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PROJECT SPECIFIC PLAN FOR WAC ATTAINMENT SAMPLING OF AREA 7 SOILS

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO

SEPTEMBER 1998

U.S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE

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DRAFT FINAL

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1.0 INTRODUCTION

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1.1 PURPOSE

This project specific plan (PSP) has been developed to evaluate a portion of the soils in Area 7 for the On-Site Disposal Facility (OSDF) Waste Acceptance Criteria (WAC) through a field sampling program. The areas to be characterized under this PSP are scheduled for excavation during 1999 and beyond as part of various Silos Project construction activities. This PSP fulfills the Sitewide Excavation Plan (SEP) (DOE 1997c) and the Waste Acceptance Criteria Attainment Plan for the On-Site Disposal Facility (WACAP) (DOE 1998c) requirements for development of pre-design investigation plans and for documenting the justification for selection of specific WAC Constituents of Concern (COCs). The existing body of soil data and process knowledge associated with this area serve as the foundation from which the sampling strategy presented in this PSP has been developed. The existing data set primarily consists of remedial investigation data.

The WAC characterization data obtained from implementation of this PSP is intended to identify soil that may exceed the OSDF WAC for certain constituents in order to properly segregate these soils and therefore preclude 1) the reuse of above-WAC soil for roads or other fill purposes and; 2) the spread of above-WAC soil during construction activities. The sampling will also determine the disposition of soil stockpiles in the area as well as excess soil generated during construction if necessary. This PSP is not designed to identify soils that exceed the final remediation levels (FRLs) for the area-specific constituents of concern. Following the dismantlement of the Silos Project waste processing facilities and utilities in approximately 2007, pre-design investigation PSPs will be implemented to determine the extent of final excavation of above-WAC and above-FRL soils as summarized in the SEP. These pre-design investigation PSPs will address soil contamination conditions after the completion of waste processing and treatment of the silo contents as well as dismantlement of the silos. The remedial design will be developed and documented in the Integrated Remedial Design Package (IRDP) which is planned for completion in 2008.

The Phase I field sampling program is organized into six geographical areas based on the Silos Project's proposed construction plan and/or the excavation schedule, process knowledge of the area,

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and the WAC constituents of concern (COC) for the area. The six physical areas are defined as follows:

- Area A: Soil stockpile
- Area B: Path of planned infrastructure road
- Area C: Area west of Silo 3 & 4
- Area D: Area for planned Silo 3 facilities and K-65 Transfer Tank Area
- Area E: Northeast sector for planned lay-down area
- Area F: Area for planned K-65 facilities

The location and boundaries of the specific areas are illustrated in Figure 2-1. A Phase II field sampling program which will focus on the Silo 1 and 2 soil berms and several areas associated with the silo berms will be addressed under a separate PSP.

The soils that comprise Areas A through F will be sampled and analyzed for two WAC constituents of concern, total uranium and technetium-99. Additionally, samples collected from Area C and a western portion of Area B will be analyzed for lead and chromium to determine if soils in this area have a potential to be RCRA characteristic soil.

The sampling strategy presented in this PSP involves WAC characterization of various areas comprised of both native and backfilled soils prior to the start of construction activities for silo waste processing facilities. The sampling design includes systematic and biased physical sampling throughout the areas defined above as well as real-time gamma measurements over the surface of the area where feasible. The real-time measurement data will be used for the total uranium WAC determination for exposed surface soil where high gamma background does not cause an interference. Biased sampling is also planned on a limited basis based on previous data indicating that a waste transfer pipe (within the K-65 trench) may have been the source of soil contamination. Biased sampling will also be performed on soil stockpiles in the areas using field radiological screening instruments. Under this PSP, only the small area where the waste transfer pipe intersects with the planned service road will be investigated. In case the initial sampling reveals above-WAC levels, a delineation sampling effort may also be performed under this PSP if necessary and will be documented in the form of a Field Change Notice document.

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Development of this PSP and initiation of sampling in the late Summer of 1998 is necessary to support the excavation of soils in the specific areas by determining whether the soils meet the OSDF WAC. To accomplish this, field sampling should generally precede the planned start of construction excavation by a minimum of approximately three months. The initial sampling in the late Summer of 1998 will involve Area A and Area B in order to assess the WAC status of soils prior to construction of the infrastructure road in the Spring of 1999. Characterization of the remaining areas is planned to occur during the Fall of 1998 through the Spring of 1999. The data generated under this PSP will be used in conjunction with the existing data set to: 1) demonstrate that these Area 7 soils do not exceed the WAC and may be bulk excavated for reuse as road fill soil in the Silos Project area or be placed in the OSDF or, 2) develop a plan to segregate potential above-WAC soil and/or RCRA characteristic soil.

1.2 BACKGROUND

This section describes the existing conditions in Area A through F and the proposed use of the land. The sampling approach for each area is described in Section 2.1.

1.2.1 Area A

Area A consists of a soil stockpile located in the east, central area of the Silos Project grounds. The source of the stockpile is: 1) soil excavated from the Vitrification Pilot Plant footprint in 1994 prior to construction of the foundation and soil excavated for installation of office trailers in the same area, and 2) soil excavated from the area previously occupied by the high and low nitrate containment pools. No other soils are known to have been placed on the stockpile. The stockpile was reconfigured to allow access for installation of overhead utility lines which created a ravine through the center of the pile. The stockpile has an approximate soil volume of 1,500 cubic yards. Historical data collected from the source area for these soils is further discussed in Section 1.3.

1.2.2 Area B

Area B consists of the path of the planned infrastructure road which encircles the Silos Project area. The construction of the infrastructure road will involve a cut and fill approach including excavation of existing soil and filling with borrow soil as needed to obtain the designed elevations. A portion of this area may have an existing cover of gravel which will be cored through for sampling purposes to collect the underlying, native soil as necessary. A 50-foot wide band encompassing the proposed road,

drainage ditches and electrical upgrades will be the focus of sampling with depths varying with the cut or fill design at several points along the road.

1.2.3 Area C

Area C is located west of Silo 3 and 4 and west of the proposed infrastructure road. The Silos Project plans to construct office trailers, a warehouse, substation, and parking area in this vicinity for Silo 3 support in the 2000 following WAC characterization. The area is currently used as a lay-down area consisting of both gravel and grassy areas. The area will be considered separately from the other areas due to additional WAC attainment characterization issues in this immediate area. Lead and chromium have been detected at elevated levels at one location in the general vicinity as discussed in Section 1.3.

1.2.4 Area D

Area D consists of several planned footprint areas for the following buildings or facilities:
K-65 Transfer Tank Area, Radon Control System, Silo 3 Stabilization Facility, Silo 3 container storage area, loading area and construction lay-down area. Most of these areas currently consist of undisturbed soil vegetated with grasses or gravel roadways. Excavations for foundations are planned for these facilities, with the exception of the lay-down area, and will require deeper characterization of soil for WAC. The proposed Transfer Tank Area consists partially of backfilled and compacted clay. The boring locations and sample depths for this area are summarized in Table B-1 in Appendix B.

1.2.5 Area E

Area E is a proposed storage and lay-down area located in the northeast sector of the Silos Project grounds and north of the High Nitrate Storage Tank. The area measures approximately 180 x 200 feet. Approximately 20 percent of the surface area consists of three small soil stockpiles which originated from the waste haul road excavation in 1997 as well as other unknown sources in 1996 and 1997. The stockpiled soil volume is estimated to contain approximately 150 cubic yards with a maximum height above grade of four feet. The majority of this area was formerly occupied by the modular high nitrate storage tank/pool which was dismantled in 1996. The proposed storage and lay-down area will be prepared by placement of a gravel/limestone subgrade.

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1.2.6 Area F

Area F consist of a grassy, rectangular area approximately 500 X 300 feet located south of the K-65 trench and east of Silos 1 and 2. In addition to the K-65 Stabilization Facility being proposed for this area, several ancillary buildings, access roads and lay-down areas for the facility are planned. The area is also proposed for the fabrication of the Radon Control System modules. In approximately 1994, the western portion of this area was used as an office and staging area which included placement of a gravel/stone base. This area was later covered by clay fill soil, re-graded and compacted using soil excavated from the new drainage ditch and storm water retention basin located southeast of Area F. The clay fill was designed to level the area and provide a compacted soil base in preparation for future construction. The southern portion of the area has been filled with up to four feet of clay with lesser amounts to the north. This area has been undisturbed since the fill material was placed and compacted into the area in 1996.

1.3 DETERMINATION OF WAC CONSTITUENTS OF CONCERN (COCS)

Consistent with the provisions for defining WAC COCs found in the SEP and the WACAP, existing analytical data and historical process knowledge have been used to define the WAC COCs for the Silos Project areas addressed in this PSP. The process utilized to develop the area-specific COC lists presented in Section 1.3.1 has been developed after considering the existing data set and what is known about the land use and the soil types comprising this portion of Area 7.

1.3.1 Selection of WAC COCs

The first step in the selection of COCs for the areas of interest was to evaluate the 18 soil contaminants for which a concentration-based WAC has been established (Table 3-1 of WACAP) for applicability to the area. To accomplish this evaluation, soil analytical data from within the study area was compiled on the WAC COCs using the Sitewide Environmental Database (SED). All of the SED data components, including live tables (containing data associated with both excavated and in-place soil) and frozen data subsets, were included in the SED data queries used to evaluate the soils. All of the existing analytical data collected from the area for the 18 COCs is presented in Table D-1 of Appendix D. The sample locations for the existing analytical data are presented in Appendix E.

The WAC COC screening process entailed the review of analytical data for the 18 COCs from within the Silos Project area (a portion of Area 7). Of the 18 WAC COCs, only total uranium and

technetium-99 have been detected in FEMP soils at concentrations above WAC or have analytical detection limits above the WAC. All of the detections of the other 16 WAC constituents are significantly below the WAC limit. However, two of the 16 constituents (4-nitroaniline and bis[(2-chloroisopropyl)]ether) have analytical detection limits above the actual WAC limit making a WAC determination for these two semivolatile compounds impractical. Based on the known levels of these constituents and the probable land use of the area during the production period, these two compounds are assumed to be below the WAC limit. Therefore, only uranium and technetium-99 were retained for further consideration through this first step of the COC selection process.

The second step in the COC selection process was to further evaluate the possibility of soil being present above the RCRA toxicity characteristic regulatory limits. The data review established lead and chromium having the potential to be above the RCRA leachability limit for soils located west of Silo 4. This potential exists due to lead and chromium sample results, collected near the bank of Paddys Run creek west of Silo 2 but well south of the construction area, which are above the twenty times rule value of 100 mg/kg (20 x the toxicity characteristic limit of 5 mg/L based on leachability) for lead and chromium. The results were 139 mg/kg and 115 mg/kg for lead and chromium, respectively, at the particular sample location west of Silo 2.

Based on the WAC COC screening process outlined above, the following constituents were selected for sampling under this PSP:

- Total uranium is retained as a WAC COC for the Silo's Project area soils based on the pervasive uranium contamination in the soils associated with the former production area. Elevated levels of uranium have been detected along the concrete-lined K-65 trench which contains a waste transfer pipe that carried the General Sump liquids to the Waste Pit Area during the production years.

- Technetium-99 is retained as a WAC COC based on one above-WAC detection for technetium-99 near the K-65 trench and the sensitivity associated with the final remediation level (FRL) being equal to the WAC level. Total uranium and technetium-99 will be sampled and analyzed from all locations in Area A through Area F under this PSP.

- Lead and chromium are selected as additional COCs for the immediate area west of Silo 4 referred to as Area C, selected sample locations in Area B west of Silos 1 and 2 and in selected soil stockpiles in Area E. This is due to the detection of chromium and lead concentrations at one location exceeding the twenty times rule in samples

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collected south of the Area C boundary. The RCRA characteristic waste determination for lead and chromium in each area will be made following completion of the sampling program outlined in this PSP. The sampling for lead and chromium in some of the Area E locations is due to the unknown origin of a portion of the soil stockpiles. Other areas to be characterized under this PSP have no history of RCRA wastes being stored or generated.

A summary of the historical data set of the four applicable COCs for the Silos Project areas is provided in Table 1-1 below.

TABLE 1-1

SUMMARY OF SELECTED WAC COC HISTORICAL DATA FOR SILOS PROJECT AREA

WAC COC	Historical Data Set (No. of Samples)	Mean Concentration	Minimum Concentration	Maximum Concentration	OSDF WAC
Total Uranium	340[a]	26.0 mg/kg	1.2 mg/kg	436.7 mg/kg	1,030 mg/kg
Technetium-99	111[a]	4.6 pCi/g	0.1 pCi/g	602 pCi/g	29.1 pCi/g
Lead	4[b]	9.8 mg/kg	7.9 mg/kg	13.2 mg/kg	5.0 mg/L
Chromium	7[b]	12.2 mg/kg	10.2 mg/kg	16.8 mg/kg	5.0 mg/L

[a]Sample set excludes silo berm data.
[b]Lead and chromium only applicable as COCs in Area C (west of Silo 4), a portion of Area B west of Silo 1 and 2, and a portion of Area E soil stockpiles.

1.4 SCOPE

This PSP presents a strategy for collecting WAC attainment data from a portion of Area 7 referred to as the Silos Project area utilizing a systematic approach for selecting sample locations as well as a biased approach near the K-65 trench. Real-time gamma measurement data will also be used to determine total uranium WAC attainment for surface soils where possible. Additionally, field radiological screening will be used on all soil cores/cuttings to select samples that exhibit beta/gamma field readings (see Section 2.2.3). The number of samples planned for collection in this PSP is based on previous sampling data from the areas and the historical land use or process knowledge. This PSP also includes a contingency for additional sampling if analytical data indicates a WAC exceedance for any of the four WAC COCs. If additional sampling is necessary, a variance form will be completed to define the additional sampling that is required to determine the specific above-WAC area of soil.

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The PSP does not address chemical or radiological characterization of debris within the soil pile or any other area. If debris is encountered during soil sample collection it will be excluded from the sample to the extent practical. The sampling efforts will focus on the soil component of the various areas.

Real-time radiological data measurements will be performed in all areas that are accessible with real-time equipment that do not present a direct radiation interference problem due to Silo 1 and 2. These measurements are intended to be used instead of the physical sample results on surface soils in accordance with the provision in the SEP and WACAP. In areas where gamma measurements are feasible, the data will be used in lieu of physical surface sample analysis for total uranium. The accessible ground surfaces will be monitored to determine patterns of radiological (gamma) activity using a mobile sodium iodide (NaI) detector (RTRAK) or High Purity Germanium (HPGe) detector to determine if the potential for a total uranium WAC exceedance exists. In areas where the RTRAK cannot access, HPGe measurements will be employed to the extent practical. The real-time program is discussed in Section 3.0.

Physical sample collection will be accomplished utilizing Geoprobe® core sampling and manual sampling methods. The samples will be analyzed for total uranium via an inductively-coupled plasma (ICP)/mass spectrometry method and technetium-99 by the gas-proportional counting method at an analytical support level (ASL) E and B, respectively by the FEMP onsite laboratory. Chromium and lead will also be analyzed at the onsite laboratory at ASL B by the ICP method. Selected samples may be split with the Ohio Environmental Protection Agency (OEPA) to support the agencies oversight role at the FEMP. All sampling and analysis activities performed by DOE shall be consistent with the requirements of the Sitewide CERCLA Quality Assurance Project Plan (SCQ). The sampling strategy is described in detail beginning in Section 2.2.

1.4.1 Key Project Personnel

The team members responsible for coordination of work in accordance with this PSP are listed in Table 1-2.

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TABLE 1-2

KEY PROJECT PERSONNEL 1733

Title	Primary	Alternate
Project Lead	Mark Cherry	Mike Frank
Field Sampling Lead	Mike Frank	Tom Buhrlage
Real-Time Lead	Joan White	Dale Seiller
Quality Assurance Contact	Reinhard Friske	Ervin O'Bryan
Data Management Contact	Susan Marsh	Kym Lockard
Analytical Lead	Bill Westerman	Grace Ruesink
Surveying Lead	Jim Schwing	John Deho
Waste Management	Sarah Alkire	Gary Young
Waste Acceptance Organization	Sue Lorenz	Linda Barlow
Health and Safety	Debra Grant	Lew Wiedeman

2.0 SAMPLING PROGRAM

2.1 SELECTION OF SAMPLE LOCATIONS

In accordance with the SEP and WACAP for the OSDF, the number of samples determined to adequately characterize the Silos Project soils in Area 7 is based on the current data set, the RI/FS sampling density, process knowledge of the area, and sampling density in previous soil stockpile sampling projects. This section describes the basis for the sample location selections in Areas A through F including the spatial arrangement and depth intervals.

Based on these requirements, approximately 210 samples will be collected from Areas A through F with additional samples collected if field beta/gamma readings indicate the potential for above-WAC total uranium levels (see Section 2.2.3). If real-time radiological (gamma) instruments (NaI and HPGe) detect total uranium at a level above 721 ppm or 928 ppm, respectively, during the ground surface scans, a physical sample(s) may be collected as part of delineation activities to vertically bound the contamination. The HPGe real-time instrumentation will be utilized to horizontally delineate above-WAC soil as referenced in Section 3.0.

The sections below describe the sampling approach for each of the six areas. The exact locations and designated sampling depth intervals are presented in Table B-1 of Appendix B. Surface soil samples are specified for Areas A through F for total uranium and technetium-99. However, the total uranium

analyses may not be performed if real-time measurements are sufficient to make the WAC determination in a given area.

At each designated sampling location, any existing gravel or granular road base materials on the surface will be excluded from sampling. In this case, the effective surface soil sample will begin at the top of the soil underlying these road base materials.

All samples collected from Areas A through F will be analyzed for total uranium and technetium-99, with the exception of surface samples that may not be collected or analyzed if real-time methods are used to determine WAG attainment. Samples collected from Area C, a portion of Area B, and stockpile locations in Area E will also be analyzed for lead and chromium.

2.1.1 Area A - Soil Stockpile

Area A consists of the soil stockpile located in the east, central portion of the Silos Project Area and northwest of the existing High Nitrate Tank. The number of samples planned for collection from the stockpile is based on recent stockpile sampling designs, specifically the sampling density relative to the volume of soil. A total of 16 samples have been selected for the Area A stockpile which is approximately 1,500 cubic yards. Eight soil borings will be completed on the pile with two biased sample intervals collected from each boring using a field radiological screening instrument (direct survey meter consisting of a beta-gamma probe with a rate meter). The two six-inch intervals having the highest radiological field screening result will be collected for laboratory analysis. Any other soil intervals that have above-background radiological screening levels will be collected for archive purposes. If no soil in a borehole exhibits above-background radiological readings then the random intervals included in Table B-1 of Appendix B will be collected. The eight borings are equally spaced over the pile. This screening process is described in detail in Section 2.2.3. For screening purposes, each soil boring will extend to the base of the pile to collect cores for radiological screening.

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2.1.2 Area B - Planned Path of Infrastructure Development (Road and Electrical)

Area B consists of the planned road encircling the existing and proposed Silos Project facilities and buildings. The existing soil in the pathway of this road will be characterized through surface and subsurface soil sampling dependent on the designed construction cut or fill depth in the designated sample area. At each cluster of boring locations along the proposed roadway, a sample boring will be completed in the centerline of the road and the centerline of each drainage ditch or berm, dependent on whether it is a cut or fill location and whether it is a disturbed or undisturbed soil area. If the boring location falls in a planned soil cut location that has been disturbed below the surface soil, then selected 6-inch intervals will be collected from the boring to the planned cut depth (e.g., a cut depth of three feet would result in the following sample intervals: 0-0.5', 1'-1.5', and 2.5'-3.0' interval). For sampling locations involving the planned addition of soil fill, then only a surface sample (0'-0.5') will be collected unless real-time methods are suitable as described in Section 3.0. The specific intervals to be sampled for other cut depths (ranging from zero to 3.5 feet) can be found in Appendix B.

Radiological screening of all soil collected from these sampling locations will also be performed as described in Section 2.2.3. Additional sampling for total uranium may be performed if the action level is reached during field screening.

For the southern portion of the road where the area has been covered with up to two feet of clean fill soil, the spatial pattern of sampling locations is approximately 200-foot intervals. For the remainder of the road, the distance between the clustered sample locations are approximately 100 feet due to more frequent historical use of this area including traffic and construction activities.

The three sampling locations at the intersection of the proposed roadway and the K-65 trench (waste transfer piping) were strategically located as biased sample locations due to the increased potential of soil contamination along the pipeline. Sampling will begin at these locations upon encountering the first soil underlying the existing road gravel or road base materials.

Three of the clustered sample locations and one biased sample location west of Silo 1 and 2 will be analyzed for total lead and chromium in addition to total uranium and technetium-99. These locations are identified in Figure 2-1 as B19, B20, B21, B22, B23, B24, and B72. The one biased location (B72) is located near a culvert pipe and manhole used for storm water runoff control. The assessment of the other locations is necessary due to the detection of lead and chromium above 100 mg/kg in a soil boring to the west near the bank of Paddys Run.

2.1.3 Area C - Silo 3 Trailer and Warehouse Area

Area C is located to the west of Silos 3 and 4 and outside of the planned infrastructure road. The spatial distribution of samples in this area is based on approximate 50-foot centers. The higher density sampling is necessary to ensure that sufficient samples are collected to adequately characterize the area for the lead and chromium RCRA characteristic waste determination. Twelve sample locations are designated for this area, all of which will involve surface soil sampling (0-0.5'). This area is the primary area to be sampled for lead and chromium in addition to total uranium and technitium-99.

Radiological screening of all soil collected from these sampling locations will also be performed as described in Section 2.2.3. Additional sampling for total uranium may be performed if the action level is reached during field screening.

2.1.4 Area D - Planned Silos Project Processing Facilities

Area D consists of four relatively large areas designated for the construction of the K-65 Transfer Tank Area, the Silo 3 Stabilization Facility and Superstructure, the Radon Control System (RCS) facility, and a Silo 3 construction lay-down area. Sample locations in these areas are generally spaced on approximately 100-foot centers or less. The sampling depths for each location are based on the planned excavation depth (four feet) in the general vicinity for construction purposes. A total of 11 deep boring locations (five feet depth) are positioned within the footprints of the K-65 Transfer Tank Area, the Silo 3 Stabilization Facility and Superstructure, and the RCS. These facilities are expected to require excavations to approximately four feet for construction of the foundations with the exception of the lay-down areas. The remaining sampling locations will be sampled at the surface (0-6 inches) due to shallow excavations, if any, required in these remaining portions of Area D.

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The sampling depth intervals for the 11 deep borings will involve collection of soil from selected six-inch intervals (0-0.5', 1'-1.5', 2.5'-3', and 4.5'-5') throughout each boring which is designed to collect more samples near the surface due to the higher potential for contamination. During collection of the soil cores from the deep borings, the soil will be classified by a geologist and recorded on a lithologic log for entry into the SED. The specific sampling intervals for the 11 deep borings are summarized in Table B-1 of Appendix B. The deep borings are also depicted in Figure 2-1 in the footprints of the planned process buildings.

Radiological screening of all soil collected from these sampling locations will also be performed as described in Section 2.2.3. Additional sampling for total uranium may be performed if the action level is reached during field screening.

2.1.5 Area E - Planned East Lay-down Area

Area E is an area measuring approximately 200' X 180' with 20 percent of the area covered by three small soil stockpiles four feet or less in height. A portion of the stockpiled soil originated from the haul road excavation. However, the remaining soil (less than 25 cubic yards) was placed in the area in 1996 and 1997 from an unknown origin.

A total of 11 sample boring locations were selected for this area, four of which are concentrated near the K-65 trench and pipeline that borders the southern boundary in order to conduct bias sampling in this suspect area. Five of the boring locations are located on the small soil stockpiles with one biased sample to be collected from each boring using a direct survey meter with a beta-gamma probe to determine the highest radiological reading, if any. If no interval exhibits above-background readings, then the pre-determined random intervals presented in Table B-1 will be used. An archive sample will be collected from any other interval that exhibits above-background field screening levels. Field radiological screening will be performed on soil collected from the entire pile thickness (approximately four feet) at each location. The remaining two boring locations are in areas of original grade and are spaced approximately 100 feet north of the K-65 trench. All samples collected from the Area E stockpile sample locations (E5, E6, E7, E10, and E11 on Figure 2-1) will be analyzed for total uranium, technitium-99, lead and chromium.

Radiological screening of all soil collected from these sampling locations will also be performed as described in Section 2.2.3. Additional sampling for total uranium may be performed if the action level is reached during field screening.

2.1.6 Area F - K-65 Stabilization Facilities

Since Area F largely consists of clay soil fill transferred from the retention basin area south of Area F, the soil sample borings selected for the area will extend through the fill (estimated one to four feet) for radiological field screening purposes (Section 2.2.3). Sixteen boring locations involving surface soil sampling (0-6 inches) are specified, with deeper samples collected if necessary based on field screening. Four deep boring locations (five feet) are specified for Area F which are within the footprint for the K-65 Stabilization Facility. The surface sample locations are spatially located on approximately 100-foot centers. The sampling depth intervals for the four deep borings will involve collection of soil from selected six-inch intervals (0-0.5', 1'-1.5', 2.5'-3', and 4.5'-5') throughout each boring.

The single above-WAC detection for technetium-99 was located adjacent to the K-65 trench which runs along the northern boundary of Area F. This area of above-WAC soil will not be disturbed or excavated during any Silos Project activities.

Radiological screening of all soil collected from these sampling locations will also be performed as described in Section 2.2.3. Additional sampling for total uranium may be performed if the action level is reached during field screening.

2.2 SAMPLE COLLECTION METHODS

Samples will be collected using the Geoprobe® Model 5400 in accordance with procedure EQT-06, *Geoprobe® Model 5400-Operation and Maintenance* or using manual methods as specified in procedure SMPL-01, *Solids Sampling*. The Geoprobe® sampling system will be used for sample locations that will support the safe operation of the Geoprobe® vehicle. Hand augering or direct-push liner sampling will be conducted in all other areas (e.g., side slopes of stockpile). At each sampling location, the surface vegetation within a 6-inch radius of the sample point will be removed using a stainless steel trowel or by hand with clean nitrile gloves while taking care to minimize the removal of any soil.

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All soil samples should be collected from a discrete 6-inch depth interval and recorded as such on the field documentation. In addition to the planned sample depth intervals included in Appendix B, additional samples may be necessary dependent on the soil fill conditions at the deep boring locations as described below. Upon reconfiguring the soil stockpile (Area A), the random sample depths will be determined based on the new soil stockpile height determined by a land survey.

All borings will be completed to the base of the Area A soil pile for field radiological screening purposes and possible collection of biased samples (see Section 2.2.3). If refusal or resistance is encountered during the soil borings in any area, up to two additional borings within a one-foot radius of the original point should be attempted in order to collect the specified samples. ~~Additionally, other boreholes may be attempted if necessary at new locations on the pile if refusal is encountered at the original location. The Field Sampling Lead will determine if the location should be moved several feet to collect the planned samples.~~

At each designated sampling location, any existing gravel or granular road base materials on the surface will be excluded from sampling. In this case, the effective surface soil sample will begin at the top of the soil underlying these road base materials.

Fifteen deep borings (5 feet deep) are planned where foundations may be constructed. The sampling intervals for all boring locations are described in Section 2.1 and included in Appendix B.

2.2.1 Geoprobe® Methods

A Geoprobe® Macro-core sampler will be advanced in approximately 12-42 inch increments to collect the target depth intervals for the soil samples specified in Appendix B. The Macro-core collects a 1.5-inch diameter soil core. Multiple cores may be collected at each sampling location (not to exceed one foot apart) to obtain sufficient sample volume for analysis if complete sample recovery is not obtained. Borehole collapse will be monitored during core sampling to ensure minor sidewall slough is accounted for during coring and sample collection. If significant borehole collapse occurs, a closed tube piston-type core sampler (Macro-core) will be employed which is closed during advancement to the sample interval, then opened to collect the discrete interval of interest. Both core sampling methods will utilize an expendable plastic liner insert in which the soil core is recovered. All holes will be backfilled with bentonite grout pellets and hydrated.

2.2.2 Manual Sampling Methods

If Geoprobe® accessibility is not possible (e.g., side slopes), soil samples will be collected using a hand auger (typically 3-inch diameter) in accordance with SMPL-01, *Solids Sampling*. The hand auger will be advanced in approximately six-inch increments down to the target depth intervals for the soil samples specified in Appendix B. As with core sampling, multiple holes at one sampling location (not to exceed one foot apart) may have to be augered to obtain sufficient volume for laboratory analyses, particularly for split sampling intervals. Borehole collapse will be monitored during core sampling to ensure sidewall slough is accounted for during augering and sample collection. The borehole will be manually collapsed following sample collection to eliminate the possibility of injury to workers. For surface samples, a direct-push liner (six-inch length) may be used to collect the sample from the 0-6 inch interval. Surface samples may be required as a result of real-time radiological surveys as discussed in Section 3.0. All holes deeper than six inches will be backfilled with bentonite grout pellets and hydrated.

2.2.3 Biased Sample Selection Based On Field Screening

All soil cores, or soil cuttings in the case of augering, will be radiologically surveyed to determine if total uranium is present that may be near the WAC. A beta/gamma probe and survey meter will be used by the radiological technician to survey or frisk the soil being extracted from the boring or sampling locations. The beta/gamma survey must be done in a low-background area (e.g., vehicle or building) to be an effective screening method for sample selection. Additionally, any concrete and debris will be removed from the samples to the extent practical prior to screening. Any beta/gamma reading ≥ 450 ccpm (action level) will result in the collection of a biased sample for total uranium analysis. When this action level is detected, the highest six-inch interval of soil (or encompassing the highest reading) being surveyed will be collected for analysis. It is possible to collect two or more adjoining six-inch intervals if each interval exceeds the action level of 450 ccpm. If the entire soil interval is found to be < 450 ccpm then no high-biased sample will be collected for laboratory analysis, however intervals will be collected for archival purposes if they exhibit above-background levels.

When a sample is collected based on the field screening action level, then the six-inch interval above and below will be containerized and placed in archival storage until the WAC report is finalized and

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approved. Also, if any sample contains above-background radiological levels based on field screening, then a six-inch interval sample will be collected for archive purposes. The Field Sampling Lead may designate additional soil intervals for archival in the case of several elevated readings.

If above-background field readings are obtained in the last planned sample interval of a boring, then the boring will be advanced deeper to determine the vertical extent of contamination. In this event, the Field Sampling Lead will provide direction on samples to be collected which will be documented in a Variance/Field Change Notice form.

2.2.4 Soil Sample Processing and Analysis

The Geoprobe® soil core(s) will be laid on clean plastic and the appropriate sample increments, as defined in Appendix B, will be separated from the core to obtain the necessary samples. Any debris (i.e., wood, concrete, metal) contained in a sample interval will excluded from the sample in the field. If one core provides the volume of soil necessary for the laboratory analysis (including split samples), the sample will be placed directly into a sample container(s) and sealed. For manual sampling locations, the soil cuttings collected from the target sample interval will be placed in a clean tray prior to transfer to the sample container. Sample volume and analysis information is summarized in Table 2-1.

TABLE 2-1

SAMPLING AND ANALYTICAL REQUIREMENTS

Analyte	Sample Matrix	Sample Type	Preservative	Lab	ASL	Holding Time	Container
Total Uranium[a] & Technetium-99[b] (TAL A)	Solid	Grab	None	On-site	E[c] B (Technetium-99)	6 Months	500 mL glass or plastic container
Total Uranium (TAL B)	Solid	Grab	None	On-site	E[c]	6 Months	500 mL glass or plastic container
Chromium/Lead (TAL C)	Solid	Grab	Cool, 4C	On-site	B	6 Months	120 mL glass or plastic container
Alpha/Beta Screen (only for OEPA samples)*	Solid	Grab	None	On-site	B	6 months	120 mL plastic (50 grams)

[a]Inductively Coupled Plasma/Mass Spectrometry
[b]Gas Proportional Method
[c]ASL E due to higher detection limit (approximately 100 mg/kg); same lab QA/QC as ASL B applies to the ASL E.

Note: *Additional sample volume will be required at select locations to provide split samples for the OEPA. Screening samples (120 mL container with 50 grams) for alpha/beta screening will be required for each OEPA sample interval collected.

If the sample is selected to be split with the OEPA, then the soil core(s) or cuttings will be homogenized (except for semivolatile analytes) and split according to Section 6.6 of SMPL-21, *Collection of Field Quality Control Samples*, one portion for DOE analysis, the other for OEPA analysis.

