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**SMALL AREA REMEDIATION WORK AREA-SPECIFIC DESCRIPTION**

**APPENDIX A.3.1**

**PRE-DESIGN INVESTIGATION DATA SUMMARY REPORT**

**PSC METALS VICINITY PROPERTY (DT-8)**

**FUSRAP ST. LOUIS DOWNTOWN SITE**

**ST. LOUIS, MISSOURI**

Appendix A.3.1, Revision 1, replaced  
Appendix A.3.1, Revision 0, per  
transmittal letter 845843-SEICPR-175  
dated 8/10/06.

**TOTAL ENVIRONMENTAL RESTORATION CONTRACT**

**CONTRACT NO. DACW41-98-D-9006**

**TASK ORDER NO. 0011**

**Submitted to:**

**Department of the Army  
U.S. Army Engineer District,  
Kansas City Corps of Engineers  
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601 East 12<sup>th</sup> Street  
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**August 10, 2006**

**Revision 1**

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## List of Acronyms

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<b>Acronym</b>	<b>Title</b>
Ac	actinium
AEC	Atomic Energy Commission
ASTM	American Society for Testing and Materials
bgs	below ground surface
BNI	Bechtel National, Inc.
COC(s)	contaminant(s) of concern
DOE	U.S. Department of Energy
FSSP	Final Status Survey Plan
FUSRAP	Formerly Utilized Sites Remedial Action Program
HU(s)	Hydrostratigraphic Unit(s)
IT	IT Corporation
Mallinckrodt	Mallinckrodt Inc.
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MED	Manhattan Engineer District
msl	mean sea level
OD	outside diameter
Pa	protactinium
PARCC	precision, accuracy, representativeness, completeness, and comparability
pCi/g	picocuries(s) per gram
Ra	radium
RG(s)	remedial goal(s)
ROD	Record of Decision
SAG	Sampling and Analysis Guide
SAIC	Science Applications International Corporation
Shaw	Shaw Environmental, Inc. (formerly IT Corporation)
SLDS	St. Louis Downtown Site
SOR <sub>net</sub>	sum-of-ratios net
TCLP	toxicity characteristic leaching procedure
Th	thorium
U	uranium
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USGS	United States Geological Survey
USNRC	U.S. Nuclear Regulatory Commission
VOC	volatile organic compound

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## 1.0 Introduction

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A pre-design investigation at the PSC Metals Vicinity Property (DT-8) was conducted by Shaw Environmental, Inc. (Shaw) for the U.S. Army Corps of Engineers (USACE), St. Louis District, from 1999 through 2005. The pre-design investigation activities were conducted in accordance with the Formerly Utilized Sites Remedial Action Program (FUSRAP). The FUSRAP was developed in 1974 by the Atomic Energy Commission (AEC; now the U.S. Department of Energy [DOE]) to identify and clean up or otherwise control sites where residual radioactive contamination remained from activities carried out under contract to the Manhattan Engineer District (MED) and the AEC during the early years of the nation's atomic energy program (Bechtel National, Inc. [BNI], 1994). Subsequently, Congress transferred responsibility for the FUSRAP to the USACE.

The *Record of Decision for the St. Louis Downtown Site, St. Louis Missouri* (ROD) (USACE, 1998) identified the St. Louis Downtown Site (SLDS) as requiring remediation of chemical and radiological contamination. Radiological contamination was defined by the ROD as the presence of radiological contaminants of concern (COCs) in soil at concentrations exceeding the ROD criteria. In the context of this pre-design investigation report, radiological contamination is defined as the presence of COCs in an individual soil sample or group of samples at net concentrations (above the background concentration) that exceed ROD remediation criteria.

However, the presence of COCs at concentrations that exceed ROD remediation criteria in an individual sample or group of samples may not exceed ROD remedial goals (RGs). The determination of whether residual radiological activity is less than RGs is beyond the scope of this report and will be made based on the results of additional sampling performed in accordance with the *Final Status Survey Plan for Accessible Soil Within Mallinckrodt Property and the Vicinity Properties, Excluding Plants 1, 2 and the City Property at the St. Louis Downtown Site, St. Louis, Missouri* (FSSP) (USACE, 2002). If RGs are exceeded, the area will be excavated.

Note that the background concentration used in this pre-design investigation report is defined by the arithmetic mean of the distribution of background measurements that have been collected at the SLDS. As identified by the ROD, the radiological COCs at the SLDS are uranium-238 (U-238) and its daughters, especially thorium-230 (Th-230) and radium-226 (Ra-226); U-235 and its decay products, including protactinium-231 (Pa-231) and actinium-227 (Ac-227); and thorium-232 (Th-232) and its progeny.

The SLDS consists of the Mallinckrodt Inc. (Mallinckrodt) plant (a chemical manufacturer) and surrounding vicinity properties, one of which is the DT-8 (USACE, 1998). During characterization and remedial investigation activities conducted by BNI at the SLDS between 1986 and 1990, radiological contamination was identified at a number of soil sample locations on the McKinley Iron property (later identified as PSC Metals property), and that property was included as a vicinity property identified in the ROD (USACE, 1998) requiring remediation. In this report, the original McKinley Iron/PSC Metals property tract will be referred to as the "South Tract." Subsequent to the BNI investigations, a better understanding of the property boundaries, contaminant distribution, and changes to the property ownership over the years has been obtained. The USACE updated the DT-8 vicinity property descriptions in 2002 to include other property holdings or operations of PSC Metals in the immediate area of the original South Tract property and the Mallinckrodt Plant.

As currently defined by the USACE for the purpose of the FUSRAP SLDS project, the DT-8 is composed of seven separate land tracts as illustrated on Figure 1. Within those general boundaries, there are land tracts not owned by PSC Metals that are not considered part of the DT-8. Several small areas of contamination located on surrounding properties that are contiguous to contamination associated with the PSC Metals property are addressed by this report.

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In order to prepare for the remedial design and remediation of the DT-8, the USACE authorized a pre-design investigation be conducted at the DT-8. The purpose of the pre-design investigation at DT-8 was to further identify and define the estimated extent of contamination of the land tracts and to characterize the physical conditions of the land tracts for remedial design. The pre-design investigation activities conducted at the DT-8, and the results obtained during these activities, are described in this pre-design investigation report, which supersedes the previous *Pre-Design Investigation Data Summary Report, PSC Metals Vicinity Property (DT-8), FUSRAP St. Louis Downtown Site, St. Louis, Missouri*, Revision 0 (IT Corporation [IT], 2001a) in its entirety. This Revision 1 (this document) incorporates the information contained in the 2001 report as well as the methods, activities, and results of the subsequent investigations. Data and information from the *Remedial Investigation Report for the St. Louis Downtown Site, St. Louis, Missouri* (Remedial Investigation Report) (BNI, 1994); the *Remedial Investigation Addendum for the St. Louis Site, St. Louis, Missouri* (Remedial Investigation Addendum) (Science Applications International Corporation [SAIC], 1995); and the *Radiological, Chemical, and Hydrogeological Characterization Report for the St. Louis Downtown Site in St. Louis, Missouri* (Characterization Report) (BNI, 1990) were also used in this report. The analytical results for selected soil

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samples collected as part of historical sampling or pre-design investigation activities at properties adjacent to the DT-8 were used to develop an understanding of subsurface conditions on surrounding properties and whether similar subsurface conditions may exist on the DT-8. These analytical results were presented in reports issued for those specific properties, are available in the SLDS project files, and have not been included in this report.

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## **2.0 Pre-Design Investigation Activities and Methods**

As noted in Section 1.0, the development of the currently recognized DT-8 property boundaries and land tracts to be included in the investigation occurred in several steps based on information available at the time. Similarly, the scope of work for the pre-design investigation was developed in phases.

The initial scope of work was presented in the *Pre-Design Investigation Work Description, Phillip Metals Vicinity Property, FUSRAP St. Louis Downtown Site, St. Louis, Missouri*, Revision 0 (IT, 2000a) (Work Description). That Work Description described the following investigation activities to be conducted at the (now designated) South Tract:

- Performing a gamma radiological walkover survey
- Identifying potential Class 1, 2, and 3 Survey Units
- Completing up to 20 planned delineation borings around previously identified areas of radiological activity exceeding ROD remediation criteria
- Providing 42 potential Class 2 Survey Unit samples and up to 24 planned potential Class 3 Survey Unit samples to document the absence of contamination exceeding ROD remediation criteria in other areas of the South Tract
- Collecting and analyzing one or more composite waste characterization samples

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The field work for that initial scope of work was largely completed by October 2000, and a report of the findings and results (*Pre-Design Investigation Data Summary Report, PSC Metals Vicinity Property [DT-8], FUSRAP St. Louis Downtown Site, St. Louis, Missouri*) (IT, 2001a) was developed and issued in May 2001 as Appendix A.3.1 of the *Small Area Remediation Work Area-Specific Description, FUSRAP St. Louis Downtown Site, St. Louis, Missouri* (IT, 2001b). As part of the 1999 Plant 6 East Half pre-design investigation, some samples were collected on the DT-8 property. These sample locations have been included in this report. Note that the *Pre-Design Investigation Data Summary Report* (Revision 0) for DT-8 indicated that samples were collected and analyzed from a total of 19 near-surface borings, 42 potential Class 2 and 23 potential Class 3 borings, and 1 waste characterization sample.

The USACE authorized a historical background review be conducted at the DT-8 to determine if residual contamination may have been inadvertently buried, relocated, or removed through normal property development or modifications over time, subsequent to initial deposition. A number of areas or features of interest that warranted further investigation were identified during the historical background review. In April 2002, the USACE authorized a second phase of

investigation to be conducted at the South Tract to evaluate whether subsurface contamination or targets of interest were present on the DT-8. This phase of investigation included borings, soil sampling, and analysis at seven specific locations and additional radiological surveys with contingent sampling at eight other areas of interest where previously collected radiological data suggested additional investigation was warranted. The scope of work for the second phase of investigation may be found in Field Work Variance 104 to the Work Description (IT, 2000a).

A third phase of investigation was authorized for the DT-8 by the USACE in September 2002 via Field Work Variance 110 to the *Pre-Design Investigation Work Description, Vicinity Properties, St. Louis Downtown Site, St. Louis, Missouri*, Revision 1 (Work Description) (IT, 2001c). In this phase of investigation, the north and east property tracts were added to the property description and investigation, additional gamma radiological walkover surveys were authorized, and up to 35 pre-design investigation borings, along with soil sampling and analytical work, and up to 82 potential Class 2 borings with soil sampling and analytical work were proposed. Contingency borings, samples, and analytical work were also included in the scope of work. Field Work Variance 112 to the Work Description (IT, 2001c) further modified the third phase of the investigation to provide an additional ten sample locations associated with (previous) gamma radiological walkover surveys, seven sample locations associated with a (previous) characterization gamma radiological walkover survey, and two samples associated with building gutter debris. The third phase of investigation was again modified in May 2005 with the addition of six sample locations along with contingency sample locations and delineation sampling for the north and south property tracts to provide further delineation of the radiological conditions and characterization of the subsurface conditions encountered during the earlier sampling efforts (Appendix B.2, *2005 Additional Pre-Design Investigation at the PSC Metals Vicinity Properties, of the Pre-Design Investigation Work Description, FUSRAP St. Louis Downtown Site, St. Louis Missouri* [Shaw, 2004]).

Pre-design investigation activities were conducted under the guidance and direction received from the USACE throughout the investigation. Pre-design investigation methods are summarized in the following subsections. Details of the methods used can be found in the previously referenced Work Descriptions, on boring logs (see Appendix A) and other field documentation, and in analytical data tables.

## **2.1 Historical Information Review Methods**

A review of available historical information sources and documents was performed as part of the pre-design investigation to gain insights as to when land development activities and/or related

physical changes occurred at the DT-8 and surrounding properties. These land development activities/changes included the placement of fill material, earth movement activities that may have altered the topography, and the addition, removal, or modification of man-made structural elements. Historical drainage/erosional features were also identified. The land development activities and the locations of the drainage/erosional features were then compared with the known MED/AEC operational activities or site characteristics and their associated timeframes to identify areas of the DT-8 that may have been affected by MED/AEC operations.

Specific consideration was given to the identification of the historical topographic surface at the DT-8 and surrounding areas at the time of the MED/AEC operations. This historical topographic surface likely consisted of fill material that overlies the alluvial deposits referred to as the "natural, in situ soil horizon." This natural, in situ soil horizon served as a marker horizon because its homogeneity across the SLDS made it easily identifiable during subsurface investigations. The natural, in situ soil horizon also provided a reference horizon that indicated that the subsurface investigation was below the topographic surface that would have been present during and after Mallinckrodt's MED/AEC operational activities. The historical topographic surface was suspected to be present at approximately 420 feet (+/- 5 feet) above mean sea level

(msl) at other SLDS locations where radiological contamination has been identified. Therefore, the historical information review included an evaluation of the natural, in situ soil horizon at the DT-8 and the potential for radiological contamination conditions similar to those identified at other SLDS locations (including preferential pathways for contaminant migration) to be present at the DT-8.

Radiological and geological data from the remedial investigation, pre-design investigations at the DT-8 and surrounding vicinity properties, and remediation activities at nearby Mallinckrodt plants and vicinity properties were also utilized to develop insights into the nature and extent of the soil units at the DT-8. The potential for these soil units to contain radiological contamination was then estimated. Historical information sources and documents included the following:

- Historical sampling results, including results for those samples obtained during characterization and remedial investigations activities at the SLDS (BNI, 1990, 1994 and SAIC, 1995)
- Historical analytical results from previous sampling at Mallinckrodt Plant 1 (IT, 1999a), the City of Venice, Illinois Vicinity Property (DT-11) (IT, 2001b [see Appendix A.5.1]), the MSD Liftstation Vicinity Property (DT-15) (USACE, 2001a), and the City Property Vicinity Property (DT-2) (USACE, 1999)
- Sanborn Maps® (The Sanborn Map Company Inc., 1909, 1950, 1989, 1990, 1992, 1993, 1994, and 1995)

- Historical topographic maps (United States Geological Survey [USGS], 1933, 1935, 1937, 1940, 1950, 1954, 1968, and 1993)
- Eighty-six aerial photographs covering approximately 36 dates provided by the USACE, Geospatial Engineering Branch (USACE, 2001b) and other aerial photographs compiled by Shaw throughout the investigation

Additionally, a field reconnaissance was performed as part of the historical information review. Field reconnaissance activities consisted of a visual assessment and documentation of the following:

- Surface features that may affect field operations (e.g., structures, utilities, or debris that may preclude sample collection in a particular area); and
- Topographic characteristics such as evidence of disturbed ground, depressed areas, runoff/erosional areas, etc.

## 2.2 Gamma Walkover Surveys and Sampling Methods

A gamma radiological walkover survey was conducted by SAIC in accordance with the *Multi-Agency Radiation Survey and Site Investigation Manual* (MARSSIM) (U.S. Nuclear Regulatory Commission [USNRC] et al., 1997) requirements to identify areas of elevated radiological activity within the uppermost layer of soil at the DT-8. The gamma radiological walkover survey was conducted in accessible areas of the DT-8 utilizing a 2-inch by 2-inch (2 x 2) sodium iodide detector. Five soil samples were collected in conjunction with the gamma radiological walkover survey from areas exhibiting an elevated radiological count rate.

Subsequent to the initial pre-design investigation, gamma radiological walkover surveys were conducted to confirm previously identified areas of elevated radioactivity count rates and to better define the boundaries of areas exhibiting elevated radiological count rates. Soil samples were also collected in conjunction with these gamma radiological surveys to identify areas containing radiological COCs. The gamma radiological surveys were conducted in accordance with instructions and specifications provided in the previously described Work Descriptions or at the direction of the USACE.

Soil samples collected and analyzed in conjunction with the gamma radiological surveys were collected in accordance with the Work Descriptions and submitted to the St. Louis FUSRAP Laboratory under chain-of-custody for analyses by gamma spectroscopy for SLDS radiological COCs. Results from the gamma radiological surveys and soil sampling are presented and discussed in Sections 3.0 and 4.0 of this report.

### 2.3 Soil Sampling Methods

In accordance with the authorized Work Descriptions, sampling locations were identified using standard surveying methods, and the locations were then marked with paint, flags, or stakes. Prior to collecting soil samples, all sampling tools were decontaminated in accordance with the *Sampling and Analysis Guide for the St. Louis Sites, St. Louis, Missouri* (SAG) (USACE, 2000). Decontamination residuals were containerized and ultimately disposed in accordance with the *Materials Handling and Transportation Plan, FUSRAP St. Louis Downtown Site, St. Louis, Missouri* (IT, 1999b).

Most pre-design investigation borings were drilled using a Diedrich D-120 or a Central Mine Equipment 55 or 75 drill rig equipped with 4.25-inch or 3.25-inch inside diameter hollow stem augers (see specific boring logs in Appendix A for actual method used for a specific boring). Soil samples for evaluation of radiological activity were collected using a 2-foot-long by 3-inch outside diameter (OD) steel split spoon sampling device. Soil samples for evaluation of geotechnical characteristics were collected using a 2-foot-long by 2-inch OD steel split spoon sampling device. The split spoon was driven in advance of the hollow stem auger using a 140-pound automatic drop hammer activated over a 30-inch drop height (or equivalent). After each 2-foot evaluation length was collected, the augers were advanced 2 feet to the bottom of the previous evaluation length and the procedure repeated until boring/sampling completion.

Where conditions would not allow the use of a drill rig (e.g., due to the presence of overhead power lines, proximity of structures), soil borings/samples were completed using a 0.5-foot-long by 4-inch OD steel hand auger. Extensions for the hand auger shaft allowed for the collection of soil samples to a depth of 6 feet below ground surface (bgs). Soil borings/samples drilled using a hand auger were advanced at 0.5-foot increments with a pre-cleaned or decontaminated steel sample bucket. The sample bucket was carefully lowered to the bottom of the borehole to prevent scraping and dislodging of sidewall material from the borehole. The depth of penetration of the auger was closely monitored to ensure that the retrieved soil sample was representative of the appropriate sample interval.

The soil cores were field screened for radiological activity using a Ludlum Model 2221 (scaler/ratemeter) together with a Ludlum Model 44-10 (2 x 2 sodium iodide detector). During drilling activities, soil was also screened for volatile organic compounds (VOCs) using a photoionization or flame ionization detector. The field geologist identified and lithologically described the soils using American Society for Testing and Materials (ASTM) Method D2488-93, *Standard Practice for Description and Identification of Soils (Visual-Manual*

*Procedure*) (ASTM, 1993). The lithologic information and the screening results were recorded on the soil boring log at the time of boring advancement. If applicable during logging, particular attention was paid to identifying the existence of remnant surface soil horizons, erosional zones, or other historical indicators (e.g., debris zones).

At various locations, a test pit or trench was used (instead of a soil boring) to allow for characterization of the subsurface by direct observation as well as to allow for collection of subsurface samples due to access restrictions or sampling difficulties encountered at the planned sampling location. A backhoe was typically used to excavate the test pit. Test pit activities (e.g., excavating, sampling, stockpiling, and backfilling) were conducted in accordance with authorized Work Description.

Soil samples from the appropriate 0.5-foot interval were collected and processed in accordance with the SAG (USACE, 2000) or a specific Work Description, placed in 1-quart containers with tight-fitting lids, submitted to the St. Louis FUSRAP Laboratory under chain-of-custody, and analyzed by gamma spectroscopy for SLDS COCs. Soil samples collected for archiving were placed in double-bagged plastic bags with sealable openings. The samples were then transported to the on-site storage trailer under chain-of-custody in accordance with SAG procedures. Results from the soil sampling are presented and discussed in Sections 3.0 and 4.0 of this report.

Upon completion of drilling and sampling, each boring was backfilled in accordance with the SAG or as directed by the USACE. Subsequent to backfilling the soil borings or test pits, each location was either civil surveyed or its distance measured from a known point (nearby surveyed feature). Coordinate location data are retained in the project files.

#### **2.4 Waste Characterization Sampling and Investigation-Derived Waste**

One five-part composite waste characterization sample (SLD06650) was collected within the DT-8 to evaluate waste acceptance criteria for disposal purposes. A discrete sample (SLD06650-4) was collected for the VOC component portion of the waste characterization sample using the procedure described below. Each of the soil sub-samples collected was screened for VOCs using a photoionization detector in addition to radiological screening. The discrete soil sample for VOC analysis was collected from the interval that exhibited the maximum photoionization reading from the five sub-samples.

The soil-composite sample for waste characterization evaluation was submitted to Severn Trent Services Laboratory for the following analyses: toxicity characteristic leaching procedure (TCLP) pesticides, TCLP herbicides, TCLP metals (eight Resource Conservation and Recovery

Act metals plus copper and zinc), polychlorinated biphenyls, total organic halides, corrosivity, ignitability, reactivity, and the paint-filter test. The discrete sample collected for VOC analysis was submitted for TCLP VOC analysis.

Investigation-derived waste generated during the pre-design investigation activities included personal protective equipment, soil cores or cuttings, disposable sampling equipment, decontamination fluids, and plastic sheeting. This material was placed at the SLDS load-out facility, loaded into railcars, and transported off site to an approved disposal facility.

## **2.5 Interpretive Methods**

Soil samples (SLD-series or HTZ-series samples) were submitted to the St. Louis FUSRAP Laboratory and analyzed for radiological COCs by gamma spectroscopy. The gamma spectroscopy results were used to evaluate radiological conditions and help determine the estimated extent of radiological contamination. Alpha spectroscopy analysis was also performed for Th-230 and Th-232 on a portion of the soil samples. For those samples also analyzed by alpha spectroscopy, those results for Th-230 and Th-232 were used as the input for interpretation of the pre-design investigation results. Samples with PSC-series designations were considered screening level samples and, as such, were not subject to the same level of analysis, reporting, or quality assurance/quality control as samples initially designated for contaminant determination purposes (typically SLD-series and HTZ-series samples). In certain instances, selected PSC-series samples were subsequently selected for reanalysis using the SAG-prescribed methods and reassigned a SLD-series designation. In the event that reanalysis was completed for a PSC-series sample, the reanalyzed results (with the better quality data) were reported and used in this report. In the event that a PSC-series sample was not reanalyzed, the initial screening data were reported and used in this report.

The radiological soil sample results for each sample were imported into a working database to calculate the sum-of-ratios net ( $SOR_{net}$ ) value for each sample. If the detection limit for an analyte exceeded the result, then one-half of the detection limit value was used for calculating the  $SOR_{net}$  value in accordance with U.S. Environmental Protection Agency (USEPA) guidance (USEPA, 2000). The background values were subtracted from the gross radionuclide results prior to calculating the  $SOR_{net}$  value. The equations used to calculate the  $SOR_{net}$  values are as follows:

Samples from 0 to 0.5 feet bgs (the ground surface begins at the topographic surface):

$$\text{SOR}_{\text{net}} = \frac{\text{Greater of Ra-226 or Th-230}}{5 \text{ pCi/g}} + \frac{\text{Greater of Ra-228 or Th-232}}{5 \text{ pCi/g}} + \frac{\text{U-238}}{50 \text{ pCi/g}}$$

Where pCi/g = picocuries per gram

Samples greater than 0.5 feet bgs:

$$\text{SOR}_{\text{net}} = \frac{\text{Greater of Ra-226 or Th-230}}{15 \text{ pCi/g}} + \frac{\text{Greater of Ra-228 or Th-232}}{15 \text{ pCi/g}} + \frac{\text{U-238}}{50 \text{ pCi/g}}$$

After calculation of the  $\text{SOR}_{\text{net}}$ , the  $\text{SOR}_{\text{net}}$  and analytical results for each sample were compared to the ROD remediation criteria (USACE, 1998) to determine if radiological contamination was present. A sample with a  $\text{SOR}_{\text{net}}$  greater than or equal to 1.0 was assumed to be contaminated. If contamination was identified, the available data and information were evaluated further to estimate the horizontal extent of radiological contamination. The term "contamination," as defined in Section 1.0 and used herein, differs from the RG usage in that the RGs are based on the average concentration of SLDS COCs within the entire population of data that are above the site background distribution for a 100-square-meter area.

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When radiological contamination was detected within a sample from a particular sample interval (e.g., from 0 to 0.5 feet bgs), it was conservatively assumed for volume and cost estimation purposes that the depth of the contamination at that location extended to the top of the next sampled interval that did not contain radiological COCs. Based on the foregoing evaluation, potential remediation areas and/or contamination contours were identified to aid in estimating the soil volume to be removed to achieve the RGs identified in the ROD. The estimated extent of contamination was then presented in a series of figures. If the area represented by the estimated extent of contamination coincided with historical or geological features of interest identified during the historical review, the outline of the feature(s) of interest was also portrayed on the estimated-extent-of-contamination map. Areas in which one or more samples exhibit an  $\text{SOR}_{\text{net}}$  exceeding 1.0 but which may not exceed ROD (USACE, 1998) RGs, when evaluated in accordance with the FSSP (USACE, 2002), are marked with shading on the estimated-extent-of-contamination maps as described in Section 4.0 to identify them for further evaluation during the design phase. Since the estimated-extent-of-contamination contours illustrated in this report do not reflect the required excavation contours, the gross excavation contours will be provided in the DT-8 remedial design.

### **3.0 Pre-Design Investigation Results**

Pre-design investigation results include the historical information findings, soil sample analytical results, and geology and hydrogeology information from the DT-8. The boring logs are included in Appendix A.

#### **3.1 Historical Information Findings**

As a result of the historical review, a number of historical, structural, and geological features have been identified within the various DT-8 property tracts (Figures 2-A through D). These features and their association with the DT-8 were evaluated to determine their potential impact to the properties with regard to contaminant existence, migration, or concentration. A summary of the historical information and findings, documentation records for the historical background review, owner/operator interviews, and site reconnaissance is located in the SLDS project files. Discussions were organized to generally present or compare the historical information related to the MED/AEC era (1940s – 1950s). The historical perspectives were used in conjunction with the analytical data and other characterization data to assist with the interpretation of contaminant boundaries.

#### **3.2 Gamma Radiological Walkover Survey Results**

Gamma radiological walkover survey results were compiled from each of the investigations and are presented in Appendix B. As a result of identifying elevated readings during the survey, 86 biased samples designated by the HTZ prefix were collected from 49 locations, and 39 screening samples designated by the PSC or MIP prefix were collected from 23 locations. Forty-one of the 86 HTZ samples and five of 39 PSC or MIP samples showed contamination, with depths of contamination ranging from ground surface at numerous locations to at least 2.0 feet bgs at sample location HTZ66213.

#### **3.3 Pre-Design Investigation Analytical Results**

Eight hundred eight soil samples from 319 sample locations were collected from the seven property tracts composing the DT-8 and analyzed for SLDS radiological COCs. Figures 3-A through D depict the sample locations. Table C-1 in Appendix C lists the analytical results from the samples collected and analyzed from the pre-design investigation conducted at the DT-8. Subsequent discussions in this report will use data rounded to two significant figures. As a result, data discussed within the text may not exactly reflect the data as reported in the tables or in actual laboratory reports. Seventy-one samples (including HTZ, MIP, SLD, and PSC series) exhibited an  $SOR_{net}$  of 1.0 or greater (see Table 3-1). The highest  $SOR_{net}$  value (790) was

identified at sample HTZ69418, collected from 0 to 0.5 feet bgs. HTZ69418 was reported to contain 2,300 pCi/g of Ra-228 and Th-232; 1,700 pCi/g of Th-230; 50 pCi/g of U-238; and 4.0 pCi/g of Ra-226. The deepest estimated extent of contamination (6 feet bgs) was based on elevated radium concentrations noted at sample location SLD04160 (sample SLD04268) at a depth of 4.5 to 5.0 feet bgs. The  $SOR_{net}$  values associated with samples exhibiting an  $SOR_{net}$  of 1.0 or more are shown on Figures 4-A through D and the results are listed on Table 3-1.

Waste characterization analytical methods, parameters, and results are presented in Table 3-2. The complete laboratory analytical report is presented as Appendix D. The locations of the five sub-samples collected for waste characterization are also shown on Figure 3-C.

### **3.4 Geology and Hydrogeology**

The geological setting at the SLDS is characterized from surface to bedrock by a fill layer present over most of the site, and alluvial sediments located beneath the fill (USACE, 1998). The fill, discernable as multiple horizons at some locations, has an average thickness of 13 feet and may contain concrete, brick, glass, coal cinders, slag material, and/or other miscellaneous material. Along the eastern boundary of the SLDS near the Mississippi River, fill as thick as 30 feet or more was placed on top of the original floodplain sediments as the SLDS area was developed during the late 1800s and early 1900s. Fill thickness along the western boundary of the SLDS is generally 10 to 15 feet (USACE, 1998). The alluvial deposits underlying the fill consist of stratified clays, silts, sands, and gravels, and range in thickness from 5 to 30 feet.

Ground water at the SLDS has been identified within three hydrostratigraphic units (HUs): HU-A, HU-B, and HU-C. HU-A comprises the fill material and the upper portion of the underlying alluvial deposits. HU-B, also called the Mississippi Alluvial Aquifer, comprises the lower portions of the alluvial deposits and consists of sands and silty sands. HU-C is located within the limestone bedrock. Ground water in the St. Louis area is generally of poor quality and does not meet drinking water standards without treatment (USACE, 1998).

The seven property tracts composing the DT-8 are sufficiently large to cover the range of geological and hydrogeological conditions as previously described for the SLDS project area. At property tracts closer to the western side of the project, fill sequences tend to be thinner and the natural, in situ soil horizon is typically closer to the surface. At property tracts closer to the eastern side of the project area, fill sequences are thicker and the natural, in situ soil horizon is much deeper. Topographic relief across the DT-8 tracts can be variable depending upon the fill sequences and urbanization of the area. In the 1930s, topographic relief in the western portions of the DT-8 (North Tract 1) consisted of a gentle slope (0.008 feet per foot) traversing the river

embankment and entering the floodplain (which was essentially flat at 420 feet above msl). All of the other property tracts were situated within a depression (410 – 420 feet above msl) located within the floodplain. North Tract 3, North Tract 4, South Tract, and the eastern one-half of North Tract 2 were located on the slopes of the depression with slopes averaging 0.16 feet per foot. The western one-half of North Tract 2 appears to be well situated within the base of the depression (at approximately 410 feet above msl). The DT-8 pre-design investigation was targeted primarily within HU-A. When encountered, ground water in the upper fill layers of that unit tended to be isolated and perched. The primary ground water was typically encountered within the upper several feet of the natural, in situ soil layer. Specific information pertaining to the geology and hydrogeology of the various tracts can be obtained from the boring logs (see Appendix A).

### **3.5 Quality Assurance/Quality Control**

Throughout the pre-design investigation conducted at the DT-8, various quality assurance and quality control methods were used to develop an understanding of the quality and usefulness of the investigative methods used, data obtained, and interpretations made. A precision, accuracy, representativeness, completeness, and comparability (PARCC) parameter analyses was performed for the laboratory analytical data by the SAIC Data Management Group. In general summary, the laboratory data were determined to be within control limits and useable for their intended purpose with respect to precision, accuracy, and representativeness. The percent completeness for the sampling effort was reported at 99.9 percent. It was also reported that the current and historical information are sufficiently comparable to allow a reasonable determination of the nature and extent of the radiological contamination. The complete PARCC parameter report is provided in Appendix E.

On many of the land tracts, new fill units or replacement fill units appeared to have been placed within the designated estimated contaminated area or surrounding areas. As a result, the contaminated layer may have been covered, removed, or replaced. Some analytical data from the recent fill units suggested that they were at or below background radioactivity levels. Other sample data from these units suggested that while they were elevated above background radioactivity levels, radioactivity levels were not sufficiently high to be considered contaminated. Thus, some fluctuation in the estimated extent of contamination boundaries should be expected.

## 4.0 Evaluation of Pre-Design Investigation Results

In this section, the analytical results for each land tract associated with the DT-8 property are evaluated in conjunction with the relevant geological and historical data and the gamma radiological walkover survey data. Sample locations with  $SOR_{net}$  values equal to or greater than 1.0, and the estimated horizontal and vertical extent of contamination, are highlighted on Figures 4-A through D. Table 3-1 lists sample data with  $SOR_{net}$  values greater than or equal to 1.0, and the gamma radiological walkover survey results are provided in Appendix B.

### 4.1 Property Conditions – North Tract 1

Five areas of radiological contamination (labeled 1 through 5 on Figure 4-A) were identified on the North Tract 1 at the DT-8. The locations of the radiologically contaminated areas and their associated depths of radiological contamination are identified on Figure 4-A. Table C-1 lists the analytical results, and Table 3-1 lists the analytical results resulting in  $SOR_{net}$  values equal to or greater than 1.0.

Other significant property conditions identified through the historical background review or encountered during the field investigation activities and associated with North Tract 1 include the following:

- Elevated gamma radiological walkover survey results indicated potential contamination associated with soils surrounding the building located in the south central portion of the property. Two samples (SLD76942 and SLD76943) were taken of debris lodged in a rain gutter located along the top of the north wall of the south central building surrounding Area 3 to evaluate whether the elevated gamma radiological walkover survey results were caused by precipitation runoff from the building. Both samples were collected from the same location approximately 2 feet east of the northwest corner of the building. One sample was collected from approximately 0.3 feet below the top of the gutter while the second sample was collected from approximately 0.6 feet below the top of the gutter. Both samples contained  $SOR_{net}$  values below 1.0 (0.9 and 0.7 respectively); however, both contained radioactivity above background levels. The scope of work included plans to collect another set of samples from the gutter located on the northern wall, closer to the eastern side of the building; however, prior to attempting to collect those samples, the gutter fell away from the building and samples could not be recovered.
- During the pre-design investigation, utility locating was performed to clear sample locations for intrusive subsurface work. A number of underground utilities were identified (e.g., gas lines) approaching or entering the North Tract 1 property along the western side of the property and situated to connect to the vacant buildings remaining on the property. Overhead utilities were noted entering the western side

of the property and also along the northern side of the property across Bremen Street. Any further work considered in this area should avoid damaging the utilities. As on other SLDS properties, buried utility conduits can serve as preferential pathways.

- During the pre-design investigation, the building foundations, associated utilities, or other building features were not identified, explored, or mapped. However, these features should be anticipated in the area.

#### 4.1.1 Area 1

Area 1 (see Figure 4-A) is situated along the northern boundary of the North Tract 1 near the northwestern corner of the property. Area 1 covers approximately 10,752 square feet (999 square meters) and extends from approximately 60 feet east of the west property fence to approximately 240 feet east of the west property fence and from the north property fence southward approximately 100 feet. Analytical data indicate that the radiological contamination extends beyond the northern border immediately adjacent to Bremen Street as indicated on Figure 4-A. The estimated radiologically contaminated area was defined based on the gamma radiological walkover survey and analytical data associated with five soil sample locations (HTZ66254, HTZ66219, HTZ66222, HTZ66256, and HTZ66213) in which  $SOR_{net}$  values were reported equal to or greater than 1.0. The estimated extent of contamination area was developed on the basis of additional soil sample locations (SLD72939, SLD87283, SLD72144, SLD72145, SLD72146, HTZ66252, SLD72943, SLD87284, SLD87322, SLD87285, SLD72951, SLD72947, SLD72792, SLD72955, PSC00212, SLD72146, and HTZ66218), three of which (SLD72943, SLD72951, and SLD72947) contained  $SOR_{net}$  values equal to or greater than 1.0. Figure 4-A highlights the sample locations with  $SOR_{net}$  values equal to or greater than 1.0 and lists the  $SOR_{net}$  for each sample. The deepest estimated depth of contamination in Area 1 was at 3.0 feet bgs due to elevated Ra-226 in sample location SLD72939. The primary COC contributing to the radiological contamination in Area 1 was U-238. Radiological data for specific isotopes can be found in Table C-1.

Other significant property conditions identified through the historical background review or encountered during the field investigation activities and associated with Area 1 include the following:

- A number of utilities located within Bremen Street (north of the property) were identified during the historical background review. Since the extent of contamination has been interpreted to extend north of the property line and potentially into Bremen Street, contamination may have migrated to or along these lines.

- A building foundation (see Figure 2-A) was noted in/near Area 1 approximately 80 feet east of the western fence (eastern foundation wall). If further work is performed in or adjacent to Area 1, this foundation may be encountered. Further, preferential pathways and/or contaminant migration barriers may be associated with this foundation. Historical documents suggest the foundation was approximately 40 feet x 100 feet, oriented with the long side of the building in a north-south direction. The foundation was completely covered with at least 1.0 foot of fill material (mostly limestone gravel). Test pits and borings were used to explore the extent of contamination present in the subsurface, and during these intrusive activities, the north and west foundation walls were encountered. The foundation wall consisted of large blocks of limestone stacked in a wall orientation. Based on observations from test pits, no mortar was noted to have been used to construct the foundation. In several places within the test pits, piping and steel pins were noted within the rock foundation. The building foundation was not completely excavated; thus, other potential features were not identified, but may be present.

#### 4.1.2 Area 2

Area 2 (see Figure 4-A) is situated in the southwest corner of the North Tract 1. Area 2 is approximately coincident with a former rail spur, and extends from the western fence line to approximately 120 feet southeast of the west property fence and then 60 feet farther (due) east of the west property fence. It is approximately 30 feet wide throughout its extent. The former spur extended to a large, rectangular-shaped building situated near the south central part of the property. Subsequent build-out of the building appears to have positioned the spur within the building. The estimated radiologically contaminated area was identified on the basis of radiological, historical, and geological information that identified the feature and three HTZ-series samples (HTZ66217, HTZ66262, and HTZ66259), one SLD-series sample (SLD72157), and one PSC-series sample (PSC0176) that contained  $SOR_{net}$  values equal to or greater than 1.0. Additional samples surrounding Area 2 indicated that elevated radioactivity existed in some areas but was not at sufficient concentration to be considered as radiological contamination.

The extent of radiological contamination in Area 2 was estimated based on gamma radiological walkover survey results, analytical data from soil sampling, and geological and historical information pertaining to property characteristics. Radiological contamination in Area 2 was estimated to extend to approximately 2.0 feet bgs throughout the approximately 6,200-square-foot (576-square-meter) area. The primary COCs contributing to the radiological contamination noted in Area 2 were U-238, Th-230, and Ra-226.

### 4.1.3 Area 3

Area 3 (see Figure 4-A) is located in the south central part of the North Tract 1 inside a large, rectangular building with no floor. The currently identified radiologically contaminated area is somewhat uniformly shaped, consisting of an approximate 12-foot-radius area. The estimated radiologically contaminated area was identified during a gamma radiological walkover survey and was confirmed with HTZ70904, which had an  $SOR_{net}$  of 3.9 reported from 0 to 0.5 feet bgs. Contamination was also reported to a depth of 1.5 feet bgs ( $SOR_{net}$  of 1.0) at HTZ70904 and vertical delineation was not achieved; however, the concentration was so reduced in the second sampling interval that the contamination is not expected to extend to a significantly greater depth. One other sample location (SLD72162) was located within the general area. No samples with  $SOR_{net}$  values equal to or greater than 1.0 were reported from sample location SLD72162. The primary COC contributing to the radiological contamination in Area 3 was U-238; however, significantly high levels of Th-230 and Ra-226 were also noted in samples from that location.

Vertical delineation was not achieved at sample location HTZ70904 because no samples were collected at a depth greater than 1.5 feet bgs. However, vertical delineation of Area 3 was achieved using sample location SLD72162, located adjacent to HTZ70904, that yielded  $SOR_{net}$  values of less than 1.0 at depths greater than 1.5 feet bgs. Therefore, the extent of contamination in Area 3 was vertically and horizontally delineated adequately using the gamma radiological walkover survey data and available soil analytical results. Area 3 covers approximately 600 square feet (56 square meters). Radiological contamination was estimated to extend to at least 0.5 feet bgs throughout Area 3.

### 4.1.4 Areas 4 and 5

Area 4 (see Figure 4-A) is located in the southeast part of the North Tract 1 inside a large, rectangular building with a dirt floor, and Area 5 is located on the north side of this same building. Both locations appear to be isolated small areas. Radiological contamination was estimated to a shallow depth of 0.5 feet bgs in both areas. Areas 4 and 5 cover approximately 195 square feet (18 square meters) each.

## 4.2 Property Conditions – North Tract 2

One area of radiological contamination (Area 6) was identified on the North Tract 2 at the DT-8; other samples within North Tract 2 exhibited elevated levels of radioactivity, but not at contaminant levels. The location of the estimated contaminated area and its associated depth of radiological contamination are identified on Figure 4-B.

#### 4.2.1 Area 6

Area 6 (see Figure 4-B) is situated in the west central portion of the North Tract 2. Area 6 extends approximately 100 feet in a northwest-southeast orientation and 50 feet in a northeast-southwest orientation. The identified estimated radiologically contaminated area is irregular in shape and appears to coincide with a former drainage swale or low-lying topographic area (see Figure 2-B). The estimated radiologically contaminated area was identified from gamma radiological walkover survey data and four soil samples (HTZ69453, HTZ69451, HTZ69452, and SLD72213) that contained  $SOR_{net}$  values equal to or greater than 1.0. Vertical delineation of the HTZ sample points was not obtained. Additional samples (SLD72210, SLD72211, SLD72975, SLD72212, SLD72979, SLD72983, SLD72397, SLD72399, SLD72400, SLD72398, SLD72987, and SLD72806) surrounding and within Area 6 were used to assist with identifying the extent of contamination. Radiological contamination in Area 6 was estimated to extend to approximately 1.0 foot bgs throughout the approximately 3,700-square-foot (344-square-meter) area and is anticipated to be primarily surficial in nature. The primary COCs contributing to the estimated radiological contamination noted in Area 6 were Ra-226, Th-230, and U-238.

A number of water pipes crossing the North Tract 2 were identified during the historical background review. Since the estimated extent of radiological contamination has been interpreted to extend across at least one of these lines, these utilities may be encountered if additional work is planned for this area, and contamination may have migrated to or along these lines in the past.

#### 4.3 Property Conditions – North Tract 3

Four areas of radiological contamination (designated Areas 7 through 10) were identified on the North Tract 3 at the DT-8. Other areas within the North Tract 3 exhibit elevated levels of radioactivity, but not at contaminant levels. The locations of the radiologically contaminated areas and their associated depths of radiological contamination are identified on Figure 4-C.

Other significant property conditions identified through the historical background review or encountered during the field investigation activities and associated with North Tract 3 include the following:

- Several rail spurs were located within the property from at least the early 1940s. Those spurs continue to exist in approximately the same locations today. Local surface drainage and regional flooding associated with the Mississippi River have been associated with such features in the past. Small areas of elevated radioactivity may reside throughout the rail spur areas.

- Shallow perched ground water should be anticipated in non-continuous permeable fill or soil layers throughout the area. A more consistent ground water bearing unit should be anticipated at the natural, in situ soil unit within HU-A.

#### 4.3.1 Area 7

Area 7 (see Figure 4-C) is situated in the southwest corner of the North Tract 3. Area 7 extends approximately 180 feet in a west-east orientation from the western property line and approximately 25 feet in a north-south orientation from the southern property line. The identified radiologically contaminated area is irregular in shape. The estimated area of radiological contamination was based on the gamma radiological walkover survey data and sample analytical data from HTZ00266, HTZ69432, HTZ69417, and SLD72827 that contained  $SOR_{net}$  values equal to or greater than 1.0. While samples associated with sample location SLD72991 did not exhibit  $SOR_{net}$  values above 1.0, this location was included in the estimated radiological contamination contours because of the elevated Ra-226 levels (11.2 pCi/g) found at 3.1 to 3.6 feet bgs. Activity in samples SLD72999, SLD73003, SLD72427, HTZ69436, SLD72428, HTZ66274, and SLD72430 surrounding and within Area 7 are above background concentrations but are not at sufficient concentration to be considered as radiological contamination.

Radiological contamination was estimated to extend to approximately 0.5 feet bgs throughout the eastern portion of Area 7, but was estimated to extend to approximately 3.5 feet bgs in the western portion of Area 7. The total contaminated area associated with Area 7 was approximately 4,287 square feet (398 square meters). The primary COCs contributing to the radiological contamination noted in Area 7 were Ra-226 and Th-230.

#### 4.3.2 Area 8

Area 8 (see Figure 4-C) is situated along the northern property line in approximately the western central part of the property of the North Tract 3. Area 8 extends approximately 10 feet in diameter. Radiological contamination was estimated to extend to approximately 0.5 feet bgs throughout Area 8 (approximately 600 square feet [56 square meters]). The estimated area of radiologically contaminated soil was based on gamma radiological walkover surveys and on the basis of analytical results from HTZ66271 that contained an  $SOR_{net}$  equal to or greater than 1.0. Analytical results surrounding HTZ66271 contained  $SOR_{net}$  results less than 1.0.

#### 4.3.3 Area 9

Area 9 (see Figure 4-C) is situated in the northeastern portion of the North Tract 3. Area 9 extends approximately 60 feet in a west-east orientation and approximately 25 feet in a north-

south orientation. The estimated radiologically contaminated area is elliptical in shape and is situated between two rail spurs. The estimated area of radiologically contaminated soil was based on gamma radiological walkover surveys and analytical results from HTZ66267 and HTZ00268 that contained an  $SOR_{net}$  equal to or greater than 1.0. Activity in samples SLD73015, SLD73013, SLD06175, SLD72504, SLD73017, SLD72477, and PSC00218 surrounding and within Area 9 is elevated, but not at sufficient concentration to be considered as radiological contamination.

Radiological contamination was estimated to extend to approximately 0.5 feet bgs throughout Area 9 (approximately 1,400 square feet [130 square meters]). The primary COCs contributing to the radiological contamination noted in Area 9 were Th-230, Ra-226, and U-238.

#### 4.3.4 Area 10

Area 10 (see Figure 4-C) is situated along the south central border of the North Tract 3 in the area of the former Salisbury Street Roadbed. Area 10 extends approximately 50 feet in a north-south orientation and approximately 25 feet in an east-west orientation. The estimated radiologically contaminated area is elliptical in shape and is situated across the North Tract 3

boundary line. The area was identified from gamma radiological walkover surveys and analytical results from HTZ69418 ( $SOR_{net} = 790$ ), HTZ00267 ( $SOR_{net} = 2.0$ ), and HTZ66280 ( $SOR_{net} = 1.0$ ).

Radiological contamination was estimated to extend to approximately 0.5 feet bgs within Area 10 (approximately 1,886 square feet [175 square meters]). The primary COC contributing to the radiological contamination was Th-230; elevated levels of Ra-226 and U-238 were also noted.

#### 4.4 Property Conditions – South Tract

Four areas of radiological contamination are estimated to be present on the South Tract at the DT-8 and are designated as Areas 11 through 14 on Figure 4-C. Samples collected from other areas throughout the South Tract exhibited concentrations above background levels of radioactivity, but did not result in  $SOR_{net}$  values that exceeded 1.0.

Ground water can be expected in the shallow subsurface at the South Tract. Periodically, spots of perched ground water were noted during sampling (SLD04356, SLD04357, and PSC00138). A fairly consistent ground water zone was noted shortly after encountering the natural, in situ soil unit (approximately 10 feet bgs). This ground water unit may also be related to a former creek channel situated along the southern edge of the property.

#### 4.4.1 Area 11

Area 11 (see Figure 4-C) is located along the southern edge of the South Tract property, extending from Hall Street on the west to Wharf Street (Burlington Northern Santa Fe Railroad) on the east, and from the southern property line northward approximately 75 feet along an irregularly shaped path. It is known that the radiological contamination identified along the southern DT-8 property line extends southward into Mallinckrodt Plant 6 West Half and Plant 6 East Half; however, further discussion pertaining to the Plant 6 properties is not included in this report. The estimated radiologically contaminated area was defined based on gamma radiological walkover surveys and soil sample data including four HTZ-series, 13 SLD-series, 11 BNI-series, and one PSC-series samples that reported  $SOR_{net}$  values equal to or greater than 1.0. Figure 4-C highlights the sample locations with  $SOR_{net}$  values equal to or greater than 1.0 and lists the  $SOR_{net}$  for each associated sample. The analytical data for the samples collected at these locations is provided in Table C-1. The boring logs for the pre-design investigation sample locations are contained in Appendix A.

Area 11 covers approximately 30,684 square feet (2,851 square meters). Radiological contamination was estimated to extend to at least 0.5 feet bgs throughout most of Area 11 and to 6 feet bgs in an area on the east side of Area 11. In some areas, (e.g., SLDS load out area), additional cover material may have been added (or may continue to be added) to the area after the pre-design investigation samples were collected. Other significant property conditions identified on the South Tract through the historical background review or encountered during the field investigation activities include the following:

- Elevated levels (14 pCi/g) of Th-230 were noted at SLD70102 at a depth of 9.3 to 9.8 feet bgs. Additional evaluation of the subsurface at depth was authorized by the USACE in 2005. These samples indicated no significant levels of Th-230 at 7.5 to 8.0 feet bgs at sample location SLD87286, located approximately 38 feet southwest of SLD70102.
- One potential preferential pathway associated with Area 11 was a former rail spur that was located in a historically low-lying area. The rail spur may have served to channel surface water east and west to or from the adjacent railroad tracks; surface water would then be anticipated to flow in a north-south direction along the Norfolk Southern and Burlington Northern Santa Fe railroad tracks.
- A water line exists along the southern property line of the South Tract, just south of the warehouse buildings located in the southwestern corner of the property, extending the distance of the South Tract southern border from Hall Street to Wharf Street. No specific test pits or sampling of the water line for migration assessment purposes were performed during the pre-design investigation; however, preferential pathway assessments are made during remedial construction activities. Other water

lines have been noted crossing the property (The Sanborn Map Company Inc., 1909). These lines do appear to cross the estimated radiological contamination area (if the lines still exist).

#### 4.4.2 Area 12

Area 12 (see Figure 4-C) is situated near the northeast corner of the large building complex situated in the southwest corner of the South Tract. The estimated radiologically contaminated area was defined based on gamma radiological walkover surveys and soil sample data that included three BNI samples (E2400N2000, E2362N1943, and E2394N1944) with  $SOR_{net}$  values equal to or greater than 1.0. Area 12 covers approximately 5,700 square feet (530 square meters). BNI surface sample location MC116 was located in the general area and had an  $SOR_{net}$  of 1.0. Samples were collected from sample location SLD06217 to verify the data from sample location MC116. Data from sample location SLD06217 resulted in an  $SOR_{net}$  of 0.3 and therefore failed to confirm the presence of radiological concentrations in excess of ROD RGs. Figure 4-C highlights the sample locations with  $SOR_{net}$  values equal to or greater than 1.0 and lists the  $SOR_{net}$  for each associated sample. The deepest contamination reported in Area 12 was noted at 2.0 feet bgs (E2394N1944). The sample from this location and depth was collected

from a 1-foot interval instead of the typical 6-inch interval.

#### 4.4.3 Area 13

Area 13 (see Figure 4-C) is situated near the central portion of the South Tract. The estimated radiologically contaminated area was identified from results from the gamma radiological walkover survey and from three soil sample locations (HTZ00164, HTZ66299, and PSC00139). The area was bounded on the basis of other soil sample locations (SLD05727, MC117, HTZ66302, SLD70093, SLD06227, SLD05728, SLD06228, SLD06229, HTZ00165, SLD05733, and E2800N1945). The sample locations with  $SOR_{net}$  values equal to or greater than 1.0 and the  $SOR_{net}$  for each sample are provided on Figure 4-C. The deepest contamination reported in Area 13 was noted at 1.0 foot bgs (HTZ66299). Area 13 covers approximately 5,190 square feet (482 square meters). The primary COCs contributing to the radiological contamination in Area 13 were Ra-226 and Th-230. A potential preferential pathway was identified in the form of the rail spur crossing the area. Historical information has suggested that the rail spurs in the area may channel surface water runoff to surrounding areas. Radiological data for specific isotopes can be found in Table C-1.

#### 4.4.4 Area 14

Area 14 (see Figure 4-C) is situated along the northern rail spur within the South Tract. The area of estimated radiological contamination was identified from a potential Class 2 sample

(SLD05720) collected in the area and was further delineated using historical and geological information, gamma radiological walkover survey data, and soil sample analytical results collected from sample locations in the area (SLD05723, SLD05717, and MC115). Area 14 covers approximately 900 square feet (84 square meters). Radiological contamination was estimated to extend to at least 0.5 feet bgs throughout Area 14. Historical information suggests that the contamination may extend farther to the east and west parallel to the rail spur feature. The primary COC contributing to the estimated radiological contamination noted at SLD05720 is Th-230. Contamination at sample location SLD05720 was reported from 0 to 0.5 feet bgs.

At sample location SLD69754, petroleum odors and staining were reported from approximately 2.0 to 6.0 feet bgs. This particular sample location did not contain radiological contamination and is located approximately 60 feet east of contaminated sample location SLD05720. Petroleum hydrocarbon-impacted soil might be expected if remedial excavation activities advanced toward the general area of SLD69754.

#### **4.5 Property Conditions – North Tract 4**

No areas of radiological contamination were identified within the top 6 feet bgs of the North Tract 4 at the DT-8 (see Figure 4-C). Several sample locations were found to exhibit elevated levels of radioactivity, but not at contaminant levels. Soil descriptions of the top 6 feet of material indicated that that material was fill of probable recent origin. Six sample locations (SLD72529, SLD72527, SLD72530, SLD72534, SLD72531, and SLD72532) situated within the North Tract 4 and 16 sample locations from surrounding properties were used to evaluate the tract.

#### **4.6 Property Conditions – East Tracts**

The East Tracts of the DT-8 consist of two small land tracts (designated as East Tracts 1 and 2 on Figure 4-D) located east of Wharf Street (Burlington Northern Santa Fe Railroad tracks) and south of the McKinley Bridge. Pre-design investigations conducted in and around the East Tracts were limited because previous remediations at several adjacent property tracts had extended into the DT-8 East Tracts properties, and contamination was removed (USACE, 1999). One area of radiological contamination (Area 15) was identified in the East Tract 2.

Data from samples surrounding and within the East Tract 1 indicate that elevated radioactivity existed in some areas but was not at sufficient concentration to be considered as radiological contamination. Field observation and analytical results indicate that the property and surrounding areas were likely excavated and filled recently. Analytical results from the upper

0.5 feet of soil throughout the property suggest that residual contamination is not present at that depth.

#### **4.6.1 Area 15**

Area 15 is located in East Tract 2 (Figure 4-D), which is situated east of the Burlington Northern Santa Fe Railroad, west of the Mississippi River, and north of Destrehan Street. The property covers approximately 13,800 square feet (1,282 square meters). Historical records indicated that previous remediation at adjacent properties extended into the East Tract 2 and shallow contamination was removed to a depth of approximately 6.0 feet bgs in the northern part of the land tract and to a depth of approximately 1.0 foot bgs in the southern part of the land tract (USACE, 1999). A sample collected from within the East Tract 2 during the pre-design investigation (post-remediation) from sample location SLD70486 indicated no contamination present at 0 to 0.5 feet bgs; however, contamination was noted from 0.5 to 1.0 foot bgs. Ra-226 was the primary contributor to the elevated  $SOR_{net}$ . Subsequent evaluation of this location via test pit methods indicated no contamination present at 1.2 to 1.5, 2.7 to 3.0, and 5.0 to 5.3 feet bgs. Note that 0.3-foot sample intervals were used here instead of the typical 0.5-foot interval. Contamination appears to be present from 0.5 to 1.2 feet bgs at SLD70486. Vertical delineation was achieved at sample location SLD70486. Sample location SLD76911 was a test pit sample location consisting of four samples (SLD76911, SLD76912, SLD76913, and SLD76914). Analytical results from this location indicated no contamination present from 0.2 to 0.5 feet bgs (clean fill from previous remediation), contamination present at 0.7 to 1.0 foot bgs (Ra-226 primary contributor to elevated  $SOR_{net}$ ), and no contamination present at 2.5 to 2.8 feet bgs and 5.2 to 5.5 feet bgs. Note that 0.3-foot sample intervals were used instead of the typical 0.5-foot interval. Contamination should be anticipated at 0.5 to 2.5 feet bgs throughout the estimated extent of contamination indicated in Area 15. Sample location SLD76918 was a test pit location at which four samples (SLD76918, SLD76919, SLD76920, and SLD76921) were collected. Analytical results from this location indicated no  $SOR_{net}$  values equal to or greater than 1.0.

The extent of contamination in Area 15 was vertically and horizontally estimated using the available soil sample results. Radiological contamination was estimated to extend to approximately 2.5 feet bgs throughout the designated contaminated area identified on the East Tract 2 (approximately 879 square feet [82 square meters]).

## **5.0 Summary and Conclusions**

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The DT-8 consists of seven tracts of property owned by PSC Metals Company and situated in close proximity to the former MED/AEC operations conducted at the Mallinckrodt Chemical Corporation. One property tract, designated the South Tract (for the purposes of this report), was listed in the ROD as one of the original vicinity properties associated with the SLDS and cited by the ROD as requiring remediation from MED/AEC residual contamination. The USACE added the other PSC Metals property tracts to the SLDS project when it was determined that residual MED/AEC contamination may also have migrated to or been left on those properties. The USACE authorized a pre-design investigation be conducted at the DT-8 property tracts to determine the extent of radiological contamination identified during the remedial investigation, to identify and assess geological and historical deposits that may contain radiological contamination, and to more fully characterize the property tracts to allow remedial design to take place.

The pre-design investigation activities at the DT-8 were conducted between June 2000 and May 2001 (phase I), between May 2002 and January 2003 (phase II), and between September 2002 and June 2005 (phase III). As part of the 1999 Plant 6 East Half pre-design investigation, some samples were also collected on the DT-8 property. These sample locations have been included in this report. The pre-design activities included conducting background review and historical evaluations, conducting gamma radiological walkover surveys, soil sampling and analyses, waste characterization sampling and analyses, conducting site reconnaissance, and providing other ancillary support activities (e.g., surveying, mapping, site characterizations).

Based on the pre-design investigation activities authorized by the USACE, 15 areas of estimated radiological contamination were identified within the DT-8. North Tract 4 and East Tract 1 did not exhibit contamination, whereas the remaining five property tracts did. Contamination was estimated at depths ranging from the surface to 6 feet bgs on the eastern portion of Area 11. Additional sampling is required at seven of the 15 areas of radiological contamination to determine if residual radiological activity is less than ROD (USACE, 1998) RGs. These areas include Areas 4, 5, 8, 9, 12 (partial), 13, and 14. Sampling and analysis will be conducted in accordance with the FSSP (USACE, 2002). If RGs are exceeded, the area will be excavated as described in the Remediation Activity Work Description for this property.

## 6.0 References

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***Tables***

**Table 3-1**  
**PSC Metals Vicinity Property (DT-8)**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ00157	HTZ00157	08/07/00	0	0.5	0.0	Radium-226	7.15	0.34	0.10	3.53
						Radium-228	0.59	0.10	0.13	
						Thorium-230	18.00	3.82	0.15	
						Thorium-232	0.92	0.48	0.15	
						Uranium-238	17.41	2.38	6.11	
	HTZ00158	08/07/00	2	2.5		Radium-226	2.36	0.14	0.08	0.26
						Radium-228	0.83	0.12	0.11	
						Thorium-230	4.99	1.37	0.15	
						Thorium-232	1.52	0.64	0.28	
						Uranium-238	3.43	1.22	5.98	
HTZ00159	HTZ00159	08/07/00	0	0.5	0.0	Radium-226	3.70	0.21	0.07	1.11
						Radium-228	0.94	0.10	0.11	
						Thorium-230	6.63	1.69	0.15	
						Thorium-232	0.54	0.37	0.28	
						Uranium-238	10.05	1.26	4.77	
	HTZ00160	08/07/00	1	1.5		Radium-226	22.26	1.11	0.16	1.81
						Radium-228	0.85	0.18	0.20	
						Thorium-230	24.48	4.77	0.14	
						Thorium-232	0.65	0.38	0.26	
						Uranium-238	17.02	5.09	9.16	
HTZ00164	HTZ00164	08/16/00	0	0.5	0.0	Radium-226	2.66	0.14	0.03	1.05
						Radium-228	0.78	0.07	0.05	
						Thorium-230	7.20	2.17	0.68	
						Thorium-232	0.87	0.60	0.64	
						Uranium-238	1.72	0.42	2.14	
HTZ00266	HTZ00266	10/11/00	0	0.5	0.0	Radium-226	5.26	0.29	0.09	2.50
						Radium-228	1.04	0.13	0.14	
						Thorium-230	5.62	16.78	27.77	
						Thorium-232	1.04	0.13	0.14	
						Uranium-238	6.10	2.69	5.17	
HTZ00267	HTZ00267	10/11/00	0	0.5	0.0	Radium-226	3.14	0.18	0.06	1.62
						Radium-228	1.03	0.12	0.09	
						Thorium-230	-7.76	13.16	19.84	
						Thorium-232	1.03	0.12	0.09	
						Uranium-238	2.33	1.86	3.98	
HTZ00268	HTZ00268	10/11/00	0	0.5	0.0	Radium-226	3.33	0.19	0.07	1.88
						Radium-228	0.78	0.10	0.10	
						Thorium-230	-6.43	13.10	21.15	
						Thorium-232	0.78	0.10	0.10	
						Uranium-238	9.02	2.32	4.14	
HTZ66213	HTZ66213	01/04/02	0	0.5	0.0	Radium-226	4.23	0.16	0.11	53.07
						Radium-228	1.53	0.12	0.16	
						Thorium-230	95.53	17.01	0.31	
						Thorium-232	2.38	1.11	0.31	
						Uranium-238	1706.00	75.11	2.93	
	HTZ66214	01/04/02	0.5	1.0	0.5	Radium-226	4.07	0.17	0.14	36.90
						Radium-228	1.85	0.16	0.18	
						Thorium-230	103.10	18.90	0.64	
						Thorium-232	2.64	1.24	0.34	
						Uranium-238	1504.00	66.99	5.45	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
HTZ66213	HTZ66215	01/04/02	1	1.5	1.0	Radium-226	3.47	0.13	0.07	3.34
						Radium-228	1.11	0.09	0.10	
						Thorium-230	5.98	1.43	0.12	
						Thorium-232	1.19	0.51	0.12	
						Uranium-238	154.60	8.16	1.21	
	HTZ66216	01/04/02	1.5	2.0	1.5	Radium-226	1.88	0.07	0.05	10.53
						Radium-228	0.97	0.07	0.08	
						Thorium-230	23.41	4.34	0.23	
						Thorium-232	1.35	0.55	0.27	
						Uranium-238	455.50	20.45	1.36	
HTZ66217	HTZ66217	01/04/02	0	0.5	0.0	Radium-226	37.53	1.03	0.17	12.99
						Radium-228	0.99	0.15	0.26	
						Thorium-230	11.30	2.46	0.45	
						Thorium-232	0.60	0.39	0.41	
						Uranium-238	302.80	18.11	5.01	
HTZ66219	HTZ66219	01/04/02	0	0.5	0.0	Radium-226	2.90	0.11	0.06	11.42
						Radium-228	1.10	0.08	0.09	
						Thorium-230	34.53	6.10	0.12	
						Thorium-232	1.50	0.57	0.12	
						Uranium-238	242.40	11.56	1.39	
	HTZ66220	01/04/02	0.5	1.0	0.5	Radium-226	1.79	0.08	0.05	4.11
						Radium-228	0.97	0.07	0.08	
						Thorium-230	15.26	2.93	0.12	
						Thorium-232	0.91	0.42	0.12	
	HTZ66221	01/04/02	1	1.5	1.0	Radium-226	1.25	0.06	0.04	1.69
						Radium-228	0.91	0.07	0.07	
						Thorium-230	3.75	1.08	0.14	
						Thorium-232	1.01	0.48	0.14	
HTZ66222	HTZ66222	01/07/02	0	0.5	0.0	Radium-226	2.15	0.09	0.06	5.70
						Radium-228	1.05	0.08	0.08	
						Thorium-230	15.59	3.10	0.23	
						Thorium-232	0.63	0.36	0.28	
						Uranium-238	148.90	7.82	2.28	
	HTZ66223	01/07/02	0.5	1.0	0.5	Radium-226	2.11	0.09	0.05	2.34
						Radium-228	1.22	0.09	0.08	
						Thorium-230	4.51	1.22	0.14	
						Thorium-232	1.50	0.60	0.14	
	HTZ66224	01/07/02	1	1.5	1.0	Radium-226	0.79	0.05	0.05	1.00
						Radium-228	0.73	0.08	0.07	
						Thorium-230	2.30	0.76	0.23	
						Thorium-232	0.65	0.36	0.13	
HTZ66224	01/07/02	1	1.5	1.0	Uranium-238	50.10	3.44	1.62		
					Radium-226	3.14	0.13	0.09		
					Radium-228	0.95	0.10	0.12		
					Thorium-230	-123.40	35.49	54.92		
					Thorium-232	0.95	0.10	0.12		
HTZ66254	HTZ66254	01/22/02	0	0.5	0.0	Uranium-238	801.00	36.39	3.76	
						Radium-226	3.14	0.13	0.09	
						Radium-228	0.95	0.10	0.12	
						Thorium-230	-123.40	35.49	54.92	
						Thorium-232	0.95	0.10	0.12	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66254	HTZ66255	01/22/02	0.5	1.0	1.0	Radium-226	3.09	0.13	0.10	18.98
						Radium-228	1.35	0.12	0.15	
						Thorium-230	-98.39	37.78	59.66	
						Thorium-232	1.35	0.12	0.15	
						Uranium-238	855.90	38.86	4.00	
HTZ66256	HTZ66256	01/22/02	0	0.5	0.0	Radium-226	3.70	0.14	0.07	0.66
						Radium-228	1.19	0.11	0.11	
						Thorium-230	4.06	1.15	0.14	
						Thorium-232	1.35	0.58	0.14	
						Uranium-238	10.50	2.28	2.29	
	HTZ66257	01/22/02	0.5	1.0	1.0	Radium-226	3.79	0.15	0.08	1.12
						Radium-228	1.24	0.11	0.13	
						Thorium-230	12.25	14.79	24.88	
						Thorium-232	1.24	0.11	0.13	
						Uranium-238	21.34	3.15	2.89	
	HTZ66258	01/22/02	1	1.5	1.0	Radium-226	2.07	0.09	0.07	0.04
						Radium-228	1.08	0.09	0.10	
						Thorium-230	1.77	0.66	0.13	
						Thorium-232	1.33	0.56	0.13	
Uranium-238						2.68	1.75	2.07		
HTZ66259	HTZ66259	01/22/02	0	0.5	0.0	Radium-226	4.33	0.17	0.10	5.47
						Radium-228	1.28	0.13	0.14	
						Thorium-230	-44.92	25.47	37.84	
						Thorium-232	1.28	0.13	0.14	
						Uranium-238	101.70	7.04	4.44	
	HTZ66260	01/22/02	0.5	1.0	0.5	Radium-226	3.51	0.16	0.11	7.34
						Radium-228	0.97	0.13	0.18	
						Thorium-230	-14.84	33.18	54.05	
						Thorium-232	0.97	0.13	0.18	
						Uranium-238	284.70	15.52	6.30	
	HTZ66261	01/22/02	1	1.5	1.0	Radium-226	2.35	0.11	0.08	1.74
						Radium-228	0.96	0.12	0.12	
						Thorium-230	-9.56	16.87	27.50	
						Thorium-232	0.96	0.12	0.12	
Uranium-238						49.02	4.43	3.21		
HTZ66262	HTZ66262	01/22/02	0	0.5	0.0	Radium-226	5.65	0.21	0.12	10.48
						Radium-228	1.25	0.13	0.18	
						Thorium-230	-93.76	36.80	53.97	
						Thorium-232	1.25	0.13	0.18	
						Uranium-238	271.90	14.49	6.37	
	HTZ66263	01/22/02	0.5	1.0	0.5	Radium-226	3.11	0.13	0.07	1.46
						Radium-228	1.03	0.11	0.11	
						Thorium-230	10.23	16.08	25.35	
						Thorium-232	1.03	0.11	0.11	
						Uranium-238	38.43	3.82	2.90	
HTZ66267	HTZ66267	01/23/02	0	0.5	0.0	Radium-226	5.42	0.18	0.07	1.13
						Radium-228	1.02	0.10	0.10	
						Thorium-230	5.41	1.12	0.24	
						Thorium-232	1.26	0.43	0.17	
						Uranium-238	21.42	2.22	1.58	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
HTZ66267	HTZ66268	01/23/02	0.5	1.0	0.5	Radium-226	1.54	0.08	0.06	0.05
						Radium-228	1.01	0.10	0.09	
						Thorium-230	2.05	0.57	0.08	
						Thorium-232	0.89	0.35	0.17	
						Uranium-238	3.22	1.09	1.22	
	HTZ66269	01/23/02	1	1.5	1.0	Radium-226	1.61	0.08	0.06	0.05
						Radium-228	0.84	0.09	0.09	
						Thorium-230	2.28	0.62	0.21	
						Thorium-232	0.77	0.33	0.17	
						Uranium-238	2.65	1.12	1.22	
	HTZ66270	01/23/02	1.5	2.0	1.5	Radium-226	1.42	0.08	0.06	0.06
						Radium-228	0.97	0.10	0.10	
						Thorium-230	2.29	0.63	0.18	
						Thorium-232	0.90	0.36	0.18	
						Uranium-238	3.18	1.32	1.21	
HTZ66271	HTZ66271	01/23/02	0	0.5	0.0	Radium-226	5.60	0.20	0.09	1.15
						Radium-228	1.03	0.12	0.15	
						Thorium-230	6.81	1.34	0.08	
						Thorium-232	1.28	0.44	0.08	
						Uranium-238	8.56	2.02	1.94	
	HTZ66272	01/23/02	0.5	1.0	0.5	Radium-226	3.01	0.13	0.07	0.17
						Radium-228	1.06	0.12	0.11	
						Thorium-230	3.58	0.83	0.24	
						Thorium-232	1.21	0.42	0.08	
						Uranium-238	4.08	1.54	1.52	
	HTZ66273	01/23/02	1	1.5	1.0	Radium-226	2.27	0.10	0.06	0.03
						Radium-228	0.88	0.11	0.09	
						Thorium-230	2.12	0.61	0.09	
						Thorium-232	0.40	0.24	0.09	
						Uranium-238	2.53	1.18	1.33	
HTZ66280	HTZ66280	01/23/02	0	0.5	0.0	Radium-226	4.64	0.15	0.05	1.11
						Radium-228	1.10	0.09	0.08	
						Thorium-230	7.00	1.72	0.39	
						Thorium-232	1.01	0.49	0.14	
						Uranium-238	4.90	0.89	0.63	
	HTZ66281	01/23/02	0.5	1.0	0.5	Radium-226	5.29	0.20	0.09	0.30
						Radium-228	1.15	0.14	0.15	
						Thorium-230	5.03	1.29	0.24	
						Thorium-232	1.00	0.47	0.24	
						Uranium-238	5.46	1.41	1.15	
	HTZ66282	01/23/02	1	1.5	1.0	Radium-226	2.56	0.09	0.04	0.06
						Radium-228	0.99	0.07	0.06	
						Thorium-230	2.35	0.78	0.13	
						Thorium-232	0.67	0.37	0.13	
						Uranium-238	2.75	0.44	0.52	
HTZ66299	HTZ66299	01/29/02	0	0.5	0.0	Radium-226	3.96	0.12	0.03	0.24
						Radium-228	0.39	0.04	0.05	
						Thorium-230	-0.12	2.91	4.23	
						Thorium-232	0.39	0.04	0.05	
						Uranium-238	0.95	0.44	0.40	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft <sup>1</sup> bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66299	HTZ66300	01/29/02	0.5	1.0	0.5	Radium-226	64.09	1.72	0.13	4.09
						Radium-228	0.45	0.11	0.20	
						Thorium-230	9.47	10.07	15.39	
						Thorium-232	0.45	0.11	0.20	
						Uranium-238	1.60	1.15	1.49	
	HTZ66301	01/29/02	1	1.5	1.0	Radium-226	14.85	0.42	0.06	0.83
						Radium-228	0.55	0.07	0.10	
						Thorium-230	-2.08	5.59	8.04	
						Thorium-232	0.55	0.07	0.10	
						Uranium-238	2.72	0.80	0.78	
HTZ66305	HTZ66305	01/29/02	0	0.5	0.0	Radium-226	4.89	0.17	0.07	2.36
						Radium-228	1.11	0.10	0.11	
						Thorium-230	-1.13	8.13	11.77	
						Thorium-232	1.11	0.10	0.11	
						Uranium-238	78.23	4.85	1.17	
	HTZ66306	01/29/02	0.5	1.0	0.5	Radium-226	3.12	0.13	0.07	0.26
						Radium-228	1.16	0.11	0.10	
						Thorium-230	1.33	5.19	8.37	
						Thorium-232	1.16	0.11	0.10	
						Uranium-238	6.47	1.00	0.83	
	HTZ66307	01/29/02	1	1.5	1.0	Radium-226	2.08	0.08	0.05	0.12
						Radium-228	0.80	0.08	0.08	
						Thorium-230	2.40	4.08	6.10	
						Thorium-232	0.80	0.08	0.08	
						Uranium-238	3.66	0.76	0.59	
HTZ66322	HTZ66322	02/07/02	0	0.5	0.0	Radium-226	20.15	0.55	0.06	3.78
						Radium-228	0.43	0.06	0.10	
						Thorium-230	10.21	1.96	0.34	
						Thorium-232	0.44	0.30	0.39	
						Uranium-238	16.73	1.47	0.76	
	HTZ66323	02/07/02	0.5	1.0	0.5	Radium-226	22.26	0.61	0.06	1.63
						Radium-228	0.50	0.07	0.09	
						Thorium-230	11.99	2.32	0.11	
						Thorium-232	0.57	0.32	0.11	
						Uranium-238	18.07	1.54	0.76	
HTZ69417	HTZ69417	03/19/02	0	0.5	0.0	Radium-226	501.45	13.35	0.53	99.77
						Radium-228	1.07	0.29	0.54	
						Thorium-230	33.71	26.40	41.66	
						Thorium-232	1.07	0.29	0.54	
						Uranium-238	-0.74	2.83	4.12	
HTZ69418	HTZ69418	03/19/02	0	0.5	0.0	Radium-226	4.18	2.46	3.68	793.48
						Radium-228	2252.00	73.55	3.88	
						Thorium-230	1713.00	353.90	240.30	
						Thorium-232	2252.00	73.55	3.88	
						Uranium-238	54.36	16.63	23.51	
HTZ69432	HTZ69432	03/20/02	0	0.5	0.0	Radium-226	578.70	15.54	1.01	115.75
						Radium-228	2.10	0.73	1.08	
						Thorium-230	-49.73	167.60	271.20	
						Thorium-232	2.10	0.73	1.08	
						Uranium-238	-5.00	22.29	36.23	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ69451	HTZ69451	04/12/02	0	0.5	0.0	Radium-226	50.67	1.40	0.20	11.06
						Radium-228	6.24	0.29	0.22	
						Thorium-230	-1.61	22.96	35.30	
						Thorium-232	6.24	0.29	0.22	
						Uranium-238	22.66	4.02	4.15	
HTZ69452	HTZ69452	04/12/02	0	0.5	0.0	Radium-226	54.23	1.47	0.16	12.03
						Radium-228	8.03	0.31	0.16	
						Thorium-230	18.59	21.78	26.68	
						Thorium-232	8.03	0.31	0.16	
						Uranium-238	17.82	2.73	3.18	
HTZ69453	HTZ69453	04/12/02	0	0.5	0.0	Radium-226	38.34	1.05	0.13	8.24
						Radium-228	5.04	0.21	0.13	
						Thorium-230	12.35	14.21	22.08	
						Thorium-232	5.04	0.21	0.13	
						Uranium-238	17.00	2.61	2.58	
HTZ70904	HTZ70904	10/28/02	0	0.5	0.0	Radium-226	3.30	0.13	0.08	3.86
						Radium-228	0.89	0.08	0.09	
						Thorium-230	7.23	1.58	0.26	
						Thorium-232	0.92	0.43	0.12	
						Uranium-238	141.50	7.88	3.64	
	HTZ70906	10/28/02	1	1.5		Radium-226	2.79	0.11	0.06	1.04
						Radium-228	0.85	0.07	0.06	
						Thorium-230	4.86	1.23	0.24	
						Thorium-232	0.75	0.40	0.13	
						Uranium-238	43.95	3.42	2.26	
PSC00139	PSC00139	05/22/02	0	0.5	0.0	Radium-226	4.54	0.25	0.19	1.18
						Radium-228	0.90	0.17	0.19	
						Thorium-230	-2.24	9.03	14.49	
						Thorium-232	0.90	0.17	0.19	
						Uranium-238	7.56	1.69	1.50	
	PSC00140	05/22/02	0.5	1.0		Radium-226	4.39	0.22	0.17	0.90
						Radium-228	1.07	0.16	0.17	
						Thorium-230	-3.71	9.16	14.59	
						Thorium-232	1.07	0.16	0.17	
						Uranium-238	28.05	2.80	1.44	
	PSC00141	05/22/02	2.9	3.4		Radium-226	2.85	0.05	0.09	0.16
						Radium-228	0.65	0.03	0.13	
						Thorium-230	5.40	1.59	7.14	
						Thorium-232	0.65	0.03	0.13	
						Uranium-238	4.07	0.30	0.98	
PSC00145	PSC00145	05/22/02	0	0.5	0.0	Radium-226	7.27	0.29	0.18	2.18
						Radium-228	1.13	0.14	0.19	
						Thorium-230	-2.40	11.03	16.19	
						Thorium-232	1.13	0.14	0.19	
						Uranium-238	47.30	3.97	1.61	
	PSC00146	05/22/02	0.5	1.0		Radium-226	1.88	0.05	0.11	0.01
						Radium-228	0.86	0.05	0.18	
						Thorium-230	0.00	0.00	14.10	
						Thorium-232	0.86	0.05	0.18	
						Uranium-238	2.09	0.30	1.19	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
PSC00145	PSC00147	05/22/02	2	2.5		Radium-226	1.34	0.03	0.07	0.01
						Radium-228	0.80	0.03	0.10	
						Thorium-230	0.00	0.00	9.35	
						Thorium-232	0.80	0.03	0.10	
						Uranium-238	1.79	0.20	0.78	
PSC00176	PSC00176	06/25/02	0	0.5	0.0	Radium-226	8.43	0.28	0.11	1.34
						Radium-228	1.44	0.12	0.11	
						Thorium-230	7.74	7.13	8.50	
						Thorium-232	1.44	0.12	0.11	
						Uranium-238	7.01	1.17	0.81	
PSC00177	PSC00177	06/25/02	0	0.5	0.0	Radium-226	4.68	0.25	0.18	1.31
						Radium-228	1.03	0.15	0.20	
						Thorium-230	5.43	9.37	14.36	
						Thorium-232	1.03	0.15	0.20	
						Uranium-238	13.67	2.15	1.45	
PSC00205	PSC00205	07/22/02	0	0.5	0.0	Radium-226	4.02	0.10	0.20	1.22
						Radium-228	0.97	0.07	0.28	
						Thorium-230	14.12	3.54	15.40	
						Thorium-232	0.97	0.07	0.28	
						Uranium-238	4.87	0.57	2.14	
SLD02670	SLD02670	08/25/99	0	0.5	0.0	Radium-226	2.76	0.17	0.07	1.26
						Radium-228	0.80	0.12	0.10	
						Thorium-230	6.28	1.48	0.31	
						Thorium-232	0.95	0.44	0.12	
						Uranium-238	21.18	3.48	4.76	
	SLD02747	08/25/99	3	3.5		Radium-226	2.80	0.17	0.06	0.32
						Radium-228	0.96	0.11	0.10	
						Thorium-230	6.22	1.67	0.16	
						Thorium-232	1.46	0.66	0.36	
						Uranium-238	2.00	1.82	4.35	
	SLD02824	08/25/99	5	5.5		Radium-226	2.21	0.14	0.07	0.02
						Radium-228	1.00	0.12	0.10	
						Thorium-230	1.96	0.70	0.32	
						Thorium-232	1.08	0.49	0.24	
						Uranium-238	3.43	1.94	4.60	
SLD02674	SLD02674	08/25/99	0	0.5	0.0	Radium-226	2.80	0.17	0.08	2.00
						Radium-228	1.07	0.13	0.11	
						Thorium-230	6.30	13.70	22.92	
						Thorium-232	1.07	0.13	0.11	
						Uranium-238	5.25	2.26	4.45	
	SLD02751	08/25/99	2.5	4.0		Radium-226	1.21	0.09	0.06	0.48
						Radium-228	0.95	0.11	0.09	
						Thorium-230	-1.02	10.42	18.02	
						Thorium-232	0.95	0.11	0.09	
						Uranium-238	2.58	2.28	4.13	
	SLD02828	08/25/99	5	5.5		Radium-226	0.99	0.07	0.05	0.43
						Radium-228	0.94	0.10	0.07	
						Thorium-230	7.27	9.28	16.38	
						Thorium-232	0.94	0.10	0.07	
						Uranium-238	0.86	2.13	3.80	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD04160	SLD04160	11/08/99	0.3	0.8	0.3	Radium-226	11.23	1.36	0.19	1.69
						Radium-228	0.94	0.07	0.04	
						Thorium-230	2.85	0.93	0.15	
						Thorium-232	0.86	0.45	0.15	
						Uranium-238	0.04	0.12	0.15	
	SLD04214	11/08/99	2.5	3.0		Radium-226	12.32	1.51	0.25	0.65
						Radium-228	1.12	0.08	0.05	
						Thorium-230	1.78	0.66	0.13	
						Thorium-232	0.91	0.45	0.13	
						Uranium-238	0.00	0.16	0.18	
	SLD04268	11/08/99	4.5	5.0		Radium-226	13.86	1.66	0.19	0.74
						Radium-228	0.95	0.07	0.05	
						Thorium-230	1.36	0.55	0.13	
						Thorium-232	0.84	0.42	0.13	
						Uranium-238	0.12	0.15	0.17	
SLD04355	SLD04355	02/21/00	1.6	2.2	0.2	Radium-226	52.52	0.73	0.53	3.81
						Radium-228	0.52	0.07	0.54	
						Thorium-230	34.74	15.65	72.20	
						Thorium-232	0.52	0.07	0.54	
						Uranium-238	26.19	1.90	6.46	
	SLD04535	02/21/00	3.5	4.2		Radium-226	2.09	0.05	0.11	0.43
						Radium-228	0.43	0.04	0.21	
						Thorium-230	6.54	3.15	14.50	
						Thorium-232	0.43	0.04	0.21	
						Uranium-238	5.34	0.52	2.05	
SLD05708	SLD05708	10/23/00	0	0.5	0.0	Radium-226	2.88	0.16	0.07	1.35
						Radium-228	0.81	0.10	0.10	
						Thorium-230	8.22	2.10	0.17	
						Thorium-232	0.94	0.52	0.17	
						Uranium-238	6.00	1.38	4.07	
	SLD05750	10/23/00	1.4	2.0		Radium-226	2.80	0.15	0.07	0.20
						Radium-228	1.29	0.13	0.10	
						Thorium-230	3.76	1.21	0.33	
						Thorium-232	1.89	0.78	0.18	
						Uranium-238	2.70	1.16	5.40	
SLD05720	SLD05720	10/17/00	0	0.5	0.0	Radium-226	1.13	0.08	0.04	1.24
						Radium-228	0.36	0.06	0.07	
						Thorium-230	8.01	2.08	0.17	
						Thorium-232	0.70	0.44	0.17	
						Uranium-238	2.83	1.22	2.29	
	SLD05762	10/17/00	1.6	2.0		Radium-226	3.83	0.22	0.08	0.25
						Radium-228	0.92	0.12	0.10	
						Thorium-230	4.51	1.32	0.16	
						Thorium-232	1.07	0.54	0.16	
						Uranium-238	5.54	2.36	5.04	
SLD05737	SLD05737	10/11/00	0	0.5	0.0	Radium-226	3.36	0.20	0.08	1.21
						Radium-228	0.82	0.12	0.11	
						Thorium-230	4.28	1.18	0.13	
						Thorium-232	0.80	0.42	0.13	
						Uranium-238	38.63	4.89	4.76	

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SLD05737	SLD05779	10/11/00	1.5	2.0		Radium-226	1.30	0.09	0.06	0.02
						Radium-228	1.03	0.11	0.09	
						Thorium-230	1.29	0.55	0.13	
						Thorium-232	1.18	0.52	0.13	
						Uranium-238	1.95	1.59	3.96	
SLD06213	SLD06213	10/26/00	0	0.6	0.0	Radium-226	4.35	0.23	0.06	1.82
						Radium-228	0.59	0.07	0.07	
						Thorium-230	10.50	2.57	0.18	
						Thorium-232	0.90	0.51	0.17	
						Uranium-238	6.83	0.88	3.44	
	SLD06238	10/26/00	1.5	2.0		Radium-226	8.05	0.41	0.08	0.71
						Radium-228	0.87	0.12	0.12	
						Thorium-230	10.79	6.47	8.92	
						Thorium-232	0.87	0.12	0.12	
						Uranium-238	7.64	1.26	5.44	
SLD06215	SLD06215	10/26/00	0	0.5	0.0	Radium-226	3.97	0.21	0.05	1.28
						Radium-228	0.64	0.08	0.08	
						Thorium-230	8.01	2.04	0.17	
						Thorium-232	0.72	0.45	0.31	
						Uranium-238	4.85	0.66	3.29	
	SLD06240	10/26/00	1.5	2.0		Radium-226	17.32	0.83	0.11	1.08
						Radium-228	0.77	0.12	0.15	
						Thorium-230	11.56	8.70	11.75	
						Thorium-232	0.77	0.12	0.15	
						Uranium-238	6.97	1.34	6.77	
SLD06220	SLD06220	10/26/00	0	0.5	0.0	Radium-226	8.60	0.47	0.18	1.44
						Radium-228	0.69	0.19	0.26	
						Thorium-230	5.82	9.83	15.72	
						Thorium-232	0.69	0.19	0.26	
						Uranium-238	14.49	2.31	11.42	
	SLD06245	10/26/00	1.4	2.0		Radium-226	3.94	0.21	0.06	0.22
						Radium-228	1.05	0.11	0.09	
						Thorium-230	-2.68	4.47	6.87	
						Thorium-232	1.05	0.11	0.09	
						Uranium-238	7.11	1.01	3.87	
SLD06226	SLD06226	10/19/00	0	0.5	0.0	Radium-226	3.34	0.19	0.09	1.72
						Radium-228	0.79	0.12	0.12	
						Thorium-230	0.15	10.11	16.94	
						Thorium-232	0.79	0.12	0.12	
						Uranium-238	22.14	2.63	4.74	
	SLD06251	10/19/00	1.5	2.0		Radium-226	1.73	0.16	0.11	0.45
						Radium-228	0.80	0.18	0.19	
						Thorium-230	-1.76	9.52	15.30	
						Thorium-232	0.80	0.18	0.19	
						Uranium-238	1.57	1.35	10.12	
SLD06230	SLD06230	10/23/00	0	0.5	0.0	Radium-226	3.30	0.19	0.07	1.01
						Radium-228	1.09	0.12	0.10	
						Thorium-230	1.50	5.38	8.94	
						Thorium-232	1.09	0.12	0.10	
						Uranium-238	25.20	2.37	4.72	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD06230	SLD06255	10/23/00	1.5	2.0		Radium-226	1.87	0.12	0.05	0.06
						Radium-228	1.04	0.10	0.07	
						Thorium-230	4.12	4.57	5.42	
						Thorium-232	1.04	0.10	0.07	
						Uranium-238	2.33	0.64	3.37	
SLD06231	SLD06231	10/10/00	0	0.5	0.0	Radium-226	3.08	0.18	0.07	1.02
						Radium-228	0.88	0.11	0.09	
						Thorium-230	4.57	1.36	0.17	
						Thorium-232	0.94	0.51	0.17	
						Uranium-238	26.36	2.43	4.16	
	SLD06256	10/10/00	1.5	2.0		Radium-226	2.66	0.16	0.07	0.06
						Radium-228	1.19	0.13	0.09	
						Thorium-230	2.36	0.84	0.15	
						Thorium-232	1.23	0.57	0.15	
						Uranium-238	2.53	0.78	4.51	
SLD70096	SLD70096	05/08/02	0	0.5	0.0	Radium-226	2.89	0.16	0.14	1.55
						Radium-228	0.53	0.10	0.13	
						Thorium-230	-1.31	7.61	12.21	
						Thorium-232	0.53	0.10	0.13	
						Uranium-238	37.28	3.20	1.26	
	SLD70097	05/08/02	1.5	2.0		Radium-226	2.14	0.09	0.06	0.04
						Radium-228	0.90	0.07	0.06	
						Thorium-230	3.59	2.87	4.72	
						Thorium-232	0.90	0.07	0.06	
						Uranium-238	1.86	0.48	0.45	
	SLD70098	05/08/02	2	2.5		Radium-226	1.86	0.13	0.14	0.34
						Radium-228	0.61	0.13	0.14	
						Thorium-230	-0.06	6.69	10.96	
						Thorium-232	0.61	0.13	0.14	
						Uranium-238	6.50	1.29	1.11	
	PSC00130	05/08/02	2.5	3.0		Radium-226	0.73	0.02	0.07	0.00
						Radium-228	0.66	0.03	0.11	
						Thorium-230	0.00	0.00	9.73	
						Thorium-232	0.66	0.03	0.11	
						Uranium-238	0.79	0.18	0.82	
	PSC00131	05/08/02	5	5.2		Radium-226	0.59	0.02	0.07	0.00
						Radium-228	0.66	0.03	0.11	
						Thorium-230	0.00	0.00	9.62	
						Thorium-232	0.66	0.03	0.11	
Uranium-238						0.66	0.18	0.79		
SLD70111	05/08/02	5.2	5.7		Radium-226	1.37	0.07	0.06	0.02	
					Radium-228	0.70	0.06	0.06		
					Thorium-230	0.76	2.70	4.42		
					Thorium-232	0.70	0.06	0.06		
					Uranium-238	1.26	0.52	0.43		
PSC00132	05/08/02	8.5	9.0		Radium-226	0.64	0.02	0.07	0.00	
					Radium-228	0.61	0.03	0.10		
					Thorium-230	0.00	0.00	9.85		
					Thorium-232	0.61	0.03	0.10		
					Uranium-238	0.94	0.19	0.79		

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SLD70096	PSC00133	05/08/02	10.5	11.0		Radium-226	0.59	0.02	0.08	0.00
						Radium-228	0.60	0.03	0.12	
						Thorium-230	0.00	0.00	9.86	
						Thorium-232	0.60	0.03	0.12	
						Uranium-238	0.37	0.18	0.85	
	PSC00134	05/08/02	15	15.5		Radium-226	0.67	0.02	0.07	0.00
						Radium-228	0.61	0.03	0.11	
						Thorium-230	0.00	0.00	9.98	
						Thorium-232	0.61	0.03	0.11	
						Uranium-238	0.00	0.00	1.10	
SLD70102	SLD70102	05/13/02	0	0.5	0.0	Radium-226	3.16	0.18	0.13	0.65
						Radium-228	0.62	0.12	0.14	
						Thorium-230	1.36	6.30	9.71	
						Thorium-232	0.62	0.12	0.14	
						Uranium-238	4.63	1.37	0.94	
	SLD70103	05/13/02	0.5	1.0		Radium-226	12.83	0.47	0.19	1.03
						Radium-228	0.75	0.17	0.19	
						Thorium-230	11.22	15.43	25.76	
						Thorium-232	0.75	0.17	0.19	
						Uranium-238	16.29	3.05	2.78	
	SLD70104	05/13/02	2.5	3.0		Radium-226	4.31	0.18	0.10	0.39
						Radium-228	1.32	0.12	0.11	
						Thorium-230	-0.52	8.85	13.68	
						Thorium-232	1.32	0.12	0.11	
						Uranium-238	3.41	1.36	1.44	
	SLD70121	05/13/02	4	4.5		Radium-226	2.07	0.12	0.10	0.28
						Radium-228	0.99	0.10	0.10	
						Thorium-230	0.11	7.25	12.03	
						Thorium-232	0.99	0.10	0.10	
						Uranium-238	1.97	1.19	1.31	
	SLD70122	05/13/02	7.2	7.7		Radium-226	1.62	0.10	0.09	0.22
						Radium-228	1.03	0.10	0.09	
						Thorium-230	1.98	6.12	10.23	
						Thorium-232	1.03	0.10	0.09	
						Uranium-238	0.95	0.92	1.13	
	SLD70123	05/13/02	9.3	9.8		Radium-226	1.57	0.11	0.10	0.78
						Radium-228	0.98	0.11	0.12	
						Thorium-230	13.54	10.12	12.27	
Thorium-232						0.98	0.11	0.12		
Uranium-238						1.28	0.81	1.49		
SLD70124	05/13/02	11.2	11.7		Radium-226	1.42	0.10	0.10	0.26	
					Radium-228	0.88	0.10	0.11		
					Thorium-230	-4.36	7.52	11.44		
					Thorium-232	0.88	0.10	0.11		
					Uranium-238	1.72	1.31	1.19		
SLD70486	SLD70486	09/12/02	0	0.5	0.0	Radium-226	1.65	0.09	0.07	0.61
						Radium-228	0.92	0.09	0.09	
						Thorium-230	-2.94	6.10	9.90	
						Thorium-232	0.92	0.09	0.09	
						Uranium-238	1.76	0.92	1.12	

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SLD70486	SLD70487	09/12/02	0.5	1.0		Radium-226	18.69	0.60	0.17	1.12
						Radium-228	1.05	0.14	0.16	
						Thorium-230	4.05	1.13	0.26	
						Thorium-232	1.46	0.60	0.14	
						Uranium-238	3.06	1.91	2.33	
	SLD76915	05/28/03	1.2	1.5		Radium-226	3.39	0.13	0.08	0.10
						Radium-228	0.82	0.08	0.08	
						Thorium-230	3.33	1.06	0.40	
						Thorium-232	1.15	0.57	0.35	
						Uranium-238	1.83	1.66	2.06	
	SLD76916	05/28/03	2.7	3.0		Radium-226	5.22	0.18	0.10	0.27
						Radium-228	1.30	0.09	0.09	
						Thorium-230	5.00	1.29	0.25	
						Thorium-232	1.00	0.48	0.14	
						Uranium-238	3.34	2.25	2.93	
	SLD76917	05/28/03	5	5.3		Radium-226	1.44	0.07	0.05	0.00
Radium-228						0.67	0.05	0.05		
Thorium-230						1.16	0.50	0.31		
Thorium-232						0.23	0.21	0.12		
Uranium-238						0.93	0.36	0.37		
SLD72152	SLD72152	10/15/02	0	0.5	0.0	Radium-226	3.87	0.21	0.16	1.45
						Radium-228	0.92	0.14	0.16	
						Thorium-230	4.28	11.31	17.87	
						Thorium-232	0.92	0.14	0.16	
						Uranium-238	3.98	2.03	1.99	
	SLD72179	10/15/02	1.1	1.6		Radium-226	2.00	0.13	0.12	0.33
						Radium-228	1.03	0.12	0.11	
						Thorium-230	-10.11	9.12	13.31	
						Thorium-232	1.03	0.12	0.11	
						Uranium-238	1.84	1.33	1.46	
SLD72157	SLD72157	10/21/02	0	0.5	0.0	Radium-226	5.27	0.19	0.09	1.54
						Radium-228	1.19	0.10	0.09	
						Thorium-230	-1.64	9.38	14.23	
						Thorium-232	1.19	0.10	0.09	
						Uranium-238	24.18	2.16	1.52	
	SLD72184	10/21/02	0.8	2.0		Radium-226	3.23	0.22	0.21	0.32
						Radium-228	1.00	0.18	0.20	
						Thorium-230	3.10	0.99	0.15	
						Thorium-232	1.24	0.57	0.15	
						Uranium-238	13.32	5.73	6.60	
SLD72213	SLD72213	01/21/03	0	0.5	0.0	Radium-226	1.08	0.07	0.05	1.08
						Radium-228	0.34	0.05	0.06	
						Thorium-230	5.45	11.55	14.71	
						Thorium-232	0.34	0.05	0.06	
						Uranium-238	1.74	1.03	1.76	
	SLD72404	01/21/03	1.5	2.0		Radium-226	2.68	0.12	0.09	0.55
						Radium-228	0.85	0.08	0.09	
						Thorium-230	-6.29	14.37	20.50	
						Thorium-232	0.85	0.08	0.09	
					Uranium-238	1.92	1.81	2.58		

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SLD72827	SLD72827	10/10/02	0	0.5	0.0	Radium-226	6.28	0.29	0.18	1.17
						Radium-228	1.18	0.16	0.19	
						Thorium-230	10.27	9.37	14.58	
						Thorium-232	1.18	0.16	0.19	
						Uranium-238	4.19	1.79	1.34	
	SLD72828	10/10/02	1	1.5		Radium-226	7.95	0.33	0.19	0.45
						Radium-228	1.27	0.16	0.18	
						Thorium-230	8.50	9.39	14.37	
						Thorium-232	1.27	0.16	0.18	
						Uranium-238	5.19	1.64	1.37	
	SLD72829	10/10/02	3.2	3.7		Radium-226	8.70	0.38	0.23	0.63
						Radium-228	1.38	0.19	0.24	
						Thorium-230	9.24	2.45	0.39	
						Thorium-232	1.23	0.66	0.21	
						Uranium-238	7.16	2.82	3.09	
	SLD72830	10/10/02	5.1	5.6		Radium-226	3.54	0.21	0.17	0.17
						Radium-228	1.51	0.17	0.18	
						Thorium-230	3.42	1.06	0.15	
						Thorium-232	1.93	0.74	0.15	
						Uranium-238	2.38	1.99	2.22	
SLD72831	10/10/02	16	16.5		Radium-226	1.56	0.09	0.09	0.03	
					Radium-228	0.97	0.09	0.09		
					Thorium-230	1.85	0.69	0.30		
					Thorium-232	1.52	0.61	0.14		
					Uranium-238	0.83	0.81	1.14		
SLD72943	SLD72943	02/06/03	0	0.5	0.0	Radium-226	4.26	0.16	0.08	2.26
						Radium-228	0.51	0.07	0.09	
						Thorium-230	7.21	6.92	11.79	
						Thorium-232	0.51	0.07	0.09	
						Uranium-238	75.08	4.81	1.15	
	SLD72944	02/06/03	0.5	1.0		Radium-226	4.44	0.18	0.10	0.59
						Radium-228	1.10	0.11	0.09	
						Thorium-230	0.56	5.89	9.62	
						Thorium-232	1.10	0.11	0.09	
						Uranium-238	20.79	1.82	0.95	
	SLD72945	02/06/03	2.5	3.0		Radium-226	2.02	0.21	0.23	0.07
						Radium-228	1.39	0.23	0.22	
						Thorium-230	2.47	0.84	0.15	
						Thorium-232	1.59	0.66	0.34	
						Uranium-238	1.59	1.37	1.65	
	SLD72946	02/06/03	5	5.8		Radium-226	1.46	0.08	0.08	0.09
						Radium-228	1.19	0.09	0.08	
						Thorium-230	-0.46	3.96	6.08	
						Thorium-232	1.19	0.09	0.08	
						Uranium-238	1.43	0.62	0.61	
SLD72947	SLD72947	02/11/03	0	0.5	0.0	Radium-226	2.10	0.10	0.07	0.57
						Radium-228	0.39	0.06	0.07	
						Thorium-230	2.53	0.76	0.22	
						Thorium-232	0.31	0.24	0.12	
						Uranium-238	24.22	1.99	0.76	

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SLD72947	SLD72948	02/11/03	1	1.5		Radium-226	4.25	0.22	0.17	1.71
						Radium-228	1.12	0.15	0.16	
						Thorium-230	6.37	9.65	15.94	
						Thorium-232	1.12	0.15	0.16	
						Uranium-238	66.13	5.17	1.53	
	SLD72949	02/11/03	3	3.5		Radium-226	1.75	0.16	0.18	0.31
						Radium-228	1.25	0.18	0.18	
						Thorium-230	0.20	7.44	12.38	
						Thorium-232	1.25	0.18	0.18	
						Uranium-238	1.94	1.48	1.23	
	SLD72950	02/11/03	5	5.5		Radium-226	1.76	0.16	0.17	0.29
						Radium-228	1.14	0.18	0.16	
						Thorium-230	-4.24	7.58	12.21	
						Thorium-232	1.14	0.18	0.16	
						Uranium-238	1.18	0.86	1.56	
SLD72951	SLD72951	02/05/03	0	0.5	0.0	Radium-226	2.66	0.11	0.06	0.16
						Radium-228	0.36	0.06	0.06	
						Thorium-230	1.99	3.18	4.92	
						Thorium-232	0.36	0.06	0.06	
						Uranium-238	4.01	0.52	0.45	
	SLD72952	02/05/03	1	1.5		Radium-226	2.64	0.18	0.18	1.71
						Radium-228	1.07	0.16	0.19	
						Thorium-230	3.79	1.17	0.17	
						Thorium-232	1.18	0.59	0.32	
						Uranium-238	80.22	6.38	2.01	
	SLD72953	02/05/03	2	2.5		Radium-226	3.68	0.22	0.19	0.95
						Radium-228	1.02	0.16	0.19	
						Thorium-230	4.52	1.24	0.28	
						Thorium-232	1.34	0.59	0.15	
						Uranium-238	39.32	3.83	1.67	
SLD72954	02/05/03	4	4.5		Radium-226	2.51	0.10	0.06	0.51	
					Radium-228	0.95	0.07	0.07		
					Thorium-230	2.43	4.00	6.56		
					Thorium-232	0.95	0.07	0.07		
					Uranium-238	22.45	1.85	0.65		
SLD76911	SLD76911	05/28/03	0.2	0.5		Radium-226	1.44	0.07	0.06	0.04
						Radium-228	0.87	0.06	0.06	
						Thorium-230	1.87	0.70	0.14	
						Thorium-232	1.00	0.49	0.27	
						Uranium-238	3.27	1.32	1.92	
	SLD76912	05/28/03	0.7	1.0		Radium-226	38.66	1.08	0.20	2.43
						Radium-228	1.05	0.14	0.19	
						Thorium-230	4.84	1.38	0.37	
						Thorium-232	1.11	0.56	0.17	
						Uranium-238	-0.32	3.86	6.32	
	SLD76913	05/28/03	2.5	2.8		Radium-226	5.72	0.27	0.19	0.27
						Radium-228	1.42	0.19	0.21	
						Thorium-230	4.35	1.24	0.29	
						Thorium-232	1.63	0.67	0.28	
						Uranium-238	4.63	4.64	7.10	

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SLD76911	SLD76914	05/28/03	5.2	5.5		Radium-226	1.07	0.06	0.07	0.02
						Radium-228	0.64	0.06	0.07	
						Thorium-230	1.27	0.56	0.27	
						Thorium-232	1.32	0.58	0.27	
						Uranium-238	1.58	1.34	1.88	

<sup>1</sup> ft - feet

<sup>2</sup> bgs - below ground surface

<sup>3</sup> Analytical data includes background values (i.e., concentrations reflect gross radionuclide values)

<sup>4</sup> pCi/g - Picocuries per gram

<sup>5</sup> Prior to calculating the SOR, background values for each radionuclide were subtracted from their respective gross radionuclide values

Background Values:    Radium-226 =    2.78 pCi/g  
                                  Radium-228 =    .95 pCi/g  
                                  Thorium-230 =    1.94 pCi/g  
                                  Thorium-232 =    1.09 pCi/g  
                                  Uranium-238 =    1.44 pCi/g

If Detection Limit exceeds Result, ½ of Detection Limit was substituted for Result value in the SOR calculation.

*Samples in italics indicate MDA > Result*

Data presented in this Table were used solely for the purpose of delineating, vertically and horizontally, radiological COCs within the surface and subsurface soils.

Table 3-2  
PSC Metals Vicinity Property (DT-8)  
Pre-Design Investigation Waste Characterization Sampling Analytical Results

Sample Location	Sample Number	Collection Date	Start Depth (ft bgs)	End Depth (ft bgs)	Parameter	Result	Detection Limit	Units
SLD06650 <sub>1</sub>	SLD06650	12/22/2000	0	2	1,1-Dichloroethene	ND	50	ug/L
SLD06650 <sub>2</sub>	SLD06650	12/22/2000	0	2	1,2-Dichloroethane	ND	50	ug/L
SLD06650 <sub>3</sub>	SLD06650	12/22/2000	0	2	1,4-Dichlorobenzene	ND	50	ug/L
SLD06650 <sub>4</sub>	SLD06650	12/22/2000	0	0.5	2, 4, 5-Trichlorophenol	ND	50	ug/L
SLD06650 <sub>5</sub>	SLD06650	12/22/2000	0	2	2, 4, 6-Trichlorophenol	ND	50	ug/L
					2, 4-D	ND	40	ug/L
					2, 4-Dinitrotoluene	ND	50	ug/L
					2,4,5-TP (Silvex)	ND	10	ug/L
					2,4-Dinitrotoluene	ND	50	ug/L
					2-Butanone	ND	200	ug/L
					2-Methylphenol	ND	50	ug/L
					4-Methylphenol	ND	50	ug/L
					Aroclor-1016	ND	390	ug/kg
					Aroclor-1221	ND	390	ug/kg
					Aroclor-1232	ND	390	ug/kg
					Aroclor-1242	ND	390	ug/kg
					Aroclor-1248	ND	390	ug/kg
					Aroclor-1254	ND	390	ug/kg
					Aroclor-1260	2200	390	ug/kg
					Arsenic	ND	750	ug/L
					Barium	955	500	ug/L
					Benzene	ND	50	ug/L
					Cadmium	273	125	ug/L
					Carbon Tetrachloride	ND	50	ug/L
					Chlordane	ND	5	ug/L
					Chlorobenzene	ND	50	ug/L
					Chloroform	ND	50	ug/L
					Chromium	2.3 <sup>E</sup>	250	ug/L
					Copper	254 <sup>E,1</sup>	625	ug/L
					Endrin	ND	0.5	ug/L
					Flashpoint	>60.0	25	Deg. C
					Gamma-BHC (Lindane)	ND	0.5	ug/L
					Heptachlor Epoxide	ND	0.5	ug/L
					Hexachlorobenzene	ND	50	ug/L
					Hexachlorobutadiene	ND	50	ug/L

Table 3-2  
PSC Metals Vicinity Property (DT-8)  
Pre-Design Investigation Waste Characterization Sampling Analytical Results

Sample Location	Sample Number	Collection Date	Start Depth (ft bgs)	End Depth (f. bgs)	Parameter	Result	Detection Limit	Units
					Hexachloroethane	ND	50	ug/L
					Lead	101 <sup>E</sup>	250	ug/L
					Mercury	ND <sup>E</sup>	1	ug/L
					Methoxychlor	ND	1	ug/L
					Nitrobenzene	ND	50	ug/L
					Paint Filter	pass	--	--
					Pentachlorophenol	ND	250	ug/L
					Percent Moisture	14.9	0.1	percent
					pH (solid)	9.3	--	pH unts
					Pyridine	ND	100	ug/L
					Reactive Cyanide	ND	0.029	mg/kg
					Reactive Sulfide	ND	5.2	mg/kg
					Selenium	6.5 <sup>E</sup>	125	ug/L
					Silver	ND	250	ug/L
					Tetrachloroethane	ND	50	ug/L
					Total Cyanide	0.36	0.29	mg/kg
					TOX	65.3	58.7	mg/kg
					Toxaphene	ND	20	ug/L
					Trichloroethene	ND	50	ug/L
					Vinyl Chloride	ND	100	ug/L
					Zinc	2960 <sup>I</sup>	500	ug/L

<sup>E</sup> Estimated result. Result is less than the Detection Limit

<sup>I</sup> Matrix interference

ug/L- micrograms per liter

ug/kg- micrograms per kilogram

mg/kg - milligrams per kilogram

Deg. C - degrees celcius

TOX - total organic halogens

ND-Not detected above laboratory analytical detection limits

Analytical Methods:

TCLP Pesticides- EPA 8080

TCLP Volatiles- EPA 8260A

TCLP Herbicides- EPA 8150

TCLP Metals- EPA 7470/6010

PCB's- EPA 8082

Reactive Cyanide - EPA 7.3.3

Reactive Sulfide - EPA 7.3.4

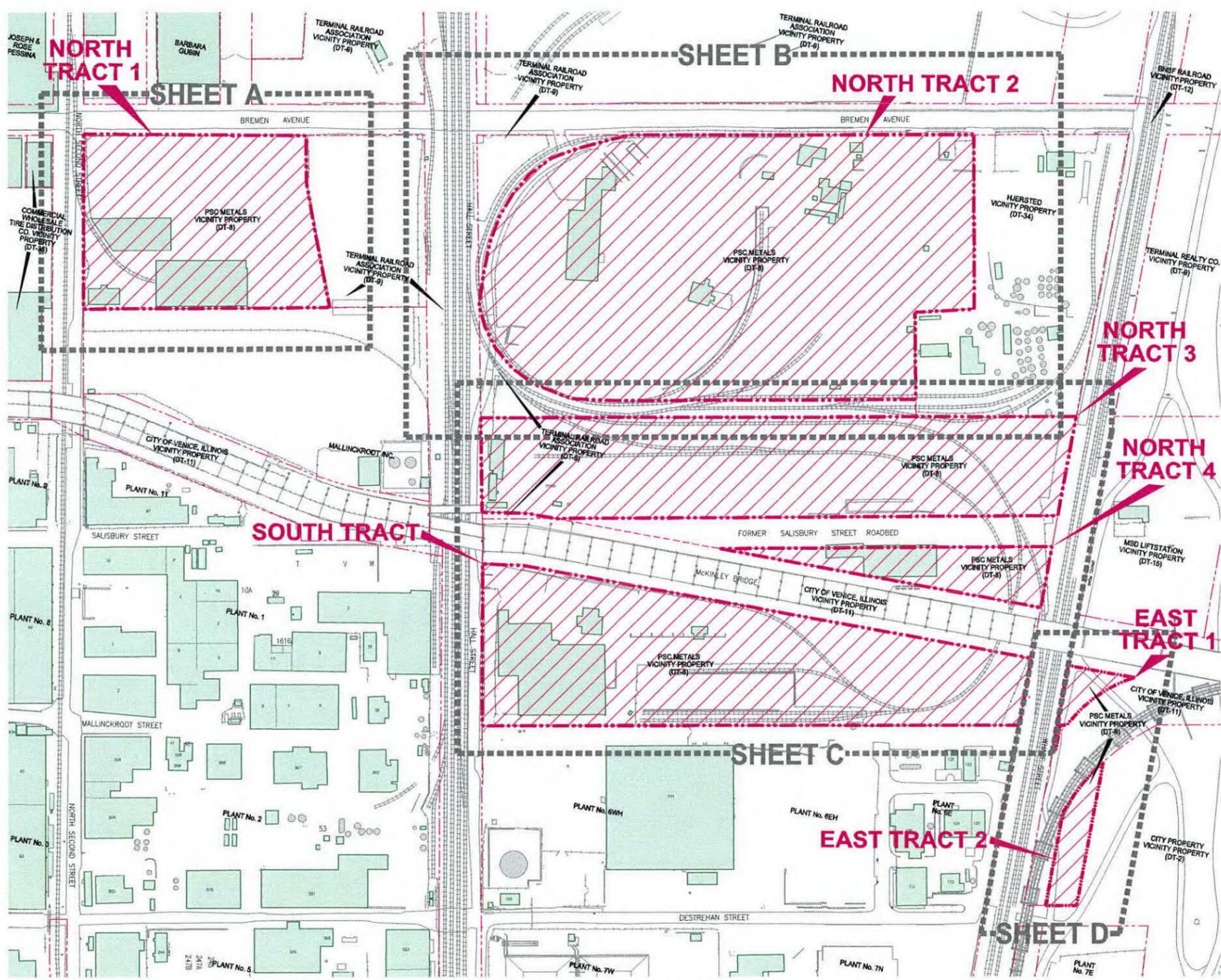
Total Cyanide - EPA 9010A

TOX - 9020A

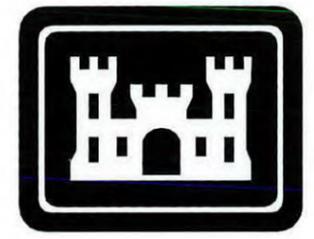
Note: A discrete soil sample was collected from sample location SLD06650<sub>4</sub> for the analysis of VOCs. Sample locations SLD06650<sub>1</sub> thru SLD06650<sub>5</sub> represent the five subsamples that make up the single composite sample.

***Figures***

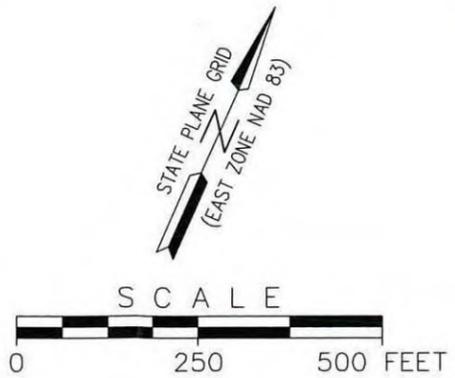
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Drawing File:  
OFFICE STL



SITE LOCATION MAP



**FUSRAP**



**PSC METALS**  
ST. LOUIS DOWNTOWN SITE (SLDS)  
PSC METALS VICINITY PROPERTY (DT-8)  
St. Louis, Missouri  
Prepared for:  
**U.S. ARMY CORPS of ENGINEERS**  
Kansas City District / St. Louis District

FIGURE TITLE INDEX TO FIGURES & TRACT DESIGNATIONS (DT-8) ..... FIGURE 1  
 HISTORIC FEATURES..... FIGURE 2 - (A,B,C,D)  
 SAMPLE LOCATIONS..... FIGURE 3 - (A,B,C,D)  
 ESTIMATED EXTENT OF CONTAMINATION..... FIGURE 4 - (A,B,C[3 SHEETS],D)

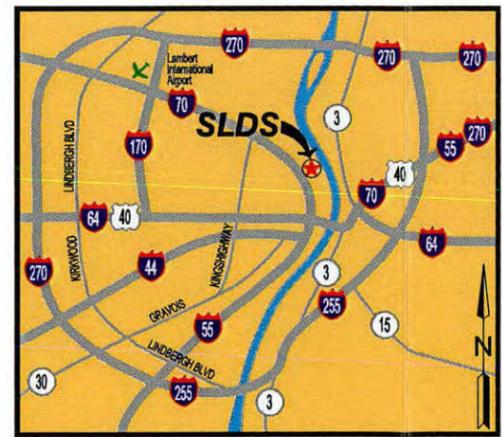
**SAMPLE LEGEND:**

- | SYMBOL           | ID       | DESCRIPTION                                  |
|------------------|----------|--|
| ⊕                | B16Rxxxx | = BNI/RI SAMPLE LOCATION                     |
| MCxxx/ExxxxNxxxx |          |  |
| ⊕                | SLDxxxxx | = FSS CLASS 1 SAMPLE LOCATION                |
| ⊕                | SLDxxxxx | = FSS CLASS 2 SAMPLE LOCATION                |
| ⊕                | SLDxxxxx | = FSS CLASS 3 SAMPLE LOCATION                |
| ▲                | HTRxxxxx | = FSS HTR SAMPLE LOCATION                    |
| ▲                | HTRxxxxx | = FSS HTR COMPOSITE SAMPLE LOCATION          |
| ▲                | HTZxxxxx | = FSS HTZ SAMPLE LOCATION                    |
| ▲                | HTZxxxxx | = FSS HTZ COMPOSITE SAMPLE LOCATION          |
| ■                | TPxx     | = TEST PIT/TRENCH                            |
| ⊕                | SLDxxxxx | = PDI SAMPLE LOCATION                        |
| ⊕                | SLDxxx-1 | = WASTE CHARACTERIZATION SUB-SAMPLE LOCATION |
| ◆                | SLDxxxxx | = PP SAMPLE LOCATION                         |
| ⊕                | PSCxxxxx | = SCR SAMPLE LOCATION                        |
| ●                | SLDxxxxx | = INACCESSIBLE SAMPLE LOCATION               |

FSS = FINAL STATUS SURVEY  
 PDI = PRE-DESIGN INVESTIGATION  
 PP = PREFERENTIAL PATHWAY  
 RI = REMEDIAL INVESTIGATION  
 SCR = SCREENING  
 FSSP = FINAL STATUS SURVEY PLAN FOR ACCESSIBLE SOIL WITHIN MALLINCKRODT PROPERTY AND THE VICINITY PROPERTIES, EXCLUDING PLANTS 1, 2 AND THE CITY PROPERTY AT THE ST. LOUIS DOWNTOWN SITE, ST. LOUIS, MISSOURI (USACE, 2002)

**GENERAL LEGEND:**

- |                   |  |
|-------------------|--|
| —                 | CHAIN LINK FENCE                             |
| —                 | RAILROAD TRACKS                              |
| ■                 | EXISTING BUILDING (INCLUDING TEMP. BUILDING) |
| 125               | MALLINCKRODT INC. BUILDING NUMBER            |
| ○                 | EXISTING ABOVEGROUND STORAGE TANK (AST)      |
| —                 | PROPERTY BOUNDARY                            |
| TRACT 1           | PSC METALS TRACT NUMBERS                     |
| —                 | PSC METALS PROPERTY BOUNDARY                 |
| ■                 | PSC METALS PROPERTY                          |
| -----SHEET 1----- | SHEET EXTENTS AND REFERENCE NUMBER           |



SITE VICINITY MAP

Revisions			
Symbol	Descriptions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB

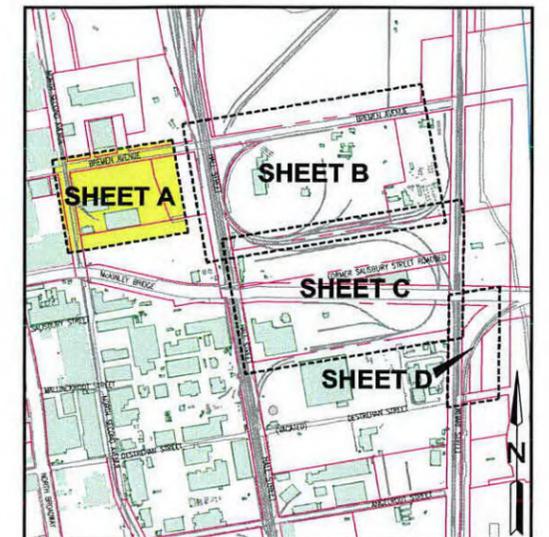
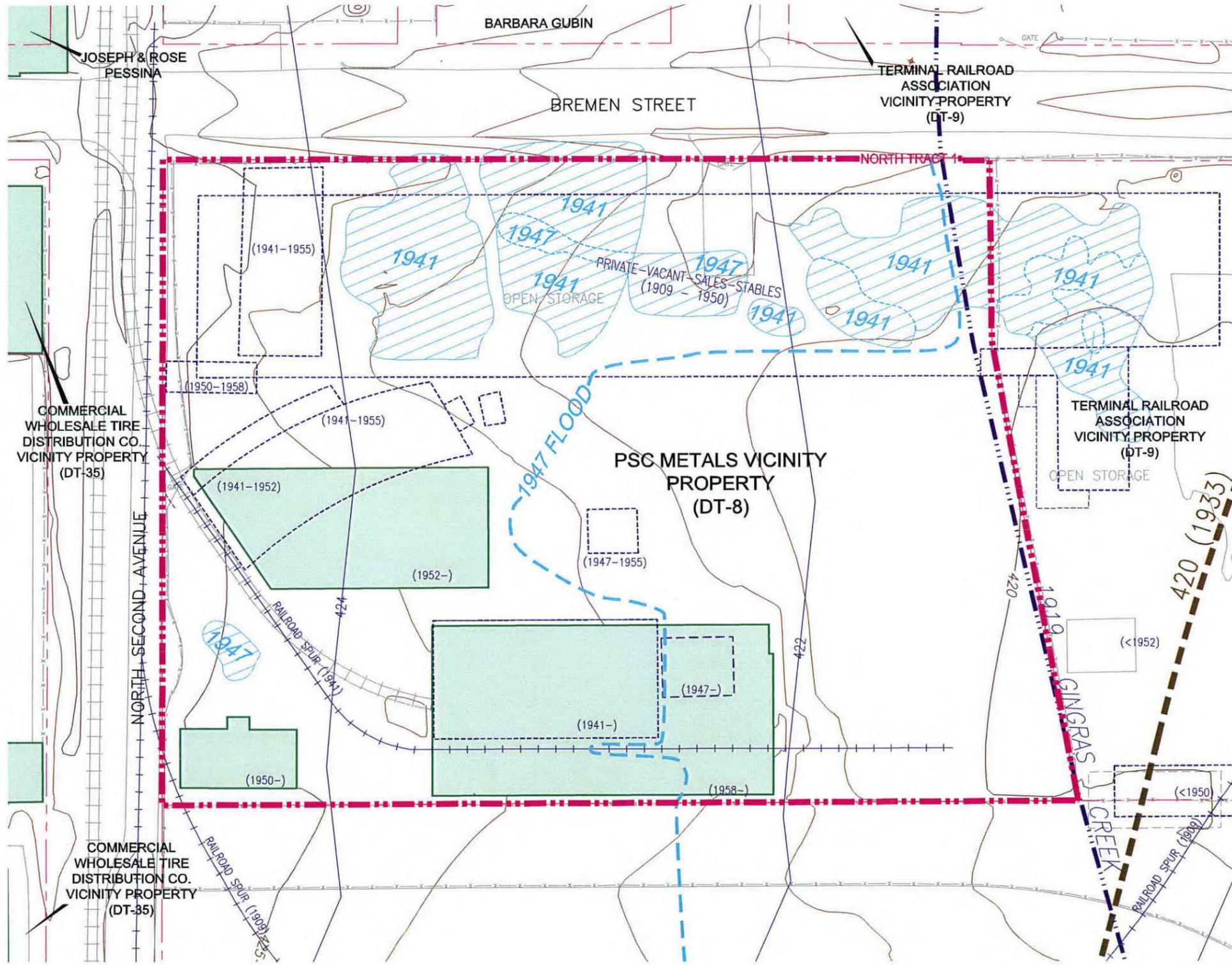
  

 Shaw Environmental, Inc.	 U.S. ARMY CORPS OF ENGINEERS KANSAS CITY DISTRICT (CENWK) ST. LOUIS DISTRICT (CEMVS)	Designed by: B. Eberlin	<b>INDEX TO FIGURES &amp; TRACT DESIGNATIONS (DT-8)</b> PSC METALS VICINITY PROPERTY (DT-8) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI	
		Drawn by: M. Peake		
Checked by: K. Beach	Scale: AS SHOWN	Figure Number: 1		Spec No. -
Approved by: B. Fox	Date: 8/10/06	Drawing File: 845843-B103.dwg		Contract No. DACW41-98-D-9006

X:\S\SLDS\_Pittsburgh\Project\775575\FSC Metals\845843B103 (REV 1).dwg, Figure 1, 8/1/2006 8:32:33 AM, Monte,Peake

845843-B104

Office Drawing File:  
STL



KEY PLAN

LEGEND:

- (1909) HISTORICAL REFERENCE
- 108 HISTORICAL STRUCTURE
- ++++ HISTORICAL TRACKS
- x-x- HISTORICAL FENCE
- (M203) (M236) HISTORICAL TANKS
- HISTORICAL ELEVATION OF INTEREST (TYPICAL)
- 1941 HISTORICAL LOW-LYING/FILL AREA
- 424 HISTORICAL CONTOURS (1933)
- 420 CURRENT CONTOURS (2005)

GENERAL NOTE:

SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).



STATE PLANE GRID  
(EAST ZONE NAD 83)

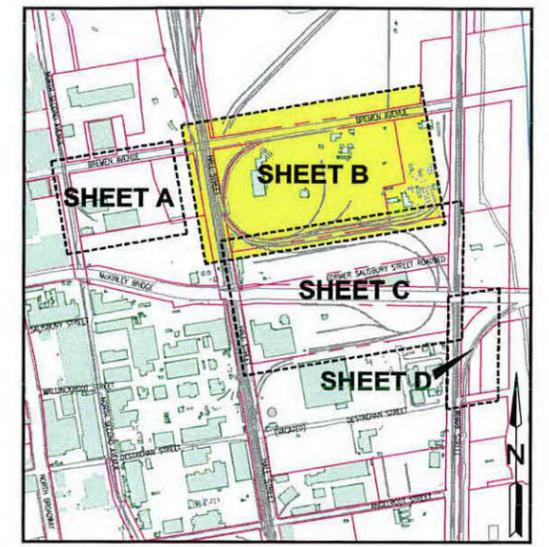
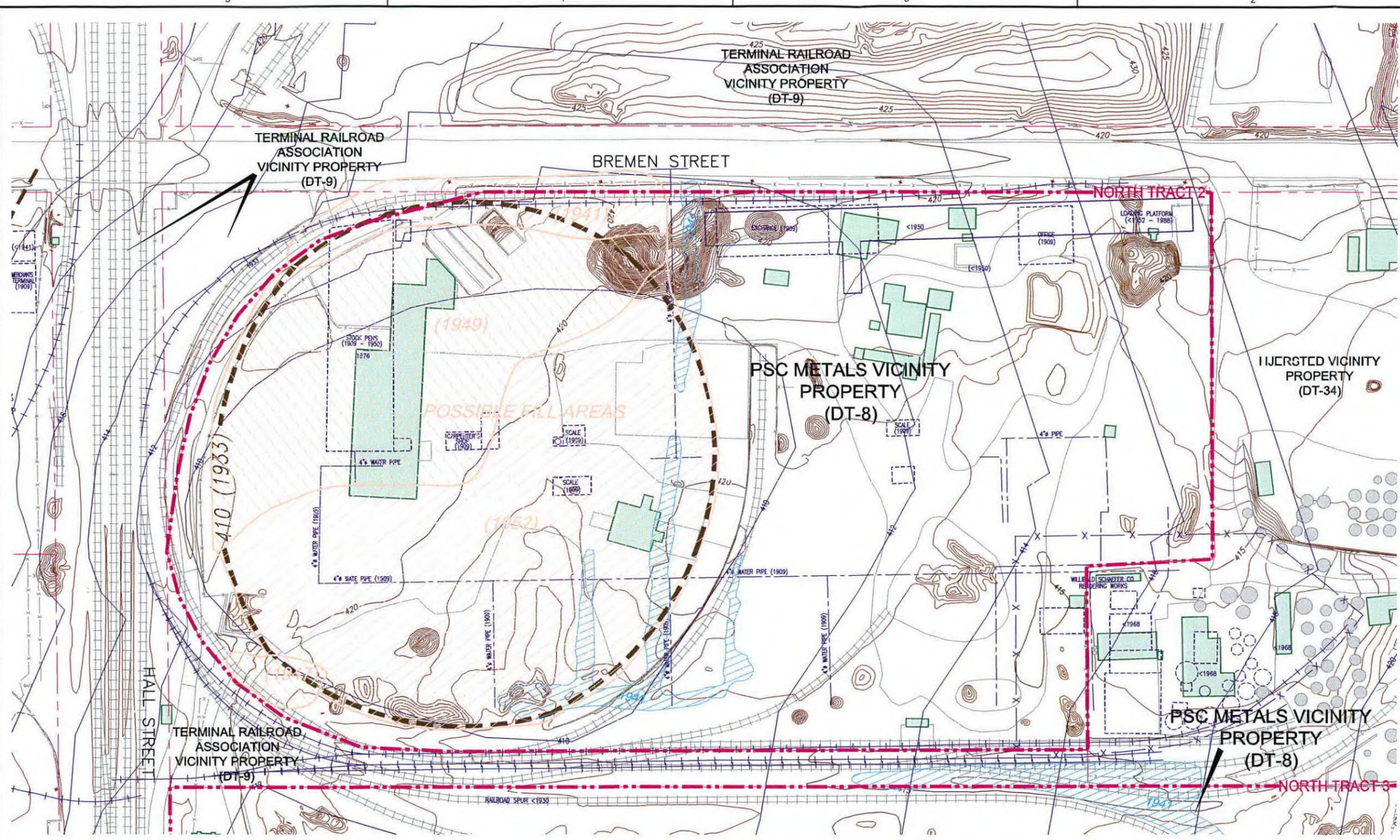
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Symbol	Descriptions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB

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Shaw Environmental, Inc.

**FUSRAP**  
U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT (CENWK)  
ST. LOUIS DISTRICT (CEMVS)

Designed by: B. Eberlin	<b>HISTORICAL FEATURES MAP</b> PSC METALS VICINITY PROPERTY (NORTH TRACT 1) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Drawn by: M. Peake	Scale: AS SHOWN	Figure - Sheet No.:	Spec No.:
Checked by: K. Beach	Date: 8/10/06	2-A	Contract No.:
Approved by: B. Fox	Drawing File: 845843-B104.dwg		DACW41-98-0-9006

845843-B104  
 Drawing File:  
 Office STL



KEY PLAN

LEGEND:

- (1909) HISTORICAL REFERENCE
- 108 HISTORICAL STRUCTURE
- HISTORICAL TRACKS
- x-x- HISTORICAL FENCE
- (M205) (M236) HISTORICAL TANKS
- HISTORICAL ELEVATION OF INTEREST (TYPICAL)
- 1941 HISTORICAL LOW-LYING/FILL AREA
- 424 HISTORICAL CONTOURS (1933)
- 420 CURRENT CONTOURS (2005)
- POSSIBLE FILL AREA

GENERAL NOTE:

SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).



STATE PLANE GRID  
 (EAST ZONE NAD 83)

Revisions			
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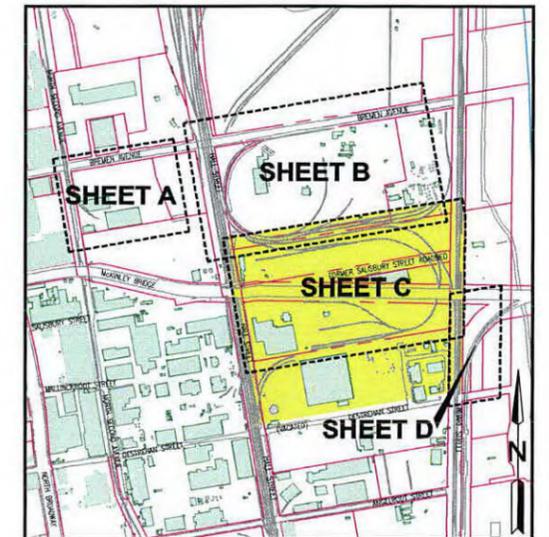
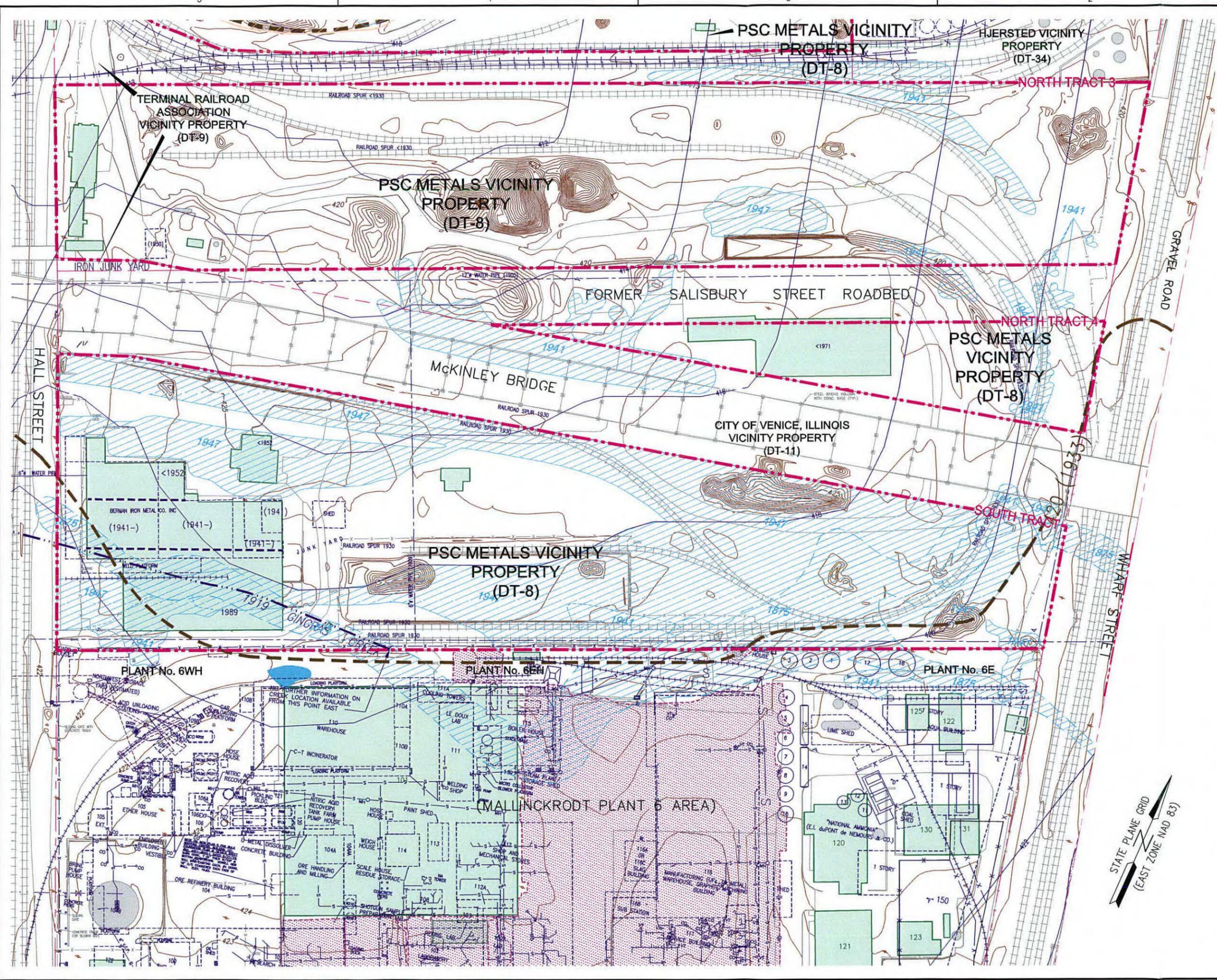


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Designed by: B. Eberlin	<b>HISTORICAL FEATURES MAP</b> PSC METALS VICINITY PROPERTY (NORTH TRACT 2) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Drawn by: M. Peake			
Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.:	Spec No.:
Approved by: B. Fox	Date: 8/10/06	2-B	Contract No. DACW41-98-D-9006
Drawing File: 845843-B104.dwg			



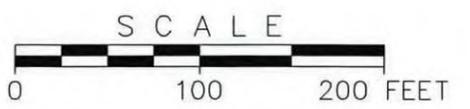
KEY PLAN

LEGEND:

- (1909) HISTORICAL REFERENCE
- 108 HISTORICAL STRUCTURE
- HISTORICAL TRACKS
- x-x- HISTORICAL FENCE
- (M205) (M236) HISTORICAL TANKS
- HISTORICAL ELEVATION OF INTEREST (TYPICAL)
- 1941 HISTORICAL LOW-LYING/FILL AREA
- 424 HISTORICAL CONTOURS (1933)
- 420 CURRENT CONTOURS (2005)
- AREA PREVIOUSLY REMEDIATED (TYPICAL)

GENERAL NOTE:

SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).



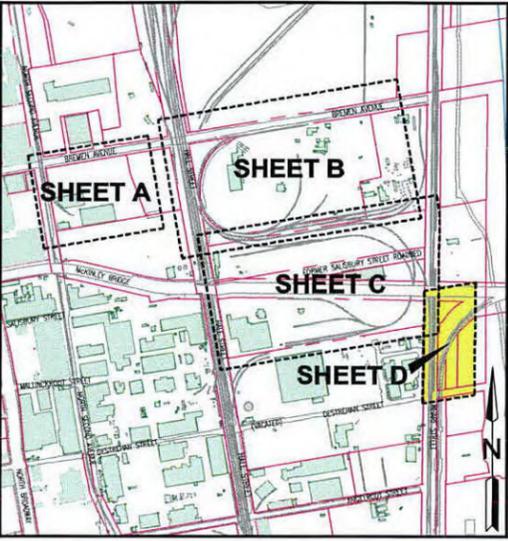
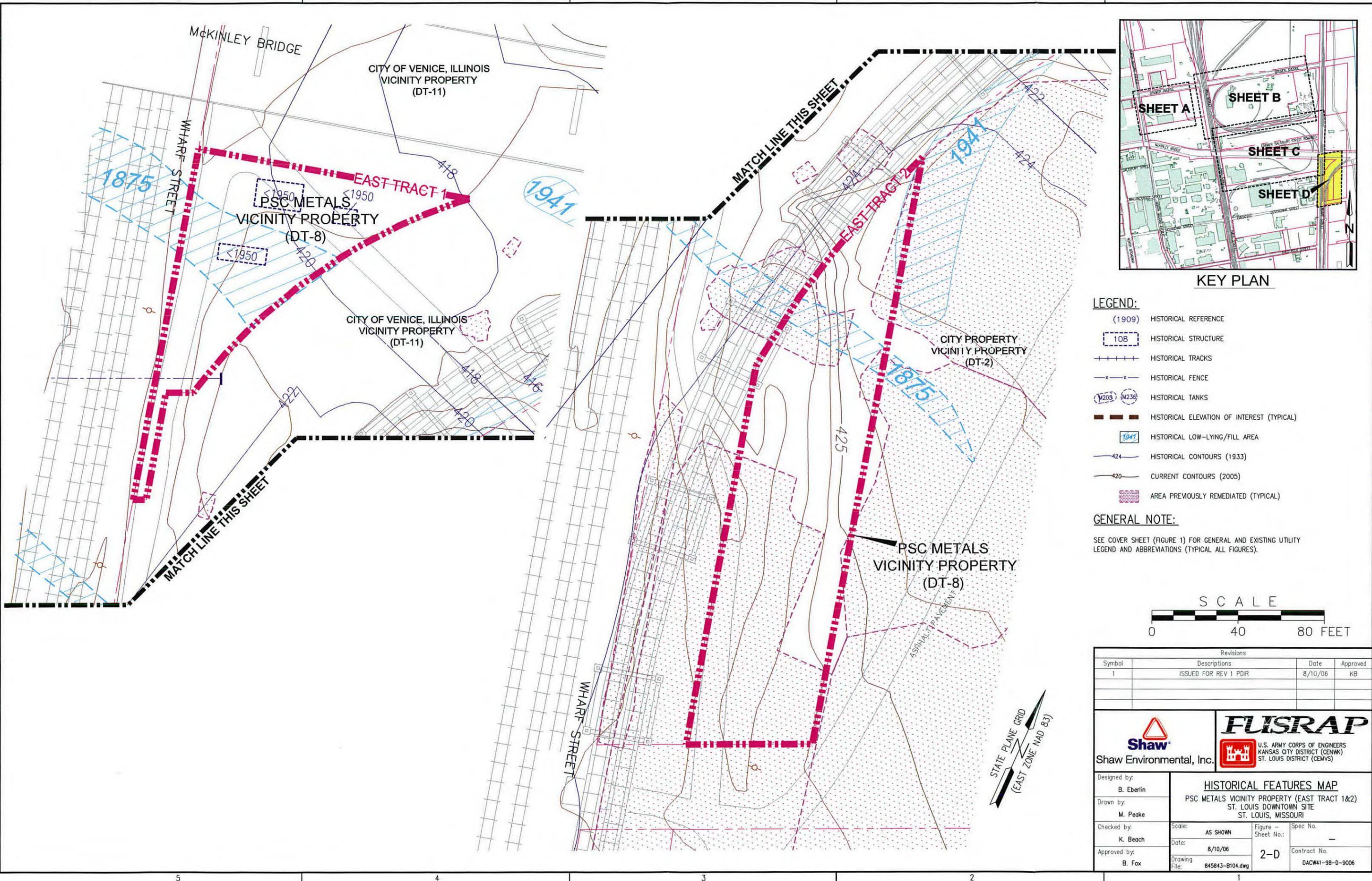
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U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT (CENWK)  
ST. LOUIS DISTRICT (CEMVS)

Designed by: B. Eberlin	<b>HISTORICAL FEATURES MAP</b>		
Drawn by: M. Peake	PSC METALS VICINITY PROPERTY (N. TRACT 3&4, S. TRACT) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.:	Spec No.:
Approved by: B. Fox	Date: 8/10/06	2-C	Contract No. DACW41-98-D-9006
Drawing File: 845843-B104.dwg			

STATE PLANE GRID  
(EAST ZONE NAD 83)



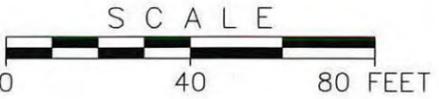
KEY PLAN

LEGEND:

- (1909) HISTORICAL REFERENCE
- 108 HISTORICAL STRUCTURE
- ++++ HISTORICAL TRACKS
- x-x- HISTORICAL FENCE
- (M208) (M236) HISTORICAL TANKS
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GENERAL NOTE:

SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).



Revisions			
Symbol	Descriptions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB

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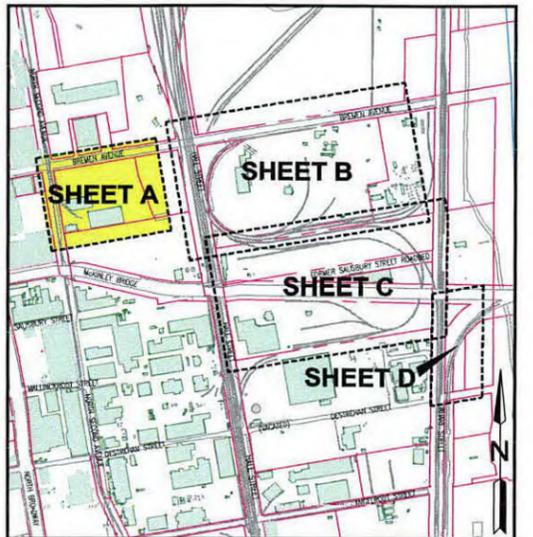
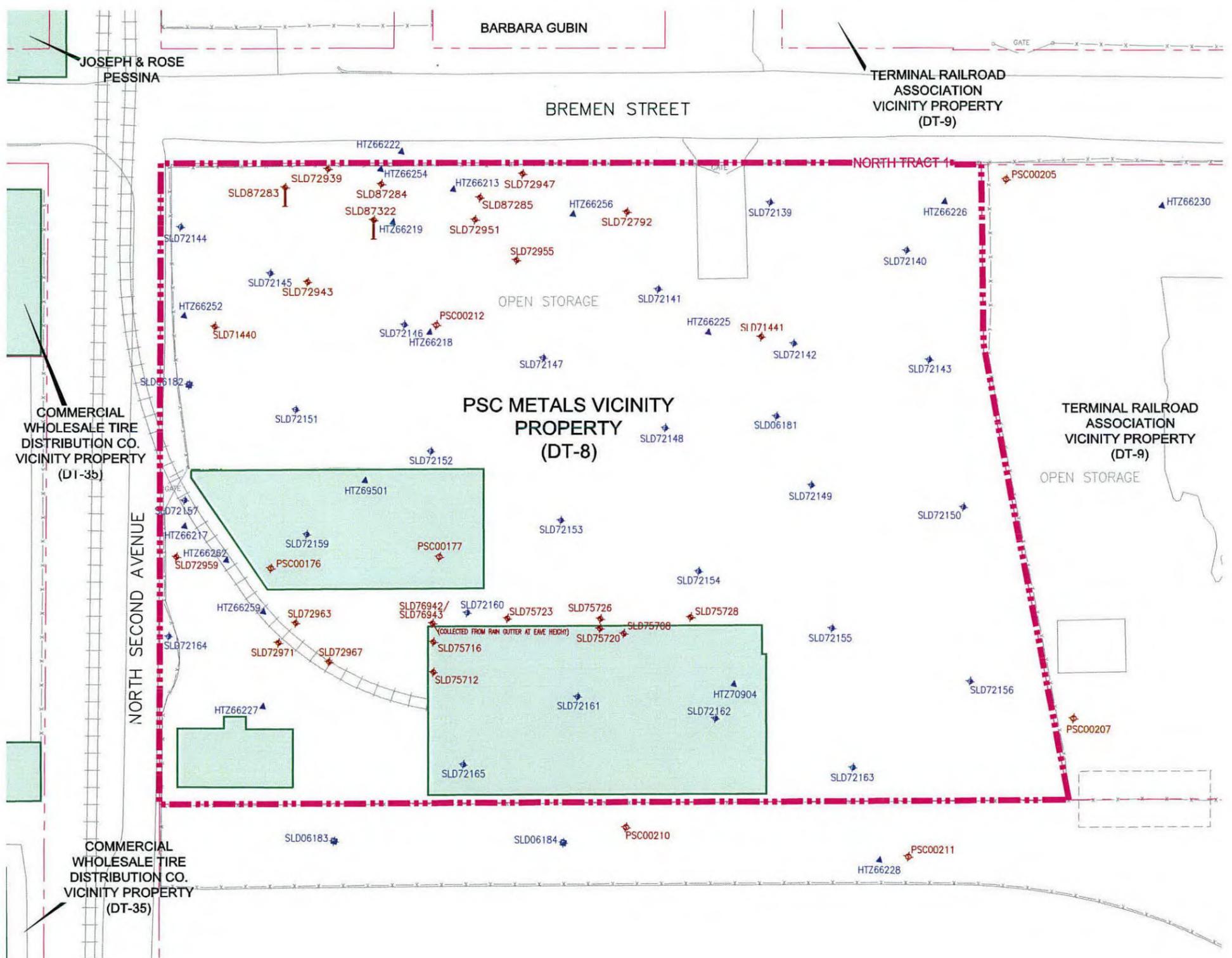
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U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT (CENWK)  
ST. LOUIS DISTRICT (CEMVS)

Designed by: B. Eberlin	<b>HISTORICAL FEATURES MAP</b> PSC METALS VICINITY PROPERTY (EAST TRACT 1&2) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Drawn by: M. Peake			
Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.:	Spec No.:
Approved by: B. Fox	Date: 8/10/06	2-D	Contract No. DACW41-98-0-9006
Drawing File: 845843-B104.dwg			

STATE PLANE GRID  
(EAST ZONE NAD 83)

845843-B104

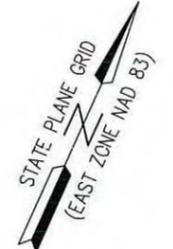
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KEY PLAN

GENERAL NOTE:

SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).



Revisions			
Symbol	Descriptions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB



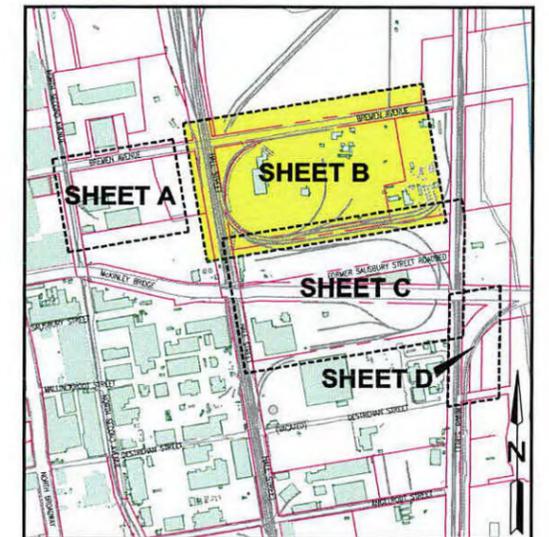
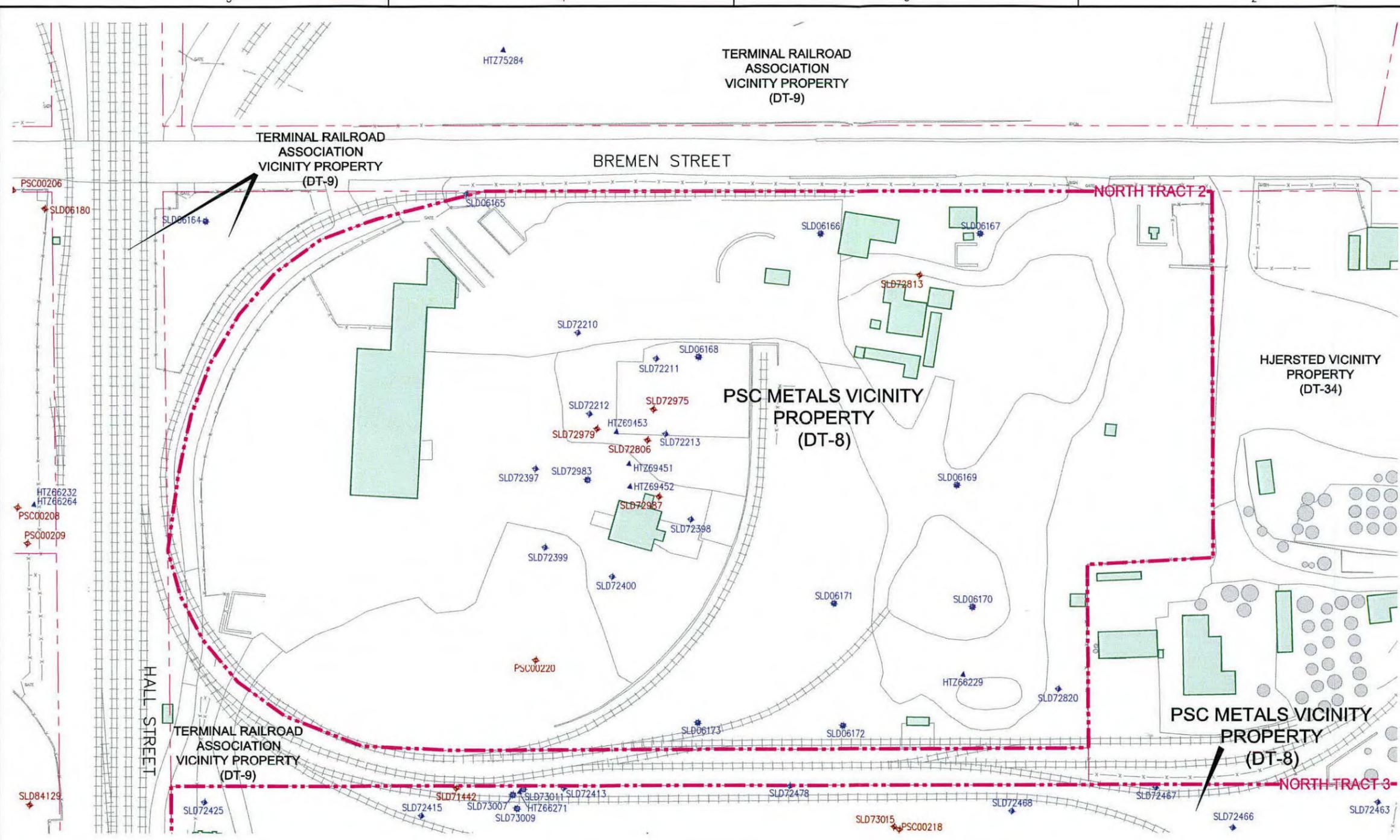
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**FUSRAP**  
U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT (CENWK)  
ST. LOUIS DISTRICT (CEMVS)

Designed by: B. Eberlin	<b>SAMPLE LOCATION MAP</b> PSC METALS VICINITY PROPERTY (NORTH TRACT 1) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Drawn by: M. Peake			
Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.:	Spec No.:
Approved by: B. Fox	Date: 8/10/06	3-A	Contract No. DACW41-98-D-9006
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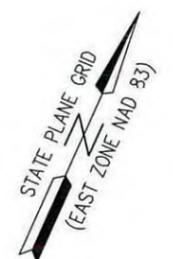
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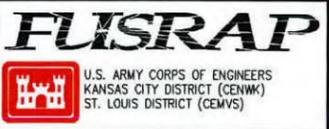
KEY PLAN

GENERAL NOTE:

SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).

