2-6RM	12774B	CL	crop field	RwB2
717		J	SBS-5-3-6RM	12788	CL	hay field	RvB2
652		J	SBS-5-2-6RM	12787	CL	hay field	FcA
606		J	SBS-4-2-6RM	12783	CL	hay field	RvB2
591		J	SBS-4-1-6RM	1764A	CL	hay field	XeB
540		UJ	SBS-8-2-6RM	12798	CL	crop field	FcA
516		UJ	SBS-2-3-6RM	12775	CL	crop field	FdA
501		J	SBS-8-3-6RM	12799	CL	crop field	XfB
484		J	SBS-4-3-6RM	12784	CL	hay field	XeB
478		J	SBS-9-2-6RM	12802	CL	crop field	MtC2
464		J	SBS-9-1-6RM	1872A	CL	hay field	XfB
391		J	SBS-6-1-6RM	1829A	CL	crop field	XfB
370		J	SBS-5-1-6RM	1826A	CL	hay field	XeB
350		J	SBS-8-1-6RM	1834A	CL	crop field	FcA
282		J	SBS-6-3-6RM	12792	CL	crop field	RwB
270		J	SBS-6-2-6RM	12791	CL	crop field	RwB2
261		J	SBS-6-1-6RM-D	1829A	CL	crop field	XfB

APPENDIX E

CONCENTRATION OF SILVER AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.45		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
0.4		-	SBS-5-2-1RM	12787	ML	hay field	FcA
0.38		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
0.36	U	U	SBS-6-3-1RM	12792	ML	crop field	RwB
0.36	U	U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
0.36	U	U	SBS-8-1-1RM	1834A	ML	crop field	FcA
0.35	U	U	SBS-10-3-1RM	12807	ML	hay field	FdA
0.35	U	U	SBS-4-3-1RM	12784	ML	hay field	XeB
0.35	U	U	SBS-2-1-1RM	1756A	ML	crop field	FdA
0.35	U	U	SBS-7-2-1RM	12794	ML	crop field	XfB
0.34	U	U	SBS-2-3-1RM	12775	ML	crop field	FdA
0.34	U	U	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.34	U	U	SBS-6-1-1RM	1829A	ML	crop field	XfB
0.34	U	U	SBS-1-1-1RM	1755A	ML	crop field	FdA
0.34	U	U	SBS-5-3-1RM	12788	ML	hay field	RvB2
0.34	U	U	SBS-1-3-1RM	12771	ML	crop field	RwB2
0.34	U	U	SBS-10-2-1RM	12806	ML	hay field	Ra
0.34	U	U	SBS-2-2A-1RM	12774A	ML	crop field	FdA
0.34	U	U	SBS-2-2-1RM	12774B	ML	crop field	RwB2
0.34	U	U	SBS-11-1-1RM	1879A	ML	crop field	XfB
0.34	U	U	SBS-5-1-1RM	1826A	ML	hay field	XeB
0.34	U	U	SBS-7-1-1RM	1832A	ML	crop field	FdA
0.33	U	U	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.33	U	U	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
0.33	U	U	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
0.33	U	U	SBS-9-3-1RM	12804	CL	crop field	EcE2
0.33	U	U	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.33	U	U	SBS-8-2-1RM	12798	ML	crop field	FcA
0.33	U	U	SBS-7-3-1RM	12795	ML	crop field	MsD2
0.33	U	U	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
0.32	U	U	SBS-4-2-1RM	12783	ML	hay field	RvB2
0.32	U	U	SBS-11-3-1RM	12811	CL	crop field	EcE2
0.32	U	U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
0.32	U	U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
0.32	U	U	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.32	U	U	SBS-8-3-1RM	12799	ML	crop field	XfB
0.31	U	U	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.31		U	SBS-2-1B-1RM	1756B	ML	crop field	FdA
0.31	U	U	SBS-9-2-1RM	12802	ML	crop field	MtC2

APPENDIX E

CONCENTRATION OF SILVER AT 12-18 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.14		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
1.03		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.86		-	SBS-8-3-3RM	12799	CL	crop field	XfB
0.7		-	SBS-1-2-3RM	12770	CL	crop field	Ra
0.59		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.58		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
0.54		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
0.5		-	SBS-6-3-3RM	12792	CL	crop field	RwB
0.48		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
0.38		-	SBS-4-3-3RM	12784	CL	hay field	XeB
0.36	U	U	SBS-6-1-3RM	1829A	ML	crop field	XfB
0.36		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.36	U	U	SBS-2-1-3RM	1756A	CL	crop field	FdA
0.35	U	U	SBS-10-1-3RM	1873A	CL	hay field	FdA
0.35	U	U	SBS-11-1-3RM	1879A	ML	crop field	XfB
0.35	U	U	SBS-4-1-3RM	1764A	CL	hay field	XeB
0.35	U	U	SBS-3-3-3RM	12779	CL	crop field	RwB
0.35	U	U	SBS-8-1-3RM	1834A	CL	crop field	FcA
0.34	U	U	SBS-10-2-3RM	12806	CL	hay field	Ra
0.34	U	U	SBS-5-1-3RM	1826A	CL	hay field	XeB
0.34	U	U	SBS-5-3-3RM	12788	CL	hay field	RvB2
0.34	U	U	SBS-2-2A-3RM	12774A	CL	crop field	FdA
0.34	U	U	SBS-2-3-3RM	12775	CL	crop field	FdA
0.34	U	U	SBS-2-1B-3RM	1756B	ML	crop field	FdA
0.34	U	U	SBS-8-2-3RM	12798	CL	crop field	FcA
0.34	U	U	SBS-7-1-3RM	1832A	CL	crop field	FdA
0.33	U	U	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
0.33	U	U	SBS-1-3-3RM	12771	CL	crop field	RwB2
0.33	U	U	SBS-10-3-3RM	12807	ML	hay field	FdA
0.33	U	U	SBS-6-2-3RM	12791	ML	crop field	RwB2
0.33	U	U	SBS-7-2-3RM	12794	CL	crop field	XfB
0.33	U	U	SBS-7-3-3RM	12795	CL	crop field	MsD2
0.32	U	U	SBS-5-2-3RM	12787	ML	hay field	FcA
0.32		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.32	U	U	SBS-9-1-3RM	1872A	CL	hay field	XfB

APPENDIX E

CONCENTRATION OF SILVER AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.12		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
1.1		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
1.08		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.98		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.88		-	SBS-6-3-4RM	12792	CL	crop field	RwB
0.84		-	SBS-1-2-4RM	12770	CL	crop field	Ra
0.84		-	SBS-8-3-4RM	12799	CL	crop field	XfB
0.79		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.75		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.71		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
0.68		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.59		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.56		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
0.56		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.48		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.48		-	SBS-3-3-4RM	12779	CL	crop field	RwB
0.47		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
0.38		-	SBS-5-2-4RM	12787	CL	hay field	FcA
0.38		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
0.36	U	U	SBS-4-3-4RM	12784	CL	hay field	XeB
0.36	U	U	SBS-10-2-4RM	12806	CL	hay field	Ra
0.36	U	U	SBS-8-1-4RM	1834A	CL	crop field	FcA
0.35	U	U	SBS-10-1-4RM	1873A	CL	hay field	FdA
0.35	U	U	SBS-7-2-4RM	12794	CL	crop field	XfB
0.34	U	U	SBS-3-1-4RM	1763A	CL	crop field	XfB
0.34	U	U	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.34	U	U	SBS-6-2-4RM	12791	CL	crop field	RwB2
0.34	U	U	SBS-2-1-4RM	1756A	CL	crop field	FdA
0.34	U	U	SBS-2-1B-4RM	1756B	CL	crop field	FdA
0.34	U	U	SBS-1-3-4RM	12771	CL	crop field	RwB2
0.34	U	U	SBS-8-2-4RM	12798	CL	crop field	FcA
0.33	U	U	SBS-10-3-4RM	12807	ML	hay field	FdA
0.33	U	U	SBS-2-3-4RM	12775	CL	crop field	FdA
0.33	U	U	SBS-6-1-4RM	1829A	ML	crop field	XfB
0.32	U	U	SBS-2-3-4RM-D	12775	CL	crop field	FdA
0.32	U	U	SBS-2-2A-4RM	12774A	CL	crop field	FdA
0.32	U	U	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.32	U	U	SBS-7-3-4RM	12795	CL	crop field	MsD2
0.31	U	U	SBS-9-1-4RM	1872A	CL	hay field	XfB

APPENDIX E

CONCENTRATION OF SILVER AT 24-30 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.32		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
1.31		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
1.28		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
1.12		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
1.08		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
1.06		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.91		-	SBS-1-2-5RM	12770	CL	crop field	Ra
0.9		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.84		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.81		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.73		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.73		-	SBS-8-3-5RM	12799	CL	crop field	XfB
0.7		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.69		-	SBS-10-3-5RM	12807	ML	hay field	FdA
0.66		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.62		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.55		-	SBS-10-2-5RM	12806	CL	hay field	Ra
0.47		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.45		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.41		-	SBS-5-2-5RM	12787	CL	hay field	FcA
0.4		-	SBS-6-3-5RM	12792	CL	crop field	RwB
0.36		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
0.35	U	U	SBS-3-3-5RM	12779	CL	crop field	RwB
0.35	U	U	SBS-8-1-5RM	1834A	CL	crop field	FcA
0.34	U	U	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.34	U	U	SBS-3-1-5RM	1763A	CL	crop field	XfB
0.34	U	U	SBS-2-2A-5RM	12774A	CL	crop field	FdA
0.34	U	U	SBS-8-2-5RM	12798	CL	crop field	FcA
0.33	U	U	SBS-2-1B-5RM	1756B	CL	crop field	FdA
0.33	U	U	SBS-5-3-5RM	12788	CL	hay field	RvB2
0.33		-	SBS-2-3-5RM	12775	CL	crop field	FdA
0.33	U	U	SBS-2-1-5RM	1756A	CL	crop field	FdA
0.32	U	U	SBS-10-1-5RM	1873A	CL	hay field	FdA
0.32	U	U	SBS-4-3-5RM	12784	CL	hay field	XeB
0.32	U	U	SBS-7-2-5RM	12794	CL	crop field	XfB
0.31	U	U	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.31	U	U	SBS-7-3-5RM	12795	CL	crop field	MsD2

APPENDIX E

CONCENTRATION OF SILVER AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.38		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
1.38		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
1.32		-	SBS-11-3-6RM	12811	C	crop field	EcE2
1.22		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
1.08		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
1.02		-	SBS-6-3-6RM	12792	CL	crop field	RwB
0.98		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.94		-	SBS-10-3-6RM	12807	CL	hay field	FdA
0.92		-	SBS-1-2-6RM	12770	CL	crop field	Ra
0.92		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.9		J	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.87		-	SBS-8-2-6RM	12798	CL	crop field	FcA
0.81		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.81		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.79		-	SBS-10-2-6RM	12806	CL	hay field	Ra
0.76		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.75		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.72		-	SBS-8-3-6RM	12799	CL	crop field	XfB
0.71		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.71		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.68		U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.68		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.68		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.67		-	SBS-3-3-6RM	12779	CL	crop field	RwB
0.66		-	SBS-2-3-6RM	12775	CL	crop field	FdA
0.65		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.61		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.56		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.39		-	SBS-5-2-6RM	12787	CL	hay field	FcA
0.35	U	U	SBS-2-2A-6RM	12774A	CL	crop field	FdA
0.34	U	U	SBS-1-1-6RM	1755A	CL	crop field	FdA
0.33	U	U	SBS-4-3-6RM	12784	CL	hay field	XeB
0.33	U	UJ	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.32	U	U	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.32	U	U	SBS-7-2-6RM	12794	CL	crop field	XfB
0.31	U	U	SBS-9-1-6RM	1872A	CL	hay field	XfB

APPENDIX E

CONCENTRATION OF SODIUM AT 0-6 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
259		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
231		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
83.8		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
83.1		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
82.8		U	SBS-5-1-1RM	1826A	ML	hay field	XeB
76.1		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
71.5		U	SBS-11-1-1RM	1879A	ML	crop field	XfB
70.7		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
67.2		U	SBS-5-2-1RM	12787	ML	hay field	FcA
66.6		U	SBS-1-1-1RM	1755A	ML	crop field	FdA
65.4		-	SBS-10-3-1RM	12807	ML	hay field	FdA
61.6		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
59.8		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
59.1		-	SBS-6-3-1RM	12792	ML	crop field	RwB
57.2		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
57.1		U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
55.4		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
54.2		U	SBS-2-1B-1RM	1756B	ML	crop field	FdA
54		U	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
52.5		-	SBS-4-3-1RM	12784	ML	hay field	XeB
52.2		-	SBS-10-2-1RM	12806	ML	hay field	Ra
47.8		-	SBS-2-3-1RM	12775	ML	crop field	FdA
47.4		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
46.7		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
46		U	SBS-5-3-1RM	12788	ML	hay field	RvB2
45.2		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
44.5		U	SBS-8-2-1RM	12798	ML	crop field	FcA
44.4		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
44.4		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
44.1		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
43.9		U	SBS-3-1-1RM	1763A	ML	crop field	XfB
39.4		U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
36.7		-	SBS-8-3-1RM	12799	ML	crop field	XfB
36.4		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
35.4		U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
35.4		-	SBS-7-2-1RM	12794	ML	crop field	XfB
25.2		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
24.6		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
20.3	U	U	SBS-7-3-1RM	12795	ML	crop field	MsD2

APPENDIX E

CONCENTRATION OF SODIUM AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1320		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
695		-	SBS-8-3-3RM	12799	CL	crop field	XfB
627		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
604		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
481		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
401		-	SBS-1-2-3RM	12770	CL	crop field	Ra
130		U	SBS-11-1-3RM	1879A	ML	crop field	XfB
124		-	SBS-4-3-3RM	12784	CL	hay field	XeB
120		U	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
111		-	SBS-6-3-3RM	12792	CL	crop field	RwB
109		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
97.6		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
96.4		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
91.1		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
86.2		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
85.5		U	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
78.7		U	SBS-5-1-3RM	1826A	CL	hay field	XeB
76.9		U	SBS-5-3-3RM	12788	CL	hay field	RvB2
75.4		U	SBS-2-1B-3RM	1756B	ML	crop field	FdA
71.7		-	SBS-10-2-3RM	12806	CL	hay field	Ra
69.6		U	SBS-5-2-3RM	12787	ML	hay field	FcA
69.2		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
69		U	SBS-8-2-3RM	12798	CL	crop field	FcA
66.1		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
61.6		U	SBS-3-3-3RM	12779	CL	crop field	RwB
60.5		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
58.6		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
58.2		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
50.3		U	SBS-3-1-3RM	1763A	CL	crop field	XfB
46.4		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
46.1		-	SBS-10-3-3RM	12807	ML	hay field	FdA
45.3		-	SBS-2-3-3RM	12775	CL	crop field	FdA
44.7		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
43		-	SBS-7-2-3RM	12794	CL	crop field	XfB
38.6		-	SBS-7-3-3RM	12795	CL	crop field	MsD2

APPENDIX E

CONCENTRATION OF SODIUM AT 18-24 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1390		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
936		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
885		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
822		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
794		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
766		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
725		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
715		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
707		-	SBS-8-3-4RM	12799	CL	crop field	XfB
587		-	SBS-6-3-4RM	12792	CL	crop field	RwB
447		-	SBS-1-2-4RM	12770	CL	crop field	Ra
320		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
261		J	SBS-10-3-4RM-D	12807	ML	hay field	FdA
193		U	SBS-11-1-4RM	1879A	CL	crop field	XfB
163		-	SBS-4-3-4RM	12784	CL	hay field	XeB
159		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
141		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
121		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
119		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
115		U	SBS-3-3-4RM	12779	CL	crop field	RwB
111		-	SBS-2-3-4RM	12775	CL	crop field	FdA
111		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
110		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
104		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
101		U	SBS-1-1-4RM	1755A	CL	crop field	FdA
95.9		U	SBS-5-2-4RM	12787	CL	hay field	FcA
95		U	SBS-2-1B-4RM	1756B	CL	crop field	FdA
92.2		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
90.4		U	SBS-5-3-4RM	12788	CL	hay field	RvB2
84.3		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
83.6		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
77.1		U	SBS-3-1-4RM	1763A	CL	crop field	XfB
73.4		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
66		U	SBS-8-2-4RM	12798	CL	crop field	FcA
65.7		-	SBS-10-2-4RM	12806	CL	hay field	Ra
65		-	SBS-7-2-4RM	12794	CL	crop field	XfB
63.6		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
52		J	SBS-10-3-4RM	12807	ML	hay field	FdA
46.4		-	SBS-2-1-4RM	1756A	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF SODIUM AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1210		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
1200		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
1110		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
1040		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
991		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
878		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
850		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
844		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
818		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
818		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
788		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
753		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
753		-	SBS-8-3-5RM	12799	CL	crop field	XfB
741		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
705		-	SBS-1-2-5RM	12770	CL	crop field	Ra
420		-	SBS-10-3-5RM	12807	ML	hay field	FdA
344		-	SBS-10-2-5RM	12806	CL	hay field	Ra
338		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
304		-	SBS-6-3-5RM	12792	CL	crop field	RwB
180		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
171		-	SBS-3-3-5RM	12779	CL	crop field	RwB
166		-	SBS-2-3-5RM	12775	CL	crop field	FdA
163		-	SBS-4-3-5RM	12784	CL	hay field	XeB
157		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
116		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
115		U	SBS-5-3-5RM	12788	CL	hay field	RvB2
114		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
105		U	SBS-1-1-5RM	1755A	CL	crop field	FdA
99.8		U	SBS-2-1B-5RM	1756B	CL	crop field	FdA
99		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
96.3		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
94.7		U	SBS-5-2-5RM	12787	CL	hay field	FcA
71.2		U	SBS-8-2-5RM	12798	CL	crop field	FcA
64.3		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
63.7		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
58.9		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
51.9		-	SBS-7-2-5RM	12794	CL	crop field	XfB

APPENDIX E

3502

CONCENTRATION OF SODIUM AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1720		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
1560		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
1180		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
1160		-	SBS-11-3-6RM	12811	C	crop field	EcE2
937		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
871		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
863		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
823		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
817		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
786		-	SBS-10-3-6RM	12807	CL	hay field	FdA
759		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
748		-	SBS-8-3-6RM	12799	CL	crop field	XfB
742		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
715		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
712		-	SBS-10-2-6RM	12806	CL	hay field	Ra
676		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
670		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
655		-	SBS-6-3-6RM	12792	CL	crop field	RwB
636		-	SBS-1-2-6RM	12770	CL	crop field	Ra
569		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
524		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
518		-	SBS-3-3-6RM	12779	CL	crop field	RwB
490		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
438		J	SBS-6-1-6RM	1829A	CL	crop field	XfB
395		-	SBS-8-2-6RM	12798	CL	crop field	FcA
374		-	SBS-2-3-6RM	12775	CL	crop field	FdA
352		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
307		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
251		J	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
205		U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
200		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
148		-	SBS-4-3-6RM	12784	CL	hay field	XeB
102		U	SBS-5-2-6RM	12787	CL	hay field	FcA
99.2		U	SBS-1-1-6RM	1755A	CL	crop field	FdA
84.2		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
80.2		-	SBS-7-2-6RM	12794	CL	crop field	XfB

APPENDIX E

CONCENTRATION OF THALLIUM AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.74		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
0.65		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
0.56	U	U	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.55	U	U	SBS-10-2-1RM	12806	ML	hay field	Ra
0.55	U	U	SBS-7-2-1RM	12794	ML	crop field	XfB
0.54	U	U	SBS-10-3-1RM	12807	ML	hay field	FdA
0.52	U	U	SBS-7-3-1RM	12795	ML	crop field	MsD2
0.52		-	SBS-8-3-1RM	12799	ML	crop field	XfB
0.5	U	U	SBS-6-3-1RM	12792	ML	crop field	RwB
0.49	U	UJ	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
0.49	U	U	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
0.48	U	U	SBS-6-1-1RM	1829A	ML	crop field	XfB
0.48	U	U	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
0.48	U	U	SBS-5-3-1RM	12788	ML	hay field	RvB2
0.47	U	UJ	SBS-11-1-1RM	1879A	ML	crop field	XfB
0.47	W	J	SBS-8-2-1RM	12798	ML	crop field	FcA
0.46	U	U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
0.46	U	U	SBS-2-3-1RM	12775	ML	crop field	FdA
0.46	U	U	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
0.46	UW	UJ	SBS-9-2-1RM	12802	ML	crop field	MtC2
0.45	U	U	SBS-1-1-1RM	1755A	ML	crop field	FdA
0.45	U	U	SBS-2-1-1RM	1756A	ML	crop field	FdA
0.45	U	U	SBS-4-2-1RM	12783	ML	hay field	RvB2
0.45	U	U	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.45	U	U	SBS-2-2A-1RM	12774A	ML	crop field	FdA
0.45	U	U	SBS-2-1B-1RM	1756B	ML	crop field	FdA
0.45	U	U	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.44	U	U	SBS-2-2-1RM	12774B	ML	crop field	RwB2
0.44	U	U	SBS-4-3-1RM	12784	ML	hay field	XeB
0.44	U	U	SBS-5-2-1RM	12787	ML	hay field	FcA
0.44	U	U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
0.44	U	U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
0.43	U	UJ	SBS-11-3-1RM	12811	CL	crop field	EcE2
0.43	UW	U	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.43	U	U	SBS-1-3-1RM	12771	ML	crop field	RwB2
0.43	U	U	SBS-5-1-1RM	1826A	ML	hay field	XeB
0.43	U	U	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
0.43	U	UJ	SBS-9-3-1RM	12804	CL	crop field	EcE2
0.43	U	UJ	SBS-9-1-1RM	1872A	ML	hay field	XfB

APPENDIX E

CONCENTRATION OF THALLIUM AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.2		-	SBS-8-3-3RM	12799	CL	crop field	XfB
0.75		-	SBS-8-2-3RM	12798	CL	crop field	FcA
0.57	W	J	SBS-8-1-3RM	1834A	CL	crop field	FcA
0.56	U	U	SBS-10-1-3RM	1873A	CL	hay field	FdA
0.56	U	U	SBS-10-2-3RM	12806	CL	hay field	Ra
0.55	U	U	SBS-7-1-3RM	1832A	CL	crop field	FdA
0.54	U	U	SBS-10-3-3RM	12807	ML	hay field	FdA
0.52	U	U	SBS-7-3-3RM	12795	CL	crop field	MsD2
0.51	U	U	SBS-7-2-3RM	12794	CL	crop field	XfB
0.49	U	U	SBS-6-2-3RM	12791	ML	crop field	RwB2
0.49	U	U	SBS-2-2A-3RM	12774A	CL	crop field	FdA
0.49	U	U	SBS-4-3-3RM	12784	CL	hay field	XeB
0.48	U	U	SBS-2-1-3RM	1756A	CL	crop field	FdA
0.48	U	U	SBS-2-3-3RM	12775	CL	crop field	FdA
0.47	U	UJ	SBS-11-1-3RM	1879A	ML	crop field	XfB
0.47	U	U	SBS-5-2-3RM	12787	ML	hay field	FcA
0.47	U	U	SBS-4-1-3RM	1764A	CL	hay field	XeB
0.47	U	U	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.47	U	U	SBS-2-1B-3RM	1756B	ML	crop field	FdA
0.47	U	U	SBS-3-1-3RM	1763A	CL	crop field	XfB
0.47	U	U	SBS-6-1-3RM	1829A	ML	crop field	XfB
0.46	U	U	SBS-5-3-3RM	12788	CL	hay field	RvB2
0.46	U	U	SBS-1-3-3RM	12771	CL	crop field	RwB2
0.45	U	U	SBS-5-1-3RM	1826A	CL	hay field	XeB
0.45	U	U	SBS-3-3-3RM	12779	CL	crop field	RwB
0.44	U	U	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.44	U	U	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
0.44	U	UJ	SBS-11-2-3RM	12810	CL	crop field	EcE2
0.44	U	UJ	SBS-11-3-3RM	12811	CL	crop field	EcE2
0.44	UW	UJ	SBS-9-1-3RM	1872A	CL	hay field	XfB
0.44	UW	UJ	SBS-9-3-3RM	12804	CL	crop field	EcE2
0.43	U	U	SBS-6-3-3RM	12792	CL	crop field	RwB
0.41	U	U	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.41	UW	UJ	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.4	U	U	SBS-1-2-3RM	12770	CL	crop field	Ra

APPENDIX E

CONCENTRATION OF THALLIUM AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.65		-	SBS-8-3-4RM	12799	CL	crop field	XfB
0.64	W	J	SBS-8-2-4RM	12798	CL	crop field	FcA
0.59		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
0.57	U	U	SBS-10-2-4RM	12806	CL	hay field	Ra
0.55	U	U	SBS-7-2-4RM	12794	CL	crop field	XfB
0.53	U	U	SBS-10-1-4RM	1873A	CL	hay field	FdA
0.52	W	J	SBS-5-3-4RM	12788	CL	hay field	RvB2
0.51	U	U	SBS-7-3-4RM	12795	CL	crop field	MsD2
0.5	U	U	SBS-10-3-4RM	12807	ML	hay field	FdA
0.49	U	U	SBS-4-3-4RM	12784	CL	hay field	XeB
0.49	U	U	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.48	U	U	SBS-3-3-4RM	12779	CL	crop field	RwB
0.48	U	U	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.48	U	U	SBS-2-3-4RM	12775	CL	crop field	FdA
0.48	U	U	SBS-1-1-4RM	1755A	CL	crop field	FdA
0.48	U	U	SBS-6-1-4RM	1829A	ML	crop field	XfB
0.47	U	U	SBS-2-1-4RM	1756A	CL	crop field	FdA
0.47	U	U	SBS-2-3-4RM-D	12775	CL	crop field	FdA
0.46	U	U	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.46	U	U	SBS-5-2-4RM	12787	CL	hay field	FcA
0.45	U	U	SBS-2-2A-4RM	12774A	CL	crop field	FdA
0.45	U	U	SBS-6-2-4RM	12791	CL	crop field	RwB2
0.45	U	U	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.44	U	U	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.44	U	UJ	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.44	UW	UJ	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.44	U	UJ	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.44	U	UJ	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.43	U	U	SBS-3-1-4RM	1763A	CL	crop field	XfB
0.43	UW	U	SBS-2-1B-4RM	1756B	CL	crop field	FdA
0.43	U	U	SBS-1-3-4RM	12771	CL	crop field	RwB2
0.43	U	UJ	SBS-11-2-4RM	12810	CL	crop field	EcE2
0.43	U	U	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
0.43	U	U	SBS-6-3-4RM	12792	CL	crop field	RwB
0.43	UW	UJ	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.42	U	U	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.42	U	UJ	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.41	U	U	SBS-1-2-4RM	12770	CL	crop field	Ra
0.39	U	U	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX E

3502

CONCENTRATION OF THALLIUM AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.05		-	SBS-8-3-5RM	12799	CL	crop field	XfB
0.57	W	J	SBS-8-2-5RM	12798	CL	crop field	FcA
0.56		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.54		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
0.52	U	U	SBS-10-3-5RM	12807	ML	hay field	FdA
0.52	U	U	SBS-7-2-5RM	12794	CL	crop field	XfB
0.5	U	U	SBS-10-1-5RM	1873A	CL	hay field	FdA
0.49	U	U	SBS-10-2-5RM	12806	CL	hay field	Ra
0.49		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.49	U	U	SBS-7-3-5RM	12795	CL	crop field	MsD2
0.48	U	U	SBS-3-3-5RM	12779	CL	crop field	RwB
0.48	U	U	SBS-1-1-5RM	1755A	CL	crop field	FdA
0.47	U	U	SBS-2-3-5RM	12775	CL	crop field	FdA
0.47	U	U	SBS-3-1-5RM	1763A	CL	crop field	XfB
0.46	U	U	SBS-2-1B-5RM	1756B	CL	crop field	FdA
0.46	U	U	SBS-5-2-5RM	12787	CL	hay field	FcA
0.46	U	U	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.46	W	J	SBS-5-3-5RM	12788	CL	hay field	RvB2
0.46	U	U	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.46	U	U	SBS-2-2A-5RM	12774A	CL	crop field	FdA
0.46	U	U	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.45	U	UJ	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.45	U	U	SBS-4-3-5RM	12784	CL	hay field	XeB
0.45	UW	UJ	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.44	U	UJ	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.44	U	UJ	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.43	U	U	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.43	U	U	SBS-2-1-5RM	1756A	CL	crop field	FdA
0.42	U	U	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.42	U	UJ	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.42	U	U	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.42	UW	UJ	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.42	U	U	SBS-6-3-5RM	12792	CL	crop field	RwB
0.41	U	U	SBS-1-2-5RM	12770	CL	crop field	Ra
0.41	U	U	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.4	U	U	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.4	U	UJ	SBS-9-2-5RM	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF THALLIUM AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.64		-	SBS-8-3-6RM	12799	CL	crop field	XfB
0.55	U	U	SBS-7-2-6RM	12794	CL	crop field	XfB
0.52	U	U	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.49	U	U	SBS-1-1-6RM	1755A	CL	crop field	FdA
0.49	U	U	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.48	U	U	SBS-10-2-6RM	12806	CL	hay field	Ra
0.48	U	U	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.47	U	U	SBS-10-3-6RM	12807	CL	hay field	FdA
0.46	U	U	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.46	UW	U	SBS-2-2A-6RM	12774A	CL	crop field	FdA
0.46	U	U	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.46	U	U	SBS-4-3-6RM	12784	CL	hay field	XeB
0.46	U	U	SBS-8-2-6RM	12798	CL	crop field	FcA
0.45	U	U	SBS-5-2-6RM	12787	CL	hay field	FcA
0.45	U	U	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.44	U	UJ	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.44	U	U	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.44	U	U	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.44	U	UJ	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.44	UW	UJ	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.43	U	U	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.43	U	UJ	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.43	U	U	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.43	U	U	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.43	U	U	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.43	U	U	SBS-6-3-6RM	12792	CL	crop field	RwB
0.43	UW	UJ	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.42	U	U	SBS-2-3-6RM	12775	CL	crop field	FdA
0.42	U	UJ	SBS-11-3-6RM	12811	C	crop field	EcE2
0.42	U	U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.42	U	U	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.41	U	U	SBS-3-3-6RM	12779	CL	crop field	RwB
0.41	U	U	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.41	U	U	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.4	U	U	SBS-1-2-6RM	12770	CL	crop field	Ra
0.4	U	U	SBS-2-2-6RM	12774B	CL	crop field	RwB2

APPENDIX E

3502

CONCENTRATION OF VANADIUM AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
36.1		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
36		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
35.3		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
34.5		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
32.6		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
32.3		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
31.6		-	SBS-6-3-1RM	12792	ML	crop field	RwB
30.9		-	SBS-5-1-1RM	1826A	ML	hay field	XeB
30.9		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
30.4		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
29.4		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
29.3		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
28.7		-	SBS-5-2-1RM	12787	ML	hay field	FcA
28.6		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
28.4		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
28		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
28		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
27.7		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
25.4		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
25.4		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
24.9		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
24.5		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
24.2		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
24.2		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
23.9		-	SBS-8-2-1RM	12798	ML	crop field	FcA
23.8		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
23.6		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
23.6		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
23.6		-	SBS-8-3-1RM	12799	ML	crop field	XfB
23.4		-	SBS-10-2-1RM	12806	ML	hay field	Ra
23.4		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
23.1		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
23		-	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
21.8		-	SBS-2-3-1RM	12775	ML	crop field	FdA
21.8		-	SBS-10-3-1RM	12807	ML	hay field	FdA
21.2		-	SBS-4-3-1RM	12784	ML	hay field	XeB
21		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
20.4		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
18.9		-	SBS-7-2-1RM	12794	ML	crop field	XfB

APPENDIX E

CONCENTRATION OF VANADIUM AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
43.5		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
41.9		-	SBS-4-3-3RM	12784	CL	hay field	XeB
41.8		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
41.1		-	SBS-7-2-3RM	12794	CL	crop field	XfB
40.6		-	SBS-3-3-3RM	12779	CL	crop field	RwB
39.3		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
39.2		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
38.2		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
37.8		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
37.5		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
37.2		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
35.8		-	SBS-10-2-3RM	12806	CL	hay field	Ra
35.1		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
33.9		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
33.8		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
33.6		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
33.5		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
32.5		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
32.1		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
30.8		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
30.6		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
29.7		-	SBS-6-3-3RM	12792	CL	crop field	RwB
28.2		-	SBS-2-3-3RM	12775	CL	crop field	FdA
28.1		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
28		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
27.7		-	SBS-5-2-3RM	12787	ML	hay field	FcA
27.6		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
25.6		-	SBS-10-3-3RM	12807	ML	hay field	FdA
24.8		-	SBS-1-2-3RM	12770	CL	crop field	Ra
24.1		-	SBS-8-2-3RM	12798	CL	crop field	FcA
22.3		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
22.3		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
22		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
18.2		-	SBS-8-3-3RM	12799	CL	crop field	XfB
17.9		-	SBS-9-2-3RM	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF VANADIUM AT 18-24 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
40.8		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
40.1		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
39.9		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
38.2		-	SBS-3-3-4RM	12779	CL	crop field	RwB
36.8		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
36.7		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
36.6		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
34.7		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
33		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
32.8		-	SBS-10-2-4RM	12806	CL	hay field	Ra
31		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
30.8		-	SBS-7-2-4RM	12794	CL	crop field	XfB
30.6		-	SBS-4-3-4RM	12784	CL	hay field	XeB
29.3		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
29.2		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
28.7		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
28.4		-	SBS-5-2-4RM	12787	CL	hay field	FcA
28.3		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
28.2		-	SBS-8-2-4RM	12798	CL	crop field	FcA
27.8		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
27.8		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
26.7		-	SBS-2-3-4RM	12775	CL	crop field	FdA
26.1		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
26		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
25.8		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
25		-	SBS-10-3-4RM	12807	ML	hay field	FdA
24.9		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
24.1		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
23.3		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
22.7		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
22.6		-	SBS-1-2-4RM	12770	CL	crop field	Ra
20.4		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
20.4		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
20.1		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
19.5		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
19.2		-	SBS-6-3-4RM	12792	CL	crop field	RwB
18.3		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
16.3		-	SBS-8-3-4RM	12799	CL	crop field	XfB
13.6		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF VANADIUM AT 24-30 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
40.8		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
37.4		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
34.1		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
33.8		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
33.6		-	SBS-3-3-5RM	12779	CL	crop field	RwB
31.6		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
31.3		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
30.9		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
30.1		-	SBS-4-3-5RM	12784	CL	hay field	XeB
29.5		-	SBS-7-2-5RM	12794	CL	crop field	XfB
27.8		-	SBS-8-2-5RM	12798	CL	crop field	FcA
25.8		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
25.6		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
25.2		-	SBS-5-2-5RM	12787	CL	hay field	FcA
24.8		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
24.8		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
24.6		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
24.3		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
24		-	SBS-6-3-5RM	12792	CL	crop field	RwB
23.5		-	SBS-10-2-5RM	12806	CL	hay field	Ra
22		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
21		-	SBS-10-3-5RM	12807	ML	hay field	FdA
20.7		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
20.7		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
20.3		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
19.4		-	SBS-2-3-5RM	12775	CL	crop field	FdA
18.8		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
18.7		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
18		-	SBS-11-3-5RM	12811	CL	crop field	EcE2
18		-	SBS-1-2-5RM	12770	CL	crop field	Ra
17.6		-	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
17.5		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
17.2		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
16.1		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
15.7		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
15.4		-	SBS-8-3-5RM	12799	CL	crop field	XfB
14.3		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2

APPENDIX E

3502

CONCENTRATION OF VANADIUM AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
32.1		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
31.3		-	SBS-7-2-6RM	12794	CL	crop field	XfB
30.8		-	SBS-5-2-6RM	12787	CL	hay field	FcA
30.6		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
29.7		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
27.4		-	SBS-4-3-6RM	12784	CL	hay field	XeB
27		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
25.5		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
25.4		-	SBS-3-3-6RM	12779	CL	crop field	RwB
24.9		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
24.6		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
23.5		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
23.4		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
22.5		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
22.4		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
21.4		-	SBS-8-2-6RM	12798	CL	crop field	FcA
21.1		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
20.1		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
19.2		-	SBS-1-2-6RM	12770	CL	crop field	Ra
19.1		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
18.6		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
18.4		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
18		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
17.9		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
17.9		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
17.7		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
17.4		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
17.4		-	SBS-10-3-6RM	12807	CL	hay field	FdA
16		-	SBS-8-3-6RM	12799	CL	crop field	XfB
15.4		-	SBS-10-2-6RM	12806	CL	hay field	Ra
15.4		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
15.2		-	SBS-2-3-6RM	12775	CL	crop field	FdA
14.4		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
13.9		-	SBS-6-3-6RM	12792	CL	crop field	RwB
12.7		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
12.1		-	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX E

CONCENTRATION OF ZINC AT 0-6 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
65.2		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
63.8		J	SBS-9-3-1RM	12804	CL	crop field	EcE2
63.6		J	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
61.3		-	SBS-6-3-1RM	12792	ML	crop field	RwB
58.3		J	SBS-11-3-1RM	12811	CL	crop field	EcE2
57.7		-	SBS-10-3-1RM	12807	ML	hay field	FdA
56.8		J	SBS-9-1-1RM	1872A	ML	hay field	XfB
56.2		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
53.8		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
53.2		J	SBS-11-1-1RM	1879A	ML	crop field	XfB
50.1		J	SBS-9-2-1RM	12802	ML	crop field	MtC2
49.6		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
49.2		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
48.5		-	SBS-8-3-1RM	12799	ML	crop field	XfB
48.2		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
47.2		J	SBS-5-2-1RM	12787	ML	hay field	FcA
45.8		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
45.7		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
45		J	SBS-5-3-1RM	12788	ML	hay field	RvB2
42.4		J	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
38.5		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
38.4		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
37.4		J	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
36.1		J	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
36		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
35.7		-	SBS-2-3-1RM	12775	ML	crop field	FdA
34.4		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
34.3		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
33.5		J	SBS-3-1-1RM	1763A	ML	crop field	XfB
33.2		-	SBS-10-2-1RM	12806	ML	hay field	Ra
32.8		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
32.6		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
32.4		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
32.1		-	SBS-8-2-1RM	12798	ML	crop field	FcA
29.6		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
29.4		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
28.4		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
27.9		-	SBS-4-3-1RM	12784	ML	hay field	XeB
26.8		-	SBS-7-2-1RM	12794	ML	crop field	XfB

APPENDIX E

3502

CONCENTRATION OF ZINC AT 12-18 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
85.7		J	SBS-11-1-3RM	1879A	ML	crop field	XfB
82.6		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
80		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
77.8		J	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
77.1		J	SBS-5-3-3RM	12788	CL	hay field	RvB2
76.5		J	SBS-11-3-3RM	12811	CL	crop field	EcE2
73		-	SBS-6-3-3RM	12792	CL	crop field	RwB
72.6		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
70.1		-	SBS-10-3-3RM	12807	ML	hay field	FdA
69.4		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
67.8		-	SBS-7-2-3RM	12794	CL	crop field	XfB
67.2		J	SBS-9-3-3RM	12804	CL	crop field	EcE2
65.1		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
64.8		-	SBS-10-2-3RM	12806	CL	hay field	Ra
60.8		J	SBS-11-2-3RM	12810	CL	crop field	EcE2
60.8		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
59.3		J	SBS-9-1-3RM	1872A	CL	hay field	XfB
57.6		-	SBS-4-3-3RM	12784	CL	hay field	XeB
56.7		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
55.4		-	SBS-1-2-3RM	12770	CL	crop field	Ra
55.2		J	SBS-3-3-3RM	12779	CL	crop field	RwB
54.8		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
54.7		J	SBS-5-2-3RM	12787	ML	hay field	FcA
54.2		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
53.9		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
53.4		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
52.2		J	SBS-3-1-3RM	1763A	CL	crop field	XfB
50.3		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
47.9		J	SBS-9-2-3RM	12802	CL	crop field	MtC2
47.6		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
45.9		-	SBS-8-2-3RM	12798	CL	crop field	FcA
45.3		-	SBS-8-3-3RM	12799	CL	crop field	XfB
39.4		-	SBS-2-3-3RM	12775	CL	crop field	FdA
37.4		J	SBS-5-1-3RM	1826A	CL	hay field	XeB
37.1		-	SBS-8-1-3RM	1834A	CL	crop field	FcA

APPENDIX E

CONCENTRATION OF ZINC AT 18-24 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
88.5		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
82.5		J	SBS-5-3-4RM	12788	CL	hay field	RvB2
82		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
79.7		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
76.5		J	SBS-11-2-4RM	12810	CL	crop field	EcE2
74.5		J	SBS-11-1-4RM	1879A	CL	crop field	XfB
73.2		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
71.9		J	SBS-5-2-4RM	12787	CL	hay field	FcA
70.9		J	SBS-11-3-4RM	12811	CL	crop field	EcE2
70.9		J	SBS-9-1-4RM	1872A	CL	hay field	XfB
70.8		-	SBS-10-2-4RM	12806	CL	hay field	Ra
70.5		J	SBS-3-1-4RM	1763A	CL	crop field	XfB
70		J	SBS-3-3-4RM	12779	CL	crop field	RwB
69.9		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
68.3		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
67.6		-	SBS-10-3-4RM	12807	ML	hay field	FdA
66.8		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
65.9		-	SBS-2-3-4RM	12775	CL	crop field	FdA
65.8		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
65.8		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
65.7		-	SBS-8-2-4RM	12798	CL	crop field	FcA
64.2		-	SBS-4-3-4RM	12784	CL	hay field	XeB
62		-	SBS-7-2-4RM	12794	CL	crop field	XfB
61.5		J	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
61.4		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
60.4		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
59.7		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
58.4		J	SBS-9-3-4RM	12804	CL	crop field	EcE2
57.9		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
57.6		J	SBS-5-1-4RM	1826A	CL	hay field	XeB
53.9		-	SBS-1-2-4RM	12770	CL	crop field	Ra
52.2		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
51.1		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
51.1		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
51.1		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
48.9		-	SBS-8-3-4RM	12799	CL	crop field	XfB
47.2		J	SBS-9-2-4RM	12802	CL	crop field	MtC2
42.6		-	SBS-6-3-4RM	12792	CL	crop field	RwB
40.3		J	SBS-9-2-4RM-D	12802	CL	crop field	MtC2

APPENDIX E

CONCENTRATION OF ZINC AT 24-30 INCHES

3502

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
102		J	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
92.8		J	SBS-11-2-5RM	12810	CL	crop field	EcE2
91.4		J	SBS-3-1-5RM	1763A	CL	crop field	XfB
87.9		J	SBS-3-3-5RM	12779	CL	crop field	RwB
82.5		J	SBS-5-3-5RM	12788	CL	hay field	RvB2
80.5		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
79.7		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
76.9		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
76.6		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
74.4		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
71.6		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
70.2		J	SBS-5-2-5RM	12787	CL	hay field	FcA
65.5		-	SBS-8-2-5RM	12798	CL	crop field	FcA
64		J	SBS-9-3-5RM	12804	CL	crop field	EcE2
63.9		-	SBS-4-3-5RM	12784	CL	hay field	XeB
63.8		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
62		-	SBS-7-2-5RM	12794	CL	crop field	XfB
62		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
61		J	SBS-9-1-5RM	1872A	CL	hay field	XfB
58.3		-	SBS-10-2-5RM	12806	CL	hay field	Ra
57		-	SBS-2-3-5RM	12775	CL	crop field	FdA
55.2		-	SBS-10-3-5RM	12807	ML	hay field	FdA
55		J	SBS-11-1-5RM	1879A	CL	crop field	XfB
54.4		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
51.8		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
50.2		J	SBS-9-2-5RM	12802	CL	crop field	MtC2
47.4		J	SBS-5-1-5RM	1826A	CL	hay field	XeB
46.4		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
44.5		-	SBS-1-2-5RM	12770	CL	crop field	Ra
43.8		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
43.4		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
43.2		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
43.2		-	SBS-8-3-5RM	12799	CL	crop field	XfB
43		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
42.7		-	SBS-6-3-5RM	12792	CL	crop field	RwB
38.2		J	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
38		-	SBS-7-1-5RM	1832A	CL	crop field	FdA

APPENDIX E

CONCENTRATION OF ZINC AT 30-36 INCHES

Result (mg/kg)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
142		J	SBS-9-3-6RM	12804	CL	crop field	EcE2
94.5		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
79.5		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
76.8		J	SBS-5-2-6RM	12787	CL	hay field	FcA
74.4		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
69.8		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
68.2		-	SBS-4-3-6RM	12784	CL	hay field	XeB
68		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
62.8		-	SBS-7-2-6RM	12794	CL	crop field	XfB
62.7		J	SBS-5-3-6RM	12788	CL	hay field	RvB2
61.8		J	SBS-9-1-6RM	1872A	CL	hay field	XfB
61		J	SBS-3-3-6RM	12779	CL	crop field	RwB
60.7		J	SBS-11-2-6RM	12810	CL	crop field	EcE2
60.2		J	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
60		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
54.7		-	SBS-8-2-6RM	12798	CL	crop field	FcA
53.6		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
49.1		-	SBS-10-3-6RM	12807	CL	hay field	FdA
47.7		-	SBS-8-3-6RM	12799	CL	crop field	XfB
47.4		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
46.8		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
45.9		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
45.8		-	SBS-6-3-6RM	12792	CL	crop field	RwB
45.7		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
45.5		-	SBS-1-2-6RM	12770	CL	crop field	Ra
44.6		-	SBS-2-3-6RM	12775	CL	crop field	FdA
44.4		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
44		-	SBS-10-2-6RM	12806	CL	hay field	Ra
43.3		J	SBS-9-2-6RM	12802	CL	crop field	MtC2
41.9		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
41.4		J	SBS-11-1-6RM	1879A	CL	crop field	XfB
41		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
40.4		J	SBS-5-1-6RM	1826A	CL	hay field	XeB
39.3		J	SBS-3-1-6RM	1763A	ML	crop field	XfB
32.4		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
30.9		J	SBS-11-3-6RM	12811	C	crop field	EcE2

1 The symbols of this column are USCS symbols as follows:
CL - Inorganic clays of low to medium plasticity, gravely clays, sandy clays, silty clays, lean clays
ML - Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, clayey silts with slight plasticity
OL - Organic silts and organic silty clays of low plasticity

(2) Soil classifications are according to maps of the Butler County Soil Survey, U.S. Soil Conservation Service, January 1980. Map symbols consist of a combination of letters or of letters and a number. The first capital letter and lower case letter represent the map unit name. The second capital letter indicates the class of slope: A for 0 to 2 percent, B for 2 to 6 percent, and C for 6 to 12 percent. Symbols without a slope letter are for nearly level soils or miscellaneous areas. A final number of 2 indicates that the soil is moderately eroded.