2.3 SAMPLE IDENTIFICATION

All physical soil samples collected for laboratory analysis will be assigned a unique sample identifier (customer number), as listed in Appendix B. Fernald Analytical Customer Tracking System (FACTS) identification numbers will be utilized by the laboratory to track the sample through the analytical and data review process. The field team will record the sample identifiers used by the OEPA and correlate them to the split sample submitted to the offsite laboratory. All FEMP soil samples collected for laboratory analysis will be assigned a unique sample identifier, as follows:

A7-xx-y-R (or RM)

Where:

A7	=	Sample collected from part of Area 7 soil area
xx	=	Area number A through F (see Figure 2-1) and sample location number (e.g., C12).
y	=	Depth code for sample interval collected. A "1" represents 0-0.5 feet, a "2" represents 0.5-1.0 feet, a "6" represents 3.5-4.0 feet and so on.
R	=	Radiological Analyte(s); "AB" will be used for any alpha/beta screening samples collected. A "V" will also be used as a suffix for any archival samples collected.
M	=	Metal (lead and chromium) analyses A "V" will also be used as a suffix for any archival samples collected.

Therefore, sample identification number A7-C4-3-R is from boring location #4 in Area C from the 1.0-1.5 feet depth interval.

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If a biased sample is collected based on field radiological screening (survey meter), then a "B" will be inserted in the sample ID as follows: A7-C4-3B-R.

All sample identification numbers for planned samples are shown in Appendix B, Table B-1.

2.4 EQUIPMENT DECONTAMINATION

Sampling equipment will be decontaminated before transport to the sampling site. Additionally, equipment that comes into contact with sample media at the target sample interval must be decontaminated. The decontamination of equipment that comes into contact with the sample will include the core sampler cutting shoe, hand auger buckets, and other sample collection tools. All decontamination will be a Level II decontamination as specified in SMPL-01, *Solids Sampling*. The core barrel portion of the core sampler will be wiped down between sample intervals and locations to remove visible soil or material. Decontamination of the core barrel will not be necessary because the core barrel will not come into contact with the sample when using a liner insert.

2.5 SAMPLE HANDLING AND SHIPPING

Samples will be processed in accordance with SMPL-01, *Solids Sampling*, for ensuring that samples are documented properly and custody and sample integrity are maintained. All samples will be transported from the field to the sample processing laboratory within the on-site laboratory.

3.0 REAL-TIME INSTRUMENTATION SOIL WAC EXCEEDANCE APPROACH

Real-time instrumentation consists of two types of gamma detectors: the Sodium Iodide (NaI) RTRAK/RSS systems and the High Purity Germanium (HPGe) systems. They will be used to carry out the approach for identifying and delineating soil WAC-exceedance areas as presented in the document 20701-RP-0006 User Guidelines, Measurement Strategies, and Operational Factors for Deployment of In-Situ Gamma Spectrometry at the Fernald Site (DOE 1998b). The approach is based on total uranium driving the WAC exceedance decision process. Where real-time measurements and physical sampling are required in the same area, real-time measurements will be conducted first.

The approach is carried out in three phases: the Detection Phase, the Confirmation Phase and the Delineation Phase. In the Detection Phase, the RTRAK/RSS or the HPGe detection systems will be

used to provide as close to complete coverage of the area, as possible. In the Confirmation Phase the HPGe systems will be used to confirm the RTRAK/RSS or HPGe Detection Phase results for potential WAC exceedance. In the Delineation Phase the HPGe systems will identify the horizontal boundary of the WAC exceedance area for excavation and segregation.

3.1 DETECTION OF POTENTIAL SOIL WAC EXCEEDANCE AREAS USING THE RTRAK/RSS

The RTRAK/RSS will be used to provide as close to 100 percent coverage as possible. The acquisition time will be 4 seconds with data collected at a maximum speed of 1 mile per hour as assisted by the on-board Global Positioning System (GPS). This results in a 9 m^2 field of view. The detector height is at the fixed 31 cm above the ground.

RTRAK/RSS passes will be in a back and forth pattern, if possible. For the RTRAK, overlapping passes are achieved by placing the innermost RTRAK tires in the former outermost RTRAK tire track from the previous RTRAK pass, achieving an approximate 0.4 meter overlap. For the RSS, the 0.4 meter overlap will be achieved visually. Stakes or other markers may be used to stay on track.

The RTRAK/RSS trigger level requiring confirmation by the HPGe for total uranium will be 721 ppm based on individual RTRAK measurements.

3.2 DETECTION OF POTENTIAL SOIL WAC EXCEEDANCE AREAS USING THE HPGE

The HPGe detector system may be used to perform a surface scan of areas where the RTRAK/RSS cannot gain access due to topography or excessive moisture conditions, or if the RTRAK/RSS systems are out of service. Examples of inaccessible topographic conditions include narrow ditches and deep excavations (with slopes inaccessible to the RTRAK/RSS detector). The decision to use the HPGe systems will be made by the Real-Time Lead.

If the HPGe is used in place of the RTRAK/RSS for surface scanning, then a triangular grid will be established with minimal overlap of measurement areas achieving a 99.1 percent coverage. This grid pattern results in the collection of approximately 43 measurements per acre. A detector height of 1 meter and an acquisition time of 5 minutes will be used.

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The HPGe surface scan trigger level requiring further delineation by HPGe for total uranium will be 400 ppm total uranium. An action level of 400 ppm has been established since WAC exceedance areas larger than 7.1 m^2 can be detected at a 1 meter detector height if they have a concentration greater than 400 ppm total uranium.

HPGe measurements will be accompanied by northing and easting coordinates determined by the GPS at each measurement location. One duplicate HPGe measurement will be collected for each 20 HPGe measurements performed. The duplicate will be collected immediately after the measurement being collected and will be the same detector height and at the same acquisition time.

3.3 CONFIRMATION OF POTENTIAL SOIL WAC EXCEEDANCE AREAS USING THE HPGE

Confirmation of the presence of potential above-WAC concentrations of soil for total uranium will be conducted on Detection Phase RTRAK/RSS measurement locations equal to or above 721 ppm total uranium and for Detection Phase HPGe measurement locations equal to or above 400 ppm total uranium. Since the RTRAK/RSS GPS location represents the location at the end of the 4 second acquisition time, the location of maximum activity within the field of view will be further identified in the field using a hand-held instrument such as a frisker. In like manner, since the HPGe Detection Phase measurement taken at 1 meter detection height has a large field of view, the location of maximum activity will be further identified in the field using a hand-held instruments such as a frisker. The confirmation measurement will be made at this refined location, and a new GPS location acquired. No duplicate is required for the confirmation HPGe measurement.

HPGe confirmation measurements will be made using detector heights of both 31 cm and 15 cm with an acquisition time of 5 minutes. Use of both 31 cm and 15 cm for the HPGe detector height provides the fields of view of about 20 m^2 and 3 m^2, respectively, bracketing the 9 m^2 field of view of the RTRAK/RSS. If either measurement exceeds a HPGe trigger level of 928 ppm, then the area of the above-WAC contamination will be delineated with the HPGe. If the HPGe trigger level of 928 ppm is not exceeded by the HPGe results, no further HPGe measurements are needed.

3.4 DELINEATION OF ABOVE-WAC SOIL AREAS USING THE HPGE

The HPGe system will be used to delineate the horizontal boundaries of the confirmed WAC exceedance soils. For delineation, HPGe measurements will be made at a 15 cm detector height with

an acquisition time of 5 minutes on a 2 meter triangular grid covering the entire area indicated by the HPGe confirmation measurements, if possible. The radius of the field of view is 1.0 meter for a 15 cm detector height, therefore, a 2 meter grid spacing has no overlap between adjacent fields of view.

HPGe delineation measurements will be accompanied by northing and easting coordinates determined by the GPS at each measurement location. One duplicate will be collected for each 20 delineation HPGe measurements performed. The duplicate will be collected immediately after the measurement being collected and will be the same detector height and at the same acquisition time.

3.5 SURFACE MOISTURE MEASUREMENTS

Surface moisture readings will be collected with a direct moisture measurement tool prior to collection of gamma readings, if possible. The moisture data will be used to correct the RTRAK/RSS and HPGe data from wet weight to dry weight equivalents to compensate for the effects of moisture content on gamma attenuation in the soil.

Moisture readings must be collected within 8 hours of the gamma readings or more frequently if moisture conditions change or are expected to change. Additional field conditions, such as weather, will be noted on the applicable electronic worksheet.

Soil moisture readings will be collected on the surface soil at each HPGe location. If the RTRAK/RSS is used, soil moisture readings will be collected at the rate of two per acre. The two measurements will be averaged together to yield an average moisture content for the acre.

More than two moisture measurements may be collected if differences in the surface moisture content is suspected. If more than two moisture measurements are collected, and they are similar in moisture content, they can be averaged together to make one average moisture measurement for the acre. If more than two moisture measurements are collected and they indicate significant differences in the moisture content, the moisture measurements will not be averaged. In this case, separate RTRAK/RSS runs will be collected and the specific area moisture measurement applied to specific RTRAK/RSS runs.

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When using the HPGe, one surface moisture measurement will be collected and recorded at each HPGe measurement location.

If conditions prevent the use of the surface moisture gauge, a soil moisture core will be collected from 0-46 inches using a plastic or stainless steel liner and submitted to the FEMP on-site laboratory for percent moisture analysis only (no density). Liner ends will be capped and sealed immediately after moisture core collection. The percent moisture information will be used to correct the gamma measurements to dry weight equivalents.

3.6 HPGe Measurement Identification

The HPGe measurement numbering form will be comprised of a prefix designating the area name (A7 for Area 7), followed by Area letter (A through E), followed by the sequential measurement number beginning with "1", followed by a "G" designating the type of measurement ("G" for gamma). A "D" will be used to designate the duplicate measurements. For example:

> *A7-C1-G-D* is the first gamma reading taken in Area C as identified in Figure 2-1 and is a duplicate measurement.

RTRAK/RSS measurement numbering will be comprised of a prefix designating the area name (A7 for Area 7) followed by the Area Letter (A through E), followed by the batch number. For example:

> A7-C-batch number is the next sequential batch number in the RTRAK/RSS data base taken in Area C as identified in Figure 2-1.

4.0 LABORATORY SAMPLE PREPARATION

Physical samples collected for laboratory analysis will be prepared in a consistent manner. Lead and chromium samples will be prepared and analyzed in accordance with SW-846 requirements by the onsite laboratory. For the total uranium and technetium-99 analysis, the FEMP onsite laboratory will, at a minimum, meet the following guidelines for sample preparation:

1) All sample material (including any organic matter) will be removed from the sample container, weighed, and recorded. The analyst performing this step will describe the appearance of the sample.

2) All sample material will be dried at 105° to 112° C for a minimum of 8 hours to constant weight.

3) The percent moisture content of the sample will be calculated and recorded.

4) The entire sample will then be ground until all the material passes through a one millimeter sieve.

5) The sample will then be mixed by hand or machine.

6) The necessary aliquot will be removed for analysis and the remaining sampled material archived.

5.0 QUALITY ASSURANCE/QUALITY CONTROL REQUIREMENTS

Sampling events will follow Quality Assurance/Quality Control (QA/QC) protocol as established in Section 4 of the SCQ.

5.1 FIELD QUALITY CONTROL SAMPLES, ANALYTICAL REQUIREMENTS AND DATA VALIDATION

No field quality control samples will be collected under this sampling program. All sampling and laboratory analyses will be performed at Analytical Support Level (ASL) B or E as specified in Table 2-1. Ten percent of the data will be validated to ASL B (technetium-99, lead and chromium) or ASL E (total uranium).

The following DQOs have been identified as applicable to this project: SL-048, Revision 1, "Delineating the Extent of Constituents of Concern in Pre-Design Investigations and Remediation Sampling (WAC) and SL-051 (Revision 1), "Excavation Monitoring for Total Uranium Waste Acceptance Criteria." An uncontrolled copy of the supporting DQO SL-048 is located in Appendix A.

5.2 PROJECT-SPECIFIC PROCEDURES AND MANUALS

To assure consistency and data integrity, field activities in support of the PSP will follow the requirements and responsibilities outlined in controlled procedures and manufacturers' operational manuals. Applicable procedures and manuals include:

SMPL-01, *Solids Sampling*
SMPL-21, *Collection of Field Quality Control* 766-S-1000

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EQT-06, *Geoprobe® Model 5400 - Operation, Maintenance, and Calibration*
EQT-05, *Geodimeter® 4000 Survey System - Operation, Maintenance, and Calibration.*
EQT-22, *Characterization of Gamma Sensitive Detectors*
EQT-23, *Operation of ADCAM Series Analyzers With Gamma Sensitive Detectors*
EQT-30, *Operation of the Radiation Tracking Vehicle Sodium Iodide Detection System*
EQT-32, *Troxler 3440 Series Surface Moisture/Density Gauge-Calibration, Operation, and Maintenance*
EQT-33, *Real-time Differential Global Positioning System Operation*
EQT-34, *Operation of the Radiation Scanning System [RSS].*
Sitewide CERCLA Quality Assurance Plan (SCQ)

5.3 PROJECT REQUIREMENTS FOR INDEPENDENT ASSESSMENTS

The SCEP project management has ultimate responsibility for the quality of the work processes and the results of the sampling activities covered by this PSP. The FEMP QA organization will conduct independent assessments of the work process and operations to assure the quality of performance. Assessment will encompass technical and procedural requirements of this PSP and the SCQ. Independent assessment will be performed by conducting surveillance. As a minimum, one surveillance will be conducted during implementation of this PSP, consisting of monitoring/observing on-going project activity and work areas to verify conformance to specified requirements. The surveillance will be planned and documented according to Section 12.3 of the SCQ.

5.4 IMPLEMENTATION OF FIELD CHANGES

If field conditions require changes or variances, the Field Sampling Lead must obtain written approval (electronic mail is acceptable) from the Project Lead, the Silos Project lead, and QA before the changes may be implemented. Changes to the PSP will be noted in the applicable field activity logs and on a Variance Request/Field Change Notice Form (VR/FCN). QA must receive the completed VR/FCN, which includes the signatures of the Project Sampling Lead, Project Lead, and the QA Representative, within 7 working days of the granting of the verbal approval.

Sampling locations will be surveyed and staked prior to field sampling. In the event a location must be moved, then a relocation of three feet or less from the original point is permitted. A Variance/Field Change Notice will be completed for points moved in excess of three feet.

6.0 DISPOSITION OF WASTES

During completion of sampling activities, technicians will generate contact and decontamination waste. Following completion of sampling, the technicians will place contact wastes into properly labeled bags, and drums if necessary, and dispose of it according to appropriate FEMP waste management policies. Excess soil generated from the soil pile will be placed back into the borehole it originated from. Decontamination water will be discharged based on direction from the waste management contact via the FEMP Wastewater Discharge Request Form. The Waste Management representative will complete a waste management plan including a Material Segregation and Containerization Criteria (MSCC) form and a Project Waste Identification Disposition (PWID) form prior to the start of work, if necessary, and field personnel will be briefed to the plan. The Waste Management representative will also coordinate delivery of waste containers and facilitate movement of containers.

7.0 HEALTH AND SAFETY

The Health & Safety Lead, Field Sampling Leads, and team members will assess the safety of performing sampling activities in the Silos Project Area. This will include vehicle positioning limitations, underground utilities, fall hazards, and vehicle stability if Geoprobe work is performed on slopes.

Technicians will conform to precautionary surveys performed by personnel representing the Radiological Control, Safety, and Industrial Hygiene organizations. Concurrence with applicable safety permits (indicated by the signature of each field team member assigned to this project) is expected by each team member in the performance of their assigned duties.

The Field Sampling Lead will ensure that each technician performing sampling related to this project has been trained to the relevant sampling procedures including safety precautions. Technicians who do not sign project safety and technical briefing forms will not participate in the execution of sampling activities related to the completion of assigned project responsibilities. A copy of applicable safety permits/surveys issued for worker safety and health will be posted at each sample location area.

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8.0 DATA MANAGEMENT

A data management process will be implemented so information collected during the investigation will be properly managed following completion of the field activities. As specified in Section 5.1 of the SCQ, sampling teams will describe daily activities on the Field Activity Log sufficient for the sampling team to reconstruct a particular situation without reliance on memory. Sample Collection Logs will be completed according to instructions specified in Appendix B of the SCQ.

All field measurements, observations, and sample collection information will be recorded as applicable on the Sample Collection Log, the Field Activity Log, and the Chain of Custody/Request for Analysis Form as required. The method of sample collection will be specified in the Field Activity Log. Samples will be assigned a unique sample identifier, as listed in Appendix B. Refer to Section 2.5 for a description of the sample identifiers to be used. This unique sample identifier will appear on the Chain of Custody/Request for Analysis and will be used to identify the sample during analysis, data entry, and data management.

Technicians will review all field data for completeness and accuracy and then forward the data package to the Data Quality organization for final review. The field data package will be filed in the records of the Environmental Monitoring project under project number 20500-PSP-01.

The Data Management organization will perform data entry into the Site-wide Environmental Database. Field logs will maintained in loose-leaf form during the field recording activities. Analytical data from the laboratory will be reviewed by the Project Lead prior to entry or transfer of the data into the SED from the FACTS database. The analytical data validation requirements are outlined in Section 5.1.

APPENDIX A

DATA QUALITY OBJECTIVE
SL-048

Note: The attached DQO is for informational purposes only. Refer to controlled copies for most current revision.

APPENDIX A

DATA QUALITY OBJECTIVE
SL-048

**Note: The attached DQO is for informational purposes only.
Refer to controlled copies for most current revision.**

Control Number _____

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Fernald Environmental Management Project

Data Quality Objectives

Title: Delineating the Extent of Constituents of Concern in Pre-design Investigation and Remediation Sampling

Number: SL-048

Revision: 3

Effective Date: June 17, 1998

Contact Name: Eric Kroger

Approval: (signature on file) Date: 6/17/98
William D. Kelley
DQO Coordinator

Approval: (signature on file) Date: 6/17/98
J.D. Chiou
SCEP Project Director

Rev. #	0	1	2	3	4	5	6
Effective Date:	9/19/97	10/3/97	4/15/98	6/17/98			

DATA QUALITY OBJECTIVES
Delineating the Extent of Constituents of Concern in Pre-design Investigation and Remediation Sampling

Members of Data Quality Objectives (DQO) Scoping Team
The members of the DQO team include a project lead, a project engineer, a field lead, a statistician, a lead chemist, a sampling supervisor, and a data management lead.

Conceptual Model of the Site
Media is considered contaminated if the concentration of a constituent of concern (COC) exceeds the final remediation levels (FRLs). The extent of specific media contamination was estimated and published in the Operable Unit 5 Feasibility Study (FS). These estimates were based on kriging analysis of available data for media collected during the Remedial Investigation (RI) effort and other FEMP environmental characterization studies. Maps outlining contaminated media boundaries were generated for the Operable Unit 5 FS by overlaying the results of the kriging analysis data with isoconcentration maps of the other constituents of concern (COCs), as presented in the Operable Unit 5 RI report, and further modified by spatial analysis of maps reflecting the most current media characterization data. A sequential remediation plan has been presented that subdivides the FEMP into seven construction areas. During the course of remediation, areas of specific media may require additional characterization so remediation can be carried out as thoroughly and efficiently as possible. As a result, additional sampling may be necessary to accurately delineate a volume of specific media as exceeding a target level, such as the FRL or the Waste Attainment Criterion (WAC). Each individual Project-Specific Plan (PSP) will identify and describe the particular media to be sampled.

1.0 Statement of Problem

If the extent (depth and/or area) of the media COC contamination is unknown, then it must be defined with respect to the appropriate target level (FRL, WAC, or other specified media concentration).

2.0 Identify the Decision

Delineate the horizontal and/or vertical extent of media COC contamination in an area with respect to the appropriate target level.

3.0 Inputs That Affect the Decision

Informational Inputs - Historical data, process history knowledge, the modeled extent of COC contamination, and the origins of contamination will be required to establish a sampling plan to delineate the extent of COC contamination. The

desired precision of the delineation must be weighed against the cost of collecting and analyzing additional samples in order to determine the optimal sampling density. The project-specific plan will identify the optimal sampling density.

Action Levels - COCs must be delineated with respect to a specific action level, such as FRLs and On-Site Disposal Facility (OSDF) WAC concentrations. Specific media FRLs are established in the OU2 and OU5 RODs, and the WAC concentrations are published in the OU5 ROD. Media COCs may also require delineation with respect to other action levels that act as remediation drivers, such as Benchmark Toxicity Values (BTVs) and As Low As Reasonably Achievable (ALARA) levels.

4.0 The Boundaries of the Situation

Temporal Boundaries - Sampling must be completed within a time frame sufficient to meet the remediation schedule. Time frames must allow for the scheduling of sampling and analytical activities, the collection of samples, analysis of samples and the processing of analytical data when received.

Scale of Decision Making - The decision made based upon the data collected in this investigation will be the extent of COC contamination at or above the appropriate action level. This delineation will result in media contaminant concentration information being incorporated into engineering design, and the attainment of established remediation goals.

Parameters of Interest - The parameters of interest are the COCs that have been determined to require additional delineation before remediation design can be finalized with the optimal degree of accuracy.

5.0 Decision Rule

If existing data provide an unacceptable level of uncertainty in the COC delineation model, then additional sampling will take place to decrease the model uncertainty. When deciding what additional data is needed, the costs of additional sampling and analysis must be weighed against the benefit of reduced uncertainty in the delineation model, which will eventually be used for assigning excavation, or for other purposes.

6.0 Limits on Decision Errors

In order to be useful, data must be collected with sufficient areal and depth coverage, and at sufficient density to ensure an accurate delineation of COC concentrations. Analytical sensitivity and reproducibility must be sufficient to differentiate the COC concentrations below their respective target levels.

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Types of Decision Errors and Consequences

Decision Error 1 - This decision error occurs when the decision maker determines that the extent of media contaminated with COCs above action levels is not as extensive as it actually is. This error can result in a remediation design that fails to incorporate media contaminated with COC(s) above the action level(s). This could result in the re-mobilization of excavation equipment and delays in the remediation schedule. Also, this could result in media contaminated above action levels remaining after remediation is considered complete, posing a potential threat to human health and the environment.

Decision Error 2 - This decision error occurs when the decision maker determines that the extent of media contaminated above COC action levels is more extensive than it actually is. This error could result in more excavation than necessary, and this excess volume of materials being transferred to the OSDF, or an off-site disposal facility if contamination levels exceed the OSDF WAC.

True State of Nature for the Decision Errors - The true state of nature for Decision Error 1 is that the maximum extent of contamination above the FRL is more extensive than was determined. The true state of nature for Decision Error 2 is that the maximum extent of contamination above the FRL is not as extensive as was determined. Decision Error 1 is the more severe error.

7.0 Optimizing Design for Useable Data

7.1 Sample Collection

A sampling and analytical testing program will delineate the extent of COC contamination in a given area with respect to the action level of interest. Existing data, process knowledge, modeled concentration data, and the origins of contamination will be considered when determining the lateral and vertical extent of sample collection. The cost of collecting and analyzing additional samples, will be weighed against the benefit of reduced uncertainty in the delineation model. This will determine the sampling density. Individual PSPs will identify the locations and depths to be sampled, the sampling density necessary to obtain the desired accuracy of the delineation, and if samples will be analyzed by the on-site or off-site laboratory. The PSP will also identify the sampling increments to be selectively analyzed for concentrations of the COC(s) of interest, along with field work requirements. Analytical requirements will be listed in the PSP. The chosen analytical methodologies are able to achieve a detection limit capable of resolving the COC action level. Sampling of groundwater monitoring wells may require different purge requirements than those stated in the SCQ (i.e., dry well definitions or small purge volumes). In order to accommodating sampling of wells that may go dry prior to completing purging of three well volume, attempts to sample the

monitoring wells will be made 24 hours after purging the well dry. If, after the 24 hour period, the well does not yield the required volume, the analytes will be collected in the order stated in the applicable PSP until the well goes dry. Any remaining analytes will not be collected. In some instances, after the 24 hour wait the well may not yield any water. For these cases, the well will be considered dry and will not be sampled.

7.2 COC Delineation

The media COC delineation will use all data collected under the PSP, and if deemed appropriate by the Project Lead, may also include existing data obtained from physical samples, and if applicable, information obtained through real-time screening. The delineation may be accomplished through modeling (e.g. kriging) of the COC concentration data with a confidence limit specific to project needs that will reduce the potential for Decision Error 1. A very conservative approach to delineation may also be utilized where the boundaries of the contaminated media are extended to the first known vertical and horizontal sample locations that reveal concentrations below the desired action level.

7.3 QC Considerations

Laboratory work will follow the requirements specified in the SCQ. If analysis is to be carried out by an off-site laboratory, it will be a Fluor Daniel Fernald approved full service laboratory. Laboratory quality control measures include a media prep blank, a laboratory control sample (LCS), matrix duplicates and matrix spike. Typical Field QC samples are not required for ASL B analysis. However the PSPs may specify appropriate field QC samples for the media type with respect to the ASL in accordance with the SCQ, such as field blanks, trip blanks, and container blanks. All field QC samples will be analyzed at the associated field sample ASL. If collected, the frequency of field QC sampling is as follows:

Duplicate samples will be taken at a minimum of one per 20 samples. Rinsates will be performed at a minimum of one per 20 samples or one per 20 field sampling tools that are re-used. Trip blanks will be taken at a minimum of one per shipping container when analyzing for volatile organic compounds (VOCs). For VOCs, container blanks will be taken at a minimum of one per Area and Phase per container type (i.e. stainless steel core liner/plastic core liner/Geoprobe tube) when using uncertified containers. Field blanks are not necessary for soil metal analysis, as it is unlikely in ambient field conditions to have metals cross contamination. However, the potential of cross contamination with semi-volatile organic compounds (SVOCs) is higher, therefore soil samples being analyzed for SVOCs may also require associated field blanks to be collected and analyzed. If collected, field blanks will be taken at a minimum of one per 20 soil samples.

Per the Sitewide Excavation Plan, the ASL and data validation requirements for soil and field QC samples collected in association with this DQO are as follows:

- If physical samples are analyzed for Pre-design Investigations and/or Pre-certification delineations, 100% of the data will be analyzed per ASL B requirements. 90% of the data will require only a Certificate of Analysis, the other 10% will require the Certificate of Analysis and all associated QA/QC results, and will be validated to ASL B.

- If samples are analyzed for WAC Attainment and/or RCRA Characteristic Areas Delineation, 100% of the data will be analyzed and reported to ASL B with 10% validated. The ASL B package will include a Certificate of Analysis along with all associated QA/QC results. Total uranium analyses using a higher detection limit than is required for ASL B (10 mg/kg) may be appropriate for WAC attainment purposes since the WAC limit for total uranium is 1,030 mg/kg. In this case, an ASL E designation will apply to the analysis and reporting to be performed under the following conditions:

    - all of the ASL B laboratory QA/QC methods and reporting criteria will apply with the exception of the total uranium detection limit

    - the detection limit will be ≤10% of the WAC limit (e.g., ≤103 mg/kg for total uranium).

- If delineation data are also to be used for certification, the data must meet the data quality objectives specified in the Certification DQO (SL-043).

All data will undergo an evaluation by the Project Team, including a comparison for consistency with historical data. Deviations from QC considerations resulting from evaluating inputs to the decision from Section 3, must be justified in the PSP such that the objectives of the decision rule in Section 5 are met.

7.4 Independent Assessment

Independent assessment shall be performed by the FEMP QA organization by conducting surveillances. Surveillances will be planned and documented in accordance with Section 12.3 of the SCQ.

7.5 Data Management

Upon receipt from the laboratory, all results will be entered into the SED as qualified data using standard data entry protocol. The required ASL B, D or E data will undergo analytical validation by the FEMP validation team. A minimum of ten percent (10%) of field data will be validated by the FEMP QA validation team. The

Project Manager will be responsible to determine data usability as it pertains to supporting the DQO decision of determining delineation of media COC's.

7.6 Applicable Procedures

Sample collection will be described in the PSP with a listing of applicable procedures. Typical related plans and procedures are the following:

- Sitewide Excavation Plan (SEP)
- Sitewide CERCLA Quality Assurance Project Plan (SCQ).
- SMPL-01, *Solids Sampling*
- SMPL-02, *Liquids and Sludge Sampling*
- SMPL-21, *Collection of Field Quality Control Samples*
- EQT-06, *Geoprobe® Model 5400 Operation and Maintenance*
- EQT-23, *Operation of ADCAM Series Analyzers with Gamma Sensitive Detectors*
- EQT-30, *Operation of Radiation Tracking Vehicle Sodium Iodide Detection System*

Data Quality Objectives
Delineating the Extent of Media Constituents of Concern

1A. Task/Description: Delineating the extent of contamination above the FRLs

1.B. Project Phase: (Put an X in the appropriate selection.)

RI ☐ FS ☐ RD ☒ RA ☐ R,A ☐ OTHER ☐

1.C. DQO No.: SL-048, Rev. 3 DQO Reference No.: _____

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2. Media Characterization: (Put an X in the appropriate selection.)

Air ☐ Biological ☐ Groundwater ☒ Sediment ☒ Soil ☒

Waste ☒ Wastewater ☐ Surface water ☐ Other (specify) _____

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3. Data Use with Analytical Support Level (A-E): (Put an X in the appropriate Analytical Support Level selection(s) beside each applicable Data Use.)

Site Characterization	A ☐	B ☒	C ☐	D ☒	E ☒	Risk Assessment	A ☐	B ☐	C ☐	D ☐	E ☐
Evaluation of Alternatives	A ☐	B ☐	C ☐	D ☐	E ☐	Engineering Design	A ☐	B ☒	C ☐	D ☒	E ☒
Monitoring during remediation	A ☐	B ☒	C ☐	D ☒	E ☒	Other	A ☐	B ☐	C ☐	D ☐	E ☐

4.A. Drivers: Remedial Action Work Plans, Applicable or Relevant and Appropriate Requirements (ARARs) and the OU2 and/or OU5 Record of Decision (ROD).

4.B. Objective: Delineate the extent of media contaminated with a COC (or COCs) with respect to the action level(s) of interest.

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5. Site Information (Description):

6.A. Data Types with appropriate Analytical Support Level Equipment Selection and SCQ Reference: (Place an "X" to the right of the appropriate box or boxes selecting the type of analysis or analyses required. Then select the type of equipment to perform the analysis if appropriate. Please include a reference to the SCQ Section.)

1.	pH	X *	2.	Uranium	X *	3.	BTX	
	Temperature	X *		Full Radiological	X *		TPH	
	Specific Conductance	X *		Metals	X *		Oil/Grease	
	Dissolved Oxygen	X *		Cyanide				
	Technetium-99	X *		Silica				

4.	Cations		5.	VOA	X *	6. Other (specify)	
	Anions			BNA	X *		
	TOC			Pesticides	X *		
	TCLP	X *		PCB	X *		
	CEC			COD			

*If constituent is identified for delineation in the individual PSP.

6.B. Equipment Selection and SCQ Reference:

	Equipment Selection		Refer to SCQ Section
ASL A		SCQ Section:	
ASL B	X	SCQ Section:	App. G Tables G-1&G-3
ASL C		SCQ Section:	
ASL D	X	SCQ Section:	App. G Tables G-1&G-3
ASL E	X (total uranium only - See sect. 7.3, pg. 6)	SCQ Section:	App. G Tables G-1&G-3

7.A. Sampling Methods: (Put an X in the appropriate selection.)

Biased	X	Composite		Environmental	X	Grab	X	Grid	X
Intrusive	X	Non-Intrusive				Phased		Source	

DQO Number: SL-048, Rev. 3

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7.B. Sample Work Plan Reference: This DQO is being written prior to the PSPs.

Background samples: OU5 RI

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7.C. Sample Collection Reference:

Sample Collection Reference: SMPL-01, SMPL-02, EQT-05

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8. Quality Control Samples: (Place an "X" in the appropriate selection box.)

8.A. Field Quality Control Samples:

Trip Blanks	X *	Container Blanks	X ++
Field Blanks	X +	Duplicate Samples	X ***
Equipment Rinsate Samples	***	Split Samples	X **
Preservative Blanks		Performance Evaluation Samples	
Other (specify)			

* For volatile organics only
** Split samples will be collected where required by EPA or OEPA.
*** If specified in PSP.
\+ Collected at the discretion of the Project Manager (if warranted by field conditions)
\+ + One per Area and Phase Area per container type (i.e. stainless steel core liner/plastic core liner/Geoprobe tube).

8.B. Laboratory Quality Control Samples:

Method Blank	X	Matrix Duplicate/Replicate	X
Matrix Spike	X	Surrogate Spikes	
Tracer Spike			

Other (specify) Per SCQ

9. Other: Please provide any other germane information that may impact the data quality or gathering of this particular objective, task or data use.