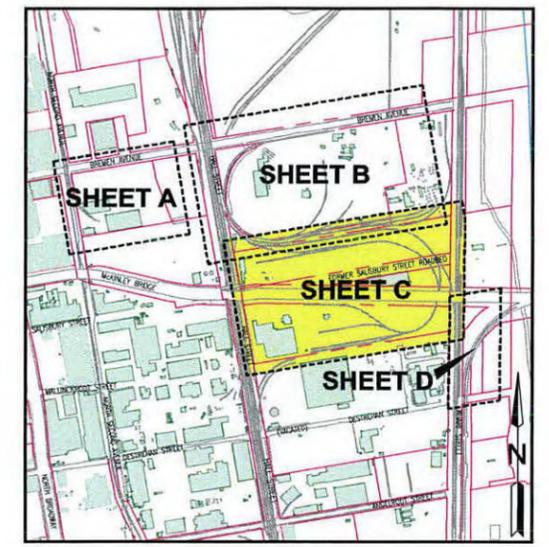
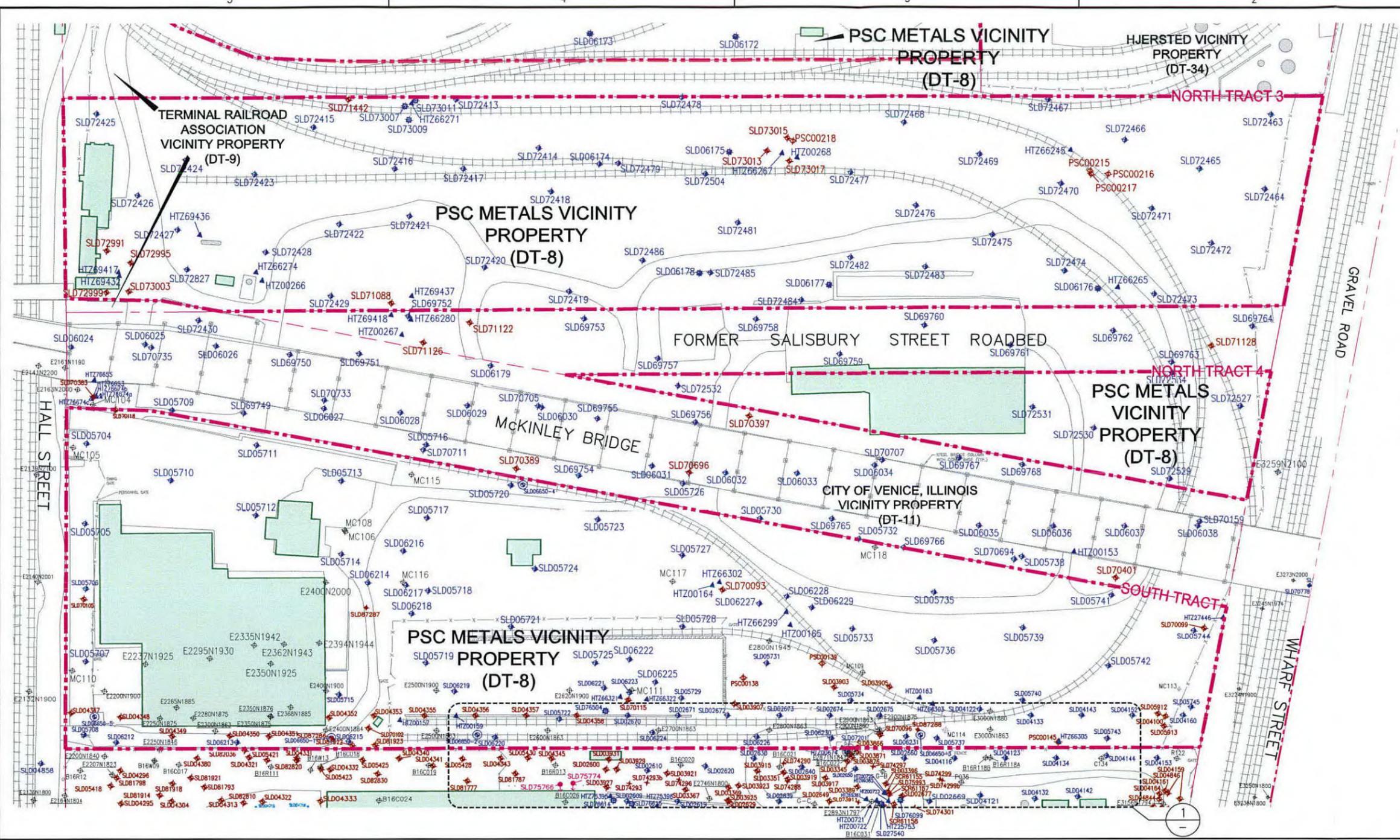


Revisions			
Symbol	Descriptions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB



Designed by: B. Eberlin	<p><b>SAMPLE LOCATION MAP</b> PSC METALS VICINITY PROPERTY (NORTH TRACT 2) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI</p>		
Drawn by: M. Peake			
Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.:	Spec No.:
Approved by: B. Fox	Date: 8/10/06	3-B	Contract No. DACW41-98-D-9006
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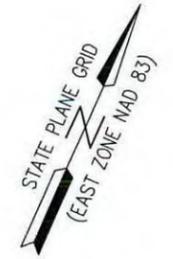
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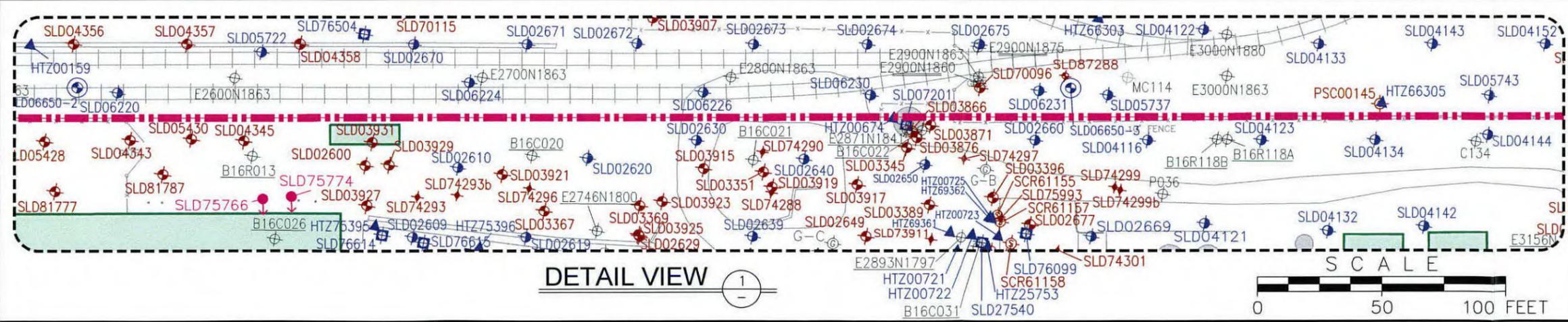
KEY PLAN

GENERAL NOTE:

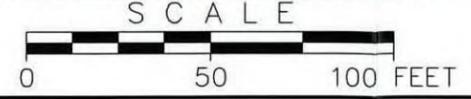
SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).



SCALE



DETAIL VIEW (1)

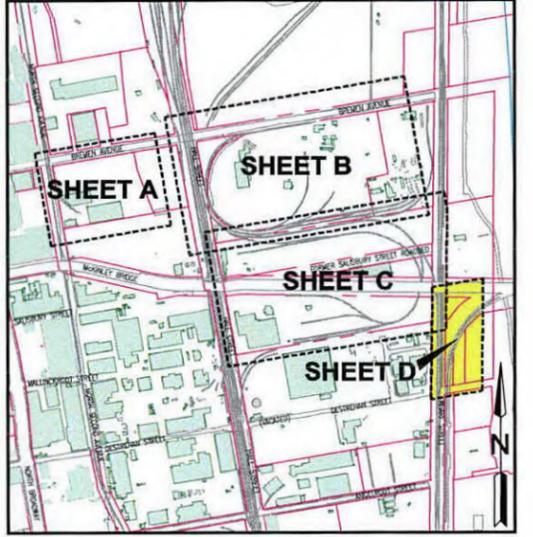
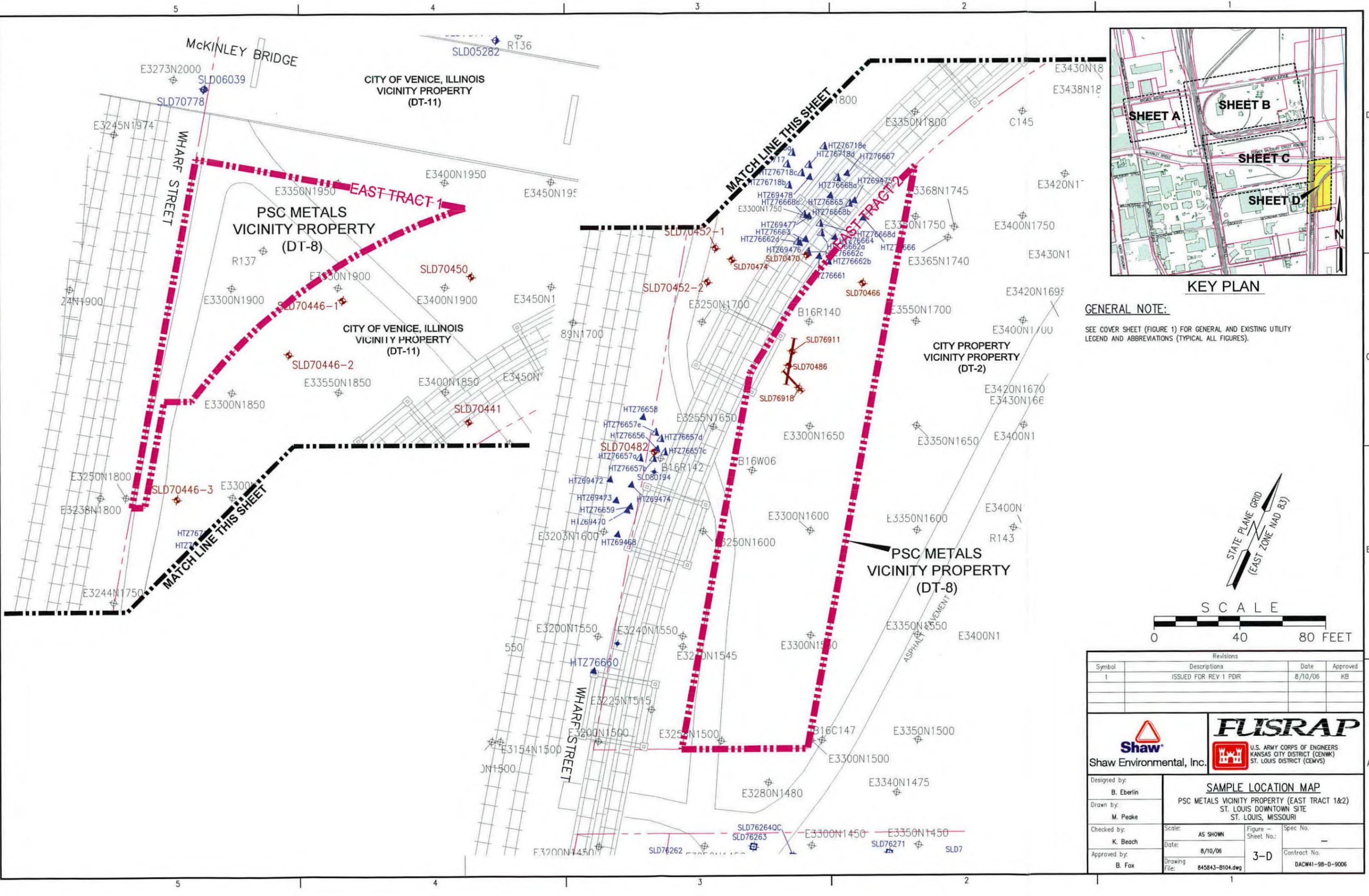


Revisions			
Symbol	Descriptions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB

Designed by: B. Eberlin		U.S. ARMY CORPS OF ENGINEERS KANSAS CITY DISTRICT (CENWK) ST. LOUIS DISTRICT (CEMVS)	
Drawn by: M. Peake		<b>SAMPLE LOCATION MAP</b> PSC METALS VICINITY PROPERTY (N. TRACT 3&4, S. TRACT) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI	
Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.: 3-C	Spec No.: -
Approved by: B. Fox	Date: 8/10/06	Drawing File: 845843-B104.dwg	Contract No.: DACW41-98-D-9006

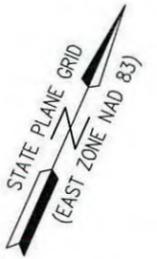
845843-B104  
Drawing File:  
STL



KEY PLAN

**GENERAL NOTE:**

SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).



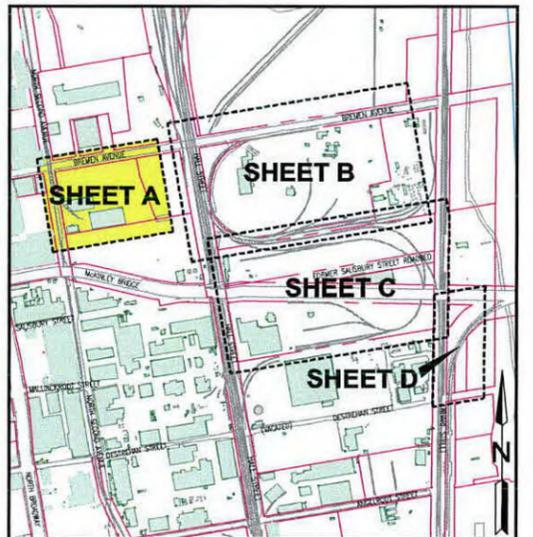
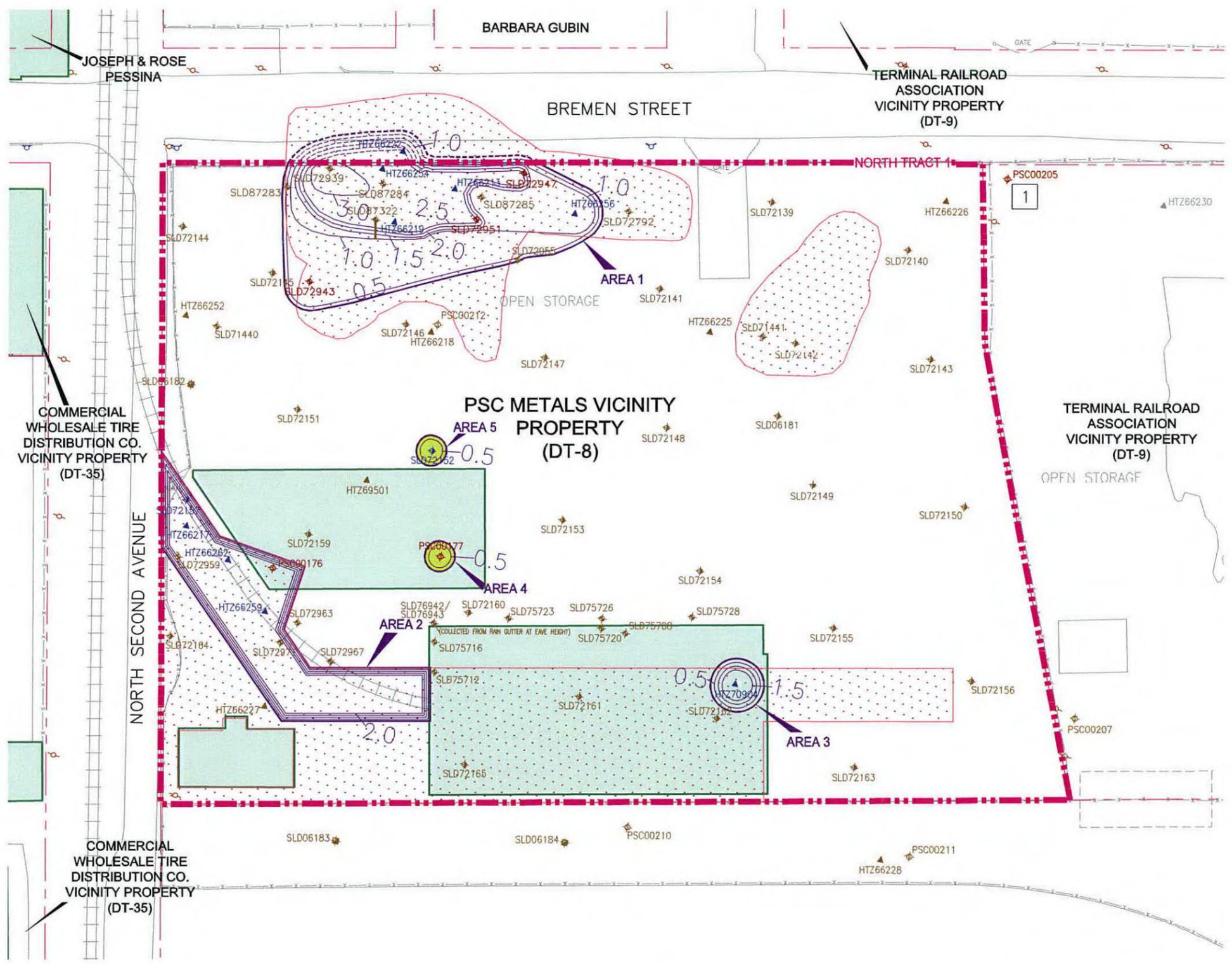
Revisions			
Symbol	Descriptions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB

  
**Shaw Environmental, Inc.**

  
U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT (CENK)  
ST. LOUIS DISTRICT (CEMVS)

Designed by: B. Eberlin	<b>SAMPLE LOCATION MAP</b>		
Drawn by: M. Peake	PSC METALS VICINITY PROPERTY (EAST TRACT 1&2) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.:	Spec No.:
Approved by: B. Fox	Date: 8/10/06	3-D	Contract No.:
	Drawing File: 845843-B104.dwg		DACW41-98-D-9006

845843-B104  
Office Drawing File:  
SIT



KEY PLAN

LEGEND:

- SLDxxxxx = SAMPLE LOCATIONS WITH SOR VALUES ≥ 1.0
- HTZxxxxx = SAMPLE LOCATIONS WITH SOR VALUES < 1.0
- SLDxxxxx (50 FT BEYOND) = SAMPLE LOCATIONS (50 FEET BEYOND SUBJECT PROPERTY)
- HTZxxxxx (50 FT BEYOND) = SAMPLE LOCATIONS (50 FEET BEYOND SUBJECT PROPERTY)
- 0.5 — ESTIMATED MAXIMUM RADIOLOGICAL CONTAMINATION DEPTH CONTOUR (FT BGS)
- 1.0 --- ESTIMATED CONTOUR OUTSIDE PSC METALS BOUNDARY (FT BGS)
- AREA IDENTIFIED FOR ADDITIONAL SAMPLING IN ACCORDANCE WITH THE FSSP (TYPICAL)
- AREA OF HISTORICAL/GEOLOGICAL INTEREST (TYPICAL)
- AREA PREVIOUSLY REMEDIATED (TYPICAL)

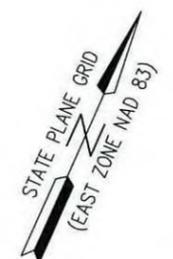
KEYED NOTE:

- 1 SAMPLE LOCATION PSC00205 HAS AN SOR ≥ 1, BUT WILL BE ADDRESSED WITH THE DT-9 VICINITY PROPERTY.

GENERAL NOTE:

SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).

Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>	Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>	Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>	Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>
HTZ66213	HTZ66213	0.0	53.07	HTZ66222	HTZ66222	0.0	5.70	HTZ66261	HTZ66261	1.0	1.74	SLD72152	SLD72152	0.0	1.45
HTZ66214	HTZ66214	0.5	36.90	HTZ66223	HTZ66223	0.5	2.34	HTZ66262	HTZ66262	0.0	10.48	SLD72157	SLD72157	0.0	1.54
HTZ66215	HTZ66215	1.0	3.34	HTZ66224	HTZ66224	1.0	1.00	HTZ66263	HTZ66263	0.5	1.46	SLD72943	SLD72943	0.0	2.26
HTZ66216	HTZ66216	1.5	10.53	HTZ66254	HTZ66254	0.0	21.10	HTZ70904	HTZ70904	0.0	3.86	SLD72947	SLD72947	1.0	1.71
HTZ66217	HTZ66217	0.0	12.99	HTZ66255	HTZ66255	0.5	18.98	HTZ70906	HTZ70906	1.0	1.04	SLD72951	SLD72951	1.0	1.71
HTZ66219	HTZ66219	0.0	11.42	HTZ66256	HTZ66256	0.5	1.12	PSC00176	PSC00176	0.0	1.34				
HTZ66220	HTZ66220	0.5	4.11	HTZ66259	HTZ66259	0.0	5.47	PSC00177	PSC00177	0.0	1.31				
HTZ66221	HTZ66221	1.0	1.69	HTZ66260	HTZ66260	0.5	7.34	PSC00205	PSC00205	0.0	1.22				



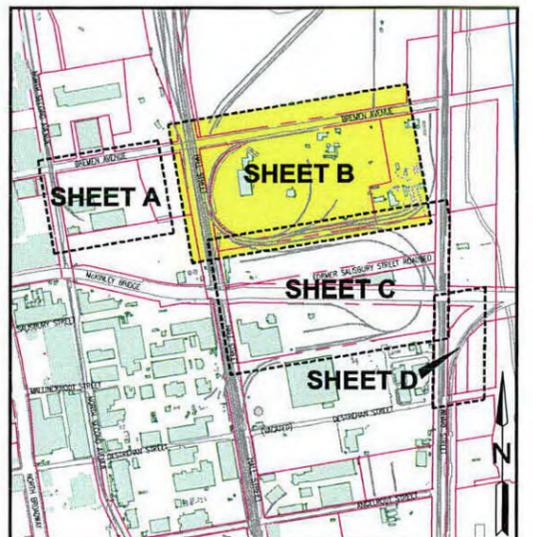
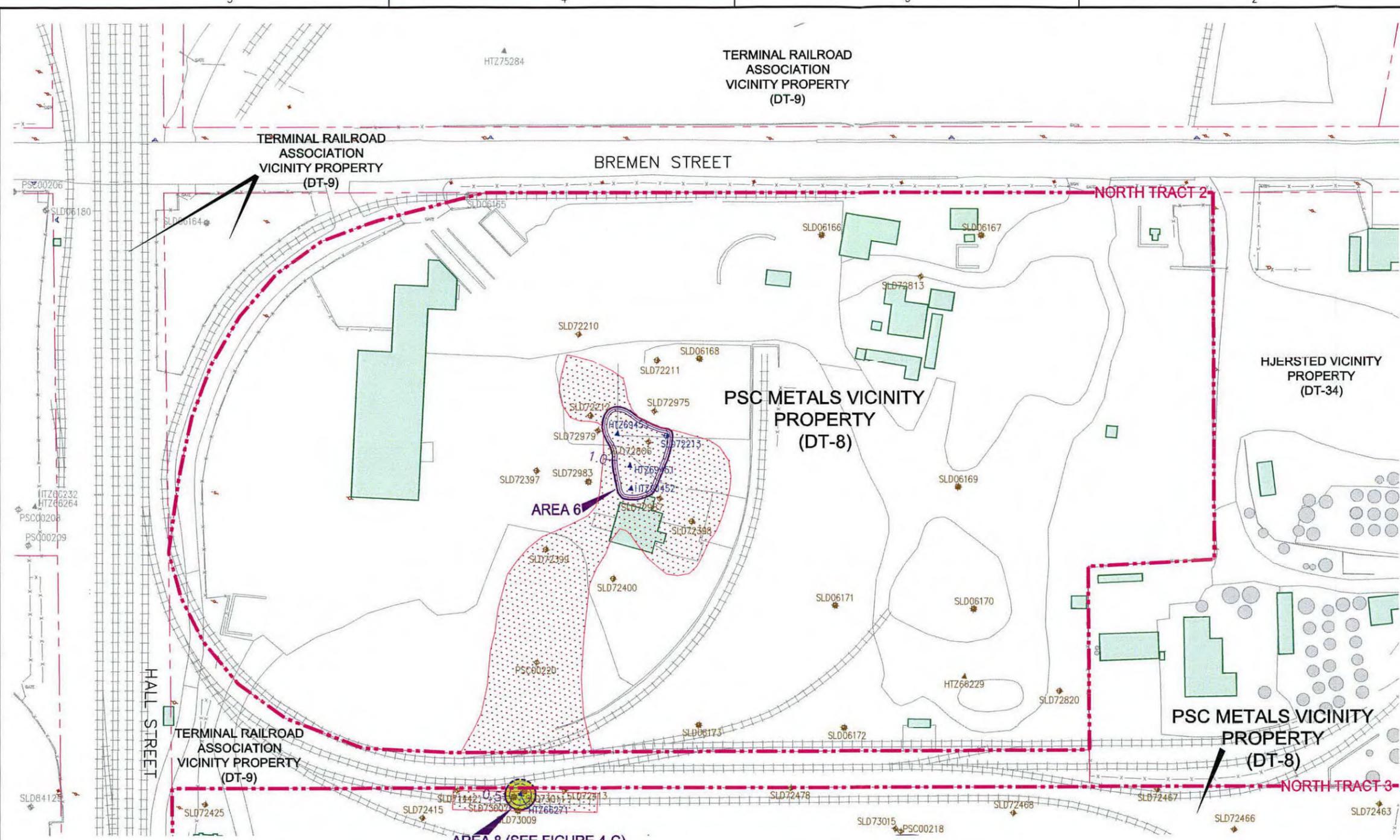
Symbol	Revisions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB

**Shaw**  
Shaw Environmental, Inc.

**FUSRAP**  
U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT (CENWK)  
ST. LOUIS DISTRICT (CEMVS)

Designed by: B. Eberlin	<b>ESTIMATED EXTENT OF CONTAMINATION MAP</b>		
Drawn by: M. Peake	PSC METALS VICINITY PROPERTY (NORTH TRACT 1) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.:	Spec No.:
Approved by: B. Fox	Date: 8/10/06	4-A	Contract No. DACW41-98-D-9006
	Drawing File: 845843-B104.dwg		

845843-B104  
Office Drawing File:  
STL



KEY PLAN

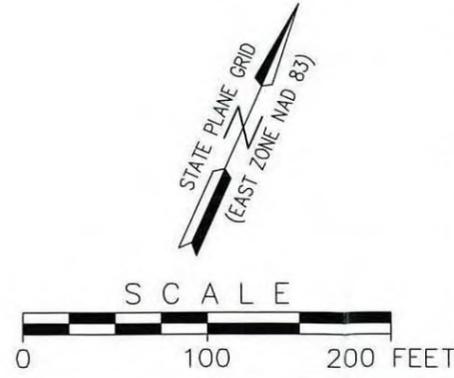
LEGEND:

- SLDXXXXX, HTZXXXXX = SAMPLE LOCATIONS WITH SOR VALUES  $\geq 1.0$
- SLDXXXXX, HTZXXXXX = SAMPLE LOCATIONS WITH SOR VALUES  $< 1.0$
- SLDXXXXX, HTZXXXXX = SAMPLE LOCATIONS (OUTSIDE OF SUBJECT PROPERTY)
- 0.5 — ESTIMATED MAXIMUM RADIOLOGICAL CONTAMINATION DEPTH CONTOUR (FT BGS)
- 1.0 --- ESTIMATED CONTOUR OUTSIDE PSC METALS BOUNDARY (FT BGS)
- AREA IDENTIFIED FOR ADDITIONAL SAMPLING IN ACCORDANCE WITH THE FSSP (TYPICAL)
- ▨ AREA OF HISTORICAL/GEOLOGICAL INTEREST (TYPICAL)
- ▩ AREA PREVIOUSLY REMEDIATED (TYPICAL)

GENERAL NOTE:

SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).

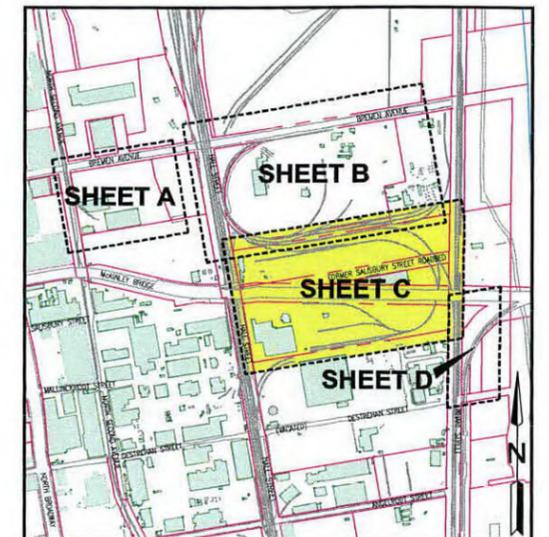
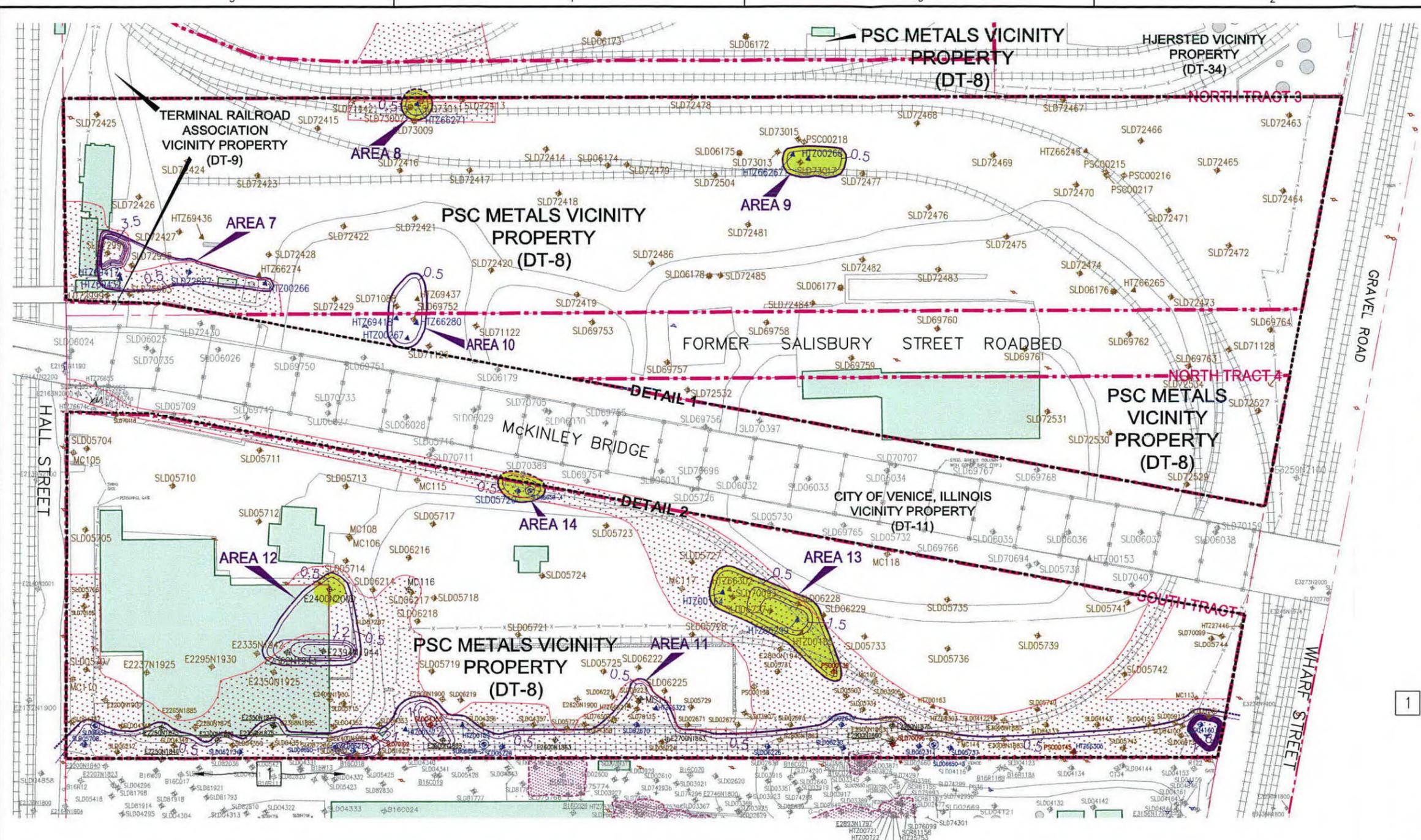
Sample Loc.	Sample ID	Starting Depth (ft bgs)	SOR <sub>net</sub>
HTZ69451	HTZ69451	0.0	11.06
HTZ69452	HTZ69452	0.0	12.03
HTZ69453	HTZ69453	0.0	8.24
SLD72213	SLD72213	0.0	1.08



Symbol	Revisions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB

**Shaw** Environmental, Inc. **FUSRAP**  
U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT (GENWK)  
ST. LOUIS DISTRICT (CEMVS)

Designed by: B. Eberlin	<b>ESTIMATED EXTENT OF CONTAMINATION MAP</b>		
Drawn by: M. Peake	PSC METALS VICINITY PROPERTY (NORTH TRACT 2) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.:	Spec No.:
Approved by: B. Fox	Date: 8/10/06	4-B	Contract No. DACW41-98-D-9006
	Drawing File: 845843-B104.dwg		



- LEGEND:**
- SLDxxxxxx = SAMPLE LOCATIONS WITH SOR VALUES ≥ 1.0
  - HTZxxxxxx = SAMPLE LOCATIONS WITH SOR VALUES < 1.0
  - SLDxxxxxx = SAMPLE LOCATIONS WITH SOR VALUES < 1.0
  - HTZxxxxxx = SAMPLE LOCATIONS WITH SOR VALUES < 1.0
  - SLDxxxxxx = SAMPLE LOCATIONS OUTSIDE OF SUBJECT PROPERTY
  - HTZxxxxxx = SAMPLE LOCATIONS OUTSIDE OF SUBJECT PROPERTY
  - 0.5 — ESTIMATED MAXIMUM RADIOLOGICAL CONTAMINATION DEPTH CONTOUR (FT BGS)
  - 1.0 --- ESTIMATED CONTOUR OUTSIDE PSC METALS BOUNDARY (FT BGS)
  - AREA IDENTIFIED FOR ADDITIONAL SAMPLING IN ACCORDANCE WITH THE FSSP (TYPICAL)
  - AREA OF HISTORICAL/GEOLOGICAL INTEREST (TYPICAL)
  - AREA PREVIOUSLY REMEDIATED (TYPICAL)

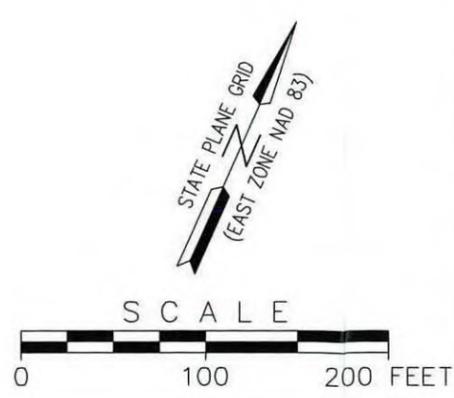
**KEYED NOTE:**

1 RADIOLOGICAL CONTAMINATION WAS IDENTIFIED DURING THE 2005 PLANT 6 WEST HALF EXCAVATION AT DEPTHS DEEPER THAN DEPICTED ON THIS FIGURE. THIS WILL BE ADDRESSED IN THE DT-8 RAWD.

**GENERAL NOTE:**

SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).

Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>	Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>	Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>	Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>
E2250N1846	N/A	N/A	18.56	HTZ00159	HTZ00159	0.0	1.11	SLD06220	SLD06220	0.0	1.44	SLD06226	SLD06226	0.0	1.72
E2250N1875	N/A	N/A	1.46	HTZ00160	HTZ00160	1.0	1.81	MC111	N/A	N/A	1.85	SLD06230	SLD06230	0.0	1.01
E2300N1863	N/A	N/A	1.95	HTZ00164	HTZ00164	0.0	1.05	SLD06231	SLD06231	0.0	1.18	SLD70096	SLD70096	0.0	1.55
E2350N1875	N/A	N/A	1.25	HTZ00266	HTZ00266	0.0	2.50	SLD06231	SLD06231	0.0	1.02	SLD70102	SLD70103	0.5	1.03
E2350N1876	N/A	N/A	3.71	HTZ00267	HTZ00267	0.0	1.62	SLD06231	SLD06231	0.0	1.02	SLD72827	SLD72827	0.0	1.17
E2362N1943	N/A	N/A	1.27	HTZ00268	HTZ00268	0.0	1.88	SLD06226	SLD06226	0.0	1.26				
E2394N1944	N/A	N/A	5.06	HTZ66267	HTZ66267	0.0	1.13	SLD02674	SLD02674	0.0	2.00				
				HTZ66271	HTZ66271	0.0	1.15	SLD04160	SLD04160	0.3	1.69				
E2400N2000	N/A	N/A	2.22	HTZ66280	HTZ66280	0.0	1.11	SLD04355	SLD04355	1.6	3.81				
E2500N1863	N/A	N/A	6.36	HTZ66299	HTZ66300	0.5	4.09	SLD05708	SLD05708	0.0	1.35				
E2600N1863	N/A	N/A	4.41	HTZ66305	HTZ66305	0.0	2.36	SLD05720	SLD05720	0.0	1.24				
E2700N1863	N/A	N/A	1.18	HTZ66322	HTZ66322	0.0	3.78	SLD05737	SLD05737	0.0	1.21				
E2900N1860	N/A	N/A	1.65	HTZ66323	HTZ66323	0.5	1.63	SLD06213	SLD06213	0.0	1.82				
E2900N1875	N/A	N/A	1.97	HTZ69417	HTZ69417	0.0	99.77	SLD06215	SLD06215	0.0	1.28				
HTZ00157	HTZ00157	0.0	3.53	HTZ69418	HTZ69418	0.0	793.48	SLD06240	SLD06240	1.5	1.08				



Symbol	Descriptions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB

**Shaw Environmental, Inc.**

**FUSRAP**  
U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT (CENWK)  
ST. LOUIS DISTRICT (CEMVS)

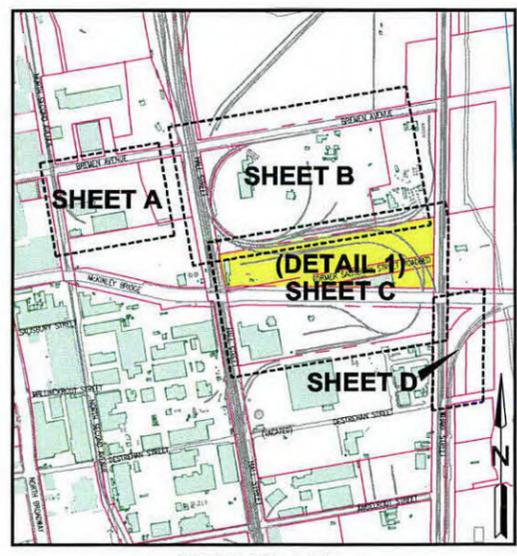
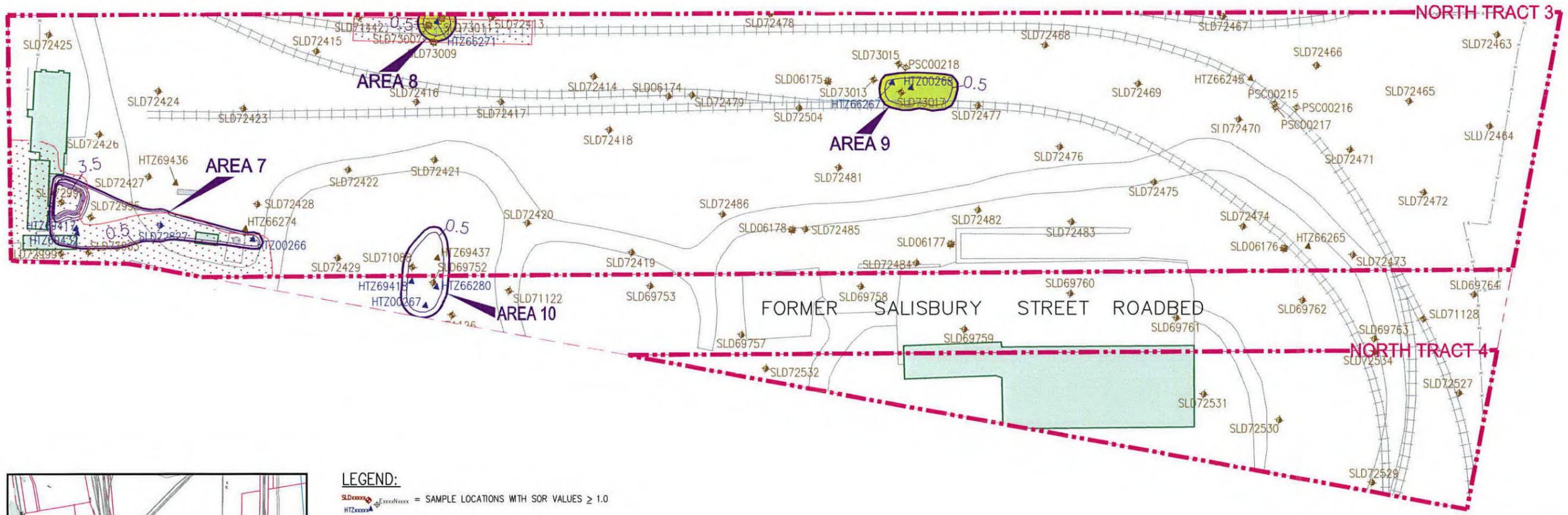
Designed by: B. Eberlin  
Drawn by: M. Peake  
Checked by: K. Beach  
Approved by: B. Fox

**ESTIMATED EXTENT OF CONTAMINATION MAP**  
PSC METALS VICINITY PROPERTY (N. TRACT 3&4, S. TRACT)  
ST. LOUIS DOWNTOWN SITE  
ST. LOUIS, MISSOURI

Scale: AS SHOWN  
Date: 8/10/06  
Drawing File: 845843-B104.dwg

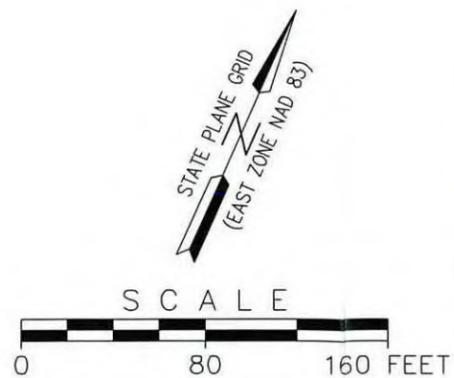
Figure - Sheet No.: 4-C  
Spec No.:  
Contract No.: DACW41-98-D-9006

Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>
HTZ00266	HTZ00266	0.0	2.50
HTZ00267	HTZ00267	0.0	1.62
HTZ00268	HTZ00268	0.0	1.88
HTZ66267	HTZ66267	0.0	1.13
HTZ66271	HTZ66271	0.0	1.15
HTZ66280	HTZ66280	0.0	1.11
HTZ69417	HTZ69417	0.0	99.77
HTZ69418	HTZ69418	0.0	793.48
HTZ69432	HTZ69432	0.0	115.75
SLD72827	SLD72827	0.0	1.17



- LEGEND:**
- SLDxxxxx, HTZxxxxx (with SOR ≥ 1.0) = SAMPLE LOCATIONS WITH SOR VALUES ≥ 1.0
  - SLDxxxxx, HTZxxxxx (with SOR < 1.0) = SAMPLE LOCATIONS WITH SOR VALUES < 1.0
  - HORIZONTAL LIMITS OF ESTIMATED DEPTH CONTOUR (FT BGS)
  - 0.5 — ESTIMATED MAXIMUM RADIOLOGICAL CONTAMINATION DEPTH CONTOUR (FT BGS)
  - 1.0 --- ESTIMATED CONTOUR OUTSIDE PSC METALS BOUNDARY (FT BGS)
  - AREA IDENTIFIED FOR ADDITIONAL SAMPLING IN ACCORDANCE WITH THE FSSP (TYPICAL)
  - ▨ AREA OF HISTORICAL/GEOLOGICAL INTEREST (TYPICAL)
  - ▩ AREA PREVIOUSLY REMEDIATED (TYPICAL)

**GENERAL NOTE:**  
SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).



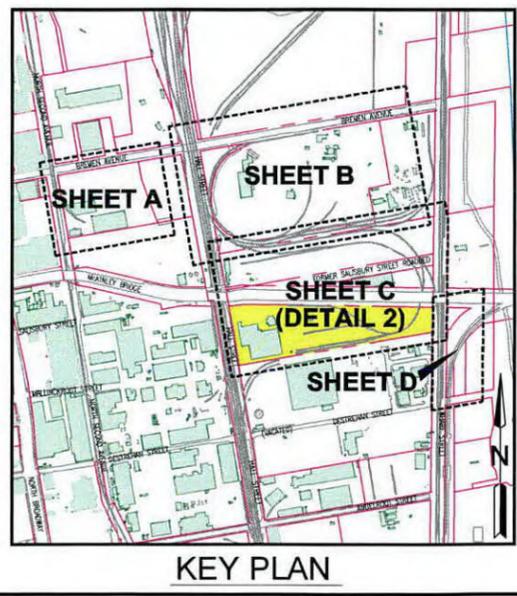
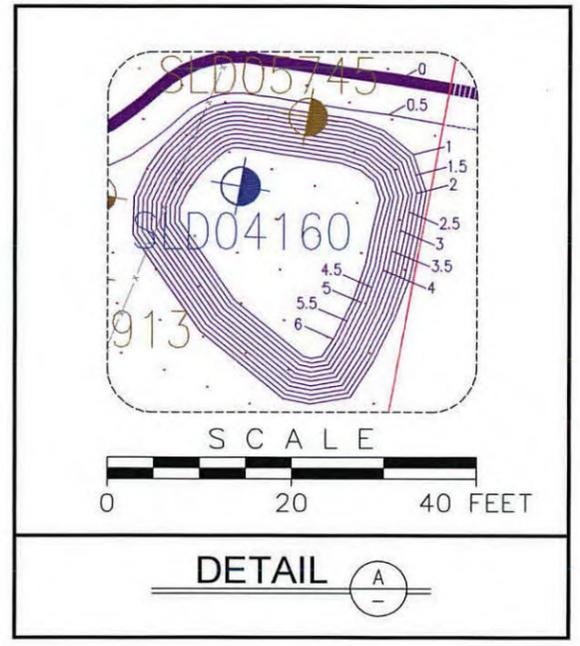
Symbol	Descriptions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB

Shaw Environmental, Inc.

U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT (CENWK)  
ST. LOUIS DISTRICT (CEMVS)

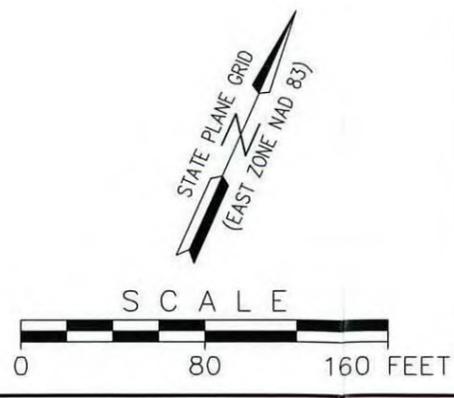
Designed by: B. Eberlin	<b>ESTIMATED EXTENT OF CONTAMINATION MAP</b> PSC METALS VICINITY PROPERTY (NORTH TRACT 3&4) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Drawn by: M. Peake			
Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.: 4-C	Spec No.: DETAIL 1
Approved by: B. Fox	Date: 8/10/06	Drawing File: 845843-B104.dwg	Contract No.: DACW41-98-D-9006

Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>	Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>	Sample Loc.	Sample ID	Starting Depth (ft. bgs)	SOR <sub>net</sub>
E2250N1846	N/A	N/A	18.56	HTZ00159	HTZ00159	0.0	1.11	SLD05708	SLD05708	0.0	1.35
E2250N1875	N/A	N/A	1.46	HTZ00160	HTZ00160	1.0	1.81	SLD05720	SLD05720	0.0	1.24
E2300N1863	N/A	N/A	1.95	HTZ00164	HTZ00164	0.0	1.05	SLD05737	SLD05737	0.0	1.21
E2350N1875	N/A	N/A	1.25	HTZ66299	HTZ66300	0.5	4.09	SLD06213	SLD06213	0.0	1.82
E2350N1876	N/A	N/A	3.71	HTZ66305	HTZ66305	0.0	2.36	SLD06215	SLD06215	0.0	1.28
E2362N1943	N/A	N/A	1.27	HTZ66322	HTZ66322	0.0	3.78	SLD06220	SLD06220	0.0	1.44
E2394N1944	N/A	N/A	5.06	HTZ66323	HTZ66323	0.5	1.63	SLD06226	SLD06226	0.0	1.72
				MC111	N/A	N/A	1.85	SLD06230	SLD06230	0.0	1.01
E2400N2000	N/A	N/A	2.22	MC116	N/A	0.0	1.31	SLD06231	SLD06231	0.0	1.02
E2500N1863	N/A	N/A	6.36	PSC00139	PSC00139	0.0	1.18	SLD70096	SLD70096	0.0	1.55
E2600N1863	N/A	N/A	4.41	PSC00145	PSC00145	0.0	2.18	SLD70102	SLD70103	0.5	1.03
E2700N1863	N/A	N/A	1.18	SLD02670	SLD02670	0.0	1.26				
E2900N1860	N/A	N/A	1.65	SLD02674	SLD02674	0.0	2.00				
E2900N1875	N/A	N/A	1.97	SLD04160	SLD04160	0.3	1.69				
HTZ00157	HTZ00157	0.0	3.53	SLD04355	SLD04355	1.6	3.81				



- LEGEND:**
- SLDxxxxx = SAMPLE LOCATIONS WITH SOR VALUES ≥ 1.0
  - HTZxxxxx = SAMPLE LOCATIONS WITH SOR VALUES < 1.0
  - 0.5 — ESTIMATED MAXIMUM RADIOLOGICAL CONTAMINATION DEPTH CONTOUR (FT BGS)
  - 1.0 --- ESTIMATED CONTOUR OUTSIDE PSC METALS BOUNDARY (FT BGS)
  - AREA IDENTIFIED FOR ADDITIONAL SAMPLING IN ACCORDANCE WITH THE FSSP (TYPICAL)
  - ▨ AREA OF HISTORICAL/GEOLOGICAL INTEREST (TYPICAL)
  - ▩ AREA PREVIOUSLY REMEDIATED (TYPICAL)

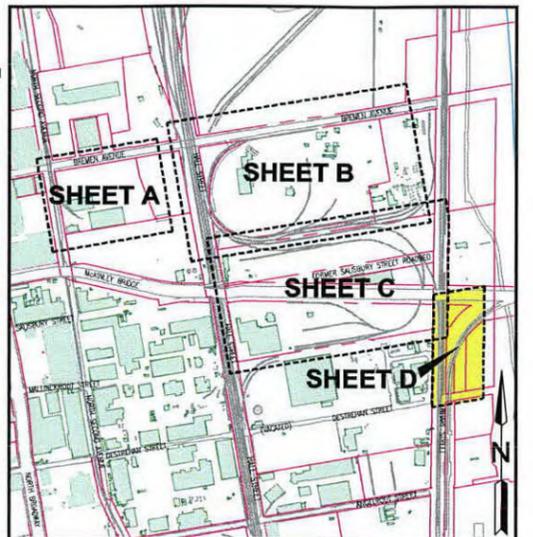
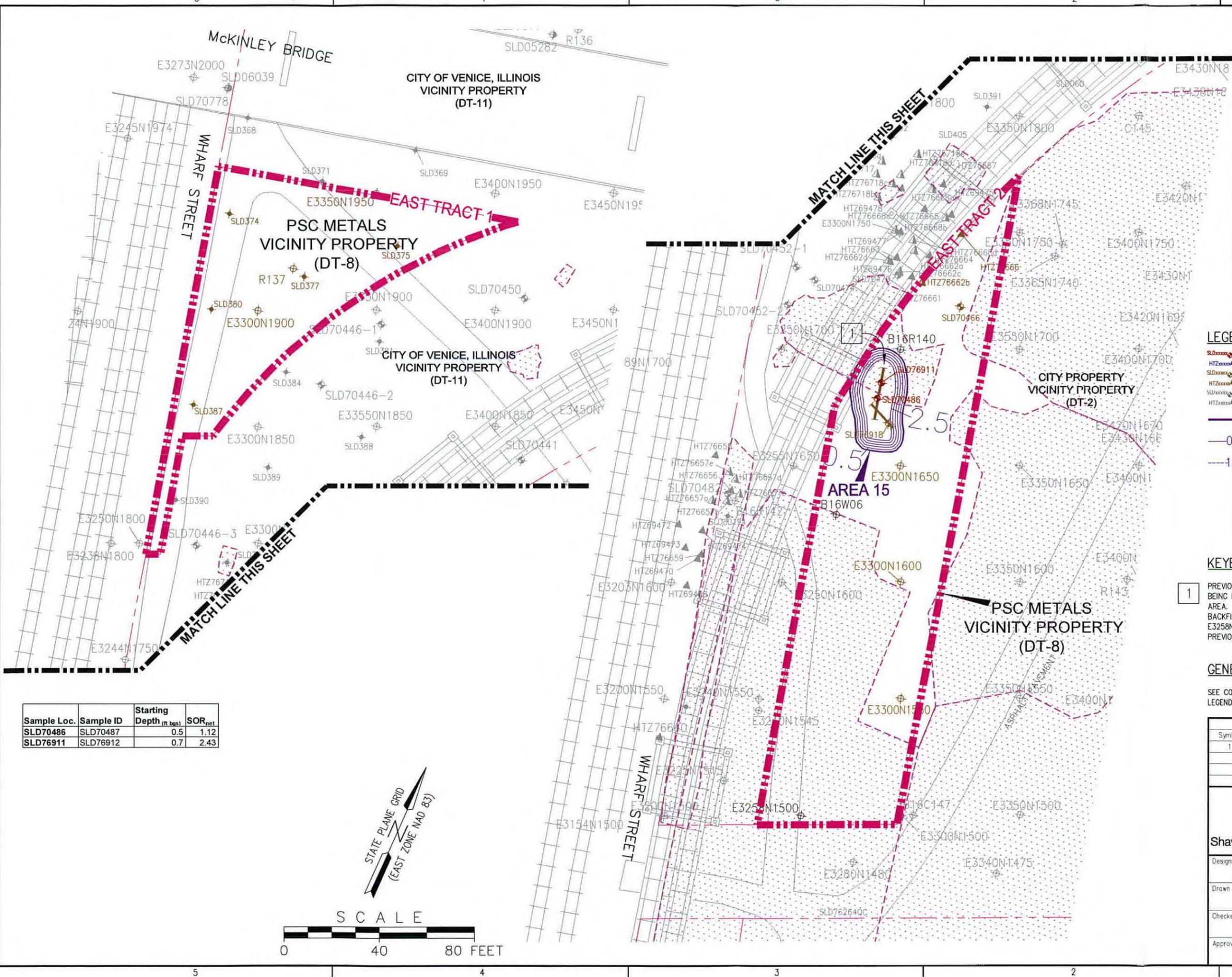
**GENERAL NOTE:**  
SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).



Revisions			
Symbol	Descriptions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB

		U.S. ARMY CORPS OF ENGINEERS KANSAS CITY DISTRICT (CENWK) ST. LOUIS DISTRICT (CEMVS)	
		Designed by: B. Eberlin	<b>ESTIMATED EXTENT OF CONTAMINATION MAP</b> PSC METALS VICINITY PROPERTY (SOUTH TRACT) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI
Drawn by: M. Peake	Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.: DETAIL 2
Approved by: B. Fox	Date: 8/10/06	Drawing File: 845843-B104.dwg	Spec No. Contract No. 4-C DACW41-98-D-9006



KEY PLAN

LEGEND:

- SLDxxxxx = SAMPLE LOCATIONS WITH SOR VALUES ≥ 1.0
- HTZxxxxx = SAMPLE LOCATIONS WITH SOR VALUES < 1.0
- SLDxxxxx = SAMPLE LOCATIONS (OUTSIDE OF SUBJECT PROPERTY)
- HTZxxxxx = SAMPLE LOCATIONS (OUTSIDE OF SUBJECT PROPERTY)
- 0.5 — HORIZONTAL LIMITS OF ESTIMATED DEPTH CONTOUR (FT BGS)
- 1.0 — ESTIMATED MAXIMUM RADIOLOGICAL CONTAMINATION DEPTH CONTOUR (FT BGS)
- 2.5 — ESTIMATED CONTOUR OUTSIDE PSC METALS BOUNDARY (FT BGS)
- AREA IDENTIFIED FOR ADDITIONAL SAMPLING IN ACCORDANCE WITH THE FSSP (TYPICAL)
- AREA OF HISTORICAL/GEOLOGICAL INTEREST (TYPICAL)
- AREA PREVIOUSLY REMEDIATED (TYPICAL)

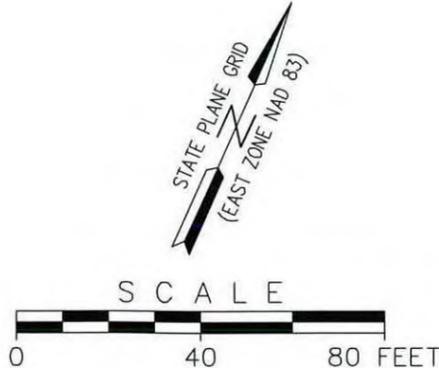
KEYED NOTE:

1 PREVIOUS REMEDIATION OF THIS AREA RESULTED IN CLEAN BACKFILL BEING PLACED OVER AND AROUND THE NORTHERN PORTION OF THE AREA. CONTAMINATION IS ESTIMATED TO EXIST BELOW THE CLEAN BACKFILL. HISTORICAL SAMPLE LOCATIONS B16R140, B16W06 AND E3258N1500 HAD AN SOR NET VALUE ≥ 1.0, BUT HAVE BEEN PREVIOUSLY REMEDIATED.

GENERAL NOTE:

SEE COVER SHEET (FIGURE 1) FOR GENERAL AND EXISTING UTILITY LEGEND AND ABBREVIATIONS (TYPICAL ALL FIGURES).

Sample Loc.	Sample ID	Starting Depth (ft bgs)	SOR <sub>net</sub>
SLD70486	SLD70487	0.5	1.12
SLD76911	SLD76912	0.7	2.43



Symbol	Descriptions	Date	Approved
1	ISSUED FOR REV 1 PDIR	8/10/06	KB

Shaw Environmental, Inc.

U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT (CENWK)  
ST. LOUIS DISTRICT (CEMVS)

Designed by: B. Eberlin	<b>ESTIMATED EXTENT OF CONTAMINATION MAP</b>		
Drawn by: M. Peake	PSC METALS VICINITY PROPERTY (EAST TRACT 1&2) ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Checked by: K. Beach	Scale: AS SHOWN	Figure - Sheet No.:	Spec No.:
Approved by: B. Fox	Date: 8/10/06	Drawing File: 845843-B104.dwg	Contract No. DACW41-98-D-9006

***Appendix A***

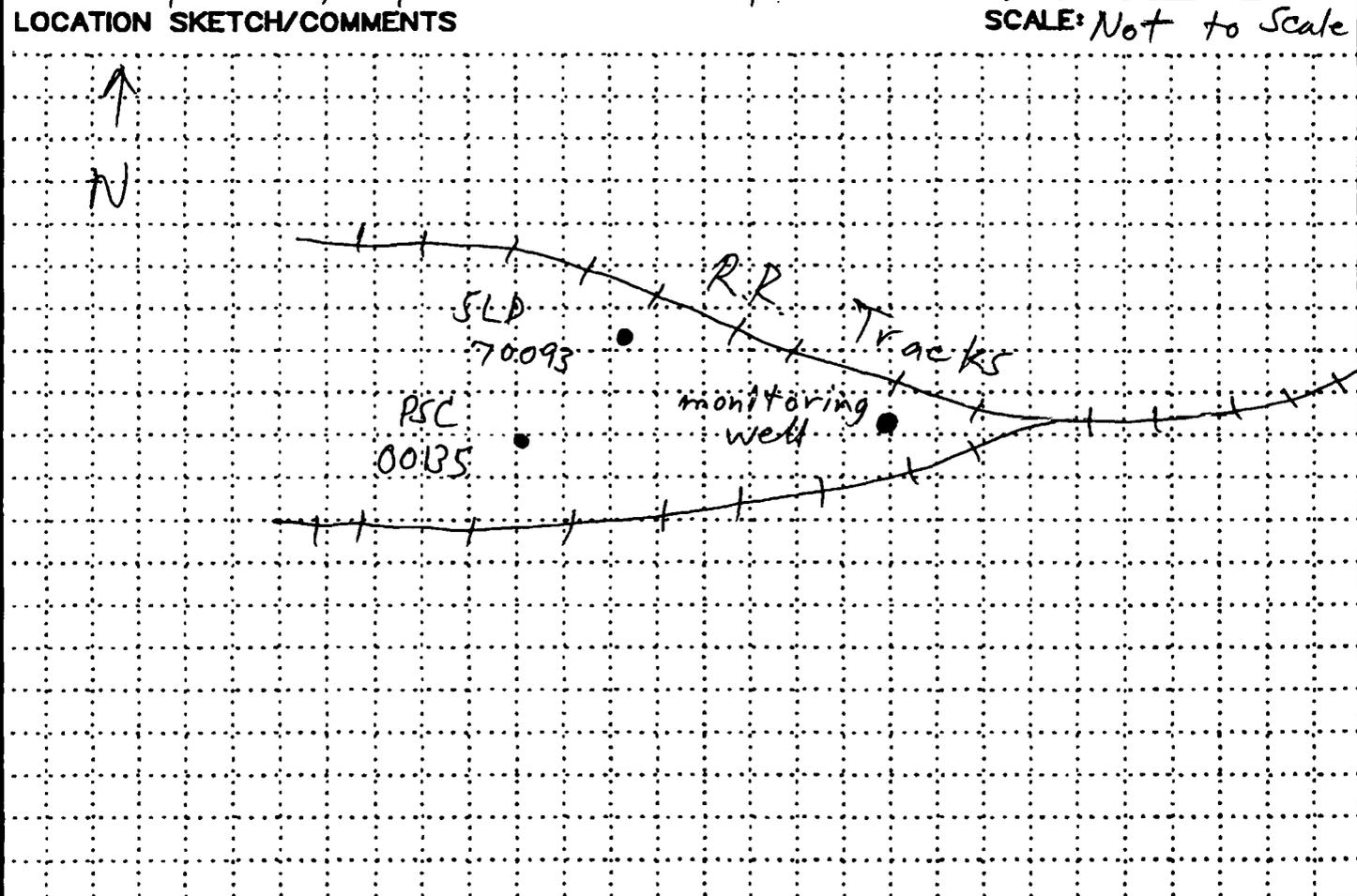
DT-8 Boring Logs

### Appendix A – DT-8 Boring Logs

PSC00135	SLD5718	SLD6181	SLD72152	SLD72428	SLD72943
PSC00138	SLD5719	SLD6182	SLD72153	SLD72428B	SLD72947QC
PSC00139	SLD5720	SLD6212	SLD72154	SLD72429	SLD72947QC(b)
PSC00142	SLD5721	SLD6213	SLD72154B	SLD72430	SLD72951
PSC00145	SLD5722	SLD6215	SLD72155	SLD72463QC	SLD72955
PSC00148	SLD5723	SLD6216	SLD72156	SLD72464	SLD72959
SLD2670	SLD5724	SLD6217	SLD72157	SLD72465	SLD72963
SLD2671	SLD5725	SLD6218	SLD72159	SLD72465B	SLD72967QC
SLD2672	SLD5726	SLD6219	SLD72160	SLD72466	SLD72971
SLD2673	SLD5727	SLD6220	SLD72160B	SLD72467QC	SLD72975
SLD2674	SLD5728	SLD6221	SLD72161	SLD72468	SLD72979
SLD2675	SLD5729	SLD6222	SLD72162	SLD72469	SLD72983
SLD3903	SLD5730	SLD6223	SLD72163	SLD72470	SLD72987QC
SLD3905	SLD5731	SLD6224	SLD72164	SLD72471	SLD72987QC(b)
SLD3907	SLD5732	SLD6225	SLD72165QC(a)	SLD72472	SLD72991
SLD4122	SLD5733	SLD6226	SLD72165QC(b)	SLD72473	SLD72995
SLD4133	SLD5734	SLD6227	SLD72210	SLD72474	SLD72999
SLD4143	SLD5735	SLD6228	SLD72210B	SLD72475	SLD73003
SLD4152	SLD5736	SLD6229	SLD72211	SLD72476	SLD73007QC
SLD4160	SLD5737	SLD6230	SLD72211B	SLD72477	SLD73007QC(b)
SLD4347	SLD5738	SLD6231	SLD72212	SLD72478	SLD73009
SLD4348	SLD5739	SLD70093	SLD72213	SLD72479	SLD73011
SLD4349	SLD5740	SLD70096	SLD72397	SLD72481	SLD73013
SLD4350	SLD5741	SLD70099	SLD72398	SLD72482QC	SLD73015
SLD4351	SLD5742	SLD70102	SLD72400	SLD72483	SLD73017
SLD4352	SLD5743	SLD70105	SLD72400B	SLD72484	SLD75708
SLD4353	SLD5744	SLD70115	SLD72413	SLD72484B	SLD75712
SLD4355	SLD5745	SLD70118	SLD72414	SLD72485	SLD75716
SLD4356	SLD6164	SLD70466	SLD72415	SLD72486	SLD75720
SLD4357	SLD6165	SLD70486	SLD72416	SLD72504QC	SLD75723
SLD4358	SLD6166	SLD71088	SLD72417	SLD72527	SLD75726
SLD5704	SLD6167	SLD72139	SLD72417B	SLD72529QC	SLD75728
SLD5705	SLD6168	SLD72140	SLD72417QC	SLD72530	SLD76911 (test pit)
SLD5706	SLD6169	SLD72141	SLD72418	SLD72530B	SLD76942
SLD5707	SLD6170	SLD72142	SLD72419	SLD72531	SLD76943
SLD5708	SLD6171	SLD72143	SLD72420	SLD72532	SLD87283
SLD5709	SLD6172	SLD72144	SLD72420B	SLD72534	SLD87284
SLD5710	SLD6173	SLD72145	SLD72421	SLD72534B	SLD87285
SLD5711	SLD6174	SLD72146	SLD72422	SLD72792	SLD87286
SLD5712	SLD6175	SLD72147	SLD72423	SLD72792B	SLD87287
SLD5713	SLD6176	SLD72148	SLD72424	SLD72806	SLD87288
SLD5714	SLD6177	SLD72149	SLD72424B	SLD72813	SLD87322
SLD5715	SLD6178	SLD72150	SLD72425	SLD72820	
SLD5716	SLD6179	SLD72150B	SLD72426QC	SLD72827	
SLD5717	SLD6180	SLD72151	SLD72427	SLD72939	

SLD 7116 5/27/02  
 HOLE NUMBER PSC 00135 1/102  
 SHEET 1 OF 2

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		PSC-00135	
1. COMPANY NAME <i>Shaw, E &amp; I</i>		2. DRILLING SUBCONTRACTOR <i>Layne - Western</i>		HOLE NUMBER <i>PSC 00135 1/102</i>	
3. PROJECT <i>FUSRAP / SLDs</i>		4. LOCATION <i>PSC Metals</i>		SHEET <i>1</i> OF <i>2</i> SHEETS	
5. NAME OF DRILLER <i>Charles Riffle</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 75</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>CME 75 using 4 1/4" Hollow Stem Auger and 3 in x 2' split spoon. Nat: uid 75-059</i>		8. HOLE LOCATION		9. SURFACE ELEVATION	
<i>PTD BKG: 6206</i>		10. DATE STARTED <i>5-22-02</i>		11. DATE COMPLETED <i>5-22-02</i>	
12. OVERBURDEN THICKNESS <i>N/A</i>		15. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
13. DEPTH DRILLED INTO ROCK <i>N/A</i>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
14. TOTAL DEPTH OF HOLE <i>4.0' BGS</i>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
18. GEOTECHNICAL SAMPLES		DISTURBED <input type="checkbox"/>		UNDISTURBED <input type="checkbox"/>	
19. TOTAL NUMBER OF CORE BOXES <input type="checkbox"/>		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY <input type="checkbox"/> %	
VOC <input type="checkbox"/>		METALS <input type="checkbox"/>		OTHER (SPECIFY) <i>KAP</i>	
22. DISPOSITION OF HOLE		BACKFILLED <input type="checkbox"/>		MONITORING WELL <input type="checkbox"/>	
<i>yes</i>		OTHER (SPECIFY) <input type="checkbox"/>		23. SIGNATURE OF INSPECTOR <i>Phillip M. Stollen</i>	



PROJECT <i>FUSRAP / SLDs</i>	HOLE NO. <i>PSC 00135</i>
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Figure 4-2. HTRW Drilling Log

56D 7165 A 7/2/02  
7/1/02

**HTRW DRILLING LOG (CONTINUATION SHEET)**

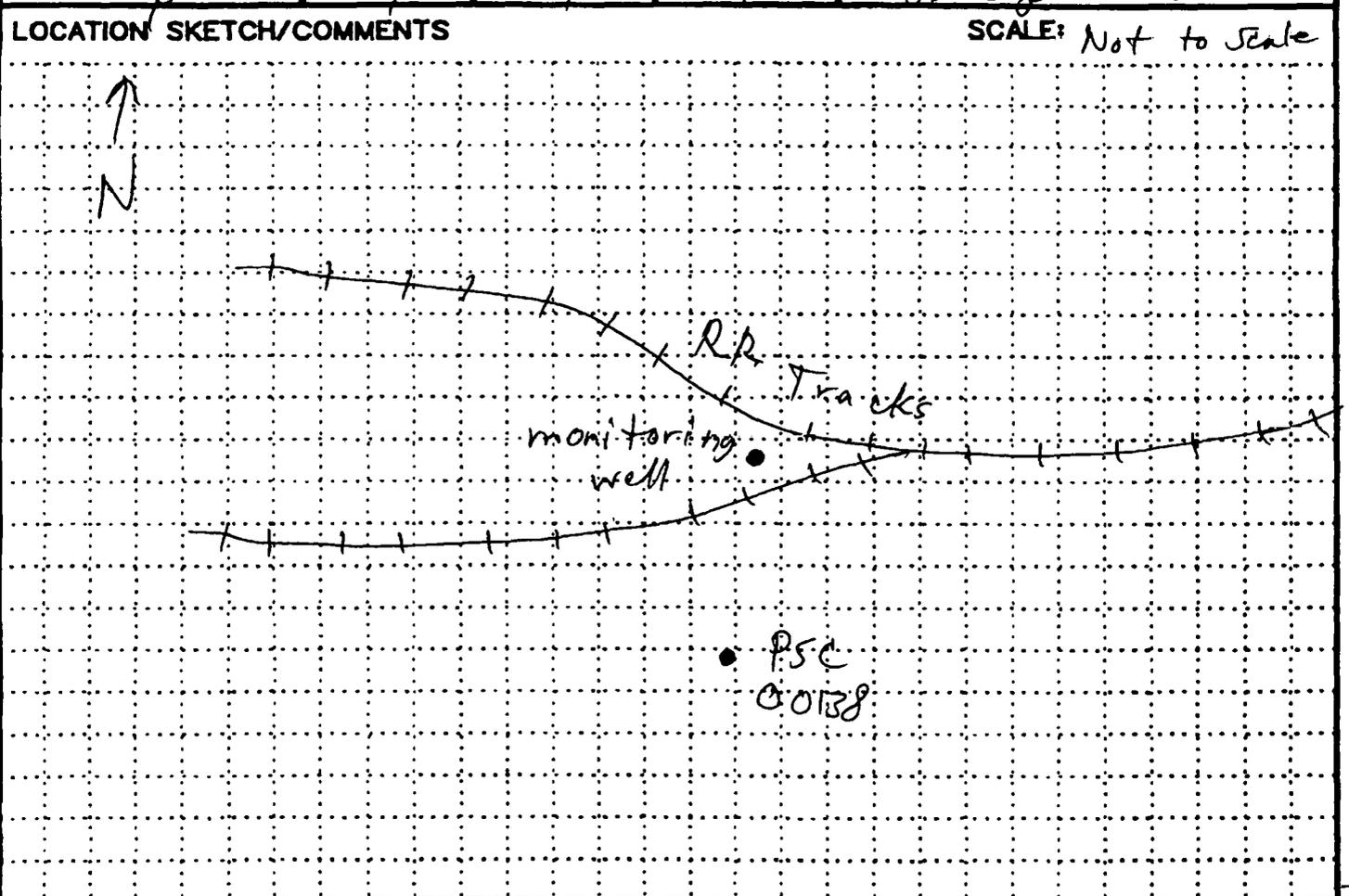
PSC-00135 56D PSC-00135

PROJECT **FUSRAP/SLDS** INSPECTOR **Phillip Statter** SHEET **2** OF **2** SHEETS

CREW (1)	DEPTH (ft)	DESCRIPTION OF MATERIALS (2)	FIELD MOISTURE PERCENT (3)	REMARKS (4)	ANALYTICAL SAMPLE NO. (5)	BLDG COUNT (6)	REMARKS (7)
SP	1	fine sand w/ few silt, med. dense, poorly graded, dry, lt. brn.; few cinders, slag and glass.	7000 0.6	PSC-01137 56D 7165 A 7/2/02	PSC-01137 5-22-02 1045	21	1 min. count 6900
		brick frags.	5700 0.0			91	1 min. count 6,200
SM	2	silty sand (fine), very dense, poorly graded, dk. brn. to blk.; dry, some cinders, trace metal frags.	5500 -0.0	2.0	PSC 00136 1050	78	1 min. count 6,000
			6200 0.0			41	1 min. count 6,600
		brick frags.	5800 0.0			26	1 min. count 6,700
CL	3	silty clay, very stiff, med. plast.; med. to lt. brn.; moist, trace med. gravel, trace cinders.	6200 0.0	2.0 / 2.0		18	1 min. count 6,500
			5700 0.0			20	1 min. count 6,600
			5600 0.0			15	1 min. count 6,500
	4	TD: 4.0' BGS 5-22-02 1100					Background: NaI: 6,200 PID: 0.0  Soil cuttings in Drum #1.  Backfilled boring w/ 1/2 bags of Bent chips. <del>Covered</del> Native soil covered last 6" of boring. Covered last 6" of boring w/ native soil.  No augers used on boring. 2' split spoons were driven to 4.0' BGS. Boring was measured to ensure accuracy.

SLD 71166A

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		PSC-00138		HOLE NUMBER: <u>7/11/02</u> PSC-00138	
1. COMPANY NAME <u>Shaw, E &amp; I</u>		2. DRILLING SUBCONTRACTOR <u>Layne - Western</u>		SHEET <u>1</u> OF <u>2</u>		SHEETS	
3. PROJECT <u>FUSRAP/SLDS</u>			4. LOCATION <u>PSC Metals</u>				
5. NAME OF DRILLER <u>Charles Riffle</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 75</u>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>3 in. X 3' split casing</u> <u>3 in. X 3' split casing</u> <u>Nat. LUD 172059</u> <u>cal. log date = 12-13-02</u> <u>PTD</u> <u>RKG = 6.200</u>		CME 75 using 4 1/2" Hollow Stem Augers and		8. HOLE LOCATION <u>PSC Metals</u>		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS <u>N/A</u>		13. DEPTH DRILLED INTO ROCK <u>N/A</u>		10. DATE STARTED <u>5-22-02</u>		11. DATE COMPLETED <u>5-22-02</u>	
14. TOTAL DEPTH OF HOLE <u>0.5' BGS</u>		15. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>	
18. GEOTECHNICAL SAMPLES		DISTURBED <input checked="" type="checkbox"/>		UNDISTURBED <input checked="" type="checkbox"/>		19. TOTAL NUMBER OF CORE BRICKS <input checked="" type="checkbox"/>	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC <input checked="" type="checkbox"/>		METALS <input checked="" type="checkbox"/>		OTHER (SPECIFY) <input checked="" type="checkbox"/>	
22. DISPOSITION OF HOLE		BAGGED <input checked="" type="checkbox"/>		MONITORING WELL <input checked="" type="checkbox"/>		OTHER (SPECIFY) <input checked="" type="checkbox"/>	
						23. SIGNATURE OF INSPECTOR <u>D. Kelly M. Stables</u>	



PROJECT <u>FUSRAP / SLDS</u>	HOLE NO. <u>PSC 00138</u>
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Figure 4-2. HTRW Drilling Log

EM 1110-1-4000  
1 Nov 98

SLD 71166

HTRW DRILLING LOG (CONTINUATION SHEET)							NAME NUMBER PSC 00138
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Statter			SHEET 2 OF 3		
CHEN (1)	DEPTH (2)	DESCRIPTION OF MATERIALS (3)	FIELD BORING OR DEPTH (4)	DEPTH TO TOP OF CLOG (5)	ANALYTICAL SAMPLE NO. (6)	ALLOY COUNTY (7)	REMARKS (8)
SM	0.5	silty sand w/ few med gravel, loose, poorly graded, dk. brn, dry	5900 0.0	SLD 71166 PSC-00138 7/1/02	7/1/02 00138 5-22-98 1630	N/A	6700  Drill rig hit refusal 3 separate times. Hand dug 0.5' w/ trowel.

FUSRAP / SLDs

PSC 00138

6-6-02 Start Time 1000 Finished 1315

HTRW DRILLING LOG (CONTINUATION SHEET)							HOLE NUMBER PSC00138
PROJECT FUSRAP/SLDS		INSPECTOR Don V. Jones, Recovery NA			SHEET 1A of 1A		SAMPLES
ELEV. (1)	DEPTH (2)	DESCRIPTION OF MATERIALS (3)	WELL-LOGGING DEPTH (4)	WATER SAMPLE OR OTHER NO. (5)	ANALYTICAL SAMPLE NO. (6)	DEPTH CORRECT (7)	REMARKS (8) In min Count
		See Pg 2 of Drilling Log For		PSC00138			
	0.5						Backhoe 5800
	1.0	Cobbles with sandy silt, brown, dry, base. Cobbles consisted of concrete, slag, limestone, and granite. Few brick and metal.	14,700/0.0 10,500/0.0 2,200/0.0 collected inside hole				5500
	1.5	Metal pieces, throughout. Encountered one large metal piece (3" thick and 3x4")	13,850/0.0 collected inside hole		PSC00151 1100		6400
ML	2.0	Clayey silt, dark brown to black, soft, dry, few woodchips, coal, green speckled material, metal, and ceramic pieces.	12,600/0.0 collected in hole				6540
SP	2.5	Sand, coarse, poorly graded, wet rounded. Few ash, coal, and fine gravel.	26,900/0.0 collected inside hole		PSC00152 1130	7/14/02	Used Hand Auger 7883
GP	3.0	Slag with copper, few coal, trace sand, Black, saturated.	6,900/0.0	See 11/7/02 PSC00152			6982
	3.5	Slag is gravel sized. (Note: small amount of water in hole)	6,700/0.0				6944
	4.0	Clay, brown and gray, med soft to med. stiff, med plasticity. 50% wet TD = 4.0'					

NAT model  
#172040  
cal Date 4/01/03  
Background 8200  
  
Staged excavated  
Soil/debris on  
plastic sheeting  
pending analytical.

# HTRW DRILLING LOG

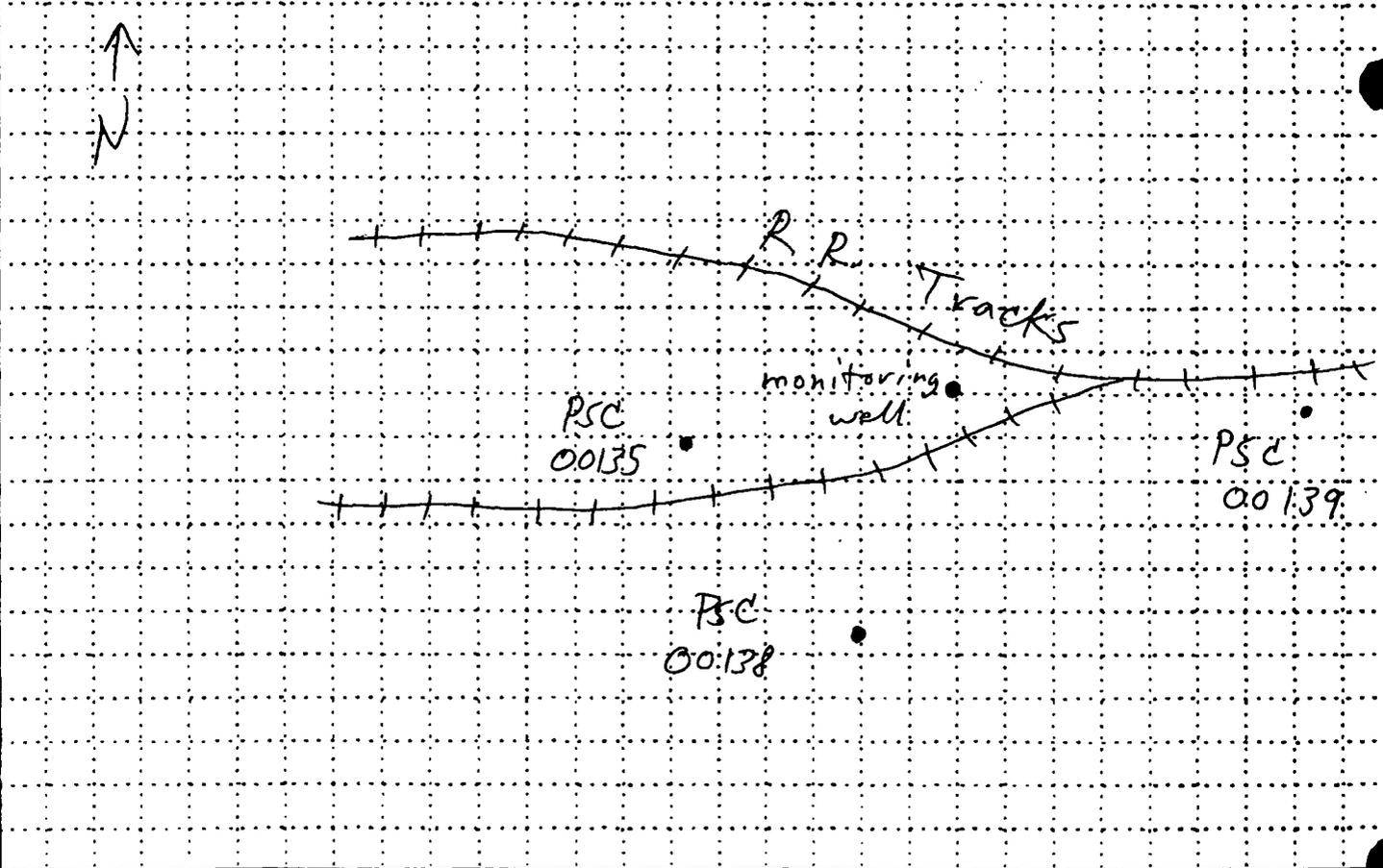
DISTRICT *St. Louis*

HOLE NUMBER: *00139*  
PSC-00139

1. COMPANY NAME <i>Shaw, E &amp; I</i>		2. DRILLING SUBCONTRACTOR <i>Layne - Western</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SLDS</i>			4. LOCATION <i>PSC Metals</i>		
5. NAME OF DRILLER <i>Charles Riffle</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 75</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>CME 75 using 4 1/4" Hollow Stem Augers</i> <i>and 3 in. x 2' split spoon</i> <i>Nat: LUD 172059</i> <i>cal. due date: 7-00-02</i> <i>BKG: 6200 12-13-02</i>		8. HOLE LOCATION		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS <i>N/A</i>		15. DEPTH GROUNDWATER ENCOUNTERED		10. DATE STARTED <i>5-22-02</i>	
13. DEPTH DRILLED INTO ROCK <i>N/A</i>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>		11. DATE COMPLETED <i>5-22-02</i>	
14. TOTAL DEPTH OF HOLE <i>4.0' BGS</i>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES		21. TOTAL CORE RECOVERY %	
20. SAMPLES FOR CHEMICAL ANALYSIS		OTHER (SPECIFY)		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR <i>William M. Stahl</i>	

LOCATION SKETCH/COMMENTS

SCALE: Not to Scale



PROJECT <i>FUSRAP/SLDS</i>	HOLE NO. <i>00139</i> PSC-00138-25
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PSC-00139  
HOLE NUMBER 5015  
PSC 00139  
SHEET 2 of 2

# HTRW DRILLING LOG (CONTINUATION SHEET)

PROJECT **FUSRAP/SLDS** INSPECTOR **Phillip Statler**

DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SOLENOID REPAIRS (ft)	RECOVERY (%)	ANALYTICAL SAMPLE NO.	ALONG COREY	REMARKS
1	silty sand (fine) w/ conchoidal, loose, poorly graded, dk. brn. to blk., dry, few slag.	6900	0.0	PSC 00139 5-22-02 1345 PSC 00140 1355 7/1/02	5	7,100
		6700	0.0		9	7,000
		6400	0.0		8	6,600
		6200	0.0		5	N/A
2	few med. gravel	5900	0.0	PSC 00141 1420	5	6,500
		6300	0.0		10	6,200
3	silty clay (stiff, med. plast.) bt. moist, few med. gravel, few brick frags.	5800	0.0	no recovery	5	7,000
		N/A	N/A		5	N/A

SM

CL

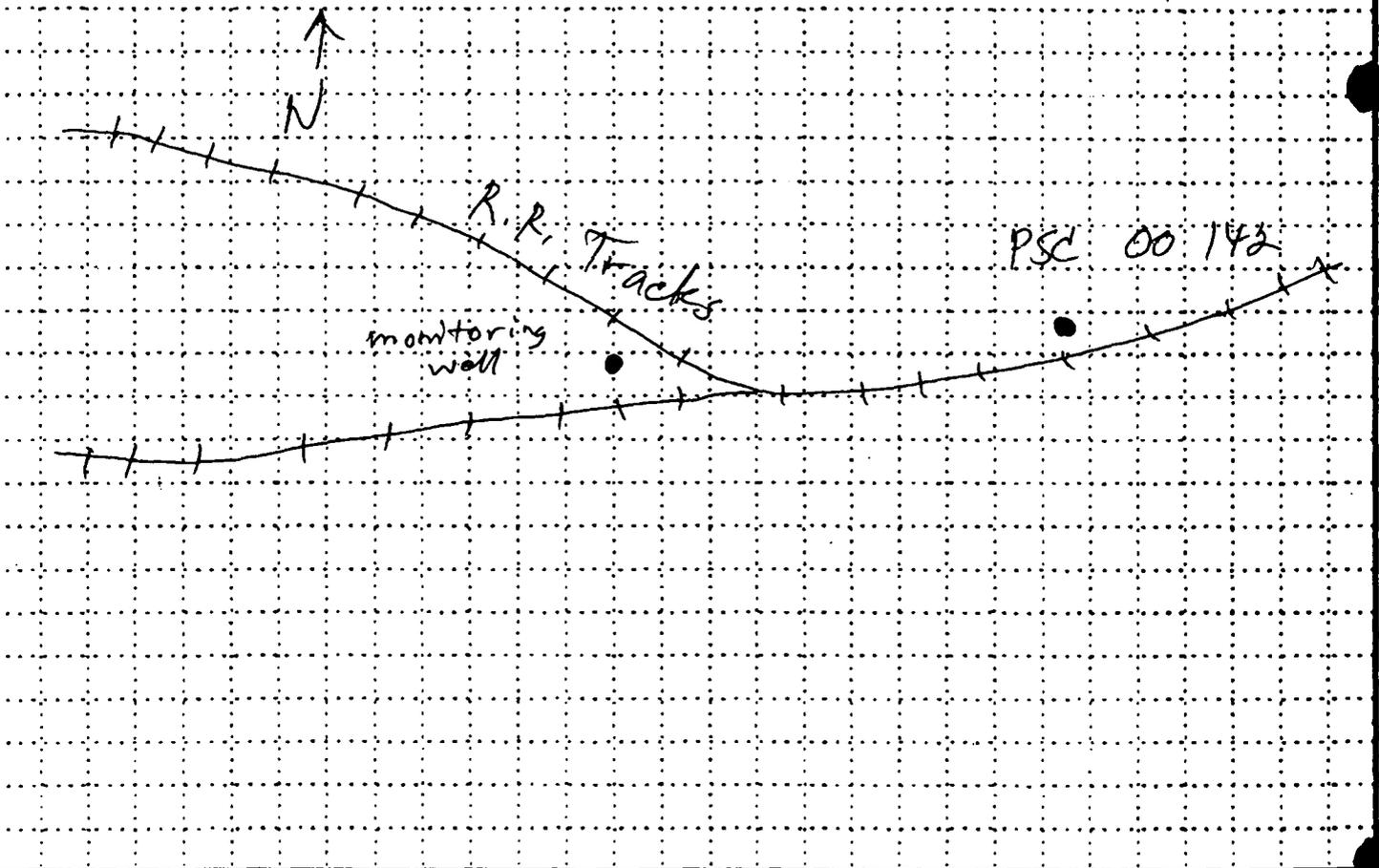
TD: 4.0' BGS  
5-22-02  
1415

Back ground  
Nat: 6,200  
PTD: 0.0  
Back-filled  
boring w/  
1/2 bag bent.  
chips. Capped  
top 6" of  
boring w/  
native soil.  
Soil cuttings  
in Drum #1.

<b>HTRW DRILLING LOG</b>		DISTRICT	St. Louis	HOLE NUMBER	PSC 552 0014
1. COMPANY NAME		2. DRILLING SUBCONTRACTOR		SHEET 1 OF 2 SHEETS	
3. PROJECT		4. LOCATION		5. NAME OF DRILLER	
FUSRAP/SLDS		PSC Metals		Charles Riffle	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		6. MANUFACTURER'S DESIGNATION OF DRILL		8. HOLE LOCATION	
CME 75 using 4 1/2" Hollow Stem Augers and 3in. x 3 Split Spoon Nat: LUD 172059 Cal due date: 4-12-02 PTD RKG: 6200		CME 75			
12. OVERBURDEN THICKNESS		10. DATE STARTED		11. DATE COMPLETED	
N/A		5-22-02		5-22-02	
13. DEPTH DRILLED INTO ROCK		15. DEPTH GROUNDWATER ENCOUNTERED		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
N/A		N/A		N/A	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)		19. TOTAL NUMBER OF CORE BOXES	
4.0' BGS		N/A		0	
18. GEOTECHNICAL SAMPLER		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %	
DISTURBED <input checked="" type="checkbox"/> UNDISTURBED <input checked="" type="checkbox"/>		YOC <input checked="" type="checkbox"/> METALS <input checked="" type="checkbox"/> OTHER (SPECIFY) RAP <input checked="" type="checkbox"/>		0	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR			
BACKFILLED <input checked="" type="checkbox"/> MONITORING WELL <input checked="" type="checkbox"/>		yes <input checked="" type="checkbox"/> <i>D. R. Hatten</i>			

LOCATION SKETCH/COMMENTS

SCALE: Not to Scale



PROJECT	FUSRAP/SLDS	HOLE NO.	PSC 00142
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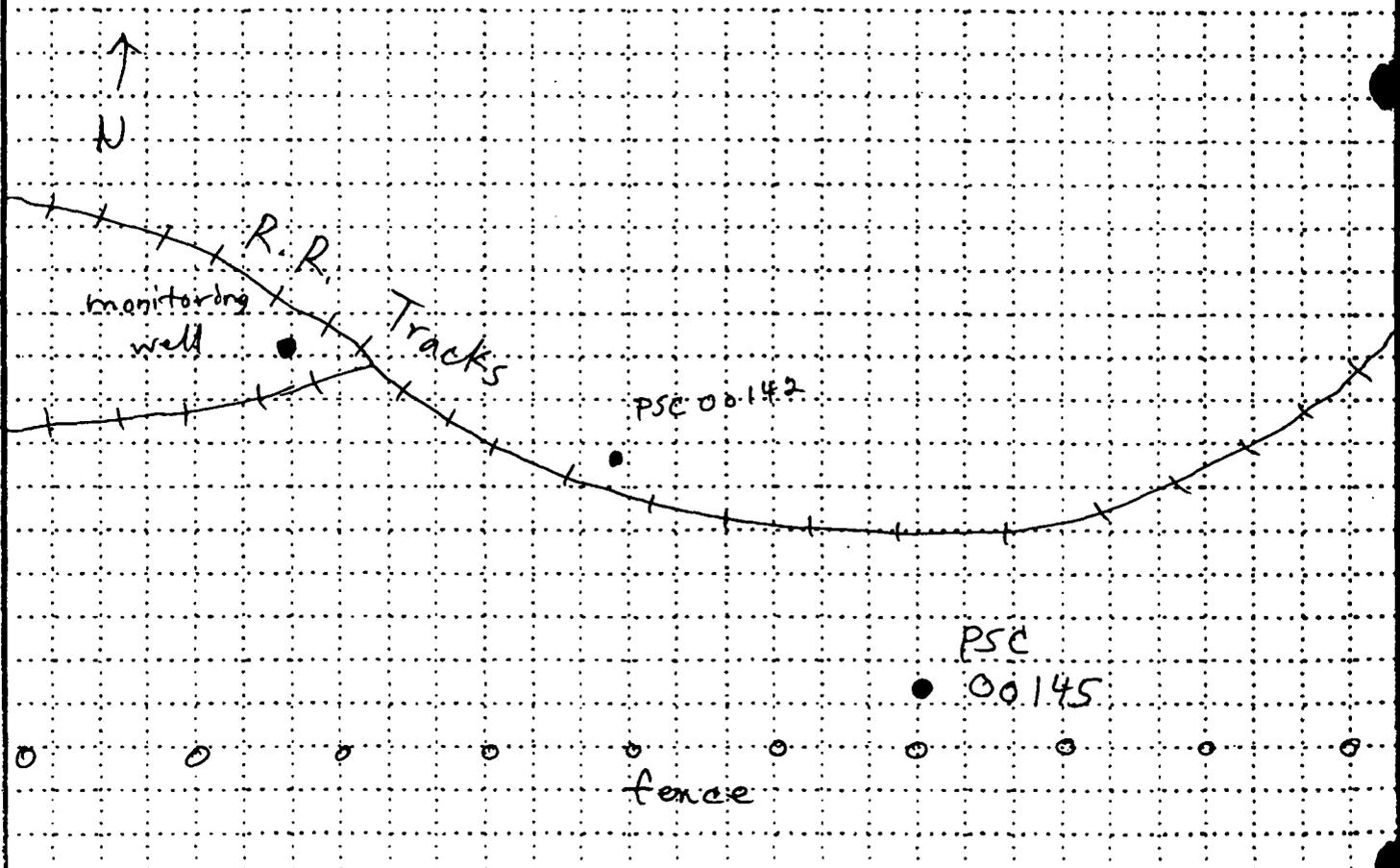
HTRW DRILLING LOG (CONTINUATION SHEET)						
PROJECT		INSPECTOR		MOLE NUMBER		
FUSRAP/SLDS		Phillip Statler		PSC 00142		
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SPECTRA (ft)	REMARKS	ANALYTICAL SUPPLY NO.	BLOW COUNT	REMARKS
SM 1	silty sand (fine) w/ cinders and slag, loose, poorly graded, trace ash, dk. brn. to blk., dry.	6300 0.0	2.0 / 2.0	PSC 00142 5-22-02 1450	7	6,800
		6400 0.0		PSC 00143 1505	7	6,700
		5800 -0.0			7	6,600
CL 2	large piece of slag few brick frags.	6500 0.0			5	6,500
		5900 0.0			3	6,700
SM 3	silty sand (fine), loose, poorly graded, dk. brn., moist, few cinders.	6200 0.0	1.9 / 2.0		3	6,700
		6400 0.0		PSC 00144 1510	4	6,800
		6000 0.0			3	6,500
CL 4	silty clay, soft, med. plast, H. brn. to grv. moist	0.0	no recovery			
TD: 4.0' BGS 1515 5-22-02						Background: NAT: 6200 PID: 0.0 Drum #1 for Soil Cuttings <del>Backfilling</del> Backfilled boring w/ 1/2 bag bent. chips. Capped boring w/ soil.

SLD7H685/10/10

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		PSC-00145		HOLE NUMBER <u>7/10</u> <u>PSC 00145</u>	
1. COMPANY NAME(S) <u>R. Shaw, E &amp; I</u>		2. DRILLING SUBCONTRACTOR <u>Layne - Western</u>		SHEET <u>1</u> OF <u>2</u>		SHEETS	
3. PROJECT <u>FUSRAP/SLDS</u>			4. LOCATION <u>PSC Metals</u>				
5. NAME OF DRILLER <u>Charles Riffle</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 75</u>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>CME 75 using 4 1/2" Hollow Stem Auger and 3 in. x 2' split spoon. Note: LWD 172-059</u>		8. HOLE LOCATION		9. SURFACE ELEVATION		10. DATE STARTED <u>5-22-02</u>	
11. DATE COMPLETED <u>5-22-02</u>		12. OVERBURDEN THICKNESS <u>N/A</u>		13. DEPTH DRILLED INTO ROCK <u>N/A</u>		14. TOTAL DEPTH OF HOLE <u>4.0' BGS</u>	
15. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>		18. GEOTECHNICAL SAMPLES	
DISTURBED <input type="checkbox"/>		UNDISTURBED <input type="checkbox"/>		19. TOTAL NUMBER OF CORE BOXES <u>0</u>		20. SAMPLES FOR CHEMICAL ANALYSIS	
YOC <input type="checkbox"/>		METALS <input type="checkbox"/>		OTHER (SPECIFY) <u>RAD</u>		OTHER (SPECIFY) <u>0</u>	
OTHER (SPECIFY) <u>0</u>		OTHER (SPECIFY) <u>0</u>		OTHER (SPECIFY) <u>0</u>		21. TOTAL CORE RECOVERY <u>0</u> %	
22. DISPOSITION OF HOLE <u>yes</u>		BACKFILLED <input type="checkbox"/>		MONITORING WELL <input type="checkbox"/>		OTHER (SPECIFY) <input type="checkbox"/>	
23. SIGNATURE OF INSPECTOR <u>Philly M. [Signature]</u>							

LOCATION SKETCH/COMMENTS

SCALE: Not to Scale



PROJECT: <u>FUSRAP/SLDS</u>	HOLE NO. <u>PSC 00145</u>
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HTRW DRILLING LOG (CONTINUATION SHEET)

SLD 7468 7/23/02  
PSC 00145 7/19/02  
SHEET 2 OF 2

PROJECT FUSRAP / SLDS INSPECTOR Phillip Statler

CREW (1)	DEPTH (ft)	DESCRIPTION OF MATERIALS (2)	FIELD SAMPLE NO. (3)	RECOVERY (4)	ANALYTICAL SAMPLE NO. (5)	BLDG CORRECTION (6)	REMARKS (7)		
SM	1	silty sand (fine) w/ some cinders and few med. gravel; loose, poorly graded, dk. brn. to blk, dry.	6800	2.0 / 2.0	PSC 00145 5-22-02 1600	740	7300		
			6500			0.0	1615	3	6,600
			6500			0.0		4	6,500
			6400			0.0		5	6,600
			6400			0.0			
CL	3	silty clay, soft, med. plast., lt. brn., dry. few cinders	6400	1.7 / 2.0	PSC 00147 1630	3	6,800		
			5900			0.0		3	6,600
			6300			0.0		3	6,300
			6100			0.0		4	6,700
	4			no recovery					

TP: 4,0' BGS  
1625  
5-22-02

Back ground  
NaI: 6200  
PID: 0.0  
Cuttings in Drum #1.  
Back filled w/ 1/2 bag bentonite chips. Capped w/ native soil.

610711692  
2/22/02

HTRW DRILLING LOG		DISTRICT		PSC-00148		HOLE NUMBER: 7/11/02 PSC 00148	
1. COMPANY NAME Shaw, F & I		2. DRILLING SUBCONTRACTOR Layhe - Western		SHEET		1 of 2	
3. PROJECT FUSRAP / SLDs			4. LOCATION PSC Metals				
5. NAME OF DRILLER Charles Riffle			6. MANUFACTURER'S DESIGNATION OF DRILL CME 75				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT CME 75 using 4 1/4" Hollow Stem Augers and 3 in x 3/4" split spoon N/A: LUD 173040 cal. due date: 4-1-03 RKG: 29.00		8. HOLE LOCATION		9. SURFACE ELEVATION		10. DATE STARTED 5-23-02	
12. OVERBURDEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A		11. DATE COMPLETED 5-23-02		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
13. DEPTH DRILLED INTO ROCK N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		14. TOTAL DEPTH OF HOLE 4.0' BGS			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
21. TOTAL CORE RECOVERY %		yes		R&D		SIGNATURE OF INSPECTOR [Signature]	
LOCATION SKETCH/COMMENTS							
SCALE: Not to Scale							
PROJECT FUSRAP / SLDs						HOLE NO. PSC 00148	

Figure 4-2. HTRW Drilling Log

460 71169 7/22/02  
PSC-00148  
PSC-00148 7/11/02

HTRW DRILLING LOG (CONTINUATION SHEET)							
PROJECT		INSPECTOR		SHEET		SHEETS	
CH. NO.	DEPTH	DESCRIPTION OF MATERIALS	FIELD OBSERVATIONS	RECOVERY	ANALYTICAL SAMPLE NO.	FLOW COUNT	1 min. Count
SM	1	silty sand (fine) med. dense, poorly graded, blk., moist, few cinders and slag	9200 0.0	1.7/1.7	7/10/02 PSC-00148 5-23-02 5882	14	9,400
		few ash	8900 0.0	2.0		44	9,800
			9400 -0.0		PSC 00149 0900	6	10,000
			N/A				
	2	slag and cinders increasing	N/A	no recovery	ps.	13	N/A
			9000 0.0			21	9,200
			8500 0.0	1.9/2.6	PSC-00150 0910	44	9,600
	3		8500 0.0		460 71170 PSC 00150 7/22/02	32	9,100
		few ash	8600 0.0			20	9,000
				no recovery			
		TD: 4.0' BGS 0910 5-23-02					Background: NaI: 8,900 PID: 0.0 Soil Cuttings in 2 Drum Backfilled w/ 1/2 bag bent. chips. Boring capped w/ native soil.

<b>HTRW DRILLING LOG</b>		DISTRICT <b>SL. LOUIS</b>	HOLE NUMBER <b>SLD 2670</b>
1. COMPANY NAME <b>IT CORPORATION</b>		2. DRILL SUBCONTRACTOR <b>Geotechnology</b>	
3. PROJECT <b>FUSRAP/SLOS</b>		4. LOCATION <b>PIED 6 Fk (McKinley Spn)</b>	
5. NAME OF DRILLER <b>JIM McDONALD</b>		6. MANUFACTURER'S DESIGNATION OF CORE	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>HAND AGG</b>		8. HOLE LOCATION	
		9. SURFACE ELEVATION	
		10. DATE STARTED <b>8/25/99</b>	11. DATE COMPLETED <b>8/25/99</b>
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <b>N/A</b>	
14. DEPTH DRILLED INTO ROCK		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>	
15. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>	
18. GEOTECHNICAL SAMPLES <b>0</b>	19. CUSTOMER	20. UNCUSTOMER	21. TOTAL NUMBER OF CORE BITES
22. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY) <b>RAD</b>
			OTHER (SPECIFY)
			OTHER (SPECIFY)
			23. TOTAL CORE RECOVERY
24. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY) <b>TECP</b>
			25. SIGNATURE OF INSPECTOR <i>Jim Mc</i>

LOCATION SKETCH/COMMENTS

SCALE:

↑ N

McKinley Iron Property

RED SLD 2670 FORCE L.S.

MAcKINLEY PROPERTY

PROJECT <b>FUSRAP/SLOS</b>	<b>SLD 2670</b>	HOLE NO. <b>SLD 2670</b>
ORM 5056-R, AUG 94		(Proponent: CECW-EG)

GRAV DRILL LOG

SLD 2670

PROJECT: **FUSRAP/SIDS** OPERATOR: **Chris Lock**

DEPTH (ft)	DEPTH (m)	DESCRIPTION OF MATERIALS	NETS SCREENING RESULTS	SCREENING SAMPLE IN CORE (ft)	SCREENING SAMPLE IN CORE (m)	REMARKS
1		Slty, CINDID BICA	11576 COUNTS MNI 0.0 PPM PFO	N/A	SLD 2670	
2		SAND, gravel, sily B. sand	12158 COUNTS MNI PPM PFO	N/A	13324	
3					SLD 2777	
4		FAT clay Green.	13140 COUNTS MNI 0.0 PPM PFO	N/A	14014	
5					SLD 2824	Total CAPAC/ total Arsenic from labors
6						
7		T.O.	6.0	ft	14.0	hrs 8/25/97 DUM 14

SLD 2670

SLD 2670

<b>HTRW DRILLING LOG</b>		DISTRICT: <u>St. Louis</u>	HOLE NUMBER <u>SLD 2671</u>
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotech</u>	
3. PROJECT <u>FUSRAP/SOS</u>		4. LOCATION	
5. NAME OF DRILLER <u>JIM McDONALD</u>		6. MANUFACTURER'S DESIGNATION OF DRILL	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>HMD Auger</u>		8. HOLE LOCATION	
		9. SURFACE ELEVATION	
		10. DATE STARTED	11. DATE COMPLETED
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>74'</u>	
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>32'</u>	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>74'</u>	
18. GEOTECHNICAL SAMPLES <u>0</u>	DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY) <u>RAD</u>
			OTHER (SPECIFY)
			OTHER (SPECIFY)
			21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE	ABANDONED	MONITORING WELL	OTHER (SPECIFY)
			22. SIGNATURE OF INSPECTOR

LOCATION SKETCH/COMMENTS

SCALE:

Mickinoly Iron P. 15/20/84

SLD 2671

FORM R. 1.

MALLERDE P. 15/20/84

Bu. 20, AS 101

16/11/87  
12AS

PROJECT <u>FUSRAP/SOS</u>	<b>SLD 2671</b>	HOLE NO. <u>SLD 2671</u>
FORM 5056-R-AUG 94		(Prepared by) CECW-EG1

MIRN DRILLING LOG

SLD 2671

PROJECT: FUSRA/205 OPERATOR: Chris Locke

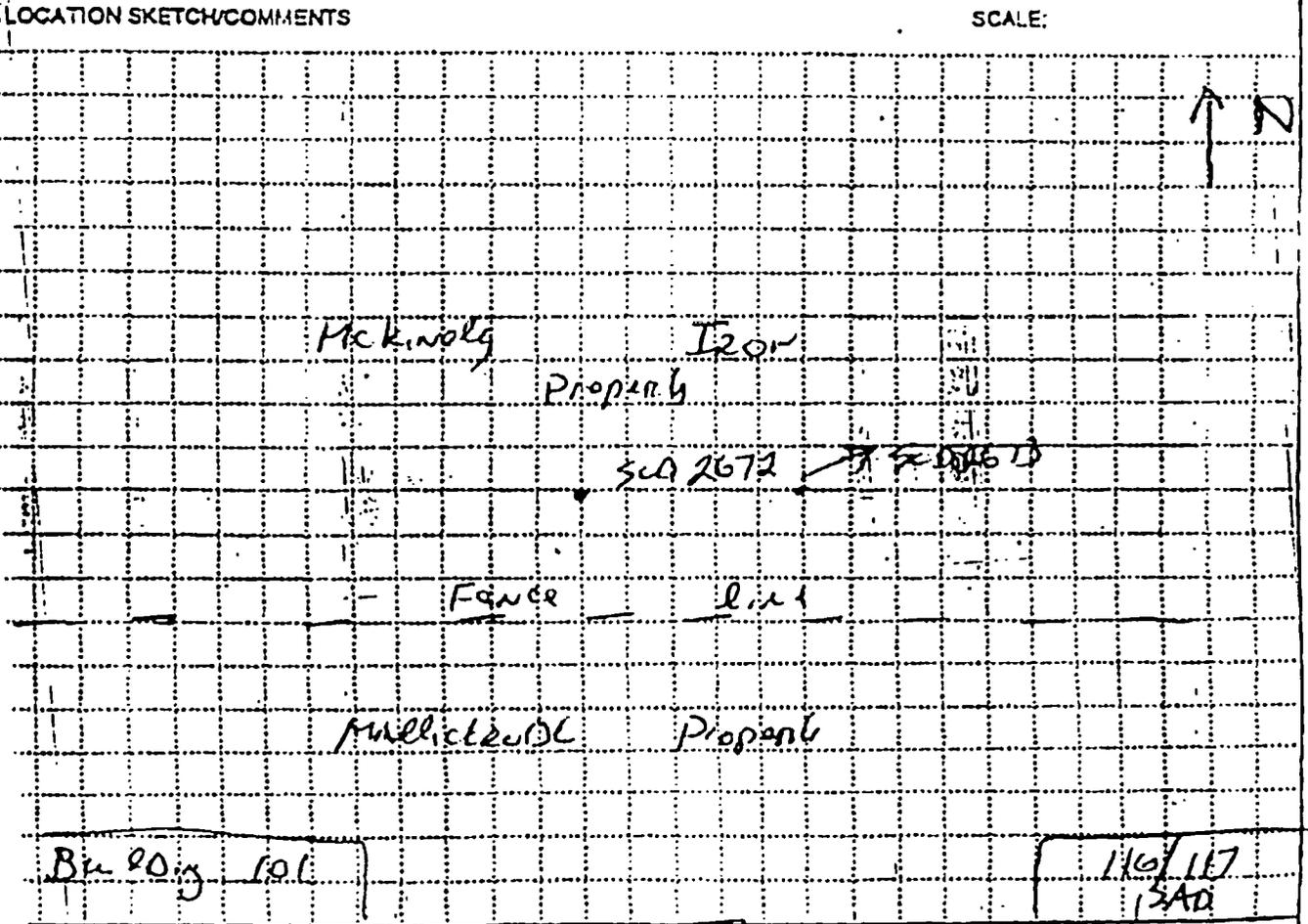
DATE: 8 Jan 2

DEPTH (ft)	DESCRIPTION OF MATERIAL	NO. SAMPLES RELIANT	SCALED SAMPLE OR COPY FOR USE	ANALYTICAL LABORATORY	REMARKS
1	Gr Dops	12263 COUNTS N.I. 0.0 PPM PID	N/A	SLD 2671	
2				1120hrs	
3	SAND, Gr-Dops Med. Brown	12099 COUNTS N.I. 0.0 PPM PID	N/A	2400 2748	
4				1122hrs	
5	FAT Clay Green - Brown	12050 COUNTS N.I. PPM PID	N/A	SLD 2671	
6				1123hrs	
7		TID 6.0 ft		1135 hrs 8/25/97 Diam: 14	

SLD 2671

SLD 2671

<b>HTRW DRILLING LOG</b>		DISTRICT <u>SL 2011</u>		HOLE NUMBER <u>SLD 2672</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SIDS</u>			4. LOCATION <u>PIANT 6 E 1/2 (McKinley Iron)</u>		
5. NAME OF DRILLER <u>J.R. McDowd</u>			6. MANUFACTURER'S DESCRIPTION OF DRILL		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow stem Auger 200.0 gpm</u>		8. HOLE LOCATION		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS		13. DATE STARTED <u>8/25/99</u>		14. DATE COMPLETED <u>8/25/99</u>	
13. DEPTH DRILLED INTO ROCK		15. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
18. GASTROCHEMICAL SAMPLES <u>0</u>		19. TOTAL NUMBER OF CORE BOXES			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
		OTHER (SPECIFY) <u>RAM</u>		OTHER (SPECIFY)	
21. DESCRIPTION OF HOLE		BACKFILLED		MONITORING WELL	
		OTHER (SPECIFY) <u>FEW</u>		22. SIGNATURE OF INSPECTOR <u>[Signature]</u>	



PROJECT	<u>FUSRAP/SIDS</u>	<u>SLD 2672</u>	HOLE NO. <u>SLD 2672</u>
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7.7.77 DRILLING LOG

SLD 2672

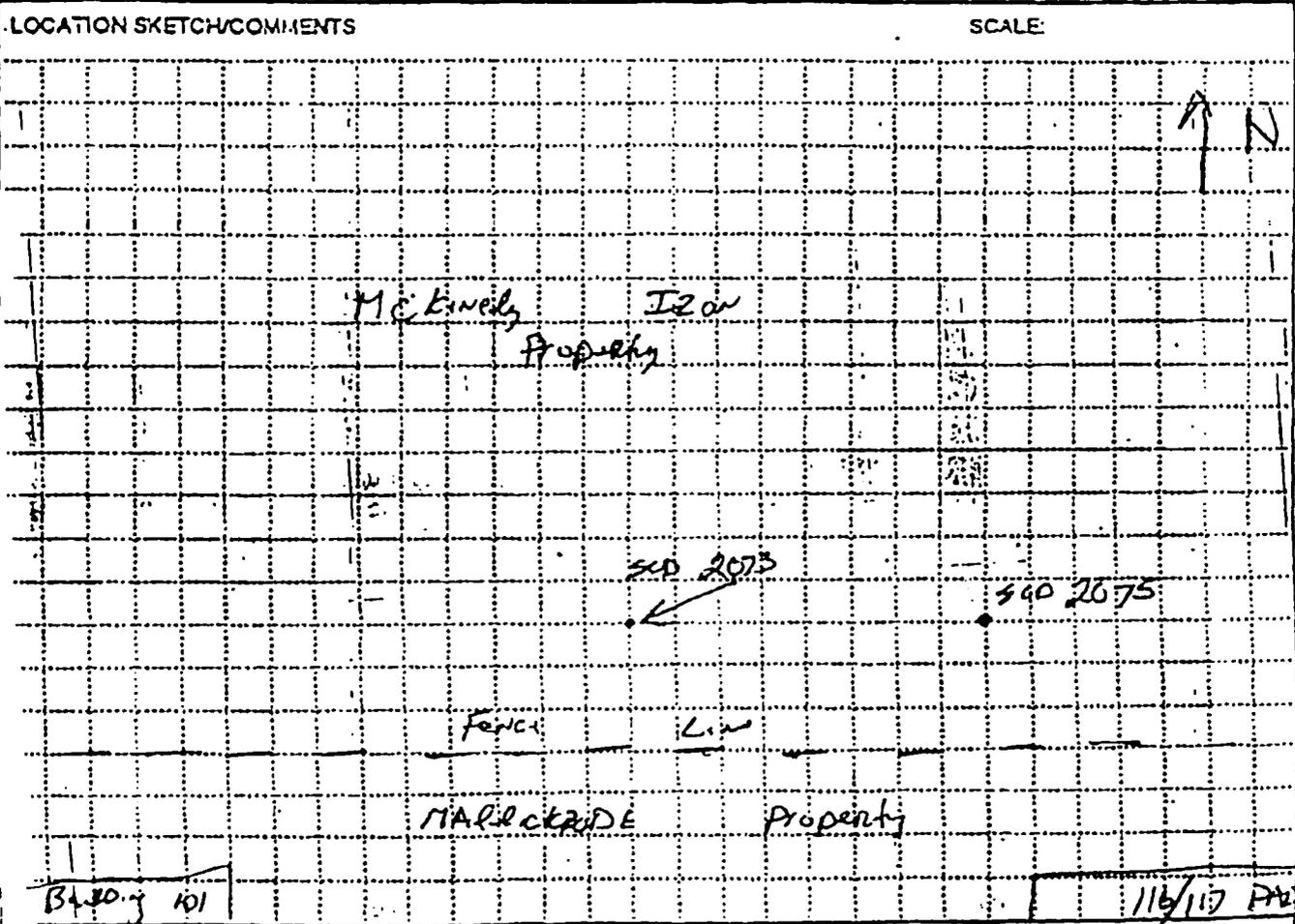
2 WEN 2

DEPTH	DESCRIPTION OF MATERIAL	TESTS PERFORMED	REMARKS	LABORATORY NO.	DATE
1	SLY, CINDERS BLACK	10182 COUNTS N-I O-D P-PH P-ID	1.0 2.0	SLD 2672 1034A	SAMPLE taken at top 6"
2	CINDERS, SAND & SLS BLACK	10215 COUNTS N-I O-D P-PH P-ID	1.5 2.0	SLD 2747 1032A	SAMPLE taken at top 6"
3	LEAN CLAY, WOOD GREEN			SLD 2747 1032A	
4	LEAN CLAY GREEN	10335 COUNTS N-I O-D P-PH P-ID	1.5 2.0	SLD 2826 1033A	SAMPLE taken at
5					
6					
7					
	T.D.	60 ft		1045 hrs	8/25/99 DUNN 14

SLD 2672

SLD 2672

<b>HTRW DRILLING LOG</b>		DISTRICT SE. COL 43	HOLE NUMBER SLD 2673
1. COMPANY NAME IT CORPORATION		2. DRILL SUBCONTRACTOR Gautsch Logging	
3. PROJECT FUSRAP/205		4. LOCATION Plant 6 E'k (McKinley Izor)	
5. NAME OF DRILLER Jim McDonald		6. MANUFACTURER'S DESIGNATION OF DRILL	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Hollow Stem Auger 2200' Spore		8. HOLE LOCATION	
		9. SURFACE ELEVATION	
		10. DATE STARTED 8/24/95	11. DATE COMPLETED 8/24/95
12. OVERBURDEN THICKNESS		13. DEPTH OF GROUND WATER ENCOUNTERED N/A	
13. DEPTH CALLED # TO ROCK		14. DEPTH TO WATER AND MEASURED TIME AFTER DRILLING COMPLETED N/A	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A	
18. GEOTECHNICAL SAMPLES 1	19. DISTURBED	19. UNDISTURBED	18. TOTAL NUMBER OF CORE BITES
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY) RAD
			OTHER (SPECIFY)
			OTHER (SPECIFY)
21. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	21. SIGNATURE OF INSPECTOR JCLD
			21. TOTAL CORE RECOVERY



B430.3 101

11/5/10 PAV

PROJECT	SLD 2673	HOLE NO. SLD 2673
FORM E056-R, AUG 94		(Proponent: CECV-EG)

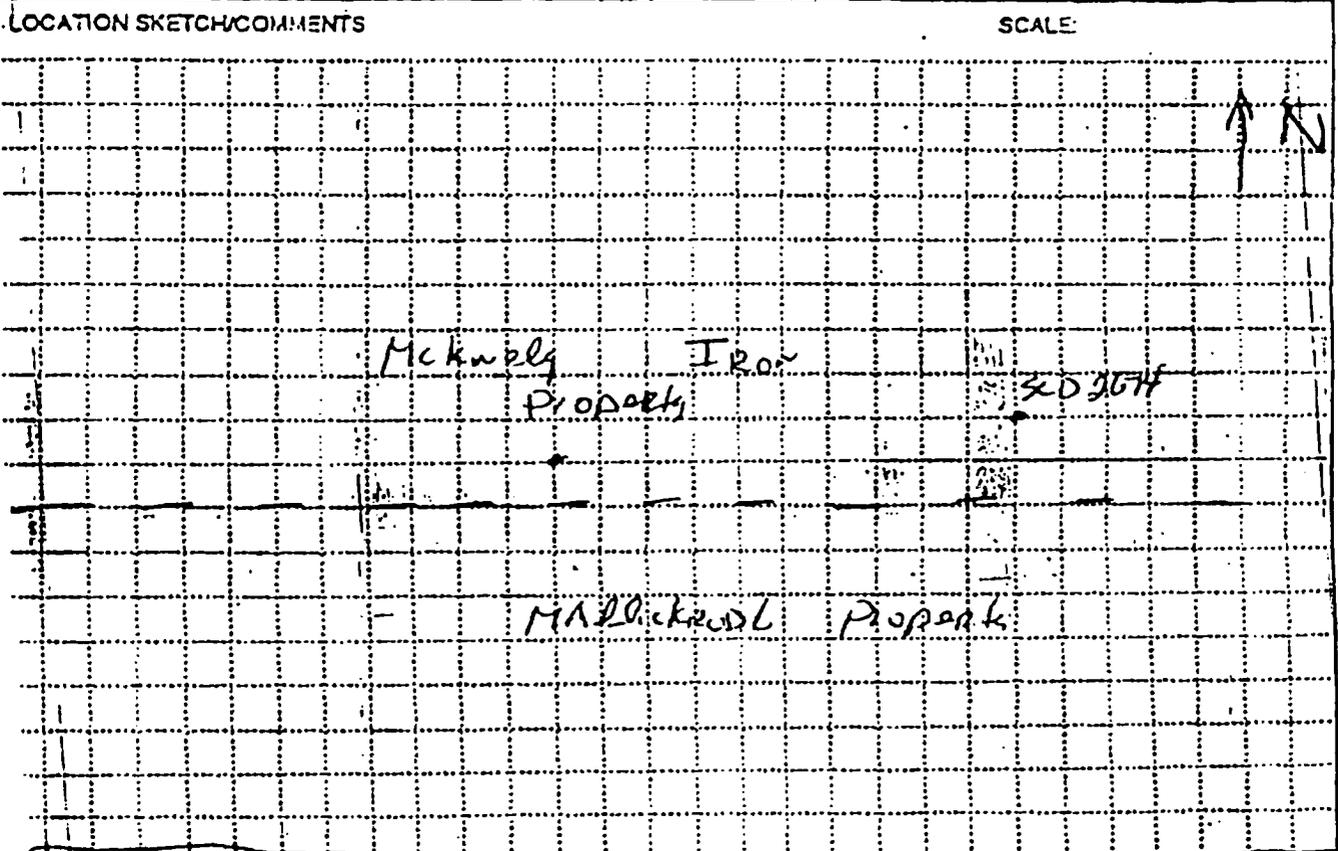
# DIRTY UNWELDED LOG

BLK. NO.	DEPTH (ft)	DESCRIPTION OF MATERIAL	GROSS COUNTS NET D.P.P.M. P.P.M.	SECTION SAMPLE OR CORE DEPTH	MULTIPLIER SAMPLE SIZE	REMARKS
		FUSRAP/SIDS				2673
		APIS Lock				2 Jan 2
1	0	TOP SOIL (surface) - Brown	10600 counts NET 0.0 PPM P.P.M.	1.0 / 2.0		SAMPLE taken at Bottom 6" top
2	1	SLY, SAND, (irregular) MED Brown			5000 2673	
3	2	YARD FILL (Cement, RUBBER, Brick, metal) Brown	10023 counts NET 0.0 PPM P.P.M.	1.5 / 2.0		SAMPLE taken at Bottom 6"
4	3				5000 2750	
5	4	FAT Clay MED-Dark Brown irregular uniform throughout spec.	9643 counts NET 0.0 PPM P.P.M.	1.0 / 2.0		SAMPLE taken at  TOTAL CADmium/ 6600 Arsenic SAMPLE taken.
6	5				5000 2827	
7	6				16200	
	7	T.D. 6.0 ft		1700	NIS	8/24/95 Drum 14 1. BAG Benhur 10159 counts NET Background. NOTE - split/ Dupl Samples are 500 2860 A-D 500 2861.

SLD 2673

500 2673

<b>HTRW DRILLING LOG</b>		DISTRICT <u>SL 204</u>		HOLE NUMBER <u>SLD 2674</u>	
1. OCCUPANT NAME <u>IT CORPORATION</u>		2. DRILL SUB CONTRACTOR <u>Goelach Nelson</u>		SHEET <u>1</u> OF <u>2</u>	
2. PROJECT <u>FUSRAP/SLDS</u>			4. LOCATION <u>PW1 G E 1/2 (McKinley Iron)</u>		
3. NAME OF DRILLER <u>JIM McDONALD</u>			5. MANUFACTURER'S DESIGNATION OF DRILL		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger split spoon</u>		6. HOLE LOCATION			
		8. SURFACE ELEVATION			
		10. DATE STARTED <u>8/25/99</u>		11. DATE COMPLETED <u>8/25/99</u>	
12. OVERBURDEN THICKNESS		13. DEPTH BELOW GROUND WATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A 32'</u>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
18. GEOCHEMICAL SAMPLES <u>0</u>		DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAD</u>	OTHER (SPECIFY)
					21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY) <u>RLO</u>	21. SIGNATURE OF INSPECTOR <u>[Signature]</u>



PROJECT <u>FUSRAP/SLDS</u>		HOLE NO. <u>SLD 2674</u>	
G FORM 5056-R AUG 94		(Prepared by: CECW-EG)	

MIRN DRILLING LOG

SLD 2674

FRISBAY/SLD'S      CRISLOCK

DEPTH	DESCRIPTION OF MATERIAL	FIELD TESTS	GRAVITY SAMPLE OR CORE NO.	ANALYSIS	COMMENTS
1	SLY, CAPS Black	9903 COUNTS N.I. O.D PPM PID	15 2.0	SLD 2674	Sample taken at Bottom 6' top
2	LOW CLAY - ORGANIC Green	10157 COUNTS N.I. O.D PPM PID	2.0 2.0	0925H	Sample taken at Bottom 6' top
3	WOOD Black			SLD 2751	
4	LOW CLAY Black			0925H	
5	LOW CLAY Black	9778 COUNTS N.I. O.D PPM PID	1.0 2.0	SLD 2828	Sample taken at Bottom 6' top Total Arsenic/ Low Cadmium Sample taken
6				0925H	
7		T.D.	6.0 ft	0950H	6/25/95 Dur: 14

SLD 2674

2674

HTRW DRILLING LOG				DISTRICT St. Louis		HOLE NUMBER SLD 2675	
1. COMPANY NAME IT CORPORATION			2. DRILL SUBCONTRACTOR Geotech No. 100			SHEET 1 of 2	
3. PROJECT FUSRAP/SIDS				4. LOCATION Plant 6 E 1/4 (McKewly Iron)			
5. NAME OF DRILLER Jim McDonald				6. MANUFACTURER'S DESIGNATION OF DRILL			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Hollow Stem Auger Split Spoon			8. HOLE LOCATION				
9. SURFACE ELEVATION							
10. DATE STARTED 8/24/99				11. DATE COMPLETED 8/24/99			
12. OVERBURDEN THICKNESS				13. DEPTH OF GROUNDWATER ENCOUNTERED N/A			
13. DEPTH DRILLED INTO ROCK				14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE				15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
16. GEOTECHNICAL SAMPLES		- DISTURBED		UNDISTURBED		18. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY) RAD	
23. DESIGNATION OF HOLE		BAGGED		MONITORING WELL		21. TOTAL CORE RECOVERY	
22. SIGNATURE OF INSPECTOR TCLD							
LOCATION SKETCH/COMMENTS				SCALE:			
PROJECT FUSRAP/SIDS		HOLE NO. SLD 2675		1/6/17 PAB			

# MIRN DRILLING LOG

FUSRAP/SLDS		INVESTOR <b>Chris Locke</b>			SLD 2675
DEPTH	DESCRIPTION OF MATERIALS	FIELD MEASUREMENTS	LABORATORY SAMPLE NO. OR CODE	ANALYTICAL SAMPLE NO.	REMARKS
1	Slag Black Literology uniform throughout SPON	8026 counts NaI 0.0 PPM PIA	1.57 / 2.0		Sample taken at <del>Bottom</del> 2" top
2				SLD 2675	
3	Slag Black Lean clay Green	7937 counts NaI 0.0 PPM PIA	1.57 / 2.0		Sample taken at <del>Bottom</del> 6" top Bottom
4	Lean clay - wood Green - Brown			SLD 2722	
5	Lean clay - wood Green - Brown	7959 counts NaI 0.0 PPM PIA	1.8 / 2.0		Sample taken at Bottom 6" top Bottom
6				SLD 2829	
7				1601h1	
7	T.I.D.	6.0 ft		1600	his 8/24/97 Dum : 14 1-Bay Bentonite

SLD 2675

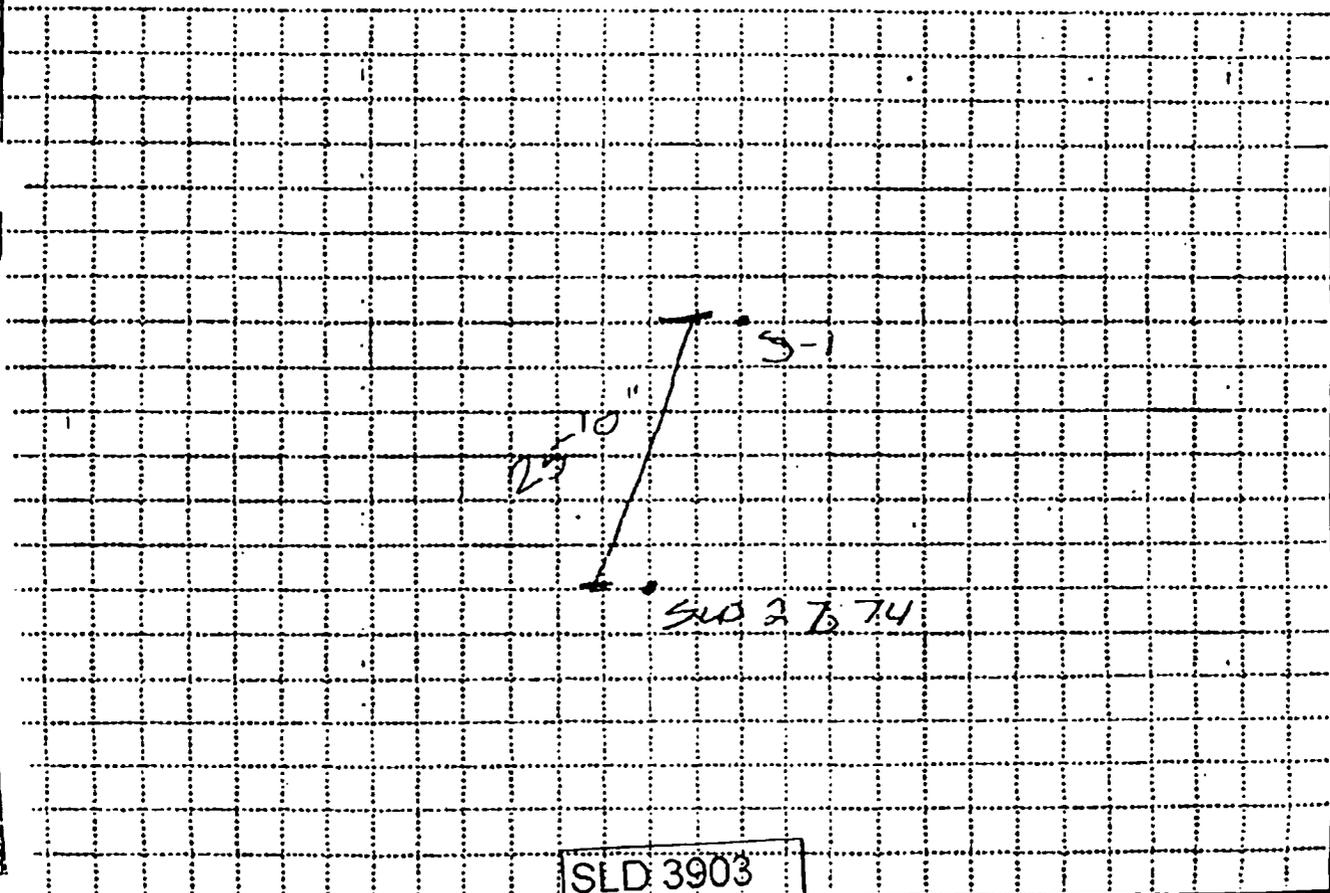
SLD 2675

S-1

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>	HOLE NUMBER <b>SLD 3903</b>	
1. COMPANY NAME <i>IT CORPORATION</i>		2. DRILL SUBCONTRACTOR <i>DM</i>		SHEET 1 OF 2
3. PROJECT <i>FUSRAP/SUX</i>		4. LOCATION <i>McKinley 520r Plupool</i>		
5. NAME OF DRILLER <i>N/A</i>		6. MANUFACTURER'S DESIGNATION OF DRILL		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>AT&amp;D Ansox</i>		8. HOLE LOCATION		
		9. SURFACE ELEVATION		
		10. DATE STARTED <i>10/14/97</i>	11. DATE COMPLETED <i>12/14/97</i>	
12. OVERBURDEN THICKNESS		12. DEPTH OF GROUNDWATER ENCOUNTERED <i>N/A</i>		
13. DEPTH DRILLED INTO ROCK		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>		
14. TOTAL DEPTH OF HOLE		14. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>		
15. GEOTECHNICAL SAMPLES <i>2</i>	DISTURBED	UNDISTURBED	15. TOTAL NUMBER OF CORE BOXES	
16. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY) <i>RAO</i>	OTHER (SPECIFY)
				16. TOTAL CORE RECOVERY
17. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	17. SIGNATURE OF INSPECTOR <i>[Signature]</i>

LOCATION SKETCH/COMMENTS

SCALE:



SLD 3903

PROJECT *FUSRAP/SLO1*

HOLE NO. *SLD 3903*

ENG 2700/5005 Chris Lobb 420 3403

DEPTH	DESCRIPTION OF MATERIAL	MOISTURE	GRAVIMETER	WATER	OTHER
	COVER				
1	SAND, BROWN	6003 COUNTS NAT OJD PPM PER	N/A	SW 3703	
	SAND			081711	
2		6010 COUNTS NAT PPM PER	N/A	SW 3704	
				08226	
3					<p>DRUM: N/A</p> <p>30570 counts NAT BA ignored 6" Depth</p> <p>BURIAL CAPTION A S-1</p>

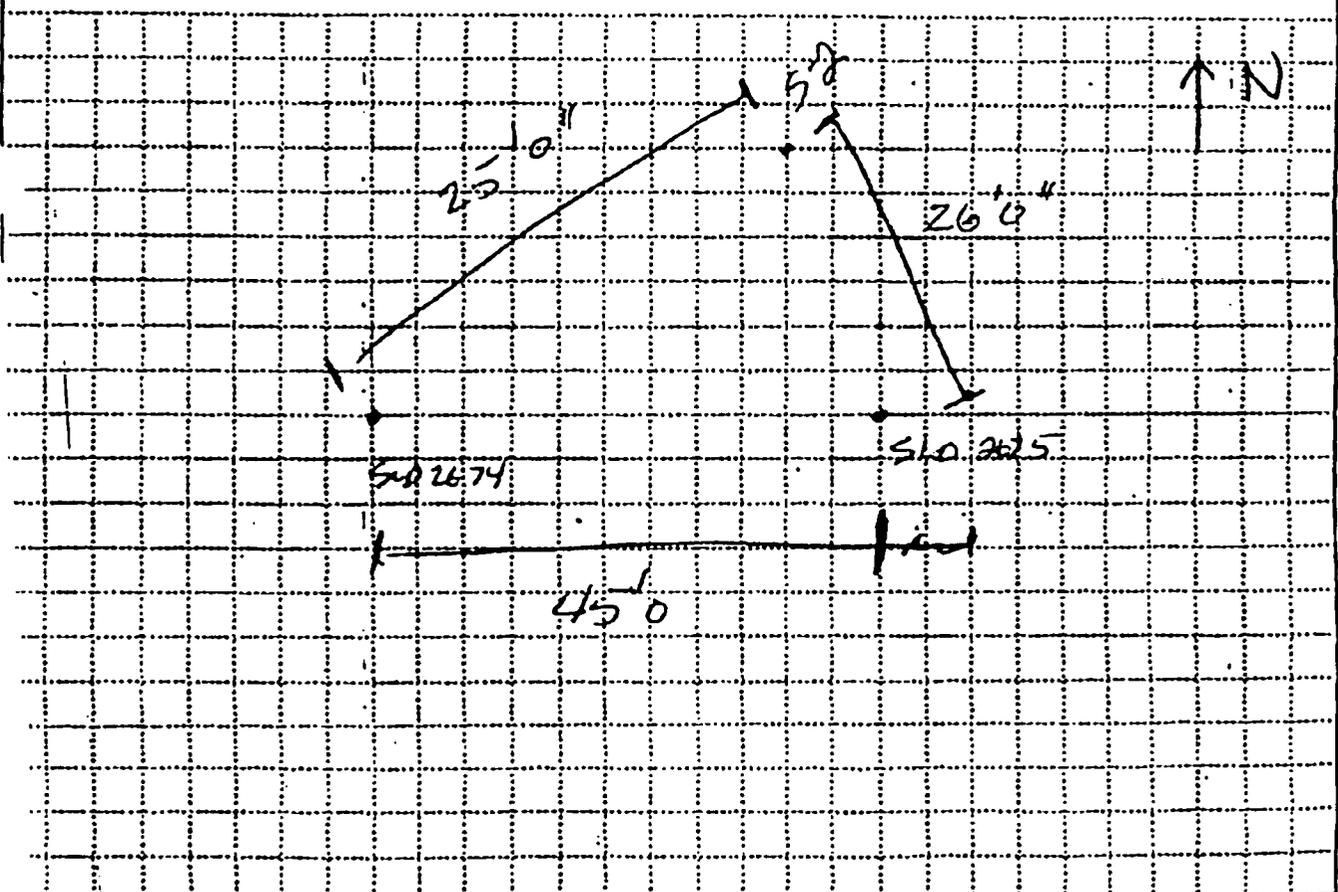
SW 3703

S-2

<b>HTRW DRILLING LOG</b>		DISTRICT		HOLE NUMBER	
1. COMPANY NAME <u>LT Corporation</u>		2. DRILL SUBCONTRACTOR <u>N/A</u>		<u>SLD 3905</u>	
3. PROJECT <u>FUSRAP/205</u>			4. LOCATION <u>Pickinocky IRON Property</u>		
5. NAME OF DRILLER <u>N/A</u>			6. MANUFACTURER'S DESIGNATION OF DRILL		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Cor HAND Auger</u>		8. HOLE LOCATION			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>10/14/99</u>		11. DATE COMPLETED <u>10/14/99</u>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
14. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
15. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RA3</u>	OTHER (SPECIFY)
16. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	18. TOTAL NUMBER OF CORE BOXES
					19. SIGNATURE OF INSPECTOR <i>[Signature]</i>

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT <u>FUSRAP/205</u>	HOLE NO. <u>SLD 3905</u>
------------------------------	-----------------------------

SLD 3905

50 3905  
Aven 2

FUSRNA/SLD CHAS. Lode

DEPTH	DATE	DESCRIPTION OF MATERIAL	NO. TESTS	TEST RESULTS	TEST NO.	TEST DATE
1		SAND Bene	6363 COUNTS N-I	NA	50 3805 0855A	
2		SAND Bene	6707 COUNTS N-I O-J PPT HSP	NA	70 5706 0859	
3		TID 2.2'	0905	hrs	10/11/94	
						Pin: NA Boring corresponds S-2 2035 counts per 6" depth T.D. Due to Refusal.