Appendix F

APPENDIX F

SUMMARY TABLES OF RADIOLOGICAL RESULTS BY ANALYTE AND DEPTH

APPENDIX F

3502

CONCENTRATION OF ACTINIUM-227 AT 0-6 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.375	U	U	SBS-1-3-1RM	12771	ML	crop field	RwB2
0.361	U	U	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
0.355	U	U	SBS-1-1-1RM	1755A	ML	crop field	FdA
0.353	U	U	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
0.352	U	U	SBS-10-2-1RM	12806	ML	hay field	Ra
0.346	U	U	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
0.344	U	U	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.34	U	U	SBS-8-1-1RM	1834A	ML	crop field	FcA
0.336	U	U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
0.336	U	U	SBS-11-1-1RM	1879A	ML	crop field	XfB
0.336	U	U	SBS-8-3-1RM	12799	ML	crop field	XfB
0.336	U	U	SBS-10-3-1RM	12807	ML	hay field	FdA
0.334	U	U	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
0.334	U	U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
0.333	U	U	SBS-7-3-1RM	12795	ML	crop field	MsD2
0.332	U	U	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.324	U	U	SBS-5-1-1RM	1826A	ML	hay field	XeB
0.322	U	U	SBS-5-2-1RM	12787	ML	hay field	FcA
0.314	U	U	SBS-8-2-1RM	12798	ML	crop field	FcA
0.314	U	U	SBS-11-3-1RM	12811	CL	crop field	EcE2
0.31	U	U	SBS-2-3-1RM	12775	ML	crop field	FdA
0.309	U	U	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.3	U	U	SBS-4-2-1RM	12783	ML	hay field	RvB2
0.289	U	U	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.277	U	U	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.257	U	U	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
0.256	U	U	SBS-5-3-1RM	12788	ML	hay field	RvB2
0.253	U	U	SBS-2-2A-1RM	12774A	ML	crop field	FdA
0.246	U	U	SBS-2-2-1RM	12774B	ML	crop field	RwB2
0.245	U	U	SBS-2-1-1RM	1756A	ML	crop field	FdA
0.244	U	U	SBS-9-3-1RM	12804	CL	crop field	EcE2
0.243	U	U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
0.237	U	U	SBS-9-2-1RM	12802	ML	crop field	MtC2
0.236	U	U	SBS-2-1B-1RM	1756B	ML	crop field	FdA
0.235	U	U	SBS-7-2-1RM	12794	ML	crop field	XfB
0.235	U	U	SBS-4-3-1RM	12784	ML	hay field	XeB
0.233	U	U	SBS-7-1-1RM	1832A	ML	crop field	FdA
0.219	U	U	SBS-6-1-1RM	1829A	ML	crop field	XfB
0.159	U	U	SBS-6-3-1RM	12792	ML	crop field	RwB

APPENDIX F

CONCENTRATION OF ACTINIUM-227 AT 12-18 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.397	U	U	SBS-1-3-3RM	12771	CL	crop field	RwB2
0.387	U	U	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
0.373	U	U	SBS-10-1-3RM	1873A	CL	hay field	FdA
0.368	U	U	SBS-6-2-3RM	12791	ML	crop field	RwB2
0.368	U	U	SBS-2-1B-3RM	1756B	ML	crop field	FdA
0.361	U	U	SBS-10-2-3RM	12806	CL	hay field	Ra
0.361	U	U	SBS-10-3-3RM	12807	ML	hay field	FdA
0.357	U	U	SBS-8-2-3RM	12798	CL	crop field	FcA
0.356	U	U	SBS-6-1-3RM	1829A	ML	crop field	XfB
0.355	U	U	SBS-3-3-3RM	12779	CL	crop field	RwB
0.349	U	U	SBS-8-1-3RM	1834A	CL	crop field	FcA
0.339	U	U	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.337	U	U	SBS-4-3-3RM	12784	CL	hay field	XeB
0.337	U	U	SBS-5-1-3RM	1826A	CL	hay field	XeB
0.332	U	U	SBS-7-1-3RM	1832A	CL	crop field	FdA
0.331	U	U	SBS-5-2-3RM	12787	ML	hay field	FcA
0.329	U	U	SBS-2-2A-3RM	12774A	CL	crop field	FdA
0.327	U	U	SBS-2-1-3RM	1756A	CL	crop field	FdA
0.323	U	U	SBS-1-2-3RM	12770	CL	crop field	Ra
0.317	U	U	SBS-4-1-3RM	1764A	CL	hay field	XeB
0.313	U	U	SBS-5-3-3RM	12788	CL	hay field	RvB2
0.313	U	U	SBS-11-1-3RM	1879A	ML	crop field	XfB
0.312	U	U	SBS-3-1-3RM	1763A	CL	crop field	XfB
0.306	U	U	SBS-11-2-3RM	12810	CL	crop field	EcE2
0.297	U	U	SBS-8-3-3RM	12799	CL	crop field	XfB
0.295	U	U	SBS-6-3-3RM	12792	CL	crop field	RwB
0.293	U	U	SBS-9-3-3RM	12804	CL	crop field	EcE2
0.293	U	U	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.286	U	U	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.272	U	U	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.27	U	U	SBS-11-3-3RM	12811	CL	crop field	EcE2
0.257	U	U	SBS-2-3-3RM	12775	CL	crop field	FdA
0.25	U	U	SBS-7-3-3RM	12795	CL	crop field	MsD2
0.246		U	SBS-7-2-3RM	12794	CL	crop field	XfB
0.245	U	U	SBS-9-1-3RM	1872A	CL	hay field	XfB

APPENDIX F

CONCENTRATION OF ACTINIUM-227 AT 18-24 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.398	U	U	SBS-1-1-4RM	1755A	CL	crop field	FdA
0.389	U	U	SBS-1-3-4RM	12771	CL	crop field	RwB2
0.373	U	U	SBS-10-1-4RM	1873A	CL	hay field	FdA
0.368	U	U	SBS-10-2-4RM	12806	CL	hay field	Ra
0.361	U	U	SBS-8-1-4RM	1834A	CL	crop field	FcA
0.359	U	U	SBS-3-3-4RM	12779	CL	crop field	RwB
0.352	U	U	SBS-5-3-4RM	12788	CL	hay field	RvB2
0.35	U	U	SBS-11-2-4RM	12810	CL	crop field	EcE2
0.344	U	U	SBS-2-2A-4RM	12774A	CL	crop field	FdA
0.344	U	U	SBS-2-1B-4RM	1756B	CL	crop field	FdA
0.343	U	U	SBS-7-2-4RM	12794	CL	crop field	XfB
0.34	U	U	SBS-8-2-4RM	12798	CL	crop field	FcA
0.337	U	U	SBS-2-3-4RM-D	12775	CL	crop field	FdA
0.332	U	U	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.332	U	U	SBS-4-3-4RM	12784	CL	hay field	XeB
0.332	U	U	SBS-6-1-4RM	1829A	ML	crop field	XfB
0.328	U	U	SBS-2-1-4RM	1756A	CL	crop field	FdA
0.327	U	U	SBS-10-3-4RM	12807	ML	hay field	FdA
0.322	U	U	SBS-1-2-4RM	12770	CL	crop field	Ra
0.322	U	U	SBS-2-3-4RM	12775	CL	crop field	FdA
0.314	U	U	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.305	U	U	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.302	U	U	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.3	U	U	SBS-7-3-4RM	12795	CL	crop field	MsD2
0.296	U	U	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.295	U	U	SBS-6-3-4RM	12792	CL	crop field	RwB
0.293	U	U	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.284	U	U	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.276	U	U	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.268	U	U	SBS-8-3-4RM	12799	CL	crop field	XfB
0.265	U	U	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.257	U	U	SBS-3-1-4RM	1763A	CL	crop field	XfB
0.248	U	U	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
0.236	U	U	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.235	U	U	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.234	U	U	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.218	U	U	SBS-5-2-4RM	12787	CL	hay field	FcA
0.194	U	U	SBS-6-2-4RM	12791	CL	crop field	RwB2
0.194	U	U	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX F

CONCENTRATION OF ACTINIUM-227 AT 24-30 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.389	U	U	SBS-1-1-5RM	1755A	CL	crop field	FdA
0.367	U	U	SBS-10-1-5RM	1873A	CL	hay field	FdA
0.367	U	U	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.364	U	U	SBS-3-3-5RM	12779	CL	crop field	RwB
0.35	U	U	SBS-2-3-5RM	12775	CL	crop field	FdA
0.349	U	U	SBS-8-1-5RM	1834A	CL	crop field	FcA
0.328	U	U	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.328	U	U	SBS-10-2-5RM	12806	CL	hay field	Ra
0.327	U	U	SBS-8-2-5RM	12798	CL	crop field	FcA
0.327	U	U	SBS-2-1B-5RM	1756B	CL	crop field	FdA
0.316	U	U	SBS-5-2-5RM	12787	CL	hay field	FcA
0.313	U	U	SBS-3-1-5RM	1763A	CL	crop field	XfB
0.311	U	U	SBS-2-1-5RM	1756A	CL	crop field	FdA
0.302	U	U	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.298	U	U	SBS-1-2-5RM	12770	CL	crop field	Ra
0.296	U	U	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.294	U	U	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.293	U	U	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.29		J	SBS-2-2A-5RM	12774A	CL	crop field	FdA
0.28	U	U	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.275	U	U	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.271	U	U	SBS-7-3-5RM	12795	CL	crop field	MsD2
0.262	U	U	SBS-10-3-5RM	12807	ML	hay field	FdA
0.255	U	U	SBS-8-3-5RM	12799	CL	crop field	XfB
0.253	U	U	SBS-4-3-5RM	12784	CL	hay field	XeB
0.25	U	U	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.244	U	U	SBS-7-2-5RM	12794	CL	crop field	XfB
0.243	U	U	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.242	U	U	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.239	U	U	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.238	U	U	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.237	U	U	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.231	U	U	SBS-5-3-5RM	12788	CL	hay field	RvB2
0.198	U	U	SBS-6-3-5RM	12792	CL	crop field	RwB
0.196	U	U	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.194	U	U	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.188	U	U	SBS-2-2-5RM	12774B	CL	crop field	RwB2

APPENDIX F

CONCENTRATION OF ACTINIUM-227 AT 30-36 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.402	U	U	SBS-1-1-6RM	1755A	CL	crop field	FdA
0.344	U	U	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.334	U	U	SBS-5-2-6RM	12787	CL	hay field	FcA
0.326	U	U	SBS-2-2A-6RM	12774A	CL	crop field	FdA
0.32	U	U	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.32	U	U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.317	U	U	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.313	U	U	SBS-7-2-6RM	12794	CL	crop field	XfB
0.311	U	U	SBS-4-3-6RM	12784	CL	hay field	XeB
0.307	U	U	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.305	U	U	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.302	U	U	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.298	U	U	SBS-1-2-6RM	12770	CL	crop field	Ra
0.297	U	U	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.293	U	U	SBS-8-2-6RM	12798	CL	crop field	FcA
0.29	U	U	SBS-3-3-6RM	12779	CL	crop field	RwB
0.285	U	U	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.283	U	U	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.283	U	U	SBS-10-2-6RM	12806	CL	hay field	Ra
0.281	U	U	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.275	U	U	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.273	U	U	SBS-10-3-6RM	12807	CL	hay field	FdA
0.27	U	U	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.269	U	U	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.261	U	U	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.255	U	U	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.249	U	U	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.246	U	U	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.245	U	U	SBS-6-3-6RM	12792	CL	crop field	RwB
0.242	U	U	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.241	U	U	SBS-8-3-6RM	12799	CL	crop field	XfB
0.24	U	U	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.227	U	U	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.214	U	U	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.208	U	U	SBS-2-3-6RM	12775	CL	crop field	FdA
0.176	U	U	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX F

CONCENTRATION OF CESIUM-137 AT 0-6 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.393		J	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
0.348		J	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.235		J	SBS-11-1-1RM	1879A	ML	crop field	XfB
0.229		J	SBS-4-2-1RM	12783	ML	hay field	RvB2
0.22		J	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
0.218		J	SBS-11-3-1RM	12811	CL	crop field	EcE2
0.209		J	SBS-2-3-1RM	12775	ML	crop field	FdA
0.208		J	SBS-8-2-1RM	12798	ML	crop field	FcA
0.208		J	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.202		J	SBS-2-2A-1RM	12774A	ML	crop field	FdA
0.192		J	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
0.186		J	SBS-8-1-1RM	1834A	ML	crop field	FcA
0.181		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
0.178		J	SBS-8-3-1RM	12799	ML	crop field	XfB
0.177		J	SBS-6-3-1RM	12792	ML	crop field	RwB
0.176		J	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
0.173		J	SBS-9-3-1RM	12804	CL	crop field	EcE2
0.172		J	SBS-10-3-1RM	12807	ML	hay field	FdA
0.169		J	SBS-4-3-1RM	12784	ML	hay field	XeB
0.169		J	SBS-5-2-1RM	12787	ML	hay field	FcA
0.168		J	SBS-6-1-1RM	1829A	ML	crop field	XfB
0.167		J	SBS-7-1-1RM	1832A	ML	crop field	FdA
0.167		J	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
0.165		J	SBS-10-2-1RM	12806	ML	hay field	Ra
0.162		J	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
0.162		J	SBS-7-3-1RM	12795	ML	crop field	MsD2
0.159		J	SBS-7-2-1RM	12794	ML	crop field	XfB
0.157		J	SBS-1-3-1RM	12771	ML	crop field	RwB2
0.15		J	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.146		J	SBS-2-1B-1RM	1756B	ML	crop field	FdA
0.145		J	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.138		J	SBS-2-1-1RM	1756A	ML	crop field	FdA
0.134		J	SBS-2-2-1RM	12774B	ML	crop field	RwB2
0.131		J	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.124		J	SBS-5-3-1RM	12788	ML	hay field	RvB2
0.118		J	SBS-1-1-1RM	1755A	ML	crop field	FdA
0.117		J	SBS-9-2-1RM	12802	ML	crop field	MtC2
0.089		J	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
0.053		J	SBS-5-1-1RM	1826A	ML	hay field	XeB

APPENDIX F

CONCENTRATION OF CESIUM-137 AT 12-18 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.092		J	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.057	U	UJ	SBS-2-1B-3RM	1756B	ML	crop field	FdA
0.054	U	UJ	SBS-6-1-3RM	1829A	ML	crop field	XfB
0.053		UJ	SBS-5-2-3RM	12787	ML	hay field	FcA
0.053	U	UJ	SBS-6-2-3RM	12791	ML	crop field	RwB2
0.051	U	UJ	SBS-5-1-3RM	1826A	CL	hay field	XeB
0.045	U	UJ	SBS-3-3-3RM	12779	CL	crop field	RwB
0.044	U	UJ	SBS-10-2-3RM	12806	CL	hay field	Ra
0.044	U	UJ	SBS-8-2-3RM	12798	CL	crop field	FcA
0.042	U	UJ	SBS-1-3-3RM	12771	CL	crop field	RwB2
0.042	U	UJ	SBS-10-1-3RM	1873A	CL	hay field	FdA
0.042	U	UJ	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.041	U	UJ	SBS-1-2-3RM	12770	CL	crop field	Ra
0.041	U	UJ	SBS-8-1-3RM	1834A	CL	crop field	FcA
0.041	U	UJ	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
0.041	U	UJ	SBS-10-3-3RM	12807	ML	hay field	FdA
0.04	U	UJ	SBS-7-1-3RM	1832A	CL	crop field	FdA
0.04	U	UJ	SBS-4-3-3RM	12784	CL	hay field	XeB
0.039	U	UJ	SBS-4-1-3RM	1764A	CL	hay field	XeB
0.039	U	UJ	SBS-8-3-3RM	12799	CL	crop field	XfB
0.039	U	UJ	SBS-2-2A-3RM	12774A	CL	crop field	FdA
0.038	U	UJ	SBS-11-2-3RM	12810	CL	crop field	EcE2
0.038	U	UJ	SBS-2-1-3RM	1756A	CL	crop field	FdA
0.038	U	UJ	SBS-11-1-3RM	1879A	ML	crop field	XfB
0.038	U	UJ	SBS-3-1-3RM	1763A	CL	crop field	XfB
0.038	U	UJ	SBS-5-3-3RM	12788	CL	hay field	RvB2
0.037	U	UJ	SBS-6-3-3RM	12792	CL	crop field	RwB
0.037	U	UJ	SBS-9-3-3RM	12804	CL	crop field	EcE2
0.036	U	UJ	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.035	U	UJ	SBS-11-3-3RM	12811	CL	crop field	EcE2
0.034	U	UJ	SBS-7-2-3RM	12794	CL	crop field	XfB
0.034	U	UJ	SBS-7-3-3RM	12795	CL	crop field	MsD2
0.034	U	UJ	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.032	U	UJ	SBS-2-3-3RM	12775	CL	crop field	FdA
0.032	U	UJ	SBS-9-1-3RM	1872A	CL	hay field	XfB

APPENDIX F

CONCENTRATION OF CESIUM-137 AT 18-24 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.066		J	SBS-11-2-4RM	12810	CL	crop field	EcE2
0.057	U	UJ	SBS-6-1-4RM	1829A	ML	crop field	XfB
0.057	U	UJ	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.056	U	UJ	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.056	U	UJ	SBS-2-1B-4RM	1756B	CL	crop field	FdA
0.055	U	UJ	SBS-2-1-4RM	1756A	CL	crop field	FdA
0.053	U	UJ	SBS-1-1-4RM	1755A	CL	crop field	FdA
0.052	U	UJ	SBS-5-3-4RM	12788	CL	hay field	RvB2
0.052	U	UJ	SBS-7-2-4RM	12794	CL	crop field	XfB
0.05	U	UJ	SBS-4-3-4RM	12784	CL	hay field	XeB
0.05	U	UJ	SBS-2-2A-4RM	12774A	CL	crop field	FdA
0.049	U	UJ	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.049	U	UJ	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.048	U	UJ	SBS-10-1-4RM	1873A	CL	hay field	FdA
0.047	U	UJ	SBS-3-3-4RM	12779	CL	crop field	RwB
0.047	U	UJ	SBS-10-2-4RM	12806	CL	hay field	Ra
0.047	U	UJ	SBS-6-3-4RM	12792	CL	crop field	RwB
0.047	U	UJ	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.045	U	UJ	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.044	U	UJ	SBS-10-3-4RM	12807	ML	hay field	FdA
0.043	U	UJ	SBS-8-2-4RM	12798	CL	crop field	FcA
0.043	U	UJ	SBS-1-3-4RM	12771	CL	crop field	RwB2
0.041	U	UJ	SBS-8-1-4RM	1834A	CL	crop field	FcA
0.041	U	UJ	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.04	U	UJ	SBS-2-3-4RM	12775	CL	crop field	FdA
0.039	U	UJ	SBS-1-2-4RM	12770	CL	crop field	Ra
0.038	U	UJ	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.036	U	UJ	SBS-2-3-4RM-D	12775	CL	crop field	FdA
0.036	U	UJ	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.035	U	UJ	SBS-8-3-4RM	12799	CL	crop field	XfB
0.033	U	UJ	SBS-3-1-4RM	1763A	CL	crop field	XfB
0.033	U	UJ	SBS-5-2-4RM	12787	CL	hay field	FcA
0.031	U	UJ	SBS-7-3-4RM	12795	CL	crop field	MsD2
0.031	U	UJ	SBS-6-2-4RM	12791	CL	crop field	RwB2
0.031	U	UJ	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.031	U	UJ	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.029	U	UJ	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.028	U	UJ	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
0.026	U	UJ	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX F

CONCENTRATION OF CESIUM-137 AT 24-30 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.055	U	UJ	SBS-2-3-5RM	12775	CL	crop field	FdA
0.054	U	UJ	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.051	U	UJ	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.049	U	UJ	SBS-3-3-5RM	12779	CL	crop field	RwB
0.043	U	UJ	SBS-1-1-5RM	1755A	CL	crop field	FdA
0.043	U	UJ	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.043	U	UJ	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.042	U	UJ	SBS-8-1-5RM	1834A	CL	crop field	FcA
0.041	U	UJ	SBS-8-2-5RM	12798	CL	crop field	FcA
0.041	U	UJ	SBS-10-2-5RM	12806	CL	hay field	Ra
0.041	U	UJ	SBS-10-1-5RM	1873A	CL	hay field	FdA
0.039	U	UJ	SBS-2-1-5RM	1756A	CL	crop field	FdA
0.039	U	UJ	SBS-2-1B-5RM	1756B	CL	crop field	FdA
0.038	U	UJ	SBS-5-2-5RM	12787	CL	hay field	FcA
0.038	U	UJ	SBS-3-1-5RM	1763A	CL	crop field	XfB
0.037	U	UJ	SBS-1-2-5RM	12770	CL	crop field	Ra
0.036	U	UJ	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.036	U	UJ	SBS-10-3-5RM	12807	ML	hay field	FdA
0.035	U	UJ	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.035	U	UJ	SBS-8-3-5RM	12799	CL	crop field	XfB
0.035	U	UJ	SBS-7-3-5RM	12795	CL	crop field	MsD2
0.035	U	UJ	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.034		UJ	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.034	U	UJ	SBS-2-2A-5RM	12774A	CL	crop field	FdA
0.034	U	UJ	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.033	U	UJ	SBS-4-3-5RM	12784	CL	hay field	XeB
0.033	U	UJ	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.032	U	UJ	SBS-7-2-5RM	12794	CL	crop field	XfB
0.031	U	UJ	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.031	U	UJ	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.03	U	UJ	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.03	U	UJ	SBS-5-3-5RM	12788	CL	hay field	RvB2
0.029	U	UJ	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.028	U	UJ	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.028	U	UJ	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.026	U	UJ	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.026	U	UJ	SBS-6-3-5RM	12792	CL	crop field	RwB

APPENDIX F

CONCENTRATION OF CESIUM-137 AT 30-36 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.053	U	UJ	SBS-5-2-6RM	12787	CL	hay field	FcA
0.052	U	UJ	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.05	U	UJ	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.05	U	UJ	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.048	U	UJ	SBS-1-1-6RM	1755A	CL	crop field	FdA
0.046	U	UJ	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.046	U	UJ	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.045	U	UJ	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.044	U	UJ	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.043	U	UJ	SBS-3-3-6RM	12779	CL	crop field	RwB
0.043	U	UJ	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.042	U	UJ	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.042	U	UJ	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.04	U	UJ	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.04	U	UJ	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.04	U	UJ	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.04	U	UJ	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.039	U	UJ	SBS-10-3-6RM	12807	CL	hay field	FdA
0.039	U	UJ	SBS-2-2A-6RM	12774A	CL	crop field	FdA
0.039	U	UJ	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.039	U	UJ	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.038	U	UJ	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.038	U	UJ	SBS-4-3-6RM	12784	CL	hay field	XeB
0.037	U	UJ	SBS-7-2-6RM	12794	CL	crop field	XfB
0.035	U	UJ	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.035	U	UJ	SBS-10-2-6RM	12806	CL	hay field	Ra
0.034	U	UJ	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.033	U	UJ	SBS-1-2-6RM	12770	CL	crop field	Ra
0.033	U	UJ	SBS-8-3-6RM	12799	CL	crop field	XfB
0.032	U	UJ	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.032	U	UJ	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.032	U	UJ	SBS-6-3-6RM	12792	CL	crop field	RwB
0.027	U	UJ	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.027	U	UJ	SBS-2-3-6RM	12775	CL	crop field	FdA
0.025	U	UJ	SBS-11-3-6RM	12811	C	crop field	EcE2
0.023	U	UJ	SBS-8-2-6RM	12798	CL	crop field	FcA

APPENDIX F

CONCENTRATION OF LEAD-210 AT 0-6 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.512		J	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
1.391		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
1.373		J	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
1.356		J	SBS-5-2-1RM	12787	ML	hay field	FcA
1.334		J	SBS-9-2-1RM	12802	ML	crop field	MtC2
1.331		J	SBS-6-3-1RM	12792	ML	crop field	RwB
1.318		J	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1.314		J	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
1.296		J	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1.265		J	SBS-4-3-1RM	12784	ML	hay field	XeB
1.262		J	SBS-11-1-1RM	1879A	ML	crop field	XfB
1.261		J	SBS-1-3-1RM	12771	ML	crop field	RwB2
1.252		J	SBS-8-1-1RM	1834A	ML	crop field	FcA
1.244		J	SBS-2-1-1RM	1756A	ML	crop field	FdA
1.244		J	SBS-3-1-1RM	1763A	ML	crop field	XfB
1.24		J	SBS-2-2-1RM	12774B	ML	crop field	RwB2
1.239		J	SBS-1-1-1RM	1755A	ML	crop field	FdA
1.236		J	SBS-10-3-1RM	12807	ML	hay field	FdA
1.23		J	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1.23		J	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
1.215		J	SBS-5-3-1RM	12788	ML	hay field	RvB2
1.202		J	SBS-9-3-1RM	12804	CL	crop field	EcE2
1.201		J	SBS-8-2-1RM	12798	ML	crop field	FcA
1.196		J	SBS-4-2-1RM	12783	ML	hay field	RvB2
1.181		J	SBS-7-1-1RM	1832A	ML	crop field	FdA
1.173		J	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
1.17		J	SBS-8-3-1RM	12799	ML	crop field	XfB
1.165		J	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1.162		J	SBS-2-3-1RM	12775	ML	crop field	FdA
1.158		J	SBS-6-1-1RM	1829A	ML	crop field	XfB
1.152		J	SBS-11-3-1RM	12811	CL	crop field	EcE2
1.142		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
1.137		J	SBS-10-2-1RM	12806	ML	hay field	Ra
1.133		J	SBS-9-1-1RM	1872A	ML	hay field	XfB
1.119		J	SBS-7-3-1RM	12795	ML	crop field	MsD2
1.111		J	SBS-7-2-1RM	12794	ML	crop field	XfB
1.109		J	SBS-4-1-1RM	1764A	ML	hay field	XeB
1.095		J	SBS-10-1-1RM	1873A	ML	hay field	FdA
1.094		J	SBS-6-2-1RM	12791	ML	crop field	RwB2

APPENDIX F

CONCENTRATION OF LEAD-210 AT 12-18 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.567		J	SBS-2-3-3RM	12775	CL	crop field	FdA
1.558		J	SBS-7-1-3RM	1832A	CL	crop field	FdA
1.535		J	SBS-8-2-3RM	12798	CL	crop field	FcA
1.531		J	SBS-2-1-3RM	1756A	CL	crop field	FdA
1.523		J	SBS-2-2A-3RM	12774A	CL	crop field	FdA
1.509		J	SBS-4-3-3RM	12784	CL	hay field	XeB
1.48		J	SBS-4-1-3RM	1764A	CL	hay field	XeB
1.476		J	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1.47		J	SBS-11-3-3RM	12811	CL	crop field	EcE2
1.468		J	SBS-1-3-3RM	12771	CL	crop field	RwB2
1.435		J	SBS-10-2-3RM	12806	CL	hay field	Ra
1.433		J	SBS-11-1-3RM	1879A	ML	crop field	XfB
1.43		J	SBS-8-1-3RM	1834A	CL	crop field	FcA
1.427		J	SBS-7-2-3RM	12794	CL	crop field	XfB
1.409		J	SBS-3-3-3RM	12779	CL	crop field	RwB
1.404		J	SBS-9-1-3RM	1872A	CL	hay field	XfB
1.4		J	SBS-10-1-3RM	1873A	CL	hay field	FdA
1.393		J	SBS-5-1-3RM	1826A	CL	hay field	XeB
1.381		J	SBS-3-1-3RM	1763A	CL	crop field	XfB
1.367		J	SBS-6-2-3RM	12791	ML	crop field	RwB2
1.349		J	SBS-5-3-3RM	12788	CL	hay field	RvB2
1.348		J	SBS-6-1-3RM	1829A	ML	crop field	XfB
1.341		J	SBS-2-1B-3RM	1756B	ML	crop field	FdA
1.325		J	SBS-11-2-3RM	12810	CL	crop field	EcE2
1.308		J	SBS-10-3-3RM	12807	ML	hay field	FdA
1.289		J	SBS-7-3-3RM	12795	CL	crop field	MsD2
1.27		J	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
1.264		J	SBS-2-2-3RM	12774B	CL	crop field	RwB2
1.202		J	SBS-5-2-3RM	12787	ML	hay field	FcA
1.166		J	SBS-6-3-3RM	12792	CL	crop field	RwB
1.035		J	SBS-1-2-3RM	12770	CL	crop field	Ra
1.015		J	SBS-4-2-3RM	12783	CL	hay field	RvB2
1.011		J	SBS-8-3-3RM	12799	CL	crop field	XfB
1.005		J	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.941		J	SBS-9-3-3RM	12804	CL	crop field	EcE2

APPENDIX F

CONCENTRATION OF LEAD-210 AT 18-24 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.631		J	SBS-3-1-4RM	1763A	CL	crop field	XfB
1.614		J	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.595		J	SBS-3-3-4RM	12779	CL	crop field	RwB
1.56		J	SBS-1-3-4RM	12771	CL	crop field	RwB2
1.542		J	SBS-2-3-4RM-D	12775	CL	crop field	FdA
1.518		J	SBS-8-1-4RM	1834A	CL	crop field	FcA
1.513		J	SBS-2-3-4RM	12775	CL	crop field	FdA
1.502		J	SBS-2-1-4RM	1756A	CL	crop field	FdA
1.501		J	SBS-8-2-4RM	12798	CL	crop field	FcA
1.491		J	SBS-10-1-4RM	1873A	CL	hay field	FdA
1.487		J	SBS-2-2A-4RM	12774A	CL	crop field	FdA
1.482		J	SBS-2-1B-4RM	1756B	CL	crop field	FdA
1.463		J	SBS-4-3-4RM	12784	CL	hay field	XeB
1.459		J	SBS-10-2-4RM	12806	CL	hay field	Ra
1.453		J	SBS-9-1-4RM	1872A	CL	hay field	XfB
1.448		J	SBS-5-3-4RM	12788	CL	hay field	RvB2
1.434		J	SBS-10-3-4RM-D	12807	ML	hay field	FdA
1.423		J	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.401		J	SBS-10-3-4RM	12807	ML	hay field	FdA
1.395		J	SBS-6-2-4RM	12791	CL	crop field	RwB2
1.346		J	SBS-7-2-4RM	12794	CL	crop field	XfB
1.324		J	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
1.318		J	SBS-5-2-4RM	12787	CL	hay field	FcA
1.305		J	SBS-7-3-4RM	12795	CL	crop field	MsD2
1.244		J	SBS-4-1-4RM	1764A	CL	hay field	XeB
1.202		J	SBS-7-1-4RM	1832A	CL	crop field	FdA
1.076		J	SBS-2-2-4RM	12774B	CL	crop field	RwB2
1.062		J	SBS-5-1-4RM	1826A	CL	hay field	XeB
1.048		J	SBS-11-2-4RM	12810	CL	crop field	EcE2
1.045		J	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.943		J	SBS-1-2-4RM	12770	CL	crop field	Ra
0.887		J	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.863		J	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.86		J	SBS-6-3-4RM	12792	CL	crop field	RwB
0.834		J	SBS-8-3-4RM	12799	CL	crop field	XfB
0.797		J	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.704		J	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.653		J	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.602		J	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX F

CONCENTRATION OF LEAD-210 AT 24-30 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.686		J	SBS-3-1-5RM	1763A	CL	crop field	XfB
1.572		J	SBS-4-3-5RM	12784	CL	hay field	XeB
1.538		J	SBS-5-3-5RM	12788	CL	hay field	RvB2
1.529		J	SBS-1-1-5RM	1755A	CL	crop field	FdA
1.528		J	SBS-3-3-5RM	12779	CL	crop field	RwB
1.498		J	SBS-2-1B-5RM	1756B	CL	crop field	FdA
1.453		J	SBS-2-2A-5RM	12774A	CL	crop field	FdA
1.45		J	SBS-8-1-5RM	1834A	CL	crop field	FcA
1.431		J	SBS-2-3-5RM	12775	CL	crop field	FdA
1.423		J	SBS-10-1-5RM	1873A	CL	hay field	FdA
1.377		J	SBS-5-2-5RM	12787	CL	hay field	FcA
1.36		J	SBS-7-2-5RM	12794	CL	crop field	XfB
1.323		J	SBS-10-2-5RM	12806	CL	hay field	Ra
1.315	U	J	SBS-2-1-5RM	1756A	CL	crop field	FdA
1.311		J	SBS-6-1-5RM	1829A	CL	crop field	XfB
1.241		J	SBS-7-3-5RM	12795	CL	crop field	MsD2
1.237		J	SBS-8-2-5RM	12798	CL	crop field	FcA
1.196		J	SBS-1-3-5RM	12771	CL	crop field	RwB2
1.071		J	SBS-6-2-5RM	12791	CL	crop field	RwB2
1.008		J	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.991		J	SBS-10-3-5RM	12807	ML	hay field	FdA
0.925		J	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.909		J	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.899		J	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.879		J	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.863		J	SBS-6-3-5RM	12792	CL	crop field	RwB
0.854		J	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.833		J	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.828		J	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.813		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.801	U	J	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.787		J	SBS-1-2-5RM	12770	CL	crop field	Ra
0.757		J	SBS-8-3-5RM	12799	CL	crop field	XfB
0.743		J	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.741		J	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.681		J	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.638		J	SBS-11-3-5RM-D	12811	CL	crop field	EcE2

APPENDIX F

3502

CONCENTRATION OF LEAD-210 AT 30-36 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.599		J	SBS-1-1-6RM	1755A	CL	crop field	FdA
1.435		J	SBS-2-2A-6RM	12774A	CL	crop field	FdA
1.383		J	SBS-4-3-6RM	12784	CL	hay field	XeB
1.337		J	SBS-5-2-6RM	12787	CL	hay field	FcA
1.301		J	SBS-7-2-6RM	12794	CL	crop field	XfB
1.275		J	SBS-2-1B-6RM	1756B	CL	crop field	FdA
1.259		J	SBS-5-3-6RM	12788	CL	hay field	RvB2
1.228		J	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
1.163		J	SBS-2-3-6RM	12775	CL	crop field	FdA
1.138		J	SBS-6-1-6RM	1829A	CL	crop field	XfB
1.082		J	SBS-8-1-6RM	1834A	CL	crop field	FcA
1.036		J	SBS-7-3-6RM	12795	CL	crop field	MsD2
1.033		J	SBS-8-2-6RM	12798	CL	crop field	FcA
0.978		J	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.906		J	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.891		J	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.891		J	SBS-10-3-6RM	12807	CL	hay field	FdA
0.888		J	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.881		J	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.861		J	SBS-10-2-6RM	12806	CL	hay field	Ra
0.839		J	SBS-6-3-6RM	12792	CL	crop field	RwB
0.839		J	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.834		J	SBS-3-3-6RM	12779	CL	crop field	RwB
0.797		J	SBS-1-2-6RM	12770	CL	crop field	Ra
0.791		J	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.79		J	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.785		J	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.748		J	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.743	U	J	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.743		J	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.724		J	SBS-8-3-6RM	12799	CL	crop field	XfB
0.722		J	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.708		J	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.696		J	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.628		J	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.515		J	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX F

CONCENTRATION OF POTASSIUM-40 AT 0-6 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
25.02		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
24.55		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
23.1		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
20.33		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
19.95		-	SBS-6-3-1RM	12792	ML	crop field	RwB
19.39		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
19.08		-	SBS-5-2-1RM	12787	ML	hay field	FcA
19.05		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
18.84		-	SBS-8-3-1RM	12799	ML	crop field	XfB
18.59		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
18.45		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
18.41		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
17.68		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
17.44		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
17.31		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
17.13		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
17.12		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
17.07		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
17		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
16.74		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
16.61		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
16.6		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
16.34		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
16.32		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
16.27		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
15.97		-	SBS-7-3-1RM	12795	ML	crop field	MsD2
15.93		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
15.87		-	SBS-7-2-1RM	12794	ML	crop field	XfB
15.78		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
15.75		-	SBS-4-3-1RM	12784	ML	hay field	XeB
15.54		-	SBS-10-2-1RM	12806	ML	hay field	Ra
15.45		-	SBS-10-3-1RM	12807	ML	hay field	FdA
15.35		-	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
14.53		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
14.37		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
13.89		-	SBS-2-3-1RM	12775	ML	crop field	FdA
13.77		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
13.72		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
12.47		-	SBS-8-2-1RM	12798	ML	crop field	FcA

APPENDIX F

3502

CONCENTRATION OF POTASSIUM-40 AT 12-18 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
32.75		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
29.51		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
24.32		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
24.22		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
23.97		-	SBS-6-3-3RM	12792	CL	crop field	RwB
22.86		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
22.62		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
22.41		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
21.07		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
20.5		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
19.78		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
19.58		-	SBS-5-2-3RM	12787	ML	hay field	FcA
19.48		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
19.15		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
19.1		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
18.7		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
18.51		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
18.48		-	SBS-10-3-3RM	12807	ML	hay field	FdA
18.35		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
18.01		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
17.79		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
17.77		-	SBS-1-2-3RM	12770	CL	crop field	Ra
17.73		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
17.5		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
17.43		-	SBS-3-3-3RM	12779	CL	crop field	RwB
17.13		-	SBS-4-3-3RM	12784	CL	hay field	XeB
16.79		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
16.49		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
16.42		-	SBS-8-3-3RM	12799	CL	crop field	XfB
16.37		-	SBS-10-2-3RM	12806	CL	hay field	Ra
16.19		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
16		-	SBS-7-2-3RM	12794	CL	crop field	XfB
15.88		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
15.58		-	SBS-2-3-3RM	12775	CL	crop field	FdA
14.88		-	SBS-8-2-3RM	12798	CL	crop field	FcA

000254

APPENDIX F

CONCENTRATION OF POTASSIUM-40 AT 18-24 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
26.12		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
25.64		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
23.42		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
23.18		-	SBS-5-2-4RM	12787	CL	hay field	FcA
22.66		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
22.43		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
21.94		-	SBS-3-3-4RM	12779	CL	crop field	RwB
20.93		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
20.76		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
20.49		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
20.2		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
19.91		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
19.85		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
19.79		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
18.86		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
18.84		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
18.81		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
18.78		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
18.64		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
18.59		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
17.82		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
17.48		-	SBS-1-2-4RM	12770	CL	crop field	Ra
17.18		-	SBS-6-3-4RM	12792	CL	crop field	RwB
17.11		-	SBS-7-2-4RM	12794	CL	crop field	XfB
17.03		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
17		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
16.94		-	SBS-10-2-4RM	12806	CL	hay field	Ra
16.86		-	SBS-2-3-4RM	12775	CL	crop field	FdA
16.79		-	SBS-10-3-4RM	12807	ML	hay field	FdA
16.4		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
16.23		-	SBS-8-2-4RM	12798	CL	crop field	FcA
16.08		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
16.03		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
15.98		-	SBS-4-3-4RM	12784	CL	hay field	XeB
15.58		-	SBS-4-2-4RM	12783	CL	hay field	RvB2
14.27		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
13.75		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
13.55		-	SBS-8-3-4RM	12799	CL	crop field	XfB
13.06		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2

APPENDIX F

CONCENTRATION OF POTASSIUM-40 AT 24-30 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
31.63		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
30.2		-	SBS-3-3-5RM	12779	CL	crop field	RwB
27.09		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
25.41		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
24.49		-	SBS-5-2-5RM	12787	CL	hay field	FcA
23.16		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
21.99		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
20.92		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
20.85		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
20.79		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
20.56		-	SBS-7-2-5RM	12794	CL	crop field	XfB
20.23		-	SBS-4-3-5RM	12784	CL	hay field	XeB
19.99		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
19.59		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
19.45		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
19.42		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
19.39		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
19.31		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
19.08		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
18.17		-	SBS-6-3-5RM	12792	CL	crop field	RwB
17.82		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
17.59		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
17.42		-	SBS-10-2-5RM	12806	CL	hay field	Ra
17.07		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
17.06		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
16.5		-	SBS-8-2-5RM	12798	CL	crop field	FcA
15.97		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
15.95		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
15.82		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
15.81		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
15.64		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
15.62		-	SBS-1-2-5RM	12770	CL	crop field	Ra
15.29		-	SBS-2-3-5RM	12775	CL	crop field	FdA
13.74		-	SBS-10-3-5RM	12807	ML	hay field	FdA
13.18		J	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
12.84		-	SBS-8-3-5RM	12799	CL	crop field	XfB
12.31		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB

APPENDIX F

CONCENTRATION OF POTASSIUM-40 AT 30-36 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
31.88		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
24.39		-	SBS-5-2-6RM	12787	CL	hay field	FcA
22.6		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
22.51		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
21.81		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
20.84		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
20.76		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
20.53		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
20.5		-	SBS-4-3-6RM	12784	CL	hay field	XeB
20.47		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
20.47		-	SBS-3-3-6RM	12779	CL	crop field	RwB
20.12		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
19.22		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
19.18		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
19.05		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
18.67		-	SBS-7-2-6RM	12794	CL	crop field	XfB
18.28		-	SBS-6-3-6RM	12792	CL	crop field	RwB
18.15		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
17.62		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
17.02		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
16.69		-	SBS-1-2-6RM	12770	CL	crop field	Ra
16.57		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
15.84		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
15.49		-	SBS-2-3-6RM	12775	CL	crop field	FdA
15.35		-	SBS-8-2-6RM	12798	CL	crop field	FcA
15.13		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
14.99		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
14.58		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
14.39		-	SBS-10-3-6RM	12807	CL	hay field	FdA
14.36		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
13.84		-	SBS-8-3-6RM	12799	CL	crop field	XfB
12.57		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
12.32		-	SBS-11-3-6RM	12811	C	crop field	EcE2
12.2		-	SBS-10-2-6RM	12806	CL	hay field	Ra
12.19		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
9.7		-	SBS-9-1-6RM	1872A	CL	hay field	XfB

APPENDIX F

CONCENTRATION OF PROTACTINIUM-231 AT 0-6 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.544	U	U	SBS-7-3-1RM	12795	ML	crop field	MsD2
1.519	U	U	SBS-4-1-1RM	1764A	ML	hay field	XeB
1.508	U	U	SBS-11-1-1RM	1879A	ML	crop field	XfB
1.485	U	U	SBS-3-1-1RM	1763A	ML	crop field	XfB
1.465	U	U	SBS-10-2-1RM	12806	ML	hay field	Ra
1.463	U	U	SBS-11-3-1RM	12811	CL	crop field	EcE2
1.458	U	U	SBS-2-3-1RM	12775	ML	crop field	FdA
1.439	U	U	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
1.43	U	U	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
1.424	U	U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1.415	U	U	SBS-1-1-1RM	1755A	ML	crop field	FdA
1.407	U	U	SBS-8-3-1RM	12799	ML	crop field	XfB
1.405	U	U	SBS-10-3-1RM	12807	ML	hay field	FdA
1.396	U	U	SBS-1-3-1RM	12771	ML	crop field	RwB2
1.381	U	U	SBS-10-1-1RM	1873A	ML	hay field	FdA
1.362	U	U	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1.358	U	U	SBS-5-2-1RM	12787	ML	hay field	FcA
1.327	U	U	SBS-8-1-1RM	1834A	ML	crop field	FcA
1.316	U	U	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
1.288	U	U	SBS-4-2-1RM	12783	ML	hay field	RvB2
1.267	U	U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
1.257	U	U	SBS-8-2-1RM	12798	ML	crop field	FcA
1.245	U	U	SBS-5-1-1RM	1826A	ML	hay field	XeB
1.243	U	U	SBS-9-1-1RM	1872A	ML	hay field	XfB
1.199	U	U	SBS-6-2-1RM	12791	ML	crop field	RwB2
1.134	U	U	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
1.117	U	U	SBS-2-2-1RM	12774B	ML	crop field	RwB2
1.105	U	U	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1.095	U	U	SBS-9-2-1RM	12802	ML	crop field	MtC2
1.094	U	U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
1.081	U	U	SBS-9-3-1RM	12804	CL	crop field	EcE2
1.077	U	U	SBS-5-3-1RM	12788	ML	hay field	RvB2
1.068	U	U	SBS-6-1-1RM	1829A	ML	crop field	XfB
1.065	U	U	SBS-7-1-1RM	1832A	ML	crop field	FdA
1.056	U	U	SBS-2-1-1RM	1756A	ML	crop field	FdA
1.055	U	U	SBS-4-3-1RM	12784	ML	hay field	XeB
1.052	U	U	SBS-6-3-1RM	12792	ML	crop field	RwB
1.045	U	U	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1.04	U	U	SBS-7-2-1RM	12794	ML	crop field	XfB

000258

APPENDIX F

CONCENTRATION OF PROTACTINIUM-231 AT 12-18 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.625	U	U	SBS-2-1B-3RM	1756B	ML	crop field	FdA
1.602	U	U	SBS-5-1-3RM	1826A	CL	hay field	XeB
1.584	U	U	SBS-6-1-3RM	1829A	ML	crop field	XfB
1.58	U	U	SBS-6-2-3RM	12791	ML	crop field	RwB2
1.525	U	U	SBS-5-2-3RM	12787	ML	hay field	FcA
1.501	U	U	SBS-3-3-3RM	12779	CL	crop field	RwB
1.476	U	U	SBS-4-2-3RM	12783	CL	hay field	RvB2
1.47	U	U	SBS-8-2-3RM	12798	CL	crop field	FcA
1.467	U	U	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1.436	U	U	SBS-1-3-3RM	12771	CL	crop field	RwB2
1.436	U	U	SBS-8-1-3RM	1834A	CL	crop field	FcA
1.423	U	U	SBS-10-3-3RM	12807	ML	hay field	FdA
1.419	U	U	SBS-10-1-3RM	1873A	CL	hay field	FdA
1.366	U	U	SBS-4-1-3RM	1764A	CL	hay field	XeB
1.36	U	U	SBS-11-2-3RM	12810	CL	crop field	EcE2
1.359	U	U	SBS-10-2-3RM	12806	CL	hay field	Ra
1.347	U	U	SBS-11-1-3RM	1879A	ML	crop field	XfB
1.344	U	U	SBS-2-2A-3RM	12774A	CL	crop field	FdA
1.344	U	U	SBS-4-3-3RM	12784	CL	hay field	XeB
1.339	U	U	SBS-7-2-3RM	12794	CL	crop field	XfB
1.325	U	U	SBS-3-1-3RM	1763A	CL	crop field	XfB
1.305	U	U	SBS-9-3-3RM	12804	CL	crop field	EcE2
1.305	U	U	SBS-7-1-3RM	1832A	CL	crop field	FdA
1.294	U	U	SBS-2-2-3RM	12774B	CL	crop field	RwB2
1.288	U	U	SBS-6-3-3RM	12792	CL	crop field	RwB
1.278	U	U	SBS-5-3-3RM	12788	CL	hay field	RvB2
1.274	U	U	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
1.263	U	U	SBS-1-2-3RM	12770	CL	crop field	Ra
1.255	U	U	SBS-8-3-3RM	12799	CL	crop field	XfB
1.165	U	U	SBS-9-2-3RM	12802	CL	crop field	MtC2
1.147	U	U	SBS-11-3-3RM	12811	CL	crop field	EcE2
1.136	U	U	SBS-7-3-3RM	12795	CL	crop field	MsD2
1.116	U	U	SBS-2-3-3RM	12775	CL	crop field	FdA
1.097	U	U	SBS-2-1-3RM	1756A	CL	crop field	FdA
1.094	U	U	SBS-9-1-3RM	1872A	CL	hay field	XfB

APPENDIX F

CONCENTRATION OF PROTACTINIUM-231 AT 18-24 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.719	U	U	SBS-4-3-4RM	12784	CL	hay field	XeB
1.627	U	U	SBS-5-3-4RM	12788	CL	hay field	RvB2
1.6	U	U	SBS-9-1-4RM	1872A	CL	hay field	XfB
1.592	U	U	SBS-2-1B-4RM	1756B	CL	crop field	FdA
1.589	U	U	SBS-2-1-4RM	1756A	CL	crop field	FdA
1.572	U	U	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.558	U	U	SBS-2-2A-4RM	12774A	CL	crop field	FdA
1.521	U	U	SBS-10-1-4RM	1873A	CL	hay field	FdA
1.518	U	U	SBS-3-3-4RM	12779	CL	crop field	RwB
1.504	U	U	SBS-7-2-4RM	12794	CL	crop field	XfB
1.503	U	U	SBS-8-1-4RM	1834A	CL	crop field	FcA
1.502	U	U	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.489	U	U	SBS-8-2-4RM	12798	CL	crop field	FcA
1.485	U	U	SBS-7-1-4RM	1832A	CL	crop field	FdA
1.483	U	U	SBS-10-2-4RM	12806	CL	hay field	Ra
1.442	U	U	SBS-2-2-4RM	12774B	CL	crop field	RwB2
1.437	U	U	SBS-10-3-4RM	12807	ML	hay field	FdA
1.405	U	U	SBS-6-3-4RM	12792	CL	crop field	RwB
1.378	U	U	SBS-10-3-4RM-D	12807	ML	hay field	FdA
1.361	U	U	SBS-2-3-4RM	12775	CL	crop field	FdA
1.336	U	U	SBS-11-2-4RM	12810	CL	crop field	EcE2
1.335	U	U	SBS-9-3-4RM	12804	CL	crop field	EcE2
1.312	U	U	SBS-1-3-4RM	12771	CL	crop field	RwB2
1.311	U	U	SBS-9-2-4RM	12802	CL	crop field	MtC2
1.306	U	U	SBS-2-3-4RM-D	12775	CL	crop field	FdA
1.263	U	U	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
1.258	U	U	SBS-7-3-4RM	12795	CL	crop field	MsD2
1.219	U	U	SBS-1-2-4RM	12770	CL	crop field	Ra
1.194	U	U	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
1.181	U	U	SBS-3-1-4RM	1763A	CL	crop field	XfB
1.166	U	U	SBS-11-3-4RM	12811	CL	crop field	EcE2
1.163	U	U	SBS-5-2-4RM	12787	CL	hay field	FcA
1.133	U	U	SBS-8-3-4RM	12799	CL	crop field	XfB
1.131	U	U	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
1.094	U	U	SBS-5-1-4RM	1826A	CL	hay field	XeB
1.072	U	U	SBS-11-1-4RM	1879A	CL	crop field	XfB
1.069	U	U	SBS-6-2-4RM	12791	CL	crop field	RwB2
1.043	U	U	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.841	U	U	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX F

CONCENTRATION OF PROTACTINIUM-231 AT 24-30 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.635	U	U	SBS-2-3-5RM	12775	CL	crop field	FdA
1.524	U	UJ	SBS-4-1-5RM	1764A	CL	hay field	XeB
1.523	U	U	SBS-3-3-5RM	12779	CL	crop field	RwB
1.52	U	U	SBS-5-1-5RM	1826A	CL	hay field	XeB
1.44	U	U	SBS-10-1-5RM	1873A	CL	hay field	FdA
1.433	U	U	SBS-8-1-5RM	1834A	CL	crop field	FcA
1.386	U	U	SBS-1-1-5RM	1755A	CL	crop field	FdA
1.378	U	U	SBS-11-3-5RM	12811	CL	crop field	EcE2
1.375	U	U	SBS-3-1-5RM	1763A	CL	crop field	XfB
1.366	U	U	SBS-8-2-5RM	12798	CL	crop field	FcA
1.362	U	U	SBS-1-3-5RM	12771	CL	crop field	RwB2
1.355	U	U	SBS-2-1B-5RM	1756B	CL	crop field	FdA
1.347	U	U	SBS-10-2-5RM	12806	CL	hay field	Ra
1.331	U	U	SBS-5-2-5RM	12787	CL	hay field	FcA
1.314	U	U	SBS-11-2-5RM	12810	CL	crop field	EcE2
1.28	U	U	SBS-11-1-5RM	1879A	CL	crop field	XfB
1.267	U	U	SBS-2-1-5RM	1756A	CL	crop field	FdA
1.259	U	U	SBS-7-3-5RM	12795	CL	crop field	MsD2
1.238	U	U	SBS-6-1-5RM	1829A	CL	crop field	XfB
1.233	U	U	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
1.17	U	U	SBS-1-2-5RM	12770	CL	crop field	Ra
1.168	U	U	SBS-6-2-5RM	12791	CL	crop field	RwB2
1.145	U	U	SBS-10-3-5RM	12807	ML	hay field	FdA
1.138	U	U	SBS-8-3-5RM	12799	CL	crop field	XfB
1.137	U	U	SBS-5-3-5RM	12788	CL	hay field	RvB2
1.13	U	U	SBS-7-1-5RM	1832A	CL	crop field	FdA
1.123	U	U	SBS-8-3-5RM-D	12799	CL	crop field	XfB
1.1	U	U	SBS-4-2-5RM	12783	CL	hay field	RvB2
1.093	U	U	SBS-4-3-5RM	12784	CL	hay field	XeB
1.083	U	U	SBS-2-2A-5RM	12774A	CL	crop field	FdA
1.079	U	U	SBS-7-2-5RM	12794	CL	crop field	XfB
1.035	U	U	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.966	U	U	SBS-6-3-5RM	12792	CL	crop field	RwB
0.954	U	U	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.936	U	U	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.864	U	U	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.843	U	U	SBS-9-2-5RM	12802	CL	crop field	MtC2

000261

APPENDIX F

3502

CONCENTRATION OF PROTACTINIUM-231 AT 30-36 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.57	U	U	SBS-5-2-6RM	12787	CL	hay field	FcA
1.55	U	U	SBS-1-1-6RM	1755A	CL	crop field	FdA
1.489	U	U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
1.446	U	U	SBS-11-1-6RM	1879A	CL	crop field	XfB
1.389	U	U	SBS-4-1-6RM	1764A	CL	hay field	XeB
1.344	U	U	SBS-10-1-6RM	1873A	CL	hay field	FdA
1.341	U	U	SBS-4-3-6RM	12784	CL	hay field	XeB
1.338	U	U	SBS-6-1-6RM	1829A	CL	crop field	XfB
1.338	U	U	SBS-8-2-6RM	12798	CL	crop field	FcA
1.331	U	U	SBS-2-1-6RM	1756A	CL	crop field	FdA
1.316	U	U	SBS-8-1-6RM	1834A	CL	crop field	FcA
1.308	U	U	SBS-4-2-6RM	12783	CL	hay field	RvB2
1.306	U	U	SBS-9-3-6RM	12804	CL	crop field	EcE2
1.289	U	U	SBS-7-1-6RM	1832A	CL	crop field	FdA
1.283	U	U	SBS-2-2A-6RM	12774A	CL	crop field	FdA
1.27	U	U	SBS-3-3-6RM	12779	CL	crop field	RwB
1.269	U	U	SBS-1-3-6RM	12771	CL	crop field	RwB2
1.268	U	U	SBS-7-2-6RM	12794	CL	crop field	XfB
1.268	U	U	SBS-6-2-6RM	12791	CL	crop field	RwB2
1.262	U	U	SBS-7-3-6RM	12795	CL	crop field	MsD2
1.249	U	U	SBS-11-2-6RM	12810	CL	crop field	EcE2
1.21	U	U	SBS-3-1-6RM	1763A	ML	crop field	XfB
1.201	U	U	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
1.2	U	U	SBS-1-2-6RM	12770	CL	crop field	Ra
1.193	U	U	SBS-10-3-6RM	12807	CL	hay field	FdA
1.188	U	U	SBS-10-2-6RM	12806	CL	hay field	Ra
1.181	U	U	SBS-9-1-6RM	1872A	CL	hay field	XfB
1.176	U	U	SBS-5-3-6RM	12788	CL	hay field	RvB2
1.13	U	U	SBS-2-2-6RM	12774B	CL	crop field	RwB2
1.113	U	U	SBS-8-3-6RM	12799	CL	crop field	XfB
1.112	U	U	SBS-6-3-6RM	12792	CL	crop field	RwB
1.11	U	U	SBS-9-2-6RM	12802	CL	crop field	MtC2
1.078	U	U	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.958	U	U	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.944	U	U	SBS-2-3-6RM	12775	CL	crop field	FdA
0.85	U	U	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX F

CONCENTRATION OF RADIUM-224 AT 0-6 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.188		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
1.173		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
1.126		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1.123		-	SBS-6-3-1RM	12792	ML	crop field	RwB
1.1		-	SBS-5-2-1RM	12787	ML	hay field	FcA
1.097		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
1.081		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
1.077		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
1.076		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1.072		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1.072		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
1.069		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
1.068		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
1.055		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1.044		-	SBS-7-2-1RM	12794	ML	crop field	XfB
1.044		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
1.027		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
1.026		-	SBS-2-3-1RM	12775	ML	crop field	FdA
1.025		-	SBS-8-3-1RM	12799	ML	crop field	XfB
1.022		-	SBS-10-2-1RM	12806	ML	hay field	Ra
1.02		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
1.015		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
1.006		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
1.005		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
1.005		-	SBS-4-3-1RM	12784	ML	hay field	XeB
1.004		J	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
1.004		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
1		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
0.998		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
0.996		-	SBS-8-2-1RM	12798	ML	crop field	FcA
0.99		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.98		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.977		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
0.971		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
0.968		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.938		-	SBS-10-3-1RM	12807	ML	hay field	FdA
0.923		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.92		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.845		J	SBS-7-3-1RM	12795	ML	crop field	MsD2

000263

APPENDIX F

CONCENTRATION OF RADIUM-224 AT 12-18 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.304		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
1.277		-	SBS-2-3-3RM	12775	CL	crop field	FdA
1.253		-	SBS-3-3-3RM	12779	CL	crop field	RwB
1.242		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
1.236		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1.216		-	SBS-7-2-3RM	12794	CL	crop field	XfB
1.19		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
1.187		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
1.185		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
1.178		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
1.176		-	SBS-8-2-3RM	12798	CL	crop field	FcA
1.168		-	SBS-10-2-3RM	12806	CL	hay field	Ra
1.151		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
1.15		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
1.149		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
1.14		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
1.137		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
1.133		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
1.123		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
1.123		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
1.122		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
1.114		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
1.114		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
1.102		-	SBS-10-3-3RM	12807	ML	hay field	FdA
1.094		-	SBS-5-2-3RM	12787	ML	hay field	FcA
1.058		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
1.037		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
1.021		-	SBS-6-3-3RM	12792	CL	crop field	RwB
0.991		-	SBS-4-3-3RM	12784	CL	hay field	XeB
0.937		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.843		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.836		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.789		-	SBS-1-2-3RM	12770	CL	crop field	Ra
0.749		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.664		-	SBS-8-3-3RM	12799	CL	crop field	XfB

APPENDIX F

CONCENTRATION OF RADIUM-224 AT 18-24 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.305		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.304		-	SBS-3-3-4RM	12779	CL	crop field	RwB
1.228		-	SBS-2-3-4RM	12775	CL	crop field	FdA
1.221		-	SBS-7-2-4RM	12794	CL	crop field	XfB
1.203		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
1.184		-	SBS-4-3-4RM	12784	CL	hay field	XeB
1.183		-	SBS-5-2-4RM	12787	CL	hay field	FcA
1.165		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
1.163		-	SBS-8-2-4RM	12798	CL	crop field	FcA
1.151		-	SBS-10-2-4RM	12806	CL	hay field	Ra
1.148		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.136		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
1.127		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
1.103		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
1.087		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
1.08		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
1.078		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
1.077		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
1.065		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
1.05		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
1.017		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
0.99		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
0.944		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.93		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.894		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.894		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.889		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.856		-	SBS-10-3-4RM	12807	ML	hay field	FdA
0.839		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.81		-	SBS-1-2-4RM	12770	CL	crop field	Ra
0.751		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.713		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.682		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.649		-	SBS-6-3-4RM	12792	CL	crop field	RwB
0.632		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.607		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.583		-	SBS-8-3-4RM	12799	CL	crop field	XfB
0.574		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.516		-	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX F

CONCENTRATION OF RADIUM-224 AT 24-30 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.277		-	SBS-3-3-5RM	12779	CL	crop field	RwB
1.199		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
1.166		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
1.16		-	SBS-4-3-5RM	12784	CL	hay field	XeB
1.15		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
1.129		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
1.124		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
1.106		-	SBS-7-2-5RM	12794	CL	crop field	XfB
1.101		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
1.097		-	SBS-5-2-5RM	12787	CL	hay field	FcA
1.06		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
1.059		-	SBS-2-3-5RM	12775	CL	crop field	FdA
1.045		-	SBS-8-2-5RM	12798	CL	crop field	FcA
1.021		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
1.013		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
1.007		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
0.961		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.955		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.862		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.817		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.799		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.796		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.789		-	SBS-10-2-5RM	12806	CL	hay field	Ra
0.707		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.696		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.678		-	SBS-6-3-5RM	12792	CL	crop field	RwB
0.674		-	SBS-1-2-5RM	12770	CL	crop field	Ra
0.673		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.672		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.647		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.618		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.59		-	SBS-10-3-5RM	12807	ML	hay field	FdA
0.558		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.538		-	SBS-8-3-5RM	12799	CL	crop field	XfB
0.531		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.512		J	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.496		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB

APPENDIX F

CONCENTRATION OF RADIUM-224 AT 30-36 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.266		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
1.171		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
1.064		-	SBS-4-3-6RM	12784	CL	hay field	XeB
1.03		-	SBS-5-2-6RM	12787	CL	hay field	FcA
0.967		-	SBS-7-2-6RM	12794	CL	crop field	XfB
0.964		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.9		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.883		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.875		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.861		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.854		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.827		-	SBS-3-3-6RM	12779	CL	crop field	RwB
0.808		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.797		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.784		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.783		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.759		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.734		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.71		-	SBS-8-2-6RM	12798	CL	crop field	FcA
0.691		-	SBS-1-2-6RM	12770	CL	crop field	Ra
0.682		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.681		-	SBS-6-3-6RM	12792	CL	crop field	RwB
0.661		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.657		-	SBS-2-3-6RM	12775	CL	crop field	FdA
0.63		-	SBS-10-3-6RM	12807	CL	hay field	FdA
0.608		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.606		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.6		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.571		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.547		-	SBS-10-2-6RM	12806	CL	hay field	Ra
0.509		-	SBS-8-3-6RM	12799	CL	crop field	XfB
0.504		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.497		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.483		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.47		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.459		-	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX F

CONCENTRATION OF RADIUM-226 AT 0-6 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.512		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
1.391		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
1.373		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
1.356		-	SBS-5-2-1RM	12787	ML	hay field	FcA
1.334		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
1.331		-	SBS-6-3-1RM	12792	ML	crop field	RwB
1.318		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1.314		J	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
1.296		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1.265		-	SBS-4-3-1RM	12784	ML	hay field	XeB
1.262		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
1.261		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
1.252		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
1.244		J	SBS-3-1-1RM	1763A	ML	crop field	XfB
1.244		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
1.24		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
1.239		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
1.236		-	SBS-10-3-1RM	12807	ML	hay field	FdA
1.23		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1.23		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
1.215		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
1.202		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
1.201		-	SBS-8-2-1RM	12798	ML	crop field	FcA
1.196		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
1.181		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
1.173		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
1.17		-	SBS-8-3-1RM	12799	ML	crop field	XfB
1.165		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1.162		-	SBS-2-3-1RM	12775	ML	crop field	FdA
1.158		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
1.152		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
1.142		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
1.137		-	SBS-10-2-1RM	12806	ML	hay field	Ra
1.133		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
1.119		J	SBS-7-3-1RM	12795	ML	crop field	MsD2
1.111		-	SBS-7-2-1RM	12794	ML	crop field	XfB
1.109		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
1.095		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
1.094		-	SBS-6-2-1RM	12791	ML	crop field	RwB2

APPENDIX F

CONCENTRATION OF RADIUM-226 AT 12-18 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.567		-	SBS-2-3-3RM	12775	CL	crop field	FdA
1.558		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
1.535		-	SBS-8-2-3RM	12798	CL	crop field	FcA
1.531		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
1.523		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
1.509		-	SBS-4-3-3RM	12784	CL	hay field	XeB
1.48		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
1.476		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1.47		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
1.468		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
1.435		-	SBS-10-2-3RM	12806	CL	hay field	Ra
1.433		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
1.43		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
1.427		-	SBS-7-2-3RM	12794	CL	crop field	XfB
1.409		-	SBS-3-3-3RM	12779	CL	crop field	RwB
1.404		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
1.4		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
1.393		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
1.381		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
1.367		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
1.349		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
1.348		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
1.341		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
1.325		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
1.308		-	SBS-10-3-3RM	12807	ML	hay field	FdA
1.289		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
1.27		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
1.264		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
1.202		-	SBS-5-2-3RM	12787	ML	hay field	FcA
1.166		-	SBS-6-3-3RM	12792	CL	crop field	RwB
1.035		-	SBS-1-2-3RM	12770	CL	crop field	Ra
1.015		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
1.011		-	SBS-8-3-3RM	12799	CL	crop field	XfB
1.005		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.941		-	SBS-9-3-3RM	12804	CL	crop field	EcE2

000269

APPENDIX F

3502

CONCENTRATION OF RADIUM-226 AT 18-24 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.631		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
1.614		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.595		-	SBS-3-3-4RM	12779	CL	crop field	RwB
1.56		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
1.542		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
1.518		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
1.513		-	SBS-2-3-4RM	12775	CL	crop field	FdA
1.502		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
1.501		-	SBS-8-2-4RM	12798	CL	crop field	FcA
1.491		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
1.487		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
1.482		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
1.463		-	SBS-4-3-4RM	12784	CL	hay field	XeB
1.459		-	SBS-10-2-4RM	12806	CL	hay field	Ra
1.453		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
1.448		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
1.434		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
1.423		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.401		-	SBS-10-3-4RM	12807	ML	hay field	FdA
1.395		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
1.346		-	SBS-7-2-4RM	12794	CL	crop field	XfB
1.324		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
1.318		-	SBS-5-2-4RM	12787	CL	hay field	FcA
1.305		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
1.244		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
1.202		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
1.076		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
1.062		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
1.048		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
1.045		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.943		-	SBS-1-2-4RM	12770	CL	crop field	Ra
0.887		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.863		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.86		-	SBS-6-3-4RM	12792	CL	crop field	RwB
0.834		-	SBS-8-3-4RM	12799	CL	crop field	XfB
0.797		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.704		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.653		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.602		-	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX F

CONCENTRATION OF RADIUM-226 AT 24-30 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.686		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
1.572		-	SBS-4-3-5RM	12784	CL	hay field	XeB
1.538		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
1.529		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
1.528		-	SBS-3-3-5RM	12779	CL	crop field	RwB
1.498		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
1.453		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
1.45		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
1.431		-	SBS-2-3-5RM	12775	CL	crop field	FdA
1.423		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
1.377		-	SBS-5-2-5RM	12787	CL	hay field	FcA
1.36		-	SBS-7-2-5RM	12794	CL	crop field	XfB
1.323		-	SBS-10-2-5RM	12806	CL	hay field	Ra
1.315		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
1.311		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
1.241		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
1.237		-	SBS-8-2-5RM	12798	CL	crop field	FcA
1.196		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
1.071		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
1.008		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.991		-	SBS-10-3-5RM	12807	ML	hay field	FdA
0.925		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.909		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.899		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.879		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.863		-	SBS-6-3-5RM	12792	CL	crop field	RwB
0.854		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.833		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.828		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.813		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.801		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.787		-	SBS-1-2-5RM	12770	CL	crop field	Ra
0.757		-	SBS-8-3-5RM	12799	CL	crop field	XfB
0.743		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.741		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.681		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.638		J	SBS-11-3-5RM-D	12811	CL	crop field	EcE2

APPENDIX F

3502

CONCENTRATION OF RADIUM-226 AT 30-36 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.599		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
1.435		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
1.383		-	SBS-4-3-6RM	12784	CL	hay field	XeB
1.337		-	SBS-5-2-6RM	12787	CL	hay field	FcA
1.301		-	SBS-7-2-6RM	12794	CL	crop field	XfB
1.275		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
1.259		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
1.228		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
1.163		-	SBS-2-3-6RM	12775	CL	crop field	FdA
1.138		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
1.082		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
1.036		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
1.033		-	SBS-8-2-6RM	12798	CL	crop field	FcA
0.978		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.906		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.891		-	SBS-10-3-6RM	12807	CL	hay field	FdA
0.891		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.888		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.881		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.861		-	SBS-10-2-6RM	12806	CL	hay field	Ra
0.839		-	SBS-6-3-6RM	12792	CL	crop field	RwB
0.839		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.834		-	SBS-3-3-6RM	12779	CL	crop field	RwB
0.797		-	SBS-1-2-6RM	12770	CL	crop field	Ra
0.791		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.79		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.785		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.748		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.743		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.743		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.724		-	SBS-8-3-6RM	12799	CL	crop field	XfB
0.722		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.708		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.696		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.628		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.515		-	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX F

CONCENTRATION OF RADIUM-228 AT 0-6 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.229		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
1.219		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
1.136		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1.128		-	SBS-6-3-1RM	12792	ML	crop field	RwB
1.124		-	SBS-5-2-1RM	12787	ML	hay field	FcA
1.11		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
1.104		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1.103		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
1.101		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
1.099		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
1.088		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
1.075		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1.068		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
1.059		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1.057		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
1.047		-	SBS-8-3-1RM	12799	ML	crop field	XfB
1.047		-	SBS-10-2-1RM	12806	ML	hay field	Ra
1.043		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
1.043		-	SBS-7-2-1RM	12794	ML	crop field	XfB
1.042		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
1.036		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
1.036		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
1.035		-	SBS-2-3-1RM	12775	ML	crop field	FdA
1.031		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
1.027		-	SBS-4-3-1RM	12784	ML	hay field	XeB
1.024		J	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
1.024		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
1.023		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
1.018		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
1.004		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
1.002		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
1.001		-	SBS-8-2-1RM	12798	ML	crop field	FcA
0.995		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.994		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.993		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.96		-	SBS-10-3-1RM	12807	ML	hay field	FdA
0.95		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.94		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.861		J	SBS-7-3-1RM	12795	ML	crop field	MsD2

APPENDIX F

CONCENTRATION OF RADIUM-228 AT 12-18 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.321		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
1.29		-	SBS-2-3-3RM	12775	CL	crop field	FdA
1.271		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1.266		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
1.265		-	SBS-3-3-3RM	12779	CL	crop field	RwB
1.255		-	SBS-7-2-3RM	12794	CL	crop field	XfB
1.241		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
1.231		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
1.215		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
1.2		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
1.196		-	SBS-8-2-3RM	12798	CL	crop field	FcA
1.194		-	SBS-10-2-3RM	12806	CL	hay field	Ra
1.192		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
1.184		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
1.173		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
1.166		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
1.165		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
1.156		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
1.155		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
1.144		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
1.141		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
1.135		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
1.125		-	SBS-10-3-3RM	12807	ML	hay field	FdA
1.123		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
1.084		-	SBS-5-2-3RM	12787	ML	hay field	FcA
1.084		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
1.074		-	SBS-4-3-3RM	12784	CL	hay field	XeB
1.066		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
1.022		-	SBS-6-3-3RM	12792	CL	crop field	RwB
0.97		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.857		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.846		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.792		-	SBS-1-2-3RM	12770	CL	crop field	Ra
0.778		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.681		-	SBS-8-3-3RM	12799	CL	crop field	XfB

000274

APPENDIX F

CONCENTRATION OF RADIUM-228 AT 18-24 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.317		-	SBS-3-3-4RM	12779	CL	crop field	RwB
1.309		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.27		-	SBS-2-3-4RM	12775	CL	crop field	FdA
1.227		-	SBS-7-2-4RM	12794	CL	crop field	XfB
1.22		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
1.21		-	SBS-4-3-4RM	12784	CL	hay field	XeB
1.2		-	SBS-5-2-4RM	12787	CL	hay field	FcA
1.194		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
1.192		-	SBS-8-2-4RM	12798	CL	crop field	FcA
1.189		-	SBS-10-2-4RM	12806	CL	hay field	Ra
1.171		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.156		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
1.15		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
1.135		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
1.113		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
1.108		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
1.107		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
1.099		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
1.086		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
1.069		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
1.022		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
1.001		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
1		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.95		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.917		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.915		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.896		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.892		-	SBS-10-3-4RM	12807	ML	hay field	FdA
0.841		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.809		-	SBS-1-2-4RM	12770	CL	crop field	Ra
0.773		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.734		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.698		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.658		-	SBS-6-3-4RM	12792	CL	crop field	RwB
0.649		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.615		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.593		-	SBS-8-3-4RM	12799	CL	crop field	XfB
0.567		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.518		-	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX F

CONCENTRATION OF RADIUM-228 AT 24-30 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.292		-	SBS-3-3-5RM	12779	CL	crop field	RwB
1.209		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
1.187		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
1.173		-	SBS-4-3-5RM	12784	CL	hay field	XeB
1.172		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
1.166		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
1.155		-	SBS-5-2-5RM	12787	CL	hay field	FcA
1.147		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
1.119		-	SBS-7-2-5RM	12794	CL	crop field	XfB
1.117		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
1.08		-	SBS-2-3-5RM	12775	CL	crop field	FdA
1.069		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
1.04		-	SBS-8-2-5RM	12798	CL	crop field	FcA
1.033		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
1.026		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
1.021		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
0.965		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.956		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.878		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.817		-	SBS-10-2-5RM	12806	CL	hay field	Ra
0.814		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.811		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.81		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.72		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.705		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.703		-	SBS-6-3-5RM	12792	CL	crop field	RwB
0.694		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.689		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.677		-	SBS-1-2-5RM	12770	CL	crop field	Ra
0.645		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.627		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.589		-	SBS-10-3-5RM	12807	ML	hay field	FdA
0.572		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.556		-	SBS-8-3-5RM	12799	CL	crop field	XfB
0.546		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.525		J	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.506		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB

000276

APPENDIX F

CONCENTRATION OF RADIUM-228 AT 30-36 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.279		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
1.183		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
1.094		-	SBS-4-3-6RM	12784	CL	hay field	XeB
1.045		-	SBS-5-2-6RM	12787	CL	hay field	FcA
0.993		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.987		-	SBS-7-2-6RM	12794	CL	crop field	XfB
0.926		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.914		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.896		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.886		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.874		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.835		-	SBS-3-3-6RM	12779	CL	crop field	RwB
0.834		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.801		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.796		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.787		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.765		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.747		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.744		-	SBS-8-2-6RM	12798	CL	crop field	FcA
0.701		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.696		-	SBS-1-2-6RM	12770	CL	crop field	Ra
0.678		-	SBS-6-3-6RM	12792	CL	crop field	RwB
0.677		-	SBS-2-3-6RM	12775	CL	crop field	FdA
0.664		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.64		-	SBS-10-3-6RM	12807	CL	hay field	FdA
0.632		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.63		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.617		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.558		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.552		-	SBS-10-2-6RM	12806	CL	hay field	Ra
0.516		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.508		-	SBS-8-3-6RM	12799	CL	crop field	XfB
0.502		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.502		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.477		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.467		-	SBS-11-3-6RM	12811	C	crop field	EcE2

000277

APPENDIX F

CONCENTRATION OF RUTHENIUM-106 AT 0-6 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.482	U	U	SBS-11-1-1RM	1879A	ML	crop field	XfB
0.452	U	U	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.451	U	U	SBS-2-3-1RM	12775	ML	crop field	FdA
0.444	U	U	SBS-7-3-1RM	12795	ML	crop field	MsD2
0.442		J	SBS-11-3-1RM	12811	CL	crop field	EcE2
0.433	U	U	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.41	U	U	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
0.397	U	U	SBS-8-3-1RM	12799	ML	crop field	XfB
0.37	U	U	SBS-1-1-1RM	1755A	ML	crop field	FdA
0.369	U	U	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.368	U	U	SBS-10-3-1RM	12807	ML	hay field	FdA
0.366	U	U	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
0.365	U	U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
0.36	U	U	SBS-1-3-1RM	12771	ML	crop field	RwB2
0.36	U	U	SBS-10-2-1RM	12806	ML	hay field	Ra
0.36	U	U	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
0.357	U	U	SBS-8-1-1RM	1834A	ML	crop field	FcA
0.352	U	U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
0.344	U	U	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
0.339	U	U	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.332	U	U	SBS-5-2-1RM	12787	ML	hay field	FcA
0.324	U	U	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.323	U	U	SBS-8-2-1RM	12798	ML	crop field	FcA
0.322	U	U	SBS-4-2-1RM	12783	ML	hay field	RvB2
0.318	U	U	SBS-5-1-1RM	1826A	ML	hay field	XeB
0.304	U	U	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
0.296	U	U	SBS-6-3-1RM	12792	ML	crop field	RwB
0.294	U	U	SBS-2-2A-1RM	12774A	ML	crop field	FdA
0.288	U	U	SBS-9-2-1RM	12802	ML	crop field	MtC2
0.286	U	U	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
0.285	U	U	SBS-4-3-1RM	12784	ML	hay field	XeB
0.283	U	U	SBS-5-3-1RM	12788	ML	hay field	RvB2
0.281	U	U	SBS-9-3-1RM	12804	CL	crop field	EcE2
0.275	U	U	SBS-7-2-1RM	12794	ML	crop field	XfB
0.274	U	U	SBS-2-2-1RM	12774B	ML	crop field	RwB2
0.273	U	U	SBS-6-1-1RM	1829A	ML	crop field	XfB
0.27	U	U	SBS-7-1-1RM	1832A	ML	crop field	FdA
0.266	U	U	SBS-2-1B-1RM	1756B	ML	crop field	FdA
0.255	U	U	SBS-2-1-1RM	1756A	ML	crop field	FdA

APPENDIX F

CONCENTRATION OF RUTHENIUM-106 AT 12-18 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.505	U	U	SBS-6-2-3RM	12791	ML	crop field	RwB2
0.469	U	U	SBS-2-1B-3RM	1756B	ML	crop field	FdA
0.462	U	U	SBS-6-1-3RM	1829A	ML	crop field	XfB
0.461	U	U	SBS-5-2-3RM	12787	ML	hay field	FcA
0.437	U	U	SBS-5-1-3RM	1826A	CL	hay field	XeB
0.43	U	U	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.419	U	U	SBS-1-3-3RM	12771	CL	crop field	RwB2
0.401	U	U	SBS-3-3-3RM	12779	CL	crop field	RwB
0.394	U	U	SBS-8-1-3RM	1834A	CL	crop field	FcA
0.391	U	U	SBS-10-2-3RM	12806	CL	hay field	Ra
0.385	U	U	SBS-4-3-3RM	12784	CL	hay field	XeB
0.38	U	U	SBS-10-1-3RM	1873A	CL	hay field	FdA
0.367	U	U	SBS-8-2-3RM	12798	CL	crop field	FcA
0.363	U	U	SBS-11-2-3RM	12810	CL	crop field	EcE2
0.362	U	U	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.361	U	U	SBS-3-1-3RM	1763A	CL	crop field	XfB
0.361	U	U	SBS-1-2-3RM	12770	CL	crop field	Ra
0.355	U	U	SBS-9-3-3RM	12804	CL	crop field	EcE2
0.353	U	U	SBS-10-3-3RM	12807	ML	hay field	FdA
0.353		J	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
0.352	U	U	SBS-6-3-3RM	12792	CL	crop field	RwB
0.351	U	U	SBS-4-1-3RM	1764A	CL	hay field	XeB
0.35	U	U	SBS-7-2-3RM	12794	CL	crop field	XfB
0.35	U	U	SBS-5-3-3RM	12788	CL	hay field	RvB2
0.343	U	U	SBS-2-1-3RM	1756A	CL	crop field	FdA
0.338	U	U	SBS-11-1-3RM	1879A	ML	crop field	XfB
0.337	U	U	SBS-7-1-3RM	1832A	CL	crop field	FdA
0.323	U	U	SBS-2-2A-3RM	12774A	CL	crop field	FdA
0.314	U	U	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.314	U	U	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.306	U	U	SBS-11-3-3RM	12811	CL	crop field	EcE2
0.297	U	U	SBS-2-3-3RM	12775	CL	crop field	FdA
0.297	U	U	SBS-9-1-3RM	1872A	CL	hay field	XfB
0.278		J	SBS-8-3-3RM	12799	CL	crop field	XfB
0.273	U	U	SBS-7-3-3RM	12795	CL	crop field	MsD2

APPENDIX F

3502

CONCENTRATION OF RUTHENIUM-106 AT 18-24 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.542	U	U	SBS-6-1-4RM	1829A	ML	crop field	XfB
0.492	U	U	SBS-5-3-4RM	12788	CL	hay field	RvB2
0.486	U	U	SBS-4-3-4RM	12784	CL	hay field	XeB
0.483	U	U	SBS-2-2A-4RM	12774A	CL	crop field	FdA
0.476	U	U	SBS-7-2-4RM	12794	CL	crop field	XfB
0.47	U	U	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.44	U	U	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.429	U	U	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.425	U	U	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.424	U	U	SBS-2-1B-4RM	1756B	CL	crop field	FdA
0.398	U	U	SBS-10-1-4RM	1873A	CL	hay field	FdA
0.397	U	U	SBS-1-1-4RM	1755A	CL	crop field	FdA
0.389	U	U	SBS-8-1-4RM	1834A	CL	crop field	FcA
0.387	U	U	SBS-3-3-4RM	12779	CL	crop field	RwB
0.379	U	U	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.379	U	U	SBS-11-2-4RM	12810	CL	crop field	EcE2
0.373	U	U	SBS-6-3-4RM	12792	CL	crop field	RwB
0.37	U	U	SBS-1-3-4RM	12771	CL	crop field	RwB2
0.366	U	U	SBS-10-3-4RM	12807	ML	hay field	FdA
0.365	U	U	SBS-8-2-4RM	12798	CL	crop field	FcA
0.361	U	U	SBS-1-2-4RM	12770	CL	crop field	Ra
0.361	U	U	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.359	U	U	SBS-2-3-4RM	12775	CL	crop field	FdA
0.357	U	U	SBS-10-2-4RM	12806	CL	hay field	Ra
0.357	U	U	SBS-2-3-4RM-D	12775	CL	crop field	FdA
0.341	U	U	SBS-7-3-4RM	12795	CL	crop field	MsD2
0.34	U	U	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.333	U	U	SBS-2-1-4RM	1756A	CL	crop field	FdA
0.316	U	U	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.314	U	U	SBS-5-2-4RM	12787	CL	hay field	FcA
0.305	U	U	SBS-8-3-4RM	12799	CL	crop field	XfB
0.298	U	U	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.295	U	U	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
0.283	U	U	SBS-6-2-4RM	12791	CL	crop field	RwB2
0.281	U	U	SBS-3-1-4RM	1763A	CL	crop field	XfB
0.275	U	U	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.274	U	U	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.262	U	U	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.234	U	U	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX F