APPENDIX B

SAMPLE LOCATIONS AND IDENTIFIERS

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TABLE B-1

SILOS PROJECT AREA SAMPLE LOCATIONS, DEPTHS, AND ANALYTES

Area	Sample Identifier *	Discrete Sample Interval (feet)*	Target Analytes	Northing Coordinate	Easting Coordinate
A	A7-A1-y-R	0.03 x total depth	Total U/Tc-99	480636.81	1347714.89
A	A7-A1-y-R	0.75 x total depth	Total U/Tc-99	480636.81	1347714.89
A	A7-A2-y-R	0.06 x total depth	Total U/Tc-99	480604.17	1347717.70
A	A7-A2-y-R	0.22 x total depth	Total U/Tc-99	480604.17	1347714.70
A	A7-A3-y-R	0.44 x total depth	Total U/Tc-99	480569.29	1347721.07
A	A7-A3-y-R	0.70 x total depth	Total U/Tc-99	480569.29	1347721.07
A	A7-A4-y-R	0.58 x total depth	Total U/Tc-99	480529.90	1347723.32
A	A7-A4-y-R	0.84 x total depth	Total U/Tc-99	480529.90	1347723.32
A	A7-A5-y-R	0.38 x total depth	Total U/Tc-99	480651.44	1347776.74
A	A7-A5-y-R	0.79 x total depth	Total U/Tc-99	480651.44	1347776.74
A	A7-A6-y-R	0.48 x total depth	Total U/Tc-99	480608.67	1347780.11
A	A7-A6-y-R	0.73 x total depth	Total U/Tc-99	480608.67	1347780.11
A	A7-A7-y-R	0.21 x total depth	Total U/Tc-99	480569.29	1347777.30
A	A7-A7-y-R	0.86 x total depth	Total U/Tc-99	480569.29	1347777.30
A	A7-A8-y-R	0.17 x total depth	Total U/Tc-99	480535.98	1347776.83
A	A7-A8-y-R	0.83 x total depth	Total U/Tc-99	480535.98	1347776.83
B	A7-B1-1-R	0-.5	Total U/Tc-99	480150.79	1347680.60
B	A7-B2-1-R	0-.5	Total U/Tc-99	480125.79	1347680.60
B	A7-B2-5-R	2-2.5	Total U/Tc-99	480125.79	1347680.60
B	A7-B3-1-R	0-.5	Total U/Tc-99	480175.79	1347680.60
B	A7-B3-3-R	1-1.5	Total U/Tc-99	480175.79	1347680.60
B	A7-B3-6-R	2.5-3	Total U/Tc-99	480175.79	1347680.60
B	A7-B4-1-R	0-.5	Total U/Tc-99	480155.72	1347480.66
B	A7-B5-1-R	0-.5	Total U/Tc-99	480130.72	1347480.66
B	A7-B5-3-R	1-1.5	Total U/Tc-99	480130.72	1347480.66
B	A7-B6-1-R	0-.5	Total U/Tc-99	480180.72	1347480.66
B	A7-B6-3-R	1-1.5	Total U/Tc-99	480180.72	1347480.66
B	A7-B6-6-R	2.5-3	Total U/Tc-99	480180.72	1347480.66
B	A7-B7-1-R	0-.5	Total U/Tc-99	480160.65	1347280.72
B	A7-B8-1-R	0-.5	Total U/Tc-99	480135.65	1347280.72
B	A7-B9-1-R	0-.5	Total U/Tc-99	480185.65	1347280.72
B	A7-B9-4-R	1.5-2	Total U/Tc-99	480185.65	1347280.72
B	A7-B9-7-R	3-3.5	Total U/Tc-99	480185.65	1347280.72
B	A7-B10-1-R	0-.5	Total U/Tc-99	480165.57	1347080.78
B	A7-B11-1-R	0-.5	Total U/Tc-99	480140.57	1347080.78
B	A7-B12-1-R	0-.5	Total U/Tc-99	480190.57	1347080.78
B	A7-B12-5-R	2-2.5	Total U/Tc-99	480190.57	1347080.78
B	A7-B13-1-R	0-.5	Total U/Tc-99	480170.50	1346880.84
B	A7-B14-1-R	0-.5	Total U/Tc-99	480145.50	1346880.84

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TABLE B-1
(Continued)

Area	Sample Identifier *	Discrete Sample Interval (feet)*	Target Analytes	Northing Coordinate	Easting Coordinate
B	A7-B15-1-R	0-.5	Total U/Tc-99	480195.50	1346880.84
B	A7-B16-1-R	0-.5	Total U/Tc-99	480325.34	1346832.08
B	A7-B17-1-R	0-.5	Total U/Tc-99	480325.34	1346807.08
B	A7-B17-4-R	1.5-2	Total U/Tc-99	480325.34	1346807.08
B	A7-B18-1-R	0-.5	Total U/Tc-99	480325.34	1346857.08
B	A7-B19-1-R	0-.5	Total U/Tc-99	480424.10	1346847.76
B	A7-B19-1-M	0-.5	Chromium/Lead	480424.10	1346847.76
B	A7-B20-1-R	0-.5	Total U/Tc-99	480424.10	1346822.76
B	A7-B20-1-M	0-.5	Chromium/Lead	480424.10	1346822.76
B	A7-B21-1-R	0-.5	Total U/Tc-99	480424.10	1346872.76
B	A7-B21-1-M	0-.5	Chromium/Lead	480424.10	1346872.76
B	A7-B22-1-R	0-.5	Total U/Tc-99	480523.01	1346862.48
B	A7-B22-1-M	0-.5	Chromium/Lead	480523.01	1346862.48
B	A7-B23-1-R	0-.5	Total U/Tc-99	480523.01	1346837.48
B	A7-B23-1-M	0-.5	Chromium/Lead	480523.01	1346837.48
B	A7-B24-1-R	0-.5	Total U/Tc-99	480523.01	1346887.48
B	A7-B24-1-M	0-.5	Chromium/Lead	480523.01	1346887.48
B	A7-B25-1-R	0-.5	Total U/Tc-99	480621.92	1346877.20
B	A7-B26-1-R	0-.5	Total U/Tc-99	480621.92	1346852.20
B	A7-B27-1-R	0-.5	Total U/Tc-99	480621.92	1346902.20
B	A7-B28-1-R	0-.5	Total U/Tc-99	480720.83	1346891.91
B	A7-B29-1-R	0-.5	Total U/Tc-99	480720.83	1346866.91
B	A7-B29-3-R	1-1.5	Total U/Tc-99	480720.83	1346866.91
B	A7-B30-1-R	0-.5	Total U/Tc-99	480720.83	1346919.91
B	A7-B30-4-R	1.5-2	Total U/Tc-99	480720.83	1346916.91
B	A7-B31-1-R	0-.5	Total U/Tc-99	480819.74	1346906.63
B	A7-B32-1-R	0-.5	Total U/Tc-99	480819.74	1346881.63
B	A7-B32-3-R	1-1.5	Total U/Tc-99	480819.74	1346881.63
B	A7-B33-1-R	0-.5	Total U/Tc-99	480819.74	1346931.63
B	A7-B33-3-R	1-1.5	Total U/Tc-99	480819.74	1346931.63
B	A7-B34-1-R	0-.5	Total U/Tc-99	480919.20	1346915.58
B	A7-B35-1-R	0-.5	Total U/Tc-99	480919.20	1346890.58
B	A7-B35-4-R	1.5-2	Total U/Tc-99	480919.20	1346890.58
B	A7-B36-1-R	0-.5	Total U/Tc-99	480919.20	1346940.58
B	A7-B36-4-R	1.5-2	Total U/Tc-99	480919.20	1346940.58
B	A7-B37-1-R	0-.5	Total U/Tc-99	481019.12	1346919.71
B	A7-B38-1-R	0-.5	Total U/Tc-99	481019.12	1346894.71
B	A7-B39-1-R	0-.5	Total U/Tc-99	481019.12	1346944.71
B	A7-B39-4-R	1.5-2	Total U/Tc-99	481019.12	1346944.71
B	A7-B40-1-R	0-.5	Total U/Tc-99	480173.28	1346987.22

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TABLE B-1
(Continued)

Area	Sample Identifier *	Discrete Sample Interval (feet)*	Target Analytes	Northing Coordinate	Easting Coordinate
B	A7-B41-1-R	0-.5	Total U/Tc-99	481048.28	1346987.22
B	A7-B42-1-R	0-.5	Total U/Tc-99	481098.28	1346987.22
B	A7-B42-5-R	2-2.5	Total U/Tc-99	481098.28	1346987.22
B	A7-B43-1-R	0-.5	Total U/Tc-99	480987.37	1347152.71
B	A7-B44-1-R	0-.5	Total U/Tc-99	481004.59	1347170.84
B	A7-B45-1-R	0-.5	Total U/Tc-99	480970.15	1347134.58
B	A7-B45-4-R	1.5-2	Total U/Tc-99	480970.15	1347134.58
B	A7-B46-1-R	0-.5	Total U/Tc-99	480914.86	1347221.57
B	A7-B47-1-R	0-.5	Total U/Tc-99	480932.08	1347239.69
B	A7-B47-3-R	1-1.5	Total U/Tc-99	480932.08	1347239.69
B	A7-B48-1-R	0-.5	Total U/Tc-99	480897.64	1347203.44
B	A7-B49-1-R	0-.5	Total U/Tc-99	480826.36	1347256.69
B	A7-B50-1-R	0-.5	Total U/Tc-99	480830.43	1347281.36
B	A7-B50-3-R	1-1.5	Total U/Tc-99	480830.43	1347281.36
B	A7-B51-1-R	0-.5	Total U/Tc-99	480822.29	1347235.02
B	A7-B51-3-R	1-1.5	Total U/Tc-99	480822.29	1347235.02
B	A7-B52-1-R	0-.5	Total U/Tc-99	480745.36	1347310.29
B	A7-B53-1-R	0-.5	Total U/Tc-99	480765.47	1347323.54
B	A7-B54-1-R	0-.5	Total U/Tc-99	480723.71	1347296.03
B	A7-B55-1-R	0-.5	Total U/Tc-99	480720.43	1347406.18
B	A7-B56-1-R	0-.5	Total U/Tc-99	480745.15	1347409.86
B	A7-B57-1-R	0-.5	Total U/Tc-99	480695.70	1347402.49
B	A7-B57-4-R	1.5-2	Total U/Tc-99	480695.70	1347402.49
B	A7-B57-7-R	3-3.5	Total U/Tc-99	480695.70	1347402.49
B	A7-B58-1-R	0-.5	Total U/Tc-99	480705.67	1347505.09
B	A7-B58-3-R	1-1.5	Total U/Tc-99	480705.67	1347505.09
B	A7-B59-1-R	0-.5	Total U/Tc-99	480730.58	1347507.57
B	A7-B59-3-R	1-1.5	Total U/Tc-99	480730.58	1347507.57
B	A7-B60-1-R	0-.5	Total U/Tc-99	480680.76	1347502.61
B	A7-B60-3-R	1-1.5	Total U/Tc-99	480680.76	1347502.61
B	A7-B60-6-R	2.5-3	Total U/Tc-99	480680.76	1347502.61
B	A7-B61-1-R	0-.5	Total U/Tc-99	480695.71	1347702.57
B	A7-B62-1-R	0-.5	Total U/Tc-99	480720.68	1347702.57
B	A7-B62-4-R	1.5-2	Total U/Tc-99	480720.68	1347702.57
B	A7-B63-1-R	0-.5	Total U/Tc-99	480670.74	1347702.57
B	A7-B63-4-R	1.5-2	Total U/Tc-99	480670.74	1347702.57
B	A7-B63-7-R	3-3.5	Total U/Tc-99	480670.74	1347702.57
B	A7-B64-1-R	0-.5	Total U/Tc-99	480673.74	1347815.09
B	A7-B64-3-R	1-1.5	Total U/Tc-99	480673.74	1347815.09
B	A7-B64-6-R	2.5-3	Total U/Tc-99	480673.74	1347815.09

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TABLE B-1
(Continued)

Area	Sample Identifier *	Discrete Sample Interval (feet)*	Target Analytes	Northing Coordinate	Easting Coordinate
B	A7-B65-1-R	0-.5	Total U/Tc-99	480574.40	1347767.36
B	A7-B65-4-R	1.5-2	Total U/Tc-99	480574.40	1347767.36
B	A7-B66-1-R	0-.5	Total U/Tc-99	480474.44	1347789.59
B	A7-B66-3-R	1-1.5	Total U/Tc-99	480474.44	1347789.59
B	A7-B67-1-R	0-.5	Total U/Tc-99	480474.44	1347814.59
B	A7-B67-4-R	1.5-2	Total U/Tc-99	480474.44	1347814.59
B	A7-B68-1-R	0-.5	Total U/Tc-99	480474.44	1347814.59
B	A7-B69-1-R	0-.5	Total U/Tc-99	480374.48	1347786.83
B	A7-B70-1-R	0-.5	Total U/Tc-99	480374.48	1347811.83
B	A7-B70-3-R	1-1.5	Total U/Tc-99	480374.48	1347811.83
B	A7-B70-6-R	2.5-3	Total U/Tc-99	480374.48	1347811.83
B	A7-B71-1-R	0-.5	Total U/Tc-99	480374.48	1347761.83
B	A7-B72-1-R	0-.5	Total U/Tc-99	TBD	TBD
B	A7-B72-1-M	0-.5	Lead / Chromium	TBD	TBD
B	A7-B72-2-R	0.5-1.0	Total U/Tc-99	TBD	TBD
B	A7-B72-1-M	0.5-1.0	Lead / Chromium	TBD	TBD
C	A7-C1-1-R	0-.5	Total U/Tc-99	480775.62	1346859.22
C	A7-C1-1-M	0-.5	Lead / Chromium	480775.62	1346859.22
C	A7-C2-1-R	0-.5	Total U/Tc-99	480826.27	1346857.91
C	A7-C2-1-M	0-.5	Lead / Chromium	480826.27	1346857.91
C	A7-C3-1-R	0-.5	Total U/Tc-99	480877.58	1346838.59
C	A7-C3-1-M	0-.5	Lead / Chromium	480877.58	1346838.59
C	A7-C4-1-R	0-.5	Total U/Tc-99	480877.58	1346869.70
C	A7-C4-1-M	0-.5	Lead / Chromium	480877.58	1346869.70
C	A7-C5-1-R	0-.5	Total U/Tc-99	480927.58	1346838.59
C	A7-C5-1-M	0-.5	Lead / Chromium	480927.58	1346838.59
C	A7-C6-1-R	0-.5	Total U/Tc-99	480927.58	1346869.70
C	A7-C6-1-M	0-.5	Lead / Chromium	480927.58	1346869.70
C	A7-C7-1-R	0-.5	Total U/Tc-99	480977.58	1346807.55
C	A7-C7-1-M	0-.5	Lead / Chromium	480977.58	1346807.55
C	A7-C8-1-R	0-.5	Total U/Tc-99	480977.58	1346838.59
C	A7-C8-1-M	0-.5	Lead / Chromium	480977.58	1346838.59
C	A7-C9-1-R	0-.5	Total U/Tc-99	480977.58	1346869.70
C	A7-C9-1-M	0-.5	Lead / Chromium	480977.58	1346869.70
C	A7-C10-1-R	0-.5	Total U/Tc-99	481027.58	1346807.55
C	A7-C10-1-M	0-.5	Lead / Chromium	481027.58	1346807.55
C	A7-C11-1-R	0-.5	Total U/Tc-99	481027.58	1346838.59
C	A7-C11-1-M	0-.5	Lead / Chromium	481027.58	1346838.59
C	A7-C12-1-R	0-.5	Total U/Tc-99	481027.58	1346869.70
C	A7-C12-1-M	0-.5	Lead / Chromium	481027.58	1346869.70

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TABLE B-1
(Continued)

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Area	Sample Identifier *	Discrete Sample Interval (feet)*	Target Analytes	Northing Coordinate	Easting Coordinate
D	A7-D1-1-R	0-.5	Total U/Tc-99	480250.41	1347181.00
D	A7-D1-3-R	1-1.5	Total U/Tc-99	480250.41	1347181.00
D	A7-D1-6-R	2.5-3	Total U/Tc-99	480250.41	1347181.00
D	A7-D1-10-R	4.5-5	Total U/Tc-99	480250.41	1347181.00
D	A7-D2-1-R	0-.5	Total U/Tc-99	480284.83	1347220.09
D	A7-D2-3-R	1-1.5	Total U/Tc-99	480284.83	1347220.09
D	A7-D2-6-R	2.5-3	Total U/Tc-99	480284.83	1347220.09
D	A7-D2-10-R	4.5-5	Total U/Tc-99	480284.83	1347220.09
D	A7-D3-1-R	0-.5	Total U/Tc-99	480336.76	1347173.41
D	A7-D3-3-R	1-1.5	Total U/Tc-99	480336.76	1347173.41
D	A7-D3-6-R	2.5-3	Total U/Tc-99	480336.76	1347173.41
D	A7-D3-10-R	4.5-5	Total U/Tc-99	480336.76	1347173.41
D	A7-D4-1-R	0-.5	Total U/Tc-99	480378.18	1347225.34
D	A7-D4-3-R	1-1.5	Total U/Tc-99	480378.18	1347225.34
D	A7-D4-6-R	2.5-3	Total U/Tc-99	480378.18	1347225.34
D	A7-D4-10-R	4.5-5	Total U/Tc-99	480378.18	1347225.34
D	A7-D5-1-R	0-.5	Total U/Tc-99	480421.94	1347179.25
D	A7-D5-3-R	1-1.5	Total U/Tc-99	480421.94	1347179.25
D	A7-D5-6-R	2.5-3	Total U/Tc-99	480421.94	1347179.25
D	A7-D5-10-R	4.5-5	Total U/Tc-99	480421.94	1347179.25
D	A7-D6-1-R	0-.5	Total U/Tc-99	480603.50	1347211.07
D	A7-D6-3-R	1-1.5	Total U/Tc-99	480603.50	1347211.07
D	A7-D6-6-R	2.5-3	Total U/Tc-99	480603.50	1347211.07
D	A7-D6-10-R	4.5-5	Total U/Tc-99	480603.50	1347211.07
D	A7-D7-1-R	0-.5	Total U/Tc-99	480619.82	1347229.06
D	A7-D7-3-R	1-1.5	Total U/Tc-99	480619.82	1347229.06
D	A7-D7-6-R	2.5-3	Total U/Tc-99	480619.82	1347229.06
D	A7-D7-10-R	4.5-5	Total U/Tc-99	480619.82	1347229.06
D	A7-D8-1-R	0-.5	Total U/Tc-99	480677.27	1347400.07
D	A7-D9-1-R	0-.5	Total U/Tc-99	480700.18	1347300.12
D	A7-D10-1-R	0-.5	Total U/Tc-99	480701.03	1347200.16
D	A7-D11-1-R	0-.5	Total U/Tc-99	480731.15	1347117.91
D	A7-D12-1-R	0-.5	Total U/Tc-99	480764.45	1347163.70
D	A7-D13-1-R	0-.5	Total U/Tc-99	480800.09	1347199.74
D	A7-D14-1-R	0-.5	Total U/Tc-99	480807.31	1347096.28
D	A7-D15-1-R	0-.5	Total U/Tc-99	480852.70	1347135.56
D	A7-D16-1-R	0-.5	Total U/Tc-99	480899.80	1347100.10
D	A7-D17-1-R	0-.5	Total U/Tc-99	480978.29	1347106.88
D	A7-D18-1-R	0-.5	Total U/Tc-99	480846.34	1346967.32
D	A7-D18-3-R	1-15	Total U/Tc-99	480846.34	1346967.32

TABLE B-1
(Continued)

Area	Sample Identifier *	Discrete Sample Interval (feet)*	Target Analytes	Northing Coordinate	Easting Coordinate
D	A7-D18-6-R	2.5-3	Total U/Tc-99	480846.34	1346967.32
D	A7-D18-10-R	4.5-5	Total U/Tc-99	480846.34	1346967.32
D	A7-D19-1-R	0-.5	Total U/Tc-99	480844.64	1347043.64
D	A7-D19-3-R	1-1.5	Total U/Tc-99	480844.64	1347043.64
D	A7-D19-6-R	2.5-3	Total U/Tc-99	480844.64	1347043.64
D	A7-D19-10-R	4.5-5	Total U/Tc-99	480844.64	1347043.64
D	A7-D20-1-R	0-.5	Total U/Tc-99	480884.96	1347044.49
D	A7-D20-3-R	1-1.5	Total U/Tc-99	480884.96	1347044.49
D	A7-D20-6-R	2.5-3	Total U/Tc-99	480884.96	1347044.49
D	A7-D20-10-R	4.5-5	Total U/Tc-99	480884.96	1347044.49
D	A7-D21-1-R	0-.5	Total U/Tc-99	480884.95	1346967.74
D	A7-D21-3-R	1-1.5	Total U/Tc-99	480884.95	1346967.74
D	A7-D21-6-R	2.5-3	Total U/Tc-99	480884.95	1346967.74
D	A7-D21-10-R	4.5-5	Total U/Tc-99	480884.95	1346967.74
D	A7-D22-1-R	0-.5	Total U/Tc-99	480803.2	1346975.1
D	A7-D22-3-R	1-1.5	Total U/Tc-99	480803.2	1346975.1
D	A7-D22-6-R	2.5-3	Total U/Tc-99	480803.2	1346975.1
D	A7-D22-10-R	4.5-5	Total U/Tc-99	480803.2	1346975.1
D	A7-D23-1-R	0-.5	Total U/Tc-99	480776.6	1346964.7
D	A7-D23-3-R	1-1.5	Total U/Tc-99	480776.6	1346964.7
D	A7-D23-6-R	2.5-3	Total U/Tc-99	480776.6	1346964.7
D	A7-D23-10-R	4.5-5	Total U/Tc-99	480776.6	1346964.7
D	A7-D24-1-R	0-.5	Total U/Tc-99	480738.9	1346960.8
D	A7-D24-3-R	1-1.5	Total U/Tc-99	480738.9	1346960.8
D	A7-D24-6-R	2.5-3	Total U/Tc-99	480738.9	1346960.8
D	A7-D24-10-R	4.5-5	Total U/Tc-99	480738.9	1346960.8
D	A7-D25-1-R	0-.5	Total U/Tc-99	480709.7	1346978.3
D	A7-D25-3-R	1-1.5	Total U/Tc-99	480709.7	1346978.3
D	A7-D25-6-R	2.5-3	Total U/Tc-99	480709.7	1346978.3
D	A7-D25-10-R	4.5-5	Total U/Tc-99	480709.7	1346978.3
D	A7-D26-1-R	0-.5	Total U/Tc-99	480724.0	1347060.7
D	A7-D26-3-R	1-1.5	Total U/Tc-99	480724.0	1347060.7
D	A7-D26-6-R	2.5-3	Total U/Tc-99	480724.0	1347060.7
D	A7-D26-10-R	4.5-5	Total U/Tc-99	480724.0	1347060.7
D	A7-D27-1-R	0-.5	Total U/Tc-99	480801.2	1347065.2
D	A7-D27-3-R	1-1.5	Total U/Tc-99	480801.2	1347065.2
D	A7-D27-6-R	2.5-3	Total U/Tc-99	480801.2	1347065.2
D	A7-D27-10-R	4.5-5	Total U/Tc-99	480801.2	1347065.2
E	A7-E1-1-R	0-.5	Total U/Tc-99	480490.32	1347835.39
E	A7-E2-1-R	0-.5	Total U/Tc-99	480487.20	1347875.95

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TABLE B-1
(Continued)

Area	Sample Identifier *	Discrete Sample Interval (feet)*	Target Analytes	Northing Coordinate	Easting Coordinate
E	A7-E3-1-R	0-.5	Total U/Tc-99	480486.16	1347920.17
E	A7-E4-1-R	0-.5	Total U/Tc-99	480482.00	1347964.39
E	A7-E5-y-R	0.15 x total depth	Total U/Tc-99	480535.64	1347879.04
E	A7-E5-y-M	0.15 x total depth	Lead / Chromium	480535.64	1347879.04
E	A7-E6-y-R	0.85 x total depth	Total U/Tc-99	480534.65	1347912.70
E	A7-E6-y-M	0.85 x total depth	Lead / Chromium	480534.65	1347912.70
E	A7-E7-y-R	0.60 x total depth	Total U/Tc-99	480535.64	1347950.52
E	A7-E7-y-M	0.60 x total depth	Lead / Chromium	480535.64	1347950.52
E	A7-E8-1-R	0-.5	Total U/Tc-99	480589.18	1347880.29
E	A7-E9-1-R	0-.5	Total U/Tc-99	480588.83	1347943.73
E	A7-E10-y-R	0.17 x total depth	Total U/Tc-99	480630.72	1347866.76
E	A7-E10-y-M	0.17 x total depth	Lead / Chromium	480630.72	1347866.76
E	A7-E11-y-R	0.96 x total depth	Total U/Tc-99	480631.62	1347952.78
E	A7-E11-y-M	0.96 x total depth	Lead / Chromium	480631.62	1347952.78
F	A7-F1-1-R	0-.5	Total U/Tc-99	480200.00	1347300.02
F	A7-F1-3-R	1-1.5	Total U/Tc-99	480200.00	1347300.02
F	A7-F1-6-R	2.5-3	Total U/Tc-99	480200.00	1347300.02
F	A7-F1-10-R	4.5-5	Total U/Tc-99	480200.00	1347300.02
F	A7-F2-1-R	0-.5	Total U/Tc-99	480200.00	1347400.02
F	A7-F2-3-R	1-1.5	Total U/Tc-99	480200.00	1347400.02
F	A7-F2-6-R	2.5-3	Total U/Tc-99	480200.00	1347400.02
F	A7-F2-10-R	4.5-5	Total U/Tc-99	480200.00	1347400.02
F	A7-F3-1-R	0-.5	Total U/Tc-99	480300.00	1347400.02
F	A7-F3-3-R	1-1.5	Total U/Tc-99	480300.00	1347400.02
F	A7-F3-6-R	2.5-3	Total U/Tc-99	480300.00	1347400.02
F	A7-F3-10-R	4.5-5	Total U/Tc-99	480300.00	1347400.02
F	A7-F4-1-R	0-.5	Total U/Tc-99	480300.00	1347300.02
F	A7-F4-3-R	1-1.5	Total U/Tc-99	480300.00	1347300.02
F	A7-F4-6-R	2.5-3	Total U/Tc-99	480300.00	1347300.02
F	A7-F4-10-R	4.5-5	Total U/Tc-99	480300.00	1347300.02
F	A7-F5-1-R	0-.5	Total U/Tc-99	480200.00	1347500.09
F	A7-F6-1-R	0-.5	Total U/Tc-99	480200.00	1347600.09
F	A7-F7-1-R	0-.5	Total U/Tc-99	480200.00	1347700.09
F	A7-F8-1-R	0-.5	Total U/Tc-99	480300.00	1347500.09
F	A7-F9-1-R	0-.5	Total U/Tc-99	480300.00	1347600.09
F	A7-F10-1-R	0-.5	Total U/Tc-99	480300.00	1347700.09
F	A7-F11-1-R	0-.5	Total U/Tc-99	480400.00	1347300.09
F	A7-F12-1-R	0-.5	Total U/Tc-99	480400.00	1347400.09
F	A7-F13-1-R	0-.5	Total U/Tc-99	480400.00	1347500.09
F	A7-F14-1-R	0-.5	Total U/Tc-99	480400.00	1347600.09

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TABLE B-1
(Continued)

Area	Sample Identifier *	Discrete Sample Interval (feet)*	Target Analytes	Northing Coordinate	Easting Coordinate
F	A7-F15-1-R	0-.5	Total U/Tc-99	480400.00	1347700.09
F	A7-F16-1-R	0-.5	Total U/Tc-99	480464.04	1347299.93
F	A7-F17-1-R	0-.5	Total U/Tc-99	480460.94	1347401.52
F	A7-F18-1-R	0-.5	Total U/Tc-99	480458.53	1347501.05
F	A7-F19-1-R	0-.5	Total U/Tc-99	480465.46	1347602.05
F	A7-F20-1-R	0-.5	Total U/Tc-99	480454.04	1347701.23

Note: Soil stockpile sample locations have sample depth intervals in terms of random percentage of the total depth of the stockpile at a particular location. However, sample selection will be based primarily on the highest radiological field screening levels. If there are no elevated field readings, then the random depths presented in the table will be sampled.