FUSRNA/SLD

SLD 3905

50 3905

SLD 3907

FLORAP/SIX

Chris Lock

2 ven 2

DEPTH	DESCRIPTION OF MATERIAL	NO. SAMPLES	DATE	TIME	COUNTS	PPM
1	SAND Coarse	6996 COUNTS NET 0.0 PPM	N/A		3757	
2	SAND, Bran	6541 COUNTS NET	N/A		3708	
3						

DATA: N/A  
BORING CAPTURED  
W S-3

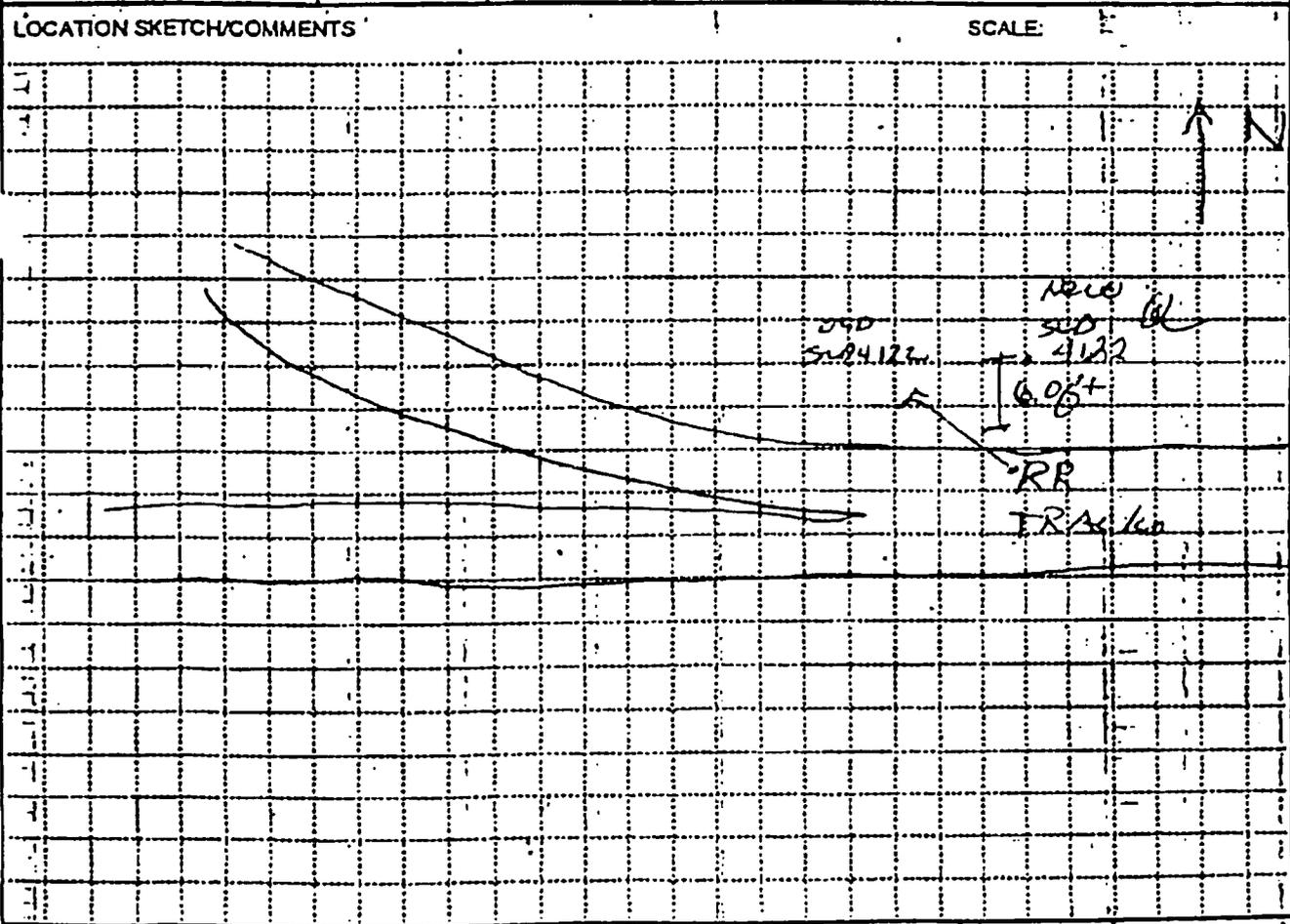
34494 counts NET  
Background 6" DATA

SLD 3907

SLD 3907

SOIL DRILLING WITH

<b>HTRW DRILLING LOG</b>		DISTRICT		HOLE NUMBER 520-4122	
1. COMPANY NAME IT CORP of CA		7. DRILL SUBCONTRACTOR		HOLE DEPTH 30	
3. PROJECT FWSRAQ/SID			4. LOCATION		
5. NAME OF DRILLER N/A			8. MANUFACTURER'S DESIGNATION OF DRILL		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT HAND OPER		8. HOLE LOCATION			
		9. SURFACE ELEVATION			
		10. DATE STARTED		11. DATE COMPLETED	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)			
18. GEOTECHNICAL SAMPLES		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) RAD	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
23. TOTAL CORE RECOVERY					



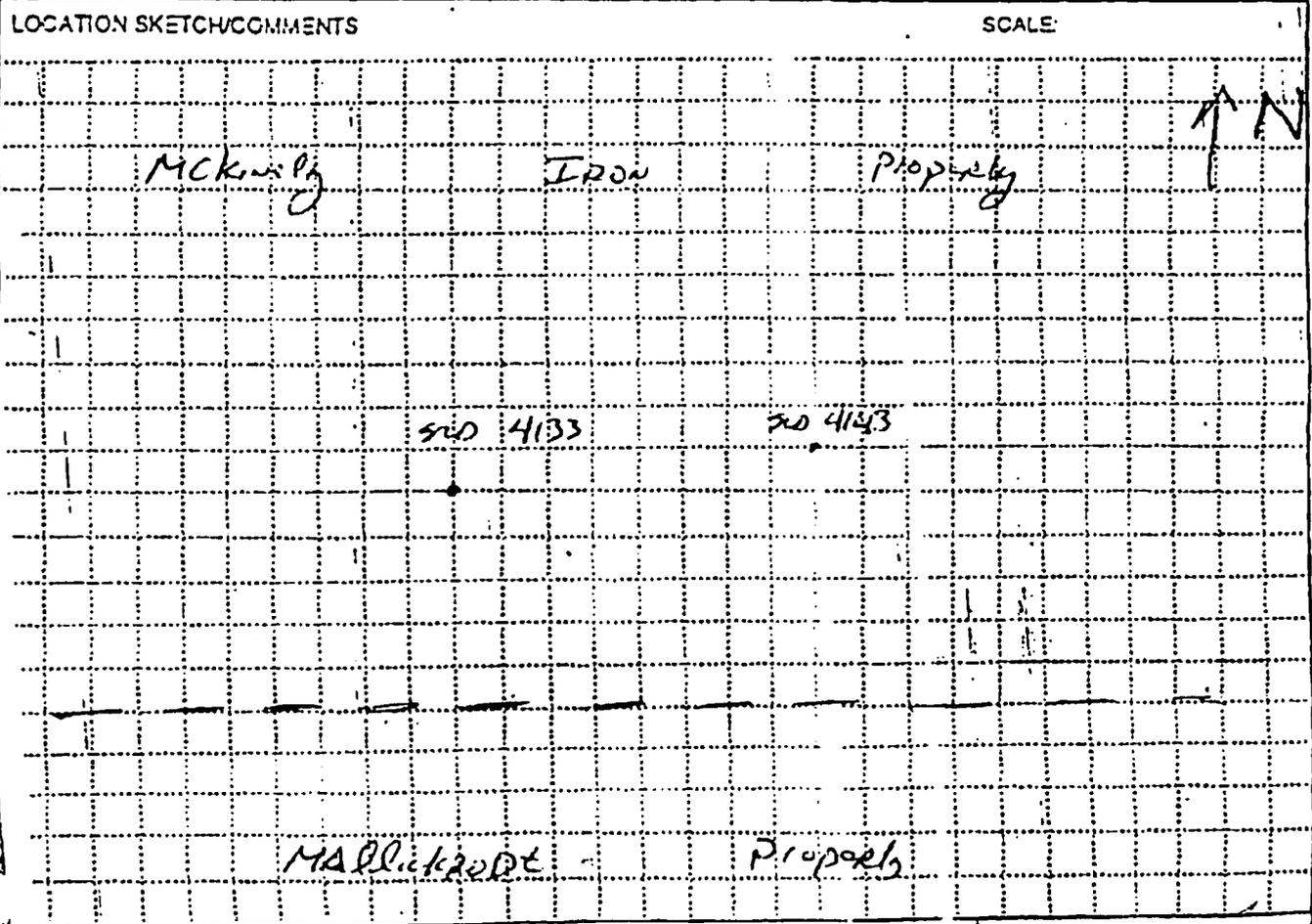
PROJECT FWSRAQ/SID	HOLE NO. 520-4122
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PROJECT		INSPECTOR	DOJ ENV-111		240 4120
DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	CERTIFIED SAMPLE OR FIELD BOX NO.	ANALYTICAL SAMPLE NO.	COMMENTS
	COVER				
1	SAND, CINDER Brown	7723 counts N/A 0.0 P/P	N/A	SWD 4120	Composite Sample taken 4.0%
2				091024	
3	SAND, CINDER, COAL Brown	7664 counts N/A 0.0 P/P	N/A	SWD 4176	Composite Sample taken 4.2%
4				091376	
5	Fat clay Brown	6883 counts N/A 0.0 P/P	N/A	SWD 4200	Composite Sample taken 4.5%
6				091641	
7	TID	6.7	0925 hrs	11/15/95	Split / Duplicate Boring Down 3

Fugate/SWS

SWD 4120

HTRW DRILLING LOG		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 4133</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET 1 of 1	
3. PROJECT <i>FUSRAP/SDS</i>			4. LOCATION <i>Plant GE (McKinley Iron)</i>		
5. NAME OF DRILLER <i>Koum Bessler</i>			6. MANUFACTURER: DESCRIPTION OF DRILL		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow stem Auger 202T SPDR</i>			8. HOLE LOCATION		
			9. SURFACE ELEVATION		
			10. DATE STARTED <i>11/2/97</i>		11. DATE COMPLETED <i>11/2/97</i>
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>		
14. DEPTH DRILLED INTO ROCK			15. DEPTH TO WATER AND SLAPPED TIME AFTER DRILLING COMPLETED <i>N/A</i>		
16. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>		
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
				OTHER (SPECIFY) <i>RAO</i>	
20. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				21. SIGNATURE OF INSPECTOR <i>Chris Tab</i>	



PROJECT <i>FUSRAP/SDS</i>	HOLE NO. <i>SD 4133</i>
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SLO 4133

FUSRAP/SLOS

CRIMS Lock

land

NO.	DESCRIPTION OF MATERIAL	NO. TESTS	TEST RESULTS	TEST DATE	TESTER
1	CONCRETE Slag cinder Block	8549	counts N.E O.U PDM PFI	2.0 2.0	SLO 4133
2	Brick Red				1521 hrs
3	Slag cinder Block	9535	counts N.E O.U PDM PFI	2.0 2.0	SLO 4133
4	Land Block				SLO 4137
5	Fat Cim Brown-Green				1524 hrs
6	Fat Cim Green	9635	counts N.E O.U PDM	1.7 2.0	SLO 4124
7		T.O 6.2/1		1540 hrs	11/2/99

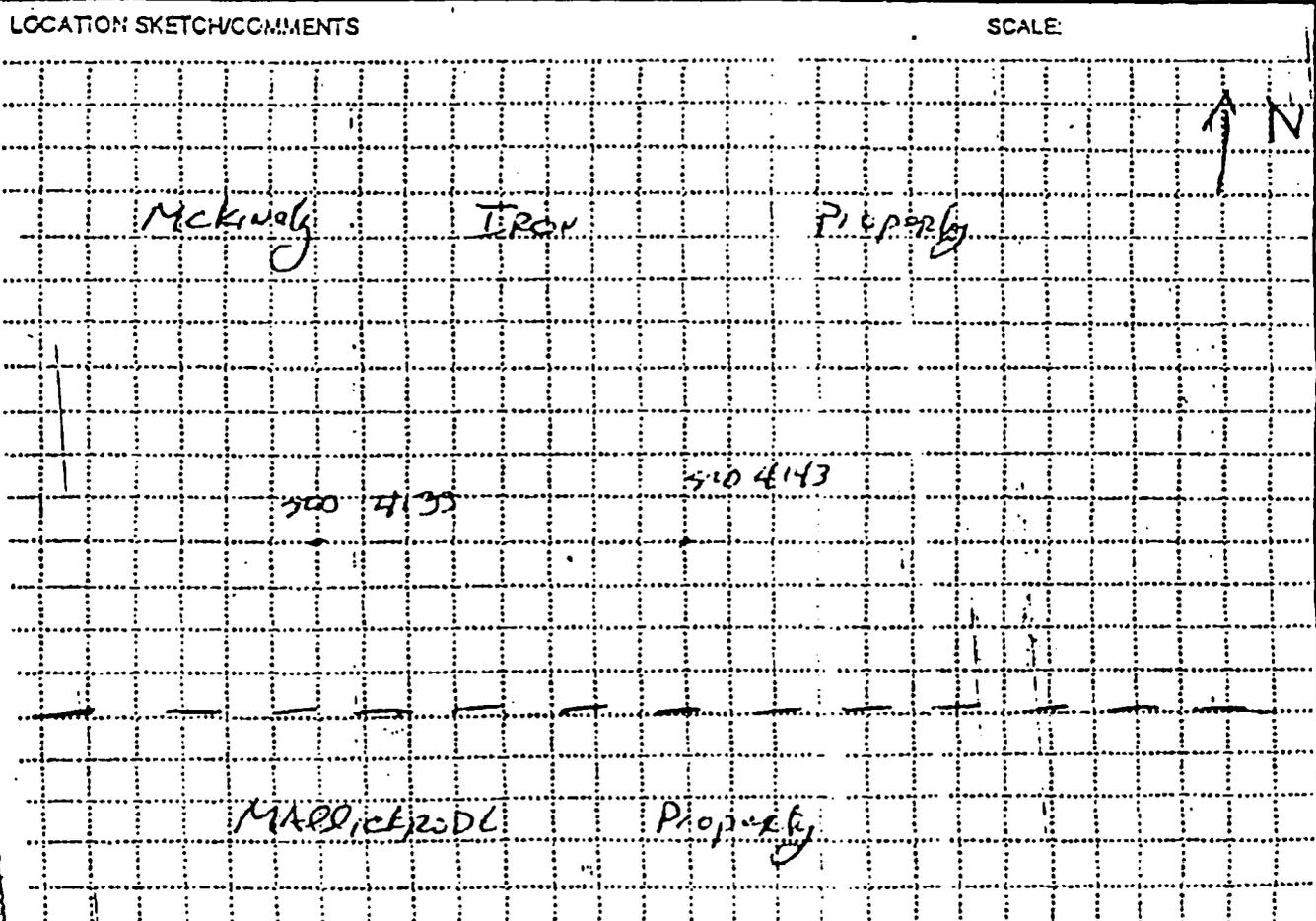
From distribution  
COC to  
Verify

Sample taken  
top 6'

FUSRAP/SLOS

SLO 4133

<b>HTRW DRILLING LOG</b>		DISTRICT <b>St. Louis</b>		HOLE NUMBER <b>5004143</b>	
1. COMPANY NAME <b>IT COOPERATION</b>		2. DRILL SUBCONTRACTOR <b>Geo Technology</b>		SHEET <b>02</b> OF <b>02</b>	
3. PROJECT <b>FUSRAP/SLDS</b>		4. LOCATION <b>PLANT GE (MCKINLEY TOWN)</b>			
5. NAME OF DRILLER <b>Kevin Bassler</b>		6. MANUFACTURER DESIGNATION OF DRILL			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Hollow Stem Auger SPRT 5000R</b>		8. HOLE LOCATION			
		9. SURFACE ELEVATION			
		10. DATE STARTED <b>11/2/78</b>		11. DATE COMPLETED <b>11/2/78</b>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <b>NA</b>			
14. DEPTH DRILLED INTO ROCK		15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>NA</b>			
16. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>NA</b>			
18. GEOTECHNICAL SAMPLES <b>0</b>		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS <b>TECP</b>	OTHER (SPECIFY) <b>RAD</b>	OTHER (SPECIFY)
21. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	22. SIGNATURE OF INSPECTOR <i>[Signature]</i>



PROJECT <b>FUSRAP/SLDS</b>	HOLE NO. <b>500 4143</b>
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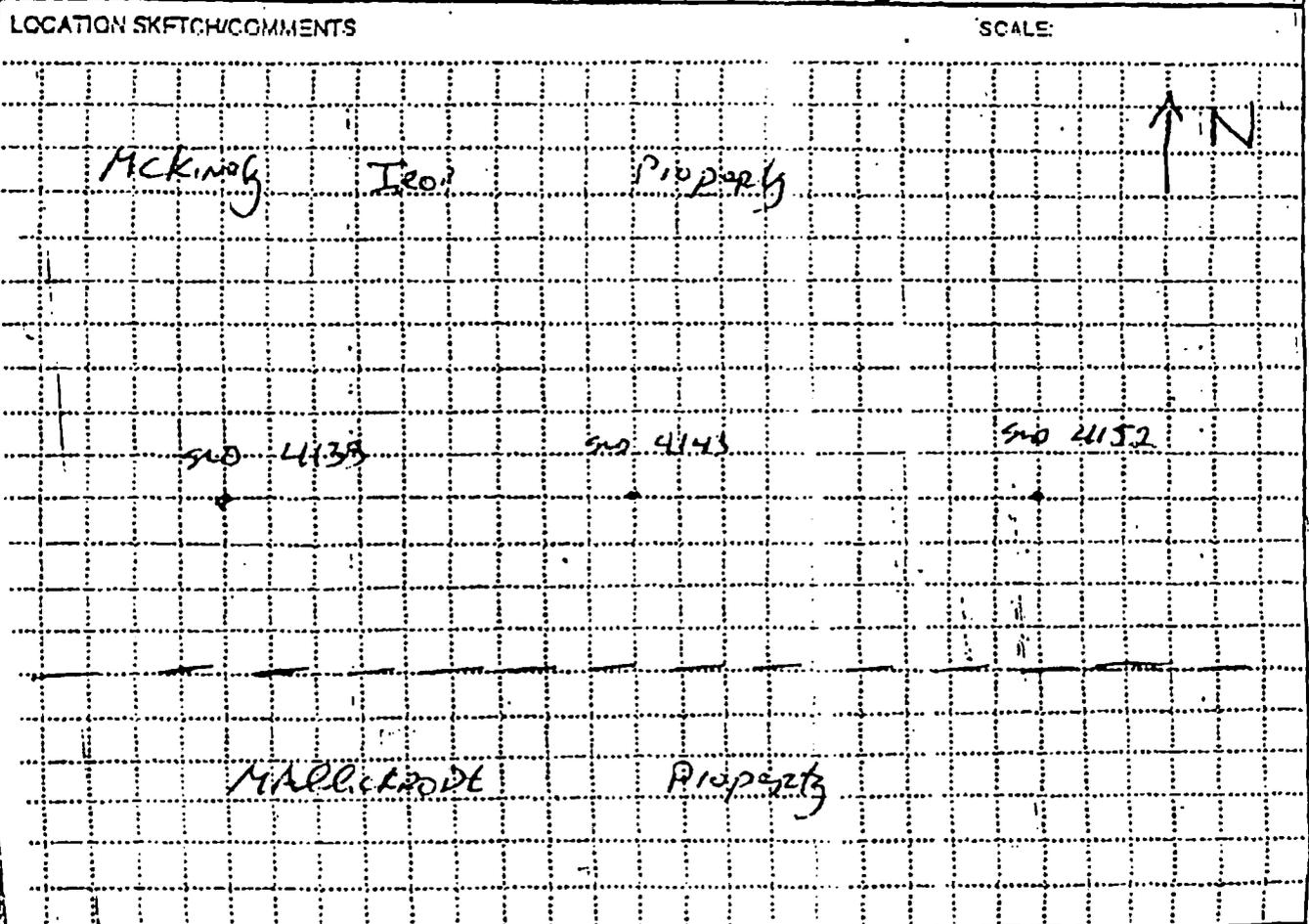
FUSPAP/SDS  
 CHRIS Locke  
 SEP 4143  
 A wand

DEPTH	DESCRIPTION OF MATERIAL	NO. SAMPLES	DEPTH	DATE	TIME
1	COV42 Brnch, SAND, green Red, Brown	7690 counts NET 0.0 PPM PID	1.5 2.0	5:00 4143	SAMPLE taken top 6"
2				4456	
3	LOW clay, Brnch, wood Brown, Red	7680 counts NET 0.0 PPM PID	2.0 2.0	5:00 4197	SAMPLE taken top 6"
4				1450	
5	SAND, cinders, Brnch Red, Red	7610 counts NET 0.0 PPM PID	1.7 2.0	5:00 4251	SAMPLE taken top 6" Metal sample taken
6	LOW - int clay Brown			1458	
7		TID	62/1	1500	hrs 11/2/99

FUSPAP/SDS

SEP 4143

<b>HTRW DRILLING LOG</b>		DISTRICT 41. Lewis	HOLE NUMBER 50 4152
1. COMPANY NAME IT Corporation		2. DRILL SUPERVISOR Cookman	SHEET 1 of 1
3. PROJECT FUSRAP/SWS		4. LOCATION Plot GE (McKinley Iron)	
5. NAME OF DRILLER KOWN Bessler		6. MANUFACTURER'S DESIGNATION OF DRILL	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Hollow Stem Auger 5000 5000		8. HOLE LOCATION	
		9. SURFACE ELEVATION	
12. OVERALL HOEN THICKNESS		10. DATE STARTED 11/2/91	11. DATE COMPLETED 11/2/91
13. DEPTH DRILLED INTO ROCK		15. DEPTH TO GROUNDWATER ENCOUNTERED N/A	
14. TOTAL DEPTH OF HOLE		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		18. TOTAL NUMBER OF CORE BOXES	
19. GEOLOGICAL SAMPLES 0	DISTURBED	UNDISTURBED	20. TOTAL CORE RECOVERY
21. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS TCP	OTHER (SPECIFY) RAD
22. DISPOSITION OF HOLE BAGGED		MONITORING WELL	23. SIGNATURE OF INSPECTOR [Signature]



PROJECT FUSRAP/SWS	HOLE NO. 50 4152
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FUSRAP/3103		Chris Loebe		SEP 4/52	
DEPTH	DESCRIPTION OF MATERIAL	FIELD RECORDING DATA	MOISTURE	DATE	LOCATION
1	COVER Silty, Black, wood Brown-Black.	8620 Counts N-15 D-10 PPM PST	$\frac{2.9}{2.0}$	SEP 4/52	SAMPLE taken at top 6"
2					
3	LEAF CLAY Green	8063 Counts N-15 D-10 PPM PST	$\frac{1.5}{2.0}$	SEP 4/206	SAMPLE taken at top 6"
4					
5	SANDY LOAM CLAY Brown.	3321 Counts N-15 D-10 PPM PST	$\frac{0.8}{2.0}$	SEP 4/260	SAMPLE taken at top 6" Metal SAMPLE taken
6					
7	T.D 6.26t	1430	hrs	11/2/99	

FUSRAP/3103

SEP 4/52

# HTRW DRILLING LOG

DISTRICT St Louis

HOLE NUMBER SLD 416

1. COMPANY NAME IT Corporation

2. DRILL SUBCONTRACTOR Geotechnics

SHEET 1 OF 2

3. PROJECT FUSRAP/SLD

4. LOCATION PIAN 6 E (McKinley)

5. NAME OF DRILLER KEW Bassler

6. MANUFACTURER'S DESIGNATION OF DRILL

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 1 1/2" Hollow Stem Auger  
SPRT SPOON

8. HOLE LOCATION

9. SURFACE ELEVATION

10. DATE STARTED 11/8/99

11. DATE COMPLETED 11/8/99

12. OVERBURDEN THICKNESS

13. DEPTH GROUNDWATER ENCOUNTERED N/A

14. DEPTH DRILLED INTO ROCK

15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A

16. TOTAL DEPTH OF HOLE

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A

18. GEOTECHNICAL SAMPLES

DISTURBED

UNDISTURBED

19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS

VOC

METALS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

22. DISPOSITION OF HOLE

BACKFILLED

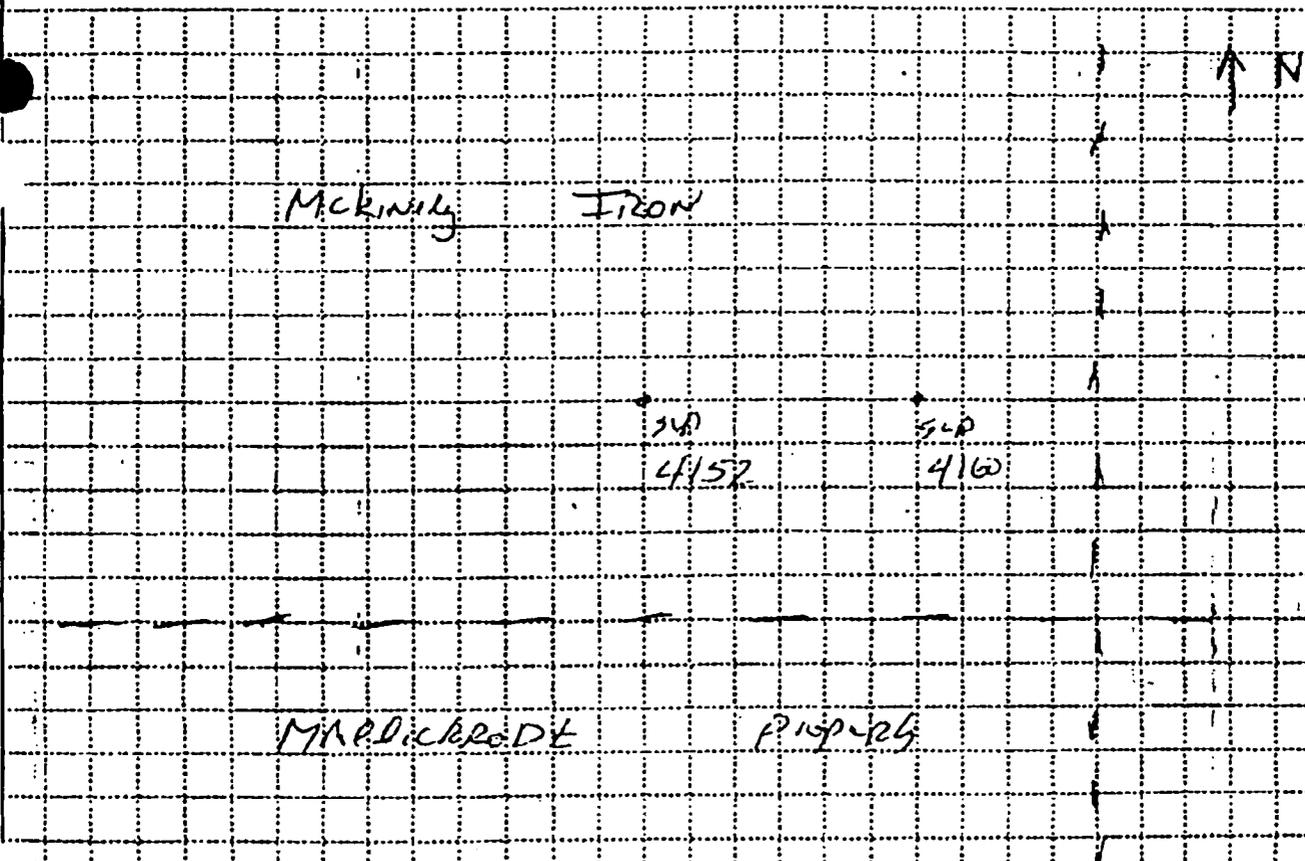
MONITORING WELL

OTHER (SPECIFY)

23. SIGNATURE OF INSPECTOR

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT FUSRAP/SLD

HOLE NO. 4160

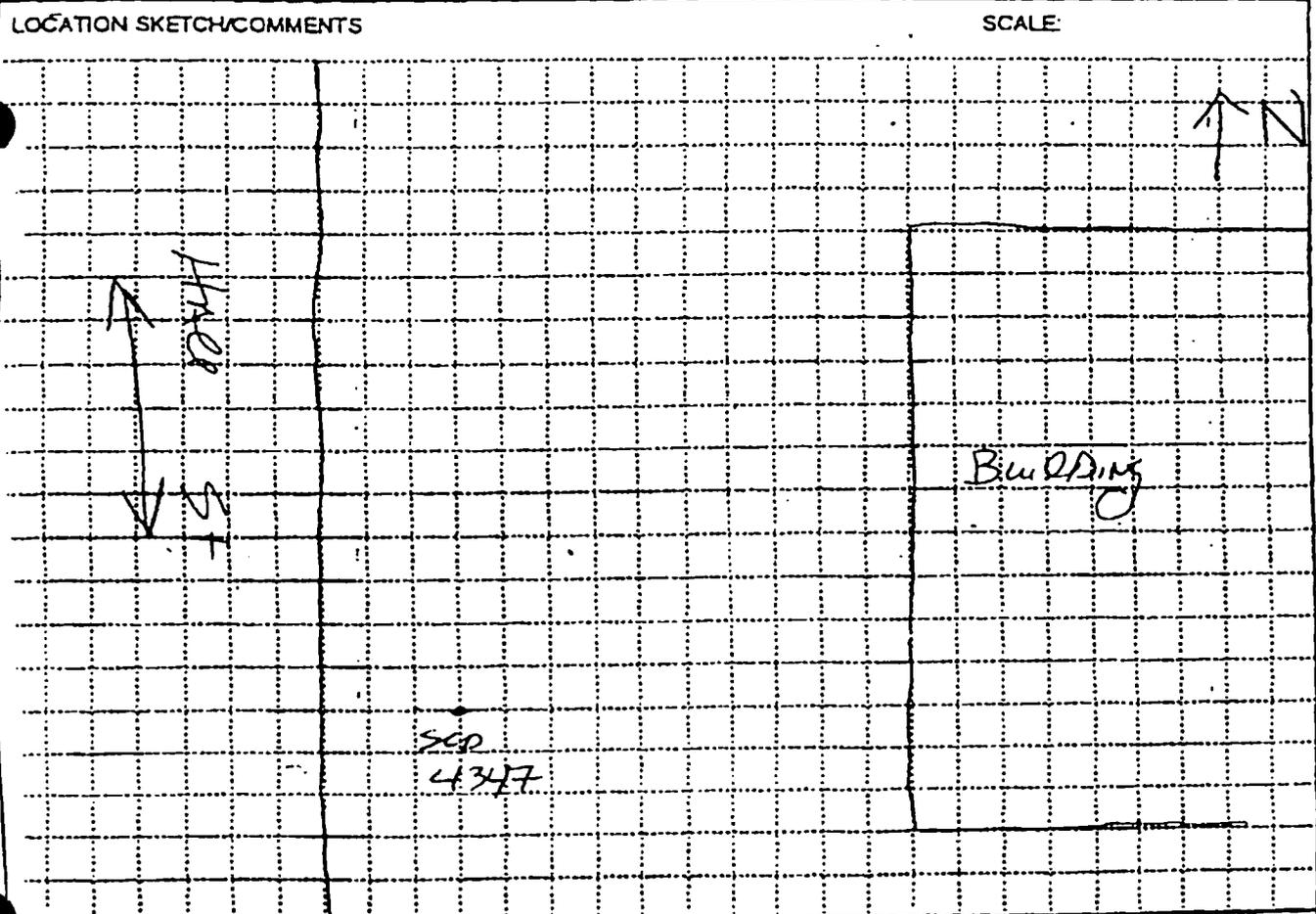
SPD 4160

PROJECT: FUSRAP/SLOS		INSPECTOR: Chris Dock		DATE: 11/8/99	
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	CALIBRATION SAMPLE OR EQUIV. DATA	ANALYTICAL SAMPLE NO.	REMARKS
1	COVER				
1	SAND, Wood Brown	7224 COUNTS NET 0.0 PPM PIID	1.0 2.0	SLO 4160	Sample taken at top 6"
2				08391A	
3	SAND, gray Brown	7712 COUNTS NET 0.0 PPM PIID	1.8 2.0	SLO 4214	Sample taken at top 6"
4				0842A	
5	SAND, TAN-Brown	7853 COUNTS NET 0.0 PPM PIID	1.0 2.0	SLO 4265	Sample taken at top 6"
6				0847A	
	T.D.	63 ft	0	855	his 11/8/99

FUSRAP/SLOS

SPD 4160

HTRW DRILLING LOG		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SD 4347</u>			
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geo. R. Amberg</u>		SHEET <u>1</u> OF <u>2</u>			
3. PROJECT <u>FUSRAP/SD</u>			4. LOCATION <u>McKinley Iron</u>				
5. NAME OF DRILLER <u>Kevin Bossler</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger</u> <u>SD 4347</u>		8. HOLE LOCATION					
8. SURFACE ELEVATION							
12. OVERBURDEN THICKNESS			10. DATE STARTED <u>2/21/02</u>		11. DATE COMPLETED <u>2/21/02</u>		
13. DEPTH DRILLED INTO ROCK			13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>				
14. TOTAL DEPTH OF HOLE			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>				
16. GEOTECHNICAL SAMPLES <u>0</u>			DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAO</u>	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURE OF INSPECTOR <u>Chris Tark</u>		



422.8

# HTRW DRILLING LOG

PROJECT: FUSRAP/SLOS      INSPECTOR: Chris Lock      WELL NUMBER: SLD 4347

DATE: 2      SHEET: 2

DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD LOGGING RESULT	DEPTH SAMPLE OR CORE (ft)	ANALYTICAL SAMPLE NO.	REMARKS
	COVER				
1	SAND, GRAVEL (SP)(GP) Black, soft, loose, dry. FILL GRAVEL ~ 40% Angular	6664 counts NFI 0.0 PIM PID		SLD 43-17	2.0 Recover
2				1957	
3	TID	2.1 ft	1405	A15	2/2/00 Dura: 5

SP  
GP

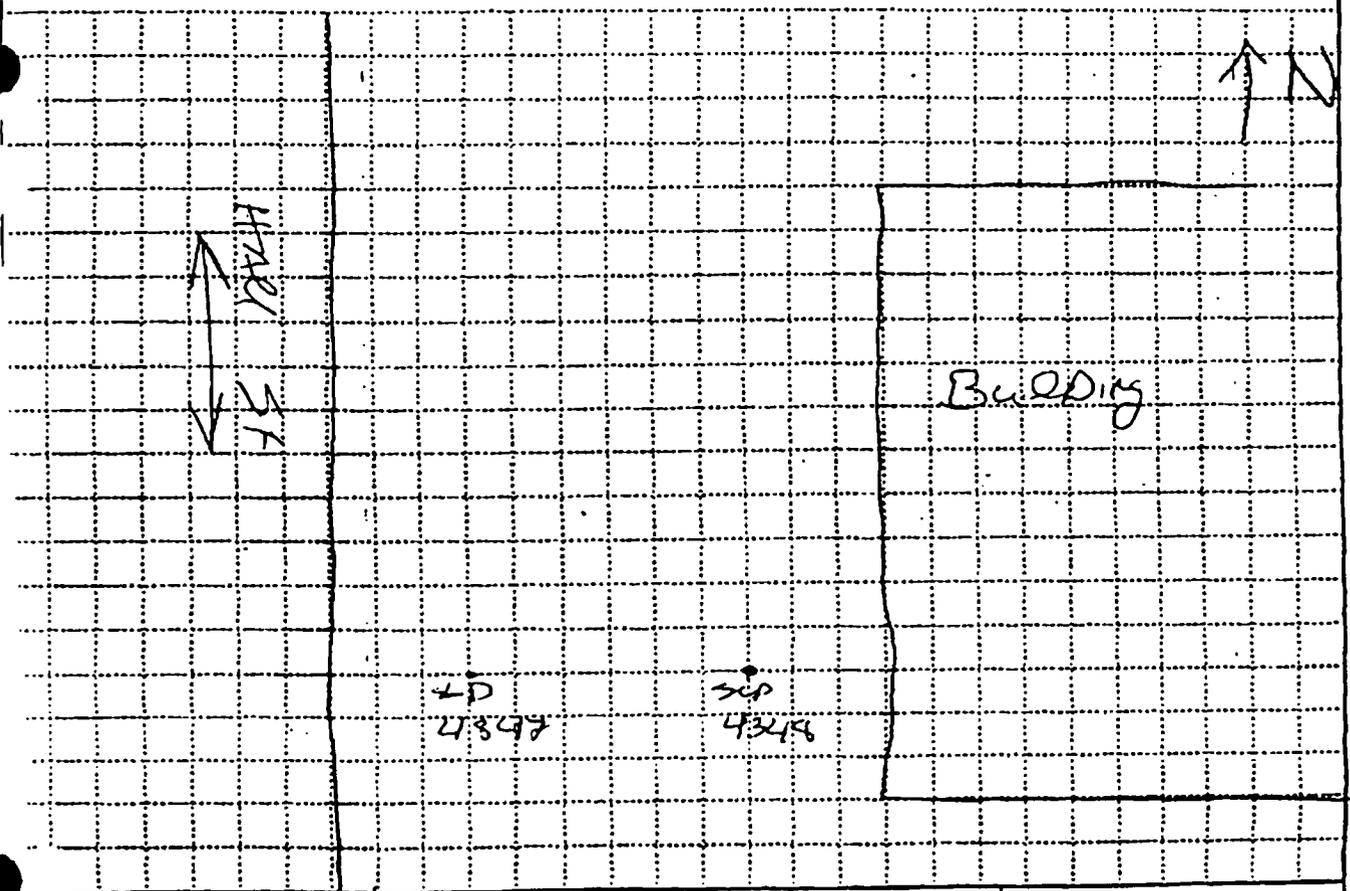
PROJECT: FUSRAP/SLOS

WELL NO. SLD 4347

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SD 48348</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnics</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SDS</u>			4. LOCATION <u>McKinley Trw</u>		
5. NAME OF DRILLER <u>Kevin Bassler</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger</u> <u>Split Spool</u>		8. HOLE LOCATION			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>2/21/00</u>		11. DATE COMPLETED <u>2/21/00</u>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUND WATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
16. GEOTECHNICAL SAMPLES <u>1</u>	DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY) <u>PAD</u>	OTHER (SPECIFY)	OTHER (SPECIFY)
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURE OF INSPECTOR <u>Ann Fick</u>	
21. TOTAL CORE RECOVERY					

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT <u>FUSRAP/SDS</u>	HOLE NO. <u>SD 48348</u>
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# HTRW DRILLING LOG

WELL NUMBER  
**SLD 4348**  
DATE  
**2 OCT 02**

PROJECT  
**FUSRAP/SWS**

INSPECTOR  
**Chris Locke**

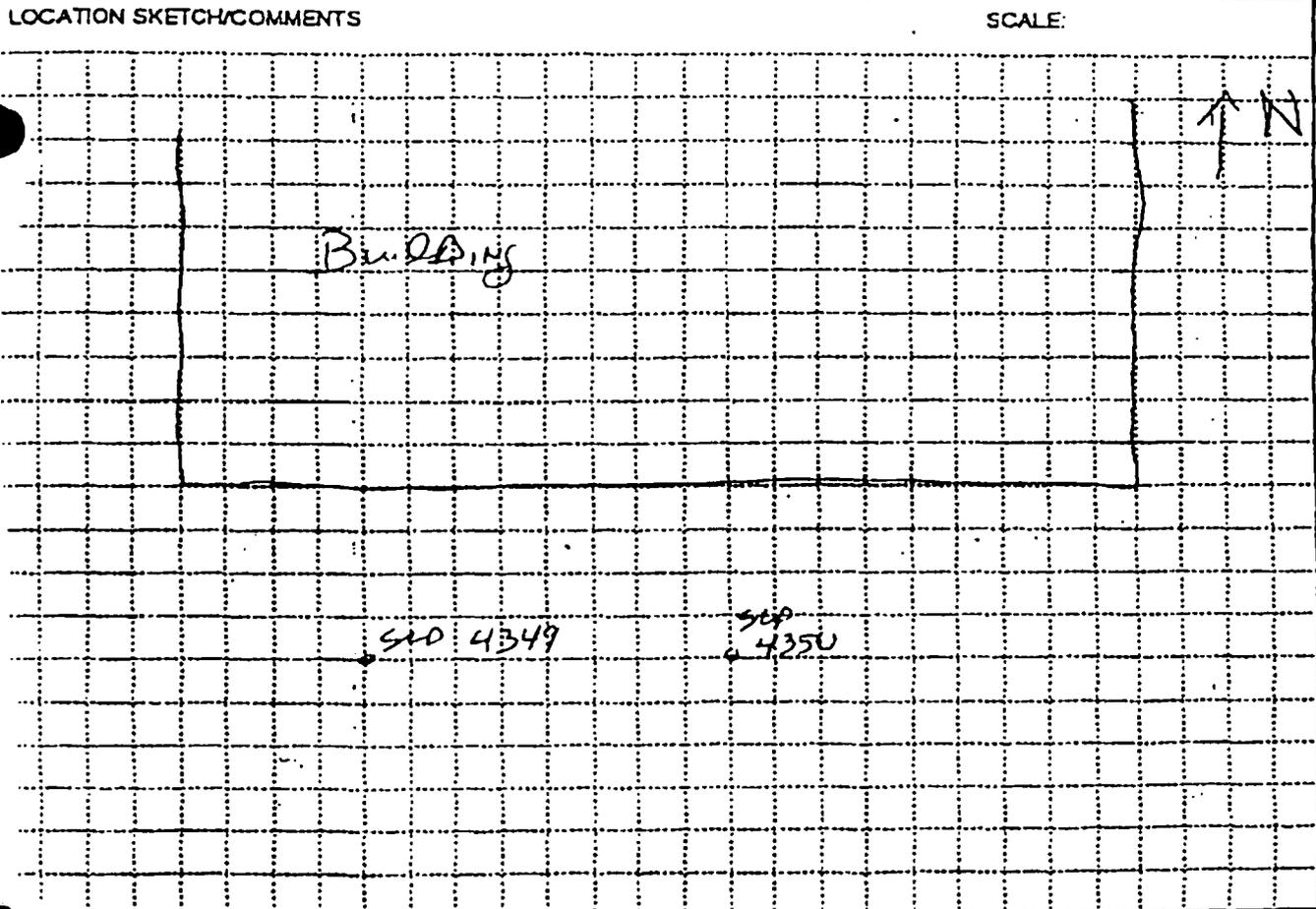
D.E.T. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	FIELD LOGGING RESULTS (ft)	DETAILED SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
		CONCRETE, CURR				
	1	GRAVEL, SAND, Brown, Sift, LOOSE Diy. GRAVEL & 50% ANGLES	6773 COUNT NAT 0.0 PPM RTP			2.0 2.0 Recovery
GW SU	2				70 4348 13484	
	3	TID.	2.1/4	1350	ns	2/2/00 Dum: 5
	4					

PROJECT  
**FUSRAP/SWS**

WELL NO.  
**SLD 4348**

# HTRW DRILLING LOG

1. COMPANY NAME <b>IT Corporation</b>		2. DRILL SUBCONTRACTOR <b>N/A</b>		HOLE NUMBER <b>SD 4349</b>	
3. PROJECT <b>FUSRAP/SD</b>		4. LOCATION <b>McKinley Tron</b>		SHEET <b>1 of 2</b>	
5. NAME OF DRILLER <b>N/A</b>		6. MANUFACTURER DESIGNATION OF DRILL <b>N/A</b>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>HAND Auger</b>		8. HOLE LOCATION			
		9. SURFACE ELEVATION			
		10. DATE STARTED <b>2/21/92</b>		11. DATE COMPLETED <b>2/21/92</b>	
12. OVERBURDEN THICKNESS		13. DEPTH OF GROUND WATER ENCOUNTERED <b>N/A</b>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>			
16. GEOTECHNICAL SAMPLES <b>0</b>		DISTURBED		18. TOTAL NUMBER OF CORE BOXES	
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
		OTHER (SPECIFY) <b>PAD</b>		OTHER (SPECIFY)	
20. DISPOSITION OF HOLE		BACKFILLED		21. SIGNATURE OF INSPECTOR <i>[Signature]</i>	
		MONITORING WELL		OTHER (SPECIFY)	
		OTHER (SPECIFY)			



PROJECT <b>FUSRAP/SD</b>	HOLE NO. <b>SD 4349</b>
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# HTRW DRILLING LOG

PROJECT		INSPECTOR		WELL NUMBER		
FUSRAP/SUDS		Chris Locke		SUD 4349		
				WELL # 2 SHEETS		
S.D.	DEPTH IN	DESCRIPTION OF MATERIALS ENC.	PILES TO CORNER DETAILED	LATEST SAMPLE OR CORE LOG NO.	ANALYTICAL SAMPLE NO.	REMARKS
SP GP	1	COVER SAND. GRAVEL, (SPXGP) Black, Stiff, Loose, Dry	7440. COUNT NAT O/D PPT PID			N/A HAND ASBEST
	2				7440 4349 1334h	
	3	T.D 2.1 ft		1340	hs	2/21/00 Drum: 5
	4					

PROJECT FUSRAP/SUDS

WELL # SUD 4351  
4349

# HTRW DRILLING LOG

DISTRICT St Louis

HOLE NUMBER SD 4350

1. COMPANY NAME IT Corporation

2. DRILL SUBCONTRACTOR GC. N/A

SHEET 1 OF 2

3. PROJECT FUSRAP/SD's

4. LOCATION McKinley Tru-

5. NAME OF DRILLER N/A

6. MANUFACTURER'S DESIGNATION OF DRILL N/A

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT HAND Auger

8. HOLE LOCATION

9. SURFACE ELEVATION

10. DATE STARTED 2/22/00

11. DATE COMPLETED 2/21/00

12. OVERBURDEN THICKNESS

13. DEPTH GROUNDWATER ENCOUNTERED N/A

13. DEPTH DRILLED INTO ROCK

14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A

14. TOTAL DEPTH OF HOLE

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A

18. GEOTECHNICAL SAMPLES

DISTURBED

UNOBTAINED

18. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS

VOC

METALS

OTHER (SPECIFY) RAD

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

22. DISPOSITION OF HOLE

BACKFILLED

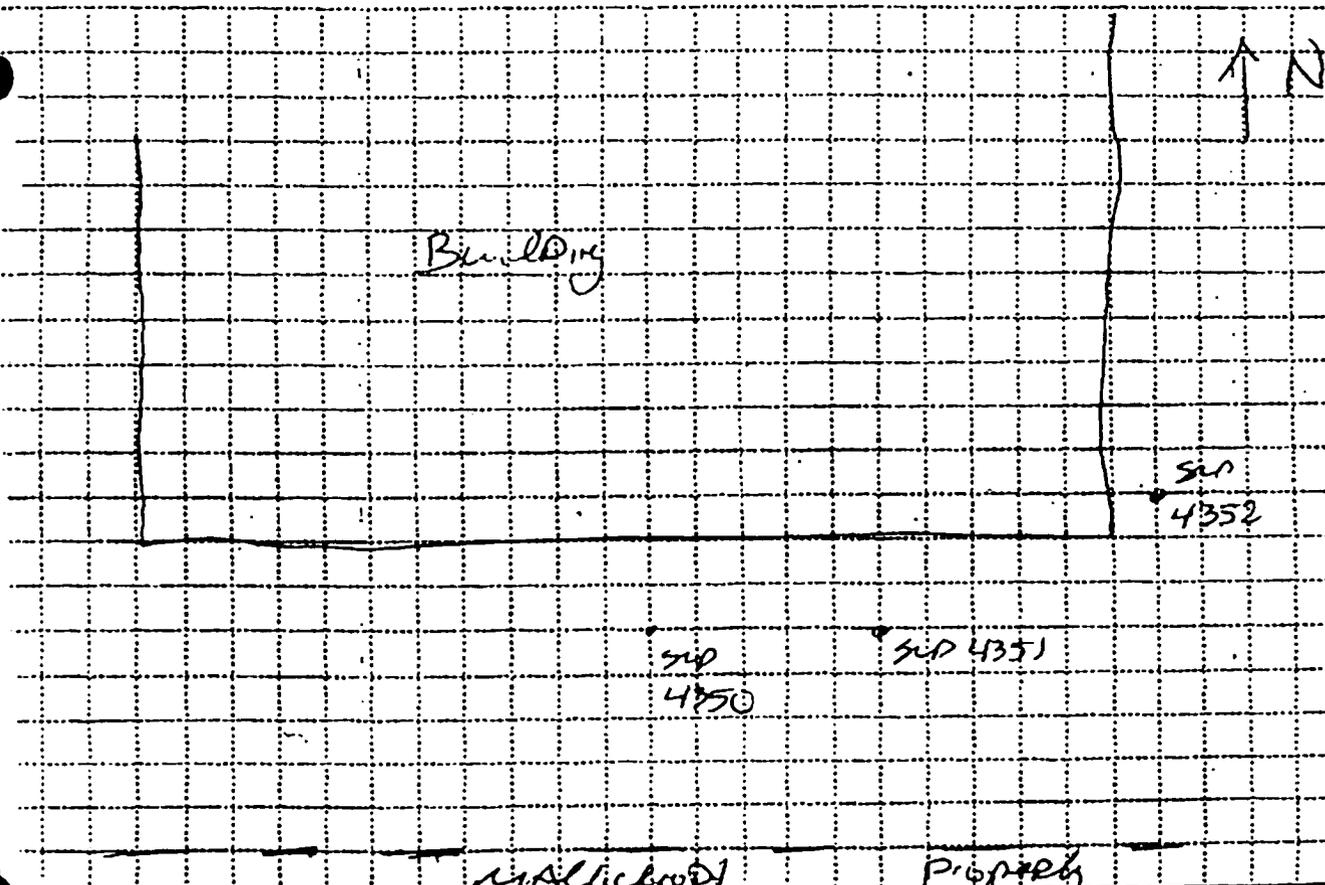
MONITORING WELL

OTHER (SPECIFY)

23. SIGNATURE OF INSPECTOR [Signature]

LOCATION SKETCH/COMMENTS

SCALE:



ECT FUSRAP/SD's

HOLE NO. SD 4350

# HTRW DRILLING LOG

PROJECT: FUSRAP/sps      INSPECTOR: Chris Locke      WELL NUMBER: 940 4350

WELL DEPTH: 2 METERS

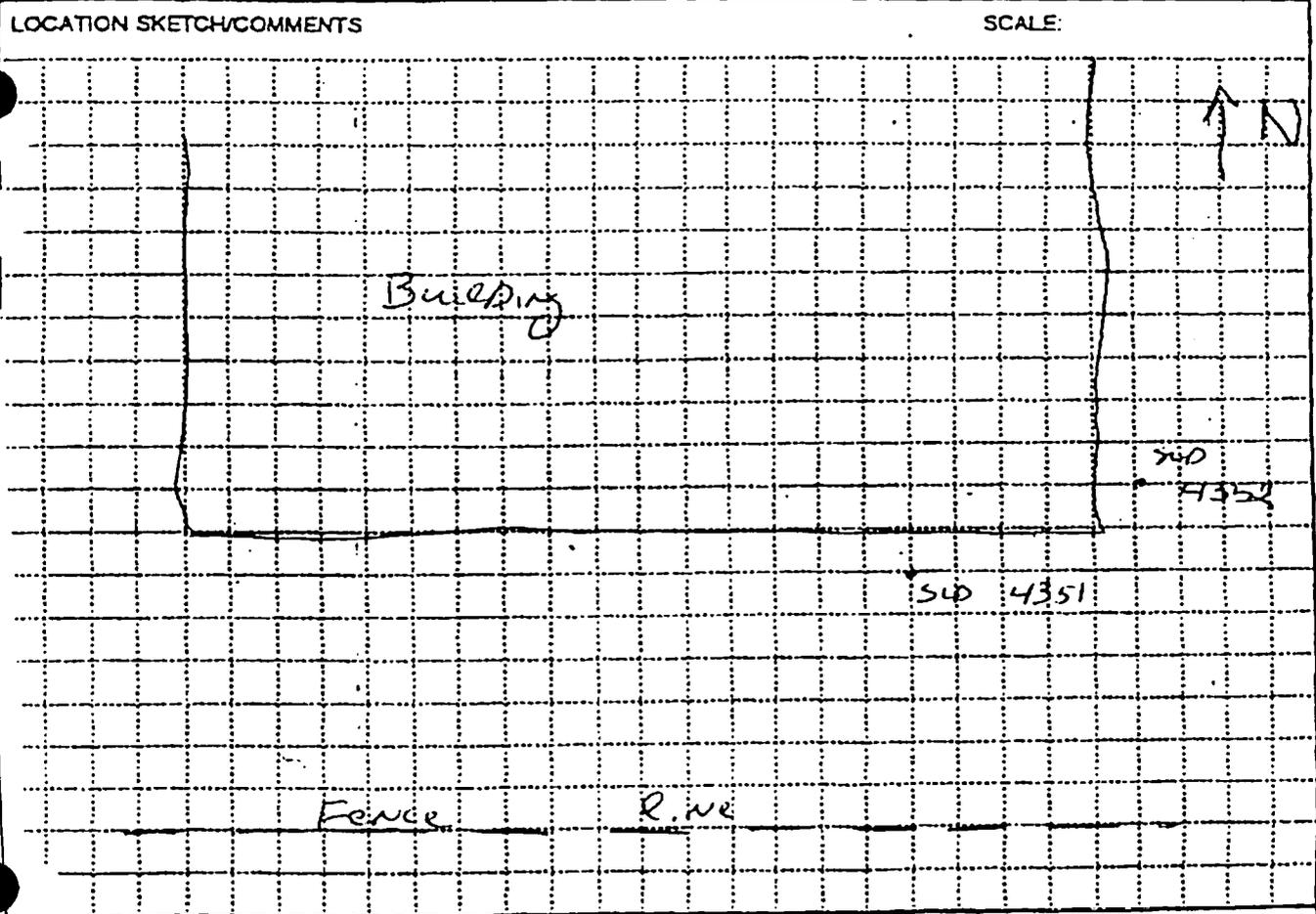
DEPTH (M)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	DETAILED SAMPLE OR CORE ID#	ANALYTICAL SAMPLE NO.	REMARKS
1	COVER SAND, GRAVEL (SP/GP) Black, Loose, soft, Dry.	7823 Counts NAI 0.0 173M PID			N/A HAND ANAL
2				340 4350 1330	
3	T.D 2.1 ft		1333 hrs	2/2/0	Drum: 5 7923 counts N= I Background

SP/GP

PROJECT: FUSRAP/sps

WELL NUMBER: 940 4350

HTRW DRILLING LOG		DISTRICT <i>Sl. Lewis</i>		HOLE NUMBER <i>SLP 4351</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>N/A</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SLP</i>			4. LOCATION <i>McKinley IRON</i>		
5. NAME OF DRILLER <i>KE NIA</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>N/A</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>HAND AUGER</i>		8. HOLE LOCATION		8. SURFACE ELEVATION	
9. OVERBURDEN THICKNESS			10. DATE STARTED <i>2/21/00</i>		
10. DATE STARTED			11. DATE COMPLETED <i>2/21/00</i>		
11. DEPTH OF UNDERWATER ENCOUNTERED <i>N/A</i>			12. DEPTH DRILLED INTO ROCK <i>N/A</i>		
12. DEPTH DRILLED INTO ROCK			13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>		
13. DEPTH DRILLED INTO ROCK			14. TOTAL DEPTH OF HOLE		
14. TOTAL DEPTH OF HOLE			15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>		
16. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)
21. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURE OF INSPECTOR <i>Chris Taha</i>
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)
21. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY



PROJECT <i>FUSRAP/SLP</i>	HOLE NO. <i>SLP 4351</i>
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# HTRW DRILLING LOG

4351

PROJECT FUSRAP/SUDS

INSPECTOR Chris Locke

WELL NUMBER SLD 4349  
 WELL ID 2 DEPTH 2

DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GRAVED SAMPLE OF CORE OR PEL	ANALYTICAL SAMPLE NO.	REMARKS
0	COVER				
1	SAND, GRAVEL (SP)(GP) BLACK, soft, loose, Dry	7669 COUNTS NAI 0.0 PPM P210			N/A HAND ASST
2				SUP 4351 1320hr	
3	TID 2.1 ft		1325 hrs		2/21/00 Duran: 5 6400 counts NAI Background

6399  
6400

PROJECT FUSRAP/SUDS

WELL NO SLD 4349  
4351

# HTRW DRILLING LOG

DISTRICT *St. Louis* HOLE NUMBER *SLD 4352*

1. COMPANY NAME *IT Corporation* 2. DRILL SUBCONTRACTOR *N/A* SHEET *1* OF *2*

3. PROJECT *FUSRAP/SD* 4. LOCATION *McKinley IRON*

5. NAME OF DRILLER *N/A* 6. MANUFACTURER'S DESIGNATION OF DRILL *N/A*

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT *1 1/2" HAND Auger* 8. HOLE LOCATION

9. SURFACE ELEVATION

10. DATE STARTED *2/21/00* 11. DATE COMPLETED *2/21/00*

12. OVERBURDEN THICKNESS 13. DEPTH DRILLED INTO ROCK

14. TOTAL DEPTH OF HOLE 15. DEPTH GROUNDWATER ENCOUNTERED *N/A*

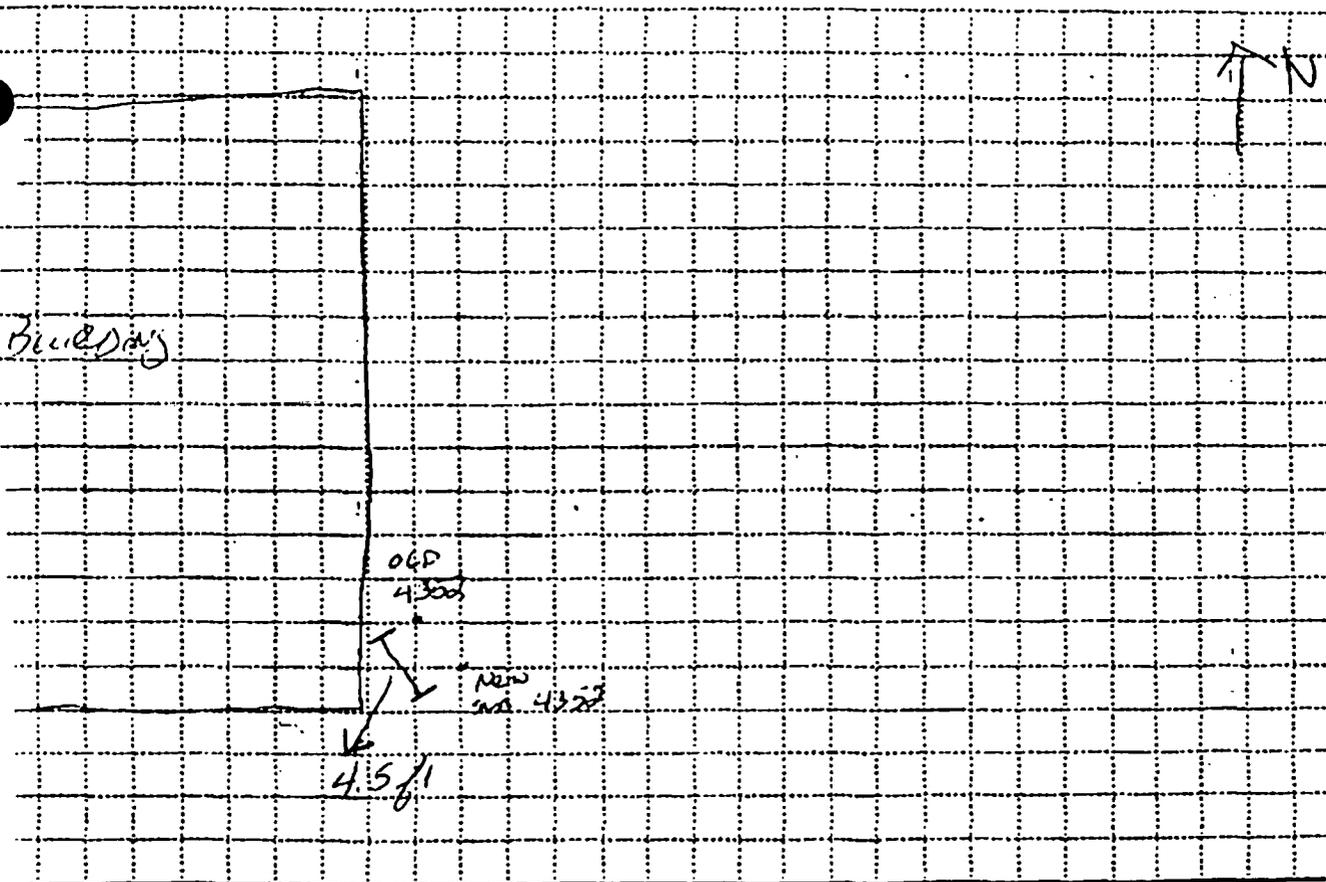
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED *N/A*

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) *N/A*

18. GEOTECHNICAL SAMPLES <i>0</i>	18. DISTURBED	18. UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)	OTHER (SPECIFY)
21. TOTAL CORE RECOVERY					
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	22. SIGNATURE OF INSPECTOR <i>[Signature]</i>	

LOCATION SKETCH/COMMENTS

SCALE:



JECT *FUSRAP/SD*

HOLE NO. *SLD 4352*

# HTRW DRILLING LOG

BLD. NO.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	CLASSIFIED SAMPLE OR CORE SIZE NO.	ANALYTICAL SAMPLE NO.	REMARKS
		COVER				
	1	FAT clay with gravel GRAVEL 20%, Angular. Brown, soft, Loose, D.S.	5614 counts NET 010 ppm P/P			N/A HAND ASSET
	2				4350 090411	
	3	SAND, gravel (SP) (GP) BLACK, Loose, D.S. RY	5427 counts NET 010 ppm P/P			N/A HAND ASSET
	4				240 4485	
	5	T.D. 4.1	4	0910 112		2/2100 Drum 5 5125 counts NET BACKGROUND

WELL NUMBER  
**SLP 4352**  
WELL  
**02** SHEET **0**

PROJECT **FURRAP/SID**

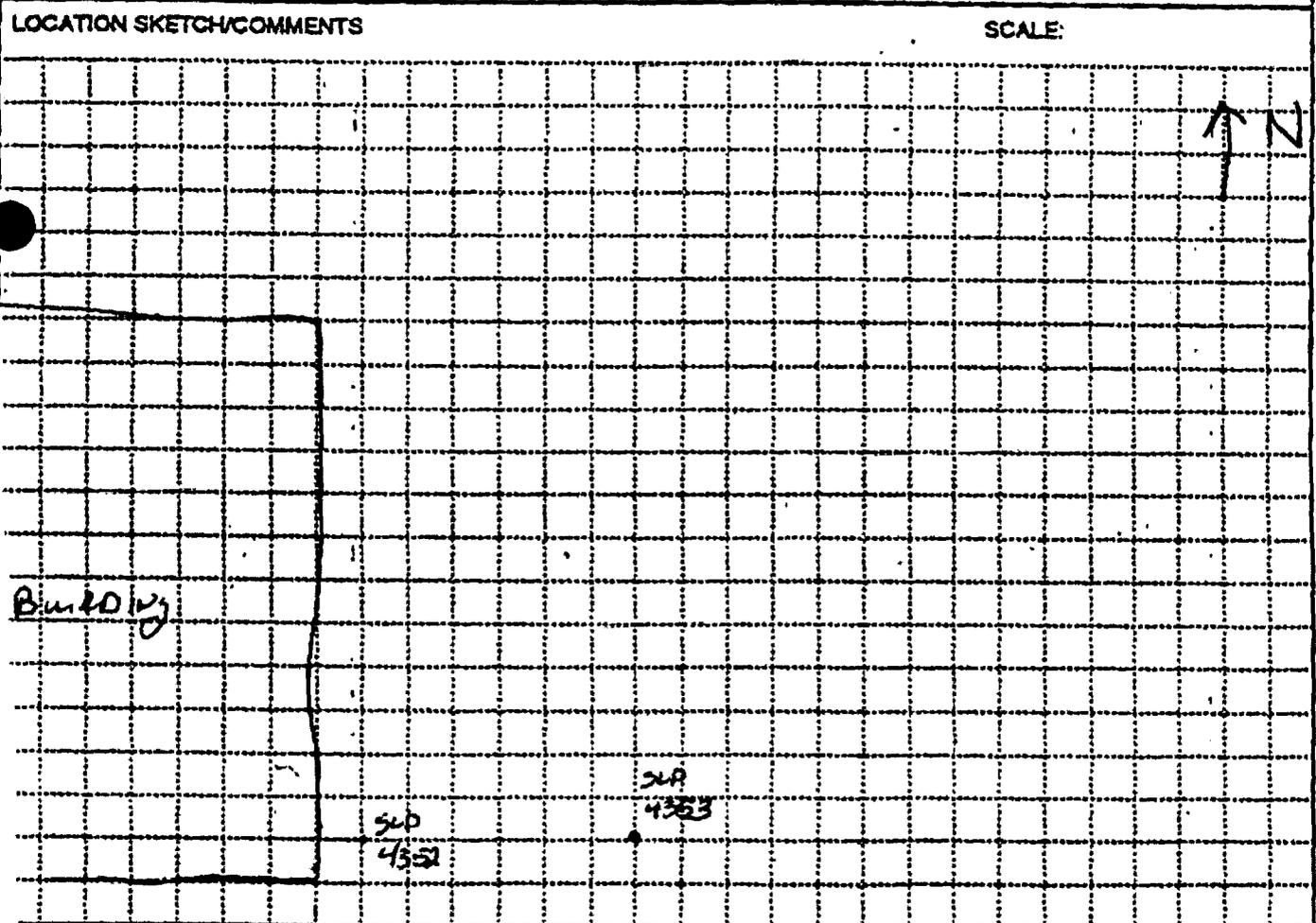
INSPECTOR **Chris Loop**

5125

WELL NO.  
**SLP 4352**

4352, 4485

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St Louis</u>		HOLE NUMBER <u>SLD 4353</u>	
1. COMPANY NAME <u>LI Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnics</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SLD</u>			4. LOCATION <u>McKinley IRON</u>		
5. NAME OF DRILLER <u>N/A</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>N/A</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>HARD ANNE</u>		8. HOLE LOCATION			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>2/21/00</u>		11. DATE COMPLETED <u>2/21/00</u>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
15. GEOTECHNICAL SAMPLES <u>0</u>		DISTURBED	UNOBTAINED	18. TOTAL NUMBER OF CORE BOXES	
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAI</u>	21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR



PROJECT <u>FUSRAP/SLD</u>	HOLE NO. <u>SLD 4353</u>
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FORM 5056-R, AUG 94 (Proponent: CECW-EG)

# HTRW DRILLING LOG

PROJECT <b>FUSRAP/SIDS</b>		INSPECTOR <b>Chris Locke</b>			WELL NUMBER <b>SCP 4353</b>
DEPTH FT	DESCRIPTION OF MATERIALS NO.	FIELD SCREENING RESULTS	CERTIFIED SAMPLE OR CORE ID# NO.	ANALYTICAL SAMPLE NO.	REMARKS
1	COVE SAND, GRAVEL (SPXGP) BLACK, soft, LOOSE, Dig	5309 COUNTS NAI  PPM PID.			N/A HAND ASSESS
2				SLP 4353 091341	
3	SAND, GRAVEL (SP)(GP) BLACK, soft, LOOSE, Dig.	5256 COUNTS NAI DID PPM PID			N/A HAND ASSESS
4				SLP 4356 092041	
5	TID	4.1	f4	0925	his 2/21/00  DIN 5 5215 counts NAI

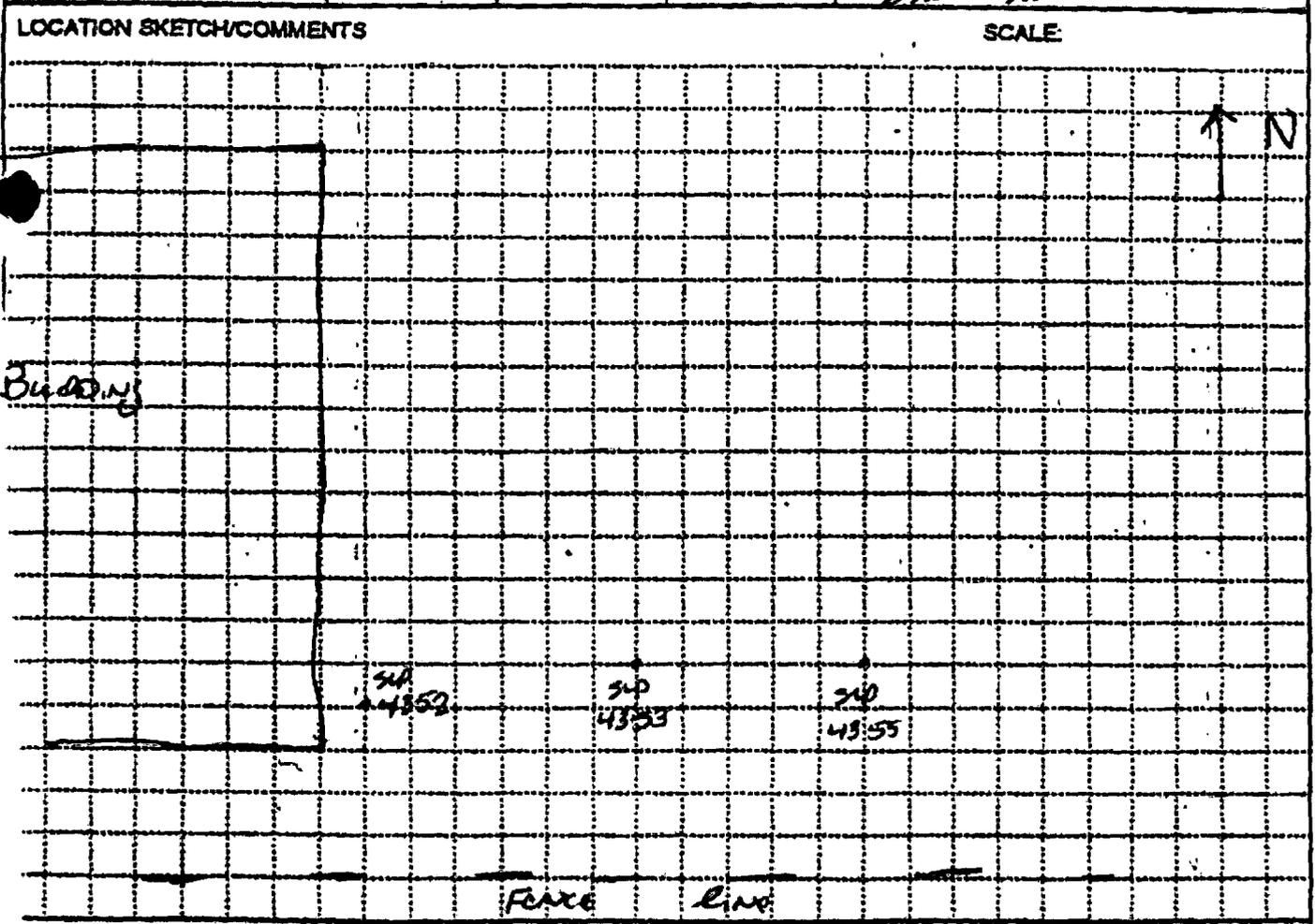
SP  
GP

GP  
SP

PROJECT **FUSRAP/SIDS**

WELL NUMBER  
**SCP 4353**

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>70 4355</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>DTA</u>		SHEET <u>1</u> OF <u>2</u> SHEETS	
3. PROJECT <u>FUSRAP/SOS</u>			4. LOCATION <u>McKinley IRP</u>		
5. MAKE OF DRILLER <u>N/A</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>N/A</u>		
7. SIZE AND TYPE OF DRILLING AND SAMPLING EQUIPMENT <u>Hand Auger</u>			8. HOLE LOCATION		
			9. SURFACE ELEVATION		
			10. DATE STARTED <u>2/2/00</u>		11. DATE COMPLETED <u>2/2/00</u>
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>		
13. DEPTH DRILLED INTO ROCK			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>		
14. TOTAL DEPTH OF HOLE			15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>		
16. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
<u>0</u>				18. TOTAL NUMBER OF CORE BOXES	
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)
				<u>RAD</u>	
20. DEPOSITION OF HOLE		SACCELLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURE OF INSPECTOR
					<u>[Signature]</u>



PROJECT <u>FUSRAP/SOS</u>	HOLE NO. <u>70 4355</u>
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# HTRW DRILLING LOG

BLK. NO.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCORING RESULTS	DETECT. SAMPLE OF CORE OR NO.	ANALYTICAL SAMPLE NO.	REMARKS
PROJECT <b>FUSRAP/SUS</b>		INSPECTOR <b>Chris Lock</b>			WELL NUMBER <b>SID 4355</b>	
					DEPTH <b>0-2</b> SECTION <b>2</b>	
SP GP	1	COVER SAND, GRAVEL (SP/GU) BLACK, soft, LOOSE, Dry, F.M.	12496 COUNTS NET DIO PPM PDP			N/A HAND ANGER
	2				SID 4355 1002hr	
	3		6457 COUNTS NET DIO PPM PDP			N/A HAND ANGER
	4				SID 4355 1002hr	
		T.I.D. 4.1 hrs		1015hrs	2/21/00	Dura: 5 6546 counts NET Background

6546

PROJECT **FUSRAP/SUS**

WELL NO. **SID 4355**

# HTRW DRILLING LOG

DISTRICT St. Louis HOLE NUMBER SD 4356  
 1. COMPANY NAME IT Corporation 2. DRILL SUBCONTRACTOR N/A SHEET 1 OF 2

3. PROJECT FLSRAP/SRS 4. LOCATION Mckinoh IRON

5. NAME OF DRILLER N/A 6. MANUFACTURER/DESIGNATION OF DRILL N/A

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Hand Auger 8. HOLE LOCATION

9. SURFACE ELEVATION

10. DATE STARTED 2/21/00 11. DATE COMPLETED 2/21/00

12. OVERBURDEN THICKNESS

13. DEPTH DRILLED INTO ROCK

14. TOTAL DEPTH OF HOLE

15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A

16. GEOTECHNICAL SAMPLES

DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES
<u>0</u>		

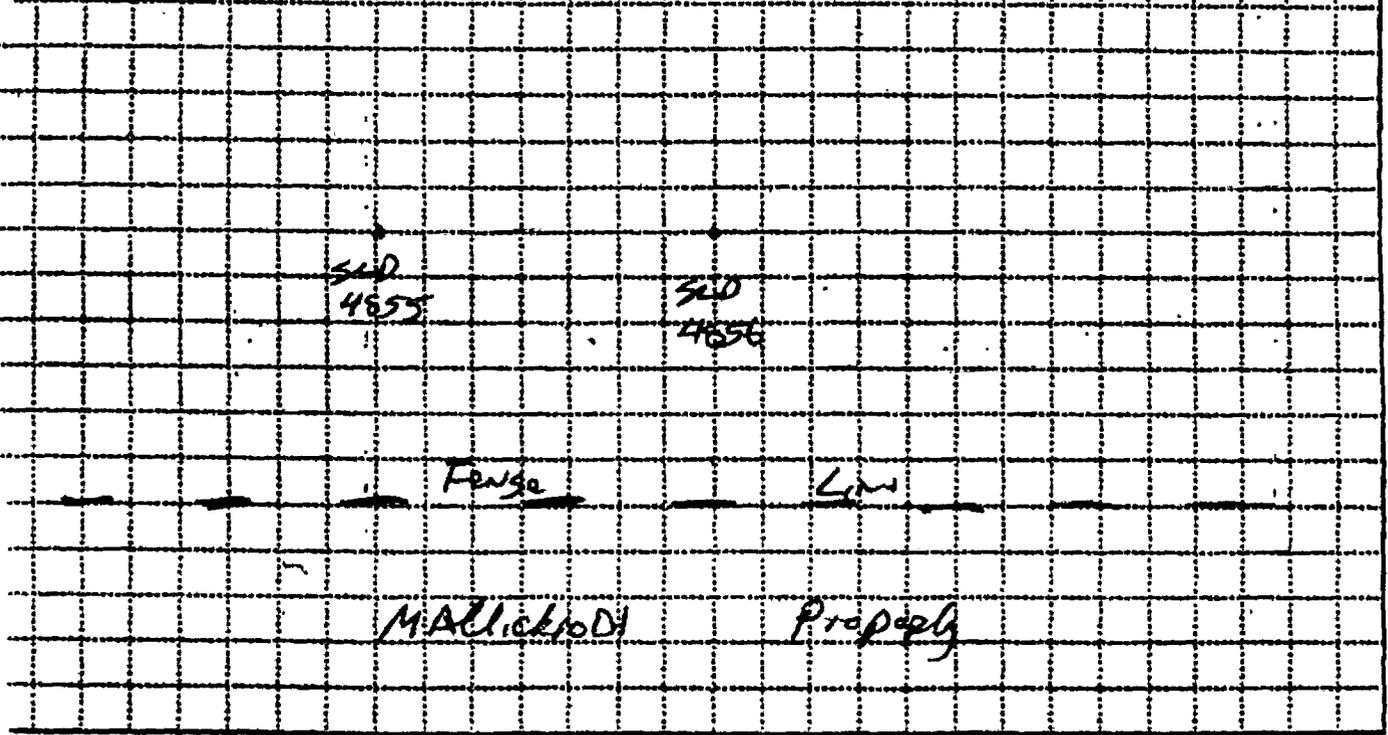
19. SAMPLES FOR CHEMICAL ANALYSIS

VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
		<u>2AD</u>			

20. DEPOSITION OF HOLE

BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	22. SIGNATURE OF INSPECTOR
			<u>[Signature]</u>

LOCATION SKETCH/COMMENTS SCALE:



PROJECT FLSRAP/SRS HOLE NO. SD 4356

# HTRW DRILLING LOG

PROJECT: **FUSRAP/SUP3**      INSPECTOR: **Chris Leck**      WELP NUMBER: **SLD 4356**  
 WELP: **2**      WELP: **A**

BLK. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	DETECTED SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
GW	1	COVER GRAVEL, BLACK, stfb. Loose net	G103 Counts NAT 00 PPM PIT			N/A HAND ASER
	2				SLD 4356 1015	-
	3	T.I.D. 2.1 ft		1020 hrs		2/21/00 Duri: 5  5871 counts NAT BACKGROUND.
	4					

PROJECT: **FUSRAP/SUP3**

WELP NO: **SLD 4356**

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SLD 4357</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>N/A</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SLDS</u>			4. LOCATION <u>McKinley Iron</u>		
5. NAME OF DRILLER <u>N/A</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>N/A</u>		
7. SIZE AND TYPE OF DRILLING AND SAMPLING EQUIPMENT <u>Hand Auger</u>		8. HOLE LOCATION			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>2/11/00</u>		11. DATE COMPLETED <u>2/11/00</u>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
16. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
17. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
				OTHER (SPECIFY) <u>RAO</u>	
18. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				19. TOTAL NUMBER OF CORE BOXES	
				20. SIGNATURE OF INSPECTOR <u>[Signature]</u>	
				21. TOTAL CORE RECOVERY	

LOCATION SKETCH/COMMENTS

SCALE:

↑ N

Mallinckrodt      Property

SLD 4357      SLD 4358

# HTRW DRILLING LOG

PROJECT <i>ENSRAP/SWS</i>		INSPECTOR <i>Chris Lochi</i>			HOLE NUMBER <i>SUD 4357</i>
S.D. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	CONTROL SAMPLE OR CORE ID NO.	ANALYTICAL SAMPLE NO.
<i>GP</i>	1	<i>Cover</i> <i>Gravel, 5 to 6, Loose, wet</i>	<i>5209</i> <i>COUNTS</i> <i>NAT</i> <i>0.0</i> <i>PPM</i> <i>6</i> <i>PD</i>		
	2				<i>SUD</i> <i>4357</i> <i>10236</i>
	3	<i>TID.</i>	<i>2.1 ft</i>	<i>1030</i>	<i>ACS</i>  <i>2/21/00</i> <i>Drum: 5</i>
	4				

HOLE NUMBER  
*SUD 4357*  
PAGE  
*2* SHEETS  
*8*

*ENSRAP/SWS*

*SUD 4357*

<b>HTRW DRILLING LOG</b>			DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>SLD 4358</i>		
1. COMPANY NAME <i>IT CORPORATION</i>			2. DRILL SUBCONTRACTOR <i>N/A</i>			SHEET <i>1</i> OF <i>2</i>		
3. PROJECT <i>FUSRAP/SLD</i>				4. LOCATION <i>MCKINLEY IRON</i>				
5. NAME OF DRILLER <i>N/A</i>				6. MANUFACTURER'S DESIGNATION OF DRILL <i>N/A</i>				
7. SIZE AND TYPE OF DRILLING AND SAMPLING EQUIPMENT <i>HARD ASAC</i>			8. HOLE LOCATION					
			9. SURFACE ELEVATION					
			10. DATE STARTED <i>2/21/00</i>			11. DATE COMPLETED <i>2/21/00</i>		
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>					
13. DEPTH DRILLED INTO ROCK			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>					
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>					
15. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		18. TOTAL NUMBER OF CORE BOXES		
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY) <i>RAD</i>		OTHER (SPECIFY)
20. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		21. SIGNATURE OF INSPECTOR <i>[Signature]</i>
21. TOTAL CORE RECOVERY								

LOCATION SKETCH/COMMENTS

SCALE:

↑ N

*SLD 4357      SLD 4358      SLD 4359*

*FUSR      RMP      PROPERTY*

PROJECT <i>SLD5/FUSRAP</i>	HOLE NO. <i>SLD 4358</i>
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# HTRW DRILLING LOG

PROJECT *FUSRAP/SIDS*

INSPECTOR *Chris Licho*

WELL NUMBER *SLD 4358*

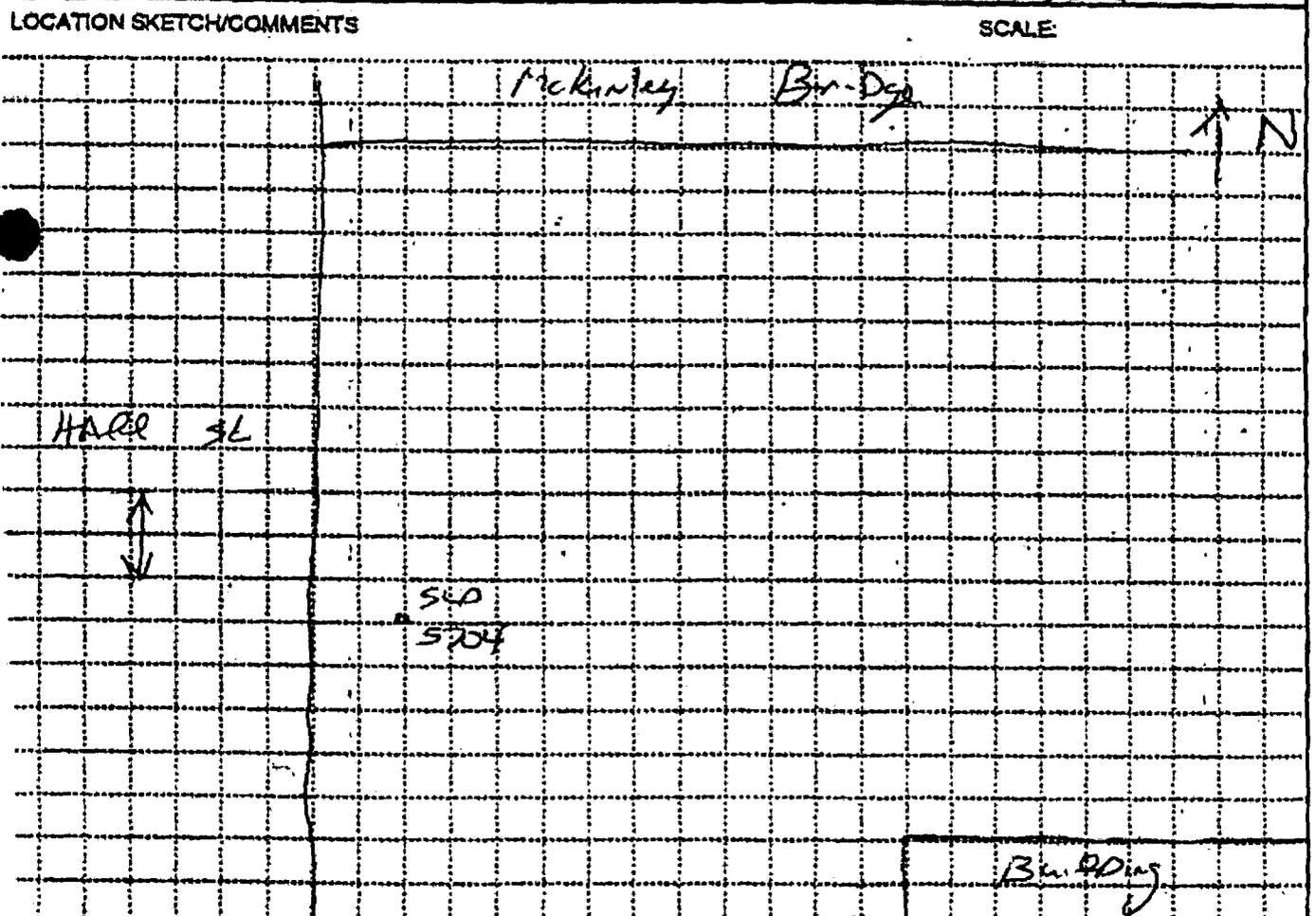
WELL *2* SECTION *2*

GLCH NO.	DEPTH FT.	DESCRIPTION OF MATERIALS NO.	FIELD (COUNTING) RESULTS NO.	CORRECTED SAMPLE OR CORE DRILL NO. NO.	ANALYTICAL SAMPLE NO. NO.	REMARKS NO.
<i>SP</i> <i>GP</i>	1	<i>COVER</i> <i>SAND, GRAVEL (SP) (GP)</i> <i>Black, st/fb, loose, Dry</i>	<i>6118</i> <i>COUNTS</i> <i>NAT</i> <i>D.O</i> <i>PPM</i> <i>PIED</i>	-		<i>N/A</i> <i>Hard</i> <i>Angle</i>
	2				<i>200</i> <i>4358</i> <i>103/hr</i>	-
	3	<i>TID. 2.1 f/s</i>		<i>1040</i>	<i>hrs</i>	<i>2/21/00</i> <i>Drum: 5</i>  <i>5129 counts NAT</i> <i>Background.</i>
	4					

PROJECT *FUSRAP/SIDS*

WELL NUMBER *SLD 4358*

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>570 5704</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SLS</i>		4. LOCATION <i>2 Ph. 2, PS Garage</i>			
5. NAME OF DRILLER <i>JIM McDONNELL</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>CHE 55</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow 5/8" Auger SPDR 3000</i>		8. HOLE LOCATION <i>CLASS 2</i>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <i>10/18/00</i>		11. DATE COMPLETED <i>10/18/00</i>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
16. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)
					21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <i>Chris Tarkenton</i>



PROJECT <i>FUSRAP/SLS</i>	HOLE NO. <i>570 5704</i>
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# HTRW DRILLING LOG

PROJECT		INSPECTOR		WELL NUMBER		
FUSRAP/SUDS		Miss Locke		SUD 5704		
BLK. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	CERTIFIED SAMPLE OR CORE NO.	ANALYTICAL SAMPLE NO.	REMARKS
		CONCRETE	4800 COUNTS NAT O.D. PPM		501 5704 (CONC)	
	1	GRAVEL, SAND, LOW CLAY, Brown, HARD, LOOSE, Dry, FB.	6100 COUNTS NAT O.D. PPM	110 102/10	500 5704 1052	2.0 2.0 Recovery
	2	LOW CLAY WITH GRAVEL Brown, Brown, HARD, DENSE, Dry, FB	5400 COUNTS NAT O.D. PPM		500 5740 1056	
	3	-TID.	2.6	6+ 1100		his 10/18/00 Drum: I (ph. 0.05) 5400 counts NAT BACKGROUND Bentonite Cap for BF

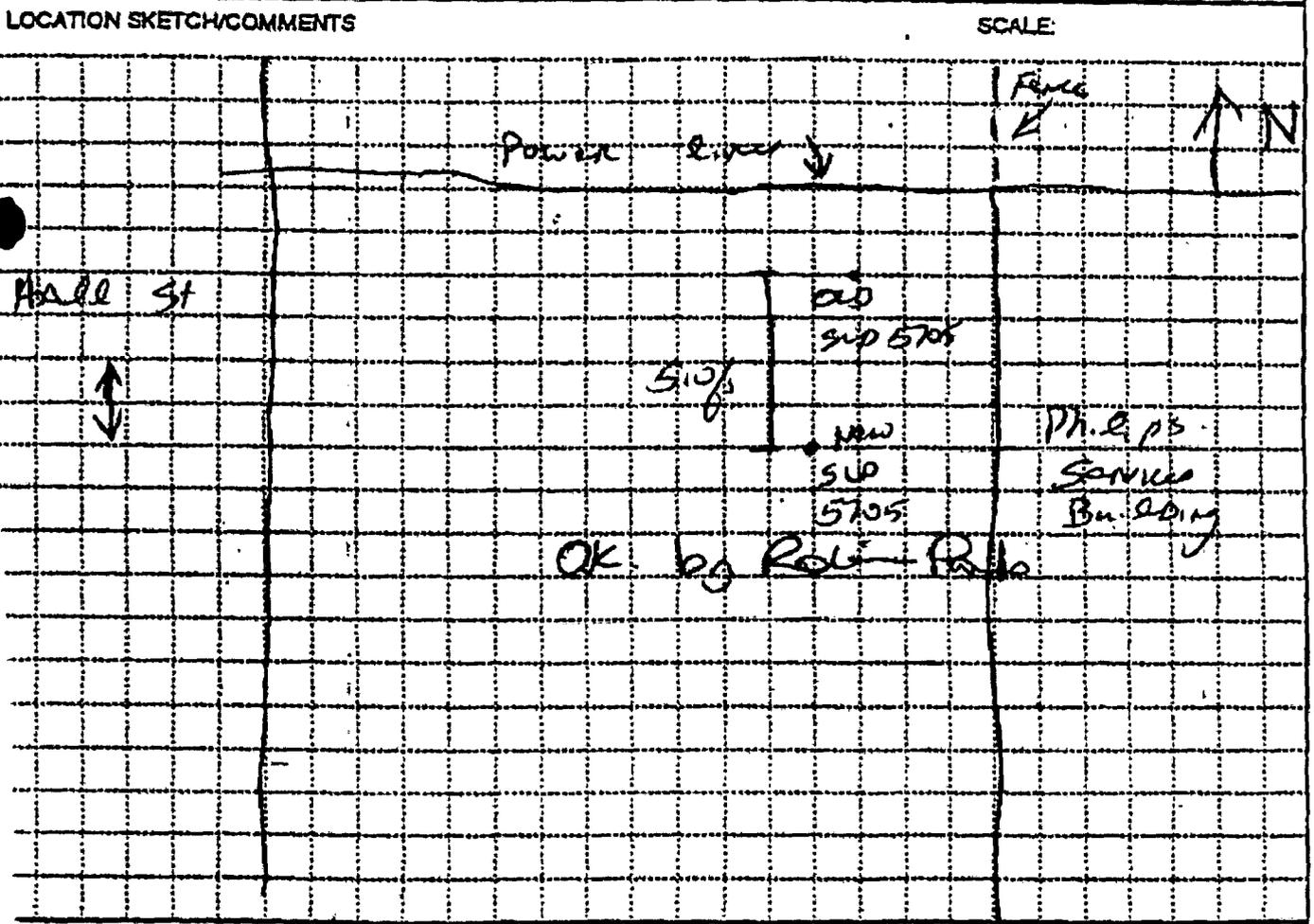
5400

GW

PROJECT FUSRAP/SUDS

SUD 5704

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>50 5705</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnics</i>		SHEET <i>1</i> OF <i>2</i> SHEETS	
3. PROJECT <i>FUSRAP/SWS</i>			4. LOCATION <i>Philips Services</i>		
5. NAME OF DRILLER <i>Jim McDonnell</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CNE 55</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger Solid 7/8" ID</i>		8. HOLE LOCATION <i>CLASS 2</i>		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS			10. DATE STARTED <i>10/24/02</i>		
13. DEPTH DRILLED INTO ROCK			11. DATE COMPLETED <i>10/24/02</i>		
14. TOTAL DEPTH OF HOLE			15. DEPTH GROUNDWATER ENCOUNTERED <i>NA</i>		
16. OVERBURDEN THICKNESS			18. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>NA</i>		
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>NA</i>			19. TOTAL NUMBER OF CORE BOXES		
19. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED	UNDISTURBED	20. SAMPLES FOR CHEMICAL ANALYSIS	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)
21. DISPOSITION OF HOLE		BAGGED	MONITORING WELL	OTHER (SPECIFY)	22. SIGNATURE OF INSPECTOR <i>[Signature]</i>
21. TOTAL CORE RECOVERY		23. SIGNATURE OF INSPECTOR		24. SIGNATURE OF INSPECTOR	



PROJECT <i>FUSRAP/SWS</i>	HOLE NO. <i>SLD 5705</i>
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# HTRW DRILLING LOG

PROJECT		INSPECTOR			HOLE NUMBER	
FUSRAP/SWS		Chris Locke			SWP 5705	
CLY. NO.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
GW	1	CONCRETE	6700 COUNTS NET		5400 5705 (CONC) 0926	
	2	GRAVEL, TAM HARD. LASSA, Dry FILL	6700 COUNTS NET PPM PFD 7100 COUNTS NET PFD	0.5 ton/6ft <sup>2</sup>	5400 5705 0931	1.5 2.0 RECOVERY
	3	TID	2.3 ft	0945	his 10/24/00	Drum: 1 (ph. lips) 6400 counts NET BACKGROUND Bentomb chip for BF

6400

PROJECT FUSRAP/SWS

HOLE NO. SWP 5705

HTRW DRILLING LOG				DISTRICT		HOLE NUMBER	
1. COMPANY NAME <b>IT Corporation</b>				2. DRILL SUBCONTRACTOR <b>Geotechnologs</b>		3. HOLE NUMBER <b>SD 5706</b>	
3. PROJECT <b>FUSRAD/SWS</b>				4. LOCATION <b>Philips Service</b>			
5. NAME OF DRILLER <b>JIM McONARD</b>				6. MANUFACTURER'S DESIGNATION OF DRILL <b>CME 55</b>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>302-1 3000</b>		8. HOLE LOCATION <b>CLASS 2</b>		9. SURFACE ELEVATION		10. DATE STARTED <b>10/24/00</b>	
12. OVERBURDEN THICKNESS		13. DEPTH DREADED INTO ROCK		14. TOTAL DEPTH OF HOLE		11. DATE COMPLETED <b>10/24/00</b>	
15. GEOTECHNICAL SAMPLES <b>0</b>		16. DEPTH GROUNDWATER ENCOUNTERED <b>N/A</b>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>		18. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>	
19. DISPOSITION OF HOLE <b>SACFILLED</b>		20. SIGNATURE OF INSPECTOR <i>[Signature]</i>		21. TOTAL CORE RECOVERY		22. SIGNATURE OF INSPECTOR <i>[Signature]</i>	
23. DISPOSITION OF HOLE <b>SACFILLED</b>		24. SIGNATURE OF INSPECTOR <i>[Signature]</i>		25. SIGNATURE OF INSPECTOR <i>[Signature]</i>		26. SIGNATURE OF INSPECTOR <i>[Signature]</i>	
LOCATION SKETCH/COMMENTS				SCALE:			
<p>The sketch shows a grid with a north arrow pointing up. A vertical line on the left is labeled 'HARD SE'. A horizontal line at the top is labeled 'Philips Service Building'. Below the building, there is a 'PARKING' area. A diagonal line labeled 'NEWEST' points towards the bottom left. Measurements include '6'' and '40'' along the diagonal line. Other labels include 'SD 5706 OLD' and 'SD 5706'. A note at the bottom says 'OK by Phil's Park'.</p>							
PROJECT <b>FUSRAD/SWS</b>				HOLE NO. <b>SD 5706</b>			

# HTRW DRILLING LOG

PROJECT		INSPECTOR			WELL NUMBER	
FUSRAP/SUPS		Chris Lock			SHP 5706	
DEPTH	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	DETERMINED SAMPLE NO. OF CORE	ANALYTICAL SAMPLE NO.	REMARKS
		control	7900 counts NIST		5706 (control)	
CL	1	S. Rh - low clay Brown - hard, loose, Dry, Fri.	8100 counts NIST PPM PSD		5706 0841	0.5 / 20 Recovery
	2	T.D. 1.5 ft		0850	his	10/24/00
	3					

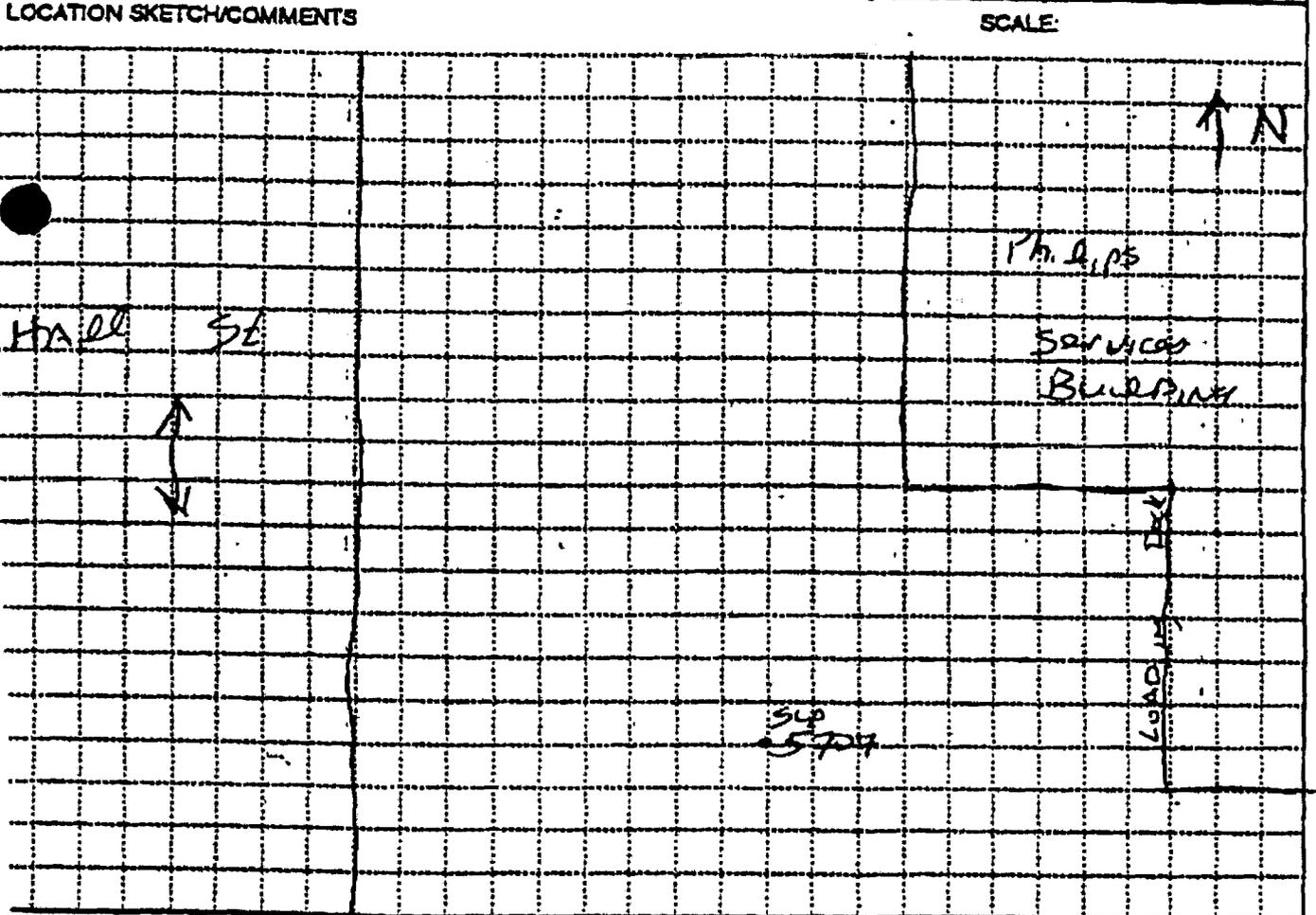
8000  
7600

Drum: 1 (ph. logs)  
7600 counts NIST Background  
Bentonite chips for BF  
T.D. Due to refusal with  
oil from USACE (was the third attempt to complete the Boring).  
by Robin Pano

PROJECT FUSRAP/SUPS

WELL NO. SHP 5706

<b>HTRW DRILLING LOG</b>			DISTRICT <u>St. Louis</u>			HOLE NUMBER <u>SLD 5707</u>		
1. COMPANY NAME <u>I Corporation</u>			2. DRILL SUBCONTRACTOR <u>Geotechnology</u>			SHEET <u>1</u> OF <u>2</u>		
PROJECT <u>FYSRAP/SUDS</u>			4. LOCATION <u>Ph. Lips Services</u>					
5. NAME OF DRILLER <u>Jim McDonald</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CHE 55</u>					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Annular Split 3"OD</u>			8. HOLE LOCATION <u>CLASS 2</u>					
			9. SURFACE ELEVATION					
			10. DATE STARTED <u>10/23/00</u>			11. DATE COMPLETED <u>10/23/00</u>		
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>					
13. DEPTH DRILLED INTO ROCK			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>					
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>					
18. GEOTECHNICAL SAMPLES <u>0</u>		18.1. DISTURBED	18.2. UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES				
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAp</u>	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY	
22. DISPOSITION OF HOLE		SACK FILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <u>[Signature]</u>			



PROJECT <u>FYSRAP/SUDS</u>	HOLE NO. <u>700 5707</u>
FORM 5086-R, AUG 94	
(Prepared CECW-EG)	

# HTRW DRILLING LOG

PROJECT		INSPECTOR			WELL NUMBER	
FUSRAP/SWS		Chris Lodu			SUD 5707	
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	EST TECH SAMPLE OR CORE DEPTH (ft)	ANALYTICAL SAMPLE NO.	REMARKS	
1	CONCRETE	6100 COUNTS NAT		340 577 (C-14) 1339 MS		
	SAND, GRAVEL, SLAY BRACK, HARD LOOSE Dry, Fin, Angular	6200 COUNTS NAT 0.1 PPM PSP	0.5 40m/ft <sup>2</sup>	540 577 1345	2.0 2.0 Recovery	
2		6500 COUNTS NAT 0.1 PPM		540 5749 1346		
3	T.D.	2.4 ft	1355 hrs		10/23/00 Drum: 1 (ph eps) 5800 counts NAT Background Bentonite chip for BF	

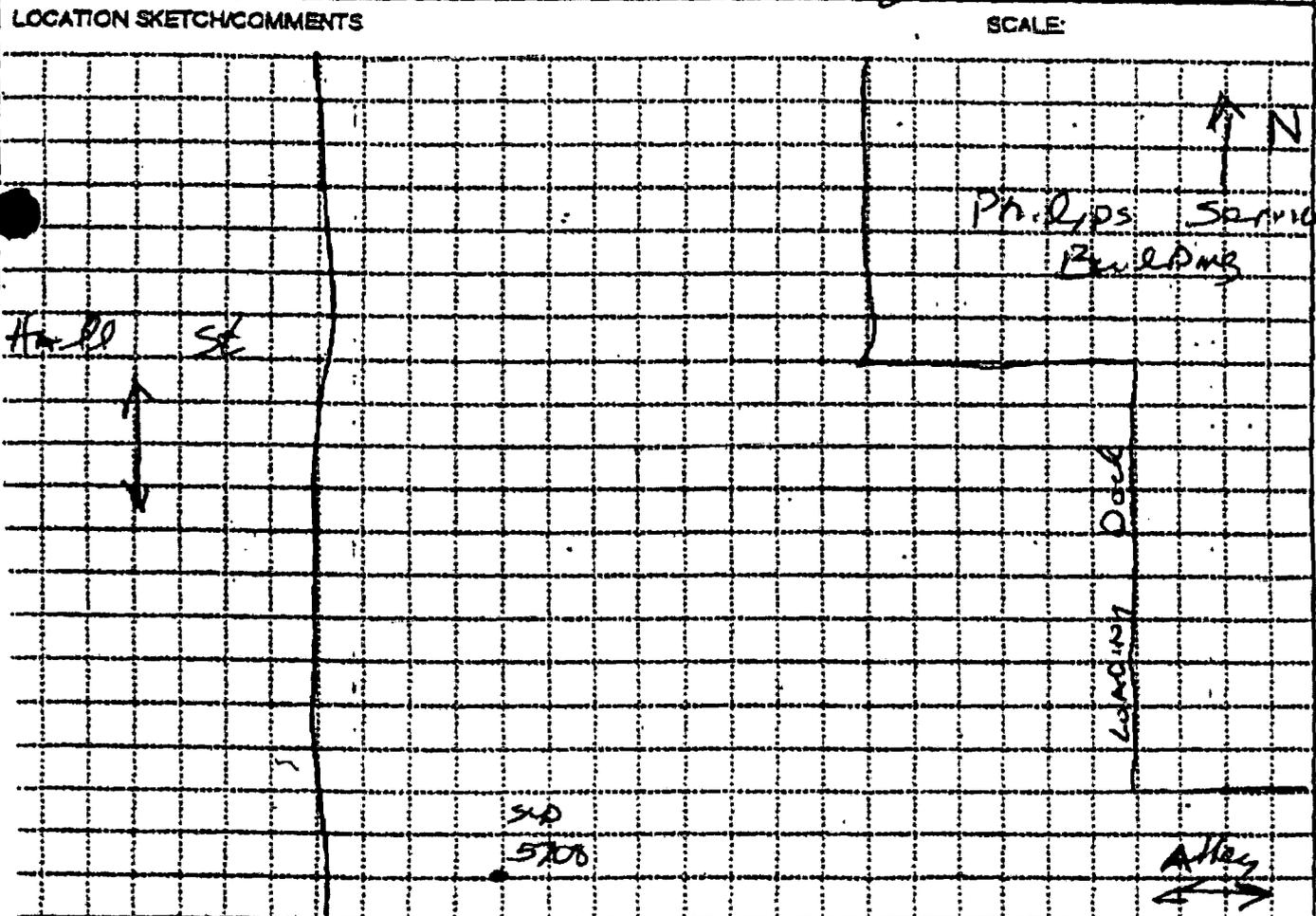
SW

5600

PROJECT FUSRAP/SWS

WELL NO SUD 5707

<b>HTRW DRILLING LOG</b>			DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>SP 5708</i>		
1. COMPANY NAME <i>IT Corporation</i>			2. DRILL SUBCONTRACTOR <i>Geotechnology</i>			SHEET <i>1</i> OF <i>2</i> SHEETS		
3. PROJECT <i>FUSRAP/SWS</i>				4. LOCATION <i>PH. Lips Service</i>				
5. NAME OF DRILLER <i>J. McDonald</i>				6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 33</i>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger 30" 5/8" DIA</i>				8. HOLE LOCATION				
				9. SURFACE ELEVATION				
				10. DATE STARTED <i>10/23/00</i>		11. DATE COMPLETED <i>10/23/00</i>		
12. OVERBURDEN THICKNESS				13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>				
13. DEPTH DRILLED INTO ROCK				14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>				
14. TOTAL DEPTH OF HOLE				15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>				
16. GEOTECHNICAL SAMPLER <i>0</i>		DISTURBED		UNDISTURBED		18. TOTAL NUMBER OF CORE SECTIONS		
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY) <i>TRAD</i>		21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR <i>[Signature]</i>



PROJECT <i>FUSRAP/SWS</i>	HOLE NO. <i>SP 5708</i>
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# HTRW DRILLING LOG

WELL NUMBER  
510 5708  
SHEET  
2

PROJECT  
FUSRAP/SWS

INSPECTOR  
Chris Lock

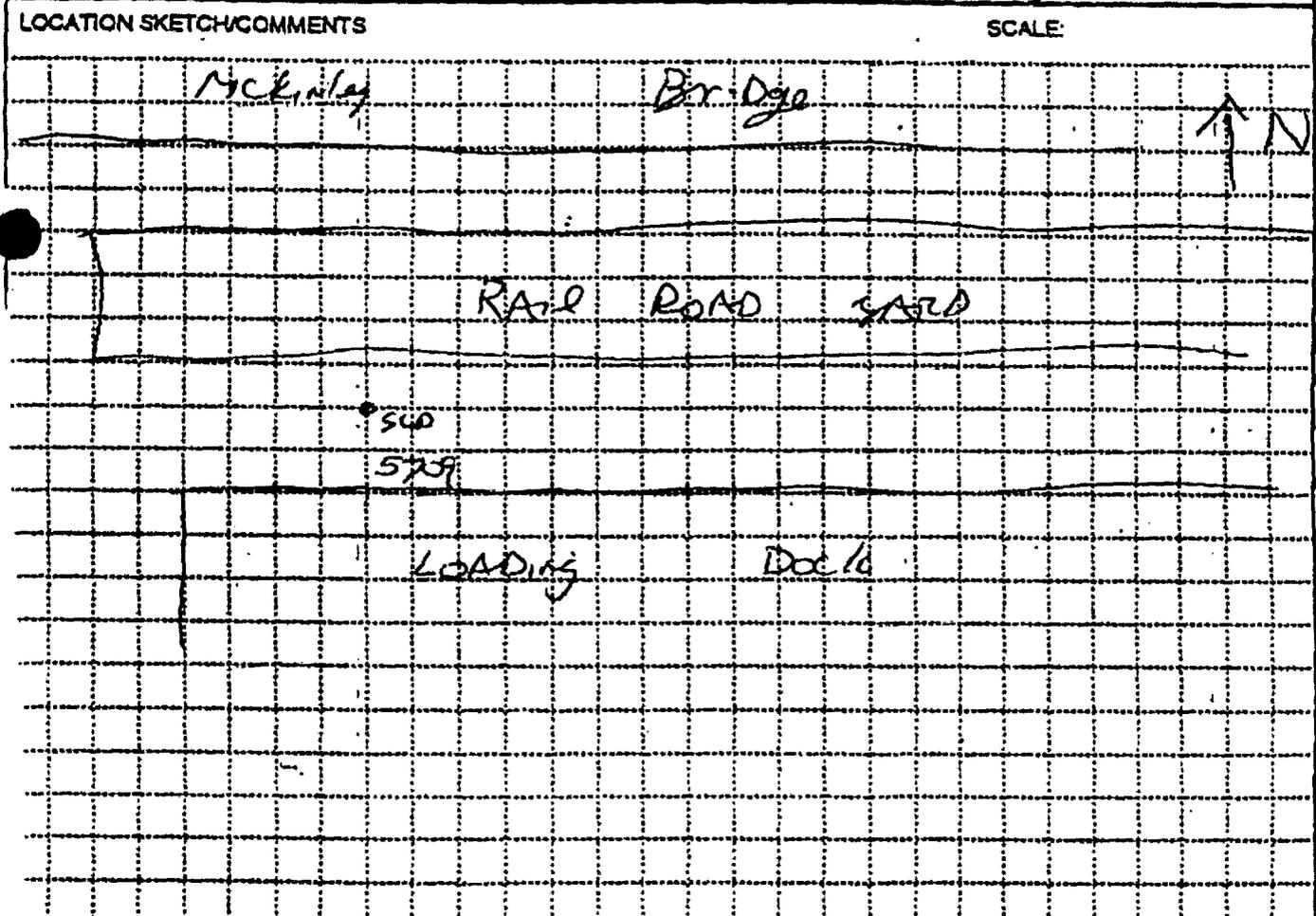
BLK. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	FIELD MEASUREMENT RESULTS (ft)	COLLECTED SAMPLE OR CORE NO. (ft)	ANALYTICAL SAMPLE NO. (ft)	REMARKS (ft)
SW	1	Slag, cinders, gravel Hard, Loose, Dry, Fill, Angular	6800 COUNTS NET 0.0 PPM Pb	0.5 ton/ft <sup>2</sup>	2470 5706 1308	1.8 2.0 Recovery
	2		7100 COUNTS NET 0.0 PPM Pb		5400 5750 1312	
	3	T.D.	2.0	67	1320	hrs 10/23/00 Dini, (ph. log) 600 counts Net Background Bentone chip for BF

(9/100)

PROJECT  
FUSRAP/SWS

WELL NUMBER  
510 5708

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>3-D 5709</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SWS</i>			4. LOCATION <i>Ph. Lips Samu</i>		
5. NAME OF DRILLER <i>JIM McDONNAD</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger SPRT 3000</i>		8. HOLE LOCATION <i>Class 2</i>		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS		15. DATE STARTED <i>10/18/60</i>		11. DATE COMPLETED <i>10/18/60</i>	
13. DEPTH DRILLED INTO ROCK		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>NA</i>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>NA</i>	
14. TOTAL DEPTH OF HOLE		18. GEOTECHNICAL SAMPLES <i>D</i>		19. TOTAL NUMBER OF CORE BOXES	
		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
				OTHER (SPECIFY) <i>RHO</i>	
21. DISPOSITION OF HOLE		BACIFILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				22. SIGNATURE OF INSPECTOR <i>Jim Tark</i>	



PROJECT <i>FUSRAP/SWS</i>	HOLE NO. <i>3-D 5709</i>
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FORM 5086-R, AUG 54 (Prepared: CECW-EG)

# HTRW DRILLING LOG

PROJECT		INSPECTOR		WELL NUMBER		
FUSRAP/SWS		Chris Cook		SND 5709		
DEPTH (ft)	DEPTH (m)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	DELETED SAMPLE OR CORE ORG. NO.	ANALYTICAL SAMPLE NO.	DATE
		CONCRETE	5600 counts NCI		5400 5709 CONCRETE 1311 hrs	
	1	GRAVEL, SAND, BROWN, BLACK, HARD, LOOSE, DRY, FOP	5800 counts NCI PPM PPO	0.5 ton/ft <sup>2</sup>	5400 5709 1312 hrs	1.8 2.0 Recovery
	2		5800 counts NCI PPM PPO			
	3				5400 5751 1315 hrs	
		TID	2.5 ft	1320 hrs		10/18/00 Drum: 1 (p.h.d.p.s) 5300 counts NCI BACKGROUND Bentonite chips for BF

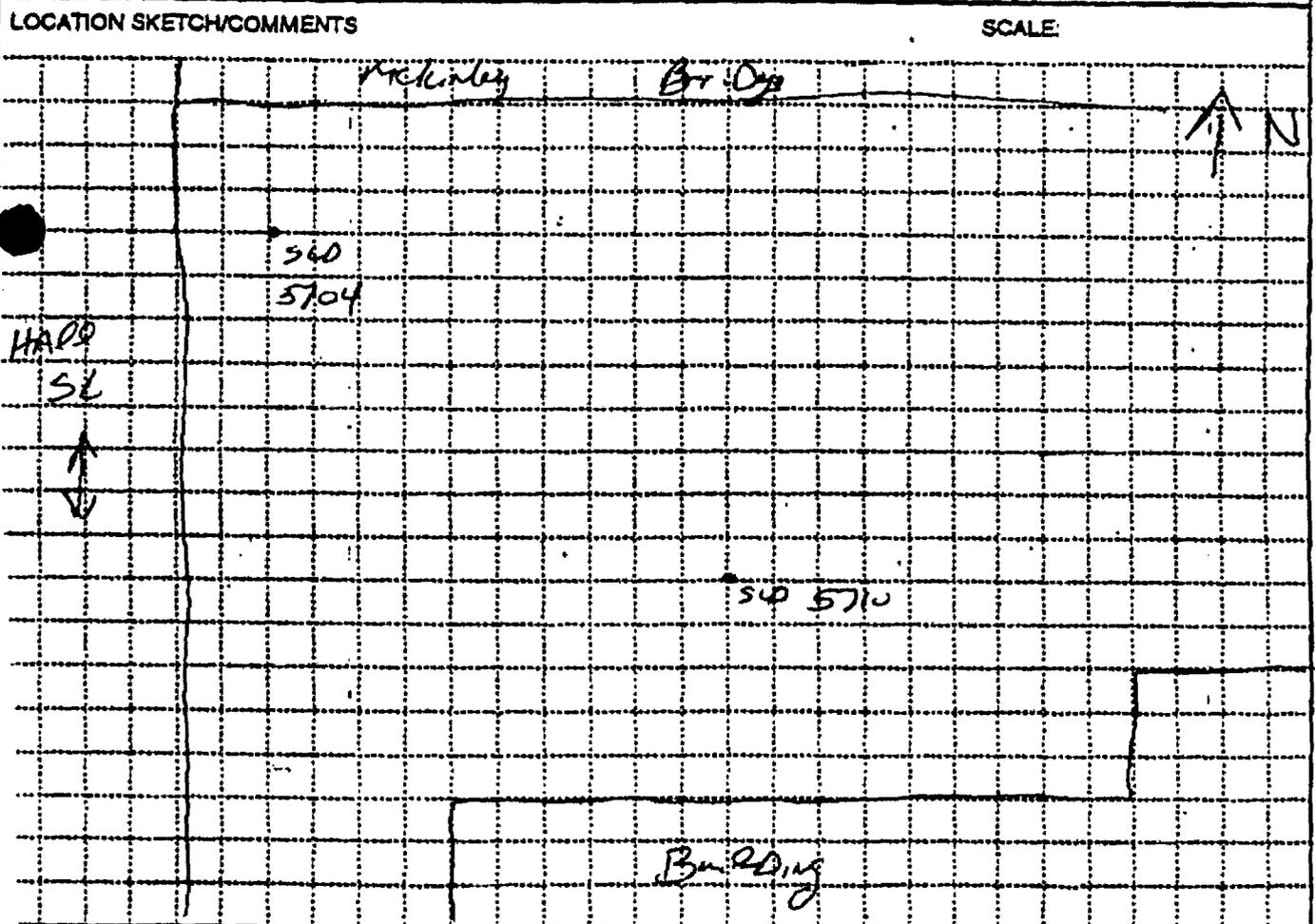
5300

GW

PROJECT FUSRAP/SWS

WELL NO. SND 5709

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>340 5710</i>	
1. COMPANY NAME <i>IT CORPORATION</i>		2. DRILL SUBCONTRACTOR <i>Geology</i>		SHEET SHEETS <i>1 of 2</i>	
3. PROJECT <i>FUSRAP/SWS</i>		4. LOCATION <i>Ph. Lps Sewer</i>			
5. NAME OF DRILLER <i>JIM McDONALD</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 5D</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger Split Spoon</i>		8. HOLE LOCATION <i>Cross 2</i>		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS		10. DATE STARTED <i>10/18/04</i>		11. DATE COMPLETED <i>10/18/04</i>	
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>		15. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
16. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE SCORES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
				23. SIGNATURE OF INSPECTOR <i>[Signature]</i>	



PROJECT <i>FUSRAP/SWS</i>	HOLE NO. <i>340 5710</i>
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FORM 5056-R. AUG 94

(Proponent: CECW-EG)

# HTRW DRILLING LOG

PROJECT		INSPECTOR			WELL NUMBER	
FUSPAP/SMA		Chris Locke			SLD 5710	
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCORING RESULTS	DRIFTH SAMPLE OR CORE DRIFTH	ANALYTICAL SAMPLE NO.	REMARKS	
GW  CH  3	CONCRETE (COVER)	5900 COUNTS NFI		5400 5710 (COVER) 0929		
	GRAVEL, SAND TAN, HARD, DENSE DIG, FINE, ANGRY	5600 COUNTS NFI PPM PTD 5700 COUNTS NFI PPM PTD		2400 5710 0936	118 2.0 Recovery	
	FAL CHIP, BROWN HARD, DENSE, DIG		2.5 to 11'	5400 5752 0940		
	TID 2.6 ft		0950	115	10/18/00 Dunn: ) (philips) 5800 counts NFI BACKGROUND Bentonite chip for BF.	

5800

PROJECT FUSPAP/SMA

WELL NO. SLD 5710

HTRW DRILLING LOG			DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>SD 5711</i>	
1. COMPANY NAME <i>IT Corporation</i>			2. DRILL SUBCONTRACTOR <i>Geotechnical</i>			SHEET <i>1</i> OF <i>2</i> SHEETS	
3. PROJECT <i>FUSRAP/SWS</i>			4. LOCATION <i>PH 445 SORVEN</i>				
5. NAME OF DRILLER <i>JIM McDONALD</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME</i>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Star Angel SABO SCOR</i>			8. HOLE LOCATION <i>CLASS 2</i>				
			9. SURFACE ELEVATION				
			10. DATE STARTED <i>10/31/90</i>		11. DATE COMPLETED <i>10/31/90</i>		
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>				
13. DEPTH DRILLED INTO ROCK			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>				
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>				
15. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		18. TOTAL NUMBER OF CORE BOXES	
16. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
						<i>RAD</i>	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
						21. SIGNATURE OF INSPECTOR <i>[Signature]</i>	
LOCATION SKETCH/COMMENTS						SCALE:	
PROJECT <i>FUSRAP/SWS</i>						HOLE NO. <i>SD 5711</i>	

# HTRW DRILLING LOG

PROJECT		INSPECTOR		WELL NUMBER		
FUSRAP/SMS		Chris Locks		5711		
SLT. NO.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	SCREEN SAMPLE OR CORE DEPTH	ANALYTICAL SAMPLE NO.	REMARKS
	1	Concrete, cover	5300 counts NAI ppm PSP		240 5711 (cover) 09M	
	2	fat clay with silty Green, HARD, dense dry, fill	5600 counts NAI	1.5 down/ft	3400 5711 0915	115 2.0 Recovers
	3		PSP 6000 counts NAI			
	4		ppm PSP		5400 5753 0927	
		TID	4.0 ft	0935 hrs	10/31/00	Drum: 2 (ph. 1.05) 5300 counts NAI Background Bentonite chip for BF

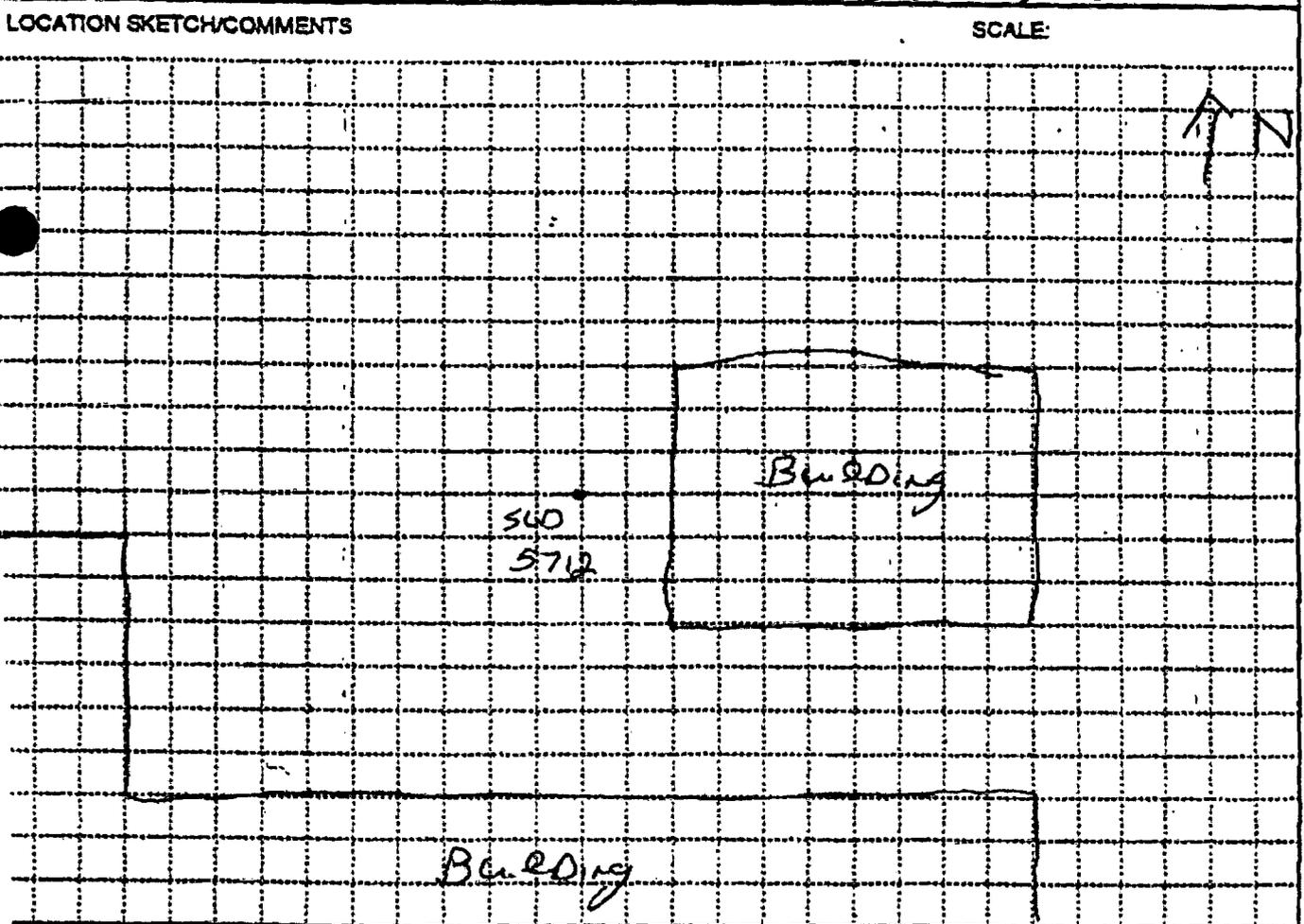
5300

CH

FUSRAP/SMS

5711

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>	HOLE NUMBER <u>50 572</u>
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>	SHEET <u>1</u> OF <u>2</u>
3. PROJECT <u>FUSRAP/SIDS</u>		4. LOCATION <u>Ph. Lips Service</u>	
5. NAME OF DRILLER <u>JIM McDONALD</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow 3/4 Auger SPIN TAP</u>		8. HOLE LOCATION <u>TR class 2</u>	
		9. SURFACE ELEVATION	
		10. DATE STARTED <u>10/18/00</u>	11. DATE COMPLETED <u>10/18/00</u>
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>	
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>	
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>	
16. GEOTECHNICAL SAMPLES <u>0</u>	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY) <u>RAD</u>
			OTHER (SPECIFY)
21. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)
			22. SIGNATURE OF INSPECTOR <u>[Signature]</u>



PROJECT <u>FUSRAP/SIDS</u>	HOLE NO. <u>50 572</u>
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FORM 5056-R, AUG 94 (Proponent: CECW-EG)

# HTRW DRILLING LOG

PROJECT		INSPECTOR		WELL NUMBER		
FUSRAP/SIDS		Chris Locke		SND 5712		
DEPTH (ft)	DEPTH (m)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	CERTIFIED SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
		Concrete	5700 counts NET		5100 5712 (LUXE) 1414	
GW 1	1	GRAVEL, SAND, HARD, LOOSE, Dry, FRI Angular	5300 counts NET 010 PPM P10	0.5 - ton/ft <sup>2</sup>	5100 5712 1412	1.5 2.0 Recovery
CZ 2	2	S. clay - LEAN clay with WOOD - STAG Black, HARD Dense Moist, FRI.	5800 counts NET 010 PPM		5100 5754 1421H	
	3	LID	2.3 ft	1430	his	10/18/00 Dunn: i (p.h.o.p.s) 5500 counts NET Background Barbark chip for BF.

550

PROJECT FUSRAP/SIDS

WELL NO. SND 5712

# HTRW DRILLING LOG

DISTRICT *St. Louis*

SLD 5713

1. COMPANY NAME *IT Corporation* 2. DRILL SUBCONTRACTOR *Geotechnology* SHEET *1* OF *2*

3. PROJECT *FUSRAP/SLD* 4. LOCATION *Ph. 1. ps Service*

5. NAME OF DRILLER *JIM McDONALD* 6. MANUFACTURER'S DESIGNATION OF DRILL *CME 55*

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT *Hollow Stem Auger Split Spoon* 8. HOLE LOCATION *CLASS 2*

9. SURFACE ELEVATION

10. DATE STARTED *10/30/20* 11. DATE COMPLETED *10/30/20*

12. OVERBURDEN THICKNESS 13. DEPTH DRILLED INTO ROCK

14. TOTAL DEPTH OF HOLE 15. DEPTH GROUNDWATER ENCOUNTERED *N/A*

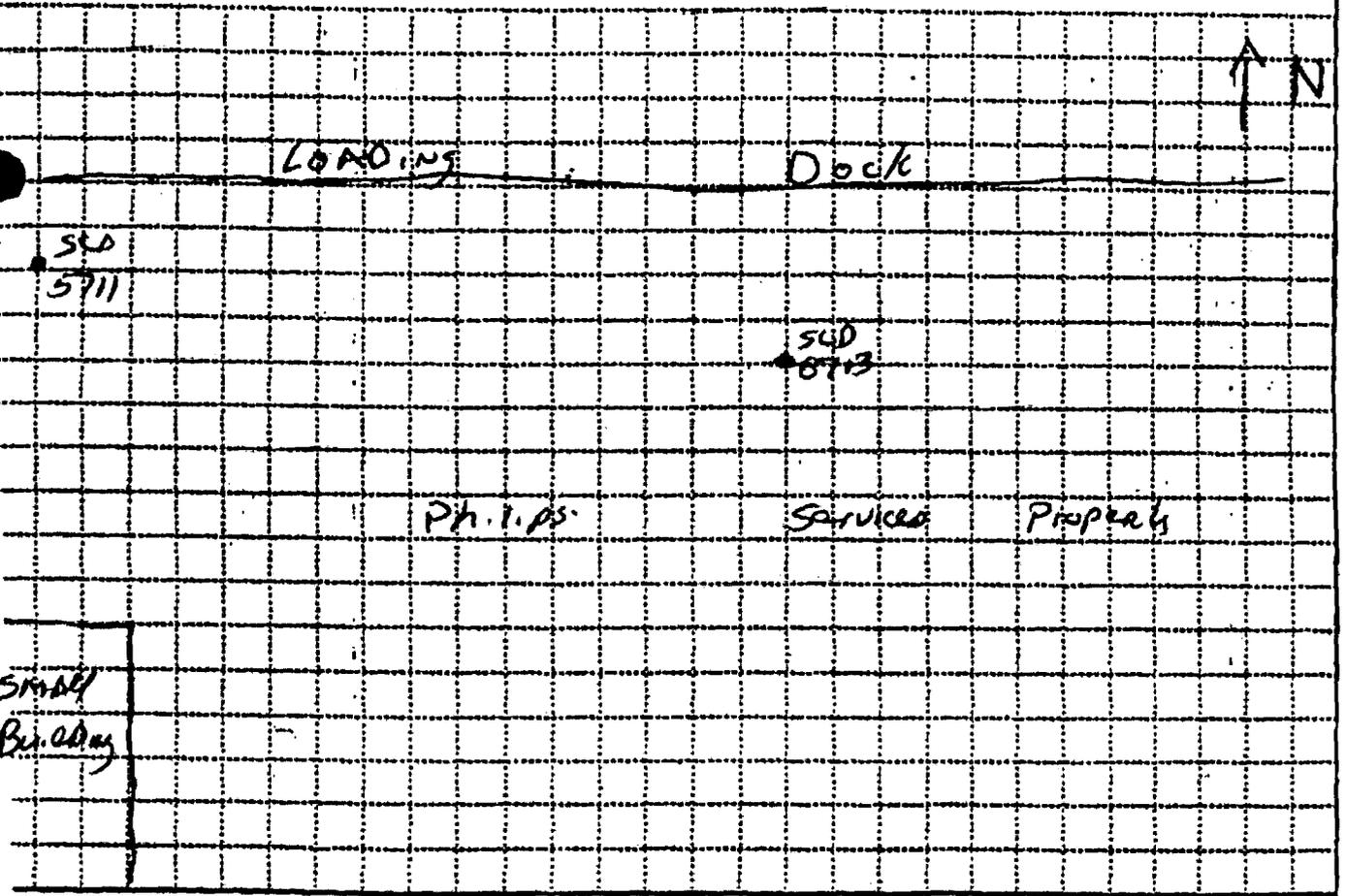
16. DEPTH TO WATER AND BLEND TIME AFTER DRILLING COMPLETED *N/A* 17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) *N/A*

18. GEOTECHNICAL SAMPLES *0* 19. DISTURBED *-* 20. UNDISTURBED *-* 21. TOTAL NUMBER OF CORE BOXES

22. SAMPLES FOR CHEMICAL ANALYSIS VOC METALS OTHER (SPECIFY) *RAD* OTHER (SPECIFY) OTHER (SPECIFY) 23. TOTAL CORE RECOVERY

24. DISPOSITION OF HOLE BAGGED MONITORING WELL OTHER (SPECIFY) 25. SIGNATURE OF INSPECTOR *[Signature]*

LOCATION SKETCH/COMMENTS SCALE:



PROJECT *FUSRAP/SLD* HOLE NO. *SLD 5713*

# HTRW DRILLING LOG

PROJECT **FUSRAP/SWS**

INSPECTOR **Chris Loch**

WELL NUMBER **SWD 5713**

DEPTH **2** FEET **2**

ELEV. (ft)	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD COUNTING RESULTS	DEATHOON SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
		CONCRETE, COVER	5500 COUNTS NET		5400 5713 (COUNT) 1532	
	1	SAND, GRAVEL, HARD, LOOSE, DRY, FINE, TAN.	4500 COUNTS NET  PPM PID		5400 5713 1541	15 2.0 Recovery
	2	SILT, CLAY, BRICK, HARD, DENSE, DRY, RED	4700 COUNTS NET  PPM PID		5400 5735 1545	
	3	FD	2.5	6+	1550	hrs 10/30/00 Drum: 2 (pipes)  5700 counts NET Background Bentonite chip for BF

5100

PROJECT **FUSRAP/SWS**

WELL NO. **SWD 5713**

HTRW DRILLING LOG				DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 5714</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>			3. SHEET SHEETS <i>1 of 2</i>		
2. PROJECT <i>FUSRAP/SOS</i>				4. LOCATION <i>Ph. Deps Service</i>			
5. NAME OF DRILLER <i>Jim McDougal</i>				6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME - 55</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger Split Spoon</i>		8. HOLE LOCATION <i>Plant Class 2</i>					
9. SURFACE ELEVATION				10. DATE STARTED <i>10/18/00</i>			
12. OVERBURDEN THICKNESS				11. DATE COMPLETED <i>10/18/00</i>			
13. DEPTH DRILLED INTO ROCK				15. DEPTH GROUNDWATER ENCOUNTERED <i>NA</i>			
14. TOTAL DEPTH OF HOLE				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>NA</i>			
18. GEOTECHNICAL SAMPLES <i>0</i>				DISTURBED		UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES		20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAO</i>	OTHER (SPECIFY)
21. TOTAL CORE RECOVERY		22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <i>[Signature]</i>
LOCATION SKETCH/COMMENTS				SCALE:			
PROJECT <i>FUSRAP/SOS</i>				HOLE NO. <i>SD 5714</i>			

# HTRW DRILLING LOG

PROJECT: FUSRAP/SND LOCATION: Miss. Lake WELL NO: 5714  
 DATE: 2-2-82

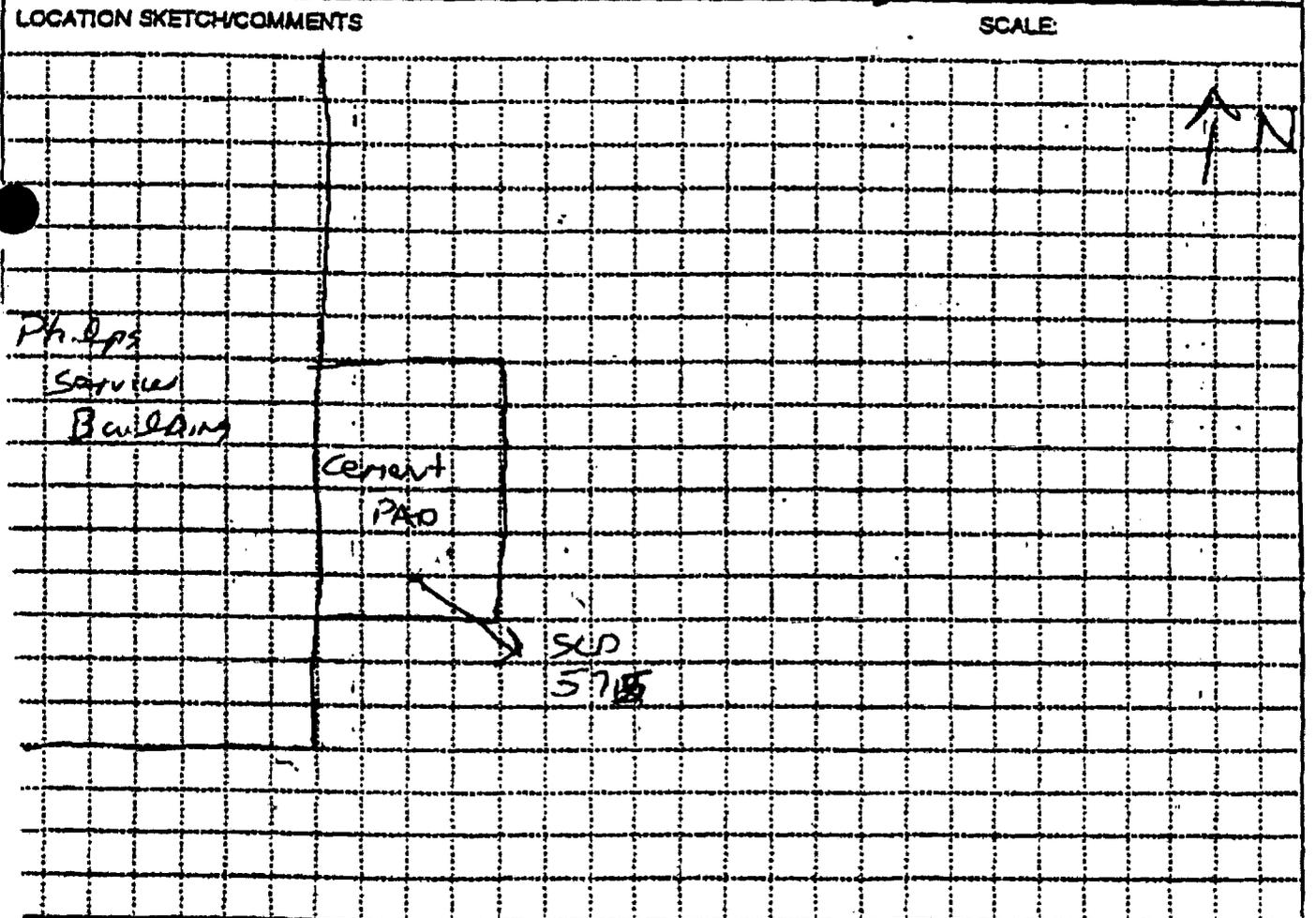
DEPTH (ft)	DESCRIPTION OF MATERIAL	FIELD COUNTING RESULT	DEPTH SAMPLE OR CORE (ft)	CALIBRATION SOURCE NO.	REMARKS
1	concrete	4900 counts N/A		2400 5714 1516	Cover
2	GRAVEL, SAND, TAN - Brown, HARD, loose, Dry, FINE Angular	5300 counts N/A DID PID	DIS top of 1"	3400 5714 1524	1.5 20 ROUGH
3	T.I.D.	5500 counts N/A PID	28"	5400 5756 1527	10/18/80 Draw: T.I (photo's) 5700 counts NET BACKGROUND Bentonek chips for R BF  T.I.D. Due to refusal with O.K. from USACE. Relin Park

GW

FUSRAP/SND

5714

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>	HOLE NUMBER <i>SUD 5715</i>
1. COMPANY NAME <i>IT CORPORATION</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>	
3. PROJECT <i>FUSRAP/SUD</i>		4. LOCATION <i>Ph. Lips Service</i>	
5. NAME OF DRILLER <i>Jim McDONARD</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>	
7. SIZE AND TYPE OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger Split Spoon</i>		8. HOLE LOCATION <i>CLASS 2</i>	
9. OVERBURDEN THICKNESS		10. DATE STARTED <i>10/23/00</i>	
13. DEPTH DRILLED INTO ROCK		11. DATE COMPLETED <i>10/24/00</i>	
14. TOTAL DEPTH OF HOLE		12. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>	
15. GEOTECHNICAL SAMPLES		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>	
19. SAMPLES FOR CHEMICAL ANALYSIS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>	
20. DEPOSITION OF HOLE		18. TOTAL NUMBER OF CORE BOXES	
21. SIGNATURE OF INSPECTOR <i>[Signature]</i>		22. TOTAL CORE RECOVERY	



# HTRW DRILLING LOG

PROJECT		INSPECTOR		WELL NUMBER		
FUSAPP/SWS		Chris Locke		SUD 5715		
BLK. NO.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	DETECT SAMPLE OR CORE DEPT. NO.	ANALYTICAL SAMPLE NO.	REMARKS
		Concrete	5500 Counts NAI		5200 5715 (covered) 1105	
CL	1	Silty-LEAN CLAY Brown- HARD LOOSE Dry.	5700 Counts NAI		5200 5715 1108	2.4 20 Recovery
		Brick	ppm P20			
SW	2	Sling, Black, HARD, Loose, Dry, Fiel.	6300 Counts NAI		5400	
			ppm P20		5757	
	3	T.I.D.	2.0 ft	1120	111 hrs	10/23/00 Drum: 1 (ph. eps) 5900 counts NAI Background Bentone chip for BF

~~5900~~  
5900

PROJECT FUSAPP/SWS

WELL NO. SUD 5715

HTRW DRILLING LOG				DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>540 576</i>	
1. COMPANY NAME <i>IT Corporation</i>			2. DRILL SUBCONTRACTOR <i>GeoTechnology</i>			SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SWS</i>				4. LOCATION <i>Ph. 2. ps Sainco</i>			
5. NAME OF DRILLER <i>Jim McDonald</i>				6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT			8. HOLE LOCATION <i>CLASS 2</i>				
<i>Hollow Stem Auger</i> <i>SOBT Spun</i>			9. SURFACE ELEVATION				
			10. DATE STARTED <i>10/18/00</i>		11. DATE COMPLETED <i>10/18/00</i>		
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>				
13. DEPTH DRILLED INTO ROCK			14. DEPTH TO WATER AND SLAPPED TIME AFTER DRILLING COMPLETED <i>N/A</i>				
14. TOTAL DEPTH OF HOLE			15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>				
16. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		18. TOTAL NUMBER OF CORE BOXES	
<i>0</i>							
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACIFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <i>[Signature]</i>		
LOCATION SKETCH/COMMENTS				SCALE:			
PROJECT <i>FUSRAP/SWS</i>						HOLE NO. <i>540 576</i>	

# HTRW DRILLING LOG

PROJECT <i>FUSPAD/SUP</i>		INSPECTOR <i>Chris Locke</i>		WELL NUMBER <i>SUP 5716</i>		
LOG NO.	DEPTH	DESCRIPTION OF MATERIALS	FIELD TECHNIQUE RESULTS	LAB TECH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO. & REMARKS	
<i>CL</i>	<i>1</i>	<i>Silty - lean clay with yellow, brown, dry, fine. HARD, loose</i>	<i>5200 Counts. NET PPM PPA</i>	<i>0.5 10/18/00</i>	<i>SUP 5716 OBSU</i>	<i>116 / 20 Recovery</i>
		<i>WOOD</i>	<i>5500 Counts. NET PPM PPA</i>			
<i>GW</i>	<i>2</i>	<i>Silty, brown, HARD, loose, dry, fine, angular</i>	<i>PPM PPA</i>		<i>SUP 5750 OBSU</i>	
	<i>3</i>	<i>T.D</i>	<i>2.0</i>	<i>ft</i>	<i>0900</i>	<i>his 10/18/00</i> <i>Diagn: (ph. 2ms)</i> <i>4600 counts NET BACK ground</i>  <i>Bentontk chips for BIT</i>

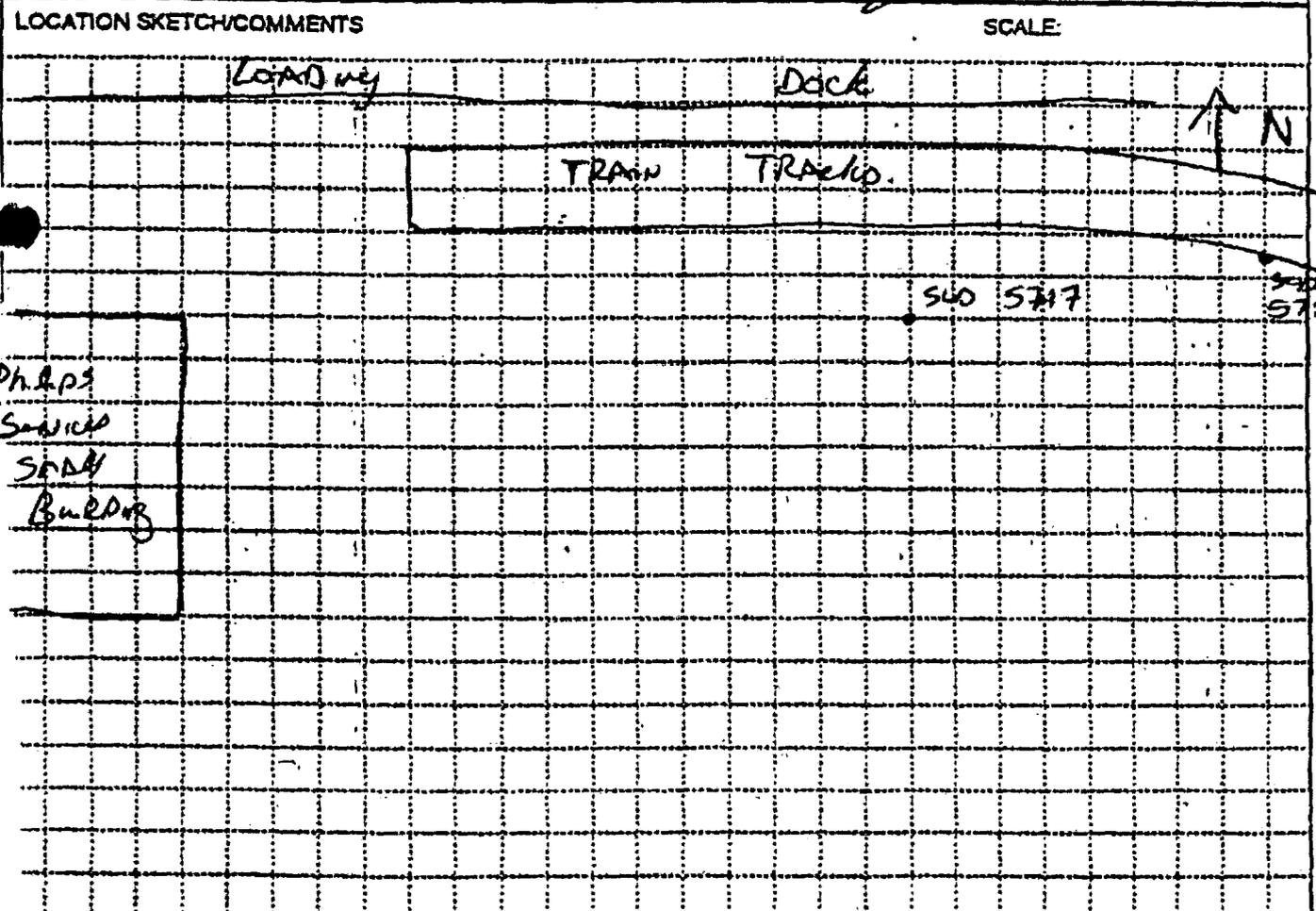
*4600*

PROJECT *SUP/FUSPAD*

WELL NO. *SUP 5716*

# HTRW DRILLING LOG

1. COMPANY NAME <b>IT Corporation</b>		2. DRILL SUBCONTRACTOR <b>Geotechnics</b>		HOLE NUMBER <b>RD 5717</b>	
3. PROJECT <b>FUSAP/SW</b>		4. LOCATION <b>Philips Serv</b>		SHEET 1. OF 2	
5. NAME OF DRILLER <b>JM McDONALD</b>		6. MANUFACTURER'S DESIGNATION OF DRILL <b>CNC 55</b>		7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>1/2" Star Angel SOFT Spoon</b>	
8. HOLE LOCATION <b>Class 1</b>		9. SURFACE ELEVATION		10. DATE STARTED <b>10/24/00</b>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <b>N/A</b>		11. DATE COMPLETED <b>10/24/00</b>	
12. DEPTH DRILLED INTO ROCK		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>	
14. TOTAL DEPTH OF HOLE		18. TOTAL NUMBER OF CORE BOXES		19. DATE STARTED	
19. GEOTECHNICAL SAMPLES <b>0</b>		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
21. TOTAL CORE RECOVERY		OTHER (SPECIFY) <b>N/A</b>		OTHER (SPECIFY)	
23. SIGNATURE OF INSPECTOR		OTHER (SPECIFY)		OTHER (SPECIFY)	



PROJECT <b>FUSAP/SW</b>	HOLE NO. <b>RD 5717</b>
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# HTRW DRILLING LOG

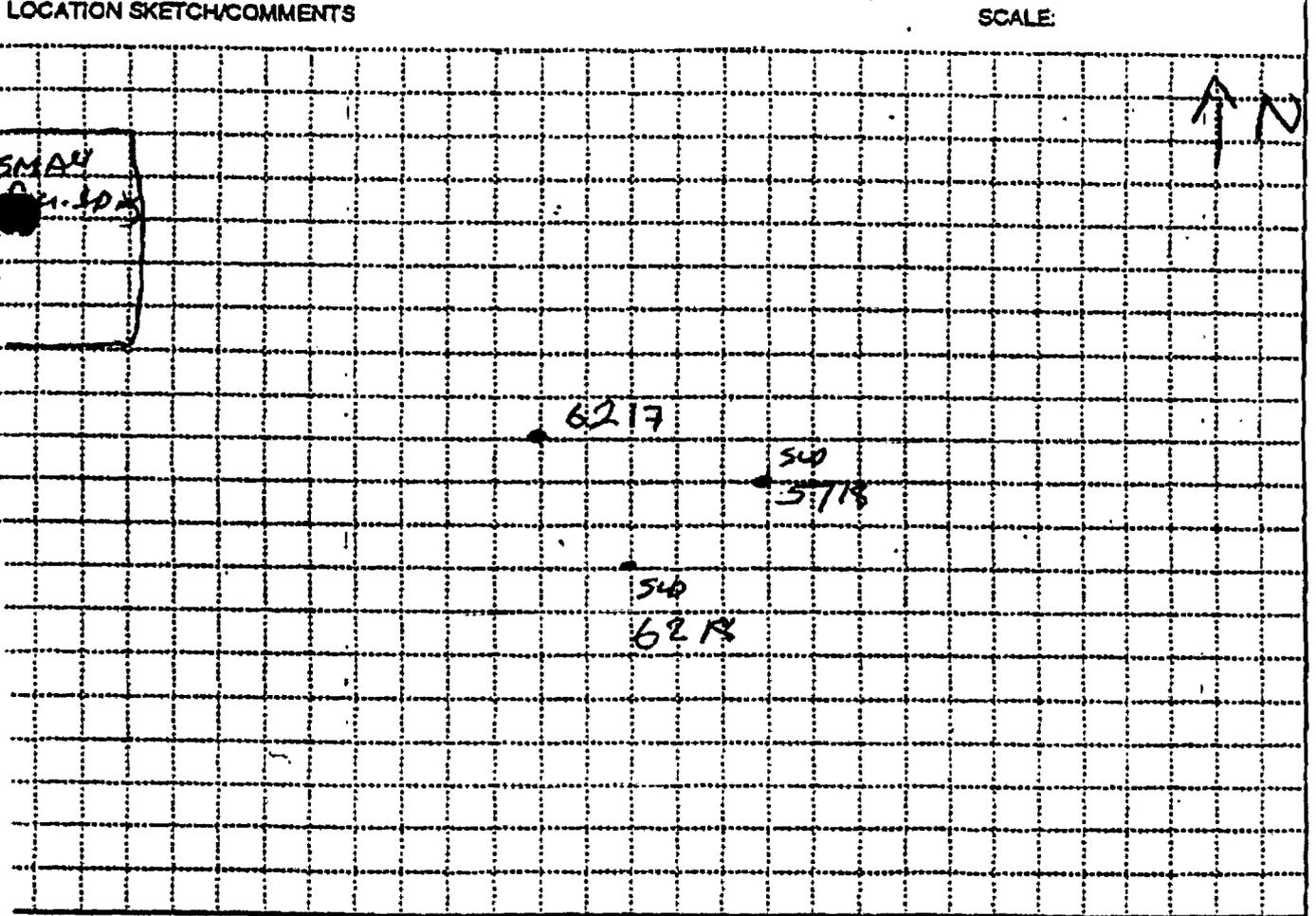
PROJECT		INSPECTOR			WELL NUMBER	
FUSRAP/SWS		Chris Lock			SWS 5717	
DEPTH	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
		CONCRETE	5100 COUNTS N/A		5400 5717 1035	
GW	1	GRAVEL, SAND, HARD, LOOSE, DRY BROWN, Angular	5500 COUNTS N/A PPM P/P	0.5 ton/ft <sup>2</sup>	5400 5717 1045	1.5 20 Recovery
GW	2	GRAVEL, SAND, TAN, LOOSE, DRY FINE, Angular	5100 COUNTS N/A PPM P/P		5400 5759 1047	Strong - ODOR N/A
	3	T.O	25	81	1055 hrs	10/24/00 Drum .1 (ph. l.p.s) 500 counts N/A BACKGROUND Bentonite chip for BF.

538

PROJECT FUSRAP/SWS

WELL NO SWS 5717

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>320 5718</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SOS</u>		4. LOCATION <u>Philips Service</u>			
5. NAME OF DRILLER <u>JIM McDONALD</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Air Auger JPR-1 3000</u>		8. HOLE LOCATION <u>CLASS 2</u>		9. SURFACE ELEVATION	
10. OVERBURDEN THICKNESS		10. DATE STARTED <u>10/30/04</u>		11. DATE COMPLETED <u>10/30/04</u>	
12. DEPTH DRILLED INTO ROCK		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
16. GEOTECHNICAL SAMPLES		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>		18. TOTAL NUMBER OF CORE BOXES	
19. SAMPLES FOR CHEMICAL ANALYSIS		DISTURBED		UNDISTURBED	
20. DISPOSITION OF HOLE		VOC		METALS	
		OTHER (SPECIFY) <u>NO</u>		OTHER (SPECIFY)	
		MONITORING WELL		OTHER (SPECIFY)	
		OTHER (SPECIFY)		21. SIGNATURE OF INSPECTOR <u>[Signature]</u>	
		22. TOTAL CORE RECOVERY			



PROJECT <u>FUSRAP/SOS</u>	HOLE NO. <u>320 5718</u>
FORM 5056-R, AUG 94	(Proponent: CECW-EG)

# HTRW DRILLING LOG

PROJECT <b>FUSRAP/SUD</b>		INSPECTOR <b>Chris Cook</b>			WELL NUMBER <b>SUD 5718</b>	
DEPTH IN	DEPTH FT	DESCRIPTION OF MATERIALS NO.	FIELD SCANNING RESULTS NO.	DEPTH SAMPLE OR CORE BOX NO. NO.	ANALYTICAL SAMPLE NO. NO.	REMARKS
GW	1	GRAVEL SAND, S.B LEAD CLAY BROWN - HARD, LOOSE Dry, Fine, Angular	5200 COUNTS NCl 0.5 PPM Pb		5200 5718 1126	2.0 2.0 Results
	2		5700 COUNTS NCl 0.5 PPM Pb		5700 5760 1120	
	3	T.P.	2nd ft	1140	NCS 10/30/00	Drum: (Phillips)  5600 counts NCl BACKPACK Bentonsite Clay for BF

5600

PROJECT **FUSRAP/SUDS**

WELL NO **SUD 5718**

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnologs</i>	
3. PROJECT <i>FUSRAP/GDS</i>		4. LOCATION <i>Ph.D. ps Service</i>	
5. NAME OF DRILLER <i>JIM McDONALD</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger SPR-1 20" dia</i>		8. HOLE LOCATION <i>Dominion</i>	
		9. SURFACE ELEVATION	
		10. DATE STARTED <i>10/15/02</i>	11. DATE COMPLETED <i>10/23/02</i>
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED	
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	
18. GEOTECHNICAL SAMPLES <i>0</i>	18. DISTURBED	18. UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY) <i>ROD</i>
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)
			21. TOTAL CORE RECOVERY
			21. SIGNATURE OF INSPECTOR
LOCATION SKETCH/COMMENTS		SCALE:	
<i>RR      SPR</i>			
<i>SLD 5719</i>			
<i>6215</i>			
<i>SLD 5722</i>			
<i>RR      SPR</i>			

# HTRW DRILLING LOG

SLD 5719

PROJECT FUS RAP/SUS

INSPECTOR Chris Lock

SHEET 2 OF 2

SLY. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENERING RESULTS	SECTION SAMPLE OR CORE IDENT. NO.	ANALYTICAL SAMPLE NO.	REMARKS
GW	1	GRAVEL, SING, SAND Brown, HARD, LOOSE, Dry, Fair Angular	600 COUNTS NET PPM Pb 570 COUNTS NET PPM Pb	0.5 ton/6"²	5700 5719 0945	1.6 2.0 Recovery
	2				5700 5701 0946	
	3					TID 2.0 ft 1000 Hrs 10/30/00 Drilling (p.h. lips) 5600 counts NET Background Bentonite clay for BF

(5600)

PROJECT FUS RAP/SUS

SHEET 2 OF 2 SLD 5719

# HTRW DRILLING LOG

DISTRICT St. Louis SLS 5720  
 SHEET 1 OF 2

1. COMPANY NAME LT Corporation 2. DRILL SUBCONTRACTOR Geotechnology

3. PROJECT FUSRAP/S4D1 4. LOCATION Philip Service

5. NAME OF DRILLER J.M. McDONARD 6. MANUFACTURER'S DESIGNATION OF DRILL CME 55

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Hollow Stem Auger  
SPT + SAW 8. HOLE LOCATION Class 2

9. SURFACE ELEVATION

10. DATE STARTED 10/1/70 11. DATE COMPLETED 10/1/70

12. OVERBURDEN THICKNESS 13. DEPTH DRILLED INTO ROCK

14. TOTAL DEPTH OF HOLE 15. DEPTH GROUNDWATER ENCOUNTERED N/A

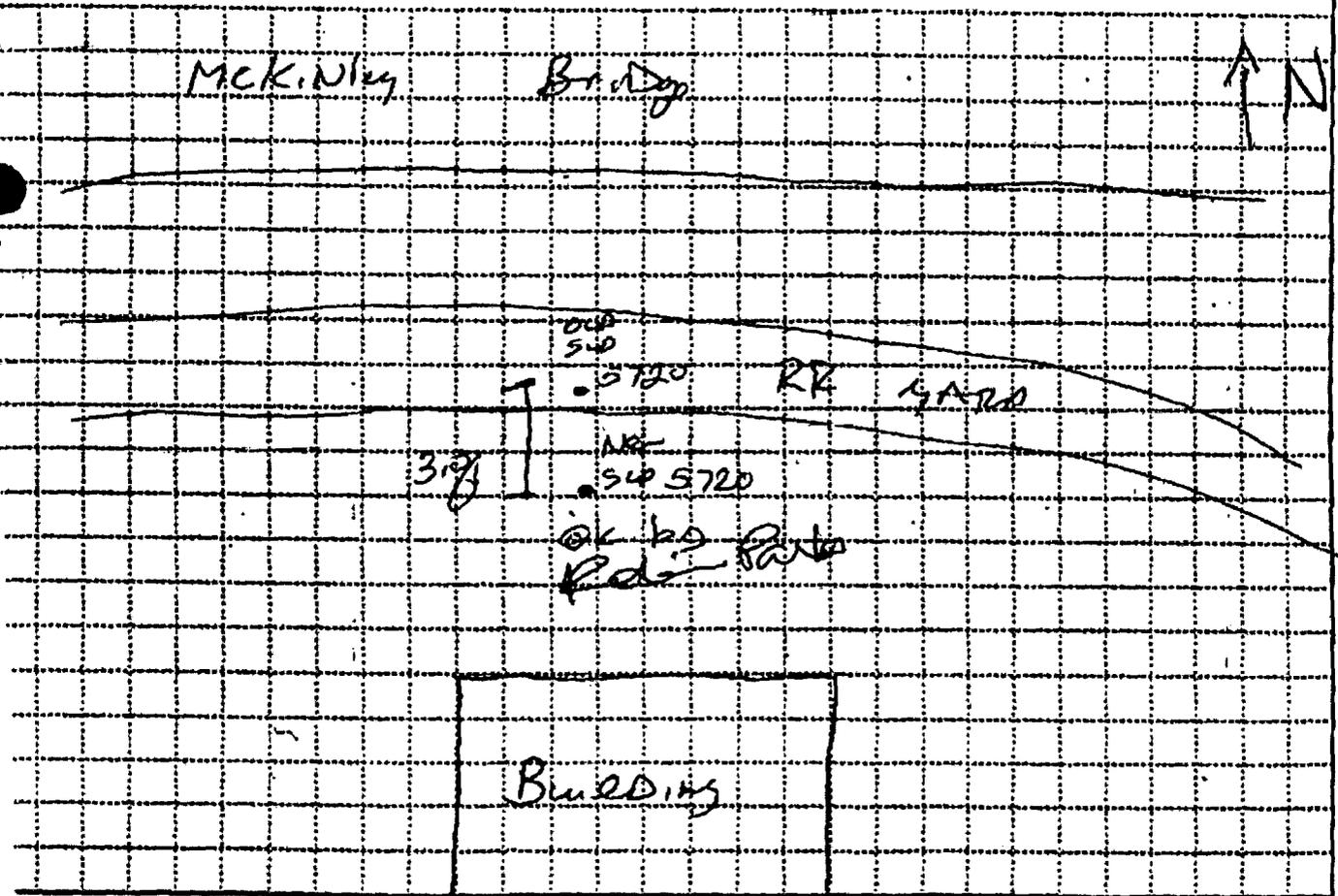
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A

18. GEOTECHNICAL SAMPLES 0 DISTURBED - UNDISTURBED - 19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS VOC METALS OTHER (SPECIFY) OTHER (SPECIFY) OTHER (SPECIFY) 21. TOTAL CORE RECOVERY RPO

22. DISPOSITION OF HOLE BACKFILLED MONITORING WELL OTHER (SPECIFY) 23. SIGNATURE OF INSPECTOR [Signature]



PROJECT FUSRAP/S4D1 HOLE NO. S4D 5720

# HTRW DRILLING LOG

PROJECT		INSPECTOR			FILE NUMBER	
F45RPP/S403		Chris Webb			S40 5720	
DEPTH	DEPTH	DESCRIPTION OF MATERIALS	FIELD MEASUREMENTS	SECTION SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
CU	1	S. lky LOAM clay with gravel, Brown, HARD, LOOSE (MOIST (from RAIN))	5200 COUNTS. NAI PPM PSD	0.5 ton/6"	5400 5720 1334	2.0 / 2.0 Recovery
GW	2	Slty with LOAM clay, Black, HARD, LOOSE, MOIST (from RAIN)	5900 COUNTS NAI D10 PPM PSD		5400 5762 1537H	
	3	T.I.D. 20 ft		1545 hrs		10/17/00 Drum (philips) 5200 Counts NAI Background Bantank chips for BF.

5200

PROJECT F45RPP/S403

S40 5720

HTRW DRILLING LOG			DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>540 572</i>	
1. COMPANY NAME <i>FT Corporation</i>			2. DRILL SUBCONTRACTOR <i>Geotechnology</i>			SHEET NUMBER <i>1</i> OF <i>2</i>	
3. PROJECT <i>F4 SRAP/SWS</i>			4. LOCATION <i>Philips Service</i>				
5. NAME OF DRILLER <i>Jim McDonald</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Star Right Split Spoon</i>			8. HOLE LOCATION <i>CLASS 2</i>				
			9. SURFACE ELEVATION				
			10. DATE STARTED <i>10/19/60</i>		11. DATE COMPLETED <i>10/19/60</i>		
12. OVERBURDEN THICKNESS			13. DEPTH OF GROUNDWATER ENCOUNTERED <i>N/A</i>				
13. DEPTH DRILLED INTO ROCK			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>				
14. TOTAL DEPTH OF HOLE			15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>				
16. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED	UNCATURBED		18. TOTAL NUMBER OF CORE BOXES		
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BAGGED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <i>[Signature]</i>		
LOCATION SKETCH/COMMENTS						SCALE:	
<p><i>540 6218</i>      <i>540 5721</i></p> <p><i>Mallick Road Property</i></p>							
PROJECT <i>F4 SRAP/SWS</i>						HOLE NO. <i>540 5721</i>	

# HTRW DRILLING LOG

WELL NUMBER  
**SLD 5721**  
SHEET  
of **10** of **2**

DEPTH	DEPTH	DESCRIPTION OF MATERIALS	FIELD MEASUREMENTS	CORRECTION FACTOR	ANALYTICAL SAMPLE NO.	REMARKS
	1	SAND GRAVEL Brown HARD, LOOSE Dry, F.V.	5700 COUNTS NI PPM PSS 5600 COUNTS MIN	0.5 ton/ft <sup>2</sup>	5400 5721 0856	115 2.0 Recovery
	2				3400 <del>5721</del> 0859	5763
	3	TID.	2.0 ft	D905		hs 10/19/62 Drum: 1 (p. 1/12) 5400 counts NI Background Bentombr chip for BF.