CONCENTRATION OF RUTHENIUM-106 AT 24-30 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.485	U	U	SBS-2-3-5RM	12775	CL	crop field	FdA
0.458	U	U	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.417	U	U	SBS-3-3-5RM	12779	CL	crop field	RwB
0.407	U	U	SBS-1-1-5RM	1755A	CL	crop field	FdA
0.4	U	U	SBS-8-2-5RM	12798	CL	crop field	FcA
0.392	U	U	SBS-10-1-5RM	1873A	CL	hay field	FdA
0.388	U	U	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.366	U	U	SBS-3-1-5RM	1763A	CL	crop field	XfB
0.366	U	U	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.359	U	U	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.359	U	U	SBS-8-1-5RM	1834A	CL	crop field	FcA
0.358	U	U	SBS-10-2-5RM	12806	CL	hay field	Ra
0.354	U	U	SBS-2-1B-5RM	1756B	CL	crop field	FdA
0.351	U	U	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.346	U	U	SBS-5-2-5RM	12787	CL	hay field	FcA
0.343	U	U	SBS-2-1-5RM	1756A	CL	crop field	FdA
0.331	U	U	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.329	U	U	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.326	U	U	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.323	U	U	SBS-1-2-5RM	12770	CL	crop field	Ra
0.319	U	U	SBS-7-3-5RM	12795	CL	crop field	MsD2
0.317	U	U	SBS-10-3-5RM	12807	ML	hay field	FdA
0.317	U	U	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.312	U	U	SBS-2-2A-5RM	12774A	CL	crop field	FdA
0.312	U	U	SBS-5-3-5RM	12788	CL	hay field	RvB2
0.299	U	U	SBS-8-3-5RM	12799	CL	crop field	XfB
0.299	U	U	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.296	U	U	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.295	U	U	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.294	U	U	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.292	U	U	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.291	U	U	SBS-4-3-5RM	12784	CL	hay field	XeB
0.249	U	U	SBS-6-3-5RM	12792	CL	crop field	RwB
0.248	U	U	SBS-7-2-5RM	12794	CL	crop field	XfB
0.247	U	U	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.243	U	U	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.22	U	U	SBS-9-1-5RM	1872A	CL	hay field	XfB

APPENDIX F

3502

CONCENTRATION OF RUTHENIUM-106 AT 30-36 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.518	U	U	SBS-5-2-6RM	12787	CL	hay field	FcA
0.457	U	U	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.441	U	U	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.433	U	U	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.422	U	U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.416	U	U	SBS-1-1-6RM	1755A	CL	crop field	FdA
0.414	U	U	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.408	U	U	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.397	U	U	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.376	U	U	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.372	U	U	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.37	U	U	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.363	U	U	SBS-8-2-6RM	12798	CL	crop field	FcA
0.361	U	U	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.358	U	U	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.358	U	U	SBS-3-3-6RM	12779	CL	crop field	RwB
0.353	U	U	SBS-4-3-6RM	12784	CL	hay field	XeB
0.353	U	U	SBS-2-2A-6RM	12774A	CL	crop field	FdA
0.351	U	U	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.34	U	U	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.336	U	U	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.327	U	U	SBS-7-2-6RM	12794	CL	crop field	XfB
0.325	U	U	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.324	U	U	SBS-10-3-6RM	12807	CL	hay field	FdA
0.32	U	U	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.305	U	U	SBS-6-3-6RM	12792	CL	crop field	RwB
0.298	U	U	SBS-1-2-6RM	12770	CL	crop field	Ra
0.291	U	U	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.285	U	U	SBS-10-2-6RM	12806	CL	hay field	Ra
0.284	U	U	SBS-8-3-6RM	12799	CL	crop field	XfB
0.277	U	U	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.272	U	U	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.27	U	U	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.256	U	U	SBS-2-3-6RM	12775	CL	crop field	FdA
0.25	U	U	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.221	U	U	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX F

CONCENTRATION OF THORIUM-228 AT 0-6 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.188		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
1.173		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
1.126		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1.123		-	SBS-6-3-1RM	12792	ML	crop field	RwB
1.1		-	SBS-5-2-1RM	12787	ML	hay field	FcA
1.097		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
1.081		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
1.077		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
1.076		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1.072		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1.072		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
1.069		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
1.068		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
1.055		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1.044		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
1.044		-	SBS-7-2-1RM	12794	ML	crop field	XfB
1.031		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
1.027		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
1.026		-	SBS-2-3-1RM	12775	ML	crop field	FdA
1.025		-	SBS-8-3-1RM	12799	ML	crop field	XfB
1.022		-	SBS-10-2-1RM	12806	ML	hay field	Ra
1.02		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
1.015		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
1.005		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
1.005		-	SBS-4-3-1RM	12784	ML	hay field	XeB
1.004		J	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
1.004		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
1		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
0.998		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
0.996		-	SBS-8-2-1RM	12798	ML	crop field	FcA
0.99		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.98		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.977		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
0.971		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
0.968		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.938		-	SBS-10-3-1RM	12807	ML	hay field	FdA
0.923		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.92		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.845		J	SBS-7-3-1RM	12795	ML	crop field	MsD2

000283

APPENDIX F

CONCENTRATION OF THORIUM-228 AT 12-18 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.304		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
1.277		-	SBS-2-3-3RM	12775	CL	crop field	FdA
1.253		-	SBS-3-3-3RM	12779	CL	crop field	RwB
1.242		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
1.236		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1.216		-	SBS-7-2-3RM	12794	CL	crop field	XfB
1.19		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
1.187		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
1.185		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
1.178		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
1.176		-	SBS-8-2-3RM	12798	CL	crop field	FcA
1.168		-	SBS-10-2-3RM	12806	CL	hay field	Ra
1.151		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
1.15		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
1.149		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
1.14		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
1.137		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
1.133		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
1.123		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
1.123		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
1.122		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
1.114		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
1.114		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
1.102		-	SBS-10-3-3RM	12807	ML	hay field	FdA
1.094		-	SBS-5-2-3RM	12787	ML	hay field	FcA
1.058		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
1.037		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
1.021		-	SBS-6-3-3RM	12792	CL	crop field	RwB
0.991		-	SBS-4-3-3RM	12784	CL	hay field	XeB
0.937		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.843		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.836		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.789		-	SBS-1-2-3RM	12770	CL	crop field	Ra
0.749		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.664		-	SBS-8-3-3RM	12799	CL	crop field	XfB

APPENDIX F

CONCENTRATION OF THORIUM-228 AT 18-24 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.305		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.304		-	SBS-3-3-4RM	12779	CL	crop field	RwB
1.228		-	SBS-2-3-4RM	12775	CL	crop field	FdA
1.221		-	SBS-7-2-4RM	12794	CL	crop field	XfB
1.203		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
1.184		-	SBS-4-3-4RM	12784	CL	hay field	XeB
1.183		-	SBS-5-2-4RM	12787	CL	hay field	FcA
1.165		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
1.163		-	SBS-8-2-4RM	12798	CL	crop field	FcA
1.151		-	SBS-10-2-4RM	12806	CL	hay field	Ra
1.148		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.136		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
1.127		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
1.103		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
1.087		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
1.08		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
1.078		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
1.077		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
1.065		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
1.05		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
1.017		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
0.99		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
0.944		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.93		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.894		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.894		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.889		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.856		-	SBS-10-3-4RM	12807	ML	hay field	FdA
0.839		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.81		-	SBS-1-2-4RM	12770	CL	crop field	Ra
0.751		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.713		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.682		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.649		-	SBS-6-3-4RM	12792	CL	crop field	RwB
0.632		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.607		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.583		-	SBS-8-3-4RM	12799	CL	crop field	XfB
0.574		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.516		-	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX F

CONCENTRATION OF THORIUM-228 AT 24-30 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.277		-	SBS-3-3-5RM	12779	CL	crop field	RwB
1.199		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
1.166		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
1.16		-	SBS-4-3-5RM	12784	CL	hay field	XeB
1.15		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
1.129		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
1.124		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
1.106		-	SBS-7-2-5RM	12794	CL	crop field	XfB
1.101		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
1.097		-	SBS-5-2-5RM	12787	CL	hay field	FcA
1.06		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
1.059		-	SBS-2-3-5RM	12775	CL	crop field	FdA
1.045		-	SBS-8-2-5RM	12798	CL	crop field	FcA
1.021		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
1.013		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
1.007		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
0.961		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.955		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.862		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.817		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.799		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.796		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.789		-	SBS-10-2-5RM	12806	CL	hay field	Ra
0.707		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.696		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.678		-	SBS-6-3-5RM	12792	CL	crop field	RwB
0.674		-	SBS-1-2-5RM	12770	CL	crop field	Ra
0.673		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.672		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.647		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.618		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.59		-	SBS-10-3-5RM	12807	ML	hay field	FdA
0.558		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.538		-	SBS-8-3-5RM	12799	CL	crop field	XfB
0.531		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.512		J	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.496		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB

APPENDIX F

CONCENTRATION OF THORIUM-228 AT 30-36 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.266		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
1.171		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
1.064		-	SBS-4-3-6RM	12784	CL	hay field	XeB
1.03		-	SBS-5-2-6RM	12787	CL	hay field	FcA
0.967		-	SBS-7-2-6RM	12794	CL	crop field	XfB
0.964		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.9		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.883		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.875		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.861		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.854		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.827		-	SBS-3-3-6RM	12779	CL	crop field	RwB
0.808		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.797		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.784		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.783		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.759		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.734		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.71		-	SBS-8-2-6RM	12798	CL	crop field	FcA
0.691		-	SBS-1-2-6RM	12770	CL	crop field	Ra
0.682		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.681		-	SBS-6-3-6RM	12792	CL	crop field	RwB
0.661		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.657		-	SBS-2-3-6RM	12775	CL	crop field	FdA
0.63		-	SBS-10-3-6RM	12807	CL	hay field	FdA
0.608		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.606		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.6		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.571		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.547		-	SBS-10-2-6RM	12806	CL	hay field	Ra
0.509		-	SBS-8-3-6RM	12799	CL	crop field	XfB
0.504		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.497		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.483		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.47		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.459		-	SBS-11-3-6RM	12811	C	crop field	EcE2

000287

APPENDIX F

3502

CONCENTRATION OF THORIUM-232 AT 0-6 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.229		-	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
1.219		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
1.136		-	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
1.128		-	SBS-6-3-1RM	12792	ML	crop field	RwB
1.124		-	SBS-5-2-1RM	12787	ML	hay field	FcA
1.11		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
1.104		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1.103		-	SBS-9-2-1RM	12802	ML	crop field	MtC2
1.101		-	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
1.099		-	SBS-11-1-1RM	1879A	ML	crop field	XfB
1.088		-	SBS-2-2-1RM	12774B	ML	crop field	RwB2
1.075		-	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1.068		-	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
1.059		-	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1.057		-	SBS-9-3-1RM	12804	CL	crop field	EcE2
1.047		-	SBS-10-2-1RM	12806	ML	hay field	Ra
1.047		-	SBS-8-3-1RM	12799	ML	crop field	XfB
1.043		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
1.043		-	SBS-7-2-1RM	12794	ML	crop field	XfB
1.042		-	SBS-5-3-1RM	12788	ML	hay field	RvB2
1.036		-	SBS-4-2-1RM	12783	ML	hay field	RvB2
1.036		-	SBS-7-1-1RM	1832A	ML	crop field	FdA
1.035		-	SBS-2-3-1RM	12775	ML	crop field	FdA
1.031		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
1.027		-	SBS-4-3-1RM	12784	ML	hay field	XeB
1.024		J	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
1.024		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
1.023		-	SBS-8-1-1RM	1834A	ML	crop field	FcA
1.018		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
1.004		-	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
1.002		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
1.001		-	SBS-8-2-1RM	12798	ML	crop field	FcA
0.995		-	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.994		-	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.993		-	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.96		-	SBS-10-3-1RM	12807	ML	hay field	FdA
0.95		-	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.94		-	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.861		J	SBS-7-3-1RM	12795	ML	crop field	MsD2

APPENDIX F

CONCENTRATION OF THORIUM-232 AT 12-18 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.321		-	SBS-8-1-3RM	1834A	CL	crop field	FcA
1.29		-	SBS-2-3-3RM	12775	CL	crop field	FdA
1.271		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1.266		-	SBS-1-3-3RM	12771	CL	crop field	RwB2
1.265		-	SBS-3-3-3RM	12779	CL	crop field	RwB
1.255		-	SBS-7-2-3RM	12794	CL	crop field	XfB
1.241		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
1.231		-	SBS-2-1-3RM	1756A	CL	crop field	FdA
1.215		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
1.2		-	SBS-7-1-3RM	1832A	CL	crop field	FdA
1.196		-	SBS-8-2-3RM	12798	CL	crop field	FcA
1.194		-	SBS-10-2-3RM	12806	CL	hay field	Ra
1.192		-	SBS-5-3-3RM	12788	CL	hay field	RvB2
1.184		-	SBS-11-1-3RM	1879A	ML	crop field	XfB
1.173		-	SBS-4-1-3RM	1764A	CL	hay field	XeB
1.166		-	SBS-10-1-3RM	1873A	CL	hay field	FdA
1.165		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
1.156		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
1.155		-	SBS-6-2-3RM	12791	ML	crop field	RwB2
1.144		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
1.141		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
1.135		-	SBS-11-2-3RM	12810	CL	crop field	EcE2
1.125		-	SBS-10-3-3RM	12807	ML	hay field	FdA
1.123		-	SBS-2-1B-3RM	1756B	ML	crop field	FdA
1.084		-	SBS-9-1-3RM	1872A	CL	hay field	XfB
1.084		-	SBS-5-2-3RM	12787	ML	hay field	FcA
1.074		-	SBS-4-3-3RM	12784	CL	hay field	XeB
1.066		-	SBS-9-3-3RM	12804	CL	crop field	EcE2
1.022		-	SBS-6-3-3RM	12792	CL	crop field	RwB
0.97		-	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.857		-	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.846		-	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.792		-	SBS-1-2-3RM	12770	CL	crop field	Ra
0.778		-	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.681		-	SBS-8-3-3RM	12799	CL	crop field	XfB

000289

APPENDIX F

CONCENTRATION OF THORIUM-232 AT 18-24 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.317		-	SBS-3-3-4RM	12779	CL	crop field	RwB
1.309		-	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.27		-	SBS-2-3-4RM	12775	CL	crop field	FdA
1.227		-	SBS-7-2-4RM	12794	CL	crop field	XfB
1.22		-	SBS-8-1-4RM	1834A	CL	crop field	FcA
1.21		-	SBS-4-3-4RM	12784	CL	hay field	XeB
1.2		-	SBS-5-2-4RM	12787	CL	hay field	FcA
1.194		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
1.192		-	SBS-8-2-4RM	12798	CL	crop field	FcA
1.189		-	SBS-10-2-4RM	12806	CL	hay field	Ra
1.171		-	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.156		-	SBS-1-3-4RM	12771	CL	crop field	RwB2
1.15		-	SBS-2-1-4RM	1756A	CL	crop field	FdA
1.135		-	SBS-5-3-4RM	12788	CL	hay field	RvB2
1.113		-	SBS-3-1-4RM	1763A	CL	crop field	XfB
1.108		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
1.107		-	SBS-6-2-4RM	12791	CL	crop field	RwB2
1.099		-	SBS-10-1-4RM	1873A	CL	hay field	FdA
1.086		-	SBS-2-1B-4RM	1756B	CL	crop field	FdA
1.069		-	SBS-2-2A-4RM	12774A	CL	crop field	FdA
1.022		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
1.001		-	SBS-11-2-4RM	12810	CL	crop field	EcE2
1		-	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.95		-	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.917		-	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.915		-	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.896		-	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.892		-	SBS-10-3-4RM	12807	ML	hay field	FdA
0.841		-	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.809		-	SBS-1-2-4RM	12770	CL	crop field	Ra
0.773		-	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.734		-	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.698		-	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.658		-	SBS-6-3-4RM	12792	CL	crop field	RwB
0.649		-	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.615		-	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.593		-	SBS-8-3-4RM	12799	CL	crop field	XfB
0.567		-	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.518		-	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX F

CONCENTRATION OF THORIUM-232 AT 24-30 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.292		-	SBS-3-3-5RM	12779	CL	crop field	RwB
1.209		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
1.187		-	SBS-5-3-5RM	12788	CL	hay field	RvB2
1.173		-	SBS-4-3-5RM	12784	CL	hay field	XeB
1.172		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
1.166		-	SBS-2-1B-5RM	1756B	CL	crop field	FdA
1.155		-	SBS-5-2-5RM	12787	CL	hay field	FcA
1.147		-	SBS-7-3-5RM	12795	CL	crop field	MsD2
1.119		-	SBS-7-2-5RM	12794	CL	crop field	XfB
1.117		-	SBS-8-1-5RM	1834A	CL	crop field	FcA
1.08		-	SBS-2-3-5RM	12775	CL	crop field	FdA
1.069		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
1.04		-	SBS-8-2-5RM	12798	CL	crop field	FcA
1.033		-	SBS-10-1-5RM	1873A	CL	hay field	FdA
1.026		-	SBS-9-3-5RM	12804	CL	crop field	EcE2
1.021		-	SBS-3-1-5RM	1763A	CL	crop field	XfB
0.965		-	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.956		-	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.878		-	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.817		-	SBS-10-2-5RM	12806	CL	hay field	Ra
0.814		-	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.811		-	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.81		-	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.72		-	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.705		-	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.703		-	SBS-6-3-5RM	12792	CL	crop field	RwB
0.694		-	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.689		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.677		-	SBS-1-2-5RM	12770	CL	crop field	Ra
0.645		-	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.627		-	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.589		-	SBS-10-3-5RM	12807	ML	hay field	FdA
0.572		-	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.556		-	SBS-8-3-5RM	12799	CL	crop field	XfB
0.546		-	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.525		J	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.506		-	SBS-8-3-5RM-D	12799	CL	crop field	XfB

APPENDIX F

CONCENTRATION OF THORIUM-232 AT 30-36 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
1.279		-	SBS-1-1-6RM	1755A	CL	crop field	FdA
1.183		-	SBS-2-2A-6RM	12774A	CL	crop field	FdA
1.094		-	SBS-4-3-6RM	12784	CL	hay field	XeB
1.045		-	SBS-5-2-6RM	12787	CL	hay field	FcA
0.993		-	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.987		-	SBS-7-2-6RM	12794	CL	crop field	XfB
0.926		-	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.914		-	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.896		-	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.886		-	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.874		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.835		-	SBS-3-3-6RM	12779	CL	crop field	RwB
0.834		-	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.801		-	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.796		-	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.787		-	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.765		-	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.747		-	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.744		-	SBS-8-2-6RM	12798	CL	crop field	FcA
0.701		-	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.696		-	SBS-1-2-6RM	12770	CL	crop field	Ra
0.678		-	SBS-6-3-6RM	12792	CL	crop field	RwB
0.677		-	SBS-2-3-6RM	12775	CL	crop field	FdA
0.664		-	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.64		-	SBS-10-3-6RM	12807	CL	hay field	FdA
0.632		-	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.63		-	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.617		-	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.558		-	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.552		-	SBS-10-2-6RM	12806	CL	hay field	Ra
0.516		-	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.508		-	SBS-8-3-6RM	12799	CL	crop field	XfB
0.502		-	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.502		-	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.477		-	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.467		-	SBS-11-3-6RM	12811	C	crop field	EcE2

APPENDIX F

CONCENTRATION OF URANIUM, TOTAL AT 0-6 INCHES

Result (ug/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
9.093	U	UJ	SBS-9-3-1RM	12804	CL	crop field	EcE2
8.964	U	UJ	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
8.035	U	UJ	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
7.018	U	UJ	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
5.259		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
4.8		-	SBS-2-3-1RM	12775	ML	crop field	FdA
4.617		J	SBS-4-3-1RM	12784	ML	hay field	XeB
4.188		J	SBS-5-2-1RM	12787	ML	hay field	FcA
4.109		J	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
4.056		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
4.027		J	SBS-1-3-1RM	12771	ML	crop field	RwB2
3.996		J	SBS-2-1-1RM	1756A	ML	crop field	FdA
3.982		J	SBS-1-1-1RM	1755A	ML	crop field	FdA
3.912		J	SBS-8-3-1RM	12799	ML	crop field	XfB
3.889		J	SBS-8-1-1RM	1834A	ML	crop field	FcA
3.789		J	SBS-6-3-1RM	12792	ML	crop field	RwB
3.559		J	SBS-11-1-1RM	1879A	ML	crop field	XfB
3.558		J	SBS-6-2-1RM	12791	ML	crop field	RwB2
3.5		J	SBS-7-2-1RM	12794	ML	crop field	XfB
3.432		J	SBS-6-1-1RM	1829A	ML	crop field	XfB
3.346		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
3.227		J	SBS-10-2-1RM	12806	ML	hay field	Ra
3.207		J	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
3.158		J	SBS-7-3-1RM	12795	ML	crop field	MsD2
3.141		J	SBS-10-3-1RM	12807	ML	hay field	FdA
3.099		J	SBS-5-3-1RM	12788	ML	hay field	RvB2
3.079		J	SBS-2-2-1RM	12774B	ML	crop field	RwB2
2.831		J	SBS-8-2-1RM	12798	ML	crop field	FcA
2.757	U	UJ	SBS-10-1-1RM	1873A	ML	hay field	FdA
2.604		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
2.544		J	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
2.483	U	UJ	SBS-4-1-1RM	1764A	ML	hay field	XeB
2.402	U	UJ	SBS-4-2-1RM	12783	ML	hay field	RvB2
2.356	U	UJ	SBS-3-1-1RM	1763A	ML	crop field	XfB
2.252	U	UJ	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
2.232	U	UJ	SBS-9-2-1RM	12802	ML	crop field	MtC2
2.07	U	UJ	SBS-7-1-1RM	1832A	ML	crop field	FdA
2.063		J	SBS-2-1B-1RM	1756B	ML	crop field	FdA
1.912	U	UJ	SBS-9-1-1RM	1872A	ML	hay field	XfB

APPENDIX F

CONCENTRATION OF URANIUM, TOTAL AT 12-18 INCHES

3502

Result (ug/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
7.559	U	UJ	SBS-10-2-3RM	12806	CL	hay field	Ra
7.297	U	UJ	SBS-3-3-3RM	12779	CL	crop field	RwB
5.851		J	SBS-5-2-3RM	12787	ML	hay field	FcA
5.227		J	SBS-5-1-3RM	1826A	CL	hay field	XeB
4.814		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
4.568		J	SBS-6-1-3RM	1829A	ML	crop field	XfB
4.46		J	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
4.457		-	SBS-2-3-3RM	12775	CL	crop field	FdA
4.117		J	SBS-4-1-3RM	1764A	CL	hay field	XeB
3.999		J	SBS-6-2-3RM	12791	ML	crop field	RwB2
3.572		J	SBS-2-2-3RM	12774B	CL	crop field	RwB2
3.398		J	SBS-10-1-3RM	1873A	CL	hay field	FdA
3.327		J	SBS-11-3-3RM	12811	CL	crop field	EcE2
3.161	U	UJ	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
3.092		J	SBS-7-2-3RM	12794	CL	crop field	XfB
3.014		J	SBS-10-3-3RM	12807	ML	hay field	FdA
2.97		J	SBS-4-3-3RM	12784	CL	hay field	XeB
2.927	U	U	SBS-2-1B-3RM	1756B	ML	crop field	FdA
2.88	U	U	SBS-2-1-3RM	1756A	CL	crop field	FdA
2.827	U	U	SBS-8-2-3RM	12798	CL	crop field	FcA
2.817	U	UJ	SBS-4-2-3RM	12783	CL	hay field	RvB2
2.742		J	SBS-9-1-3RM	1872A	CL	hay field	XfB
2.678		J	SBS-1-3-3RM	12771	CL	crop field	RwB2
2.662	U	UJ	SBS-7-1-3RM	1832A	CL	crop field	FdA
2.631		J	SBS-1-2-3RM	12770	CL	crop field	Ra
2.563		J	SBS-11-2-3RM	12810	CL	crop field	EcE2
2.538		J	SBS-7-3-3RM	12795	CL	crop field	MsD2
2.394	U	UJ	SBS-9-3-3RM	12804	CL	crop field	EcE2
2.376	U	U	SBS-11-1-3RM	1879A	ML	crop field	XfB
2.371	U	UJ	SBS-6-3-3RM	12792	CL	crop field	RwB
2.35		J	SBS-3-1-3RM	1763A	CL	crop field	XfB
2.338	U	U	SBS-8-1-3RM	1834A	CL	crop field	FcA
2.235	U	UJ	SBS-5-3-3RM	12788	CL	hay field	RvB2
2.109	U	UJ	SBS-9-2-3RM	12802	CL	crop field	MtC2
2.017		J	SBS-8-3-3RM	12799	CL	crop field	XfB

000294

APPENDIX F

CONCENTRATION OF URANIUM, TOTAL AT 18-24 INCHES

Result (ug/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
8.823		J	SBS-1-3-4RM	12771	CL	crop field	RwB2
7.11	U	UJ	SBS-2-1-4RM	1756A	CL	crop field	FdA
4.62		J	SBS-7-3-4RM	12795	CL	crop field	MsD2
4.483		J	SBS-8-1-4RM	1834A	CL	crop field	FcA
4.443		J	SBS-10-2-4RM	12806	CL	hay field	Ra
4.361		J	SBS-9-1-4RM	1872A	CL	hay field	XfB
4.236		J	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
4.208		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
4.013		J	SBS-2-1B-4RM	1756B	CL	crop field	FdA
3.959		J	SBS-2-3-4RM	12775	CL	crop field	FdA
3.712		J	SBS-4-3-4RM	12784	CL	hay field	XeB
3.538		J	SBS-1-1-4RM	1755A	CL	crop field	FdA
3.474		J	SBS-1-2-4RM	12770	CL	crop field	Ra
3.423		J	SBS-6-1-4RM	1829A	ML	crop field	XfB
3.349		J	SBS-7-2-4RM	12794	CL	crop field	XfB
3.329		J	SBS-11-1-4RM	1879A	CL	crop field	XfB
3.139		J	SBS-4-1-4RM	1764A	CL	hay field	XeB
3.117		J	SBS-7-1-4RM	1832A	CL	crop field	FdA
3.047		J	SBS-8-3-4RM	12799	CL	crop field	XfB
3.007		J	SBS-2-2A-4RM	12774A	CL	crop field	FdA
2.939		J	SBS-6-3-4RM	12792	CL	crop field	RwB
2.87	U	UJ	SBS-10-3-4RM-D	12807	ML	hay field	FdA
2.815	U	UJ	SBS-10-3-4RM	12807	ML	hay field	FdA
2.742	U	UJ	SBS-5-3-4RM	12788	CL	hay field	RvB2
2.731		J	SBS-6-2-4RM	12791	CL	crop field	RwB2
2.708		J	SBS-3-1-4RM	1763A	CL	crop field	XfB
2.572		J	SBS-10-1-4RM	1873A	CL	hay field	FdA
2.553	U	UJ	SBS-3-3-4RM	12779	CL	crop field	RwB
2.521	U	U	SBS-2-2-4RM	12774B	CL	crop field	RwB2
2.441	U	U	SBS-11-2-4RM	12810	CL	crop field	EcE2
2.358		J	SBS-5-1-4RM	1826A	CL	hay field	XeB
2.299	U	U	SBS-8-2-4RM	12798	CL	crop field	FcA
2.142	U	UJ	SBS-5-2-4RM	12787	CL	hay field	FcA
2.035	U	U	SBS-11-3-4RM	12811	CL	crop field	EcE2
2.012	U	UJ	SBS-9-2-4RM	12802	CL	crop field	MtC2
1.924	U	UJ	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
1.848	U	UJ	SBS-4-2-4RM	12783	CL	hay field	RvB2
1.756	U	UJ	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
1.632	U	UJ	SBS-9-3-4RM	12804	CL	crop field	EcE2

APPENDIX F

CONCENTRATION OF URANIUM, TOTAL AT 24-30 INCHES

3502

Result (ug/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
9.084	U	UJ	SBS-6-1-5RM	1829A	CL	crop field	XfB
7.217		J	SBS-8-3-5RM	12799	CL	crop field	XfB
7.09	U	UJ	SBS-10-1-5RM	1873A	CL	hay field	FdA
5.519	U	UJ	SBS-10-2-5RM	12806	CL	hay field	Ra
5.351	U	UJ	SBS-8-3-5RM-D	12799	CL	crop field	XfB
4.061		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
3.974		J	SBS-3-1-5RM	1763A	CL	crop field	XfB
3.542		J	SBS-2-2A-5RM	12774A	CL	crop field	FdA
3.389		J	SBS-7-2-5RM	12794	CL	crop field	XfB
3.306		J	SBS-4-2-5RM	12783	CL	hay field	RvB2
3.304		J	SBS-6-3-5RM	12792	CL	crop field	RwB
3.254		J	SBS-5-3-5RM	12788	CL	hay field	RvB2
3.191		J	SBS-8-2-5RM	12798	CL	crop field	FcA
3.101		J	SBS-2-3-5RM	12775	CL	crop field	FdA
3.066		J	SBS-11-1-5RM	1879A	CL	crop field	XfB
3.014		J	SBS-4-3-5RM	12784	CL	hay field	XeB
2.855	U	U	SBS-11-2-5RM	12810	CL	crop field	EcE2
2.82		J	SBS-2-1B-5RM	1756B	CL	crop field	FdA
2.502	U	U	SBS-8-1-5RM	1834A	CL	crop field	FcA
2.444		J	SBS-3-3-5RM	12779	CL	crop field	RwB
2.438	U	U	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
2.425		J	SBS-9-1-5RM	1872A	CL	hay field	XfB
2.424		J	SBS-7-3-5RM	12795	CL	crop field	MsD2
2.356	U	UJ	SBS-1-3-5RM	12771	CL	crop field	RwB2
2.354		J	SBS-10-3-5RM	12807	ML	hay field	FdA
2.321		UJ	SBS-5-2-5RM	12787	CL	hay field	FcA
2.305		J	SBS-5-1-5RM	1826A	CL	hay field	XeB
2.304		J	SBS-9-2-5RM	12802	CL	crop field	MtC2
2.29	U	UJ	SBS-6-2-5RM	12791	CL	crop field	RwB2
2.228		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
2.175	U	UJ	SBS-1-1-5RM	1755A	CL	crop field	FdA
2.13		J	SBS-9-3-5RM	12804	CL	crop field	EcE2
2.036	U	UJ	SBS-1-2-5RM	12770	CL	crop field	Ra
2.017	U	UJ	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
1.989	U	UJ	SBS-7-1-5RM	1832A	CL	crop field	FdA
1.97	U	UJ	SBS-4-1-5RM	1764A	CL	hay field	XeB
1.824	U	U	SBS-2-2-5RM	12774B	CL	crop field	RwB2

APPENDIX F

CONCENTRATION OF URANIUM, TOTAL AT 30-36 INCHES

Result (ug/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
7.678	U	UJ	SBS-5-2-6RM	12787	CL	hay field	FcA
5.477	U	UJ	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
4.466		-	SBS-8-3-6RM	12799	CL	crop field	XfB
4.209		J	SBS-1-1-6RM	1755A	CL	crop field	FdA
3.927		J	SBS-1-2-6RM	12770	CL	crop field	Ra
3.772		J	SBS-4-3-6RM	12784	CL	hay field	XeB
3.382		J	SBS-7-3-6RM	12795	CL	crop field	MsD2
3.25		J	SBS-10-3-6RM	12807	CL	hay field	FdA
3.221		J	SBS-4-2-6RM	12783	CL	hay field	RvB2
3.056		J	SBS-1-3-6RM	12771	CL	crop field	RwB2
2.857		J	SBS-6-1-6RM	1829A	CL	crop field	XfB
2.73		J	SBS-8-1-6RM	1834A	CL	crop field	FcA
2.696	U	U	SBS-11-2-6RM	12810	CL	crop field	EcE2
2.657		J	SBS-7-2-6RM	12794	CL	crop field	XfB
2.585		J	SBS-10-2-6RM	12806	CL	hay field	Ra
2.463		J	SBS-2-3-6RM	12775	CL	crop field	FdA
2.427		J	SBS-2-2A-6RM	12774A	CL	crop field	FdA
2.406		J	SBS-3-1-6RM	1763A	ML	crop field	XfB
2.378		J	SBS-10-1-6RM	1873A	CL	hay field	FdA
2.293		J	SBS-9-1-6RM	1872A	CL	hay field	XfB
2.279	U	U	SBS-8-2-6RM	12798	CL	crop field	FcA
2.236	U	U	SBS-2-1-6RM	1756A	CL	crop field	FdA
2.222	U	UJ	SBS-4-1-6RM	1764A	CL	hay field	XeB
2.218	U	UJ	SBS-6-2-6RM	12791	CL	crop field	RwB2
2.209		J	SBS-6-3-6RM	12792	CL	crop field	RwB
2.201	U	UJ	SBS-7-1-6RM	1832A	CL	crop field	FdA
2.179	U	UJ	SBS-5-3-6RM	12788	CL	hay field	RvB2
2.135		UJ	SBS-9-3-6RM	12804	CL	crop field	EcE2
2.129	U	U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
2.114	U	UJ	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
2.079	U	UJ	SBS-9-2-6RM	12802	CL	crop field	MtC2
1.984	U	UJ	SBS-5-1-6RM	1826A	CL	hay field	XeB
1.931	U	U	SBS-2-2-6RM	12774B	CL	crop field	RwB2
1.881	U	U	SBS-11-1-6RM	1879A	CL	crop field	XfB
1.87	U	UJ	SBS-3-3-6RM	12779	CL	crop field	RwB
1.584	U	U	SBS-11-3-6RM	12811	C	crop field	EcE2

000297

APPENDIX F

CONCENTRATION OF URANIUM-235 AT 0-6 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.61	U	U	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
0.123		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
0.117		J	SBS-1-3-1RM	12771	ML	crop field	RwB2
0.115		-	SBS-6-3-1RM	12792	ML	crop field	RwB
0.108		J	SBS-5-3-1RM	12788	ML	hay field	RvB2
0.105		J	SBS-9-3-1RM	12804	CL	crop field	EcE2
0.099		J	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
0.098		-	SBS-5-1-1RM	1826A	ML	hay field	XeB
0.097		J	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
0.097		J	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
0.096		J	SBS-2-2A-1RM	12774A	ML	crop field	FdA
0.096		J	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
0.095		J	SBS-6-2-1RM	12791	ML	crop field	RwB2
0.093		J	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
0.091		-	SBS-7-2-1RM	12794	ML	crop field	XfB
0.089		J	SBS-9-2-1RM	12802	ML	crop field	MtC2
0.088		J	SBS-7-3-1RM	12795	ML	crop field	MsD2
0.087		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
0.086		J	SBS-9-1-1RM	1872A	ML	hay field	XfB
0.085		J	SBS-10-2-1RM	12806	ML	hay field	Ra
0.084		J	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.081		J	SBS-1-1-1RM	1755A	ML	crop field	FdA
0.08		J	SBS-5-2-1RM	12787	ML	hay field	FcA
0.078		J	SBS-8-1-1RM	1834A	ML	crop field	FcA
0.077		J	SBS-6-1-1RM	1829A	ML	crop field	XfB
0.075		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
0.073		J	SBS-8-2-1RM	12798	ML	crop field	FcA
0.072		J	SBS-4-2-1RM	12783	ML	hay field	RvB2
0.07		J	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.07	U	U	SBS-11-1-1RM	1879A	ML	crop field	XfB
0.069		J	SBS-4-3-1RM	12784	ML	hay field	XeB
0.069		J	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.067		J	SBS-7-1-1RM	1832A	ML	crop field	FdA
0.066		J	SBS-2-2-1RM	12774B	ML	crop field	RwB2
0.066	U	U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
0.065	U	U	SBS-10-3-1RM	12807	ML	hay field	FdA
0.061	U	U	SBS-2-3-1RM	12775	ML	crop field	FdA
0.061	U	U	SBS-8-3-1RM	12799	ML	crop field	XfB
0.053		J	SBS-2-1B-1RM	1756B	ML	crop field	FdA

APPENDIX F

CONCENTRATION OF URANIUM-235 AT 12-18 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.135		-	SBS-7-2-3RM	12794	CL	crop field	XfB
0.133		-	SBS-11-3-3RM	12811	CL	crop field	EcE2
0.126		J	SBS-2-2A-3RM	12774A	CL	crop field	FdA
0.123		J	SBS-5-2-3RM	12787	ML	hay field	FcA
0.118		J	SBS-2-1-3RM	1756A	CL	crop field	FdA
0.118		J	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
0.116		J	SBS-7-1-3RM	1832A	CL	crop field	FdA
0.114		-	SBS-3-1-3RM	1763A	CL	crop field	XfB
0.114		J	SBS-4-1-3RM	1764A	CL	hay field	XeB
0.111		J	SBS-1-2-3RM	12770	CL	crop field	Ra
0.109		J	SBS-5-1-3RM	1826A	CL	hay field	XeB
0.106		J	SBS-2-3-3RM	12775	CL	crop field	FdA
0.102		J	SBS-2-1B-3RM	1756B	ML	crop field	FdA
0.099		J	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
0.093		-	SBS-7-3-3RM	12795	CL	crop field	MsD2
0.09		J	SBS-6-2-3RM	12791	ML	crop field	RwB2
0.088		J	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.088		J	SBS-10-2-3RM	12806	CL	hay field	Ra
0.087		J	SBS-10-1-3RM	1873A	CL	hay field	FdA
0.079		J	SBS-11-2-3RM	12810	CL	crop field	EcE2
0.077		J	SBS-4-3-3RM	12784	CL	hay field	XeB
0.076		J	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.074		J	SBS-1-3-3RM	12771	CL	crop field	RwB2
0.073		J	SBS-3-3-3RM	12779	CL	crop field	RwB
0.072		J	SBS-5-3-3RM	12788	CL	hay field	RvB2
0.072		U	SBS-11-1-3RM	1879A	ML	crop field	XfB
0.07		U	SBS-6-1-3RM	1829A	ML	crop field	XfB
0.069		J	SBS-6-3-3RM	12792	CL	crop field	RwB
0.069		J	SBS-10-3-3RM	12807	ML	hay field	FdA
0.068	U	U	SBS-8-2-3RM	12798	CL	crop field	FcA
0.067	U	U	SBS-8-1-3RM	1834A	CL	crop field	FcA
0.064		J	SBS-9-1-3RM	1872A	CL	hay field	XfB
0.063		J	SBS-2-2-3RM	12774B	CL	crop field	RwB2
0.062		J	SBS-9-3-3RM	12804	CL	crop field	EcE2
0.057	U	U	SBS-8-3-3RM	12799	CL	crop field	XfB

APPENDIX F

CONCENTRATION OF URANIUM-235 AT 18-24 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.125		-	SBS-2-3-4RM	12775	CL	crop field	FdA
0.111		J	SBS-2-2A-4RM	12774A	CL	crop field	FdA
0.108		J	SBS-11-2-4RM	12810	CL	crop field	EcE2
0.108		J	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.108		J	SBS-2-3-4RM-D	12775	CL	crop field	FdA
0.106		-	SBS-5-2-4RM	12787	CL	hay field	FcA
0.101		J	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.097		J	SBS-10-3-4RM	12807	ML	hay field	FdA
0.096		J	SBS-5-3-4RM	12788	CL	hay field	RvB2
0.095		J	SBS-3-1-4RM	1763A	CL	crop field	XfB
0.091		J	SBS-10-1-4RM	1873A	CL	hay field	FdA
0.087		J	SBS-7-2-4RM	12794	CL	crop field	XfB
0.084		J	SBS-1-3-4RM	12771	CL	crop field	RwB2
0.08		J	SBS-1-1-4RM	1755A	CL	crop field	FdA
0.08		J	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.079		J	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.079		J	SBS-3-3-4RM	12779	CL	crop field	RwB
0.078		J	SBS-2-1B-4RM	1756B	CL	crop field	FdA
0.077	U	U	SBS-4-3-4RM	12784	CL	hay field	XeB
0.076	U	U	SBS-8-1-4RM	1834A	CL	crop field	FcA
0.075	U	U	SBS-6-1-4RM	1829A	ML	crop field	XfB
0.074	U	U	SBS-9-1-4RM	1872A	CL	hay field	XfB
0.072		J	SBS-6-2-4RM	12791	CL	crop field	RwB2
0.072		J	SBS-10-2-4RM	12806	CL	hay field	Ra
0.07		J	SBS-7-3-4RM	12795	CL	crop field	MsD2
0.069	U	U	SBS-7-1-4RM	1832A	CL	crop field	FdA
0.067	U	U	SBS-6-3-4RM	12792	CL	crop field	RwB
0.067		J	SBS-11-1-4RM	1879A	CL	crop field	XfB
0.065	U	U	SBS-2-1-4RM	1756A	CL	crop field	FdA
0.065		J	SBS-4-1-4RM	1764A	CL	hay field	XeB
0.064		J	SBS-8-3-4RM	12799	CL	crop field	XfB
0.062		U	SBS-8-2-4RM	12798	CL	crop field	FcA
0.062	U	U	SBS-9-3-4RM	12804	CL	crop field	EcE2
0.061	U	U	SBS-1-2-4RM	12770	CL	crop field	Ra
0.058	U	U	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.056	U	U	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.053	U	U	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.049	U	U	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
0.049	U	U	SBS-4-2-4RM	12783	CL	hay field	RvB2

APPENDIX F

CONCENTRATION OF URANIUM-235 AT 24-30 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.148		-	SBS-1-1-5RM	1755A	CL	crop field	FdA
0.129		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
0.128		-	SBS-5-2-5RM	12787	CL	hay field	FcA
0.128		-	SBS-2-2A-5RM	12774A	CL	crop field	FdA
0.119		J	SBS-11-1-5RM	1879A	CL	crop field	XfB
0.096		J	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.093		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.091		J	SBS-8-2-5RM	12798	CL	crop field	FcA
0.089		J	SBS-2-1B-5RM	1756B	CL	crop field	FdA
0.084		J	SBS-6-1-5RM	1829A	CL	crop field	XfB
0.081		J	SBS-10-3-5RM	12807	ML	hay field	FdA
0.076		J	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.074	U	U	SBS-3-1-5RM	1763A	CL	crop field	XfB
0.073		J	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.07		J	SBS-2-2-5RM	12774B	CL	crop field	RwB2
0.069	U	U	SBS-3-3-5RM	12779	CL	crop field	RwB
0.068	U	U	SBS-5-3-5RM	12788	CL	hay field	RvB2
0.068	U	U	SBS-7-3-5RM	12795	CL	crop field	MsD2
0.067	U	U	SBS-8-1-5RM	1834A	CL	crop field	FcA
0.065		J	SBS-7-2-5RM	12794	CL	crop field	XfB
0.064		J	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.063	U	U	SBS-4-3-5RM	12784	CL	hay field	XeB
0.063	U	U	SBS-10-1-5RM	1873A	CL	hay field	FdA
0.061		J	SBS-6-3-5RM	12792	CL	crop field	RwB
0.059		U	SBS-1-2-5RM	12770	CL	crop field	Ra
0.058	U	U	SBS-2-3-5RM	12775	CL	crop field	FdA
0.058		J	SBS-8-3-5RM-D	12799	CL	crop field	XfB
0.057	U	U	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.057	U	U	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.057	U	U	SBS-10-2-5RM	12806	CL	hay field	Ra
0.057	U	U	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.055	U	U	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.055	U	U	SBS-8-3-5RM	12799	CL	crop field	XfB
0.051	U	U	SBS-4-2-5RM	12783	CL	hay field	RvB2
0.05	U	U	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.05		J	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.045		J	SBS-5-1-5RM	1826A	CL	hay field	XeB