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APPENDIX C

TARGET ANALYTE LISTS

TARGET ANALYTE LISTS

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TAL 20500-PSP01-A

Analyte	Method
Total Uranium	ICP/MS (ASL E)
Technetium-99	Gas Proportional Counting (ASL B)

TAL 20500-PSP01- B

Analyte	Method
Total Uranium	ICP/MS (ASL E)

TAL 20500-PSP01- C

Analyte	Method
Chromium	SW 846 ICP (ASL B)
Lead	SW 846 ICP (ASL B)

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APPENDIX D

AREA 7 HISTORICAL ANALYTICAL DATA SUMMARY

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
98323	1839	24-Jun-92	5	6	480463.3	1347681.0	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61189	WPA27	26-Apr-91	1.5	2	480355.5	1347243.6	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61196	WPA28	26-Apr-91	1.5	2	480350.0	1347443.5	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61147	WPA21	26-Apr-91	1.5	2	480251.1	1346846.9	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61098	WPA14	25-Apr-91	1.5	2	481063.3	1346962.9	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
98318	1839	24-Jun-92	2	3	480463.3	1347681.0	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61182	WPA26	27-Apr-91	1.5	2	480252.8	1347340.8	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
98372	1836	06-Jul-92	3	4	481120.2	1347265.7	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.2	1346857.4	1,1-Dichloroethene	5.0	U	ug/kg	NORMAL
98358	1837	01-Jul-92	6	7	480868.6	1347258.1	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
56005	1476	19-Nov-89	14.8	15	480394.8	1346823.5	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61203	WPA29	28-Apr-91	1.5	2	480457.7	1347161.4	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61140	WPA20	26-Apr-91	1.5	2	480466.4	1346846.5	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
98356	1837	01-Jul-92	3	4	480868.6	1347258.1	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61105	WPA15	25-Apr-91	1.5	2	481057.9	1347162.8	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61217	WPA31	24-Apr-91	1.5	2	480503.3	1347281.2	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61258	WPA37	23-Apr-91	1.5	2	480858.0	1347157.3	1,1-Dichloroethene	5.0	U	ug/kg	NORMAL
119432	11079	30-Jun-93			481067.8	1347002.7	1,1-Dichloroethene	12.0	U	UG/KG	DRILL CUTTINGS
61133	WPA19	27-Apr-91	1.5	2	480666.3	1346852.0	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61245	WPA35	25-Apr-91	1.5	2	480755.3	1347254.5	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
56039	1482	05-Dec-89	14	14	480462.3	1347578.1	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.7	1346789.3	1,1-Dichloroethene	12.0	U	ug/kg	NORMAL
98376	1836	06-Jul-92	6	7	481120.2	1347265.7	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61238	WPA34	25-Apr-91	1.5	2	480632.8	1347367.7	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61252	WPA36	23-Apr-91	1.5	2	480724.8	1347453.7	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61168	WPA24	27-Apr-91	1.5	2	480258.2	1347140.9	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.2	1346874.7	1,1-Dichloroethene	5.0	U	ug/kg	NORMAL
61225	WPA32	26-Apr-91	1.5	2	480549.9	1347449.0	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61175	WPA25	28-Apr-91	1.5	2	480155.6	1347238.1	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
61210	WPA30	24-Apr-91	1.5	2	480452.7	1347346.3	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
123249	WP-SS-14	09-Jul-93	0	0.5	481047.0	1347185.9	1,1-Dichloroethene	11.0	U	ug/kg	NORMAL
98356	1837	01-Jul-92	3	4	480868.6	1347258.1	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
98358	1837	01-Jul-92	6	7	480868.6	1347258.1	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61175	WPA25	28-Apr-91	1.5	2	480155.6	1347238.1	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61245	WPA35	25-Apr-91	1.5	2	480755.3	1347254.5	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61203	WPA29	28-Apr-91	1.5	2	480457.7	1347161.4	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
98323	1839	24-Jun-92	5	6	480463.3	1347681.0	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.2	1346857.4	1,2-Dichloroethane	5.0	U	ug/kg	NORMAL
61196	WPA28	26-Apr-91	1.5	2	480350.0	1347443.5	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61225	WPA32	26-Apr-91	1.5	2	480549.9	1347449.0	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61252	WPA36	23-Apr-91	1.5	2	480724.8	1347453.7	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61133	WPA19	27-Apr-91	1.5	2	480666.3	1346852.0	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
123249	WP-SS-14	09-Jul-93	0	0.5	481047.0	1347185.9	1,2-Dichloroethane	11.0	U	ug/kg	NORMAL
61140	WPA20	26-Apr-91	1.5	2	480466.4	1346846.5	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61147	WPA21	26-Apr-91	1.5	2	480251.1	1346846.9	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61258	WPA37	23-Apr-91	1.5	2	480858.0	1347157.3	1,2-Dichloroethane	5.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.2	1346874.7	1,2-Dichloroethane	5.0	U	ug/kg	NORMAL
61210	WPA30	24-Apr-91	1.5	2	480452.7	1347346.3	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.7	1346789.3	1,2-Dichloroethane	12.0	U	ug/kg	NORMAL
61168	WPA24	27-Apr-91	1.5	2	480258.2	1347140.9	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61105	WPA15	25-Apr-91	1.5	2	481057.9	1347162.8	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61238	WPA34	25-Apr-91	1.5	2	480632.8	1347367.7	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
98376	1836	06-Jul-92	6	7	481120.2	1347265.7	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
119432	11079	30-Jun-93			481067.8	1347002.7	1,2-Dichloroethane	12.0	U	UG/KG	DRILL CUTTINGS
98318	1839	24-Jun-92	2	3	480463.3	1347681.0	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61189	WPA27	26-Apr-91	1.5	2	480355.5	1347243.6	1,2-Dichloroethane	6.0	UJ	ug/kg	NORMAL
61098	WPA14	25-Apr-91	1.5	2	481063.3	1346962.9	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
56005	1476	19-Nov-89	14.8	15	480394.8	1346823.5	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61182	WPA26	27-Apr-91	1.5	2	480252.8	1347340.8	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
98372	1836	06-Jul-92	3	4	481120.2	1347265.7	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
61217	WPA31	24-Apr-91	1.5	2	480503.3	1347281.2	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
56039	1482	05-Dec-89	14	14	480462.3	1347578.1	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.2	1346874.7	4-NITROANILINE	1800.0	UJ	ug/kg	NORMAL
61515	WPA18	25-Jul-91	0.5	1	480866.2	1346857.4	4-NITROANILINE	17000.0	UJ	ug/kg	NORMAL
61252	WPA36	23-Apr-91	1.5	2	480724.8	1347453.7	4-NITROANILINE	2000.0	U	ug/kg	NORMAL
61196	WPA28	26-Apr-91	1.5	2	480350.0	1347443.5	4-NITROANILINE	2000.0	U	ug/kg	NORMAL
61140	WPA20	26-Apr-91	1.5	2	480466.4	1346846.5	4-NITROANILINE	1900.0	U	ug/kg	NORMAL
61168	WPA24	27-Apr-91	1.5	2	480258.2	1347140.9	4-NITROANILINE	1900.0	U	ug/kg	NORMAL
61133	WPA19	27-Apr-91	1.5	2	480666.3	1346852.0	4-NITROANILINE	1900.0	U	ug/kg	NORMAL
61147	WPA21	26-Apr-91	1.5	2	480251.1	1346846.9	4-NITROANILINE	1800.0	U	ug/kg	NORMAL
61245	WPA35	25-Apr-91	1.5	2	480755.3	1347254.5	4-NITROANILINE	1900.0	U	ug/kg	NORMAL
61126	WPA18	27-Apr-91	1.5	2	480866.2	1346857.4	4-NITROANILINE	8700.0	U	ug/kg	NORMAL
56039	1482	05-Dec-89	14	14	480462.3	1347578.1	4-NITROANILINE	1900.0	U	ug/kg	NORMAL
61182	WPA26	27-Apr-91	1.5	2	480252.8	1347340.8	4-NITROANILINE	2000.0	U	ug/kg	NORMAL
61203	WPA29	28-Apr-91	1.5	2	480457.7	1347161.4	4-NITROANILINE	1900.0	U	ug/kg	NORMAL
61105	WPA15	25-Apr-91	1.5	2	481057.9	1347162.8	4-NITROANILINE	2000.0	U	ug/kg	NORMAL
61098	WPA14	25-Apr-91	1.5	2	481063.3	1346962.9	4-NITROANILINE	2000.0	U	ug/kg	NORMAL
61210	WPA30	24-Apr-91	1.5	2	480452.7	1347346.3	4-NITROANILINE	1900.0	U	ug/kg	NORMAL
61175	WPA25	28-Apr-91	1.5	2	480155.6	1347238.1	4-NITROANILINE	2000.0	U	ug/kg	NORMAL
61258	WPA37	23-Apr-91	1.5	2	480858.0	1347157.3	4-NITROANILINE	1800.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.7	1346789.3	4-NITROANILINE	980.0	U	ug/kg	NORMAL
61238	WPA34	25-Apr-91	1.5	2	480632.8	1347367.7	4-NITROANILINE	2000.0	U	ug/kg	NORMAL
56005	1476	19-Nov-89	14.8	15	480394.8	1346823.5	4-NITROANILINE	1900.0	UJ	ug/kg	NORMAL
61217	WPA31	24-Apr-91	1.5	2	480503.3	1347281.2	4-NITROANILINE	1900.0	U	ug/kg	NORMAL

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID		Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
61225	WPA32		26-Apr-91	1.5	2	480549.9	1347449.0	4-NITROANILINE	2000.0	U	ug/kg	NORMAL
61189	WPA27		26-Apr-91	1.5	2	480355.5	1347243.6	4-NITROANILINE	2000.0	U	ug/kg	NORMAL
61512	WPA18		24-Jul-91	1.5	2	480866.2	1346857.4	4-NITROANILINE	17000.0	UJ	ug/kg	NORMAL
61198	WPA29		28-Apr-91	0	0.5	480457.7	1347161.4	alpha-Chlordane	100.0	U	ug/kg	NORMAL
61205	WPA30		24-Apr-91	0	0.5	480452.7	1347346.3	alpha-Chlordane	120.0	U	ug/kg	NORMAL
61191	WPA28		26-Apr-91	0	0.5	480350.0	1347443.5	alpha-Chlordane	110.0	U	ug/kg	NORMAL
61515	WPA18		25-Jul-91	0.5	1	480866.2	1346857.4	alpha-Chlordane	340.0	U	ug/kg	NORMAL
61093	WPA14		25-Apr-91	0	0.5	481063.3	1346962.9	alpha-Chlordane	92.0	U	ug/kg	NORMAL
61254	WPA37		23-Apr-91	0	0.5	480858.0	1347157.3	alpha-Chlordane	95.0	U	ug/kg	NORMAL
121093	SS-32		08-Jul-93	0	0.5	480974.7	1346789.3	alpha-Chlordane	4.0	U	ug/kg	NORMAL
61233	WPA34		25-Apr-91	0	0.5	480632.8	1347367.7	alpha-Chlordane	93.0	U	ug/kg	NORMAL
61142	WPA21		26-Apr-91	0	0.5	480251.1	1346846.9	alpha-Chlordane	94.0	U	ug/kg	NORMAL
61514	WPA18		25-Jul-91	1.3	1.8	480866.2	1346857.4	alpha-Chlordane	1700.0	U	ug/kg	NORMAL
61310	WPA23		27-Apr-91	0	0.5	480269.5	1346938.0	alpha-Chlordane	100.0	U	ug/kg	NORMAL
61512	WPA18		24-Jul-91	1.5	2	480866.2	1346857.4	alpha-Chlordane	870.0	U	ug/kg	NORMAL
61163	WPA24		27-Apr-91	0	0.5	480258.2	1347140.9	alpha-Chlordane	98.0	U	ug/kg	NORMAL
61170	WPA25		28-Apr-91	0	0.5	480155.6	1347238.1	alpha-Chlordane	100.0	U	ug/kg	NORMAL
61128	WPA19		27-Apr-91	0	0.5	480666.3	1346852.0	alpha-Chlordane	90.0	U	ug/kg	NORMAL
56005		1476	19-Nov-89	14.8	15	480394.8	1346823.5	alpha-Chlordane	94.0	U	ug/kg	NORMAL
61219	WPA33		26-Apr-91	0	0.5	480638.7	1347131.1	alpha-Chlordane	91.0	U	ug/kg	NORMAL
61121	WPA18		27-Apr-91	0	0.5	480866.2	1346857.4	alpha-Chlordane	270.0	U	ug/kg	NORMAL
61240	WPA35		25-Apr-91	0	0.5	480755.3	1347254.5	alpha-Chlordane	92.0	U	ug/kg	NORMAL
61135	WPA20		26-Apr-91	0	0.5	480466.4	1346846.5	alpha-Chlordane	100.0	U	ug/kg	NORMAL
61212	WPA31		24-Apr-91	0	0.5	480503.3	1347281.2	alpha-Chlordane	96.0	U	ug/kg	NORMAL
61511	WPA18		25-Jul-91	1.5	1.9	480866.2	1346857.4	alpha-Chlordane	1700.0	U	ug/kg	NORMAL
56039		1482	05-Dec-89	14	14	480462.3	1347578.1	alpha-Chlordane	200.0	U	ug/kg	NORMAL
61221	WPA32		23-Apr-91	0	0.5	480549.9	1347449.0	alpha-Chlordane	100.0	U	ug/kg	NORMAL
61247	WPA36		23-Apr-91	0	0.5	480724.8	1347453.7	alpha-Chlordane	97.0	U	ug/kg	NORMAL
61100	WPA15		25-Apr-91	0	0.5	481057.9	1347162.8	alpha-Chlordane	100.0	U	ug/kg	NORMAL
61184	WPA27		26-Apr-91	0	0.5	480355.5	1347243.6	alpha-Chlordane	96.0	U	ug/kg	NORMAL
61177	WPA26		27-Apr-91	0	0.5	480252.8	1347340.8	alpha-Chlordane	100.0	U	ug/kg	NORMAL
61168	WPA24		27-Apr-91	1.5	2	480258.2	1347140.9	bis(2-Chloroisopropyl) ether	390.0	U	ug/kg	NORMAL
61175	WPA25		28-Apr-91	1.5	2	480155.6	1347238.1	bis(2-Chloroisopropyl) ether	410.0	U	ug/kg	NORMAL
61217	WPA31		24-Apr-91	1.5	2	480503.3	1347281.2	bis(2-Chloroisopropyl) ether	390.0	U	ug/kg	NORMAL
61252	WPA36		23-Apr-91	1.5	2	480724.8	1347453.7	bis(2-Chloroisopropyl) ether	410.0	U	ug/kg	NORMAL
61196	WPA28		26-Apr-91	1.5	2	480350.0	1347443.5	bis(2-Chloroisopropyl) ether	410.0	U	ug/kg	NORMAL
61126	WPA18		27-Apr-91	1.5	2	480866.2	1346857.4	bis(2-Chloroisopropyl) ether	1800.0	U	ug/kg	NORMAL
61203	WPA29		28-Apr-91	1.5	2	480457.7	1347161.4	bis(2-Chloroisopropyl) ether	390.0	U	ug/kg	NORMAL
56005		1476	19-Nov-89	14.8	15	480394.8	1346823.5	bis(2-Chloroisopropyl) ether	390.0	U	ug/kg	NORMAL
61225	WPA32		26-Apr-91	1.5	2	480549.9	1347449.0	bis(2-Chloroisopropyl) ether	420.0	U	ug/kg	NORMAL
61105	WPA15		25-Apr-91	1.5	2	481057.9	1347162.8	bis(2-Chloroisopropyl) ether	420.0	U	ug/kg	NORMAL
61258	WPA37		23-Apr-91	1.5	2	480858.0	1347157.3	bis(2-Chloroisopropyl) ether	370.0	U	ug/kg	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
61238	WPA34	25-Apr-91	1.5	2	480632.8	1347367.7	bis(2-Chloroisopropyl) ether	410.0	U	ug/kg	NORMAL
56039	1482	05-Dec-89	14	14	480462.3	1347578.1	bis(2-Chloroisopropyl) ether	400.0	U	ug/kg	NORMAL
61098	WPA14	25-Apr-91	1.5	2	481063.3	1346962.9	bis(2-Chloroisopropyl) ether	410.0	U	ug/kg	NORMAL
61210	WPA30	24-Apr-91	1.5	2	480452.7	1347346.3	bis(2-Chloroisopropyl) ether	400.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.7	1346789.3	bis(2-Chloroisopropyl) ether	390.0	U	ug/kg	NORMAL
61245	WPA35	25-Apr-91	1.5	2	480755.3	1347254.5	bis(2-Chloroisopropyl) ether	390.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.2	1346874.7	bis(2-Chloroisopropyl) ether	370.0	U	ug/kg	NORMAL
61512	WPA18	24-Jul-91	1.5	2	480866.2	1346857.4	bis(2-Chloroisopropyl) ether	3500.0	U	ug/kg	NORMAL
61140	WPA20	26-Apr-91	1.5	2	480466.4	1346846.5	bis(2-Chloroisopropyl) ether	390.0	U	ug/kg	NORMAL
61147	WPA21	26-Apr-91	1.5	2	480251.1	1346846.9	bis(2-Chloroisopropyl) ether	370.0	U	ug/kg	NORMAL
61182	WPA26	27-Apr-91	1.5	2	480252.8	1347340.8	bis(2-Chloroisopropyl) ether	410.0	U	ug/kg	NORMAL
61515	WPA18	25-Jul-91	0.5	1	480866.2	1346857.4	bis(2-Chloroisopropyl) ether	3500.0	U	ug/kg	NORMAL
61133	WPA19	27-Apr-91	1.5	2	480666.3	1346852.0	bis(2-Chloroisopropyl) ether	380.0	U	ug/kg	NORMAL
61189	WPA27	26-Apr-91	1.5	2	480355.5	1347243.6	bis(2-Chloroisopropyl) ether	420.0	U	ug/kg	NORMAL
123249	WP-SS-14	09-Jul-93	0	0.5	481047.0	1347185.9	bis(2-Chloroisopropyl) ether	380.0	UJ	ug/kg	NORMAL
123249	WP-SS-14	09-Jul-93	0	0.5	481047.0	1347185.9	Bromodichloromethane	11.0	U	ug/kg	NORMAL
61189	WPA27	26-Apr-91	1.5	2	480355.5	1347243.6	Bromodichloromethane	6.0	U	ug/kg	NORMAL
61210	WPA30	24-Apr-91	1.5	2	480452.7	1347346.3	Bromodichloromethane	6.0	U	ug/kg	NORMAL
61203	WPA29	28-Apr-91	1.5	2	480457.7	1347161.4	Bromodichloromethane	6.0	U	ug/kg	NORMAL
61258	WPA37	23-Apr-91	1.5	2	480858.0	1347157.3	Bromodichloromethane	5.0	U	ug/kg	NORMAL
61196	WPA28	26-Apr-91	1.5	2	480350.0	1347443.5	Bromodichloromethane	6.0	U	ug/kg	NORMAL
56005	1476	19-Nov-89	14.8	15	480394.8	1346823.5	Bromodichloromethane	6.0	U	ug/kg	NORMAL
61252	WPA36	23-Apr-91	1.5	2	480724.8	1347453.7	Bromodichloromethane	6.0	U	ug/kg	NORMAL
98376	1836	06-Jul-92	6	7	481120.2	1347265.7	Bromodichloromethane	6.0	U	ug/kg	NORMAL
61182	WPA26	27-Apr-91	1.5	2	480252.8	1347340.8	Bromodichloromethane	6.0	UJ	ug/kg	NORMAL
61238	WPA34	25-Apr-91	1.5	2	480632.8	1347367.7	Bromodichloromethane	6.0	U	ug/kg	NORMAL
61140	WPA20	26-Apr-91	1.5	2	480466.4	1346846.5	Bromodichloromethane	6.0	U	ug/kg	NORMAL
61147	WPA21	26-Apr-91	1.5	2	480251.1	1346846.9	Bromodichloromethane	6.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.2	1346874.7	Bromodichloromethane	5.0	U	ug/kg	NORMAL
61225	WPA32	26-Apr-91	1.5	2	480549.9	1347449.0	Bromodichloromethane	6.0	UJ	ug/kg	NORMAL
98356	1837	01-Jul-92	3	4	480868.6	1347258.1	Bromodichloromethane	6.0	UJ	ug/kg	NORMAL
61105	WPA15	25-Apr-91	1.5	2	481057.9	1347162.8	Bromodichloromethane	6.0	U	ug/kg	NORMAL
61245	WPA35	25-Apr-91	1.5	2	480755.3	1347254.5	Bromodichloromethane	6.0	U	ug/kg	NORMAL
61133	WPA19	27-Apr-91	1.5	2	480666.3	1346852.0	Bromodichloromethane	6.0	UJ	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.2	1346857.4	Bromodichloromethane	5.0	UJ	ug/kg	NORMAL
98358	1837	01-Jul-92	6	7	480868.6	1347258.1	Bromodichloromethane	6.0	UJ	ug/kg	NORMAL
98318	1839	24-Jun-92	2	3	480463.3	1347681.0	Bromodichloromethane	6.0	U	ug/kg	NORMAL
56039	1482	05-Dec-89	14	14	480462.3	1347578.1	Bromodichloromethane	6.0	U	ug/kg	NORMAL
98323	1839	24-Jun-92	5	6	480463.3	1347681.0	Bromodichloromethane	6.0	U	ug/kg	NORMAL
61098	WPA14	25-Apr-91	1.5	2	481063.3	1346962.9	Bromodichloromethane	6.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.7	1346789.3	Bromodichloromethane	12.0	U	ug/kg	NORMAL
98372	1836	06-Jul-92	3	4	481120.2	1347265.7	Bromodichloromethane	6.0	U	ug/kg	NORMAL

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID		Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result		Valid. Qual.	Units	Sample Type
61217	WPA31		24-Apr-91	1.5	2	480503.3	1347281.2	Bromodichloromethane	6.0	U		ug/kg	NORMAL
61168	WPA24		27-Apr-91	1.5	2	480258.2	1347140.9	Bromodichloromethane	6.0	UJ		ug/kg	NORMAL
119432		11079	30-Jun-93			481067.8	1347002.7	Bromodichloromethane	12.0	U		UG/KG	DRILL CUTTINGS
61175	WPA25		28-Apr-91	1.5	2	480155.6	1347238.1	Bromodichloromethane	6.0	U		ug/kg	NORMAL
123249	WP-SS-14		09-Jul-93	0	0.5	481047.0	1347185.9	Carbazole	380.0	UJ		ug/kg	NORMAL
121093	SS-32		08-Jul-93	0	0.5	480974.7	1346789.3	Chloroethane	12.0	U		ug/kg	NORMAL
98356		1837	01-Jul-92	3	4	480868.6	1347258.1	Chloroethane	11.0	U		ug/kg	NORMAL
61105	WPA15		25-Apr-91	1.5	2	481057.9	1347162.8	Chloroethane	13.0	U		ug/kg	NORMAL
61121	WPA18		27-Apr-91	0	0.5	480866.2	1346857.4	Chloroethane	11.0	U		ug/kg	NORMAL
61203	WPA29		28-Apr-91	1.5	2	480457.7	1347161.4	Chloroethane	12.0	U		ug/kg	NORMAL
119432		11079	30-Jun-93			481067.8	1347002.7	Chloroethane	12.0	U		UG/KG	DRILL CUTTINGS
61258	WPA37		23-Apr-91	1.5	2	480858.0	1347157.3	Chloroethane	11.0	U		ug/kg	NORMAL
61225	WPA32		26-Apr-91	1.5	2	480549.9	1347449.0	Chloroethane	12.0	U		ug/kg	NORMAL
98372		1836	06-Jul-92	3	4	481120.2	1347265.7	Chloroethane	11.0	U		ug/kg	NORMAL
61238	WPA34		25-Apr-91	1.5	2	480632.8	1347367.7	Chloroethane	12.0	U		ug/kg	NORMAL
61196	WPA28		26-Apr-91	1.5	2	480350.0	1347443.5	Chloroethane	12.0	U		ug/kg	NORMAL
61098	WPA14		25-Apr-91	1.5	2	481063.3	1346962.9	Chloroethane	12.0	U		ug/kg	NORMAL
61182	WPA26		27-Apr-91	1.5	2	480252.8	1347340.8	Chloroethane	12.0	U		ug/kg	NORMAL
56005		1476	19-Nov-89	14.8	15	480394.8	1346823.5	Chloroethane	11.0	U		ug/kg	NORMAL
61147	WPA21		26-Apr-91	1.5	2	480251.1	1346846.9	Chloroethane	11.0	U		ug/kg	NORMAL
56022		1481	20-Nov-89	15	15	480882.2	1346874.7	Chloroethane	11.0	U		ug/kg	NORMAL
61217	WPA31		24-Apr-91	1.5	2	480503.3	1347281.2	Chloroethane	11.0	U		ug/kg	NORMAL
61245	WPA35		25-Apr-91	1.5	2	480755.3	1347254.5	Chloroethane	11.0	U		ug/kg	NORMAL
98318		1839	24-Jun-92	2	3	480463.3	1347681.0	Chloroethane	12.0	U		ug/kg	NORMAL
61210	WPA30		24-Apr-91	1.5	2	480452.7	1347346.3	Chloroethane	12.0	U		ug/kg	NORMAL
123249	WP-SS-14		09-Jul-93	0	0.5	481047.0	1347185.9	Chloroethane	11.0	U		ug/kg	NORMAL
56039		1482	05-Dec-89	14	14	480462.3	1347578.1	Chloroethane	12.0	U		ug/kg	NORMAL
61189	WPA27		26-Apr-91	1.5	2	480355.5	1347243.6	Chloroethane	12.0	U		ug/kg	NORMAL
61140	WPA20		26-Apr-91	1.5	2	480466.4	1346846.5	Chloroethane	11.0	U		ug/kg	NORMAL
61252	WPA36		23-Apr-91	1.5	2	480724.8	1347453.7	Chloroethane	12.0	U		ug/kg	NORMAL
98376		1836	06-Jul-92	6	7	481120.2	1347265.7	Chloroethane	12.0	U		ug/kg	NORMAL
98323		1839	24-Jun-92	5	6	480463.3	1347681.0	Chloroethane	12.0	U		ug/kg	NORMAL
61133	WPA19		27-Apr-91	1.5	2	480666.3	1346852.0	Chloroethane	11.0	U		ug/kg	NORMAL
61175	WPA25		28-Apr-91	1.5	2	480155.6	1347238.1	Chloroethane	12.0	U		ug/kg	NORMAL
98358		1837	01-Jul-92	6	7	480868.6	1347258.1	Chloroethane	11.0	U		ug/kg	NORMAL
61168	WPA24		27-Apr-91	1.5	2	480258.2	1347140.9	Chloroethane	12.0	U		ug/kg	NORMAL
61219	WPA33		26-Apr-91	0	0.5	480638.7	1347131.1	Mercury	0.1	U		mg/kg	NORMAL
61254	WPA37		23-Apr-91	0	0.5	480858.0	1347157.3	Mercury	0.1	U		mg/kg	NORMAL
61233	WPA34		25-Apr-91	0	0.5	480632.8	1347367.7	Mercury	0.1	U		mg/kg	NORMAL
56039		1482	05-Dec-89	14	14	480462.3	1347578.1	Mercury	0.1	U		mg/kg	NORMAL
61212	WPA31		24-Apr-91	0	0.5	480503.3	1347281.2	Mercury	0.1	U		mg/kg	NORMAL
61221	WPA32		23-Apr-91	0	0.5	480549.9	1347449.0	Mercury	0.1	U		mg/kg	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
56005	1476	19-Nov-89	14.8	15	480394.8	1346823.5	Mercury	0.1	U	mg/kg	NORMAL
61247	WPA36	23-Apr-91	0	0.5	480724.8	1347453.7	Mercury	0.1	U	mg/kg	NORMAL
61240	WPA35	25-Apr-91	0	0.5	480755.3	1347254.5	Mercury	0.1	U	mg/kg	NORMAL
121357	11167	08-Jul-93	4.5	6	480467.4	1346872.2	Mercury	0.1	UJ	mg/kg	NORMAL
122520	11162	25-Jul-93	6.5	7	480517.4	1346872.2	Mercury	0.2	U	mg/kg	NORMAL
121352	11167	09-Jul-93	0	1.5	480467.4	1346872.2	Mercury	0.1	UJ	mg/kg	NORMAL
61205	WPA30	24-Apr-91	0	0.5	480452.7	1347346.3	Mercury	0.1	U	mg/kg	NORMAL
122348	11149	24-Jul-93	5	5.5	480448.4	1346815.3	Mercury	0.1	U	mg/kg	NORMAL
61170	WPA25	28-Apr-91	0	0.5	480155.6	1347238.1	Mercury	0.1	U	mg/kg	NORMAL
122101	11158	21-Jul-93	5.5	6	480491.1	1346863.2	Mercury	0.1	U	mg/kg	NORMAL
122102	11158	22-Jul-93	7	7.5	480491.1	1346863.2	Mercury	0.2	U	mg/kg	NORMAL
122507	11149	24-Jul-93	3	3.5	480448.4	1346815.3	Mercury	0.1	U	MG/KG	DUPLICATE
122103	11158	22-Jul-93	6.5	7	480491.1	1346863.2	Mercury	0.1	U	MG/KG	DUPLICATE
61177	WPA26	27-Apr-91	0	0.5	480252.8	1347340.8	Mercury	0.1	U	mg/kg	NORMAL
122347	11149	24-Jul-93	3.5	4	480448.4	1346815.3	Mercury	0.1	U	mg/kg	NORMAL
121802	11159	14-Jul-93	4.5	6	480481.1	1346863.2	Mercury	0.1	U	mg/kg	NORMAL
121755	11157	14-Jul-93	5.5	6	480501.1	1346863.2	Mercury	0.1	U	mg/kg	NORMAL
121803	11159	14-Jul-93	1.5	3	480481.1	1346863.2	Mercury	0.1	U	mg/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.2	1346857.4	Mercury	0.1	U	mg/kg	NORMAL
61184	WPA27	26-Apr-91	0	0.5	480355.5	1347243.6	Mercury	0.1	U	mg/kg	NORMAL
122302	11148	23-Jul-93	5	5.5	480458.4	1346815.3	Mercury	0.1	U	mg/kg	NORMAL
121818	11159	14-Jul-93	2.5	3	480481.1	1346863.2	Mercury	0.1	U	MG/KG	DUPLICATE
121759	11160	14-Jul-93	2	2.5	480471.1	1346863.2	Mercury	0.1	U	mg/kg	NORMAL
121843	11150	16-Jul-93	3	3.5	480504.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
121844	11150	16-Jul-93	4.5	5	480504.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
122327	11147	24-Jul-93	9.5	10.5	480468.4	1346815.3	Mercury	0.1	U	mg/kg	NORMAL
122005	11154	15-Jul-93	5	5.5	480464.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
122021	11152	16-Jul-93	5	5.5	480484.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
121633	11153	15-Jul-93	2.5	3.5	480474.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
121637	11153	15-Jul-93	4.5	6	480474.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
61142	WPA21	26-Apr-91	0	0.5	480251.1	1346846.9	Mercury	0.1	U	mg/kg	NORMAL
122001	11154	15-Jul-93	4	4.5	480464.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
122036	11151	16-Jul-93	5.5	6	480494.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
121790	11155	15-Jul-93	5.5	6	480454.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
121786	11155	15-Jul-93	2.5	3	480454.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
121751	11157	14-Jul-93	2	2.5	480501.1	1346863.2	Mercury	0.1	U	mg/kg	NORMAL
61310	WPA23	27-Apr-91	0	0.5	480269.5	1346938.0	Mercury	0.1	U	mg/kg	NORMAL
122056	11156	21-Jul-93	4	4.5	480511.1	1346863.2	Mercury	0.1	U	mg/kg	NORMAL
122057	11156	21-Jul-93	5.5	6	480511.1	1346863.2	Mercury	0.1	U	mg/kg	NORMAL
122032	11151	16-Jul-93	0.5	1	480494.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
61163	WPA24	27-Apr-91	0	0.5	480258.2	1347140.9	Mercury	0.1	U	mg/kg	NORMAL
61128	WPA19	27-Apr-91	0	0.5	480666.3	1346852.0	Mercury	0.1	U	mg/kg	NORMAL