5400

PROJECT **FUSRABO/SWD**

WELL NO. **SLD 5721**

HTRW DRILLING LOG		DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>5720</i>	
1. COMPANY NAME <i>FT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotech Inc</i>			SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SUDS</i>			4. LOCATION <i>Philips Samer</i>			
5. NAME OF DRILLER <i>JIM McDONALD</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 35</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow 3/4" Drill 3/8" Spoon</i>		8. HOLE LOCATION <i>CLASS 2</i>				
		9. SURFACE ELEVATION				
		10. DATE STARTED <i>10/20/00</i>		11. DATE COMPLETED <i>10/20/00</i>		
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <i>NA</i>				
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>NA</i>				
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>NA</i>				
16. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED		UNCISTURBED		18. TOTAL NUMBER OF CORE BOXES
19. SAMPLER FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAO</i>	OTHER (SPECIFY)	OTHER (SPECIFY)
20. DEPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURE OF INSPECTOR <i>JM</i> <i>JH</i>	
LOCATION SKETCH/COMMENTS						SCALE:
PROJECT <i>FUSRAP/SUDS</i>				HOLE NO. <i>5720</i>		

# HTRW DRILLING LOG

WELL NUMBER  
SD 5722  
SHEET  
2 OF 2 SHEETS

PROJECT  
FUSRAP/SUDS

INSPECTOR  
Chris Lock

CL. NO.	DEPTH IN	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	DEPTH SAMPLE OR CORE DR. NO.	ANALYTICAL SAMPLE NO.	REMARKS
SW	1	SAND GRAVEL, Brown, HARD, LOOSE Dry, FINE, Angular	5600 Counts NAT PPM PSP	0.5 in/ft.	5400 5700 1038	1.5 2.0 Roachets
	2		5700 Counts NAT PPM PSP		5400 5700 1041	-
	3	TID	21" INCH		1050	his 10/30/82 Drum: 5600 Counts NAT Background Bentonek chip for BF  TID Due to Refuse with Oil from USEC O-Ridge Park

5700

5600

PROJECT  
FUSRAP/SUDS

WELL NO  
SD 5722

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SD 523</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SWS</u>			4. LOCATION <u>Ph. 2.1) Service</u>		
5. NAME OF DRILLER <u>Kevin Bassler</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CRF 55</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION		9. SURFACE ELEVATION	
<u>Hollow Stem Auger</u> <u>SPRt Spoon</u>		<u>CLASS 2</u>			
10. DATE STARTED <u>11/14/02</u>			11. DATE COMPLETED <u>11/14/02</u>		
12. OVERBURDEN THICKNESS			13. DEPTH OF GROUNDWATER ENCOUNTERED <u>N/A</u>		
14. DEPTH DRILLED INTO ROCK			15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>		
16. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>		
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
<u>0</u>					
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
				<u>RAD</u>	
20. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				21. SIGNATURE OF INSPECTOR <u>[Signature]</u>	

LOCATION SKETCH/COMMENTS

SCALE:

McKinley Br. Oz. ↑ N

540  
523

340  
524

PROJECT <u>FUSRAP/SWS</u>	HOLE NO. <u>SD 523</u>
FORM 5056-R, AUG 94	(Proponent CECW-EG)

# HTRW DRILLING LOG

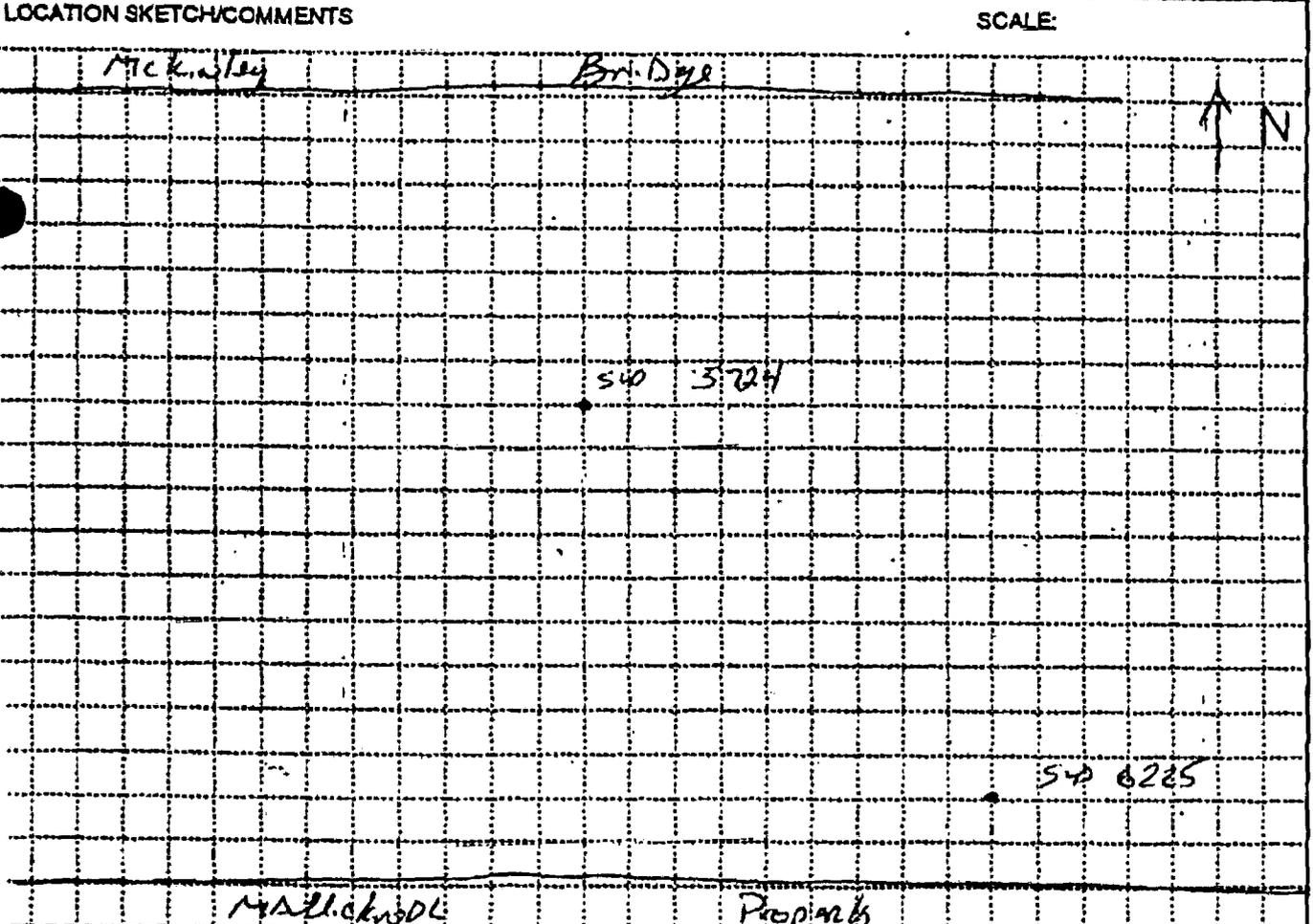
PROJECT		INSPECTOR			WELL NUMBER	
FUSHAM/SURS		Chris Cook			540 5723	
DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	TESTED SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS	
	CONCRETE	COUNTS 5700 N=I		5721 5722		
GW 1	Sing. Brck, HARD, Loose, F.M.	5700 COUNTS N=I		5720 5723 0908	1.5 2.0 Recovery	
	Brck. RAP	0.0 PTD			Strong ODOR N=I	
GW 2	Sing. Brck, HARD Loose, dy. F.M.	5700 COUNTS N=I 0.0 PTD		5700 5705 0911		
3			0920 hrs		11/14/00 Drum 2 (1.7m. end) 5700 counts N=I Background Bentonite Chr	

(5700)

PROJECT FUSHAM/SURS

540 5723

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>S-0 524</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnologs</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SOS</u>			4. LOCATION <u>Philips Services</u>		
5. NAME OF DRILLER <u>Kevin Bossler</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CMF 55</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION		9. SURFACE ELEVATION	
<u>Hollow Sta Auger</u> <u>SPR-1 Spoon</u>		<u>CLASS 2</u>			
10. DATE STARTED <u>11/14/00</u>			11. DATE COMPLETED <u>11/14/00</u>		
12. OVERBURDEN THICKNESS			15. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>		
13. DEPTH DRILLED INTO ROCK			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>		
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>		
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
<u>0</u>					
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
				<u>RAO</u>	
20. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				21. SIGNATURE OF INSPECTOR <u>[Signature]</u>	



PROJECT <u>FUSRAP/SOS</u>		HOLE NO. <u>S-0 524</u>	
FORM 5056-R, AUG 94		(Proponent: CECW-EG)	

# HTRW DRILLING LOG.

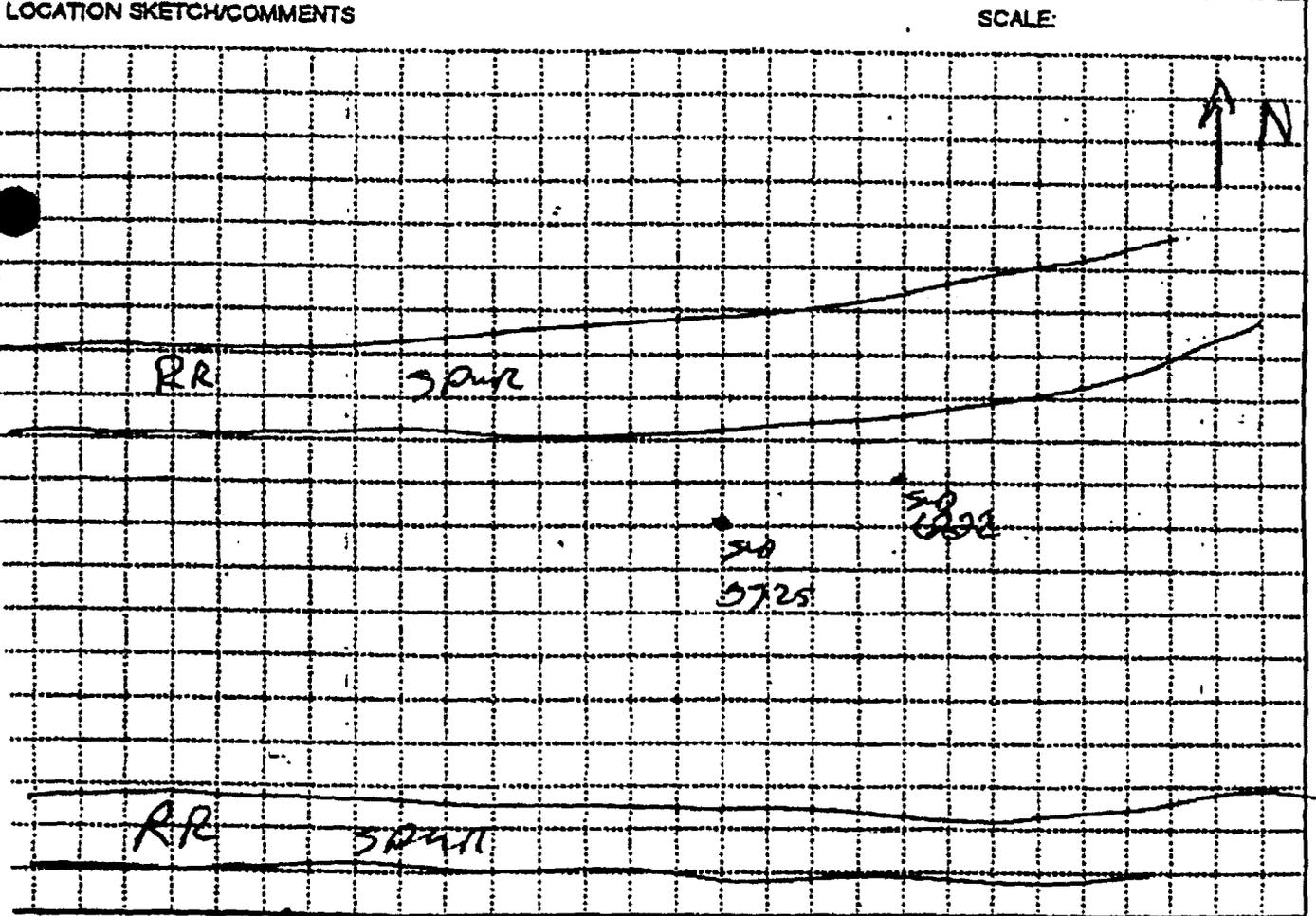
PROJECT		INSPECTOR			HOLE NUMBER	
FUSRAP/SLO		Chris Luck			SLO 5724	
DEPTH	DEPTH	DESCRIPTION OF MATERIALS	FIELD MONITORING RESULTS	DETECT SAMPLE OR CORE DEPT. NO.	ANALYTICAL SAMPLE NO.	REMARKS
1		Silt. Lean Clay with silt. Brown, HARD LOOSE wet (from RAN)	4600 counts Net ppm PFA SND COUNT Net ppm PFA	1.0 ton/ft	540 5724 1001 hrs	1.5 Recovery 20
2		SIAS, Black, HARD, LOOSE, Dry, FLI. Angular			1006 5400 5746	
3		T.D. 2.0 ft		1015	hrs	11/14 ton Draw: 2 (1st. 2. AS) 5000 counts Net Background Banana Chip for BF.

500

PROJECT SLO/FUSRAP

HOLE NO SLO 5724

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 5725</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotech Polys</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SUDS</i>		4. LOCATION <i>Philips Service</i>			
5. NAME OF DRILLER <i>JIM McDONALD</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow 3 1/2" Auger SPR 3000</i>		8. HOLE LOCATION <i>C1A3 2</i>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <i>10/30/00</i>		11. DATE COMPLETED <i>10/30/00</i>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
15. GEOTECHNICAL SAMPLES		18. TOTAL NUMBER OF CORE BOXES			
16. SAMPLES FOR CHEMICAL ANALYSIS		19. TOTAL CORE RECOVERY			
20. DISPOSITION OF HOLE		21. SIGNATURE OF INSPECTOR <i>[Signature]</i>			



PROJECT <i>FUSRAP/SUDS</i>	HOLE NO. <i>SD 5725</i>
FORM 5058-R, AUG 84	(Proponent: CECW-EQ)

# HTRW DRILLING LOG

WELL NUMBER  
FWS 5725

PROJECT  
FWSRAN/SAS

INSPECTOR  
Chris Beck

DATE  
2/2/02

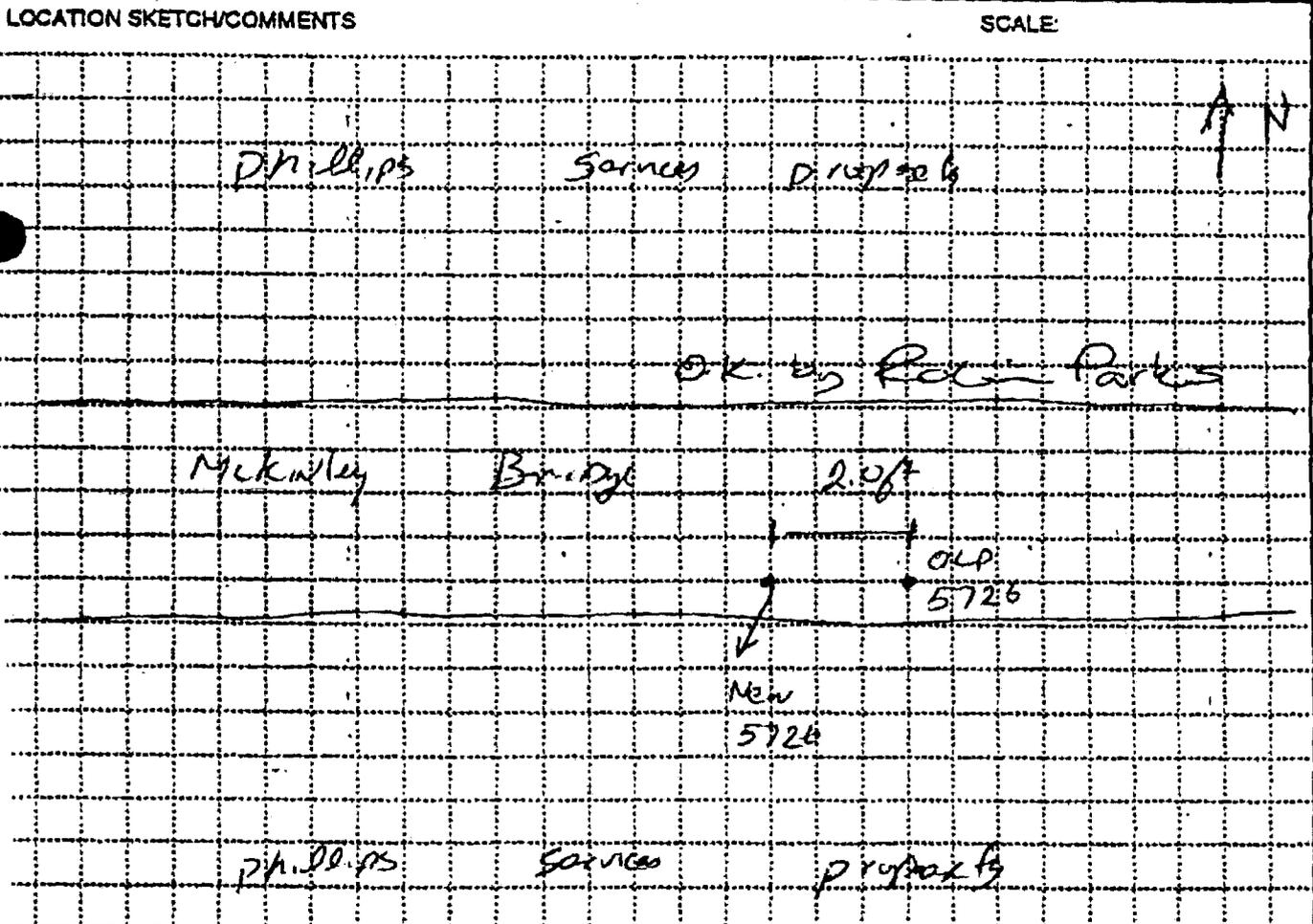
DEPTH FEET	DEPTH METERS	DESCRIPTION OF MATERIALS LOG	FIELD SCREENING RESULTS (1)	CORRECTED SAMPLE OR CORE DEPTH LOG	ANALYTICAL SAMPLE NO. (2)	REMARKS (3)
1		SAND, GRAVEL, BROWN, HARD, LOOSE Dry, Fill. Angular	5900 COUNTS NFI PDM 7500 COUNT NFI PFO	0.5 ton/6"	5472 5725 1456  5471 5767 1459 N/A	2.0 2.0 Recovery
2						
3						
		TID	2.0 ft	1505	NS	10/30 lb Draw: 2 (philips) 5900 counts NFI BACKGROUND Bantomb Chip for PFI

(5900)  
28  
x 59  
4  
19

FWSRAN/SAS

WELL NUMBER  
FWS 5725

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SLD 5726</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SWS</i>			4. LOCATION <i>PHILLIPS Service</i>		
5. NAME OF DRILLER <i>JIM McDONNED</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hardlow stem Auger SPR.T SPOOR</i>		8. HOLE LOCATION			
		8. SURFACE ELEVATION			
		10. DATE STARTED <i>10/12/00</i>		11. DATE COMPLETED <i>10/12/00</i>	
12. OVERBURDEN THICKNESS		14. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
13. DEPTH DRILLED INTO ROCK		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
18. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOG	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
					23. SIGNATURE OF INSPECTOR <i>[Signature]</i>



PROJECT <i>FUSRAP/SWS</i>	HOLE NO. <i>SLD 5726</i>
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# HTRW DRILLING LOG

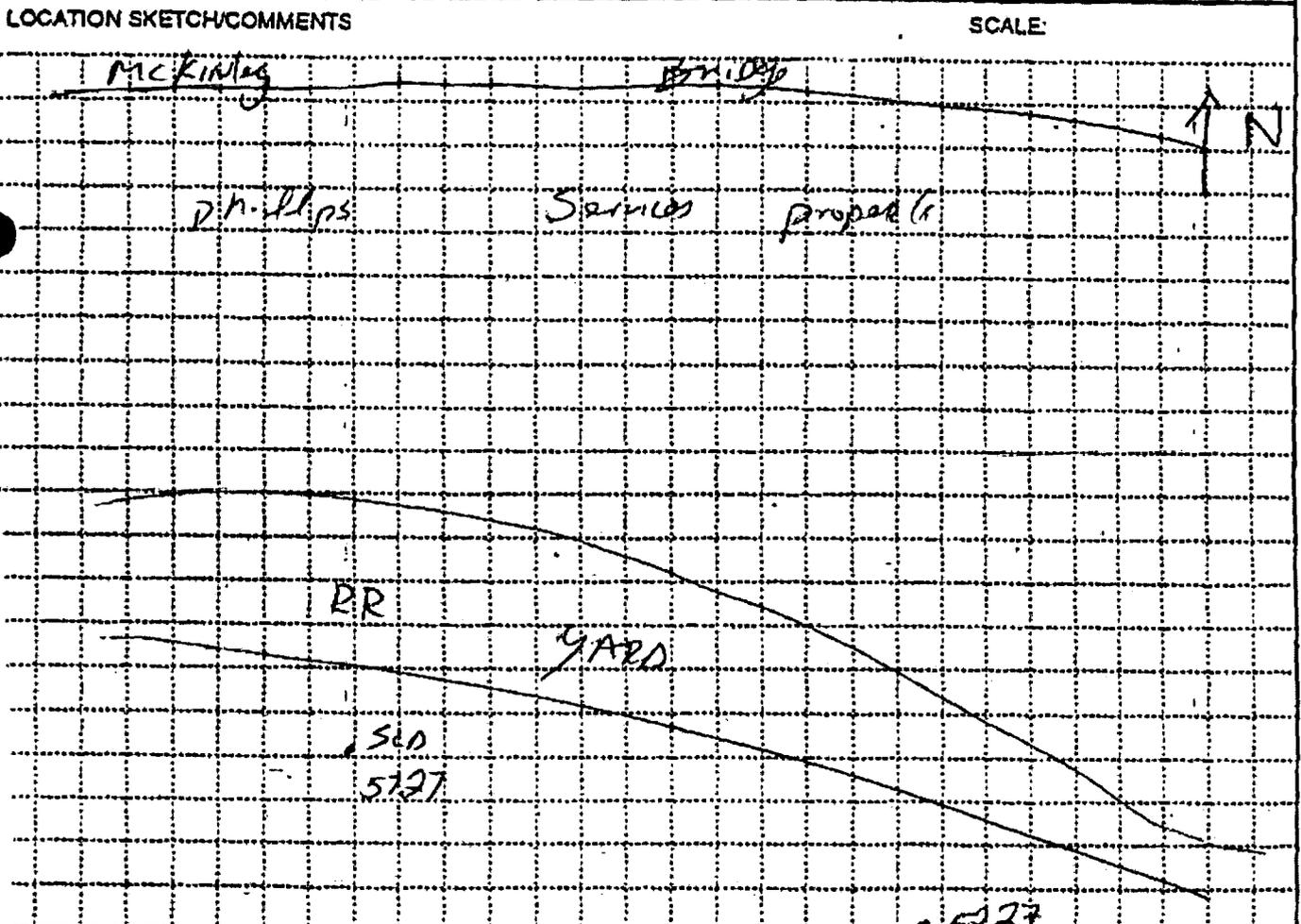
PROJECT		INSPECTOR			WELL NUMBER	
FUSRAP/SWS		Chris Lock			340 5726	
DATE	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	SCREEN SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
SW	1	SAND, GRAVEL Brown, HARD, LOOSE, Dry Full Angular	5400 COUNTS NET DIO PIPM PTIP	0.5 ton/60	5400 5726 0923	1.5 2 = Recovery
	2		5300 COUNTS NET		5400 5766 0926	
	3			TID 20" 0935 hrs		10/12/00 Drum! (Phillips) 5300 counts NET Background Bentham Cap for BF TID due to refusal with permission from ES&C Robin Parks

5300

PROJECT FUSRAP/SWS

WELL NO 340 5726

<b>HTRW DRILLING LOG</b>			DISTRICT <u>St. Louis</u>			HOLE NUMBER <u>540 5727</u>		
1. COMPANY NAME <u>IT Corporation</u>			2. DRILL SUBCONTRACTOR <u>Geo Technology</u>			SHEET <u>1</u> OF <u>2</u>		
3. PROJECT <u>FUSRAP/SUDS</u>				4. LOCATION <u>PHILLIPS Services</u>				
5. NAME OF DRILLER <u>JIM McDONALD</u>				6. MANUFACTURER'S DESIGNATION OF DRILL <u>CM-E 53</u>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger</u> <u>SPR. SPOON</u>			8. HOLE LOCATION					
			9. SURFACE ELEVATION					
			10. DATE STARTED <u>10/12/00</u>			11. DATE COMPLETED <u>10/12/00</u>		
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>					
13. DEPTH DRILLED INTO ROCK			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>					
14. TOTAL DEPTH OF HOLE			15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>					
16. GEOTECHNICAL SAMPLES <u>0</u>		DISTURBED		UNDISTURBED		18. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY) <u>RAD</u>		OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY
						23. SIGNATURE OF INSPECTOR <u>[Signature]</u>		



PROJECT <u>FUSRAP/SUDS</u>	HOLE NO. <u>540 5727</u>
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# HTRW DRILLING LOG

PROJECT		INSPECTOR			WELL NUMBER	
FUSPAP/SWS		Chris Locke			SW 5727	
DATE	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	CERTIFIED SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
SW	1	SAND, GRAVEL, HARD, DENSE, DRY FILL.	5200 COUNTS NAT	0.5 ton/yr	540 5727 1024	1.0 2.0 Recovery
		Brick	PPM P/P 4800 counts		540 5769 1026	
	2	TID	16"	1035	his	10/12/00 Dum: 1 (ph. 22.05) 5200 counts NAT Background Bentomk chip for B.F.
	3					T.D. Due to Refusal with USACE Approval. Robin Parks

5200

PROJECT FUSPAP/SWS

WELL SW 5727

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>540 528</u>	
1. COMPANY NAME <u>ET Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnics</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SRS</u>		4. LOCATION <u>Ph. 2, p3 Series</u>			
5. NAME OF DRILLER <u>JIM McDONALD</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger 37.5cm 400mm</u>		8. HOLE LOCATION <u>Class 2</u>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>10/17/00</u>		11. DATE COMPLETED <u>10/17/00</u>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
16. GEOTECHNICAL SAMPLES <u>0</u>		DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES	
17. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAO</u>	OTHER (SPECIFY)
19. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
					22. SIGNATURE OF INSPECTOR <u>[Signature]</u>
LOCATION SKETCH/COMMENTS				SCALE:	
PROJECT <u>FUSRAP/SRS</u>				HOLE NO. <u>540 528</u>	

# HTRW DRILLING LOG

PROJECT <i>FUSRAP/SUDS</i>		INSPECTOR <i>Chris Locke</i>			WELL NO. <i>54D 5728</i>	SHEETS <i>2</i>
LOG NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD COUNTING RESULTS	DETECT SAMPLE OR CORE BAR NO.	ANALYTICAL SAMPLE NO.	REMARKS
CL	1	Silty - LOAM clay Brown - HARD Dense Wet (from RAIN)	6800 COUNTS NET 0.10 1700	0.15 ton/ft <sup>3</sup>	5400 0837 5728	1.5 / 20 Recovery
SW	2	Silty, Black, HARD, WOOD Wet from RAIN	5700 COUNTS NET 0.00 1700		3400 5770 0891	
	3	T.O.D	2.0 ft	0850		As 10/17/6 Dumai (phosph) 6500 counts NET Background Bentone cap for BF Split / Core Bore

650

*FUSRAP/SUD*

*54D 5728*

HTRW DRILLING LOG				DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>2nd 529</i>	
1. COMPANY NAME <i>Corporation</i>			2. DRILL SUBCONTRACTOR <i>Geotechnology</i>			SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SWS</i>				4. LOCATION <i>Ph. Lips Service</i>			
5. NAME OF DRILLER <i>JIM McDonald</i>				6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 53</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger Split Spoon</i>			8. HOLE LOCATION <i>CLASS 2</i>			9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS				13. DATE STARTED <i>10/19/60</i>			
13. DEPTH DRILLED INTO ROCK				14. DATE COMPLETED <i>10/19/60</i>			
14. TOTAL DEPTH OF HOLE				15. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
15. GEOTECHNICAL SAMPLES <i>0</i>				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
16. DISTURBED		UNOBTAINED		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
18. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY) <i>RAO</i>	
20. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
21. TOTAL NUMBER OF CORE BOLES				22. SIGNATURE OF INSPECTOR <i>[Signature]</i>			
23. TOTAL CORE RECOVERY				24. SIGNATURE OF INSPECTOR <i>[Signature]</i>			
LOCATION SKETCH/COMMENTS				SCALE:			
<p><i>Ph. Lips Service Property</i></p> <p><i>SUP 529</i></p> <p><i>SUP 624 RAIL ROAD TRACK</i></p> <p><i>MALICKRUDI Property</i></p>							
PROJECT <i>FUSRAP/SWS</i>				HOLE NO. <i>2nd 529</i>			

# HTRW DRILLING LOG

COR. NO.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	SECTION SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
		PROJECT <u>FUSRAP/SWS</u>		INSPECTOR <u>Chris Lock</u>		WELL NUMBER <u>540 5729</u>
						SHEET <u>2</u> OF <u>2</u>
CL	1	5 sh. LEAN CLAY with wood, gravel Brown, HARD, LOOSE, Dry, Flt	7100 COUNTS NET 0.6 ppm PID	0.5 in / ft	540 5729 1054	1.5 / 20 Recovery
CL	2	5 sh. LEAN CLAY with gravel Brown-green, HARD, Loose, Dry, Flt	7200 COUNTS NET ppm		3400 5729 1054	
	3	TID	2.0 ft	1105	his	10/19/00
						Drum: 1 (ph. 2. ps) 6300 counts NET BACKGROUND Bentonite chip for BF

6300

PROJECT FUSRAP/SWS

WELL NO. 540 5729

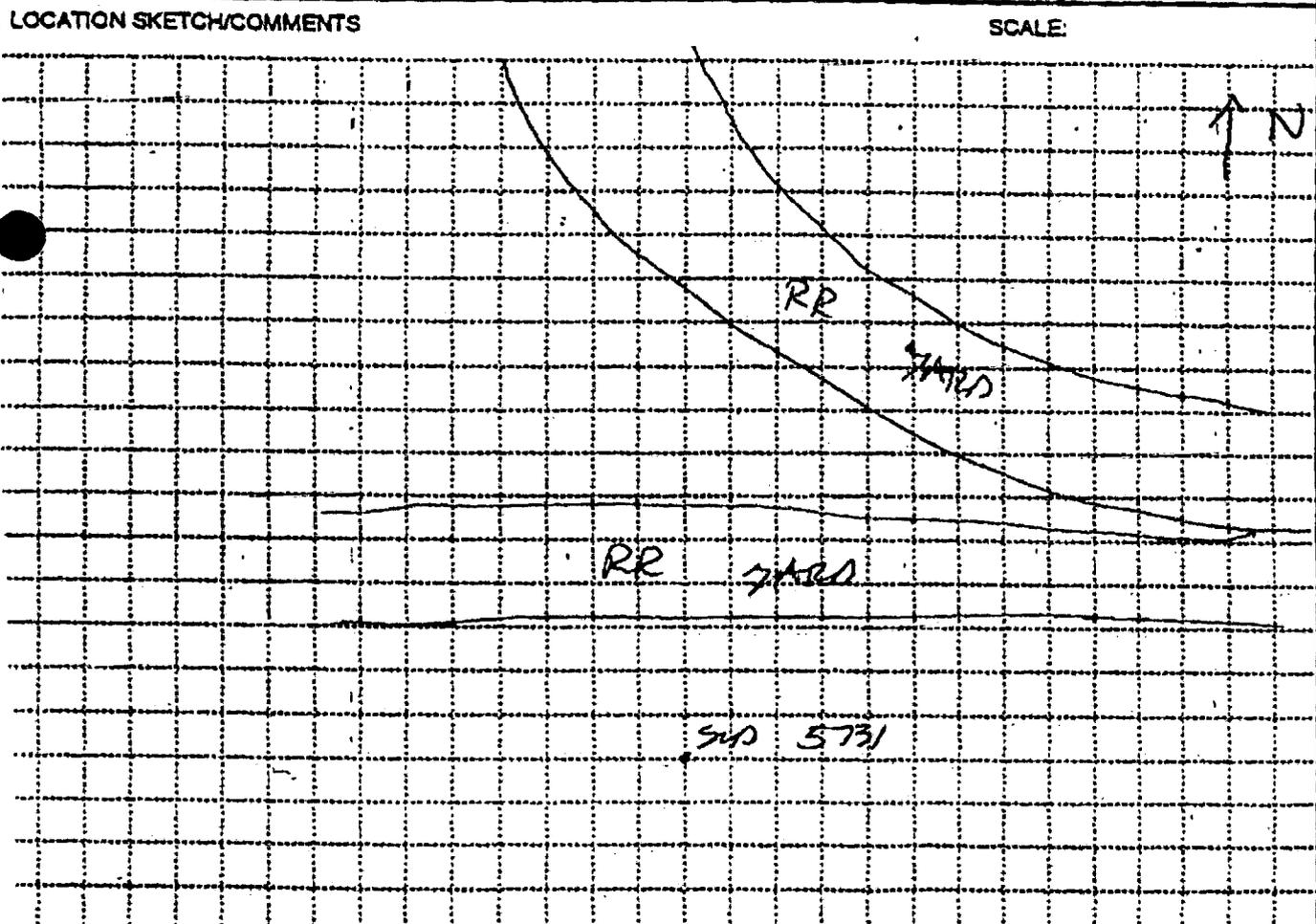
HTRW DRILLING LOG			DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>510 5730</i>	
1. COMPANY NAME <i>IT Corporation</i>			2. DRILL SUBCONTRACTOR <i>Geotechnology</i>			SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SWS</i>			4. LOCATION <i>Ph. R. P. Service</i>				
5. NAME OF DRILLER <i>JM McDONALD</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 35</i>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger Split Spoon</i>			8. HOLE LOCATION				
			9. SURFACE ELEVATION				
			10. DATE STARTED <i>10/16/00</i>		11. DATE COMPLETED <i>10/16/00</i>		
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>				
13. DEPTH DRILLED INTO ROCK			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>				
14. TOTAL DEPTH OF HOLE			15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>				
16. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED	UNOBTAINED		18. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAP</i>	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	22. SIGNATURE OF INSPECTOR <i>[Signature]</i>		
LOCATION SKETCH/COMMENTS						SCALE:	
PROJECT <i>FUSRAP/SWS</i>			HOLE NO. <i>510 5730</i>				

# HTRW DRILLING LOG

PROJECT		INSPECTOR			WELL NUMBER	
FUS PMP/SUDS		Chris Lock			540 5730	
DEPTH	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	DEPTH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
GL		Silty-Low clay Brown - HARD, DENSE, Dry	5100 COUNTS NAT		5100 5730 0979	1.5 2.0 Recovery
GW	1	SLAY, cinders. Black, HARD, <del>DRY</del> LOOSE Dry, F.U.	PPM PTD 4900 COUNTS NAT	0.5 top/6.2		
		Brick	PPM		5100 5772	
cut	2	Fnt clay, <del>BRN</del> HARD	PPM	15 days	0952	
		TID		2.0 6+	1000	his
	3					10/16/00 Drum #1 (PH. 0952) 4800 counts NAT Bentomb Utip for BF

4800

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 5731</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnics</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SDS</i>		4. LOCATION <i>Phelps Service</i>			
5. NAME OF DRILLER <i>Jim McDonald</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger Split Spill</i>		8. HOLE LOCATION <i>Class 2</i>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <i>10/17/02</i>		11. DATE COMPLETED <i>10/17/02</i>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
16. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED		UNDISTURBED	
17. TOTAL NUMBER OF CORE BOXES					
18. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)
					19. TOTAL CORE RECOVERY
20. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURE OF INSPECTOR <i>[Signature]</i>



PROJECT <i>FUSRAP/SDS</i>	HOLE NO. <i>SD 5731</i>
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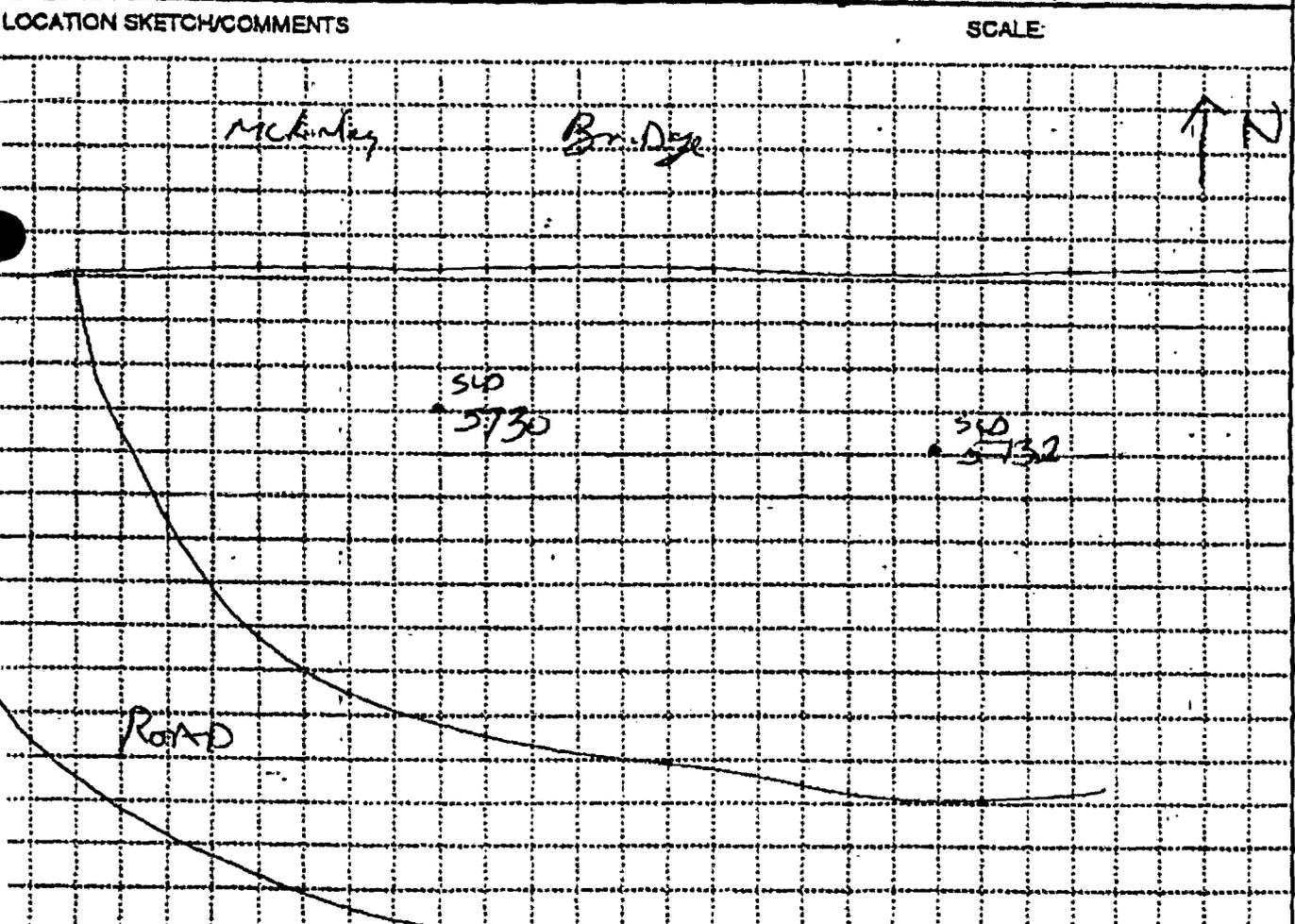
# HTRW DRILLING LOG

PROJECT <i>FUSRAP/SUDS</i>		INSPECTOR <i>Mrs. Loda</i>		WELL NUMBER <i>340 5731</i>		
ELEV. FEET	DEPTH FEET	DESCRIPTION OF MATERIALS (in)	FIELD SCREENING RESULTS (in)	CORRECTED SAMPLE OR CORE DEPTH (in)	ANALYTICAL SAMPLE NO. (in)	REMARKS (in)
CL	1	Silty LEAN clay with silt Brown, HARD, LOOSE, wet (from Rain)	6200 counts NAT 0.3 PSP	0.5 bar/ft	SUD 5731 1110hrs	2.0 2.0 Recovery
GW	2	GRAVEL, SAND Brown, HARD, LOOSE (wet from Rain)	5900 counts NAT 0.3 PSP		SUD 5731 1113hrs	
	3	TID 20 ft		1120 hrs	10/17/60	Dyna: 1 (phlopos)  5800 counts NAT Background Benzene Chp for BF.

PROJECT *FUSRAP/SUDS*

WELL NO.  
*340 5731*

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 5732</i>	
1. COMPANY NAME <i>LT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET SHEETS <i>1 of 2</i>	
3. PROJECT <i>FUSRAP/SD</i>			4. LOCATION <i>Ph. Lips Service</i>		
5. NAME OF DRILLER <i>Jim McDonald</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger Split Spoon</i>		8. HOLE LOCATION <i>Class 2</i>			
8. SURFACE ELEVATION					
12. OVERBURDEN THICKNESS			13. DATE STARTED <i>10/17/00</i>		
13. DEPTH DRILLED INTO ROCK			11. DATE COMPLETED <i>10/17/00</i>		
14. TOTAL DEPTH OF HOLE			15. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>		
18. GEOTECHNICAL SAMPLES			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>		
18. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAO</i>	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURE OF INSPECTOR <i>[Signature]</i>
21. TOTAL CORE RECOVERY					<i>[Signature]</i>



PROJECT <i>FUSRAP/SD</i>	HOLE NO. <i>SD 5732</i>
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# HTRW DRILLING LOG

WELL NUMBER  
**SLD 5732**

PROJECT **FUSRAP/SUS**

INSPECTOR **Chris Lock**

SHEET  
**2** OF **2**

ELEV. (ft)	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	DISTURBED SAMPLE OR CORE IDENT. NO.	ANALYTICAL SAMPLE NO.	REMARKS
	1	CONCRETE (COVER)	4500 COUNTS NET 0.0 PSA		5400 5732 CORR 1310ms	N/A 2.0 Recovery
CL	2	s. lky- LOAN clay Brown, HARD, LOOSE, MOIST (from RAIN)	4900 COUNTS NET 0.1 PSA	1.5 ton/ft <sup>2</sup>	5400 5732 1532	2.0 2.0 Recovery
GW	3	SLAY, BRACK, HARD LOOSE, MOIST (from RAIN)	5600 COUNTS NET 0.0 PSA		5400 5774 1335	
	4	T.D 3.0 ft		1340 ms		10/17/00 Dm: 1 (ph. 2.0ms) 5200 counts NET Background Bentone chip for BF

PROJECT **FUSRAP/SUS**

WELL NUMBER  
**SLD 5732**

HTRW DRILLING LOG		DISTRICT		HOLE NUMBER	
1. COMPANY NAME IT Corporation		ST. LOUIS		SLD 5733	
2. PROJECT FUSRAP/SLOS		2. DRILL SUBCONTRACTOR Geotechnology		SHEET 1 OF 2	
3. NAME OF DRILLER JIM McDONARD		4. LOCATION Phillips Services		5. MANUFACTURER'S DESIGNATION OF DRILL CME 55	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Hollow stem Auger Split Spool		6. HOLE LOCATION		8. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS		10. DATE STARTED 10/11/00		11. DATE COMPLETED 10/11/00	
13. DEPTH DRILLED INTO ROCK		15. DEPTH GROUNDWATER ENCOUNTERED N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		18. TOTAL NUMBER OF CORE BOXES	
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
22. DISPOSITION OF HOLE		SACRIFLED		MONITORING WELL	
21. TOTAL CORE RECOVERY		OTHER (SPECIFY) RAD		23. SIGNATURE OF INSPECTOR <i>[Signature]</i>	
LOCATION SKETCH/COMMENTS				SCALE:	
<p>McKinley      Bird Dog</p> <p>EDT      6028      6029</p> <p>SLD 5733</p> <p>Phillips Services Corporation</p>					
PROJECT FUSRAP/SLOS				HOLE NO. SLD 5733	

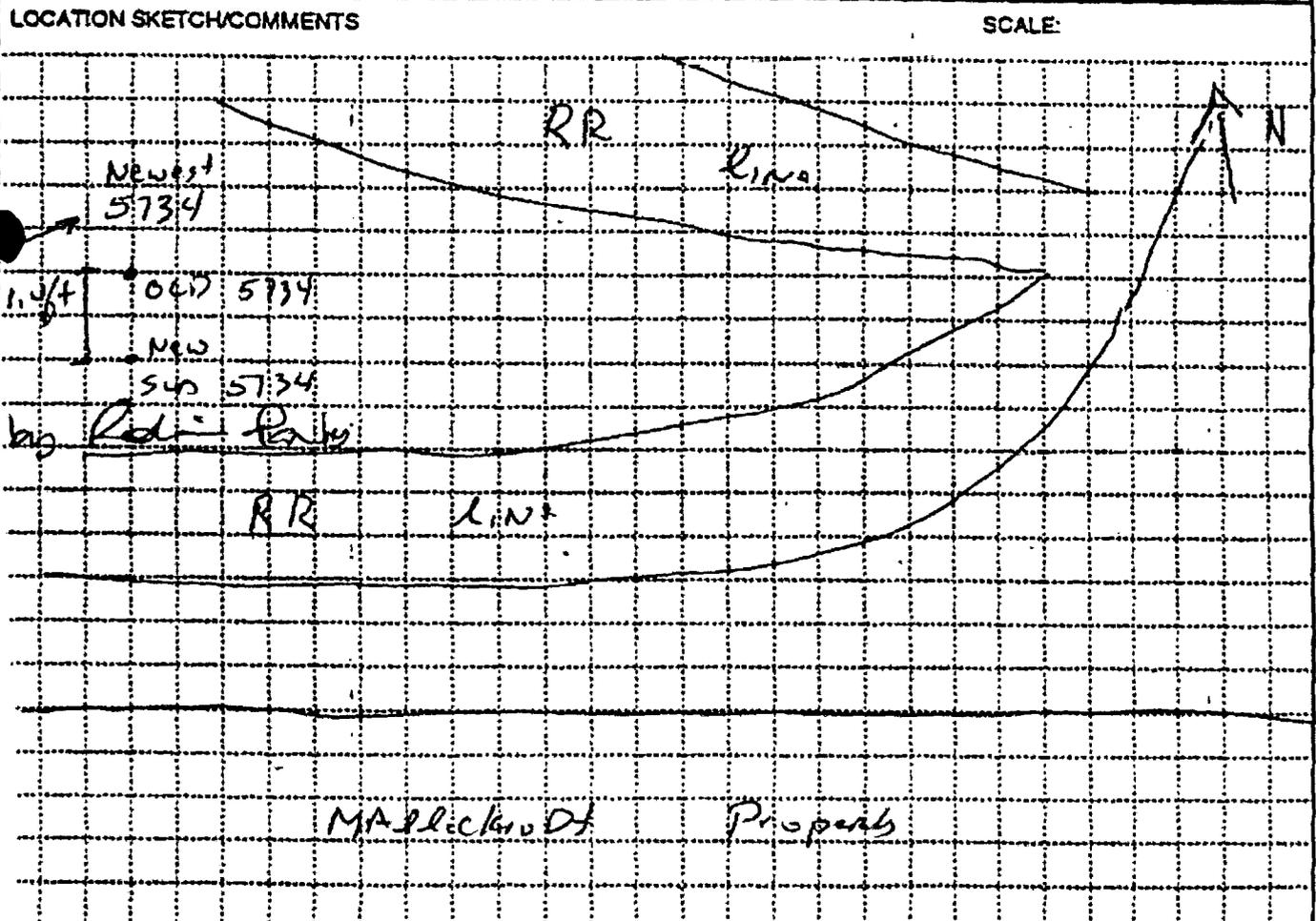
# HTRW DRILLING LOG

PROJECT <i>FUSRAP/SWS</i>		INSPECTOR <i>Chris Laska</i>			WELL NUMBER <i>SUP 5733</i>	
ELEV. (ft)	DEPTH (ft)	DESCRIPTION OF MATERIALS NO.	FIELD SCREENING RESULTS	CERTIFICATION OR CORE DRILL NO.	ANALYTICAL SAMPLE NO.	REMARKS
<i>GW</i>	1	<p><i>SAND, GRAVEL</i> <i>Brown, Hard Dense,</i> <i>Dry, Fri.</i></p>	<p><i>4800</i> <i>counts</i> <i>N-T</i> <i>0.0</i> <i>PTD</i></p>	<p><i>0.15</i> <i>for 16"</i></p>	<p><i>7401</i> <i>5737</i> <i>1406</i></p>	<p><i>1.0</i> <i>2.0 Roswary</i></p>
	2	<i>T.D</i>	<i>18"</i>	<i>1415 hrs</i>		<p><i>10/11/01</i> <i>Draw: 1 (particles)</i> <i>4800 counts</i> <i>w/ Background</i> <i>Bentoni's Check</i> <i>for BF.</i></p>
	3					<p><i>T.D Due</i> <i>to Refusal</i> <i>with USACE</i> <i>Approval</i> <i>Robin Parks</i></p>

PROJECT *FUSRAP/SWS*

WELL NO. *SUP 5733*

<b>HTRW DRILLING LOG</b>		DISTRICT	St. Louis		HOLE NUMBER	SD 5734		
1. COMPANY NAME		IT Corporation			2. DRILL SUBCONTRACTOR		Geotechnology	
3. PROJECT		FUSRAP/SUD			4. LOCATION		PH. J. PS Service	
5. NAME OF DRILLER		JIM McDONALD			6. MANUFACTURER'S DESIGNATION OF DRILL		CME 55	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		Hollow Stem Auger SPRT Spoon			8. HOLE LOCATION			
12. OVERBURDEN THICKNESS					9. SURFACE ELEVATION			
13. DEPTH DRILLED INTO ROCK					10. DATE STARTED		11. DATE COMPLETED	
14. TOTAL DEPTH OF HOLE					12/16/00		10/16/05	
15. GEOTECHNICAL SAMPLES		DISTURBED			UNDISTURBED		18. TOTAL NUMBER OF CORE BOXES	
16. SAMPLES FOR CHEMICAL ANALYSIS		VOC			METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED			MONITORING WELL		OTHER (SPECIFY)	
							21. TOTAL CORE RECOVERY	
							23. SIGNATURE OF INSPECTOR	



PROJECT	FUSRAP/SUD	HOLE NO.	SD 5734
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# HTRW DRILLING LOG

WELL NUMBER  
**S4D 5734**  
 SHEET  
 OF **2** SHEETS **2**

PROJECT **FUSRAP/S4D5**

INSPECTOR **Chris Latta**

DEPTH OF	DEPTH OF	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	DEPTH SAMPLE OR CORE LOG NO.	ANALYTICAL SAMPLE NO.	SQUARES
CL	1	S. clay - LOAN CLAY Brown. HARD, Dense Dry, Flap	5500 Counts NET PPM PID GPO Comb NET PPM	1.5 ton/ft	S4D5 5734 1115	1.0 2.0 Recovery
	2				S4D5 5734 1117	
	3					1125 hrs 10/16/00 Dun: 1 (ph, p, s) 6600 counts NET BACKGROUND Bentonite cap for BF.

660

PROJECT **FUSRAP/S4D5**

WELL NO. **S4D 5734**

HTRW DRILLING LOG			DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>520 5735</i>			
1. COMPANY NAME <i>IT CORPORATION</i>			2. DRILL SUBCONTRACTOR <i>Geotechnology</i>			SHEET SHEETS <i>1 of 2</i>			
3. PROJECT <i>FUSRAP/5405</i>				4. LOCATION <i>Phillips Services</i>					
5. NAME OF DRILLER <i>JIM McQuinn</i>				6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 53</i>					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger 500 ft Spout</i>				8. HOLE LOCATION					
				9. SURFACE ELEVATION					
				10. DATE STARTED <i>10/12/00</i>		11. DATE COMPLETED <i>10/12/00</i>			
12. OVERBURDEN THICKNESS				13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>					
13. DEPTH DRILLED INTO ROCK				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>					
14. TOTAL DEPTH OF HOLE				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>					
18. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <i>[Signature]</i>		
LOCATION SKETCH/COMMENTS						SCALE:			
PROJECT <i>FUSRAP/5405</i>						HOLE NO. <i>520 5735</i>			

# HTRW DRILLING LOG

PROJECT		INSPECTOR			WELL NUMBER	
FUSRAP/SUDS		Chris Locke			SUD 5735	
DEPTH	DEPTH OF	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	DELETED SAMPLE OR CORE DEPTH	ANALYTICAL SAMPLE NO.	REMARKS
SW	1	SAND, GRAVEL, BROWN HARD LOOSE Dry, FIN	6000 counts NAI PPM PTP	0.5 tor/ft	5400 5735 1053	1.8 2.0 Recovery
GW	2	SAND, GRAVEL, BLACK HARD, LOOSE, Dry, FIN.	6500 counts NAI PPM		5400 5777 1053	
	3	T.D	2.0 ft	1100 hrs		10/12/60 Drum: 1 (p.m. 1.13) 5700 counts NAI Background Bentonite chip for PAF

5700

PROJECT FUSRAP/SUDS

WELL NO SUD 5735

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SUP 5736</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnics</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SUP</u>		4. LOCATION <u>Phillips Service</u>			
5. NAME OF DRILLER <u>JIM McDONNELL</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger</u> <u>50mm 50mm</u>		8. HOLE LOCATION <u>Class 2</u>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>10/17/00</u>		11. DATE COMPLETED <u>10/17/00</u>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
15. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
<u>0</u>				18. TOTAL NUMBER OF CORE BOXES	
19. SAMPLES FOR CHEMICAL ANALYSES		VOC	METALS	OTHER (SPECIFY) <u>RAO</u>	OTHER (SPECIFY)
					20. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURE OF INSPECTOR <u>[Signature]</u>
LOCATION SKETCH/COMMENTS			SCALE:		
<p><u>Mz Kinley</u> <u>Br Day</u></p>					
<u>MALICKRODT</u>			<u>Prepared</u>		

# HTRW DRILLING LOG

WELL NUMBER  
540 5736

PROJECT  
FUSRAP/SND

INSPECTOR  
Chris Locke

SHEET  
2 of 2

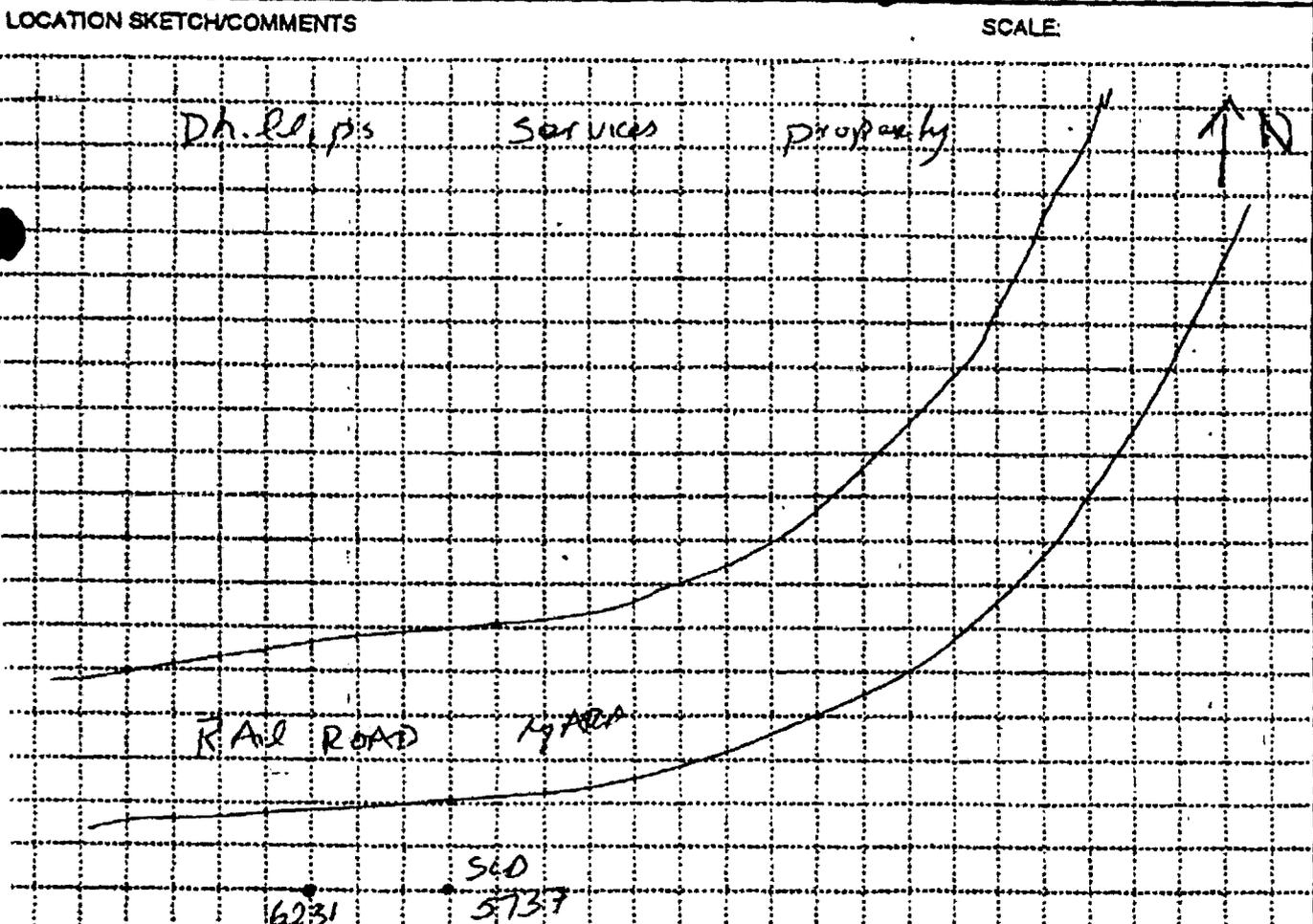
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS (cpm)	DEPTH SAMPLE OR CORE NO. (ft)	ANALYTICAL SAMPLE NO. (ft)	REMARKS
1	Silty LOAM CLAY Brown-HARD, LOOSE LOOSE, TRUST (from RAIN)	5300 COUNTS NET PPM 4900 COUNTS NET PPM PSP	0.5 ft	540 5736 1445	0.8 / 2.5 Recovery
2				5400 5778	
3	TID	19"	1500	hrs	10/17/00 Drum: 1 (p.h. lips) 5700 counts NET Background Bentomb chn for BF TID Due to Refusal with O.K. from USACE Robin Parks

5100

PROJECT  
FUSRAP/SND

WELL NO.  
T 540 5736

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SD 5737</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geoteknology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SWS</u>			4. LOCATION <u>Ph. R. P's Services</u>		
5. NAME OF DRILLER <u>JIM McDONNELL</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION		9. SURFACE ELEVATION	
<u>Hollow Split Spoon</u>		<u>Split Spoon</u>		10. DATE STARTED <u>10/1/00</u>	
				11. DATE COMPLETED <u>10/1/00</u>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>	
13. DEPTH DRILLED INTO ROCK		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>		16. TOTAL NUMBER OF CORE BOXES	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>		18. TOTAL NUMBER OF CORE BOXES	
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
<u>0</u>					
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
				<u>RAO</u>	
20. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				21. SIGNATURE OF INSPECTOR <u>Jim Tark</u>	
21. TOTAL CORE RECOVERY					



PROJECT <u>FUSRAP/SWS</u>	HOLE NO. <u>SD 5737</u>
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# HTRW DRILLING LOG

PROJECT		INSPECTOR				WELL NUMBER	
FUSPAD/SND		Chris Lock				SND 5737	
LOG ID	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	DATE/TECH SAMPLE OR CORE NO. / FT	ANALYTICAL SAMPLE NO.	REMARKS	
SW	1	Clay, sand, green, black, hard, loose, dry.	6400 counts net PPM RAD		5401 5737 1326NS	115 2.0	RECOVERIES
CH	2	Fat clay Brown - green, hard, dense, dry.	6800 counts net PPM RAD	5.0 to 8 ft	5400 5739 1326NS		
	3	T.P.	2.0	67	1335		hrs 10/11/01 Draw: 1 (ph. order) 5300 counts net Bentback for BF.

5300

PROJECT  
FUSPAD/SND

WELL NO.  
SND 5737

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SLD 5738</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET SHEETS <i>1 of 2</i>	
3. PROJECT <i>FUSRAP/SLOs</i>			4. LOCATION <i>Phillips Service</i>		
5. NAME OF DRILLER <i>JIM McDONNELL</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger SPR.3 SPDR</i>		8. HOLE LOCATION			
		9. SURFACE ELEVATION			
		10. DATE STARTED <i>10/12/00</i>		11. DATE COMPLETED <i>10/12/00</i>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
16. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES	
17. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAS</i>	OTHER (SPECIFY)
19. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	20. SIGNATURE OF INSPECTOR <i>[Signature]</i>
21. TOTAL CORE RECOVERY					
LOCATION SKETCH/COMMENTS			SCALE:		
PROJECT <i>FUSRAP/SLOs</i>			HOLE NO. <i>SLD 5738</i>		

# HTRW DRILLING LOG

HOLE NUMBER  
540 5738

PROJECT  
FUSRAP/SWS

INSPECTOR  
Chris Lock

SHEET  
2 of 2

CLAY ID	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING DETAILS	CORRECTED SAMPLE OR COPY BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
SW	1	SAND GRAVEL Brown, HARD, loose, Dry, FILL	5300 COUNTS NEI OIS PDM PSP	05 ton/ft <sup>2</sup>	5400 5738 1329	1.8 2.0 Recovery
GW	2	Slag, Cinder Block, HARD, loose Dry, FILL, Angular	6200 COUNTS NEI OIS PDM		5400 5760 1332	
	3		TID 2.0 ft	1335	hrs	10/12/01 Drum: 1 (ph. 02.02.05) 5700 counts NEI Background Bentont chip for BF.

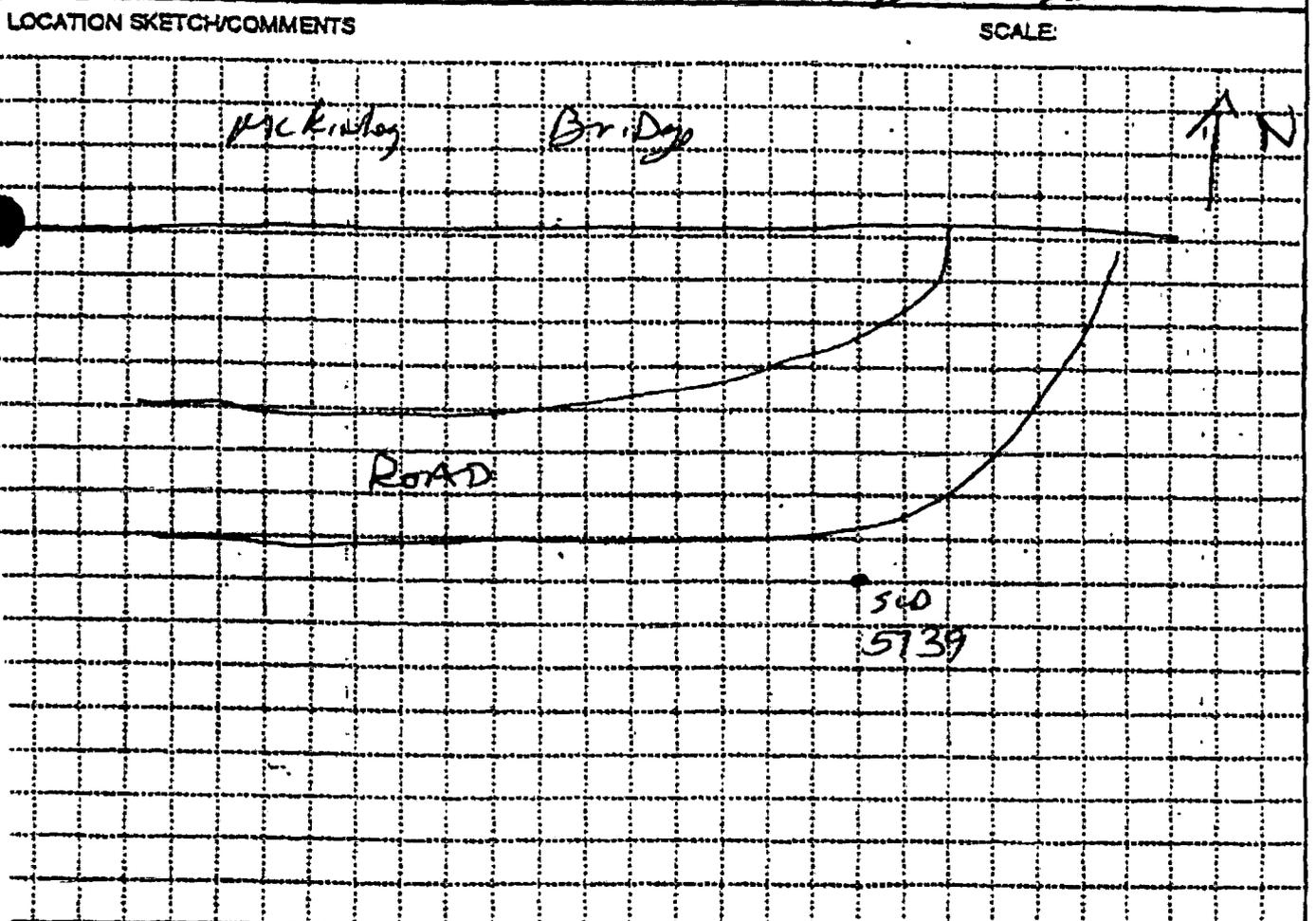
670

5700

PROJECT  
FUSRAP/SWS

HOLE NO.  
540 5738

<b>HTRW DRILLING LOG</b>			DISTRICT <u>52. L-13</u>			SLD 5739		
1. COMPANY NAME <u>IT Corporation</u>			2. DRILL SUBCONTRACTOR <u>Geotechnics</u>			SHEET <u>1</u> OF <u>2</u>		
3. PROJECT <u>FUSRAP/SWS</u>			4. LOCATION <u>Ph. 2, ps Service</u>					
5. NAME OF DRILLER <u>Jim McDermid</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 33</u>					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Star Drill</u> <u>302.4 SPOON</u>			8. HOLE LOCATION <u>CLASS 2</u>			9. SURFACE ELEVATION		
12. OVERBURDEN THICKNESS			10. DATE STARTED <u>10/19/00</u>			11. DATE COMPLETED <u>10/19/00</u>		
13. DEPTH DRILLED INTO ROCK			15. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>					
14. TOTAL DEPTH OF HOLE			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>					
18. GEOTECHNICAL SAMPLES <u>0</u>			DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS			VOC	METALS	OTHER (SPECIFY) <u>RAD</u>	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
22. DEPOSITION OF HOLE			BAG FILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <u>[Signature]</u>		



PROJECT <u>FUSRAP/SWS</u>			HOLE NO. <u>SLD 5739</u>		
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# HTRW DRILLING LOG

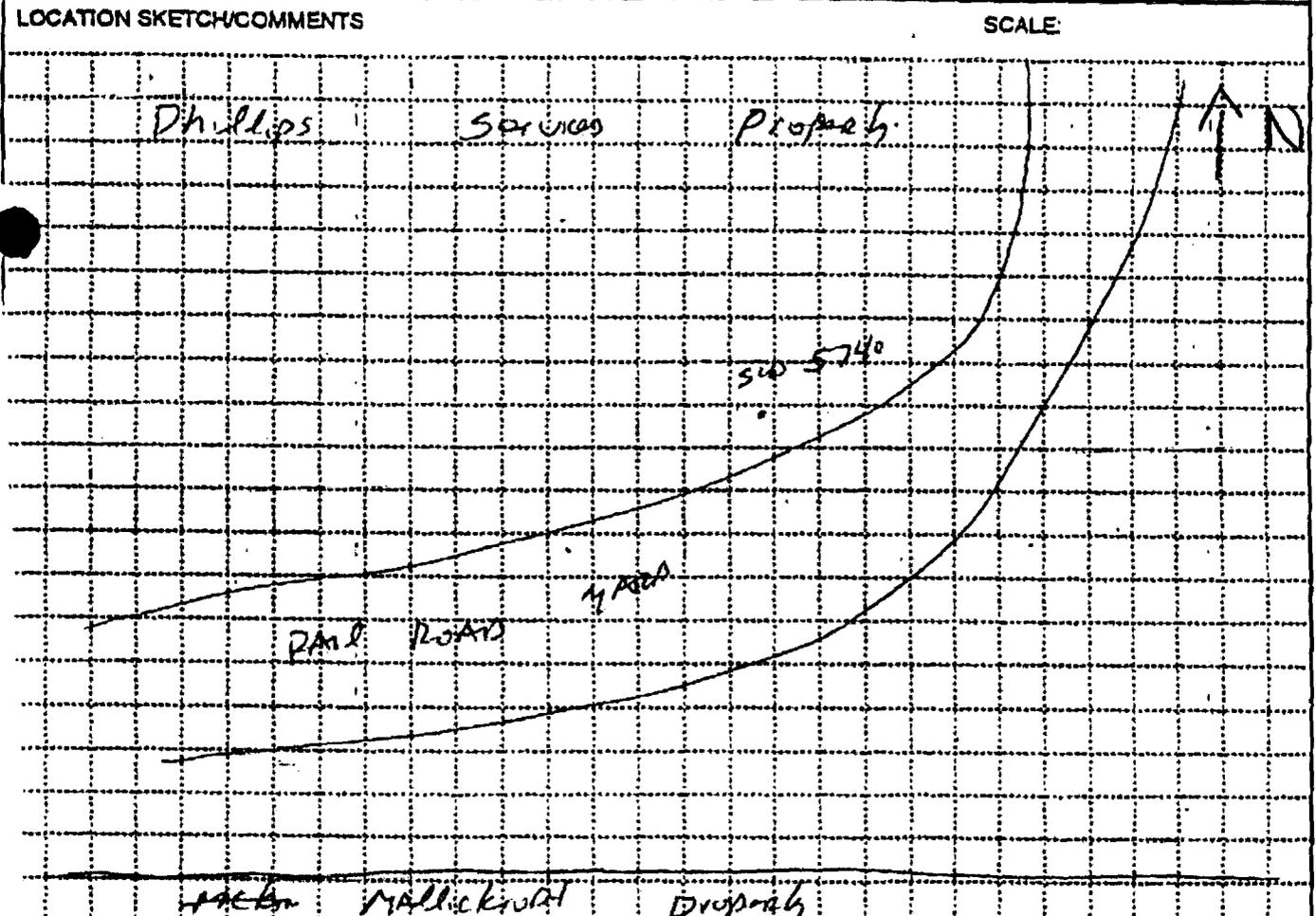
PROJECT		INSPECTOR			WELL NUMBER	
FUSRAP/SND		Chris Lock			SND 5739	
DEPTH	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	SCREENING SAMPLE OR CORE DEPTH	ANALYTICAL SAMPLE NO.	CORRECTION
GW	1	GRAVEL, SAND TAN-BROWN HARD, loose, dry, fine Angular	5700 counts NET DIP PPM		5700 5739 0941	2.0 2.0 Rowing
CL	2	Silty LOAM CLAY with SAND Brown-HARD, LOOSE Dry fine	6400 counts NET DIP PPM		5700 0946	5700
	3	TID	2.0 ft	0955	his	10/19/60 Draw: 1 (, sh. exps) 5700 counts NET Background Bentonite chip fine BF

5700

5700

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SW 5740</u>	
1. COMPANY NAME <u>IT CORPORATION</u>		2. DRILL SUBCONTRACTOR <u>Geo Technology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SWS</u>			4. LOCATION <u>Ph. Phillips Service</u>		
5. NAME OF DRILLER <u>JIM McDONALD</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger</u> <u>Sp. 1 SPOON</u>		8. HOLE LOCATION			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>10/11/00</u>		11. DATE COMPLETED <u>10/11/00</u>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
16. GEOTECHNICAL SAMPLES		DISTURBED <u>0</u>		UNDISTURBED <u>-</u>	
18. TOTAL NUMBER OF CORE BOXES		19. SAMPLES FOR CHEMICAL ANALYSIS			
		VOC		METALS	
		OTHER (SPECIFY) <u>RAD</u>		OTHER (SPECIFY)	
20. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
		OTHER (SPECIFY)		21. SIGNATURE OF INSPECTOR <u>[Signature]</u>	
21. TOTAL CORE RECOVERY					



PROJECT <u>FUSRAP/SWS</u>	HOLE NO. <u>SW 5740</u>
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# HTRW DRILLING LOG

PROJECT		INSPECTOR			HOLE NUMBER	
FUSAP/SUS		Mits Lock			SAP 5740	
DEPTH	DEPTH	DESCRIPTION OF MATERIALS	FIELD TOOLS/RESULTS	CORRECT SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
GN	1	Silt, clays Black, HARD, Bass Dry, Fine, Angular	8300 Counts ppm P20		940 5740 1058N	20 20 RECOVER
CH	2	Fat clay Green, HARD, Dense Dry, Fine,	8100 Counts N/S	> 510 ton/6hr	5400 5782 1101N	
	3	T.D	20 ft	110 NS	10/1100	Drum: 1 (7H. 00. ps) 7100 counts NET Background Bartonek chp. for BF

7100

PROJECT FUSAP/SUS

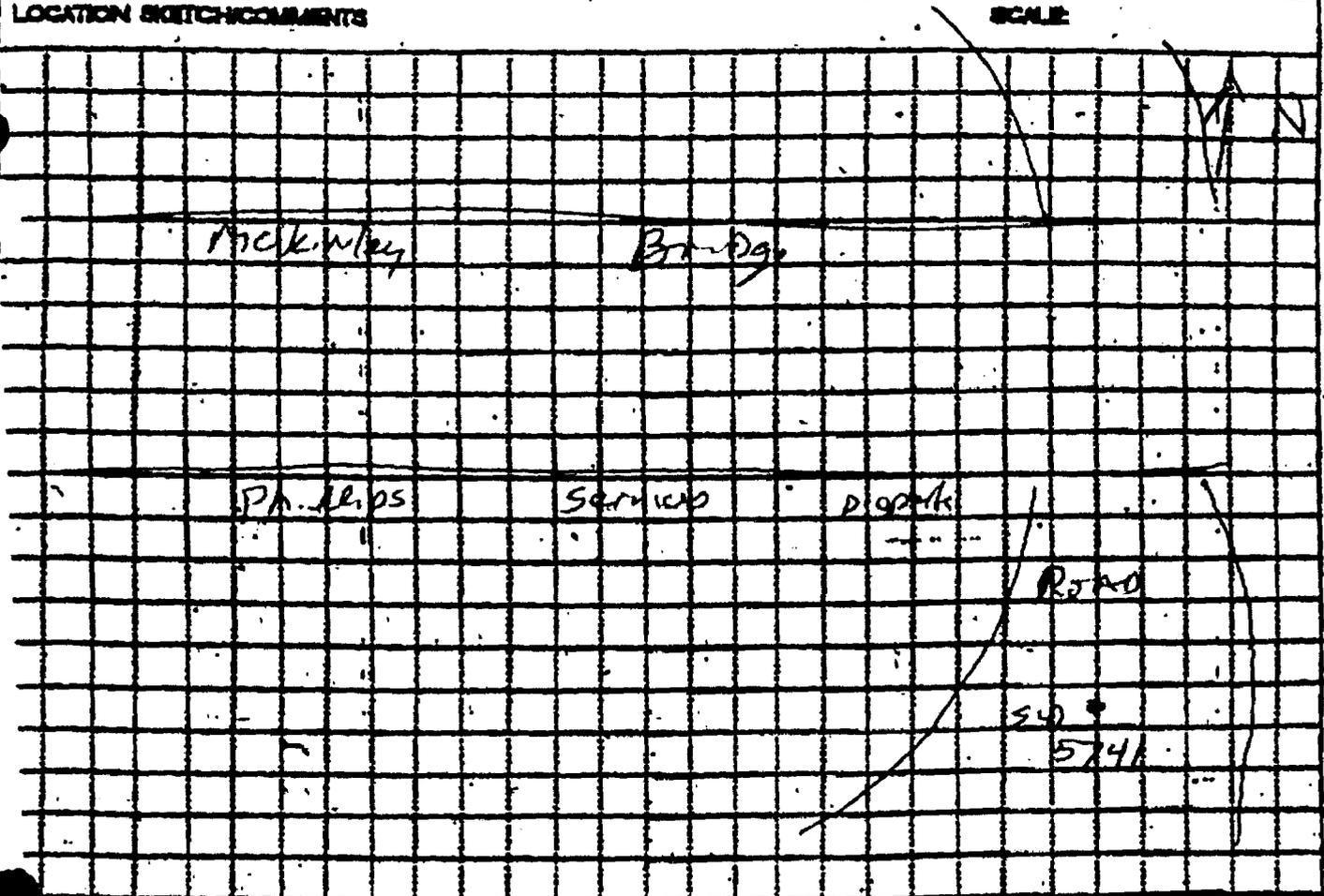
HOLE NO. SAP 5740

# HTRW DRILLING LOG

St. Louis

340 5741

1. COMPANY NAME <b>IT Corporation</b>		2. WELL NUMBER <b>Geotechnology</b>		3. WELL DEPTH <b>100</b>	
4. SERVICE <b>FUSRAP/5405</b>		5. LOGGING SERVICE <b>Phil Phillips Services</b>			
6. NAME OF WELL <b>JIM McDONALD</b>		7. WELL NUMBER (CONTINUED) <b>CME 55</b>			
8. WELL TYPE AND DEPTH <b>Hollow Stem Auger 3000</b>		9. LOGGING METHOD <b></b>			
10. DATE OF LOGGING <b>10/10/00</b>		11. DATE OF LOGGING <b>10/10/00</b>			
12. WELL NUMBER (CONTINUED) <b>N/A</b>		13. WELL NUMBER (CONTINUED) <b>N/A</b>			
14. WELL NUMBER (CONTINUED) <b>N/A</b>		15. WELL NUMBER (CONTINUED) <b>N/A</b>			
16. WELL NUMBER (CONTINUED) <b></b>		17. WELL NUMBER (CONTINUED) <b></b>			
18. WELL NUMBER (CONTINUED) <b></b>		19. WELL NUMBER (CONTINUED) <b></b>			
20. WELL NUMBER (CONTINUED) <b></b>		21. WELL NUMBER (CONTINUED) <b></b>			
22. WELL NUMBER (CONTINUED) <b></b>		23. WELL NUMBER (CONTINUED) <b></b>			
24. WELL NUMBER (CONTINUED) <b></b>		25. WELL NUMBER (CONTINUED) <b></b>			
26. WELL NUMBER (CONTINUED) <b></b>		27. WELL NUMBER (CONTINUED) <b></b>			
28. WELL NUMBER (CONTINUED) <b></b>		29. WELL NUMBER (CONTINUED) <b></b>			
30. WELL NUMBER (CONTINUED) <b></b>		31. WELL NUMBER (CONTINUED) <b></b>			
32. WELL NUMBER (CONTINUED) <b></b>		33. WELL NUMBER (CONTINUED) <b></b>			
34. WELL NUMBER (CONTINUED) <b></b>		35. WELL NUMBER (CONTINUED) <b></b>			
36. WELL NUMBER (CONTINUED) <b></b>		37. WELL NUMBER (CONTINUED) <b></b>			
38. WELL NUMBER (CONTINUED) <b></b>		39. WELL NUMBER (CONTINUED) <b></b>			
40. WELL NUMBER (CONTINUED) <b></b>		41. WELL NUMBER (CONTINUED) <b></b>			
42. WELL NUMBER (CONTINUED) <b></b>		43. WELL NUMBER (CONTINUED) <b></b>			
44. WELL NUMBER (CONTINUED) <b></b>		45. WELL NUMBER (CONTINUED) <b></b>			
46. WELL NUMBER (CONTINUED) <b></b>		47. WELL NUMBER (CONTINUED) <b></b>			
48. WELL NUMBER (CONTINUED) <b></b>		49. WELL NUMBER (CONTINUED) <b></b>			
50. WELL NUMBER (CONTINUED) <b></b>		51. WELL NUMBER (CONTINUED) <b></b>			
52. WELL NUMBER (CONTINUED) <b></b>		53. WELL NUMBER (CONTINUED) <b></b>			
54. WELL NUMBER (CONTINUED) <b></b>		55. WELL NUMBER (CONTINUED) <b></b>			
56. WELL NUMBER (CONTINUED) <b></b>		57. WELL NUMBER (CONTINUED) <b></b>			
58. WELL NUMBER (CONTINUED) <b></b>		59. WELL NUMBER (CONTINUED) <b></b>			
60. WELL NUMBER (CONTINUED) <b></b>		61. WELL NUMBER (CONTINUED) <b></b>			
62. WELL NUMBER (CONTINUED) <b></b>		63. WELL NUMBER (CONTINUED) <b></b>			
64. WELL NUMBER (CONTINUED) <b></b>		65. WELL NUMBER (CONTINUED) <b></b>			
66. WELL NUMBER (CONTINUED) <b></b>		67. WELL NUMBER (CONTINUED) <b></b>			
68. WELL NUMBER (CONTINUED) <b></b>		69. WELL NUMBER (CONTINUED) <b></b>			
70. WELL NUMBER (CONTINUED) <b></b>		71. WELL NUMBER (CONTINUED) <b></b>			
72. WELL NUMBER (CONTINUED) <b></b>		73. WELL NUMBER (CONTINUED) <b></b>			
74. WELL NUMBER (CONTINUED) <b></b>		75. WELL NUMBER (CONTINUED) <b></b>			
76. WELL NUMBER (CONTINUED) <b></b>		77. WELL NUMBER (CONTINUED) <b></b>			
78. WELL NUMBER (CONTINUED) <b></b>		79. WELL NUMBER (CONTINUED) <b></b>			
80. WELL NUMBER (CONTINUED) <b></b>		81. WELL NUMBER (CONTINUED) <b></b>			
82. WELL NUMBER (CONTINUED) <b></b>		83. WELL NUMBER (CONTINUED) <b></b>			
84. WELL NUMBER (CONTINUED) <b></b>		85. WELL NUMBER (CONTINUED) <b></b>			
86. WELL NUMBER (CONTINUED) <b></b>		87. WELL NUMBER (CONTINUED) <b></b>			
88. WELL NUMBER (CONTINUED) <b></b>		89. WELL NUMBER (CONTINUED) <b></b>			
90. WELL NUMBER (CONTINUED) <b></b>		91. WELL NUMBER (CONTINUED) <b></b>			
92. WELL NUMBER (CONTINUED) <b></b>		93. WELL NUMBER (CONTINUED) <b></b>			
94. WELL NUMBER (CONTINUED) <b></b>		95. WELL NUMBER (CONTINUED) <b></b>			
96. WELL NUMBER (CONTINUED) <b></b>		97. WELL NUMBER (CONTINUED) <b></b>			
98. WELL NUMBER (CONTINUED) <b></b>		99. WELL NUMBER (CONTINUED) <b></b>			
100. WELL NUMBER (CONTINUED) <b></b>		101. WELL NUMBER (CONTINUED) <b></b>			



# HTRW DRILLING LOG

FUSRAP/SD

Chris Lock

5741

DEPTH (ft)	DESCRIPTION OF MATERIAL	FIELD MEASUREMENTS (COUNTS, NCI, PPM, etc.)	OTHER SAMPLE OR DATA INFO	ANALYTICAL SAMPLE NO.	REMARKS
GW	GRAVEL, BROWN, HARD Loose, Dry, FR.	4000 COUNTS NCI	0.5 ton/6'	SUP 5741 1345	1.8/2.0 Recovery
GW	GRAVEL, SAND, CLAY BROWN-BLACK, HARD Loose, Dry, FR.	5400 COUNTS NCI PPM PPM		4 5783 1348A	
2	TID.	2.0	6 + 1400		has 10/100.
3					Draw: 4 (Phillips) 5700 counts NCI BACKGROUND Beitomb chips for BF

5700  
5400

FUSRAP/SDS

SUP 4 5741

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SD 5742</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geoteknology</u>		SHEET <u>1</u> OF <u>2</u> SHEETS	
3. PROJECT <u>FUSRAP/SD2</u>			4. LOCATION <u>Phillips Service</u>		
5. NAME OF DRILLER <u>Jim McDonald</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 35</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>1 1/2" Stem Auger</u> <u>Split Spoon</u>			8. HOLE LOCATION		
			9. SURFACE ELEVATION		
			10. DATE STARTED <u>10/11/05</u>		11. DATE COMPLETED <u>10/11/05</u>
12. OVERBURDEN THICKNESS			15. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>		
13. DEPTH DRILLED INTO ROCK			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>		
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>		
18. BOTECHNICAL SAMPLES <u>0</u>		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAA</u>	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
				23. SIGNATURE OF INSPECTOR <u>[Signature]</u>	
LOCATION SKETCH/COMMENTS				SCALE:	
PROJECT <u>FUSRAP/SD2</u>				HOLE NO. <u>SD 5742</u>	

# HTRW DRILLING LOG

PROJECT		INSPECTOR			WELL NUMBER	
FUSPAP/sms		Chris Lack			SD 5742	
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS (cpm)	DEPTCH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS	
1	SANDY-GRAVEL, Brown-HARD, LOOSE Dij. Fill.	7800 COUNTS NET OS PPM PIP	05 40M/62	5-01 5742 1017	118/ 20 Recovery	
2	Slag, 2-in-balls Black, HARD, LOOSE, Dij. Fill. ANYMAN	7900 COUNTS NET OS PPM PIP		5-01 5784 1020		
3	TID 20 ft		1025	115	10/11/00 Diam: 10 (Ph. 0.1) 7700 counts NET BACKGROUN Bentonite chip for BF.	

7700

PROJECT FUSPAP/sms

WELL NO. SD 5742

<b>HTRW DRILLING LOG</b>		DISTRICT <i>SL Louis</i>		HOLE NUMBER <i>540 5743</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SUS</i>			4. LOCATION <i>Ph. 20. ps Service</i>		
5. NAME OF DRILLER <i>JIM McDONNELL</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow 3/4" Auger SPB.1 SPOON</i>		8. HOLE LOCATION		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS		15. DATE STARTED <i>10/11/00</i>		11. DATE COMPLETED <i>10/11/00</i>	
13. DEPTH DRILLED INTO ROCK		16. DEPTH OF GROUND WATER ENCOUNTERED <i>N/A</i>		18. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
19. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
				OTHER (SPECIFY) <i>ROD</i>	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				21. SIGNATURE OF INSPECTOR <i>John Tule</i>	
LOCATION SKETCH/COMMENTS			SCALE:		
PROJECT <i>FUSRAP/SUS</i>			HOLE NO. <i>540 5743</i>		

# HTRW DRILLING LOG

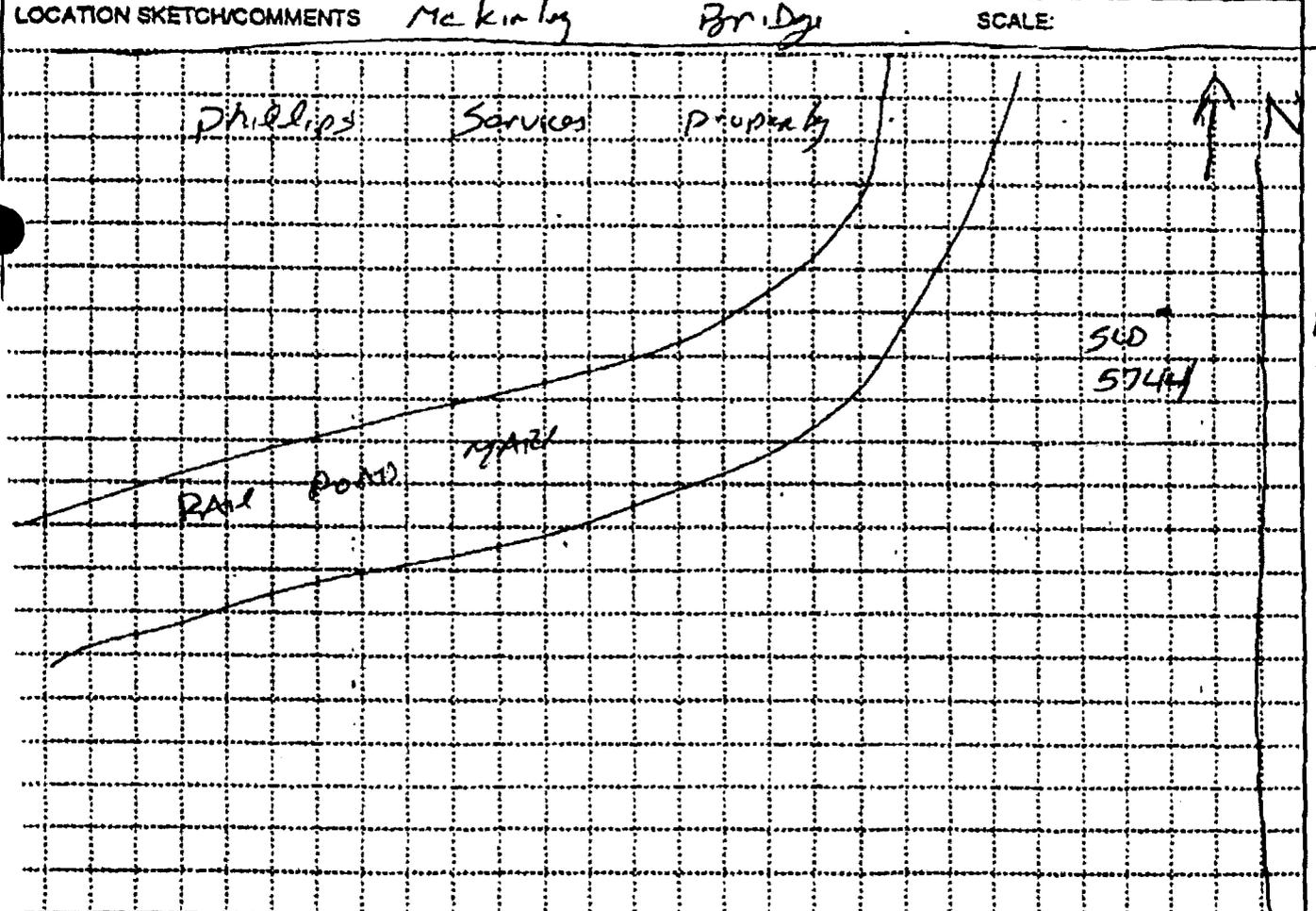
PROJECT		INSPECTOR			WELL NUMBER	
FUSRAP/SWS		Chris Lala			SUD 5743	
CLAY-LOG	DEPTH (ft)	DESCRIPTION OF MATERIALS (log)	FIELD SCREENING RESULTS (log)	DEPTEN SAMPLE OR CORE BOX NO. (log)	ANALYTICAL SAMPLE NO. (log)	REMARKS
SW	1	SAND, GRAVEL, Brown, HARD LOOSE Dry Fill, Angular	7800 COUNTS NET 0.0 PPM		5400 5743 0913	1.8 2.0 Recovery
SW		SAND, GRAVEL, with silty-lean clay Brown-Grey, HARD DENSE, Dry Limestone.	8700 COUNTS NET 0.0 PPM		5400 5785 0915	
-		2	TID.	2.0	0920 hrs	
-	3					

7100  
7000

PROJECT FUSRAP/SWS

WELL NO. SUD 5743

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SD 5744</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSPAP/SDS</u>			4. LOCATION <u>Phillips Service</u>		
5. NAME OF DRILLER <u>JIM McDONARD</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		<u>15.00W 3ton Agm</u> <u>302.1 700N</u>		8. HOLE LOCATION	
				9. SURFACE ELEVATION	
		10. DATE STARTED <u>10/11/00</u>		11. DATE COMPLETED <u>10/11/00</u>	
12. OVERBURDEN THICKNESS		15. DEPTH OF GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
18. GEOTECHNICAL SAMPLES		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAD</u>	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
					23. SIGNATURE OF INSPECTOR <u>Chris Cook</u>



PROJECT <u>FUSPAP/SDS</u>	HOLE NO. <u>SD 5744</u>
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FORM 5056-R, AUG 94 (Proponent: CECW-EG)

# HTRW DRILLING LOG

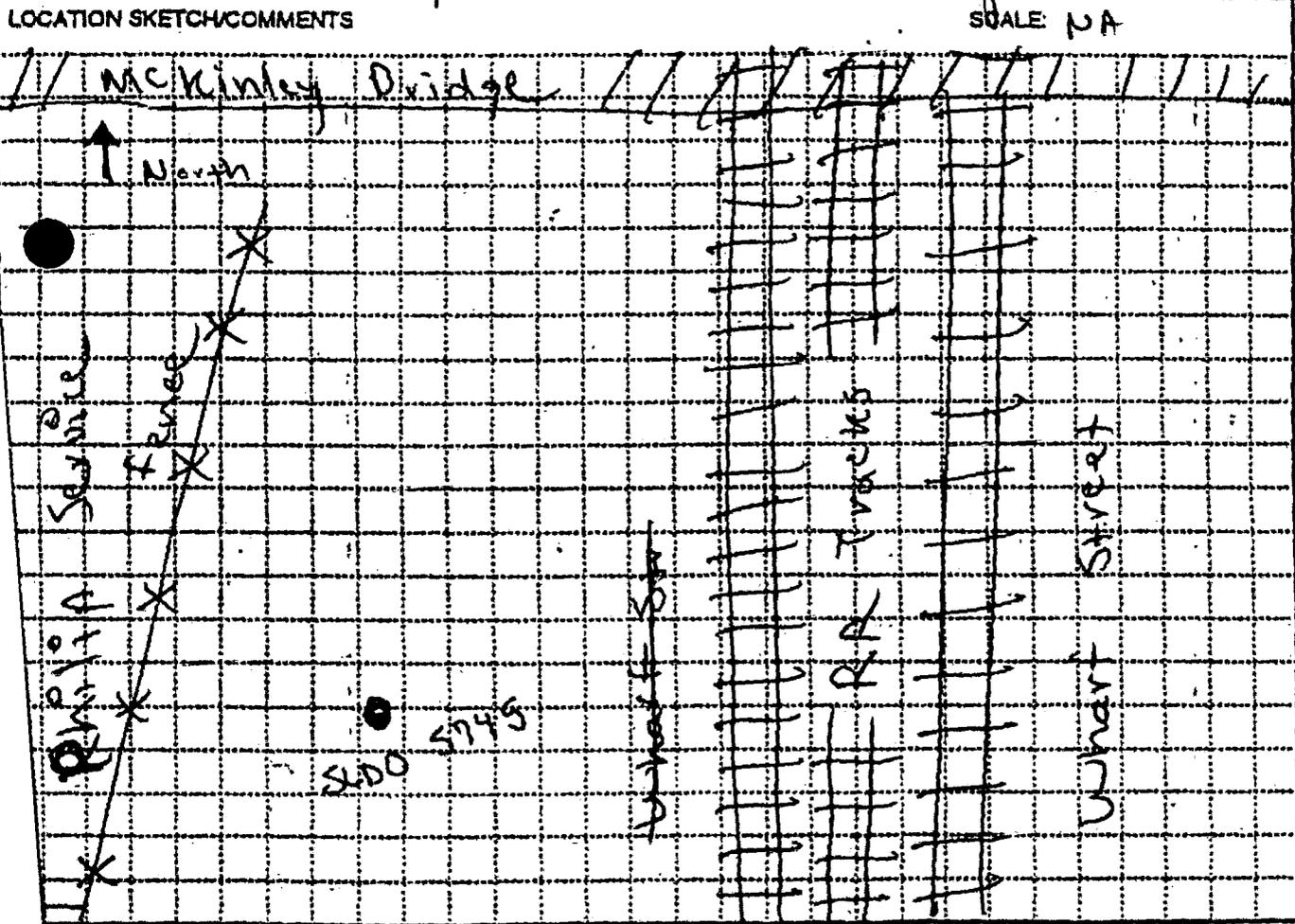
PROJECT <i>FUSRAP/SOS</i>		INSPECTOR <i>Chris Locke</i>			WELL NUMBER <i>SLD 5744</i>	
CLOG NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD COUNTING RESULTS	CERTIFIED SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
1		<i>SANDY - GRAVEL FROCK, HARD, LOOSE, Dry. FR.</i>	<i>8400 COUNTS NET O.D. P.D.</i>		<i>SLD 5744 0845</i>	<i>1.5 / 20 Recovery</i>
2		<i>SLAG, CINDERS BRICK, HARD LOOSE, Dry. FR.</i>	<i>6200 COUNTS NET O.D. P.D.</i>		<i>SLD 5786 0848</i>	
3		<i>T.D 20 ft</i>		<i>0855</i>	<i>hrs</i>	<i>10/11/00 Drain 1 (PHILIPS SERVICE) 8000 counts NET Background BF is Bendumb CAPS</i>

PROJECT *FUSRAP/SOS*

WELL NUMBER  
*SLD 5744*

<b>HTRW DRILLING LOG</b>		DISTRICT	St. Louis	HOLE NUMBER	5745
1. COMPANY NAME		2. DRILL SUBCONTRACTOR		SHEET	SHEETS
IT Coop		NA		1	2
3. PROJECT			4. LOCATION		
FUSRAP / SLOS			Class II		
5. NAME OF DRILLER			6. MANUFACTURER'S DESIGNATION OF DRILL		
NA					
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION			
Hand Auger		Philip Service			
		9. SURFACE ELEVATION			
		10. DATE STARTED		11. DATE COMPLETED	
		11/02/00		11/02/00	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED			
NA		NA			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED			
NA		NA			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)			
2'		NA			

15. GEOTECHNICAL SAMPLES		16. TOTAL NUMBER OF CORE BOXES					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
yes		X		Rad			
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR		
backfilled		yes	No		[Signature]		



PROJECT	FUSRAP / SLOS	HOLE NO.	5745
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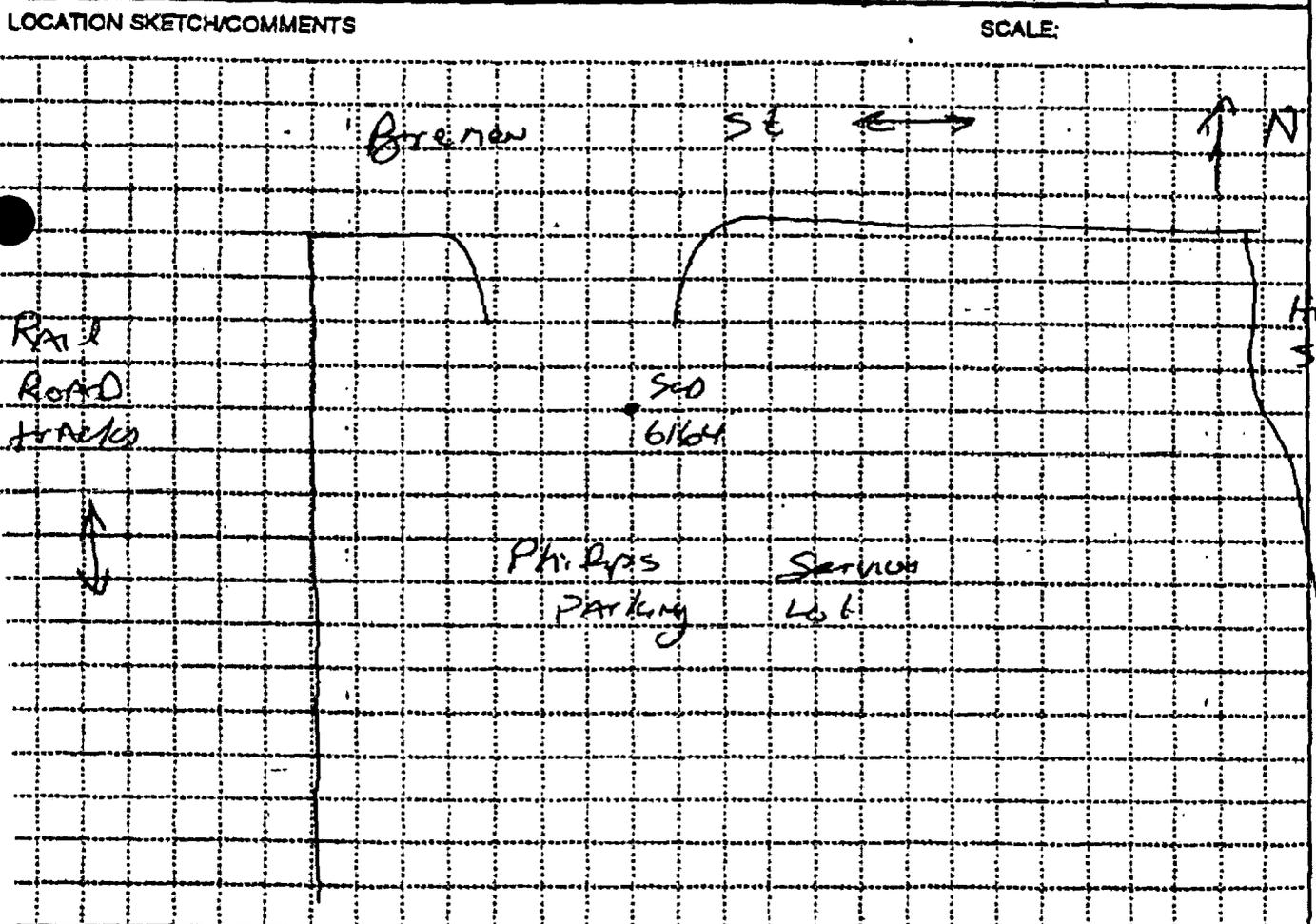
# HTRW DRILLING LOG

PROJECT FUSRAP / SLOS				INSPECTOR J. Barker		WELL NUMBER 5745	
DEPTH (ft)	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	SECTION SAMPLE OR CORE DRILL NO.	ANALYTICAL SAMPLE NO.	SHEET 2 OF 2 SHEETS 2	
CL	1'	Silty clay w/ gravel	7842 counts NaI 0.0010	N/A	500 5745 0945	Hand Auger	
	2'	concrete debris	7993 counts 0.0010 NaI		500 5787 0955		
		T.O. 2.0'				0957 hrs. 11/02/00  Split/dupe 5745-1,2  Background 7891 counts/plm  Drum #	

PROJECT FUSRAP / SLOS

WELL NO 5745

<b>HTRW DRILLING LOG</b>			DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>SD 6164</i>				
1. COMPANY NAME <i>IT Corporation</i>			2. DRILL SUBCONTRACTOR <i>Geotechnology</i>			SHEET <i>1</i> OF <i>2</i>				
3. PROJECT <i>FUSRAP/SOS</i>			4. LOCATION <i>Ph. Rps Service</i>							
5. NAME OF DRILLER <i>JIM McDONALD</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>							
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow 3/4" Auger SPL-1 PDR</i>			8. HOLE LOCATION <i>CHASS 3</i>			9. SURFACE ELEVATION				
12. OVERBURDEN THICKNESS			10. DATE STARTED <i>11/8/00</i>			11. DATE COMPLETED <i>11/8/00 -</i>				
13. DEPTH DRILLED INTO ROCK			16. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>				
14. TOTAL DEPTH OF HOLE			18. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			19. TOTAL NUMBER OF CORE BOXES				
18. GEOTECHNICAL SAMPLES <i>0</i>			DISTURBED	UNDISTURBED	20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERY		
22. DISPOSITION OF HOLE			VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <i>[Signature]</i>		



PROJECT <i>FUSRAP/SOS</i>	HOLE NO. <i>SD 6164</i>
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# HTRW DRILLING LOG

PROJECT **FUSRAP/SWS**

INSPECTOR **Chris Cook**

WELL NUMBER **SW 6164**

SHEET **2**

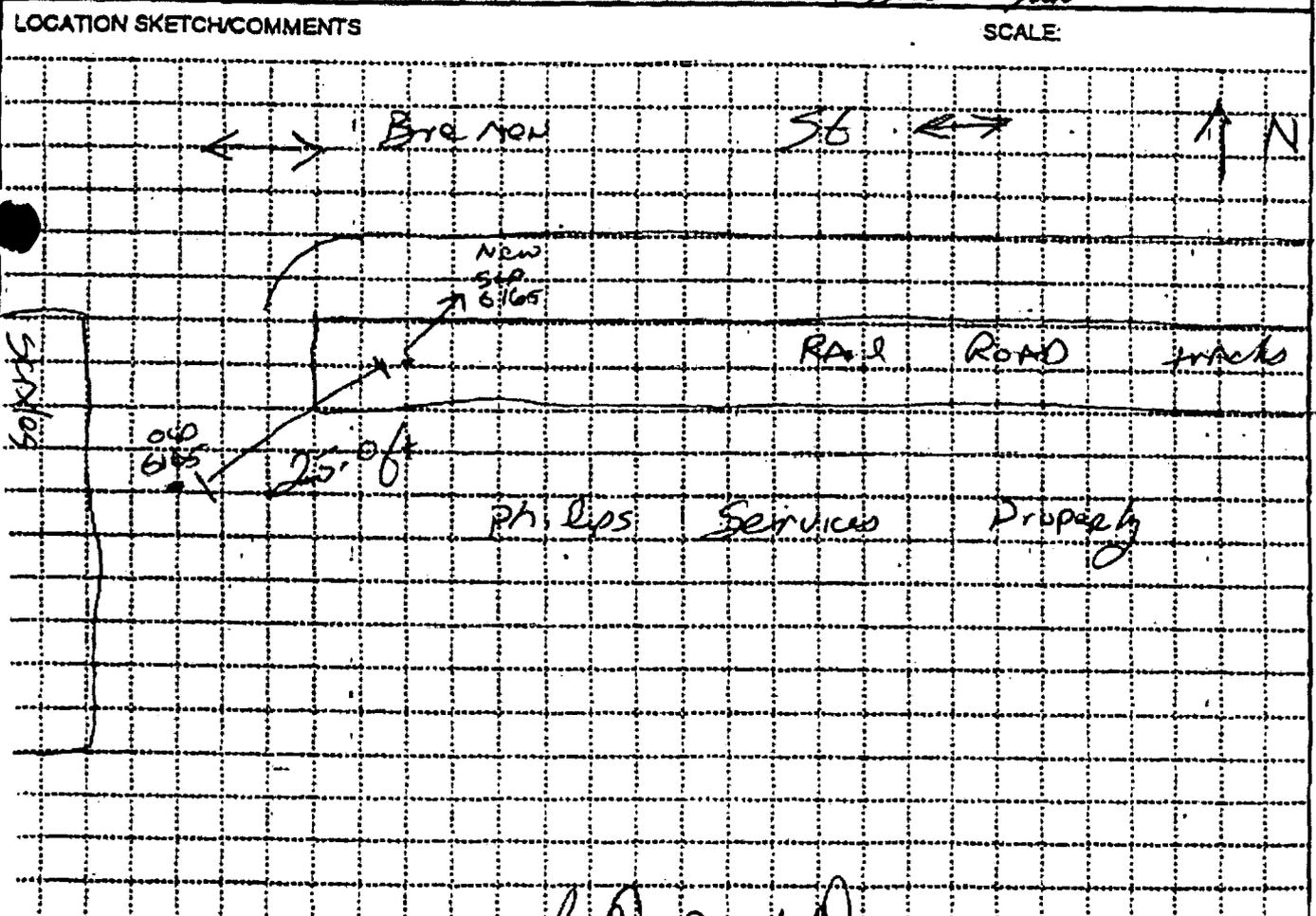
DEPTH FT	DEPTH IN	DESCRIPTION OF MATERIALS LOG	FIELD SCREENING RESULTS (1)	GEOTECH SAMPLE OR CORE DEN. NO. (2)	ANALYTICAL SAMPLE NO. (3)	REMARKS
		Asphalt	5100 COUNTS NFI		SW 6164 (core) 0923	
	1	SLAY, GRAVEL, SAND Break - Brown. HARD, LOOSE, Dry FRI. Angular	5400 COUNTS N-I	0.15 ton/ft <sup>3</sup>	SW 6164 0930	1.5 2.0 Recovery
	2		5600 COUNTS NFI		SW 6164 0930	
	3					TID 2.0 ft + 0940 hrs 11/8/00 Dmn: 2 (17M.R.P.S) 5500 counts NFI Background Bentonite chr for BF

5500

PROJECT **FUSRAP/SWS**

WELL NUMBER **SW 6164**

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SD 6165</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SDS</u>		4. LOCATION <u>Ph-Lips Service</u>			
5. NAME OF DRILLER <u>Kevin Bassler</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Spin Auger</u> <u>split spoon</u>		8. HOLE LOCATION <u>Class 3</u>		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS		10. DATE STARTED <u>11/13/00</u>		11. DATE COMPLETED <u>11/13/00</u>	
13. DEPTH DRILLED INTO ROCK		15. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
18. DEPTH TECHNICAL SAMPLER		19. TOTAL NUMBER OF CORE BOXES			
20. SAMPLES FOR CHEMICAL ANALYSIS		DISTURBED		UNDISTURBED	
		VOC		METALS	
				OTHER (SPECIFY) <u>RAD</u>	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				21. SIGNATURE OF INSPECTOR <u>Mr. [Signature]</u>	



PROJECT <u>FUSRAP/SDS</u>	<u>[Signature]</u>	HOLE NO. <u>SD 6165</u>
FORM 8056-R, AUG 94	<u>11/14/00</u>	(Proponent: CECW-EG)

# HTRW DRILLING LOG

PROJECT FUSPAP/SWS

INSPECTOR Chris Lock

WELL NUMBER SUD 6165

SHEET 2 OF 2

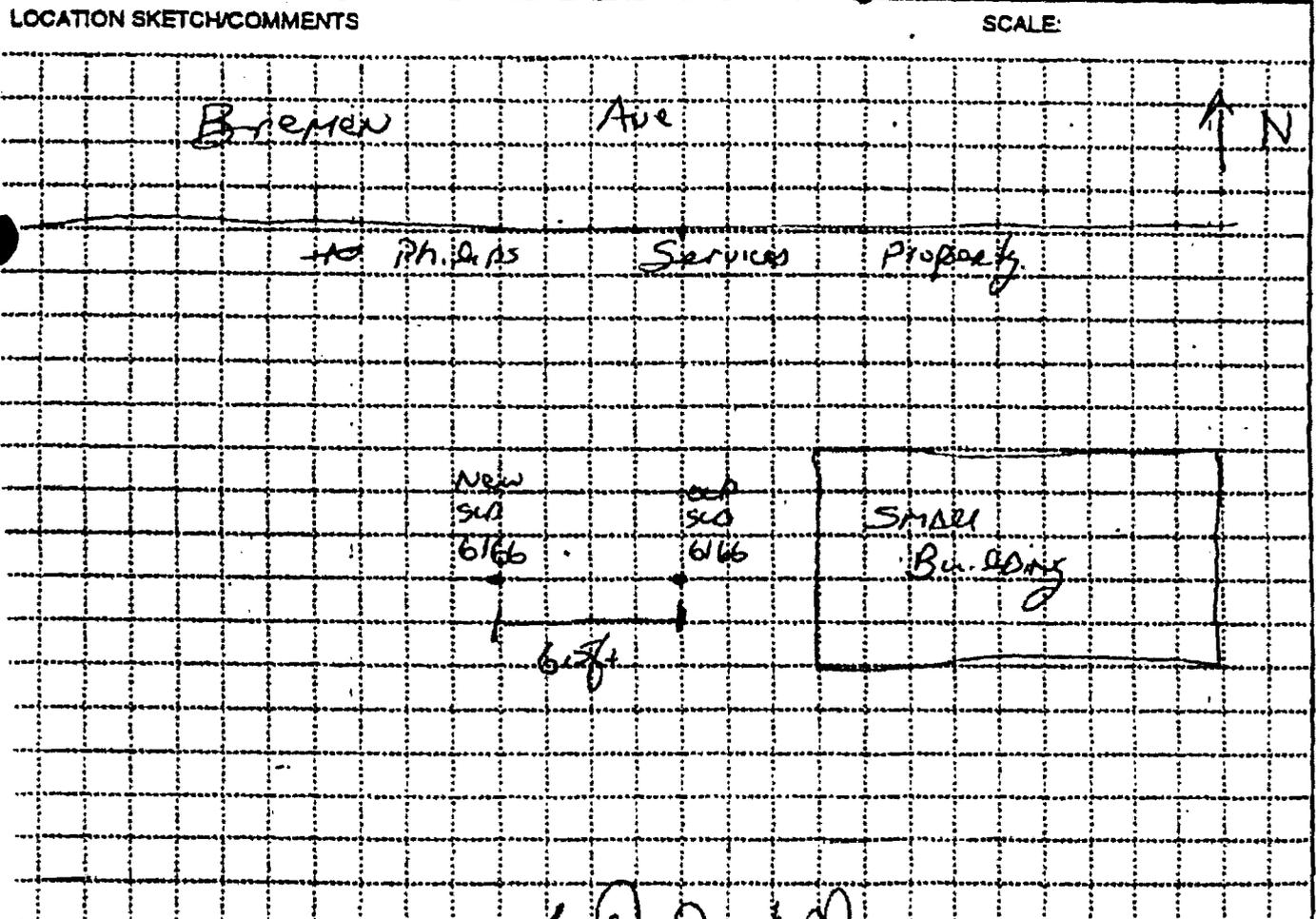
CLY. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	CEMENTED SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
SW	1	SAND, GRAVEL, BROWN, HARD, LOOSE & MOIST (from rain)	5600 counts NFI 9.5m PJD	0.15 10/16/02	5200 6365 1406	1.5 2.0 Recovery
	2		5300 counts NFI 0.0 PJD		689 1406	
	3		TID	2.0 ft	1415 hrs	11/13/02 Dura: 2 C.P.H. 2.0 ft 5400 counts NFI Background Bentonite Clay for BF.

5400

PROJECT FUSPAP/SWS

WELL NUMBER SUD 6165

<b>HTRW DRILLING LOG</b>			DISTRICT <u>St Louis</u>			HOLE NUMBER <u>SD 6166</u>		
1. COMPANY NAME <u>IT Corporation</u>			2. DRILL SUBCONTRACTOR <u>Geotechnics</u>			SHEET <u>1</u> OF <u>2</u>		
3. PROJECT <u>FUSRAP/SUB</u>				4. LOCATION <u>Ph. Lps Service</u>				
5. NAME OF DRILLER <u>Ray Beasler</u>				6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>				
7. SIZE AND TYPE OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger</u> <u>5.0" I.D. 52" L</u>				8. HOLE LOCATION <u>CLASS 3</u>				
				9. SURFACE ELEVATION				
				10. DATE STARTED <u>11/13/00</u>		11. DATE COMPLETED <u>11/13/00</u>		
12. OVERBURDEN THICKNESS				13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>				
13. DEPTH DRILLED INTO ROCK				14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>				
14. TOTAL DEPTH OF HOLE				15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>				
16. GEOTECHNICAL SAMPLES <u>0</u>		DISTURBED		UNDISTURBED		18. TOTAL NUMBER OF CORE BOXES		
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY) <u>RAO</u>		OTHER (SPECIFY)
20. DEPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY
						22. SIGNATURE OF INSPECTOR <u>John Tuck</u>		



PROJECT <u>FUSRAP/SUB</u>	<u>[Signature]</u>	HOLE NO. <u>SD 6166</u>
FORM 5056-R, AUG 94		11/14/00 (Preponent: CECW-EG)

# HTRW DRILLING LOG

PROJECT <i>FUSRAP/SUD</i>		INSPECTOR <i>Chris Lock</i>			WELL NUMBER <i>SUD 6166</i>
ELEV. 10'	DEPTH 10'	DESCRIPTION OF MATERIALS 10'	FIELD SCREENING RESULTS 10'	DETAILED SAMPLE OR CORE DES. NO. 10'	ANALYTICAL SAMPLE NO. 10'
		Concrete	4700 counts NAI		5400 6166 (SURF) 1455
1	1	SAND, GRAVEL, TANISH-BROWN HARD, LOOSE, DRY. ALL ANGULAR	4400 4900 counts NAI 010 1777 RSD 5200 counts NAI 010 1777 RSD	0.5 100/ft	5400 6166 1447
2	2				5400 6190 1450
3	3	FID 2.7 ft		1300 hrs	11/13/00
					Drum: 2 (PH. RPS) 5300 counts NAI Background Bentonite chip for BF.

GW-SW

5300

PROJECT *FUSRAP/SUD*

WELL NO *SUD 6166*

HTRW DRILLING LOG			DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>SD 6167</i>		
1. COMPANY NAME <i>IT Corporation</i>			2. DRILL SUBCONTRACTOR <i>Geotechnical</i>			SHEET SHEETS <i>1 of 2</i>		
3. PROJECT <i>FUSRAP SWS</i>			4. LOCATION <i>Ph. Dept Service</i>					
5. NAME OF DRILLER <i>Kow Bossler</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger 3" dia. 30" dia.</i>			8. HOLE LOCATION <i>Class 3</i>			9. SURFACE ELEVATION		
12. OVERBURDEN THICKNESS			10. DATE STARTED <i>11/13/00</i>			11. DATE COMPLETED <i>11/13/00</i>		
13. DEPTH DRILLED INTO ROCK			15. DEPTH OF GROUND WATER ENCOUNTERED <i>N/A</i>					
14. TOTAL DEPTH OF HOLE			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>					
18. GEOTECHNICAL SAMPLES			19. TOTAL NUMBER OF CORE BOXES			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>		
20. SAMPLES FOR CHEMICAL ANALYSIS			DISTURBED			UNDISTURBED		
22. DISPOSITION OF HOLE			VOC			METALS		
21. TOTAL CORE RECOVERY			OTHER (SPECIFY) <i>RAD</i>			OTHER (SPECIFY)		
23. SIGNATURE OF INSPECTOR <i>[Signature]</i>			MONITORING WELL			OTHER (SPECIFY)		
22. DISPOSITION OF HOLE			SACRIFICED			MONITORING WELL		
LOCATION SKETCH/COMMENTS								
SCALE:								
PROJECT <i>FUSRAP SWS</i>			HOLE NO. <i>SD 6167</i>			FORM 5066-R, AUG 94		
						<i>11/14/00</i> (Proponent: CECW-EG)		

# HTRW DRILLING LOG

PROJECT FUSRAP/SOS

INSPECTOR Chris Cook

WELL NUMBER S40 6167

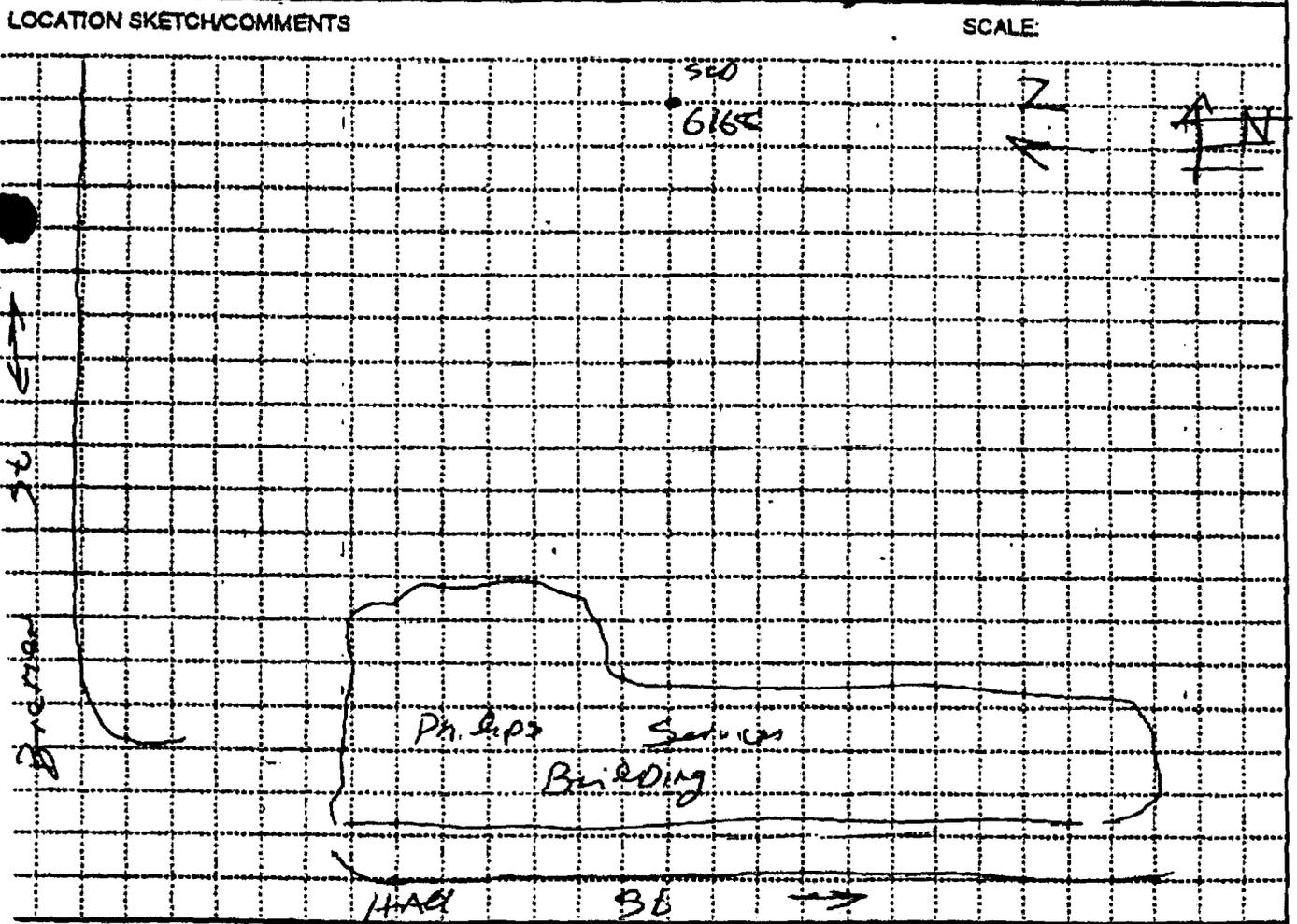
SHEET 02 OF 2

BLK. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	IDENTIFIED SAMPLE OR CORE BODY NO.	ANALYTICAL SAMPLE NO.	REMARKS
			4600 counts NET 0.0		S40 6167 (core) 1549	N/A
1		Slag, Black, HARD, Loose, Dig, FILL, Angular	4600 counts NET 0.0 PTD	0-3 ft fom/ft	S40 6167 1555	1-5 / 2.0 Recovery.
2		Brick - Red				
		Slag, Black, HARD, Loose, Dig, FILL Angular	5300 counts NET 0.0 PTD		S40 1600	
3		T.D. 2.6 ft		1610	N/A	11/13/00. Drain: 2 (7th. Laps) 4800 counts NET Background Bentonite chips for BF.

PROJECT FUSRAP/SOS

WELL NO. S40 6167

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SD 6168</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnics</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SOS</u>		4. LOCATION <u>Ph. Rps Service</u>			
5. NAME OF OPERATOR <u>SM McDONALD</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CNE 55</u>			
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hand Operated SPT</u>		8. HOLE LOCATION <u>CLASS 3</u>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>11/8/00</u>		11. DATE COMPLETED <u>11/8/00</u>	
12. OVERBURDEN THICKNESS		13. DEPTH DRILLED INTO ROCK		14. TOTAL DEPTH OF HOLE	
		15. DEPTH OF GROUND WATER ENCOUNTERED <u>N/A</u>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>	
		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES			
<u>0</u>		<u>0</u>			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
				<u>RAO</u>	
21. DISPOSITION OF HOLE		SACK FILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				22. SIGNATURE OF INSPECTOR <u>Mike Tob</u>	



PROJECT <u>FUSRAP/SOS</u>	HOLE NO. <u>SD 6168</u>
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# HTRW DRILLING LOG

PROJECT FUSRAP/SWAS

INSPECTOR Chris Cook

WELL NUMBER  
SUP 6168

SHEET  
02 OF 2

DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	DETECT SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
1	Slty Gravel, MHP Brown, hard loose Dry. F.S.	5100 COUNTS NET 00 PSP	015 top 1/2"	5100 6168 0845	11/20 Recover
2		5600 COUNTS NET 00 PSP		5100 6192 0844	
3	TID	20"	0900	hrs	11/8/04 Drill - 2 (ph. log) 4500 counts NET background Bentonite chip f BF TID catch Dug to Referral with Oik from USNLE Rep Rain Parko

GW

(4500)

PROJECT FUSRAP/SWAS

WELL NO. SUP 6168

HTRW DRILLING LOG			DISTRICT <u>St. Louis</u>			HOLE NUMBER <u>SND 6169</u>	
1. COMPANY NAME <u>IT Corporation</u>			2. DRILL SUBCONTRACTOR <u>Geotechnology</u>			SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SND</u>			4. LOCATION <u>Ph. Lips Service</u>				
5. NAME OF DRILLER <u>KDW Bossler</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 35</u>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger SPR. 1 GROUP</u>			8. HOLE LOCATION <u>CLASS 3</u>				
			9. SURFACE ELEVATION				
			10. DATE STARTED <u>11/14/00</u>		11. DATE COMPLETED <u>11/14/00</u>		
12. OVERBURDEN THICKNESS			15. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>				
13. DEPTH DRILLED INTO ROCK			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>				
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>				
18. GEOTECHNICAL SAMPLES <u>0</u>		DISTURBED	UNDISTURBED		19. TOTAL NUMBER OF CORE SECTORS		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>HAD</u>	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <u>[Signature]</u>		
LOCATION SKETCH/COMMENTS						SCALE:	
PROJECT <u>FUSRAP/SND</u>					HOLE NO. <u>SND 6169</u>		

# HTRW DRILLING LOG

PROJECT		INSPECTOR			WELL NUMBER	
FASRAP/SUDS		Chris Lock			SUD 6169	
SLY. NO.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE ID# NO.	ANALYTICAL SAMPLE NO. (L)	REMARKS
		CONCRETE			SUD 6169 (over) 1500	
	1	SAND, Gravel	3000 COUNTS NAI	015 TON/GIR	SUD 6169 1507	1.5 2.0 RECOVERY  Strong O.DOR Notes
	2				SUD 6193 1510	
	3	T.D. 2.4	611	1515	NAI	11/14/00 Drum: -2 (12h. 24h) 2700 counts NAI Background Bentonite chips for BF.

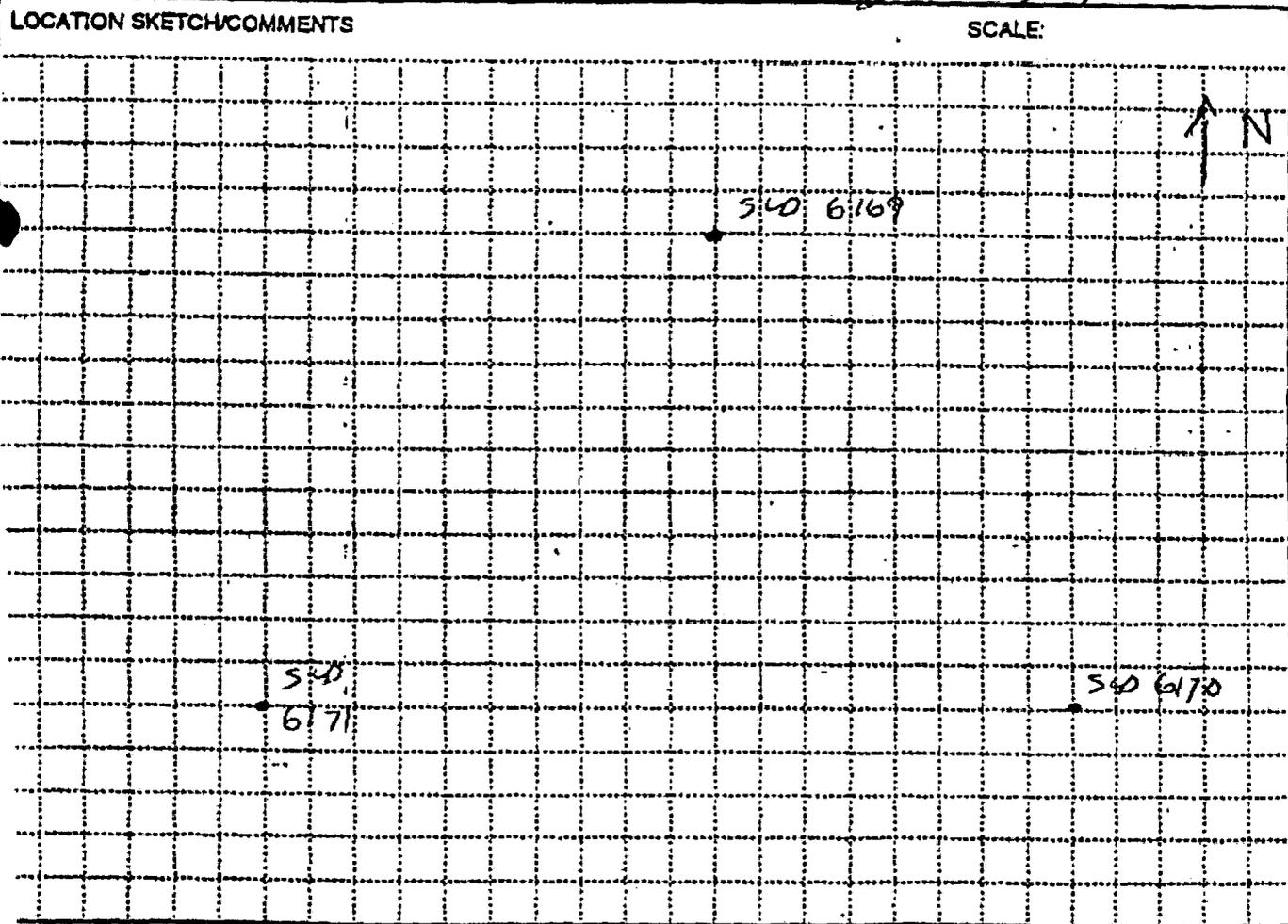
SW-  
GW

2.700

FASRAP/SUDS

SUD 6169

<b>HTRW DRILLING LOG</b>			DISTRICT <u>St. Louis</u>			HOLE NUMBER <u>SD 6170</u>		
1. COMPANY NAME <u>IT Corporation</u>			2. DRILL SUBCONTRACTOR <u>Geotecnology</u>			SHEET <u>1</u> OF <u>2</u> SHEETS		
3. PROJECT <u>FUSRAP/SAS</u>			4. LOCATION <u>Ph. Lips Service</u>					
5. NAME OF DRILLER <u>Kevin Bossler</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CLASS 3</u>					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger split spoon</u>			8. HOLE LOCATION <u>CME 55</u>					
			9. SURFACE ELEVATION					
			10. DATE STARTED <u>11/14/00</u>			11. DATE COMPLETED <u>11/14/00</u>		
12. OVERBURDEN THICKNESS			15. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>					
13. DEPTH DRILLED INTO ROCK			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>					
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		
<u>0</u>								
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		OTHER (SPECIFY)
						<u>PAH</u>		
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		21. SIGNATURE OF INSPECTOR
								<u>[Signature]</u>



PROJECT <u>FUSRAP/SAS</u>	HOLE NO. <u>SD 6170</u>
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# HTRW DRILLING LOG

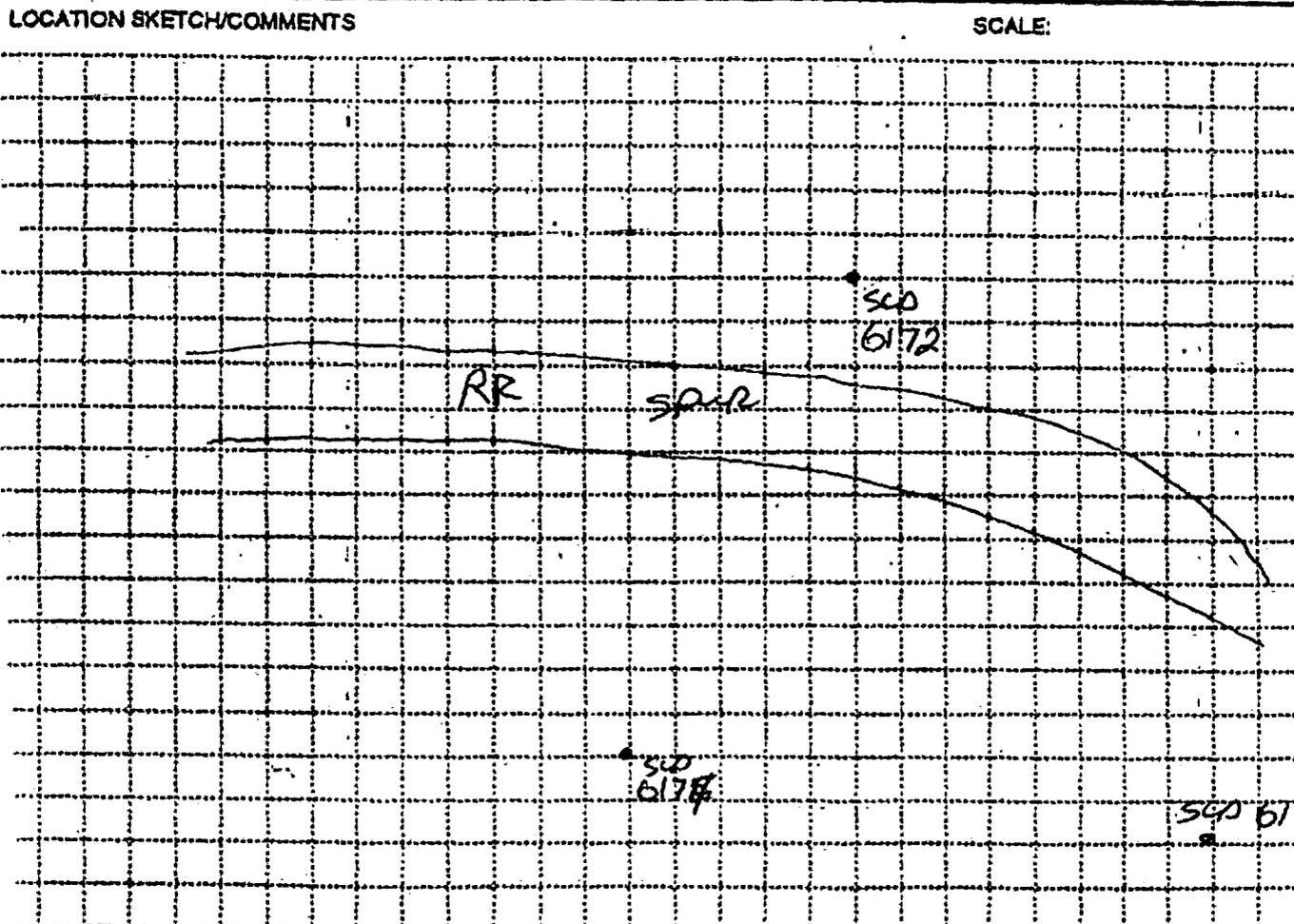
PROJECT		INSPECTOR			WELL NUMBER	
FUSPAR/SUPS		Mick Lock			SUD 6170	
ELEV. (ft)	DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	FIELD LOGGING RESULT (ft)	CORRECTED SAMPLE OR CORE DEPTH (ft)	ANALYTICAL SAMPLE NO. (ft)	SHEET
	1	GRAND, SAND, Brown, HARD, loose, wet (from RAIN)	250 COUNTS N/S 0.1 PID	0.5 10m/ft	SUD 6170 1446	115 / 2 Recovery
	2	Lean clay with grad Brown HARD, loose wet (from RAIN)	300 COUNTS N/S 0.1 PID		SUD 6194 1450	-
	3	T.D. 20 ft		1500	N/S	11/14/00 Draw: 2 (phi. logs) 2700 counts N/S Background Bentonite chips. for BF

2700

SUD 6170

HTRW DRILLING LOG		DISTRICT <i>St. Louis</i>		SLD 6171	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SWS</i>		4. LOCATION <i>Ph. 2ps Service</i>			
5. NAME OF DRILLER <i>Kevin Bessler</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger Split Spoon</i>		8. HOLE LOCATION <i>CLASS 3</i>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <i>11/14/00</i>		11. DATE COMPLETED <i>11/14/00</i>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
16. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED		UNDISTURBED	
17. TOTAL NUMBER OF CORE BOXES					
18. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)
					20. TOTAL CORE RECOVERY
19. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURE OF INSPECTOR <i>[Signature]</i>
LOCATION SKETCH/COMMENTS			SCALE:		
<p><i>Note - T.D. Due to Refusal of the City to make the boring due to the USEC Approval</i></p> <p><i>OK by Paul Rosen</i></p> <p><i>Building</i></p> <p><i>TRAIN</i></p> <p><i>TRACKS</i></p> <p><i>Building</i></p> <p><i>NE SLD 6171</i></p> <p><i>SW SLD 6171</i></p> <p><i>↑ N</i></p>					
PROJECT <i>FUSRAP/SWS</i>		HOLE NO. <i>SLD 6171</i>			

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		SLD 6172	
1. COMPANY NAME <u>IT CORPORATION</u>		2. DRILL SUBCONTRACTOR <u>Geotech Analysis</u>			
3. PROJECT <u>FUSRAP/SWS</u>		4. LOCATION <u>Philips Service</u>		1 OF 2	
5. NAME OF DRILLER <u>JIM McDONALD</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger SOFT SOIL</u>		8. HOLE LOCATION <u>CLASS 3</u>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>10/31/00</u>		11. DATE COMPLETED <u>10/31/00</u>	
12. OVERBURDEN THICKNESS		16. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		19. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
<u>0</u>					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAO</u>	OTHER (SPECIFY)
					21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	
				23. SIGNATURE OF INSPECTOR <u>[Signature]</u>	



PROJECT <u>FUSRAP/SWS</u>	HOLE NO. <u>50 6172</u>
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# HTRW DRILLING LOG

PROJECT		INSPECTOR			WELL NUMBER		SHEET	
FUGRAD/SWS		Chris Cook			SWS 6172		2 of 2	
DEPT.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	CERTIFIED SAMPLE OR CORE DEPT. NO.	ANALYTICAL SAMPLE NO.	REMARKS		
GW	1	GRAVEL, SAND Brown, HARD, LOOSE, Diy. Fill. Angular.	4300 COUNTS NET 0.1 PPM Pb	0.5 to 1/2"	5200 612 1445	2.0 2.0 Recovery		
	2	Brick, GRAVEL RAD.	4700 COUNTS NET 0.1 PPM		5400 6197 1449	Strong petrolic OPOR Notes.		
	3	T.D.	2.0 ft		1500	his 10/31/68 Drum 2 (ph. his)  4600 counts NET Background Bamberg Club for BI		

47

4600

FUGRAD/SWS

SWS 6172

HTRW DRILLING LOG		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 673</i>	
1. COMPANY NAME <i>FUSRAM/SMS</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		3. SHEET SHEETS <i>1. of 2</i>	
3. PROJECT <i>JIT Corporation</i>		4. LOCATION <i>Ph. 2. ps Service</i>			
5. NAME OF DRILLER <i>JIM McDONNELL</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>C/E 55</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow stem Auger SPRT SPOON</i>		8. HOLE LOCATION <i>CLASS 3</i>		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS		10. DATE STARTED <i>11/7/00</i>		11. DATE COMPLETED <i>11/7/00</i>	
13. DEPTH DRILLED INTO ROCK		12. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
14. TOTAL DEPTH OF HOLE		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
15. GEOTECHNICAL SAMPLES		14. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>		17. TOTAL NUMBER OF CORE BOXES	
16. SAMPLES FOR CHEMICAL ANALYSIS		15. TOTAL NUMBER OF CORE BOXES		18. TOTAL CORE RECOVERY	
17. DISPOSITION OF HOLE		16. TOTAL NUMBER OF CORE BOXES		19. SIGNATURE OF INSPECTOR	
18. DISPOSITION OF HOLE		17. TOTAL NUMBER OF CORE BOXES		20. SIGNATURE OF INSPECTOR	
19. LOCATION SKETCH/COMMENTS					
SCALE:					
<p>The sketch shows a grid with two points labeled 'SD 673' and '6678'. A north arrow is in the top right. A horizontal line is drawn across the grid, with 'Rail Road Tracks' written below it. A rectangular box labeled 'SCARP HOUSE' is drawn on the right side of the grid.</p>					
20. PROJECT <i>FUSRAM/SMS</i>				21. HOLE NO. <i>SD 673</i>	

# HTRW DRILLING LOG

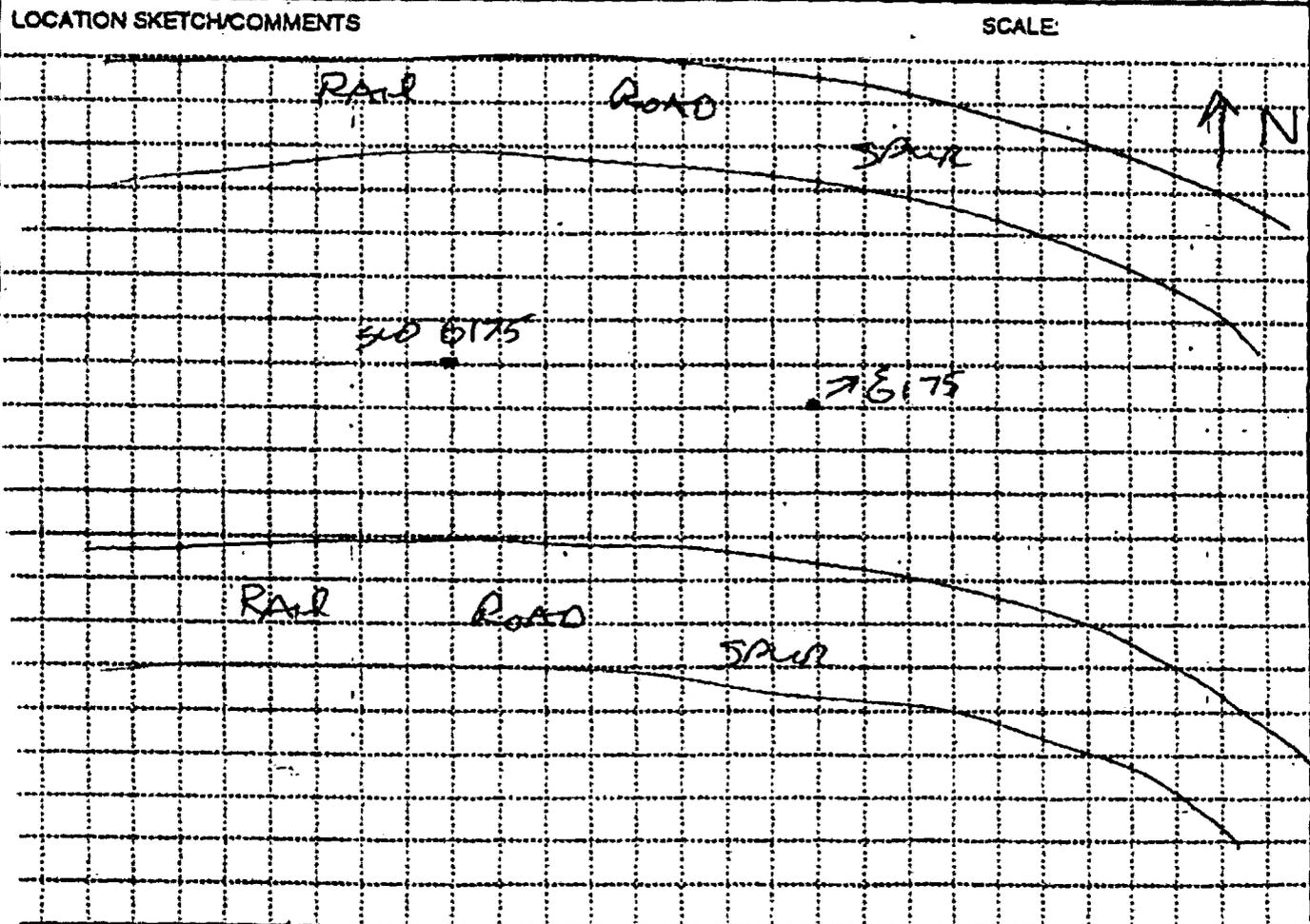
PROJECT		INSPECTOR			WELL NUMBER	
FUSAP/S20		Chris Cook			S20 673	
WELL NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING PERMIT NO.	DETERMINED SAMPLE OR CORE NO. & WT.	ANALYTICAL SAMPLE NO. (L)	REMARKS
GW	1	STK SAND GRAVEL, Brown, HARD, LOOSE, Dry, FLY	4700 COUNTS NAT. 0.0 ppm ATD	0.15 ton/ft <sup>2</sup>	S400 6173 102U	2.0 2.0 Recovers
	2	Gravel, Tan - white, HARD, Loose, Dry, FLY Gravel, Brown, HARD, Loose, Dry, FLY, Wet (Iron Oxide)	4900 COUNTS NAT. 0.0 ppm	-	S400 6196 1025M	Strong ODOR No lap
	3	T.I.D.	2.0	6 ft	1030	hrs 11/1/00 Drum 2 (ph. d.p.s) 4600 counts NAT. Backgr Bentonite chip for BF

4600

PROJECT FUSAP/S20

WELL S20 673

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SD 6174</u>	
1. COMPANY NAME <u>I.T. Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SAS</u>		4. LOCATION <u>PH. Rps Service</u>			
5. NAME OF DRILLER <u>JIM McDONALD</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 53</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow stem Auger</u> <u>SP-1 SP-2</u>		8. HOLE LOCATION <u>CLASS 3</u>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>11/7/00</u>		11. DATE COMPLETED <u>11/7/00</u>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
16. GEOTECHNICAL SAMPLES <u>0</u>		DISTURBED		UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAD</u>	OTHER (SPECIFY)
					21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	23. SIGNATURE OF INSPECTOR <u>[Signature]</u>	



PROJECT <u>FUSRAP/SAS</u>	HOLE NO. <u>SD 6174</u>
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# HTRW DRILLING LOG

PROJECT		INSPECTOR		WELL NUMBER		
FLUPAD/SEPS		Chris Lock		SD 6174		
DEPTH	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCHEMING DATA	GEOTECH SAMPLE OR CORE ID NO.	ANALYTICAL SAMPLE NO.	REMARKS
SW GW CH	1	SAND, GRAVEL, HARD, LOOSE, Dry, F.S.	8400 COUNTS NET 0.5 PPM PPM 9200 COUNTS NET 0.5 PPM PPM	0.5 ton/ft <sup>3</sup>	300 6174 0937	2.0 2.0 Recovery
	2	SLAG, Cinders BLACK, HARD, LOOSE, Dry, F.S. FAT clay, HARD, DRUSA Dry.			500 6195 0934	
	2	TID	2.0	64	D950	hrs
	3					11/7/00 Dura: 2 L, H, R, P 8400 counts NET Background Bentonite clay for BF

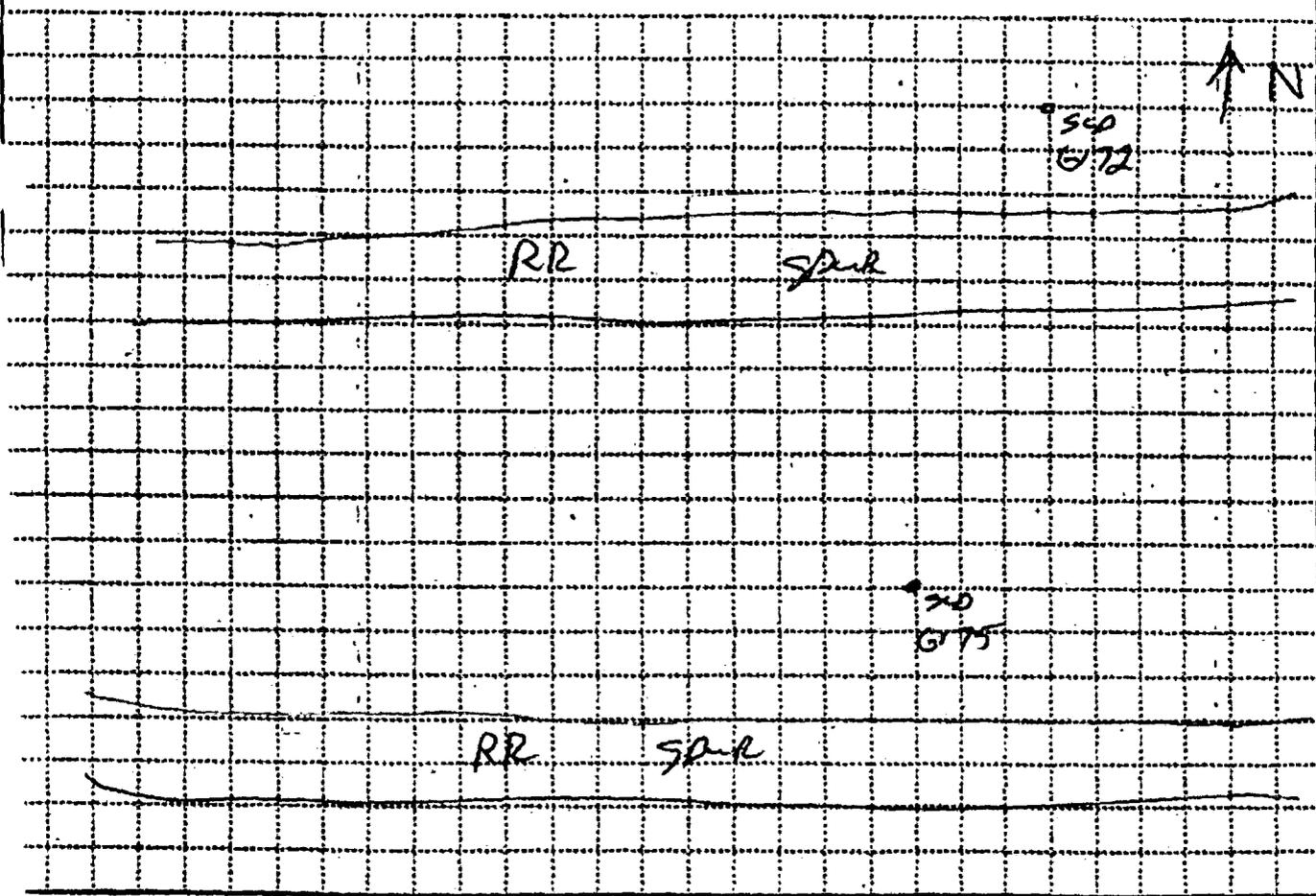
810

SD 6174

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		SLD 6175	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SWS</u>			4. LOCATION <u>Philips Sarnia</u>		
5. NAME OF DRILLER <u>JIM McDONALD</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CNF 55</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger SPRUB SPOON</u>		8. HOLE LOCATION <u>CLASS R3</u>			
9. SURFACE ELEVATION			10. DATE STARTED <u>10/3/00</u>		
12. OVERBURDEN THICKNESS			11. DATE COMPLETED <u>10/26/00</u>		
13. DEPTH DRILLED INTO ROCK			13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>		
14. TOTAL DEPTH OF HOLE			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>		
15. GEOTECHNICAL SAMPLES			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>		
15. GEOTECHNICAL SAMPLES		DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAO</u>	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BAG-FILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
23. SIGNATURE OF INSPECTOR <u>[Signature]</u>					

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT FUSRAP/SWS  
IG FORM 5056-R, AUG 94

HTRW 2.000  
SLD 6175

reprotonic: CECW-EG1

# HTRW DRILLING LOG

SLD 6175

PROJECT *FUSRAP/SND*

INSPECTOR *Chris Locke*

SHEET *2* OF *2*

EST. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD MEASUREMENT RESULTS	LAB TECH SAMPLE OR CORE IDENT. NO.	ANALYTICAL SAMPLE NO.	REMARKS
<i>GW</i>	<i>1</i>	<i>Gravel, Brown, HARD, loose, Dry, Fair, Angular</i>	<i>7300 counts NFI</i>		<i>540 6175 1345</i>	<i>115 20 Recovery</i>
	<i>2</i>		<i>6800 counts NFI PPM PDD</i>		<i>540 6199 1349</i>	
	<i>3</i>	<i>TID</i>	<i>2.0 ft</i>	<i>1400 hrs</i>	<i>10/31/82</i>	<i>Drum: J (p.n. top)  7000 counts NFI Background  Bentonite cap for PFI</i>

*7000*

PROJECT *FUSRAP/SND*

SHEET NO. *540 6175*

HTRW DRILLING LOG		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>540 676</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geo Technology</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SWS</i>		4. LOCATION <i>Ph. Lips Service</i>			
5. NAME OF DRILLER <i>Jim McQuinn</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow 2 1/2" Auger S.P.D.F. Slout</i>		8. HOLE LOCATION <i>CLASS 3</i>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <i>11/7/04</i>		11. DATE COMPLETED <i>11/7/04</i>	
12. OVERBURDEN THICKNESS		13. DEPTH OF GROUNDWATER ENCOUNTERED <i>NA</i>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>NA</i>			
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>NA</i>			
16. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES	
17. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)
20. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURE OF INSPECTOR <i>[Signature]</i>
19. TOTAL CORE RECOVERY					
LOCATION SKETCH/COMMENTS			SCALE:		
↑ N					
ROAD					
ROAD					
ROAD					
30' off rd 676					
5' off rd					
New S.P.D.F. 676					
McQuinn Br. Dept. OK by Robert Parks					
PROJECT <i>FUSRAP/SWS</i>				HOLE NO. <i>540 676</i>	

# HTRW DRILLING LOG

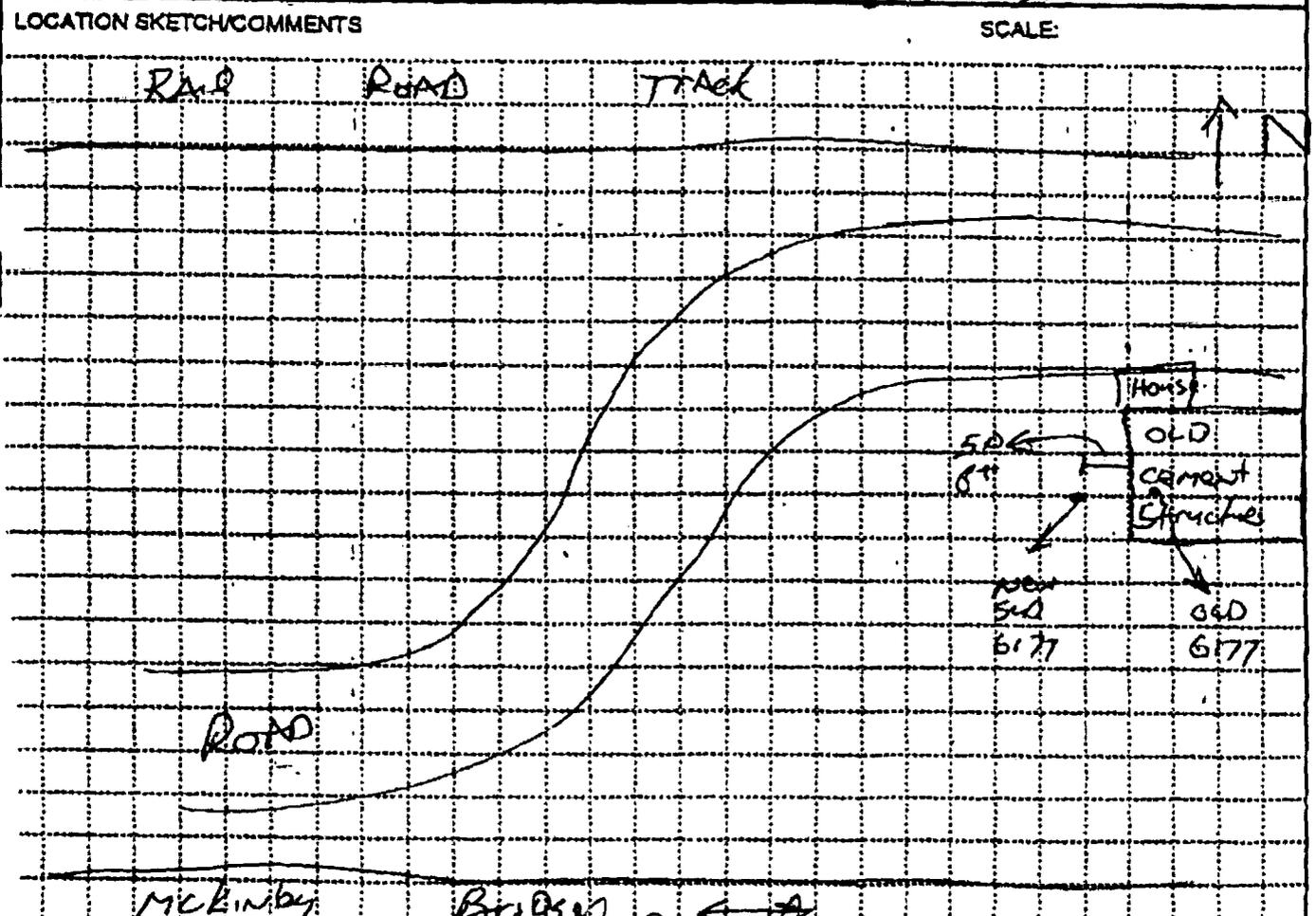
PROJECT <i>FUSRAP/S-12</i>		INSPECTOR <i>Mrs. Cook</i>			WELL NUMBER <i>SD 6176</i>	
BLK. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	FIELD SCREENING RESULT (cpm)	DETECT SAMPLE OR CORE DEN. NO.	ANALYTICAL SAMPLE NO.	REMARKS
CL		Silty, LEAN CLAY, BROWN HARD, LOOSE Dry FILL.	6700 COUNTS NET DIP PDD	1.0 ton/ft <sup>2</sup>	SD 6176 1114M	2.0 Recovery
GW	1	Silty, BLACK HARD Loose, Dry, FILL.	6800 COUNTS NET DIP PDD	0.5 ton/ft <sup>2</sup>	SD 6200 1116	
	2	Fat clay, Brown, HARD				
	3	TID		2.0 ft	1125	his 11/76 Draw: 2 (7m tips) 6400 counts NET Background Bantomb chr for Bi

6400

*FUSRAP/S-12*

*SD 6176*

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SD 6177</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>EUSRAP/SOS</u>		4. LOCATION <u>Ph. Dept. SINKER</u>			
5. NAME OF DRILLER <u>JIM McDONNELL</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CHE 55</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem <del>ASAP</del> SALT STUMP</u>		8. HOLE LOCATION <u>CLASS 3</u>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>11/7/00</u>		11. DATE COMPLETED <u>11/7/00</u>	
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
<u>0</u>				18. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAD</u>	OTHER (SPECIFY)
21. DEPOSITION OF HOLE		BAG FILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORES RECOVERY
					21. SIGNATURE OF INSPECTOR <u>[Signature]</u>



PROJECT	<u>MCKINLEY</u>	<u>By [Signature]</u>	HOLE NO. <u>6177</u>
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# HTRW DRILLING LOG

WELL NUMBER  
SD 6177

PROJECT  
FUSRAP/SOS

INSPECTOR  
Chris Locke

SHEET  
2 OF 2

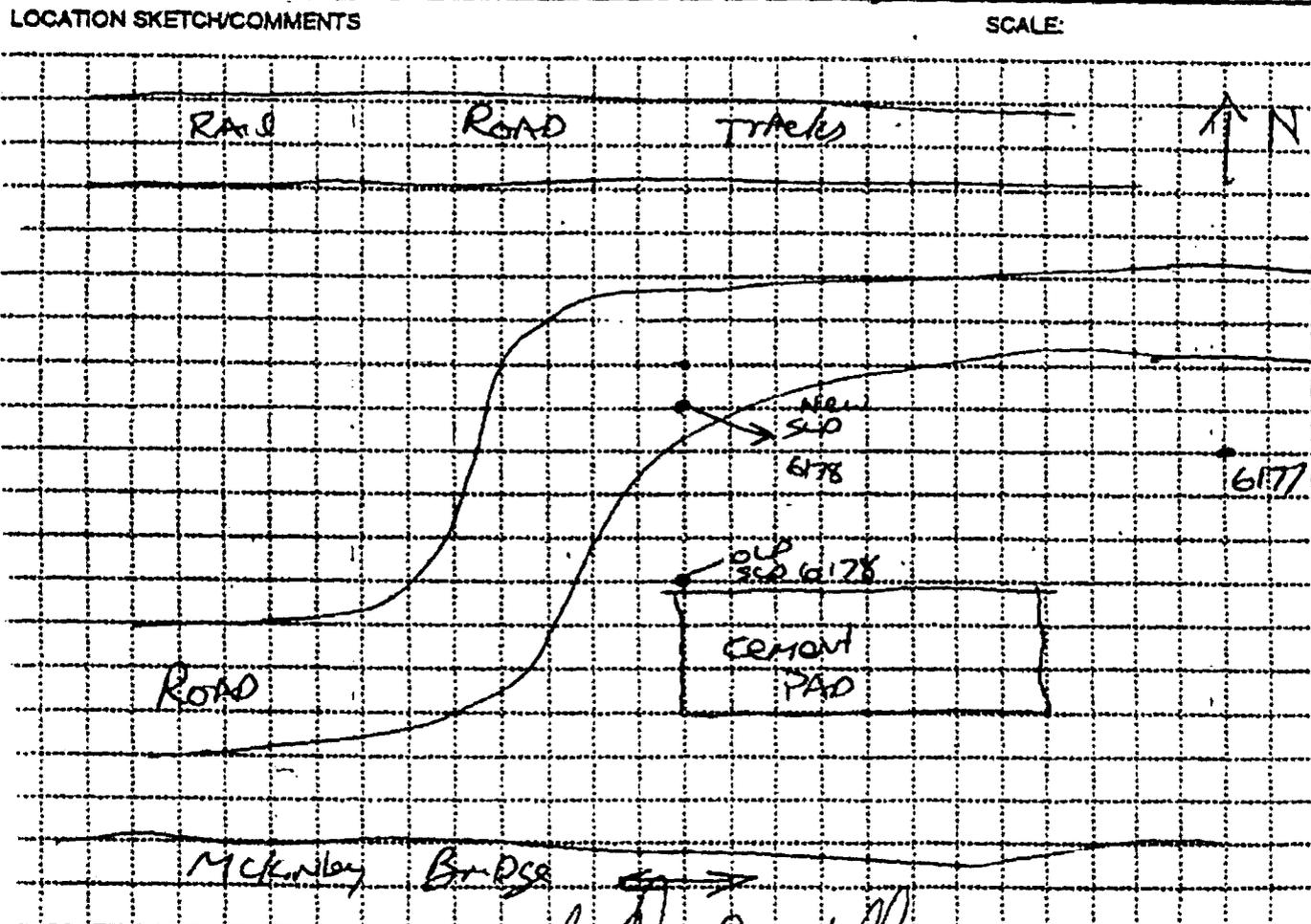
LOG NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD MEASUREMENT RESULTS	REFINED SAMPLE OR CORE IDENT. NO.	ANALYTICAL SAMPLE NO.	REMARKS
GW	1	Brick, LEAN CLAY WOOD, RED HARD, Loose, wet (from RAI)	4300 COUNTS NAI ppm PIA	105 ton/yr	SD 6177 1331	1.5 2.0 Recovery
GW	2	Brick, LEAN CLAY gravel, HARD, LOOSE, BCEL (from RAI)	4200 COUNTS NAI ppm PIA		SD 6201 1332	
	3		TID 2.0 G.	1340	NAI	11/7/00 Drilling (1.5h. 2.0) 4400 counts NAI Background Bentone chip for BI

4400

PROJECT  
FUSRAP/SOS

WELL NUMBER  
SD 6177

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 6178</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnical</i>		SHEET SHEETS <i>1 of 2</i>	
3. PROJECT <i>FUSRAP/SAS</i>			4. LOCATION <i>Ph. eps Services</i>		
5. NAME OF OPERATOR <i>JIM McDONNELL</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow stem Auger 5/8" + 5000</i>		8. HOLE LOCATION <i>CLASS 3</i>		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS		10. DATE STARTED <i>11/7/00</i>		11. DATE COMPLETED <i>11/7/00</i>	
13. DEPTH DRILLED INTO ROCK		15. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
18. GEOTECHNICAL SAMPLES <i>0</i>		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RA</i>	OTHER (SPECIFY)
21. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	22. SIGNATURE OF INSPECTOR <i>[Signature]</i>
23. TOTAL CORE RECOVERY					



PROJECT <i>FUSRAP/SAS</i>	<i>[Signature]</i>	HOLE NO. <i>SD 6178</i>
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# HTRW DRILLING LOG

PROJECT FUSRAP/S40		INSPECTOR <i>Mrs. Loda</i>			SHEET NO. 2 OF 2	
SEC. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD TECHNIQUE RESULTS	CORRECTION SAMPLE OR CORE DR. NO.	ANALYTICAL SAMPLE NO.	REMARKS
GW	1	SNG. & GRAVEL, lean CLAY, Brown HARD, Loose wet (from Rain) WOOD, bark	462 COUNT N.E. 0.0 PPM P.D. 4500 COUNTS N.E.	0.5 ton/ft	500 678 1443	11/7/00 2.0 Recovery
	2		PPM 0.0		6202 1445	
	3	T.D.	2.0 ft	1455	hrs	11/7/00 Dm-2 Lphind 4400 counts N.E. Background Bentrite Ch. P for BF

440

PROJECT FUSRAP/S40

SHEET NO. S40 6178

# HTRW DRILLING LOG

1. COMPANY NAME: **IT Corporation**      2. WELL IDENTIFICATION: **Gas technology**

3. PROJECT: **FUSRAP/SWS**      4. LOCATION: **Phillips Services**

5. NAME OF OPERATOR: **Jim McDONALD**      6. APPROPRIATE ABBREVIATION OF WELL: **CME 55**

7. WELL AND TYPE OF WELL AND COMPLETE DEPTH: **Hollow Stem Auger 3221 3200**      8. WELL LOCATION: \_\_\_\_\_

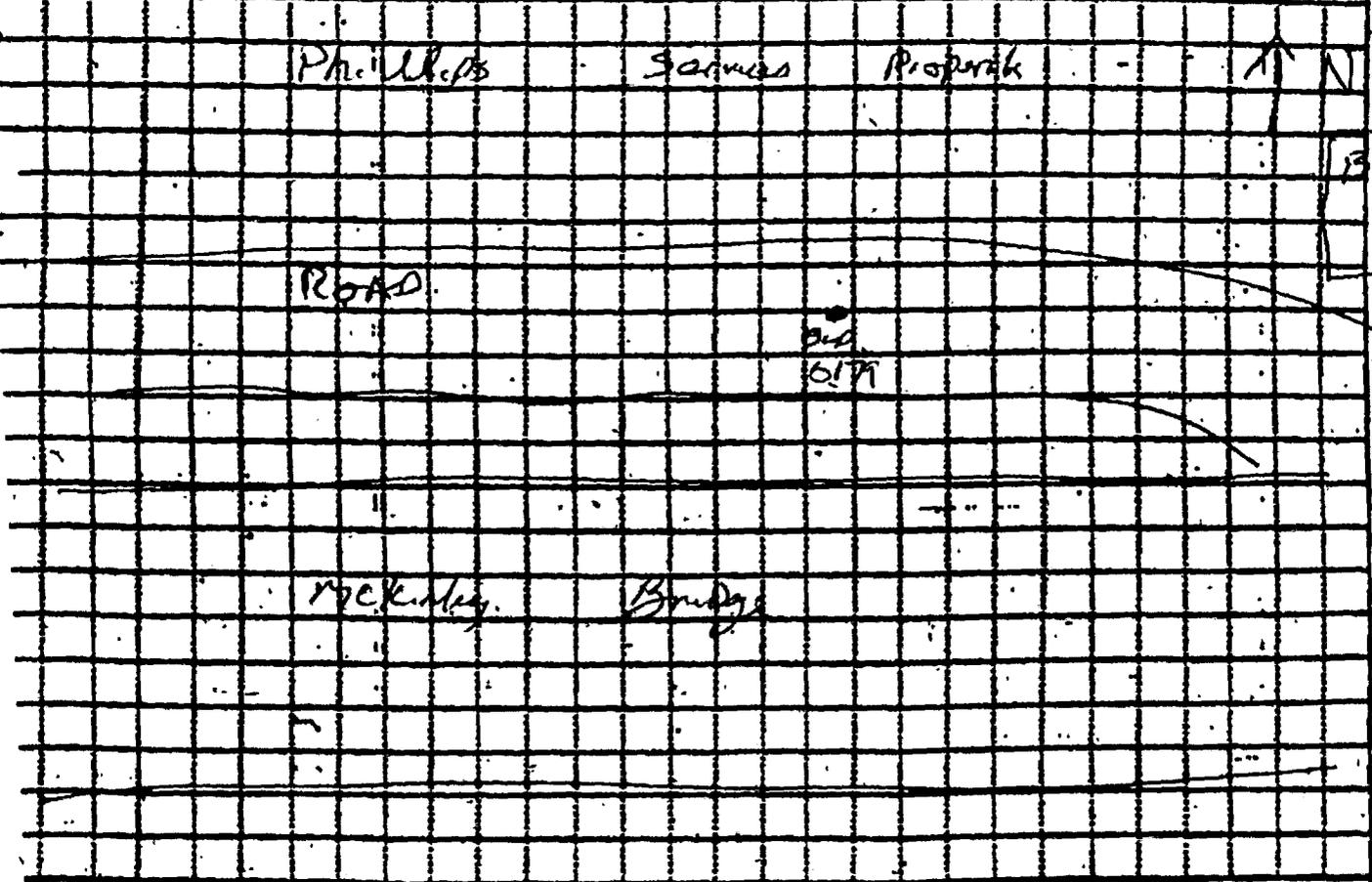
9. DATE STARTED: **10/10/00**      10. DATE COMPLETED: **10/10/00**

11. TYPE OF ROCK: \_\_\_\_\_      12. DEPTH TO WATER AND SLURRY TIME AFTER DRILLING COMPLETED: **NA**

13. OTHER INFORMATION: **NA**      14. OTHER INFORMATION: **NA**

15. DRILLING METHOD	16. DRILLING METHOD	17. DRILLING METHOD	18. TOOL NUMBER OF CORE BIT
19. NUMBER OF CORES	20. NUMBER OF CORES	21. NUMBER OF CORES	22. NUMBER OF CORES
23. NUMBER OF CORES	24. NUMBER OF CORES	25. NUMBER OF CORES	26. NUMBER OF CORES

LOCATION: **Phillips Services Proprietary**      SCALE: \_\_\_\_\_



PROJECT: **FUSRAP/SWS**      WELL NO.: **320 6177**

# HTRW DRILLING LOG

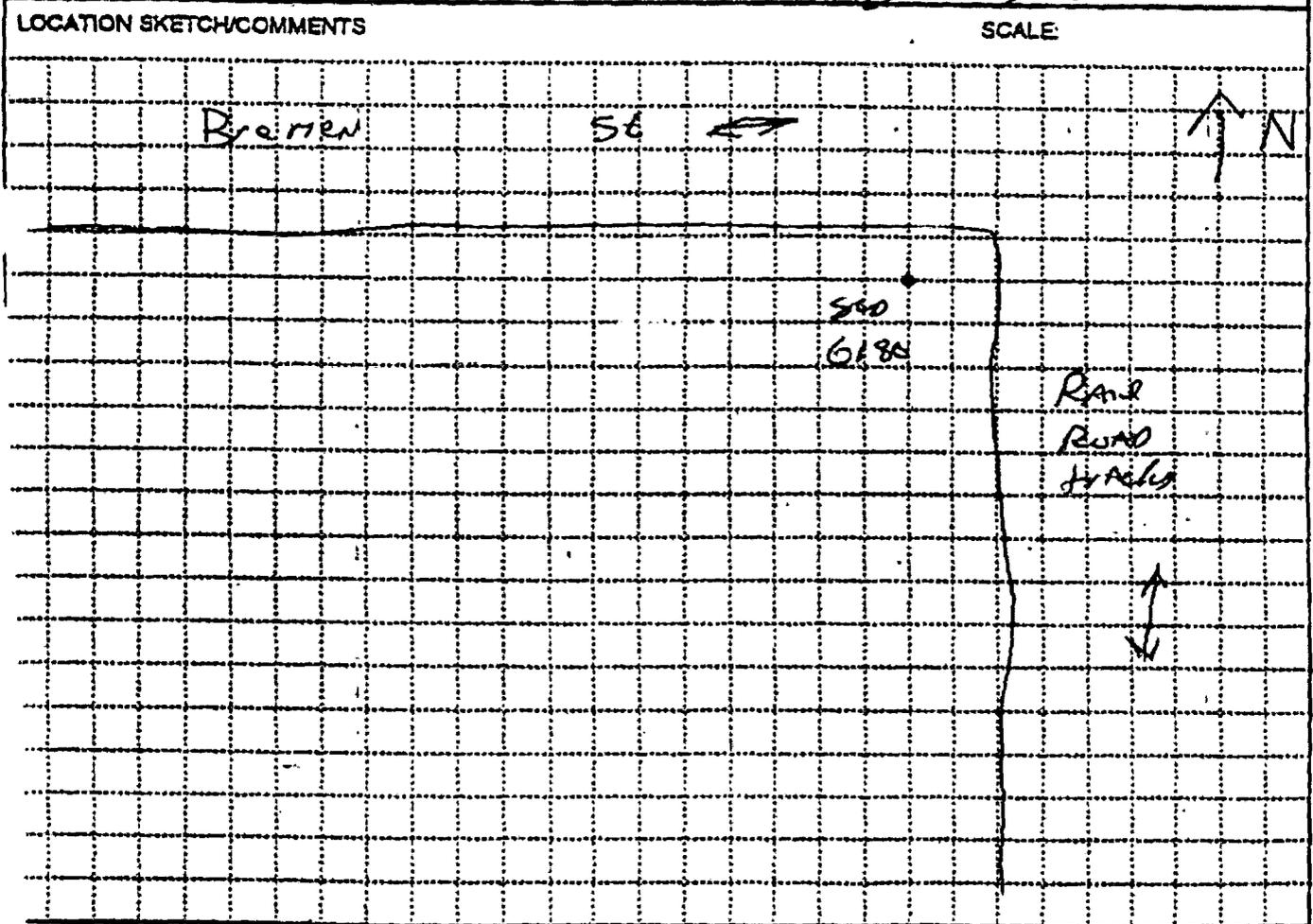
FUSRAP/SND		Ohio			SND 6179
DEPTH	CORRECTION	DESCRIPTION OF MATERIAL	FIELD MEASUREMENTS	CORRECTION FACTORS	CALCULATED SAMPLE VALUE
50	1	SAND, GRAVEL Brown, Tan, HARD Loose, Dry	4600 COUNTS NAI 100M PSP	D.5 10M/ft	5.05 1112hr
60	2	GRAVEL, BRICK, GUNN Brown, HARD, DARK, Dry, etc.	4200 COUNTS NAI 0.5 PSP		3.00 6203 1116hrs
	3	T.D.	2.0	H	1125 hrs 10/10/61
	4				Drum #1 (Ph. 11.15)  4600 counts MS BACKGROUND Bentonek Ch. P. for BF.