APPENDIX F

CONCENTRATION OF URANIUM-235 AT 30-36 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
0.132		-	SBS-7-3-6RM	12795	CL	crop field	MsD2
0.124		J	SBS-2-2A-6RM	12774A	CL	crop field	FdA
0.101		J	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.093		J	SBS-4-3-6RM	12784	CL	hay field	XeB
0.089		J	SBS-5-2-6RM	12787	CL	hay field	FcA
0.086		J	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.083		J	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.082	U	U	SBS-1-1-6RM	1755A	CL	crop field	FdA
0.078		J	SBS-2-3-6RM	12775	CL	crop field	FdA
0.076		J	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.071		J	SBS-10-2-6RM	12806	CL	hay field	Ra
0.071	U	U	SBS-7-2-6RM	12794	CL	crop field	XfB
0.071		J	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.068		J	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.065	U	U	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
0.064		J	SBS-6-3-6RM	12792	CL	crop field	RwB
0.062	U	U	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.062	U	U	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.06	U	U	SBS-10-3-6RM	12807	CL	hay field	FdA
0.06	U	U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.06	U	U	SBS-1-2-6RM	12770	CL	crop field	Ra
0.06	U	U	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.059		U	SBS-8-2-6RM	12798	CL	crop field	FcA
0.058		J	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.057	U	U	SBS-3-3-6RM	12779	CL	crop field	RwB
0.055	U	U	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.053		J	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.051		U	SBS-4-2-6RM	12783	CL	hay field	RvB2
0.05		U	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.05	U	U	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.048	U	U	SBS-8-3-6RM	12799	CL	crop field	XfB
0.047	U	U	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.047	U	U	SBS-11-3-6RM	12811	C	crop field	EcE2
0.045	U	U	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.045	U	U	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.041	U	U	SBS-4-1-6RM	1764A	CL	hay field	XeB

APPENDIX F

CONCENTRATION OF URANIUM-238 AT 0-6 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3.057	U	UJ	SBS-9-3-1RM	12804	CL	crop field	EcE2
3.014	U	UJ	SBS-7-3-1RM-D	12795	ML	crop field	MsD2
2.701	U	UJ	SBS-3-3-1RM-D	12779	ML/CL	crop field	RwB
2.359	U	U	SBS-3-2-1RM	12778	ML	crop field	EcE2/WyC2
1.768		-	SBS-11-3-1RM	12811	CL	crop field	EcE2
1.614		-	SBS-2-3-1RM	12775	ML	crop field	FdA
1.552		-	SBS-4-3-1RM	12784	ML	hay field	XeB
1.408		-	SBS-5-2-1RM	12787	ML	hay field	FcA
1.381		J	SBS-1-3-1RM-D	12771	CL	crop field	RwB2
1.364		-	SBS-2-2A-1RM	12774A	ML	crop field	FdA
1.354		-	SBS-1-3-1RM	12771	ML	crop field	RwB2
1.343		-	SBS-2-1-1RM	1756A	ML	crop field	FdA
1.339		-	SBS-1-1-1RM	1755A	ML	crop field	FdA
1.315		J	SBS-8-3-1RM	12799	ML	crop field	XfB
1.307		J	SBS-8-1-1RM	1834A	ML	crop field	FcA
1.274		J	SBS-6-3-1RM	12792	ML	crop field	RwB
1.196		J	SBS-6-2-1RM	12791	ML	crop field	RwB2
1.196		J	SBS-11-1-1RM	1879A	ML	crop field	XfB
1.177		-	SBS-7-2-1RM	12794	ML	crop field	XfB
1.154		-	SBS-6-1-1RM	1829A	ML	crop field	XfB
1.125		J	SBS-5-1-1RM-D	1826A	ML/CL	hay field	XeB
1.085		J	SBS-10-2-1RM	12806	ML	hay field	Ra
1.078		J	SBS-11-2-1RM	12810	OL/CL	crop field	EcE2
1.062		J	SBS-7-3-1RM	12795	ML	crop field	MsD2
1.056		J	SBS-10-3-1RM	12807	ML	hay field	FdA
1.042		J	SBS-5-3-1RM	12788	ML	hay field	RvB2
1.035		J	SBS-2-2-1RM	12774B	ML	crop field	RwB2
0.952		J	SBS-8-2-1RM	12798	ML	crop field	FcA
0.927	U	U	SBS-10-1-1RM	1873A	ML	hay field	FdA
0.875		J	SBS-5-1-1RM	1826A	ML	hay field	XeB
0.855		J	SBS-1-2-1RM	12770	ML/CL	crop field	Ra
0.835	U	U	SBS-4-1-1RM	1764A	ML	hay field	XeB
0.807	U	U	SBS-4-2-1RM	12783	ML	hay field	RvB2
0.792	U	U	SBS-3-1-1RM	1763A	ML	crop field	XfB
0.757	U	U	SBS-3-3-1RM	12779	ML/CL	crop field	RwB
0.75	U	U	SBS-9-2-1RM	12802	ML	crop field	MtC2
0.696	U	U	SBS-7-1-1RM	1832A	ML	crop field	FdA
0.693		J	SBS-2-1B-1RM	1756B	ML	crop field	FdA
0.643	U	U	SBS-9-1-1RM	1872A	ML	hay field	XfB

APPENDIX F

CONCENTRATION OF URANIUM-238 AT 12-18 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2.541	U	U	SBS-10-2-3RM	12806	CL	hay field	Ra
2.453	U	UJ	SBS-3-3-3RM	12779	CL	crop field	RwB
1.967		-	SBS-5-2-3RM	12787	ML	hay field	FcA
1.757		-	SBS-5-1-3RM	1826A	CL	hay field	XeB
1.618		-	SBS-2-2A-3RM	12774A	CL	crop field	FdA
1.536		-	SBS-6-1-3RM	1829A	ML	crop field	XfB
1.499		-	SBS-1-1-3RM	1755A	ML/CL	crop field	FdA
1.498		-	SBS-2-3-3RM	12775	CL	crop field	FdA
1.384		J	SBS-4-1-3RM	1764A	CL	hay field	XeB
1.344		J	SBS-6-2-3RM	12791	ML	crop field	RwB2
1.201		J	SBS-2-2-3RM	12774B	CL	crop field	RwB2
1.142		J	SBS-10-1-3RM	1873A	CL	hay field	FdA
1.118		J	SBS-11-3-3RM	12811	CL	crop field	EcE2
1.063	U	U	SBS-3-2-3RM	12778	ML	crop field	EcE2/WyC2
1.04		J	SBS-7-2-3RM	12794	CL	crop field	XfB
1.013		J	SBS-10-3-3RM	12807	ML	hay field	FdA
0.998		J	SBS-4-3-3RM	12784	CL	hay field	XeB
0.984	U	U	SBS-2-1B-3RM	1756B	ML	crop field	FdA
0.968	U	U	SBS-2-1-3RM	1756A	CL	crop field	FdA
0.95	U	U	SBS-8-2-3RM	12798	CL	crop field	FcA
0.947	U	U	SBS-4-2-3RM	12783	CL	hay field	RvB2
0.922		J	SBS-9-1-3RM	1872A	CL	hay field	XfB
0.9		J	SBS-1-3-3RM	12771	CL	crop field	RwB2
0.895	U	U	SBS-7-1-3RM	1832A	CL	crop field	FdA
0.884		J	SBS-1-2-3RM	12770	CL	crop field	Ra
0.862		J	SBS-11-2-3RM	12810	CL	crop field	EcE2
0.853		J	SBS-7-3-3RM	12795	CL	crop field	MsD2
0.805	U	U	SBS-9-3-3RM	12804	CL	crop field	EcE2
0.799	U	U	SBS-11-1-3RM	1879A	ML	crop field	XfB
0.797		U	SBS-6-3-3RM	12792	CL	crop field	RwB
0.79		J	SBS-3-1-3RM	1763A	CL	crop field	XfB
0.786	U	U	SBS-8-1-3RM	1834A	CL	crop field	FcA
0.751	U	U	SBS-5-3-3RM	12788	CL	hay field	RvB2
0.709	U	U	SBS-9-2-3RM	12802	CL	crop field	MtC2
0.678		J	SBS-8-3-3RM	12799	CL	crop field	XfB

APPENDIX F

CONCENTRATION OF URANIUM-238 AT 18-24 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2.966		J	SBS-1-3-4RM	12771	CL	crop field	RwB2
2.39	U	U	SBS-2-1-4RM	1756A	CL	crop field	FdA
1.553		-	SBS-7-3-4RM	12795	CL	crop field	MsD2
1.507		J	SBS-8-1-4RM	1834A	CL	crop field	FcA
1.494		-	SBS-10-2-4RM	12806	CL	hay field	Ra
1.466		J	SBS-9-1-4RM	1872A	CL	hay field	XfB
1.424		-	SBS-4-1-4RM-D	1764A	CL	hay field	XeB
1.415		-	SBS-2-3-4RM-D	12775	CL	crop field	FdA
1.349		J	SBS-2-1B-4RM	1756B	CL	crop field	FdA
1.331		J	SBS-2-3-4RM	12775	CL	crop field	FdA
1.248		J	SBS-4-3-4RM	12784	CL	hay field	XeB
1.189		J	SBS-1-1-4RM	1755A	CL	crop field	FdA
1.168		J	SBS-1-2-4RM	12770	CL	crop field	Ra
1.151		J	SBS-6-1-4RM	1829A	ML	crop field	XfB
1.126		J	SBS-7-2-4RM	12794	CL	crop field	XfB
1.119		J	SBS-11-1-4RM	1879A	CL	crop field	XfB
1.055		J	SBS-4-1-4RM	1764A	CL	hay field	XeB
1.048		J	SBS-7-1-4RM	1832A	CL	crop field	FdA
1.024		J	SBS-8-3-4RM	12799	CL	crop field	XfB
1.011		J	SBS-2-2A-4RM	12774A	CL	crop field	FdA
0.988		J	SBS-6-3-4RM	12792	CL	crop field	RwB
0.965	U	U	SBS-10-3-4RM-D	12807	ML	hay field	FdA
0.946	U	U	SBS-10-3-4RM	12807	ML	hay field	FdA
0.922	U	U	SBS-5-3-4RM	12788	CL	hay field	RvB2
0.918		J	SBS-6-2-4RM	12791	CL	crop field	RwB2
0.91		J	SBS-3-1-4RM	1763A	CL	crop field	XfB
0.865		J	SBS-10-1-4RM	1873A	CL	hay field	FdA
0.858	U	U	SBS-3-3-4RM	12779	CL	crop field	RwB
0.847	U	U	SBS-2-2-4RM	12774B	CL	crop field	RwB2
0.821	U	U	SBS-11-2-4RM	12810	CL	crop field	EcE2
0.793		J	SBS-5-1-4RM	1826A	CL	hay field	XeB
0.773	U	U	SBS-8-2-4RM	12798	CL	crop field	FcA
0.72		U	SBS-5-2-4RM	12787	CL	hay field	FcA
0.684	U	U	SBS-11-3-4RM	12811	CL	crop field	EcE2
0.677	U	U	SBS-9-2-4RM	12802	CL	crop field	MtC2
0.647	U	U	SBS-9-2-4RM-D	12802	CL	crop field	MtC2
0.621	U	U	SBS-4-2-4RM	12783	CL	hay field	RvB2
0.59	U	U	SBS-3-2-4RM	12778	CL	crop field	EcE2/WyC2
0.549	U	U	SBS-9-3-4RM	12804	CL	crop field	EcE2

APPENDIX F

CONCENTRATION OF URANIUM-238 AT 24-30 INCHES

3502

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
3.054	U	UJ	SBS-6-1-5RM	1829A	CL	crop field	XfB
2.426		J	SBS-8-3-5RM	12799	CL	crop field	XfB
2.384	U	U	SBS-10-1-5RM	1873A	CL	hay field	FdA
1.855	U	U	SBS-10-2-5RM	12806	CL	hay field	Ra
1.799	U	U	SBS-8-3-5RM-D	12799	CL	crop field	XfB
1.365		-	SBS-2-1-5RM	1756A	CL	crop field	FdA
1.336		J	SBS-3-1-5RM	1763A	CL	crop field	XfB
1.191		J	SBS-2-2A-5RM	12774A	CL	crop field	FdA
1.139		-	SBS-7-2-5RM	12794	CL	crop field	XfB
1.112		J	SBS-4-2-5RM	12783	CL	hay field	RvB2
1.111		-	SBS-6-3-5RM	12792	CL	crop field	RwB
1.094		J	SBS-5-3-5RM	12788	CL	hay field	RvB2
1.073		J	SBS-8-2-5RM	12798	CL	crop field	FcA
1.043		J	SBS-2-3-5RM	12775	CL	crop field	FdA
1.031		J	SBS-11-1-5RM	1879A	CL	crop field	XfB
1.013		J	SBS-4-3-5RM	12784	CL	hay field	XeB
0.96	U	U	SBS-11-2-5RM	12810	CL	crop field	EcE2
0.948		J	SBS-2-1B-5RM	1756B	CL	crop field	FdA
0.841	U	U	SBS-8-1-5RM	1834A	CL	crop field	FcA
0.822		J	SBS-3-3-5RM	12779	CL	crop field	RwB
0.82	U	U	SBS-11-3-5RM-D	12811	CL	crop field	EcE2
0.815		J	SBS-7-3-5RM	12795	CL	crop field	MsD2
0.815		J	SBS-9-1-5RM	1872A	CL	hay field	XfB
0.792	U	U	SBS-1-3-5RM	12771	CL	crop field	RwB2
0.791		J	SBS-10-3-5RM	12807	ML	hay field	FdA
0.78		U	SBS-5-2-5RM	12787	CL	hay field	FcA
0.775		J	SBS-9-2-5RM	12802	CL	crop field	MtC2
0.775		J	SBS-5-1-5RM	1826A	CL	hay field	XeB
0.77	U	U	SBS-6-2-5RM	12791	CL	crop field	RwB2
0.749		J	SBS-11-3-5RM	12811	CL	crop field	EcE2
0.731	U	U	SBS-1-1-5RM	1755A	CL	crop field	FdA
0.716		J	SBS-9-3-5RM	12804	CL	crop field	EcE2
0.684	U	U	SBS-1-2-5RM	12770	CL	crop field	Ra
0.678	U	U	SBS-3-2-5RM	12778	CL	crop field	EcE2/WyC2
0.669	U	U	SBS-7-1-5RM	1832A	CL	crop field	FdA
0.662	U	U	SBS-4-1-5RM	1764A	CL	hay field	XeB
0.613	U	U	SBS-2-2-5RM	12774B	CL	crop field	RwB2

APPENDIX F

CONCENTRATION OF URANIUM-238 AT 30-36 INCHES

Result (pCi/g)	Lab Qualifier	Validation Qualifier	Sample ID	Boring	Lithology (1)	Land Use	Soil Classification (2)
2.581	U	U	SBS-5-2-6RM	12787	CL	hay field	FcA
1.841	U	UJ	SBS-3-2-6RM	12778	CL	crop field	EcE2/WyC2
1.501		-	SBS-8-3-6RM	12799	CL	crop field	XfB
1.415		J	SBS-1-1-6RM	1755A	CL	crop field	FdA
1.32		-	SBS-1-2-6RM	12770	CL	crop field	Ra
1.268		J	SBS-4-3-6RM	12784	CL	hay field	XeB
1.137		J	SBS-7-3-6RM	12795	CL	crop field	MsD2
1.093		J	SBS-10-3-6RM	12807	CL	hay field	FdA
1.083		J	SBS-4-2-6RM	12783	CL	hay field	RvB2
1.027		J	SBS-1-3-6RM	12771	CL	crop field	RwB2
0.96		J	SBS-6-1-6RM	1829A	CL	crop field	XfB
0.918		J	SBS-8-1-6RM	1834A	CL	crop field	FcA
0.906	U	U	SBS-11-2-6RM	12810	CL	crop field	EcE2
0.893		J	SBS-7-2-6RM	12794	CL	crop field	XfB
0.869		J	SBS-10-2-6RM	12806	CL	hay field	Ra
0.828		J	SBS-2-3-6RM	12775	CL	crop field	FdA
0.816		J	SBS-2-2A-6RM	12774A	CL	crop field	FdA
0.809		J	SBS-3-1-6RM	1763A	ML	crop field	XfB
0.8		J	SBS-10-1-6RM	1873A	CL	hay field	FdA
0.771		J	SBS-9-1-6RM	1872A	CL	hay field	XfB
0.766	U	U	SBS-8-2-6RM	12798	CL	crop field	FcA
0.752	U	U	SBS-2-1-6RM	1756A	CL	crop field	FdA
0.747	U	U	SBS-4-1-6RM	1764A	CL	hay field	XeB
0.746	U	U	SBS-6-2-6RM	12791	CL	crop field	RwB2
0.743		J	SBS-6-3-6RM	12792	CL	crop field	RwB
0.74	U	U	SBS-7-1-6RM	1832A	CL	crop field	FdA
0.732	U	U	SBS-5-3-6RM	12788	CL	hay field	RvB2
0.718	U	U	SBS-9-3-6RM	12804	CL	crop field	EcE2
0.716	U	U	SBS-2-1B-6RM	1756B	CL	crop field	FdA
0.711	U	U	SBS-6-1-6RM-D	1829A	CL	crop field	XfB
0.699	U	U	SBS-9-2-6RM	12802	CL	crop field	MtC2
0.667	U	U	SBS-5-1-6RM	1826A	CL	hay field	XeB
0.649	U	U	SBS-2-2-6RM	12774B	CL	crop field	RwB2
0.632	U	U	SBS-11-1-6RM	1879A	CL	crop field	XfB
0.629	U	U	SBS-3-3-6RM	12779	CL	crop field	RwB
0.533	U	U	SBS-11-3-6RM	12811	C	crop field	EcE2

000307

3502

1 The symbols of this column are USCS symbols as follows:
CL - Inorganic clays of low to medium plasticity, gravely clays, sandy clays, silty clays, lean clays
ML - Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, clayey silts with slight plasticity
OL - Organic silts and organic silty clays of low plasticity

(2) Soil classifications are according to maps of the Butler County Soil Survey, U.S. Soil Conservation Service, January 1980. Map symbols consist of a combination of letters or of letters and a number. The first capital letter and lower case letter represent the map unit name. The second capital letter indicates the class of slope: A for 0 to 2 percent, B for 2 to 6 percent, and C for 6 to 12 percent. Symbols without a slope letter are for nearly level soils or miscellaneous areas. A final number of 2 indicates that the soil is moderately eroded.

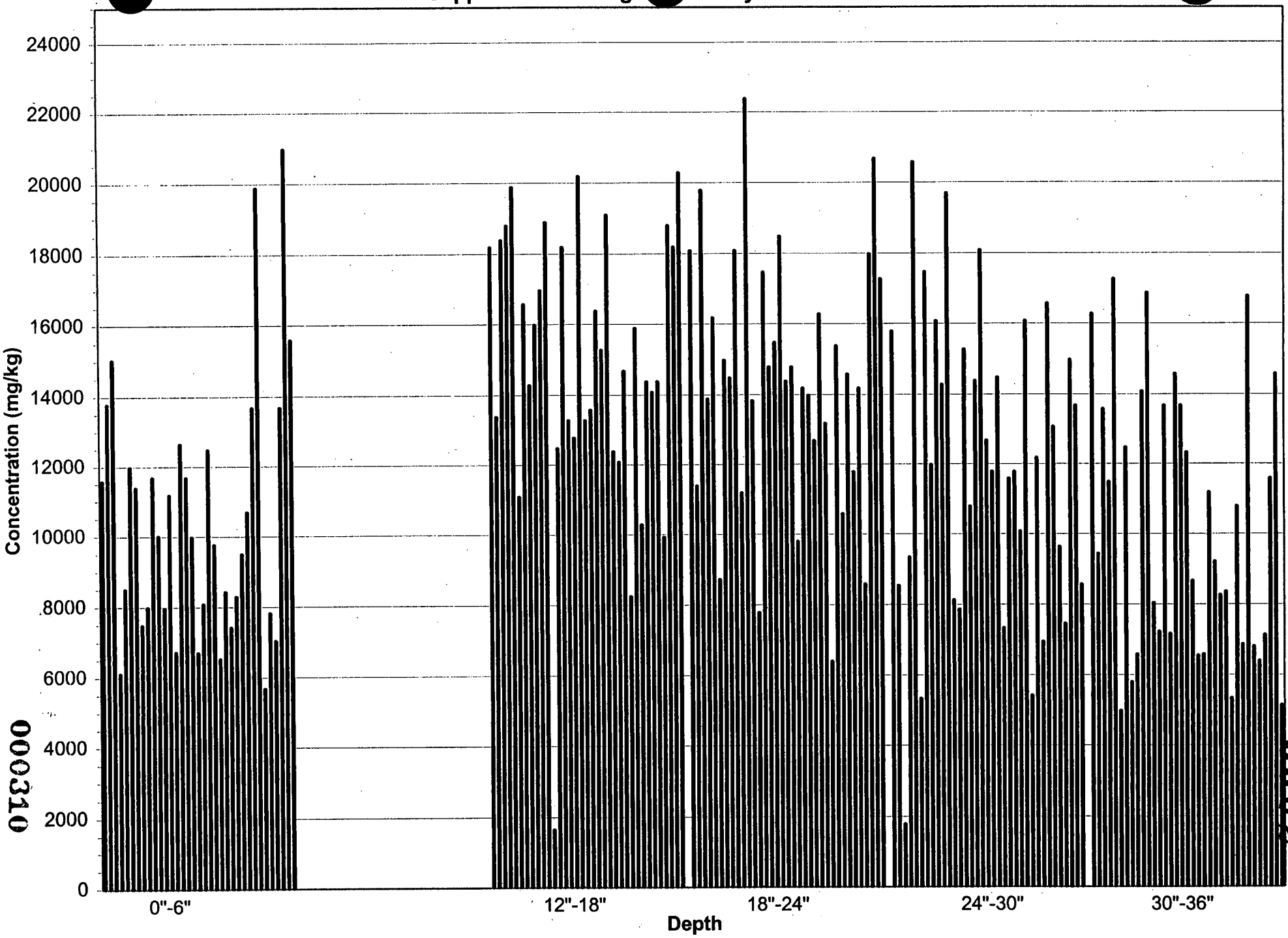
Appendix G

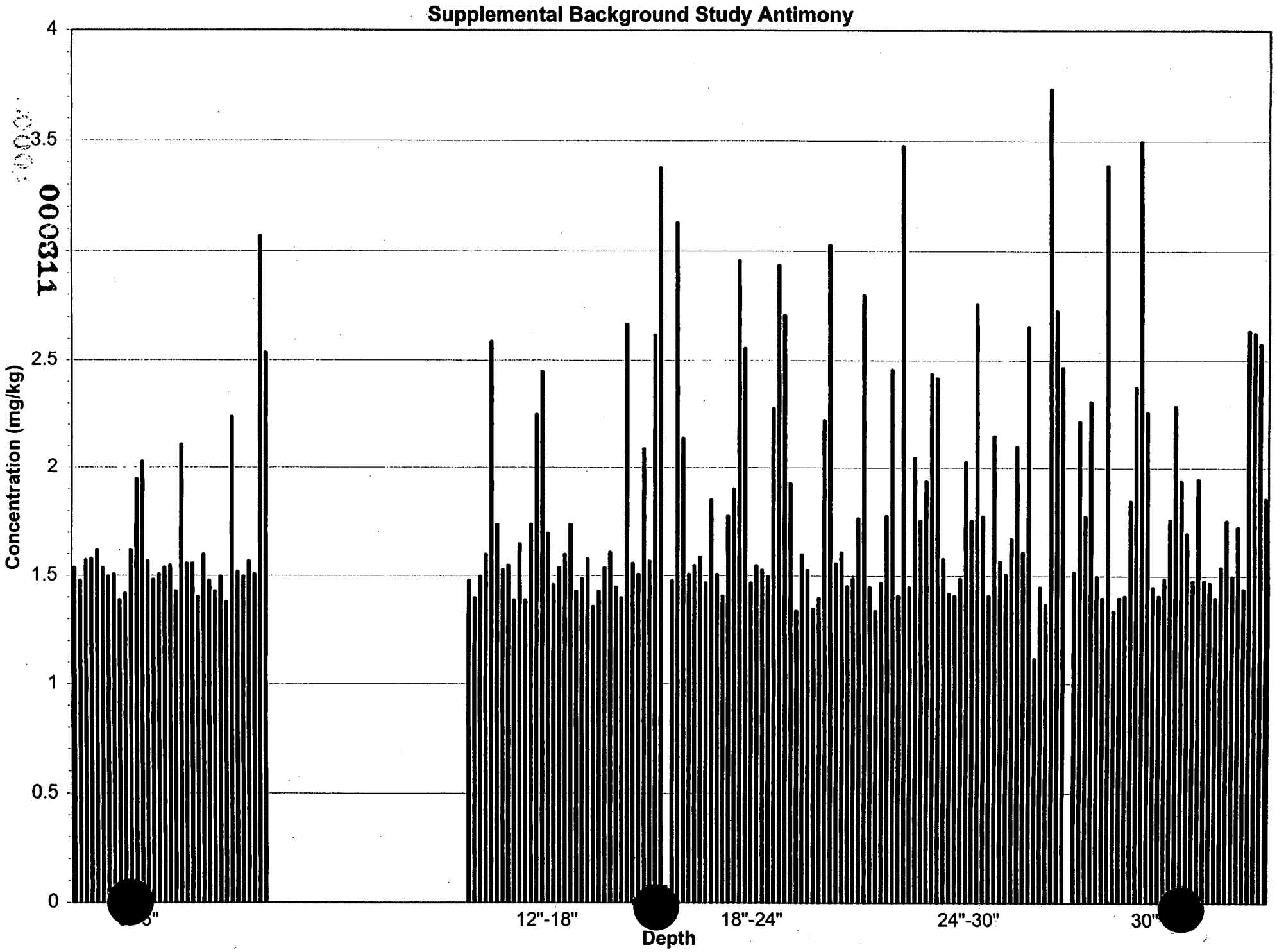
APPENDIX G

SUMMARY GRAPHS OF INORGANIC RESULTS BY ANALYTE AND DEPTH

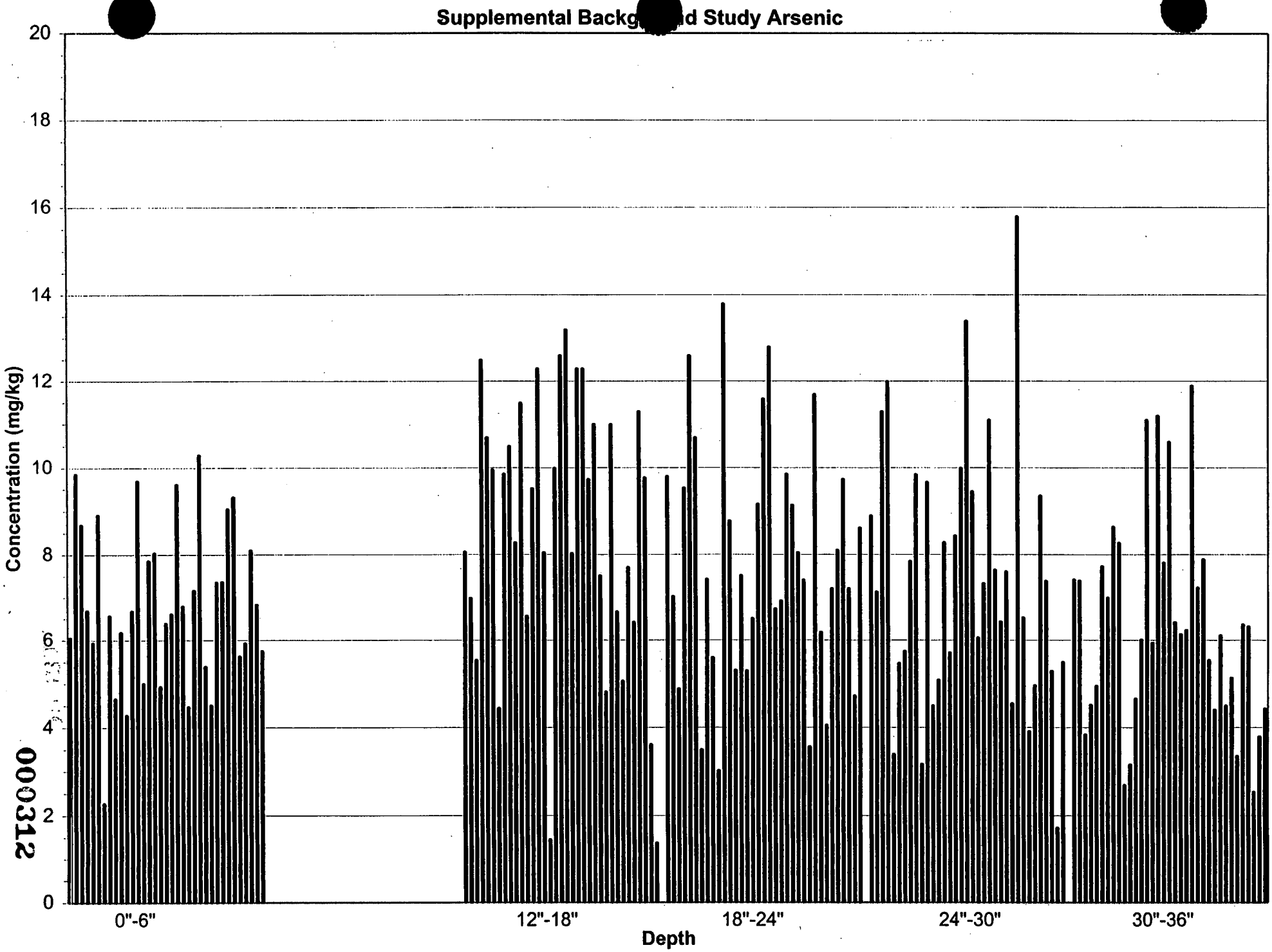
Appendix G

Supplemental Background Study Aluminum



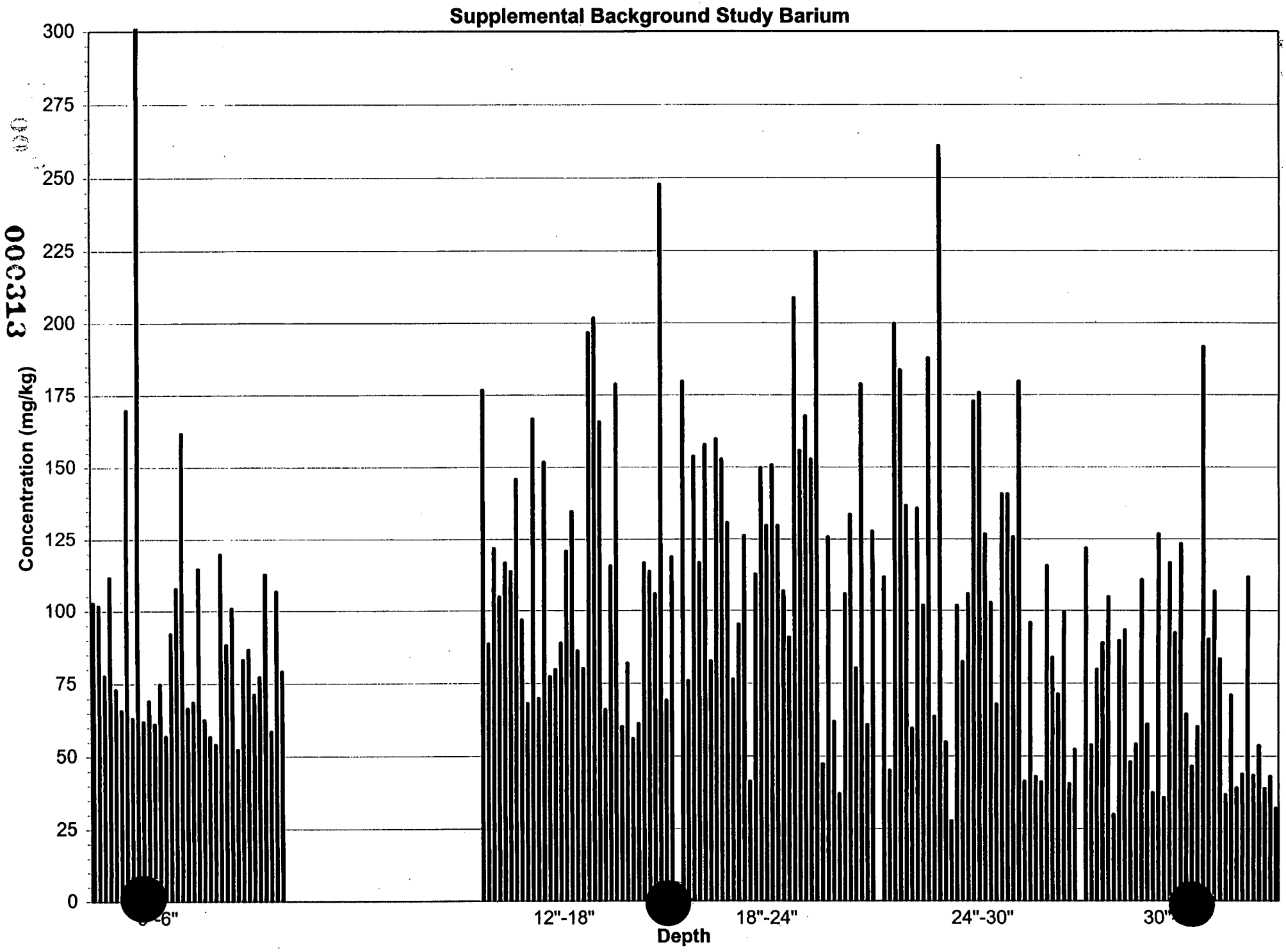

Supplemental Background Study Antimony
Concentration (mg/kg)
4
3.5
2.5
2
1.5
1
0.5
0
12"-18"
18"-24"
24"-30"
30"
Depth

000311

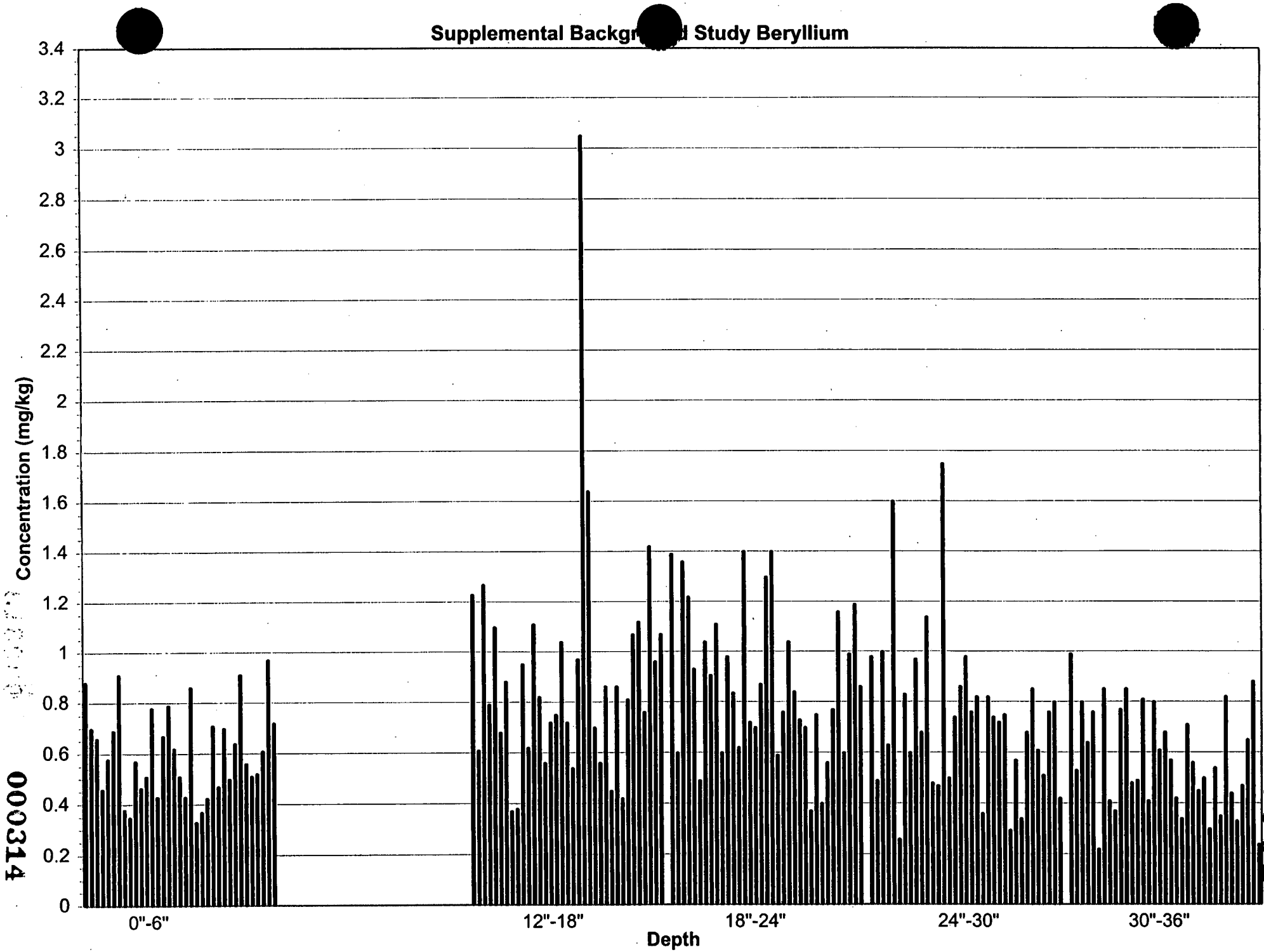

Supplemental Background Study Arsenic
Concentration (mg/kg)
0
2
4
6
8
10
12
14
16
18
20
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

000312

3502

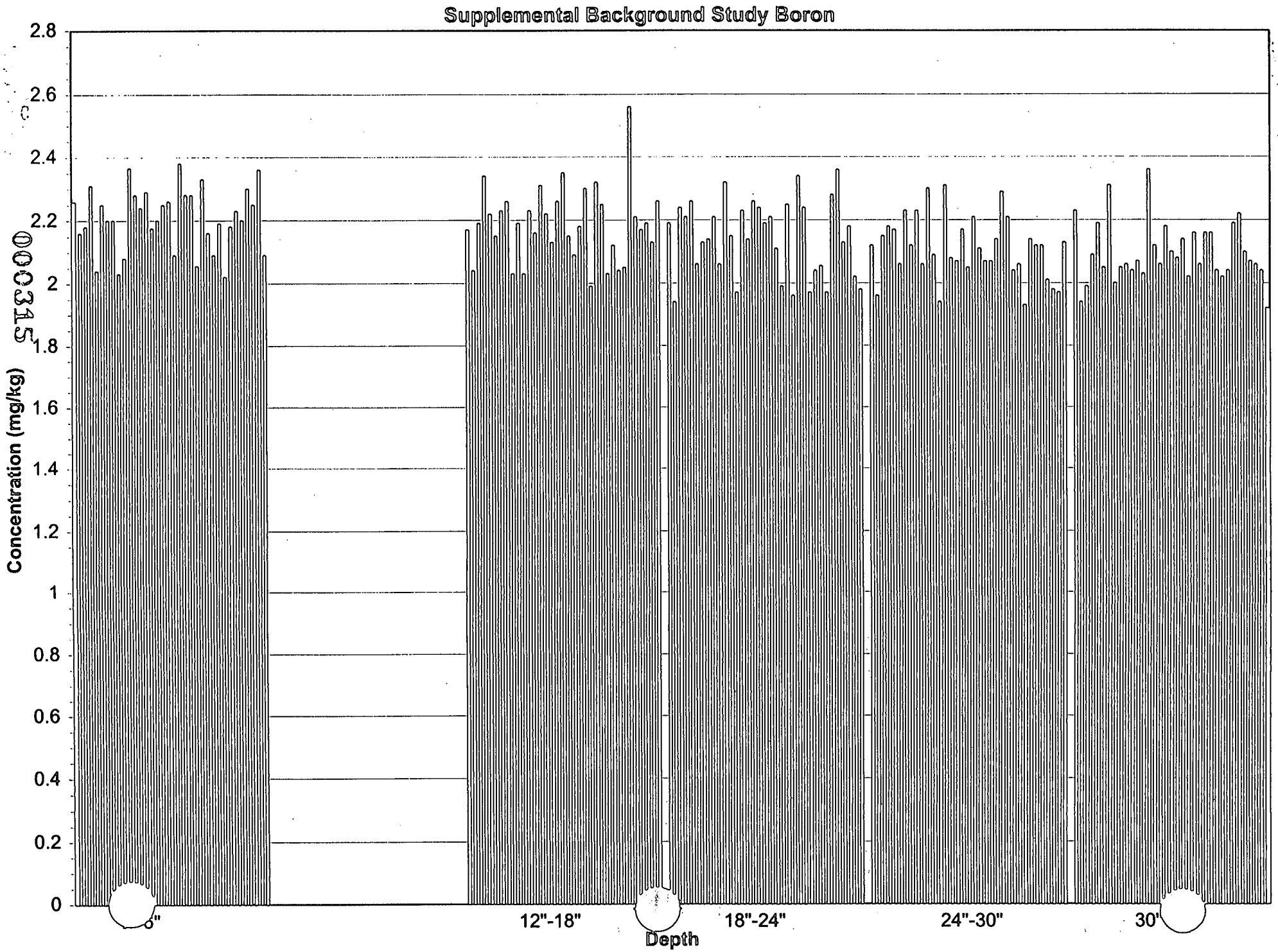

Supplemental Background Study Barium
Concentration (mg/kg)
300
275
250
225
200
175
150
125
100
75
50
25
0
12"-18"
18"-24"
24"-30"
Depth