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
61135	WPA20	26-Apr-91	0	0.5	480466.4	1346846.5	Mercury	0.1	U	mg/kg	NORMAL
121896	11148	23-Jul-93	4.5	5	480458.4	1346815.3	Mercury	0.1	U	mg/kg	NORMAL
122526	11162	24-Jul-93	4.5	5	480517.4	1346872.2	Mercury	0.1	U	MG/KG	DUPLICATE
121391	11165	10-Jul-93	3	4.5	480487.4	1346872.2	Mercury	0.1	U	mg/kg	NORMAL
121616	11163	11-Jul-93	4.5	6	480507.4	1346872.2	Mercury	0.1	U	mg/kg	NORMAL
121620	11163	11-Jul-93	3	4.5	480507.4	1346872.2	Mercury	0.1	U	mg/kg	NORMAL
121383	11164	10-Jul-93	3	4.5	480497.4	1346872.2	Mercury	0.1	U	mg/kg	NORMAL
61198	WPA29	28-Apr-91	0	0.5	480457.7	1347161.4	Mercury	0.1	U	mg/kg	NORMAL
121387	11164	10-Jul-93	4.5	6	480497.4	1346872.2	Mercury	0.1	U	mg/kg	NORMAL
121395	11165	10-Jul-93	4.5	6	480487.4	1346872.2	Mercury	0.1	U	mg/kg	NORMAL
121881	11145	21-Jul-93	4.5	5	480488.4	1346815.3	Mercury	0.1	U	mg/kg	NORMAL
61100	WPA15	25-Apr-91	0	0.5	481057.9	1347162.8	Mercury	0.1	U	mg/kg	NORMAL
61093	WPA14	25-Apr-91	0	0.5	481063.3	1346962.9	Mercury	0.1	U	mg/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.7	1346789.3	Mercury	0.1	UJ	mg/kg	NORMAL
121372	11166	09-Jul-93	3	4.5	480477.4	1346872.2	Mercury	0.1	J	mg/kg	NORMAL
121376	11166	09-Jul-93	4.5	6	480477.4	1346872.2	Mercury	0.1	J	mg/kg	NORMAL
122519	11162	24-Jul-93	5	5.5	480517.4	1346872.2	Mercury	0.1	U	mg/kg	NORMAL
122017	11152	16-Jul-93	2.5	3	480484.7	1346834.2	Mercury	0.1	U	mg/kg	NORMAL
61191	WPA28	26-Apr-91	0	0.5	480350.0	1347443.5	Mercury	0.1	U	mg/kg	NORMAL
121763	11160	14-Jul-93	5.5	6	480471.1	1346863.2	Mercury	0.1	U	mg/kg	NORMAL
121645	11161	14-Jul-93	4.5	6	480461.1	1346863.2	Mercury	0.1	U	mg/kg	NORMAL
122305	11146	24-Jul-93	11.5	12	480478.4	1346815.3	Mercury	0.1	U	mg/kg	NORMAL
123249	WP-SS-14	09-Jul-93	0	0.5	481047.0	1347185.9	Mercury	0.1	U	mg/kg	NORMAL
121641	11161	14-Jul-93	1.5	3	480461.1	1346863.2	Mercury	0.1	U	mg/kg	NORMAL
122326	11147	23-Jul-93	6	6.5	480468.4	1346815.3	Mercury	0.1	U	mg/kg	NORMAL
122304	11146	23-Jul-93	8	8.5	480478.4	1346815.3	Mercury	0.1	U	mg/kg	NORMAL
121882	11145	22-Jul-93	6.5	7	480488.4	1346815.3	Mercury	0.1	U	mg/kg	NORMAL
8854	1033	08-Apr-88	1.5	3	480442.3	1347206.2	Neptunium-237	0.6	U	pCi/g	NORMAL
5423	ZONE 3-279	15-Sep-88	0	0.16667	481029.4	1346831.0	Neptunium-237	0.6	U	pCi/g	NORMAL
5652	ZONE 3-257	19-Jun-88	0.33333	0.5	480729.4	1346931.0	Neptunium-237	0.6	UJ	pCi/g	NORMAL
SS-23-170	CIS_SYSGEN_286		0	0.5	480489.0	1347493.8	Neptunium-237	0.2	U	pCi/g	NORMAL
56033	1482	05-Dec-89		10	480462.3	1347578.1	Neptunium-237	0.6	UNV	PCI/G	NORMAL
8188	1072	06-Mar-88	0	1.5	481055.3	1347007.4	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56036	1483	05-Dec-89		8	480463.6	1347552.5	Neptunium-237	0.6	UNV	PCI/G	NORMAL
SS-46-206	CIS_SYSGEN_339		0	0.16	480762.8	1346954.1	Neptunium-237	0.3	U	pCi/g	NORMAL
56035	1483	05-Dec-89		5	480463.6	1347552.5	Neptunium-237	0.6	UNV	PCI/G	NORMAL
SS-46-214	CIS_SYSGEN_317		0	0.16	480649.2	1347451.2	Neptunium-237	0.2	UJ	pCi/g	NORMAL
SS-23-162	CIS_SYSGEN_278		0	0.5	480485.0	1347639.8	Neptunium-237	0.2	U	pCi/g	NORMAL
5651	ZONE 3-257	19-Jun-88	0.16667	0.33333	480729.4	1346931.0	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56038	1484	05-Dec-89		8.5	480464.1	1347527.6	Neptunium-237	0.6	UNV	PCI/G	NORMAL
5645	ZONE 3-208	19-Jun-88	0.16667	0.33333	480289.4	1346871.0	Neptunium-237	0.6	UJ	pCi/g	NORMAL
5648	ZONE 3-250	19-Jun-88	0.16667	0.33333	480569.4	1346881.0	Neptunium-237	0.6	UJ	pCi/g	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
98356	1837	01-Jul-92	3	4	480868.6	1347258.1	Neptunium-237	0.2	UJ	pCi/g	NORMAL
98358	1837	01-Jul-92	6	7	480868.6	1347258.1	Neptunium-237	0.2	UJ	pCi/g	NORMAL
SS-23-145	CIS_SYSGEN_293		0	0.5	480494.0	1347858.1	Neptunium-237	0.2	UNV	pCi/g	NORMAL
5649	ZONE 3-250	19-Jun-88	0.33333	0.5	480569.4	1346881.0	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56034	1482	05-Dec-89		14	480462.3	1347578.1	Neptunium-237	0.6	UNV	PCI/G	NORMAL
SS-23-176	CIS_SYSGEN_276		0	0.5	480484.3	1347919.9	Neptunium-237	0.2	U	pCi/g	NORMAL
5646	ZONE 3-208	19-Jun-88	0.33333	0.5	480289.4	1346871.0	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56037	1484	05-Dec-89		5	480464.1	1347527.6	Neptunium-237	0.6	UNV	PCI/G	NORMAL
5890	ZONE 2-177	09-Oct-88	0	0.5	480268.4	1347531.0	Neptunium-237	0.6	U	pCi/g	NORMAL
5884	ZONE 2-179	09-Oct-88	0	0.5	480279.4	1347031.0	Neptunium-237	0.6	U	pCi/g	NORMAL
32456	2032	06-Feb-90	7.5	9	480533.0	1346829.6	Neptunium-237	0.6	U	pCi/g	NORMAL
8810	2008	21-Mar-88	13.5	15	480690.8	1347449.0	Neptunium-237	0.6	U	pCi/g	NORMAL
56032	1482	05-Dec-89		6.5	480462.3	1347578.1	Neptunium-237	0.6	UNV	PCI/G	NORMAL
123249	WP-SS-14	09-Jul-93	0	0.5	481047.0	1347185.9	Neptunium-237	0.8	J	pCi/g	NORMAL
8827	2008	23-Mar-88	55	56.5	480690.8	1347449.0	Neptunium-237	0.6	U	pCi/g	NORMAL
56004	1478	18-Nov-89	9.3	9.7	480444.8	1346823.5	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56003	1478	18-Nov-89	4.9	5.3	480444.8	1346823.5	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56002	1477	18-Nov-89	9.8	10	480419.8	1346823.5	Neptunium-237	0.6	UJ	pCi/g	NORMAL
32465	2032	07-Feb-90	25	26.5	480533.0	1346829.6	Neptunium-237	0.6	U	pCi/g	NORMAL
56001	1477	18-Nov-89	4.8	5	480419.8	1346823.5	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56014	1479	19-Nov-89	9.8	10	480832.2	1346874.7	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56000	1476	18-Nov-89	14.8	15	480394.8	1346823.5	Neptunium-237	0.6	UJ	pCi/g	NORMAL
32766	2033	05-Jun-90	40	40.5	480440.5	1347218.3	Neptunium-237	0.6	UJ	pCi/g	NORMAL
8295	3034	22-Mar-88	95	96.5	480269.6	1346962.4	Neptunium-237	0.6	U	pCi/g	NORMAL
55999	1476	18-Nov-89	9.8	10	480394.8	1346823.5	Neptunium-237	0.6	UJ	pCi/g	NORMAL
55996	1476	18-Nov-89	4.8	5.3	480394.8	1346823.5	Neptunium-237	0.6	UJ	pCi/g	NORMAL
8279	3034	20-Mar-88	21	22.5	480269.6	1346962.4	Neptunium-237	0.6	U	pCi/g	NORMAL
8272	3034	20-Mar-88	10.5	12	480269.6	1346962.4	Neptunium-237	0.6	U	pCi/g	NORMAL
SS-23-106	CIS_SYSGEN_200		0	0.5	480450.4	1347840.9	Neptunium-237	0.2	UNV	pCi/g	NORMAL
56013	1479	19-Nov-89	4.8	5	480832.2	1346874.7	Neptunium-237	0.6	UJ	pCi/g	NORMAL
7504	1032	30-Oct-87	15	16.5	480544.672	1346827.9	Neptunium-237	0.6	UJ	pCi/g	NORMAL
98323	1839	24-Jun-92	5	6	480463.3	1347681.0	Neptunium-237	0.2	UJ	pCi/g	NORMAL
98318	1839	24-Jun-92	2	3	480463.3	1347681.0	Neptunium-237	0.2	UJ	pCi/g	NORMAL
56019	1481	20-Nov-89	4.9	5.3	480882.2	1346874.7	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56015	1479	19-Nov-89	14.6	15	480832.2	1346874.7	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56018	1480	20-Nov-89	14.7	15	480857.2	1346874.7	Neptunium-237	0.6	UJ	pCi/g	NORMAL
6100	ZONE 1-130	26-Oct-88	0	0.5	480279.4	1347781.0	Neptunium-237	0.6	U	pCi/g	NORMAL
56017	1480	20-Nov-89	9.9	10.3	480857.2	1346874.7	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56021	1481	20-Nov-89	14.6	15	480882.2	1346874.7	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56016	1480	20-Nov-89	4.8	5	480857.2	1346874.7	Neptunium-237	0.6	UJ	pCi/g	NORMAL
5887	ZONE 2-178	09-Oct-88	0	0.5	480274.4	1347281.0	Neptunium-237	0.6	U	pCi/g	NORMAL
56020	1481	20-Nov-89	9.8	10.2	480882.2	1346874.7	Neptunium-237	0.6	UJ	pCi/g	NORMAL

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
8272	3034	20-Mar-88	10.5	12	480269.6	1346962.4	Strontium-90	0.5	U	pCi/g	NORMAL
98318	1839	24-Jun-92	2	3	480463.3	1347681.0	Strontium-90	0.5	J	pCi/g	NORMAL
33083	3032	23-Sep-90	95	96.5	480522.1	1346827.6	Strontium-90	0.8	J	pCi/g	NORMAL
SS-46-214	CIS_SYSGEN_317		0	0.16	480649.2	1347451.2	Strontium-90	0.8	UJ	pCi/g	NORMAL
98358	1837	01-Jul-92	6	7	480868.6	1347258.1	Strontium-90	0.5	UJ	pCi/g	NORMAL
8279	3034	20-Mar-88	21	22.5	480269.6	1346962.4	Strontium-90	0.5	U	pCi/g	NORMAL
98376	1836	06-Jul-92	6	7	481120.2	1347265.7	Strontium-90	0.5	UJ	pCi/g	NORMAL
32456	2032	06-Feb-90	7.5	9	480533.0	1346829.6	Strontium-90	2.8	J	pCi/g	NORMAL
8295	3034	22-Mar-88	95	96.5	480269.6	1346962.4	Strontium-90	0.5	U	pCi/g	NORMAL
SS-23-162	CIS_SYSGEN_278		0	0.5	480485.0	1347639.8	Strontium-90	0.5	U	pCi/g	NORMAL
98356	1837	01-Jul-92	3	4	480868.6	1347258.1	Strontium-90	0.5	UJ	pCi/g	NORMAL
7504	1032	30-Oct-87	15	16.5	480544.7	1346827.9	Strontium-90	0.5	U	pCi/g	NORMAL
8810	2008	21-Mar-88	13.5	15	480690.8	1347449.0	Strontium-90	0.5	U	pCi/g	NORMAL
98323	1839	24-Jun-92	5	6	480463.3	1347681.0	Strontium-90	0.5	UJ	pCi/g	NORMAL
SS-23-170	CIS_SYSGEN_286		0	0.5	480489.0	1347493.8	Strontium-90	1.4	NV	pCi/g	NORMAL
32465	2032	07-Feb-90	25	26.5	480533.0	1346829.6	Strontium-90	0.6	J	pCi/g	NORMAL
8827	2008	23-Mar-88	55	56.5	480690.8	1347449.0	Strontium-90	0.5	U	pCi/g	NORMAL
SS-23-176	CIS_SYSGEN_276		0	0.5	480484.3	1347919.9	Strontium-90	0.5	U	pCi/g	NORMAL
SS-23-145	CIS_SYSGEN_293		0	0.5	480494.0	1347858.1	Strontium-90	0.5	NV	pCi/g	NORMAL
SS-23-106	CIS_SYSGEN_200		0	0.5	480450.4	1347840.9	Strontium-90	0.5	UNV	pCi/g	NORMAL
56036	1483	05-Dec-89		8	480463.6	1347552.5	Strontium-90	0.5	UNV	PCI/G	NORMAL
SS-46-206	CIS_SYSGEN_339		0	0.16	480762.8	1346954.1	Strontium-90	0.5	UJ	pCi/g	NORMAL
122022	11152	16-Jul-93	5	5.5	480484.7	1346834.2	Strontium-90	0.5	UJ	pCi/g	NORMAL
56013	1479	19-Nov-89	4.8	5	480832.2	1346874.7	Strontium-90	0.5	U	pCi/g	NORMAL
122018	11152	16-Jul-93	2.5	3	480484.7	1346834.2	Strontium-90	0.5	UJ	pCi/g	NORMAL
5887	ZONE 2-178	09-Oct-88	0	0.5	480274.4	1347281.0	Strontium-90	1.8	J	pCi/g	NORMAL
121634	11153	15-Jul-93	2.5	3.5	480474.7	1346834.2	Strontium-90	0.8	UJ	pCi/g	NORMAL
56014	1479	19-Nov-89	9.8	10	480832.2	1346874.7	Strontium-90	0.5	UJ	pCi/g	NORMAL
121787	11155	15-Jul-93	2.5	3	480454.7	1346834.2	Strontium-90	0.7	UJ	pCi/g	NORMAL
121791	11155	15-Jul-93	5.5	6	480454.7	1346834.2	Strontium-90	0.8	UJ	pCi/g	NORMAL
5884	ZONE 2-179	09-Oct-88	0	0.5	480279.4	1347031.0	Strontium-90	0.5	UJ	pCi/g	NORMAL
122517	11162	24-Jul-93	5	5.5	480517.4	1346872.2	Strontium-90	0.5	UJ	pCi/g	NORMAL
122037	11151	16-Jul-93	5.5	6	480494.7	1346834.2	Strontium-90	0.5	UJ	pCi/g	NORMAL
122058	11156	21-Jul-93	4	4.5	480511.1	1346863.2	Strontium-90	2.7	UJ	pCi/g	NORMAL
122506	11149	24-Jul-93	3	3.5	480448.4	1346815.3	Strontium-90	0.4	UJ	PCI/G	DUPLICATE
5645	ZONE 3-208	19-Jun-88	0.16667	0.33333	480289.4	1346871.0	Strontium-90	0.9	J	pCi/g	NORMAL
56018	1480	20-Nov-89	14.7	15	480857.2	1346874.7	Strontium-90	0.5	U	pCi/g	NORMAL
121845	11150	16-Jul-93	3	3.5	480504.7	1346834.2	Strontium-90	0.6	UJ	pCi/g	NORMAL
56017	1480	20-Nov-89	9.9	10.3	480857.2	1346874.7	Strontium-90	0.5	U	pCi/g	NORMAL
122033	11151	16-Jul-93	0.5	1	480494.7	1346834.2	Strontium-90	0.6	UJ	pCi/g	NORMAL
121846	11150	16-Jul-93	4.5	5	480504.7	1346834.2	Strontium-90	0.5	UJ	pCi/g	NORMAL
56016	1480	20-Nov-89	4.8	5	480857.2	1346874.7	Strontium-90	0.5	U	pCi/g	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
5890	ZONE 2-177	09-Oct-88	0	0.5	480268.4	1347531.0	Strontium-90	0.9	J	pCi/g	NORMAL
121380	11167	09-Jul-93	0	1.5	480467.4	1346872.2	Strontium-90	0.5	UJ	pCi/g	NORMAL
122350	11149	24-Jul-93	5	5.5	480448.4	1346815.3	Strontium-90	0.7	UJ	pCi/g	NORMAL
121621	11163	11-Jul-93	3	4.5	480507.4	1346872.2	Strontium-90	0.5	UJ	pCi/g	NORMAL
123249	WP-SS-14	09-Jul-93	0	0.5	481047.0	1347185.9	Strontium-90	0.5	UJ	pCi/g	NORMAL
121760	11160	14-Jul-93	2	2.5	480471.1	1346863.2	Strontium-90	0.7	UJ	pCi/g	NORMAL
121764	11160	14-Jul-93	5.5	6	480471.1	1346863.2	Strontium-90	2.8	U	pCi/g	NORMAL
121619	11163	11-Jul-93	4.5	6	480507.4	1346872.2	Strontium-90	0.5	UJ	pCi/g	NORMAL
121817	11159	14-Jul-93	2.5	3	480481.1	1346863.2	Strontium-90	0.7	UJ	PCI/G	DUPLICATE
122525	11162	24-Jul-93	4.5	5	480517.4	1346872.2	Strontium-90	0.4	UJ	PCI/G	DUPLICATE
121646	11161	14-Jul-93	4.5	6	480461.1	1346863.2	Strontium-90	0.7	J	pCi/g	NORMAL
121384	11164	10-Jul-93	3	4.5	480497.4	1346872.2	Strontium-90	3.5	U	pCi/g	NORMAL
121396	11165	10-Jul-93	4.5	6	480487.4	1346872.2	Strontium-90	0.8	UJ	pCi/g	NORMAL
121804	11159	14-Jul-93	1.5	3	480481.1	1346863.2	Strontium-90	0.8	UJ	pCi/g	NORMAL
121756	11157	14-Jul-93	5.5	6	480501.1	1346863.2	Strontium-90	1.5	UJ	pCi/g	NORMAL
122104	11158	21-Jul-93	5.5	6	480491.1	1346863.2	Strontium-90	0.6	UJ	pCi/g	NORMAL
6100	ZONE 1-130	26-Oct-88	0	0.5	480279.4	1347781.0	Strontium-90	0.5	U	pCi/g	NORMAL
121377	11166	09-Jul-93	4.5	6	480477.4	1346872.2	Strontium-90	0.5	UJ	pCi/g	NORMAL
122105	11158	22-Jul-93	7	7.5	480491.1	1346863.2	Strontium-90	0.7	UJ	pCi/g	NORMAL
121373	11166	09-Jul-93	3	4.5	480477.4	1346872.2	Strontium-90	0.5	UJ	pCi/g	NORMAL
121801	11159	14-Jul-93	4.5	6	480481.1	1346863.2	Strontium-90	0.7	UJ	pCi/g	NORMAL
121610	11165	10-Jul-93	1.5	2	480487.4	1346872.2	Strontium-90	0.6	UJ	pCi/g	NORMAL
122106	11158	22-Jul-93	6.5	7	480491.1	1346863.2	Strontium-90	0.8	UJ	PCI/G	DUPLICATE
56019	1481	20-Nov-89	4.9	5.3	480882.2	1346874.7	Strontium-90	0.5	U	pCi/g	NORMAL
56015	1479	19-Nov-89	14.6	15	480832.2	1346874.7	Strontium-90	0.5	U	pCi/g	NORMAL
8188	1072	06-Mar-88	0	1.5	481055.3	1347007.4	Strontium-90	0.5	UJ	pCi/g	NORMAL
56033	1482	05-Dec-89		10	480462.3	1347578.1	Strontium-90	1.9	NV	PCI/G	NORMAL
5646	ZONE 3-208	19-Jun-88	0.33333	0.5	480289.4	1346871.0	Strontium-90	0.8	J	pCi/g	NORMAL
5423	ZONE 3-279	15-Sep-88	0	0.16667	481029.4	1346831.0	Strontium-90	0.5	U	pCi/g	NORMAL
98372	1836	06-Jul-92	3	4	481120.2	1347265.7	Strontium-90	0.5	UJ	pCi/g	NORMAL
122307	11146	24-Jul-93	11.5	12	480478.4	1346815.3	Strontium-90	0.5	UJ	pCi/g	NORMAL
122329	11147	24-Jul-93	9.5	10.5	480468.4	1346815.3	Strontium-90	0.5	UJ	pCi/g	NORMAL
56038	1484	05-Dec-89		8.5	480464.1	1347527.6	Strontium-90	1.2	NV	PCI/G	NORMAL
56037	1484	05-Dec-89		5	480464.1	1347527.6	Strontium-90	0.5	UNV	PCI/G	NORMAL
56034	1482	05-Dec-89		14	480462.3	1347578.1	Strontium-90	0.7	NV	PCI/G	NORMAL
5652	ZONE 3-257	19-Jun-88	0.33333	0.5	480729.4	1346931.0	Strontium-90	1.6	J	pCi/g	NORMAL
56032	1482	05-Dec-89		6.5	480462.3	1347578 1	Strontium-90	4.3	NV	PCI/G	NORMAL
5649	ZONE 3-250	19-Jun-88	0.33333	0.5	480569.4	1346881 0	Strontium-90	1.0	J	pCi/g	NORMAL
121897	11148	23-Jul-93	4.5	5	480458.4	1346815.3	Strontium-90	0.9	UJ	pCi/g	NORMAL
122328	11147	23-Jul-93	6	6.5	480468.4	1346815.3	Strontium-90	0.6	J	pCi/g	NORMAL
56021	1481	20-Nov-89	14.6	15	480882.2	1346874.7	Strontium-90	0.5	U	pCi/g	NORMAL
5648	ZONE 3-250	19-Jun-88	0.16667	0.33333	480569.4	1346881.0	Strontium-90	0.8	J	pCi/g	NORMAL

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
8854	1033	08-Apr-88	1.5	3	480442.3	1347206.2	Strontium-90	0.5	UJ	pCi/g	NORMAL
122349	11149	24-Jul-93	3.5	4	480448.4	1346815.3	Strontium-90	0.9	UJ	pCi/g	NORMAL
56035	1483	05-Dec-89		5	480463.6	1347552.5	Strontium-90	6.0	NV	PCI/G	NORMAL
56020	1481	20-Nov-89	9.8	10.2	480862.2	1346874.7	Strontium-90	0.5	U	pCi/g	NORMAL
122306	11146	23-Jul-93	8	8.5	480478.4	1346815.3	Strontium-90	0.5	UJ	pCi/g	NORMAL
122303	11148	23-Jul-93	5	5.5	480458.4	1346815.3	Strontium-90	0.6	UJ	pCi/g	NORMAL
98376	1836	06-Jul-92	6	7	481120.2	1347265.7	Technetium-99	1.0	UJ	pCi/g	NORMAL
5648	ZONE 3-250	19-Jun-88	0.16667	0.33333	480569.4	1346881.0	Technetium-99	1.1	UJ	pCi/g	NORMAL
5651	ZONE 3-257	19-Jun-88	0.16667	0.33333	480729.4	1346931.0	Technetium-99	1.0	UJ	pCi/g	NORMAL
121879	11145	21-Jul-93	4.5	5	480488.4	1346815.3	Technetium-99	1.7	J	pCi/g	NORMAL
122105	11158	22-Jul-93	7	7.5	480491.1	1346863.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
5649	ZONE 3-250	19-Jun-88	0.33333	0.5	480569.4	1346881.0	Technetium-99	1.2	J	pCi/g	NORMAL
122104	11158	21-Jul-93	5.5	6	480491.1	1346863.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
122349	11149	24-Jul-93	3.5	4	480448.4	1346815.3	Technetium-99	1.0	U	pCi/g	NORMAL
121801	11159	14-Jul-93	4.5	6	480481.1	1346863.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
121760	11160	14-Jul-93	2	2.5	480471.1	1346863.2	Technetium-99	4.2	-	pCi/g	NORMAL
7504	1032	30-Oct-87	15	16.5	480544.7	1346827.9	Technetium-99	1.0	U	pCi/g	NORMAL
121642	11161	14-Jul-93	1.5	3	480461.1	1346863.2	Technetium-99	1.0	U	pCi/g	NORMAL
121764	11160	14-Jul-93	5.5	6	480471.1	1346863.2	Technetium-99	1.3	-	pCi/g	NORMAL
5423	ZONE 3-279	15-Sep-88	0	0.16667	481029.4	1346831.0	Technetium-99	1.0	U	pCi/g	NORMAL
SS-46-214	CIS_SYSGEN_317		0	0.16	480649.2	1347451.2	Technetium-99	4.8	-	pCi/g	NORMAL
SS-23-106	CIS_SYSGEN_200		0	0.5	480450.4	1347840.9	Technetium-99	1.2	UNV	pCi/g	NORMAL
8854	1033	08-Apr-88	1.5	3	480442.3	1347206.2	Technetium-99	1.3	UNV	pCi/g	NORMAL
5652	ZONE 3-257	19-Jun-88	0.33333	0.5	480729.4	1346931.0	Technetium-99	1.0	UJ	pCi/g	NORMAL
121817	11159	14-Jul-93	2.5	3	480481.1	1346863.2	Technetium-99	0.1	J	PCI/G	DUPLICATE
SS-23-145	CIS_SYSGEN_293		0	0.5	480494.0	1347858.1	Technetium-99	1.1	UNV	pCi/g	NORMAL
8188	1072	06-Mar-88	0	1.5	481055.3	1347007.4	Technetium-99	3.6	-	pCi/g	NORMAL
123249	WP-SS-14	09-Jul-93	0	0.5	481047.0	1347185.9	Technetium-99	1.0	UJ	pCi/g	NORMAL
121804	11159	14-Jul-93	1.5	3	480481.1	1346863.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
121756	11157	14-Jul-93	5.5	6	480501.1	1346863.2	Technetium-99	1.0	U	pCi/g	NORMAL
121791	11155	15-Jul-93	5.5	6	480454.7	1346834.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
6100	ZONE 1-130	26-Oct-88	0	0.5	480279.4	1347781.0	Technetium-99	1.0	UJ	pCi/g	NORMAL
121846	11150	16-Jul-93	4.5	5	480504.7	1346834.2	Technetium-99	1.0	U	pCi/g	NORMAL
5646	ZONE 3-208	19-Jun-88	0.33333	0.5	480289.4	1346871.0	Technetium-99	1.0	UJ	pCi/g	NORMAL
122037	11151	16-Jul-93	5.5	6	480494.7	1346834.2	Technetium-99	1.0	U	pCi/g	NORMAL
5884	ZONE 2-179	09-Oct-88	0	0.5	480279.4	1347031.0	Technetium-99	1.0	UJ	pCi/g	NORMAL
122033	11151	16-Jul-93	0.5	1	480494.7	1346834.2	Technetium-99	1.0	U	pCi/g	NORMAL
122329	11147	24-Jul-93	9.5	10.5	480468.4	1346815.3	Technetium-99	1.2	UJ	pCi/g	NORMAL
121897	11148	23-Jul-93	4.5	5	480458.4	1346815.3	Technetium-99	1.0	UJ	pCi/g	NORMAL
121845	11150	16-Jul-93	3	3.5	480504.7	1346834.2	Technetium-99	1.0	U	pCi/g	NORMAL
SS-23-170	CIS_SYSGEN_286		0	0.5	480489.0	1347493.8	Technetium-99	602.0	NV	pCi/g	NORMAL
122506	11149	24-Jul-93	3	3.5	480448.4	1346815.3	Technetium-99	0.2	UJ	PCI/G	DUPLICATE

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
122303	11148	23-Jul-93	5	5.5	480458.4	1346815.3	Technetium-99	1.0	UJ	pCi/g	NORMAL
SS-23-162	CIS_SYSGEN_278		0	0.5	480485.0	1347639.8	Technetium-99	3.3	NV	pCi/g	NORMAL
SS-23-176	CIS_SYSGEN_276		0	0.5	480484.3	1347919.9	Technetium-99	2.4	NV	pCi/g	NORMAL
122350	11149	24-Jul-93	5	5.5	480448.4	1346815.3	Technetium-99	1.0	U	pCi/g	NORMAL
122328	11147	23-Jul-93	6	6.5	480468.4	1346815.3	Technetium-99	1.2	UJ	pCi/g	NORMAL
122018	11152	16-Jul-93	2.5	3	480484.7	1346834.2	Technetium-99	1.0	U	pCi/g	NORMAL
121752	11157	14-Jul-93	2	2.5	480501.1	1346863.2	Technetium-99	1.0	U	pCi/g	NORMAL
5890	ZONE 2-177	09-Oct-88	0	0.5	480268.4	1347531.0	Technetium-99	1.0	UJ	pCi/g	NORMAL
121880	11145	22-Jul-93	6.5	7	480488.4	1346815.3	Technetium-99	1.0	UJ	pCi/g	NORMAL
122059	11156	21-Jul-93	5.5	6	480511.1	1346863.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
122058	11156	21-Jul-93	4	4.5	480511.1	1346863.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
5645	ZONE 3-208	19-Jun-88	0.16667	0.33333	480289.4	1346871.0	Technetium-99	1.0	UJ	pCi/g	NORMAL
122306	11146	23-Jul-93	8	8.5	480478.4	1346815.3	Technetium-99	1.2	UJ	pCi/g	NORMAL
122006	11154	15-Jul-93	5	5.5	480464.7	1346834.2	Technetium-99	18.6	J	pCi/g	NORMAL
121787	11155	15-Jul-93	2.5	3	480454.7	1346834.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
122022	11152	16-Jul-93	5	5.5	480484.7	1346834.2	Technetium-99	1.0	U	pCi/g	NORMAL
122002	11154	15-Jul-93	4	4.5	480464.7	1346834.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
122307	11146	24-Jul-93	11.5	12	480478.4	1346815.3	Technetium-99	1.2	UJ	pCi/g	NORMAL
121638	11153	15-Jul-93	4.5	6	480474.7	1346834.2	Technetium-99	16.9	J	pCi/g	NORMAL
5887	ZONE 2-178	09-Oct-88	0	0.5	480274.4	1347281.0	Technetium-99	1.0	UJ	pCi/g	NORMAL
121634	11153	15-Jul-93	2.5	3.5	480474.7	1346834.2	Technetium-99	7.7	J	pCi/g	NORMAL
121646	11161	14-Jul-93	4.5	6	480461.1	1346863.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
122106	11158	22-Jul-93	6.5	7	480491.1	1346863.2	Technetium-99	0.3	UJ	PCI/G	DUPLICATE
56016	1480	20-Nov-89	4.8	5	480857.2	1346874.7	Technetium-99	1.0	U	pCi/g	NORMAL
55998	1476	18-Nov-89	4.8	5.3	480394.8	1346823.5	Technetium-99	1.0	UJ	pCi/g	NORMAL
56020	1481	20-Nov-89	9.8	10.2	480882.2	1346874.7	Technetium-99	1.0	U	pCi/g	NORMAL
32766	2033	05-Jun-90	40	40.5	480440.5	1347218.3	Technetium-99	1.0	U	pCi/g	NORMAL
56021	1481	20-Nov-89	14.6	15	480882.2	1346874.7	Technetium-99	1.0	U	pCi/g	NORMAL
55999	1476	18-Nov-89	9.8	10	480394.8	1346823.5	Technetium-99	1.0	UJ	pCi/g	NORMAL
33083	3032	23-Sep-90	95	96.5	480522.1	1346827.6	Technetium-99	1.0	UJ	pCi/g	NORMAL
121380	11167	09-Jul-93	0	1.5	480467.4	1346872.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
98318	1839	24-Jun-92	2	3	480463.3	1347681.0	Technetium-99	1.0	UJ	pCi/g	NORMAL
56032	1482	05-Dec-89		6.5	480462.3	1347578.1	Technetium-99	0.9	UNV	PCI/G	NORMAL
121358	11167	08-Jul-93	4.5	6	480467.4	1346872.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
98358	1837	01-Jul-92	6	7	480868.6	1347258.1	Technetium-99	1.0	UJ	pCi/g	NORMAL
56033	1482	05-Dec-89		10	480462.3	1347578.1	Technetium-99	0.9	UNV	PCI/G	NORMAL
56019	1481	20-Nov-89	4.9	5.3	480882.2	1346874.7	Technetium-99	1.0	U	pCi/g	NORMAL
32465	2032	07-Feb-90	25	26.5	480533.0	1346829.6	Technetium-99	1.0	U	pCi/g	NORMAL
56000	1476	18-Nov-89	14.8	15	480394.8	1346823.5	Technetium-99	1.0	UJ	pCi/g	NORMAL
121377	11166	09-Jul-93	4.5	6	480477.4	1346872.2	Technetium-99	2.7	J	pCi/g	NORMAL
8827	2008	23-Mar-88	55	56.5	480690.8	1347449.0	Technetium-99	1.0	U	pCi/g	NORMAL
56013	1479	19-Nov-89	4.8	5	480832.2	1346874.7	Technetium-99	1.0	U	pCi/g	NORMAL