4600

FUSRAP/SND

SND 6179

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SD 6180</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geoteknology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SUB</u>		4. LOCATION <u>Phelps Perry</u>			
5. NAME OF DRILLER <u>JIN McDONALD</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 23</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>3/4" 2" Auger</u> <u>split spoon</u>		8. HOLE LOCATION <u>CLASS 3</u>			
		9. SURFACE ELEVATION			
		10. DATE STARTED <u>11/8/00</u>		11. DATE COMPLETED <u>11/8/00</u>	
12. OVERLAP/OPEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
16. OBSERVATIONAL SAMPLES <u>0</u>		DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES	
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAO</u>	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
					23. SIGNATURE OF INSPECTOR <u>[Signature]</u>



PROJECT <u>FUSRAP/SUB</u>	HOLE NO. <u>SD 6180</u>
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# HTRW DRILLING LOG

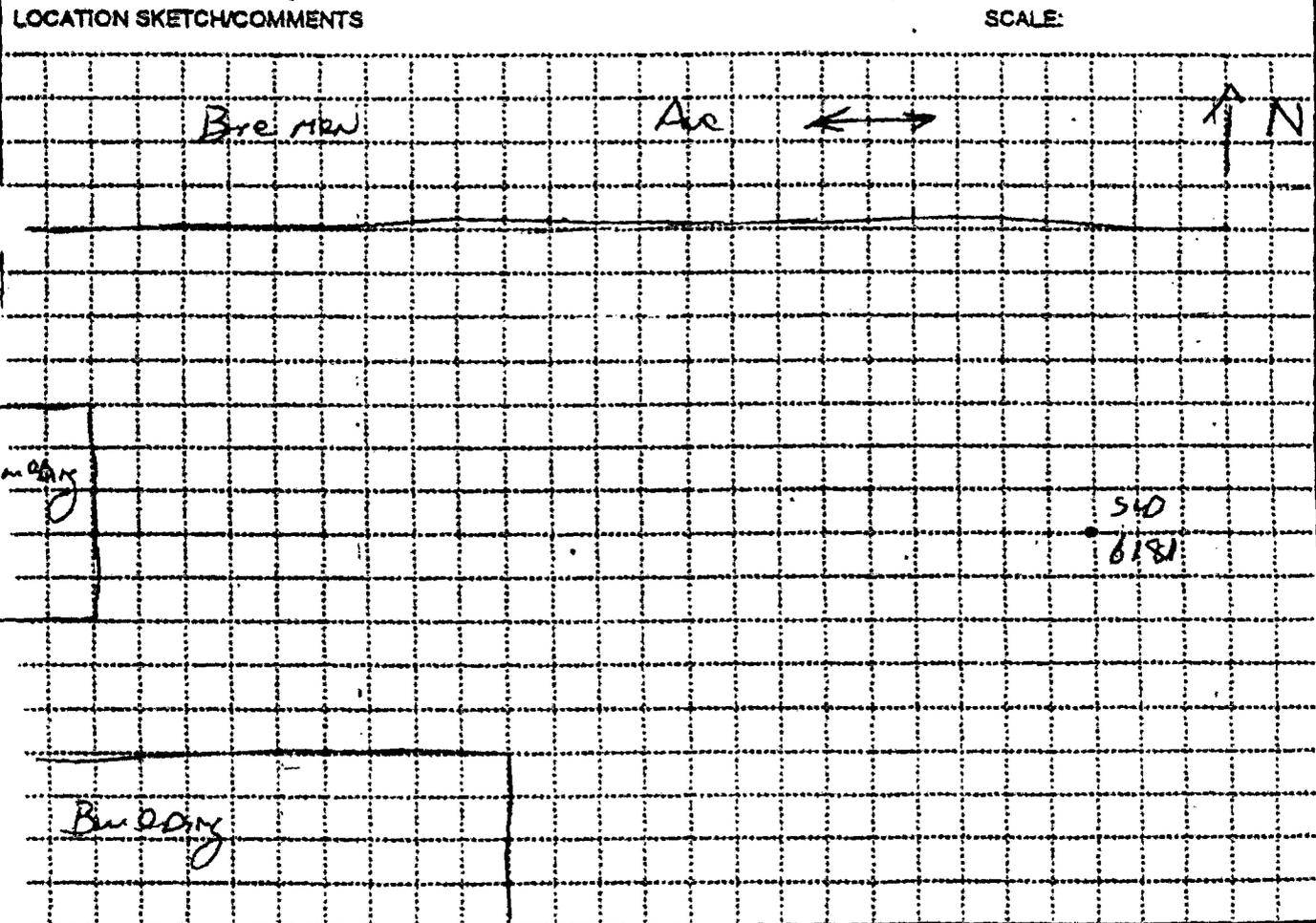
PROJECT		INSPECTOR		WELL NUMBER		
FUSPAD/SOS		Chris Koch		SND 6180		
DEPTH	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	CERTIFIED SAMPLE OR CORE ID#	ANALYTICAL SAMPLE NO.	REMARKS
6W	1	SAND, GRAY, BROWN, HARD, LOOSE, Dry, F. Cl.	7400 COUNTS NAT	0.5 ton/ft	5001 6180 1030	1.8 / 2.0 Recover
CH	1	Fat clay, GRAY, HARD, DENSE, Dry.	PIP 8100 COUNTS NAT			
CH	2	Fat clay (lenticular) white, LOOSE	PIP		500 6200 1035	6200
	3	T.D	2.0	6x	1040	his 11/8/00 Draw: -2 (ph. 2.75) 7200 COUNT NAT Background Bantombk Chr for BF

7200

PROJECT FUSPAD/SOS

WELL NO. SND 6180

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St Louis</i>		HOLE NUMBER <i>SD 6181</i>			
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Advanced Technology</i>		SHEET <i>1</i> OF <i>2</i>			
3. PROJECT <i>FUSPAP/SUPS</i>		4. LOCATION <i>Phelps Services</i>					
5. NAME OF DRILLER <i>Kevin Bassler</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>					
7. SIZE AND TYPE OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger 324 + 3000</i>		8. HOLE LOCATION <i>CLASS 3</i>					
		9. SURFACE ELEVATION					
		10. DATE STARTED <i>11/13/00</i>		11. DATE COMPLETED <i>11/13/00</i>			
12. OVERBURDEN THICKNESS		15. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>					
13. DEPTH DRILLED INTO ROCK		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>					
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED			
<i>0</i>				19. TOTAL NUMBER OF CORE BOXES			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>PAH</i>	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <i>[Signature]</i>		



PROJECT <i>FUSPAP/SUPS</i>	HOLE NO. <i>SD 6181</i>
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# HTRW DRILLING LOG

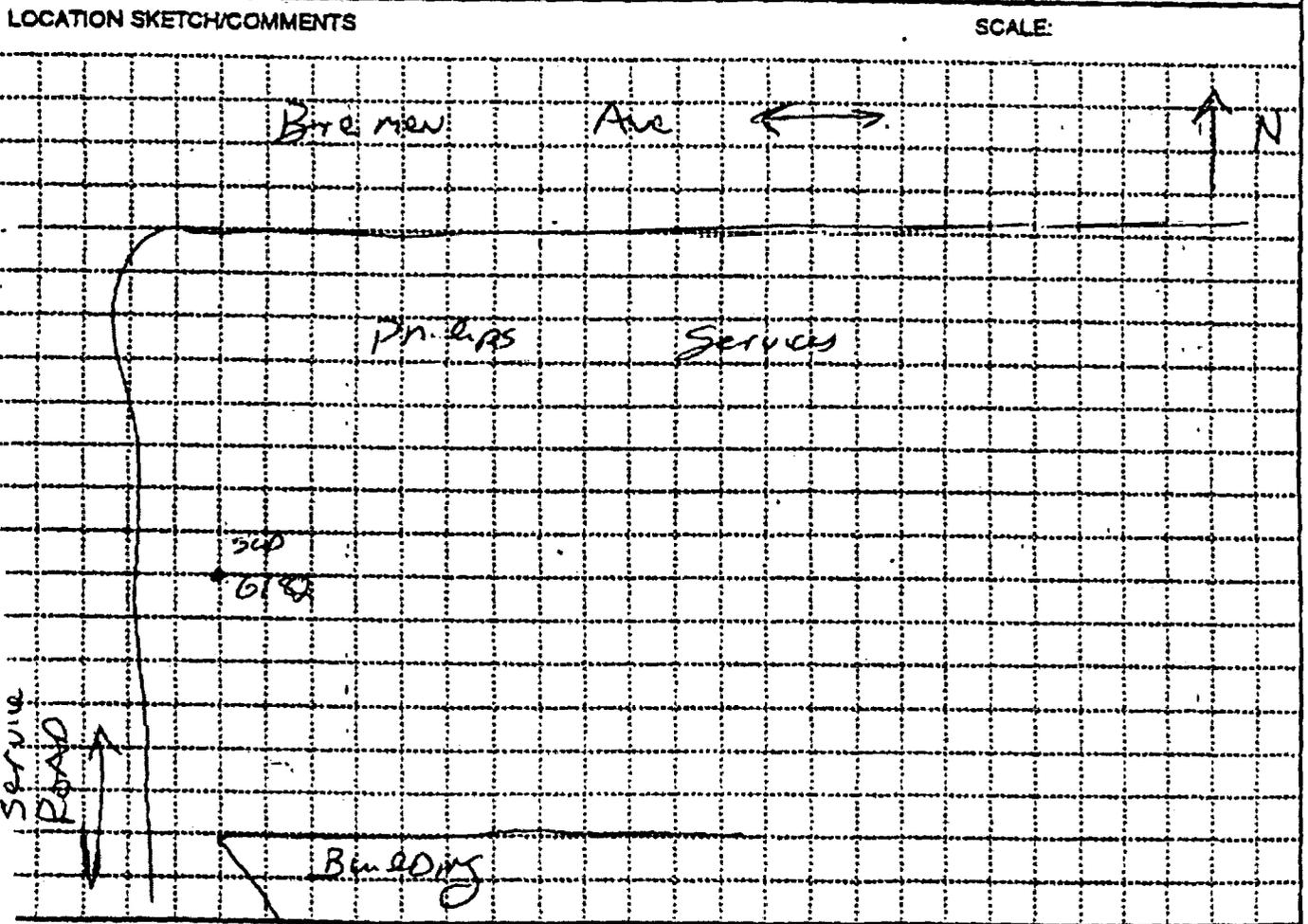
PROJECT		INSPECTOR			WELL NUMBER	
FUSRAP/SAPS		Chris Lock			SUD 6181	
BLK. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	DELETED SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
GW	1	GRAVEL, SAND TANISH-BROWN, HARD, LOOSE, Dry, FINE, Angular.	5900 COUNTS NET 0.8 PPM PISA		SUD 6181 1304	2.0 2.0 Rowner
GW	2	SLAG, BLACK, HARD, LOOSE, Dry, FINE, Angular	8900 COUNTS NET 0.8 PPM PISA		SUD 6205	
	3	TID	2.0 ft	1315	h-s 11/13/00	Drum 2 (, 2H. L. AS) 6000 counts NET BACKGROUND  Bentonite chip for BF.

6000

FUSRAP/SAPS

SUD 6181

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SD 6182	
1. COMPANY NAME IT Corporation		2. DRILL SUBCONTRACTOR GeoTechnology			SHEET SHEETS 2 OF 2		
3. PROJECT FUSRAP/SIS				4. LOCATION Ph. Ops Service			
5. NAME OF DRILLER Karl Baaske				6. MANUFACTURER'S DESIGNATION OF DRILL CME 55			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Hollow Stem Auger SOBH 9/200		8. HOLE LOCATION CLASS 3					
		9. SURFACE ELEVATION					
		10. DATE STARTED <del>11/19/00</del> 11/13/00			11. DATE COMPLETED <del>11/19/00</del> 11/13/00		
12. OVERBURDEN THICKNESS		13. DEPTH GROUNDWATER ENCOUNTERED N/A					
13. DEPTH DRILLED INTO ROCK		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
14. TOTAL DEPTH OF HOLE		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
16. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
18. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY) RAD	
20. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
						21. TOTAL CORE RECOVERY	
						22. SIGNATURE OF INSPECTOR Uha Jhb	



PROJECT FUSRAP/SIS HOLE NO. SD 6182

# HTRW DRILLING LOG

PROJECT <i>FUSRAP/SUPC</i>		INSPECTOR <i>Chris Lach</i>			WELL NUMBER <i>SUD 6182</i>
ELEV. 100'	DEPTH 100'	DESCRIPTION OF MATERIALS 100'	FIELD SCREENING RESULTS 100'	DESIGN SAMPLE OR CORE BOX NO. 100'	ANALYTICAL SAMPLE NO. 100'
<i>SW</i>	1	<i>SAND, GRAY, silty Brown, HARD, LOOSE, dy. fill. irregular</i>	<i>6300 COUNT NAI 0.5 7PM PTD</i>	<i>0.5 10/15</i>	<i>5-09 6182 1112</i>
	2				
	3	<i>TID</i>	<i>2.0 ft</i>	<i>1120</i>	<i>1157</i>

*1.5/2.0 Recovery*

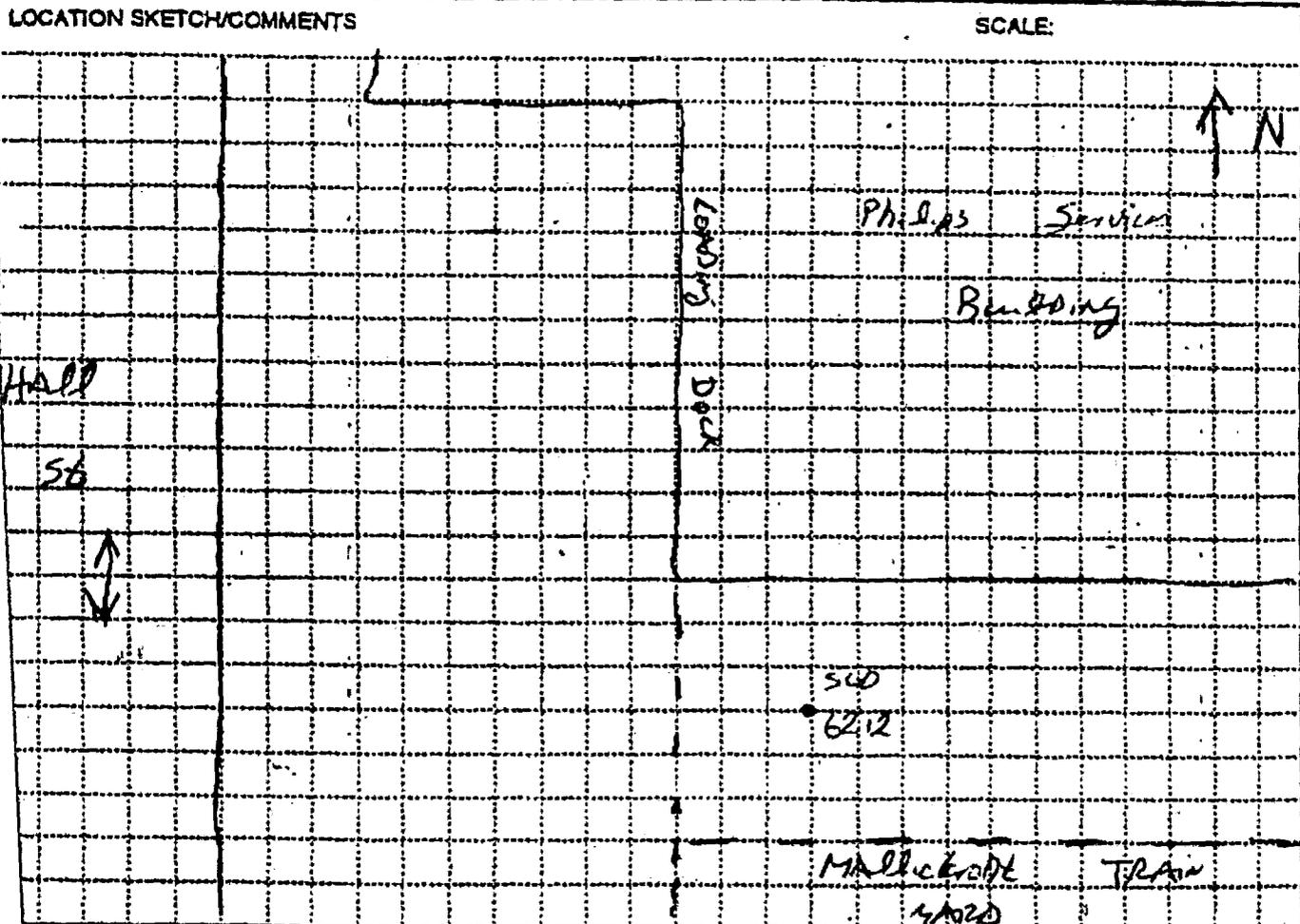
*11/13/00  
Dinner: 2  
(7h. 8.00)  
6400 counts  
NAI Background  
Bentank done  
for BF*

*0400*

PROJECT *FUSRAP/SUPC*

WELL NUMBER  
*SUD 6182*

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnics</u>	
3. PROJECT <u>FUSRAP/SWS</u>		4. LOCATION <u>Ph. &amp; P.S. Service</u>	
5. NAME OF DRILLER <u>Kavin Bessler</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CNE 55</u>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger SQA, SQA</u>		8. HOLE LOCATION <u>CLASS DELINEATION</u>	
12. OVERBURDEN THICKNESS		10. DATE STARTED <u>11/14/00</u>	
13. DEPTH DRILLED INTO ROCK		11. DATE COMPLETED <u>11/14/00</u>	
14. TOTAL DEPTH OF HOLE		15. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>	
18. GEOTECHNICAL SAMPLES		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>	
19. TOTAL NUMBER OF CORE SOLES		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>	
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR	



PROJECT <u>FUSRAP/SWS</u>	HOLE NO. <u>500 6212</u>
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# HTRW DRILLING LOG

PROJECT: FUSRAP/SWS      INSPECTOR: Chris Locke      SHEET: 2 OF 2      HOLE NUMBER: SWS 6212

BLK. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	DELETED SAMPLE OR CORE DEPT. NO.	ANALYTICAL SAMPLE NO.	REMARKS
CL	1	S. & B. LOAN CLAY Brown Green, HARD Loose, Dry, FLL	7100 COUNTS NET	0.5 ton/ft <sup>2</sup>	SWS 6212 1600	1.5 2.0 Recovery
CH	2	FAL CLAY, Brown-Green, HARD	7100 COUNT NET	5.0 ton/ft <sup>2</sup>	SWS 6237 1003	-
	3		TID 2.0 ft	1610	ARS	11/14/00 Diam: 2 (ph. lps) 7100 counts NET Background Bottle check for BF.

7100

PROJECT: FUSRAP/SWS      SHEET: SWS 6212

<b>HTRW DRILLING LOG</b>			DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>500 6213</i>		
1. COMPANY NAME <i>FT Corporation</i>			2. DRILL SUBCONTRACTOR <i>Geotechnology</i>			SHEET <i>1</i> OF <i>2</i>		
3. PROJECT <i>FUSRAP/SWS</i>				4. LOCATION <i>Philips Service</i>				
5. NAME OF DRILLER <i>JIM McDaniel</i>				6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT			8. HOLE LOCATION					
<i>Hollow Stem Auger</i>			<i>Dalwarden</i>					
<i>Split Spoon</i>			9. SURFACE ELEVATION					
12. OVERBURDEN THICKNESS				10. DATE STARTED <i>10/26/20</i>		11. DATE COMPLETED <i>10/26/20</i>		
13. DEPTH DRILLED INTO ROCK				18. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>				
14. TOTAL DEPTH OF HOLE				19. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>				
16. GEOTECHNICAL SAMPLES				15. TOTAL NUMBER OF CORE SECTIONS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>		
<i>0</i>		DISTURBED		UNDISTURBED				
20. SAMPLES FOR CHEMICAL ANALYSIS			VOC		METALS		OTHER (SPECIFY) <i>PH</i>	
22. DISPOSITION OF HOLE			BAGGED		MONITORING WELL		21. SIGNATURE OF INSPECTOR <i>[Signature]</i>	

LOCATION SKETCH/COMMENTS

SCALE:

PROJECT <i>FUSRAP/SWS</i>	HOLE NO. <i>500 6213</i>
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# HTRW DRILLING LOG

WELL NUMBER  
SUD 6213

PROJECT  
FUSRAP/SUDS

INSPECTOR  
Chris Lock

SHEET  
2 OF 2

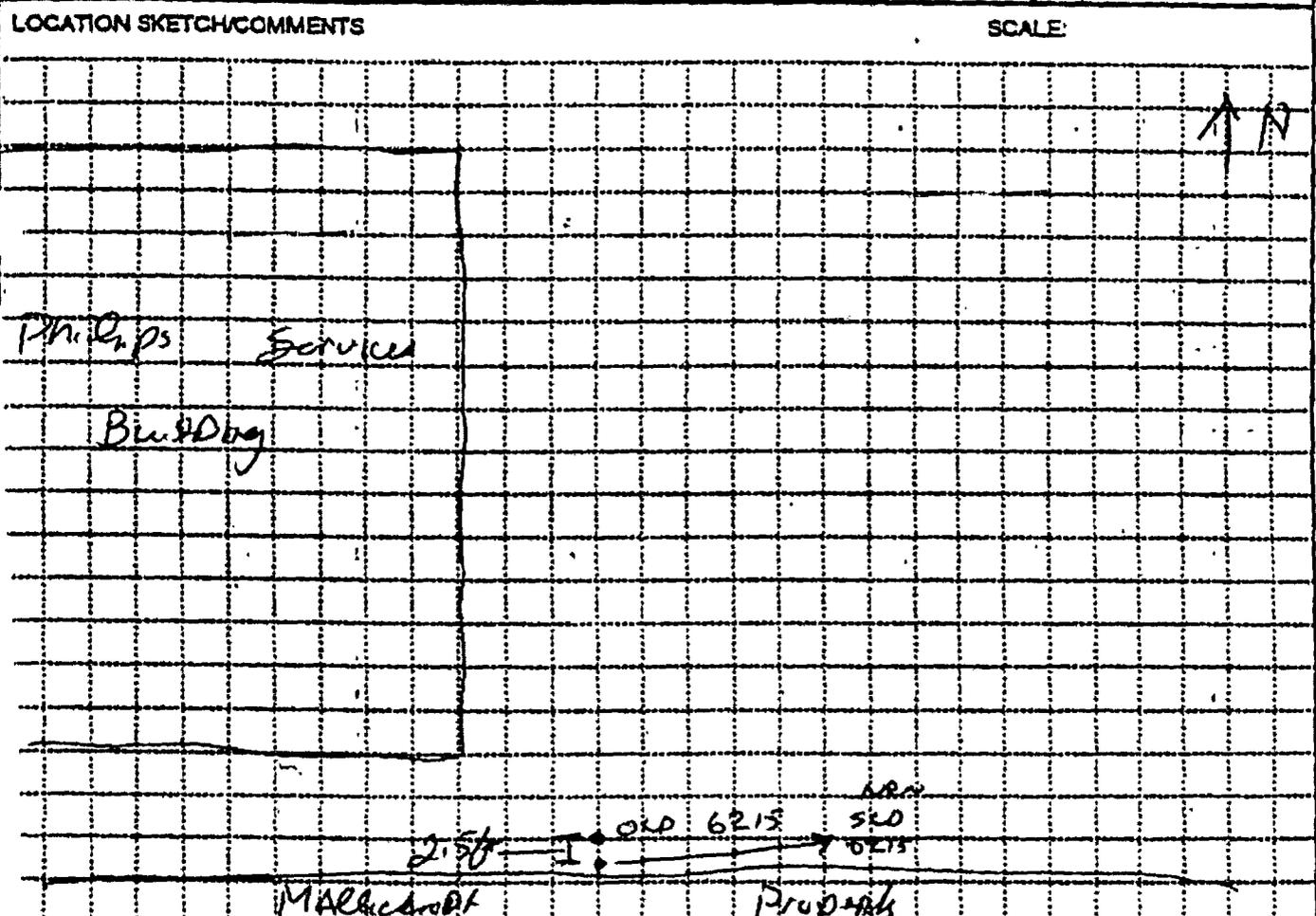
LOG NO	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	CORRECTED SAMPLE NO. OR CORE BODY NO.	ANALYTICAL SAMPLE NO.	REMARKS
GLW	1	slty, SAND BROWN, HARD, LOOSE, Dry, FINE, Angular	9700 COUNTS NFI PPM P/D	0.5 tar/gal	SUD 6213 1051	1.8 2.0 Recovery
SW	2	SAND, slty Brown HARD, LOOSE Dry, FINE, Angular	9400 COUNTS NFI PPM P/D		SUD 6232 1054M	
	3	T.O.D 2.0	6+	1100 NIS	10/26/00	Draw: 1 (p.h. tips) 8000 counts NFI Background Bentonite chip for BF

8000

PROJECT  
FUSRAP/SUDS

WELL NO  
SUD 6213

<b>HTRW DRILLING LOG</b>			DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>SD 6215</i>		
1. COMPANY NAME <i>IT Corporation</i>			2. DRILL SUBCONTRACTOR <i>Geoteknology</i>			SHEET <i>1</i> OF <i>2</i>		
3. PROJECT <i>FUSRAP/SAS</i>				4. LOCATION <i>Philips Service</i>				
5. NAME OF DRILLER <i>SIM McDONALD</i>				6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 53</i>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem 4 1/2" 50L+ 3/100W</i>			8. HOLE LOCATION <i>Designation</i>					
			9. SURFACE ELEVATION					
			10. DATE STARTED <i>12/26/66</i>			11. DATE COMPLETED <i>12/26/66</i>		
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <i>NA</i>					
13. DEPTH DRILLED INTO ROCK			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>NA</i>					
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>NA</i>					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY) <i>RAO</i>		OTHER (SPECIFY)
								21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BAGGED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR <i>[Signature]</i>



PROJECT <i>FUSRAP/SAS</i>	HOLE NO. <i>SD 6215</i>
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# HTRW DRILLING LOG

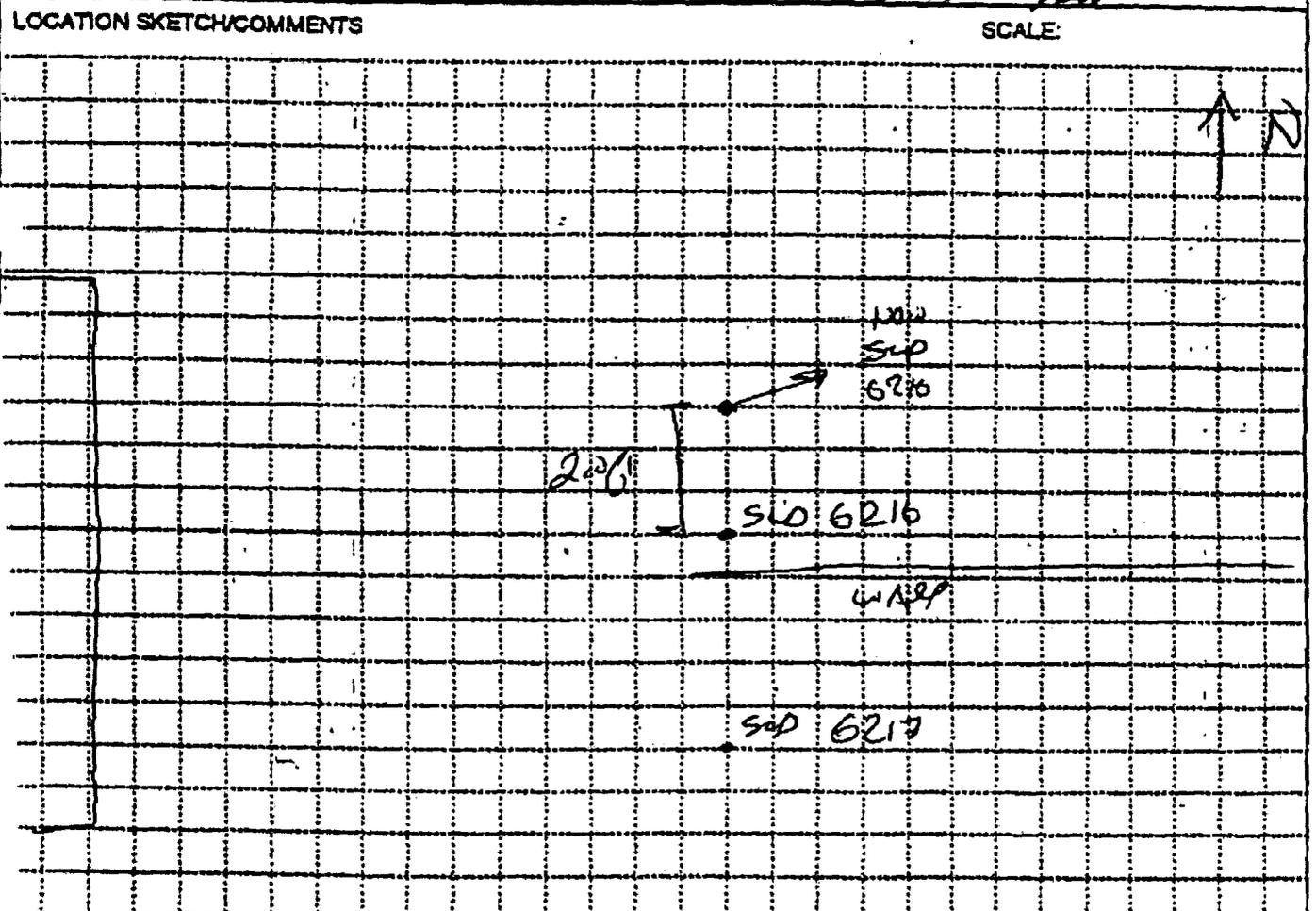
PROJECT FUSRAP/SWS		INSPECTOR Chris Lock			WELL NUMBER 540 6215	
DEPTH IN	DEPTH FT	DESCRIPTION OF MATERIALS SEE	FIELD SCREENING RESULTS CPI	CERTIFIED SAMPLE OR CORE BOX NO. CPI	ANALYTICAL SAMPLE NO. CPI	REMARKS
GW	1	Slty, cindery with s.lty LOAN clay Brown, HARD, LOOSE, Dry Fial	4700 counts NFI PPI PDD	0.5 ton/ft <sup>2</sup>	3000 6215 1314	1.5 2.0 Recovered
		Brick	8900 counts NFI			
GW	2	Slty, cindery, with s.lty, s.lty LOAN clay Brown, HARD, LOOSE	PPM PDD		5400 6240 1317	-
	3	T.C.D.	2.0 ft	1325 hrs	10/26/10	Drum: 1 (ph. tape) 8100 counts NFI Background Bentonite chip for BF

6100

PROJECT  
FUSRAP/SWS

WELL NO  
540 6215

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		SLD 6216	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geofachobay</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SWS</i>			4. LOCATION <i>Philips Smeu</i>		
5. NAME OF DRILLER <i>JIM McDONALD</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 5T</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow 3in Auger Split 2000'</i>		8. HOLE LOCATION <i>Delineator</i>			
9. SURFACE ELEVATION			10. DATE STARTED <i>11/25/00</i>		
12. OVERBURDEN THICKNESS			11. DATE COMPLETED <i>12/26/00</i>		
13. DEPTH DRILLED INTO ROCK			15. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>		
14. TOTAL DEPTH OF HOLE			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>		
19. GEOTECHNICAL SAMPLES <i>0</i>			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>		
18. DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE ROCKS	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAO</i>	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
				22. SIGNATURE OF INSPECTOR <i>[Signature]</i>	



PROJECT <i>FUSRAP/SWS</i>	HOLE NO. <i>7D 6216</i>
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# HTRW DRILLING LOG

WELL NUMBER  
 SWD 6216  
 SHEET  
 2 OF 2

PROJECT  
 FUSRAP/SWS

INSPECTOR  
 Chris Locke

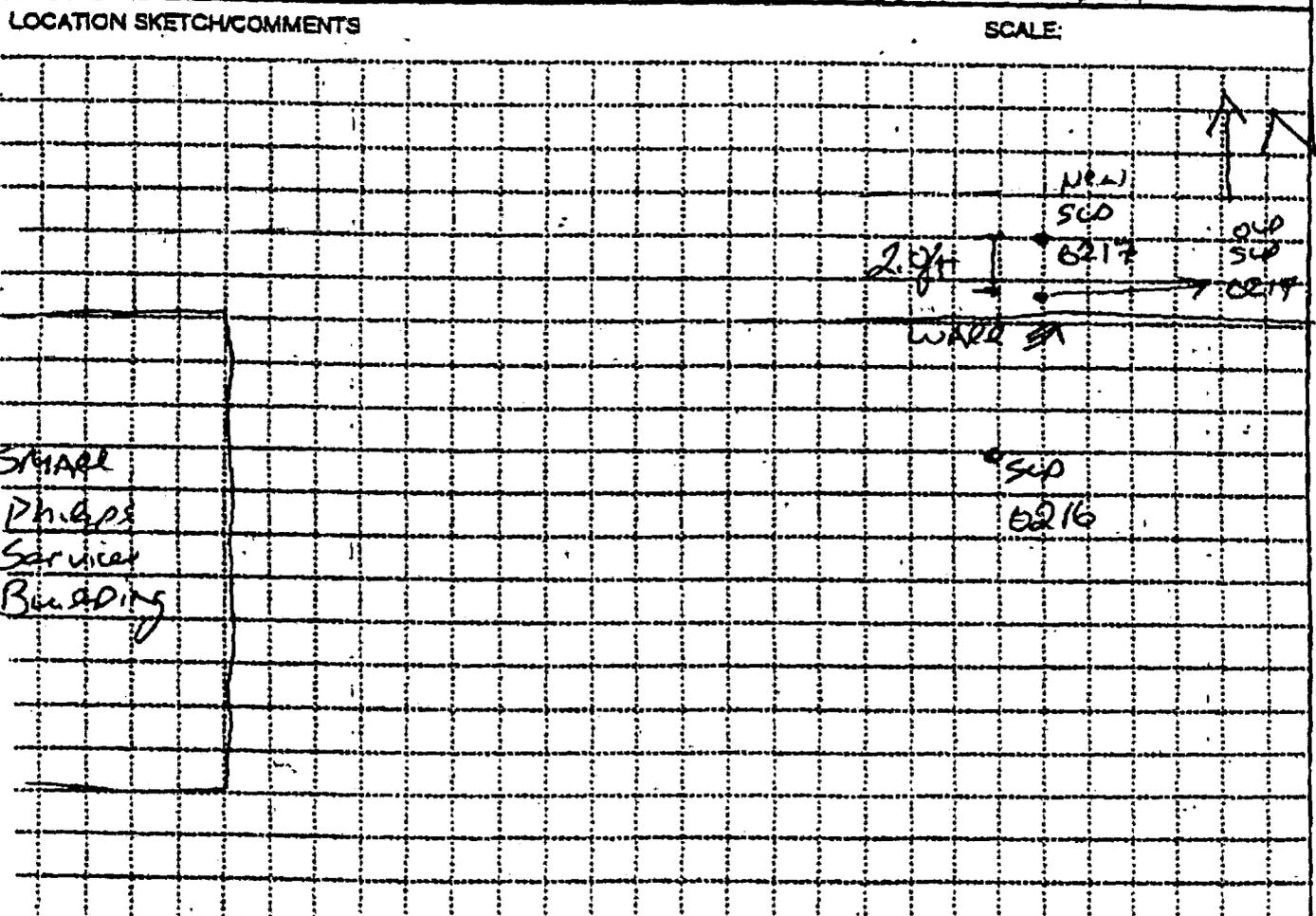
DATE	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	CORRECTION SAMPLE OR CORE DEPTH	ANALYTICAL SAMPLE NO.	REMARKS
		Concrete	5200 COUNTS NFI		3420 6216 (Cont.) 1449	
GW	1	GRAVEL, SAND Brown, HARD, LOOSE Dry, FINE, Angular	5500 COUNTS NFI PDI PDI		5420 6216 1456	1.5 2.0 Recovery strong ODOR Naked.
	2		5800 COUNTS NFI O-V PDI		5420 6216 1500	
	3	T.D 2.5	1510	his	1.0/26/00	Drum: 1 (ph. kps) 5200 count NFI Background Bentone Chip for BP

5200

PROJECT  
 FUSRAP/SWS

WELL NUMBER  
 SWD 6216

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>540 6217</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>		SHEET <u>1</u> OF <u>2</u> SHEETS	
3. PROJECT <u>FUSRAP/SWS</u>			4. LOCATION <u>Phelps Services</u>		
5. NAME OF DRILLER <u>JIM McDONALD</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION			
<u>Hollow Stem Auger</u>		<u>Delinawhox</u>			
<u>Split Spoon</u>		9. SURFACE ELEVATION			
		10. DATE STARTED <u>10/26/04</u>		11. DATE COMPLETED <u>10/26/04</u>	
12. OVERBURDEN THICKNESS		13. DEPTH OF GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
<u>0</u>				19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
				OTHER (SPECIFY) <u>ROD</u>	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				23. SIGNATURE OF INSPECTOR <u>[Signature]</u>	



PROJECT <u>FUSRAP/SWS</u>	HOLE NO. <u>540 6217</u>
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# HTRW DRILLING LOG

WELL NUMBER  
SUD 6217

PROJECT  
FUSRAP/SUDS

SUPERVISOR  
Chris Lock

SHEET  
2 of 2

C.D. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	CERTIFIED SAMPLE OR CORE IDENT. NO.	ANALYTICAL SAMPLE NO.	REMARKS
CL 1	1	Silty - LOAM clay, Brown - HARD, LOOSE, Dry. F.S.	5200 COUNTS NFI D.O PPM 5900 COUNTS NFI D.O PPM	0.5 µm/ft <sup>2</sup>	9400 6217 0852	115 2.0 Recovery  Note - petroleum hydrocarbon odor noted.
-	2				5400 6212 0855	
	3	T.D	2.0	ft	0905	his 10/26/00 Drum: 1 (174 lbs) 5800 counts NFI Background Bentonite Cap for BF

5800

PROJECT  
FUSRAP/SUDS

WELL NO  
SUD 6217

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 6218</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SDS</i>			4. LOCATION <i>Ph. Lps Service</i>		
5. NAME OF DRILLER <i>JIM McDONAD</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow solid spoon solid spoon</i>		8. HOLE LOCATION <i>Delineation</i>			
9. SURFACE ELEVATION					
10. DATE STARTED <i>10/23/00</i>			11. DATE COMPLETED <i>10/23/00</i>		
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>		
14. DEPTH DRILLED INTO ROCK			15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>		
16. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>		
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
<i>0</i>					
19. TOTAL NUMBER OF CORE RECES					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)
					21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <i>[Signature]</i>

LOCATION SKETCH/COMMENTS

SCALE:

*SMALL  
Ph. Lps Service  
Building*

*6218*

*SD  
6218*

*RR CME*

PROJECT *FUSRAP/SDS* HOLE NO. *SD 6218*

IG FORM 5058-R, AUG 94 (Proprietary CECW-EG)

# HTRW DRILLING LOG

PROJECT		INSPECTOR		WELL NUMBER		
FUSRAP/Suds		Chris Locke		Sud 6218		
SLY. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS (CPM)	CERTIFIED SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
CC	1	Silt - Layer clay with gravel, Brown - HARD, LOOSE Dry, F.S.	7500 counts NET PPM PFD 6800 counts NET 0.0 PPM		SUD 6218 1007	2.0 2.0 Recovery
GW	2	Silt, Black, HARD, Dry, F.S.			SUD 6243 1007	
	3	T.D	2.0	f+	1020	his 10/23/00 Drum: 1 (p h. eps) 7500 counts NET Background Bentonite chip for BF.

7500

PROJECT FUSRAP/Suds

WELL NO. Sud 6218

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 6219</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET SHEETS <i>1. of 2</i>	
3. PROJECT <i>FUSRAP/SAS</i>			4. LOCATION <i>Philips Service</i>		
5. NAME OF DRILLER <i>JIM McINNES</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 53</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow 2 1/2" Auger SPRT SPDR</i>		8. HOLE LOCATION <i>DORINGA HSN</i>		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS			10. DATE STARTED <i>10/26/00</i>		
13. DEPTH DRILLED INTO ROCK			11. DATE COMPLETED <i>10/26/00</i>		
14. TOTAL DEPTH OF HOLE			12. DEPTH GROUNDWATER ENCOUNTERED <i>NA</i>		
15. GEOTECHNICAL SAMPLES		16. TOTAL NUMBER OF CORE BOXES		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>NA</i>	
18. DISTURBED		19. UNDISTURBED		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>NA</i>	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
				OTHER (SPECIFY) <i>RAD</i>	
22. DISPOSITION OF HOLE		BAG FILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				21. SIGNATURE OF INSPECTOR <i>Mr. Tubo</i>	

LOCATION SKETCH/COMMENTS

SCALE:

PROJECT <i>FUSRAP/SAS</i>	HOLE NO. <i>SD 6219</i>
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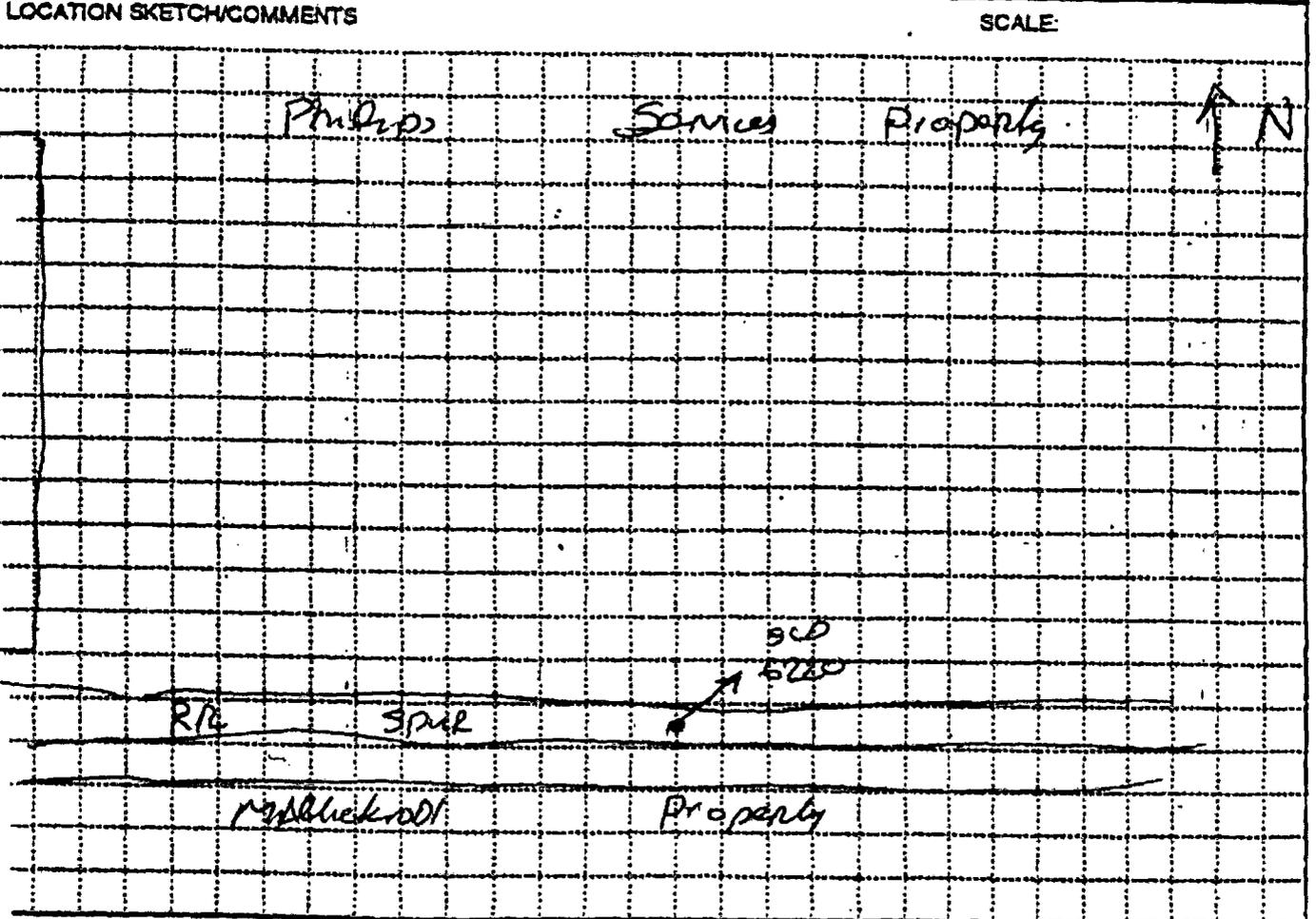
# HTRW DRILLING LOG

PROJECT		INSPECTOR			WELL NUMBER	
FUSRAP/SWS		Chris Locke			540 6219	
SLY. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	CERTIFIED SAMPLE OR CORE ID#	ANALYTICAL SAMPLE NO.	REMARKS
GW	1	GRAVEL, SAND, (Limestone), TAN, HARD, Loose, Dry, Fill.	5400 counts NET 0.0 PDM PTD	0.5 ton/gal	5400 6219 0926	1.5 / 2nd Recovery
		Limostone	640 counts M			
GW	2	slay, clays Black, HARD, Loose, Dry	610 PDM		5400 6240 0925	-
	3	T.D	2.0	6ft	0940	his 10/26/0 Drm: - (ph. tips) 5800 counts NET Background Bentonite cap for BF

FUSRAP/SWS

540 6219

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>720 6220</i>			
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET <i>1</i> OF <i>2</i>			
3. PROJECT <i>FUSRAP/SWS</i>			4. LOCATION <i>Philips Service</i>				
5. NAME OF DRILLER <i>JM McDONARD</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CHE 55</i>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger 30cm 30cm</i>		8. HOLE LOCATION <i>Delinathor</i>					
9. SURFACE ELEVATION							
12. OVERBURDEN THICKNESS			10. DATE STARTED <i>10/26/62</i>		11. DATE COMPLETED <i>10/26/62</i>		
13. DEPTH DRILLED INTO ROCK			16. DEPTH OF GROUNDWATER ENCOUNTERED <i>N/A</i>				
14. TOTAL DEPTH OF HOLE			19. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>				
15. GEOTECHNICAL SAMPLES <i>0</i>			DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BAG FILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <i>[Signature]</i>		



PROJECT <i>FUSRAP/SWS</i>		HOLE NO. <i>720 6220</i>	
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# HTRW DRILLING LOG

PROJECT FUSRAP/SWS		INSPECTOR Chris Locky			WELL NUMBER SWP 6220	
GLEY NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING ACTIVITY	SECTION SAMPLE OR CORE IDENT. NO.	ANALYTICAL SAMPLE NO. (if)	REMARKS
GW	1	Slag, Black, Hard, Loose, Dry, Flk, Angular	8500 counts NAI 0.5 ppm Pb	0.5 ton/acre	SWP 6220 1411	20 2.0 Recovery
CL	2	Silty Low Clay Brown Hard Loose, Dry	9400 counts NAI 0.5 ppm Pb		6245 1415	
	3	T.D 20 ft			N/A	10/26/00 Draw: (ph. logs)  8100 counts NAI Background Benzene Chp for BF.

PROJECT FUSRAP/SWS

WELL NO SWP 6220

HTRW DRILLING LOG				DISTRICT <u>32. Louis</u>		HOLE NUMBER <u>34 621</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>			SHEET <u>1</u> OF <u>2</u>		
3. PROJECT <u>FUSRAP/SUP</u>				4. LOCATION <u>Phelps Service</u>			
5. NAME OF DRILLER <u>Jim McDonald</u>				6. MANUFACTURER'S DESIGNATION OF DRILL <u>CHE 55</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow Stem Auger</u> <u>30" 1" 9/16"</u>		8. HOLE LOCATION <u>Class 1 - Admin</u>					
9. OVERBURDEN THICKNESS				10. DATE STARTED <u>10/17/00</u>			
11. DEPTH DRILLED INTO ROCK				11. DATE COMPLETED <u>10/17/00</u>			
12. TOTAL DEPTH OF HOLE				12. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. OBTOTECHNICAL SAMPLES				13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. DISTURBED		14. UNDISTURBED		14. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
15. SAMPLES FOR CHEMICAL ANALYSIS		15. TOTAL NUMBER OF CORE BOXES		15. DATE STARTED			
16. DISPOSITION OF HOLE		16. MONITORING WELL		16. DATE COMPLETED			
17. VOC		17. METALS		17. OTHER (SPECIFY)			
18. BACFILLED		18. OTHER (SPECIFY)		18. OTHER (SPECIFY)			
19. SIGNATURE OF INSPECTOR		19. SIGNATURE OF INSPECTOR		19. SIGNATURE OF INSPECTOR			
LOCATION SKETCH/COMMENTS				SCALE:			
↑ N							
19. SIGNATURE OF INSPECTOR				19. SIGNATURE OF INSPECTOR			

LECT

HOLE NO. 34 6221

FORM 5056-R, AUG 94

(Prepared: CECW-EG)

# HTRW DRILLING LOG

WELL NUMBER 30 6221

PROJECT FuSRAP/SUDS

INSPECTOR Chris Cook

LOG SHEET 2 OF 2

SLT. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	DEPTH SAMPLE OR CORE SEE NO.	ANALYTICAL SAMPLE NO.	REMARKS
1		S. Lty. loam clay with slag Black, hard, loose wet (from RAW)	5800 counts NIT 0.3 PSD		3401 6241 0740	1.5 / 20 Recovery Strong odor noted
2					3402 6246 0745	
3		TID. 20 ft		0950	hrs	11/17/00 Draw: 4 (philips) 6400 counts NIT Background Bentonite chip for BF.

PROJECT FuSRAP/SUDS

WELL 30 6221

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 6222</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnics</i>		SHEET <i>1</i> OF <i>1</i>	
3. PROJECT <i>FUSAP/SAP</i>			4. LOCATION <i>Philips Service</i>		
5. NAME OF DRILLER <i>Jim McDONALD</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow Stem Auger 30" dia 3000'</i>		8. HOLE LOCATION <i>Dalmeida</i>			
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>		
13. DEPTH DRILLED INTO ROCK			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>		
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>		
18. GEOTECHNICAL SAMPLES <i>0</i>		OBTAINED	UNOBTAINED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)
22. DEPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURES OF INSPECTOR <i>[Signature]</i>
LOCATION SKETCH/COMMENTS				SCALE:	
PROJECT <i>FUSAP/SAP</i>				HOLE NO. <i>SD 6222</i>	

# HTRW DRILLING LOG

PROJECT <i>FUSRAP/SUP</i>		INSPECTOR <i>Chris Lock</i>		WELL NUMBER <b>540 6222</b>		
DEPTH IN	DEPTH FEET	DESCRIPTION OF MATERIALS NO.	FIELD SCREENING RESULTS NO.	DELETED SAMPLE OR CORE BOX NO. NO.	ANALYTICAL SAMPLE NO. NO.	
<i>5m 6N</i>	1	<i>SAND, GRAVEL, Brown, HARD, LOOSE, Dry, FILL, Angular</i>	<i>5701 COUNTS NET 0.3 PID 5900 COUNTS NET</i>	<i>0.5 to 1/8"</i>	<i>5000 6222 M06</i>	<i>1.0 / 2.0 Recover</i>
	2	<i>T.I.D</i>	<i>14.0"</i>	<i>14.5 hrs</i>	<i>10/30/00</i>	<i>Drum: 1 (p.h. 1.0%) 5900 counts NET Background Bentone chip for BF.  T.I.D. Due to Ref. SAL.</i>
	3					

*5900*

PROJECT *FUSRAP/SUP*

WELL NUMBER  
**540 6222**

HTRW DRILLING LOG				DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 6223</i>	
1. COMPANY NAME <i>IT Corporation</i>			2. DRILL SUBCONTRACTOR <i>Geotechnical</i>			SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SWS</i>				4. LOCATION <i>Phelps Survey</i>			
5. NAME OF DRILLER <i>Jim McDONN</i>				6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>1 1/2" 3" Aggr 2 1/2" 3"</i>			8. HOLE LOCATION <i>Class 1 - 04in</i>				
9. SURFACE ELEVATION				10. DATE STARTED <i>10/17/00</i>		11. DATE COMPLETED <i>10/17/00</i>	
12. OVERBURDEN THICKNESS				13. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
13. DEPTH DRILLED INTO ROCK				14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
14. TOTAL DEPTH OF HOLE				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
15. GEOTECHNICAL SAMPLES <i>D</i>		DISTURBED		UNDISTURBED		18. TOTAL NUMBER OF CORE BOXES	
19. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY) <i>PAD</i>	
20. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
21. SIGNATURE OF INSPECTOR <i>[Signature]</i>						22. TOTAL CORE RECOVERY	
LOCATION SKETCH/COMMENTS				SCALE:			
PROJECT <i>FUSRAP/SWS</i>				HOLE NO. <i>SD 6223</i>			

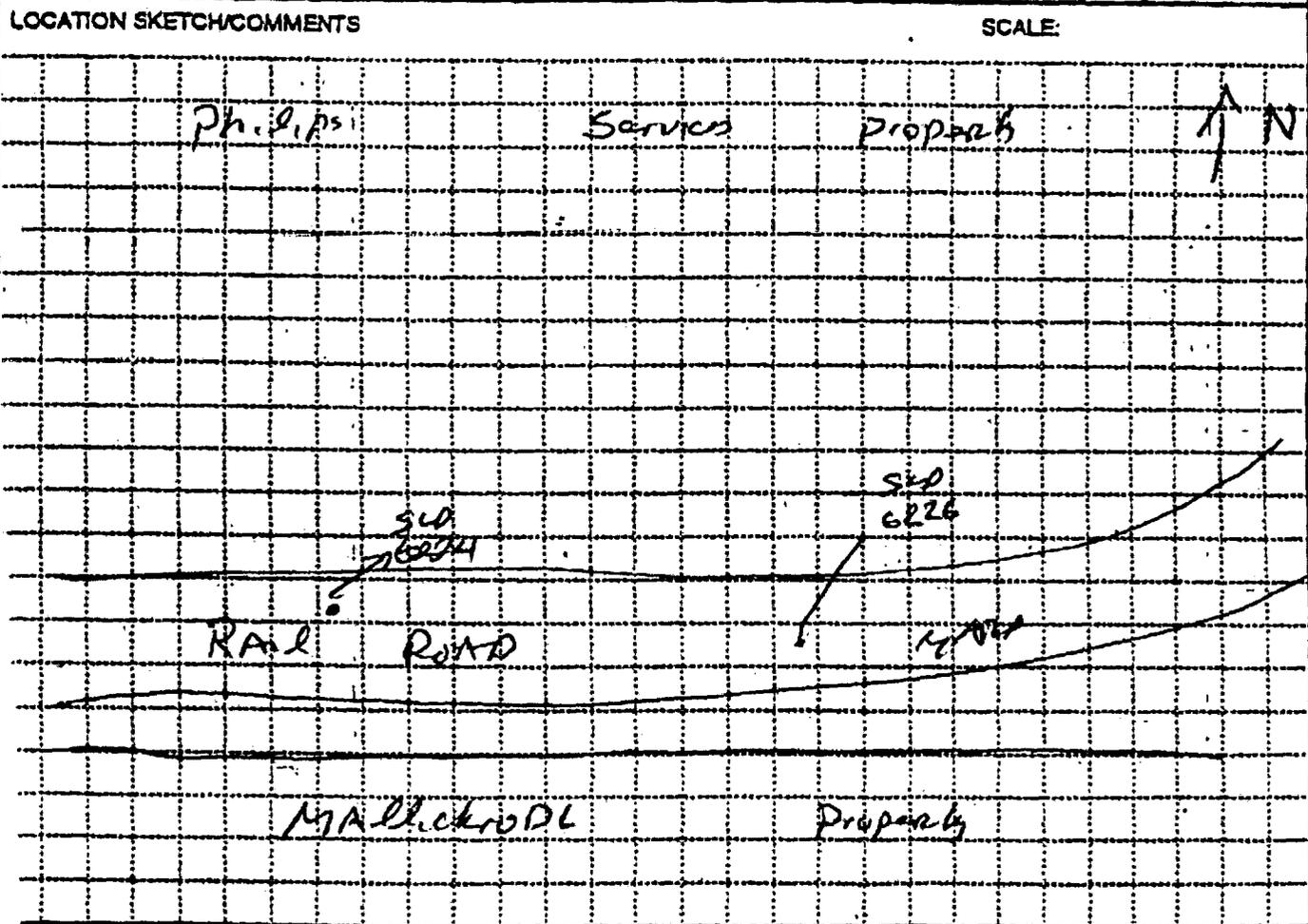
# HTRW DRILLING LOG

PROJECT <i>FUSRAP/SAS</i>		INSPECTOR <i>Chris Lab</i>			WELL NUMBER <i>SND 6223</i>	
BLK. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	CERTIFIED SAMPLE OR CORE NO.	ANALYTICAL SAMPLE NO.	REMARKS
1		<i>silty LOAM clay with 3% clay Brown, HARD, Loose wet (from Rain)</i>	<i>6200 counts NET 0.0 PSP</i>		<i>5400 6223 1006</i>	<i>1.8 / 20 Recovery</i>
2			<i>630 counts NET 0.0 PSP</i>	<i>0.5 ton/ft</i>	<i>5400 6248 1010/11</i>	
3		<i>TID 2.0 ft</i>		<i>1015 N</i>	<i>10/17/00</i>	<i>Drum: 1 (p.h.lps) 6400 counts NET BACKGROUND Bentoni chip for BE.</i>

PROJECT *FUSRAP/SAS*

WELL NO. *SND 6223*

HTRW DRILLING LOG		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SLD 6224</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SLD</i>			4. LOCATION <i>Ph. D. ps Service</i>		
5. NAME OF DRILLER <i>JIM McDONNELL</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>		
7. SIZE AND TYPE OF DRILLING AND SAMPLING EQUIPMENT <i>302.5 3000</i>		8. HOLE LOCATION <i>Delineation</i>		9. SURFACE ELEVATION	
10. DATE STARTED <i>10/19/60</i>		11. DATE COMPLETED <i>10/19/60</i>			
12. OVERBURDEN THICKNESS		13. DEPTH DRILLED INTO ROCK			
14. TOTAL DEPTH OF HOLE		15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>NA</i>			
16. GEOTECHNICAL SAMPLES <i>0</i>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>NA</i>		18. TOTAL NUMBER OF CORE SEALS	
19. SAMPLES FOR CHEMICAL ANALYSIS		20. DISPOSITION OF HOLE		21. SIGNATURE OF INSPECTOR <i>[Signature]</i>	
DISTURBED		UNDISTURBED		22. TOTAL CORE RECOVERY	
VCC		METALS		OTHER (SPECIFY) <i>RAO</i>	
BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	



PROJECT <i>FUSRAP/SLD</i>	HOLE NO. <i>SLD 6224</i>
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# HTRW DRILLING LOG

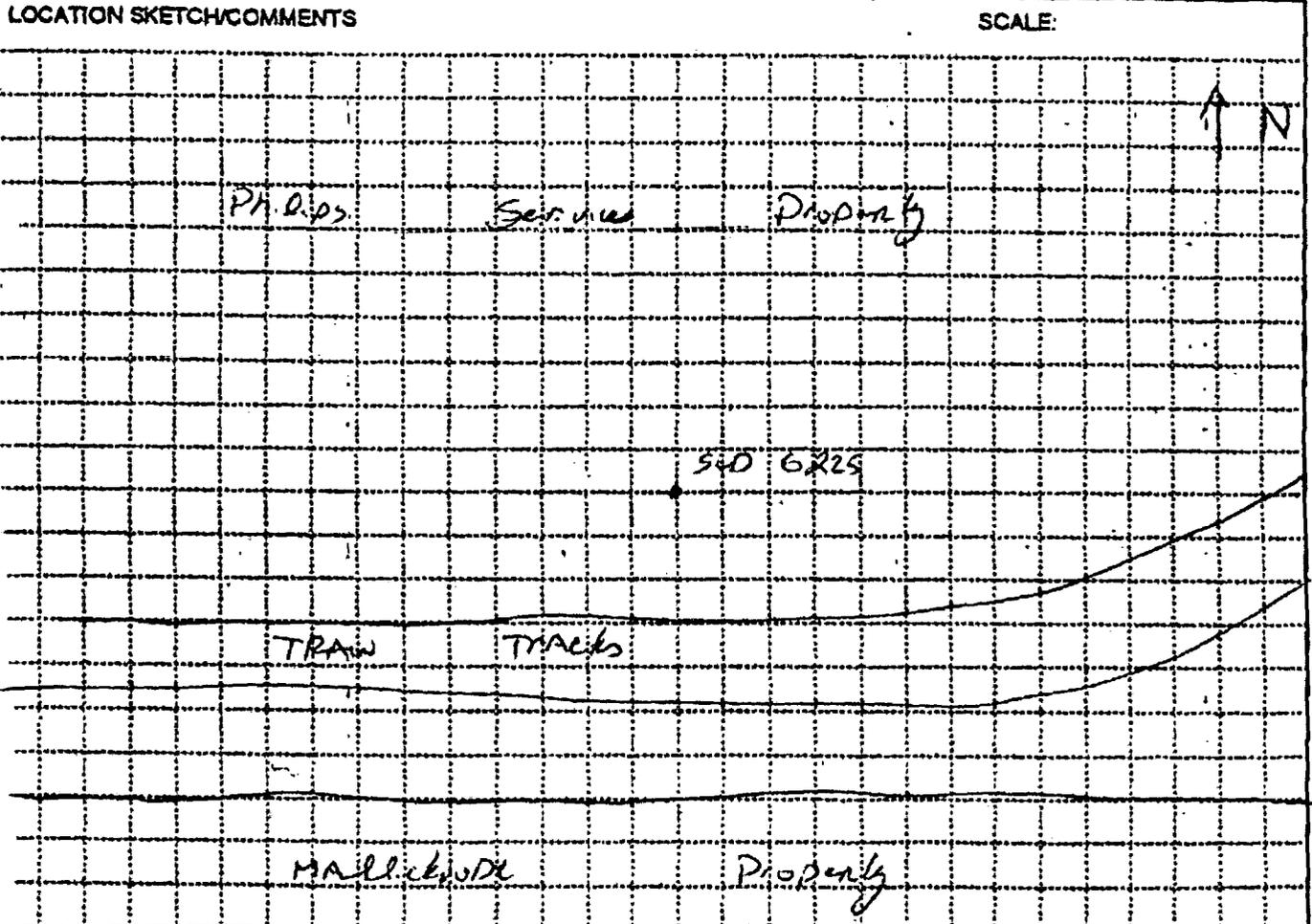
G.C. No.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
<div style="display: flex; justify-content: space-between;"> <span>PROJECT <b>FUSRAP/SWS</b></span> <span>INSPECTOR <b>Chris Lock</b></span> <span>WELL NUMBER <b>S.D. 6224</b></span> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span></span> <span></span> <span>SHEET <b>2</b></span> </div>						
GW	1	SANDY - GRAY, BROWN - BLACK, HARD, LOOSE, DRY, FINE, ARGENT	6700 Counts. NFI 81PM PSD	0.5 ton/ft	5400 6224 1334	1.5 / 2.0 Recovery
Rock	2	Limestone, Tan, HARD, DENSE DRY	7600 Counts. NFI 81PM PSD		5400 6249 1336	-
	3	TID	2.0 ft	1340	hrs 10/19/00	Drum: 1 (ph. caps)
	4					6400 counts NFI Background Bentonite Chips for BF.

6400

PROJECT **FUSRAP/SWS**

WELL NUMBER **S.D. 6224**

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>5-D 6225</u>	
1. COMPANY NAME <u>IT Corporation</u>		2. DRILL SUBCONTRACTOR <u>Geotechnology</u>		SHEET <u>1</u> OF <u>2</u>	
3. PROJECT <u>FUSRAP/SAS</u>			4. LOCATION <u>Ph. R. M. Services</u>		
5. NAME OF DRILLER <u>Kevin Bossler</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>		
7. SIZE AND TYPE OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow 3" Auger SPR-1 SPOUT</u>		8. HOLE LOCATION <u>CLASS 1 (Deliveries)</u>			
9. SURFACE ELEVATION					
10. DATE STARTED <u>11/14/00</u>			11. DATE COMPLETED <u>11/14/00</u>		
12. OVERBURDEN THICKNESS			13. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>		
13. DEPTH DRILLED INTO ROCK			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>		
14. TOTAL DEPTH OF HOLE			15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>		
16. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
17. TOTAL NUMBER OF CORE BOXES		VOC		METALS	
18. SAMPLES FOR CHEMICAL ANALYSIS		OTHER (SPECIFY) <u>RAD</u>		OTHER (SPECIFY)	
19. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
20. SIGNATURE OF INSPECTOR <u>[Signature]</u>		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY	



PROJECT <u>FUSRAP/SAS</u>	HOLE NO. <u>5-D 6225</u>
IG FORM 5056-R, AUG 84	
(Proponent: CECW-EG)	

# HTRW DRILLING LOG

PROJECT <i>FUSRAP/SUD</i>		INSPECTOR <i>Chris Loh</i>		WELL NUMBER <i>SUD 6225</i>	
DEPTH FEET	DEPTH METERS	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	TESTED SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.
		Silty LOAN CLAY with gravel, brown HARD LOOSE, wet (from RAIN)	4700 counts NET 0.0	0.5 10m/ 610	SUD 6225 1053
1			4900 counts NET 0.0 110		SUD 6250 1057
2		TID.	2.0	61	1105 hrs
3		-			11/14/00 DUN. 2 (P.H. GAS) 4500 counts NET BACKGROUND Bentonite caps for BF.

*h.u*  
*L.O. Rawson*

*4500*

PROJECT *FUSRAP/SUDS*

WELL NO *SUD 6225*

HTRW DRILLING LOG		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>540 6226</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/S-7X</i>			4. LOCATION <i>Philips Service</i>		
5. NAME OF DRILLER <i>JIM McDONNELL</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 55</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>1 1/2" 5/8" Auger 3091 5/8" 3/4"</i>		8. HOLE LOCATION <i>Delineator</i>			
12. OVERBURDEN THICKNESS		9. SURFACE ELEVATION			
13. DEPTH DRILLED INTO ROCK		10. DATE STARTED <i>10/19/62</i>		11. DATE COMPLETED <i>10/19/62</i>	
14. TOTAL DEPTH OF HOLE		12. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
15. GEOTECHNICAL SAMPLES <i>0</i>		13. DISTURBED		14. UNDISTURBED	
16. SAMPLES FOR CHEMICAL ANALYSIS		15. TOTAL NUMBER OF CORE BOXES		16. DEPTH TO WATER AND SLAPED TIME AFTER DRILLING COMPLETED <i>N/A</i>	
17. DISPOSITION OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>		17. SIGNATURE OF INSPECTOR <i>[Signature]</i>	
18. VOC		18. METALS		18. OTHER (SPECIFY) <i>RAD</i>	
19. BACKFILLED		19. MONITORING WELL		19. OTHER (SPECIFY)	
20. TOTAL CORE RECOVERY		20. SCALE:			
<p>LOCATION SKETCH/COMMENTS</p> <p><i>6224</i></p> <p><i>R.R. tracks</i></p> <p><i>540 6226</i></p> <p><i>Mallckrodt Property</i></p>					
PROJECT <i>FUSRAP/S-7X</i>		HOLE NO. <i>540 6226</i>			

# HTRW DRILLING LOG

PROJECT		INSPECTOR			WELL NUMBER	
FUSRAP/SWS		Chris Lock			S-1 6226	
CLAY NO.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	DELETED SAMPLE OF CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
CL	1	Slag with LEAD CLAY, BLACK, HARD, Loose, Dry, Fine. Argonian	6800 COUNT NAT. 00 PPM Pb 8100 COUNTS NAT. 00 PPM	0.5 100/600	5470 6226 M3148	2.0 2.0 Recovery
	2				5470 6251 1435	
	3	T.O	20	ft 1440		hrs 10/19/00 Draw: 1 (7h. e.p.s) 6400 counts NAT BACKGROUND Bentonek Clay for BF

6400  
~~32~~  
 2 | 64  
 64  
 04  
 64  
 32  
 96

PROJECT FUSRAP/SWS

WELL NO S-1 6226

HTRW DRILLING LOG				DISTRICT <u>St. Louis</u>		HOLE NUMBER <u>SLP 6027</u>	
1. COMPANY NAME <u>IT Corporation</u>			2. DRILL SUBCONTRACTOR <u>Geo Technology</u>			SHEET 1 OF 2	
3. PROJECT <u>FUSRAP/SLDS</u>				4. LOCATION <u>PHILIPS SERVICE</u>			
5. NAME OF DRILLER <u>Jim McDonnell</u>				6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow stem Auger Split SPIN</u>			8. HOLE LOCATION				
9. SURFACE ELEVATION							
10. DATE STARTED <u>10/22/00</u>				11. DATE COMPLETED <u>10/22/00</u>			
12. OVERBURDEN THICKNESS				16. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			
13. DEPTH DRILLED INTO ROCK				18. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
16. GEOTECHNICAL SAMPLES <u>0</u>		DISTURBED	UNDISTURBED	18. TOTAL NUMBER OF CORE BOXES			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY) <u>RAD</u>	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <u>[Signature]</u>		
LOCATION SKETCH/COMMENTS						SCALE:	
<p><u>McKinley</u> <u>Br. Dega</u> <u>PHILIPS SERVICE PROPERTY</u></p> <p><u>SLP 6027</u> <u>SLP 6028</u> <u>SLP 6029</u></p> <p><u>↑ N</u></p>							
PROJECT <u>FUSRAP/SLDS</u>						HOLE NO. <u>SLP 6027</u>	

# HTRW DRILLING LOG

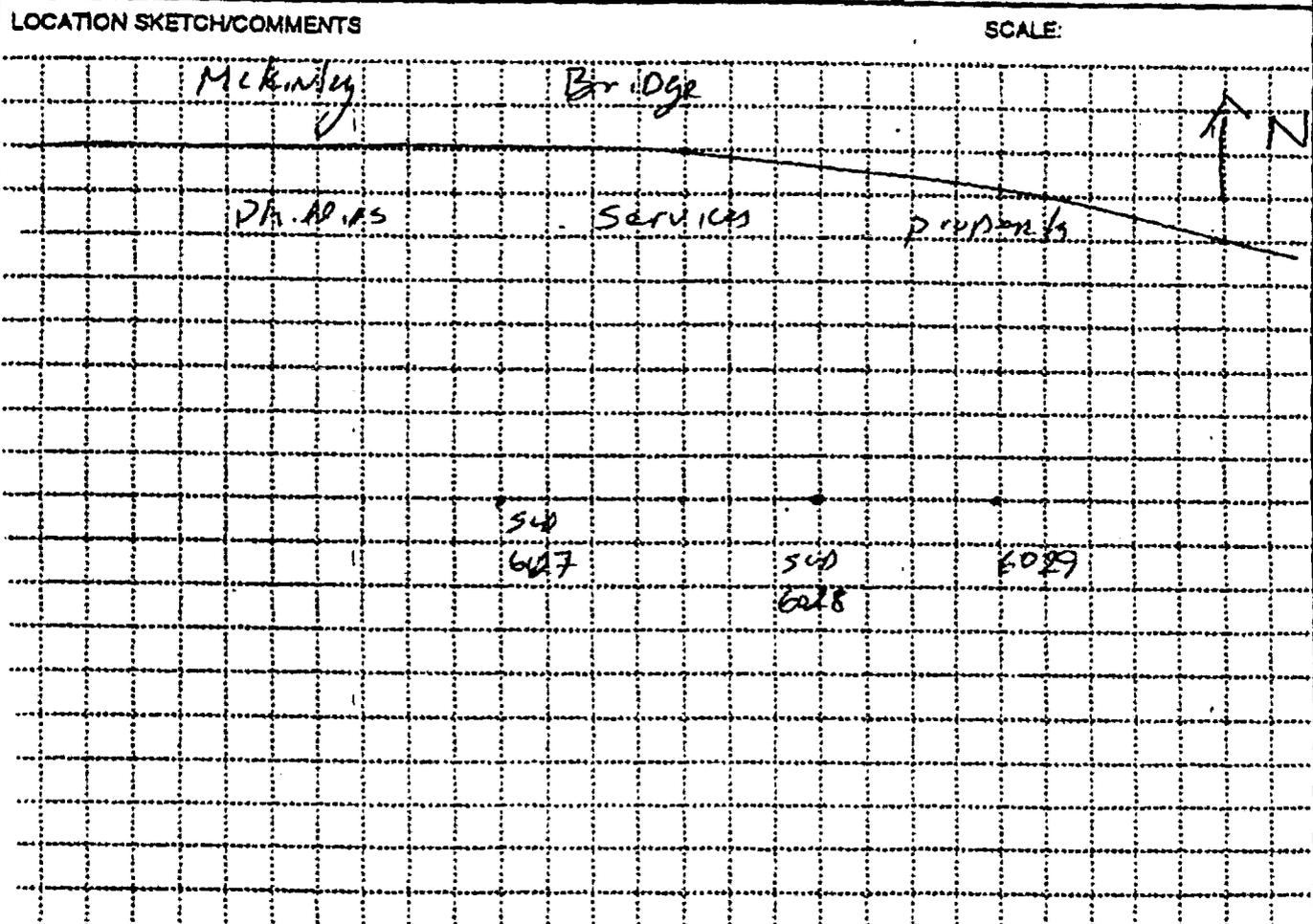
PROJECT		INSPECTOR		WELL NUMBER		WELL	
FUSRAP/SWS		Chris Locke		SW 6227		Sheet 2	
CLY. NO.	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GEOTECH SAMPLE OF CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS	
SW		SAND, GRAVEL Brown, HARD, LOOSE Dry, FILL, Angular	5200 counts NIS 0.10 1.30 PIA	0.5 ton/ft <sup>2</sup>	5200 6227 1447	1.0 / 2.0 Recovery	
GW	1	Slag, Brack, HARD LOOSE, Dry, FILL	5900 counts NIS 0.10 PIA		6232 1450	Slag petroleum odor noted.	
	2	T.I.D.	18"	1500		has 10/12/00	
	3					Drum 1 (1, 2, 3, 4, 5) 5200 counts NIS BACKGROUND Bentonite chip for BF	

5200

PROJECT FUSRAP/SWS

SW 6227

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>54 6228</i>	
1. COMPANY NAME <i>FUSRAP/SUDS</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET SHEETS <i>1 of 2</i>	
3. PROJECT <i>IT Corporation</i>			4. LOCATION <i>Ph. 12.13 Services</i>		
5. NAME OF DRILLER <i>JIM McDONALD</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 57</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Hollow stem Auger SPRT SPOON</i>		8. HOLE LOCATION		9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS		10. DATE STARTED <i>10/12/00</i>		11. DATE COMPLETED <i>10/12/00</i>	
13. DEPTH DRILLED INTO ROCK		18. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>		19. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
16. GEOTECHNICAL SAMPLES <i>0</i>	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY) <i>RAD</i>	OTHER (SPECIFY)	OTHER (SPECIFY)
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. SIGNATURE OF INSPECTOR <i>Chris Tank</i>	
30. TOTAL CORE RECOVERY					



PROJECT <i>FUSRAP/SUDS</i>	HOLE NO. <i>54 6228</i>
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# HTRW DRILLING LOG

PROJECT <i>FUSRAP/SUDS</i>		INSPECTOR <i>Chris Lala</i>		WELL NUMBER <i>SUD 6228</i>	
DEPTH (ft)		DESCRIPTION OF MATERIALS		ANALYTICAL SAMPLE NO.	
GW	1	GRAVEL, SAND, Brown, HARD, LOOSE Diy, Flat, Angular	5500 COUNTS NET 0.5 PPM P20	5-00 6228 1421	2.0  2.0 Recovery
GW	2	Slag, Cinders Black, HARD LOOSE, Diy, Flat, Angular	5900 COUNTS NET 0.5 PPM P20	0.5 tor/ft	
	3	TOD 2.0 ft	1430	A15	10/12 bu  Drum: 1 (Phillips)  5000 counts NET BACKGROUND  Bentonite CAP for BF.

5000

PROJECT *FUSRAP/SUDS*

WELL NO *SUD 6228*

HTRW DRILLING LOG			DISTRICT <u>St. Louis</u>			HOLE NUMBER <u>340 6229</u>		
1. COMPANY NAME <u>IT Corporation</u>			2. DRILL SUBCONTRACTOR <u>Geo technology</u>			SHEET <u>1</u> OF <u>2</u>		
3. PROJECT <u>FUSRAP/SWS</u>			4. LOCATION <u>@ Phillips Service</u>					
5. NAME OF DRILLER <u>JIM McDONALD</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 55</u>					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hollow 3/4 Auger SPE. + spoon</u>			8. HOLE LOCATION					
			9. SURFACE ELEVATION					
			10. DATE STARTED <u>10/12/00</u>			11. DATE COMPLETED <u>10/12/00</u>		
12. OVERBURDEN THICKNESS			18. DEPTH GROUNDWATER ENCOUNTERED <u>NA</u>					
13. DEPTH DRILLED INTO ROCK			19. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>NA</u>					
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>NA</u>					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		
<u>0</u>								
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY
						<u>RAD</u>		
22. DEPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR <u>[Signature]</u>
LOCATION SKETCH/COMMENTS						SCALE:		
PROJECT <u>FUSRAP/SWS</u>						HOLE NO. <u>340 6229</u>		

# HTRW DRILLING LOG

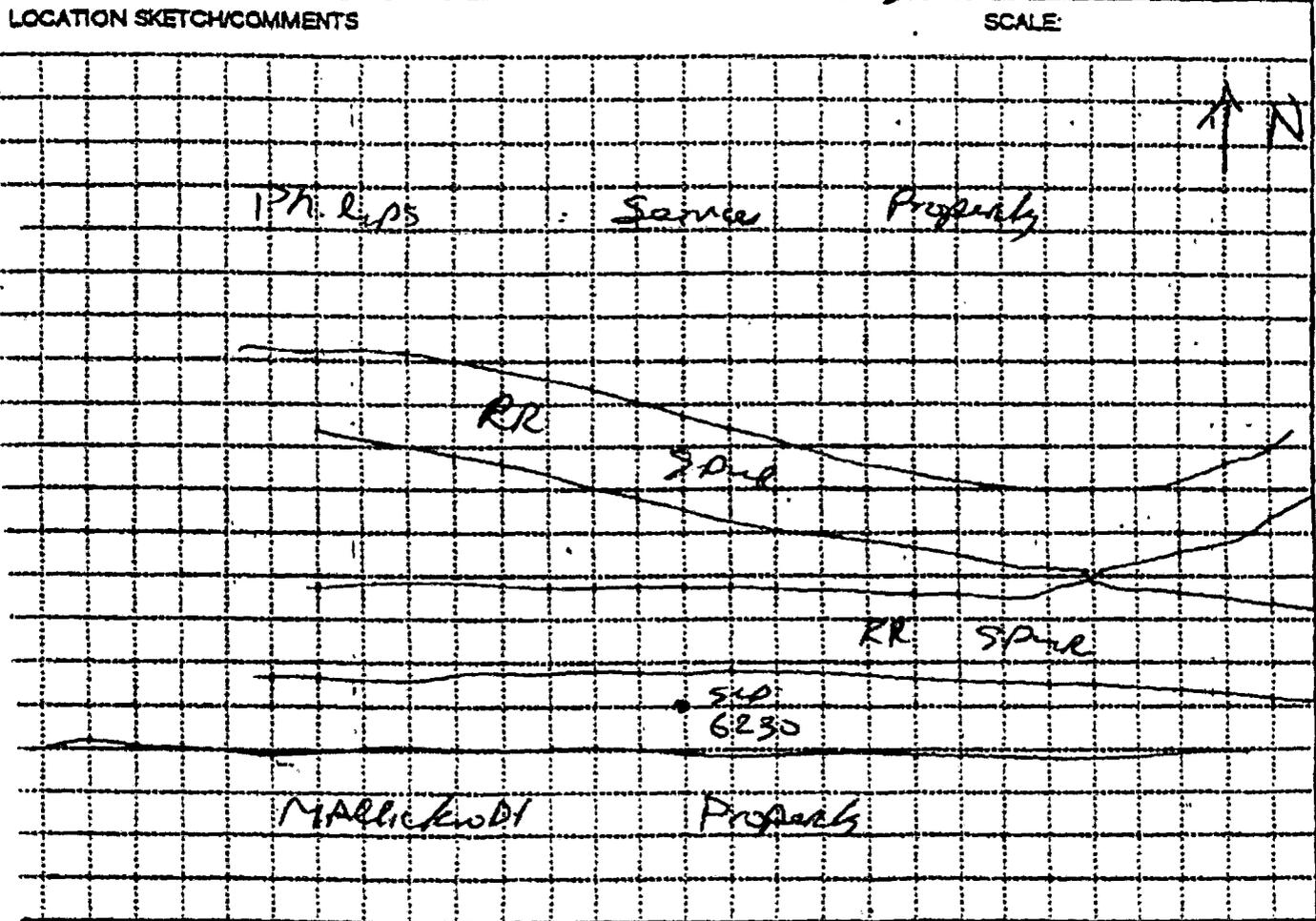
PROJECT <i>FUSPAD/SWS</i>		INSPECTOR <i>Chris Lock</i>			WELL NUMBER <i>SWS 6229</i>	
ELEV. NO.	DEPTH OF	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULT	DEPTEN SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	REMARKS
SW	1	SAND, GRAVEL, Brown, HARD, LOOSE, Dry Fill.	6200 counts NFI PPM PPM	20.5 ton/ft <sup>3</sup>	SWS 6229 0839	1.5 2.0 porosity
		Brick				
SW	2	SAND, GRAVEL Brown, HARD, DOOSE, Dry Fill	5600 counts NFI PPM PPM		SWS 6254 0841	-
	3	TID	2.0	6.1	0850	hrs 10/12/00 DIA: 4 (7" dia) 5300 counts P-I Background Bottom of CRP for BF

5300

PROJECT *FUSPAD/SWS*

WELL NO. *SWS 6229*

<b>HTRW DRILLING LOG</b>		DISTRICT <i>St. Louis</i>		HOLE NUMBER <i>SD 6230</i>	
1. COMPANY NAME <i>IT Corporation</i>		2. DRILL SUBCONTRACTOR <i>Geotechnology</i>		SHEET <i>1</i> OF <i>2</i>	
3. PROJECT <i>FUSRAP/SWS</i>		4. LOCATION <i>Philips Service</i>			
5. NAME OF DRILLER <i>Jim McDonald</i>		6. MANUFACTURER'S DESIGNATION OF DRILL <i>CME 35</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>1 1/2" Hollow Split Spoon Hollow Split Spoon</i>		8. HOLE LOCATION <i>Delmar</i>		9. SURFACE ELEVATION	
10. OVERBURDEN THICKNESS		10. DATE STARTED <i>10/23/00</i>		11. DATE COMPLETED <i>10/27/00</i>	
12. DEPTH DRILLED INTO ROCK		12. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
14. TOTAL DEPTH OF HOLE		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
15. GEOTECHNICAL SAMPLES		14. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>		15. TOTAL NUMBER OF CORE BOXES	
16. DISTURBED		16. UNDISTURBED		17. TOTAL NUMBER OF CORE BOXES	
18. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
19. DISPOSITION OF HOLE		BAG FILLED		MONITORING WELL	
20. OTHER (SPECIFY) <i>RR</i>		OTHER (SPECIFY)		OTHER (SPECIFY)	
21. TOTAL CORE RECOVERY		22. SIGNATURE OF INSPECTOR <i>[Signature]</i>		22. SIGNATURE OF INSPECTOR <i>[Signature]</i>	



PROJECT <i>FUSRAP/SWS</i>	HOLE NO. <i>SD 6230</i>
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# HTRW DRILLING LOG

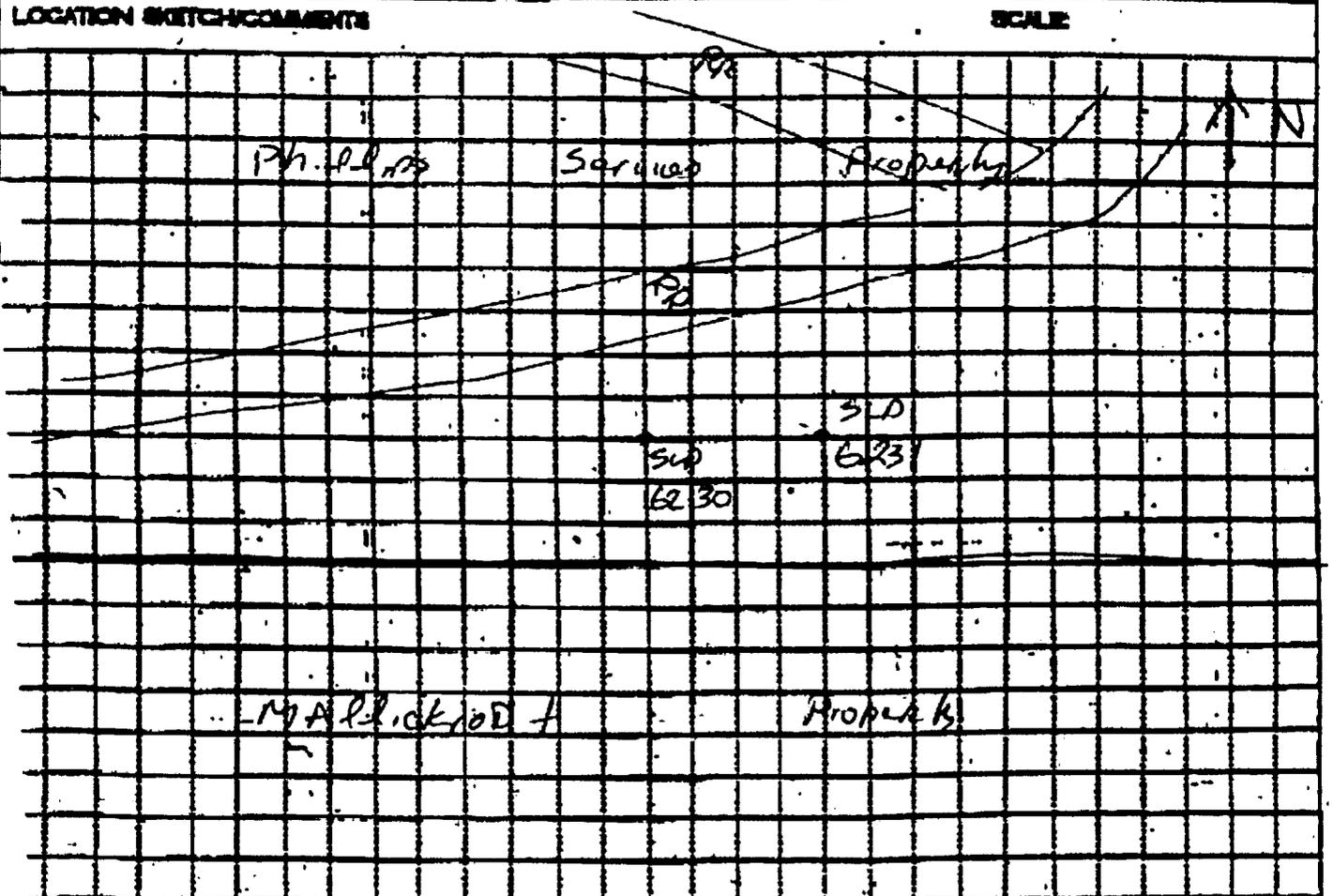
PROJECT		INSPECTOR		WELL NUMBER		SHEET	
FUSPAP/SURS		Chris Lock		540 6230		02 of 2	
CL. ID	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENERING RESULTS	DEPTH SAMPLE OR CORE ID	ANALYTICAL SAMPLE NO.	REMARKS	
CL	1	S. Bk LEAN CLAY Brown - HARD, Dense Dry FS	8100 COUNTS NET  PPM P/P		540 6230 0846	1.6	Rawray
	2		7500 COUNTS NET  PPM P/P		540 6255 0846	2.0	
	3			2.0 ft 0900		hrs 10/23/00  Drum: 1 (p.h. d.p.s) 6800 counts NET Background  Bentonite chips for BF.	

(652)

PROJECT FUSPAP/SURS

WELL NO 540 6230

<b>HTRW DRILLING LOG</b>		ST. Louis		SIP 6234	
1. COMPANY NAME IT CORPORATION		2. WELL IDENTIFICATION Geotechnology		3. WELL NUMBER 1-2	
3. PROJECT FUSRAP/S405		4. OPERATOR Phelps Service			
5. NAME OF OWNER JIA McDONNELL		6. WELL IDENTIFICATION CME 55			
7. WELL AND TYPICAL COORDINATES AND GRADE ELEVATION Hwy 100 Spm 4422 Spt 1 3700N		8. WELL NUMBER 10/10/00		9. WELL NUMBER 10/10/00	
10. WELL IDENTIFICATION		11. WELL IDENTIFICATION N/A			
12. WELL IDENTIFICATION		13. WELL IDENTIFICATION N/A			
14. WELL IDENTIFICATION		15. WELL IDENTIFICATION N/A			
16. WELL IDENTIFICATION		17. WELL IDENTIFICATION			
18. WELL IDENTIFICATION		19. WELL IDENTIFICATION			
20. WELL IDENTIFICATION		21. WELL IDENTIFICATION			
22. WELL IDENTIFICATION		23. WELL IDENTIFICATION			
24. WELL IDENTIFICATION		25. WELL IDENTIFICATION			
26. WELL IDENTIFICATION		27. WELL IDENTIFICATION			
28. WELL IDENTIFICATION		29. WELL IDENTIFICATION			
30. WELL IDENTIFICATION		31. WELL IDENTIFICATION			



PROJECT FUSRAP/S405	WELL NO. SIP 6231
FORM 108-1, AUG 84	

# HTRW DRILLING LOG

FUSRAP/SLDS		Chris Cook			SLD 6231
DATE	TIME	DESCRIPTION OF MATERIAL	7400 COUNTS NET	7800 COUNTS NET	PPM PIP
CL	1	S. 24 Low clay Brown. Hard, Dense, Dig. Flk.	7400 COUNTS NET		SLD 6231 1536
	2		7800 COUNTS NET		SLD <del>6231</del> 1534
	3	TID	2.0	6+	1545
					1.5/2.5 Ppcorns  6256  his 10/10/00 Dran: 2C Phillips Service 7800 counts NET BACK ground Bentonite chips for BF

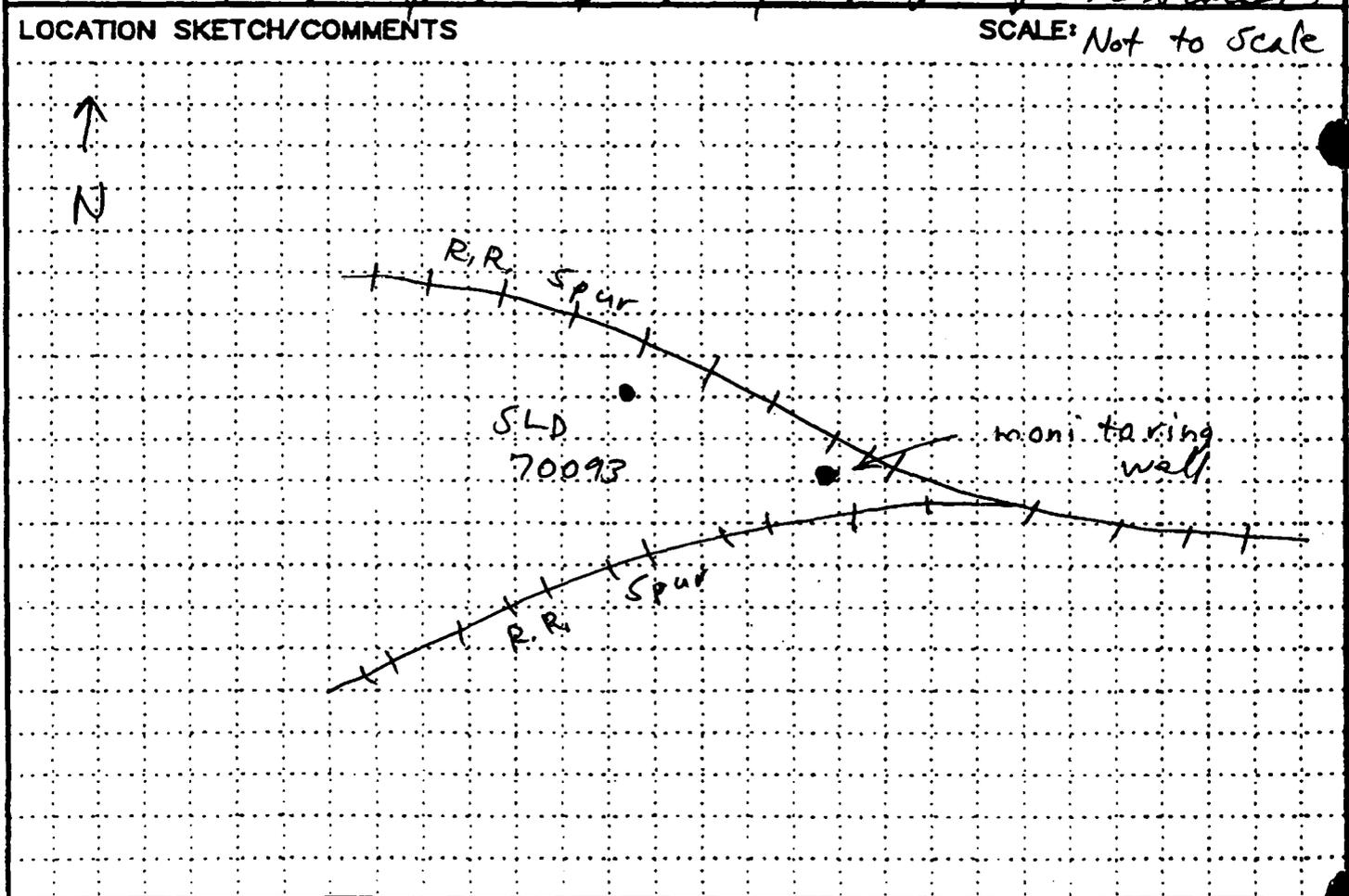
7800

FUSRAP/SLDS

SLD 6231

# HTRW DRILLING LOG

1. COMPANY NAME <b>IT Corp.</b>		2. DRILLING SUBCONTRACTOR <b>Layne - Western</b>		HOLE NUMBER: <b>SLD 70093</b>	
3. PROJECT <b>FUSRAP / SLDs</b>		4. LOCATION <b>PSC Metals</b>		SHEET <b>1</b> OF <b>3</b> SHEETS	
5. NAME OF DRILLER <b>Charles Riffle</b>		6. MANUFACTURER'S DESIGNATION OF DRILL <b>CME 75</b>		8. HOLE LOCATION	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>CME 75 using 4 1/4" Hollow Stem Auger and 3 in. x 2' split spoon. Nat: LUD 172059</b>		9. SURFACE ELEVATION		10. DATE STARTED <b>5-7-02</b>	
12. OVERBURDEN THICKNESS <b>N/A</b>		15. DEPTH GROUNDWATER ENCOUNTERED <b>12.0' BGS</b>		11. DATE COMPLETED <b>5-7-02</b>	
13. DEPTH DRILLED INTO ROCK <b>N/A</b>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>	
14. TOTAL DEPTH OF HOLE <b>14.0' BGS</b>		18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY		23. SIGNATURE OF INSPECTOR <b>Phillip Or Staller</b>	
22. DISPOSITION OF HOLE		DISTURBED		UNDISTURBED	
VOC		METALS		OTHER (SPECIFY)	
BAO/FILLED		MONITORING WELL		OTHER (SPECIFY)	



PROJECT <b>FUSRAP / SLDs</b>	HOLE NO. <b>SLD 70093</b>
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HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 70093
PROJECT FUSRAP/SLDS		OPERATOR Phillip Statler					SHEET 2 of 3
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	RECOVERY	ANALYTICAL SAMPLE NO.	BLOW COUNT	REMARKS	
SM	1 silty sand w/ fine gravel, loose, poorly graded, lt. brn., moist, one large piece of glass. med. gravel	6300	2.0	SLD 70093 5784	14		
		5500	0.0		22		
		5500	2.0		25		
	2 silt becoming blk., less sand, pieces of glass. wood in tip	5800	0.0		28		
		5900	0.0		8		
	3 few med. gravel few clay	5600	2.0		14	rough augering	
		5300	0.0		25		
		5000	0.0				
	4 brick fragments and med. gravel	5900	0.0		SLD 70094 1050	28	
		5700	0.0			8	
CL	5 silty clay, silt, med. plast., dk. brn. to blk., little gravel, moist.	5900	1.7		8	taken at 1180	
		5700	0.0	archive sample taken	8		
		5600	0.0		14		
SM	6 piece of wood, silty sand, med. gravel, loose, poorly graded, dk. brn. to blk., moist, piece of wood.	5400	1.7		14		
		5400	0.0		22		
		5400	0.0	no recovery	25		
		5200	0.0		4		
CL	7 silty clay, med. stiff, med. plast., dk. brn., moist.	5600	1.7		4	archive geological sample taken from 6.7-7.2' 895 coil observed on cuttings.	
		5500	0.0	archive sample (1145)	8		
		5500	0.0		9		
CL	8 clay becoming lt. grey, few brick frags. mottled grey/green.	5900	no recovery		7	SLD 70099 5-16-02 1285 P.S.	
		5700	0.0		5		
9		5400	0.0	archive			

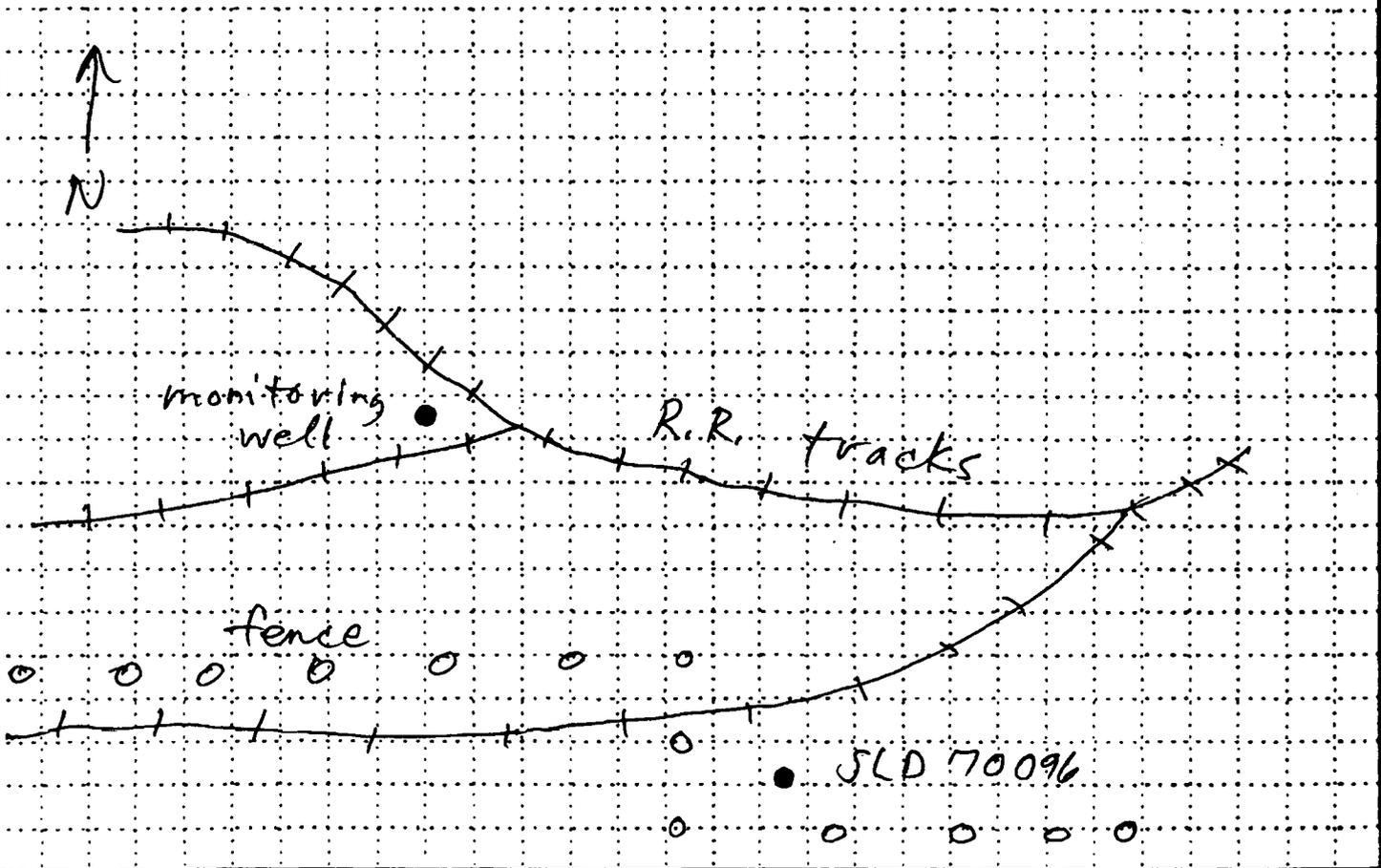
Continued on Page 1

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 70093
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Statler			SHEET 3 of 3	
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS (ft)	RECOVERY	ANALYTICAL SAMPLE NO.	BLDG. COUNTY	REMARKS
10 11 12 13 14	few wood frags	5300 PID 0.0	no recovery	Sample taken (1395)	7	
	becoming more moist	5600 - 0.0	no recovery		8	
		5800 0.0	1.7 / 2.0		1	
		5200 0.0			5	
	wood frags	5400 0.0		archive sample taken 1420	6	← in-situ encountered
		5800 0.0	no recovery		8	→ SLD 70110 5-11-02 -1305 P.S.
		5A00 0.0				
		6000 0.0		archive sample taken 1420 P.S.		sample taken at 1420
			no recovery			
TD: 14.0' BGS 1420 5-7-02						Background: NaI: 6000 PID: 0.0 Backfilled w/ Bentonite Slurry Grout P.S. (1.5 bags / 30 gal. H <sub>2</sub> O) Soil cuttings in Drum #1.

<b>HTRW DRILLING LOG</b>		DISTRICT	St. Louis		HOLE NUMBER:	SLD 70096	
1. COMPANY NAME		IT Corp.		2. DRILLING SUBCONTRACTOR		Layne-Western	
3. PROJECT		FUSRAP/SLDS		4. LOCATION		PSC Metals	
5. NAME OF DRILLER		Charles Riffle		6. MANUFACTURER'S DESIGNATION OF DRILL		CME 75	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		CME 75 using 4 1/2"		8. HOLE LOCATION			
Hollow stem Augers and 3 in. X 2' Split spoon:		Nat. LUD 149963		10. DATE STARTED		5-8-02	
P20 cal. due date 4-1-03 AKB:5900				11. DATE COMPLETED		5-8-02	
12. OVERBURDEN THICKNESS				15. DEPTH GROUNDWATER ENCOUNTERED		8.0' BGS	
13. DEPTH DRILLED INTO ROCK				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED		N/A	
14. TOTAL DEPTH OF HOLE		16.0' BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)		N/A	
18. GEOTECHNICAL SAMPLING		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
		0		0		N/A	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
		0		0		RAP	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
		0		0		0	
						23. SIGNATURE OF INSPECTOR	
						Wally M. Stoltz	

**LOCATION SKETCH/COMMENTS**

SCALE: Not to Scale



PROJECT	FUSRAP/SLDS	HOLE NO.	SLD 70096
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HTRW DRILLING LOG (CONTINUATION SHEET)							HOLE NUMBER SLD 70096		
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Stalter			SHEET 2 OF 3				
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SOIL SAMPLE NO. (ft)	RECOVERY (%)	ANALYTICAL SAMPLE NO. (ft)	BLOW COUNT (ft)	REMARKS			
SP 1	fine sand and gravel w/ few cinders and silt, loose, poorly graded, lt. brn. to brn., moist	6700	0.0	2.0 / 2.0	SLD 70096 5-8-02 1040	3			
		6900	0.0			4			
		6400	0.0			6			
2	silty clay, stiff, med. plast., moist, lt. brn., trace sands few med gravel	5600	0.0	1.8 / 2.0	SLD 70097 1045	12			
		5900	0.0			6			
3		5700	0.0	1.8 / 2.0	PSC 00150 5-8-02 110	12			
		5400	0.0			13			
4	piece of wood	5300	0.0	no recovery		8			
		6100	0.0			2			
5		5400	0.0	1.7 / 2.0	PSC 00131 archive sample 5.2-5.7 805	4	PSC 00131 5.2-5.2' 805 MS archive geological sample (1120) ↓ SLD 70111 5-16-02 to P.S.		
		6000	0.0			3			
6	low med. gravel	5500	0.0	no recovery		39			
		N/A	N/A			47			
7		N/A	N/A	no recovery		27			
		N/A	N/A	recovery		14			
8		N/A	N/A	recovery		8	rough augering in-situ encountered rough augering		
		6700	0.0	1.6 / 2.0		3			
9	becoming soft, few sand (sand well-rounded) color slightly grey.	6000	0.0	1.6 / 2.0	PSC 00132 1300	6			
		6000	0.0						
Continued on Page 2 of 3									

**HTRW DRILLING LOG (CONTINUATION SHEET)**

PROJECT **FUSRAP/SLDS** INSPECTOR **Phillip Statler** HOLE NUMBER **SLD 70096**

SHEET **3** OF **3** SHEETS

DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SOILS REPORT (ft)	RECOVERY	ANALYTICAL SAMPLE NO.	BLOW COUNT	REMARKS
10	Same as above	5600 0.0		archive sample 1330	6	archive geo. sample taken from 9.0-9.5 BGS
		N/A	no recovery		6	
		6700 -0.0			1	
11		5700 0.0	1.6 / 2.0	PSC 00133 1340	3	
		5400 0.0		archive sample 1345	4	
		5300 0.0	no recovery		6	
13		N/A		P.S. 117	1	wet, silty residue observed in spoon
		N/A	no recovery	P.S. 117	3	
		N/A	(due to loss of fine material)		3	
		N/A			6	
15	Same as above	5400 0.0	1.5 / 2.0		3	
		5500 0.0			5	
		5700 0.0		PSC 00134 1425	3	
		N/A	no recovery		4	

CL

TD: 16.0' BGS  
1416  
5-8-02

Background:  
NaI: 5900  
PID: 0.0  
Soil Cuttings in Drum #1  
Backfilled w/ 1.5 bags bent. slurry grout / 30 gal. H<sub>2</sub>O.

HTRW DRILLING LOG		DISTRICT <u>St Louis</u>		HOLE NUMBER: <u>SLD 70099</u>	
1. COMPANY NAME <u>Shaw ENI</u>		2. DRILLING SUBCONTRACTOR <u>Layne - Western</u>		SHEET <u>1</u> OF <u>3</u>	
3. PROJECT <u>FUSRAP/SLDS</u>		4. LOCATION <u>PSC Metals</u>			
5. NAME OF DRILLER <u>Charles Riffle</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 75</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>CME 75 using 4 1/2" Hollow Stem Augers and 3 in. x 2' split spoon. Not: LUD 169287</u>		8. HOLE LOCATION			
9. SURFACE ELEVATION		10. DATE STARTED <u>5-9-02</u>		11. DATE COMPLETED <u>5-9-02</u>	
12. OVERBURDEN THICKNESS <u>N/A</u>		15. DEPTH GROUNDWATER ENCOUNTERED <u>10.0' BGS</u>			
13. DEPTH DRILLED INTO ROCK <u>N/A</u>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>			
14. TOTAL DEPTH OF HOLE <u>16.0' BGS</u>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>			
18. GEOTECHNICAL SAMPLES		DISTURBED <input type="checkbox"/>		UNDISTURBED <input type="checkbox"/>	
19. TOTAL NUMBER OF CORE BOXES		0			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC <input type="checkbox"/>		METALS <input type="checkbox"/>	
		OTHER (SPECIFY) <u>RAD</u>		OTHER (SPECIFY) <input type="checkbox"/>	
21. TOTAL CORE RECOVERY <input type="checkbox"/>		0%			
22. DISPOSITION OF HOLE		BACKFILLED <input type="checkbox"/>		MONITORING WELL <input type="checkbox"/>	
		OTHER (SPECIFY) <input type="checkbox"/>		23. SIGNATURE OF INSPECTOR <u>Blatter on Plate</u>	
LOCATION SKETCH/COMMENTS					
SCALE: Not to Scale					
<p>The sketch shows a grid with a north arrow pointing up. A horizontal line represents the McKinley Bridge. Below it, a diagonal line with cross-ticks represents the R.R.P. Track. To the right of the track is a vertical line with circles representing a fence. A solid black dot marks the location of hole SLD 70099, situated between the track and the fence.</p>					
PROJECT <u>FUSRAP/SLDS</u>				HOLE NO. <u>SLD 70099</u>	

Figure 4-2. HTRW Drilling Log

HTRW DRILLING LOG (CONTINUATION SHEET)							HOLE NUMBER SLD 70099	
PROJECT FUSRAP/SLDS			INSPECTOR Phillip Stalter			SHEET 2 of 3 SHEETS		
ELEV. (1)	DEPTH (1)	DESCRIPTION OF MATERIALS (1)	FIELD SOLENOID REELS (1)	RECOVERY (1)	ANALYTICAL SAMPLE NO. (1)	SLOW COUNT (1)	REMARKS (1)	
SM		silty sand, fine, loose, poorly graded, dk. brn., moist., few med. gravel.	6600 0.0		SLD 70099 5-9-02 1030	4		
CL	1	silty clay, soft, med. plast., lt. brn. to brn., moist., brick frag frags	6700 0.0	2.0 2.0		4		
			6700 -0.0			6		
SM	2	trace coarse gr. low med gravel, trace sbbles	6800 0.0		SLD 70100 5-9-02 1035	6		
		silty sand, fine, loose, poorly graded, dk. brn., moist., trace dendars and fine gravel, few ash.	7300 0.0			4		
CL	3	becoming wet	7600 0.0	1.3 2.0	SLD 70101 1045	3		
		silty clay w/ few sand (fine), soft, med. plast., lt. brn., wet.	6900 0.0				1	
CL	4		N/A N/A	no recovery		1		
		piece of wood	6400 0.0				1	
SM	5	silty sand w/ trace clay, fine, loose, poorly graded, dk. brn., moist., trace med. gravel	6700 0.0	2.0 2.0		1		
			6100 0.0			2	P.S. in situ encountered @ 6.5' BGS	
CL	6	clay w/ low silt, very soft, med. plast., lt. brn. to gry., moist.	5900 0.0		archive sample 5.3-5.8 BGS	3	archive geo. sample taken at 1105 (SLD 70113, 5-16-02, 1035)	
		wood frags.	6600 0.0	1.6 2.0	archive sample 6.0-6.6 BGS	1	archive geo. sample taken at 1115	
CL	7	few very fine sand	6300 0.0				1	
		silty clay w/ few fine sand, very soft, lt. brn., med. p. last., moist.	5700 0.0			1		
CL	8		N/A	no recovery		3		
			6300 0.0			archive sample 8.1-8.6 BGS	weight of hammer	archive geo. sample taken at 1140 (SLD 70113, 5-16-02, 1030) P.S.
		wood layer, weathered	6100 0.0	1.6 2.0	archive	1		

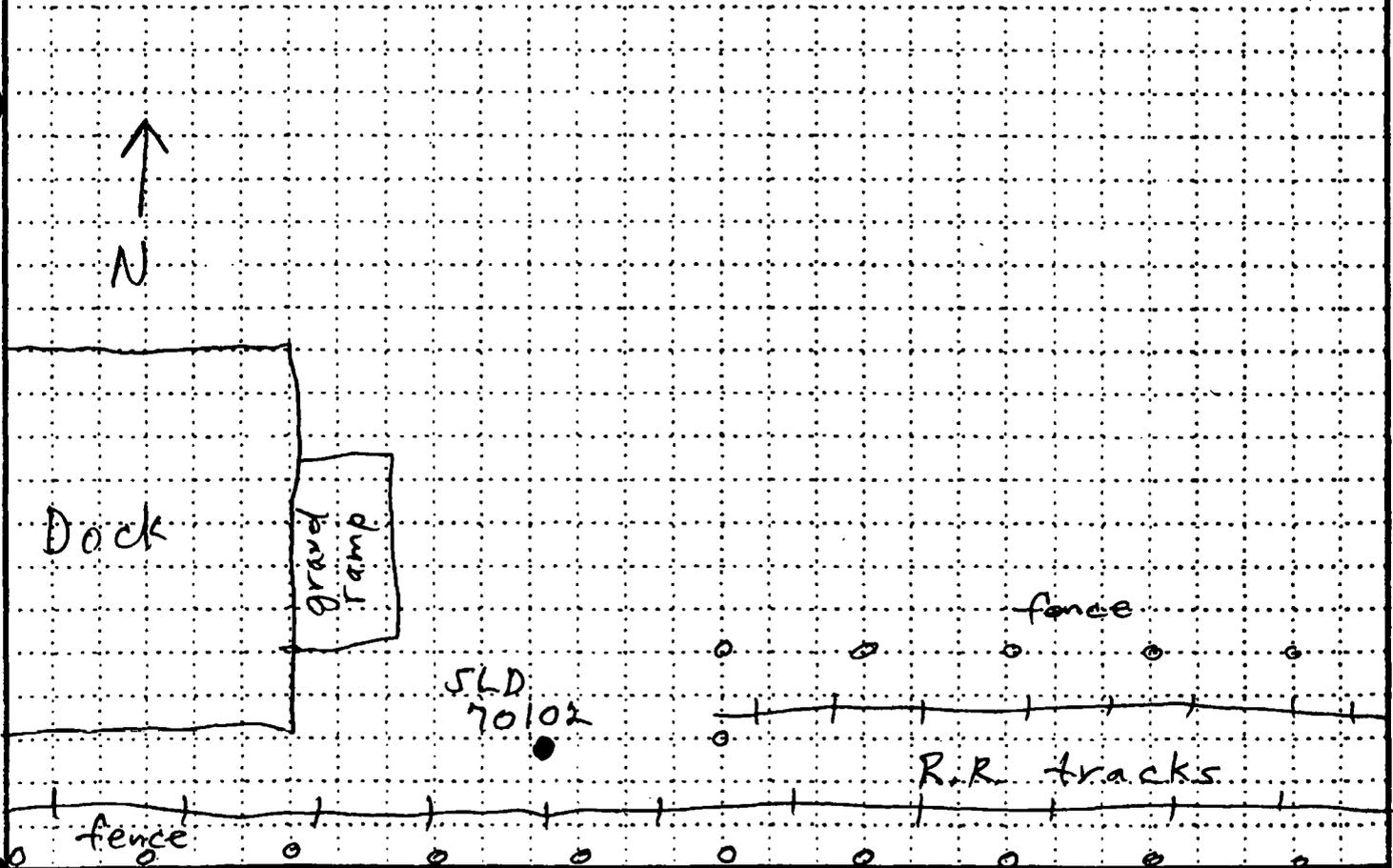
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HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 70099
PROJECT FUS RAP/SLDS		INSPECTOR Phillip Stator			SHEET 3 OF 3		
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD PENETROMETER READING (psi)	RECOVERY SAMPLE NO. OR CHS. NO. (ft)	ANALYTICAL SAMPLE NO.	BLOW COUNT	REMARKS	
CL	few wood frags. piece of wood (pine)	N/A 6300 0.0	PIID	Sample taken, 2.7-9.4 BGS	1	geo. sample taken at 1130	
10.5	silty sand w/ <del>fine</del> clay, fine, loose, poorly graded, lt. brn. to gry., <del>with</del> saturated.	N/A	no recovery		5	← in-situ encountered	
		6500 -0.0			2		
11		6600 0.0	1.7 / 2.0		2		
		6200 0.0			3	geo. archive sample, 11.2-11.7 BGS	
11.5		6400 0.0			5	1325 (SLD 70114) 5-16-02: <del>1325</del> P.S.	
13	silty clay, very soft, med. plast., gry., saturated.	6100 0.0	2.0 / 2.0	archive sample, 12.0-12.5 BGS	weight of hammer	geo. archive sample 1335	
		6500 0.0			weight of hammer		
		6400 0.0					
14	TD: 14.0' BGS 1330 5-9-02					Back ground NaI: 6400 PIID: 0.0 Soil cuttings placed in Drum #1. Back-filled w/ bentonite slurry grout @ 20-30% P.S. 1.5 bags / 23 gal 4.0	

HTRW DRILLING LOG		DISTRICT	WELL NUMBER
1. COMPANY NAME Shaw E & I		St. Louis	SLD 70102
2. DRILLING SUBCONTRACTOR Layne - Western			SHEET 1 OF 3 SHEETS
3. PROJECT FUSRAP / SLDs		4. LOCATION PSC Metals	
5. NAME OF DRILLER Charles Riffle		6. MANUFACTURER'S DESIGNATION OF DRILL CME 75	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT CME 75 using 4 1/2" Hollow Stem Auger and 3 in x 2' split cones Nal: LUD 169237 cal. due dates 1-25-02 PKG: 2400		8. HOLE LOCATION	
9. SURFACE ELEVATION		10. DATE STARTED 5-13-02	
11. DATE COMPLETED 5-13-02		12. OVERBURDEN THICKNESS N/A	
13. DEPTH DRILLED INTO ROCK N/A		15. DEPTH GROUNDWATER ENCOUNTERED 12.0' BGS	
14. TOTAL DEPTH OF HOLE 16.0' BGS		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		18. GEOTECHNICAL SAMPLES	
19. TOTAL NUMBER OF CORE BOXES 0		DISTURBED <input type="checkbox"/> UNDISTURBED <input type="checkbox"/>	
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %	
VOC <input type="checkbox"/> METALS <input type="checkbox"/> OTHER (SPECIFY) <input type="checkbox"/>		RAD <input type="checkbox"/> OTHER (SPECIFY) <input type="checkbox"/>	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR	
BACKFILLED <input type="checkbox"/> MONITORING WELL <input type="checkbox"/> OTHER (SPECIFY) <input type="checkbox"/>		Phillip M. Statten	

LOCATION SKETCH/COMMENTS

SCALE: Not to Scale



PROJECT: FUSRAP / SLDs	HOLE NO. SLD 70102
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HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 70102	
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Statler			SHEET 2 of 3		
CLV. (1)	DEPTH (2)	DESCRIPTION OF MATERIALS (3)	FIELD SCREENING RESULTS (4)	RECOVERY (5)	ANALYTICAL SAMPLE NO. (6)	BLDG CORRECTION (7)	REMARKS (8)
SM	1	silty sand (fine) w/ few med. gravel, loose, poorly graded, dk. brn. to blk, moist	8900 0.0	2.0 / 2.0	SLD 70102 5-13-02 1320	7	
		few slag, few broken glass, few cinders	8600 0.0		70103 1335	7	
		few brick frags.	8500 0.0			8	
			8400 0.0			14	
SM	2		8100 6.0	2.0 / 2.0		11	
		brick fragments, white tile frags.	8500 0.0		SLD 70104 1345	22	
			7900 0.0			25	
SM	4	cinder layer	8300 0.0	no p.s. recovery		16	
			7500 0.0		5		
		few sand (fine) white	7600 0.0		5	archive geo. sample collected at 1405. (SLD 70121)	
CL	5	silty clay w/ few fine sand, med. stiff, med. plast, lt. brn., moist.	7600 0.0	2.0 / 2.0		7	
			7500 0.0			5	
			8100 0.0			9	
		mottled brown and grey.	7400 0.0			5	
SM	7	silty fine sand w/ few clay, loose, poorly graded, lt. brn., moist	7800 0.0	2.0 / 2.0		7	
			6900 0.0			11	archive geo. sample collected at 1420 (SLD 70122)
			8400 0.0		archive sample 72-27 BGS	12	
CL	8	silty clay w/ few fine sand, stiff, med. plast, lt. brn to grey, moist	7500 0.0	1.8 / 2.0		5	
		brick frag.	8100 0.0			5	
	9						

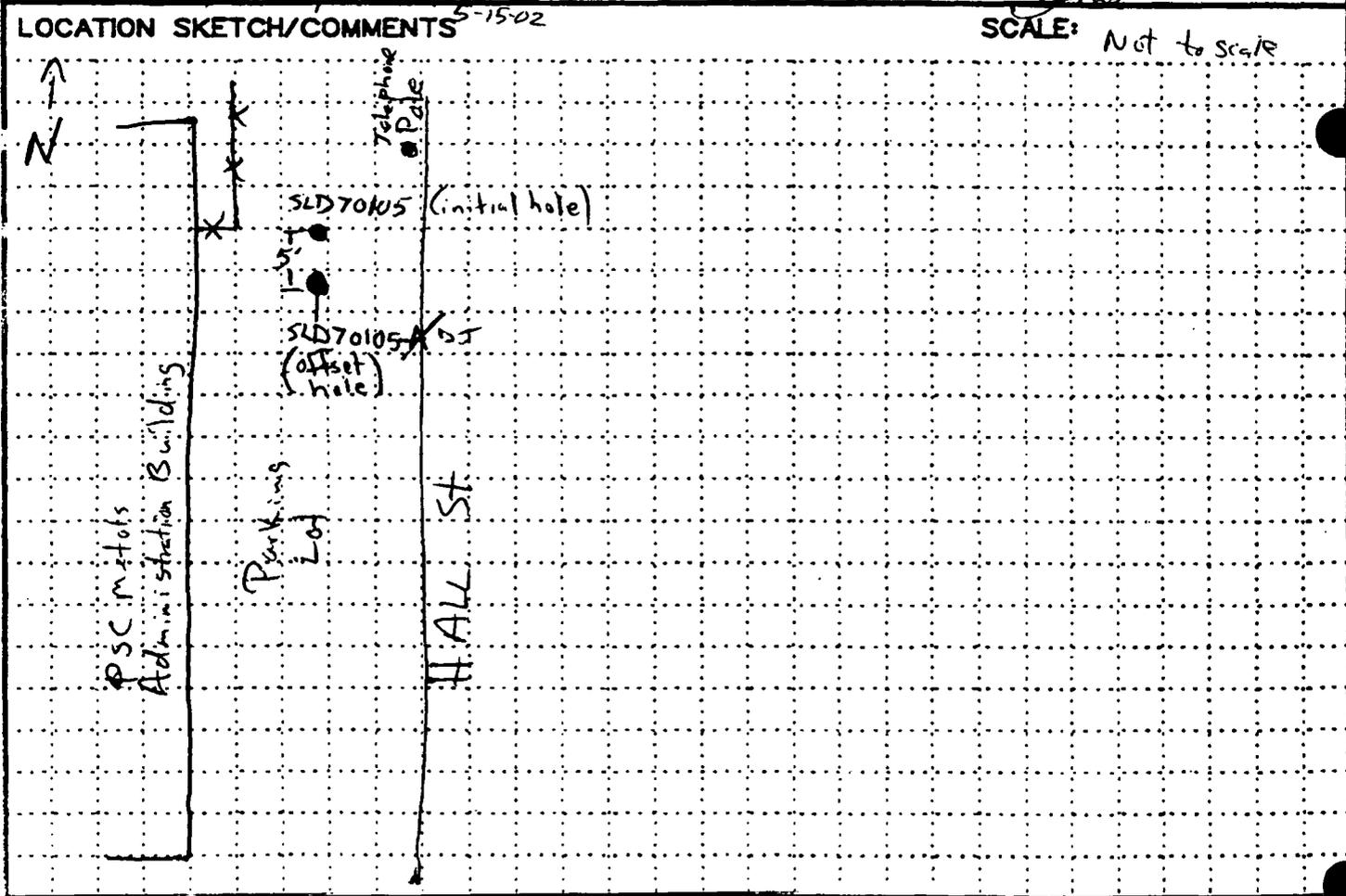
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Page 3

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 70102
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Stotler					SHEET 3 of 3
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD OBSERVED RESULTS	LABORATORY RESULTS	ANALYTICAL SAMPLE NO.	BLANK COUNT	REMARKS	
10	clay turning <del>grey</del> mostly grey	8300 0.0	no recovery	SLDS archive sample	4	9.3-9.8' BGS archive geo. sample. Collected at 1225 P.S. (SLD 70123)	
		7800 0.0			3		
11	silty fine sand w/ few clay, loose, poorly graded, grey, moist.	7200 -0.0	1.7 / 2.0		15	← in-situ encountered	
		7600 0.0			28		
		8000 0.0			44		
		N/A N/A			67		
12	saturated	7800 0.0	no recovery			archive geo. sample from 11.2-11.7' BGS. Collected at 1450. (SLD 70124)	
13	SM	8100 0.0	1.8 / 2.0		weight of hammer	archive geo. sample from 13.3-18.7' BGS Collected at 1500	
		7900 0.0			weight of hammer		
		7800 0.0			weight of hammer		
14		6800 0.0	no recovery		2		
		6100 0.0			1		
		6200 0.0			2		
15		6100 0.0	2.0 / 2.0		1		
		6100 0.0			archive (1600) sample 1159		
16		6100 0.0			2	archive geo. sample from 15.5-16.0' BGS.	
TD: 16.0' BGS 5-13-02 1600		Back ground: NaI: 8400 PID: 0.0 Backfilled w/ <del>bags</del> of Bent's slurry grout @ 20-30% 1.5 bags/30gal. H <sub>2</sub> O Drum #1 for soil cuttings					

# HTRW DRILLING LOG

DISTRICT: St. Louis  
 HOLE NUMBER: SLD70105  
 SHEET: 1 OF 3 SHEETS

1. COMPANY NAME <u>IT Corp</u>		2. DRILLING SUBCONTRACTOR <u>Layne Western</u>	
3. PROJECT <u>FUSRAP/SLDS</u>		4. LOCATION <u>PSC Metals</u>	
5. NAME OF DRILLER <u>Charles Rife</u>		6. MANUFACTURER'S DESIGNATION OF DRILL <u>CMF 75</u>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>CMF 75 using Hollow Stem Auger 5.25" 2" x 2' split screen NAT LWD 172059 Cal Due Date 12/03/02</u>		8. HOLE LOCATION	
9. SURFACE ELEVATION		10. DATE STARTED <u>DJ</u> <u>5-15-02</u> 5-14-02	
11. DATE COMPLETED <u>5-15-02</u>		12. OVERBURDEN THICKNESS <u>NA</u>	
13. DEPTH DRILLED INTO ROCK <u>NA</u>		15. DEPTH GROUNDWATER ENCOUNTERED <u>8.5' bgs</u>	
14. TOTAL DEPTH OF HOLE <u>16.5' bgs</u>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>NA</u>	
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>NA</u>		18. GEOTECHNICAL SAMPLES	
DISTURBED <input checked="" type="checkbox"/>		UNDISTURBED <input checked="" type="checkbox"/>	
19. TOTAL NUMBER OF CORE BOXES <u>0</u>		20. SAMPLES FOR CHEMICAL ANALYSIS	
VOC <input checked="" type="checkbox"/>		METALS <input checked="" type="checkbox"/>	
OTHER (SPECIFY) <u>RAD</u>		OTHER (SPECIFY) <input checked="" type="checkbox"/>	
OTHER (SPECIFY) <input checked="" type="checkbox"/>		OTHER (SPECIFY) <input checked="" type="checkbox"/>	
21. TOTAL CORE RECOVERY <u>0%</u>		22. DISPOSITION OF HOLE	
BACKFILLED <input checked="" type="checkbox"/>		MONITORING WELL <input checked="" type="checkbox"/>	
OTHER (SPECIFY) <input checked="" type="checkbox"/>		23. SIGNATURE OF INSPECTOR <u>Don One</u>	



PROJECT: FUSRAP HOLE NO. \_\_\_\_\_

Background 6200

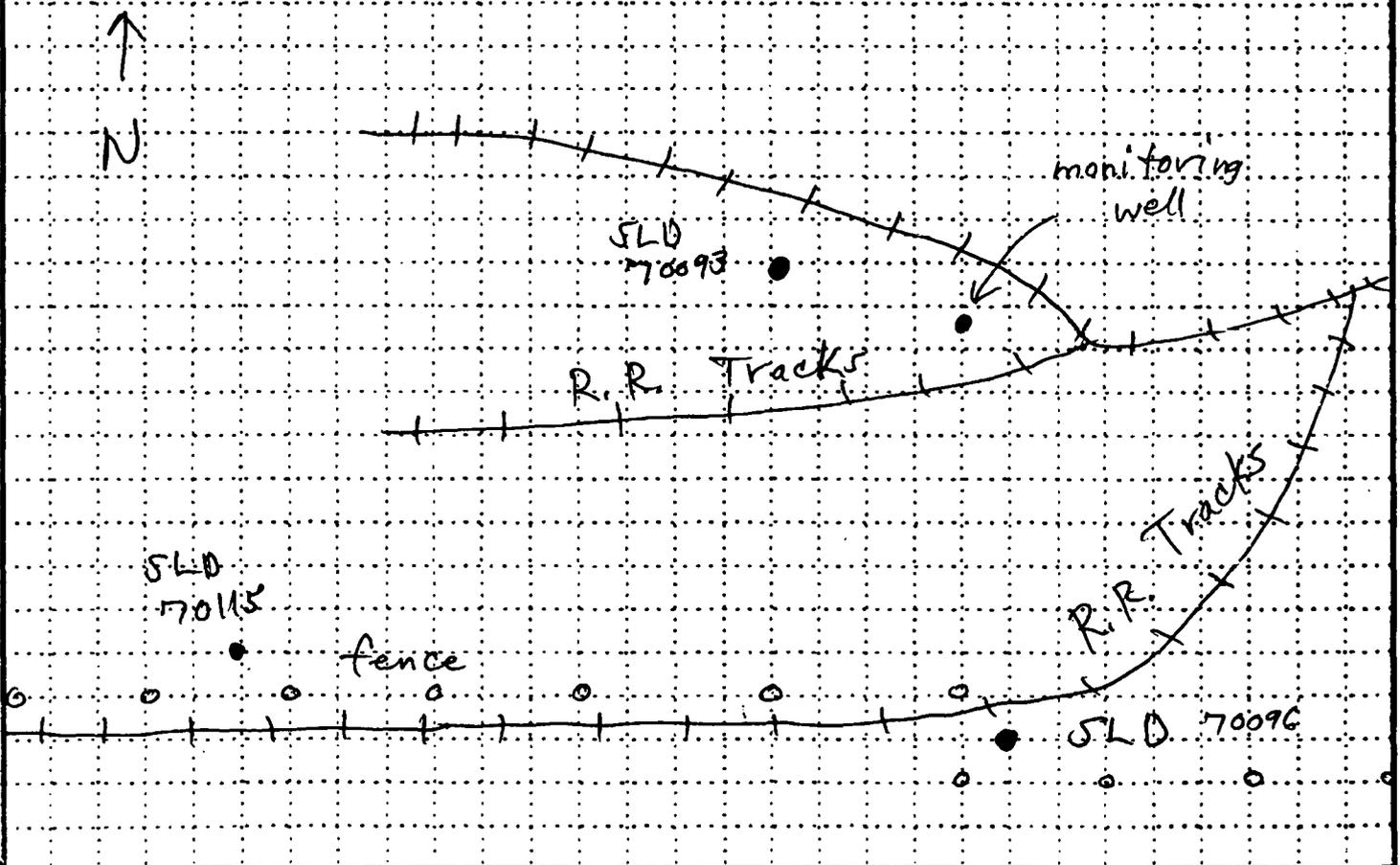
HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 70105
PROJECT		INSPECTOR Don Jones	RECOVERY		SHEET 2 OF 3 SHEETS		
DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SAMPLE NO. (ft)	RECOVERY (ft)	ANALYTICAL SAMPLE NO. (ft)	BLDG CORRECT (ft)	REMARKS	
	Cover material Asphalt (0-0.25) Concrete (0.25-0.5')	6700	0.0	SLD 70105 Cover 5-14-02	1130	Augered to 7.5' bgs (5-15-02)	
SP	Silty sand (Fine) with med gravel, loose, poorly graded, Wet	6,100	0.0	5-16-02 1.0 / $\text{DS}$ 2.0 1.0		on offset hole to continue where initial boring hit refusal on 5-14-02	
	200-ly Graded	6,500	-0.0	SLD 70105 1315 5-14-02		$\text{DS}$ 5-16-02	
SW	Sand with few silt, med to coarse, dark brown, loose to medium, few cinders, moist	6700	0		2	Only pushed spoon 1 to complete 2' sample with respect to yesterday's 1.0' recovery.	
		6800	0		14		
		7000	0	2.0 <del>1.0</del> $\text{DS}$ 2/2	9		
3	increasing amount of cinders	6800	0		13	Compression	
		6900	0		8		
4	Few coal	6900	0		5		
		6900	0	1.7 2.0 / 2.0	5	Geological sample	
SM	Silty sand, fine to med, dark brown, loose to medium, few cinders, moist, trace coal	6200	0	Archive sample collected	51		
		6500	0		25	Geological sample	
GP	Silty gravel, fine, loose, dark brown, moist, few sand, (med)	6100	0	Archive sample collected 1345	2		
			0	No Recovery	2		
					2		
					3		
					2		
					3		
DS	Continued on next page						

HTRW DRILLING LOG (CONTINUATION SHEET)							HOLE NUMBER SLD 7015
PROJECT FUSRAP/SLDS		INSPECTOR	RECOVERY				SHEET 03 2 of 3
ELEV (ft)	DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD LOGGING RESULTS	RECOVERY SAMPLE OR RECOVERY NO.	ANALYTICAL SAMPLE NO.	SLUGS COUNT	REMARKS
		Same as Saturated above @ 9.5	6500		Archive sample collected 1405	Weight	Geological sample (SLD 70125)
CL	9.5	Silty clay, soft, light brown moist to wet	6700	2.0/2.0		5	Compression
		olive grey	6400			10	
			- 0				
GM	10.5	fine to silty gravel, few clay few cinders	7600		Archive sample collected 1410	3	Rad sample
		wood (weathered) and saturated	6700			1	
CL	11.5	Silty clay, soft, dark brown/grey wet	6700	1.7/2.0		2	Gea sample (SLD 70126)
			6700		Archive sample 1420	2	
		wood, grey (possibly processed)	6700		DI	2	
	12.5	(In-situ)	6600	NO RECOVERY		2	
			6300	1.8/2.0	Archive sample 1445	2	In-situ sample (SLD 70127)
			6300			2	
	13.5		6700			1	
		wood (twigs)	6700	NO RECOVERY		2	
	14.5		6700			weight	
			6700	2.0/2.0		weight	
	15.5		6700			weight	
			6600			3	
	16.5	TD = 16.5' bgs Finish Time 1500					
				Back Filled hole with bentonite slurry to 2' bgs Background: 6200 P.I.D. = 0.0		Soil Cuttings in Drum #2	

<b>HTRW DRILLING LOG</b>		DISTRICT St. Louis	HOLE NUMBER SLD 70115	
1. COMPANY NAME Shaw, E & I		2. DRILLING SUBCONTRACTOR Layne - Western		SHEET 1 of 3
3. PROJECT FUSRAP/SLDS		4. LOCATION PSC Metals		
5. NAME OF DRILLER Charles Riffle		6. MANUFACTURER'S DESIGNATION OF DRILL CME 75		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT CME 75 using 4 1/4" Hollow Stem Augers and 3 in. x 2' split spoon NATS LUD 172059 cal. due date 12-13-02 PKG: 6,400		8. HOLE LOCATION		9. SURFACE ELEVATION
12. OVERBURDEN THICKNESS N/A		10. DATE STARTED 5-20-02		11. DATE COMPLETED 5-20-02
13. DEPTH DRILLED INTO ROCK N/A		15. DEPTH GROUNDWATER ENCOUNTERED 8.0' BGS		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A
14. TOTAL DEPTH OF HOLE 10.0' BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %		
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR		

**LOCATION SKETCH/COMMENTS**

SCALE: Not to Scale



PROJECT FUS RAP / SLDS	HOLE NO. SLD 70115
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HTRW DRILLING LOG (CONTINUATION SHEET)						WELL IDENTIFICATION SLD 70115	
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Stalter				SHEET 2 OF 3	
DEPTH (ft)	DESCRIPTION OF MATERIALS (1-8)	FIELD SAMPLE DEPTH (ft)	RECOVERY (%)	ANALYTICAL SAMPLE NO. (9)	BLOW COUNT (10)	REMARKS (11)	
1	silty sand (fine) w/ few med gravel and clay, loose, poorly graded, dk. brn., dry, few cinders and brick frags.	6,500	0.0	1.6 / 2.0	SLD 70115-1	6	
		6,600	0.0		5-20-02 1055	18	
		6,700	0.0		SLD 70116 1106	22	
2	sandstone frags.	5,600	0.0	no recovery		7	
		6,200	0.0	1.3 / 2.0	SLD 70117 1115	10	
		5,800	0.0			11	
3	brick frags piece of porcelain	6,100	0.0	no recovery		9	
		N/A	N/A			5	
		6,100	0.0			2	
4	P.S. silty sand w/ few clay, loose, poorly graded, gry, moist.	6,100	0.0	1.8 / 2.0	archive sample 1120	2	archive sample from 4.0-4.5' BGS (SLD 70128)
		6,000	0.0			5	
		6,100	0.0			6	
5		5,900	0.0	no recovery		8	
		6,200	0.0	1.8 / 2.0		2	
		6,500	0.0			5	
6	piece of wood	6,000	0.0	no recovery	archive sample 1135	6	archive sample from 6.8-7.3865 (SLD 70129)
		5,900	0.0			7	
		6,100	0.0			3	
7		5,700	0.0	1.8 / 2.0		4	
		6,100	0.0				
8	clay increasing	5,700	0.0				
		6,100	0.0				

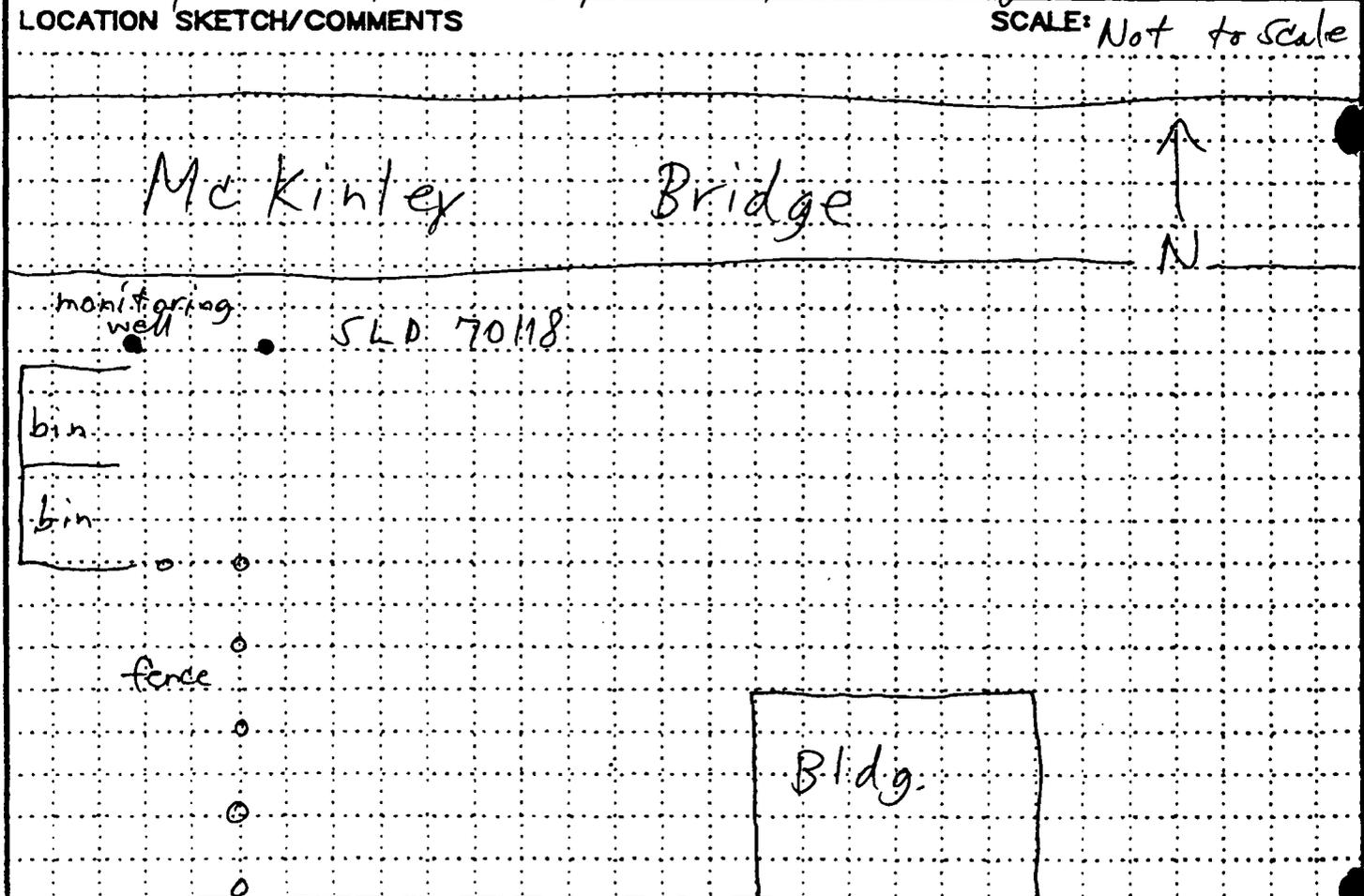
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HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 70115
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statter			SHEET 3 of 3 SHEETS		
CREW (1)	DEPTH (2)	DESCRIPTION OF MATERIALS (3)	FIELD SAMPLES RECOVERED (4)	RECOVERY BY OTHER MEANS (5)	ANALYTICAL SAMPLE NO. (6)	BLOW COUNT (7)	REMARKS (8)
SM	10	Same as above	5600	recovery	archive sample 182b	3	archive sample 9.3' - 9.8' BGS
			0.0				
			5500	no recovery		3	
		TD: 10.0' BGS 5-20-02 1315					Background: NaI: 6400 PID: 0.0 Soil Cuttings in Drum #1 Back filled w/ Bentonite slurry grout @ 20-30% 3/4 bags/15 gal H <sub>2</sub> O.