000313

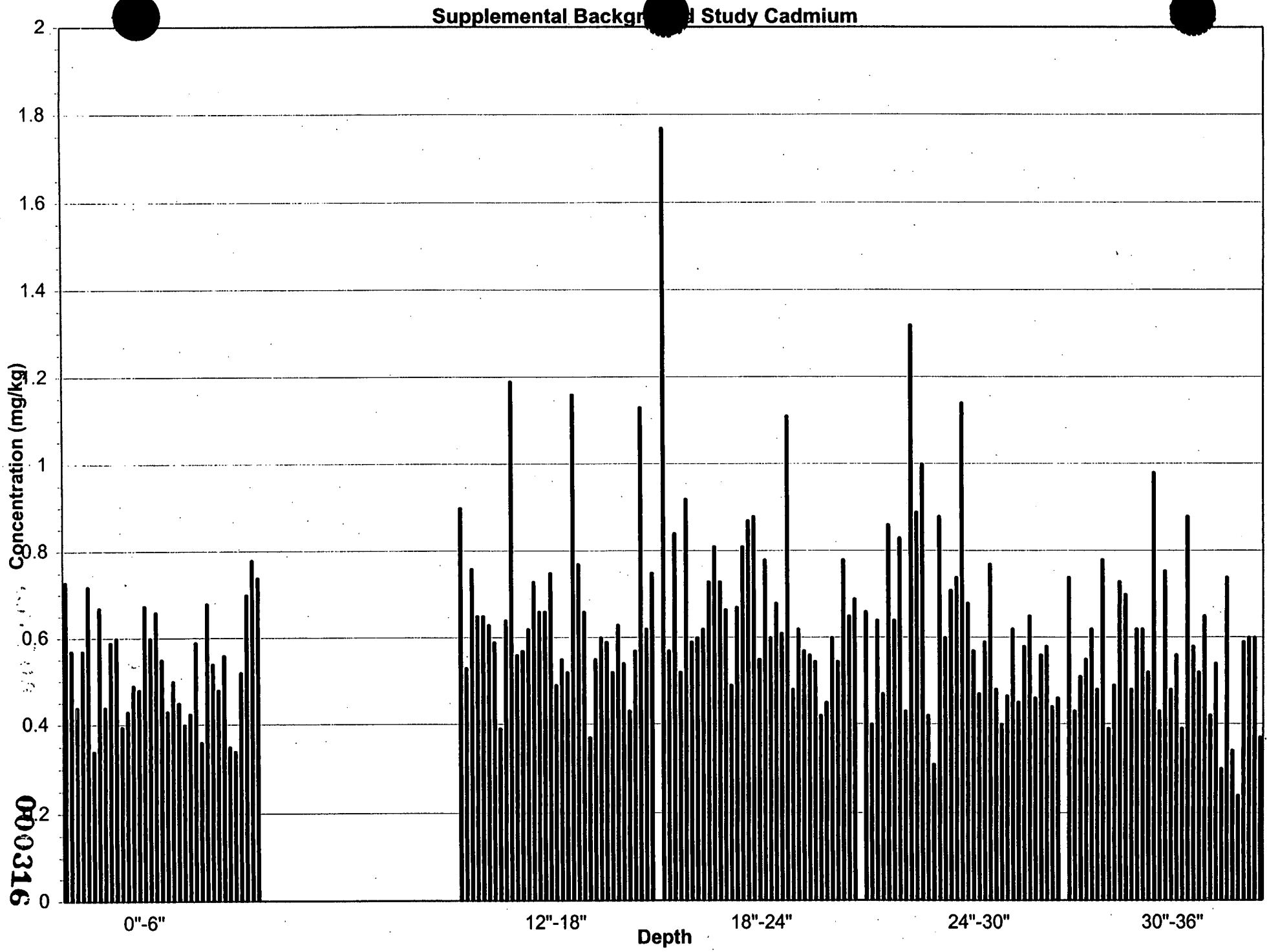

Supplemental Background Study Beryllium
Concentration (mg/kg)
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

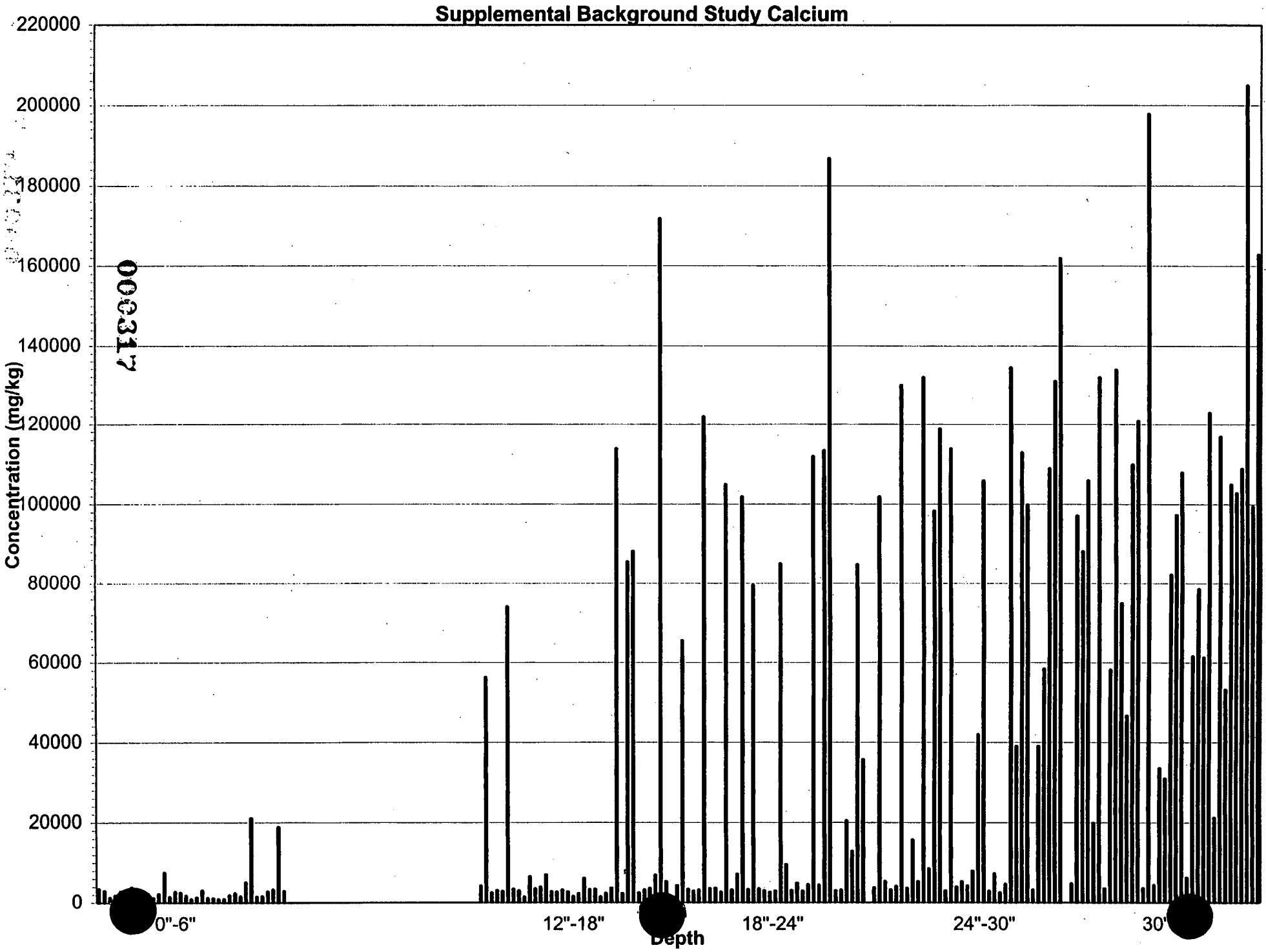
000314

35 02

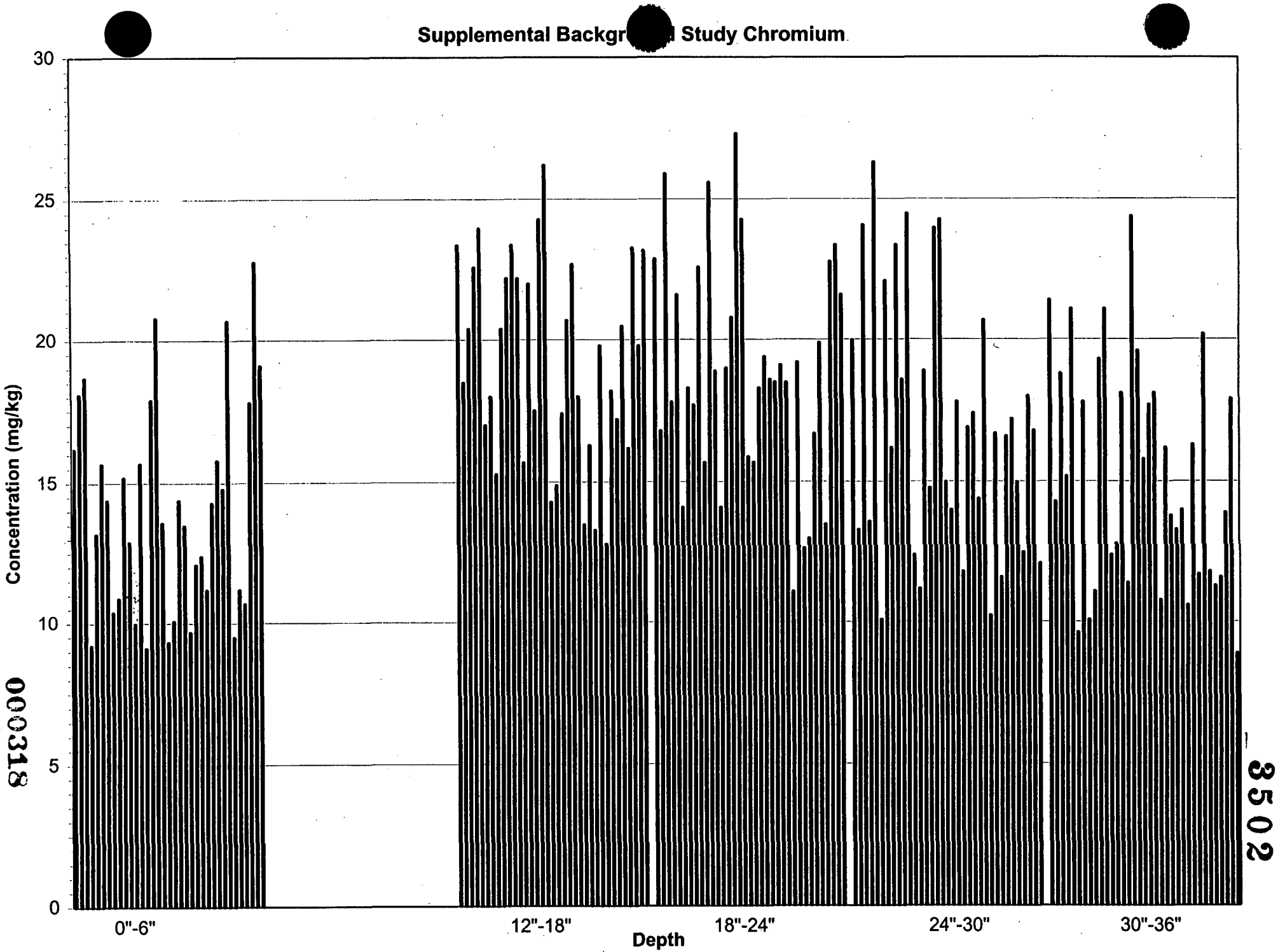

Supplemental Background Study Boron
Concentration (mg/kg)
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0"
12"-18"
18"-24"
24"-30"
30'
Depth

000315


Supplemental Backgr d Study Cadmium
Concentration (mg/kg)
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

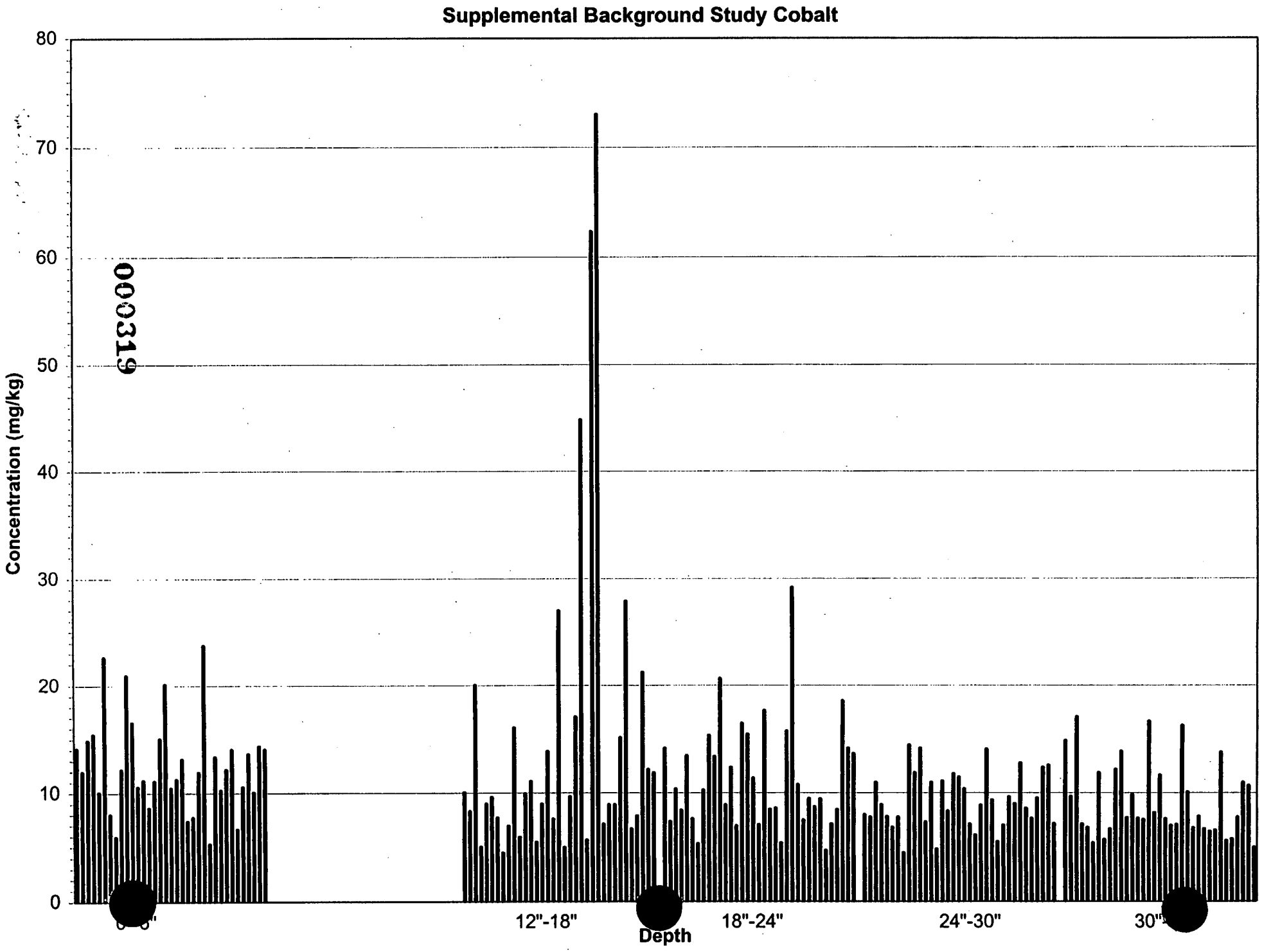

Supplemental Background Study Calcium
Concentration (mg/kg)
220000
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
0"-6"
12"-18"
18"-24"
24"-30"
Depth

003317

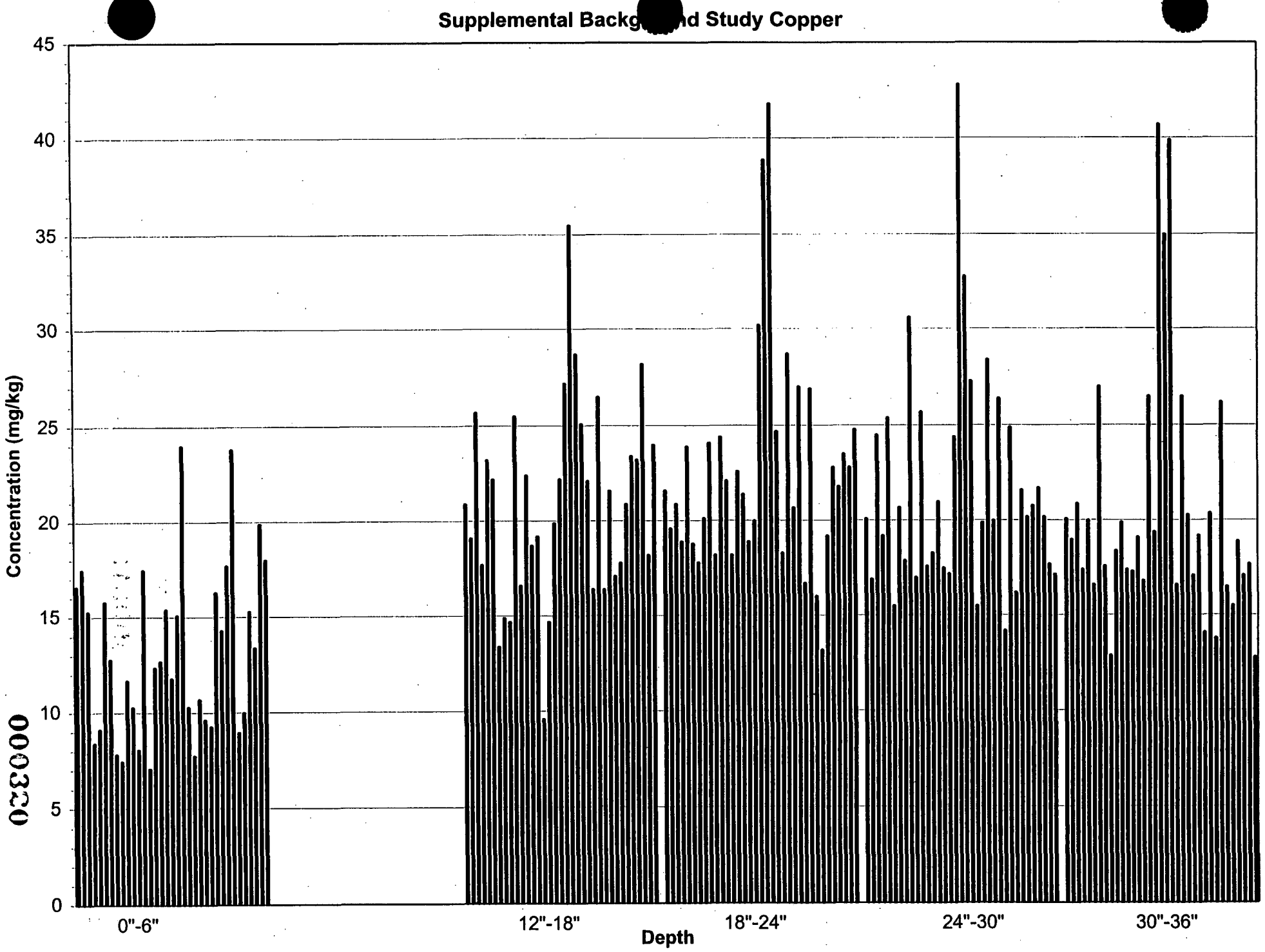

Supplemental Backgr d Study Chromium
Concentration (mg/kg)
30
25
20
15
10
5
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

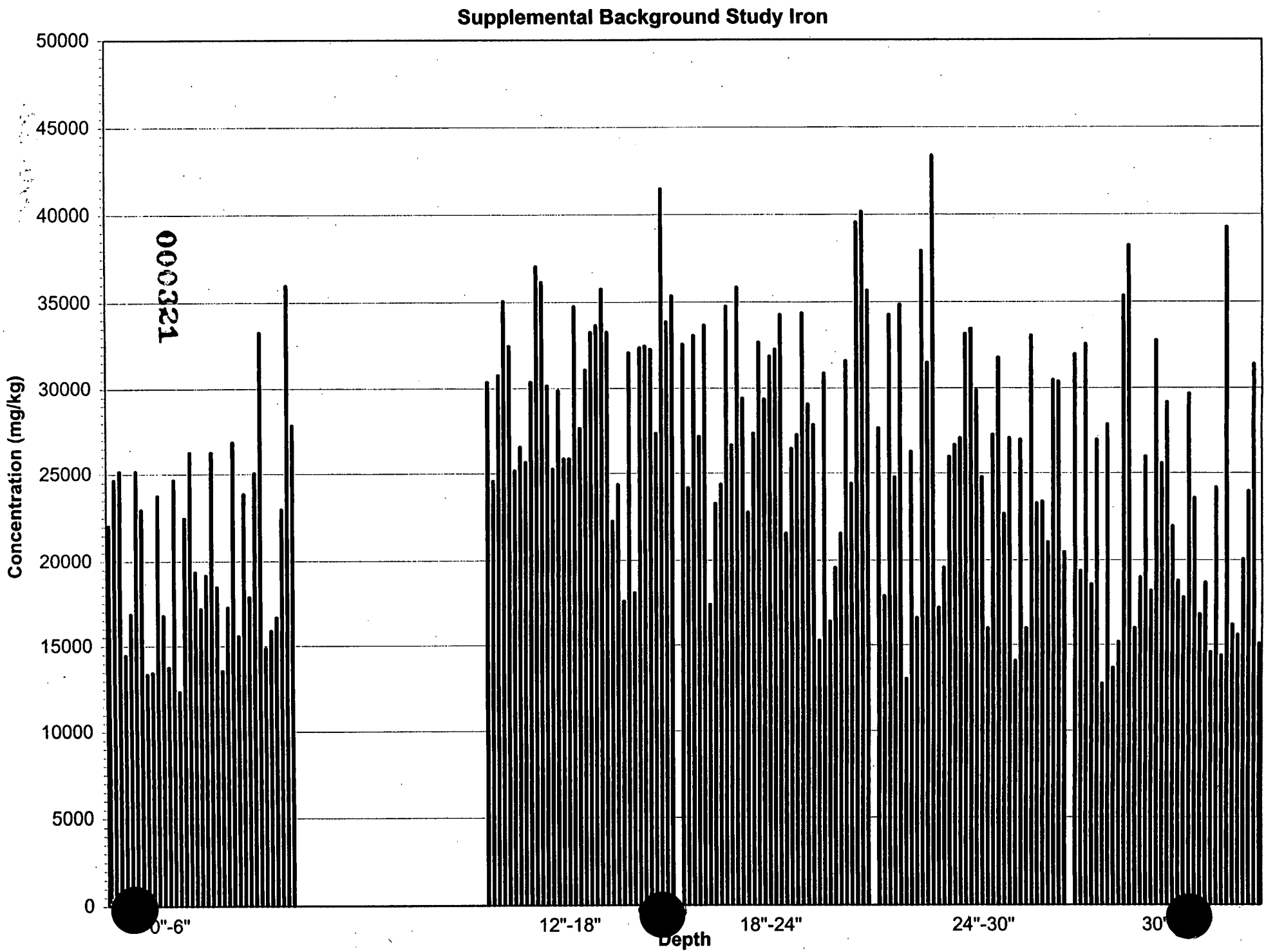
000318

3502

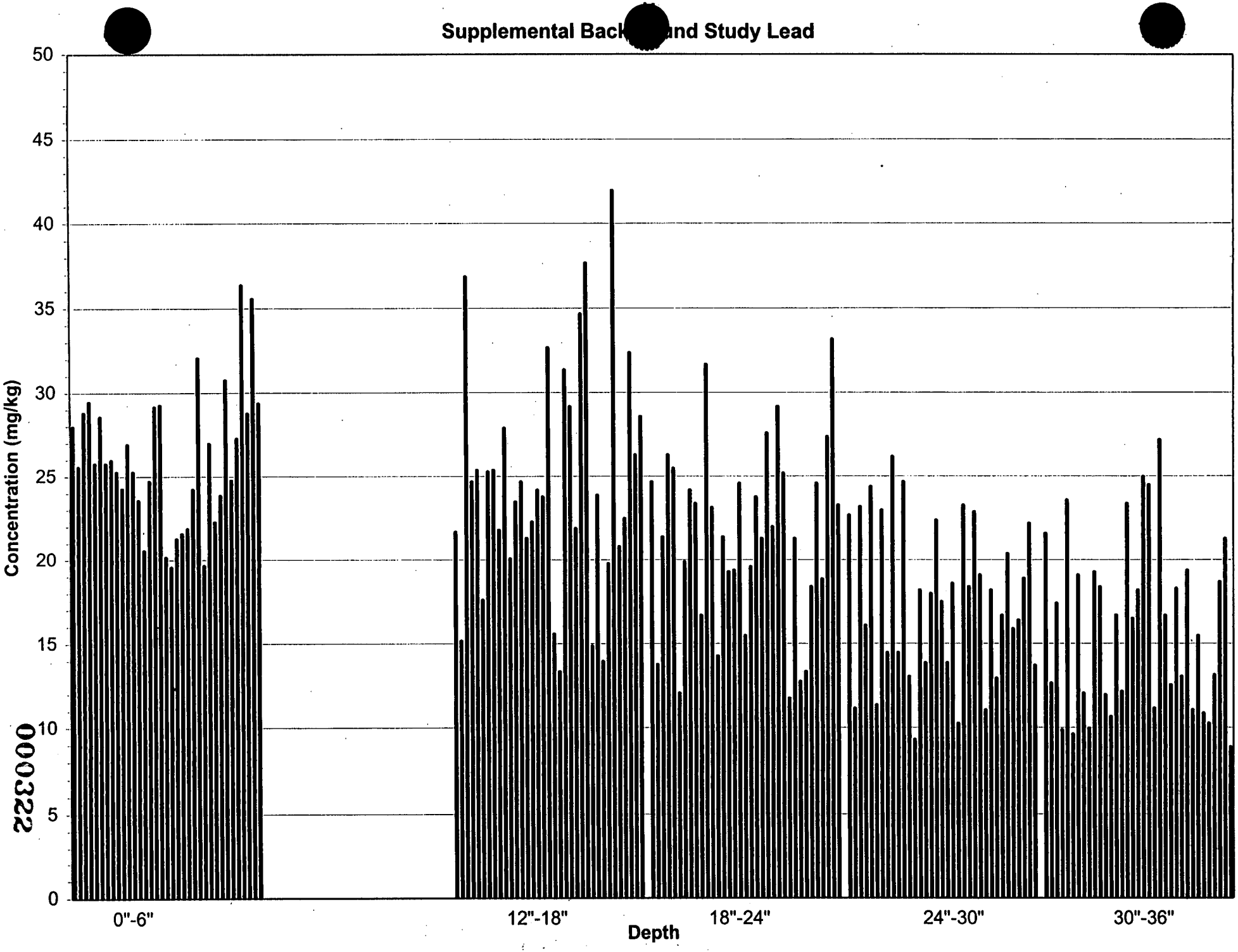

Supplemental Background Study Cobalt
Concentration (mg/kg)
80
70
60
50
40
30
20
10
0
12"-18"
18"-24"
24"-30"
Depth

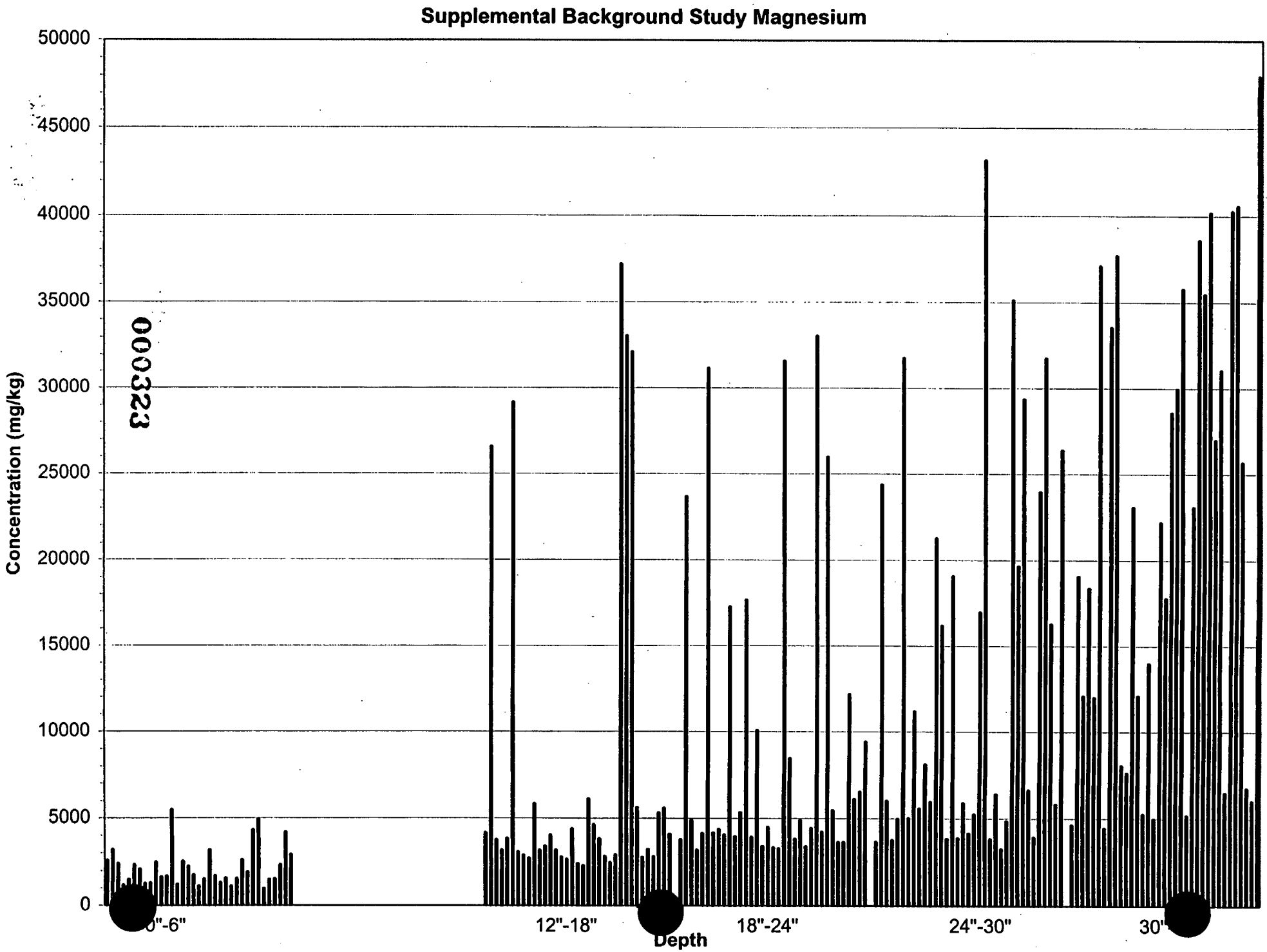
000319


Supplemental Background Study Copper
Concentration (mg/kg)
45
40
35
30
25
20
15
10
5
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

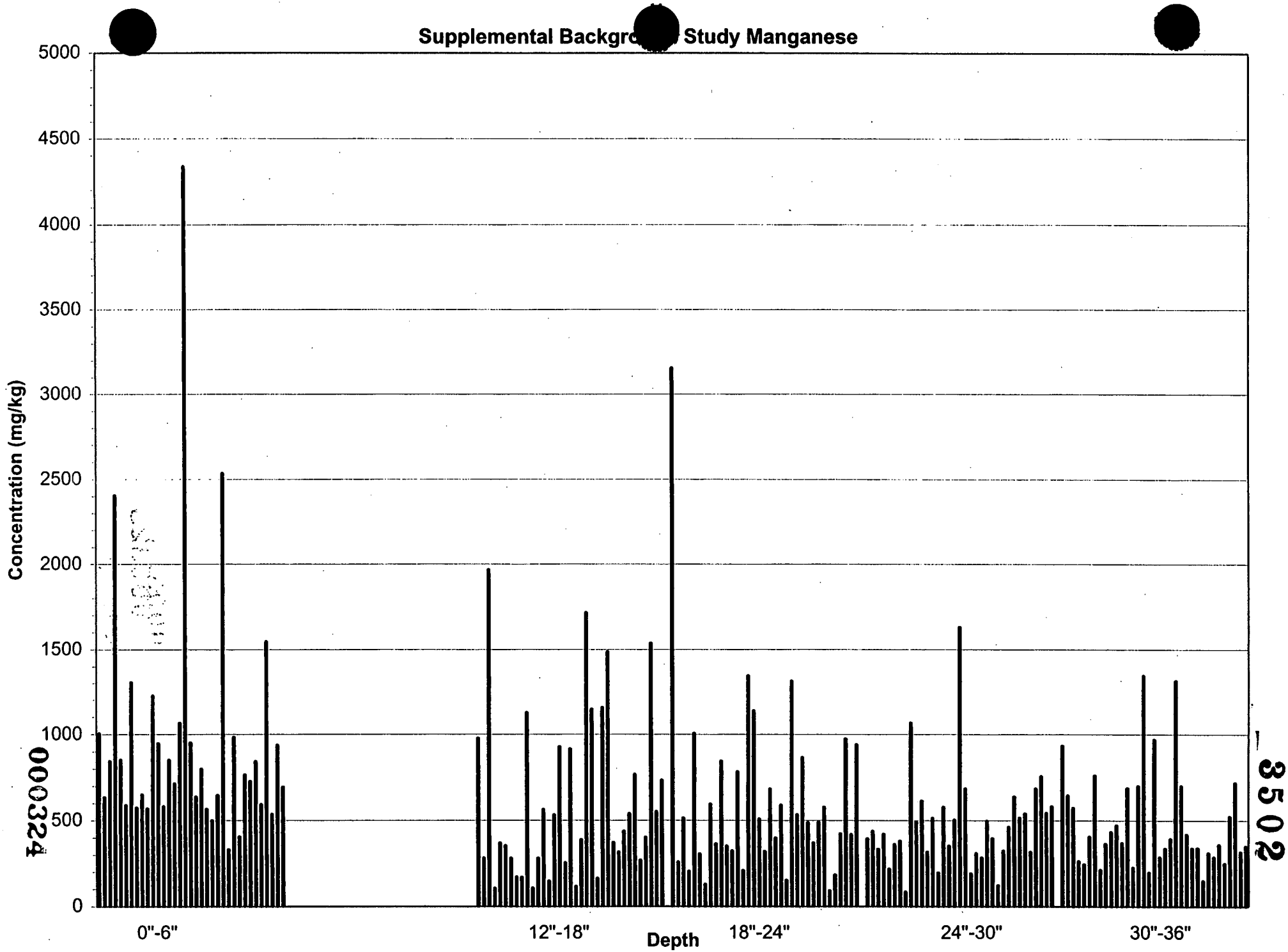

Supplemental Background Study Iron
Concentration (mg/kg)
50000
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
0"-6"
12"-18"
18"-24"
24"-30"
Depth

000321


Supplemental Background Study Lead
Concentration (mg/kg)
50
45
40
35
30
25
20
15
10
5
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth


Supplemental Background Study Magnesium
Concentration (mg/kg)
50000
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
12"-18"
18"-24"
24"-30"
Depth

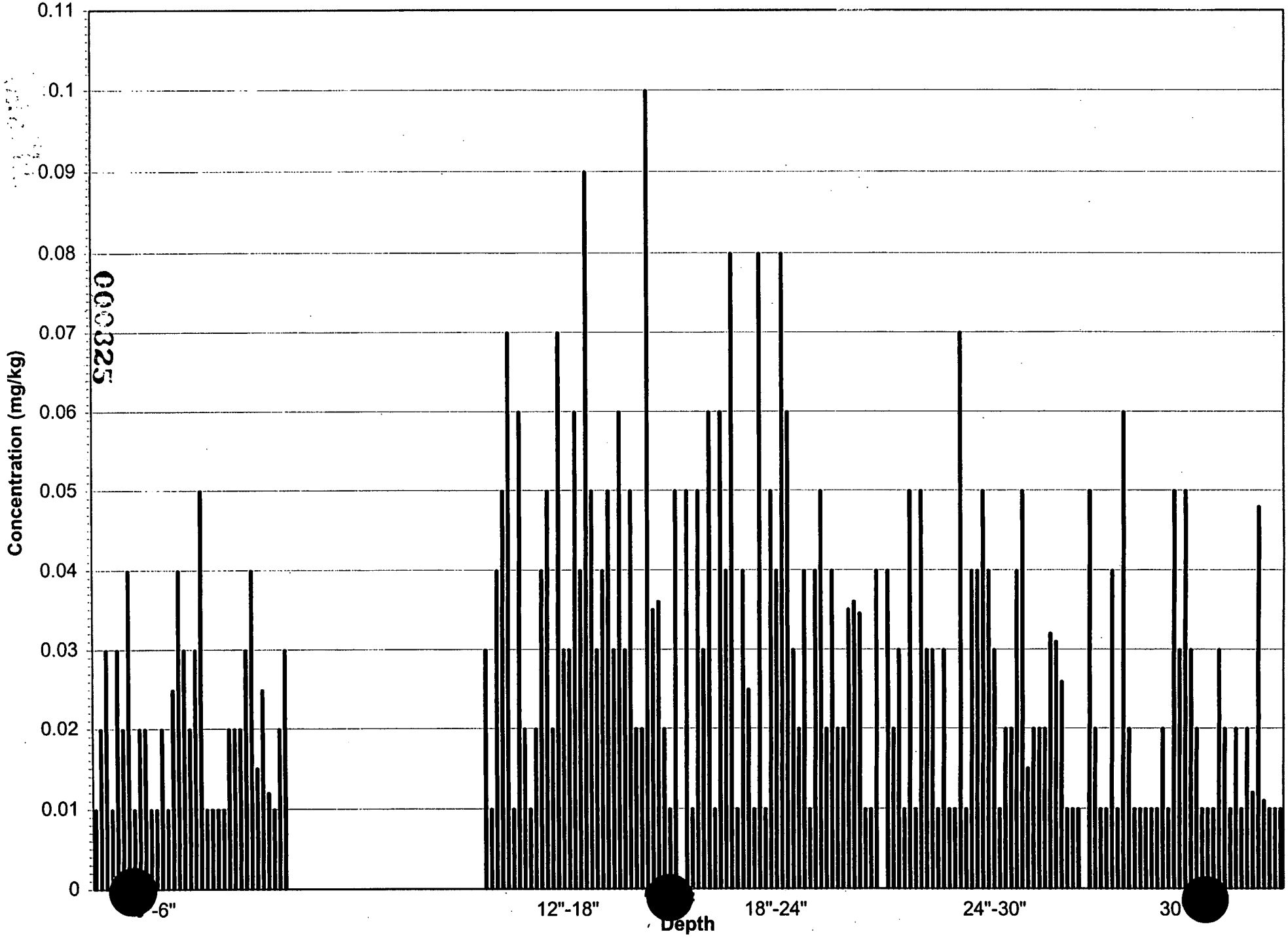
000323


Supplemental Backgro Study Manganese
Concentration (mg/kg)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

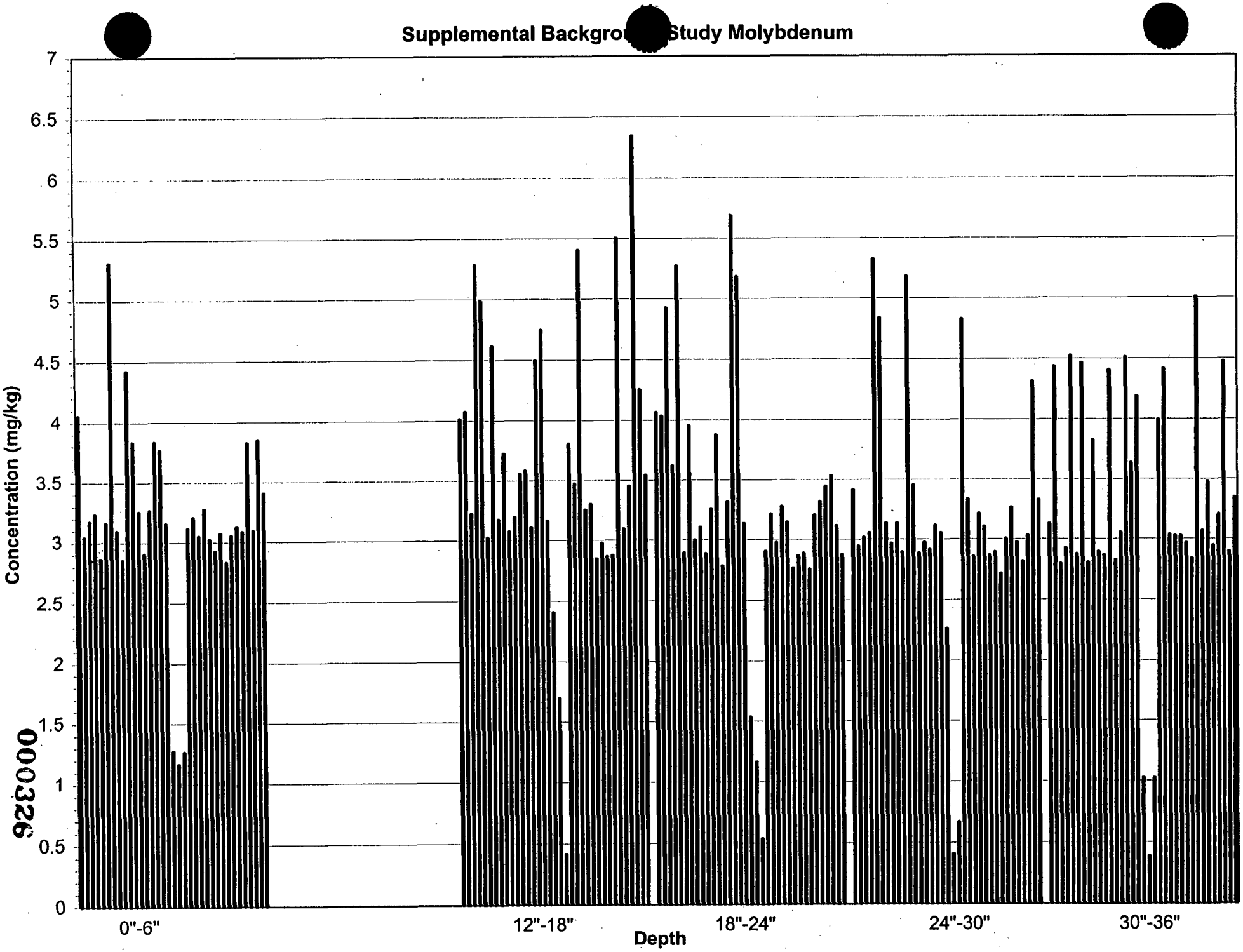
000324

35 02

Supplemental Background Study Mercury



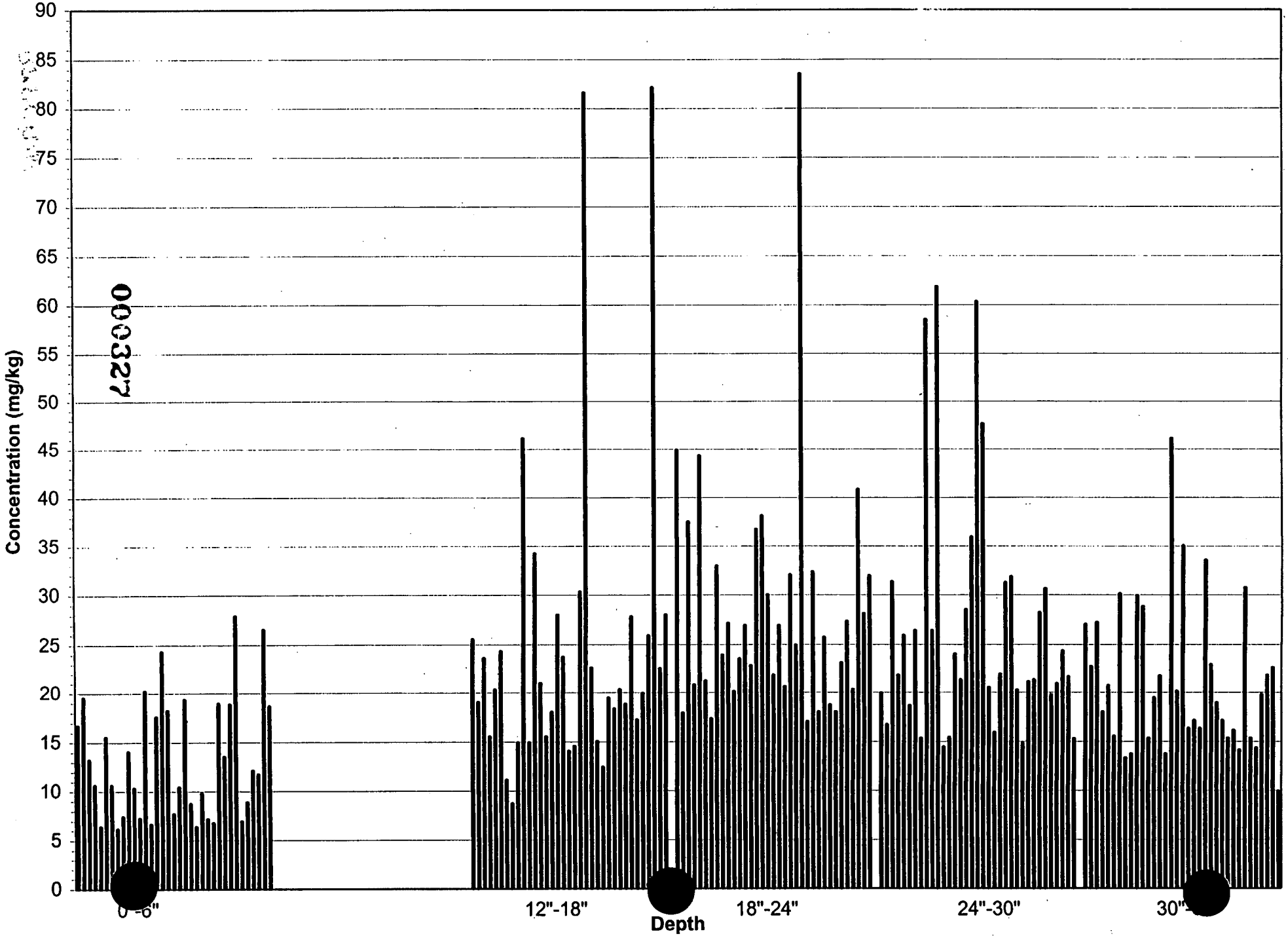
000325


Supplemental Backgro Study Molybdenum
Concentration (mg/kg)
7
6.5
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