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
56004	1478	18-Nov-89	9.3	9.7	480444.8	1346823.5	Technetium-99	1.0	UJ	pCi/g	NORMAL
56003	1478	18-Nov-89	4.9	5.3	480444.8	1346823.5	Technetium-99	1.0	UJ	pCi/g	NORMAL
56014	1479	19-Nov-89	9.8	10	480832.2	1346874.7	Technetium-99	1.0	U	pCi/g	NORMAL
56001	1477	18-Nov-89	4.8	5	480419.8	1346823.5	Technetium-99	1.0	UJ	pCi/g	NORMAL
56002	1477	18-Nov-89	9.8	10	480419.8	1346823.5	Technetium-99	1.0	UJ	pCi/g	NORMAL
56018	1480	20-Nov-89	14.7	15	480857.2	1346874.7	Technetium-99	1.0	U	pCi/g	NORMAL
56015	1479	19-Nov-89	14.6	15	480832.2	1346874.7	Technetium-99	1.0	U	pCi/g	NORMAL
98323	1839	24-Jun-92	5	6	480463.3	1347681.0	Technetium-99	1.0	UJ	pCi/g	NORMAL
32456	2032	06-Feb-90	7.5	9	480533.0	1346829.6	Technetium-99	1.0	U	pCi/g	NORMAL
56017	1480	20-Nov-89	9.9	10.3	480857.2	1346874.7	Technetium-99	1.0	U	pCi/g	NORMAL
8810	2008	21-Mar-88	13.5	15	480690.8	1347449.0	Technetium-99	3.6	-	pCi/g	NORMAL
8272	3034	20-Mar-88	10.5	12	480269.6	1346962.4	Technetium-99	1.0	UNV	pCi/g	NORMAL
121373	11166	09-Jul-93	3	4.5	480477.4	1346872.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
56037	1484	05-Dec-89		5	480464.1	1347527.6	Technetium-99	0.9	UNV	PCI/G	NORMAL
121388	11164	10-Jul-93	4.5	6	480497.4	1346872.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
121396	11165	10-Jul-93	4.5	6	480487.4	1346872.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
121392	11165	10-Jul-93	3	4.5	480487.4	1346872.2	Technetium-99	6.1	J	pCi/g	NORMAL
56036	1483	05-Dec-89		8	480463.6	1347552.5	Technetium-99	0.9	UNV	PCI/G	NORMAL
8279	3034	20-Mar-88	21	22.5	480269.6	1346962.4	Technetium-99	2.1	NV	pCi/g	NORMAL
121619	11163	11-Jul-93	4.5	6	480507.4	1346872.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
121384	11164	10-Jul-93	3	4.5	480497.4	1346872.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
121621	11163	11-Jul-93	3	4.5	480507.4	1346872.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
98372	1836	06-Jul-92	3	4	481120.2	1347265.7	Technetium-99	1.0	UJ	pCi/g	NORMAL
SS-46-206	CIS_SYSGEN_339		0	0.16	480762.8	1346954.1	Technetium-99	4.0	UJ	pCi/g	NORMAL
56038	1484	05-Dec-89		8.5	480464.1	1347527.6	Technetium-99	0.9	UNV	PCI/G	NORMAL
122518	11162	25-Jul-93	6.5	7	480517.4	1346872.2	Technetium-99	1.0	UJ	pCi/g	NORMAL
56034	1482	05-Dec-89		14	480462.3	1347578.1	Technetium-99	0.9	UNV	PCI/G	NORMAL
98356	1837	01-Jul-92	3	4	480868.6	1347258.1	Technetium-99	1.0	UJ	pCi/g	NORMAL
122525	11162	24-Jul-93	4.5	5	480517.4	1346872.2	Technetium-99	1.2	UJ	PCI/G	DUPLICATE
56035	1483	05-Dec-89		5	480463.6	1347552.5	Technetium-99	0.9	UNV	PCI/G	NORMAL
8295	3034	22-Mar-88	95	96.5	480269.6	1346962.4	Technetium-99	1.0	UNV	pCi/g	NORMAL
122517	11162	24-Jul-93	5	5.5	480517.4	1346872.2	Technetium-99	1.2	UJ	pCi/g	NORMAL
121610	11165	10-Jul-93	1.5	2	480487.4	1346872.2	Technetium-99	3.0	J	pCi/g	NORMAL
98323	1839	24-Jun-92	5	6	480463.3	1347681.0	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61225	WPA32	26-Apr-91	1.5	2	480549.9	1347449.0	Tetrachloroethene	6.0	U	ug/kg	NORMAL
98376	1836	06-Jul-92	6	7	481120.2	1347265.7	Tetrachloroethene	6.0	U	ug/kg	NORMAL
98372	1836	06-Jul-92	3	4	481120.2	1347265.7	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61105	WPA15	25-Apr-91	1.5	2	481057.9	1347162.8	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61238	WPA34	25-Apr-91	1.5	2	480632.8	1347367.7	Tetrachloroethene	6.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.7	1346789.3	Tetrachloroethene	12.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.2	1346874.7	Tetrachloroethene	5.0	U	ug/kg	NORMAL
56039	1482	05-Dec-89	14	14	480462.3	1347578.1	Tetrachloroethene	6.0	U	ug/kg	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
98358	1837	01-Jul-92	6	7	480868.6	1347258.1	Tetrachloroethene	6.0	U	ug/kg	NORMAL
98356	1837	01-Jul-92	3	4	480868.6	1347258.1	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61098	WPA14	25-Apr-91	1.5	2	481063.3	1346962.9	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.2	1346857.4	Tetrachloroethene	5.0	U	ug/kg	NORMAL
61245	WPA35	25-Apr-91	1.5	2	480755.3	1347254.5	Tetrachloroethene	6.0	U	ug/kg	NORMAL
119432	11079	30-Jun-93			481067.8	1347002.7	Tetrachloroethene	12.0	U	UG/KG	DRILL CUTTINGS
98318	1839	24-Jun-92	2	3	480463.3	1347681.0	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61217	WPA31	24-Apr-91	1.5	2	480503.3	1347281.2	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61133	WPA19	27-Apr-91	1.5	2	480666.3	1346852.0	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61189	WPA27	26-Apr-91	1.5	2	480355.5	1347243.6	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61252	WPA36	23-Apr-91	1.5	2	480724.8	1347453.7	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61258	WPA37	23-Apr-91	1.5	2	480858.0	1347157.3	Tetrachloroethene	5.0	U	ug/kg	NORMAL
61147	WPA21	26-Apr-91	1.5	2	480251.1	1346846.9	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61182	WPA26	27-Apr-91	1.5	2	480252.8	1347340.8	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61168	WPA24	27-Apr-91	1.5	2	480258.2	1347140.9	Tetrachloroethene	6.0	U	ug/kg	NORMAL
123249	WP-SS-14	09-Jul-93	0	0.5	481047.0	1347185.9	Tetrachloroethene	11.0	U	ug/kg	NORMAL
61196	WPA28	26-Apr-91	1.5	2	480350.0	1347443.5	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61203	WPA29	28-Apr-91	1.5	2	480457.7	1347161.4	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61175	WPA25	28-Apr-91	1.5	2	480155.6	1347238.1	Tetrachloroethene	6.0	U	ug/kg	NORMAL
56005	1476	19-Nov-89	14.8	15	480394.8	1346823.5	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61210	WPA30	24-Apr-91	1.5	2	480452.7	1347346.3	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61140	WPA20	26-Apr-91	1.5	2	480466.4	1346846.5	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61515	WPA18	25-Jul-91	0.5	1	480866.2	1346857.4	Toxaphene	670.0	U	ug/kg	NORMAL
61205	WPA30	24-Apr-91	0	0.5	480452.7	1347346.3	Toxaphene	240.0	U	ug/kg	NORMAL
61184	WPA27	26-Apr-91	0	0.5	480355.5	1347243.6	Toxaphene	190.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.2	1346857.4	Toxaphene	540.0	U	ug/kg	NORMAL
61163	WPA24	27-Apr-91	0	0.5	480258.2	1347140.9	Toxaphene	200.0	U	ug/kg	NORMAL
61093	WPA14	25-Apr-91	0	0.5	481063.3	1346962.9	Toxaphene	180.0	U	ug/kg	NORMAL
61247	WPA36	23-Apr-91	0	0.5	480724.8	1347453.7	Toxaphene	190.0	U	ug/kg	NORMAL
61221	WPA32	23-Apr-91	0	0.5	480549.9	1347449.0	Toxaphene	200.0	U	ug/kg	NORMAL
61177	WPA26	27-Apr-91	0	0.5	480252.8	1347340.8	Toxaphene	200.0	U	ug/kg	NORMAL
61212	WPA31	24-Apr-91	0	0.5	480503.3	1347281.2	Toxaphene	190.0	U	ug/kg	NORMAL
61254	WPA37	23-Apr-91	0	0.5	480858.0	1347157.3	Toxaphene	190.0	U	ug/kg	NORMAL
61170	WPA25	28-Apr-91	0	0.5	480155.6	1347238.1	Toxaphene	200.0	U	ug/kg	NORMAL
61191	WPA28	26-Apr-91	0	0.5	480350.0	1347443.5	Toxaphene	220.0	U	ug/kg	NORMAL
61240	WPA35	25-Apr-91	0	0.5	480755.3	1347254.5	Toxaphene	180.0	U	ug/kg	NORMAL
61135	WPA20	26-Apr-91	0	0.5	480466.4	1346846.5	Toxaphene	200.0	U	ug/kg	NORMAL
56039	1482	05-Dec-89	14	14	480462.3	1347578.1	Toxaphene	400.0	U	ug/kg	NORMAL
61310	WPA23	27-Apr-91	0	0.5	480269.5	1346938.0	Toxaphene	200.0	U	ug/kg	NORMAL
61100	WPA15	25-Apr-91	0	0.5	481057.9	1347162.8	Toxaphene	200.0	U	ug/kg	NORMAL
61198	WPA29	28-Apr-91	0	0.5	480457.7	1347161.4	Toxaphene	210.0	U	ug/kg	NORMAL
61512	WPA18	24-Jul-91	1.5	2	480866.2	1346857.4	Toxaphene	1700.0	U	ug/kg	NORMAL

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
56005	1476	19-Nov-89	14.8	15	480394.8	1346823.5	Toxaphene	190.0	U	ug/kg	NORMAL
61233	WPA34	25-Apr-91	0	0.5	480632.8	1347367.7	Toxaphene	190.0	U	ug/kg	NORMAL
61514	WPA18	25-Jul-91	1.3	1.8	480866.2	1346857.4	Toxaphene	3500.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.7	1346789.3	Toxaphene	400.0	U	ug/kg	NORMAL
61142	WPA21	26-Apr-91	0	0.5	480251.1	1346846.9	Toxaphene	190.0	U	ug/kg	NORMAL
61511	WPA18	25-Jul-91	1.5	1.9	480866.2	1346857.4	Toxaphene	3500.0	U	ug/kg	NORMAL
61219	WPA33	26-Apr-91	0	0.5	480638.7	1347131.1	Toxaphene	180.0	U	ug/kg	NORMAL
61128	WPA19	27-Apr-91	0	0.5	480666.3	1346852.0	Toxaphene	180.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.7	1346789.3	Trichloroethene	12.0	U	ug/kg	NORMAL
61196	WPA28	26-Apr-91	1.5	2	480350.0	1347443.5	Trichloroethene	6.0	U	ug/kg	NORMAL
61175	WPA25	28-Apr-91	1.5	2	480155.6	1347238.1	Trichloroethene	6.0	U	ug/kg	NORMAL
61225	WPA32	26-Apr-91	1.5	2	480549.9	1347449.0	Trichloroethene	6.0	U	ug/kg	NORMAL
61258	WPA37	23-Apr-91	1.5	2	480858.0	1347157.3	Trichloroethene	5.0	U	ug/kg	NORMAL
61098	WPA14	25-Apr-91	1.5	2	481063.3	1346962.9	Trichloroethene	6.0	U	ug/kg	NORMAL
123249	WP-SS-14	09-Jul-93	0	0.5	481047.0	1347185.9	Trichloroethene	11.0	U	ug/kg	NORMAL
98376	1836	06-Jul-92	6	7	481120.2	1347265.7	Trichloroethene	6.0	U	ug/kg	NORMAL
61182	WPA26	27-Apr-91	1.5	2	480252.8	1347340.8	Trichloroethene	6.0	U	ug/kg	NORMAL
61238	WPA34	25-Apr-91	1.5	2	480632.8	1347367.7	Trichloroethene	6.0	U	ug/kg	NORMAL
98356	1837	01-Jul-92	3	4	480868.6	1347258.1	Trichloroethene	6.0	U	ug/kg	NORMAL
119432	11079	30-Jun-93			481067.8	1347002.7	Trichloroethene	12.0	U	UG/KG	DRILL CUTTINGS
61133	WPA19	27-Apr-91	1.5	2	480666.3	1346852.0	Trichloroethene	6.0	U	ug/kg	NORMAL
56039	1482	05-Dec-89	14	14	480462.3	1347578.1	Trichloroethene	18.0	-	ug/kg	NORMAL
61245	WPA35	25-Apr-91	1.5	2	480755.3	1347254.5	Trichloroethene	6.0	U	ug/kg	NORMAL
61147	WPA21	26-Apr-91	1.5	2	480251.1	1346846.9	Trichloroethene	6.0	U	ug/kg	NORMAL
98318	1839	24-Jun-92	2	3	480463.3	1347681.0	Trichloroethene	6.0	U	ug/kg	NORMAL
56005	1476	19-Nov-89	14.8	15	480394.8	1346823.5	Trichloroethene	6.0	U	ug/kg	NORMAL
61189	WPA27	26-Apr-91	1.5	2	480355.5	1347243.6	Trichloroethene	6.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.2	1346857.4	Trichloroethene	5.0	U	ug/kg	NORMAL
98323	1839	24-Jun-92	5	6	480463.3	1347681.0	Trichloroethene	6.0	U	ug/kg	NORMAL
61210	WPA30	24-Apr-91	1.5	2	480452.7	1347346.3	Trichloroethene	6.0	U	ug/kg	NORMAL
61252	WPA36	23-Apr-91	1.5	2	480724.8	1347453.7	Trichloroethene	6.0	U	ug/kg	NORMAL
61140	WPA20	26-Apr-91	1.5	2	480466.4	1346846.5	Trichloroethene	6.0	U	ug/kg	NORMAL
61217	WPA31	24-Apr-91	1.5	2	480503.3	1347281.2	Trichloroethene	6.0	U	ug/kg	NORMAL
98372	1836	06-Jul-92	3	4	481120.2	1347265.7	Trichloroethene	6.0	U	ug/kg	NORMAL
61105	WPA15	25-Apr-91	1.5	2	481057.9	1347162.8	Trichloroethene	6.0	U	ug/kg	NORMAL
61203	WPA29	28-Apr-91	1.5	2	480457.7	1347161.4	Trichloroethene	6.0	U	ug/kg	NORMAL
61168	WPA24	27-Apr-91	1.5	2	480258.2	1347140.9	Trichloroethene	6.0	U	ug/kg	NORMAL
98358	1837	01-Jul-92	6	7	480868.6	1347258.1	Trichloroethene	6.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.2	1346874.7	Trichloroethene	5.0	U	ug/kg	NORMAL
SS-46-206	CIS_SYSGEN_339		0	0.16	480762.8	1346954.1	Uranium, Total	27.9	-	mg/kg	NORMAL
SS-46-323	CIS_SYSGEN_351		0	0.16	480811.4	1347005.5	Uranium, Total	25.5	NV	mg/kg	NORMAL
SS-46-202	CIS_SYSGEN_363		0	0.16	480862.8	1346956.9	Uranium, Total	7.8	NV	mg/kg	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
SS-46-203	CIS_SYSGEN_361		0	0.16	480860.0	1347056.8	Uranium, Total	36.9	NV	mg/kg	NORMAL
SS-46-204	CIS_SYSGEN_360		0	0.16	480857.3	1347156.8	Uranium, Total	16.8	NV	mg/kg	NORMAL
SS-46-205	CIS_SYSGEN_359		0	0.16	480854.6	1347256.7	Uranium, Total	9.3	UNV	mg/kg	NORMAL
SS-46-321	CIS_SYSGEN_352		0	0.16	480812.1	1346980.5	Uranium, Total	44.7	UNV	mg/kg	NORMAL
SS-46-569	CIS_SYSGEN_347		0	0.17	480807.3	1347155.4	Uranium, Total	55.8	NV	mg/kg	NORMAL
SS-46-567	CIS_SYSGEN_349		0	0.17	480808.7	1347105.4	Uranium, Total	112.1	NV	mg/kg	NORMAL
SS-46-318	CIS_SYSGEN_342		0	0.16	480782.3	1347154.7	Uranium, Total	44.7	UNV	mg/kg	NORMAL
SS-46-200	CIS_SYSGEN_373		0	0.16	480957.3	1347159.5	Uranium, Total	27.0	UNV	mg/kg	NORMAL
SS-46-566	CIS_SYSGEN_346		0	0.17	480806.0	1347205.4	Uranium, Total	26.1	NV	mg/kg	NORMAL
123249	WP-SS-14	09-Jul-93	0	0.5	481047.0	1347185.9	Uranium, Total	8.2	-	mg/kg	NORMAL
SS-46-325	CIS_SYSGEN_343		0	0.16	480787.8	1346954.8	Uranium, Total	16.5	NV	mg/kg	NORMAL
SS-46-201	CIS_SYSGEN_372		0	0.16	480954.5	1347259.5	Uranium, Total	26.1	UNV	mg/kg	NORMAL
SS-46-196	CIS_SYSGEN_386		0	0.17	481060.0	1347062.3	Uranium, Total	26.1	NV	mg/kg	NORMAL
SS-46-199	CIS_SYSGEN_375		0	0.16	480962.7	1346959.6	Uranium, Total	9.9	UNV	mg/kg	NORMAL
SS-46-198	CIS_SYSGEN_384		0	0.16	481054.5	1347262.2	Uranium, Total	12.3	NV	mg/kg	NORMAL
5644	ZONE 3-208	19-Jun-88	0	0.16667	480289.4	1346871.0	Uranium, Total	14.4	J	mg/kg	NORMAL
5645	ZONE 3-208	19-Jun-88	0.16667	0.33333	480289.4	1346871.0	Uranium, Total	4.0	J	mg/kg	NORMAL
5648	ZONE 3-250	19-Jun-88	0.16667	0.33333	480569.4	1346881.0	Uranium, Total	64.0	J	mg/kg	NORMAL
5651	ZONE 3-257	19-Jun-88	0.16667	0.33333	480729.4	1346931.0	Uranium, Total	10.0	J	mg/kg	NORMAL
5890	ZONE 2-177	09-Oct-88	0	0.5	480268.4	1347531.0	Uranium, Total	15.3	-	mg/kg	NORMAL
5652	ZONE 3-257	19-Jun-88	0.33333	0.5	480729.4	1346931.0	Uranium, Total	12.0	J	mg/kg	NORMAL
5646	ZONE 3-208	19-Jun-88	0.33333	0.5	480289.4	1346871.0	Uranium, Total	4.0	J	mg/kg	NORMAL
5647	ZONE 3-250	19-Jun-88	0	0.16667	480569.4	1346881.0	Uranium, Total	62.4	J	mg/kg	NORMAL
SS-46-197	CIS_SYSGEN_385		0	0.16	481057.2	1347162.3	Uranium, Total	12.3	NV	mg/kg	NORMAL
5884	ZONE 2-179	09-Oct-88	0	0.5	480279.4	1347031.0	Uranium, Total	7.2	-	mg/kg	NORMAL
5887	ZONE 2-178	09-Oct-88	0	0.5	480274.4	1347281.0	Uranium, Total	9.9	-	mg/kg	NORMAL
SS2219	LIT8923	23-Apr-86	0	0.167	480418.4	1347161.0	Uranium, Total	13.9	NV	mg/kg	NORMAL
SS-46-194	CIS_SYSGEN_387		0	0.17	481062.7	1346962.3	Uranium, Total	90.3	NV	mg/kg	NORMAL
5650	ZONE 3-257	19-Jun-88	0	0.16667	480729.4	1346931.0	Uranium, Total	21.9	J	mg/kg	NORMAL
6100	ZONE 1-130	26-Oct-88	0	0.5	480279.4	1347781.0	Uranium, Total	19.5	-	mg/kg	NORMAL
SS-23-055	CIS_SYSGEN_209		0	0.5	480454.7	1347245.8	Uranium, Total	20.1	UNV	mg/kg	NORMAL
SL-46-326	CIS_SYSGEN_339		0.16	0.5	480762.8	1346954.1	Uranium, Total	41.1	UNV	mg/kg	NORMAL
98363	1837	01-Jul-92			480868.6	1347258.1	Uranium, Total	9.3	J	MG/KG	DRILL CUTTINGS
98398	1836	09-Jul-92			481120.2	1347265.7	Uranium, Total	11.0	UNV	MG/KG	DRILL CUTTINGS
98352	1837	30-Jun-92	0	0.5	480868.6	1347258.1	Uranium, Total	11.0	UNV	mg/kg	NORMAL
98354	1837	30-Jun-92	2	2.5	480868.6	1347258.1	Uranium, Total	11.0	UNV	mg/kg	NORMAL
98356	1837	01-Jul-92	3	4	480868.6	1347258.1	Uranium, Total	2.8	-	mg/kg	NORMAL
98358	1837	01-Jul-92	6	7	480868.6	1347258.1	Uranium, Total	2.6	-	mg/kg	NORMAL
98359	1837	01-Jul-92	7	7.5	480868.6	1347258.1	Uranium, Total	11.0	UNV	mg/kg	NORMAL
98316	1839	24-Jun-92	0	0.5	480463.3	1347681.0	Uranium, Total	37.0	NV	mg/kg	NORMAL
98364	1837	01-Jul-92			480868.6	1347258.1	Uranium, Total	11.0	UNV	MG/KG	DRILL CUTTINGS
98396	1836	09-Jul-92			481120.2	1347265.7	Uranium, Total	11.0	UNV	MG/KG	DRILL CUTTINGS

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
98318	1839	24-Jun-92	2	3	480463.3	1347681.0	Uranium, Total	3.7	J	mg/kg	NORMAL
98319	1839	24-Jun-92	3	3.5	480463.3	1347681.0	Uranium, Total	11.0	UNV	mg/kg	NORMAL
98323	1839	24-Jun-92	5	6	480463.3	1347681.0	Uranium, Total	2.6	J	mg/kg	NORMAL
98324	1839	24-Jun-92	6	6.5	480463.3	1347681.0	Uranium, Total	11.0	UNV	mg/kg	NORMAL
98331	1839	24-Jun-92	11	11.5	480463.3	1347681.0	Uranium, Total	11.0	UNV	mg/kg	NORMAL
98340	1839	25-Jun-92	15.5	16	480463.3	1347681.0	Uranium, Total	11.0	UNV	mg/kg	NORMAL
98397	1836	09-Jul-92			481120.2	1347265.7	Uranium, Total	4.2	J	MG/KG	DRILL CUTTINGS
98392	1836	06-Jul-92	15	15.5	481120.2	1347265.7	Uranium, Total	11.0	UNV	mg/kg	NORMAL
98395	1836	09-Jul-92			481120.2	1347265.7	Uranium, Total	11.4	J	MG/KG	DRILL CUTTINGS
98350	1839	29-Jun-92			480463.3	1347681.0	Uranium, Total	10.9	J	MG/KG	DRILL CUTTINGS
56035	1483	05-Dec-89		5	480463.6	1347552.5	Uranium, Total	5.7	NV	MG/KG	NORMAL
56019	1481	20-Nov-89	4.9	5.3	480882.2	1346874.7	Uranium, Total	2.0	-	mg/kg	NORMAL
56020	1481	20-Nov-89	9.8	10.2	480882.2	1346874.7	Uranium, Total	1.9	-	mg/kg	NORMAL
56021	1481	20-Nov-89	14.6	15	480882.2	1346874.7	Uranium, Total	2.4	-	mg/kg	NORMAL
56032	1482	05-Dec-89		6.5	480462.3	1347578.1	Uranium, Total	3.8	NV	MG/KG	NORMAL
56033	1482	05-Dec-89		10	480462.3	1347578.1	Uranium, Total	1.8	UNV	MG/KG	NORMAL
56034	1482	05-Dec-89		14	480462.3	1347578.1	Uranium, Total	2.2	NV	MG/KG	NORMAL
56037	1484	05-Dec-89		5	480464.1	1347527.6	Uranium, Total	2.4	NV	MG/KG	NORMAL
56036	1483	05-Dec-89		8	480463.6	1347552.5	Uranium, Total	4.4	UNV	MG/KG	NORMAL
98383	1836	06-Jul-92	10	10.5	481120.2	1347265.7	Uranium, Total	11.0	UNV	mg/kg	NORMAL
56038	1484	05-Dec-89		8.5	480464.1	1347527.6	Uranium, Total	4.8	NV	MG/KG	NORMAL
98366	1836	02-Jul-92	0	0.5	481120.2	1347265.7	Uranium, Total	11.0	UNV	mg/kg	NORMAL
98370	1836	02-Jul-92	2	2.5	481120.2	1347265.7	Uranium, Total	11.0	UNV	mg/kg	NORMAL
98372	1836	06-Jul-92	3	4	481120.2	1347265.7	Uranium, Total	4.0	J	mg/kg	NORMAL
98375	1836	06-Jul-92	5	5.5	481120.2	1347265.7	Uranium, Total	11.0	UNV	mg/kg	NORMAL
98376	1836	06-Jul-92	6	7	481120.2	1347265.7	Uranium, Total	3.4	J	mg/kg	NORMAL
98348	1839	25-Jun-92	19.5	20	480463.3	1347681.0	Uranium, Total	11.0	UNV	mg/kg	NORMAL
8810	2008	21-Mar-88	13.5	15	480690.8	1347449.0	Uranium, Total	2.7	-	mg/kg	NORMAL
98351	1839	29-Jun-92			480463.3	1347681.0	Uranium, Total	11.0	UNV	MG/KG	DRILL CUTTINGS
56017	1480	20-Nov-89	9.9	10.3	480857.2	1346874.7	Uranium, Total	1.8	U	mg/kg	NORMAL
SS-23-080	CIS_SYSGEN_172		0	0.5	480341.1	1347742.9	Uranium, Total	32.4	UNV	mg/kg	NORMAL
SS-23-069	CIS_SYSGEN_163		0	0.5	480246.6	1347540.2	Uranium, Total	15.9	NV	mg/kg	NORMAL
SS-23-065	CIS_SYSGEN_164		0	0.5	480249.3	1347440.3	Uranium, Total	20.4	UNV	mg/kg	NORMAL
SS-23-061	CIS_SYSGEN_165		0	0.5	480252.1	1347340.3	Uranium, Total	25.8	UNV	mg/kg	NORMAL
SS-23-057	CIS_SYSGEN_166		0	0.5	480254.8	1347240.3	Uranium, Total	15.3	UNV	mg/kg	NORMAL
SS-23-097	CIS_SYSGEN_170		0	0.5	480335.6	1347942.8	Uranium, Total	16.2	NV	mg/kg	NORMAL
SS-23-088	CIS_SYSGEN_171		0	0.5	480338.3	1347842.8	Uranium, Total	12.3	NV	mg/kg	NORMAL
SS-46-207	CIS_SYSGEN_337		0	0.16	480757.3	1347154.1	Uranium, Total	18.6	NV	mg/kg	NORMAL
SS-23-074	CIS_SYSGEN_173		0	0.5	480343.8	1347642.9	Uranium, Total	12.0	NV	mg/kg	NORMAL
SS-23-081	CIS_SYSGEN_161		0	0.5	480241.1	1347740.1	Uranium, Total	10.8	NV	mg/kg	NORMAL
SS-23-064	CIS_SYSGEN_175		0	0.5	480349.3	1347443.0	Uranium, Total	34.5	UNV	mg/kg	NORMAL
SS-23-060	CIS_SYSGEN_176		0	0.5	480352.0	1347343.0	Uranium, Total	11.1	NV	mg/kg	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
SS-23-056	CIS_SYSGEN_177		0	0.5	480354.8	1347243.1	Uranium, Total	30.6	UNV	mg/kg	NORMAL
SS-23-096	CIS_SYSGEN_186		0	0.5	480435.6	1347945.5	Uranium, Total	14.4	NV	mg/kg	NORMAL
SS-23-086	CIS_SYSGEN_187		0	0.5	480438.3	1347845.6	Uranium, Total	26.1	UNV	mg/kg	NORMAL
SS-23-079	CIS_SYSGEN_188		0	0.5	480441.0	1347745.6	Uranium, Total	19.2	UNV	mg/kg	NORMAL
SS-23-075	CIS_SYSGEN_162		0	0.5	480243.8	1347640.2	Uranium, Total	12.6	NV	mg/kg	NORMAL
SS-23-098	CIS_SYSGEN_159		0	0.5	480235.6	1347940.1	Uranium, Total	20.7	NV	mg/kg	NORMAL
SS-23-089	CIS_SYSGEN_160		0	0.5	480238.4	1347840.1	Uranium, Total	18.3	UNV	mg/kg	NORMAL
8827	2008	23-Mar-88	55	56.5	480690.8	1347449.0	Uranium, Total	2.4	-	mg/kg	NORMAL
8272	3034	20-Mar-88	10.5	12	480269.6	1346962.4	Uranium, Total	1.8	-	mg/kg	NORMAL
32456	2032	06-Feb-90	7.5	9	480533.0	1346829.6	Uranium, Total	3.9	-	mg/kg	NORMAL
32465	2032	07-Feb-90	25	26.5	480533.0	1346829.6	Uranium, Total	1.8	-	mg/kg	NORMAL
32766	2033	05-Jun-90	40	40.5	480440.5	1347218.3	Uranium, Total	1.8	UJ	mg/kg	NORMAL
32773	2033	05-Jun-90			480440.5	1347218.3	Uranium, Total	2.8	UJ	MG/KG	DRILL CUTTINGS
33083	3032	23-Sep-90	95	96.5	480522.1	1346827.6	Uranium, Total	3.0	J	mg/kg	NORMAL
33090	3032	24-Sep-90			480522.1	1346827.6	Uranium, Total	1.6	J	MG/KG	DRILL CUTTINGS
8286	3034	21-Mar-88	50	51.5	480269.6	1346962.4	Uranium, Total	12.3	-	MG/KG	NORMAL
8279	3034	20-Mar-88	21	22.5	480269.6	1346962.4	Uranium, Total	2.7	-	mg/kg	NORMAL
SS-23-070	CIS_SYSGEN_153		0	0.5	480146.6	1347537.5	Uranium, Total	43.8	UNV	mg/kg	NORMAL
8295	3034	22-Mar-88	95	96.5	480269.6	1346962.4	Uranium, Total	1.8	U	mg/kg	NORMAL
SD-40-013	CIS_SYSGEN_146		0	0.42	480128.4	1347067.0	Uranium, Total	9.9	NV	mg/kg	NORMAL
SS-23-099	CIS_SYSGEN_149		0	0.5	480135.7	1347937.3	Uranium, Total	10.5	UNV	mg/kg	NORMAL
SS-23-090	CIS_SYSGEN_150		0	0.5	480138.4	1347837.4	Uranium, Total	16.8	UNV	mg/kg	NORMAL
SS-23-083	CIS_SYSGEN_151		0	0.5	480141.1	1347737.4	Uranium, Total	19.2	NV	mg/kg	NORMAL
SS-23-076	CIS_SYSGEN_152		0	0.5	480143.9	1347637.5	Uranium, Total	14.4	UNV	mg/kg	NORMAL
56018	1480	20-Nov-89	14.7	15	480857.2	1346874.7	Uranium, Total	6.7	-	mg/kg	NORMAL
56016	1480	20-Nov-89	4.8	5	480857.2	1346874.7	Uranium, Total	2.3	-	mg/kg	NORMAL
SS-23-143	CIS_SYSGEN_191		0	0.5	480445.4	1347840.8	Uranium, Total	19.2	UNV	mg/kg	NORMAL
121845	11150	16-Jul-93	3	3.5	480504.7	1346834.2	Uranium, Total	4.5	J	mg/kg	NORMAL
122329	11147	24-Jul-93	9.5	10.5	480468.4	1346815.3	Uranium, Total	7.5	J	mg/kg	NORMAL
121897	11148	23-Jul-93	4.5	5	480458.4	1346815.3	Uranium, Total	1.2	J	mg/kg	NORMAL
122303	11148	23-Jul-93	5	5.5	480458.4	1346815.3	Uranium, Total	2.1	J	mg/kg	NORMAL
122349	11149	24-Jul-93	3.5	4	480448.4	1346815.3	Uranium, Total	1.8	J	mg/kg	NORMAL
122350	11149	24-Jul-93	5	5.5	480448.4	1346815.3	Uranium, Total	2.7	J	mg/kg	NORMAL
122506	11149	24-Jul-93	3	3.5	480448.4	1346815.3	Uranium, Total	22.1	-	MG/KG	DUPLICATE
122033	11151	16-Jul-93	0.5	1	480494.7	1346834.2	Uranium, Total	12.3	-	mg/kg	NORMAL
121846	11150	16-Jul-93	4.5	5	480504.7	1346834.2	Uranium, Total	3.3	J	mg/kg	NORMAL
122307	11146	24-Jul-93	11.5	12	480478.4	1346815.3	Uranium, Total	8.1	J	mg/kg	NORMAL
122037	11151	16-Jul-93	5.5	6	480494.7	1346834.2	Uranium, Total	3.6	J	mg/kg	NORMAL
122018	11152	16-Jul-93	2.5	3	480484.7	1346834.2	Uranium, Total	20.1	J	mg/kg	NORMAL
122022	11152	16-Jul-93	5	5.5	480484.7	1346834.2	Uranium, Total	3.0	J	mg/kg	NORMAL
121634	11153	15-Jul-93	2.5	3.5	480474.7	1346834.2	Uranium, Total	10.2	J	mg/kg	NORMAL
121638	11153	15-Jul-93	4.5	6	480474.7	1346834.2	Uranium, Total	7.5	J	mg/kg	NORMAL