# HTRW DRILLING LOG

DISTRICT **St. Louis** HOLE NUMBER: **SLD 70118**  
 SHEETS **1 of 3** SHEETS

1. COMPANY NAME <b>Shaw, E &amp; I</b>		2. DRILLING SUBCONTRACTOR <b>Layne-Western</b>	
3. PROJECT <b>FUSRAP/SLDS</b>		4. LOCATION <b>RSC Metals</b>	
5. NAME OF DRILLER <b>Charles Riffle</b>		6. MANUFACTURER'S DESIGNATION OF DRILL <b>CME 75</b>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>CME 75 using 4 1/4" Hollow Stem Augers and 3/8 x 2' split spoon. Not: LUD 172059 cal. due date: 12-18-02</b>		8. HOLE LOCATION	
9. SURFACE ELEVATION		10. DATE STARTED <b>5-21-02</b>	
11. DATE COMPLETED <b>5-21-02</b>		12. OVERBURDEN THICKNESS <b>N/A</b>	
13. DEPTH DRILLED INTO ROCK <b>N/A</b>		15. DEPTH GROUNDWATER ENCOUNTERED <b>2.0' BGS</b>	
14. TOTAL DEPTH OF HOLE <b>18.0' BGS</b>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>	
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>		18. GEOTECHNICAL SAMPLES	
DISTURBED <input type="checkbox"/>		UNDISTURBED <input type="checkbox"/>	
19. TOTAL NUMBER OF CORE BOXES <b>0</b>		20. SAMPLES FOR CHEMICAL ANALYSIS	
VOC <input type="checkbox"/>		METALS <input type="checkbox"/>	
OTHER (SPECIFY) <b>RAD</b>		OTHER (SPECIFY) <input type="checkbox"/>	
21. TOTAL CORE RECOVERED <b>0</b> %		22. DISPOSITION OF HOLE	
BAG FILLED <input type="checkbox"/>		MONITORING WELL <input type="checkbox"/>	
23. QUALITY CONTROL INSPECTOR <b>Phillip M. Stalker</b>		yes <input checked="" type="checkbox"/>	



PROJECT **FUSRAP/SLDS** HOLE NO. **SLD 70118**

**HTRW DRILLING LOG (CONTINUATION SHEET)**

FORMAL FUSRAP/SLDS INSPECTOR Phillip Statter HOLE NUMBER SLD 70112 SHEET 2 OF 3 SHEETS

ELEV. (1)	DEPTH (2)	DESCRIPTION OF MATERIALS (3)	FIELD MEASUREMENTS (4)	RECOVERY (5)	ANALYTICAL SAMPLE NO. (6)	BLOW COUNT (7)	REMARKS (8)
	1	silty sand w/med. gravel med dense, poorly graded, dk. brn., dry, piece of rubber hose.	5100	1.8/2.0	SLD 70118 5-21-02 1040	28	rough augering
			4900			128	
			5100		28		
			-0.0				
	2	few cinders	5600	no recovery	SLD 70119 1045	32	
SM		piece of copper	5400			21	
	3	few cinders and slag	4800	2.0/2.0		42	
			4700			76	
	4		4900		SLD 70120 1100	30	
	5	silty clay, soft med. plast. moist, ft. brn., few med. gravel.	4400	1.7/2.0	archive sample 1110	4	archive sample from 4.0-4.5 BGS (SLD 70130)
			5000			4	
	6	few sand (fine)	4700	no recovery		6	
CL			4600			4	
	7	limestone frags/concrete frags	4400	0.8/1.0	archive sample 1120	2	archive sample from 6.3-6.8 BGS
			5400			5	
	8		N/A	no recovery		7	
			N/A	recovery		6	
	9		N/A	no recovery		6	
			N/A	recovery		3	

Continued on Page 3

HTRW DRILLING LOG (CONTINUATION SHEET)							HOLE NUMBER SLD 70118
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statler			SHEET 3 OF 3		SUBSHEETS
ELEV. (1)	DEPTH (2)	DESCRIPTION OF MATERIALS (3)	FIELD SENSITIVE RESULTS (4)	RECOVERY SAMPLE BY CUTTING OR A.C. (5)	ANALYTICAL SAMPLE NO. (6)	BLOW COUNT (8)	REMARKS (9)
			N/A N/A	no recovery		3	
			N/A N/A			6	
SM	10	silty sand (fine) w/ med. gravel, loose, poorly graded, dk brn. to gr, wet, sat.	4700 0.0	1.1/ 2.0	archive sample 1225	2	archive sample from 10.6-11.1' BGS
	11		4800 0.0			130	
		piece of wood	5,000 0.0	no recovery		78	hit obstruct- ion @ 11.0'
	12		N/A N/A			N/A	(piece of dense wood) (weathered)
			N/A N/A	P.S. no		175	
	13		N/A N/A	no recovery		3	
			N/A N/A			2	
	14	silty clay w/ few wood frags, soft, med. plast., grey, saturated	4900 0.0	1.6/ 2.0		2	in-situ encountered
	15		5100 0.0			2	
CL			5100 0.0		archive sample 1400	2	archive sample from 15.1-15.5' BGS
	16	wood frags. absent.	N/A N/A	no recovery		3	(SLD 70138 -1, 2)
			4500 0.0			2	
	17		5000 0.0	2.0/ 2.0		3	
			5100 0.0			4	
	18		4900 0.0		archive sample 1410	4	archive sample from 17.5-18.0' BGS
TD: 18.0' BGS 5-21-02 1410			Boring backfilled w/ bags bentonite slurry grout (5 bags / gal. H <sub>2</sub> O) 100 P.S.			Background: Nat: 5,100 PIP: 0.0 soil cuttings in Drum #1	

HTRW DRILLING LOG		TEST NO.	WELL NUMBER
1. COMPANY NAME Shaw E + I		St. Louis	SLD 70466
2. DRILLING SUBCONTRACTOR MES, Inc.			SHEETS 1 of 3
3. PROJECT FUS RAP / SLDS		4. LOCATION City of Venice, IL VP	
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using HSA and 3" x 2' Split Spoon		8. HOLE LOCATION N/A	
9. SURFACE ELEVATION N/A		10. DATE STARTED 9-5-02	
11. DATE COMPLETED 9-5-02		12. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A	
13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		14. TOTAL DEPTH OF HOLE 12.0 BGS	
15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		16. TOTAL NUMBER OF CORE BOXES 0	
17. TOTAL NUMBER OF CORE BOXES 0		18. TOTAL NUMBER OF CORE BOXES 0	
19. TOTAL NUMBER OF CORE BOXES 0		20. SAMPLES FOR CHEMICAL ANALYSIS	
21. TOTAL CORE RECOVERED 0		22. DEPOSITION OF HOLE	
23. SIGNATURE OF INSPECTOR [Signature]		24. SIGNATURE OF INSPECTOR [Signature]	
LOCATION SKETCH/COMMENTS			
PROJECT FUS RAP / SLDS		WELL NO. SLD 70466	

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 70466
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Stalter	SHEET 2 OF 3		REMARKS	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WELL DEPTH (ft)	RECOVERY	SLD NUMBER	SLD DEPTH (ft)	
1.0	silty fine sand w/ few med. gravel, med. dense, poorly graded, H. brn, dry.	5900 0.0	1.3/2.0	SLD 70466 1080	7	
		6100 0.0			9	
		6000 0.0	no recovery	SLD 70467 1090	13	
		N/A N/A			11	
2.0	few cinders and slag.	6100 0.0	1.6/2.0		5	
		6200 0.0			8	
		6800 0.0		SLD 70468 1050	9	
		6900 0.0	no recovery		12	
3.0	cinders and slag increasing	5600 0.0	1.8/2.0		6	
		7200 0.0		SLD 70469 1100	4	
		5800 0.0			11	
		6100 0.0	no recovery		9	
4.0	brick frags.	6800 0.0		SLD 70466 archive 1170	2	
		6200 0.0	1.4/2.0		3	
		6600 0.0			5	
		5600 0.0	no recovery		7	
5.0	concrete frag.	5700 0.0	1.4/2.0		3	
		5700 0.0			5	
		5600 0.0		SLD 70466 archive 1150	9	
		N/A N/A	no recovery		7	
6.0	concrete frag.	6800 0.0			12	
		6200 0.0			3	
		6600 0.0			5	
		5600 0.0	no recovery		7	
7.0	cinders and slag (few)	6800 0.0			12	
		6200 0.0			3	
		6600 0.0			5	
		5600 0.0	no recovery		7	
8.0	silty clay, med. dense, med. dense, H. brn, dry.	5600 0.0	no recovery		7	
		5700 0.0	1.4/2.0		3	
		5700 0.0			5	
		5600 0.0		SLD 70466 archive 1150	9	
9.0	silty fine sand w/ few med. to coarse gravel, loose, poorly graded, H. brn, dry.	5600 0.0			9	
		N/A N/A	no recovery		7	
		5600 0.0			9	
		N/A N/A	no recovery		7	
10.0	silty clay, med. dense, med. dense, H. brn, dry.	5600 0.0			9	
		N/A N/A	no recovery		7	
		5600 0.0			9	
		N/A N/A	no recovery		7	

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLB 70466
PROJECT EUSRAP/SLDS		INSPECTOR Phillip Staller				DATE 9/5/98
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	RECOVERY (ft)	REMARKS	SLB 70466 DATE 9/5/98	BLIND COVER NO.	REMARKS
11.0	trace brick frags	6.00 0.0			5	
		4.50 0.0	1.5/ 2.0		10	(1125)
		5.00 0.0			11	
		4.50 0.0			13	
12.0	TD: 12.0' BGS 1120 9-5-02					Background: NAI: 6000 PID: 0.0 Boring back filled w/ strength grout. (3 bags Port- land Cement, 3 bags sand- tonite, and 45 gal. H <sub>2</sub> O).
3.0						
4.0						
5.0						
6.0						
7.0						
8.0						
9.0						
10.0						
PROJECT EUSRAP/SLDS					WELL NO. SLB 70466	

HTRW DRILLING LOG		HOST CITY	HOLE NUMBER
1. COMPANY NAME Shaw E + I		St. Louis	SLD 70486
2. PROJECT FUS RAP / SLDS		2. DRILLING SERVICER FACTOR MES, Inc.	1 = 2
3. NAME OF DRILLER Chris Anthony		4. LOCATION City of Venice, IL VP	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using H97 and 3/4" x 2" split screen diag w/ screen		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120	
12. OVERBURDEN THICKNESS N/A		8. HOLE LOCATION N/A	
13. DEPTH DRILLED INTO ROCK N/A		9. SURFACE ELEVATION N/A	
14. TOTAL DEPTH OF HOLE 1.5' BGS		10. DATE STARTED 4-12-02	
15. DEPTH GROUNDWATER ENCOUNTERED N/A		11. DATE COMPLETED 4-12-02	
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A	
18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY	
22. DEPOSITION OF MCL		23. SIGNATURE OF INSPECTOR	

LOCATION SKETCH/COMMENTS

SCALE: Not to scale

PROJECT: FUS RAP / SLDS

HOLE NO.: SLD 70486

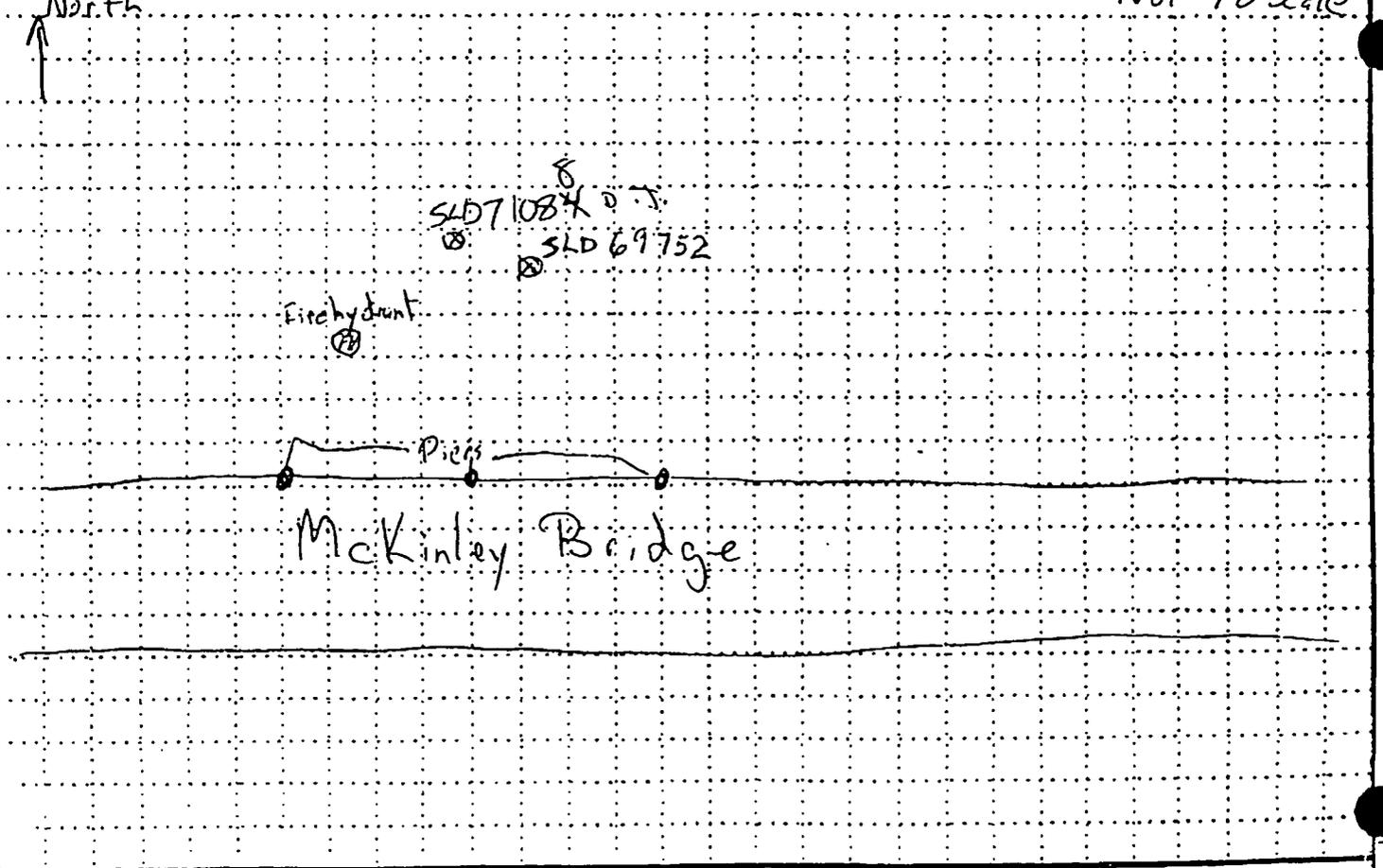
EM 1110-1-4000  
1 Nov 98

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NO.
PROJECT		INSPECTOR	DATE	DEPTH (ft)	REMARKS	SHEET
FUSRAP/SLDS		Phillip Stastek				2 of 2
SM	5 ft fine sand, (loose, poorly graded), thin brown clay some clinkers and slag	10,000	0.0	RECOVERY	70486	N/A
		15,000	0.0		70487	N/A
		13,000	0.0		1430	N/A
	TD: 1.5' 865 9-12-02 1430				Background: NAT: 10,000 PIP: 0.0  Boring back filled w/ 1/8" long hydrated bentonite chips. Capped boring w/ soil.	

<b>HTRW DRILLING LOG</b>		DISTRICT <b>St. Louis</b>	HOLE NUMBER <b>SLD 71088</b>
1. COMPANY NAME <b>Shaw &amp; FI</b>		2. DRILLING SUBCONTRACTOR <b>MES, Inc</b>	SHEET <b>1</b> OF <b>3</b> SHEETS
3. PROJECT <b>Chris Anthony D.J. FUSRAP/SLDS</b>		4. LOCATION <b>Ext PSC Metals VP</b>	
5. NAME OF DRILLER <b>Chris Anthony</b>		6. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120</b>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 4 1/4" HSA + 3" x 2" SPIF SPDR</b>		8. HOLE LOCATION	
9. SURFACE ELEVATION		10. DATE STARTED <b>7-9-02</b>	
11. DATE COMPLETED <b>7-9-02</b>		12. OVERBURDEN THICKNESS <b>NA</b>	
13. DEPTH DRILLED INTO ROCK <b>NA</b>		15. DEPTH TO GROUNDWATER ENCOUNTERED <b>NA</b>	
14. TOTAL DEPTH OF HOLE <b>10' BGS</b>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>NA</b>	
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>NA</b>		18. GEOTECHNICAL SAMPLES	
DISTURBED <input checked="" type="checkbox"/>		UNDISTURBED <input checked="" type="checkbox"/>	
19. TOTAL NUMBER OF CORE BOXES <input checked="" type="checkbox"/>		20. SAMPLES FOR CHEMICAL ANALYSIS	
VOC <input checked="" type="checkbox"/>		METALS <input checked="" type="checkbox"/>	
OTHER (SPECIFY) <b>RAD</b>		OTHER (SPECIFY) <input checked="" type="checkbox"/>	
OTHER (SPECIFY) <input checked="" type="checkbox"/>		21. TOTAL CORE RECOVERY <input checked="" type="checkbox"/>	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR	
SACK FILLED <input checked="" type="checkbox"/>		MONITORING WELL <input checked="" type="checkbox"/>	
OTHER (SPECIFY) <b>yes</b>		OTHER (SPECIFY) <input checked="" type="checkbox"/>	
		<b>Don Jones</b>	

LOCATION SKETCH/COMMENTS

SCALE: Not To Scale



03

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 710848	
PROJECT FUSRAP/SLDS		INSPECTOR Don Jones		SHEET 2 of 3		SHEETS	
DEPTH (ft)	DEPTH (m)	DESCRIPTION OF MATERIALS	WALS BOREHOLE RESULTS (ft)	RECOVERY PERCENTAGE	ANALYZED SAMPLE ID NO.	BLIND COUNT	REMARKS
ML		Silt trace glass and gravel, Light brown, Trace metal and slag	5200 0.0	2.0/20	SLD 710848 7-9-02 7010	16	
SP	1	Silts and cinder, trace sand, Coarse sand to Fine gravel particle size. Black and brown, loose, Dry, Poorly graded	5000 0.0 4800 0.0	2.0/20		13 12	
	2		5300 0.0 4700 0.0		SLD 710848 7-9-02 1015	9	
	3		5500 0.0 5000 0.0		SLD 710848 1025	6	
SM	4	Silty sand, Very fine, loose poorly graded, moist, red/brown and tan few clay	5000 0.5/0.0 4700 0.0	2.0/2.0	Archival sample 1030	4	
SP	5	Cinders and slag, Fine sand sized particle to coarse sand sized particle, Trace Clay Black and brown, Poorly graded	NA	NO Recovery (Loss)	SLD 710848 1045	8	
	6		5100 0.0 4800 0.0	2.0/20		7 7 7	
ML	7	Sandy silt, sand is very fine, moist to wet, Light brown to dark brown, trace slag and cinders, dry, silt	5100 0.0 4800 0.0	2.0/20	SLD 71091 1045	3	
SP	8	Coarse sand, tan, moist, Poorly graded, late	5200 0.0 4800 0.0		Archival sample 1100	5 3	
ML	9	iron staining	5100 0.0 5200 0.0	2.0/20		6 4 3	
		Olive gray, moist					

Continued on pg 3

**HTRW DRILLING LOG (CONTINUATION SHEET)**

WELL NUMBER  
**SLD 71084**

PROJECT  
**FUSRAP/SLDS**

INSPECTOR  
**Don Jones**

SHEET  
**2 of 3**

DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SOLENOID READING	RECOVERY SAMPLE DEPTH (ft) AND RECOVERY	ANALYTICAL SAMPLE NO.	ALLOW CORRECT	REMARKS
ML cont.	Continued P92	5200 0.0	SLD 71072	D.J. SLD 71072 Sample 1105	3 10/16/02	
CL	Silty clay, trace sand (very fine) gray/black, very moist, soft Wood weathering	4800 0.0			4	
10	T.D. = 10' BGS					
0.5						Observation: Surface 2x2 readings 7800cpm (Also area south 8' had 12K)  Background 4500cpm PID=0.0 Boring backfilled w/ bentonite chips (hydrated) 5 Bags Soil cap was placed on boring  Soil cuttings placed in Drum #1  Location was formerly known as E-4
1.5						
2.5						
3.5						
4.5						
5.5						
6.5						
7.5						
8.5						
9.5						

Continued on

# STRW DRILLING LOG

STATE: St. Louis

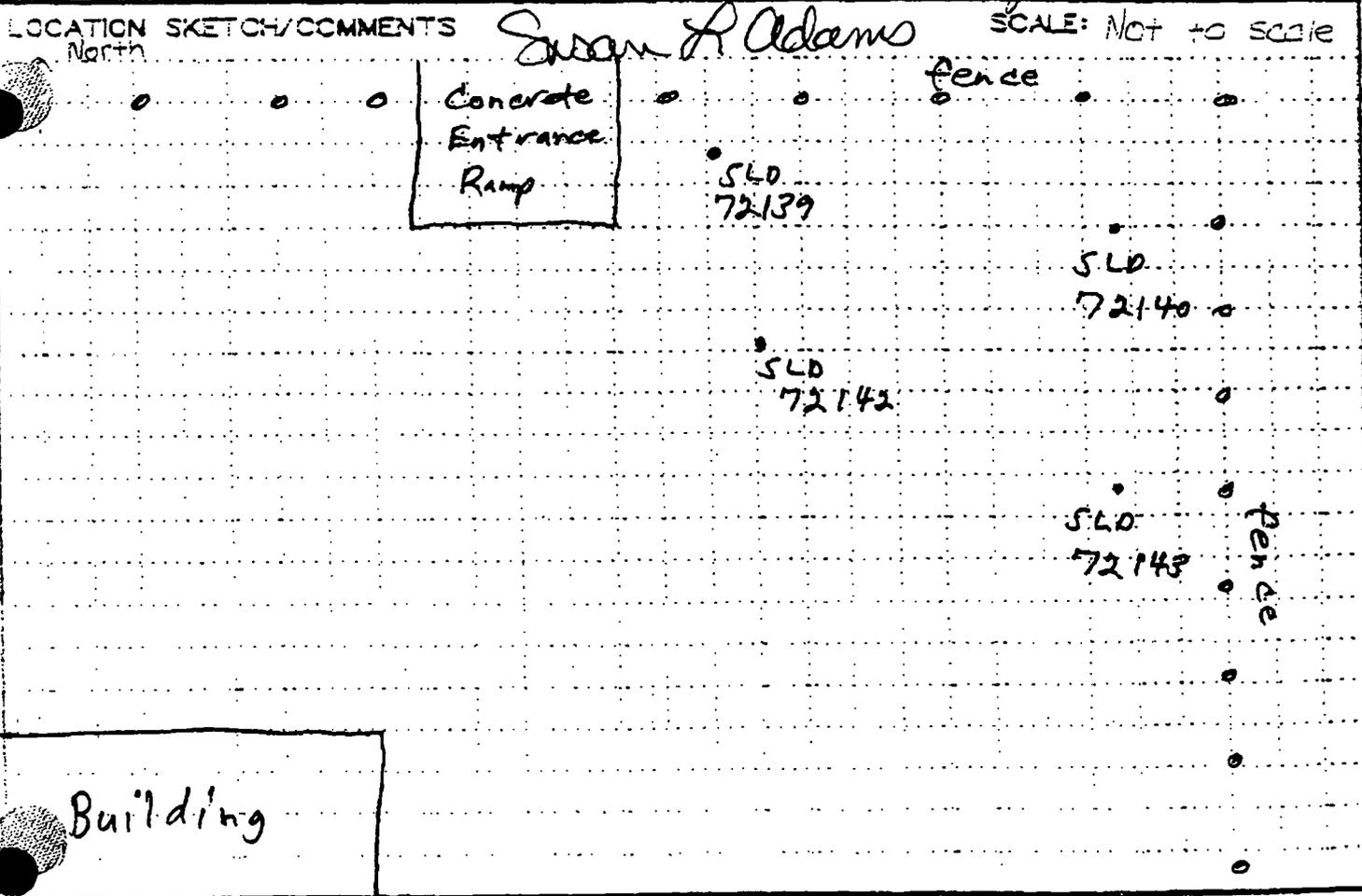
WELL NUMBER: SLD 72139

OWNER NAME: Shaw E + I

DRILLING CONTRACTOR: MES, INC.

SHEETS: 2

1. PROJECT: <u>FUS RAP / SLD5</u>		7. LOCATION: <u>PSC Metals North Tract U.P. AS.</u>	
3. NAME OF DRILLER: <u>Chris Anthony</u>		8. MANUFACTURER'S DESIGNATION OF DRILL: <u>Diedrich D-12C</u>	
6. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: <u>Diedrich D-12C using 4 1/2" HSA and 3" x 3" SALT SAGON</u>		4. HOLE LOCATION: <u>N/A</u>	
8. OVERBURDEN THICKNESS: <u>N/A</u>		9. SURFACE ELEVATION: <u>N/A</u>	
13. DEPTH DRILLED INTO ROCK: <u>N/A</u>		10. DATE STARTED: <u>10-21-02</u>	
14. TOTAL DEPTH OF HOLE: <u>6.0' BGS</u>		11. DATE COMPLETED: <u>10-21-02</u>	
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: <u>N/A</u>		12. DATE STARTED: <u>10-21-02</u>	
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): <u>N/A</u>		13. DATE COMPLETED: <u>10-21-02</u>	
18. DEPTH DRILLED INTO ROCK: <u>N/A</u>		14. DATE STARTED: <u>10-21-02</u>	
19. TOTAL DEPTH OF HOLE: <u>6.0' BGS</u>		15. DATE COMPLETED: <u>10-21-02</u>	
20. DEPTH DRILLED INTO ROCK: <u>N/A</u>		16. DATE STARTED: <u>10-21-02</u>	
21. TOTAL DEPTH OF HOLE: <u>6.0' BGS</u>		17. DATE COMPLETED: <u>10-21-02</u>	
22. DEPTH DRILLED INTO ROCK: <u>N/A</u>		18. DATE STARTED: <u>10-21-02</u>	
23. DEPTH DRILLED INTO ROCK: <u>N/A</u>		19. DATE COMPLETED: <u>10-21-02</u>	



PROJECT: FUS RAP / SLD5

WELL NO: SLD 72139

1 Nov 98

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT		SHEET	
EUSRAP/SLDS		INSPECTOR Phillip Statler		SLD 72139	
DEPTH (ft)	DESCRIPTION OF MATERIALS	NO. OF SAMPLES	RECOVERY	WATER CONTENT (%)	REMARKS
SM	Silty fine sand w/ trace cinders and slag, loose, poorly graded, dk. brn, dry. Silty clay, med. stiff, med. plastic, H. brn, dry, trace med. gravel.  Some cinders and slag, few med. gravel, dk. brn.  H. brn.	6500	1.6/2.0	SLD 72139 10220	8
		6500			6
		6500			8
		N/A	no recovery		6
		6600	2.0/2.0		4
		6600			4
		6700		SLD 72192 10220	6
		6400			7
		5900	1.5/2.0		3
		6700			4
	6200		SLD 72201 10350	6	
	N/A	no recovery		7	
CL	TD: 6.0' BDS 1020 10-21-02				Backgrounds NAT: 6200 PID: 0.0 Back-filled boring w/ 3.0 bags of bentonite chips. Capped boring w/ soil.

# TRW DRILLING LOG

CITY: St. Louis HOLE NUMBER: SLD 72140

COMPANY NAME: Shaw E + E DRILLING CONTRACTOR: MES, Inc. SHEET: 2

PROJECT: FUS RAP / SLOS LOCATION: ASC Metals North Tract U.12  
City of Venice IL I.A.P.S.

NAME OF DRILLER: Chris Anthony MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120

SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 HOLE LOCATION: N/A  
using HSA and

3" x 2" split spoon SURFACE ELEVATION: N/A

DATE STARTED: 10-17-02 DATE COMPLETED: 10-17-02  
to 100/100 Call Date 12-12-02 Bqk = 5900

OVERBURDEN THICKNESS: N/A DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A

DEPTH DRILLED INTO WALL: N/A OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

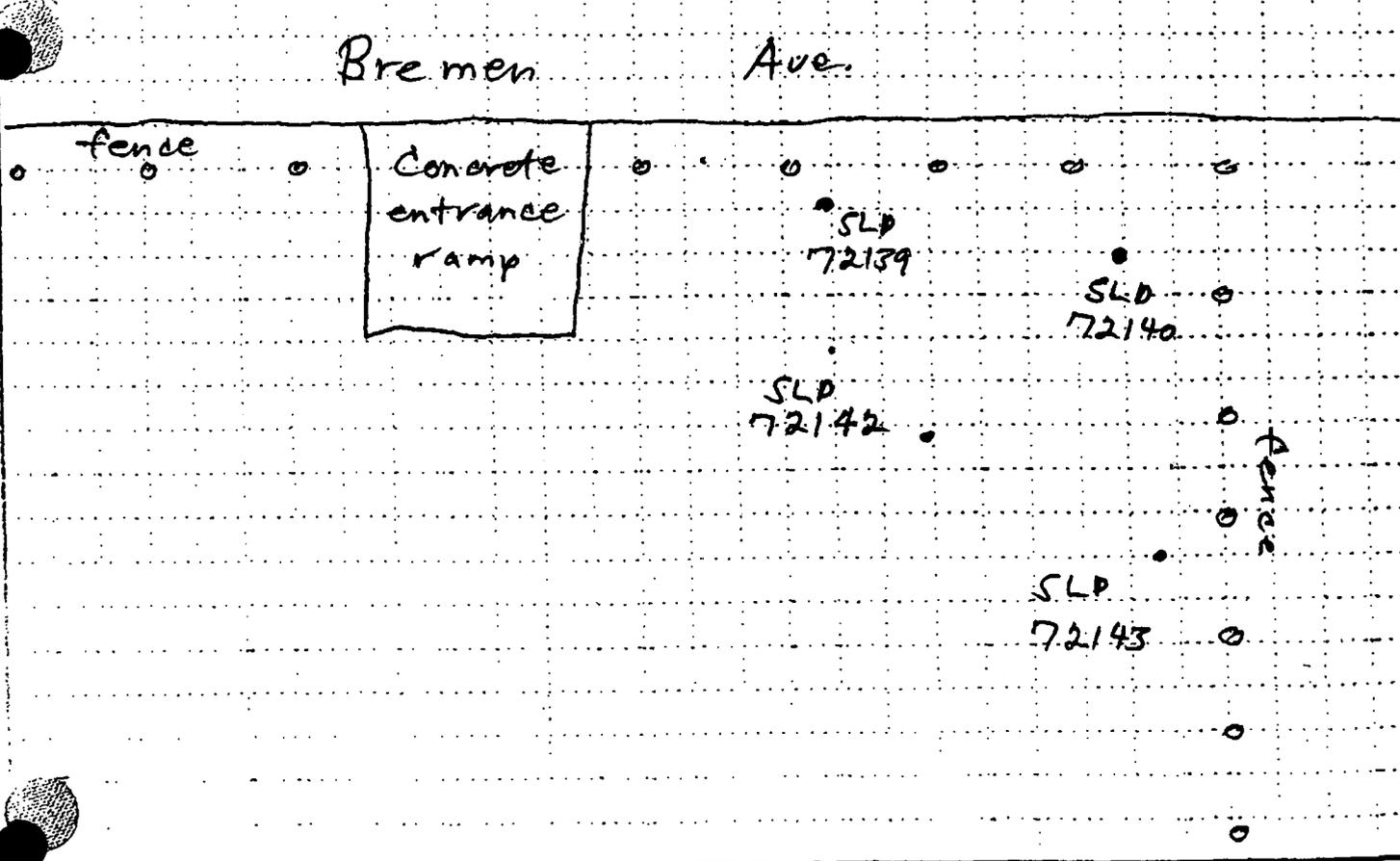
TOTAL DEPTH OF HOLE: 6.0' BGS

1. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

20. SAMPLES FOR CHEMICAL ANALYSIS	TOX	NETALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>RAD</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

22. DEPOSITION OF MUD	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
<input checked="" type="checkbox"/>	<u>Yes</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Phillip R. Stollen</u>

LOCATION SKETCH/COMMENTS: North SCALE: Not to scale



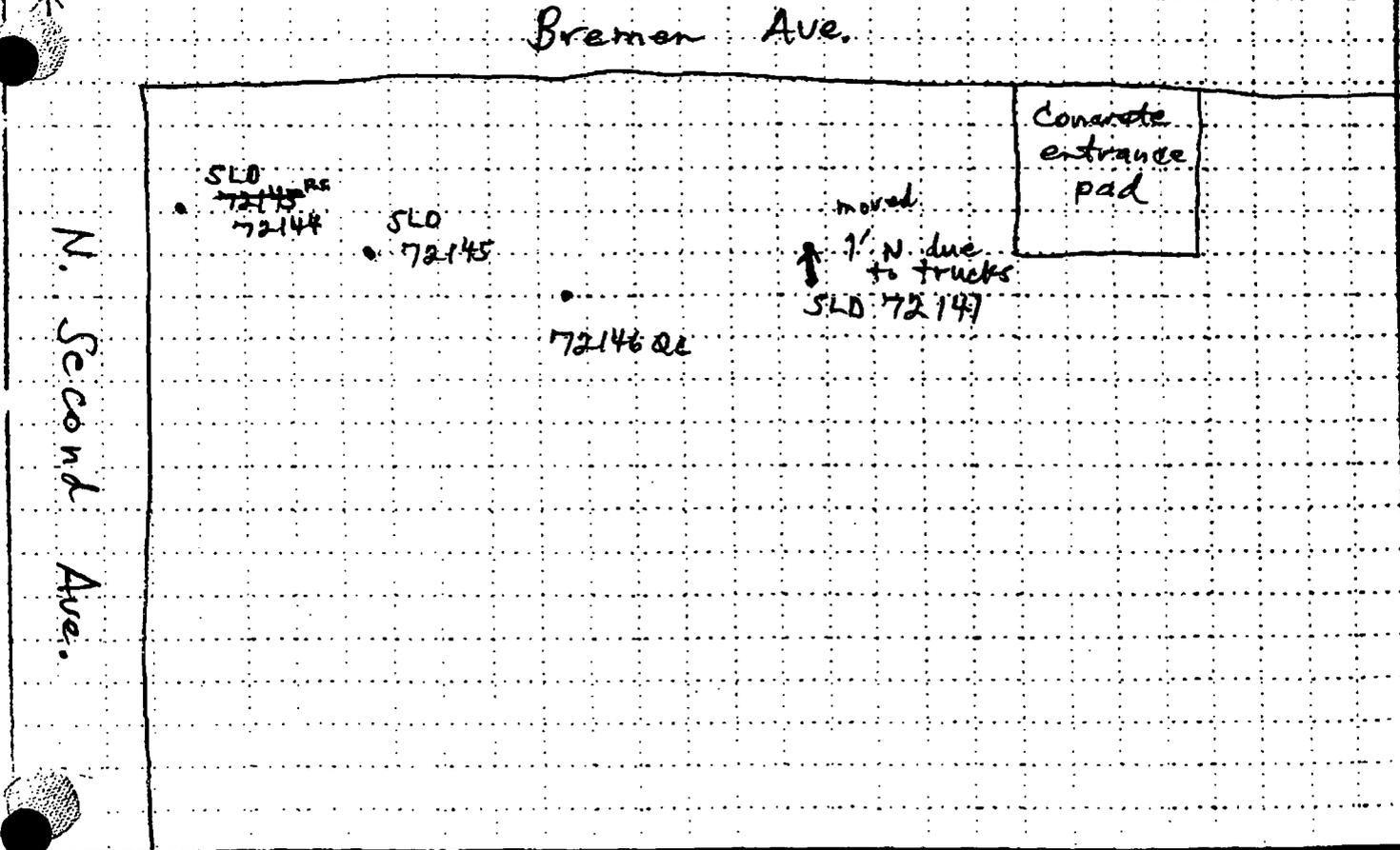
HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: FUSRAP/SLDS		INSPECTOR: Phillip Stator		SHEET: 2 OF 2	
DEPTH (feet)	DESCRIPTION OF MATERIALS	LOG INTERVAL (feet)	RECOVERY	SLC NO. (if applicable)	SLOW COUNT	REMARKS	
SM 1.0	silty fine sand w/ tan med. gravel, loose, poorly graded, some sh. frags, some slag, dk. brn, dry.	6600 0.0	2.0 / 2.0	SLC 72140 10-17-02 1015	6		
		6500 0.0		5			
		6300 0.0		9			
		6200 0.0		11			
CL 3.0	silty clay, med. stiff to stiff, med. plast., H. brn., dry.	6700 0.0	1.6 / 2.0		4		
		6600 0.0		6	archive sample from 2.5-3.0 BGS		
		6500 0.0		8			
		N/A N/A	no recovery	10			
		5500 0.0	1.7 / 1.3 / P.S. / 2.0		6		
		5300 0.0		6			
		6300 0.0		8	archive sample from 5.2-5.7' BGS		
N/A N/A	no recovery	8					
TD: 6.0' BGS 10-17-02 1015						Background: NaF: 5900 PID: 0.0 Back filled boring w/ 20 bags of bentonite chips. Capped boring w/ soil.	

# STRTW DRILLING LOG

DISTRICT: St. Louis  
 COMPANY NAME: Shaw E + I  
 DRILLING SUBCONTRACTOR: MES, Inc.  
 HOLE NUMBER: SLD 72141  
 SHEET: 1 of 2

1. PROJECT: FUS RAP / SLDs		4. LOCATION: PSC Metals North Tract v.p. - City of Venice, IL VPP#	
5. NAME OF DRILLER: Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using 4" HSA and 3" x 3' Split Spoon		8. HOLE LOCATION: N/A	
12. OVERBURDEN THICKNESS: N/A		9. SURFACE ELEVATION: N/A	
13. DEPTH DRILLED INTO ROCK: N/A		10. DATE STARTED: 10-15-02	
14. TOTAL DEPTH OF HOLE: 6.0' BGS		11. DATE COMPLETED: 10-15-02	
15. DEPTH GROUNDWATER ENCOUNTERED: N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A	
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A		18. GEOTECHNICAL SAMPLES: DISTURBED <input type="checkbox"/> UNDISTURBED <input type="checkbox"/>	
19. TOTAL NUMBER OF CORE BOXES: 0		20. SAMPLES FOR CHEMICAL ANALYSIS: VOC <input type="checkbox"/> METALS <input type="checkbox"/> OTHER (SPECIFY) RAD <input type="checkbox"/>	
21. TOTAL CORE RECOVERY: 0%		22. DISPOSITION OF HOLE: SACKFILLED <input type="checkbox"/> MONITORING WELL <input type="checkbox"/> OTHER (SPECIFY) <input type="checkbox"/>	
23. SIGNATURE OF INSPECTOR: Kelly M. Hall			

LOCATION SKETCH/COMMENTS: North  
 SCALE: Not to scale



HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: FUSRAP/SLDS		INSPECTOR: Philip Statter		HOLE NUMBER: SLD 72141	
DEPTH (ft)	DESCRIPTION OF MATERIALS	NO. OF SAMPLES	RECOVERY	SLD NUMBER	SLOW COUNT	REMARKS	
1.0	silty fine sand w/ some med. gravel, med. dense to dense, poorly graded, lt. brn. to brn. some cinders and slag, trace reddish slag	6700	1.8/2.0	SLD 72141	31		
		6800			21		
		7200			13		
		6800		SLD 72163	6		
		6700		1345	7		
2.0	trace broken glass, trace wood.	6700	no recovery		6		
		6700			7		
		6400	1.7/2.0		9		
		6700		SLD 72143	13		
		6800		1355	7		
3.0	silty clay w/ low fine sand, med. stiff to stiff, med. plast.; lt. brn., dry.	7000	1.8/2.0		6		
		6800			8		
		7100			7		
		7300		SLD 72202	8		
		7300		1405			
4.0	clay turning lt. gry. mottled gry./brn.	7000	1.8/2.0		6		
		6800			8		
		7100			7		
		7300		SLD 72202	8		
		7300		1405			
5.0		7000					
		6800					
		7100					
		7300					
		7300					
6.0	TD: 6.0' BGS. 10-15-02 1355	7000					
		6800					
		7100					
		7300					
		7300					
7.0		7000					
		6800					
		7100					
		7300					
		7300					
8.0		7000					
		6800					
		7100					
		7300					
		7300					
9.0		7000					
		6800					
		7100					
		7300					
		7300					
10.0		7000					
		6800					
		7100					
		7300					
		7300					

Back-grounds  
 Nat: 6900  
 PID: 0.0  
 Back-filled  
 boring w/  
 3 bags of  
 bentonite  
 chips.

# TRW DRILLING LOG

DISTRICT: St. Louis

HOLE NUMBER: SLD 72142

COMPANY NAME: Shaw E + I

DRILLING CONTRACTOR: MES, Inc.

SHEET: 1 of 2

PROJECT: FUS RAP / SLDS

LOCATION: PSC Metals North Tract U.P.  
CITY of Venice, IL VP PS.

NAME OF DRILLER: Chris Anthony

MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120

SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120  
using 4 1/2" HSA and  
3" x 2" split spoon

HOLE LOCATION: N/A

SURFACE ELEVATION: N/A

PI# 10-21-02 NAI LUD 172040  
to 100/100 Cal Date 4-1-03 BgK = 6,200

DATE STARTED: 10-21-02

DATE COMPLETED: 10-21-02

OVERBURDEN THICKNESS: N/A

DEPTH GROUNDWATER ENCOUNTERED: N/A

DEPTH DRILLED INTO ROCK: N/A

DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A

TOTAL DEPTH OF HOLE: 6.0' BGS

OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

13. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0

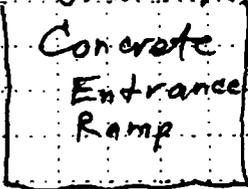
20. SAMPLES FOR CHEMICAL ANALYSIS	ROC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RAD	<input type="checkbox"/>	<input type="checkbox"/>	0%

22. DEPOSITION OF HOLE	SACK FILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
<input type="checkbox"/>	Yes	<input type="checkbox"/>	<input type="checkbox"/>	Shirley M. Stahl

LOCATION SKETCH/COMMENTS: North

Susan L. Adams

SCALE: Not to scale



Building

PROJECT: FUS RAP / SLDS

HOLE NO. SLD 72142

**ETRW DRILLING LOG (CONTINUATION SHEET)**  
 PROJECT: **FUSRAP/SLOS**      OPERATOR: **Philip Statler**      WELL NUMBER: **SLD 72142**  
 SHEET: **2** OF **2** SHEETS

DEPTH (ft)	DESCRIPTION OF MATERIAL	WELL DEPTH (ft)	RECOVERY (%)	WATER SAMPLE NO.	BLOW COUNT	REMARKS
1.0	Silty fine sand w/ few med. gravel, loam to med. dense, poorly graded, dk. brn., dry, some clods and slag.	6900 0.0	1.9/ 2.0	SLD 72142 10-21-02 1100	18	
		6500 0.0			11	
		5800 0.0			9	
2.0 3.0 4.0 5.0	Silty clay, med. str. to med. plast., H. brn., dry.	6200 0.0	1.8/ 2.0	SLD 72142 10-21-02 1100	7	
		6200 0.0			8	
		5900 0.0			3	
		6400 0.0			6	archive sample from 33-3.8' BGS
		6500 0.0			14	
		6200 0.0			4	
		6500 0.0			4	
		6500 0.0			5	
6.0 7.0 8.0	TD: 6.0' BGS 10-21-02 1100	6400 0.0	2.0/ 2.0	SLD 72142 10-21-02 1100	5	archive sample from 5.5-6.0' BGS.
		6200 0.0			4	
		6500 0.0			4	
3.0 4.0						Backfilled boring w/ 3.0 bags of bentonite chips. Capped w/ soil.

# TRW DRILLING LOG

STATION: St. Louis

HOLE NUMBER: SLD 72143

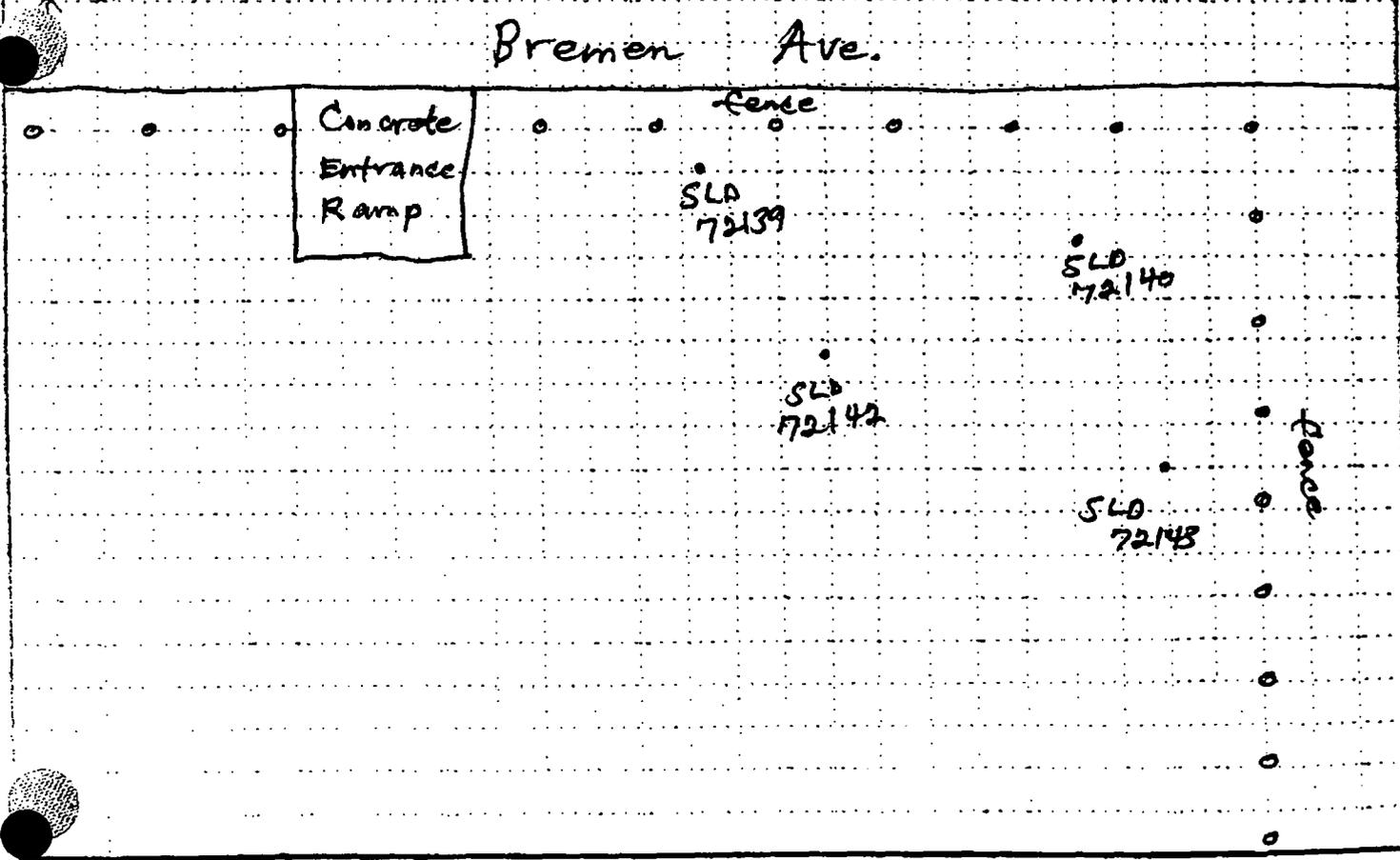
COMPANY NAME: Shaw E + I

DRILLING SUBCONTRACTOR: MES, Inc.

SHEET: 2 OF 2

2. PROJECT FUS RAP / SLOS		1. LOCATION City of Venice, IL 10	
3. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-12C	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-12C using HSA and 3" x 3" Split Spoon		3. HOLE LOCATION N/A	
8. DATE STARTED 10-17-02		9. DATE COMPLETED 10-17-02	
12. OVERHOLEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A	
13. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
4. TOTAL DEPTH OF HOLE 6.0' BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A	
18. GEOTECHNICAL SAMPLES	19. TOTAL NUMBER OF CORE BOXES	20. SAMPLES FOR CHEMICAL ANALYSIS	
Disturbed: <input checked="" type="checkbox"/>	Disturbed: <input checked="" type="checkbox"/>	Metals: <input checked="" type="checkbox"/>	
Other: <input type="checkbox"/>	Other: <input type="checkbox"/>	Other: <input checked="" type="checkbox"/> RAD	
22. DEPOSITION OF HOLE <input checked="" type="checkbox"/>	23. SIGNATURE OF INSPECTOR Blair N. Stoltz	21. TOTAL CORE RECOVERY <input checked="" type="checkbox"/>	

LOCATION SKETCH/COMMENTS: North SCALE: Not to scale



PROJECT: FUS RAP SLOS

HOLE NO: SLD 72143

PROJECT		INSPECTOR		SHEET		SHEETS	
FUSRAP/SLDS		Phillip Statler		2		2	
DEPTH	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	RECOVERY (%)	SLD NUMBER	SLOW COUNT	REMARKS	
1.0	silty fine sand w/ some med. gravel, loose to med. dense, poorly graded, lt. brn, dry, few cinders, slag, trace brick frags, trace glass.	5800 / 0.0	2.0 / 2.0	SLD 72143 10-17-02 1055	9		
		5900 / 0.0		9			
		6100 / 0.0		RS&7			
		6200 / 0.0		SLD 72170 1105	11		
		6300 / 0.0		28			
2.0	trace wood, flaky, weathered	5800 / 0.0	2.0 / 2.0	SLD 72143 1115	41		
		5800 / 0.0			17		
		6400 / 0.0			13	archive sample from 3.5 - 4.0 BGS.	
		6500 / 0.0			6		
3.0	limestone cobble some cinders, some slag, trace ash	5700 / 0.0	1.6 / 2.0	SLD 72143 archive 1120	7		
		5600 / 0.0			8	archive sample from 5.1 - 5.6 BGS.	
4.0	trace clay, brn.	6100 / 0.0	no recovery		7		
		6200 / 0.0			7		
5.0	silty clay, med. stiff, med. plast., lt. brn, dry	5700 / 0.0	1.6 / 2.0	SLD 72143 archive 1120	7		
		5600 / 0.0			8	archive sample from 5.1 - 5.6 BGS.	
6.0	silty fine sand, loose, poorly graded, lt. brn, dry, some cinders and some slag	6100 / 0.0	no recovery		7		
		6200 / 0.0			7		
6.0 - 7.0	TD: 6.0' BGS 1115 10-17-02					Background: Nat: 5900 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips. Capped w/ soil.	

PROJECT FUSRAP/SLDS

SLD 72143

# UTRW DRILLING LOG

DISTRICT: St. Louis  
 HOLE NUMBER: SLD 72144

COMPANY NAME: Shaw E + I  
 DRILLING SUBCONTRACTOR: MES, Inc.  
 SHEET: 1 of 2

PROJECT: FUS RAP / SLDS  
 LOCATION: PSC Metals North Tract U.P. City of Venice, IL VA PS.  
 NAME OF DRILLER: Chris Anthony  
 MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120

SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using 4" ASA and 3" x 2" split spoon  
 HOLE LOCATION: N/A  
 SURFACE ELEVATION: N/A

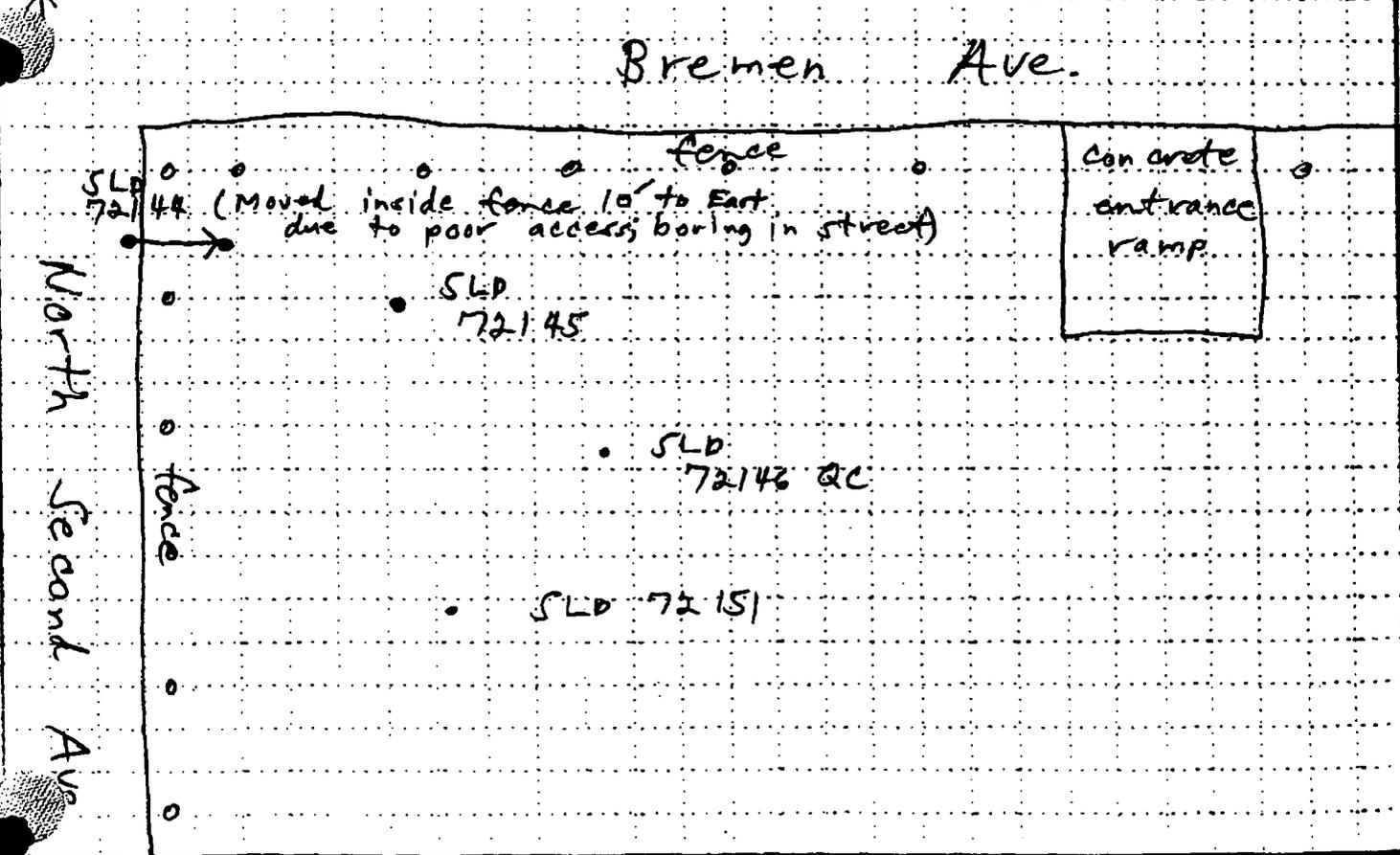
PID 10-15-02 NAI LUD 172059  
 to 100/100 Cal Date 12-13-02 BgK = 6900  
 DATE STARTED: 10-15-02  
 DATE COMPLETED: 10-15-02

OVERBURDEN THICKNESS: N/A  
 DEPTH DRILLED INTO ROCK: N/A  
 DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A

TOTAL DEPTH OF HOLE: 6.0' BGS  
 OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES	<input type="checkbox"/>	DISTURBED	<input type="checkbox"/>	UNDISTURBED	<input type="checkbox"/>	19. TOTAL NUMBER OF CORE BOXES	<input type="checkbox"/>	
20. SAMPLES FOR CHEMICAL ANALYSIS	<input type="checkbox"/>	ROC	<input type="checkbox"/>	METALS	<input type="checkbox"/>	OTHER (SPECIFY)	OTHER (SPECIFY)	
22. DEPOSITION OF HOLE	<input type="checkbox"/>	SAG FILLED	<input type="checkbox"/>	MONITORING WELL	<input type="checkbox"/>	OTHER (SPECIFY)	OTHER (SPECIFY)	
							21. TOTAL CORE RECOVERY	<input type="checkbox"/>
							23. SIGNATURE OF INSPECTOR	<i>Phillip A. Hobb</i>

LOCATION SKETCH/COMMENTS: North  
 SCALE: Not to scale



HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 72144
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Stalter				SHEET 2 OF 2 SHEETS
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	WATER CONTENT (%)	SHRINKAGE (%)	QUALITY CONTROL SAMPLE NO.	BLOW COUNT (blows)	REMARKS
SM 1.0	silty fine sand w/ few med. gravel (poorly graded) (to brn.) dry brick frags some cinders and slag.	6600 0.0	RECOVERY	SLD 72144 10-15-02 0910	5	
		7200 0.0	1.9/ 2.0		7	
		7300 0.0			9	
		7100 0.0		SLD 72171 0945	5	
		7400 0.0	no recovery		8	
CL 3.0 4.0 5.0 6.0	silty clay, med. stiff to stiff (to brn.) dry, med. plastic, few cinders and slag.  clay turning org.	7600 0.0	1.5/ 2.0	SLD 72144 0950	7	
		7400 0.0			7	
		N/A N/A	no recovery		9	
		7700 0.0	1.8/ 2.0		4	
		7100 0.0			4	
		6900 0.0		SLD 72203 0955	6	
		7400 0.0	no recovery		7	
7.0	TD: 6.0' BGS 10-15-02 0910					Background NAT: 6900 PID: 0.0  Backfilled boring w/ 3 bags of best white chips. Capped boring w/ soil.

# USTRW DRILLING LOG

COMPANY NAME: **Shaw E + I** DISTRICT: **St. Louis** HOLE NUMBER: **SLD 72145**

DRILLING SUBCONTRACTOR: **MES, Inc.** SHEET: **1 of 2**

1. PROJECT: **FUS RAP / SLDS** 4. LOCATION: **PSC Metals North Tract V, P**  
**City of Venice, IL**

5. NAME OF DRILLER: **Chris Anthony** 6. MANUFACTURER'S DESIGNATION OF DRILL: **Diedrich D-120**

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: **Diedrich D-120 using 3/4" HSAHKS and 3" x 2 1/2" split spoon** 8. HOLE LOCATION: **N/A**

9. SURFACE ELEVATION: **N/A** 10. DATE STARTED: **10-14-02** 11. DATE COMPLETED: **10-14-02**

12. OVERBURDEN THICKNESS: **N/A** 15. DEPTH GROUNDWATER ENCOUNTERED: **N/A**

13. DEPTH DRILLED INTO ROCK: **N/A** 16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: **N/A**

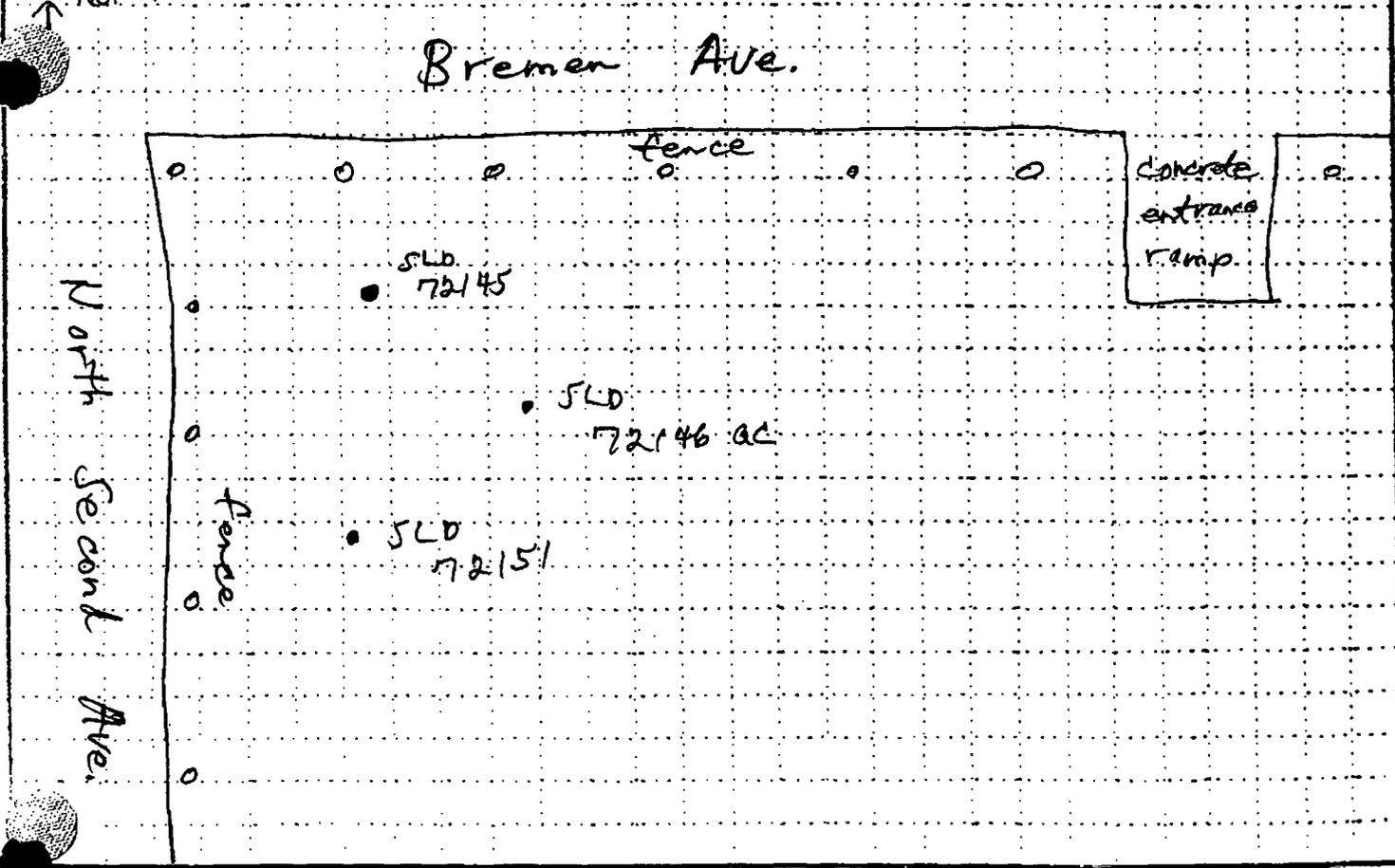
14. TOTAL DEPTH OF HOLE: **6.0' BGS** 17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): **N/A**

18. GEOTECHNICAL SAMPLES:  DISTURBED  UNDISTURBED 19. TOTAL NUMBER OF CORE BOXES: **0**

20. SAMPLES FOR CHEMICAL ANALYSIS:  VOC  METALS  OTHER (SPECIFY): **RAD**  OTHER (SPECIFY):  OTHER (SPECIFY): 21. TOTAL CORE RECOVERY: **0%**

22. DEPOSITION OF HOLE:  BACKFILLED  MONITORING WELL  OTHER (SPECIFY): 23. SIGNATURE OF INSPECTOR: **Shelly M. Hall**

LOCATION SKETCH/COMMENTS: **North** **Susan K. Adams** SCALE: **Not to scale**



HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: FUSRAP/SLDS		INSPECTOR: Phillip Statler		HOLE NUMBER: SLB 72145	
DEPTH (ft)	DESCRIPTION OF MATERIALS	NO. OF SAMPLES	RECOVERY (%)	SLB NO. (DATE)	ALLOW CORRECTION	REMARKS	
SM 1.0	silty fine sand w/ few med. gravel med. dense, poorly graded, dk. brn, dry. Some cinders and slag, + 1/4" lime frags (cobbles)	6500	1.3	SLB 72145 10/15/98	12		
		0.0	2.0				
		6600				10	
		N/A				18	
		N/A	no recovery			6	
CL 3.0	silty clay, soft to med. stiff, med. plant, dk. brn, dry.	6100	1.8	SLB 72145 archive 1/20	4	archive sample from 2.4-2.9' P&S	
		0.0	2.0		4		
		6700				6	
		6400	no recovery			8	
		6100	1.9			3	
		0.0	2.0			5	
		5800				7	
		6700				8	archive sample from 5.4-5.9' P&S.
6500	no recovery						
7.0	TD: 6.0' BGS 10-14-02 1425					Background: NAI: 6300 PID: 0.0  Backfilled boring w/ 3 bags of bentonite chips. Capped boring w/ coil.	

# STRW DRILLING LOG

257 200 St. Louis

WELL NUMBER: SLD 72146.0

DRIFTER NAME: Shaw E + I

2. DRILLING SUBCONTRACTOR: MES, Inc.

SHEET: of 2

1. PROJECT: FUS RAP / SLDs		4. LOCATION: City of Venice, IL 1P	
5. NAME OF DRILLER: Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using 4 1/2" HSA and 3" x 3" split spoon		8. HOLE LOCATION: N/A	
8. OVERBURDEN THICKNESS: N/A		9. SURFACE ELEVATION: N/A	
9. DATE STARTED: 10-15-02		10. DATE COMPLETED: 10-15-02	
11. DEPTH DRILLED INTO ROCK: N/A		12. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A	
13. TOTAL DEPTH OF HOLE: 6.0' BGS		14. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A	
15. DISTURBED SAMPLES: 0	16. UNDISTURBED SAMPLES: 0	17. TOTAL NUMBER OF CORE BOXES: 0	
18. SAMPLES FOR CHEMICAL ANALYSIS: 0	19. METALS: 0	20. OTHER (SPECIFY): RAD	21. TOTAL CORE RECOVERY: 0%
22. DEPOSITION OF HOLE: Yes	23. SIGNATURE OF INSPECTOR: Phillip R. Halls		

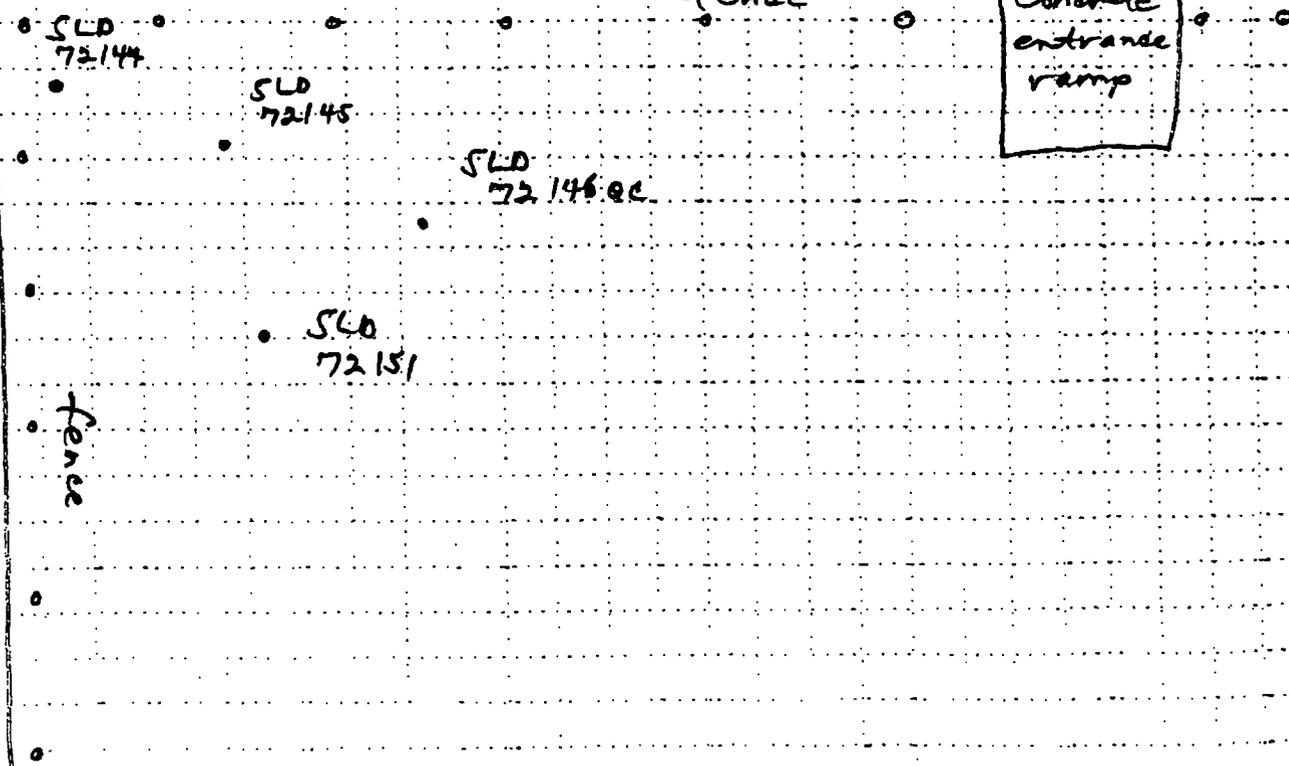
LOCATION SKETCH/COMMENTS: North

SCALE: Not to scale

Bremen Ave.

fence

Concrete entrance ramp



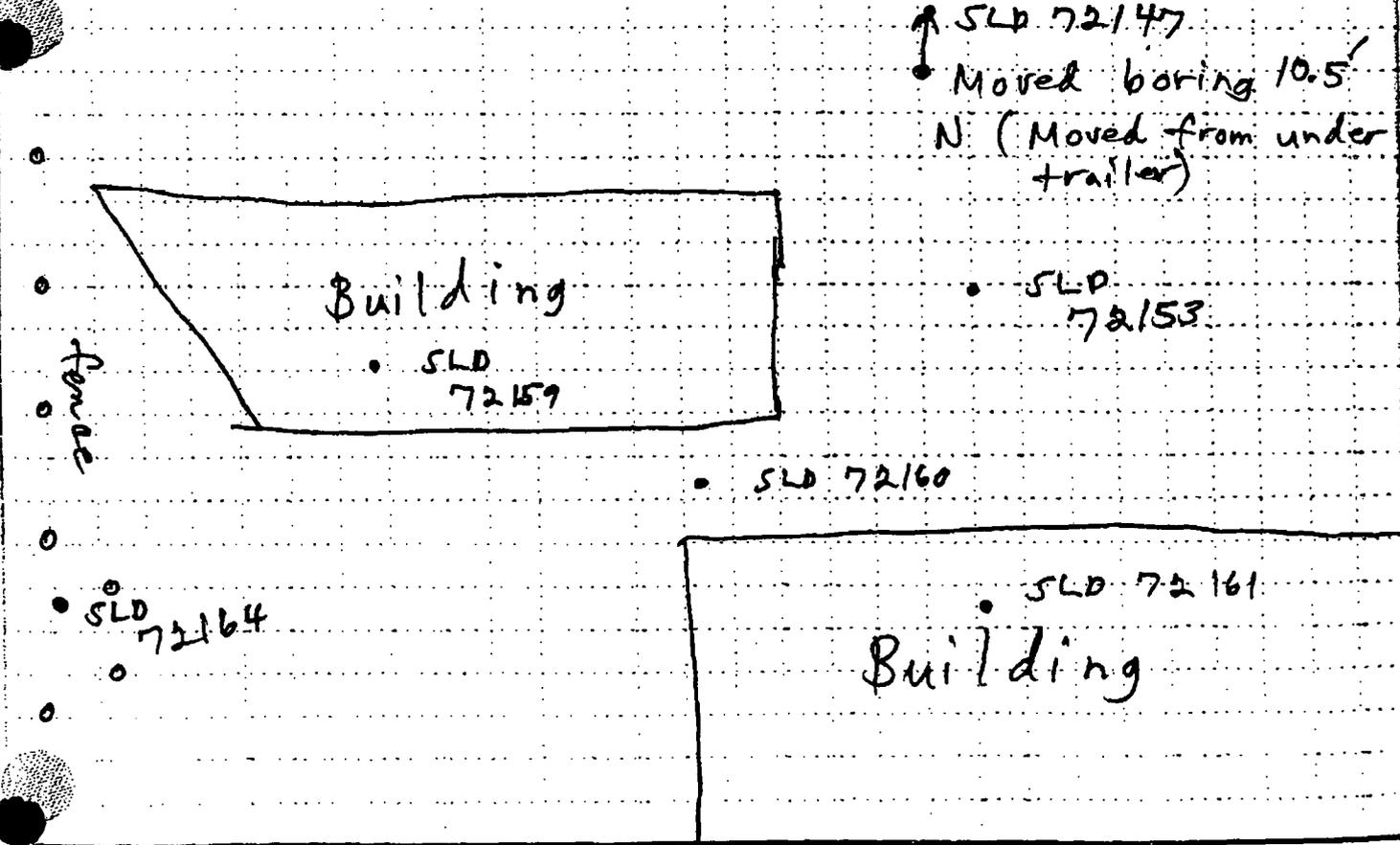
PROJECT: FUS RAP SLDs

WELL NO: SLD 72146.0c

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 72146 GC	
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Stalter				SHEET 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS (LF)	WATER LOSS (PI) (ft)	RECOVERY (ft)	BLOW COUNT (ft)	REMARKS (ft)	DEPTH (ft)	
1.0	silty fine sand w/ some med-gravel, med. dense, poorly graded, dk. brn. to blk, dry, some cinders, and slag, trace brick frags.	8200 0.0	1.6	15	SLD 72146, -1, -2, 1045-02, 1045	1.0	
		7700 0.0	2.0	14			
		7300 0.0		11			
		N/A N/A	no recovery	7			
2.0	silty clay, med. stiff, mod. plast., H. brn., dry.	7500 0.0	1.5	8	SLD 72146 archive 1110	2.0	
		7000 0.0	2.0	6			
		7300 0.0		7			
		N/A N/A	no recovery	8			
		7400 0.0	1.8	9			
		7200 0.0	2.0	9			
		7400 0.0		15			
		7300 0.0	no recovery	12			
3.0	clay becoming mottled gray/brn.				SLD 72146 archive 1110	3.0	
4.0						4.0	
5.0						5.0	
6.0						6.0	
7.0						7.0	
8.0						8.0	
9.0						9.0	
10.0						10.0	
TD: 6.0' BGS 10-15-02 1115							
Backgrounds NAT: 6,900 PIP: 0.0 Back-filled boring w/ 3.0 bags of bentonite chips. Capped boring w/ soil.							

1. PROJECT NAME <b>SNOW E + E</b>		2. DRILLING SUBCONTRACTOR <b>MES, INC.</b>		3. SHEET # <b>2</b>	
4. PROJECT <b>FUS RAP / SLD</b>		5. LOCATION <b>PSG Metals North Tract V.P. P.S.</b>			
6. NAME OF DRILLER <b>Chris Anthony</b>		7. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-12C</b>			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-12C Using 3 W/ASA and 3" x 3' Split Spoon</b>		9. HOLE LOCATION <b>N/A</b>			
10. DATE STARTED <b>10-22-02</b>		11. DATE COMPLETED <b>10-22-02</b>			
12. OVERSHEEN THICKNESS <b>N/A</b>		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>			
14. TOTAL DEPTH OF HOLE <b>6.0' BGS</b>		15. DEPTH TO WATER <b>N/A</b>			
16. TOTAL DEPTH DRILLED INTO ROCK <b>N/A</b>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>			
18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES			
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERED			
22. DEPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR			

LOCATION SKETCH/COMMENTS *Susan L. Adams* SCALE: Not to scale



FTW DRILLING LOG (CONTINUATION SHEET)		PROJECT: EUSRAP/SLDS		INSPECTOR: Philip Stalter		HOLE NUMBER: SLD 72147		SHEET: 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	NEUTRON LOG (NWL) (ft)	PID (ft)	RECOVERY (%)	WATER CONTENT (%)	SLW COUNT (cpm)	REMARKS		
0.0 - 1.0	silty fine sand w/ some med. gravel, med. dense, poorly graded, dk brn, dry, trace cinders, trace glass  silty clay, med. stiff to stiff, med. plant. lt. brn.; dry, few cinders, few slag, trace limestone cobbles.  clay forming grv.	6500	0.0	2.0	29	SLD 72147 1723-25			
1.0 - 2.0		6600	0.0	2.0	10				
2.0 - 3.0		6800	0.0		13	SLD 72174 1450			
3.0 - 4.0		6400	0.0		12				
4.0 - 5.0		6700	0.0	1.8	7				
5.0 - 6.0		6700	0.0	2.0	3				
6.0 - 7.0		6500	0.0		4		archive sample from 3.3-3.8' BGS.		
7.0 - 8.0		6700	0.0	no recovery	6	SLD 72147 archive 1450			
8.0 - 9.0		7100	0.0		3				
9.0 - 10.0		6600	0.0	2.0	3				
10.0 - 11.0	6900	0.0	2.0	7					
11.0 - 12.0	6900	0.0		9	SLD 72147 archive 1305	archive sample from 5.5-6.0' BGS.			
12.0 - 13.0	TD: 6.0' BGS						Background		
13.0 - 14.0	10-22-02						NaI: 6600		
14.0 - 15.0	1500						PID: 0.0		
15.0 - 16.0							Back-filled		
16.0 - 17.0							boring w/		
17.0 - 18.0							3.0 bags of		
18.0 - 19.0							banstonite		
19.0 - 20.0							chips. Capped		
20.0 - 21.0							boring w/		
21.0 - 22.0							soil.		

# TRW DRILLING LOG

STATION ST. LOUIS

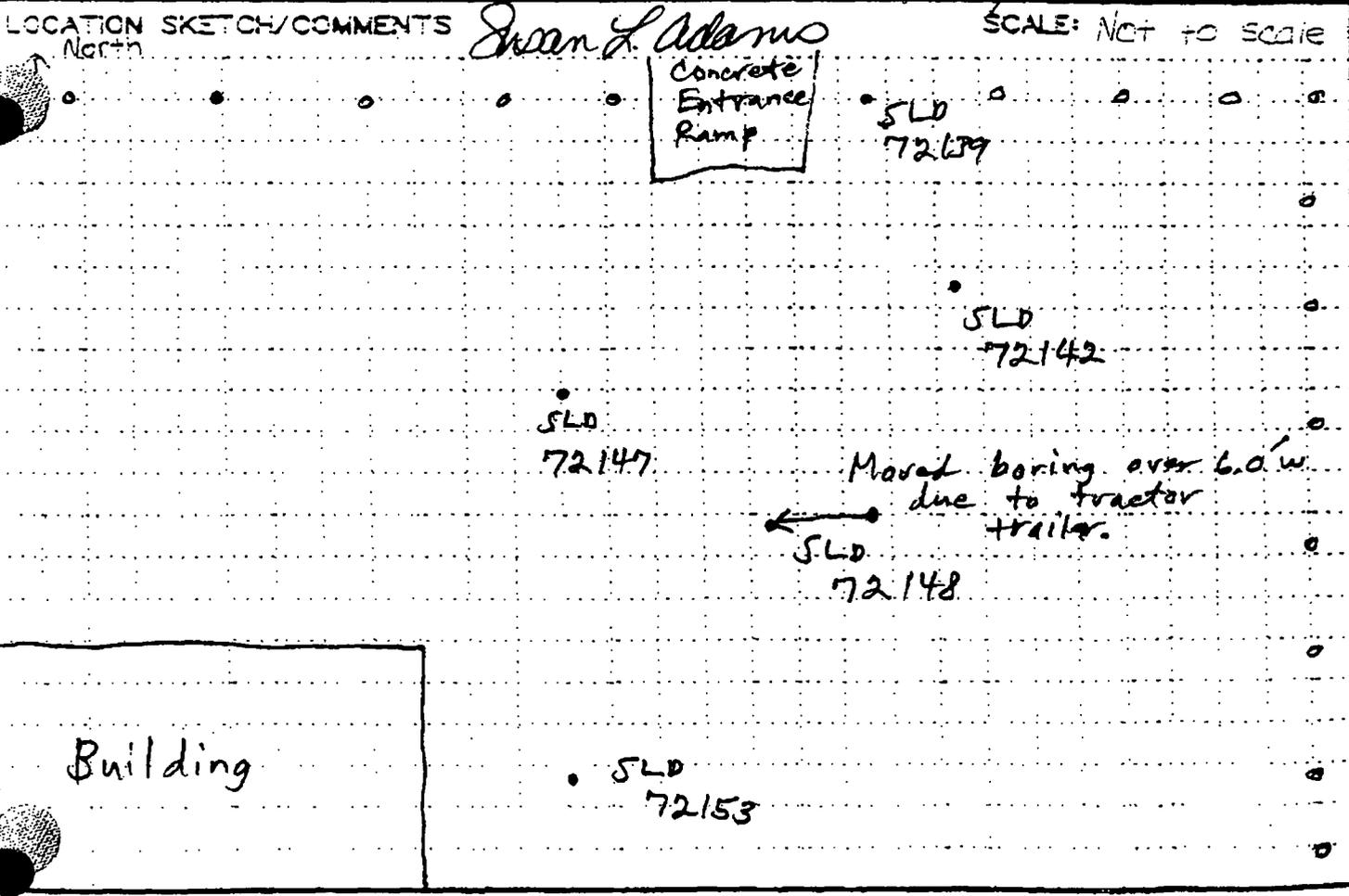
WELL NUMBER SLD 72148

COMPANY NAME Snow E + I

DRILLING CONTRACTOR VEE, Inc.

SHEET 1 OF 2 SHEETS 2

1. PROJECT FUS RAP / SLDs		4. LOCATION PSC Metals North Tract V.P. City of Independence, MO	
3. NAME OF DRILLER Chris Anthony		5. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/2" HSA and 3" x 3" Split Spoon		8. HOLE LOCATION N/A	
8. OVERBURDEN THICKNESS N/A		9. SURFACE ELEVATION N/A	
10. DATE STARTED 10-21-02		11. DATE COMPLETED 10-21-02	
12. DEPTH DRILLED INTO ROCK N/A		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
14. TOTAL DEPTH OF HOLE 6.0' BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A	
18. GEOTECHNICAL SAMPLES	DISTURBED	INDISTURBED	19. TOTAL NUMBER OF CORE BOXES
0	0	0	0
20. SAMPLES FOR CHEMICAL ANALYSIS	DC	METALS	OTHER (SPECIFY)
0	0	0	RAD
22. DEPOSITION OF ACLE	REFILLED	MONITORING WELL	OTHER (SPECIFY)
0	Yes	0	0
23. SIGNATURE OF INSPECTOR D. H. Adams			24. TOTAL CORE RECOVERED 0%



FUS RAP SLDs

SLD 72148

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: EUSRAP/SLDS		INSPECTOR: Phillip Statler		WELL NUMBER: SLD 72148	
DEPTH (FEET)	DESCRIPTION OF MATERIALS	RECOVERY (FEET)	REMARKS	SLD NUMBER	BLW COUNT	REMARKS	DEPTH (FEET)
0.0 - 1.0	SM silty fine sand w/ some med. gravel, med. dense, poorly graded, dk brn. dry, some cinders and slag, few rust.	6400 0.0 5600 0.0	RECOVERY 1.8 2.0	SLD 72148 10-21-02 1315	8 13	same slag appears "crystalline".	0.0 - 1.0
1.0 - 2.0	silty clay, med. stiff to stiff, med. plast, dk brn, dry, trace limest. cobbles.	6000 0.0 5800 0.0	no recovery	SLD 72148 1320	11 9		1.0 - 2.0
2.0 - 3.0	few brick frags, limest. stone cobbles.	6500 0.0 6600 0.0	1.8 2.0	SLD 72148 1330	3 7	(archive sample from 2.5-3.0' BGS)	2.0 - 3.0
3.0 - 4.0	1 limestone cobble	6100 0.0 6000 0.0	no recovery		8 10		3.0 - 4.0
4.0 - 5.0	clay turning H. gray.	6500 0.0 5800 0.0	2.0 2.0		2 3		4.0 - 5.0
5.0 - 6.0	some cinders and slag	6000 0.0 6300 0.0		SLD 72148 archive 1335	3 9	archive sample from 5.5-6.0' BGS	5.0 - 6.0
6.0 - 7.0	TD: 6.0' BGS 1320 10-21-02					Backgrounds Nat: 6,200 PID: 0.0	6.0 - 7.0
7.0 - 8.0						Back-filled boring w/ 3.0 bags of bentonite chips. Capped boring w/soil.	7.0 - 8.0
8.0 - 9.0							8.0 - 9.0
9.0 - 10.0							9.0 - 10.0

# TRW DRILLING LOG

DISTRICT: St. Louis HOLE NUMBER: SLD 72149

COMPANY NAME: Shaw E + I DRILLING SUBCONTRACTOR: MES, Inc. SHEETS: 1 of 5

1. PROJECT: FUS RAP / SLDS 4. LOCATION: PSG Metals North Tract U.P. City of Venice IL V.P. 85

5. NAME OF DRILLER: Chris Anthony 6. MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using 4 1/2" HSA and 3" x 2" split spoon 8. HOLE LOCATION: N/A

9. SURFACE ELEVATION: N/A

10. DATE STARTED: 10-16-02 11. DATE COMPLETED: 10-16-02

12. OVERBURDEN THICKNESS: N/A 15. DEPTH GROUNDWATER ENCOUNTERED: N/A

13. DEPTH DRILLED INTO ROCK: N/A 16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A

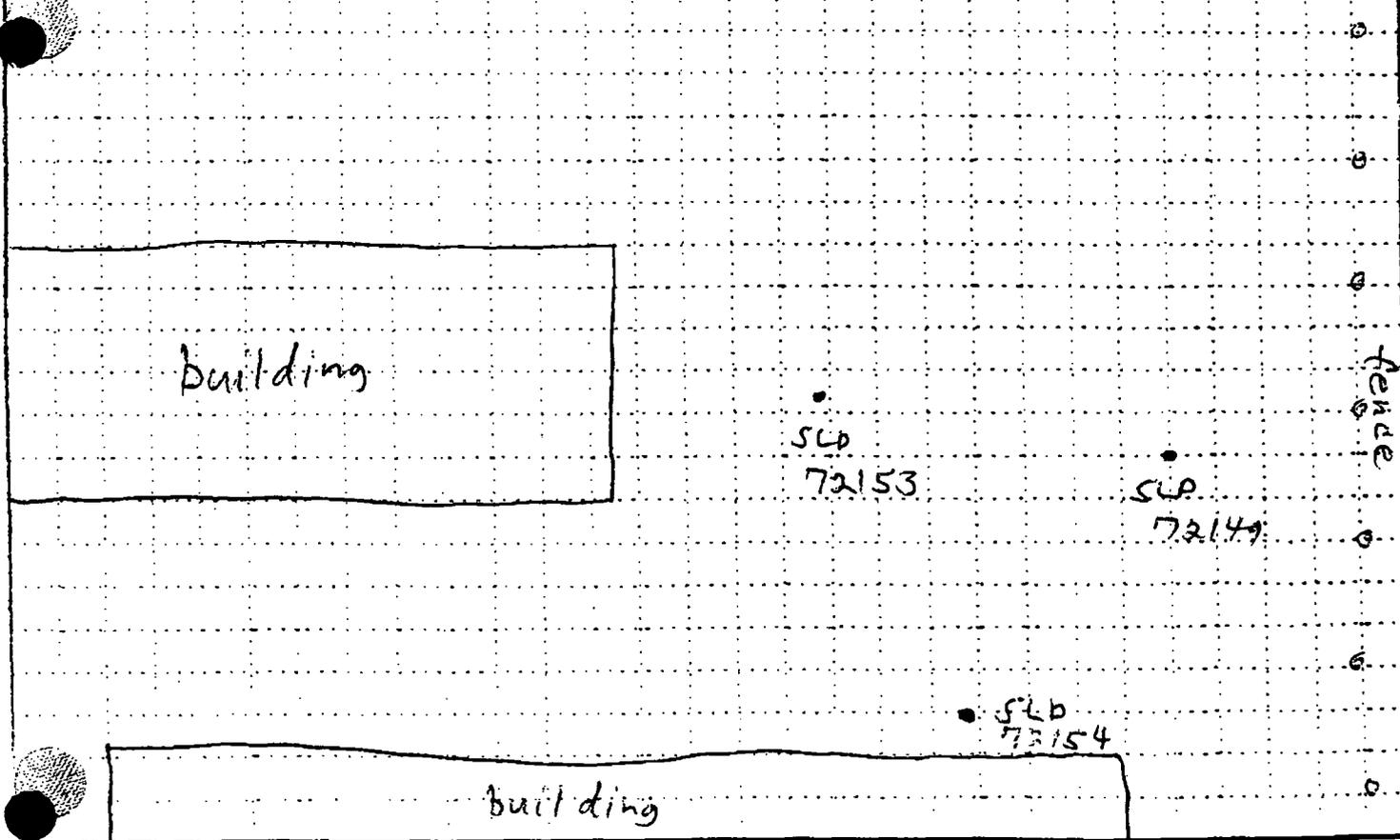
4. TOTAL DEPTH OF HOLE: 6.0' BGS 17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES:  DISTURBED  UNDISTURBED 19. TOTAL NUMBER OF CORE BOXES: 0

20. SAMPLES FOR CHEMICAL ANALYSIS:  METALS  OTHER (SPECIFY): RAD  OTHER (SPECIFY): R  OTHER (SPECIFY): R 21. TOTAL CORE RECOVERY: 0%

22. DEPOSITION OF MUD:  SACK FILLED  MONITORING WELL  OTHER (SPECIFY): Other 23. SIGNATURE OF INSPECTOR: [Signature]

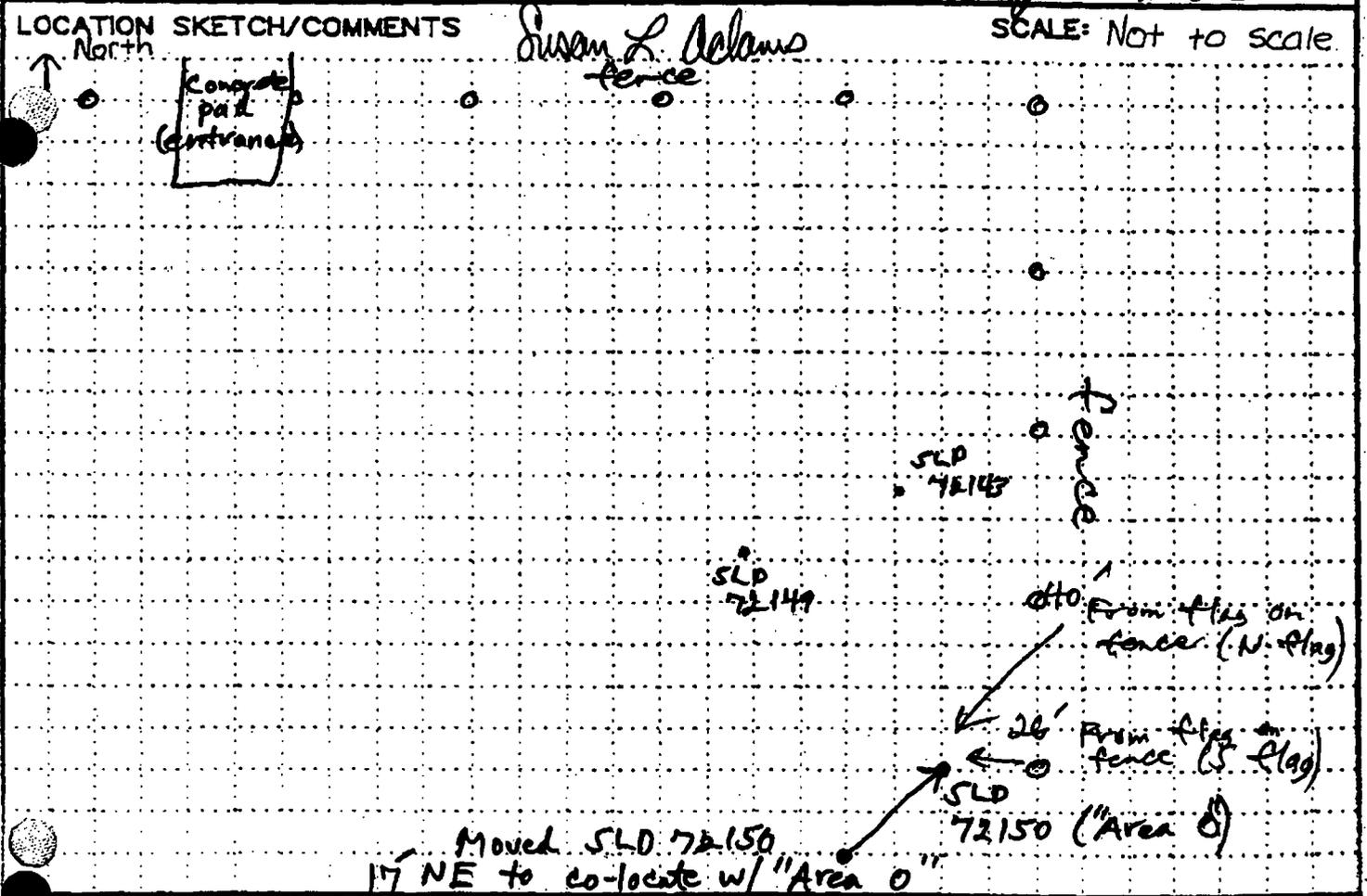
LOCATION SKETCH/COMMENTS: North Susan L. Adams SCALE: Not to scale



HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT	INSPECTOR	WELL NUMBER	SHEET	TOTAL SHEETS
FUSRAP/SLDS		Phillip Statler		SLD 72149	2	2
DEPTH (FEET)	DESCRIPTION OF MATERIALS	WELL LOG (INCHES TO FEET)	RECOVERY	ANALYTICAL ADDRESS NO.	BLOW COUNT	REMARKS
SM 1.0	Silty fine sand w/ some med. gravel, med. dense, poorly graded, th. brn. to brn, dry, some cinders, slag and brick frags.	5900 0.0	2.0	SLD 72149 10-16-02 1015	29	
		6500 0.0	2.0		31	
		5700 0.0			15	
		6800 0.0		SLD 72176 1015	10	
CL 2.0 3.0 4.0 5.0 6.0	trace clay (brn.) some cinders, slag and brick frags.  Silty clay, stiff, med. part, th. brn., dry  clay slightly gray.	6400 0.0	1.6	SLD 72149 archive 1015	7	
		5800 0.0	2.0		9	
		6700 0.0		SLD 72149 archive 1015	13	
		N/A N/A	no recovery		12	
		6300 0.0	1.9		4	
		5900 0.0	2.0		4	
		5800 0.0			5	
		6500 0.0		SLD 72149 archive 1015	5	
TD: 6.0' BGS 10-16-02 1030						Background NFI: 5,700 PID: 0.0  Backfilled boring w/ 3 bags of bestonite chips. Capped boring w/ soil.

# UTRW DRILLING LOG

1. COMPANY NAME <b>Shaw E + I</b>		DISTRICT <b>St. Louis</b>		HOLE NUMBER <b>SLD 72150</b>	
2. DRILLING SUBCONTRACTOR <b>MES, Inc.</b>		3. PROJECT <b>FUS RAP / SLDS</b>		SHEETS <b>1 of 4</b>	
4. LOCATION <b>Rsc Metals North Tract P.S. City of Venice IL VA (Area 0)</b>		5. NAME OF DRILLER <b>Chris Anthony</b>		6. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120</b>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 3/4" HSA and 3" x 2' Split Spoon</b>		8. HOLE LOCATION <b>N/A</b>		9. SURFACE ELEVATION <b>N/A</b>	
10. DATE STARTED <b>10-2-02</b>		11. DATE COMPLETED <b>10-2-02</b>		12. OVERBURDEN THICKNESS <b>N/A</b>	
13. DEPTH DRILLED INTO ROCK <b>N/A</b>		14. TOTAL DEPTH OF HOLE <b>22.0' BGS</b>		15. DEPTH GROUNDWATER ENCOUNTERED <b>10.0' BGS - N/A P.S.</b>	
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>		18. GEOTECHNICAL SAMPLES	
19. TOTAL NUMBER OF CORE BOXES <b>0</b>		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY <b>0%</b>	
22. DISPOSITION OF HOLE <b>Sackfilled</b>		23. SIGNATURE OF INSPECTOR <b>Phillip M. Stath</b>		24. LOCATION SKETCH/COMMENTS	



HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 72150
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statler					TARGET 2 - 4
DEPTH (ft)	DESCRIPTION OF MATERIALS	NO. OF SAMPLES IN LOT	RECOVERY %	SLD LABOR #	BLW CORBT	REMARKS	
1.0	silty fine sand w/ some med. gravel, med. dense, poorly graded, lt. brn/gray, trace glass. trace clay w/ some cinders trace slag. few coarse gravel.	5200	0.0	2.0 / 2.0	SLD 72150 10-7-98 0850	11	
		5300	0.0			15	
		5400	0.0	24			
		5500	0.0	22			
		5600	0.0	23			
2.0	some cinders and some slag (reddish in color), trace coarse gravel.	5500	1.6 / 2.0			23	
		5700	0.0			9	
3.0	fifty clay, med. silt/clay, med. part., dry, dry.	5700	0.0		SLD 72150 0900	7	
		N/A	N/A	no recovery		5	
4.0 - 6.0	N/A*					5	
						5	
						5	
						4	
						3	
7.0	trace brick frags and coarse gravel moist	5500	0.0	1.5 / 2.0		3	
		5100	0.0		2		
		5600	0.0	1			
8.0	wet	N/A	N/A	no recovery		1	
		5800	0.0	1.5 / 2.0	SLD 72150 archive 0910	1	
9.0	silty fine sand, very loose, poorly graded, lt. gray, well rounded sand, wet, archy, well rounded med. archy. Small wood frags, weathered, slaty, trace roots trace green/gray clay	5400	0.0	2.0	SLD 72150 archive 1010 10/17/02	1	
		5700	0.0		1		
		6200	0.0	SLD 72799	SLD 72150 archive 1020	2	
10.0		N/A	N/A	no recovery		2	

HTRW DRILLING LOG (CONTINUATION SHEET)				HOLE NO. 72150	
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Stetler		SHEET 3 OF 4	
DEPTH (ft)	DESCRIPTION OF MATERIALS	SOIL SAMPLE NO. (in 2.0)	RECOVERY	BLow COUNT (lb)	REMARKS
10.0	some sand, increasing well rounded, trace well rounded gravel.	5p00	1.8	1	Quartz sand and gravel
11.0		5700	2.0	1	← archive sample from 10.6-11.0' BGS
11.0	silty clay, soft, med. plastic, gry., saturated.	5500	N/A	weight of hammer	← archive sample from 11.1-11.6' BGS.
12.0		N/A	no recovery	2	
12.0	silty fine sand, loose, poorly graded, gry. to blk., saturated	5500	1.8	2	
13.0	some wood fragments, weathered, flaky, blk.	5400	2.0	2	archive sample taken from 12.5-13.0' BGS
13.0		5000		2	
14.0	some clay, gry.	5800	no recovery	3	
14.0	well rounded sand and med. gravel	5500	1.3	1	Quartz sand and gravel.
15.0		5400	2.0	1	archive sample taken from 14.0-14.5' BGS
15.0	wood fragments, weathered, flaky, blk.	5100		2	
16.0		N/A	no recovery	2	
16.0	wood fragments, weathered, flaky, blk.	5500	1.8	2	
17.0		6100	2.0	1	
17.0	some clay, gry.	5500		3	archive sample taken from 17.2-
18.0		5400	no recovery	4	
18.0	few wood frags, weathered, flaky	6000	1.1	3	← in-situ or contact clay has "swampy" odor
18.0	silty clay, soft, med. plastic, gry., saturated.	5200	2.0	3	
19.0		N/A	no recovery	4	archive sample from 18.3-18.8' BGS
20.0		N/A	no recovery	4	

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 72150
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Staylor			SHEET 4 OF 4		
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	SOIL LOSS (ft)	RECOVERY (%)	WELL NUMBER (ft)	BLOW COUNT (ft)	REMARKS (ft)	
CL 21.0	Same as above	SP00 0.0	1.7 / 2.0	SLD 72150	1		
		SP00 0.0			2		
		SH00 0.0			3		
2.0		N/A	no recovery		1		
2.0	TD: 22.0' BGS 10-2-02 1330					Background NaI: 5200 PID: 0.0 Back-filled boring w/ slurry grout (at 20-30% solids (60 gal.) Capped boring w/ soil.	
3.0							
4.0							
5.0							
6.0							
7.0							
8.0							
9.0							
10.0							

PROJECT FUSRAP/SLDS

WELL NO SLD 72150

# HTRW DRILLING LOG

DISTRICT: St. Louis  
 HOLE NUMBER: SLD 72150 B

1. COMPANY NAME: Shaw E + I  
 2. DRILLING SUBCONTRACTOR: MES, Inc.  
 SHEETS: 1 of 2

3. PROJECT: FUS RAP / SLDS  
 4. LOCATION: PSC Metals North tract (Area 0)  
 City of Venice, IL VA PS

5. NAME OF DRILLER: Chris Anthony  
 6. MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using 4 1/2" HSA and 3" x 2' split spoon  
 8. HOLE LOCATION: N/A

9. SURFACE ELEVATION: N/A

10. DATE STARTED: 10-3-02  
 11. DATE COMPLETED: 10-5-02

12. OVERBURDEN/THICKNESS: N/A  
 15. DEPTH GROUNDWATER ENCOUNTERED: N/A

13. DEPTH DRILLED INTO ROCK: N/A  
 16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A

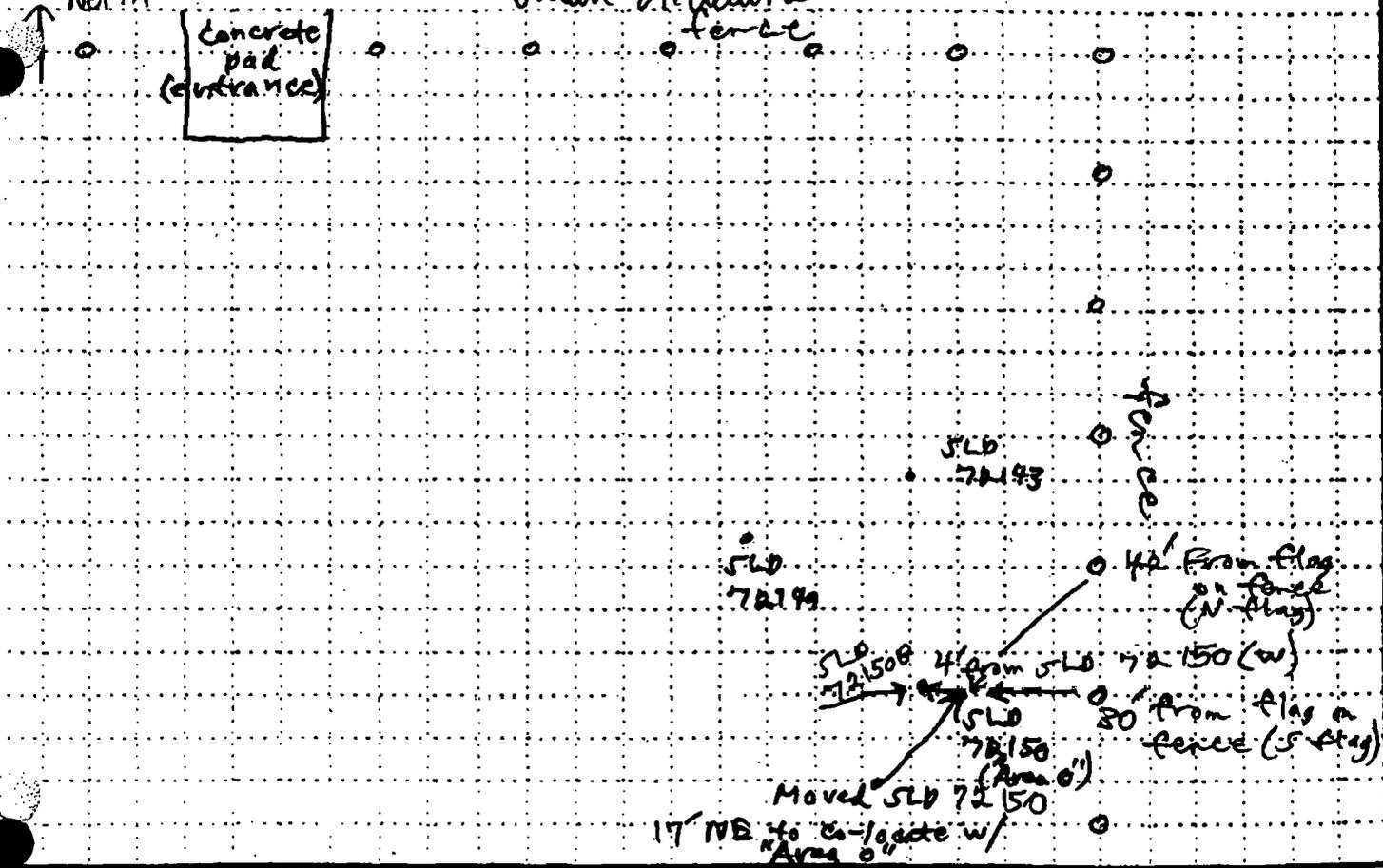
14. TOTAL DEPTH OF HOLE: 6.0' BGS  
 17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES: DISTURBED  UNDISTURBED   
 19. TOTAL NUMBER OF CORE BOXES:

20. SAMPLES FOR CHEMICAL ANALYSIS: VOC  METALS  OTHER (SPECIFY) RAD   
 21. TOTAL CORE RECOVERY:

22. DEPOSITION OF HOLE: SACFILLED  MONITORING WELL  OTHER (SPECIFY)   
 23. SIGNATURE OF INSPECTOR: Shelly M. Hall

LOCATION SKETCH/COMMENTS: North  
 SCALE: Not to scale

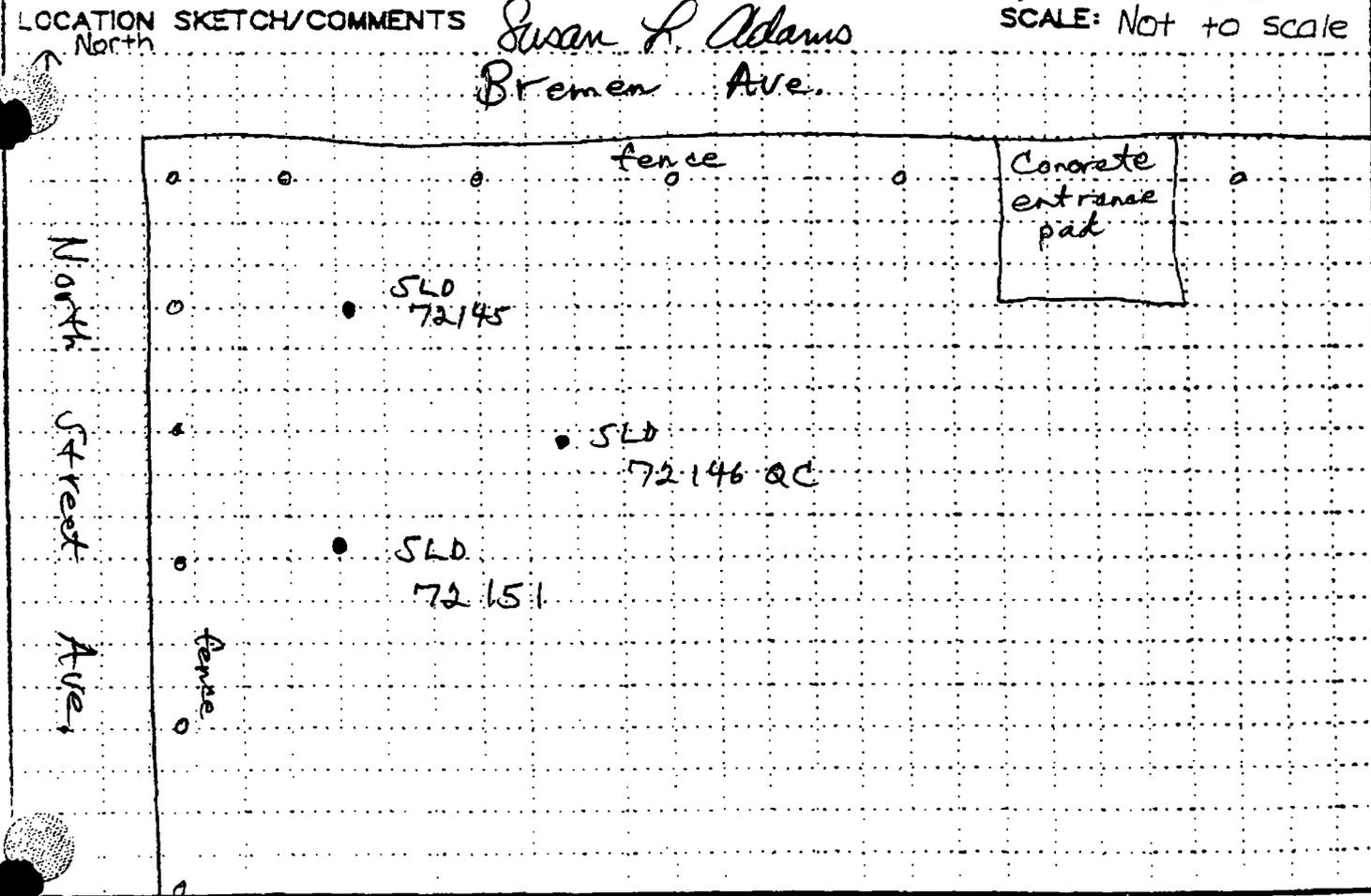


PROJECT: FUS RAP / SLDS  
 HOLE NO.: SLD 72150 B

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 72150B
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statter					SHEET 2 OF 2
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	WELL LOG IN/OUT ft	RECOVERY	WATER TABLE DEPTH (ft)	BLOW COUNT ft	REMARKS	
0.0 - 4.0	See SLD 72150 for soil and sample descriptions. (From 0.0 - 4.0' BGS)					Hand pt Augered down to 4.0' BGS and hand augered to 6.0' BGS.	
4.0 - 5.0	Silty clay, med. silt, med. plast, firm, dry, trace fine sand, org, trace cinders	5700 0.0			N/A		
5.0 - 5.5		5500 0.0			N/A		
5.5 - 6.0		4800 0.0			N/A		
6.0 - 6.5	Some well rounded sand and gravel, trace limestone frag.	5500 0.0		SLD 72150B 1130	N/A		
6.5 - 10.0	TD: 6.0' BGS 10-3-02 1130					Background: Nat: 5,200 PTD: 0.0 Backfilled boring w/ 2.0 bags of bentonite chips. Capped boring w/ soil.	

# METROW DRILLING LOG

1. PROJECT <b>FUS RAP / SLDS</b>		DISTRICT <b>St. Louis</b>		HOLE NUMBER <b>SLD 72151</b>	
COMPANY NAME <b>Shaw E + I</b>		2. DRILLING SUBCONTRACTOR <b>MES, Inc.</b>		SHEET <b>1 of 2</b>	
3. NAME OF DRILLER <b>Chris Anthony</b>		4. LOCATION <b>PSC Metals North tract V.P. <del>City of Venice, IL VP</del></b>		6. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120</b>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 1/4" HSA and 3" x 2" Split Spoon</b>		5. HOLE LOCATION <b>N/A</b>		8. SURFACE ELEVATION <b>N/A</b>	
8. DATE STARTED <b>10-14-02</b>		9. DATE COMPLETED <b>10-14-02</b>		10. DEPTH GROUNDWATER ENCOUNTERED <b>N/A</b>	
11. DEPTH DRILLED INTO ROCK <b>N/A</b>		12. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		13. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>	
14. TOTAL DEPTH OF HOLE <b>6.0' BGS</b>		15. DISTURBED		16. UNDISTURBED	
17. GEOTECHNICAL SAMPLES		18. TOTAL NUMBER OF CORE BOXES		19. TOTAL CORE RECOVERY	
20. SAMPLES FOR CHEMICAL ANALYSIS		METALS		OTHER (SPECIFY)	
21. DEPOSITION OF MCL		MONITORING WELL		OTHER (SPECIFY)	
22. SIGNATURE OF INSPECTOR		23. SIGNATURE OF INSPECTOR		24. SIGNATURE OF INSPECTOR	



ATRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 72151	
PROJECT FUSRAP/SLDS			INSPECTOR Phillip Stator			SHEET 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	WATER PTD	RECOVERY NO.	ANALYTICAL SAMPLE NO.	BLOW COUNT	REMARKS	
SM 1.0	Silty fine sand w/ few med. gravel, med. dense, poorly graded; H. brn to dk. brn, dry, some silt and clay, trace brick frags, trace glass.	6400	0.0	RECOVERY	SLD 72151 1446	17	
		6500	0.0	1.8 / 2.0		16	
		6000	0.0			17	
		7000	0.0	no recovery	SLD 72178 1445	10	
		6400	0.0			5	
CL 3.0	SM clay, med. str. med. plast.; dk. brn.; dry.	6600	0.0	1.6 / 2.0	SLD 72151 1500	6	archive sample from 2.5-3.0' BGS
		6500	0.0			8	
		N/A	N/A	no recovery		10	
		6600	0.0			4	
		5900	0.0	2.0 / 2.0		6	
		6300	0.0			10	
6.0	clay turning to gry.	6000	0.0		SLD 72151 archive 1500	12	archive sample from 5.5-6.0' BGS
		TD: 6.0' BGS 1500 10-14-02					

# TRW DRILLING LOG

ST. LOUIS

WELL NUMBER: SLD 72152

1. CONTRACTOR NAME: Shaw E + I

2. DRILLING SUBCONTRACTOR: MES, Inc.

SHEET: 1 of 2

3. PROJECT: FUS RAP / SLDs

4. LOCATION: PSA Metals North Tract U.P. City of Venice, IL VP PS

5. NAME OF DRILLER: Chris Anthony

6. MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using 420/45A and 3" x 3' split spoon

8. HOLE LOCATION: N/A

9. SURFACE ELEVATION: N/A

8. DATE STARTED: 10-15-02  
 11. DATE COMPLETED: 10-15-02

12. OVERBURDEN THICKNESS: N/A

15. DEPTH GROUNDWATER ENCOUNTERED: N/A

13. DEPTH DRILLED INTO ROCK: N/A

16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A

14. TOTAL DEPTH OF HOLE: 6.0' BGS

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES	<input type="checkbox"/> DISTURBED	<input type="checkbox"/> UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2

20. SAMPLES FOR CHEMICAL ANALYSIS	<input type="checkbox"/> OC	<input type="checkbox"/> METALS	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RAD	<input type="checkbox"/>	<input type="checkbox"/>	95%

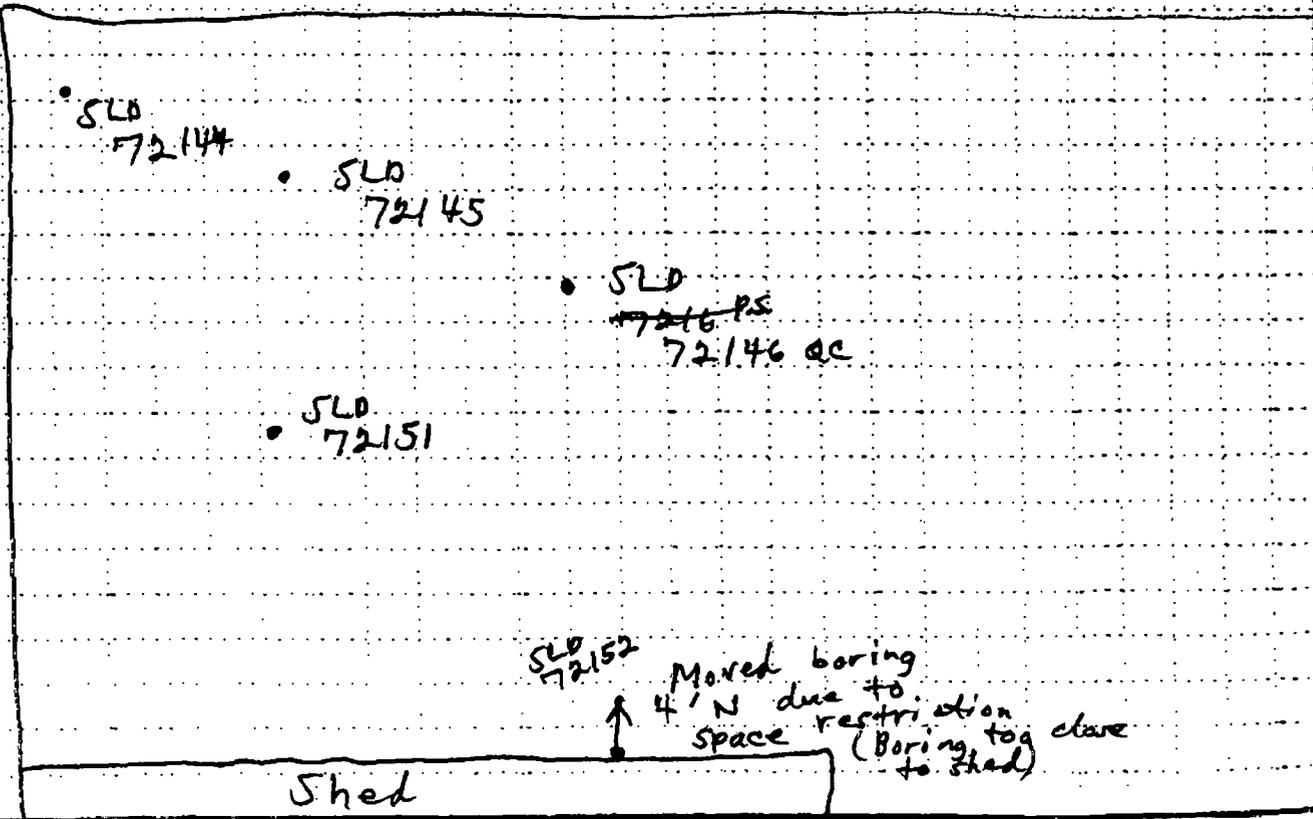
22. DEPOSITION OF HOLE	<input type="checkbox"/> FACED	<input type="checkbox"/> MONITORING WELL	<input type="checkbox"/> OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
<input type="checkbox"/>	Yes	<input type="checkbox"/>	<input type="checkbox"/>	Phillip M. Stoltz

## LOCATION SKETCH/COMMENTS

SCALE: Not to scale

N. Second Ave

Bremen Ave



FUS RAP SLDs

SLD 72152

FTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT		HOLE NUMBER		SHEET	
FUSRAP/SLDS		Inspector <i>Phillip Statler</i>		SLD 72152		2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	RECOVERY (%)	ANALYTICAL LABORATORY NO.	SLOW COUNT	REMARKS	
SM 1.0	silty fine sand w/ some med. gravel, loose, poorly graded, dk. brn., dry, few cinders and slag.	6800 0.0	1.6/ 2.0	SLD 72152 1450	3		
		6700 0.0			5		
		6500 0.0		SLD 72179 1435	4		
		6900 0.0	no recovery		3		
		6700 0.0	1.9/ 2.0		6		
		7300 0.0		SLD 72152 1450	3	archive sample from 2.5-3.0' BGs	
CL 3.0	silty clay, med. plastic, dk. brn., dry, trace cinders.	7400 0.0			6		
		7600 0.0			8		
		6700 0.0	no recovery				
		6500 0.0	2.0/ 2.0				
		7500 0.0					
		7500 0.0		SLD 72152 1450		archive sample from 5.5-6.0' BGs	
TD: 6.0' BGs 10-15-02 1450						Background: Nat's 6000 PID: 0.0 Back-filled boring w/ 3 bags of bentonite chips. Capped w/soil.	

# ATRW DRILLING LOG

ST. LOUIS

SLB 72153

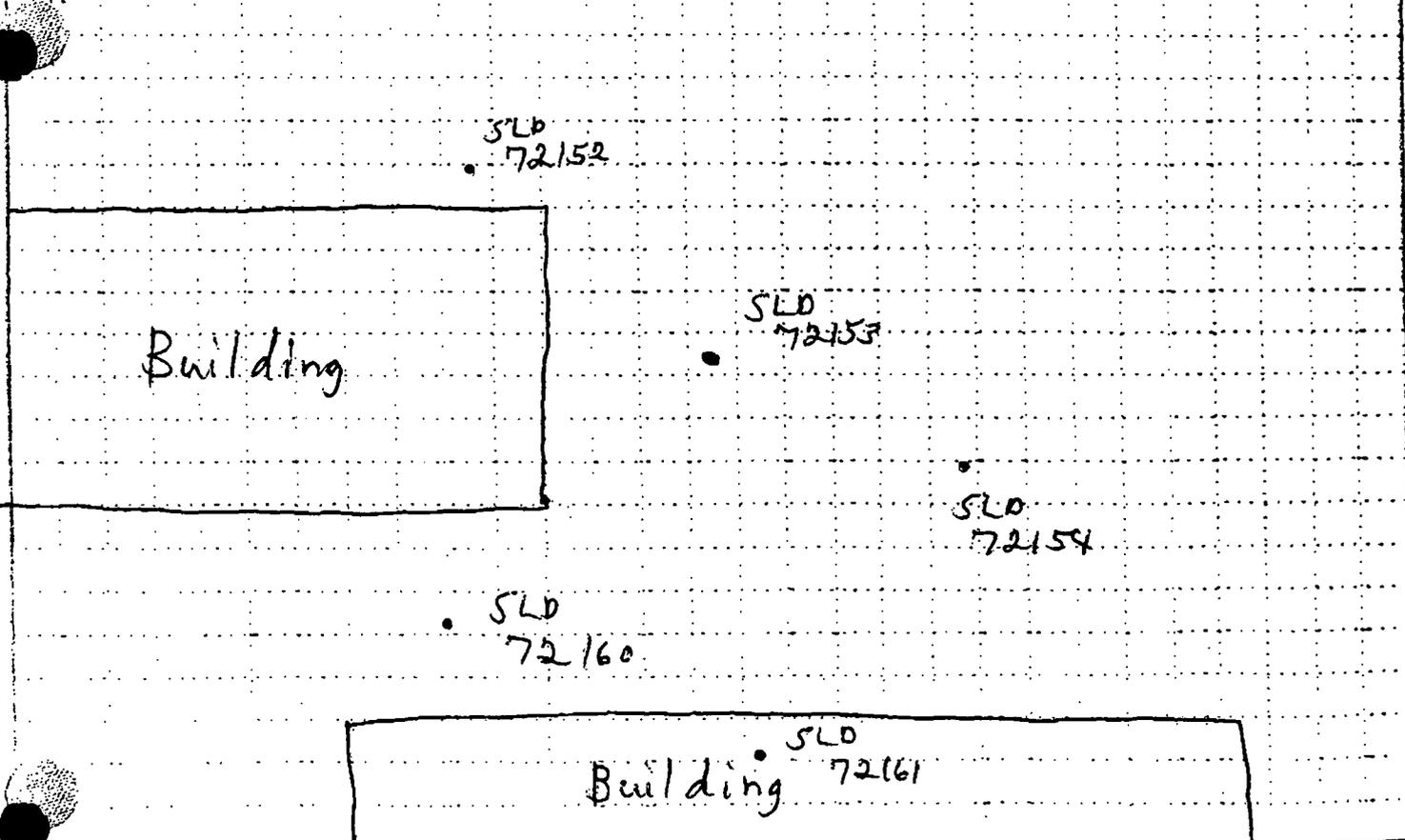
COMPANY NAME: Shaw E + I

DRILLING SUBCONTRACTOR: MEE, Inc.

SHEET: 1 of 2

1. PROJECT: FUS RAP / SLDs		4. LOCATION: City of Venice, IL VP	
2. NAME OF DRILLER: Chris Anthony		5. MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using HSA and 3" x 3' split spoon		8. HOLE LOCATION: N/A	
8. OVERBURDEN THICKNESS: N/A		9. SURFACE ELEVATION: N/A	
10. DATE STARTED: 10-16-02		11. DATE COMPLETED: 10-16-02	
12. DEPTH DRILLED INTO ROCK: N/A		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A	
14. TOTAL DEPTH OF HOLE: 6.0' BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A	
16. DISTURBED: <input type="checkbox"/>	16. UNDISTURBED: <input type="checkbox"/>	19. TOTAL NUMBER OF CORE AXES: 0	
20. SAMPLES FOR CHEMICAL ANALYSIS: <input type="checkbox"/>	OC: <input type="checkbox"/>	NETALS: <input type="checkbox"/>	OTHER (SPECIFY): R20
22. DEPOSITION OF HOLE: <input checked="" type="checkbox"/>	BACKFILLED: Yes	MONITORING WELL: <input type="checkbox"/>	OTHER (SPECIFY): <input type="checkbox"/>
23. SIGNATURE OF INSPECTOR: Phillip D. Stott		21. TOTAL CORE RECOVERED: 0%	

LOCATION SKETCH/COMMENTS: North  
 Susan K. Adams  
 SCALE: Not to scale



HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: FUSRAP/SLDS		INSPECTION: Phillip Statler		HOLE NUMBER: SLB 72153	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	RECOVERY (%)	SLB NO.	BLW COUNT	REMARKS	
SM	silty fine sand w/ some med. gravel, med. dense, poorly graded, lt. brn to brn., dry.	5600 / 0.0	2.0 / 2.0	SLB 72153 1451-1452	16		
		5900 / 0.0			20		
	6000 / 0.0	15					
	5800 / 0.0	10					
CL	Some cinders, some slag, trace bricks.	6100 / 0.0	1.8 / 2.0	SLB 72180 1455	10	archive sample from 2.7-3.2' Bds.	
		5600 / 0.0			14		
	6000 / 0.0	8					
	5500 / 0.0	11					
	5700 / 0.0	8					
	6000 / 0.0	4					
	6300 / 0.0	5					
	5900 / 0.0	6					
6.0	TD: 6.0' BGS 10-16-02 1500					Background: Nat: 5,700 PID: 0.0 Back-filled boring w/ 3.0 bags of bentonite chips. Capped boring w/ soil.	

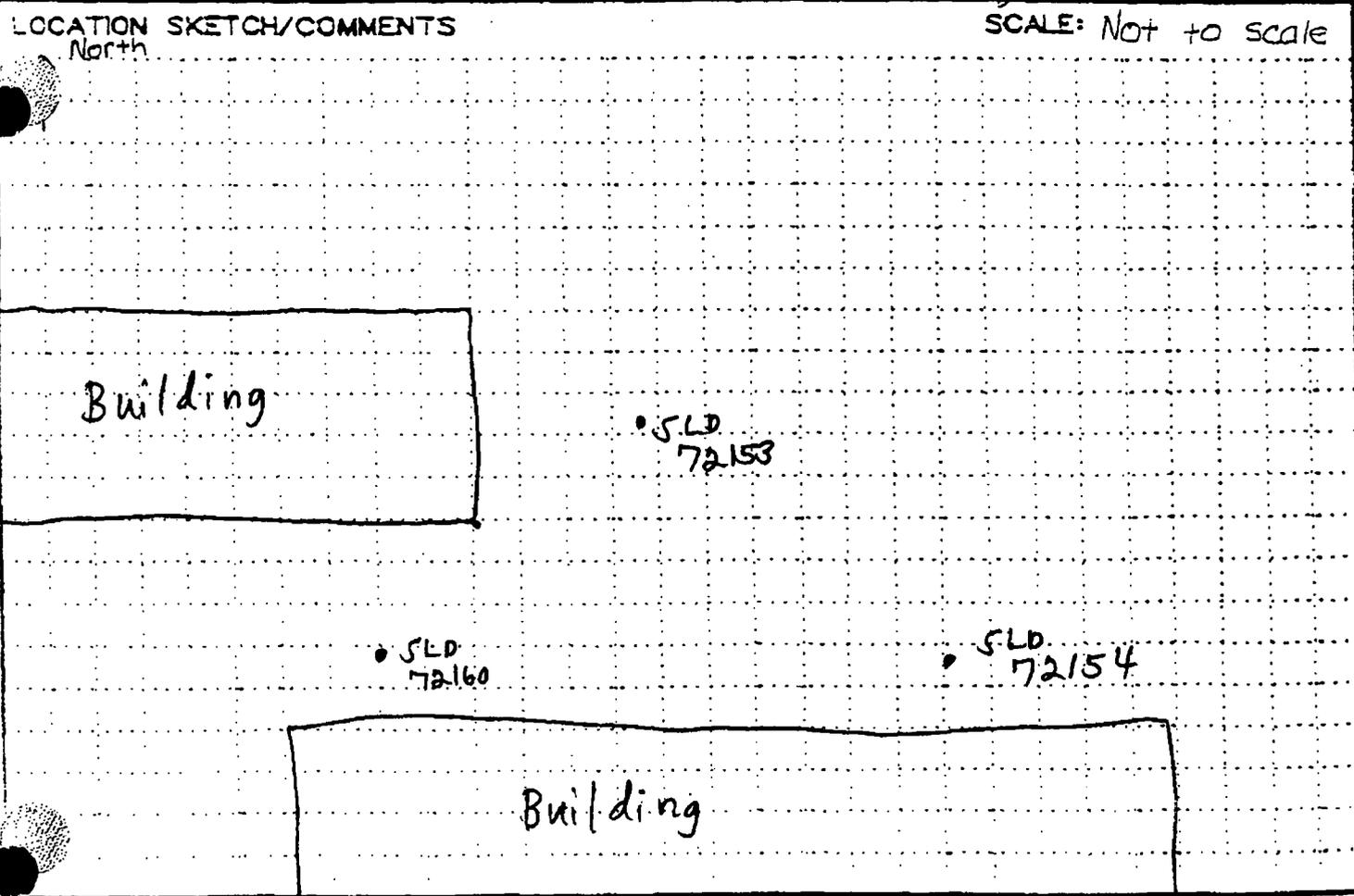
FUSRAP/SLDS

SLB 72153

# TRW DRILLING LOG

DIST. NO. St. Louis  
 HOLE NUMBER: SLD 72154

1. PROJECT FUS RAP / SLDS		2. DRILLING SUBCONTRACTOR MES, Inc.		3. SHEET 1 of 2	
4. COMPANY NAME Shaw E + I		5. LOCATION PSC Metals Vicinity Property City of Venice, IL. VP PSC (North road)		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120	
7. NAME OF DRILLER Chris Anthony		8. HOLE LOCATION N/A		9. SURFACE ELEVATION N/A	
10. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4" HSA and 3" x 2' split spoon		11. DATE STARTED 10-16-02		12. DATE COMPLETED 10-16-02	
13. OVERBURDEN THICKNESS N/A		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A	
16. DEPTH DRILLED INTO ROCK N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		18. TOTAL NUMBER OF CORE BOXES 0	
19. TOTAL DEPTH OF HOLE 6.0' BGS		20. GEOTECHNICAL SAMPLES DISTURBED: 0 UNDISTURBED: 0		21. TOTAL CORE RECOVERY 0%	
22. SAMPLES FOR CHEMICAL ANALYSIS 0		23. METALS 0		24. OTHER (SPECIFY) RAD	
25. DEPOSITION OF HOLE 0		26. SACK FILLED Yes		27. MONITORING WELL 0	
28. SIGNATURE OF INSPECTOR Phillip A. Platten					



HTRW DRILLING LOG (CONTINUATION SHEET)		HOLE NUMBER			
PROJECT		SLB 72154			
INSPECTOR		SHEET			
FUSRAP/SLDS		2 OF 2			
DEPTH (ft)	DESCRIPTION OF MATERIALS	RECOVERY	SLURRY CEMENT	REMARKS	
0.0 - 1.0	Silty fine sand w/ some med. gravel, med. coarse, poorly graded, (M, brn.), dry, some cinders, slag, trace brick frags, trace limest. cobbles, trace glass.	5500 0.0 6300 0.0 6800 0.0	1.7 / 2.0	15 21 24	
1.0 - 2.0	brick frag. in tip	6700 0.0 6700 0.0	no recovery	22	
2.0 - 3.0	few limestone cobbles, cinders, slag, and brick absent, trace clay.	6700 0.0 5800 0.0 6000 0.0	1.7 / 2.0	18 18 24	
3.0 - 4.0		5700 0.0	no recovery	15	archive sample from 3.2-3.7' BGS.
4.0 - 5.0	N/A	N/A N/A N/A N/A	1.8 / 2.0 P.S.	PSY PSY PSY PSY	Poor recovery encountered. See SLB 72154B for information.
5.0 - 6.0					
6.0 - 7.0	TD = 6.0' BGS 10-16-02 110				Background/ NFI 5700 PID = 0.0
7.0 - 8.0					Back-filled boring w/ 3.0 bags of bentonite chips. Capped boring w/ soil.
8.0 - 9.0					
9.0 - 10.0					

# TRW DRILLING LOG

ST. LOUIS

SLD 72154B

1. CLIENT NAME  
Shaw E + I

2. DRILLING SUBCONTRACTOR  
MEE, Inc.

SHEET OF 2

3. PROJECT  
FUS RAP / SLDs

4. LOCATION  
City of Venice, IL 1P

5. NAME OF DRILLER  
Chris Anthony

6. MANUFACTURER, DESIGNATION OF DRILL  
Diedrich D-120

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT  
Diedrich D-120  
Using HSA and  
3" x 2' Split Spoon

8. HOLE LOCATION  
N/A

9. SURFACE ELEVATION  
N/A

PID 10-16-02 NAE LUD 172059  
to 100/100 Cal Date 12-13-02 BGS = 5,700

10. DATE STARTED  
10-16-02

11. DATE COMPLETED  
10-16-02

12. OVERBURDEN THICKNESS  
N/A

15. DEPTH GROUNDWATER ENCOUNTERED  
N/A

13. DEPTH DRILLED INTO ROCK  
N/A

16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED  
N/A

14. TOTAL DEPTH OF HOLE  
6.0' BGS

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)  
N/A

18. GEOTECHNICAL SAMPLES

DISTURBED

UNDISTURBED

19. TOTAL NUMBER OF CORE BOXES  
0

20. SAMPLES FOR CHEMICAL ANALYSIS

METALS

OTHER (SPECIFY)  
RAD

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY  
0%

22. DEPOSITION OF HOLE

SACRIFICED

MONITORING WELL

OTHER (SPECIFY)

23. NAME OF INSPECTOR  
Phillip A. Stahl

## LOCATION SKETCH/COMMENTS

SCALE: Not to scale

North

Building

SLD 72153

SLD 72160

SLD 72154B  
SLD 72154  
moved over 2.5' from SLD 72154

Building

FUS RAP / SLDs

SLD 72154B

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: FUSRAP/SLDS		INSPECTOR: Philip Statler		WELL: SLD 72154 B		SHEET: 2 OF 3	
DEPTH (ft)	DESCRIPTION OF MATERIALS	NO. OF SAMPLES	RECOVERY (%)	WATER CONTENT (%)	SHRINKAGE (%)	MOISTURE RATIO	REMARKS		
1.0	SEE SLD 72154	N/A				N/A	Augered down to 4.0' BGS and drove spoon. (Poor re- covery in 4.0-6.0' BGS interval in SLD 72154 did not result in this)		
1.5		N/A				N/A			
2.0		N/A				N/A			
2.5		N/A				N/A			
3.0		N/A				N/A			
3.5		N/A				N/A			
4.0		N/A				N/A			
4.0		SM Silty fine sand w/ some med. gravel, pebbles, poorly graded; Hs. brn, dry; few limst. cobbles	5000	0.0				6	archive sam- ple from 4.5- 5.0' BGS
5.0	CL Silty clay, med. stiff, med. plastic; Hs. brn, dry; trace limst. cobbles, trace brick frags.	6000	0.0	1.8/ 2.0		8	archive sample from 5.3- 5.8' BGS.		
5.5		6400	0.0			8			
6.0		5800	0.0			7			
6.0	TD: 6.0' BGS 1140 10-16-02						Background NaI: 5,700 PIP: 0.0 Boring back filled w/ 3.0 bags of bentonite chips. Boring capped w/soil.		

# TRW DRILLING LOG

1. CITY: St. Louis

2. HOLE NUMBER: SLD 72155

3. COMPANY NAME: Snow E + I

4. DRILLING SUBCONTRACTOR: MES, Inc.

5. SHEETS: 1 of 2

6. PROJECT: FUS RAP / SLDs

7. LOCATION: City of Venice, IL VP

8. NAME OF DRILLER: Chris Anthony

9. MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-12C

10. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-12C using HSA and 3" x 3" split spoon

11. HOLE LOCATION: N/A

12. SURFACE ELEVATION: N/A

13. PID 10-17-02 N/A LJD 172059 to 100 / 100 Cal Date 12-12-02 Bgk = 59.00

14. DATE STARTED: 10-17-02 15. DATE COMPLETED: 10-17-02

16. OVERBURDEN THICKNESS: N/A

18. DEPTH GROUNDWATER ENCOUNTERED: N/A

19. DEPTH CHALLEN BTD BOX: N/A

20. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A

21. TOTAL DEPTH OF HOLE: 6.0' BGS

22. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

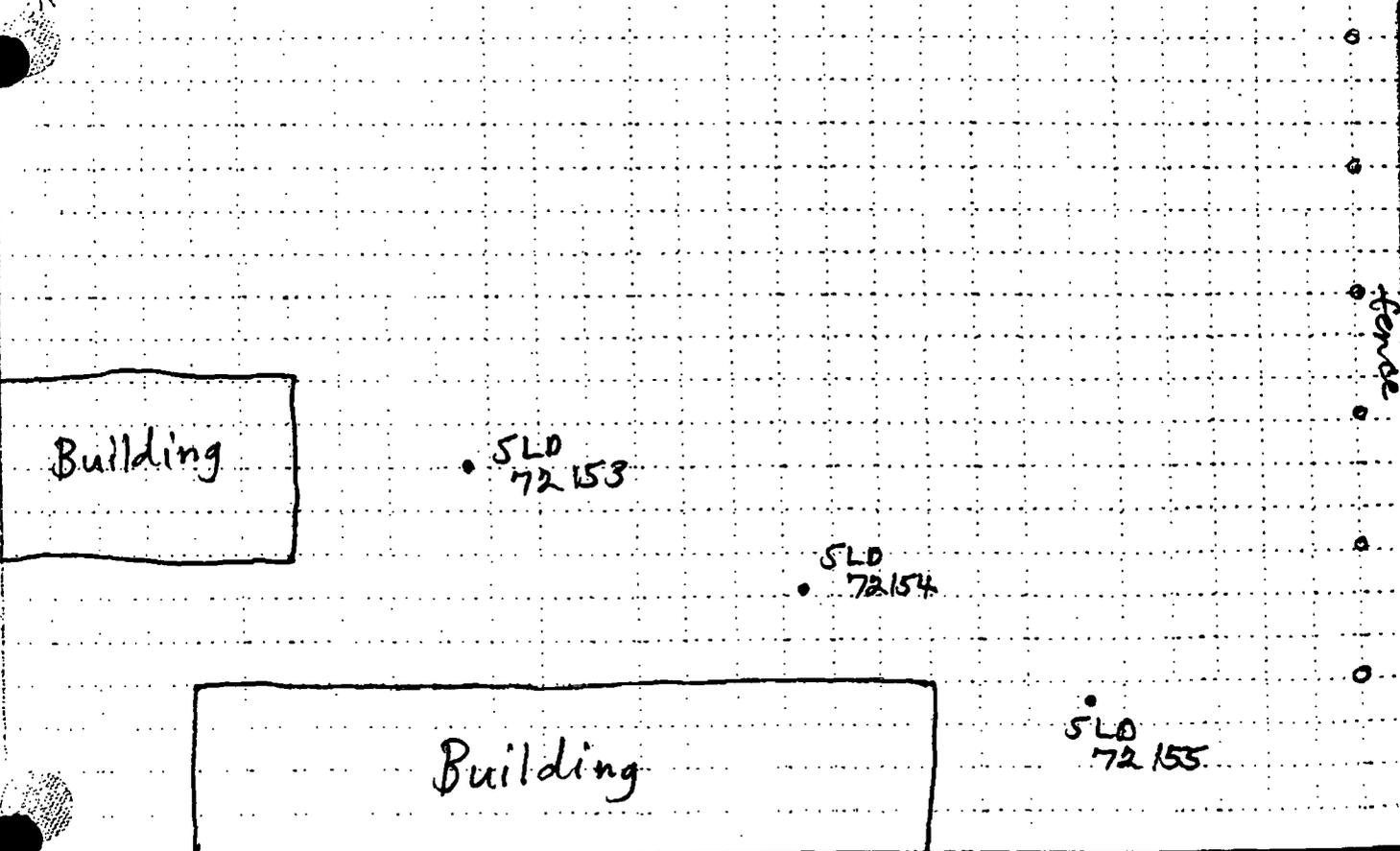
23. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	24. TOTAL NUMBER OF CORE BOXES
0	0	0	0

25. SAMPLES FOR CHEMICAL ANALYSIS	OK	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	26. TOTAL CORE RECOVERY
0	0	0	RAD	0	0	0%

27. DEPOSITION OF LOGS	SACKPILED	MONITORING WELL	OTHER (SPECIFY)	28. SIGNATURE OF INSPECTOR
0	Yes	0	0	William M. Hatten

29. LOCATION SKETCH/COMMENTS: North

SCALE: Not to scale



30. PROJECT: FUS RAP / SLDs

31. HOLE NUMBER: SLD 72155

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT FUSRAP/SLDS		INSPECTOR Philip Staller		WELL NUMBER SLD 72155		SHEET 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER SAMPLE NO. PTD	RECOVERY	ANALYTICAL LAB NO.	BLOW COUNT	REMARKS			
SM 1.0	silty fine sand w/ some med. to coarse gravel, loose to med. dense, poorly graded, (to brn. to dk brn.) dry, some clumps, some slag, trace wood, few brn. clay.	5500 0.0	1.7	SLD 72155 10-17-02 1315	14				
		5800 0.0	2.0		7				
		5900 0.0		SLD 72182 1315	11				
		5700 0.0	no recovery		8				
CL 2.0 3.0 4.0 5.0 6.0	silty clay, stiff, med. plast., (to brn.) dry.  trace coarse limestone frags.    trace brick frags.  trace brick frags.	5600 0.0	1.6		10	archive sample from 2.5-3.2 BGS.			
		5900 0.0	2.0	SLD 72155 archive 1315	8				
		5600 0.0			14				
		N/A N/A	no recovery		9				
		5500 0.0	1.7		6				
		5700 0.0	2.0		9				
6.0	TD: 6.0' BGS 10-17-02 1315	6600 0.0		SLD 72155 archive 1315	7	archive sample from 5.2-5.7 BGS.			
		N/A N/A	no recovery		5				
7.0						Backgrounds Nat: 5,900 PTDs 0.0 Backfilled boring w/ 30 bags of bentonite chips Capped boring w/ soil.			
8.0									
9.0									
10.0									

# U.S. ARMY DRILLING LOG

POST OFFICE: St. Louis

WELL NUMBER: SLD 72156

COMPANY NAME: Snow E + I

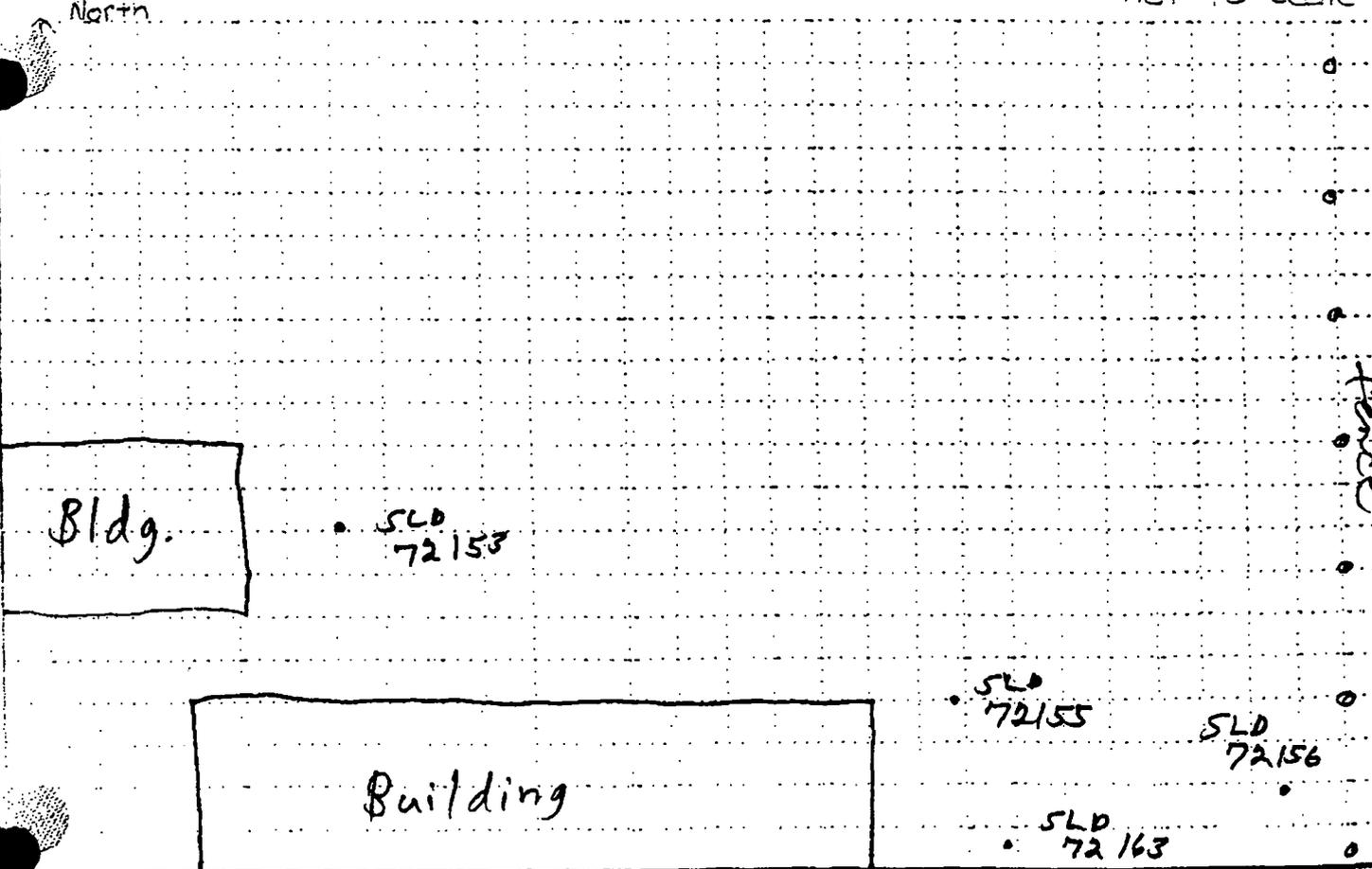
2. DRILLING CONTRACTOR: MEE, INC.