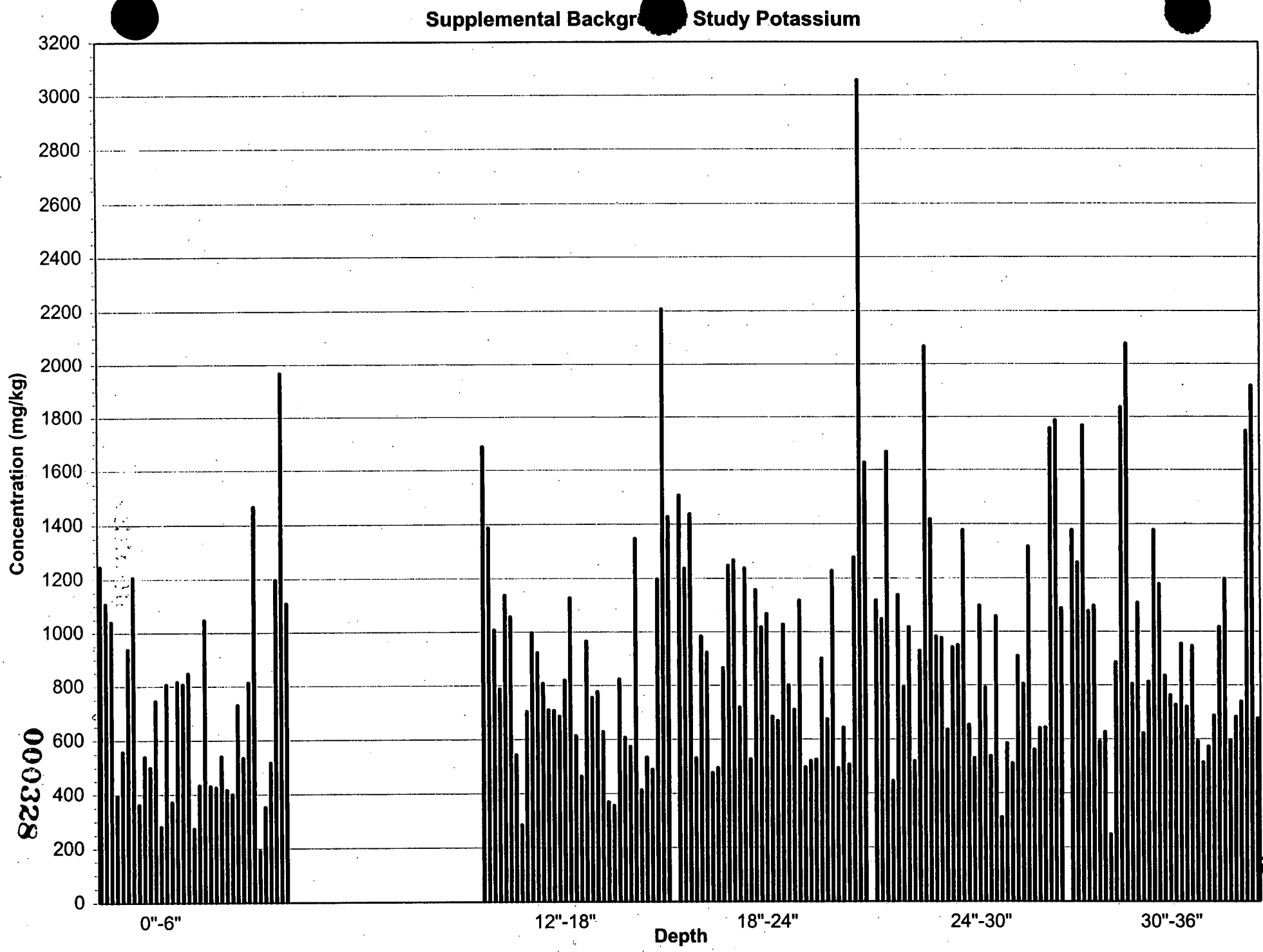
000326

3502

Supplemental Background Study Nickel



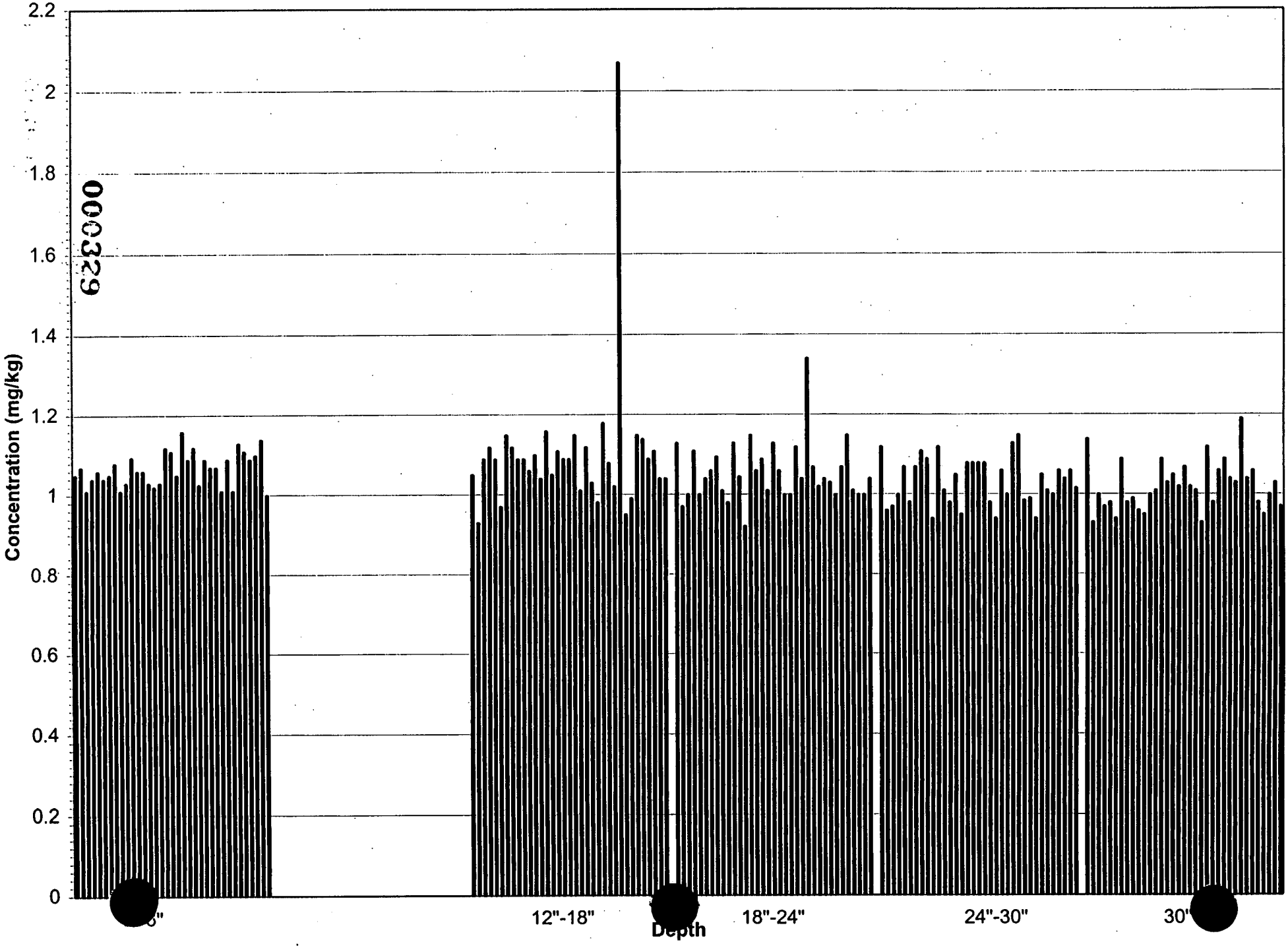
000327


Supplemental Backgr Study Potassium
Concentration (mg/kg)
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

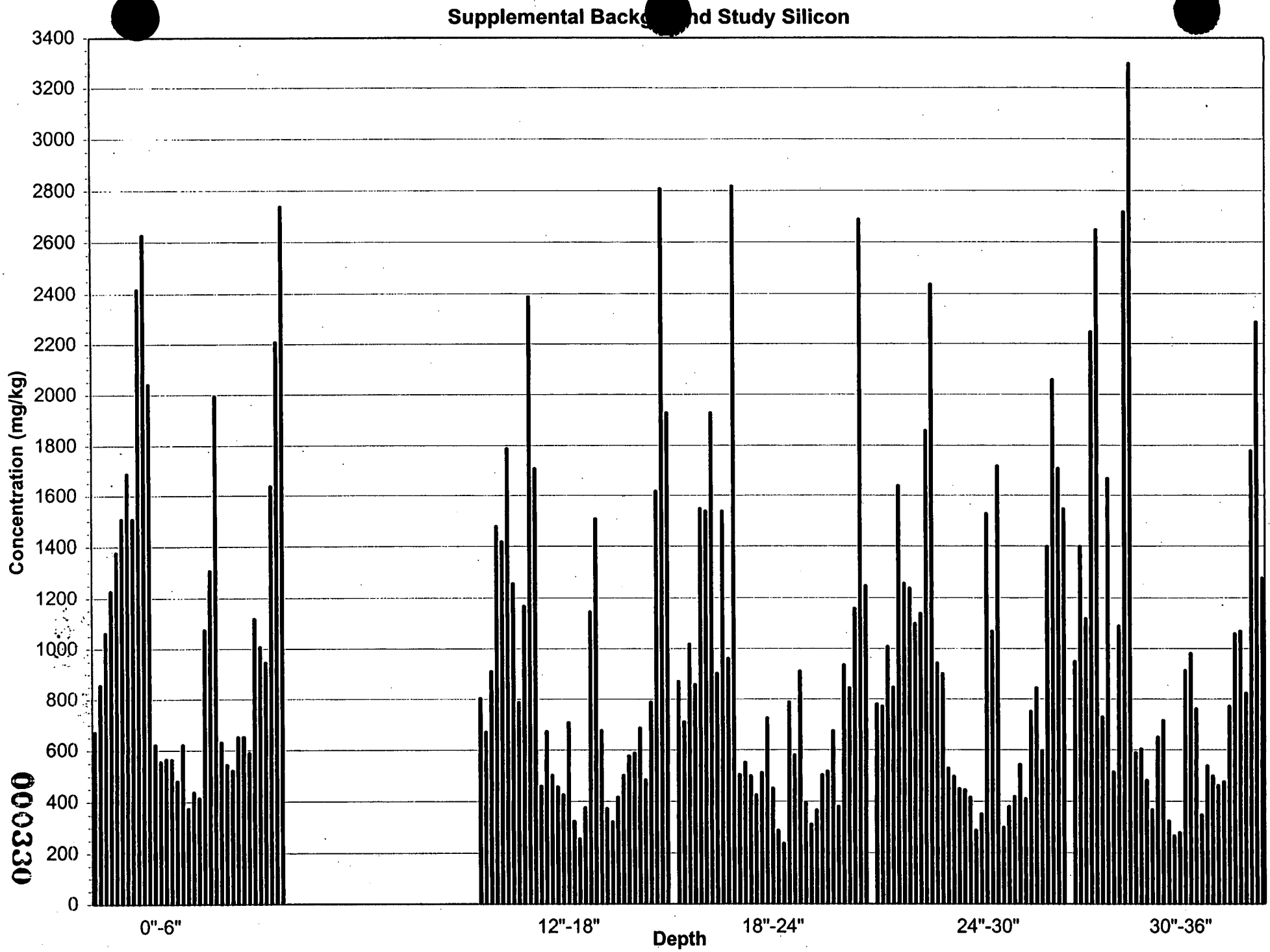
000328

3502

Supplemental Background Study Selenium

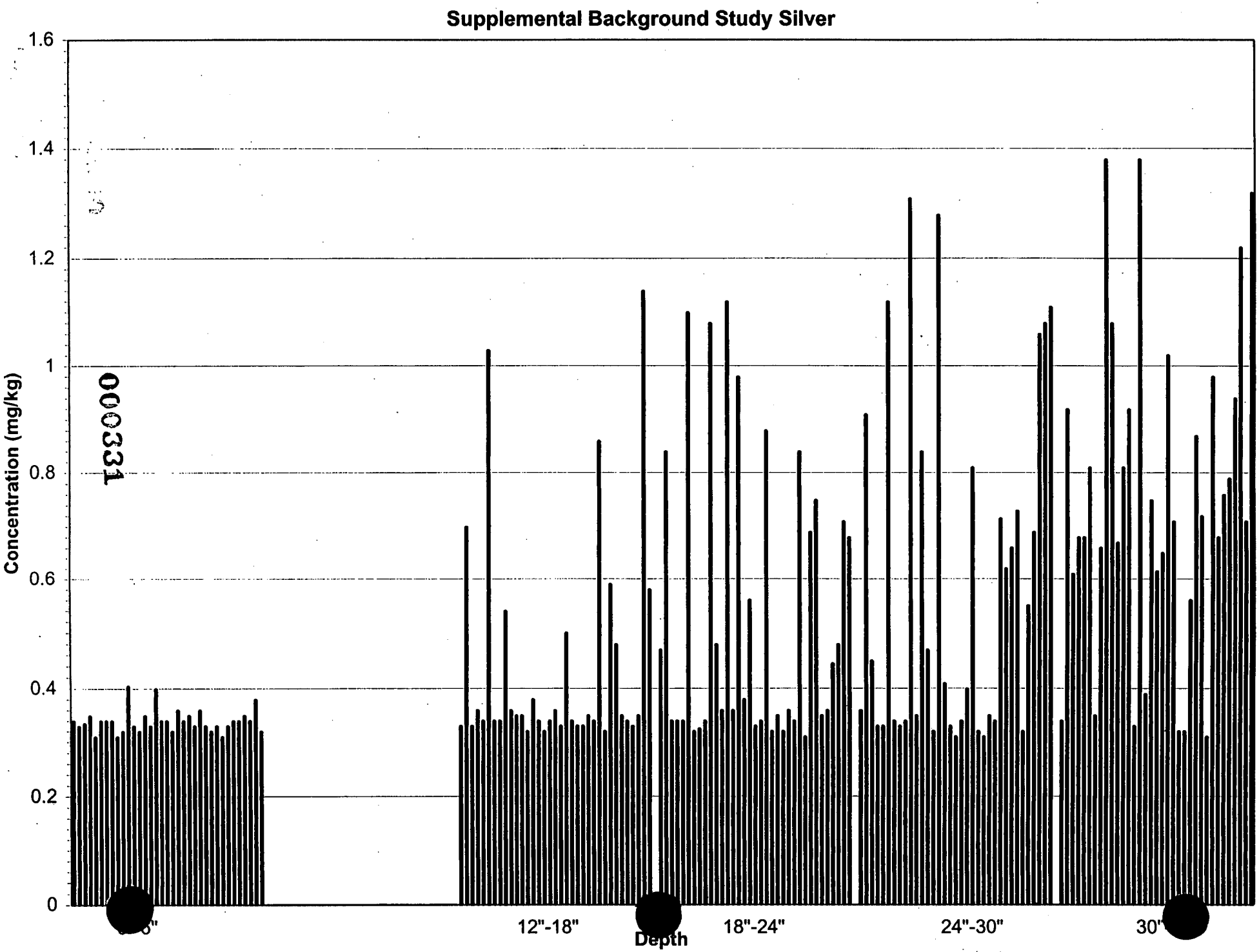


000329

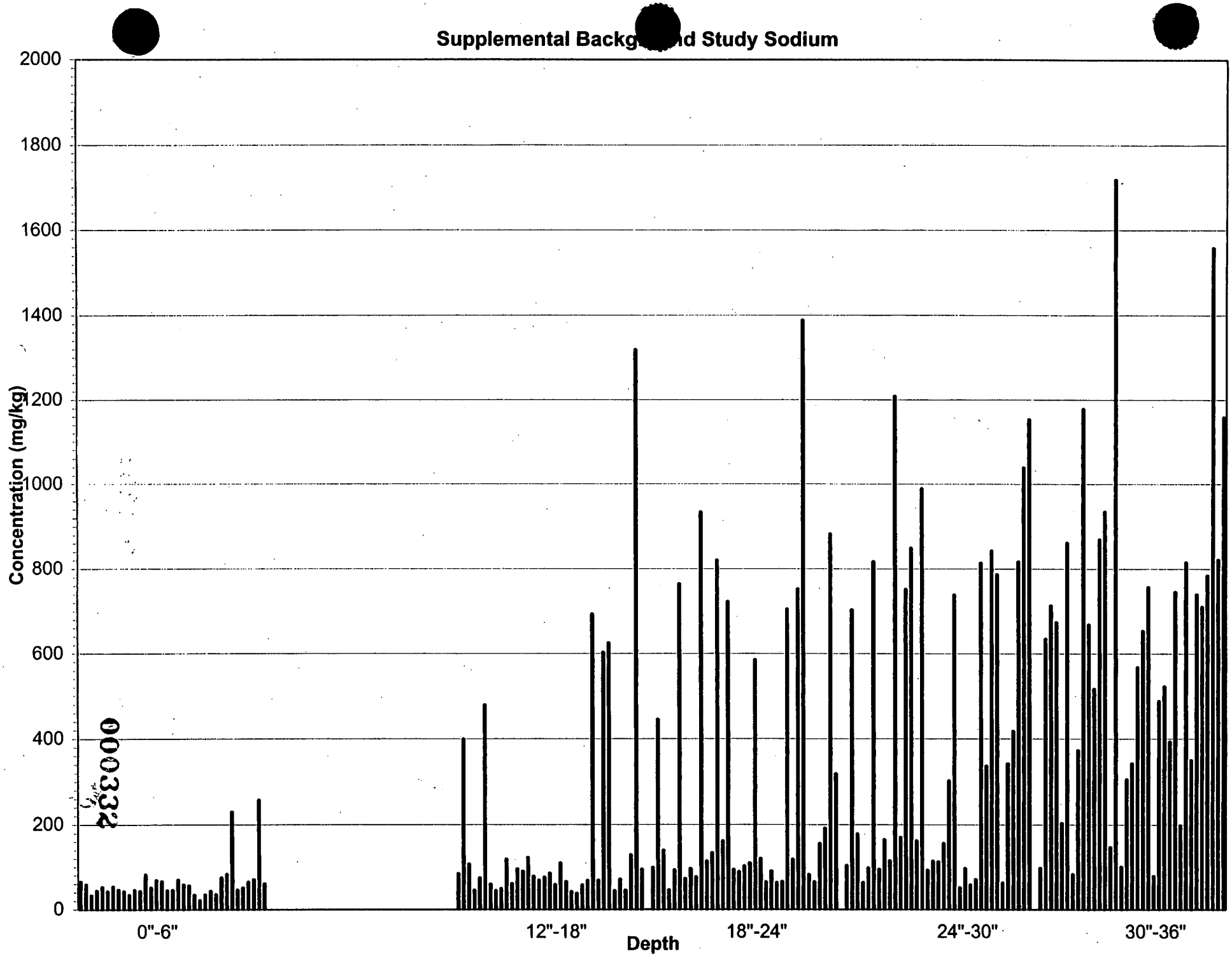

Supplemental Background Study Silicon
Concentration (mg/kg)
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

000330

3502


Supplemental Background Study Silver
Concentration (mg/kg)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
12"-18"
18"-24"
24"-30"
Depth

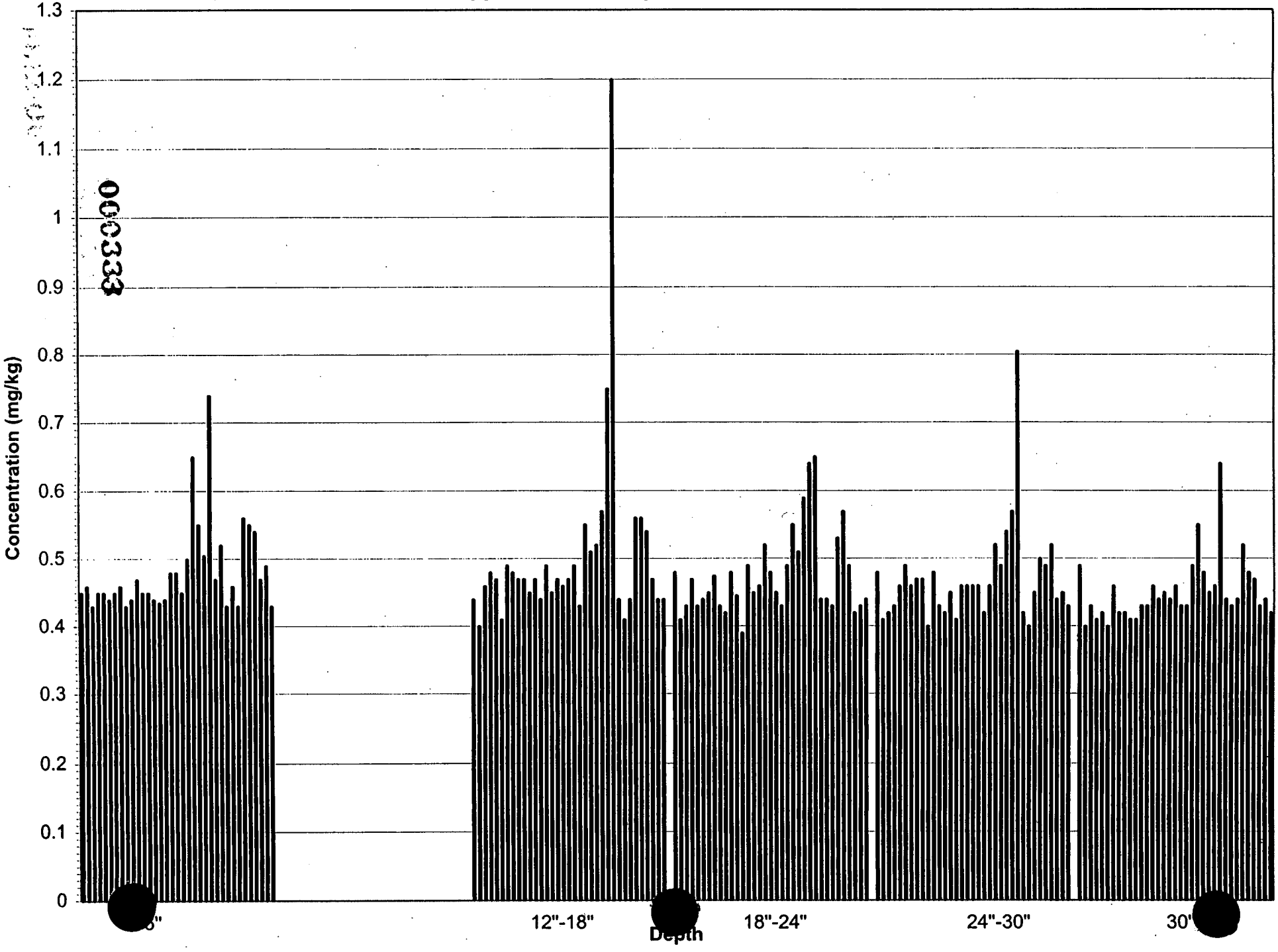
000331



0003332

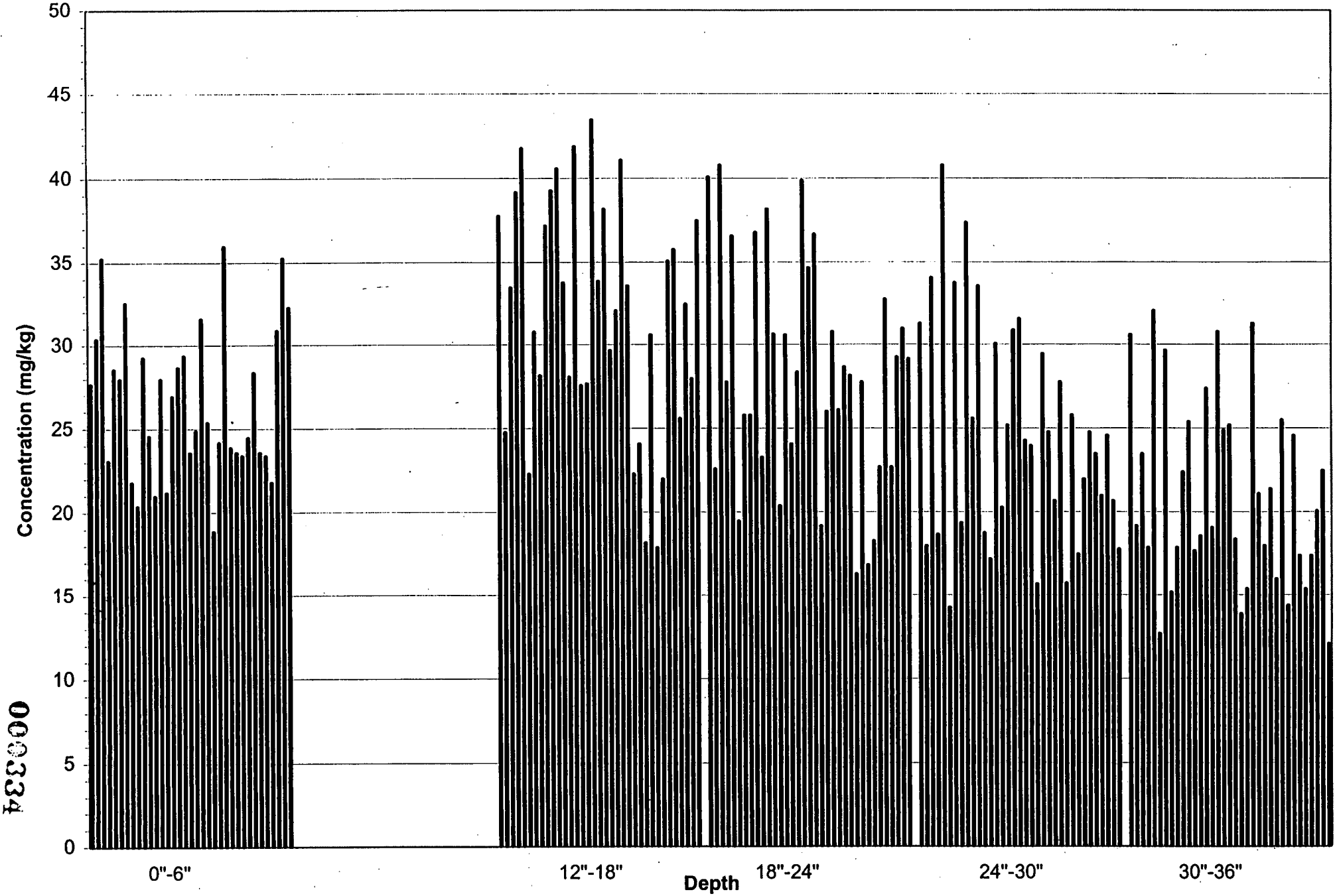
3502

Supplemental Background Study Thallium



000333

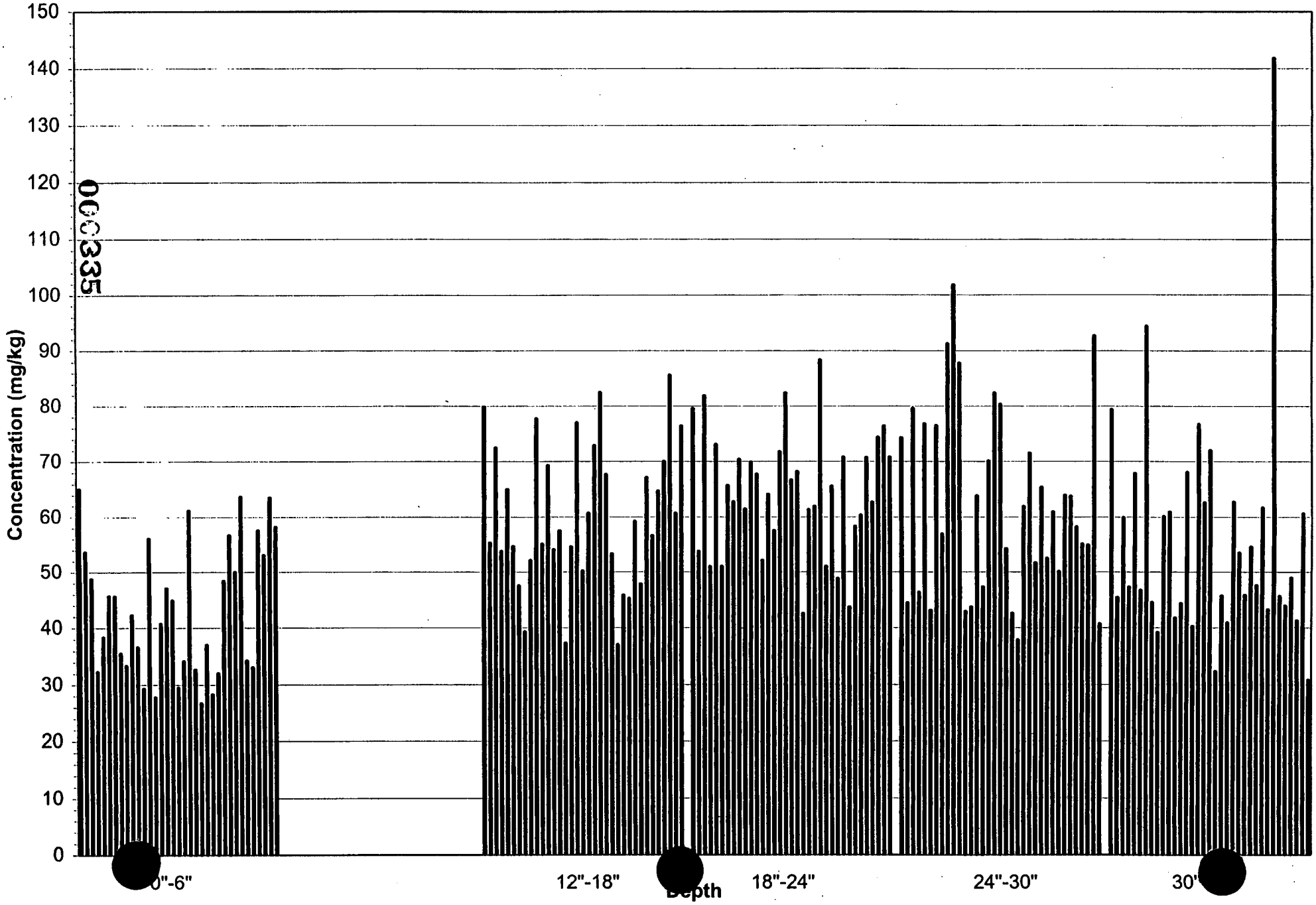
Supplemental Background Study Vanadium



000334

3502

Supplemental Background Study Zinc



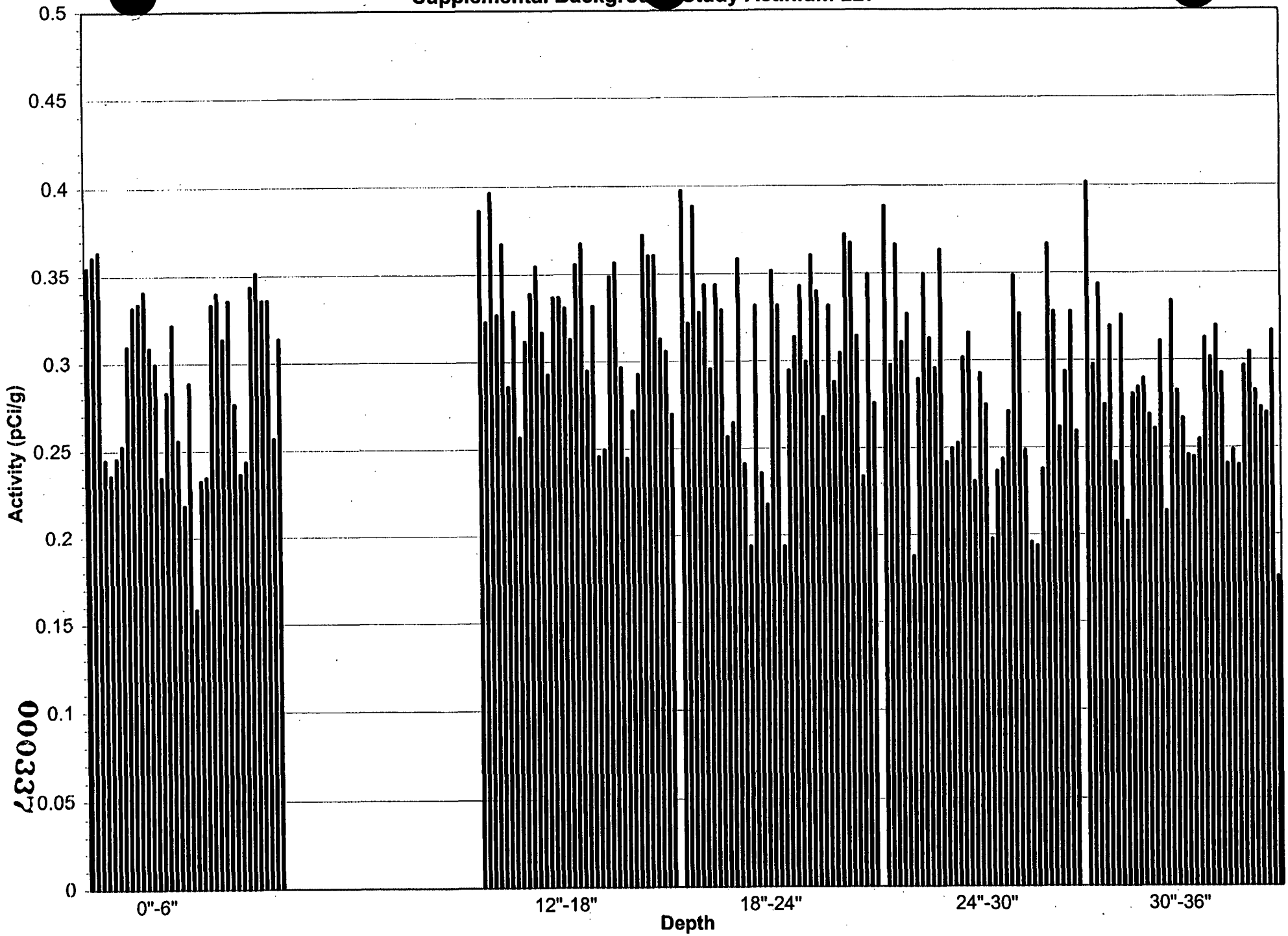
000335

APPENDIX H

SUMMARY GRAPHS OF RADIOLOGICAL RESULTS BY ANALYTE AND DEPTH

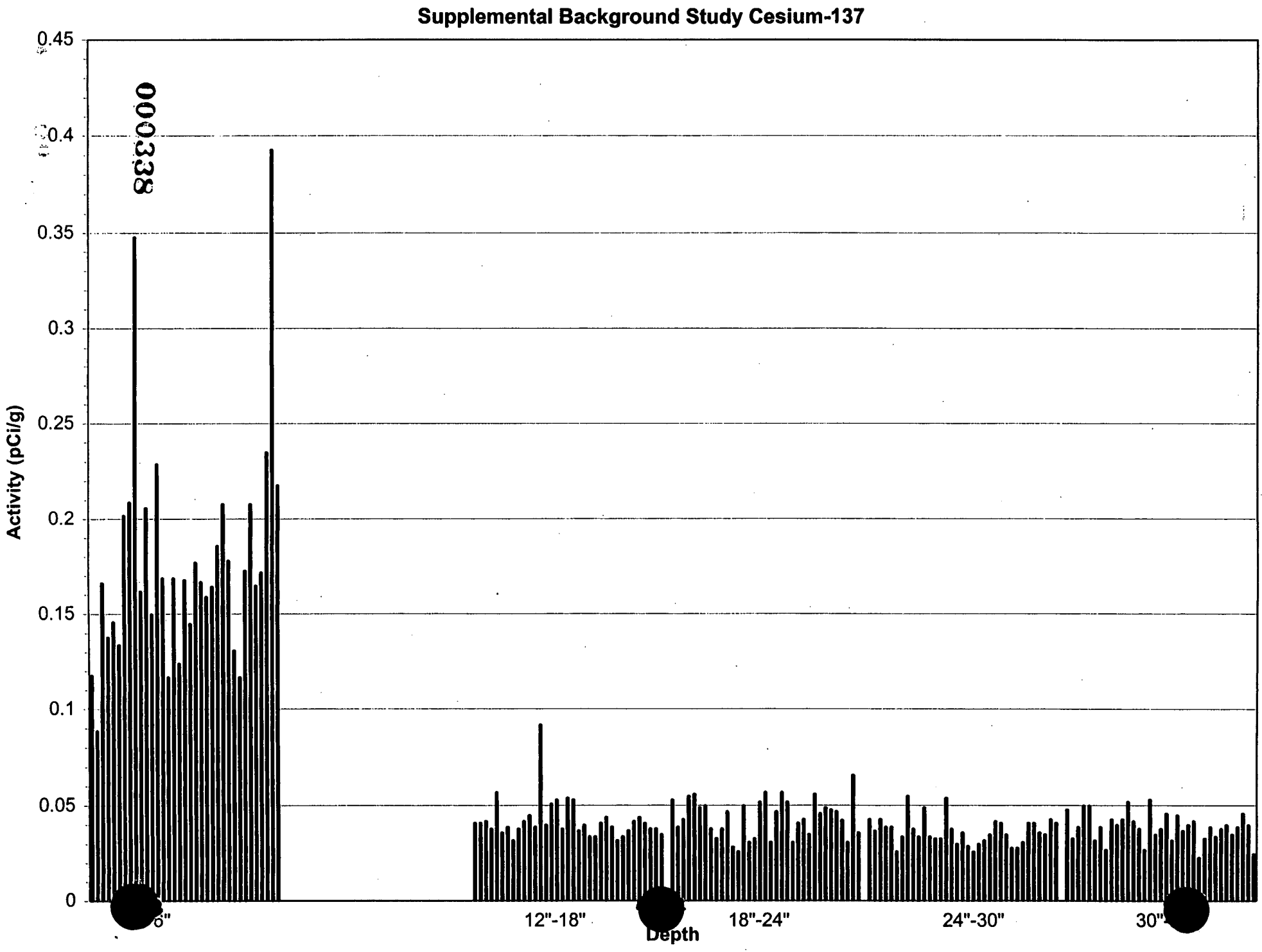
Appendix H

Supplemental Background Study Actinium-227

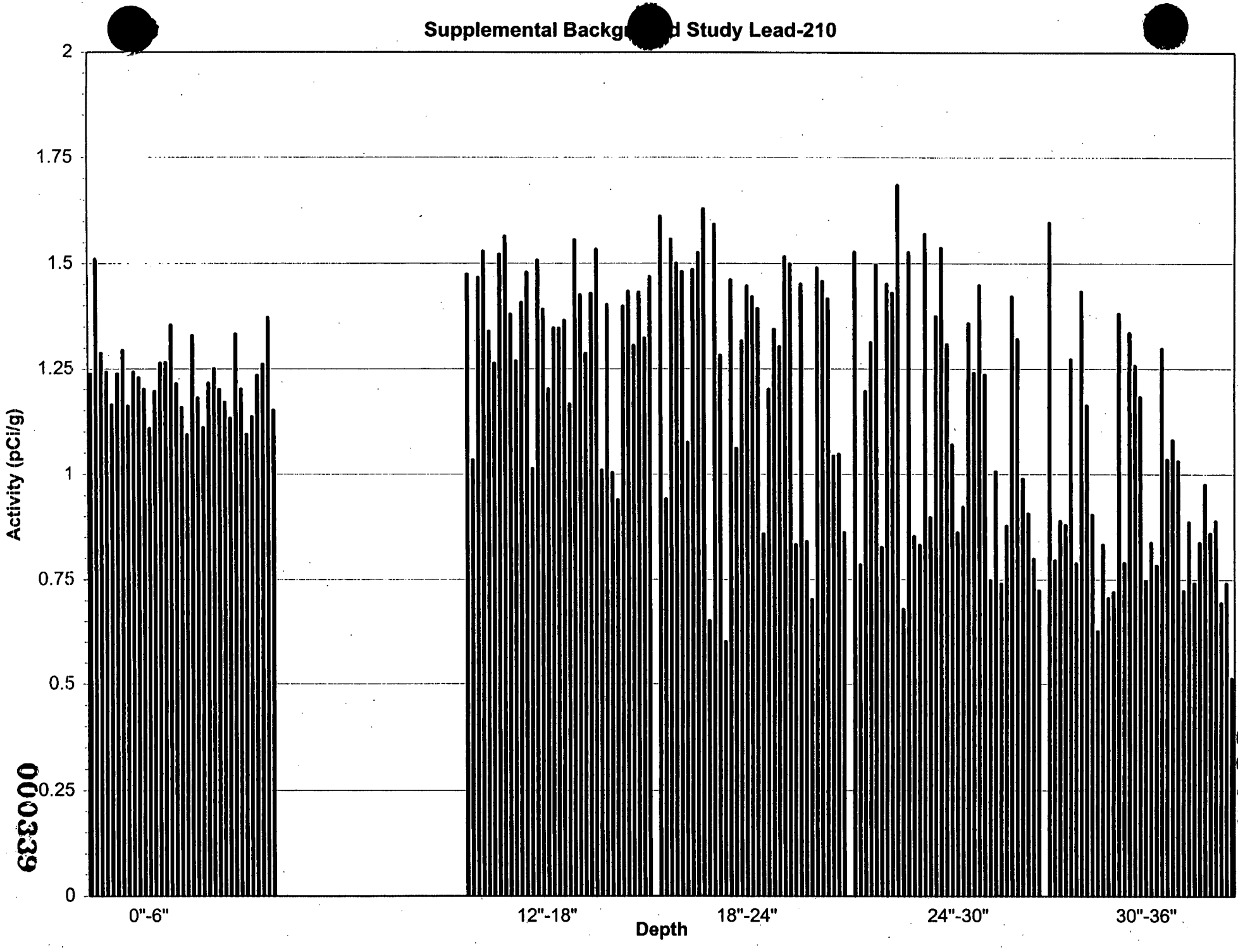


000337

3502

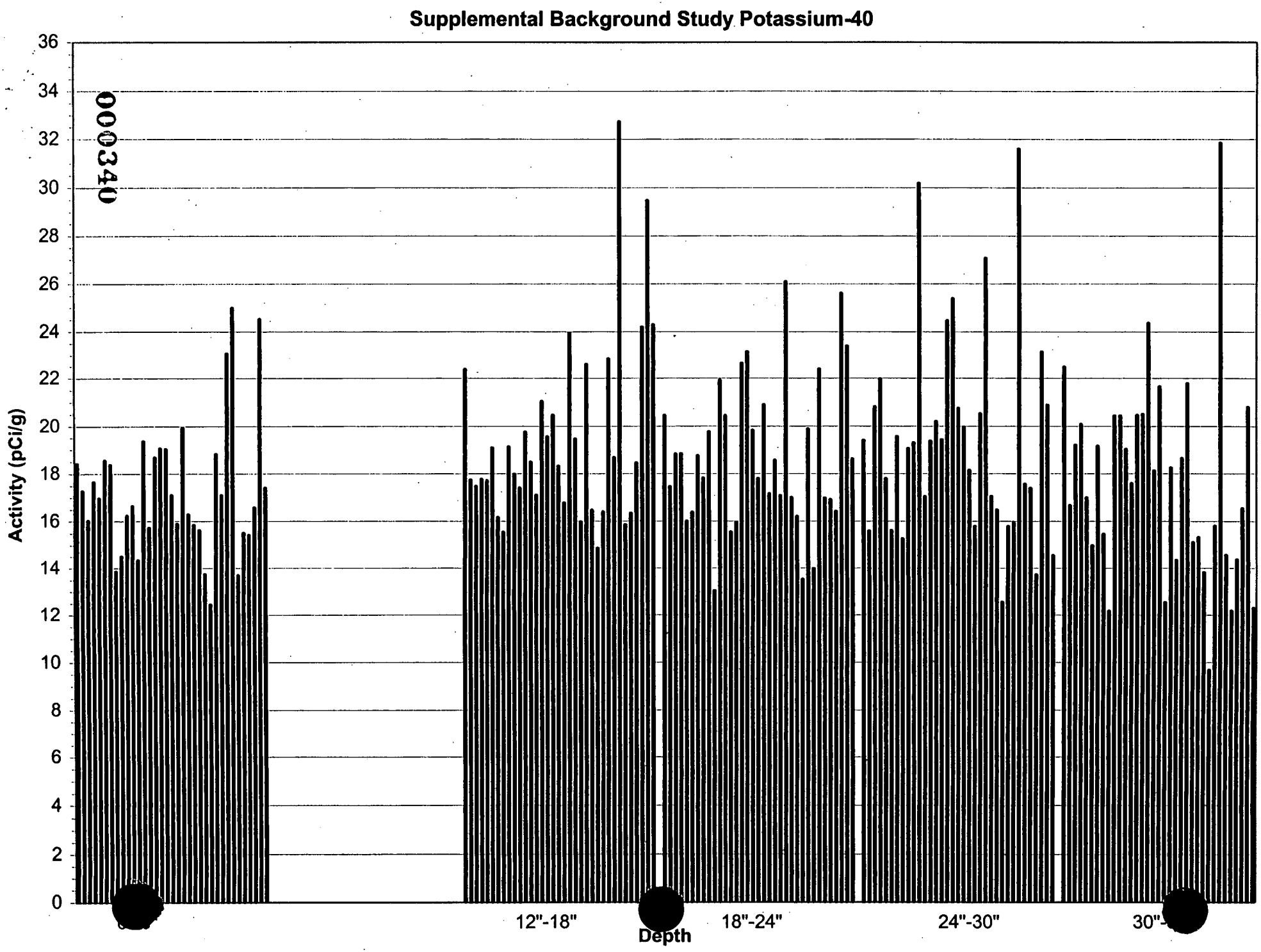

Supplemental Background Study Cesium-137
Activity (pCi/g)
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
12"-18"
18"-24"
24"-30"
Depth