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
122002	11154	15-Jul-93	4	4.5	480464.7	1346834.2	Uranium, Total	3.2	-	mg/kg	NORMAL
122328	11147	23-Jul-93	6	6.5	480468.4	1346815.3	Uranium, Total	2.7	J	mg/kg	NORMAL
121880	11145	22-Jul-93	6.5	7	480488.4	1346815.3	Uranium, Total	2.4	J	mg/kg	NORMAL
122306	11146	23-Jul-93	8	8.5	480478.4	1346815.3	Uranium, Total	6.0	J	mg/kg	NORMAL
121787	11155	15-Jul-93	2.5	3	480454.7	1346834.2	Uranium, Total	26.6	J	mg/kg	NORMAL
119019	11068	30-Jun-93	10.5	11	480177.9	1347277.8	Uranium, Total	11.0	UNV	MG/KG	NORMAL
7504	1032	30-Oct-87	15	16.5	480544.7	1346827.9	Uranium, Total	3.9	-	mg/kg	NORMAL
8854	1033	08-Apr-88	1.5	3	480442.3	1347206.2	Uranium, Total	4.2	-	mg/kg	NORMAL
8188	1072	06-Mar-88	0	1.5	481055.3	1347007.4	Uranium, Total	45.0	-	mg/kg	NORMAL
119002	11068	29-Jun-93	0	0.5	480177.9	1347277.8	Uranium, Total	24.0	NV	MG/KG	NORMAL
119005	11068	29-Jun-93	2	2.5	480177.9	1347277.8	Uranium, Total	11.0	UNV	MG/KG	NORMAL
119009	11068	29-Jun-93	5	5.5	480177.9	1347277.8	Uranium, Total	11.0	UNV	MG/KG	NORMAL
119433	11079	30-Jun-93			481067.8	1347002.7	Uranium, Total	11.0	UNV	MG/KG	DRILL CUTTINGS
119026	11068	30-Jun-93	14.5	15	480177.9	1347277.8	Uranium, Total	11.0	UNV	MG/KG	NORMAL
121879	11145	21-Jul-93	4.5	5	480488.4	1346815.3	Uranium, Total	9.9	J	mg/kg	NORMAL
119708	11079	24-Jun-93	0	0.5	481067.8	1347002.7	Uranium, Total	22.0	NV	mg/kg	NORMAL
119711	11079	24-Jun-93	2	2.5	481067.8	1347002.7	Uranium, Total	11.0	UNV	mg/kg	NORMAL
119716	11079	24-Jun-93	5	5.5	481067.8	1347002.7	Uranium, Total	11.0	UNV	mg/kg	NORMAL
119725	11079	24-Jun-93	10	10.5	481067.8	1347002.7	Uranium, Total	11.0	UNV	mg/kg	NORMAL
119733	11079	25-Jun-93	15	15.5	481067.8	1347002.7	Uranium, Total	11.0	UNV	mg/kg	NORMAL
119734	11079	25-Jun-93	20	20.5	481067.8	1347002.7	Uranium, Total	11.0	UNV	mg/kg	NORMAL
122006	11154	15-Jul-93	5	5.5	480464.7	1346834.2	Uranium, Total	1.2	J	mg/kg	NORMAL
122058	11156	21-Jul-93	4	4.5	480511.1	1346863.2	Uranium, Total	10.8	J	mg/kg	NORMAL
121791	11155	15-Jul-93	5.5	6	480454.7	1346834.2	Uranium, Total	7.5	J	mg/kg	NORMAL
56015	1479	19-Nov-89	14.6	15	480832.2	1346874.7	Uranium, Total	2.2	-	mg/kg	NORMAL
55998	1476	18-Nov-89	4.8	5.3	480394.8	1346823.5	Uranium, Total	9.0	J	mg/kg	NORMAL
121396	11165	10-Jul-93	4.5	6	480487.4	1346872.2	Uranium, Total	3.3	-	mg/kg	NORMAL
121610	11165	10-Jul-93	1.5	2	480487.4	1346872.2	Uranium, Total	2.7	J	mg/kg	NORMAL
121373	11166	09-Jul-93	3	4.5	480477.4	1346872.2	Uranium, Total	3.6	-	mg/kg	NORMAL
121377	11166	09-Jul-93	4.5	6	480477.4	1346872.2	Uranium, Total	2.9	-	mg/kg	NORMAL
121358	11167	08-Jul-93	4.5	6	480467.4	1346872.2	Uranium, Total	3.2	-	mg/kg	NORMAL
121380	11167	09-Jul-93	0	1.5	480467.4	1346872.2	Uranium, Total	6.3	J	mg/kg	NORMAL
56000	1476	18-Nov-89	14.8	15	480394.8	1346823.5	Uranium, Total	2.7	J	mg/kg	NORMAL
55999	1476	18-Nov-89	9.8	10	480394.8	1346823.5	Uranium, Total	10.5	J	mg/kg	NORMAL
121388	11164	10-Jul-93	4.5	6	480497.4	1346872.2	Uranium, Total	7.2	-	mg/kg	NORMAL
56001	1477	18-Nov-89	4.8	5	480419.8	1346823.5	Uranium, Total	3.0	J	mg/kg	NORMAL
56002	1477	18-Nov-89	9.8	10	480419.8	1346823.5	Uranium, Total	5.1	J	mg/kg	NORMAL
56003	1478	18-Nov-89	4.9	5.3	480444.8	1346823.5	Uranium, Total	1.8	UJ	mg/kg	NORMAL
56004	1478	18-Nov-89	9.3	9.7	480444.8	1346823.5	Uranium, Total	3.0	J	mg/kg	NORMAL
56013	1479	19-Nov-89	4.8	5	480832.2	1346874.7	Uranium, Total	2.0	-	mg/kg	NORMAL
56014	1479	19-Nov-89	9.8	10	480832.2	1346874.7	Uranium, Total	2.4	-	mg/kg	NORMAL
121392	11165	10-Jul-93	3	4.5	480487.4	1346872.2	Uranium, Total	3.2	-	mg/kg	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
121621	11163	11-Jul-93	3	4.5	480507.4	1346872.2	Uranium, Total	6.9	J	mg/kg	NORMAL
121384	11164	10-Jul-93	3	4.5	480497.4	1346872.2	Uranium, Total	2.7	J	mg/kg	NORMAL
122059	11156	21-Jul-93	5.5	6	480511.1	1346863.2	Uranium, Total	6.0	NV	mg/kg	NORMAL
121804	11159	14-Jul-93	1.5	3	480481.1	1346863.2	Uranium, Total	18.5	J	mg/kg	NORMAL
121752	11157	14-Jul-93	2	2.5	480501.1	1346863.2	Uranium, Total	45.2	J	mg/kg	NORMAL
121756	11157	14-Jul-93	5.5	6	480501.1	1346863.2	Uranium, Total	3.3	J	mg/kg	NORMAL
122104	11158	21-Jul-93	5.5	6	480491.1	1346863.2	Uranium, Total	4.3	J	mg/kg	NORMAL
122105	11158	22-Jul-93	7	7.5	480491.1	1346863.2	Uranium, Total	12.6	J	mg/kg	NORMAL
122106	11158	22-Jul-93	6.5	7	480491.1	1346863.2	Uranium, Total	6.1	-	MG/KG	DUPLICATE
121801	11159	14-Jul-93	4.5	6	480481.1	1346863.2	Uranium, Total	19.5	J	mg/kg	NORMAL
121760	11160	14-Jul-93	2	2.5	480471.1	1346863.2	Uranium, Total	10.0	-	mg/kg	NORMAL
121817	11159	14-Jul-93	2.5	3	480481.1	1346863.2	Uranium, Total	32.0	J	MG/KG	DUPLICATE
121619	11163	11-Jul-93	4.5	6	480507.4	1346872.2	Uranium, Total	6.3	J	mg/kg	NORMAL
121764	11160	14-Jul-93	5.5	6	480471.1	1346863.2	Uranium, Total	5.9	-	mg/kg	NORMAL
121642	11161	14-Jul-93	1.5	3	480461.1	1346863.2	Uranium, Total	6.6	-	mg/kg	NORMAL
121646	11161	14-Jul-93	4.5	6	480461.1	1346863.2	Uranium, Total	2.8	-	mg/kg	NORMAL
122517	11162	24-Jul-93	5	5.5	480517.4	1346872.2	Uranium, Total	3.6	J	mg/kg	NORMAL
122518	11162	25-Jul-93	6.5	7	480517.4	1346872.2	Uranium, Total	4.5	J	mg/kg	NORMAL
122525	11162	24-Jul-93	4.5	5	480517.4	1346872.2	Uranium, Total	3.4	-	MG/KG	DUPLICATE
SS-23-073	CIS_SYSGEN_190		0	0.5	480443.8	1347645.7	Uranium, Total	34.8	UNV	mg/kg	NORMAL
SS-23-068	CIS_SYSGEN_174		0	0.5	480346.5	1347543.0	Uranium, Total	18.6	UNV	mg/kg	NORMAL
SS-23-067	CIS_SYSGEN_192		0	0.5	480446.5	1347545.7	Uranium, Total	39.9	UNV	mg/kg	NORMAL
SS-23-063	CIS_SYSGEN_196		0	0.5	480449.2	1347445.7	Uranium, Total	13.2	NV	mg/kg	NORMAL
SS-23-049	CIS_SYSGEN_285		0	0.5	480488.0	1347270.7	Uranium, Total	20.7	NV	mg/kg	NORMAL
SL-23-159	CIS_SYSGEN_280		0.5	1	480485.4	1347731.8	Uranium, Total	26.7	UNV	mg/kg	NORMAL
SS-23-158	CIS_SYSGEN_280		0	0.5	480485.4	1347731.8	Uranium, Total	35.4	UNV	mg/kg	NORMAL
SL-23-149	CIS_SYSGEN_281		0.5	1	480485.6	1347908.9	Uranium, Total	21.3	UNV	mg/kg	NORMAL
SS-23-148	CIS_SYSGEN_281		0	0.5	480485.6	1347908.9	Uranium, Total	9.9	NV	mg/kg	NORMAL
SS-23-041	CIS_SYSGEN_282		0	0.5	480485.7	1347429.7	Uranium, Total	17.7	NV	mg/kg	NORMAL
SS-23-043	CIS_SYSGEN_283		0	0.5	480487.8	1347387.8	Uranium, Total	19.2	UNV	mg/kg	NORMAL
SS-23-045	CIS_SYSGEN_284		0	0.5	480488.0	1347346.8	Uranium, Total	14.4	NV	mg/kg	NORMAL
SS-23-170	CIS_SYSGEN_286		0	0.5	480489.0	1347493.8	Uranium, Total	436.7	NV	mg/kg	NORMAL
SL-23-171	CIS_SYSGEN_286		0.5	1	480489.0	1347493.8	Uranium, Total	29.4	NV	mg/kg	NORMAL
SS-23-162	CIS_SYSGEN_278		0	0.5	480485.0	1347639.8	Uranium, Total	214.2	J	mg/kg	NORMAL
SS-23-047	CIS_SYSGEN_287		0	0.5	480489.0	1347307.8	Uranium, Total	15.6	NV	mg/kg	NORMAL
SS-23-168	CIS_SYSGEN_288		0	0.5	480489.4	1347623.9	Uranium, Total	22.8	UNV	mg/kg	NORMAL
SS-23-051	CIS_SYSGEN_289		0	0.5	480491.2	1347226.8	Uranium, Total	24.0	UNV	mg/kg	NORMAL
SS-23-101	CIS_SYSGEN_290		0	0.5	480491.5	1347948.1	Uranium, Total	36.3	UNV	mg/kg	NORMAL
SS-23-157	CIS_SYSGEN_291		0	0.5	480493.1	1347744.0	Uranium, Total	11.4	NV	mg/kg	NORMAL
SS-23-141	CIS_SYSGEN_292		0	0.5	480493.8	1347830.1	Uranium, Total	12.9	NV	mg/kg	NORMAL
SL-23-183	CIS_SYSGEN_293		0.5	1	480494.0	1347858.1	Uranium, Total	14.4	UNV	mg/kg	NORMAL
SS-23-180	CIS_SYSGEN_279		0	0.5	480485.3	1347955.9	Uranium, Total	19.8	UNV	mg/kg	NORMAL

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
SL-23-187	CIS_SYSGEN_278		1.5	2	480485.0	1347639.8	Uranium, Total	22.8	UNV	mg/kg	NORMAL
SS-23-104	CIS_SYSGEN_294		0	0.5	480494.3	1347848.1	Uranium, Total	28.8	UNV	mg/kg	NORMAL
SS-23-181	CIS_SYSGEN_271		0	0.5	480482.1	1347927.8	Uranium, Total	39.0	UNV	mg/kg	NORMAL
SL-23-112	CIS_SYSGEN_268		0.5	1	480480.2	1347629.6	Uranium, Total	36.9	UNV	mg/kg	NORMAL
SS-23-106	CIS_SYSGEN_200		0	0.5	480450.4	1347840.9	Uranium, Total	49.0	J	mg/kg	NORMAL
SL-23-114	CIS_SYSGEN_268		1	1.5	480480.2	1347629.6	Uranium, Total	35.7	UNV	mg/kg	NORMAL
SL-23-115QC	CIS_SYSGEN_268		1	1.5	480460.3	1347614.7	Uranium, Total	45.3	NV	MG/KG	SPLIT
SS-23-032	CIS_SYSGEN_268		0	0.5	480480.2	1347629.6	Uranium, Total	48.3	UNV	mg/kg	NORMAL
SS-23-107	CIS_SYSGEN_269		0	0.5	480480.8	1347829.7	Uranium, Total	42.6	UNV	mg/kg	NORMAL
SS-23-034	CIS_SYSGEN_270		0	0.5	480481.3	1347589.7	Uranium, Total	13.2	NV	mg/kg	NORMAL
SS-23-110	CIS_SYSGEN_273		0	0.5	480483.2	1347629.7	Uranium, Total	18.6	NV	mg/kg	NORMAL
SS-23-161	CIS_SYSGEN_272		0	0.5	480483.0	1347712.8	Uranium, Total	15.6	NV	mg/kg	NORMAL
SL-23-186	CIS_SYSGEN_278		1	1.5	480485.0	1347639.8	Uranium, Total	24.9	UNV	mg/kg	NORMAL
SS-23-037	CIS_SYSGEN_274		0	0.5	480483.5	1347509.7	Uranium, Total	22.8	NV	mg/kg	NORMAL
SL-23-188	CIS_SYSGEN_275		0.5	1	480484.1	1347523.7	Uranium, Total	17.4	NV	mg/kg	NORMAL
SS-23-169	CIS_SYSGEN_275		0	0.5	480484.1	1347523.7	Uranium, Total	28.5	NV	mg/kg	NORMAL
SL-23-177	CIS_SYSGEN_276		0.5	1	480484.3	1347919.9	Uranium, Total	13.8	UNV	mg/kg	NORMAL
SS-23-176	CIS_SYSGEN_276		0	0.5	480484.3	1347919.9	Uranium, Total	37.1	J	mg/kg	NORMAL
SS-23-039	CIS_SYSGEN_277		0	0.5	480484.6	1347468.7	Uranium, Total	14.1	NV	mg/kg	NORMAL
SL-23-163	CIS_SYSGEN_278		0.5	1	480485.0	1347639.8	Uranium, Total	75.9	UNV	mg/kg	NORMAL
SS-23-145	CIS_SYSGEN_293		0	0.5	480494.0	1347858.1	Uranium, Total	23.9	J	mg/kg	NORMAL
SL-23-182	CIS_SYSGEN_296		0.5	1	480496.1	1347928.2	Uranium, Total	20.7	UNV	mg/kg	NORMAL
SS-23-030	CIS_SYSGEN_266		0	0.5	480479.1	1347670.6	Uranium, Total	18.0	UNV	mg/kg	NORMAL
SD-34-001	CIS_SYSGEN_325		0	0.5	480735.3	1347922.7	Uranium, Total	87.3	NV	mg/kg	NORMAL
SL-46-617QC	CIS_SYSGEN_320		0.17	0.5	480676.8	1347743.7	Uranium, Total	82.5	NV	MG/KG	SPLIT
SS-46-615	CIS_SYSGEN_320		0	0.17	480696.8	1347758.6	Uranium, Total	159.2	NV	mg/kg	NORMAL
SS-46-320	CIS_SYSGEN_322		0	0.16	480711.5	1347002.7	Uranium, Total	9.6	NV	mg/kg	NORMAL
SL-46-571	CIS_SYSGEN_323		0.5	1	480712.1	1346977.8	Uranium, Total	69.0	UNV	mg/kg	NORMAL
SS-46-324	CIS_SYSGEN_323		0	0.16	480712.1	1346977.8	Uranium, Total	21.6	UNV	mg/kg	NORMAL
SL-46-621	CIS_SYSGEN_324		0	0.5	480728.6	1347765.5	Uranium, Total	88.5	NV	mg/kg	NORMAL
SS-46-620	CIS_SYSGEN_324		0	0.17	480728.6	1347765.5	Uranium, Total	294.2	NV	mg/kg	NORMAL
SL-46-619	CIS_SYSGEN_327		0.17	0.5	480739.0	1347822.8	Uranium, Total	72.0	NV	mg/kg	NORMAL
SS-46-322	CIS_SYSGEN_326		0	0.16	480737.8	1346953.4	Uranium, Total	18.3	NV	mg/kg	NORMAL
SS-46-214	CIS_SYSGEN_317		0	0.16	480649.2	1347451.2	Uranium, Total	427.3	-	mg/kg	NORMAL
SS-46-618	CIS_SYSGEN_327		0	0.17	480739.0	1347822.8	Uranium, Total	139.1	NV	mg/kg	NORMAL
SS-46-211	CIS_SYSGEN_330		0	0.16	480749.1	1347453.9	Uranium, Total	18.0	UNV	mg/kg	NORMAL
SS-46-210	CIS_SYSGEN_331		0	0.16	480751.9	1347354.0	Uranium, Total	26.4	UNV	mg/kg	NORMAL
SS-46-209	CIS_SYSGEN_332		0	0.16	480754.6	1347254.0	Uranium, Total	18.6	NV	mg/kg	NORMAL
SS-46-568	CIS_SYSGEN_335		0	0.17	480756.0	1347204.0	Uranium, Total	20.7	NV	mg/kg	NORMAL
SS-46-319	CIS_SYSGEN_336		0	0.5	480756.7	1347179.0	Uranium, Total	36.3	UNV	mg/kg	NORMAL
SL-46-327	CIS_SYSGEN_337		0.16	0.5	480757.3	1347154.1	Uranium, Total	9.0	NV	mg/kg	NORMAL
SL-46-616	CIS_SYSGEN_320		0.17	0.5	480696.8	1347758.6	Uranium, Total	92.1	NV	mg/kg	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
SS-23-071	CIS_SYSGEN_316		0	0.5	480643.7	1347651.1	Uranium, Total	28.5	UNV	mg/kg	NORMAL
SL-23-184QC	CIS_SYSGEN_296		1.5	2	480476.1	1347913.2	Uranium, Total	33.1	NV	MG/KG	SPLIT
SS-23-085	CIS_SYSGEN_303		0	0.5	480538.3	1347848.3	Uranium, Total	18.9	NV	mg/kg	NORMAL
SS-23-153	CIS_SYSGEN_296		0	0.5	480496.1	1347928.2	Uranium, Total	98.1	UNV	mg/kg	NORMAL
SS-23-144	CIS_SYSGEN_298		0	0.5	480510.4	1347844.6	Uranium, Total	13.2	NV	mg/kg	NORMAL
SL-23-196	CIS_SYSGEN_299		0.5	1	480511.5	1347948.6	Uranium, Total	42.3	UNV	mg/kg	NORMAL
SS-23-102	CIS_SYSGEN_299		0	0.5	480511.5	1347948.6	Uranium, Total	29.4	UNV	mg/kg	NORMAL
SS-23-103	CIS_SYSGEN_300		0	0.5	480531.5	1347949.2	Uranium, Total	22.5	UNV	mg/kg	NORMAL
SS-23-146	CIS_SYSGEN_301		0	0.5	480532.7	1347869.2	Uranium, Total	12.9	UNV	mg/kg	NORMAL
SS-23-094	CIS_SYSGEN_302		0	0.5	480535.5	1347948.3	Uranium, Total	21.3	NV	mg/kg	NORMAL
SS-23-154	CIS_SYSGEN_305		0	0.5	480541.3	1347956.4	Uranium, Total	15.0	NV	mg/kg	NORMAL
SS-23-078	CIS_SYSGEN_304		0	0.5	480541.0	1347748.4	Uranium, Total	28.5	UNV	mg/kg	NORMAL
SS-23-077	CIS_SYSGEN_315		0	0.5	480641.0	1347751.1	Uranium, Total	13.2	NV	mg/kg	NORMAL
SS-23-072	CIS_SYSGEN_306		0	0.5	480543.7	1347648.4	Uranium, Total	12.3	NV	mg/kg	NORMAL
SS-23-066	CIS_SYSGEN_307		0	0.5	480546.5	1347548.4	Uranium, Total	13.2	NV	mg/kg	NORMAL
SS-23-062	CIS_SYSGEN_308		0	0.5	480549.2	1347448.5	Uranium, Total	43.8	UNV	mg/kg	NORMAL
SS-23-058	CIS_SYSGEN_309		0	0.5	480551.9	1347348.5	Uranium, Total	12.3	NV	mg/kg	NORMAL
SS-23-054	CIS_SYSGEN_311		0	0.5	480554.7	1347248.5	Uranium, Total	20.4	UNV	mg/kg	NORMAL
SS-23-092	CIS_SYSGEN_313		0	0.5	480635.5	1347951.0	Uranium, Total	22.5	UNV	mg/kg	NORMAL
SS-23-084	CIS_SYSGEN_314		0	0.5	480638.2	1347851.0	Uranium, Total	16.2	UNV	mg/kg	NORMAL
SS-23-156	CIS_SYSGEN_267		0	0.5	480479.5	1347765.7	Uranium, Total	17.7	NV	mg/kg	NORMAL
5423	ZONE 3-279	15-Sep-88	0	0.16667	481029.4	1346831.0	Uranium, Total	13.5	-	mg/kg	NORMAL
SS-23-022	CIS_SYSGEN_246		0	0.5	480473.8	1347829.5	Uranium, Total	128.9	NV	mg/kg	NORMAL
SL-23-175	CIS_SYSGEN_248		0.5	1	480474.1	1347925.6	Uranium, Total	20.1	UNV	mg/kg	NORMAL
SL-23-123	CIS_SYSGEN_246		1	1.5	480473.8	1347829.5	Uranium, Total	14.1	UNV	mg/kg	NORMAL
SL-23-121	CIS_SYSGEN_224		1	1.5	480463.6	1347688.2	Uranium, Total	21.0	UNV	mg/kg	NORMAL
SL-23-119	CIS_SYSGEN_266		1	1.5	480479.1	1347670.6	Uranium, Total	12.9	UNV	mg/kg	NORMAL
SS-23-152	CIS_SYSGEN_247		0	0.5	480474.1	1347927.6	Uranium, Total	58.5	UNV	mg/kg	NORMAL
SL-23-120D	CIS_SYSGEN_224		0.5	1	480443.7	1347673.3	Uranium, Total	26.5	NV	MG/KG	DUPLICATE
SS-23-174	CIS_SYSGEN_248		0	0.5	480474.1	1347925.6	Uranium, Total	16.5	UNV	mg/kg	NORMAL
SL-23-122	CIS_SYSGEN_246		0.5	1	480473.8	1347829.5	Uranium, Total	22.8	UNV	mg/kg	NORMAL
SL-23-120	CIS_SYSGEN_224		0.5	1	480463.6	1347688.2	Uranium, Total	13.2	NV	mg/kg	NORMAL
SL-23-150	CIS_SYSGEN_249		0.5	1	480474.3	1347919.6	Uranium, Total	205.7	UNV	mg/kg	NORMAL
SL-23-172	CIS_SYSGEN_249		1	1.5	480474.3	1347919.6	Uranium, Total	26.4	UNV	mg/kg	NORMAL
SS-23-027	CIS_SYSGEN_223		0	0.5	480462.5	1347729.2	Uranium, Total	30.0	UNV	mg/kg	NORMAL
SL-23-172D	CIS_SYSGEN_249		1	1.5	480454.3	1347904.6	Uranium, Total	30.7	NV	MG/KG	DUPLICATE
SS-23-029	CIS_SYSGEN_224		0	0.5	480463.6	1347688.2	Uranium, Total	17.1	NV	mg/kg	NORMAL
SS-23-016	CIS_SYSGEN_244		0	0.5	480471.5	1347947.5	Uranium, Total	34.5	UNV	mg/kg	NORMAL
SS-23-018	CIS_SYSGEN_245		0	0.5	480472.6	1347908.5	Uranium, Total	54.3	UNV	mg/kg	NORMAL
SS-23-025	CIS_SYSGEN_221		0	0.5	480461.4	1347768.2	Uranium, Total	24.0	UNV	mg/kg	NORMAL
SS-23-155	CIS_SYSGEN_226		0	0.5	480464.4	1347768.3	Uranium, Total	12.9	NV	mg/kg	NORMAL
SL-23-142	CIS_SYSGEN_230		0.5	1	480465.4	1347841.3	Uranium, Total	54.3	UNV	mg/kg	NORMAL

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
SS-23-160	CIS_SYSGEN_231		0	0.5	480465.5	1347729.3	Uranium, Total	29.7	UNV	mg/kg	NORMAL
SL-23-116	CIS_SYSGEN_228		0.5	1	480464.7	1347648.2	Uranium, Total	28.8	UNV	mg/kg	NORMAL
SS-23-033	CIS_SYSGEN_233		0	0.5	480466.8	1347608.3	Uranium, Total	51.6	UNV	mg/kg	NORMAL
SS-23-140	CIS_SYSGEN_227		0	0.5	480464.6	1347688.2	Uranium, Total	63.6	UNV	mg/kg	NORMAL
SS-23-035	CIS_SYSGEN_236		0	0.5	480467.9	1347569.3	Uranium, Total	17.7	NV	mg/kg	NORMAL
SS-23-046	CIS_SYSGEN_243		0	0.5	480471.5	1347327.3	Uranium, Total	50.1	UNV	mg/kg	NORMAL
SS-23-036	CIS_SYSGEN_237		0	0.5	480468.0	1347529.3	Uranium, Total	23.1	UNV	mg/kg	NORMAL
SS-23-038	CIS_SYSGEN_238		0	0.5	480469.1	1347487.3	Uranium, Total	21.6	NV	mg/kg	NORMAL
SS-23-040	CIS_SYSGEN_240		0	0.5	480471.2	1347448.3	Uranium, Total	36.0	UNV	mg/kg	NORMAL
SS-23-042	CIS_SYSGEN_241		0	0.5	480471.3	1347408.3	Uranium, Total	13.5	NV	mg/kg	NORMAL
SS-23-044	CIS_SYSGEN_242		0	0.5	480471.4	1347366.3	Uranium, Total	16.5	NV	mg/kg	NORMAL
SL-23-173	CIS_SYSGEN_249		1.5	2	480474.3	1347919.6	Uranium, Total	12.0	UNV	mg/kg	NORMAL
SS-23-023	CIS_SYSGEN_220		0	0.5	480461.3	1347810.2	Uranium, Total	36.9	UNV	mg/kg	NORMAL
SL-23-117	CIS_SYSGEN_228		1	1.5	480464.7	1347648.2	Uranium, Total	21.0	UNV	mg/kg	NORMAL
SL-23-185QC	CIS_SYSGEN_249		1.5	2	480454.3	1347904.6	Uranium, Total	45.0	NV	MG/KG	SPLIT
SS-23-111	CIS_SYSGEN_211		0	0.5	480455.5	1347619.0	Uranium, Total	38.4	UNV	mg/kg	NORMAL
SS-23-139	CIS_SYSGEN_257		0	0.5	480476.7	1347648.6	Uranium, Total	63.0	UNV	mg/kg	NORMAL
SS-23-026	CIS_SYSGEN_258		0	0.5	480476.9	1347749.6	Uranium, Total	12.0	UNV	mg/kg	NORMAL
SS-23-015	CIS_SYSGEN_212		0	0.5	480457.1	1347964.1	Uranium, Total	36.0	UNV	mg/kg	NORMAL
SS-23-028	CIS_SYSGEN_259		0	0.5	480477.1	1347708.6	Uranium, Total	30.0	UNV	mg/kg	NORMAL
SS-23-052	CIS_SYSGEN_261		0	0.5	480477.8	1347205.4	Uranium, Total	30.3	UNV	mg/kg	NORMAL
SS-23-105	CIS_SYSGEN_262		0	0.5	480477.9	1347861.7	Uranium, Total	36.6	UNV	mg/kg	NORMAL
SS-23-109	CIS_SYSGEN_207		0	0.5	480453.6	1347687.9	Uranium, Total	40.8	UNV	mg/kg	NORMAL
SS-23-024	CIS_SYSGEN_255		0	0.5	480475.9	1347789.6	Uranium, Total	24.6	NV	mg/kg	NORMAL
SS-23-053	CIS_SYSGEN_263		0	0.5	480477.9	1347166.4	Uranium, Total	13.5	NV	mg/kg	NORMAL
SS-23-108	CIS_SYSGEN_264		0	0.5	480478.1	1347817.7	Uranium, Total	44.4	UNV	mg/kg	NORMAL
SS-23-147	CIS_SYSGEN_265		0	0.5	480478.5	1347875.7	Uranium, Total	14.7	NV	mg/kg	NORMAL
SL-23-118	CIS_SYSGEN_266		0.5	1	480479.1	1347670.6	Uranium, Total	15.9	NV	mg/kg	NORMAL
SS-23-059	CIS_SYSGEN_203		0	0.5	480452.0	1347345.8	Uranium, Total	11.7	NV	mg/kg	NORMAL
SS-23-050	CIS_SYSGEN_256		0	0.5	480476.7	1347246.4	Uranium, Total	27.0	UNV	mg/kg	NORMAL
SS-23-031	CIS_SYSGEN_228		0	0.5	480464.7	1347648.2	Uranium, Total	30.0	UNV	mg/kg	NORMAL
SS-23-151	CIS_SYSGEN_249		0	0.5	480474.3	1347919.6	Uranium, Total	359.8	UNV	mg/kg	NORMAL
SS-23-017	CIS_SYSGEN_213		0	0.5	480457.1	1347925.1	Uranium, Total	18.0	UNV	mg/kg	NORMAL
SL-23-179	CIS_SYSGEN_250		0.5	1	480474.5	1347912.6	Uranium, Total	7.5	UNV	mg/kg	NORMAL
SS-23-021	CIS_SYSGEN_217		0	0.5	480459.3	1347847.2	Uranium, Total	15.0	UNV	mg/kg	NORMAL
SS-23-178	CIS_SYSGEN_250		0	0.5	480474.5	1347912.6	Uranium, Total	21.9	UNV	mg/kg	NORMAL
SL-23-125	CIS_SYSGEN_217		1	1.5	480459.3	1347847.2	Uranium, Total	10.5	UNV	mg/kg	NORMAL
SL-23-124	CIS_SYSGEN_217		0.5	1	480459.3	1347847.2	Uranium, Total	16.8	UNV	mg/kg	NORMAL
SS-23-048	CIS_SYSGEN_251		0	0.5	480474.6	1347288.4	Uranium, Total	38.1	UNV	mg/kg	NORMAL
SL-23-126	CIS_SYSGEN_252		0.5	1	480474.7	1347867.6	Uranium, Total	25.5	UNV	mg/kg	NORMAL
SS-23-019	CIS_SYSGEN_214		0	0.5	480458.2	1347885.1	Uranium, Total	18.9	NV	mg/kg	NORMAL
SL-23-127	CIS_SYSGEN_252		1	1.5	480474.7	1347867.6	Uranium, Total	17.4	UNV	mg/kg	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID		Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
SS-23-020	CIS_SYSGEN_252			0	0.5	480474.7	1347867.6	Uranium, Total	15.0	UNV	mg/kg	NORMAL
119432		11079	30-Jun-93			481067.8	1347002.7	Vinyl chloride	12.0	UJ	UG/KG	DRILL CUTTINGS
61182	WPA26		27-Apr-91	1.5	2	480252.8	1347340.8	Vinyl chloride	12.0	U	ug/kg	NORMAL
61175	WPA25		28-Apr-91	1.5	2	480155.6	1347238.1	Vinyl chloride	12.0	U	ug/kg	NORMAL
61196	WPA28		26-Apr-91	1.5	2	480350.0	1347443.5	Vinyl chloride	12.0	U	ug/kg	NORMAL
61189	WPA27		26-Apr-91	1.5	2	480355.5	1347243.6	Vinyl chloride	12.0	U	ug/kg	NORMAL
56039		1482	05-Dec-89	14	14	480462.3	1347578.1	Vinyl chloride	12.0	U	ug/kg	NORMAL
61168	WPA24		27-Apr-91	1.5	2	480258.2	1347140.9	Vinyl chloride	12.0	U	ug/kg	NORMAL
61225	WPA32		26-Apr-91	1.5	2	480549.9	1347449.0	Vinyl chloride	12.0	U	ug/kg	NORMAL
61140	WPA20		26-Apr-91	1.5	2	480466.4	1346846.5	Vinyl chloride	12.0	U	ug/kg	NORMAL
61252	WPA36		23-Apr-91	1.5	2	480724.8	1347453.7	Vinyl chloride	11.0	U	ug/kg	NORMAL
56005		1476	19-Nov-89	14.8	15	480394.8	1346823.5	Vinyl chloride	12.0	U	ug/kg	NORMAL
61245	WPA35		25-Apr-91	1.5	2	480755.3	1347254.5	Vinyl chloride	11.0	U	ug/kg	NORMAL
98376		1836	06-Jul-92	6	7	481120.2	1347265.7	Vinyl chloride	11.0	U	ug/kg	NORMAL
98356		1837	01-Jul-92	3	4	480868.6	1347258.1	Vinyl chloride	12.0	U	ug/kg	NORMAL
98372		1836	06-Jul-92	3	4	481120.2	1347265.7	Vinyl chloride	11.0	U	ug/kg	NORMAL
61133	WPA19		27-Apr-91	1.5	2	480666.3	1346852.0	Vinyl chloride	11.0	U	ug/kg	NORMAL
61238	WPA34		25-Apr-91	1.5	2	480632.8	1347367.7	Vinyl chloride	11.0	U	ug/kg	NORMAL
61121	WPA18		27-Apr-91	0	0.5	480866.2	1346857.4	Vinyl chloride	12.0	U	ug/kg	NORMAL
98358		1837	01-Jul-92	6	7	480868.6	1347258.1	Vinyl chloride	11.0	U	ug/kg	NORMAL
121093	SS-32		08-Jul-93	0	0.5	480974.7	1346789.3	Vinyl chloride	11.0	U	ug/kg	NORMAL
61210	WPA30		24-Apr-91	1.5	2	480452.7	1347346.3	Vinyl chloride	12.0	U	ug/kg	NORMAL
61203	WPA29		28-Apr-91	1.5	2	480457.7	1347161.4	Vinyl chloride	12.0	U	ug/kg	NORMAL
61098	WPA14		25-Apr-91	1.5	2	481063.3	1346962.9	Vinyl chloride	12.0	U	ug/kg	NORMAL
123249	WP-SS-14		09-Jul-93	0	0.5	481047.0	1347185.9	Vinyl chloride	12.0	U	ug/kg	NORMAL
98323		1839	24-Jun-92	5	6	480463.3	1347681.0	Vinyl chloride	11.0	U	ug/kg	NORMAL
61147	WPA21		26-Apr-91	1.5	2	480251.1	1346846.9	Vinyl chloride	12.0	U	ug/kg	NORMAL
61217	WPA31		24-Apr-91	1.5	2	480503.3	1347281.2	Vinyl chloride	11.0	U	ug/kg	NORMAL
98318		1839	24-Jun-92	2	3	480463.3	1347681.0	Vinyl chloride	11.0	U	ug/kg	NORMAL
61105	WPA15		25-Apr-91	1.5	2	481057.9	1347162.8	Vinyl chloride	12.0	U	ug/kg	NORMAL
61258	WPA37		23-Apr-91	1.5	2	480858.0	1347157.3	Vinyl chloride	13.0	U	ug/kg	NORMAL
56022		1481	20-Nov-89	15	15	480882.2	1346874.7	Vinyl chloride	11.0	U	ug/kg	NORMAL
									11.0	U	ug/kg	NORMAL