SHEETS: 1 of 2

1. PROJECT: FUS RAD / SLDs		4. LOCATION: PSC Metals North, Tract U.P.	
3. NAME OF DRILLER: Chris Anthony		5. MANUFACTURER'S DESIGNATION OF DRILL: Oedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Oedrich D-120 using 4 1/2" HSA and 3" x 3" Split 5000		8. HOLE LOCATION: N/A	
8. OVERBURDEN THICKNESS: N/A		9. SURFACE ELEVATION: N/A	
10. DATE STARTED: 10-21-02		11. DATE COMPLETED: 10-21-02	
12. DEPTH DRILLED INTO ROCK: N/A		15. DEPTH GROUNDWATER ENCOUNTERED: N/A	
4. TOTAL DEPTH OF HOLE: 6.0' BGS		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A	
13. GEOTECHNICAL SAMPLES: <input checked="" type="checkbox"/> DISTURBED <input checked="" type="checkbox"/> UNDISTURBED		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A	
19. DEPOSITION OF HOLE: <input checked="" type="checkbox"/> SACFILLED <input checked="" type="checkbox"/> MONITORING WELL		15. TOTAL NUMBER OF CORE BOXES: 0	
20. DEPOSITION OF HOLE: <input checked="" type="checkbox"/> SACFILLED <input checked="" type="checkbox"/> MONITORING WELL		21. TOTAL CORE RECOVERY: 0%	
22. SIGNATURE OF INSPECTOR: Phillip M. [Signature]		OTHER: SPECIFY: RAD	

## LOCATION SKETCH/COMMENTS

SCALE: Not to scale



PROJECT: FUS RAD SLDs

WELL NO: SLD 72156

HTRW DRILLING LOG		CONTINUATION SHEET		WELL NUMBER SLD 72156	
PROJECT EUSRAP/SLDS		INSPECTOR Phillip Statler		SHEET 2 OF 2	
DEPTH ft	DESCRIPTION OF MATERIALS	NO. OF SAMPLES	RECOVERY %	SLD NO.	BLW C-INT NO.
SM 1.0 2.0	Silty fine sand w/ some med. gravel, mod. dense to dense, poorly graded, dk. sh. to blk. dry, trace limestone cobbles, few cinders and slag, trace coal.	6100 0.0	2.0 / 2.0	SLD 72156 1921-22 1400	14
		6300 0.0			20
		6400 0.0			26
		6200 0.0		SLD 72183 1905	42
		5700 0.0	1.3 / 2.0		15
		6000 0.0		11	
		5900 0.0		SLD 72197 1415	13
CL 4.0 5.0 6.0	Silty clay med. stiff, mod. plst., dk. brn, dry.  some cinders, slag, coal, trace brick frags. clay turning M. grp.	N/A N/A	No recovery		7
		6200 0.0	2.0 / 2.0		5
		6300 0.0		5	
		6600 0.0		SLD 72206 1425	5
		5800 0.0			5
TD: 6.0' BG5 10-21-02 1420				Backgrounds Nat: 6200 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips.	

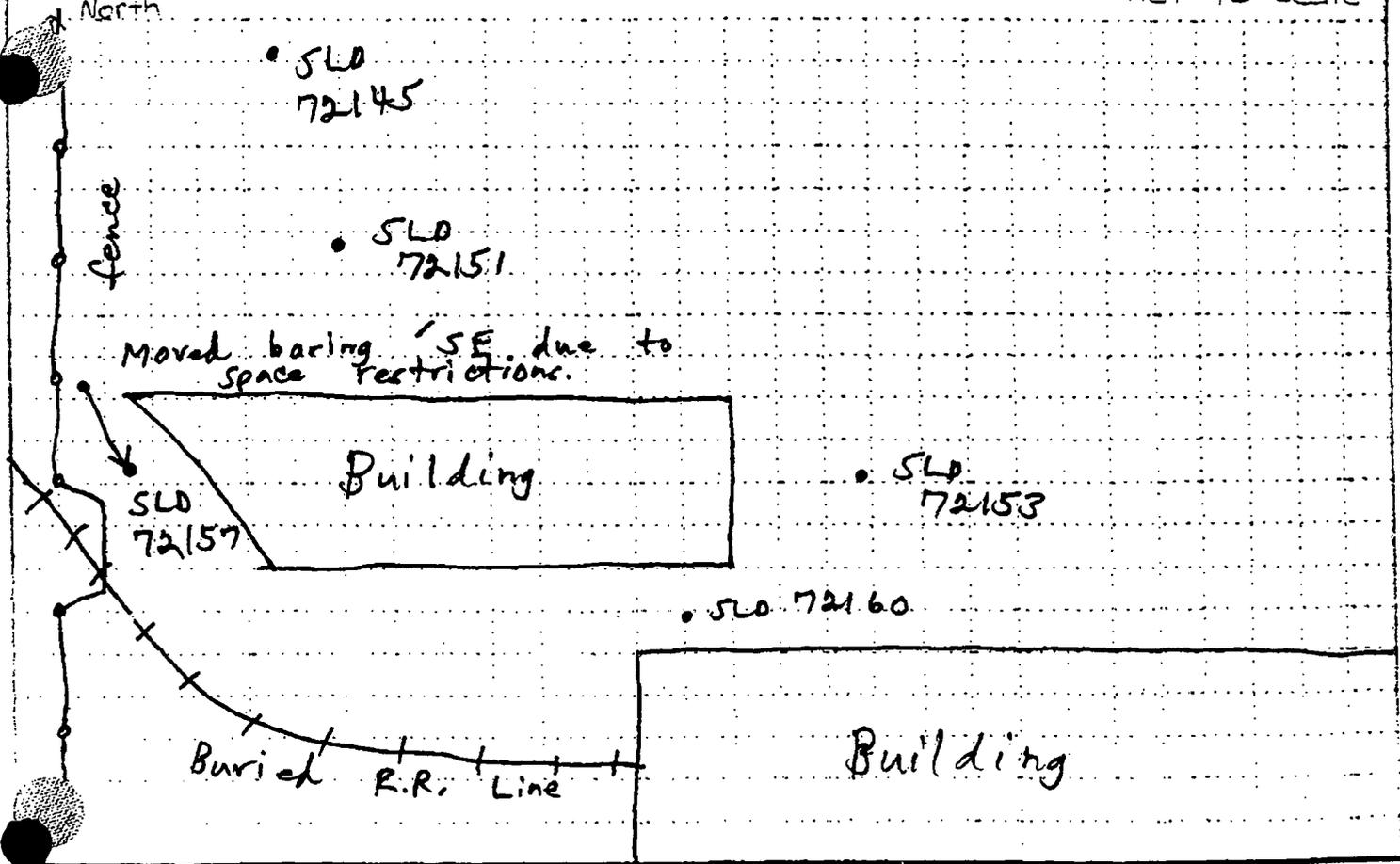
EUSRAP/SLDS

SLD 72156

1. PROJECT <b>FUS RAD - ELDS</b>		4. LOCATION <b>PSC Metals Vicinity Property S.W. of Venice St. to PS (North Tr.)</b>	
2. COMPANY NAME <b>Show E + I</b>		5. MANUFACTURER'S DESIGNATION OF DRILL <b>Piedrian 9-120</b>	
3. NAME OF DRILLER <b>Chris Anthony</b>		6. HOLE LOCATION <b>N/A</b>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Direction 9-120 using 9/16" HSA and 3" x 3" Split - soon</b>		8. SURFACE ELEVATION <b>N/A</b>	
8. OVERBURDEN THICKNESS <b>N/A</b>		9. DATE STARTED <b>10-21-02</b>	
9. DEPTH DRILLED INTO ROCK <b>N/A</b>		10. DATE COMPLETED <b>10-21-02</b>	
10. TOTAL DEPTH OF HOLE <b>6.0' BGS</b>		11. DEPTH GROUNDWATER ENCOUNTERED <b>N/A</b>	
11. GEOTECHNICAL SAMPLES <input checked="" type="checkbox"/> DISTURBED <input checked="" type="checkbox"/> UNDISTURBED		12. TOTAL NUMBER OF CORE BOXES <b>2</b>	
12. SAMPLES FOR CHEMICAL ANALYSIS <input checked="" type="checkbox"/> TOC <input checked="" type="checkbox"/> METALS <input checked="" type="checkbox"/> OTHER SPECIM. <b>RAD</b>		13. TOTAL CORE RECOVERY <b>2%</b>	
13. DEPOSITION OF HOLE <input checked="" type="checkbox"/> SAC-FILLED <input checked="" type="checkbox"/> MONITORING WELL <input checked="" type="checkbox"/> OTHER SPECIM.		14. SIGNATURE OF INSPECTOR <b>Billie McStall</b>	

LOCATION SKETCH/COMMENTS

SCALE: Nct to scale



HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: EUSRAP/SLOS		INSPECTOR: Philip Statler		SHEET 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	INCHES	RECOVERY (%)	SLD NUMBER	BLW COUNT	REMARKS	
0.0 - 1.0	Silty fine sand w/ few med. gravel, loose, poorly graded, dk. brn. to blk., dry, some cinders and slag.	6900 0.0	2.0	SLD 72157 1925 1525	6		
1.0 - 2.0	silty clay, soft, wood plant, 14% brn., dry, trace ash	6500 0.0	2.0	SLD 72184 -1, -2 1525	3		
2.0 - 3.0		7100 0.0	2.0		3		
3.0 - 4.0	few limestone cobbles	6100 0.0	1.8		2		
4.0 - 5.0		5900 0.0	2.0		6		
5.0 - 6.0	wood traces (weathered)	6200 0.0	no recovery	SLD 72157 archive 1530	5	archive sample from 3.8' BGS.	
6.0 - 7.0	clay turning lt. gray	6600 0.0	2.0		4		
7.0 - 8.0		6200 0.0	2.0		5		
8.0 - 9.0		6500 0.0		SLD 72157 archive 1525	6	archive sample from 5.0-5.5' BGS	
9.0 - 10.0	pieces of weathered wood.	6100 0.0			8		
10.0 - 11.0	TD: 6.0' BGS 1530 10-21-02					Background: Nat: 6200 PID: 0.0 Back filled boring w/ 3.0 bags of bentonite chips. Capped w/ soil.	

HTRW DRILLING LOG			DISTRICT			HOLE NUMBER																
1. COMPANY NAME Shaw E & I			St. Louis			SLD 72159																
2. DRILLING SUBCONTRACTOR M.E.S., Inc.			SHEET			SHEETS																
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.			1 OF 2																
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120																			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 Using 4 1/2" HSA and 3" x 2" split spoon.			8. HOLE LOCATION See location sketch																			
9. SURFACE ELEVATION N/A			10. DATE STARTED 2-11-03			11. DATE COMPLETED 2-11-03																
12. OVERBURDEN THICKNESS N/A			13. DEPTH GROUNDWATER ENCOUNTERED N/A																			
14. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A																			
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A																			
18. GEOTECHNICAL SAMPLES			19. TOTAL NUMBER OF CORE BOXES																			
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERY																			
22. DISPOSITION OF HOLE			23. SIGNATURE OF INSPECTOR																			
<table border="1"> <tr> <td>INSTALLED</td> <td>UNDISTURBED</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>			INSTALLED	UNDISTURBED	<input type="checkbox"/>	<input type="checkbox"/>	<table border="1"> <tr> <td>OTHER (SPECIFY)</td> <td>OTHER (SPECIFY)</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>			OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)				<table border="1"> <tr> <td>RECOVERY</td> <td>%</td> </tr> <tr> <td><input type="checkbox"/></td> <td></td> </tr> </table>			RECOVERY	%	<input type="checkbox"/>	
INSTALLED	UNDISTURBED																					
<input type="checkbox"/>	<input type="checkbox"/>																					
OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)																				
RECOVERY	%																					
<input type="checkbox"/>																						
<table border="1"> <tr> <td>BACKFILLED</td> <td>MONITORING WELL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>N/A</td> <td>N/A</td> </tr> </table>			BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	<input checked="" type="checkbox"/>	N/A	N/A	<table border="1"> <tr> <td>SIGNATURE OF INSPECTOR</td> </tr> <tr> <td><i>Whitney A. Platter</i></td> </tr> </table>			SIGNATURE OF INSPECTOR	<i>Whitney A. Platter</i>									
BACKFILLED	MONITORING WELL	OTHER (SPECIFY)																				
<input checked="" type="checkbox"/>	N/A	N/A																				
SIGNATURE OF INSPECTOR																						
<i>Whitney A. Platter</i>																						
<p>LOCATION SKETCH/COMMENTS</p> <p>Witnessed by: Susan Adams</p> <p><i>Susan Adams</i></p>			<p>SCALE: Not to Scale</p> <p>Terms used to describe %</p> <p>Trace - &lt; 5%</p> <p>Few - 5-10%</p> <p>Little - 15-25%</p> <p>Some - 20-35%</p> <p>Mostly - 50-100%</p>																			
PROJECT FUSRAP/SLDS			HOLE NO. SLD 72159																			

HTRW DRILLING LOG (CONTINUATION SHEET)						SLD 72-159
PROJECT		INSPECTOR		SHEET		SHEETS
FUSRAP/SLDS		Phillip Stalter		2 of 2		
DEPTH (ft)	DESCRIPTION OF MATERIALS	DEPTH (ft)	RECOVERY (%)	DEPTH (ft)	ROW COUNTY	MARKING
1.0	SM Silty fine sand w/ some med. gravel, loose, poorly graded, lt. brn. to blk, dry, some clinders, some slag.	6900	1.8 / 2.0	00-05'	8	SLD 72-159 1117
		7100		05-10'	8	
		6600		10-15'	6	SLD 72-159 1122
		7300		15-18'	5	
2.0		7100		20-25'	4	FS.
3.0	CL Stiff clay, soft to med. stiff, med. plant, dk brn. to lt. gry, dry.	6900	1.7 / 2.0	25-30'	3	
		6800		20-25'	5	SLD 72-159 archive (1142)
		6600		35-37'	6	
4.0		7000		40-45'	2	
		6700		45-50'	4	
5.0		6800	1.9 / 2.0	50-55'	6	
	7200	55-58'		9	SLD 72-159 archive (1112)	
6.0		7200	no recovery			
7.0	TD: 6.0' BGS 2-11-03 1133					Background: NaI: 6833 PID: 0.0 Boring back-filled w/ 3.0 bags of bentonite chips. * Samples will be counted using gas proportional meter (see attached sheet)
8.0						
9.0						
10.0						

PROJECT FUSRAP/SLDS

SLD 72-159

5-1

RADIOLOGICAL SURVEY FORM

Sample ID: SLD 72159 C2 Date Sample was collected: 2-1<sup>st</sup>-03 Date Sample was analyzed: 2-20-03  
*Susan Adams*  
 Instrument #1 Background 6833 Instrument #2 Background 4951 cpm  
 Countrate of Empty Pan: Beta 105cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Countrate in cpm	
					Gross Beta	Net Beta
0-6	6900	67	4148	-803	116	11
6-12	7900	1067	5242	291	151	46
12-18	6600	-233	4546	-405	150	45
18-24	7300	467	4978	27	125	20
24-30	7100	267	5124	173	153	48
30-36	6900	67	4787	-164	144	39
36-42	6800	-33	5010	59	158	45 <sup>53</sup>
42-48	6600	-233	5089	138	150	45
48-54	7000	167	5014	63	168	63
54-60	6700	-133	5047	96	168	63
60-66	6800	-33	5051	100	161	56
66-72	7000	167	5156	205	167	62

SLD 72159

SLD 72195

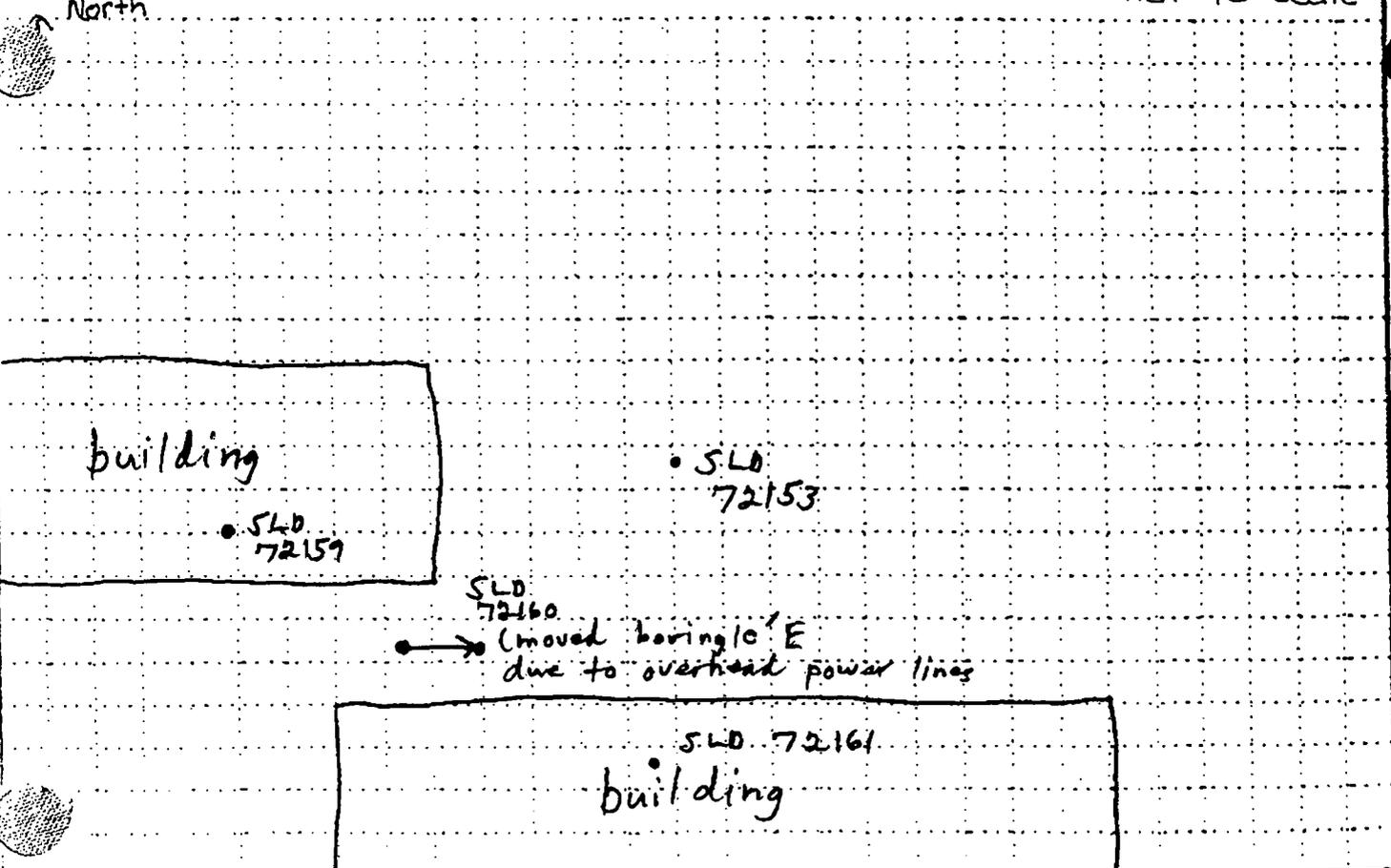
SLD 72159 archive

SLD 72159 archive

<b>TRW DRILLING LOG</b>		DISTRICT: St. Louis		HOLE NUMBER: SLD 72160	
COMPANY NAME: Shaw E + I		2. DRILLING SUBCONTRACTOR: MES, Inc.		SHEETS: 1 of 2	
1. PROJECT: FUS RAP / SLDs			4. LOCATION: RSC Metals North tract V.P. - City of Venice, IL VP-P2		
3. NAME OF DRILLER: Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using WASA and 3" x 2' split spoon			8. HOLE LOCATION: N/A		
			9. SURFACE ELEVATION: N/A		
PID 10-16-02 NAI LUD 172039 to 100/100 Cal Date 12-12-02 BqK = 5700			10. DATE STARTED: 10-16-02		11. DATE COMPLETED: 10-16-02
12. OVERBURDEN THICKNESS: N/A			15. DEPTH GROUNDWATER ENCOUNTERED: N/A		
13. DEPTH DRILLED INTO ROCK: N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A		
14. TOTAL DEPTH OF HOLE: 6.0' BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A		
18. GEOTECHNICAL SAMPLES		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
20. SAMPLES FOR CHEMICAL ANALYSIS		TOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	RAD	<input type="checkbox"/>
22. DEPOSITION OF HOLE		SACRIFICED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
<input type="checkbox"/>		Yes	<input type="checkbox"/>	<input type="checkbox"/>	Phillip N. Stalle

LOCATION SKETCH/COMMENTS

SCALE: Not to scale



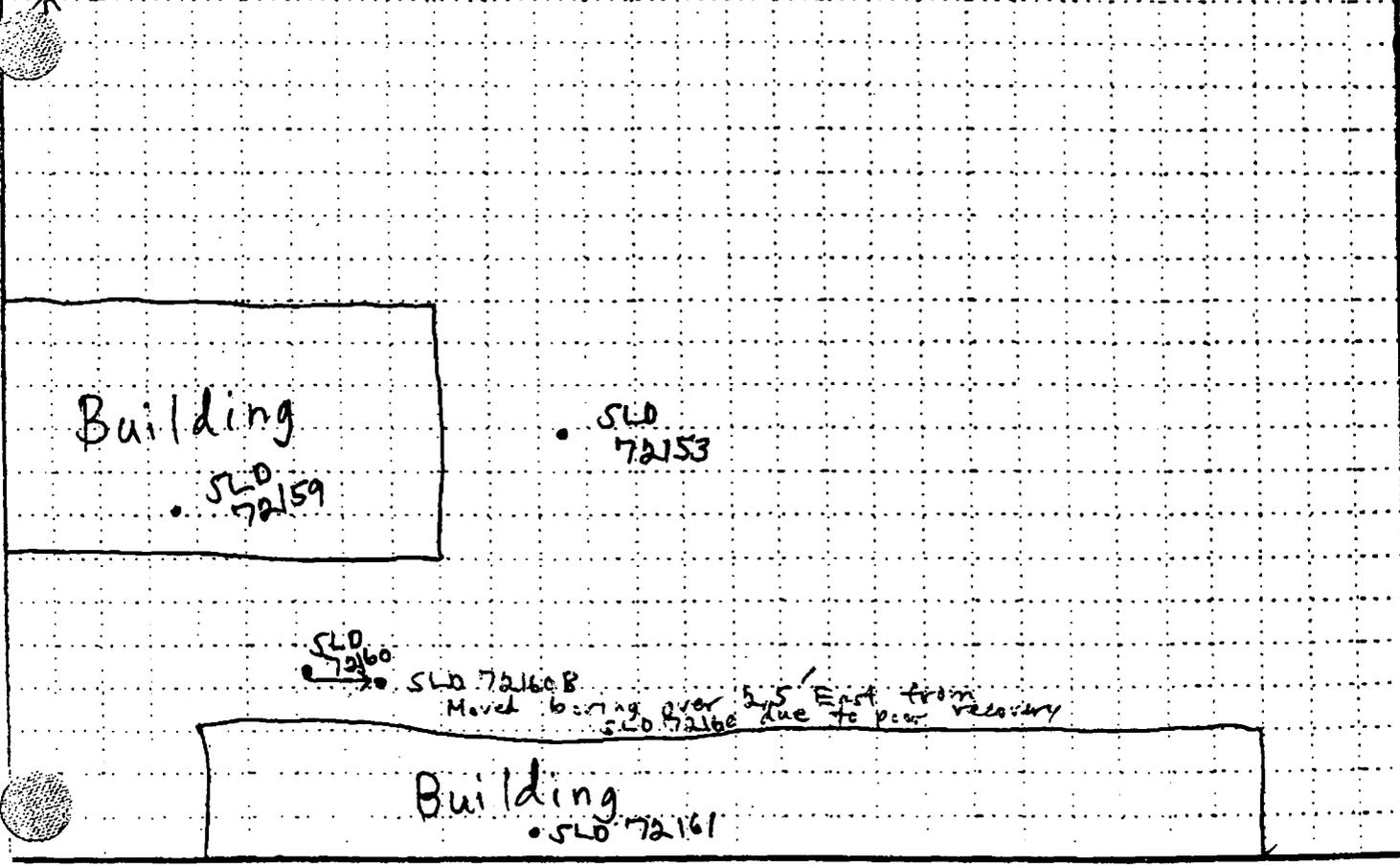
PROJECT: FUS RAP / SLDs	HOLE NO: SLD 72160
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HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: FUSRAP/SLDS		INSPECTION: Phillip Staller		HOLE NUMBER: SLD 72160	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	RECOVERY (%)	GRAVIMETRIC WATER (%)	SLOW COUNT	PAGE: 2 OF 2	
1.0	silty fine sand w/ some med. gravel, med. dense to dense, poorly graded, H. brn. to dk brn, dry, some cinders, some slag, trace limast. cobbles.  limestone rock	5400 0.0	1.7	SLD 72160 10-A-02 1335	18		
		6000 0.0	1.9		30		
		5700 0.0	2.0	43			
		5700 0.0	no recovery	SLD 72126 1346	23		
2.0		SEE SLD 72160 B	N/A				
3.0	N/A				10		
	N/A				10		
	N/A				9		
4.0	N/A				9		
5.0	clay turning H. gray	6300 0.0	1.5	SLD 72507 1355	9		
		6100 0.0	2.0		8		
		6200 0.0		8			
6.0		N/A	no recovery		7		
7.0	TD: 6.0' BGs 10-16-02 1315					Backgrounds: NAT: 5700 PID: 0.0  Backfilled boring w/ 3 bags of bentonite chips. Boring capped w/ soil.	
8.0							
9.0							
10.0							

<b>WTRW DRILLING LOG</b>		DISTRICT St. Louis		TABLE NUMBER SLD 72160B	
COMPANY NAME Shaw E + I		2. DRILLING SUBCONTRACTOR MES, Inc.		SHEETS 1 of 2	
1. PROJECT FUS RAP / SLDs			4. LOCATION Pse Metals North Tract U.P. CITY OF Venice, IL VP 23.		
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using HSA and 3" x 2' split spoon			8. HOLE LOCATION N/A		
8. OVERBURDEN THICKNESS N/A			9. SURFACE ELEVATION N/A		
10. DATE STARTED 10-16-02			11. DATE COMPLETED 10-16-02		
12. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A		
13. TOTAL DEPTH OF HOLE 4.0' BGS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
14. GEOTECHNICAL SAMPLES			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
18. DISTURBED		19. INDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		20. METALS		20. OTHER (SPECIFY)	
21. DISPOSITION OF HOLE		21. MONITORING WELL		21. OTHER (SPECIFY)	
22. SAC FILLED		22. OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR	

LOCATION SKETCH/COMMENTS  
North

SCALE: Not to scale



PROJECT FUS RAP / SLDs	WELS NO. SLD 72160 B
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HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: EUSRAP/SLDS		INSPECTOR: Phillip Statler		HOLE NUMBER: SLD 72160 B	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	SHRINKAGE (%)	FLUID LOSS (cc)	SLOW COUNT	REMARKS	
0.0 - 1.0	SEE SLD 72160	N/A	N/A	RECOVERY	N/A		
1.0 - 2.0		N/A	N/A		N/A		
2.0 - 3.0		N/A	N/A		N/A		
3.0 - 4.0	CL silty clay, med stiff, med. plast. dk brn., dry, few cinders and slag. trace brick frags, lime-stone cobble	5600 0.0	6000 0.0	1.7 / 2.0	8 6 7 7	archive sample # B65. 2d-2.7 (10-16-02)	
4.0 - 5.0	TD: 4.0' BGS 10-16-02 1400			no recovery		Backgrounds Nat: 5200 PSD: 0.0 Backfilled boring w/ 20 bags of bentonite chips. Capped w/ soil.	
5.0 - 6.0							
6.0 - 7.0							
7.0 - 8.0							
8.0 - 9.0							
9.0 - 10.0							

# STRW DRILLING LOG

St. Louis

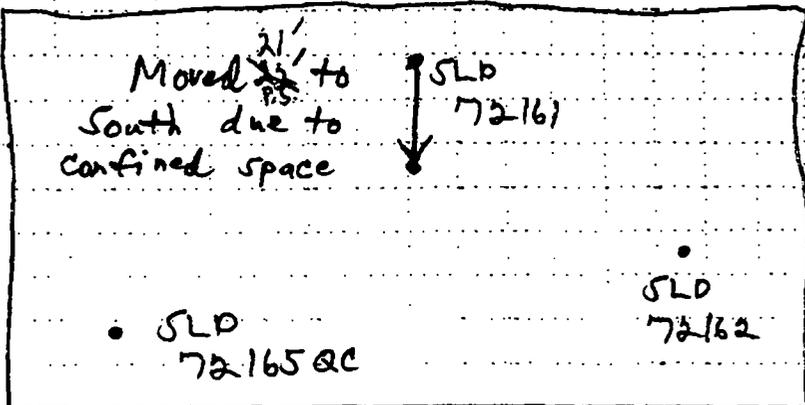
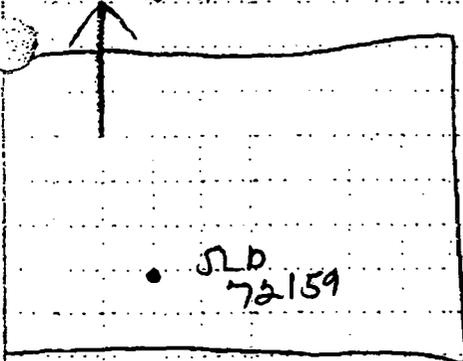
WELL NUMBER  
SLD 72161

1. DISPLAY NAME Shaw E+I		2. DRILLING CONTRACTOR MES, Inc.		3. SHEETS 1 of 2	
4. PROJECT FUSRAP/SLDS		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF DRILLER Chris Anthony		7. MANUFACTURE IDENTIFICATION OF DRILL Diedrich D-120			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3 1/4" HSA and 3" x 2" split spoon		9. HOLE LOCATION see location sketch		10. SURFACE ELEVATION N/A	
11. DATE STARTED 10-29-02		12. DATE COMPLETED 10-29-02		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
14. TOTAL DEPTH OF HOLE 6.0 FT BGS		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
16. DETECTION SAMPLES		17. TOTAL NUMBER OF CORE BOXES		18. TOTAL CORE RECOVERED	
19. SAMPLES FOR CHEMICAL ANALYSIS		20. METALS		21. OTHER SPECIFY	
22. DEPOSITION OF SCALE		23. MONITORING VEL.		24. OTHER SPECIFY	

LOCATION SKETCH/COMMENTS

Witnessed By: Robin Parks

SCALE: Not to Scale  
Terms used to describe %  
Trace - < 5%  
Few - 5-10%  
Little - 15-25%  
Some - 20-35%  
Mostly - 50-100%



SLD 72161

SLD 72161

HTRW DRILLING LOG (CONTINUATION SHEET)

SLD 72161

PROJECT FUSRAP/SLDS

INSPECTOR Phillip Statler

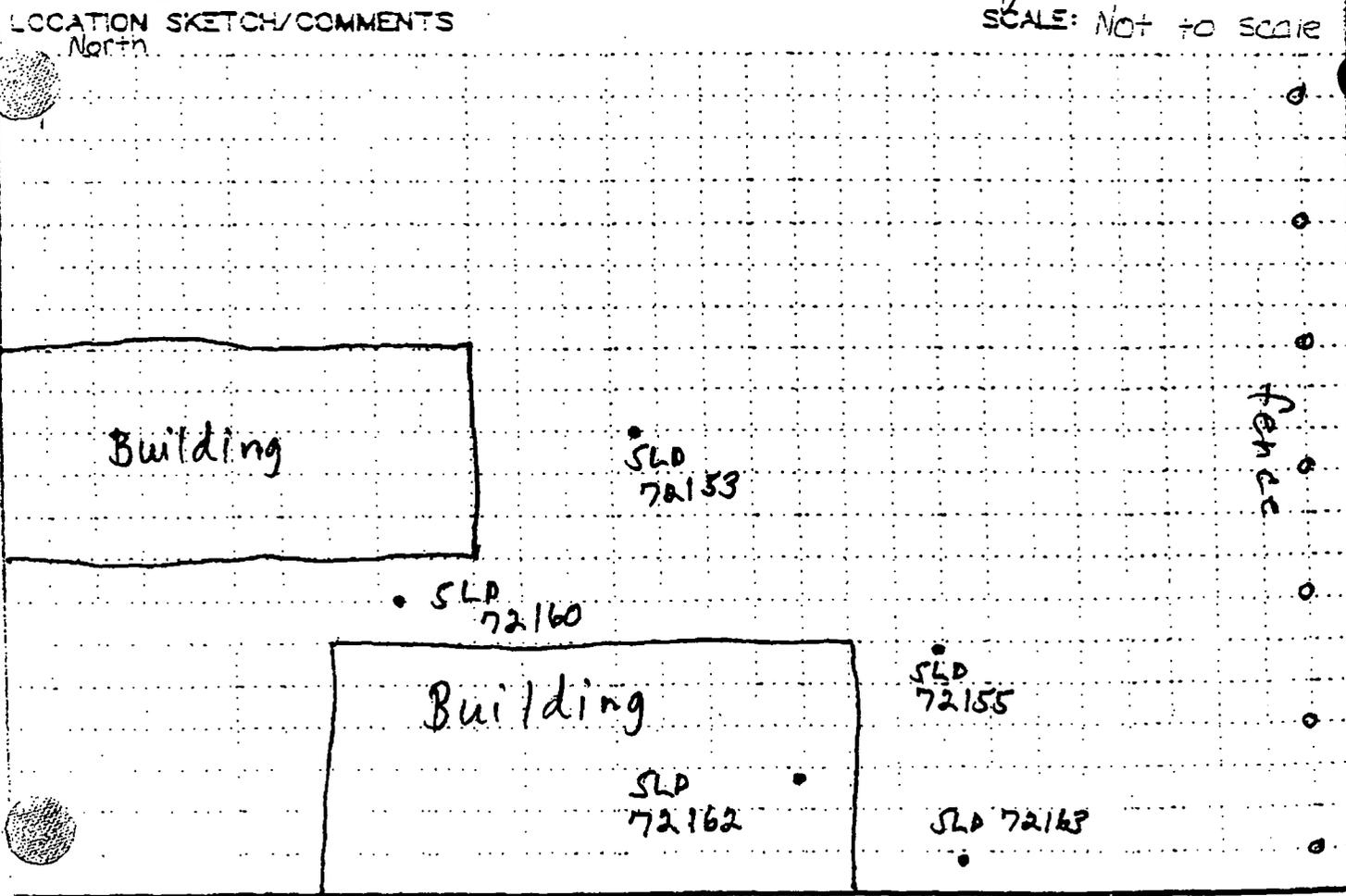
2 of 2 SHEETS

DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SOLENOID CORRECTED	RECOVERY SAMPLE OR CORE SIZE (ft)	ANALYTICAL SAMPLE NO.	DEPTH CORRECT	REMARKS
cover	asphalt cover material	5000 0.0		SLD 72161 cover 10-29-02	(1000)	
1	silty clay w few med to coarse gravel, med. stiff to hard, med plastic, dk brng some cinders some slag, trace brick frags	5600 0.0	1.7 / 2.0	SLD 72161 1035	5	
		5100 0.0			6	
2		5000 0.0	no recovery	SLD 72187 1030	52	
		4800 0.0			24	
3	CL clay turning ft. gry, few cinders, few slag, trace brick frags, trace med. gravel.	5200 0.0	2.0 / 2.0		4	
		5500 0.0		SLD 72161 archive 1035	6	archive sample from 3.0-3.5' BGS
4		4700 0.0			12	
		4500 0.0			11	
5	cinders and slag absent.	5500 0.0	1.9 / 2.0		4	
		5000 0.0			8	
6		4200 0.0	no recovery		9	
		4200 0.0		SLD 72161 archive 1035	9	archive sample from 5.9-6.4' BGS
TD: 6.0' BGS 1045 10-29-02						Background: NI: 4900 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips. Capped w/ asphalt.

# TRW DRILLING LOG

ST. LOUIS  
 SLD 72162

1. COMPANY NAME Shaw E + I		2. DRILLING SUBCONTRACTOR MES, Inc.		3. SHEETS of 2	
4. PROJECT FUS RAP / SLDs			4. LOCATION PSC Metals North Tract V.P. <del>City of Venice, IL</del> P.S.		
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-12C		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Direction D-12C using 3/4" HSA and 3" x 3" split spoon			8. HOLE LOCATION N/A		
8. PED 10-23-02 N/A = LUD 172040 to 100/100 Cal Date 4-1-03 BgK = 6300			9. DATE STARTED 10-23-02		10. DATE COMPLETED 10-23-02
11. OVERBURDEN THICKNESS N/A			12. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
13. DEPTH DRILLED INTO ROCK N/A			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
15. TOTAL DEPTH OF HOLE 6.5' BGS			16. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
17. GEOTECHNICAL SAMPLES	18. DISTURBED	19. UNDISTURBED	20. TOTAL NUMBER OF CORE BOXES		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
21. SAMPLES FOR CHEMICAL ANALYSIS	22. ROCK	23. METALS	24. OTHER (SPECIFY)	25. OTHER (SPECIFY)	26. OTHER (SPECIFY)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	RAD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
27. DEPOSITION OF HOLE	28. SACFILLED	29. MONITORING WELL	30. OTHER (SPECIFY)	31. SIGNATURE OF INSPECTOR Phillip M. Hester	
<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		



**HTRW DRILLING LOG**

(CONTINUATION SHEET)

PROJECT: **FUSRAP/SLDS**      INSPECTOR: **Phillip Statler**      WELL NUMBER: **SLD 72162**

DATE: **10-23-02**      SHEET: **2** OF **2**

DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	NUMBER OF OTHER TESTS	ANALYTICAL LABORATORY NO.	SCREENING RESULTS	REMARKS		
COVER	Cover Material (asphalt)	6300 0.0		SLD 72162 CO UOP 10-23-02	(1000)			
SM	slty. fine sand w/ some med. grav. (silt & poorly sorted, dk. gray)	6300 0.0		SLD 72162 1005	6			
CL	silty clay w/ few med. grav. (silt, med. plast.) dk. gray, dry, few cinders and slag, trace bricks, trace coal frags.	7000 0.0	2.0 / 2.0		12			
		6100 0.0			16			
		6700 0.0		SLD 72188 1010	40	archive P.S. sample from 2.0-2.5 BGS		
		6300 0.0	1.9 / 2.0		14			
		5900 0.0			13			
		6400 0.0			13			
		4	few limestone cobbles clay turning gry.	5800 0.0		SLD 72162 archive 1015	9	archive sample from 3.9-4.4 BGS
		5	trace cinders and slag, trace bricks.	6200 0.0	no recovery		3	
				6400 0.0	1.9 / 2.0	SLD 72162 archive 1025	4	archive sample from 5.0-5.5 BGS
				5800 0.0			8	
6	few limestone cobbles	6400 0.0			5			

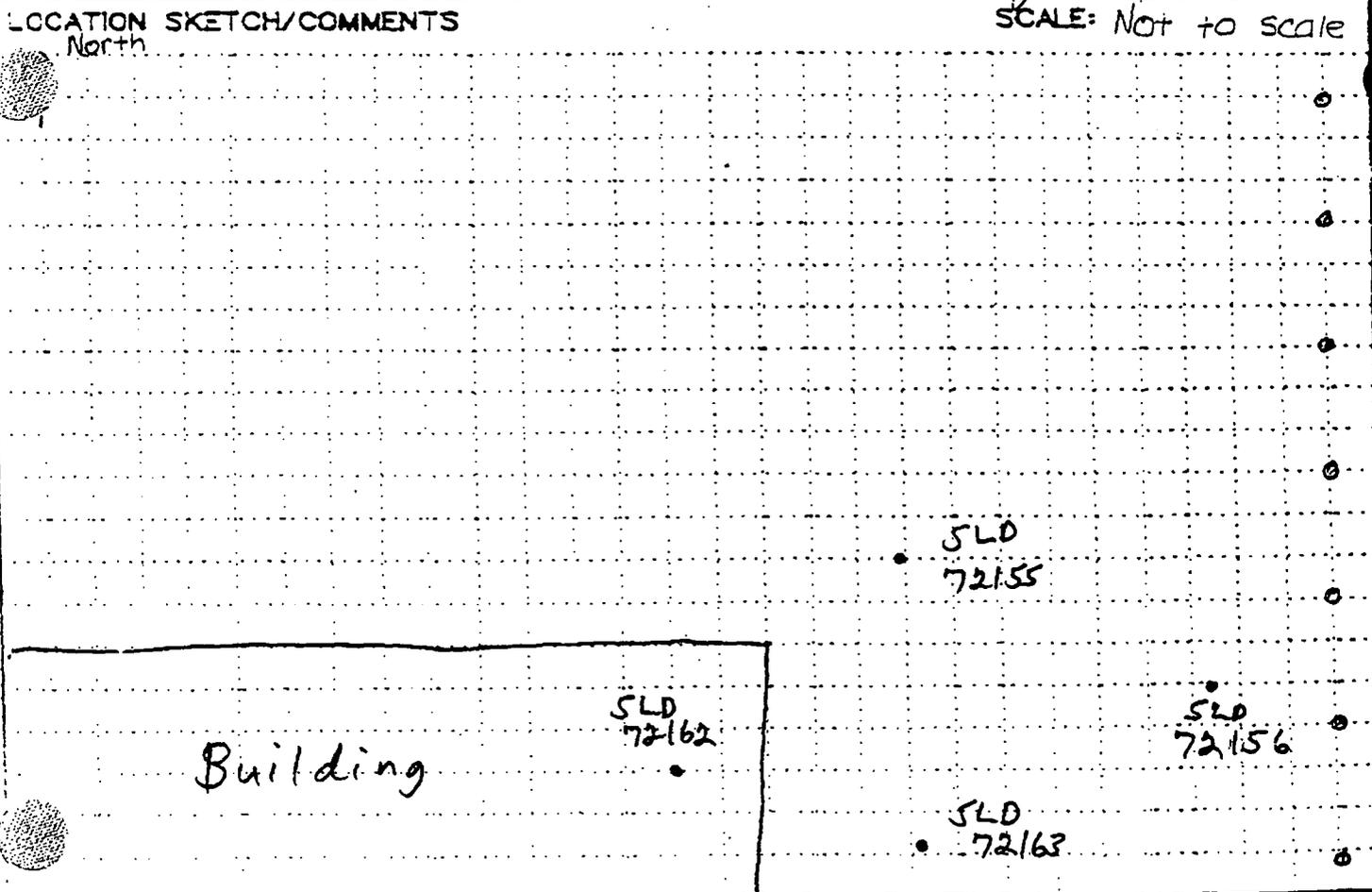
TD: <sup>6.5</sup> 6.0 ps. BGS  
10-23-02  
1015

Back ground:  
Nat: 6300  
PIP: 40  
Back filled  
boring w/  
30 bags of  
bentonite  
chips. Boring  
capped w/  
asphalt.

# TRW DRILLING LOG

1. CITY: **St. Louis**  
 2. DRILLING SUBCONTRACTOR: **MES, Inc.**  
 HOLE NUMBER: **SLD 72163**  
 SHEETS: **1 of 2**

3. PROJECT: <b>FUS RAP / SLDS</b>		4. LOCATION: <b>PSC Metals North Tract V.P.</b> <del>City of Venice, IL VA</del>	
5. NAME OF DRILLER: <b>Chris Anthony</b>		6. MANUFACTURER'S DESIGNATION OF DRILL: <b>Diedrich D-120</b>	
7. SIZES AND TYPES OF DRILLING AND SURFING EQUIPMENT: <b>Diedrich D-120 using 3/4" HSA and 3" x 3" split spoon</b>		8. HOLE LOCATION: <b>N/A</b>	
8. OVERSIZEN THICKNESS: <b>N/A</b>		9. SURFACE ELEVATION: <b>N/A</b>	
9. DATE STARTED: <b>10-22-02</b>		10. DATE COMPLETED: <b>10-22-02</b>	
10. DEPTH DRILLED INTO ROCK: <b>N/A</b>		11. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: <b>N/A</b>	
11. TOTAL DEPTH OF HOLE: <b>6.0' BGS</b>		12. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): <b>N/A</b>	
13. GEOTECHNICAL SAMPLES	<input checked="" type="checkbox"/> DISTURBED	<input checked="" type="checkbox"/> INDISTURBED	14. TOTAL NUMBER OF CORE BOXES: <b>0</b>
15. SAMPLES FOR CHEMICAL ANALYSIS	<input checked="" type="checkbox"/> OC	<input checked="" type="checkbox"/> METALS	OTHER (SPECIFY): <b>RAD</b>
16. DEPOSITION OF HOLE	<input checked="" type="checkbox"/> SACRIFICED	<input checked="" type="checkbox"/> MONITORING WELL	OTHER (SPECIFY): <b>0</b>
17. SIGNATURE OF INSPECTOR: <i>[Signature]</i>			18. TOTAL CORE RECOVERY: <b>0%</b>



HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT		SHEET		
FUSRAP/SLDS		INSPECTOR Philip Statler		HOLE NUMBER SLD 72163		
FUSRAP/SLDS		SHEET 2 OF 2		SHEETS		
DEPTH (ft)	DESCRIPTION OF MATERIALS	NO. OF SAMPLES	RECOVERY	SLD NUMBER	SLAW COUNT	REMARKS
1.0	Silty fine sand w/ few med gravel, loose, poorly graded, dk brn, dry, trace cinders, traces slag, trace brick frags.	6800	2.0 / 2.0	SLD 72163	7	
		6900		1132	6	
2.0	Silty clay, med stiff to stiff, med plastic, lt. brn., dry.	7200	1.5 / 2.0	SLD 72189	9	
		6700		1130	7	
3.0	few limestone cobbles, few sand	6400	1.5 / 2.0		10	
		6100			10	
4.0		6500	no recovery	SLD 72179	9	
		N/A		1140	8	
5.0	trace cinders and fine sand, trace weathered wood.	6600	1.7 / 2.0		5	
		6400			4	
6.0		6700	no recovery	SLD 72208	3	
		6800		1145	3	
7.0	TD: 6.0' BGS					Backgrounds: NAI: 6,600 PID: 0.0 Boring back filled w/ 3.0 bags of bentonite chips. Capped boring w/ soil.
	1140					
	10-22-02					

# TRW DRILLING LOG

ST. LOUIS

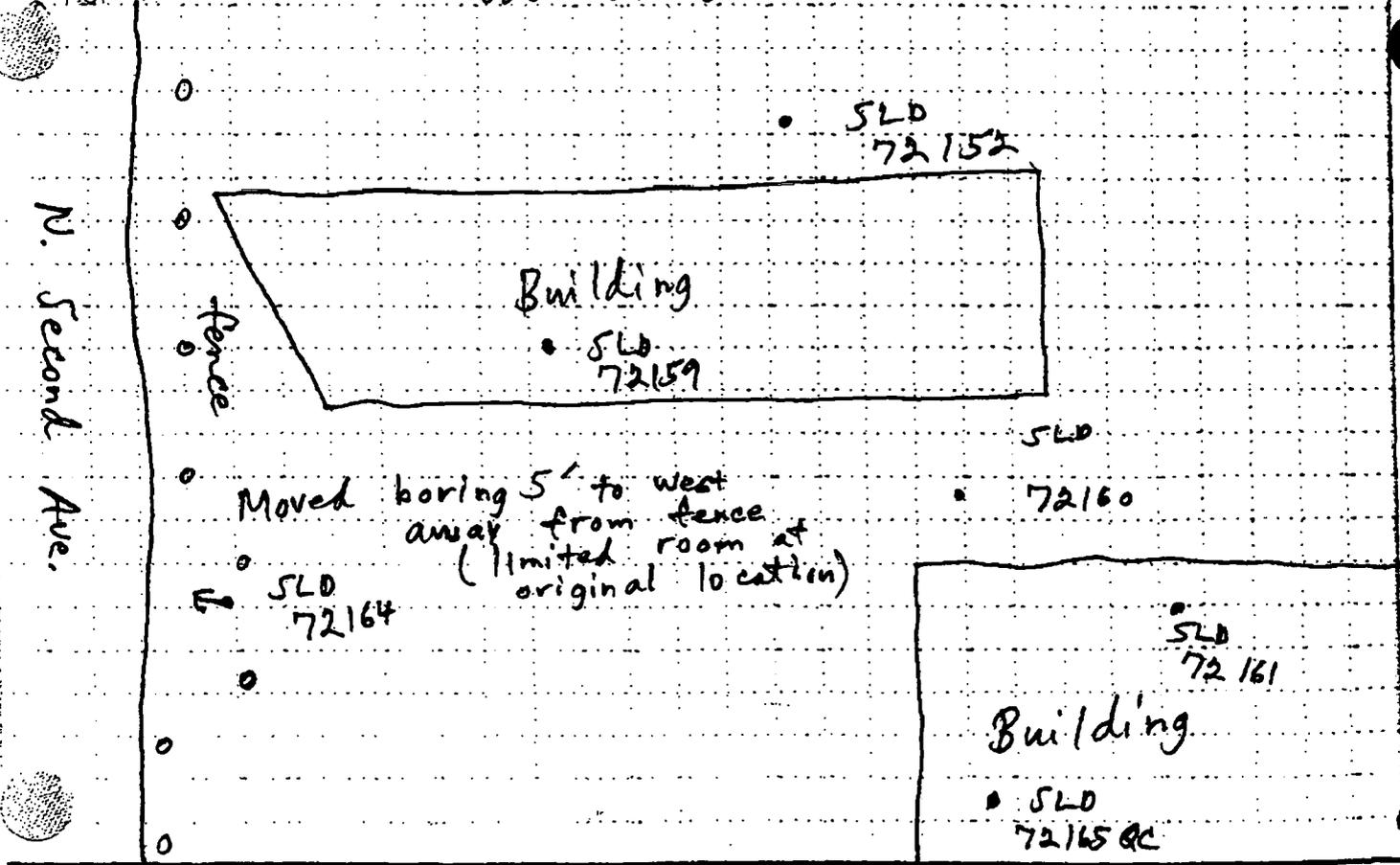
SOLE NUMBER: SLD 72164

1. PROJECT FUS RAP / SLOS		2. DRILLING CONTRACTOR MES, INC.		3. SHEET # 2	
4. NAME OF DRILLER Chris Anthony		5. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-12C		6. LOCATION PSC Metals North Tract U.P. 21' OF VENTS B.G.	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-12C using 3/4" HSA and 3" x 2" split spoon		8. HOLE LOCATION N/A		9. SURFACE ELEVATION N/A	
10. DATE STARTED 10-22-02		11. DATE COMPLETED 10-22-02		12. CYLINDER THICKNESS N/A	
13. DEPTH DRILLED INTO ROCK N/A		14. TOTAL DEPTH OF HOLE 6.0' BGS		15. DEPTH GROUNDWATER ENCOUNTERED N/A	
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		18. TOTAL NUMBER OF CORE BOXES 0	
19. SAMPLES FOR CHEMICAL ANALYSIS 0		20. DISTURBED 0		21. TOTAL CORE RECOVERY 0%	
22. DEPOSITION OF HOLE 0		23. SACCELLED Yes		24. MONITORING WELL 0	
25. OTHER (SPECIFY) RAD		26. OTHER (SPECIFY) 0		27. OTHER (SPECIFY) 0	
28. SIGNATURE OF INSPECTOR Phillip M. [Signature]					

LOCATION SKETCH/COMMENTS

Susan H. Adams

SCALE: Not to scale



FUS RAP / SLOS

SLD 72164

**HRW DRILLING LOG** (CONTINUATION SHEET)

PROJECT: **FUSRAP/SLDS**      INSPECTOR: **Phillip Statler**      HOLE NUMBER: **SLD 72164**      SHEET: **2** OF **2**

DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER LOSS (ft)	RECOVERY	LOG NO.	BLW COUNT	REMARKS
0.0 - 1.0	Silty fine sand w/ few med. gravel; loose, poorly graded, dk. brn.; dry.	6700 0.0	2.0 / 2.0	SLD 72164 10-22-02 1420	5	
1.0 - 2.0	Silty clay, med. stiff, med. plastic, dk. brn.; dry, few cinders and slag.	6500 0.0	2.0 / 2.0		7	
2.0 - 2.5		6200 0.0			7	
2.5 - 3.0		6100 0.0		SLD 72190 1405	9	
3.0 - 3.5	few limestone cobbles, cinders and slag abundant	6900 0.0			4	
3.5 - 4.0		6200 0.0	1.4 / 2.0		4	
4.0 - 4.5	limestone rubble	6500 0.0		SLD 72164 archive 1418	4	archive sample taken from 2.9-3.4 BGS
4.5 - 5.0		N/A	no recovery		5	
5.0 - 5.5	clay turning H. gray	6800 0.0			3	
5.5 - 6.0		6500 0.0			4	
6.0 - 6.5		6600 0.0			6	
6.5 - 7.0		6700 0.0		SLD 72164 archive 1418	9	archive sample from 5.5-6.0 BGS
7.0 - 8.0	TD: 6.0' BGS 10-22-02 1420					Background: NFI: 6600 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips. Capped w/soil.

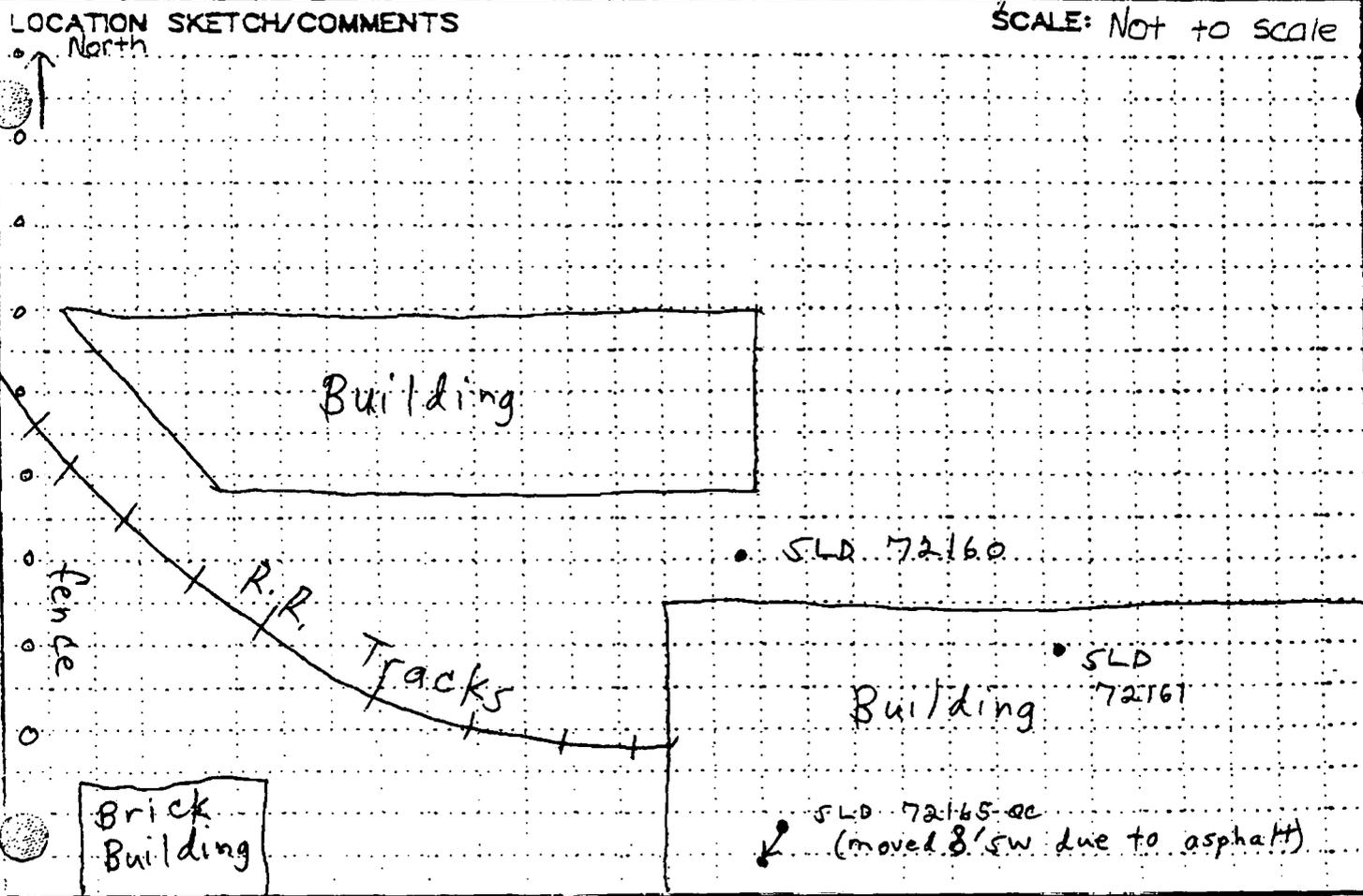
PROJECT: **FUSRAP/SLDS**      HOLE NUMBER: **SLD 72164**

# HTRW DRILLING LOG

DISTRICT: St. Louis

HOLE NUMBER: SLD 72165 Q C1a

1. COMPANY NAME Shaw E + I		2. DRILLING SUBCONTRACTOR MES, Inc.		3. SHEET 1 of 2	
3. PROJECT FUS RAP / SLDS		4. LOCATION PSC Metals North Tract V.P. City of Venice, IL VP ps.			
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich 0-120			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich 0-120 using 0.5 HSA and 3" x 2" Split Spoon Hand Auger		8. HOLE LOCATION N/A		9. SURFACE ELEVATION N/A	
PID 10-24-02 NAT LUD 172040 to 100/100 Cal Date 8-1-03 Bgs = 7300		10. DATE STARTED 10-24-02		11. DATE COMPLETED 10-24-02	
12. OVERBURDEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A			
13. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 3.0' BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. GEOTECHNICAL SAMPLES	<input type="checkbox"/>	18. DISTURBED	<input type="checkbox"/>	18. UNDISTURBED	<input type="checkbox"/>
19. TOTAL NUMBER OF CORE BOXES	<input type="checkbox"/>				
20. SAMPLES FOR CHEMICAL ANALYSIS	<input type="checkbox"/>	ROC	<input type="checkbox"/>	METALS	<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>	OTHER (SPECIFY)	ROD
21. TOTAL CORE RECOVERY	<input type="checkbox"/>				
22. DISPOSITION OF HOLE	<input type="checkbox"/>	SAG-FILLED	<input type="checkbox"/>	MONITORING WELL	<input type="checkbox"/>
	<input type="checkbox"/>	Yes	<input type="checkbox"/>		<input type="checkbox"/>
23. SIGNATURES OF INSPECTOR		<i>Phillip M. Hall</i>			



HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT		SHEET			
EUSRAP/SLDS		INSPECTION Phillip Statler		SLD 72165 Q(a)			
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	PID	RECOVERY	GRAVIMETRIC WATER CONTENT (%)	BLOW COUNT (blows/ft)	REMARKS
0.0 - 1.0	silty fine sand w/ few med to coarse gravel; H. (loose, poorly graded; H. brn.) dry; few cinders; few slag; few brick frags.	N/A	N/A		SLD 72165 QC	N/A	archive sample taken from 0.0 - 1.0' BGS
		N/A	N/A		10-24-02 archive 0850	N/A	
		N/A	N/A			N/A	
		N/A	N/A			N/A	
		N/A	N/A			N/A	
1.0 - 2.0	silty clay w/ few med. to coarse gravel med. plast. med. dense; med. stiff; H. brn.; dry; trace brick frags.	N/A	N/A		SLD 72165 QC	N/A	archive sample taken from 1.5 - 2.0' BGS
		N/A	N/A		SLD 72165 QC	N/A	
2.0 - 3.0		N/A	N/A				Hit refusal w/ hard auger at 3.0' BGS
3.0 - 4.0	TD = 3.0' BGS 1015 10-24-02						Backgrounds NaI: 7300 PID: 0.0 Back-filled boring w/ 1.5 bags of bentonite chips. Capped w/ soil.
4.0 - 5.0							
5.0 - 6.0							
6.0 - 7.0							
7.0 - 8.0							
8.0 - 9.0							
9.0 - 10.0							
10.0 - 11.0							
11.0 - 12.0							
12.0 - 13.0							

# HEAVY DRILLING LOG

St. Louis

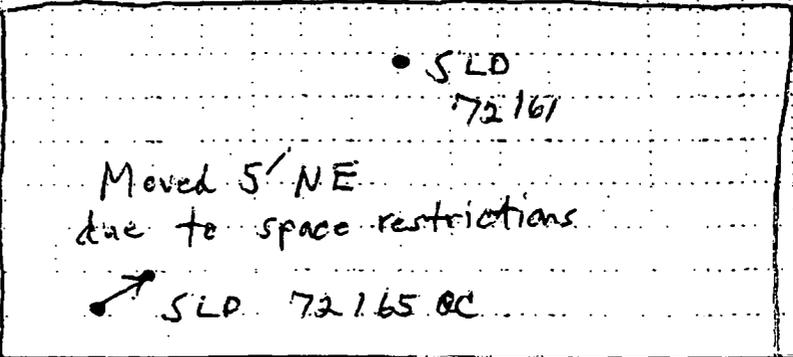
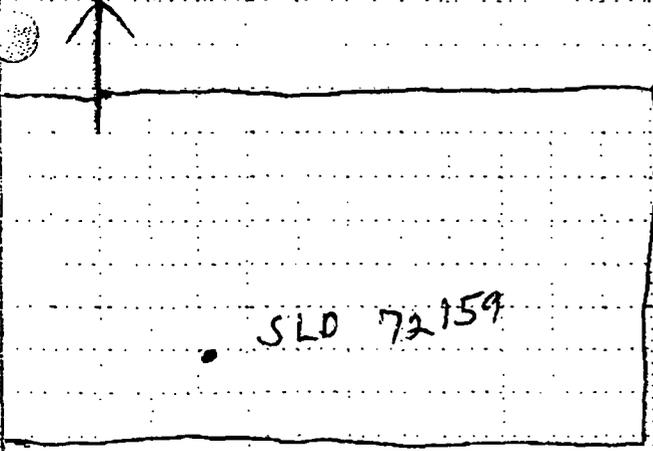
SOLE NUMBER: SLD 72165001b

1. DRILLER NAME Shaw F & I		2. DRILLING SUBCONTRACTOR M.E.S., Inc.		3. SHEET 1 of 2	
4. PROJECT FUSRAP / SLDs		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF DRILLER Chris Anthony		7. MANUFACTURER, DESIGNATION OF DRILL Diedrich D-120			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 93/16 HSA and 3" x 2" SPLIT spoon		9. HOLE LOCATION see location sketch		10. DATE STARTED 10-29-02	
11. DRILLER'S PHONE NUMBER N/A		12. SURFACE ELEVATION N/A		13. DATE COMPLETED 10-29-02	
14. DEPTH DRILLED INTO SOIL N/A		15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
16. TOTAL DEPTH OF HOLE 6.5 <del>6.0</del> FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES		
0	0	0	0		
20. SAMPLES FOR CHEMICAL ANALYSIS	OK	METALS	OTHER SPECIM	OTHER SPECIM	OTHER SPECIM
0	0	0	0	0	0
21. DEPTH OF HOLE	SAMPLES	MONITORING VEL.	OTHER SPECIM	22. SIGNATURE OF SUPERVISOR	
0	Yes	N/A	N/A	Robin Parks	

LOCATION SKETCH/COMMENTS  
North

Witnessed By: Robin Parks SCALE: Not to Scale

Terms used to describe %  
Trace - < 5%  
Few - 5-10%  
Little - 15-25%  
Some - 20-35%  
Mostly - 50-100%



PROJECT: FUSRAP / SLDs

SOLE NO: SLD 72165001b

HTRW DRILLING LOG (CONTINUATION SHEET)

PROJECT		INSPECTOR		DATE		SHEET	
FUSRAP/SLDS		Phillie Station		SLD 72165 (b)		2 of 2	
DEPT.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SAMPLE NO.	DEPTH OF SAMPLE	ANALYTICAL SAMPLE NO.	SLD NO.	REMARKS
COVER		asphalt cover material	5500 0.0		SLD 7216500 cover 10-29-02	(1570)	
	1	silty clay w/ few med. to coarse gravel, stiff to very stiff, med. plant, dk. brn, few cinders and slag, trace brick frags, few fine sand.	5500 0.0	1.7/ 2.0	SLP 72165-1-2	13	
			5000 0.0		1345	18	
	2		5100 0.0				
		limestone cobble in tip	4900 0.0	no recovery	SLD 72191 1350	18	
CL	3		5600 0.0	1.9/ 2.0		19	
			4600 0.0		12		
			5900 0.0		5		
	4	few weathered wood frags.	5300 0.0		SLD 72200 1400	3	
			4200 0.0	no recovery		5	
	5	few weathered wood frags.	5700 0.0	1.9/ 2.0	SLD 72209 1405	2	
			4900 0.0		2		
			5000 0.0		5		
	6			no recovery		2	
		TD: 6.0' BGS 1400 10-29-02			Background: NATS 4,900 PTD: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips Capped w/ asphalt.		

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72210	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich b-120 using 8/32 HSA and 3" x 2" split spoon.		8. HOLE LOCATION See location sketch			9. SURFACE ELEVATION N/A		
PFD 7-16-03 NAT to 100/100 Cal. Date: 4-18-03 Bkg: 5/00		10. DATE STARTED 7-16-03		11. DATE COMPLETED 7-16-03			
12. OVERBURDEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A					
13. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
14. TOTAL DEPTH OF HOLE 6.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTRIBUTED		UNDISTRIBUTED		19. TOTAL NUMBER OF CONE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		YES		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		RACI-FILLED		MONITORING WELL		OTHER (SPECIFY)	
		Yes		N/A		N/A	
						23. SIGNATURE OF INSPECTOR Shirley M. [Signature]	
LOCATION SKETCH/COMMENTS		Witnessed by: Susan Adams SCALE: Not to Scale					
		Terms used to describe % Trace - < 5% Few - 5-10% Little - 15-25% Some - 20-35% Mostly - 50-100%					
		PROJECT FUSRAP/SLDS HOLE NO. SLD 72210					

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72210
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Statler				SHEET 2 OF 2 SHEETS
DEPTH (ft)	DESCRIPTION OF MATERIALS	REMARKS	RECOVERY	BLOW COUNT	REMARKS	
1.0	silty fine sand w/ some med. gravel, dense to very dense, poorly graded, it. brn, dky,	5000 0.0	RECOVERY	69		
		6000 0.0	2.0	45		
		5100 0.0	2.0	38		
2.0	low clay, trace brick frags	5500 0.0		36		
3.0	Poor	N/A		30	Hit obstruction, possibly a rock at 2.0' BGS. Attempted to drive spoons after obstruction. Ps. Poor recovery possibly resulted from this.	
4.0		N/A	N/A	20		
		N/A		20		
		N/A		16		
		N/A		18		
		N/A		10		
5.0	recovery (< 1.3' BGS) See SLD 722108 for description	N/A	N/A	10		
		N/A		10		
6.0		N/A		9		
7.0	TD: 6.0' BGS 1-16-03 1545				Backgrounds NAT: 5100 STD: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips.	
8.0						
9.0						
10.0						

HTRW DRILLING LOG		DISTRICT	SOLE NUMBER										
1. COMPANY NAME <b>Shaw E &amp; I</b>		<b>St. Louis</b>	<b>SLD 72210B</b>										
2. DRILLING SUBCONTRACTOR <b>MES, Inc.</b>		SHEET	SHEETS										
3. PROJECT <b>FUSRAP/SLDS</b>		<b>1</b>	<b>2</b>										
4. LOCATION <b>PSC Metals North Tract V.P.</b>		5. NAME OF DRILLER <b>Chris Anthony</b>											
6. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120</b>		7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 2 1/4" HSA and 3" x 2" split spoon.</b>											
8. HOLE LOCATION <b>See location sketch</b>		9. SURFACE ELEVATION <b>N/A</b>											
10. DATE STARTED <b>7-16-03</b>		11. DATE COMPLETED <b>7-16-03</b>											
12. OVERBURDEN THICKNESS <b>N/A</b>		13. DEPTH DRILLED INTO ROCK <b>N/A</b>											
14. TOTAL DEPTH OF HOLE <b>6.0 FT BGS</b>		15. DEPTH GROUNDWATER ENCOUNTERED <b>N/A</b>											
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>											
18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES											
<table border="1"> <tr> <th>DISTURBED</th> <th>UNDISTURBED</th> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>		DISTURBED	UNDISTURBED	<input type="checkbox"/>	<input type="checkbox"/>	<table border="1"> <tr> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>		OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DISTURBED	UNDISTURBED												
<input type="checkbox"/>	<input type="checkbox"/>												
OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)											
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %											
<table border="1"> <tr> <th>VOC</th> <th>METALS</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>		VOC	METALS	OTHER (SPECIFY)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<table border="1"> <tr> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>		OTHER (SPECIFY)	OTHER (SPECIFY)	<input type="checkbox"/>	<input type="checkbox"/>
VOC	METALS	OTHER (SPECIFY)											
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
OTHER (SPECIFY)	OTHER (SPECIFY)												
<input type="checkbox"/>	<input type="checkbox"/>												
22. DISPOSITION OF HOLE		23. SIGNATURE OF SUPERVISOR											
<table border="1"> <tr> <th>BACKFILLED</th> <th>MONITORING WELL</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>[Signature]</b>					
BACKFILLED	MONITORING WELL	OTHER (SPECIFY)											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
LOCATION SKETCH/COMMENTS													
<p>Witnessed by: <b>Susan Adams</b></p> <p><b>Susan Adams</b></p> <p>SCALE: Not to Scale</p> <p>Terms used to describe %</p> <p>Trace - &lt; 5%</p> <p>Few - 5-10%</p> <p>Little - 15-25%</p> <p>Some - 20-35%</p> <p>Mostly - 50-100%</p> <p>SLD 72210B (moved 1.0' to N due to poor recovery)</p> <p>SLD 72210</p> <p>SLD 72211</p> <p>Bldg.</p> <p>SLD 72213</p>													
PROJECT <b>FUSRAP/SLDS</b>		SOLE NO. <b>SLD 72210B</b>											

HTRW DRILLING LOG (CONTINUATION SHEET)							HOLE NUMBER SLD 722108
PROJECT FUSRAP / SLDs		INSPECTOR Philip Staller					SHEET 2 OF 2
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	SOIL SAMPLE NO. (ft)	RECOVERY (%)	ANALYTICAL SOURCE NO. (ft)	BLOGS COUNT (ft)	REMARKS (ft)	
N/A	SEE SLD 72210 for description	N/A	N/A		N/A	Augered down to 2.0' BGS and drove spoons.	
1.0		N/A			N/A		
2.0		N/A			N/A		
SM	Silty fine sand w/ few med gravel, loose, poorly graded, dk. brn. to blk. dry, few cin. l. org, few slag, few brick frags.	5250 5.0	1.7 / 2.0		7		
3.0		5255 5.0			12		
4.0		5260 5.0		SLD 72210 archive	7	archive sample from 3.0 - 3.5' BGS; 1-16-03; 1600.	
		5265 5.0	no recovery		9		
		5270 5.0			10		
U	Silty clay, med. offset to silt, med. plast, dk. brn, dry, trace brick frags.	5300 5.0	1.8 / 2.0	SLD 72210 archive	9	archive sample from 4.5 - 5.0' BGS, 1605	
5.0		5305 5.0			7		
6.0		5310 5.0	no recovery		5		
7.0	TD: 6.0' BGS 1-16-03 1555					Backgrounds NaI: 5,100 PSD: 0.0 Backfilled boring w/ 30 bags of bentonite chips.	
8.0							
9.0							
10.0							

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72211	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 OF 2 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 Using 3/4" HSA and 3" x 2" split spoon.		8. HOLE LOCATION See location sketch			9. SURFACE ELEVATION N/A		
PIP 1-16-03 NAI LUD 12046 to 100/100 Cal. Date: 4-12-07 Bkg: 510		10. DATE STARTED 1-16-03		11. DATE COMPLETED 1-16-03			
12. OVERBURDEN THICKNESS N/A		13. DEPTH DRILLED INTO ROCK N/A					
14. TOTAL DEPTH OF HOLE 6.0 FT BGS		15. DEPTH GROUNDWATER ENCOUNTERED N/A					
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		KOC		METALS		OTHER (SPECIFY)	
21. TOTAL CORE RECOVERY		KOC		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		SACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
23. SIGNATURE OF INSPECTOR		Yes		N/A		N/A	
<p>LOCATION SKETCH/COMMENTS Witnessed by: Robin Parks, Susan Adams</p> <p>SCALE: Not to scale</p> <p>Terms used to describe %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p>							
PROJECT FUSRAP/SLDS					HOLE NO. SLD 72211		

HTRW DRILLING LOG (CONTINUATION SHEET)							PROJECT NO.
PROJECT		INSPECTOR		HOLE NO.		SHEETS	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER RECOVERY (%)	RECOVERY (%)	ANALYTICAL SAMPLE NO.	BLOW COUNT (ft)	REMARKS	
SM	Silty fine sand w/ some med. gravel, very coarse, poorly graded, dk brn. to blk, dry; few brick frags.	6'00" / 0.0	RECOVERY	SLD 72211-1030	93	(1030)	
		5'00" / 0.0	2.0		108		
		5'00" / 0.0	2.0		33		
CL	Silty clay, hard, med. stiff, med. plastic, dk. brn, dry, few med. gravel, trace clinders and silt	6'00" / 0.0		SLD 72211-1040	26		
		5'800" / 0.0	1.8		10		
		5'500" / 0.0	2.0		12		
		5'600" / 0.0		SLD 72211 archive	15	archive sample from 3.0-3.5' BGS (1100)	
		4'700" / 0.0			13		
N/A	Poor recovery (< 1.3') See SLD 72211 B for details	N/A			5	HH ob- struction at 5.0' BGS	
		N/A	N/A		7		
		N/A	N/A		7		
		N/A	N/A		6		
TD: 6.0' BGS 1-16-03 1030						Background NAT: 5700 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips.	

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72211B	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" HSA and 3" x 3" split spoon.			8. HOLE LOCATION See location sketch		9. SURFACE ELEVATION N/A		
12. OVERBURDEN THICKNESS N/A			10. DATE STARTED 7-16-03		11. DATE COMPLETED 7-16-03		
13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A				
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		YES		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACFILLED		MORTONING WELL		OTHER (SPECIFY)	
		Yes		N/A		N/A	
						23. SIGNATURE OF INSPECTOR Phillip M. Stott	
LOCATION SKETCH/COMMENTS Witnessed by: Susan Adams							
SCALE: Not to scale							
<p>Terms used to describe %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p>							
<p>SLD 72210</p> <p>SLD 72211</p> <p>SLD 72211B (Moved boring 10' to E. due to poor recovery)</p> <p>HTZ 69450</p> <p>HTZ 69451</p> <p>HTZ 69452</p> <p>SLD 72213</p> <p>Bldg</p>							
PROJECT FUSRAP/SLDS					HOLE NO. SLD 72211B		

HTRW DRILLING LOG (CONTINUATION SHEET)						SLO 7221 B	
PROJECT		INSPECTOR		SHEET		SHEETS	
FUSRAP / SLDs		Philip Staffer		2		2	
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	NO. OF SAMPLES COLLECTED	RECOVERY (%)	ANALYTICAL SAMPLE NO.	BLOGS COUNTY	REFERENCE	
1.0	See SLD 7221 for description.	N/A	N/A		N/A		
		N/A			N/A		
		N/A			N/A		
		N/A			N/A		
		N/A			N/A		
		N/A			N/A		
		N/A			N/A		
2.0	silty clay, med-stiff; med. plastic; H-brg; dry, red brick frags.	SPE	1.3 / 2.6		6	archive sample from 4.8-5.3 BGS. 1-16-03; 1110	
		5200		0.6	8		
		5500		0.6	7		
		6000		0.6	4		
4.0	TD: 6.0' BGS 1-16-03 1100		no recovery			Backgrounds Nat: 5100 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips.	
6.0							
7.0							
8.0							
9.0							
10.0							

HTRW DRILLING LOG		DISTRICT	St. Louis		MOLE NUMBER	SLD 72212	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2 SHEETS	
3. PROJECT FUSRAP/SLDS				4. LOCATION PSC Metals North Tract V.P.			
5. NAME OF DRILLER Chris Anthony				6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" HSA and 3" x 2" split spoon.		8. HOLE LOCATION See location sketch		9. SURFACE ELEVATION N/A			
PFD-15-03 NAT LUD 172044 Cal. Date: 4-13-03 Bkg: 5060		10. DATE STARTED 1-15-03		11. DATE COMPLETED 1-15-03			
12. OVERBURDEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A					
13. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
14. TOTAL DEPTH OF MOLE 6.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		YES		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF MOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
23. SIGNATURE OF INSPECTOR		Yes		N/A		N/A	
<p>LOCATION SKETCH/COMMENTS Witnessed by: <i>Conrad Allen</i> SCALE: Not to Scale</p> <p><i>(Moved boring 8' to south line to asphalt)</i></p> <p><i>SLD 72212</i></p> <p><i>HTZ 69453</i></p> <p><i>SLD 72979</i></p> <p><i>HTZ 69451</i></p> <p><i>HTZ 69452</i></p> <p><i>Bldg.</i></p>							
PROJECT FUSRAP/SLDS					MOLE NO. SLD 72212		

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 72212	
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Statter			SHEET 2 of 2		
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	WATER RECOVERY (ft)	RECOVERY (ft)	BLIND COUNT (ft)	REMARKS (ft)	SLD 72212 7445	SLD 72212 7445
SM	Silty fine sand w/ mostly med. to coarse gravel, very dense, poorly graded, lt. brn to gr, dry.	5000	0.0	RECOVERY	0.5-0.5	155	SLD 72212 7445
		4900	0.0	2.0	0.5-1.0	154	
		4800	0.0	2.0	1.0-1.5	53	SLD 72212 7445
		4700	0.0		1.5-2.0	43	
		4600	0.0		2.0-2.5	26	
CL	few brick frags. silty clay, hard, med. plast, dk. brn, dry, trace mod. gravel, trace glass, few fine sand few brick frags. clay turning lt. gry, med. gravel absent.	4500	0.0	1.8	2.5-3.0	25	
		4400	0.0	2.0	3.0-3.5	14	SLD 72401 7515
		4300	0.0		3.5-4.0	10	
		4200	0.0	no recovery	4.0-4.5	10	
		4100	0.0	1.9	4.5-5.0	11	SLD 72401 7530
		4000	0.0	2.0	5.0-5.8	9	SLD 72401 7500
		3900	0.0		5.8-6.0	9	
		3800	0.0		6.0-6.5		
		3700	0.0		6.5-7.0		
		3600	0.0		7.0-7.5		
TD: 6.0' BGS					Background:		
1-15-03					NAI 15060		
1445					PIED: 0.0		
					Backfilled		
					boring w/		
					3.0 bags of		
					bestonite chips		
					* Samples		
					will be coun-		
					ted w/ gas		
					proportion		
					meter to select		
					samples for		
					lab. see attached		
					sheet		

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72212 Class 2 Samples

Date Collected: 1-15-03  
Date Analyzed: 1-27-03

Instrument #1 Background 5060 cpm Instrument #2 Background 4500 cpm

Count rate of Empty Pan: Beta 76 cpm

Sample Depth (inches)	Field Scan of Spoon (Instrument #1) in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
				Gross Beta	Net Beta
0-6	5000	4509	9	96	20
6-12	4700	4450	-50	101	25
12-18	4900	4606	106	132	56
18-24	4600	4927	427	124	48
24-30	4500	4748	248	110	34
30-36	4500	4742	242	119	43
36-42	5100	4567	67	147	71
42-48	<sup>cp 1-22-03</sup> 5000 N/A	N/A	N/A	N/A	N/A
48-54	4700	4570	70	120	44
54-60	5100	4810	310	141	65
60-66	5100	4845	345	144	68
66-72	<sup>cp 1-22-03</sup> 4500 N/A	N/A	N/A	N/A	N/A

\* SLD 72212

\* SLD 72403

\* SLD 72409

\* SLD 72411

HTRW DRILLING LOG			DISTRICT			HOLE NUMBER		
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc.			St. Louis SLD 72213		
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.			SHEET 1 OF 2		
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/2 HSA and 3" x 3" split spear.			8. HOLE LOCATION See location sketch					
12. OVERBURDEN THICKNESS N/A			10. DATE STARTED 1-21-03			11. DATE COMPLETED 1-31-03		
13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A					
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		NO		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY %
		Yes		N/A		RAD		0 %
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR
		Yes		N/A		N/A		Chella M. Attkin
LOCATION SKETCH/COMMENTS			Witnessed by: Robin Parks			SCALE: Not to Scale		
			Terms used to describe %					
			Trace - < 5 %					
			Few - 5 - 10 %					
			Little - 15 - 25 %					
			Some - 20 - 35 %					
			Mostly - 50 - 100 %					
PROJECT			FUSRAP/SLDS			HOLE NO. SLD 72213		

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72213
PROJECT FUSRAP / SLDs		OPERATOR Phillip Gatter		DATE 2-2-98		
DEPTH FEET	DEPTH M	DESCRIPTION OF MATERIALS	DEPTH FEET	RECOVERY %	GRAIN SIZE NO.	GRAIN SIZE NO.
SM	1.0	silty fine sand w/ few med. gravel, dense, poorly graded, lt. brn, dry, trace glass, few clay, few cinders, few slag.	4600	RECOVERY	00-0.5	34
			4700	2.0	0.5-7.0	42
			4700	2.0	10-15	27
			4800		15-20	16
CL	3.0	silty clay, stiff, med. plastic, lt. brn, dry	4800	1.9	2.0-2.5	13
			4900	2.0	2.5-3.0	9
			4800		3.0-3.5	13
			5000		3.5-3.9	12
			4700	1.4	4.0-4.5	12
			5200	2.0	4.5-5.0	9
	5.0	mostly brick frags.	5100		5.0-5.4	9
			N/A	no recovery		8
	6.0					
	7.0	TD: 6.0' BGS 1-21-03 1415				
	8.0					
	9.0					
	10.0					

Background:  
NaI 47662  
PID: 0.0  
Backfilled  
boring w/  
3.0 bags  
of bentonite  
chips.  
\*Samples will  
be counted  
w/ gas propor-  
tion meter.  
See attached  
sheet.

IT Corporation  
FUSRAP SLDS 775575

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72213 Class 2 Samples

Dated Collected: 1-21-03  
Date Analyzed: 1-27-03

Instrument #1 Background 4662 cpm Instrument #2 Background ~~4601~~ 4776

Count rate of Empty Pan: Beta 65 cpm

Sample Depth (inches)	Field Scan of Spoon (Instrument #1) in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
				Gross Beta	Net Beta
0-6	4600	4416	-360	91	26
6-12	4700	4346	-430	117	52
12-18	4700	4563	-213	93	28
18-24	4800	4875	99	155	90
24-30	4800	4994	218	132	67
30-36	4200	5087	311	132	67
36-42	4800	4938	162	145	80
42-48	5000	5005	229	122	57
48-54	4700	5058	282	136	71
54-60	5200	4734	-42	123	58
60-66	5100	4786	-40	130	65
66-72	N/A	N/A	N/A	N/A	N/A

\*SLD 72213

\*SLD 72404

\*SLD 72213 archive

\*SLD 72213 archive

HTRW DRILLING LOG			DISTRICT			HOLE NUMBER																																	
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc.			St. Louis SLD 72397																																	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.			SHEET 1 OF 2																																	
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120																																				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" HSA and 3" x 2" split spoon.			8. HOLE LOCATION See location sketch																																				
9. SURFACE ELEVATION N/A			10. DATE STARTED 1-27-03			11. DATE COMPLETED 1-27-03																																	
12. OVERBURDEN THICKNESS N/A			13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A																																	
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A																																	
18. GEOTECHNICAL SAMPLES			19. TOTAL NUMBER OF CORE BOXES																																				
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERY																																				
22. DISPOSITION OF HOLE			23. SIGNATURE OF INSPECTOR																																				
<table border="1"> <tr> <th>DISTURBED</th> <th>UNDISTURBED</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </table>			DISTURBED	UNDISTURBED	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	0	0	0	0	0	<table border="1"> <tr> <th>YES</th> <th>NO</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> </tr> </table>			YES	NO	OTHER (SPECIFY)	0	0	0	<table border="1"> <tr> <th>PACKAGED</th> <th>MONITORING WELL</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> </tr> </table>			PACKAGED	MONITORING WELL	OTHER (SPECIFY)	0	0	0	<table border="1"> <tr> <th>YES</th> <th>NO</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> </tr> </table>			YES	NO	OTHER (SPECIFY)	0	0	0
DISTURBED	UNDISTURBED	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)																																			
0	0	0	0	0																																			
YES	NO	OTHER (SPECIFY)																																					
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PACKAGED	MONITORING WELL	OTHER (SPECIFY)																																					
0	0	0																																					
YES	NO	OTHER (SPECIFY)																																					
0	0	0																																					
<p>LOCATION SKETCH/COMMENTS Witnessed by: Robin Parks SCALE: Not to Scale</p> <p>Terms used to describe %</p> <p>Traces - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p> <p>gate</p> <p>SLD 72397</p> <p>SLD 72397</p> <p>Bldg.</p>																																							
PROJECT FUSRAP/SLDS						HOLE NO. SLD 72397																																	

HTRW DRILLING LOG (CONTINUATION SHEET)		WELL NUMBER			
PROJECT		WELL NO.			
FUSRAP / SLDS		SLD 72397			
INSPECTOR		SHEETS			
Philip Statler		2 of 2			
DEPTH (ft)	DESCRIPTION OF MATERIALS	RECOVERY	GRAVIMETER	REMARKS	
SM 1.0	silty fine sand w/ some med. gravel, very dense, poorly graded, lt. brn, dry, trace glass.	4700 0.0	2.0	235	SLD 72397 1-27-03 1050 1630
		4600 2.0	2.0	150	25-60 1053
		5000 2.0		136	10-15 1055
		5300 2.0		102	15-20 1101
		5600 0.6	1.8 / 2.0	10	20-25 1110
CL 3.0	silty clay med. stiff, med. plastic, dk brn, dry, few brick frags, trace slag.	4900 0.0	1.8 / 2.0	8	25-30 1112
		5200 0.0		7	3.0-3.8 1145
		5000 0.0	no recovery	5	SLD 72397 archive 3.0-3.8 1115
		5000 0.0	1.7 / 2.0	7	4.0-4.5 1125
		5200 0.0	1.7 / 2.0	4	4.5-5.0 1127
6.0	few brick frags.	4800 0.0		6	5.0-5.7 1130
		5200 0.0	no recovery	9	SLD 72397 archive 5.0-5.7 1130
7.0	TD: 6.0' BGS 1-27-03 1115				Background: Nat: 4937 PID: 0.0 Backfilled boring w/ 3.0 bag of bentonite chips *Sampler will be counted w/ gas proportional meter. (See attached sheet).
8.0					
9.0					
10.0					
PROJECT		WELL NO.			
FUSRAP / SLDS		SLD 72397			

p1 of 1

IT Corporation  
FUSRAP SLDS 775575

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72397 Date Sample was collected: 1-27-03 Date Sample was analyzed: 1-30-03  
 Class 2  
 Instrument #1 Background 4937 cpm Instrument #2 Background 4667 cpm  
 Countrate of Empty Pan: Beta 135 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Countrate in cpm	
					Gross Beta	Net Beta
0-6	4900	-37	<del>4367</del> 4367	-437	159	24
6-12	4600	-337	4367	-300	175	40
12-18	5000	63	4549	-118	205	70
18-24	5300	363	4670	3	189	54
24-30	5000	63	4567	-100	166	31
30-36	4900	-37	4751	84	231	96
36-42	5800	863	4962	295	220	85
42-48	N/A	N/A	N/A	N/A	N/A	N/A
48-54	5000	63	4675	8	211	76
54-60	5200	263	4798	131	230	95
60-66	4800	-137	4910	243	232	97
66-72	N/A	N/A	N/A	N/A	N/A	N/A

SLD 72397

SLD 72405

SLD 72397 Archive

SLD 72397 Archive

HTRW DRILLING LOG		DISTRICT		HOLE NUMBER	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.		SLD 72398 SHEET 1 of 2	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.		
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" HSA and 3" x 3" split spear.		8. HOLE LOCATION See location sketch			
9. SURFACE ELEVATION N/A			10. DATE STARTED 1-22-03		
11. DATE COMPLETED 1-22-03			12. OVERBURDEN THICKNESS N/A		
13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A		
14. TOTAL DEPTH OF HOLE 7.0 FT BGS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			18. GEOTECHNICAL SAMPLES		
DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY		22. DISPOSITION OF BOLE	
YES		METALS		OTHER (SPECIFY)	
NO		OTHER (SPECIFY)		OTHER (SPECIFY)	
LAC FILLED		MONITORING WELL		OTHER (SPECIFY)	
YES		N/A		N/A	
NO		N/A		N/A	
23. SIGNATURE OF INSPECTOR <i>Robin Parks</i>					
LOCATION SKETCH/COMMENTS Witnessed by: Robin Parks SCALE: Not to Scale Terms used to describe % Trace - < 5% Few - 5-10% Little - 15-25% Some - 20-35% Mostly - 50-100% HTZ 69452 SLD 729870C SLD 72398 Concrete Scale Mould boiling over 11.5' to NE					
PROJECT FUSRAP/SLDS				HOLE NO. SLD 72398	

HTRW DRILLING LOG (CONTINUATION SHEET)							LOG NUMBER SLD 72398
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statler			SHEET 2 of 2 SHEETS		
DEPTH (ft)	DESCRIPTION OF PENETRATOR (ft)	FIELD PENETRATION RESULTS (ft)	STANDARD PENETRATION TEST RESULTS (ft)	BLOW COUNT (ft)	REMARKS (ft)		
COVER	Concrete cover	SP00 0.0			SLD 72398 11/12 0.0		drilled through concrete cover
1	Silty fine sand w/ some med. to coarse gravel, loose, poorly graded, Hs, brk, dry	SP00 0.0	1.6 / 2.0		SLD 72398 11/12 0.0		
2		SP00 0.0			9	SLD 72398 11/12 0.0	
		SP00 0.0			11	SLD 72398 11/12 0.0	P2
		4800 0.0			10	SLD 72398 11/12 0.0	
3	SM low clay, few brick frags, trace cinders	M/A NA			11		
		SP00 0.0			9	SLD 72398 11/12 0.0	
4		SP00 0.0	1.7 / 2.0		11	SLD 72398 11/12 0.0	(1035)
		SP00 0.0			13		
		SP00 0.0			10		
5	Trace concrete frag.	SP00 0.0			no recovery		
	CL silty clay, med. stiff, med. plast, dk. brn, few brick frags, trace slag	SP00 0.0	1.8 / 2.0		3	SLD 72398 11/12 0.0	
6		SP00 0.0			6	SLD 72398 11/12 0.0	
		SP00 0.0			6	SLD 72398 11/12 0.0	
		SP00 0.0			4		
7							
	TD: 7.0' BGS 1-22-03 1030						Backgrounds Nat: 4206 P2D: 0.0 Backfill had boring w/ 3.0 bags of bestante chips *Sampler will be counted as per proportional see attached sheet

PROJECT FUSRAP/SLDS

LOG NUMBER SLD 72398

plot 2

IT Corporation  
FUSRAP SLDS 775575

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72398  
Class 2

Date Sample was collected: 1-22-03

Date Sample was analyzed: 1-27-03

Instrument #1 Background 4226cpm

Instrument #2 Background 4498cpm

Count rate of Empty Pan: Beta 82cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	cover	N/A	N/A	N/A	N/A	N/A
6-12	cover	N/A	N/A	N/A	N/A	N/A
12-18	5400	1174	4305	-193	91	9
18-24	5200	974	4187	-311	101	19
24-30	4600	374	4433	-65	115	33
30-36	N/A	N/A	N/A	N/A	N/A	N/A
36-42	5000	774	4585	87	102	20
42-48	5500	1274	4840	342	148	66
48-54	5000	774	4657	159	128	46
54-60	N/A	N/A	N/A	N/A	N/A	N/A
60-66	5100	874	4804	306	164	82
66-72	5000	774	4502	4	149	67

SLD 72398

SLD 72406

Archive Sample  
SLD 72398

IT Corporation  
FUSRAP SLDS 775575

RADIOLOGICAL SURVEY FORM

Sample ID SLD72398

Date Sample was collected: 1-22-03

Date Sample was analyzed: 1-27-03

Instrument #1 Background 4226

Instrument #2 Background 4498

Count rate of Empty Pan: Beta 82 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
72-78 <del>06</del>	5500	1274	4689	191	124	42
78-82 6-12	N/A	N/A	N/A	N/A	N/A	N/A
12-18						
18-24						
24-30						
30-36						
36-42						
42-48			N	A		
48-54						
54-60						
60-66						
66-72						

Archive Sample  
SLD72398

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72400	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 Using 3/4" HSA and 3" x 3" split spoon.			8. HOLE LOCATION See location sketch				
8. SURFACE ELEVATION N/A			9. DATE STARTED 1-28-03				
10. OVERBURDEN THICKNESS N/A			11. DATE COMPLETED 1-28-03				
12. DEPTH DRILLED INTO ROCK N/A			15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A				
13. TOTAL DEPTH OF HOLE 6.0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A				
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
23. SIGNATURE OF INSPECTOR		Yes		N/A		N/A	
LOCATION SKETCH/COMMENTS			Witnessed by: Susan Adams Susan Adams				
			SCALE: Not to Scale				
			Terms used to describe %				
			Trace - < 5%				
			Few - 5-10%				
			Little - 15-25%				
			Some - 20-35%				
			Mostly - 50-100%				
PROJECT			FUSRAP/SLDS			HOLE NO.	
						SLD 72400	

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72400	
PROJECT FUSRAP / SLDs			INSPECTOR Phillip Statter		SHEET 2 of 2		
DEPTH (ft)	DESCRIPTION OF MATERIALS	DEPTH (ft)	RECOVERY (%)	GRAIN COUNT (gr)	GRAIN COUNT (gr)	GRAIN COUNT (gr)	REMARKS
SM 1.0	silty fine sand w/ some med. gravel, very poorly graded, dry, trace brick frags	4770	0.0	1.8 / 2.0	0.0-1.5	75	SLD 72400 1350
		4780	0.0		1.5-1.0	129	
		5700	0.0	1.0-1.8	55	SLD 72400 1355	
		4700	0.0	1.8-1.5	24		
N/A 3.0	Poor recovery (< 1.3') See SLD 72400B for details	N/A	N/A	N/A		14	
		N/A	N/A			15	
		N/A	N/A			10	
		N/A	N/A			19	
		N/A	N/A				
SM 5.0	few cinders and slag, few clays, brick frags (some).	4800	0.0	1.8 / 2.0	40-45	5	
		4900	0.0		45-50	5	
		5700	0.0	5.8-5.8	7	SLD 72400 archive for SLD 1415	
		4900	0.0	no recovery	10		
7.0 8.0 9.0 10.0	TD: 6.0' BGS 1-28-03 1410						Backgrounds
							NaI: 5p00
							PID: 0.0
							Backfilled
							boring w/ 30
							bags of bentonite chips.
							* Samples will be counted using gas proportional meter. (see attached sheet)

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72400 c2

Date Sample was collected: 1-28-03

Date Sample was analyzed: 2-19-03

Instrument #1 Background 5000cpm

Instrument #2 Background 4723cpm

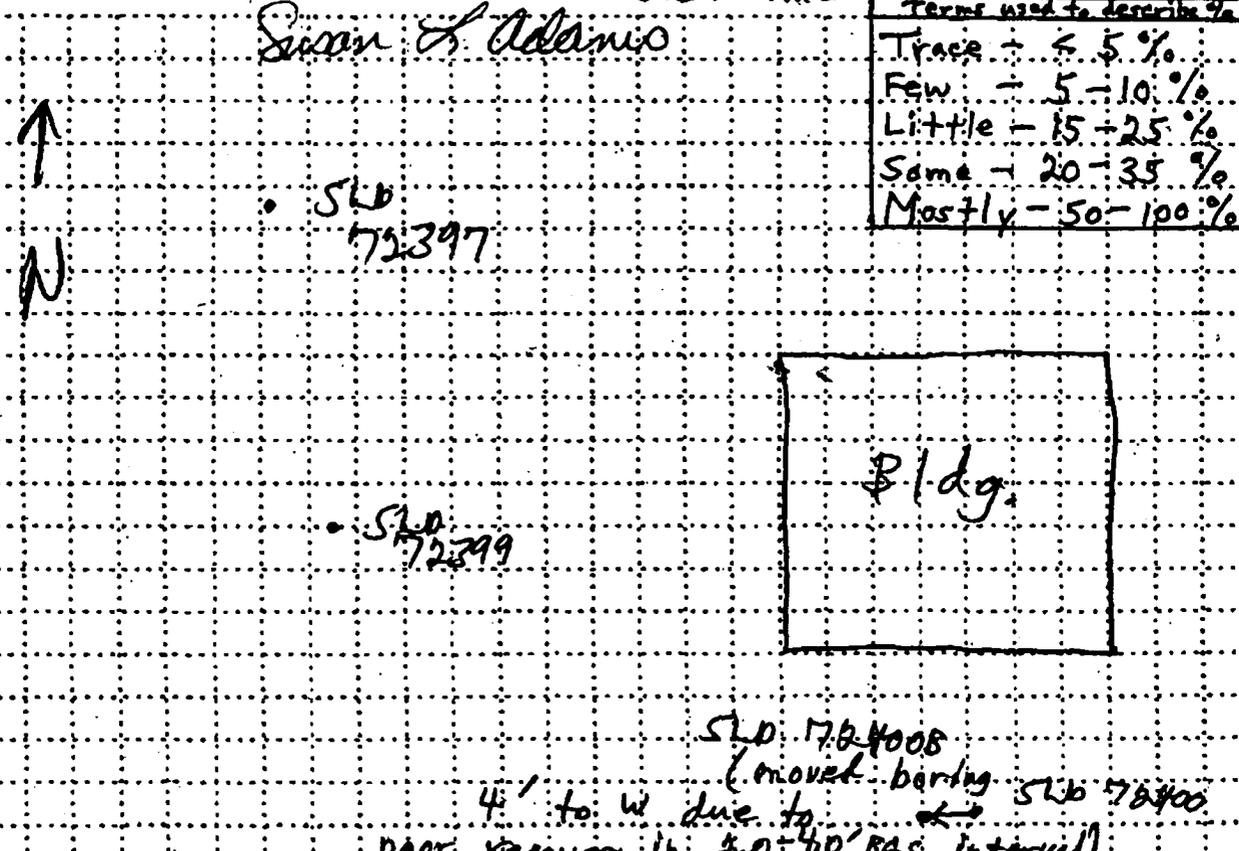
Count rate of Empty Pan: Beta 95cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	4700	-300	4188	-535	105	10
6-12	4700	-300	4574	-149	103	8
12-18	5100	100	4657	-66	134	39
18-24	N/A	N/A	N/A	N/A	N/A	N/A
24-30	N/A	N/A	N/A	N/A	N/A	N/A
30-36	N/A	N/A	N/A	N/A	N/A	N/A
36-42	N/A	N/A	N/A	N/A	N/A	N/A
42-48	N/A	N/A	N/A	N/A	N/A	N/A
48-54	4800	-200	4864	141	149	54
54-60	4900	-100	4838	115	145	50
60-66	5400	400	4741	18	146	51
66-72	N/A	N/A	N/A	N/A	N/A	N/A

SLD 72400

SLD 72408

SLD 72400  
archive

HTRW DRILLING LOG			DISTRICT <i>St. Louis</i>			HOLE NUMBER <i>SLD 72400B</i>		
1. COMPANY NAME <i>Shaw E &amp; I</i>			2. DRILLING SUBCONTRACTOR <i>MES, Inc.</i>			SHEET <i>1</i> OF <i>2</i>		
3. PROJECT <i>FUSRAP/SLDS</i>			4. LOCATION <i>PSC Metals North Tract V.P.</i>					
5. NAME OF DRILLER <i>Chris Anthony</i>			6. MANUFACTURER'S DESIGNATION OF DRILL <i>Diedrich D-120</i>					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>Diedrich D-120 using 3/4" HSA and 3" x 2" split spear.</i>			8. HOLE LOCATION <i>See location sketch</i>					
			9. SURFACE ELEVATION <i>N/A</i>					
<i>PID 1-20-03 NAT LUD 149947</i> <i>to 100/100 Cal. Date: 9-30-03 Bkg: 5008</i>			10. DATE STARTED <i>1-28-03</i>			11. DATE COMPLETED <i>1-28-03</i>		
12. OVERBURDEN THICKNESS <i>N/A</i>			15. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>					
13. DEPTH DRILLED INTO ROCK <i>N/A</i>			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>					
14. TOTAL DEPTH OF HOLE <i>4.0 FT BGS</i>			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		YES		RETAILS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY
						<i>RAD</i>		<i>0%</i>
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR
		<i>Yes</i>		<i>N/A</i>		<i>N/A</i>		<i>Shirley M. [Signature]</i>
LOCATION SKETCH/COMMENTS <i>Witnessed by: Susan Adams</i> <b>SCALE: Not to Scale</b> <i>Susan S. Adams</i> 								
<i>SLD 72399</i> <i>4' to W due to poor recovery in 20-40' BGS interval</i>						<i>SLD 72400B</i> <i>(moved boring SLD 72400)</i>		
PROJECT <i>FUSRAP/SLDS</i>						HOLE NO. <i>SLD 72400B</i>		

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72400B
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Stetler		SHEET NO. 2 of 2		
DEPTH FEET	DEPTH METERS	DESCRIPTION OF MATERIALS (L)	WATER CONTENT (%)	SHRINKAGE (%)	MOISTURE CORRECT (%)	REMARKS (R)
N/A	1.0	See SLD 72400 for details	N/A	N/A	N/A	
CL	2.0	silty clay, med. silty, med. platy, lt. brn., dry, trace brick frag.	4500 0.0	1.5	10	
SM	3.0	silty fine sand w/ some med. gravel, poorly graded, lt. brn. to tan, dry, some lime- stone cobble.	4300 0.0	2.0	25	
	4.0		4800 0.0	no recovery	15	SLD 72400B archive 2.0-2.5 (1450)
	5.0	TD: 4.0' BGS 1-28-03 1445				Background: Nat: 5,000 PID: 0.0 Back-filled boring w/ 2.0 bags of benton- ite chips each. * Samples will be counted using gas proportion- al meter. (See attached sheet)
	6.0					
	7.0					
	8.0					
	9.0					
	10.0					

PROJECT FUSRAP/SLDS

WELL NO. SLD 72400B

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72400B ca  
*Susan Adams*

Date Sample was collected: 1-28-03

Date Sample was analyzed: 2-19-03

Instrument #1 Background 5000 cpm

Instrument #2 Background 4723 cpm

Count rate of Empty Pan: Beta 95 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6						
6-12				A		
12-18						
18-24						
24-30	4500	-500	4879	156	129	34
30-36	4800	-200	4905	182	125	30
36-42	4800	-200	4636	-87	119	24
42-48	N/A	N/A	N/A	N/A	N/A	N/A
48-54						
54-60				A		
60-66						
66-72						

SLD724003  
archive

# HTRW DRILLING LOG

207.20

St. Louis

SLD 72413

1. COMPANY NAME Shaw F & I		2. DRILLING SUBCONTRACTOR MES, Inc.		3. SHEET 1		4. SHEETS 2	
5. PROJECT FUSRAP / SLDS				6. LOCATION PSC Metals North Tract V.P.			
7. NAME OF DRILLER Chris Anthony				8. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
9. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3 1/2" HSA and 3" x 2" split spoon				10. HOLE LOCATION see location sketch			
				11. SURFACE ELEVATION N/A			
12. OVERBURDEN THICKNESS N/A		13. DEPTH DRILLED INTO ROCK N/A		14. TOTAL DEPTH OF HOLE 6.0 FT BGS		15. DATE STARTED 11-20-02	
				16. DATE COMPLETED 11-20-02		17. DEPTH GROUNDWATER ENCOUNTERED N/A	
				18. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		19. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A	
20. GEOTECHNICAL SAMPLES 0		21. DISTURBED 0		22. UNDISTURBED 0		23. TOTAL NUMBER OF CORE BOXES 0	
24. SAMPLES FOR CHEMICAL ANALYSIS 0		25. TOC 0		26. METALS 0		27. OTHER SPECIFY RAD	
28. DEPOSITION OF SOIL 0		29. SACRIFICED Yes		30. MONITORING VEL. N/A		31. OTHER SPECIFY NA	
				32. SIGNATURE OF INSPECTOR B. M. H. H.		33. TOTAL CORE RECOVERED 0%	

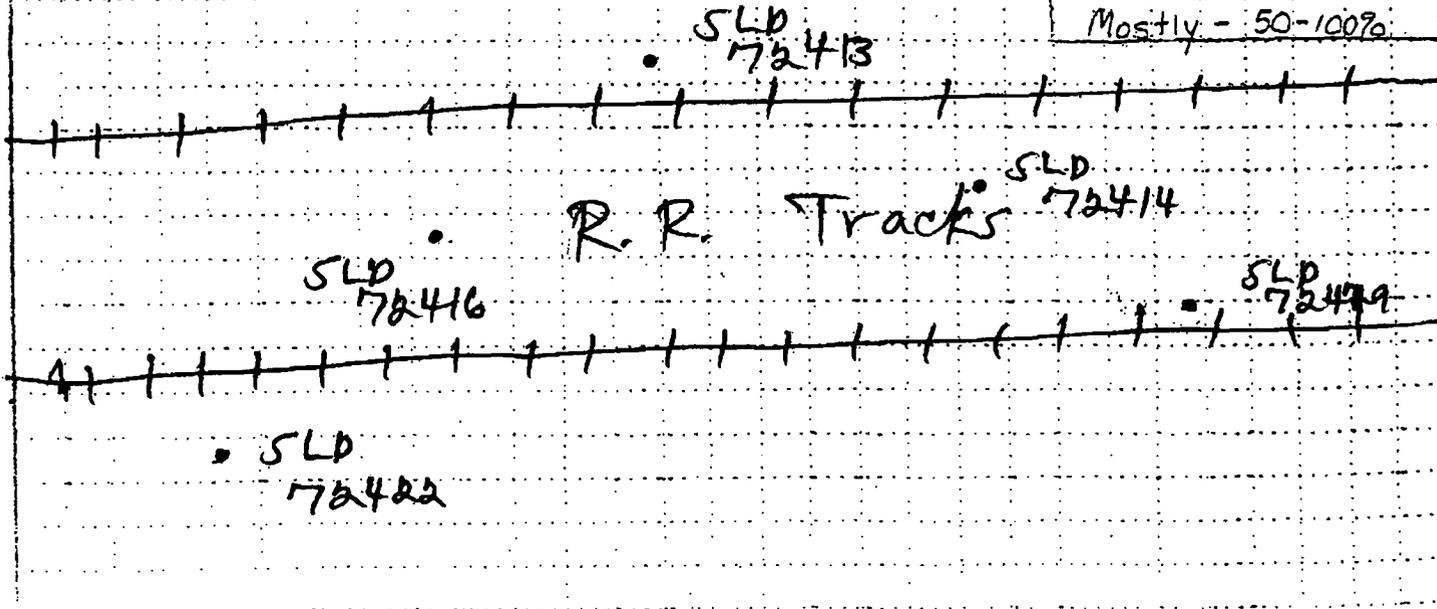
LOCATION SKETCH/COMMENTS  
North

Witnessed By: Keith Enders

SCALE: Not to Scale



Terms used to describe %  
Trace - < 5%  
Few - 5-10%  
Little - 15-25%  
Some - 20-35%  
Mostly - 50-100%



FUSRAP / SLDS

SLD 72413

**HRW DRILLING LOG (CONTINUATION SHEET)**

PROJECT: **FUSRAP/SLOS**      SUPERVISOR: **Phillip Statler**      WELL IDENTIFICATION: **SLD 72413**  
SHEET: **2** OF **2**

DEPTH (FEET)	DESCRIPTION OF MATERIALS	LOG NUMBER	RECOVERY (%)	WATER SAMPLE NO.	SLUG COUNT	REMARKS
0.0 - 1.0	silty fine sand w/ low med to coarse gravel, loose, poorly graded, dk. brn. dry, few cinders and few slag.	4400 0.0	2.0	SLD 72413 17.25 16.50	7	
1.0 - 2.0		5100 0.0			8	
2.0 - 3.0		4400 0.0			6	
3.0 - 4.0		4400 0.0			5	
4.0 - 5.0	silty clay, med. silty, med. platy, H. brn. to gray, dry, trace cinders, trace med. gravel.	5300 0.0	1.9 / 2.0	SLD 72414 17.00	3	
5.0 - 6.0		5200 0.0			3	
6.0 - 7.0		5000 0.0			3	
7.0 - 8.0		4400 0.0			4	
8.0 - 9.0	cinders, med gravel absent	5300 0.0	1.9 / 2.0	SLD 72415 17.05	3	diesel odor ↓
9.0 - 10.0		5400 0.0			4	
10.0 - 11.0		5400 0.0			4	
11.0 - 12.0		5200 0.0			7	
12.0 - 13.0	TD: 6.0' BGS 11-20-02 1650					Backgravel Nat: 4000 PTs: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips.

PROJECT: **FUSRAP/SLOS**      WELL IDENTIFICATION: **SLD 72413**

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72414	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 OF 2 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCAL RUN PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4 HSA and 3" x 2" split spoon.		8. HOLE LOCATION See location sketch			9. SURFACE ELEVATION N/A		
12. OVERBURDEN THICKNESS N/A		10. DATE STARTED 12-11-02		11. DATE COMPLETED 12-17-02			
13. DEPTH DRILLED INTO ROCK N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 6.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		RECORDED		MONITORING WELL		OTHER (SPECIFY)	
21. TOTAL CORE RECOVERY		Yes		N/A		N/A	
23. SIGNATURE OF INSPECTOR		[Signature]					
LOCATION SKETCH/COMMENTS		Witnessed by: Keith Endors					
		SCALE: Not to Scale Terms used to describe % Trace - < 5 % Few - 5 - 10 % Little - 15 - 25 % Some - 20 - 35 % Mostly - 50 - 100 %					
PROJECT FUSRAP/SLDS					HOLE NO. SLD 72414		

HTRW DRILLING LOG (CONTINUATION SHEET)		HOLE NUMBER SLD 72414	
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statter	
DEPTH FEET	DEPTH METERS	DESCRIPTION OF MATERIALS	REMARKS
CL	1.0	silty clay w/ few med gravel, med. silt to silt, med. plast, dk brn. to blk, dry, some cinders, some slag.	RECOVERY
	2.0		SLD 72414 12-11-02 1330
	3.0		SLD 72414 1330
	4.0		SLD 72414 1330
SM P.S.	3.0	silty fine sand w/ few med. gravel, loose, poorly graded, dk/brn. to blk, dry, some cinders, some slag.	2.0
	4.0		2.0
	5.0		2.0
	6.0		2.0
CL	5.0	silty clay, soft, med. plast., 14. brn., moist, some very fine sand	1.9
	6.0		2.0
	7.0		2.0
	8.0		2.0
	6.0	TD: 6.0' BGS 12-11-02 1345	Background: Nat. 4500 PIF: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips.

**HTRW DRILLING LOG** St. Louis HOLE NUMBER: SLD 72415

1. COMPANY NAME: Shaw F & I 2. DRILLING CONTRACTOR: MES, Inc. SHEET: 1 of 2

3. PROJECT: FUSRAP / SLDS 4. LOCATION: PSC Metals North Tract V.P.

5. NAME OF DRILLER: Chris Anthony 6. MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using 4 1/4 HSA and 3" x 3" split spoon 8. HOLE LOCATION: see location sketch

9. SURFACE ELEVATION: N/A

10. DATE STARTED: 11-18-02 11. DATE COMPLETED: 11-18-02

12. OVERBURDEN THICKNESS: N/A 13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A

14. DEPTH DRILLED INTO ROCK: N/A 15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A

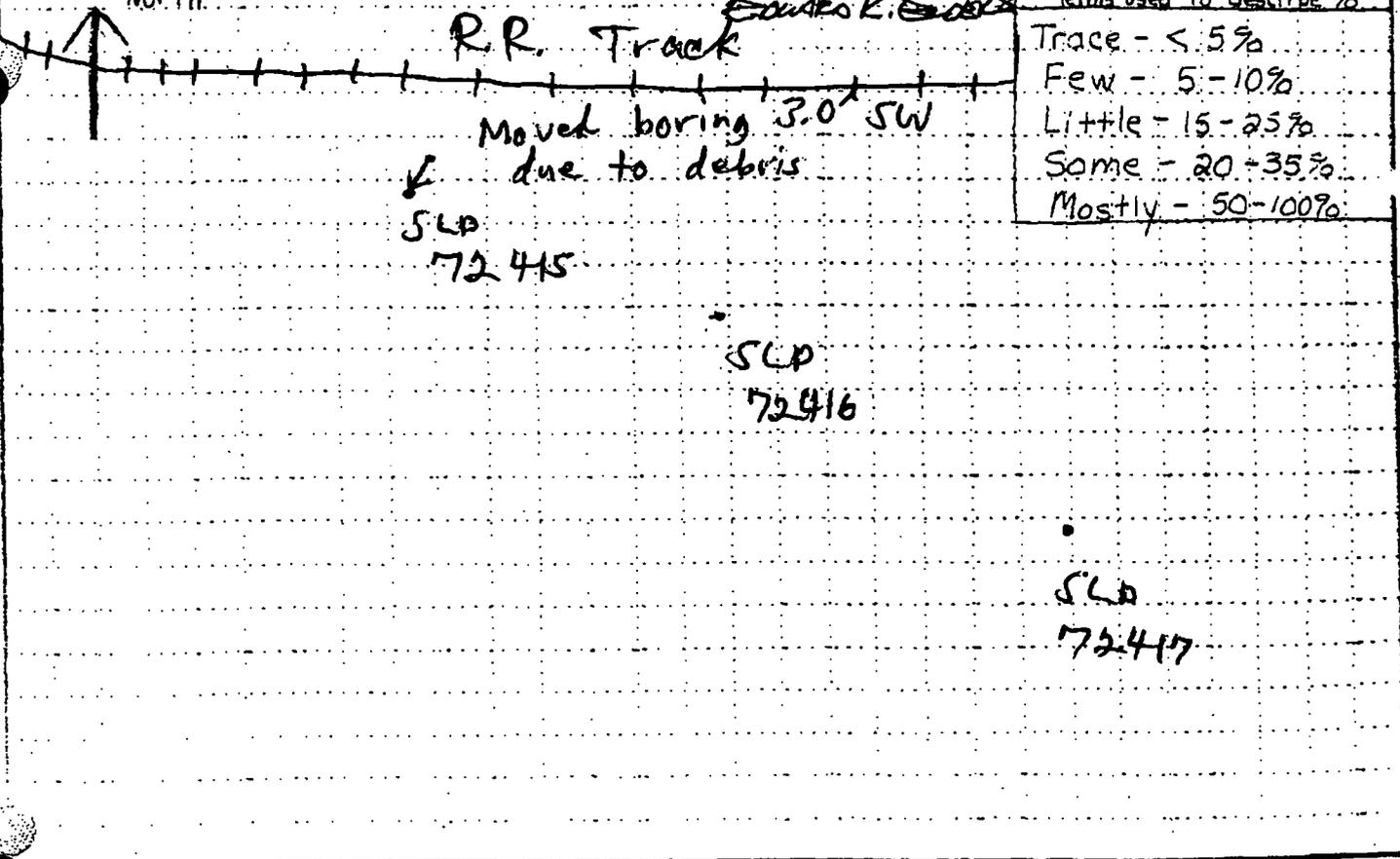
16. TOTAL DEPTH OF HOLE: 6.0 FT BGS 17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. DISTURBED SAMPLES: 0 19. TOTAL NUMBER OF CORE LOGS: 0

20. SAMPLES FOR CHEMICAL ANALYSIS: 0 21. TOTAL CORE RECOVERY: 0%

22. DEPOSITION OF SOLE: 0 23. NAME OF INSPECTOR: William A. Stahl

LOCATION SKETCH/COMMENTS: Witnessed By: Keith Ender SCALE: Not to Scale



**HRW DRILLING LOG (CONTINUATION SHEET)**

SLD 72415

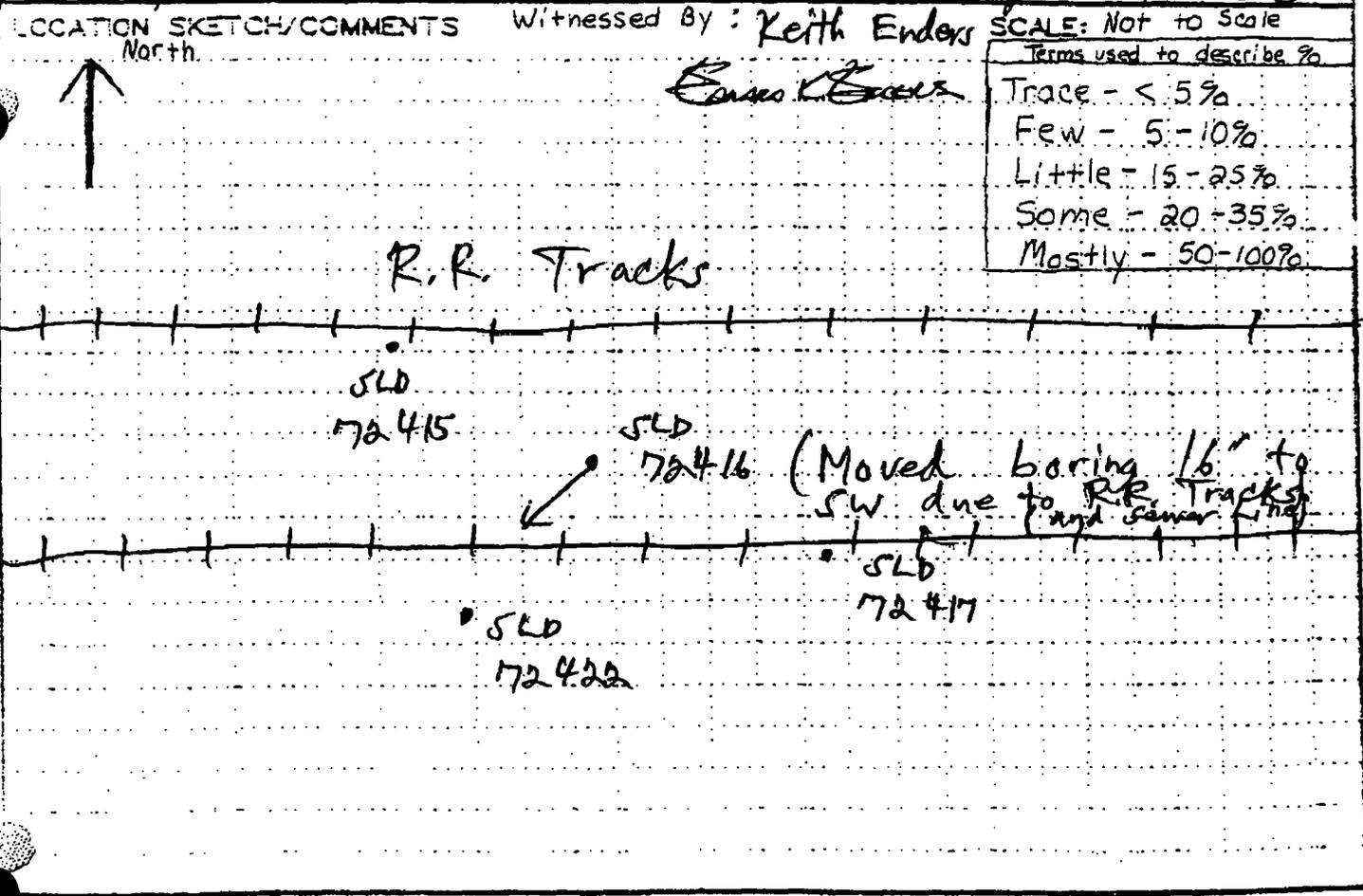
FUSRAP/SLOS      Inspector: **Phillip Statler**

DATE:      SHEET 2 OF 2

DEPTH (ft)	DESCRIPTION OF MATERIALS	NO. OF SAMPLES	RECOVERY	TEST NO.	BLW COUNT	REMARKS
1.0 - 2.0	silty fine sand w/ few med gravel, med. dense, poorly graded, dk. brn. to blk, moist, few clasts, few slag, trace coal, trace brick frags, trace silty clay, few wood frags (RR tie)	6300	0.0	72415-1140	20	
		6800	0.0		11	
		5900	0.0		9	
		6500	0.0	72415-1130	8	
2.0 - 3.0	silty clay, med. stiff to stiff, med. plastic, lt. brn. to dk. brn., med. to fine sand, few med. gravel, few "gray" silty	6100	0.0		5	
		6700	0.0		10	
		6900	0.0	SLP 72415-1140	13	archive sample from 3.0-3.5 BGS
		6700	0.0		10	
3.0 - 4.0	silty fine sand, loose, poorly graded, lt. brn. to gray, moist	5200	0.0		3	
		5900	0.0		4	
		5500	0.0		4	archive sample from 4.5-5.0 BGS (1145)
		NOON/11	no recovery		4	
4.0 - 6.0	TD: 6.0' BGS 1130 11-18-02					Background NaF 5900 PID: 0.0 Back-filled boring w/ 30 bags of bauxite chips.

FUSRAP/SLOS      SLD 72415

HTRW DRILLING LOG		St. Louis		HOLE NUMBER SLD 72416	
COMPANY NAME Shaw F & I		DRILLING CONTRACTOR MES, Inc.		SHEET 1 of 2	
PROJECT FUSRAP / SLDs			LOCATION PSC Metals North Tract V.P.		
NAME OF DRILLER Chris Anthony			MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" HSA and 3" x 2' split spoon			HOLE LOCATION see location sketch		
			SURFACE ELEVATION N/A		
PIEDMONT STATE AL LUD 172040 to 100/100 Cal Date 4-1-02 BK9 = 31.68			DATE STARTED 11-21-02		DATE COMPLETED 11-21-02
CORE BURDEN THICKNESS N/A			DEPTH GROUNDWATER ENCOUNTERED N/A		
DEPTH DRILLED INTO ROCK N/A			DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
TOTAL DEPTH OF HOLE 6.0 FT BGS			OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
ROCK SAMPLES		DISTURBED		UNDISTURBED	
0		0		0	
TOTAL NUMBER OF CORE BOXES		TOTAL NUMBER OF CORE BOXES		TOTAL NUMBER OF CORE BOXES	
0		0		0	
SAMPLES FOR CHEMICAL ANALYSIS		METALS		OTHER SPECIFY	
0		0		RAD	
DEPOSITION OF SOLE		MONITORING WELL		OTHER SPECIFY	
0		N/A		N/A	
SIGNATURE OF INSPECTOR		SIGNATURE OF INSPECTOR		SIGNATURE OF INSPECTOR	
0		Yes		N/A	



PROJECT FUSRAP / SLDs	SLD 72416
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**ATRW DRILLING LOG (CONTINUATION SHEET)**

PROJECT: EUSRAP/SLOS      INSPECTOR: Phillip Statler      HOLE NUMBER: SLD 72416

DEPTH (ft)	DESCRIPTION OF MATERIALS	UNIT WEIGHT (pcf)	RECOVERY (%)	WATER CONTENT (%)	FLOW COUNT	REMARKS
11.0 - 12.0	silty fine sand w/ few med. gravel, loose to med dense, poorly graded, dk. brn, trace silt, trace slag, trace bricks Concrete debris	4500 0.0	1.4 / 2.0	7.2% 1135	8	concrete debris (augered through spoons) archive sample from 2.0 - 2.5' BGS
		5000 0.0		7.2% 1135	11	
		N/A		N/A	N/A	
		4200 0.0		no recovery	8	
12.0 - 15.0	silty clay, stiff med. plast., lt. brn. to gray, dry, few brick frags, trace slag, trace wood frags, few coarse gravel.	5500 0.0	1.6 / 2.0	7.2% 1135	8	archive sample from 2.0 - 2.5' BGS
		5000 0.0		9		
		5100 0.0		13		
		N/A		no recovery	7	
		4700 0.0		12		
		4800 0.0		10		
15.0 - 16.0	few med. gravel, brick frags, slag, and wood absent.	5100 0.0	1.8 / 2.0	7.2% 1135	7	archive sample from 5.3 - 5.8' BGS. (U155)
		5500 0.0		10		
		no recovery				
		no recovery				
16.0 - 8.0	TD: 6.0' BGS 11-21-02 1135					Background: Nat: 5/100 PTD: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips.

PROJECT: EUSRAP/SLOS      HOLE NUMBER: SLD 72416

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72417	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2	
3. PROJECT FUSRAP/SLDS		4. LOCATION PSC Metals North Tract V.P.					
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 Using 1/2" HSA and 3" x 3" split spear.		8. HOLE LOCATION See location sketch					
		9. SURFACE ELEVATION N/A					
PED 2-19-03 NAT. LUD 172040 to 100/100 Cal. Date: 4-1-03 Bkg: 4-7-03		10. DATE STARTED 2-19-03		11. DATE COMPLETED 2-19-03			
12. OVERBURDEN THICKNESS N/A		13. DEPTH DRILLED INTO ROCK N/A					
14. TOTAL DEPTH OF HOLE 6.0 FT BGS		15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
16. GEOTECHNICAL SAMPLES		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		18. DEPTH GROUNDWATER ENCOUNTERED N/A			
19. DISTURBED		20. UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
		Yes		N/A		N/A	
21. DISPOSITION OF HOLE		22. FACILITIES		23. MONITORING WELL		OTHER (SPECIFY)	
		Yes		N/A		N/A	
24. SIGNATURE OF INSPECTOR Susan L. Adams		25. SCALE: Not to Scale					
<p>LOCATION SKETCH/COMMENTS Witnessed by: Susan Adams</p> <p>Terms used to describe %  Trace - &lt; 5%  Few - 5-10%  Little - 15-25%  Some - 20-35%  Mostly - 50-100%</p>							
PROJECT FUSRAP/SLDS					HOLE NO. SLD 72417		

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72417
DEPTH (ft)	DESCRIPTION OF MATERIAL	WATER RECOVERY (%)	RECOVERY (%)	GRAIN SIZE (mm)	WATER LOSS (%)	REMARKS
1.0	Silty fine sand P.S. Poor recovery < 1.3 See SLD 72417B for details	N/A	N/A			
2.0	Silty fine sand w/ few med. gray, loose, poorly graded, dk brn, w/ few cinders, few clay.	4700 0.0	1.8 / 2.0	20-25 17-55	8 12	
3.0		4900 0.0		25-28 14-57	12	
4.0		4800 0.0		30-35 1500	20	
5.0	some clay, cinders and slag absent.	4500 0.0	no recovery	35-38 1300	4	SLD 72450 2-19-03 1503
6.0		5100 0.0	2.0 / 2.0	40-45 1450	3	
7.0		5200 0.0		45-50 1432	4	
8.0		4800 0.0		50-55 1435	3	
9.0		5000 0.0		55-70 1440	2	
10.0	TD: 6.0' BGS 2-19-03 1435				4	SLD 72457 1440
						Background: Nat = 4,495 PIV = 0.0 Back-filled boring w/ 3.0 bag of bentonite chips. * Samples will be counted using gas proportional meter. (see sheet)

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72417  
*Susan Adams*

Date Sample was collected: 2-19-03

Date Sample was analyzed: 2-25-03

Instrument #1 Background: 4495cpm

Instrument #2 Background: 4754cpm

Count rate of Empty Pan: Beta 85cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	N/A					
6-12	N/A					
12-18	N/A					
18-24	N/A					
24-30	4700	205	4958	204	158	73
30-36	4900	405	5016	262	151	66
36-42	4800	305	5043	289	134	49
42-48	4500	5	4925	171	145	60
48-54	5100	605	4987	233	141	56
54-60	5200	705	5109	355	144	59
60-66	4800	305	4898	144	148	63
66-72	5000	505	4718	-36	129	44

SLD 72450

SLD 72457

HTRW DRILLING LOG		DISTRICT	St. Louis	SOLE NUMBER	5-0 72417 B
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.		SHEET	1 of 2 SHEETS
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.		
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4" HSA and 3" x 3" split spear.			8. HOLE LOCATION See location sketch		
9. SURFACE ELEVATION N/A			10. DATE STARTED 2-19-03		
11. DATE COMPLETED 2-19-03			12. OVERBURDEN THICKNESS N/A		
13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A		
14. TOTAL DEPTH OF HOLE 2.0 FT BGS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			18. GEOTECHNICAL SAMPLES		
18. GEOTECHNICAL SAMPLES			19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERED		
22. DISPOSITION OF HOLE			23. SIGNATURE OF INSPECTOR		
<p>LOCATION SKETCH/COMMENTS Witnessed by: Susan Adams</p> <p>SCALE: Not to Scale</p> <p>Terms used to describe %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p>					
PROJECT FUSRAP/SLDS				SOLE NO. SLD 72417 B	

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NO.
PROJECT		INSPECTOR		DATE		WELL NO.
FUSRAP / SLDS		Philip Statler		2-19-03		SLD 72417 B
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER LEVEL (ft)	RECOVERY (%)	ANALYTICAL SAMPLE NO.	DRIFT CORRECTED	REMARKS
SM 1.0	silty fine sand w/ few med. gravel, loose, poorly graded, dk. br. w/ few cinders, few slag. Some clay, few cinders, few slag	4600	1.8	00-2.5'	4	SLD 72417 B 2-19-03 1450
		0.0	2.0	1445	5	
		4600		1447	7	
		0.0	1449	7		
2.0		4700	no recovery	1456	7	SLD 72435-1) 2-19-03 1450
2.0	TD: 2.0' BGS 2-19-03 1450					Background Nat = 4495 PID = 0.0 Boring back filled w/ 1.0 bags of bentonite chips.  * Samples will be counted using gas proportional meter. (see attached sheet)
3.0						
4.0						
5.0						
6.0						
7.0						
8.0						
9.0						
10.0						
PROJECT FUSRAP / SLDS						WELL NO. SLD 72417 B

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72417 B  
Susan Adams

Date Sample was collected: 2-19-03

Date Sample was analyzed: 2-25-03

Instrument #1 Background 4495 cpm

Instrument #2 Background 4747 cpm

Count rate of Empty Pan: Beta 111 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	4600	105	4726	-21	118	7
6-12	4600	105	4839	92	146	35
12-18	4600	105	5036	289	138	27
18-24	4700	205	4611	-136	108	3
24-30						
30-36						
36-42						
42-48			N	A		
48-54						
54-60						
60-66						
66-72						

SLD 72417

SLD 72435-1,2

HTRW DRILLING LOG			DISTRICT	St. Louis	HOLE NUMBER	SLO 72417 (AC)	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3" HSA and 3" x 3" split spoon.		8. HOLE LOCATION See location sketch			9. SURFACE ELEVATION N/A		
10. DATE STARTED 2-19-03		11. DATE COMPLETED 2-19-03		12. OVERBURDEN THICKNESS N/A			
13. DEPTH DRILLED INTO ROCK N/A		14. TOTAL DEPTH OF HOLE 2.0 FT BGS		15. DEPTH GROUNDWATER ENCOUNTERED N/A			
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
						21. TOTAL CORE RECOVERY	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
		Yes		N/A		N/A	
23. SIGNATURE OF INSPECTOR		SCALE: Not to Scale					
Witnessed by: Susan Adams		<p>Terms used to describe %</p> <p>Trace - &lt; 5%</p> <p>Few - 5-10%</p> <p>Little - 15-25%</p> <p>Some - 20-35%</p> <p>Mostly - 50-100%</p>					
<p>LOCATION SKETCH/COMMENTS</p> <p>Witnessed by: Susan Adams</p> <p>SLO 72417 (AC) moved to SLO 72417</p> <p>R.R. Tracks</p> <p>SLO 72417</p> <p>SLO 72417</p>							
PROJECT					FUSRAP/SLDS		
HOLE NO.					SLO 72417 (AC)		

HTRW DRILLING LOG (CONTINUATION SHEET)						FLB 7247(OC)	
PROJECT		INSPECTOR		SHEET		SHEETS	
FUSRAP/SLDS		Phillie Stator		2 of 2		3 SHEETS	
DEPTH (ft)	DESCRIPTION OF MATERIALS	RECOVERED	RECOVERY	WATER CONTENT (%)	SLURRY COUNT	REMARKS	
0.0 - 1.0	Silty fine sand w/ few med. gravel, loose, poorly graded, dk. brn, wet, trace cinders, trace slag, some clay	N/A	2.0 / 2.0		5	Sample collected to ensure sufficient sample volume for AC sample	
1.0 - 2.0		N/A			5		
2.0 - 3.0		N/A			6		
3.0 - 4.0		4900 00		1.520 1505	5		
4.0 - 10.0	TD: 2.0' BGS 2-19-03 1500					Backgrounds Nat: 4495 PED: 0.0 Boring back filled w/ 1.0 bags of bentonite chips. * Samples will be counted w/ gas proportional meter. (See attached sheet)	

PROJECT: FUSRAP/SLDS      HOLE NO.: FLB 7247(OC)

**RADIOLOGICAL SURVEY FORM**

Sample ID SLD 7247 (QC)

Date Sample was collected: 2-19-03

Date Sample was analyzed: 2-25-03

Instrument #1 Background 4495 cpm

Instrument #2 Background 4747 cpm

Count rate of Empty Pan: Beta 111 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6				A		
6-12			N			
12-18	4900	405	5002	255	125	14
18-24						
24-30						
30-36						
36-42				A		
42-48			N			
48-54						
54-60						
60-66						
66-72						

SLD 72435 1-2

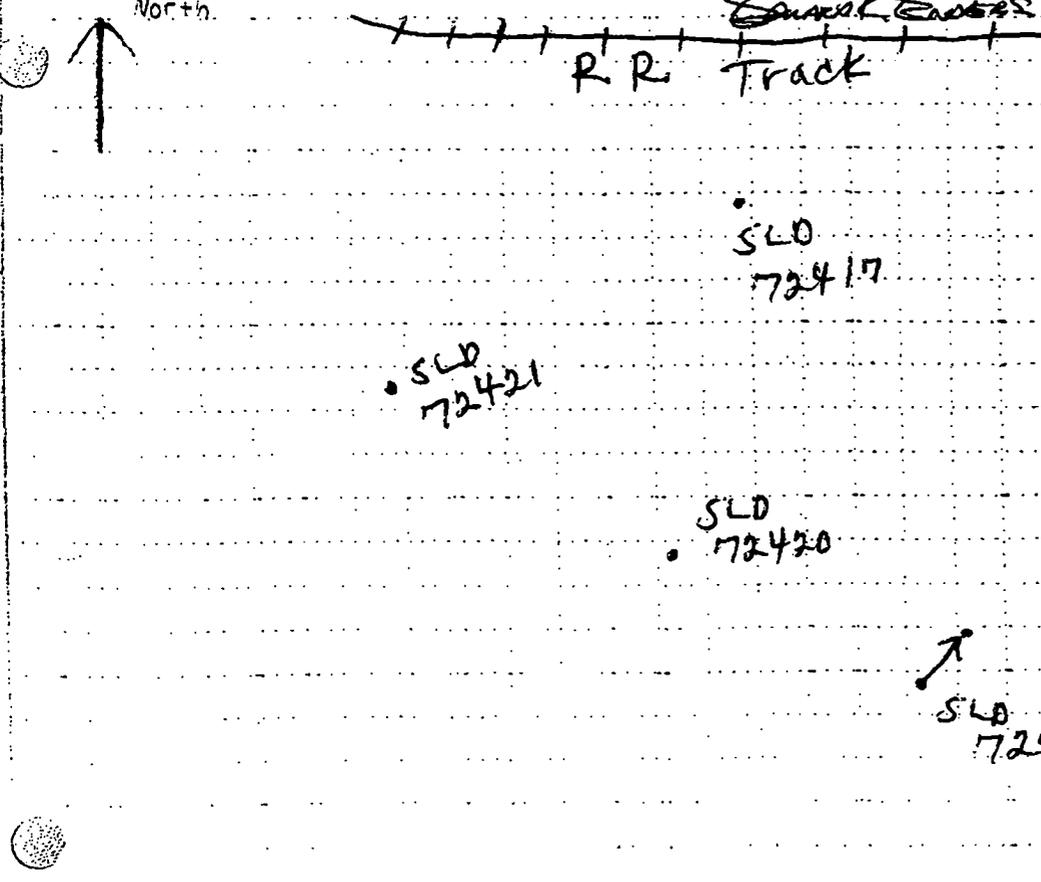
HTRW DRILLING LOG			DISTRICT			HOLE NUMBER																						
1. COMPANY NAME Shaw E & I			St. Louis			SLD 72418																						
2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET			SHEETS																						
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.			1 of 2																						
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120																									
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4W HSA and 3" X 2" split spoon.			8. HOLE LOCATION See location sketch																									
9. SURFACE ELEVATION N/A			10. DATE STARTED 12-11-02			11. DATE COMPLETED 12-12-02																						
12. OVERBURDEN THICKNESS N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A																									
13. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A																									
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A																									
18. GEOTECHNICAL SAMPLES			19. TOTAL NUMBER OF CORE BOLES																									
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERY %																									
22. DEPOSITION OF HOLE			23. SIGNATURE OF INSPECTOR																									
<table border="1"> <tr> <th>DISTURBED</th> <th>UNDISTURBED</th> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>			DISTURBED	UNDISTURBED	<input type="checkbox"/>	<input type="checkbox"/>	<table border="1"> <tr> <th>VOC</th> <th>METALS</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>RAD</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>			VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	<input type="checkbox"/>	<input type="checkbox"/>	RAD	<input type="checkbox"/>	<input type="checkbox"/>	<table border="1"> <tr> <th>BACKFILLED</th> <th>MONITORING WELL</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>Yes</td> <td>N/A</td> <td>N/A</td> </tr> </table>			BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	Yes	N/A	N/A
DISTURBED	UNDISTURBED																											
<input type="checkbox"/>	<input type="checkbox"/>																											
VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)																								
<input type="checkbox"/>	<input type="checkbox"/>	RAD	<input type="checkbox"/>	<input type="checkbox"/>																								
BACKFILLED	MONITORING WELL	OTHER (SPECIFY)																										
Yes	N/A	N/A																										
LOCATION SKETCH/COMMENTS Witnessed by: Keith Enders SCALE: Not to Scale Terms used to describe % Trace - < 5% Few - 5-10% Little - 15-25% Some - 20-35% Mostly - 50-100%			R.R. • SLD 72414 Tracks SLD 72479 SLD 72418 (Moved boring over 12' to N.S.W. due to metal p.l.k.)																									
PROJECT FUSRAP/SLDS			MOLE NO. SLD 72418																									

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 72418
PROJECT FUSRAP / SLDs		INSPECTOR Phil No Statler		SHEET 2 of 2		
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	DEPTH (ft)	RECOVERY (%)	REMARKS (ft)	REMARKS (ft)	
SM N/A	Silty fine sand w/ few med. gravel, loose, poorly graded, dk. brn, moist, few wood frags. N/A	4700 0.0	N/A	SLD 72418 12-11-02 16.5	Dug first 6" w/ hand tool.	
1.0	Silty fine sand w/ few med. gravel, med. dense, poorly graded, dk. brn, moist, few cinders, few slag.	N/A 4500 0.0	1.0	N/A	Loaders removed 1.0' of metal debris.	
2.0		5700 0.0	1.0	SLD 72436 12-18-02 16.5		
		5500 0.0				
3.0	cinders and slag about. silty sand turning to grey med. gravel.	4700 0.0	2.0			
SM		4800 0.0	2.0			
		5000 0.0		SLD 72418 archive from 12-15	archive sample from 3.5 - 4.0' BGS	
4.0		5100 0.0				
		5700 0.0	2.0	SLD 72418 archive from 12-15	archive sample from 4.5 - 5.0' BGS	
5.0		5200 0.0	2.0			
		5200 0.0				
6.0						
7.0	TD: 6.0' BGS 12-12-02 1" 40				Background: NAT: 4500 PID: 0.0 Backfilled boring w/ 3.0 bags of bestonite chips.	
8.0						
9.0						
10.0						

**-TRW DRILLING LOG** S. LOUIS SLD 72419

1. COMPANY NAME <b>Shaw F + I</b>		2. DRILLING CONTRACTOR <b>MES, Inc.</b>		3. HOLE NUMBER <b>1 - 2</b>	
4. PROJECT <b>FUSRAP / SLOS</b>		5. LOCATION <b>PSC Metals North Tract V.P.</b>			
6. NAME OF DRILLER <b>Chris Anthony</b>		7. MANUFACTURER, MAKE AND MODEL OF DRILL <b>Diedrich D-120</b>			
8. TOOLS AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>using 4 1/4" HSA and 3" x 3" split spoon</b>		9. HOLE LOCATION <b>see location sketch</b>			
10. DATE STARTED <b>11-13-02</b>		11. DATE COMPLETED <b>11-13-02</b>			
12. DEPTH DRILLED INTO SOIL <b>N/A</b>		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>			
14. TOTAL DEPTH OF HOLE <b>6.0 FT BGS</b>		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>			
16. TESTED/REMARKS		17. DISTURBED		18. TOTAL NUMBER OF CORE SAMPLES	
19. SAMPLES FOR CHEMICAL ANALYSIS		20. METALS		21. TOTAL CORE RECOVERED	
22. DEPTH OF BOTTOM OF HOLE		23. MONITORING WELL		24. SIGNATURE OF SUPERVISOR	

LOCATION SKETCH/COMMENTS Witnessed By: **Keith Enders** SCALE: Not to Scale

North 

Terms used to describe %  
 Trace - < 5%  
 Few - 5-10%  
 Little - 15-25%  
 Some - 20-35%  
 Mostly - 50-100%

Moved boring 6' to NE due to scrap pile.

**TRW DRILLING LOG** CONTINUATION SHEET SLD 72419

PROJECT: **OS 4407 S.D.S.** OPERATOR: **Phillip Statler** SHEET: **2** OF **2**

DEPTH (ft)	DESCRIPTION OF MATERIAL	REMARKS	RECOVERY	SLD NO.	BLOW COUNT
4.00	silty clay w/ few med. gravel, med. silted to stiff, med. plasticity, dk. brn., dry, trace glass some cinders, some slag, few bricks.		2.0 / 2.0	SLD 72419 11.3	9
5.00				18	
6.00				12	
6.300				SLD 72437 11.5	7
6.600	CL mainly cinders, some slag, few bricks, trace wood frags.		1.8 / 2.0	SLD 72419 archive 11.2	6
6.700					5
6.800					4
6.900					3
5.800	cinders, slag, and bricks absent. Wood frags absent.		1.3 / 2.0	SLD 72419 archive 11.2	6
6.100					4
5.900					3
N/A					5

TD: 6.0' BGS  
11-13-02  
1120

Back ground  
NAT: 6.200  
PID: 0.0  
Back-filled  
boring w/  
3.0 bags of  
bentonite  
Chips: Capped  
w/soil.

HTRW DRILLING LOG		St. Louis		HOLE NUMBER SLD 72420	
1. COMPANY NAME Shaw F + I		2. DRILLING CONTRACTOR M.E.S., Inc.		SHEETS 1 of 2	
3. PROJECT FUSRAP / SLDS		4. LOCATION PSC Metals North Tract v.p.			
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4" HSA and 3" x 3" split spoon		8. HOLE LOCATION see location sketch			
8. SURFACE ELEVATION N/A		9. DATE STARTED 11-18-02			
10. DATE COMPLETED 11-18-02		11. DATE COMPLETED 11-18-02			
12. JYCEMOR THICKNESS N/A		13. DEPTH GROUNDWATER ENCOUNTERED N/A			
14. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
17. TOTAL DEPTH OF HOLE 6.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. GEOTECHNICAL SAMPLES 0		DISTURBED 0		UNDISTURBED 0	
19. SAMPLES FOR CHEMICAL ANALYSIS 0		METALS 0		OTHER (SPECIFY) RAD	
20. DEPOSITION OF SOIL 0		SACFILLED Yes		MONITORING WELL N/A	
21. TOTAL CORE RECOVERED 0%		OTHER (SPECIFY) 0		OTHER (SPECIFY) 0	
22. SIGNATURE OF INSPECTOR Keith Enders		23. SIGNATURE OF DRILLER Chris Anthony			

LOCATION SKETCH/COMMENTS  
North.