000338

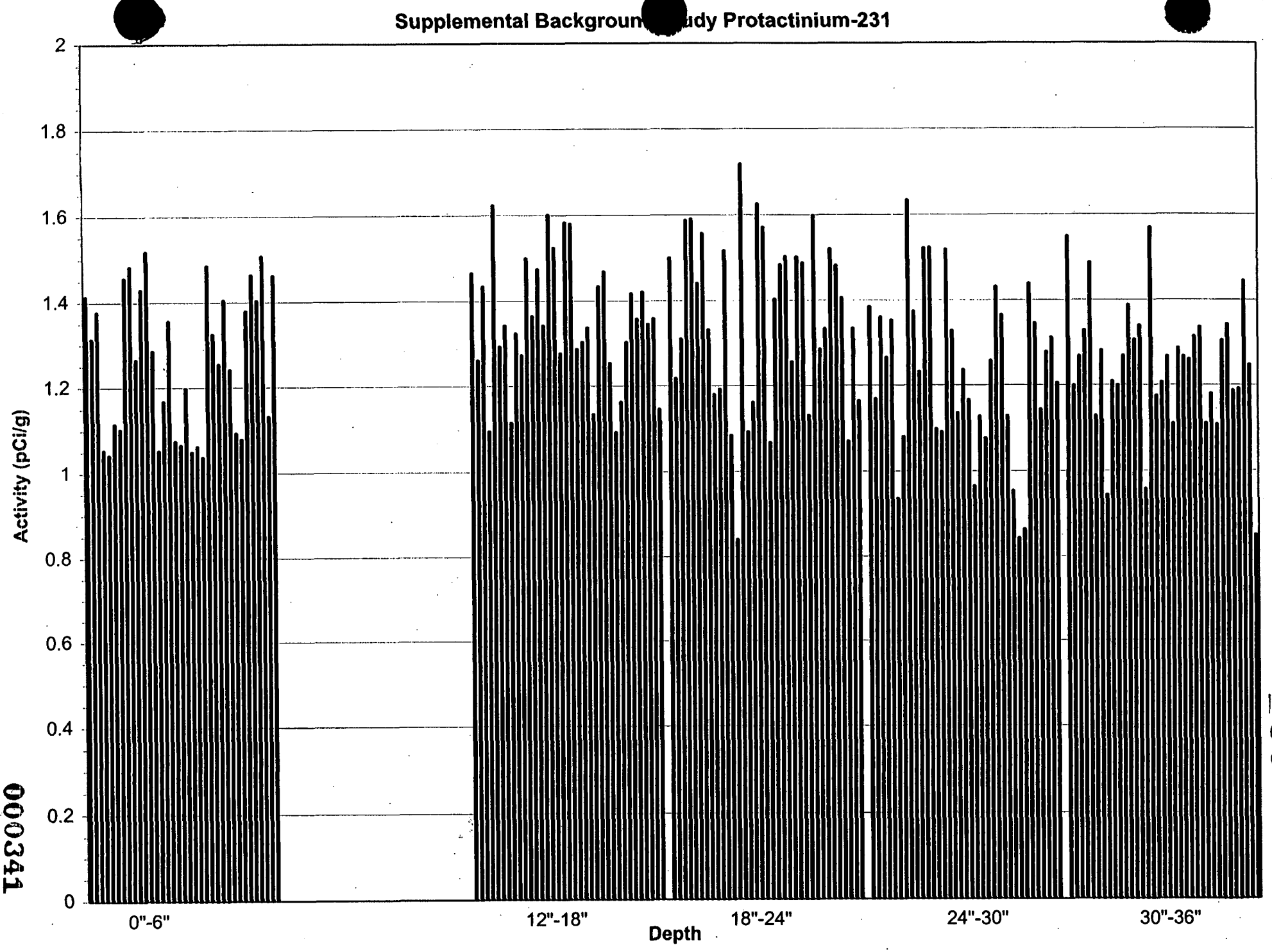

Supplemental Background Study Lead-210
Activity (pCi/g)
2
1.75
1.5
1.25
1
0.75
0.5
0.25
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

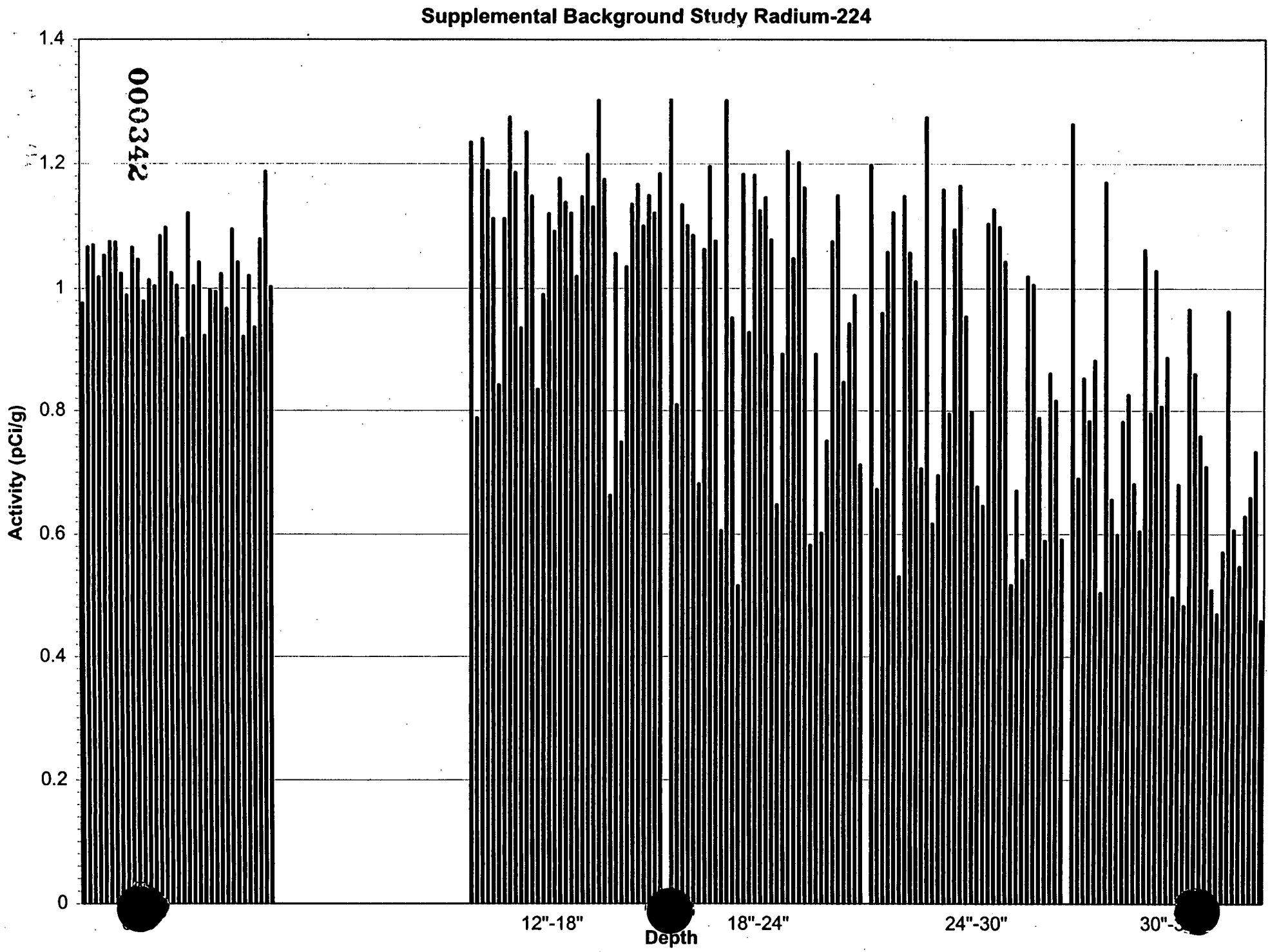
000339

3502

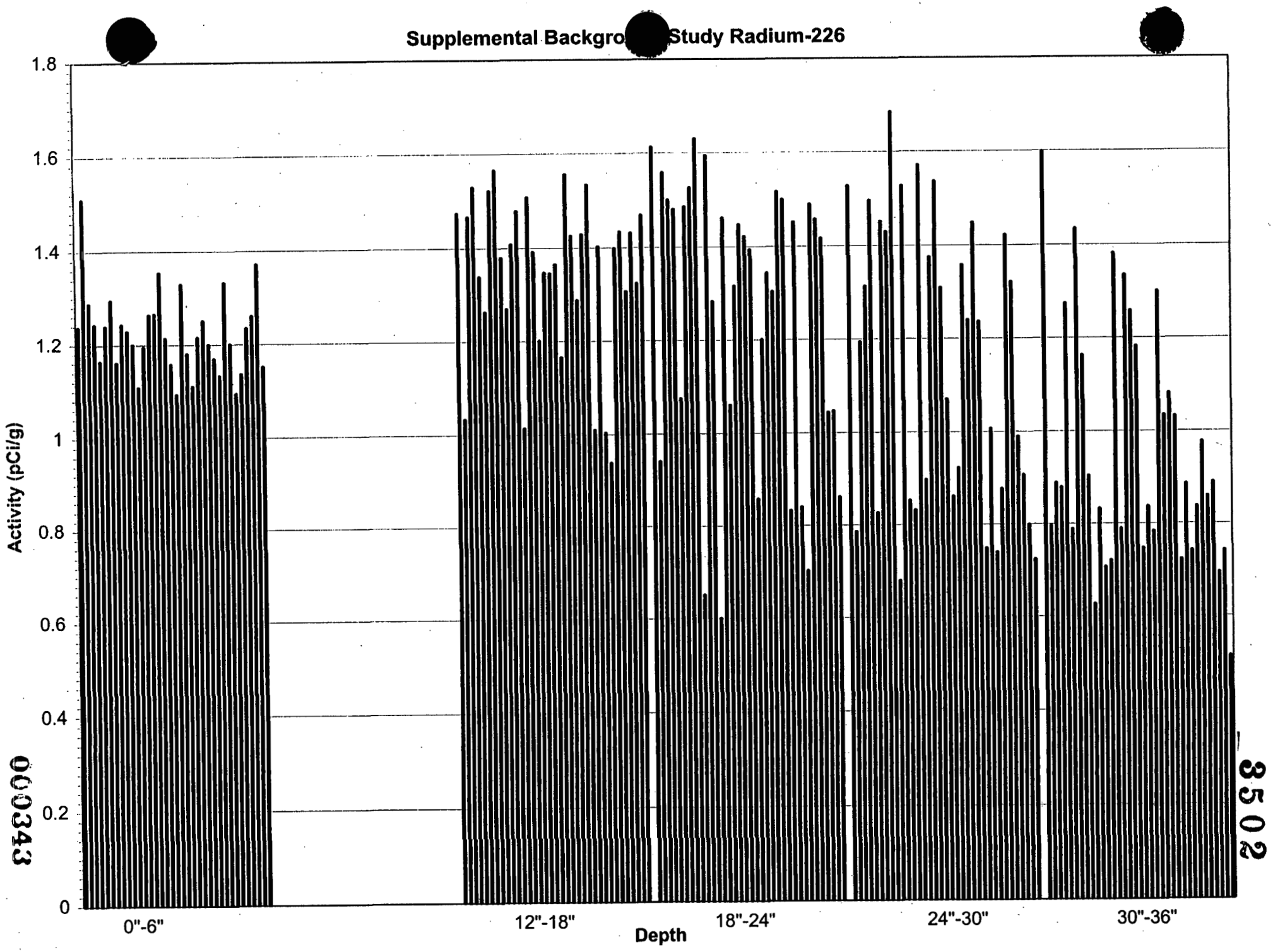

Supplemental Background Study Potassium-40
Activity (pCi/g)
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
12"-18"
18"-24"
24"-30"
Depth

000340


Supplemental Background Study Protactinium-231
Activity (pCi/g)
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

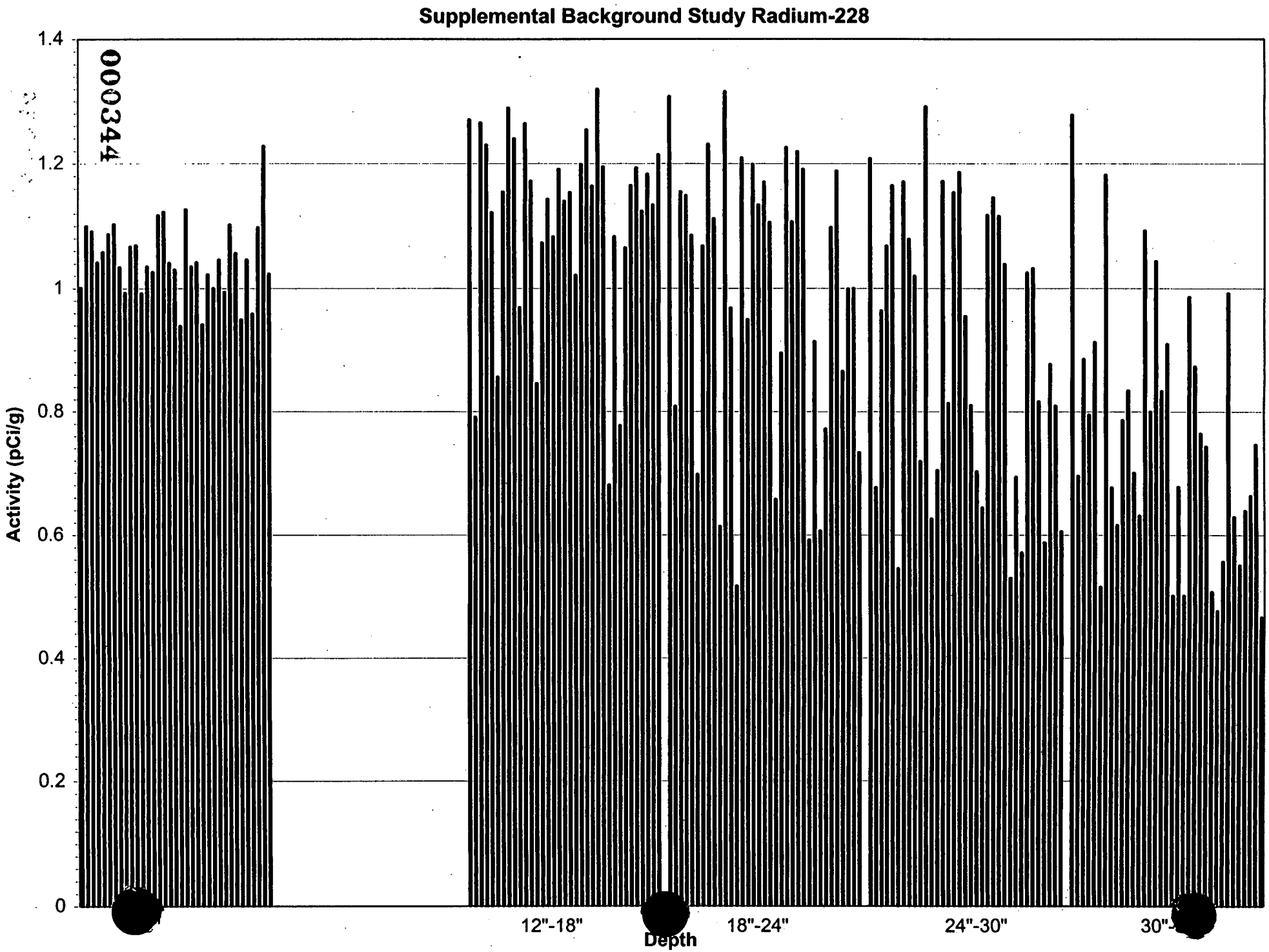

Supplemental Background Study Radium-224
Activity (pCi/g)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
12"-18"
18"-24"
24"-30"
Depth

000342

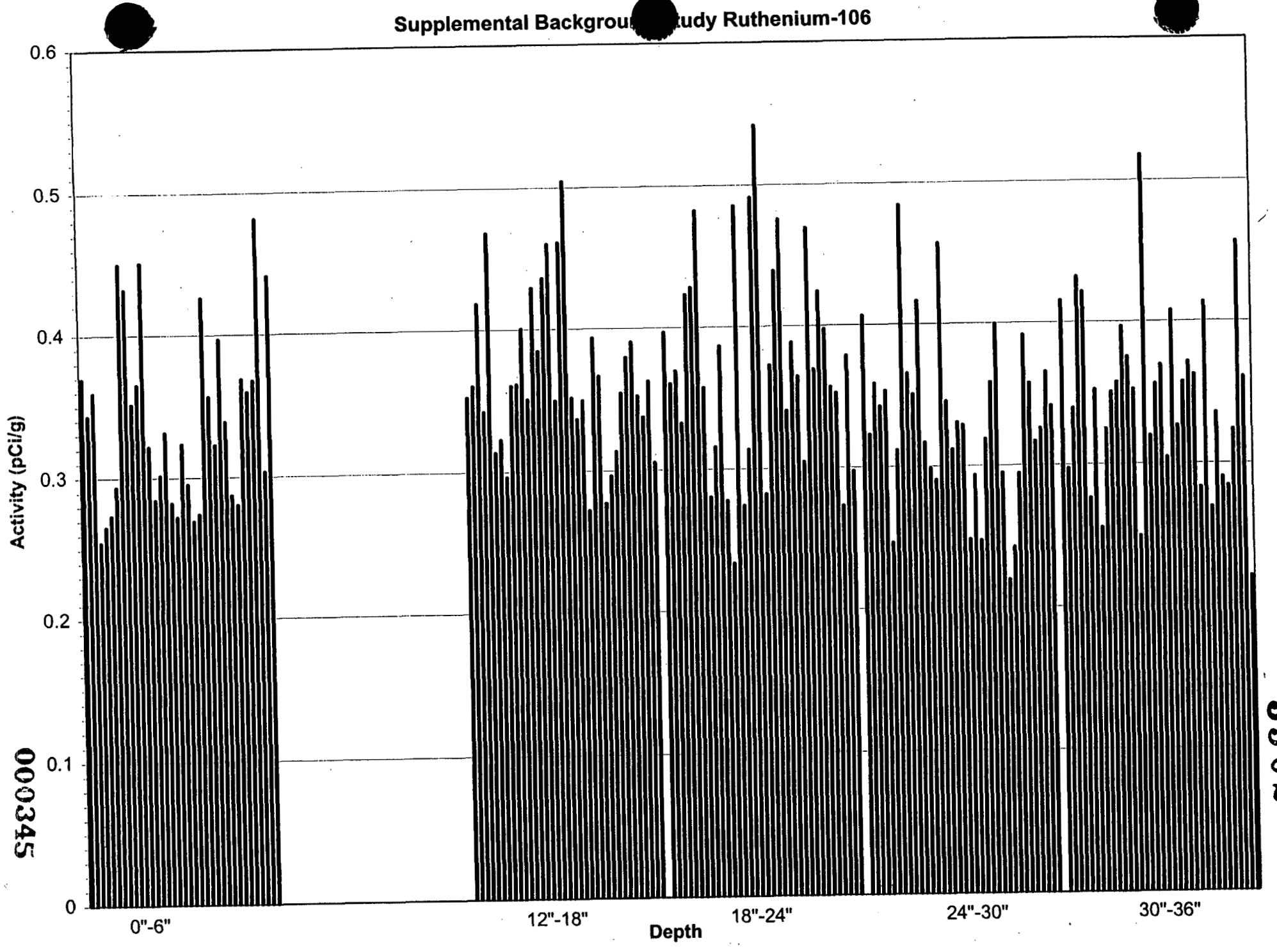

Supplemental Backgro Study Radium-226
Activity (pCi/g)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

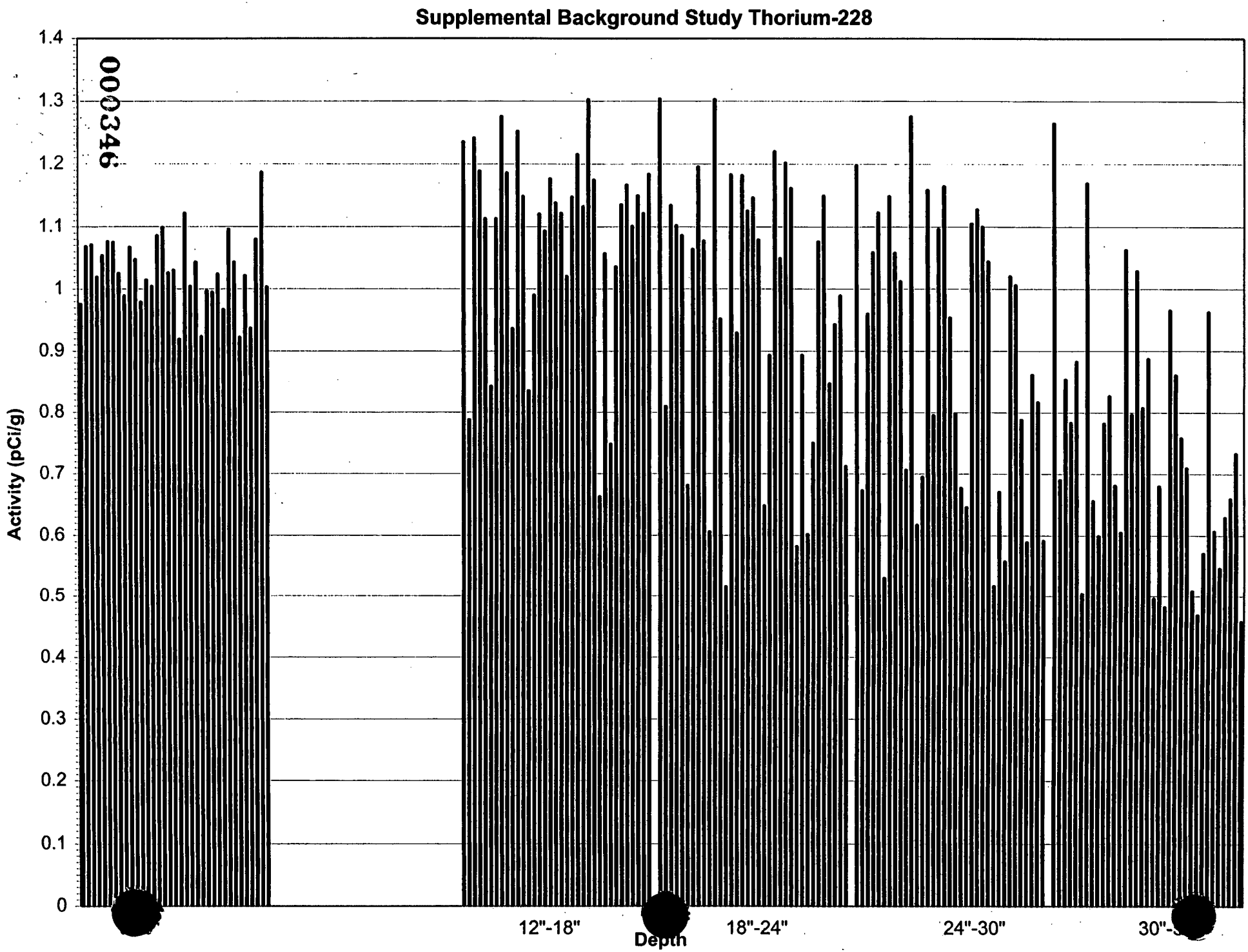
000343

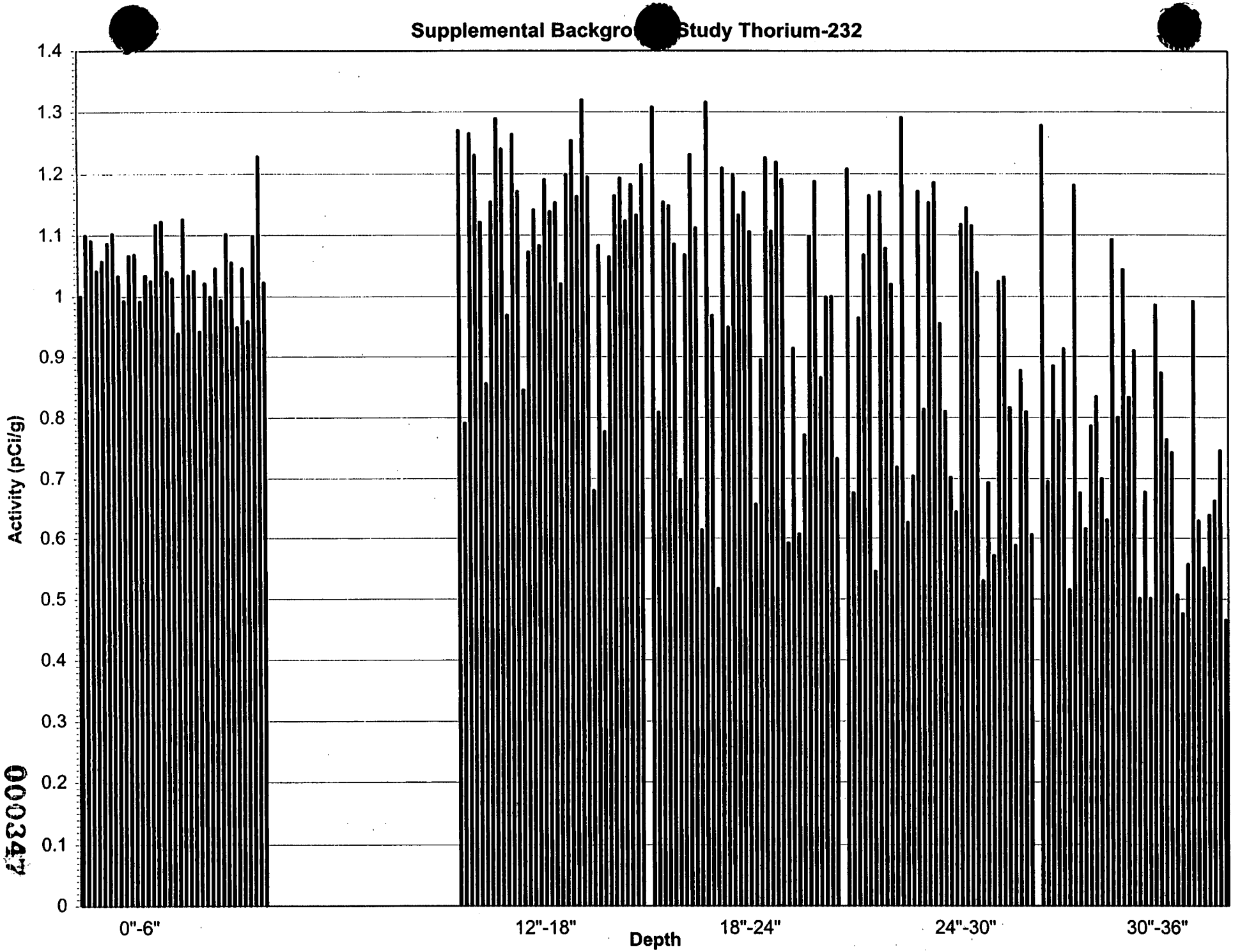
3502


Supplemental Background Study Radium-228
Activity (pCi/g)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
12"-18"
18"-24"
24"-30"
Depth

000344


Supplemental Backgrou udy Ruthenium-106
Activity (pCi/g)
0.6
0.5
0.4
0.3
0.2
0.1
0
0"-6"
12"-18"
18"-24"
24"-30"
30"-36"
Depth

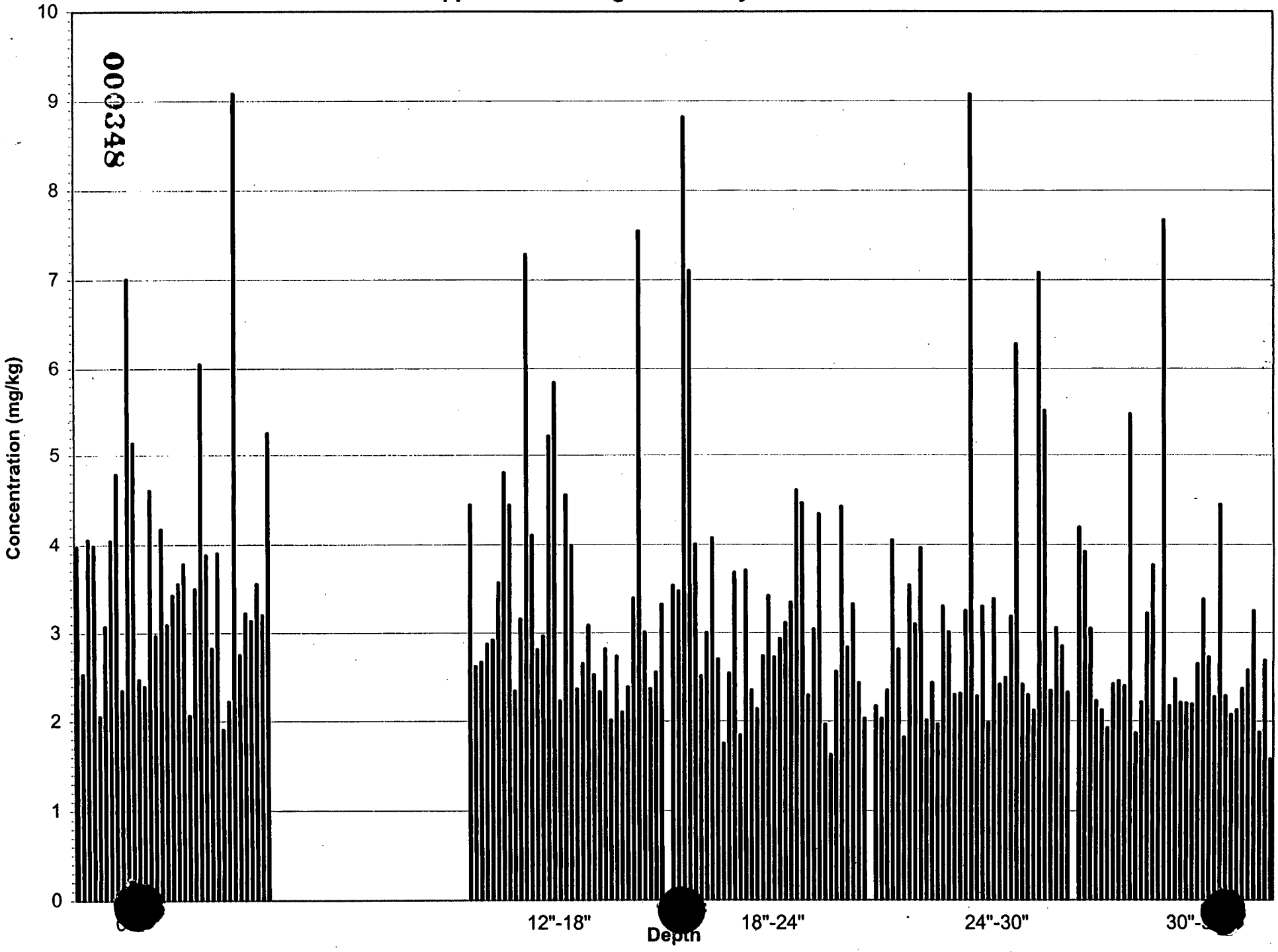

Supplemental Background Study Thorium-228
000346
Activity (pCi/g)
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
12"-18"
18"-24"
24"-30"
Depth



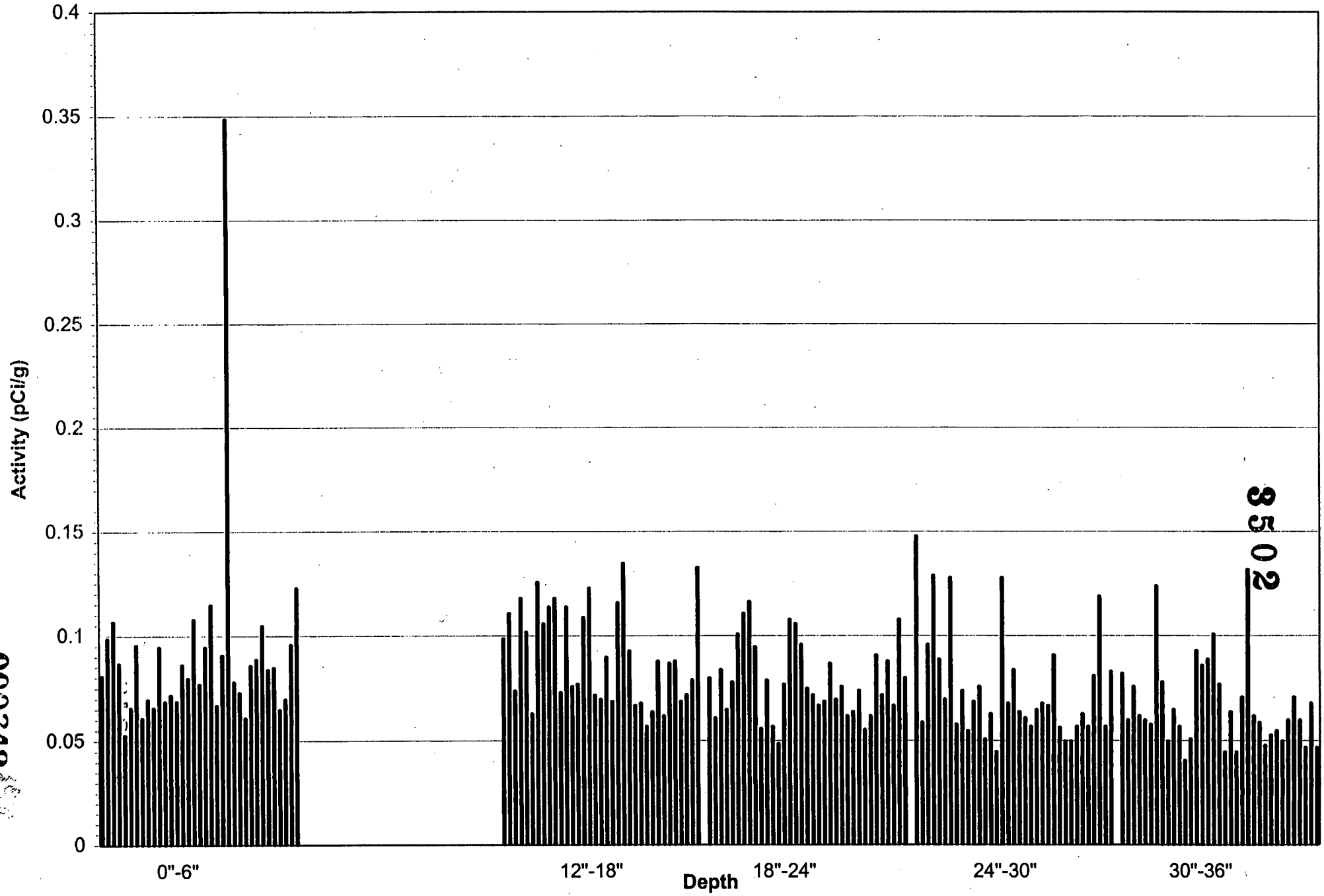
0003447

3502

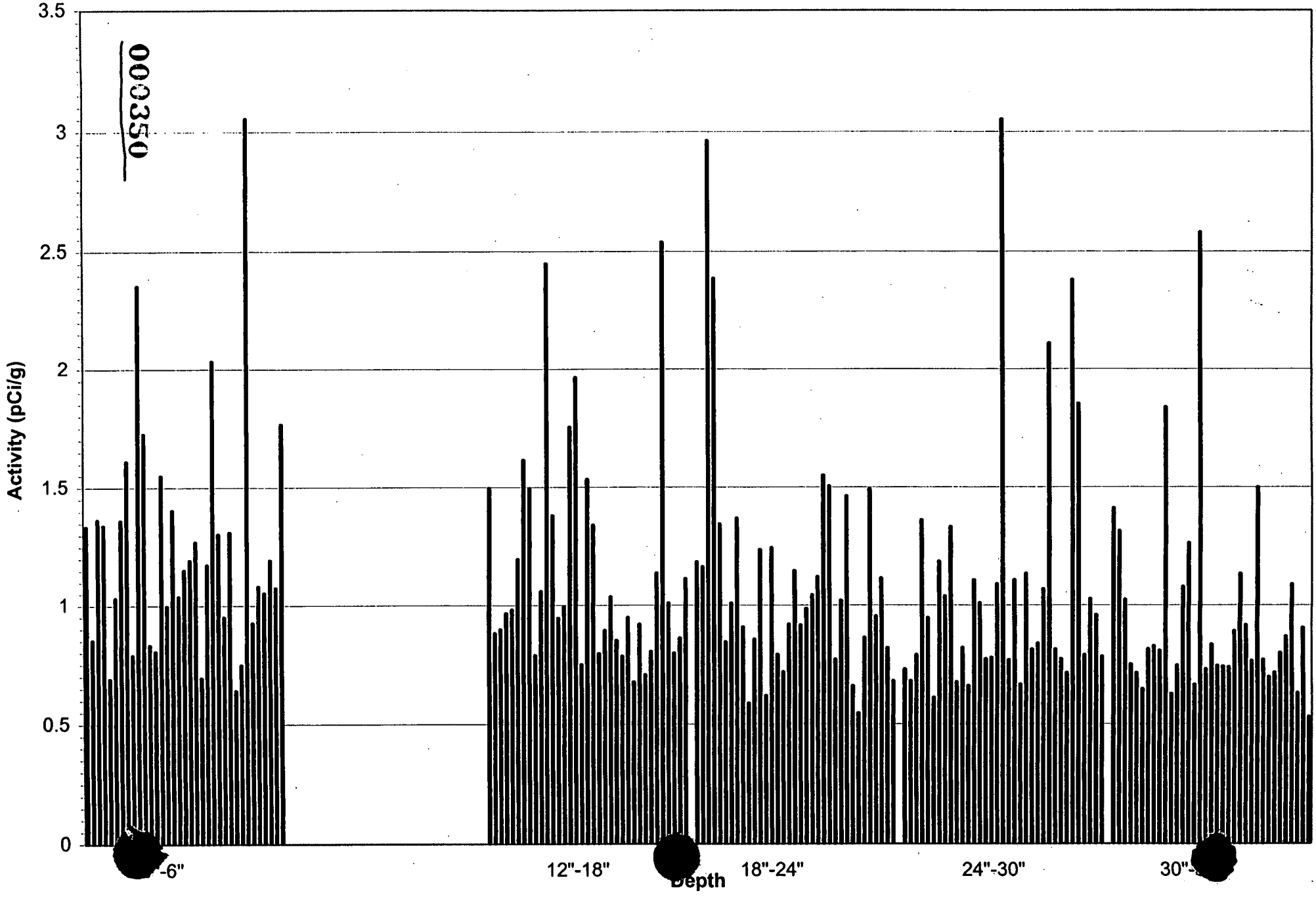
Supplemental Background Study Total Uranium



Supplemental Background Study Uranium-235



000349

8502

Supplemental Background Study Uranium-238