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
61133	WPA19	27-Apr-91	1.5	2	480666.263	1346851.992	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
123409	WP-SS-17	13-Jul-93	0	0.5	480992.065	1346717.238	1,1-Dichloroethene	11.0	U	ug/kg	NORMAL
123268	WP-SS-16	09-Jul-93	0	0.5	481131.797	1346770.376	1,1-Dichloroethene	11.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.165	1346857.389	1,1-Dichloroethene	5.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.666	1346789.288	1,1-Dichloroethene	12.0	U	ug/kg	NORMAL
61091	WPA13	21-Apr-91	1.5	2	481068.766	1346762.987	1,1-Dichloroethene	6.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.206	1346874.739	1,1-Dichloroethene	5.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.165	1346857.389	1,2-Dichloroethane	5.0	U	ug/kg	NORMAL
61133	WPA19	27-Apr-91	1.5	2	480666.263	1346851.992	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
121093	SS-32	03-Jul-93	0	0.5	480974.666	1346789.288	1,2-Dichloroethane	12.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.206	1346874.739	1,2-Dichloroethane	5.0	U	ug/kg	NORMAL
123268	WP-SS-16	09-Jul-93	0	0.5	481131.797	1346770.376	1,2-Dichloroethane	11.0	U	ug/kg	NORMAL
61091	WPA13	21-Apr-91	1.5	2	481068.766	1346762.987	1,2-Dichloroethane	6.0	U	ug/kg	NORMAL
123409	WP-SS-17	13-Jul-93	0	0.5	480992.065	1346717.238	1,2-Dichloroethane	11.0	U	ug/kg	NORMAL
61511	WPA18	25-Jul-91	1.5	1.9	480866.165	1346857.389	alpha-Chlordane	1700.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.165	1346857.389	alpha-Chlordane	270.0	U	ug/kg	NORMAL
61512	WPA18	24-Jul-91	1.5	2	480866.165	1346857.389	alpha-Chlordane	870.0	U	ug/kg	NORMAL
61515	WPA18	25-Jul-91	0.5	1	480866.165	1346857.389	alpha-Chlordane	340.0	U	ug/kg	NORMAL
61514	WPA18	25-Jul-91	1.3	1.8	480866.165	1346857.389	alpha-Chlordane	1700.0	U	ug/kg	NORMAL
61086	WPA13	21-Apr-91	0	0.5	481068.766	1346762.987	alpha-Chlordane	93.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.666	1346789.288	alpha-Chlordane	4.0	U	ug/kg	NORMAL
61128	WPA19	27-Apr-91	0	0.5	480666.263	1346851.992	alpha-Chlordane	90.0	U	ug/kg	NORMAL
61091	WPA13	21-Apr-91	1.5	2	481068.766	1346762.987	bis(2-Chloroisopropyl) ether	380.0	U	ug/kg	NORMAL
123268	WP-SS-16	09-Jul-93	0	0.5	481131.797	1346770.376	bis(2-Chloroisopropyl) ether	360.0	U	ug/kg	NORMAL
61512	WPA18	24-Jul-91	1.5	2	480866.165	1346857.389	bis(2-Chloroisopropyl) ether	3500.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.206	1346874.739	bis(2-Chloroisopropyl) ether	370.0	U	ug/kg	NORMAL
123409	WP-SS-17	13-Jul-93	0	0.5	480992.065	1346717.238	bis(2-Chloroisopropyl) ether	390.0	UJ	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.666	1346789.288	bis(2-Chloroisopropyl) ether	390.0	U	ug/kg	NORMAL
61133	WPA19	27-Apr-91	1.5	2	480666.263	1346851.992	bis(2-Chloroisopropyl) ether	380.0	U	ug/kg	NORMAL
61515	WPA18	25-Jul-91	0.5	1	480866.165	1346857.389	bis(2-Chloroisopropyl) ether	3500.0	U	ug/kg	NORMAL
61126	WPA18	27-Apr-91	1.5	2	480866.165	1346857.389	bis(2-Chloroisopropyl) ether	1800.0	U	ug/kg	NORMAL
123268	WP-SS-16	09-Jul-93	0	0.5	481131.797	1346770.376	Bromodichloromethane	11.0	U	ug/kg	NORMAL
61133	WPA19	27-Apr-91	1.5	2	480666.263	1346851.992	Bromodichloromethane	6.0	UJ	ug/kg	NORMAL
61091	WPA13	21-Apr-91	1.5	2	481068.766	1346762.987	Bromodichloromethane	6.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.666	1346789.288	Bromodichloromethane	12.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.206	1346874.739	Bromodichloromethane	5.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.165	1346857.389	Bromodichloromethane	5.0	UJ	ug/kg	NORMAL
123409	WP-SS-17	13-Jul-93	0	0.5	480992.065	1346717.238	Bromodichloromethane	11.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.666	1346789.288	Chloroethane	12.0	U	ug/kg	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID		Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
123409	WP-SS-17		13-Jul-93	0	0.5	480992.065	1346717.238	Chloroethane	11.0	U	ug/kg	NORMAL
61091	WPA13		21-Apr-91	1.5	2	481068.766	1346762.987	Chloroethane	11.0	U	ug/kg	NORMAL
56022		1481	20-Nov-89	15	15	480882.206	1346874.739	Chloroethane	11.0	U	ug/kg	NORMAL
61121	WPA18		27-Apr-91	0	0.5	480866.165	1346857.389	Chloroethane	11.0	U	ug/kg	NORMAL
61133	WPA19		27-Apr-91	1.5	2	480666.263	1346851.992	Chloroethane	11.0	U	ug/kg	NORMAL
123268	WP-SS-16		09-Jul-93	0	0.5	481131.797	1346770.376	Chloroethane	11.0	U	ug/kg	NORMAL
56022		1481	20-Nov-89	15	15	480882.206	1346874.739	Chromium	16.8	J	mg/kg	NORMAL
61121	WPA18		27-Apr-91	0	0.5	480866.165	1346857.389	Chromium	13.0	-	mg/kg	NORMAL
123268	WP-SS-16		09-Jul-93	0	0.5	481131.797	1346770.376	Chromium	11.8	-	mg/kg	NORMAL
61128	WPA19		27-Apr-91	0	0.5	480666.263	1346851.992	Chromium	10.2	-	mg/kg	NORMAL
123409	WP-SS-17		13-Jul-93	0	0.5	480992.065	1346717.238	Chromium	10.5	-	mg/kg	NORMAL
61086	WPA13		21-Apr-91	0	0.5	481068.766	1346762.987	Chromium	11.9	-	mg/kg	NORMAL
121093	SS-32		08-Jul-93	0	0.5	480974.666	1346789.288	Chromium	15.8	-	mg/kg	NORMAL
123268	WP-SS-16		09-Jul-93	0	0.5	481131.797	1346770.376	Lead	13.2	-	mg/kg	NORMAL
61086	WPA13		21-Apr-91	0	0.5	481068.766	1346762.987	Lead	7.9	J	mg/kg	NORMAL
56022		1481	20-Nov-89	15	15	480882.206	1346874.739	Lead	8.5	-	mg/kg	NORMAL
123409	WP-SS-17		13-Jul-93	0	0.5	480992.065	1346717.238	Lead	9.5	-	mg/kg	NORMAL
121093	SS-32		08-Jul-93	0	0.5	480974.666	1346789.288	Mercury	0.1	UJ	mg/kg	NORMAL
61128	WPA19		27-Apr-91	0	0.5	480666.263	1346851.992	Mercury	0.1	U	mg/kg	NORMAL
61121	WPA18		27-Apr-91	0	0.5	480866.165	1346857.389	Mercury	0.1	U	mg/kg	NORMAL
61086	WPA13		21-Apr-91	0	0.5	481068.766	1346762.987	Mercury	0.1	U	mg/kg	NORMAL
123409	WP-SS-17		13-Jul-93	0	0.5	480992.065	1346717.238	Mercury	0.1	U	mg/kg	NORMAL
123268	WP-SS-16		09-Jul-93	0	0.5	481131.797	1346770.376	Mercury	0.1	U	mg/kg	NORMAL
123268	WP-SS-16		09-Jul-93	0	0.5	481131.797	1346770.376	Neptunium-237	0.8	J	pCi/g	NORMAL
56013		1479	19-Nov-89	4.8	5	480832.205	1346874.74	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56020		1481	20-Nov-89	9.8	10.2	480882.206	1346874.739	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56016		1480	20-Nov-89	4.8	5	480857.205	1346874.739	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56017		1480	20-Nov-89	9.9	10.3	480857.205	1346874.739	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56019		1481	20-Nov-89	4.9	5.3	480882.206	1346874.739	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56018		1480	20-Nov-89	14.7	15	480857.205	1346874.739	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56014		1479	19-Nov-89	9.8	10	480832.205	1346874.74	Neptunium-237	0.6	UJ	pCi/g	NORMAL
123409	WP-SS-17		13-Jul-93	0	0.5	480992.065	1346717.238	Neptunium-237	0.3	J	pCi/g	NORMAL
56021		1481	20-Nov-89	14.6	15	480882.206	1346874.739	Neptunium-237	0.6	UJ	pCi/g	NORMAL
56015		1479	19-Nov-89	14.6	15	480832.205	1346874.74	Neptunium-237	0.6	UJ	pCi/g	NORMAL
5423	ZONE 3-279		15-Sep-88	0	0.16667	481029.367	1346830.987	Neptunium-237	0.6	U	pCi/g	NORMAL
56014		1479	19-Nov-89	9.8	10	480832.205	1346874.74	Strontium-90	0.5	UJ	pCi/g	NORMAL
123268	WP-SS-16		09-Jul-93	0	0.5	481131.797	1346770.376	Strontium-90	0.5	UJ	pCi/g	NORMAL
56015		1479	19-Nov-89	14.6	15	480832.205	1346874.74	Strontium-90	0.5	U	pCi/g	NORMAL
56017		1480	20-Nov-89	9.9	10.3	480857.205	1346874.739	Strontium-90	0.5	U	pCi/g	NORMAL

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Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
56019	1481	20-Nov-89	4.9	5.3	480882.206	1346874.739	Strontium-90	0.5	U	pCi/g	NORMAL
56013	1479	19-Nov-89	4.8	5	480832.205	1346874.74	Strontium-90	0.5	U	pCi/g	NORMAL
5423	ZONE 3-279	15-Sep-88	0	0.16667	481029.367	1346830.987	Strontium-90	0.5	U	pCi/g	NORMAL
123409	WP-SS-17	13-Jul-93	0	0.5	480992.065	1346717.238	Strontium-90	0.5	UJ	pCi/g	NORMAL
56021	1481	20-Nov-89	14.6	15	480882.206	1346874.739	Strontium-90	0.5	U	pCi/g	NORMAL
56020	1481	20-Nov-89	9.8	10.2	480882.206	1346874.739	Strontium-90	0.5	U	pCi/g	NORMAL
56016	1480	20-Nov-89	4.8	5	480857.205	1346874.739	Strontium-90	0.5	U	pCi/g	NORMAL
56018	1480	20-Nov-89	14.7	15	480857.205	1346874.739	Strontium-90	0.5	U	pCi/g	NORMAL
56014	1479	19-Nov-89	9.8	10	480832.205	1346874.74	Technetium-99	1.0	U	pCi/g	NORMAL
56016	1480	20-Nov-89	4.8	5	480857.205	1346874.739	Technetium-99	1.0	U	pCi/g	NORMAL
56017	1480	20-Nov-89	9.9	10.3	480857.205	1346874.739	Technetium-99	1.0	U	pCi/g	NORMAL
123268	WP-SS-16	09-Jul-93	0	0.5	481131.797	1346770.376	Technetium-99	1.0	UJ	pCi/g	NORMAL
56015	1479	19-Nov-89	14.6	15	480832.205	1346874.74	Technetium-99	1.0	U	pCi/g	NORMAL
56021	1481	20-Nov-89	14.6	15	480882.206	1346874.739	Technetium-99	1.0	U	pCi/g	NORMAL
56019	1481	20-Nov-89	4.9	5.3	480882.206	1346874.739	Technetium-99	1.0	U	pCi/g	NORMAL
5423	ZONE 3-279	15-Sep-88	0	0.16667	481029.367	1346830.987	Technetium-99	1.0	U	pCi/g	NORMAL
56020	1481	20-Nov-89	9.8	10.2	480882.206	1346874.739	Technetium-99	1.0	U	pCi/g	NORMAL
56013	1479	19-Nov-89	4.8	5	480832.205	1346874.74	Technetium-99	1.0	U	pCi/g	NORMAL
123409	WP-SS-17	13-Jul-93	0	0.5	480992.065	1346717.238	Technetium-99	1.0	U	pCi/g	NORMAL
56018	1480	20-Nov-89	14.7	15	480857.205	1346874.739	Technetium-99	1.0	UJ	pCi/g	NORMAL
61091	WPA13	21-Apr-91	1.5	2	481068.766	1346762.987	Tetrachloroethene	1.0	U	pCi/g	NORMAL
56022	1481	20-Nov-89	15	15	480882.206	1346874.739	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.165	1346857.389	Tetrachloroethene	5.0	U	ug/kg	NORMAL
123409	WP-SS-17	13-Jul-93	0	0.5	480992.065	1346717.238	Tetrachloroethene	5.0	U	ug/kg	NORMAL
123268	WP-SS-16	09-Jul-93	0	0.5	481131.797	1346770.376	Tetrachloroethene	11.0	U	ug/kg	NORMAL
61133	WPA19	27-Apr-91	1.5	2	480666.263	1346851.992	Tetrachloroethene	11.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.666	1346789.288	Tetrachloroethene	6.0	U	ug/kg	NORMAL
61086	WPA13	21-Apr-91	0	0.5	481068.766	1346762.987	Toxaphene	12.0	U	ug/kg	NORMAL
61128	WPA19	27-Apr-91	0	0.5	480666.263	1346851.992	Toxaphene	190.0	U	ug/kg	NORMAL
61515	WPA18	25-Jul-91	0.5	1	480866.165	1346857.389	Toxaphene	180.0	U	ug/kg	NORMAL
61514	WPA18	25-Jul-91	1.3	1.8	480866.165	1346857.389	Toxaphene	670.0	U	ug/kg	NORMAL
61512	WPA18	24-Jul-91	1.5	2	480866.165	1346857.389	Toxaphene	3500.0	U	ug/kg	NORMAL
61511	WPA18	25-Jul-91	1.5	1.9	480866.165	1346857.389	Toxaphene	1700.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.165	1346857.389	Toxaphene	3500.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.666	1346789.288	Toxaphene	540.0	U	ug/kg	NORMAL
123409	WP-SS-17	13-Jul-93	0	0.5	480992.065	1346717.238	Trichloroethene	400.0	U	ug/kg	NORMAL
123268	WP-SS-16	09-Jul-93	0	0.5	481131.797	1346770.376	Trichloroethene	6.0	J	ug/kg	NORMAL
61091	WPA13	21-Apr-91	1.5	2	481068.766	1346762.987	Trichloroethene	11.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.206	1346874.739	Trichloroethene	6.0	U	ug/kg	NORMAL
								5.0	U	ug/kg	NORMAL

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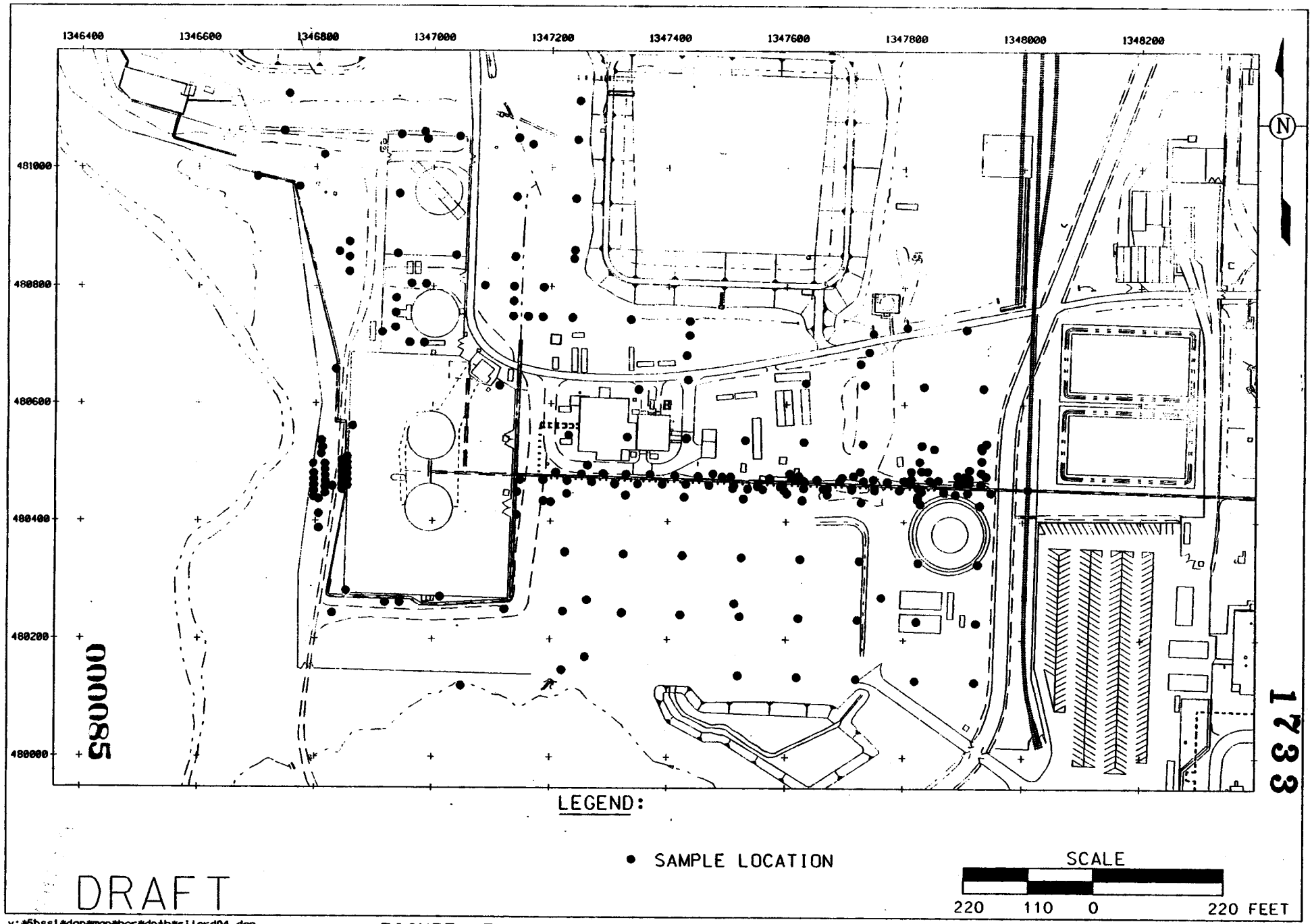
000083

Historical Data Summary for Area 7 Soils in the Silos Project Area

Sample ID	Location ID	Date Collected	Top Depth	Bottom Depth	Northing	Easting	Analyte	Result	Valid. Qual.	Units	Sample Type
61133	WPA19	27-Apr-91	1.5	2	480666.263	1346851.992	Trichloroethene	6.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.666	1346789.288	Trichloroethene	12.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.165	1346857.389	Trichloroethene	5.0	U	ug/kg	NORMAL
56017	1480	20-Nov-89	9.9	10.3	480857.205	1346874.739	Uranium, Total	1.8	U	mg/kg	NORMAL
56020	1481	20-Nov-89	9.8	10.2	480882.206	1346874.739	Uranium, Total	1.9	-	mg/kg	NORMAL
56019	1481	20-Nov-89	4.9	5.3	480882.206	1346874.739	Uranium, Total	2.0	-	mg/kg	NORMAL
56018	1480	20-Nov-89	14.7	15	480857.205	1346874.739	Uranium, Total	6.7	-	mg/kg	NORMAL
56016	1480	20-Nov-89	4.8	5	480857.205	1346874.739	Uranium, Total	2.3	-	mg/kg	NORMAL
123268	WP-SS-16	09-Jul-93	0	0.5	481131.797	1346770.376	Uranium, Total	2.8	-	mg/kg	NORMAL
56021	1481	20-Nov-89	14.6	15	480882.206	1346874.739	Uranium, Total	2.4	-	mg/kg	NORMAL
123409	WP-SS-17	13-Jul-93	0	0.5	480992.065	1346717.238	Uranium, Total	3.4	-	mg/kg	NORMAL
56015	1479	19-Nov-89	14.6	15	480832.205	1346874.74	Uranium, Total	2.2	-	mg/kg	NORMAL
56014	1479	19-Nov-89	9.8	10	480832.205	1346874.74	Uranium, Total	2.4	-	mg/kg	NORMAL
56013	1479	19-Nov-89	4.8	5	480832.205	1346874.74	Uranium, Total	2.0	-	mg/kg	NORMAL
5423	ZONE 3-279	15-Sep-88	0	0.16667	481029.367	1346830.987	Uranium, Total	13.5	-	mg/kg	NORMAL
123409	WP-SS-17	13-Jul-93	0	0.5	480992.065	1346717.238	Vinyl chloride	11.0	U	ug/kg	NORMAL
61133	WPA19	27-Apr-91	1.5	2	480666.263	1346851.992	Vinyl chloride	11.0	U	ug/kg	NORMAL
61091	WPA13	21-Apr-91	1.5	2	481068.766	1346762.987	Vinyl chloride	11.0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.666	1346789.288	Vinyl chloride	12.0	U	ug/kg	NORMAL
123268	WP-SS-16	09-Jul-93	0	0.5	481131.797	1346770.376	Vinyl chloride	11.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.206	1346874.739	Vinyl chloride	11.0	U	ug/kg	NORMAL
61121	WPA18	27-Apr-91	0	0.5	480866.165	1346857.389	Vinyl chloride	11.0	U	ug/kg	NORMAL
61515	WPA18	25-Jul-91	0.5	1	480866.165	1346857.389	4-NITROANILINE	17000.0	UJ	ug/kg	NORMAL
61133	WPA19	27-Apr-91	1.5	2	480666.263	1346851.992	4-NITROANILINE	1900.0	U	ug/kg	NORMAL
56022	1481	20-Nov-89	15	15	480882.206	1346874.739	4-NITROANILINE	1800.0	UJ	ug/kg	NORMAL
61512	WPA18	24-Jul-91	1.5	2	480866.165	1346857.389	4-NITROANILINE	17000.0	UJ	ug/kg	NORMAL
61126	WPA18	27-Apr-91	1.5	2	480866.165	1346857.389	4-NITROANILINE	8700.0	U	ug/kg	NORMAL
61091	WPA13	21-Apr-91	1.5	2	481068.766	1346762.987	4-NITROANILINE	1900 0	U	ug/kg	NORMAL
121093	SS-32	08-Jul-93	0	0.5	480974.666	1346789.288	4-NITROANILINE	980.0	U	ug/kg	NORMAL

APPENDIX E

SAMPLE LOCATIONS FROM PREVIOUS SAMPLING INVESTIGATIONS



v:\5bssl\dgn\map\hor\dpth\sllord04.dgn
STATE PLANAR COORDINATE SYSTEM 1927

FIGURE E-1. HISTORICAL SOIL SAMPLE LOCATIONS FOR TOTAL URANIUM AND OTHER WAC COCs

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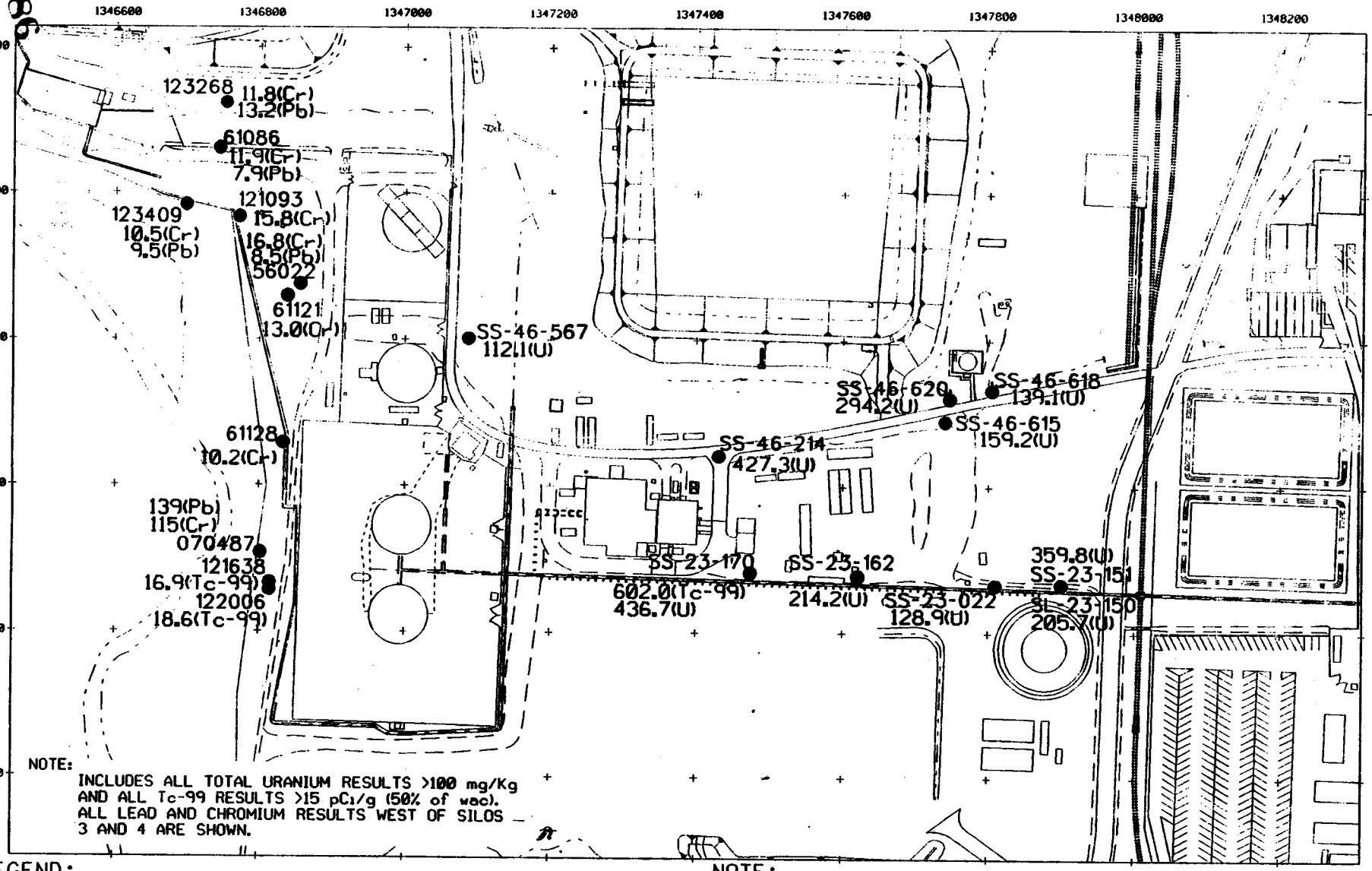

LEGEND:

123409 ● SAMPLE ID AND LOCATION

9.5(Pb) ANALYTE RESULT

(Cr) CHROMIUM

(Pb) LEAD

(U) TOTAL URANIUM

(Tc-99) TECHNETIUM-99

NOTE:
ALL UNITS ARE mg/Kg EXCEPT Tc-99 WHICH IS pCi/g.

SCALE

200 100 0 200 FEET

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FIGURE E-2 SAMPLE LOCATIONS WITH ELEVATED WAC COC CONCENTRATIONS

16-JUL-1998

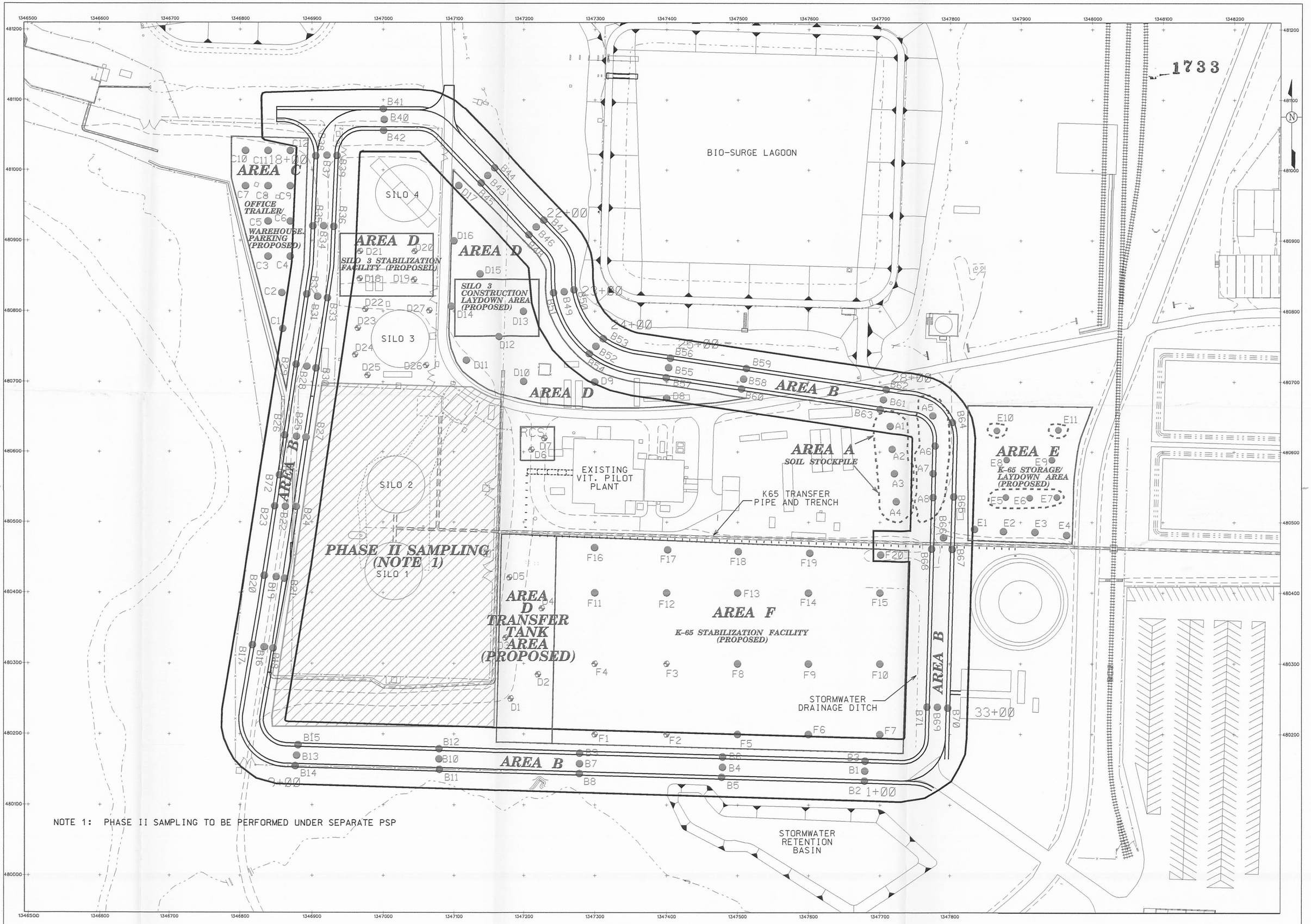

FIGURE 2-1. SILOS PROJECT AREA. SOIL WAC ATTAINMENT SAMPLING LOCATIONS