Witnessed By: Keith Enders SCALE: Not to Scale

Terms used to describe %  
Trace - < 5%  
Few - 5-10%  
Little - 15-25%  
Some - 20-35%  
Mostly - 50-100%

• SLD 72421

• SLD 72418

• SLD 72420

• SLD 72419

FUSRAP / SLDS		SLD 72420	
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**TRW DRILLING LOG (CONTINUATION SHEET)**

PROJECT: **FUSRAP/SLOS**      INSPECTOR: **Phillip Statler**      HOLE NUMBER: **SLD 72420**  
SHEET: **2** OF **2**

DEPTH (FEET)	DESCRIPTION OF MATERIAL	TIME (MIN)	RECOVERY (%)	SLD NO.	BLOW COUNT	REMARKS
0.0 - 1.0	Silty clay w/ few med to coarse gravel, med plus, dk brn, trace cinders, trace slag, few concrete frags, few wood frags, trace "grey" slag, trace brick frags.  few concrete frags, few limestone frags, trace coal.	5800	RECOVERY	SLD 72420 11-18-02 1435	20	
1.0 - 2.0		5400	2.0 / 2.0		17	
2.0 - 3.0		5600			57	
3.0 - 4.0		6300			20	
4.0 - 5.0		5700			16	
5.0 - 6.0		6400	2.0 / 2.0		19	
6.0 - 7.0		6200			30	
7.0 - 8.0		6200			26	
8.0 - 9.0	See SLD 72420 B for information.	N/A	Poor recovery		9	Poor Recovery
9.0 - 10.0		N/A			14	Moved over
10.0 - 11.0		N/A			54	6', augered
11.0 - 12.0		N/A			22	down to 4.0' BGS, and drove spoon.
12.0 - 13.0	TD: 6.0' BGS 11-18-02 1435					Background Nat: 5900 PID: 0.0 Back-filled boring w/ 3.0 bags of bestonite chips.
13.0 - 14.0						
14.0 - 15.0						
15.0 - 16.0						
16.0 - 17.0						
17.0 - 18.0						

PROJECT: **FUSRAP/SLOS**      HOLE NUMBER: **SLD 72420**

# HTRW DRILLING LOG

DISTRICT  
St. Louis

WELL NUMBER  
SLD 72420B

1. COMPANY NAME Shaw E + I		2. DRILLING SUBCONTRACTOR MES, Inc.		SHEETS 1 of 2	
3. PROJECT FUS RAP / SLDS			4. LOCATION ASC Metals North Tract V, R <del>City of Venice, IL</del> VP P.S.		
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4" HSA and 3" x 2" Split Spoon		8. HOLE LOCATION See location sketch			
9. SURFACE ELEVATION N/A		10. DATE STARTED 11-18-02		11. DATE COMPLETED 11-18-02	
12. OVERBURDEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A			
13. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 6.0' BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. GEOTECHNICAL SAMPLES DISTURBED <input type="checkbox"/> UNDISTURBED <input type="checkbox"/>		19. TOTAL NUMBER OF CORE BOXES <input type="checkbox"/>			
20. SAMPLES FOR CHEMICAL ANALYSIS TOC <input type="checkbox"/> METALS <input type="checkbox"/> OTHER (SPECIFY) <input type="checkbox"/>		OTHER (SPECIFY) <input type="checkbox"/>		OTHER (SPECIFY) <input type="checkbox"/>	
22. DISPOSITION OF HOLE SACFILLED <input type="checkbox"/> MONITORING WELL <input type="checkbox"/> OTHER (SPECIFY) <input type="checkbox"/>		21. TOTAL CORE RECOVERY <input type="checkbox"/>		23. SIGNATURE OF INSPECTOR Edward K. Enners	

LOCATION SKETCH/COMMENTS Witnessed by: Keith Enders SCALE: Not to scale



Edward K. Enners

SLD  
72421

SLD  
72420B  
↓  
SLD 72420  
Moved over 6' SSE due to refusal

SLD  
72419

PROJECT  
FUS RAP / SLDS

WELL NO.  
SLD 72400B

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT		INSPECTOR		HOLE NUMBER	
FUSRAP/SLDS		Philip S. Gator		SLD 72420B		2 OF 2 SHEETS	
DEPTH (ft)	DESCRIPTION OF MATERIALS	NAT#	PLD	RECOVERY	BLOW COUNT	REMARKS	
1.0	SEE SLD 72420 for information	N/A	N/A		N/A		
		N/A	N/A		N/A		
		N/A	N/A		N/A		
		N/A	N/A		N/A		
		N/A	N/A		N/A		
		N/A	N/A		N/A		
		N/A	N/A		N/A		
		N/A	N/A		N/A		
4.0	silty clay, stiff, med. plasticity to brn, moist, few med. gravel, few brick frags, few wood frags.	5700	0.0	2.0 / 2.0	15		
5.0		5900	0.0		7		
		6700	0.0		17		
		6800	0.0		11		
6.0	TD: 6.0' BBS 11-18-02 1645					Background!	
						NAT# 5900	
						PLD: 0.0	
						Backfilled	
						boring w/	
						3.0 bags of	
						bentonite	
						chips	

HTRW DRILLING LOG		DISTRICT		HOLE NUMBER	
1. COMPANY NAME Shaw E & I		St. Louis		SLD 72421	
2. DRILLING SUBCONTRACTOR MES, Inc.		SHEET		1 of 2	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.		
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/2" HSA and 3" x 3" split spoon.			8. HOLE LOCATION See location sketch		
8. OVERBURDEN THICKNESS N/A			9. SURFACE ELEVATION N/A		
9. DEPTH DRILLED INTO ROCK N/A			10. DATE STARTED 2-18-03		
10. TOTAL DEPTH OF HOLE 6.0 FT BGS			11. DATE COMPLETED 2-18-03		
11. GEOTECHNICAL SAMPLES			12. DEPTH GROUNDWATER ENCOUNTERED N/A		
12. SAMPLES FOR CHEMICAL ANALYSIS			13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
13. DISPOSITION OF HOLE			14. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
14. TOTAL NUMBER OF CORE BOXES			15. TOTAL CORE RECOVERY		
15. DISTURBED			16. OTHER (SPECIFY)		
16. METALS			17. OTHER (SPECIFY)		
17. MONITORING WELL			18. OTHER (SPECIFY)		
18. BACKFILLED			19. SIGNATURE OF INSPECTOR		
19. Yes			Susan Adams		
20. LOCATION SKETCH/COMMENTS					
Witnessed by: Susan Adams SCALE: Not to scale					
<p>Terms used to describe %</p> <p>Trace - ≤ 5.0%</p> <p>Few - 5-10.0%</p> <p>Little - 15-25.0%</p> <p>Some - 20-35.0%</p> <p>Mostly - 50-100.0%</p>					
<p>R.R. Tracks</p> <p>SLD 72422</p> <p>SLD 72421 (trench)</p>					
PROJECT			HOLE NO.		
FUSRAP/SLDS			SLD 72421		

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT FUSRAP / SLOS		INSPECTOR Phillip Statler		SHEET 2 of 2	
DEPTH (ft)	DESCRIPTION OF STRATIGRAPHY	DEPTH (ft)	DEPTH (ft)	DEPTH (ft)	DEPTH (ft)	DEPTH (ft)	DEPTH (ft)
SM	Silty fine sand w/ some fine to coarse gravel, dk brn, mottled, few metal frags.	6000	0.0	(3500)	SLP 72421 1838	N/A	* readings in bowl
		6200	0.0			N/A	
		6500	0.0			N/A	
		7000	0.0	(3700)	SLP 72421 1838	N/A	
		10000	0.0			N/A	
CL	Silty clay, med. stiff, med. plastic, lt, brn, wet.	17000	0.0	(4300)	SLP 72421 1838	N/A	
		16000	0.0			N/A	
		15000	0.0			N/A	
		15000	0.0			N/A	
		13000	0.0	(3700)	SLP 72421 1600	N/A	
TD: 6.0' BGS 2-18-03 1600							Background: NAT: 5104 PID: 0.0 Backfilled boring branch w/ native material in reverse order it was removed (2.5' soil segregated in each pile)

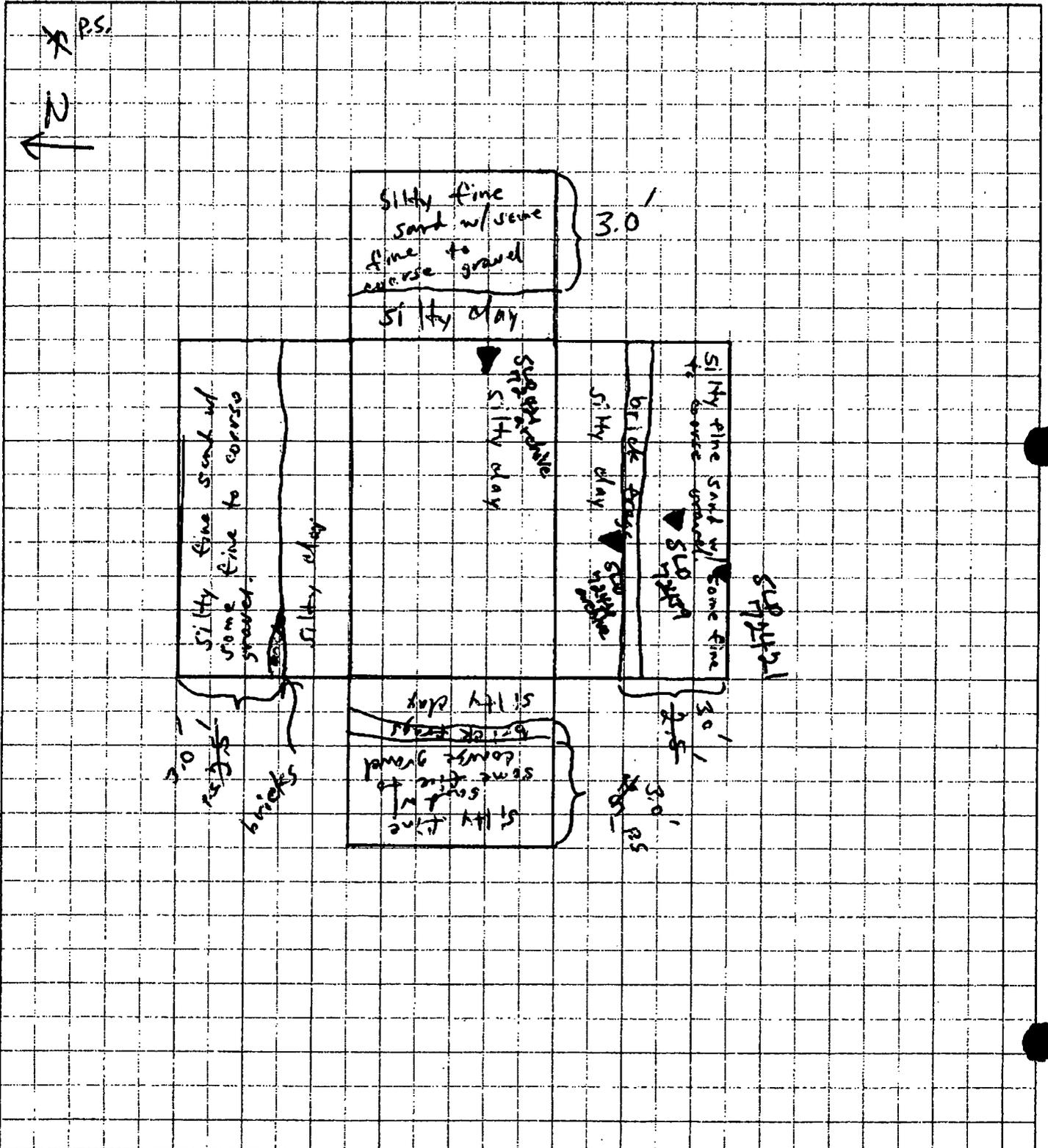


IT CORPORATION  
A Member of The IT Group

By P.S. Date 2-18-03 Subject SLD 72421 (trench) Sheet No. 1 of 1

Chkd. By \_\_\_\_\_ Date \_\_\_\_\_ Proj. No. 775575

.25 in. X .25 in.



HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72422	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 Using 1/2" HSA and 3" x 3" split screen.			8. HOLE LOCATION See location sketch				
9. SURFACE ELEVATION N/A			10. DATE STARTED 2-18-03				
11. DATE COMPLETED 2-19-03			12. OVERBURDEN THICKNESS N/A				
13. DEPTH DRILLED INTO ROCK N/A			14. TOTAL DEPTH OF HOLE 6.0 FT BGS				
15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			16. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A				
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		ROC		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BAGGIES		MONITORING WELL		OTHER (SPECIFY)	
21. TOTAL CORE RECOVERY		Yes		N/A		N/A	
23. SIGNATURE OF INSPECTOR Shelley R. Hall		24. WITNESSED BY: Susan Adams					
25. SCALE: Not to Scale		26. TERMS USED TO DESCRIBE %					
Trace - < 5%		Few - 5-10%					
Little - 15-25%		Same - 20-35%					
Mostly - 50-100%							
<p>LOCATION SKETCH/COMMENTS</p> <p>Witnessed by: Susan Adams</p> <p>Scale: Not to Scale</p> <p>Terms used to describe %</p> <p>Trace - &lt; 5%</p> <p>Few - 5-10%</p> <p>Little - 15-25%</p> <p>Same - 20-35%</p> <p>Mostly - 50-100%</p> <p>R.R. Tracks</p> <p>SLD 72422</p> <p>SLD 72417</p> <p>Model boring SW due to rubble/tracks</p> <p>SLD 72421</p>							
PROJECT FUSRAP/SLDS					HOLE NO. SLD 72422		

HTRW DRILLING LOG (CONTINUATION SHEET)							LOG NO.		
PROJECT		OPERATOR		DATE		SHEET			
FUSRAP / SLDS		Philip Staller		2		2			
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER LOSS (ft)	RECOVERY	LOG NO.	DEPTH (ft)	LOG NO.	DEPTH (ft)		
SM 1.0 2.0	Silty fine sand w/ some med. gravel, med. conc. poorly graded dk. brn. wet, few cinders, few slag.  Some brick frags	4700 0.0	2.0 / 2.0	00-05 1200	38	SLD 72422 211-02 1300			
		4500 0.0		05-10 1303				35	
		4900 0.0		10-15 1305				12	
		5000 0.0		15-20 1307				11	SLD 72440 1307
		4800 0.0		20-25 1320				6	
		4800 0.0		25-30 1322				4	
		4800 0.0		30-35 1325				6	
		4800 0.0		35-40 1327				8	SLD 72422 1327
		4300 0.0		40-45 1335				7	
		4300 0.0		45-50 1337				6	
CL 4.0 5.0 6.0	Silty clay med. stiff, med. plat. (H, brn) moist, few cinders, few slag.  few limestone frags.	4700 0.0	1.7 / 2.0	50-55 1340	6	SLD 72422 1340 (1340)			
		4600 0.0		55-57				5	
		NO RECOVERY							
		NO RECOVERY							
2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0	TD: 6.0' BGS 2-19-03 1340						Background's NAT: 4,495 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips. *Samples will be coun- ted w/ gas proportional meter. (see sheet)		
FUSRAP / SLDS				LOG NO.		SLD 72422			

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72422 C2  
Witness: Susan Adams

Date Sample was collected: 2-19-03

Date Sample was analyzed: 2-25-03

Instrument #1 Background 4495 cpm

Instrument #2 Background 4879 cpm

Count rate of Empty Pan: Beta 94 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	4700	205	4332	-547	106	12
6-12	4500	5	4367	-512	115	21
12-18	4900	405	4883	4	157	63
18-24	5000	505	5507	628	165	71
24-30	4800	305	4943	64	124	30
30-36	4800	305	4713	-166	133	39
36-42	4800	305	5002	123	166	72
42-48	4800	305	5112	233	143	49
48-54	4300	-195	4896	17	143	49
54-60	4300	-195	4687	-192	118	24
60-66	4300	-195	4657	-222	120	26
66-72	4600	105	4519	-360	98	4

SLD 72422

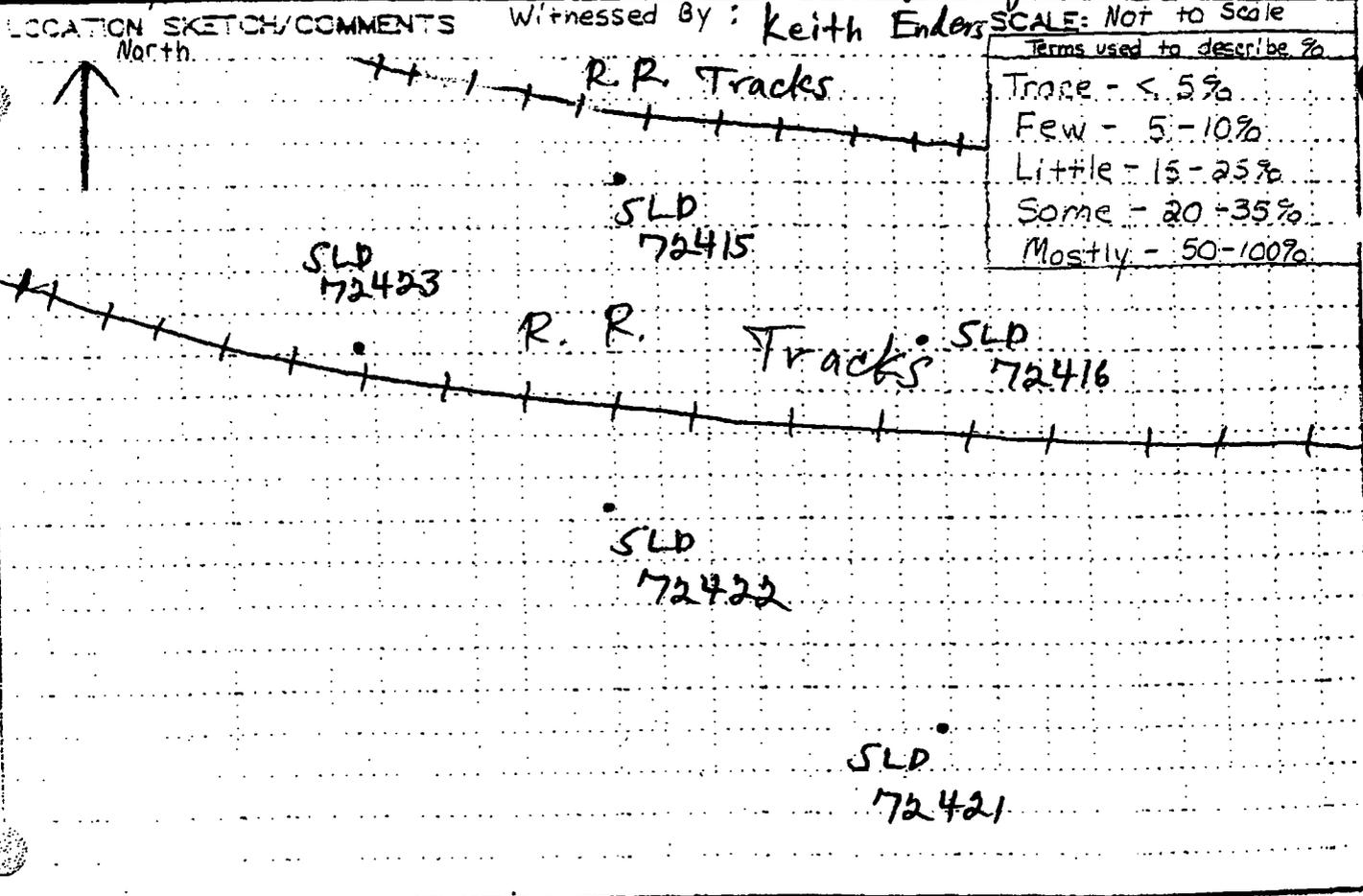
SLD 72440

SLD 72422  
archive

SLD 72422  
archive

**STRW DRILLING LOG** St. Louis

1. COMPANY NAME <b>Shaw F &amp; I</b>		2. DRILLING CONTRACTOR <b>MES, Inc.</b>		HOLE NUMBER <b>SLD 72423</b>																	
3. PROJECT <b>FUSRAP / SLDs</b>		4. LOCATION <b>PSC Metals North Tract V.P.</b>		SHEET <b>1</b> OF <b>2</b> SHEETS																	
5. NAME OF DRILLER <b>Chris Anthony</b>		6. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120</b>																			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 4 1/4" HSA and 3" x 2' split spoon</b>		8. HOLE LOCATION <b>see location sketch</b>		9. SURFACE ELEVATION <b>N/A</b>																	
10. DATE STARTED <b>11-20-02</b>		11. DATE COMPLETED <b>11-20-02</b>																			
12. TYPES AND THICKNESS <b>N/A</b>		13. DEPTH DRILLED INTO ROCK <b>N/A</b>		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>																	
15. TOTAL DEPTH OF HOLE <b>600 FT BGS</b>		16. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>																			
17. DISTURBED SAMPLES <b>0</b>		18. TOTAL NUMBER OF CORE BOXES <b>0</b>																			
19. SAMPLES FOR CHEMICAL ANALYSIS		20. DEPOSITION OF SOIL		21. TOTAL CORE RECOVERY																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>ORGANIC</th> <th>METAL</th> <th>OTHER SPECIFY</th> </tr> <tr> <td><b>0</b></td> <td><b>0</b></td> <td><b>RAD</b></td> </tr> </table>		ORGANIC	METAL	OTHER SPECIFY	<b>0</b>	<b>0</b>	<b>RAD</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>DISTURBED</th> <th>UNDISTURBED</th> <th>OTHER SPECIFY</th> <th>OTHER SPECIFY</th> <th>OTHER SPECIFY</th> </tr> <tr> <td><b>0</b></td> <td><b>0</b></td> <td><b>0</b></td> <td><b>0</b></td> <td><b>0</b></td> </tr> </table>		DISTURBED	UNDISTURBED	OTHER SPECIFY	OTHER SPECIFY	OTHER SPECIFY	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0 %</b>	
ORGANIC	METAL	OTHER SPECIFY																			
<b>0</b>	<b>0</b>	<b>RAD</b>																			
DISTURBED	UNDISTURBED	OTHER SPECIFY	OTHER SPECIFY	OTHER SPECIFY																	
<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>																	
<b>0</b>		<b>Yes</b>		<b>0</b>																	



**ETRW DRILLING LOG (CONTINUATION SHEET)**

PROJECT: **FUS RAP / SLOS**      INSPECTOR: **Phillip Statter**      HOLE NUMBER: **SLB 72423**  
SHEET: **2** OF **2** SHEETS

DEPTH (FEET)	DESCRIPTION OF MATERIALS	WATER RECOVERY (GAL/100 LB)	RECOVERY (%)	LABORATORY SAMPLE NO.	300W CORRECTION	REMARKS
1.0	Silty fine sand w/ low med. to coarse gravel, med. dense poorly graded, dk. brn, dry, few cinders, few slag.	6100	PS	SLB 72423	11	
		6400	2.0	11-20-02	10	
		6300	2.0		10	
		6400	0.0		SLB 72423	9
2.0	Cinders and slag increasing	6500	1.6		10	
		6900	2.0		6	
		6800	0.0		SLB 72452	7
3.0	some brick frags.	N/A	no recovery	1045	5	
		6000	0.0		8	
4.0	silty clay, med stiff to stiff, med plast; H. brn. to dk brn; dry, some fine sand; trace wood frags.	6800	1.6		9	
		7000	2.0		15	
		7000	no recovery		SLB 72459	15
5.0	TD: 6.0' BGS 11-20-02 PS 1015					Background: NAI: 6,100 PTP: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips.
6.0						

PROJECT: **FUS RAP / SLOS**      HOLE NUMBER: **SLB 72423**

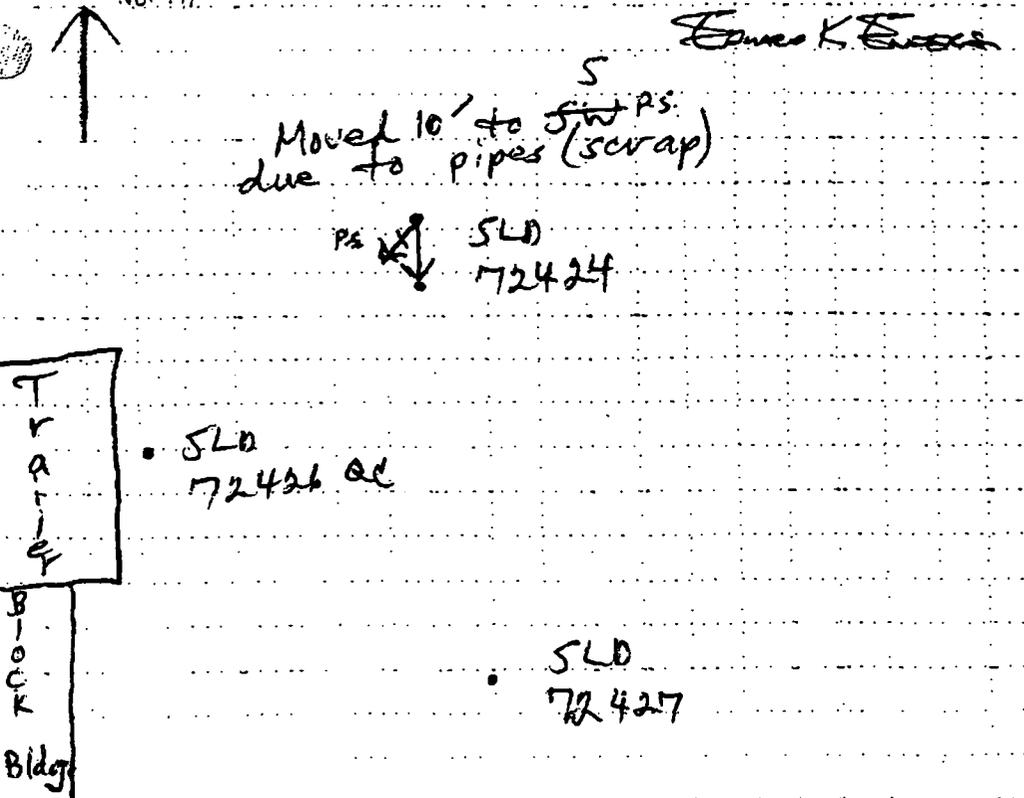
# TRW DRILLING LOG

St. Louis

72424  
SLD 72474 ps

1. COMPANY NAME Shaw F & I		2. DRILLING CONTRACTOR M.E.S., Inc.		3. SHEET 1 of 2	
4. PROJECT FUSRAP / SLOS		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF DRILLER Chris Anthony		7. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4" N.A.S.A. and 3" x 2' split spoon		9. HOLE LOCATION see location sketch			
10. DATE STARTED 11-13-02		11. DATE COMPLETED 11-13-02			
12. DEPTH DRILLED INTO SOIL N/A		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 6.0 FT GGS		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
16. TECHNICAL SAMPLES		17. TOTAL NUMBER OF CORE BORES		18. TOTAL CORE RECOVERED	
19. SAMPLES FOR CHEMICAL ANALYSIS		20. SAMPLES FOR METALS		21. OTHER SPECIES	
22. REPRODUCTION OF LOG		23. MONITORING YEL.		24. NAME OF INSPECTOR	

LOCATION SKETCH/COMMENTS Witnessed by: Keith Ender SCALE: Not to Scale



Terms used to describe %  
 Trace - < 5%  
 Few - 5-10%  
 Little - 15-25%  
 Some - 20-35%  
 Mostiv - 50-100%

Borehole		CONTINUATION SHEET		SLO 72424	
SUSPENSION		INSPECTOR Phillip Statler		SHEET 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	NATURAL GRAVITY (g)	RECOVERY (%)	SLUG WEIGHT (lb)	REMARKS
0-10	CL silty clay w/ few med. gravel, very stiff to hard, med. plasticity, brn. dry, trace cinders, trace brick frags, trace metal frags, trace wood.	6100 0.0	2.0	SLO 72424 11/15/82 1430	14
10-20		6200 0.0		SLO 72424 11/15/82 1430	38
20-30		6300 0.0		30	
30-40		5900 0.0		61	
40-50	SM silty fine sand w/ few med. gravel, loose to med. dense, dk brn. to blk, dry, some brick frags, few slag, few cinders, few coal frags.	6500 0.0	1.5 2.0		13
50-60		5900 0.0			19
60-70		6400 0.0		12	archive sample from 3.0-3.5' BGS
70-80	N/A SEE SLD 72424B for details	N/A	no recovery		8
80-90		N/A	No		4
90-100		N/A	Recovery		11
100-110		N/A			10
110-120		N/A			3
120-130	TD: 6.0' BGS 11-13-02 1430				Background: Nat: 6200 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips, capped w/ salt.

SLO 72424  
72424  
SLO 72424-23

# -TRW DRILLING LOG

St. Louis

WELLS NUMBER: **SLD 72424B**

1. COMPANY NAME <b>Shaw F &amp; I</b>		2. DRILLING CONTRACTOR <b>M.E.S., Inc.</b>		3. SHEET <b>1</b>		4. SHEETS <b>2</b>	
5. PROJECT <b>FUSRAP/SLDS</b>				6. LOCATION <b>PSC Metals North Tract V.P.</b>			
7. NAME OF DRILLER <b>Chris Anthony</b>				8. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120</b>			
9. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using HSA and 3" x 2" split spoon</b>				10. HOLE LOCATION <b>See location sketch</b>			
11. DATE STARTED <b>11-13-02</b>				12. DATE COMPLETED <b>11-13-02</b>			
13. DEPTH CORROSION ENCOUNTERED <b>N/A</b>				14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>			
15. TOTAL DEPTH OF HOLE <b>6.0 FT BGS</b>				16. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>			
17. ESTECHNICAL SAMPLES		18. DISTURBED		19. TOTAL NUMBER OF CORE BOXES		20. TOTAL CORE RECOVERED	
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
21. SAMPLES FOR CHEMICAL ANALYSIS		22. DEPOSITION OF SOIL		23. SIGNATURE OF INSPECTOR		24. TOTAL CORE RECOVERED	
<input type="checkbox"/>		<input type="checkbox"/>		<b>Keith Ender</b>		<input type="checkbox"/>	

LOCATION SKETCH/COMMENTS  
North

Witnessed By: **Keith Ender** SCALE: Not to Scale

*Edward Ender*

Terms used to describe %
Trace - < 5%
Few - 5-10%
Little - 15-25%
Some - 20-35%
Mostly - 50-100%



SLD 72424B ← SLD 72424  
(moved over 9' to W. disc. to refusal from 4.0-6.0' BGS in SLD 72424)

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SLD 72426 OC

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SLD 72427

FUSRAP/SLDS

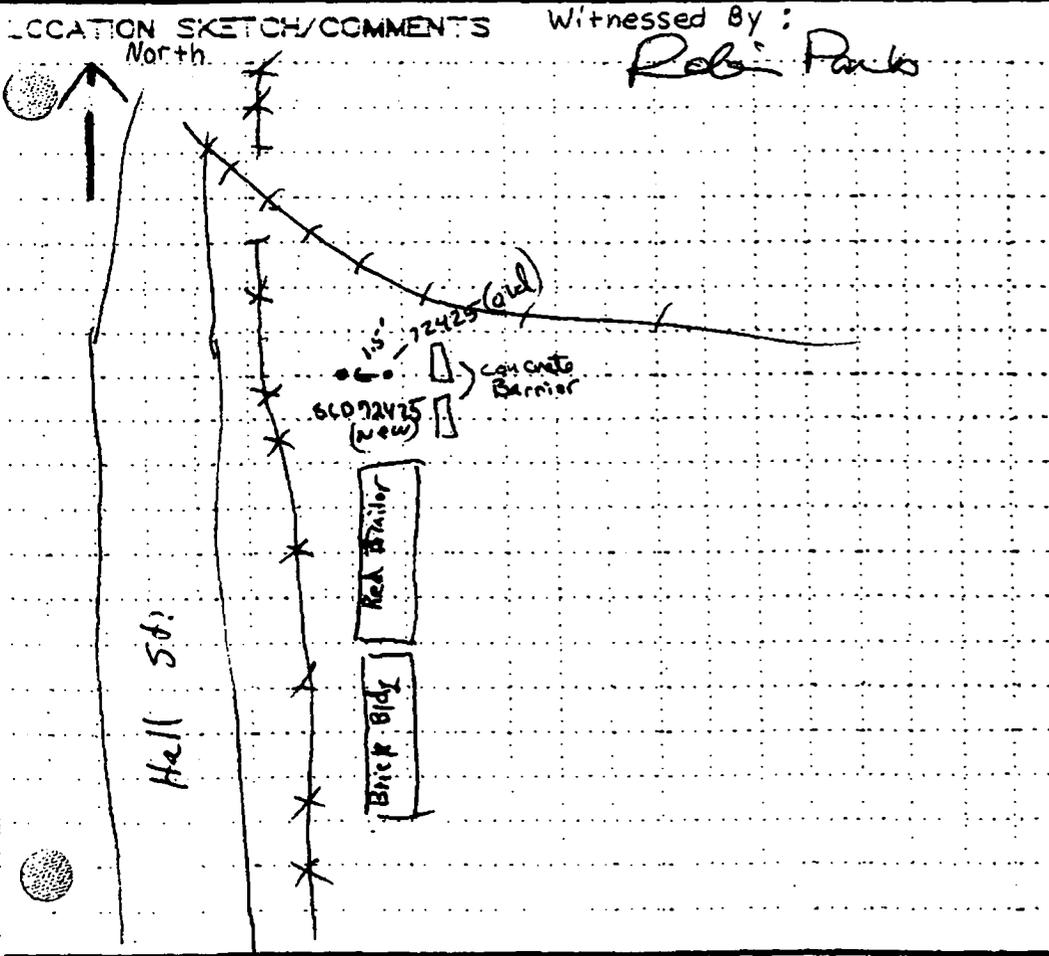
SLD 72424B

**ITEM DRILLING LOG** CONTINUATION SHEET

WELL NO: **56222/SLS** INSPECTOR: **Phillip Statter** SLD: **72424B**

DEPTH (FEET)	DESCRIPTION OF MATERIAL	REMARKS	RECOVERY	ANALYTICAL LABORATORY NO.	FLOW COUNT	REMARKS	
10	See SLD 72424 for information		N/A		N/A		
15			N/A		N/A		
20			N/A		N/A		
25			N/A		N/A		
30			N/A		N/A		
35			N/A		N/A		
40			N/A		N/A		
45			N/A		N/A		
48		CL Silty clay, med stiff med. plast.; H. dry, moist, trace brick frags, trace cinders	5600	1.9 / 2.0		8	
50			6600			7	
52	5900				5	archive sam- ple from 5.4-5.9/BSS	
54	6500				6		
55							
60	TD: 6.0/BSS 11-13-02 1605					Background: NAI: 6300 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips. Capped w/ soil.	
65							
70							
75							
80							
85							

<b>TRW DRILLING LOG</b>		DISTRICT: <b>St. Louis</b>	HOLE NUMBER: <b>SLD 72425</b>
1. COMPANY NAME: <b>Shaw F &amp; I</b>		2. DRILLING CONTRACTOR: <b>MES Inc</b>	
3. PROJECT: <b>FUSRAP/SLDS</b>		4. LOCATION: <b>PSC Metals N. Tract 3</b>	
5. NAME OF DRILLER: <b>Chris Anthony</b>		6. MANUFACTURER'S DESIGNATION OF DRILL: <b>Diedrich D-120</b>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: <b>using 3 1/4" HSA and 3" x 2' Split Spoon</b>		8. HOLE LOCATION: <b>see location sketch</b>	
9. SURFACE ELEVATION: <b>N/A</b>		10. DATE STARTED: <b>11-7-02</b>	
11. DATE COMPLETED: <b>11-6-02</b>		12. OVERBURDEN THICKNESS: <b>N/A</b>	
13. DEPTH DRILLED INTO ROCK: <b>N/A</b>		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: <b>N/A</b>	
15. TOTAL DEPTH OF HOLE: <b>FT BGS</b>		16. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): <b>N/A</b>	
17. DISTURBED: <input type="checkbox"/>		18. TOTAL NUMBER OF CORE BOXES: <input type="checkbox"/>	
19. UNDISTURBED: <input type="checkbox"/>		20. SAMPLES FOR CHEMICAL ANALYSIS:	
TOX: <input type="checkbox"/>		METALS: <input type="checkbox"/>	
OTHER SPECIFY: <b>RAD</b>		OTHER SPECIFY: <input type="checkbox"/>	
OTHER SPECIFY: <input type="checkbox"/>		OTHER SPECIFY: <input type="checkbox"/>	
OTHER SPECIFY: <input type="checkbox"/>		21. TOTAL CORE RECOVERY: <input type="checkbox"/> %	
22. DEPOSITION OF HOLE: <b>SACRIFICED</b>		23. SIGNATURE OF INSPECTOR: <b>Rob Parks</b>	



SCALE: Not to Scale

Terms used to describe %

Trace - < 5%

Few - 5-10%

Little - 15-25%

Some - 20-35%

Mostly - 50-100%

PROJECT: <b>FUSRAP/SLDS</b>	DISTRICT: <b>PSC Metals N. Tract 3</b>	HOLE NUMBER: <b>SLD 72425</b>
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SLD-72425

HTRW DRILLING LOG (CONTINUATION SHEET)							HOLE NUMBER SLD 72425
PROJECT FUSRAP/SLDS		INSPECTOR Mark Cummins			SHEETS 2 of 2		SHEETS 2
ELEV. (1)	DEPTH (2)	DESCRIPTION OF MATERIALS (3)	FIELD PENETROMETER NO. (4) PID	CORRECTION TO PENETROMETER NO. (5) PFCORR	ANALYTICAL SAMPLE NO. (6)	BLOW COUNT (7)	REMARKS (8)
	1	Gravel w/ little silty clay, coarse to fine, loose to med, Dry Grey, Dry, Poorly Graded. (Gc)	5900 0.0	2.0 2.0	SLD 72425 1335	7	
		SP	5500 0.0			11	
		Sand, Fine to med, Loose, Lt. Tan, Wet, Poorly Graded. (SP)	5600 0.0			5	
	2	Silty clay, few med to fine sand, med silt, low plastic, reddish brown, Fe staining, Dry (CL)	6200 0.0		SLD 72443 1335	11	
		Gravel w/silt, fine, poorly graded, not dense, gray, damp (Gm)	5800 0.0	2.0 4.0		21	
			5300 0.0			25	
	3	Silty sand, loose, poorly graded, blk, w/few coarse gravel, some fine gravel size clasts (SM)	5600 0.0			13	
			5700 0.0		SLD 72425 Archive 1340	8	Archive 3.5-4' BG5
	4	Trace Fines MPC coarse Gravel	6400 0.0	1.4 2.0		7	
			6200 0.0			10	
	5	Silty clay, med silt, low plasticity, brown, Dry (CL)	6500 0.0		SLD 72425 Archive 1340	12	Archive 4.9-5.4' BG5
	6	EOB 5.4' BG5 1345 11-7-02	NA	No Recovery		—	Dry 6200 NAT 0.0 PID  Backfilled Hole w/Bartarite chips

# TRW DRILLING LOG

St. Louis

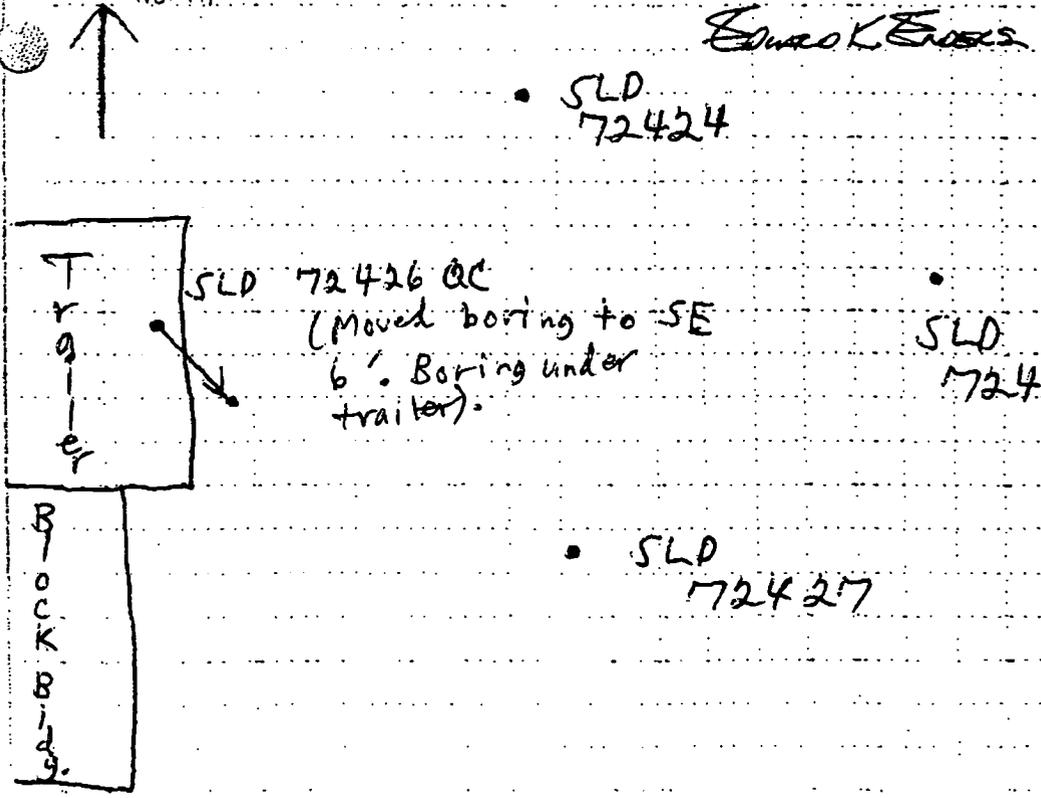
SLD 72426 OC

1. COMPANY NAME Snow F & I		2. DRILLING CONTRACTOR M. E. J., Inc.		3. SHEET NUMBER 1 = 2	
4. PROJECT FUSRAP / SLDs		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF DRILLER Chris Anthony		7. MANUFACTURER, DESIGNATION OF DRILL Diedrich D-120			
8. TYPES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" HSA and 3" x 3' split spoon		9. HOLE LOCATION see location sketch			
10. DATE STARTED 11-13-02		11. DATE COMPLETED 11-13-02			
12. DEPTH DRILLED INTO SOIL N/A		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 6.0 FT BGS		15. OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A			
16. DISTURBED SAMPLES 0	17. UNDISTURBED SAMPLES 0	18. METALS SAMPLES 0	19. OTHER SPECIFY RAD	20. TOTAL CORE RECOVERED 0	21. TOTAL CORE RECOVERED 0
22. DEPOSITION OF SOIL Yes		23. MONITORING VEL. N/A		24. SIGNATURE OF SUPERVISOR Phillip R. Hatten	

LOCATION SKETCH/COMMENTS

Witnessed By: Keith Enders

SCALE: Not to Scale  
Terms used to describe %  
Trace - < 5%  
Few - 5-10%  
Little - 15-25%  
Some - 20-35%  
Mostly - 50-100%



SLD 72426 OC

SLD 72426 OC

CONTINUATION SHEET  
 PHILIP STATION  
 SLD 72426 Q1  
 2

SLD	REMARKS	DEPTH (ft)	REMARKS	DEPTH (ft)
57	SLD 72426 Q1	10.0	6400 0.0	10.0
62	SLD 72426 Q1	11.5	5800 0.0	11.5
56	SLD 72426 Q1	10.0	5900 0.0	10.0
47	SLD 72426 Q1	10.0	6400 0.0	10.0
36	SLD 72426 Q1	2.0	5700 1.0	2.0
29	SLD 72426 Q1	2.0	6400 2.7	2.0
18	SLD 72426 Q1	2.0	6700 0.7	2.0
15	SLD 72426 Q1	1.5	6400 0.7	1.5
14	SLD 72426 Q1	1.5	6300 0.0	1.5
60	SLD 72426 Q1	1.5	5900 0.7	1.5
58	SLD 72426 Q1	1.5	6100 0.7	1.5
42	SLD 72426 Q1	1.5	no recovery	1.5

SLT the sand w/ some med. gravel, very dense, poorly graded, and dry. (dry) trace

SLT clay, very stiff to hard, med. plasticity dk. brn. to blk. clay trace sanders, trace slig.

few med. gravel, trace metal frags, trace broken glass.

Backgrounds  
 NPT: 6.0  
 PID: 0.0  
 Backfilled  
 boring w/  
 3.0 bags of  
 best grade  
 Chgo. capad  
 w/soil.

Strong Diesel @ 0.0

TD: 6.0, 865  
 11-B-02  
 1010

SLD 72426 Q1

SLD 72426 Q1

# TRW DRILLING LOG

St. Louis

SLD 72427

1. EMPLOYER NAME Shaw F & I		2. DRILLING CONTRACTOR MES, Inc.		3. SHEET 1		4. SHEETS 2	
5. PROJECT FUSRAP/SLDS				6. LOCATION PSC Metals North Tract V.P.			
7. NAME OF DRILLER Chris Anthony				8. MANUFACTURER/DESCRIPTION OF DRILL Diedrich D-120			
9. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" HSA and 3" x 2" split spoon				10. HOLE LOCATION See location sketch			
11. DATE STARTED 11-7-02				12. DATE COMPLETED 11-7-02			
13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A				14. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
15. TOTAL DEPTH OF HOLE 6.0 FT BGS				16. TOTAL NUMBER OF CORE LOGS 0			
17. DEPTH DRILLS INTO ROCK N/A		18. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		19. TOTAL NUMBER OF CORE LOGS 0		20. TOTAL CORE RECOVERED 0%	
21. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		22. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		23. TOTAL NUMBER OF CORE LOGS 0		24. TOTAL CORE RECOVERED 0%	
25. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		26. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		27. TOTAL NUMBER OF CORE LOGS 0		28. TOTAL CORE RECOVERED 0%	
29. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		30. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		31. TOTAL NUMBER OF CORE LOGS 0		32. TOTAL CORE RECOVERED 0%	
33. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		34. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		35. TOTAL NUMBER OF CORE LOGS 0		36. TOTAL CORE RECOVERED 0%	
37. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		38. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		39. TOTAL NUMBER OF CORE LOGS 0		40. TOTAL CORE RECOVERED 0%	
41. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		42. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		43. TOTAL NUMBER OF CORE LOGS 0		44. TOTAL CORE RECOVERED 0%	
45. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		46. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		47. TOTAL NUMBER OF CORE LOGS 0		48. TOTAL CORE RECOVERED 0%	
49. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		50. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		51. TOTAL NUMBER OF CORE LOGS 0		52. TOTAL CORE RECOVERED 0%	
53. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		54. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		55. TOTAL NUMBER OF CORE LOGS 0		56. TOTAL CORE RECOVERED 0%	
57. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		58. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		59. TOTAL NUMBER OF CORE LOGS 0		60. TOTAL CORE RECOVERED 0%	
61. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		62. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		63. TOTAL NUMBER OF CORE LOGS 0		64. TOTAL CORE RECOVERED 0%	
65. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		66. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		67. TOTAL NUMBER OF CORE LOGS 0		68. TOTAL CORE RECOVERED 0%	
69. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		70. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		71. TOTAL NUMBER OF CORE LOGS 0		72. TOTAL CORE RECOVERED 0%	
73. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		74. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		75. TOTAL NUMBER OF CORE LOGS 0		76. TOTAL CORE RECOVERED 0%	
77. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		78. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		79. TOTAL NUMBER OF CORE LOGS 0		80. TOTAL CORE RECOVERED 0%	
81. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		82. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		83. TOTAL NUMBER OF CORE LOGS 0		84. TOTAL CORE RECOVERED 0%	
85. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		86. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		87. TOTAL NUMBER OF CORE LOGS 0		88. TOTAL CORE RECOVERED 0%	
89. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		90. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		91. TOTAL NUMBER OF CORE LOGS 0		92. TOTAL CORE RECOVERED 0%	
93. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		94. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		95. TOTAL NUMBER OF CORE LOGS 0		96. TOTAL CORE RECOVERED 0%	
97. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		98. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		99. TOTAL NUMBER OF CORE LOGS 0		100. TOTAL CORE RECOVERED 0%	

LOCATION SKETCH/COMMENTS

Witnessed by: Robin Parks SCALE: Not to scale

Terms used to describe %
Trace - < 5%
Few - 5-10%
Little - 15-25%
Some - 20-35%
Mostly - 50-100%



SLP 72427 moved boring 9.5' to SW due to metal piles.

propane tank SLD 72428

concrete block bldg.

SLD 72430

trailer

FUSRAP/SLDS

SLD 72427

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: FUSRAP/SLDS		INSPECTOR: Phillip Statter		HOLE NUMBER: SLD 72427		SHEET 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	NO. SAMPLES	RECOVERY	ANALYTICAL	SLOW COUNT	REMARKS			
0.0 - 1.0	Silty fine sand w/ some med. to coarse gravel, dense to very dense, poorly graded, dk. brn, moist.	6100 0.0	RECOVERY	SLD 72427 1410	14				
1.0 - 2.0	Silty clay w/ few med. to coarse gravel, med. stiff to hard, med. plast, dk. brn, moist, few cinders, few slags, few brick frags, trace red slag.	5900 0.0	2.0		67				
2.0 - 3.0		6200 0.0	2.0	SLD 72445 -1-2 1415	32				
3.0 - 4.0		6700 0.0			39				
4.0 - 5.0	mostly cinders, slags, brick frags, trace (red) slags, some silt.	6200 0.0	2.0		17				
5.0 - 6.0		6700 0.0	2.0	SLD 72427 archive 1420	17	archive sample from 3.0-3.5 BGS			
6.0 - 7.0		6700 0.0			11				
7.0 - 8.0	Silty fine sand w/ some cinders, some slag, few glass, loose, poorly graded, dk. brn, moist.	6800 0.0	1.7		7	Strong diesel odor			
8.0 - 9.0		6700 0.0	2.0		7	archive sample from 5.0-5.5 BGS			
9.0 - 10.0	few clay	6700 0.0		SLD 72427 archive 1420	6				
10.0 - 11.0		N/A	N/A	n recovery	6				
11.0 - 12.0	TD: 6.0' BGS					Back ground:			
12.0 - 13.0	11-7-02					NaI: 6200			
13.0 - 14.0	1415					PFD: 0.0			
14.0 - 15.0						Back-filled			
15.0 - 16.0						boring w/			
16.0 - 17.0						3.0 bags			
17.0 - 18.0						of bentonite			
18.0 - 19.0						chips.			
19.0 - 20.0						Capped w/			
20.0 - 21.0						soil.			

HTRW DRILLING LOG		DISTRICT		HOLE NUMBER	
1. COMPANY NAME Shaw E & I		St. Louis		SLD 72428	
2. DRILLING SUBCONTRACTOR MES, Inc.		3. PROJECT FUSRAP/SLDS		SHEET 1 of 2	
4. LOCATION PSC Metals North Tract V.P.		5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/2" HSA and 3" x 2" split spoon.		8. HOLE LOCATION See location sketch		9. SURFACE ELEVATION N/A	
10. DATE STARTED 2-4-03		11. DATE COMPLETED 2-4-03		12. OVERBURDEN THICKNESS N/A	
13. DEPTH DRILLED INTO ROCK N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
14. TOTAL DEPTH OF HOLE 6.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		18. GEO TECHNICAL SAMPLES	
20. SAMPLES FOR CHEMICAL ANALYSIS		19. TOTAL NUMBER OF CORE BODIES		21. TOTAL CORE RECOVERY	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR		24. TERMS USED TO DESCRIBE %	
LOCATION SKETCH/COMMENTS		Witnessed by: Robin Parks		SCALE: Not to Scale	
		SLD 72428 (Moved boring 2.5' to NNE due to compacted soil/roadway)		Terms used to describe % Trace - < 5% Few - 5-10% Little - 15-25% Some - 20-35% Mostly - 50-100%	
PROJECT FUSRAP/SLDS		HOLE NO. SLD 72428			

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72428
PROJECT FUSRAP / SLDs		INSPECTOR Phil / Joe Stalter		SHEET NO. 2 of 2		
DEPTH (ft)	DESCRIPTION OF INTERVALS	RECOVERY	REMARKS	BLDG COUNTY	MEASUREMENT	
1.0	silty fine sand w/ some med. gravel, dispersed poorly grade, blk. brn. to blk. dry, some clumps, some slag P.S.	5380 0.0	RECOVERY	19	SLD 72428 1015	
		5700 0.0	2.0	22		
		5000 0.0	2.0	15		
		5100 0.0		22	SLD 72428 1025	
2.0	mostly cinders, mostly slag	5800 3.0	1.8 3.0	3		
		5800 0.0		4		
		5400 0.0		4	SLD 72428 archive 3.0-2.0 1040	
		5400 0.0		5		
		N/A N/A			3	
5.0	Poor recovery (C13') See SLD 72428 for details	N/A N/A	N/A	6		
		N/A N/A		7		
		N/A N/A		11		
		N/A N/A				
7.0	TD: 6.0' BGS 2-4-03 1030				Backgrounds Nat. Hf90 PID: 0.0	
					Backfilled boring w/ 3.0 bags of bentonite chips.	
					* Samples will be counted using gas por- osity cell method (See attached sheet)	
10.0						

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72428 C2  
Witness: Robin Parks

Date Sample was collected: 2-4-03

Date Sample was analyzed: 2-19-03

Instrument #1 Background 4690cpm

Instrument #2 Background 4598cpm

Count rate of Empty Pan: Beta 94cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	5300	610	4826	228	181	87
6-12	5700	1010	5117	519	152	58
12-18	5000	310	4583	75	121	27
18-24	5100	410	4719	121	131	37
24-30	5800	1110	4978	380	162	68
30-36	5900	1210	5036	438	185	91
36-42	5400	710	5487	889	208	114
42-48	N/A	N/A	N/A	N/A	N/A	N/A
48-54						
54-60						
60-66						
66-72						

SLD 72428

SLD 72446

SLD 72428  
Archive

N A

HTRW DRILLING LOG			DISTRICT	St. Louis		HOLE NUMBER	SLD 72428R	
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.					
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/2" HSA and 3" x 2" split spoon.			8. HOLE LOCATION See location sketch					
9. SURFACE ELEVATION N/A			10. DATE STARTED 2-12-03			11. DATE COMPLETED 2-12-03		
12. OVERBURDEN THICKNESS N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A					
13. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
14. TOTAL DEPTH OF HOLE 6.0 FT. BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES			DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS			YES		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE			LACEMILLED		MONITORING WELL		OTHER (SPECIFY)	
			Yes		N/A		N/A	
21. TOTAL CORE RECOVERY							%	
23. SIGNATURE OF INSPECTOR							Ch. [Signature]	
<p>LOCATION SKETCH/COMMENTS witnessed by: Robin Parks SCALE: Not to Scale</p> <p>Terms used to describe %            Trace - &lt; 5%            Few - 5-10%            Little - 15-25%            Some - 20-35%            Mostly - 50-100%</p>								
PROJECT FUSRAP/SLDS						HOLE NO. SLD 72428B		

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72428 B					
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Stoller		SHEET 2 of 2		SUBSITS					
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	WATER LEVEL (ft)	RECOVERY (ft)	LOG CORRECTION (ft)	LOG CORRECTION (%)	LOG CORRECTION (ft)	REMARKS (ft)				
1.0	SEE SLD 72428 for details	N/A	N/A	N/A	N/A	N/A					
2.0		N/A				N/A					
3.0		N/A				N/A					
4.0		N/A				N/A					
5.0		N/A				N/A					
6.0		N/A				N/A					
6.0		Silty fine sand w/ fine med. gravel, loose, poorly graded, dk. brn, dry, some voids, some trace bricks				4600 0.0		1.8 2.0	40-4.5 1555	4	
5.0		Silty clay, med. stiff, mod. plastic, dk. brn, dry, few med. gravel.				5300 0.0		1.8 2.0	4550 1557	3	
6.0	4700 0.0		50-55 1600	3	SLD 72428 arch (1600)						
6.0			non-recovery			5					
7.0	TD: 6.0' BGS 2-12-03 1557						Backgrounds NAI: 4680 PID: 0.0 Boring back filled w/ 30 bags of bentonite chips. * Samples will be counted using gas proportional counter (see attached sheet)				
8.0											
9.0											
10.0											

**RADIOLOGICAL SURVEY FORM**

Sample ID SLD 72428B  
Robin Parks

Date Sample was collected: 2-12-03

Date Sample was analyzed: 2-19-03

Instrument #1 Background 4680cpm

Instrument #2 Background 4598cpm

Count rate of Empty Pan: Beta 94cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6						
6-12						
12-18						
18-24			N	A		
24-30						
30-36						
36-42						
42-48						
48-54	4600	-80	4786	188	150	56
54-60	5000	320	5463	865	165	71
60-66	5300	620	4834	236	172	78
66-72	4700	20	4643	45	137	43

SLD 72428  
 Archive

# TRW DRILLING LOG

St. Louis

HOLE NUMBER: SLD 72429

1. COMPANY NAME Shaw E & I		2. DRILLING CONTRACTOR MES Inc.		3. SHEETS 1 of 2	
4. PROJECT FUSRAP/SLDS			5. LOCATION PSC Metals N. Tract 3		
6. NAME OF DRILLER Chris Anthony			7. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 Using 3 1/4" HSA and 3" x 2' split Spoon		9. HOLE LOCATION see location sketch			
10. DATE STARTED 11-7-02		11. DATE COMPLETED 11-2-02			
12. OVERHOLE THICKNESS N/A		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE FT BGS N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A			
16. DEPTH DRILLED INTO ROCK N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. DISTURBED SAMPLES 0		19. TOTAL NUMBER OF CORE BOXES 0		20. SAMPLES FOR CHEMICAL ANALYSIS 0	
21. DEPOSITION OF HOLE BAGGED		22. SIGNATURE OF INSPECTOR		23. TOTAL CORE RECOVERY 0 %	

LOCATION SKETCH/COMMENTS Witnessed By :

North ↑

SCALE: Not to Scale  
Terms used to describe %  
Trace - < 5%  
Few - 5-10%  
Little - 15-25%  
Some - 20-35%  
Mostly - 50-100%

O<sub>2</sub> Tank  
O<sub>2</sub> Line  
Underground  
Former Salisbury  
McKinley Bridge  
Scrap Pile  
Boring moved due to Under ground O<sub>2</sub> Line & Working Scrap Pile  
Bob Parks

FUSRAP/SLDS		PSC Metals N. Tract 3		SLD 72429	
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HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 72429	
PROJECT FUSRAP/SLDS		INSPECTOR Mark Cummings			SHEET 2 of 2 SHEETS		
DEPTH :ft	DEPTH :ft	DESCRIPTION OF MATERIALS :ft	FIELD EXPOSURE :ft	RECOVERY :ft	ANALYTICAL SAMPLE NO. :ft	BLOW COUNT :ft	REMARKS :ft
		Gravel with silt, trace clay Fine to coarse, poorly graded, to med dense, dry (GM)	6400 0.0	2.0 2.0	SLD 72429 11-7-02 1050	35	Now 6200 Bkg PSD 0.0 Bkg Total MPC 1010
1.0		Sand w/few silt, med to coarse, DK, med dense to loose, poorly graded, dry (SP)	6900 0.0			14	
		Some cinders	7000 0.0			16	
			6400 0.0		SLD 72447 1055	10	
2.0		Becoming more silty & clayey (few to little), some fine gravel,	7100 0.0	2.0 2.0		8	
			6500 0.0			7	
3.0			6700 0.0			6	
			6100 0.0		SLD 72454 1100	5	
4.0		Silty clay, med stiff, w/ few trace cinders, brown, & mortar. (CL)	6100 0.0	1.7 2.0		5	
			6300 0.0			5	
5.0		Fine sand, loose, poorly graded, brown, brick frag. (SP)	5900 0.0	compacted		4	
			6900 0.0		SLD 72461 1105	5	
6.0		TD 6' Bkg 1105 11-7-02		No Recovery			Bkg 6200 max 0.0 PSD
7.0							Hole Backfilled w/Bentonite chips 3 Bags
8.0							
9.0							

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72430	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using P/MHSA and 3" x 2" split spoon.			8. HOLE LOCATION See location sketch				
9. SURFACE ELEVATION N/A			10. DATE STARTED 1-29-03				
11. DATE COMPLETED 1-29-03			12. OVERBURDEN THICKNESS N/A				
13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A				
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A				
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			18. GEOTECHNICAL SAMPLES				
DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES			
20. SAMPLES FOR CHEMICAL ANALYSIS		YES		METALS		OTHER (SPECIFY)	
YES		NO		RAD		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		RACIPILED		MONITORING WELL		OTHER (SPECIFY)	
YES		N/A		N/A		23. SIGNATURE OF INSPECTOR Susan L. Adams	
<p>LOCATION SKETCH/COMMENTS Witnessed by: Susan Adams SCALE: Not to Scale</p> <p style="text-align: right;">Susan L. Adams</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> </div> <div style="width: 45%; border: 1px solid black; padding: 5px;"> <p>Terms used to describe %</p> <p>Trace + &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p> </div> </div> <p>SLD 72430 (Moved 12' to S due to roadway traffic)</p>							
PROJECT FUSRAP/SLDS					HOLE NO. SLD 72430		

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT	OPERATOR	DATE	SHEET
		FUSRAP/SLDS	Phillip Statter	SLD 72430	2 of 2
DEPTH (ft)	DESCRIPTION OF MATERIALS	DEPTH (ft)	RECOVERY (%)	LOG NO.	REMARKS
1.0	silty fine sand w/ some med gravel, very dense, sp. graded dk. brn. + blk, dry, few cinders, few slag.	4600 0.0	RECOVERY	04-05 1045	SLD 72430 1045
		4300 0.0	2.0 / 2.0	0.54.0 1047	163 136
	few brick frags, few limestone cobbles	4200 0.0		1.0-1.8 1100	72
		4700 0.0		1.5-2.0 1103	91
2.0	cinders and slag in drawing	5000 0.0	2.0 / 2.0	2.0-2.5 1410	SLD 72430 1103
		4800 0.0		2.5-3.0 1113	16 73
3.0		5300 0.0		3.0-3.5 1115	14
		4700 0.0		3.5-4.0 1117	9
4.0		4600 0.0	1.6 / 2.0	4.0-4.5 1120	8
	few silty clay	4900 0.0		4.5-5.0 1122	6
	few cinders and slag, few brick frags	4100 0.0		5.0- 5.6 1125	5
5.0		N/A N/A	no recovery		SLD 72430 1125
6.0					4
7.0	TD: 6.0' BGS 1115 1-29-03				Background Net: 4481 PIB: 0.0 Backfilled boring w/ 3.0 bags of best mix chips. * samples will be counted w/ gas porportion meter/ see attach sheet
8.0					
9.0					
10.0					
PROJECT		FUSRAP/SLDS		SHEET NO. SLD 72430	

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72430 c2 Super Adams Date Sample was collected: 1-29-03 Date Sample was analyzed: 2-19-03  
 Instrument #1 Background 4481 cpm Instrument #2 Background 4602 cpm  
 Countrate of Empty Pan: Beta 83 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Countrate in cpm	
					Gross Beta	Net Beta
0-6	4600	119	4284	-318	94	11
6-12	4300	-181	4386	-216	100	17
12-18	4200	281	4519	-83	136	53
18-24	4700	219	4428	-174	129	46
24-30	5000	519	4889	287	159	76
30-36	4800	319	4789	187	115	32
36-42	5300	819	4705	103	142	59
42-48	4700	219	4645	43	143	60
48-54	4600	119	4718	116	137	54
54-60	4900	419	4741	139	154	71
60-66	4900	419	4606	4	163	80
66-72	N/A	N/A	N/A	N/A	N/A	N/A

SLD 72430

SLD 72448

SLD 72455

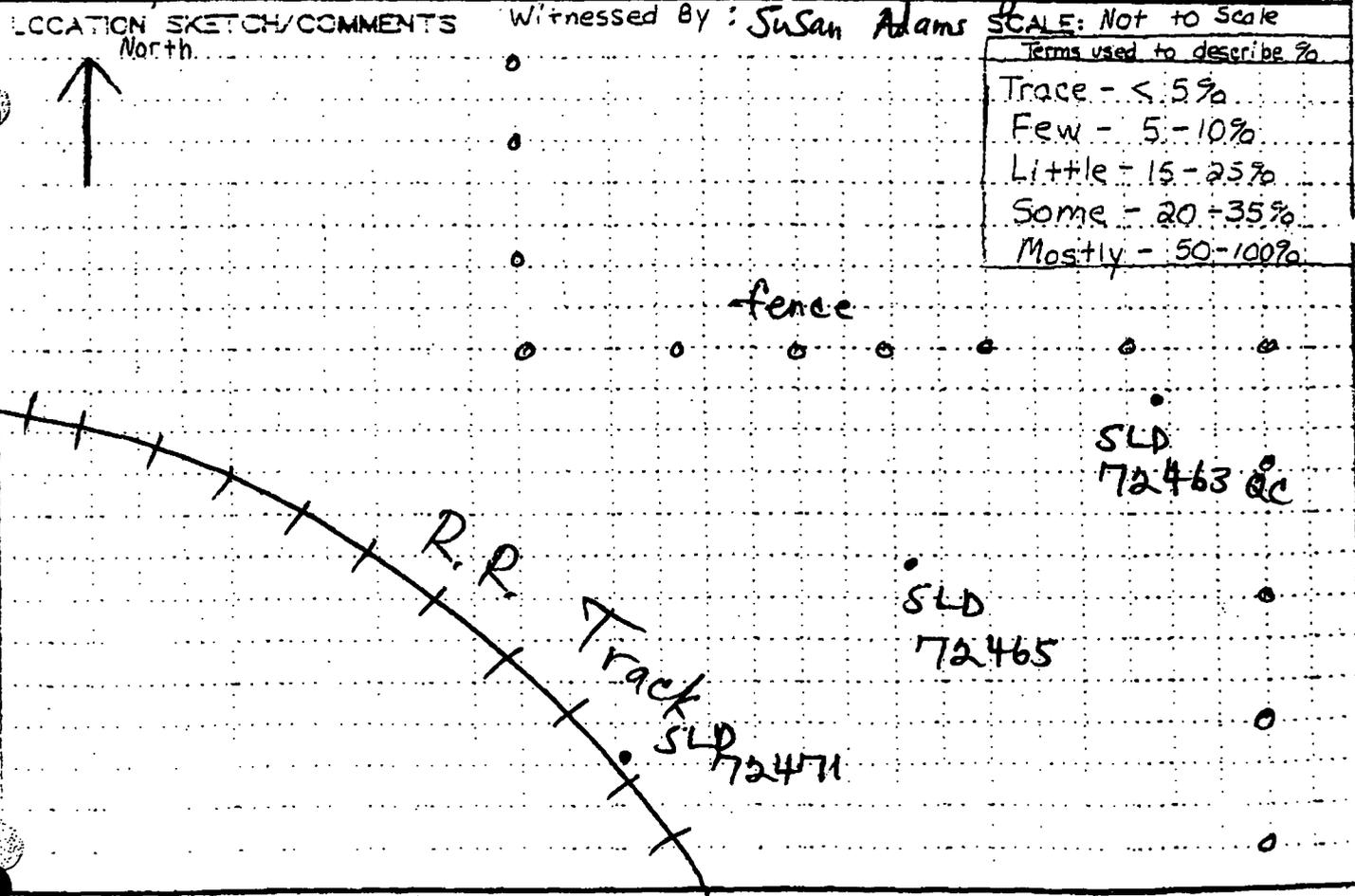
SLD 72462

# HTRW DRILLING LOG

ST. LOUIS St. Louis

WELL NUMBER: SLD 7246300  
SHEET 1 OF 2 SHEETS

1. COMPANY NAME Shaw F & I		2. DRILLING CONTRACTOR MES, Inc.		3. HOLE NUMBER SLD 7246300	
4. PROJECT FUSRAP / SLDs		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF DRILLER Chris Anthony		7. MANUFACTURER, DESIGNATION OF DRILL Diedrich D-120			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon		9. HOLE LOCATION see location sketch		10. SURFACE ELEVATION N/A	
11. OVERSIZEN THICKNESS N/A		12. DATE STARTED 11-20-02		13. DATE COMPLETED 11-20-02	
14. DEPTH DRILLED INTO ROCK N/A		15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		16. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A	
17. TOTAL DEPTH OF HOLE 6.0 FT BGS		18. TOTAL NUMBER OF CORE BOXES 0			
19. GEOTECHNICAL SAMPLES		20. DISTURBED		21. TOTAL CORE RECOVERY	
0		0		0	
22. SAMPLES FOR CHEMICAL ANALYSIS		23. METALS		24. OTHER (SPECIFY)	
0		0		RAD	
25. DESCRIPTION OF HOLE		26. MONITORING VEL.		27. SIGNATURE OF INSPECTOR	
0		N/A		[Signature]	



ATRW DRILLING LOG (CONTINUATION SHEET) FUSRAP/SLDS  
 PROJECT: FUSRAP/SLDS  
 OPERATOR: Phil Satter  
 SHEET NO: 2 OF 4  
 DATE: 11/24/88

DEPTH (ft)	DESCRIPTION OF MATERIALS	REMARKS	RECOVERY	TEST NO.	TEST DATE	TEST TYPE
10.0 - 6.0	TD: 6.0' BGS 11-20-82 1465	Backgrounds NIST 4700 PID: 0.0 Baring back Picked w/ 3.0 bags of bestowite chips.				
6.0 - 5.0	SM	STH fine sand (loose) to H. grey, dry.	no recovery	4700	11-24-88	SLD
5.0 - 4.0	CL	few fine sand	no recovery	4700	11-24-88	SLD
4.0 - 3.0	CL	few fine sand	no recovery	4700	11-24-88	SLD
3.0 - 2.0	CL	few fine sand	no recovery	4700	11-24-88	SLD
2.0 - 1.0	CL	STH clay, soft to STH (mud) dry, trace brick frags, trace wood frags.	no recovery	4700	11-24-88	SLD
1.0 - 0.0	CL	STH clay, soft to STH (mud) dry, trace brick frags, trace wood frags.	no recovery	4700	11-24-88	SLD
0.0 - 0.0	CL	STH clay, soft to STH (mud) dry, trace brick frags, trace wood frags.	no recovery	4700	11-24-88	SLD

FUSRAP/SLDS  
 SHEET NO: 2 OF 4  
 DATE: 11/24/88

# STRW DRILLING LOG

ST. LOUIS

SLD 72464

1. CONTRACT NAME Snow F+I		2. DRILLING CONTRACTOR MES, Inc.		3. SHEET NO. 1 of 2	
4. PROJECT FUSRAP/SLDS		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF DRILLER Chris Anthony		7. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
8. TOOLS AND TYPES OF DRILLING AND SAMPLING EQUIPMENT using 4 1/2" HSA and 3" x 2' split spoon		9. HOLE LOCATION See location sketch			
10. DATE STARTED 11-14-02		11. DATE COMPLETED 11-14-02			
12. DEPTH DRILLED INTO ROCK N/A		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 7.0 <sup>X<sub>AS</sub></sup> FT BGS		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
16. TESTED FOR CONTAMINATION	17. DISTURBED	18. UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS	21. METAL	22. OTHER SPECIES	23. OTHER SPECIES	24. OTHER SPECIES	25. TOTAL CORE RECOVERY
26. DEPTH OF HOLE	27. SAMPLED	28. WORKING VEL.	29. OTHER SPECIES	30. SIGNATURE OF OPERATOR Phillip M. [Signature]	

LOCATION SKETCH/COMMENTS: Witnessed by: Keith Enders SCALE: Not to scale

North ↑

fence

SLD 72463 RC

SLD 72465

SLD 72464 (Moved boring 17' to W from other side of fence)

SLD 72472

Terms used to describe %

Trace - < 5%

Few - 5-10%

Little - 15-25%

Some - 20-35%

Mostly - 50-100%

FUSRAP SLDS

SLD 72

HTRW DRILLING LOG (CONFIRMATION SHEET)

PROJECT FUSRAP/SLDS

INSPECTOR Phillip Statler

WELL NUMBER SLO 72464

SHEET 2 of 2

DEPTH (ft)	DESCRIPTION OF MATERIALS	FIELD SAMPLE NO. (ft)	RECOVERY SAMPLE OR OTHER USES (ft)	ANALYTICAL SAMPLE NO. (ft)	BLANKS CORRECT (ft)	REMARKS
COVER	Cobble Cover	5500 0.0		SLO 72464 Cover 11-14-02	N/A	(1400)
1		N/A			N/A	
2	silty clay, med. stiff, med. plast, lt. brn to dk brn, moist, 1 piece of glass, 2 limestone frags. trace wood frags, trace brick frags, trace concrete frags, trace green frags, trace sand.	5500 0.0	1.7 / 2.0	SLO 72464 1410	5	Petroleum Odor
3		5600 0.0			8	
4		4900 0.0		SLO 72468 1415	8	
5		5500 0.0	no recovery		6	
6		5600 0.0			3	
7	few wood frags, trace concrete frags.	5700 0.0	1.6 / 2.0	SLO 72511 1425	6	
8		4900 0.0			6	
9		N/A	no recovery		4	
10	few wood frags, trace cinders and slag.	5700 0.0	1.8 / 2.0		5	
11		5700 0.0			4	
12	trace coarse gravel	6100 0.0		SLO 72514 1435	4	
13		5600 0.0	no recovery		5	
14	TP: 6.0 PS, 7.0 BGS, 11-14-02, 1415					Background: NAT: 4700, PFD: 0.0. Back-filled boring w/ 3.5 bags of bentonite chips. Capped w/ soil.

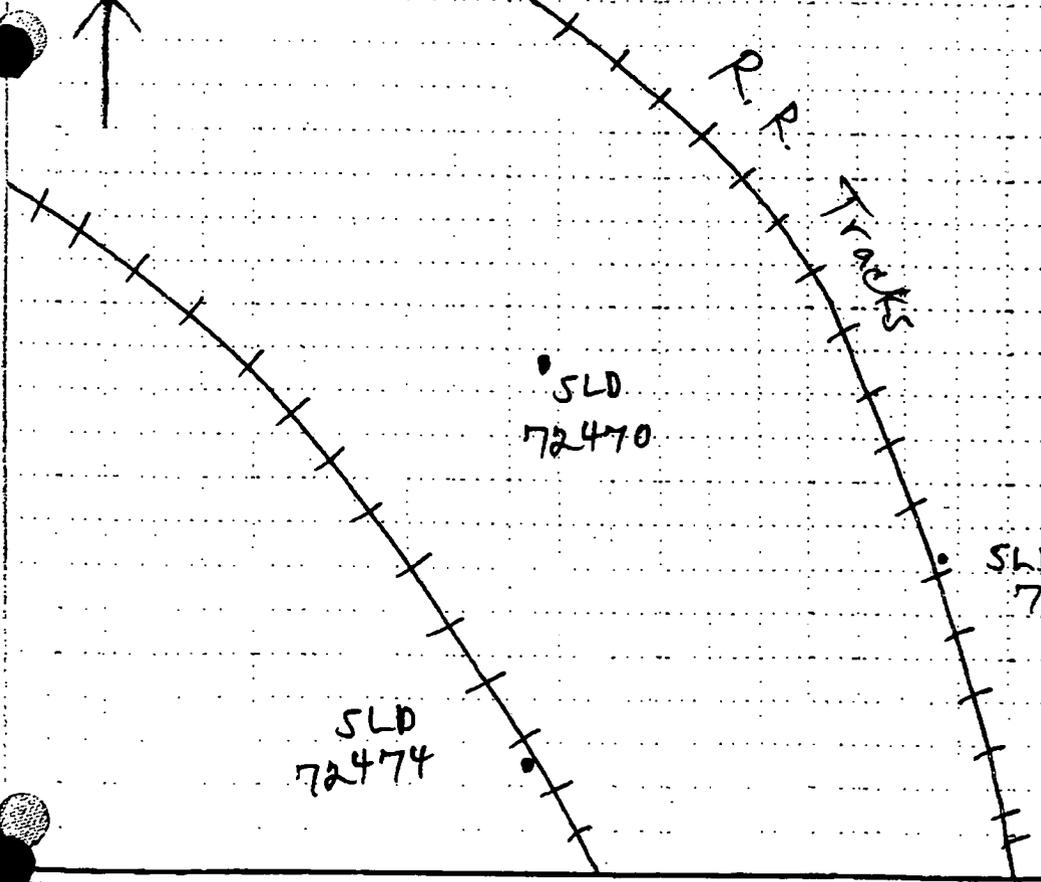
# HEAVY DRILLING LOG

STATION **St. Louis**

WELL NUMBER **SLD 72465**

1. COMPANY NAME <b>Shaw F &amp; I</b>		2. DRILLING CONTRACTOR <b>M. E. S. Inc.</b>		3. SHEET <b>1 of 2</b>	
4. PROJECT <b>FUSRAP / SLDs</b>		5. LOCATION <b>PSC Metals North Tract V.P.</b>			
6. NAME OF WELLER <b>Chris Anthony</b>		7. MANUFACTURE DESIGNATION OF WELL <b>Diedrich D-120</b>			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 4 1/4" ASA and 3" x 2" split spoon</b>		9. HOLE LOCATION <b>see location sketch</b>			
10. DATE STARTED <b>10-31-02</b>		11. DATE COMPLETED <b>10-31-02</b>			
12. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		13. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>			
14. TOTAL DEPTH OF HOLE <b>6.0 FT BGS</b>		15. TOTAL NUMBER OF CORE SECTORS <b>0</b>			
16. DEPTH DRILLS INTO ROCK <b>N/A</b>		17. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>			
18. DEPTH DRILLS INTO ROCK <b>N/A</b>		19. TOTAL NUMBER OF CORE SECTORS <b>0</b>			
20. DEPTH DRILLS INTO ROCK <b>N/A</b>		21. TOTAL CORE RECOVERED <b>0</b>			
22. DEPTH DRILLS INTO ROCK <b>N/A</b>		23. DEPTH DRILLS INTO ROCK <b>N/A</b>			

LOCATION SKETCH/COMMENTS Witnessed by: **Susan Adams** SCALE: Not to scale



Terms used to describe %  
 Trace - < 5%  
 Few - 5-10%  
 Little - 15-25%  
 Some - 20-35%  
 Mostly - 50-100%

Moved 6' SW due to debris  
 SLD 72465

HTRW DRILLING LOG (CONTINUATION SHEET)		WELL NUMBER				
PROJECT: EUSRAP/SLDS		SLP 72465				
INSPECTION: Phillip Statter		SHEET 2 of 2				
DEPTH (ft)	DESCRIPTION OF MATERIALS	WELL DEPTH (ft)	RECOVERY	ANALYTICAL NUMBER	BLOW COUNT	REMARKS
0.0 - 1.0	silty clay, mod. wt. (A), mod. plast.; dk. brn.) moist; trace wood frags; few med. to coarse gravel; trace slag; trace concrete frags; trace	4400 0.0	RECOVERY	SLP 72465 10-31-02 1185	6	pieces of metal and rubble (conc.) brought up in cuttings.
		4400 0.0	2.0		5	
		5000 0.0	2.0	SLP 72465 1185	6	
		4700 0.0			4	
1.0 - 2.0	few cinders and slag; trace brick frags.	4300 0.0	1.8 2.0	SLP 72465 archive 1185	9	archive sample from 2.5-3.0' BGS
		4400 0.0			22	
		4500 0.0			15	
2.0 - 4.0	piece of wire	4700 0.0	no recovery		16	
4.0 - 6.0					6 8 12 16	Poor re- covery between 4.0-6.0' BGS
6.0 - 7.0						
7.0 - 8.0						
8.0 - 9.0						
9.0 - 10.0						
10.0 - 11.0						
11.0 - 12.0						
12.0 - 13.0						
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97.0 - 98.0						
98.0 - 99.0						
99.0 - 100.0						

EUSRAP/SLDS

SLP 72465

# HTRW DRILLING LOG

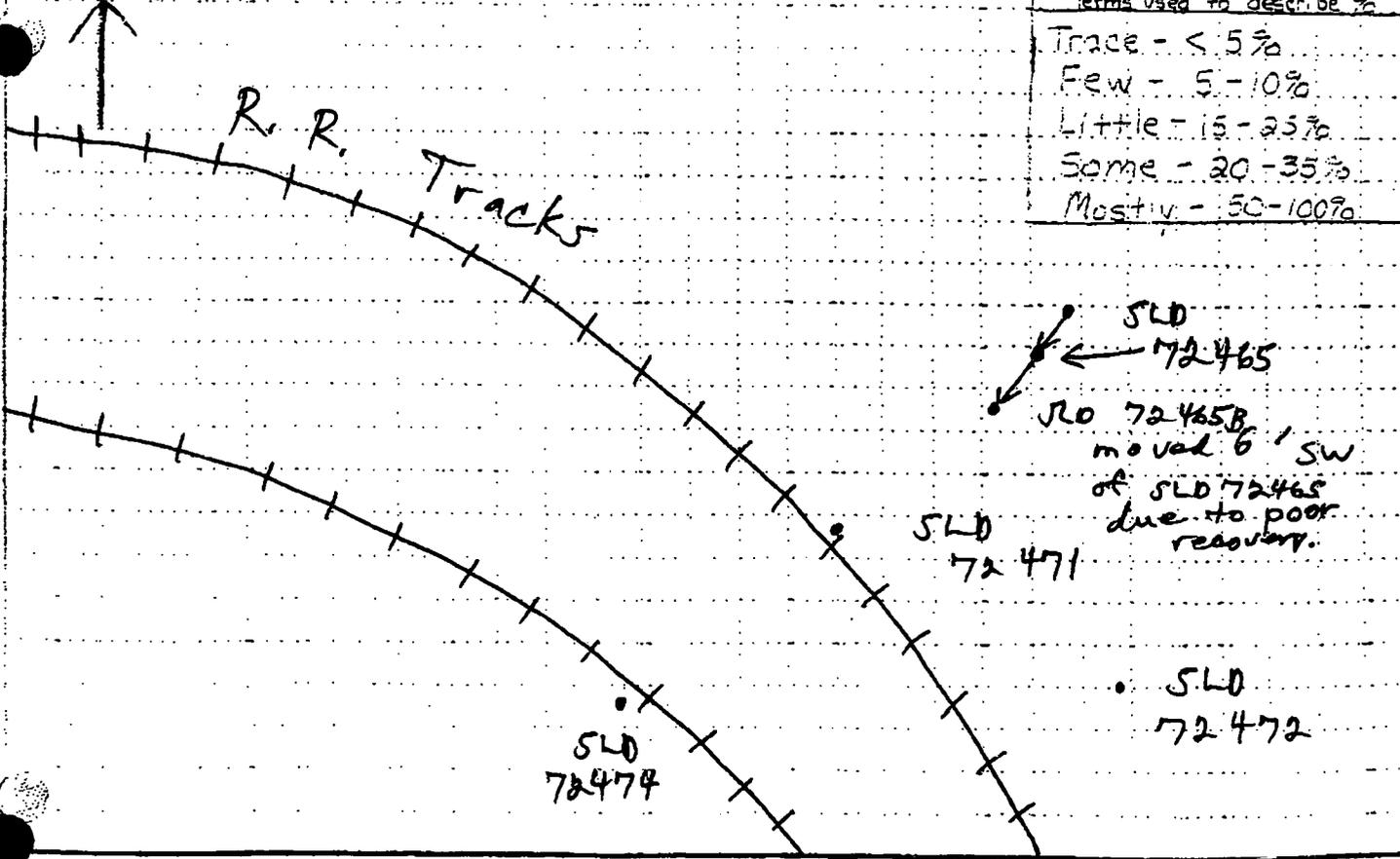
City: **St. Louis**

WELL NUMBER: **SLD 72465B**

1. COMPANY NAME <b>Shaw F &amp; I</b>		2. DRILLING CONTRACTOR <b>MES, Inc.</b>		3. SHEET NUMBER <b>1</b> of <b>2</b>	
4. PROJECT <b>FUS RAP / SLOS</b>			5. LOCATION <b>PSC Metals North Tract V.P.</b>		
6. NAME OF DRILLER <b>Chris Anthony</b>			7. MANUFACTURER / DESCRIPTION OF DRILL <b>Diedrich D-120</b>		
8. TOOLS AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon</b>			9. HOLE LOCATION <b>see location sketch</b>		
10. DATE STARTED <b>10-31-02</b>			11. DATE COMPLETED <b>10-31-02</b>		
12. OVERBURDEN THICKNESS <b>N/A</b>			13. DEPTH TO WATER AND SAMPLED TIME AFTER DRILLING COMPLETED <b>N/A</b>		
14. TOTAL DEPTH OF HOLE <b>6.0' FT BGS</b>			15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>		
16. TEST TECHNICAL SAMPLE		17. DISTURBED		18. TOTAL NUMBER OF CORE SOLES	
19. SAMPLE PRESERVATION METHOD		20. MONITORING		21. TOTAL CORE RECOVERY	
22. DEPTH OF HOLE		23. DEPTH OF HOLE		24. SIGNATURE OF INSPECTOR	

LOCATION SKETCH / COMMENTS  
North

Witnessed By: **Susan Adams** SCALE: Not to Scale



FUS RAP / SLOS

WELL NUMBER: **SLD 72465B**

HEAVY DRILLING LOG (CONTINUATION SHEET)

PROJECT: EUS 440 15.05      INSPECTOR: Phillip Statler      SLD 72465B

DATE: 11/11/98      SHEET: 2 OF 2

DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	SHRINKAGE (%)	FLUID CONTENT (%)	REMARKS
10 - 40	SEE SLD 72465 for information				
40 - 41	silty clay w/ some fine sand, loose, poorly graded, dk. brn, dry, little cinders and little slag, few brick frags, few broken glass	47.00	0.0	1.9	4
41 - 42		49.00	0.0	2.0	3
42 - 43		48.00	0.0		9
43 - 44	trace weathered wood	48.00	0.0		7
44 - 45					(1830)

TD: 6.0' B65  
10-31-02  
1320

Background:  
NAT: 4,200  
PID: 0.0  
Back-filled boring w/ 3.0 bags of bentonite chips. Capped w/ soil.

# STRW DRILLING LOG

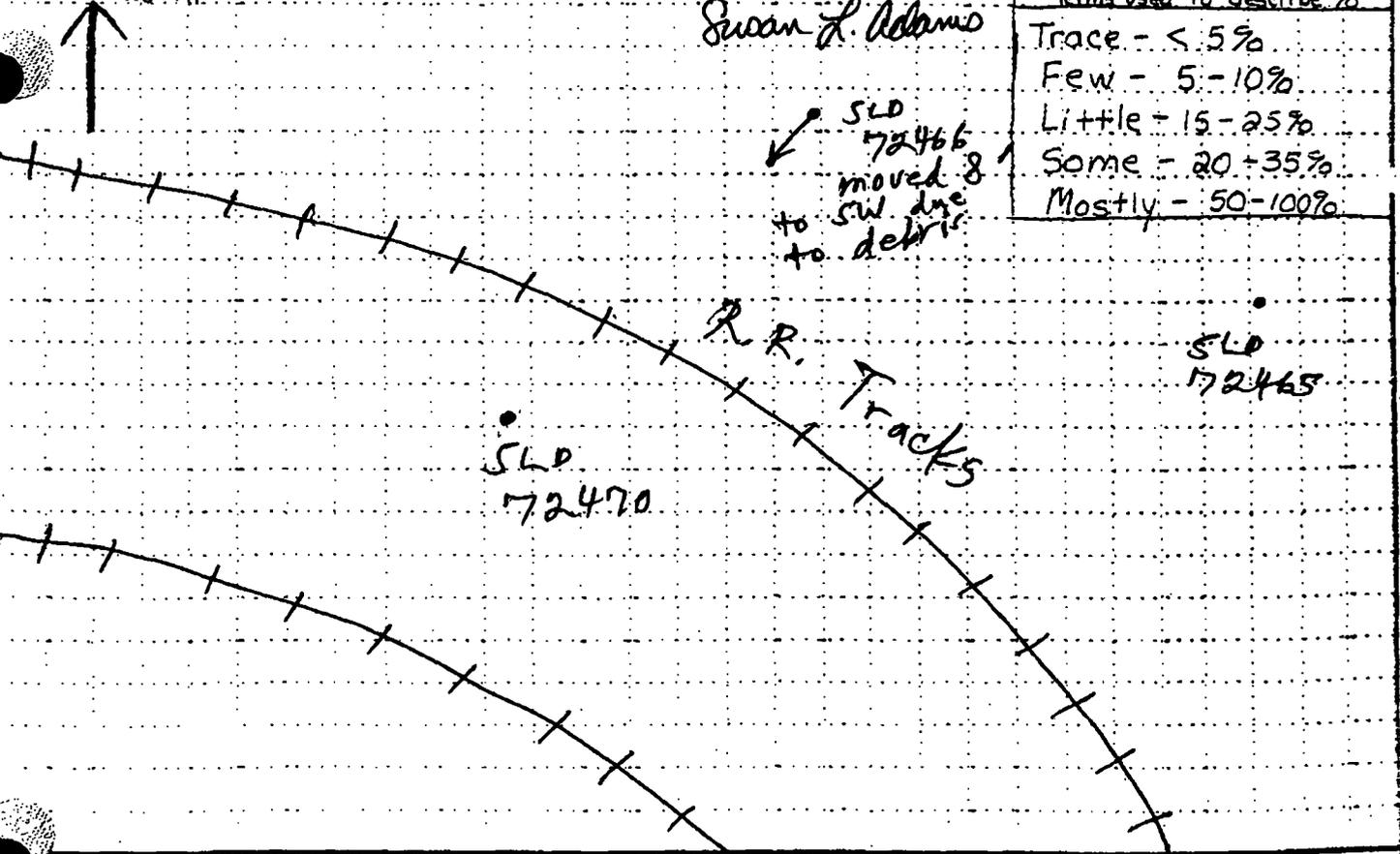
CITY: St. Louis

WELL NUMBER: SLD 72466

SHEETS: 1 of 2

1. PROJECT: FUSRAP/SLDS		4. LOCATION: PSC Metals North Tract V.P.	
2. NAME OF DRILLER: Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using 3/4" HSA and 3" x 2" split spoon		3. HOLE LOCATION: see location sketch	
8. OVERBURDEN THICKNESS: N/A		9. SURFACE ELEVATION: N/A	
10. DATE STARTED: 11-6-02		11. DATE COMPLETED: 11-6-02	
12. DEPTH DRILLED INTO ROCK: N/A		15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A	
13. TOTAL DEPTH OF HOLE: 6.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A	
14. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
0	0	0	0
20. SAMPLE FOR CHEMICAL ANALYSIS	TK	METALS	OTHER (SPECIFY)
0	0	0	RAD
22. DEPOSITION OF SOLE	SACRIFICE	MONITORING WELL	OTHER (SPECIFY)
0	Yes	N/A	NA
21. TOTAL CORE RECOVERY: 0%		23. SIGNATURE OF INSPECTOR: <i>Cheryl M. Hall</i>	

LOCATION SKETCH/COMMENTS: North. Witnessed By: Susan Adams SCALE: Not to Scale



FUSRAP/SLDS

WELL NO. SLD 72466

HTRW DRILLING LOG		CONTINUATION SHEET		PROJECT		SHEET	
FUSRAP/SLDS		INSPECTOR Phillip Statler		SLD 72466		SHEET 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	UNIT WEIGHT (pcf)	RECOVERY (%)	WATER CONTENT (%)	SLC NO.	REMARKS	DEPTH (ft)
0.0 - 1.0	silty clay, med. stiff to stiff, med. plastic, H. brny, dry.	6300 / 0.0	RECOVERY	SLD 72466 11-6-02 1520	5		1.0
1.0 - 1.5	trace brick frags.	5900 / 0.0	2.0		16		1.5
1.5 - 2.0	trace brick frags.	6200 / 0.0	2.0		10		2.0
2.0 - 2.5	few cinders, few slag, trace	6200 / 0.0		SLD 72490 11-6-02 1380	14		2.5
2.5 - 3.0	trace wood frags (very small)	5900 / 0.0			4		3.0
3.0 - 3.5	few cinders, few slag, trace bricks, 1 piece of tar paper, trace rust	6300 / 0.0	1.8		6		3.0
3.5 - 4.0	few cinders, few slag, trace bricks, 1 piece of tar paper, trace rust	6600 / 0.0	2.0	SLD 72490 11-6-02 1365	7	archive sample from 3.0-3.5' BGS	3.5
4.0 - 4.5		5900 / 0.0	no recovery		8		4.0
4.5 - 5.0	silty fine sand, loose, poorly graded, H. brny, moist.	6300 / 0.0			4		4.5
5.0 - 5.5	trace wood frags	5900 / 0.0	2.0		4		5.0
5.5 - 6.0		5600 / 0.0	2.0		5		5.5
6.0 - 6.5		5800 / 0.0		SLD 72466 11-6-02 1410	6	archive sample from 5.5-6.0' BGS	6.0
6.0 - 7.0	TD: 6.0' BGS 11-6-02 1400					Background NAI: 5500 PID: 0.0	7.0
7.0 - 8.0						Backfilled boring w/ 3.0 bags of bentonite chips. Capped w/soil.	8.0
8.0 - 9.0							9.0
9.0 - 10.0							10.0

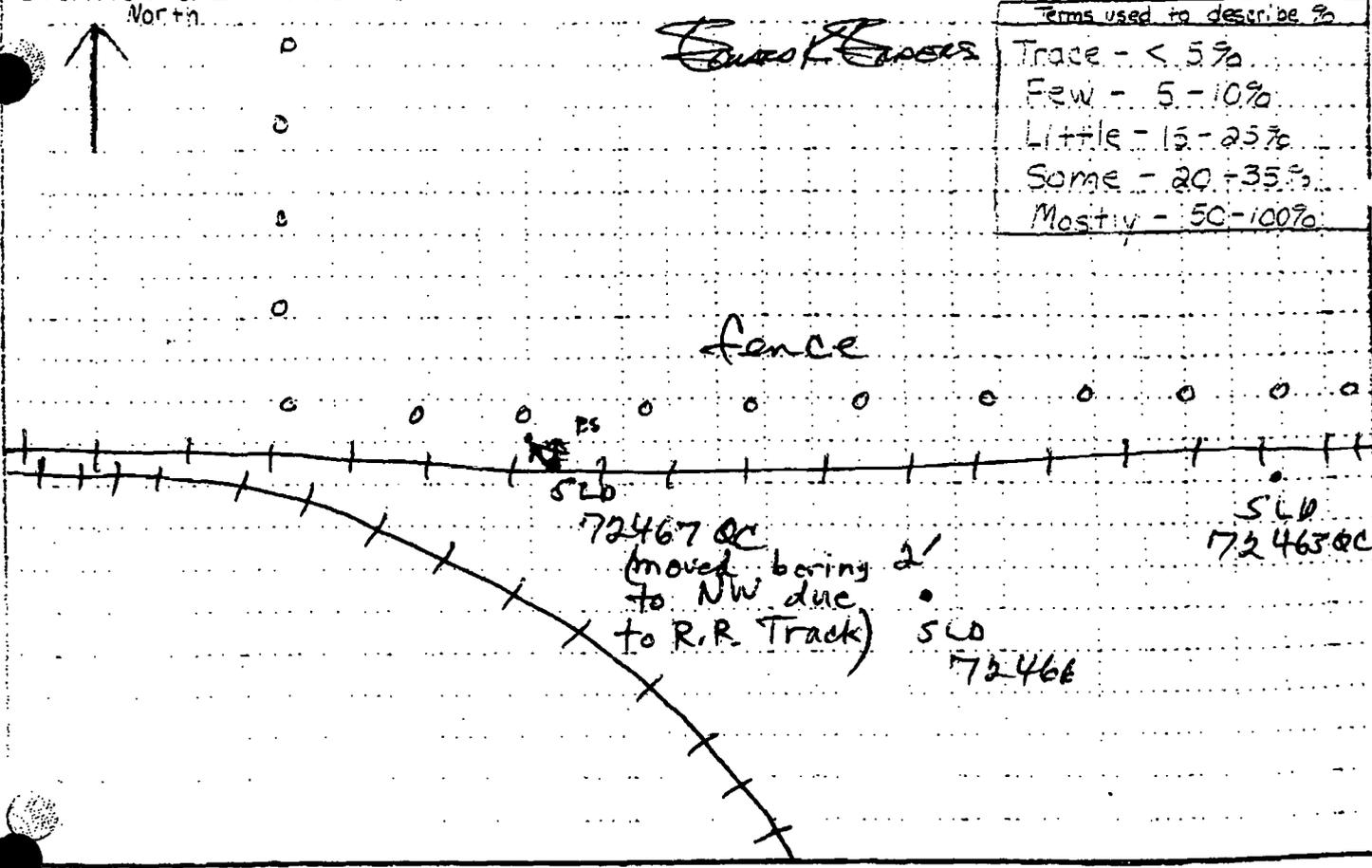
# -TRW DRILLING LOG

STATION **S. Louis**

WELL NUMBER **SLD 7246701**

1. COMPANY NAME <b>SNOW F &amp; I</b>		2. DRILLING CONTRACTOR <b>M. E. S., Inc.</b>		3. SHEET <b>1</b>		4. SHEETS <b>2</b>	
5. PROJECT <b>FUSRAC / SLOS</b>				6. LOCATION <b>PSC Metals North Tract v.p.</b>			
7. NAME OF WELLER <b>Chris Anthony</b>				8. MANUFACTURER, DESIGNATION OF DRILL <b>Diedrich D-120</b>			
9. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon</b>				10. HOLE LOCATION <b>See location sketch</b>			
11. DATE STARTED <b>11-14-02</b>				12. DATE COMPLETED <b>11-19-02</b>			
13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>				14. OTHER WATER LEVEL MEASUREMENTS, SPECIFY <b>N/A</b>			
15. DEPTH DRILLED INTO SOIL <b>N/A</b>				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>			
17. TOTAL DEPTH OF HOLE <b>6.0 FT BGS</b>				18. TOTAL NUMBER OF CORE BOXES <b>0</b>			
19. TESTED FOR CHEMICAL ANALYSIS <b>0</b>		20. TESTED FOR METALS <b>0</b>		21. TESTED FOR OTHER SPECIES <b>0</b>		22. TOTAL CORE RECORDED <b>0</b>	
23. DEPOSITION OF HOLE <b>0</b>		24. MONITORING WELL <b>N/A</b>		25. OTHER SPECIES <b>N/A</b>		26. SIGNATURE OF SUPERVISOR <i>Keith Enders</i>	

LOCATION SKETCH/COMMENTS Witnessed By: **Keith Enders** SCALE: Not to Scale



Terms used to describe %

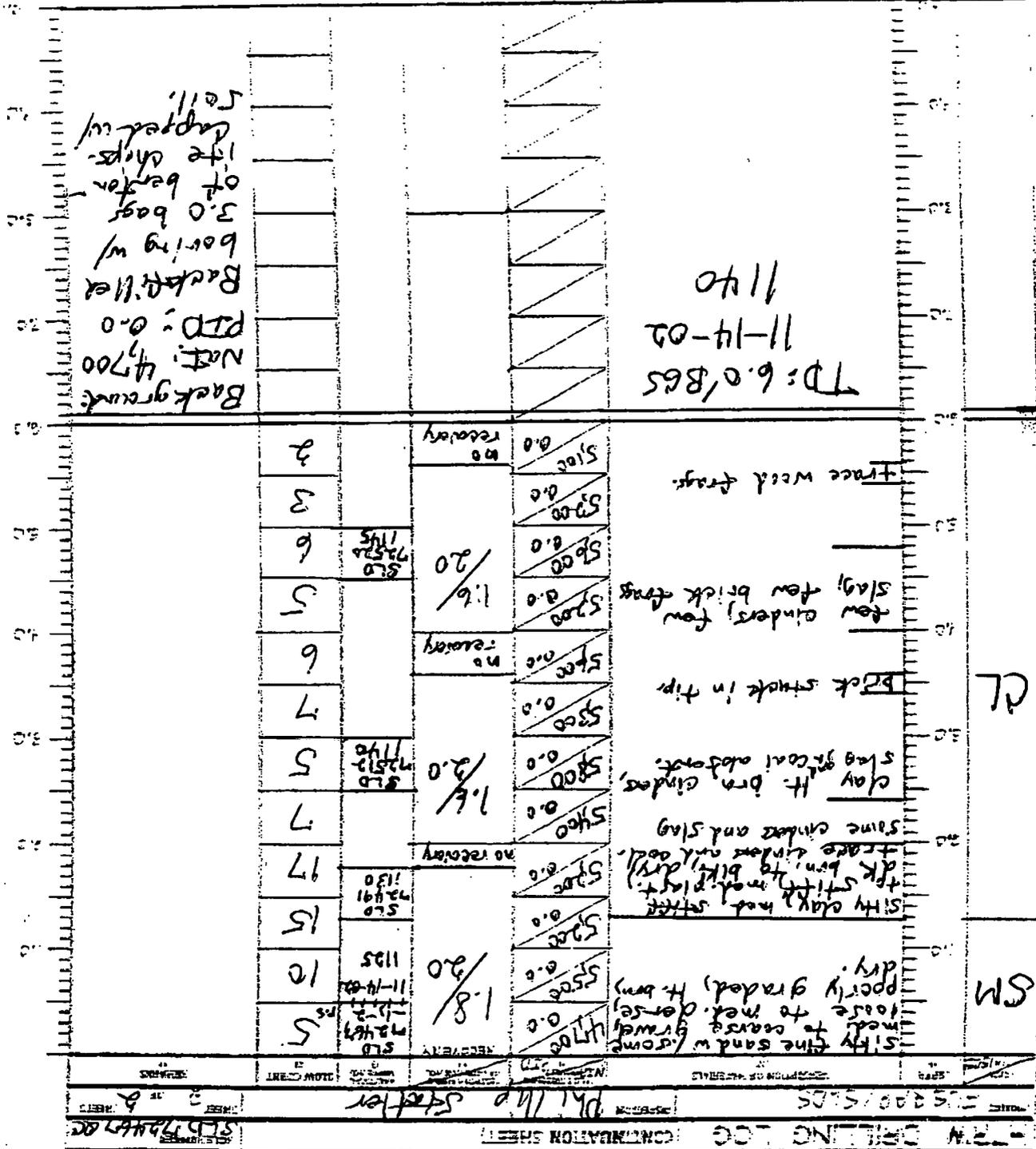
- Trace - < 5%
- Few - 5-10%
- Little - 12-25%
- Some - 20-35%
- Mostly - 50-100%

FUSRAC SLOS

SLD 72467 01

SLD 73467 DC

SLD 73467 DC



CONSTRUCTION LOG  
 SLD 73467 DC  
 PH 1140 Station  
 SLD 73467 DC

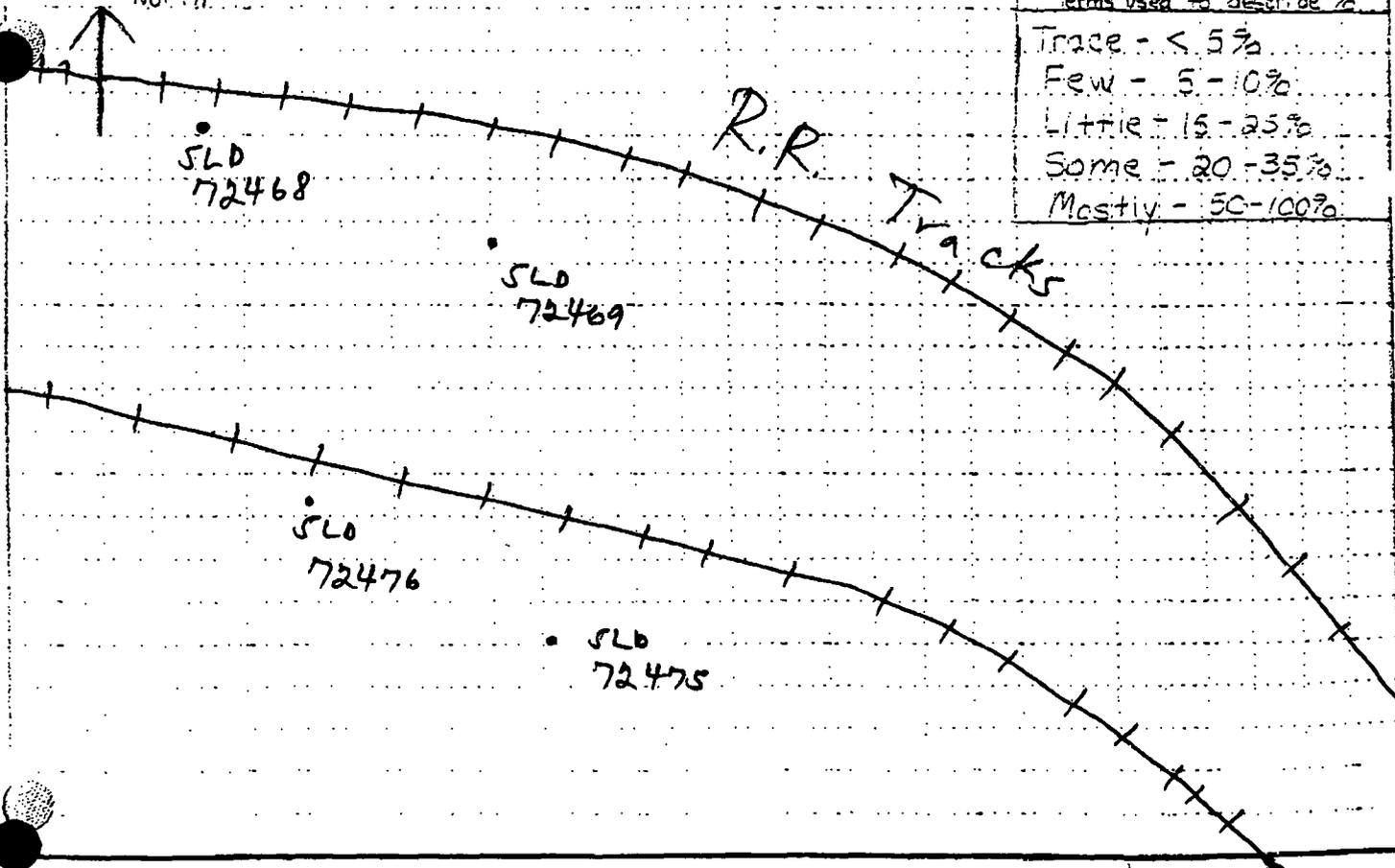
# STRW DRILLING LOG

St. Louis

SLD 72468

1. COMPANY NAME Shaw F & I		2. DRILLING CONTRACTOR M.E.S., Inc.		3. SHEET NUMBER 1 of 2	
4. PROJECT FUSRAP / SLOS		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF DRILLER Chris Anthony		7. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
8. SIZES AND TYPES OF DRILLING AND CAMPING EQUIPMENT Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon		9. HOLE LOCATION See location sketch		10. SURFACE ELEVATION N/A	
11. PERMITS PEO 19-11-4-02 N/A to 100/100 Cal Date 4-1-03		LWD 172040 BKG = 4500		12. DATE STARTED 11-4-02	
13. OVERBURDEN THICKNESS N/A		14. DEPTH COORDINATES ENCOUNTERED N/A			
15. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
17. TOTAL DEPTH OF HOLE 6.0 FT BGS		18. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
19. GEOTECHNICAL SAMPLES 0		20. DISTURBED 0		21. TOTAL NUMBER OF CORE SOLES 0	
22. SAMPLES FOR CHEMICAL ANALYSIS 0		23. METALS 0		24. OTHER SPECIFY RAD	
25. DECONTAMINATION OF HOLE 0		26. MONITORING VEL. N/A		27. OTHER SPECIFY N/A	

LOCATION SKETCH/COMMENTS: Witnessed By: Keith Enders SCALE: NOT TO SCALE



FUSRAP / SLOS

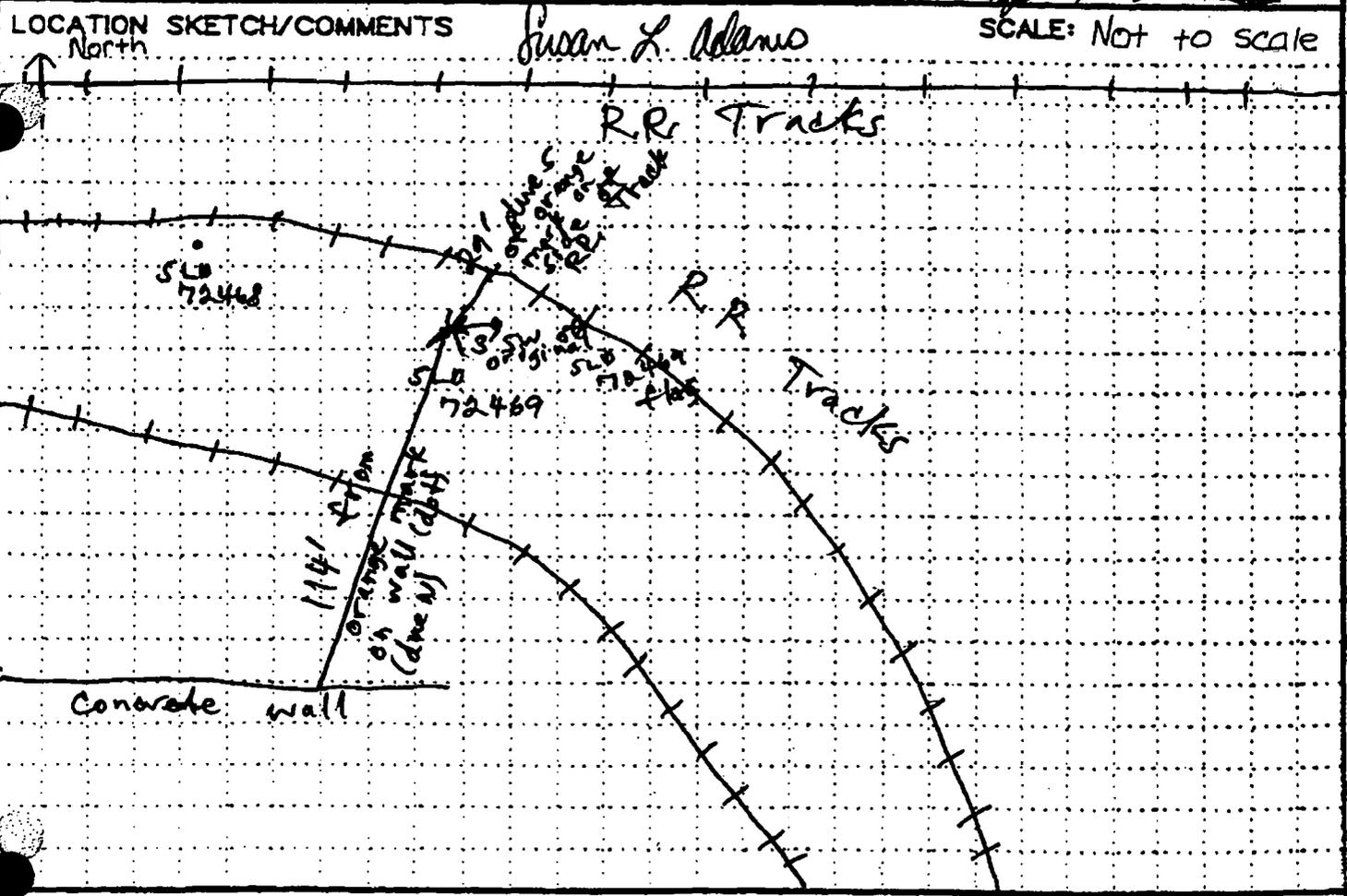
SLD 72468

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT EUSRAP/SLOS		INSPECTOR Phillip Statter		WELL NUMBER SLD 72468	
DEPTH (ft)	DESCRIPTION OF MATERIALS	LOG CORRECTION (ft)	RECOVERY (%)	WELL CORRECTION (ft)	BLOW COUNT (blows/ft)	REMARKS	
1.0	silty clay w/ fine med. gravel, med. silt, dk. to stiff, med. plast., dk. brn, some cinders and slag, trace glass, trace brick frags.	5100	2.0 / 2.0	SLD 72468 11-4-02 0930	15		
		4900			8		
		4700	7				
2.0		clay H. brn, cinders, slag and brick frags. absent	4800	2.0 / 2.0	SLD 72468 0925	8	
	4700		7				
	4900		8				
3.0	few cinders, few slag, trace brick frags. trace weathered wood		5200	2.0 / 2.0	SLD 72468 archive 0930	8	archive sample from 3.5-4.0' BGS
		5300	9				
		4900	8				
4.0		silty fine sand, loose, poorly graded, dk. brn. to lt. gry., dry.	4600	1.9 / 2.0	SLD 72468 0930	7	archive sample from 5.4-5.9' BGS.
	5100		8				
5.0			7				
6.0			8				
7.0	TD: 6.0' BGS 11-4-02 0930					Background: NaI: 4,500 PID: 0.0	
8.0						Back-filled boring w/ 3.0 bags of bentonite chips. Capped boring w/soil.	
9.0							
10.0							

PROJECT EUSRAP/SLOS

SLD 72468

<b>HTRW DRILLING LOG</b>		DISTRICT St. Louis	HOLE NUMBER SLD 72469
1. COMPANY NAME Shaw E + I		2. DRILLING SUBCONTRACTOR MES, Inc.	SHEET 1 of 2
3. PROJECT FUS RAP / SLDS		4. LOCATION PSC Metals North tract <del>City of Venice, IL</del> V.P.S.	
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 2 1/4" HSA and 3" x 2" split spoon		8. HOLE LOCATION N/A	
9. SURFACE ELEVATION N/A		10. DATE STARTED 10-8-02	
11. DATE COMPLETED 10-8-02		12. OVERBURDEN THICKNESS N/A	
13. DEPTH DRILLED INTO ROCK N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A	
14. TOTAL DEPTH OF HOLE 10.0' BGS		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY	
22. DEPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR	

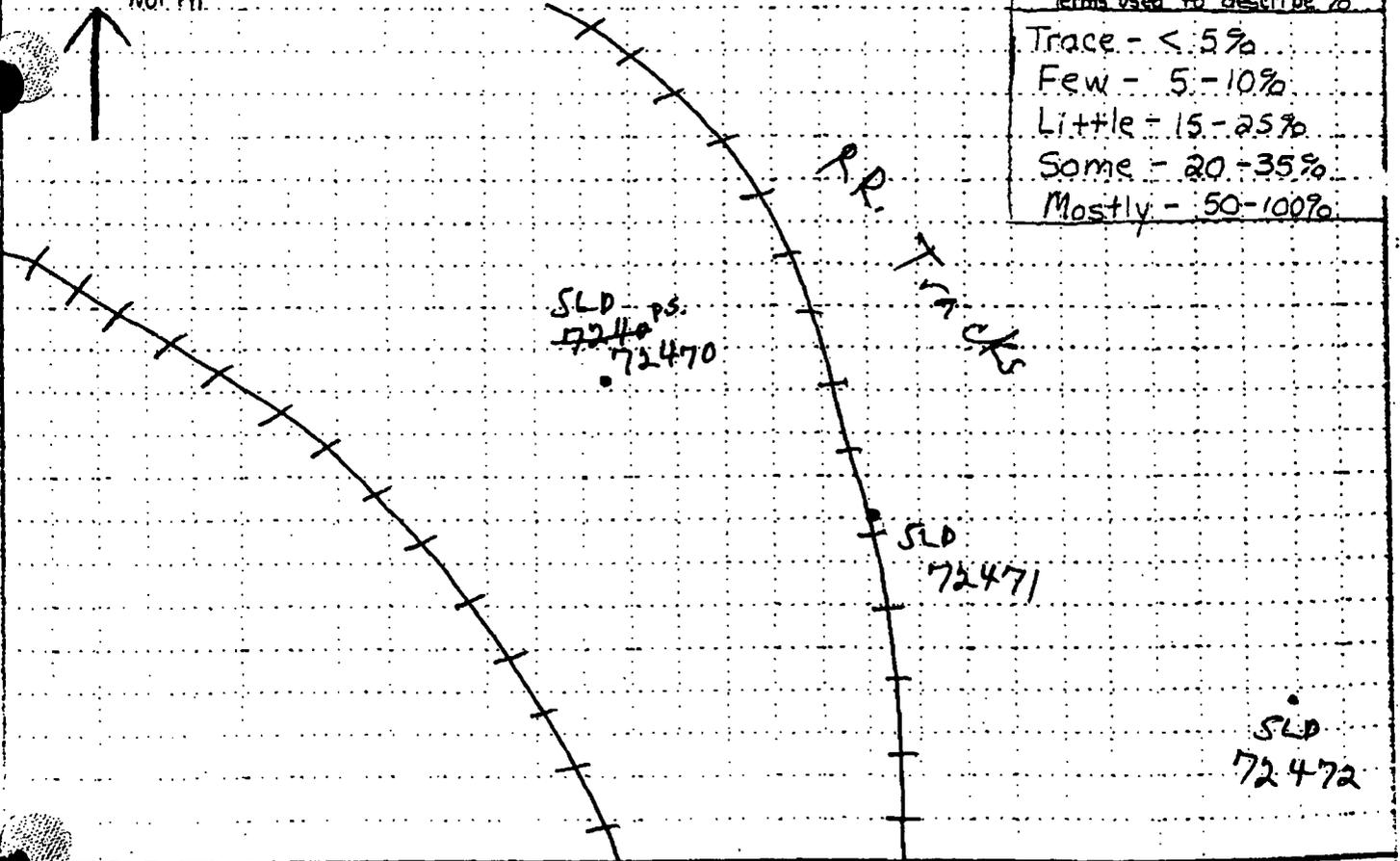


PROJECT FUS RAP / SLDS	HOLE NO. SLD 72469
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HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: FUSRAP/SLDS		INSPECTOR: Phillip Statler		HOLE NO.: 72469	
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	DEPTH (ft)	RECOVERY (%)	ANALYTICAL LABORATORY NO.	MEASUREMENT	REMARKS	
SM 1.0	6900 0.0	6900 0.0	1.7/	JLB 72469 10-2-02 1490	18		
	7500 0.0	7500 0.0	2.0		22		
	7000 0.0	7000 0.0		JLD 72493 1495	17		
	7200 0.0	7200 0.0	Recovery		12		
CL 2.0	7100 0.0	7100 0.0	2.0/	ML702 5100 72469 1495	11	archive sample from 2.3-2.8 BGS	
	7400 0.0	7400 0.0	2.0	archive 1505	9		
	6800 0.0	6800 0.0			9	SLD 72834 (10-12-02)	
	7700 0.0	7700 0.0			11		
SM 3.0	7800 0.0	7800 0.0	1.8/		5	SLD 72835 (10-12-02)	
	6800 0.0	6800 0.0	2.0		5	archive sample from 4.8-5.3 BGS	
	6800 0.0	6800 0.0		SLD 72839 archive 1510	6		
	7000 0.0	7000 0.0	no recovery	SLD 72839 archive 1510	8	gravel dk. form. highly polished	
	7300 0.0	7300 0.0	1.9/	SLD 72839 archive 1510	3	archive sample from 5.3-5.8 BGS	
	7200 0.0	7200 0.0	2.0	SLD 72839-2 6.9-7.5 BGS, 1490	3	In-situ and count	
	6800 0.0	6800 0.0			6	TD: 10.0 BGS	
	7100 0.0	7100 0.0			6	1630 10-8-02	
SM 4.0	6500 0.0	6500 0.0	2.0/		6	Backfilled boring w/ 5.0 bags bentonite chips. capped w/ soil.	
	6800 0.0	6800 0.0	2.0		3		
	6400 0.0	6400 0.0	2.0		4		
	6700 0.0	6700 0.0		SLD 72469 archive 1695	4	archive sample from 9.5-10.0 BGS	

1. PROJECT NAME <b>STRW DRILLING LOG</b>		2. CITY <b>St. Louis</b>		3. WELL NUMBER <b>SLD 72470</b>	
4. COMPANY NAME <b>Shaw E &amp; I</b>		5. DRILLING CONTRACTOR <b>MES, Inc.</b>		6. SHEET <b>1 of 2</b>	
7. PROJECT <b>FUSRAP / SLDS</b>		8. LOCATION <b>PSC Metals North Tract V.P.</b>		9. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120</b>	
10. NAME OF DRILLER <b>Chris Anthony</b>		11. HOLE LOCATION <b>See location sketch</b>		12. SURFACE ELEVATION <b>N/A</b>	
13. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 3/4" HSA and 3" x 2" split spoon</b>		14. DATE STARTED <b>11-6-02</b>		15. DATE COMPLETED <b>11-6-02</b>	
16. OVERCURE THICKNESS <b>N/A</b>		17. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		18. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>	
19. DEPTH DRILLED INTO ROCK <b>N/A</b>		20. TOTAL DEPTH OF HOLE <b>6.0 FT BGS</b>		21. DEPTH GROUNDWATER ENCOUNTERED	
22. DISTURBED		23. UNDISTURBED		24. TOTAL NUMBER OF CORE BOXES	
25. SAMPLES FOR CHEMICAL ANALYSIS		26. METALS		27. OTHER (SPECIFY)	
28. DEPOSITION OF HOLE		29. MONITORING WELL		30. OTHER (SPECIFY)	
31. YES		32. N/A		33. N/A	

LOCATION SKETCH/COMMENTS Witnessed By: **Robin Parks** SCALE: Not to Scale



FUSRAP / SLDS		SLD 72470
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HTRW DRILLING LOG		CONTINUATION SHEET		HOLE NUMBER	
PROJECT		INSPECTOR		SLO 72470	
EUSRAP/SLOS		Phillip Statler		SHEET 2 OF 2	
DEPTH (feet)	DESCRIPTION OF MATERIALS	LOG CORRECTION (ft)	RECOVERY (%)	BLOW COUNT	REMARKS
0.0 - 1.0	Silty clay w/ few med. to coarse gravel, stiff to very stiff, med. plastic, dk. brn, dry, few cinders and few slag	5700 0.0	2.0	13	
		5800 0.0	2.0	28	
		6400 0.0		20	
1.0 - 2.0	absence of cinders, slag and gravel.	5500 0.0		12	
	clay turning lt. brn.	5800 0.0		7	
		5400 0.0	1.5	10	
		6200 0.0	2.0	11	archive sample from 3.0-3.5 BGS
2.0 - 3.0		N/A N/A	no recovery	14	
3.0 - 4.0	clay turning lt. gry.	6200 0.0		3	
	trace weathered wood frags	6000 0.0	2.0	4	archive sample from 4.5-5.0' BGS
		5800 0.0	2.0	4	
	trace weathered wood frags	5600 0.0		5	
4.0 - 6.0					
6.0 - 7.0					
7.0 - 8.0					
8.0 - 9.0					
9.0 - 10.0					
TD: 6.0' BGS 11-6-02 1030					Background: NAT: 5500 PID: 0.0 Back-filled boring w/ 3.0 bags of bentonite chips. Capped w/ Soil.

# STRW DRILLING LOG

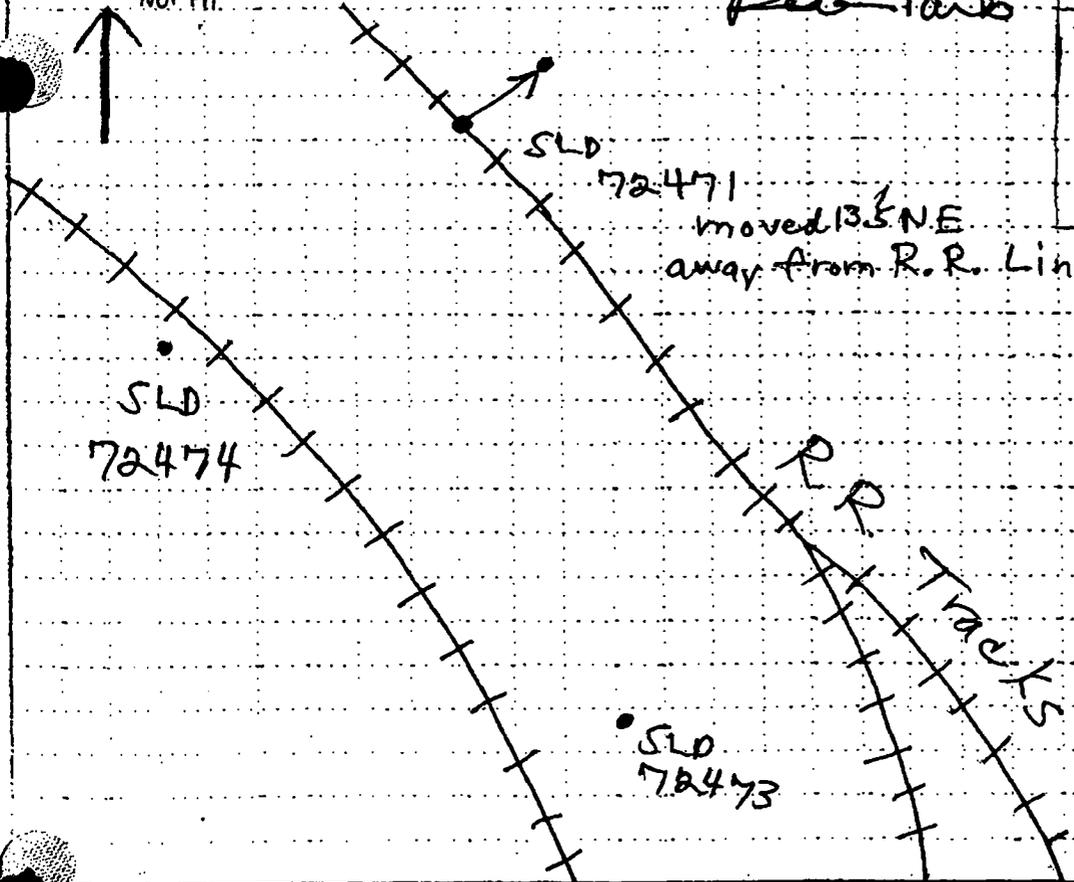
STATION St. Louis  
 HOLE NUMBER SLD 72471  
 SHEETS 1 of 2

1. COMPANY NAME Shaw F & I		2. DRILLING CONTRACTOR M.E.S., Inc.	
3. PROJECT FUSRAP / SLDS		4. LOCATION PSC Metals North Tract V.P.	
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3 1/8" HSA and 3" x 3" split spoon		8. HOLE LOCATION See location sketch	
8. SURFACE ELEVATION N/A		9. DATE STARTED 11-6-02	
10. DATE COMPLETED 11-6-02		11. DATE COMPLETED 11-6-02	
12. CORE LENGTH THICKNESS N/A		13. DEPTH GROUNDWATER ENCOUNTERED N/A	
14. DEPTH DRILLED INTO ROCK N/A		15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
16. TOTAL DEPTH OF HOLE 6.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A	
18. GEOTECHNICAL SAMPLES	19. TOTAL NUMBER OF CORE BOXES	20. SAMPLES FOR CHEMICAL ANALYSIS	
Disturbed: 0	0	Metal: 0, Other: RAD	
21. DEPOSITION OF SOILS	22. SIGNATURE OF INSPECTOR	23. SIGNATURE OF OPERATOR	
Sampled: Yes	Monitoring Well: N/A	Other: N/A	

LOCATION SKETCH/COMMENTS

Witnessed By: Robin Parks  
*Robin Parks*

SCALE: Not to Scale  
 Terms used to describe %  
 Trace - < 5%  
 Few - 5-10%  
 Little - 15-25%  
 Some - 20-35%  
 Mostly - 50-100%

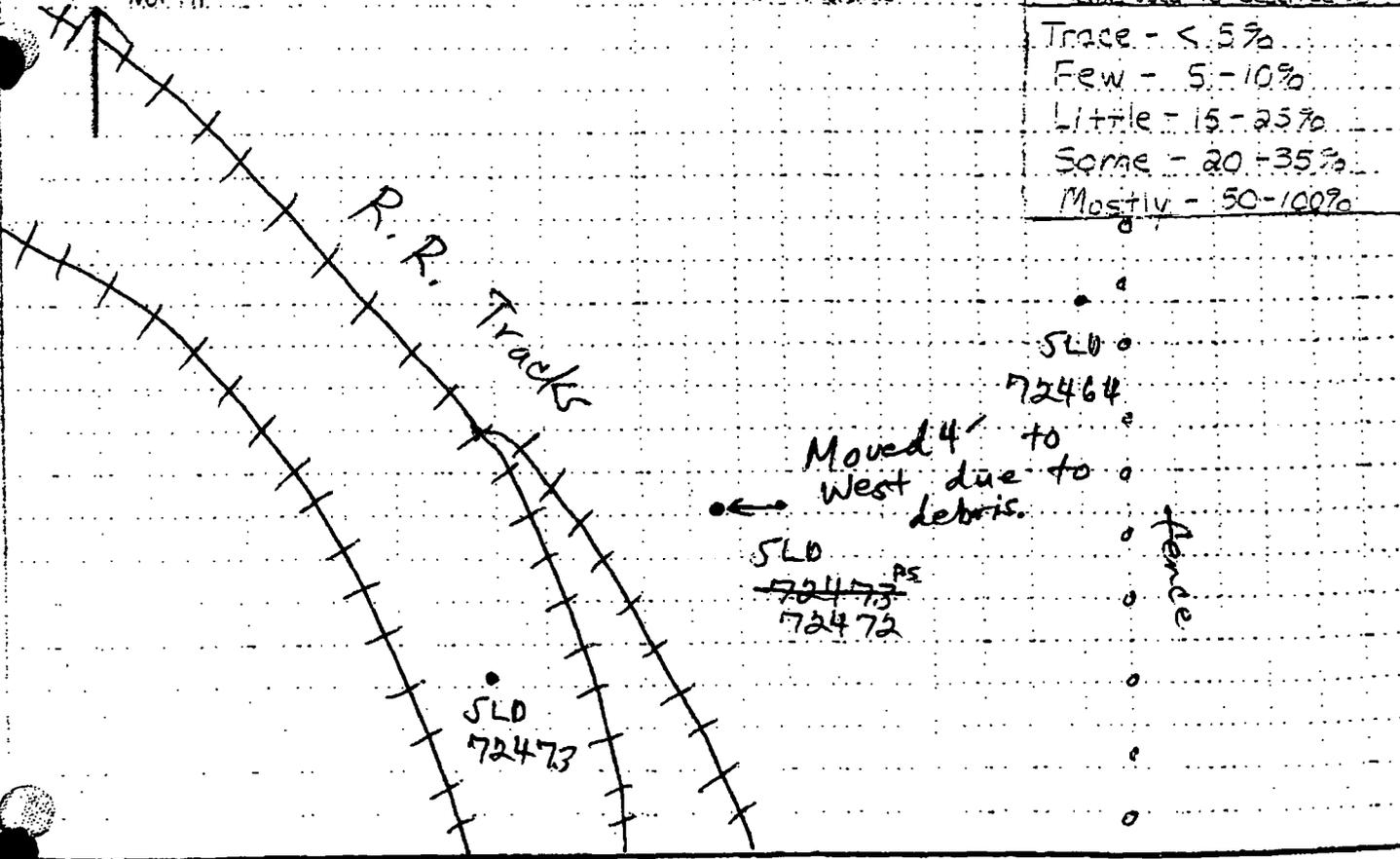


HTRW DRILLING LOG		CONTINUATION SHEET		HOLE NUMBER	
PROJECT		INSPECTOR		SHEET	
FUSRAP/SLOS		Phillip Statler		2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	LOG CORRECTION (ft)	RECOVERY (%)	LOG CORRECTION (ft)	REMARKS
1.0	silty clay w/ some med to coarse gravel, med stiff to stiff med. plastic, dk. brn, dry, few cinders, few slag, few brick frags.	5,400 / 0.0	RECOVERY	14	
		5,700 / 0.0	2.0 /	10	
		6,100 / 0.0	2.0	8	
2.0	fine sand, well sorted, trace broken glass, trace coal.	6,000 / 0.0		10	
		5,300 / 0.0		9	
		5,700 / 0.0	1.8 /	4	
3.0	cinders and slag increasing, few broken glass.	5,700 / 0.0	2.0	4	(SLO 72515)
		6,000 / 0.0		5	
4.0	few pieces of rust.	6,700 / 0.0	no recovery	3	
		5,700 / 0.0	1.5 /	3	
5.0	few weathered wood frags.	5,800 / 0.0	4.0 P.S. / 2.0	4	
		N/A / N/A	no recovery	4	
6.0					
7.0					
8.0					
9.0					
10.0					

# WATER DRILLING LOG

1. COMPANY NAME <b>Shaw F &amp; I</b>		2. DRILLING CONTRACTOR <b>MES, Inc.</b>		3. WELLS NUMBER <b>SLD 72472</b>	
4. PROJECT <b>FUSRAP / SLOS</b>		5. LOCATION <b>PSC Metals North Tract V.P.</b>		6. SHEET <b>1 of 2</b>	
7. NAME OF DRILLER <b>Chris Anthony</b>		8. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120</b>		9. DATE <b>10-31-02</b>	
10. TYPES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 1/4" HSA and 3" x 2' split spoon</b>		11. HOLE LOCATION <b>see location sketch</b>		12. DATE STARTED <b>10-31-02</b>	
13. DRILLER'S THICKNESS <b>N/A</b>		14. SURFACE ELEVATION <b>N/A</b>		15. DATE COMPLETED <b>10-31-02</b>	
16. DEPTH DRILLED INTO SOIL <b>N/A</b>		17. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		18. DEPTH TO GROUNDWATER ENCOUNTERED <b>N/A</b>	
19. TOTAL DEPTH OF HOLE <b>6.0 FT BGS</b>		20. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>		21. TOTAL NUMBER OF CORE SOLES <b>0</b>	
22. DETECTION SAMPLE		23. UNDISTURBED		24. TOTAL NUMBER OF CORE SOLES	
25. SAMPLE FOR CHEMICAL ANALYSIS		26. METAL		27. OTHER SPECIFY	
28. DEPOSITION OF SOIL		29. MONITORING WELL		30. OTHER SPECIFY	

LOCATION SKETCH, COMMENTS: Witnessed by: **Robin Parks PS** SCALE: Not to scale  
**North** Susan Adams



Terms used to describe %

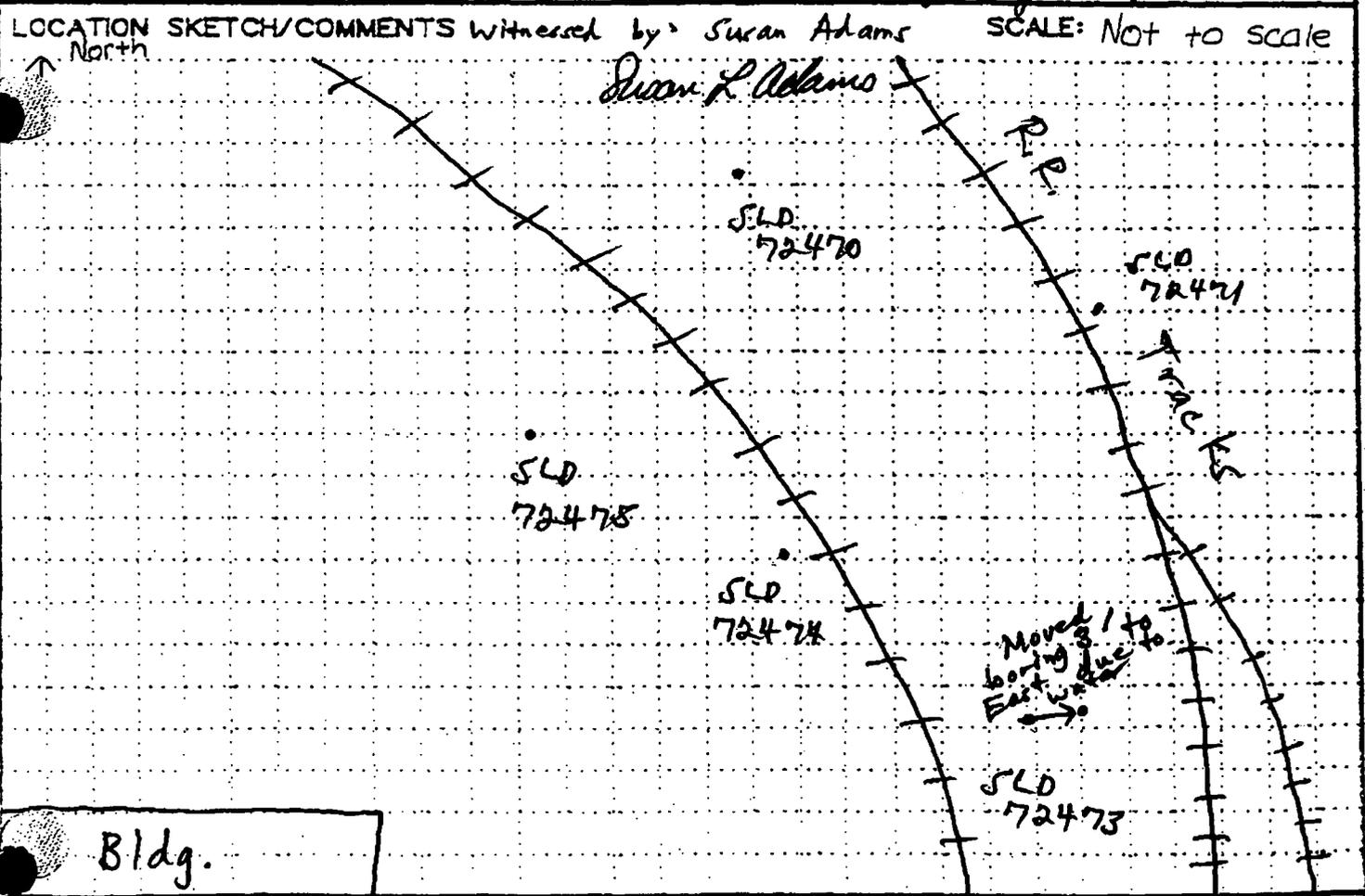
- Trace - < 5%
- Few - 5-10%
- Little - 15-25%
- Some - 20-35%
- Mostly - 50-100%

-TRW DRILLING LOG		CONTINUATION SHEET		WELL NUMBER		SHEET	
EUSRAP/SLOS		Drillbit		Phillip Statler		72472	
DEPTH (feet)	DESCRIPTION OF MATERIAL	RECOVERY	RECOVERY	BLW COUNT	REMARKS	DEPTH (feet)	REMARKS
11.0	silty clay, med. stiff to stiff, med. plastic; dk brn. dry, trace med. gravel, trace brick frags, 1 piece limestone cobble	4300 0.0	RECOVERY	SLD 72472 19-3504 1015	9		
		4500 0.0	2.0		12		
		4800 0.0	2.0	SLD 72446 1020	13		
	few cinders and slag	4500 0.0			13		
	few same cinders, some slag, trace bricks, some fine sand	4500 0.0	2.0		17		
		5100 0.0	2.0		6		
	few broken glass frags.	5200 0.0	2.0	SLD 72472 archive 1036	4	archive sample from 3.0-3.5' BGS	
	piece of porcelain	4700 0.0			6		
	few cinders, few slag, trace weathered wood.	4500 0.0			5		
		4500 0.0	1.4/2.0	SLD 72472 archive 1040	4	archive sample from 4.5-5.0' BGS	
		4500 0.0			3		
		N/A 0.0	no recovery		5		
		N/A 0.0					
TD: 6.0' BGS 10-31-02 1036							Background: NaI: 4,200 PID: 0.0 Back-filled boring w/ 3.0 bags of bentonite chips capped w/ soil.

EUSRAP/SLOS

SLD 72472

<b>UTRW DRILLING LOG</b>		DISTRICT St. Louis	HOLE NUMBER SLD 72473
COMPANY NAME Shaw E + I		2. DRILLING SUBCONTRACTOR MES, Inc.	SHEET 1 of 2
3. PROJECT FUS RAP / SLDs		4. LOCATION FSC Metals North Tract V.P. City of Venice, IL VP P.S.	
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using W/45A and 3" x 2' split spoon		8. HOLE LOCATION N/A	
		9. SURFACE ELEVATION N/A	
PID 16-20-02 NAI LUD 172040 to 109100 Cal Date 4-7-03 BgK = 5,400		10. DATE STARTED 10-30-02	11. DATE COMPLETED 10-30-02
12. OVERBURDEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A	
13. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
14. TOTAL DEPTH OF HOLE 6.0 BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A	
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. SAMPLES FOR CHEMICAL ANALYSIS	TOC	METALS	OTHER (SPECIFY)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RAD
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)
<input type="checkbox"/>	Yes	<input type="checkbox"/>	<input type="checkbox"/>
			23. SIGNATURE OF INSPECTOR Shelly McH...



PROJECT FUS RAP / SLDs	HOLE NO. SLD 72473
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HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER	
PROJECT		INSPECTOR		SHEET		OF SHEETS	
DEPTH (FEET)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	RECOVERY (%)	WATER LOSS (%)	WATER CORRECTED (%)	REMARKS	
1.0	silty clay w/ few med. to coarse gravel, stiff to very stiff, med. plastic, dk. brn., dry, trace cinders and trace slag, trace brick frag.	5500 / 0.0	1.9 / 2.0	SLD 72473 10-30-02 1450	10		
		5500 / 0.0			12		
		5500 / 0.0		SLD 72497 1440	15		
2.0		few pieces of coal, few fine sand.	4900 / 0.0	no recovery		22	
		CL few well rounded sand and well rounded gravel (med)	5600 / 0.0	2.0 / 2.0		5	
3.0	3300 / 0.0				17		
	5400 / 0.0				6		
4.0	piece of glass, clay becoming th. brn., cinders, slag, and brick absent.	5500 / 0.0		SLD 72473 10-30-02 1450	6	archive sample from 3.5 - 4.0' BGS	
	SM silty fine sand, loose, poorly graded, lt. gry, dry.	5900 / 0.0	2.0 / 2.0		4		
5.0		4400 / 0.0			5		
		5500 / 0.0			5		
6.0		5800 / 0.0		SLD 72473 10-30-02 1450	4	archive sample from 5.5 - 6.0' BGS	
7.0	TD: 6.0' BGS 10-30-02 1450					Backgrounds NAT: 5400 PID: 0.0	
8.0						Backfilled boring w/ 3.0 bags of bestonite chips. Capped boring w/ soil.	
9.0							
10.0							

# TRW DRILLING LOG

DISTRICT  
St. Louis

HOLE NUMBER  
SLD 72474

SHEETS  
1 of 2

COMPANY NAME  
Shaw E + I

2. DRILLING SUBCONTRACTOR  
MES, Inc.

3. PROJECT  
FUS RAP / SLDs

4. LOCATION  
PSC Metals North Tract V.P.  
City of Venice, IL VA PS

5. NAME OF DRILLER  
Chris Anthony

6. MANUFACTURER'S DESIGNATION OF DRILL  
Diedrich D-120

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT  
Diedrich D-120  
using F/485A and  
3" x 2' split spoon

8. HOLE LOCATION  
N/A

9. SURFACE ELEVATION  
N/A

PID 10-30-02 NAT LUD 172040  
to 100/100 Cal Date 4-7-03 Bgk = 5,400

10. DATE STARTED  
10-30-02

11. DATE COMPLETED  
10-30-02

12. OVERSIZED THICKNESS  
N/A

15. DEPTH GROUNDWATER ENCOUNTERED  
N/A

13. DEPTH DRILLED INTO ROCK  
N/A

16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED  
N/A

14. TOTAL DEPTH OF HOLE  
6.0 BGS

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)  
N/A

18. GEOTECHNICAL SAMPLES

DISTURBED

UNDISTURBED

19. TOTAL NUMBER OF CORE BOXES  
0

20. SAMPLES FOR CHEMICAL ANALYSIS

TOC

METALS

OTHER (SPECIFY)  
RAD

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY  
0%

22. DISPOSITION OF HOLE

SACK FILLED

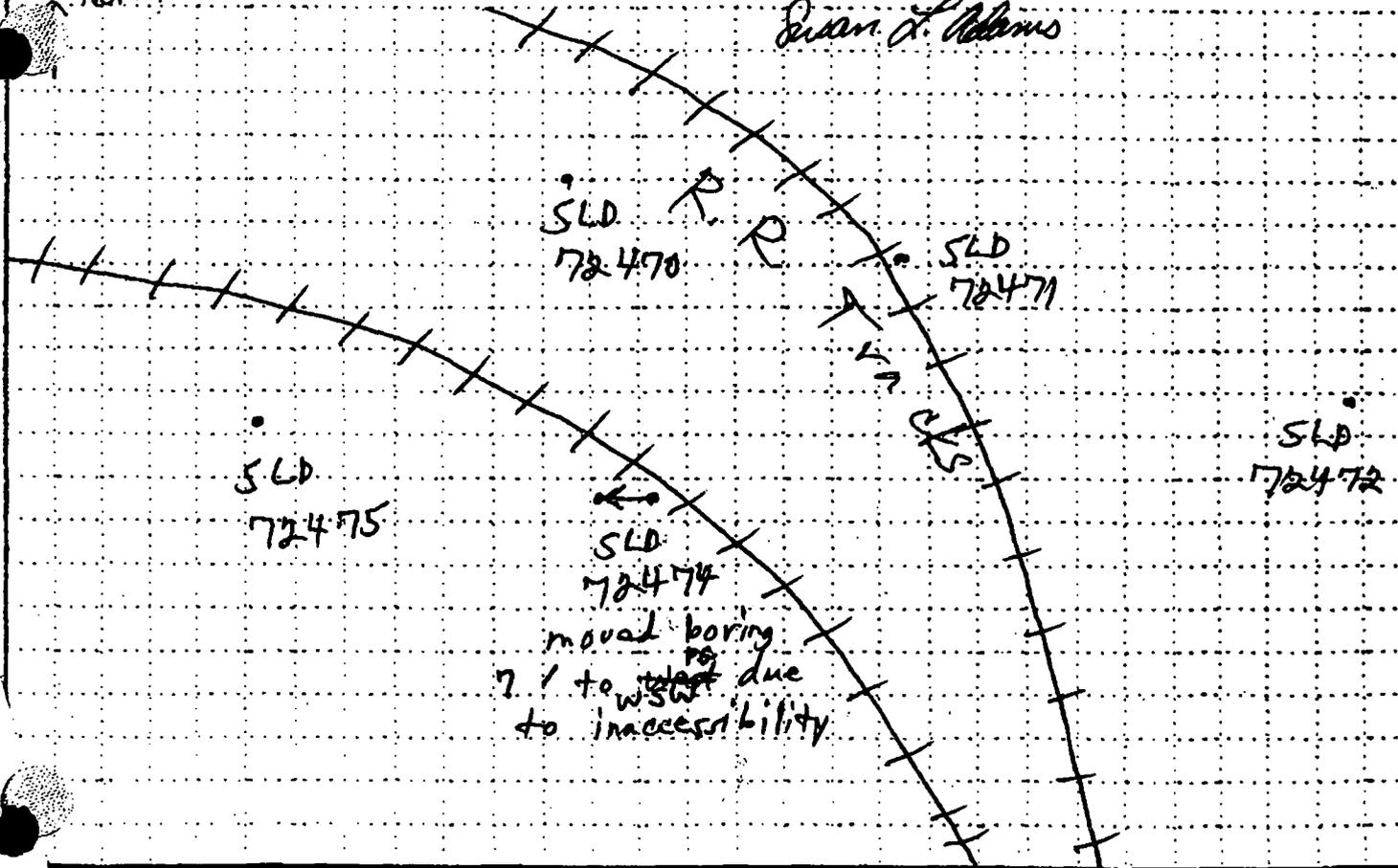
MONITORING WELL

OTHER (SPECIFY)

23. SIGNATURE OF INSPECTOR  
William M. Stahl

LOCATION SKETCH/COMMENTS Witnessed by: Susan Adams SCALE: Not to scale

Susan L. Adams



FUS RAP / SLDs

HOLE NO.  
SLD 72474

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72474	
PROJECT FUSRAP/SLDS		INSPECTOR Philip Stator				SHEET 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WELL DEPTH (ft)	RECOVERY (%)	WATER TABLE (ft)	BLOW COUNT (blows)	REMARKS	
1.0	silty clay w/ few med to coarse gravel, stiff, med. plat, dk brn., dry, few cinders and slag, trace bricks.	5400 0.0	1.3	SLD 72474 1580	8		
	brick stuck in tip	5900 0.0	2.0	SLD 72474 1648	8		
		6000 0.0			11		
2.0		N/A	no recovery		8		
	brick frags.	5400 0.0	1.8		5		
		5100 0.0	2.0		2		
3.0	brick frags.	5200 0.0		SLD 72474 1650	3		
	weathered wood frag.	5000 0.0			3		
4.0		5400 0.0			2		
	Clay becoming th. gray, cinders, clags and bricks absent.	5200 0.0	2.0		3		
5.0	weathered wood frag.	5700 0.0	2.0		2		
		5000 0.0		SLD 72474 1655	4		
6.0	weathered wood frag.						
7.0	TD = 6.0' BGS 10-30-02 1645						Background: NaF: 5400 Pb: 0.0 Back-filled boring w/ 3.0 bags of bentonite chips. Capped w/soil.
8.0							
9.0							
10.0							

PROJECT FUSRAP/SLDS

WELL NO. SLD 72474

# TRW DRILLING LOG

ST-2C

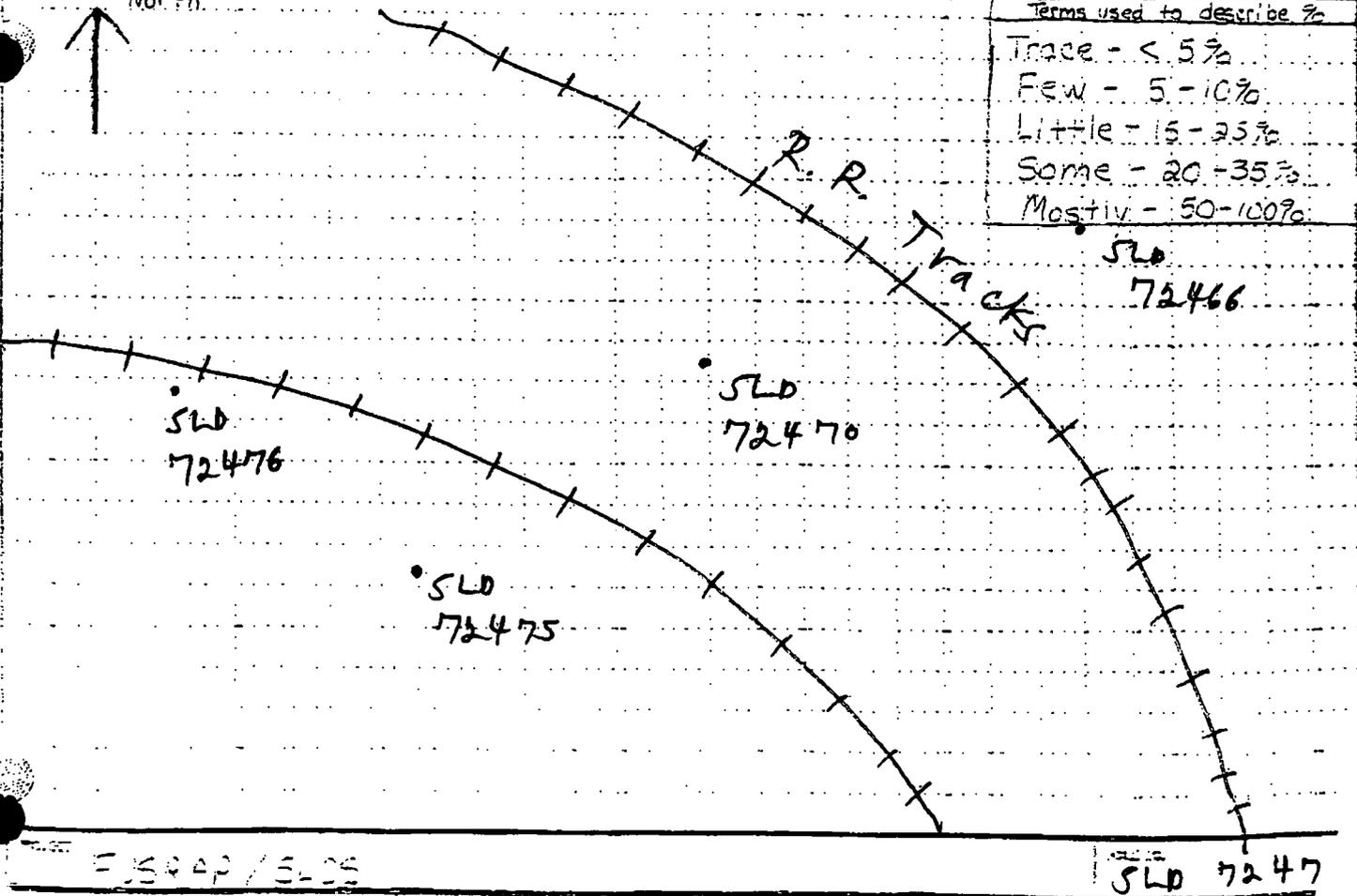
St. Louis

WELL NUMBER  
SLD 72475

1. COMPANY NAME Shaw F & I		2. DRILLING CONTRACTOR MES, Inc.		3. SHEETS 1 of 2	
4. PROJECT FUSRAP/SLOS			5. LOCATION PSC Metals North Tract V.P.		
6. NAME OF DRILLER Chris Anthony			7. MANUFACTURER, MODEL OF DRILL Diedrich D-120		
8. TOOLS AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/8 HSA and 3" x 2" split spoon			9. HOLE LOCATION see location sketch		
10. DATE STARTED PED 10-31-02 NAE to 100/100 Cal Date 9-1-03		11. DATE COMPLETED LWD 1/20/04 BKG = 4200		12. DATE COMPLETED 10-31-02	
13. OVERBURDEN THICKNESS N/A			14. DEPTH GROUNDWATER MONITORED N/A		
15. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
17. TOTAL DEPTH OF HOLE 6.0 FT BGS			18. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
19. TEST TECHNICAL SAMPLES Disturbed <input checked="" type="checkbox"/> Undisturbed <input type="checkbox"/>		20. TOTAL NUMBER OF CORE BOXES <input checked="" type="checkbox"/>		21. TOTAL CORE RECOVERY <input checked="" type="checkbox"/>	
22. SAMPLES FOR CHEMICAL ANALYSIS DC <input checked="" type="checkbox"/> METAL <input checked="" type="checkbox"/> OTHER SPECIFY RAD <input checked="" type="checkbox"/>		23. DEPOSITION OF HOLE Cased <input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> N/A		24. SIGNATURE OF SUPERVISOR Phillip M. Hatten	

LOCATION SKETCH/COMMENTS  
North

Witnessed By: Susan Adams SCALE: Not to Scale



-TRW DRILLING LOG		CONTINUATION SHEET		SHEET 2 OF 2	
PROJECT EUS RAP/SIDS		LOCATION Phi Mir Station		SHEET 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	NEATNESS (ft)	RECOVERY	BLOW COUNT	REMARKS
0.0 - 1.0	Silty fine sand w/ some med to coarse gravel, med. dense, poorly graded dk. brn., dry, trace brick frags, trace cinders and slag, trace metal	4400 0.0	2.0	26	hit metal and concrete debris at 1.0' BGS.
1.0 - 2.0	Silty clay, ST 14 to very silty, med. platy, H. brn., dry, trace cinders, slag, metal	4500 0.0	2.0	83	
2.0 - 3.0	trace limestone cobbles, few fine sand	4700 0.0	2.0	12	
3.0 - 4.0		4700 0.0	2.0	14	archive sample from 3.5 - 4.0' BGS
4.0 - 5.0	few cinders and slag	5300 0.0	2.0	12	
5.0 - 6.0		4700 0.0	2.0	21	archive sample from 5.5 - 6.0' BGS
6.0 - 7.0		4800 0.0	2.0	27	
7.0 - 8.0		5300 0.0		19	archive sample from 5.5 - 6.0' BGS
8.0 - 9.0		4900 0.6		8	
9.0 - 10.0		4800 0.0	2.0	10	archive sample from 5.5 - 6.0' BGS
10.0 - 11.0		4500 0.0	2.0	9	
11.0 - 12.0		4700 0.0		20	archive sample from 5.5 - 6.0' BGS
12.0 - 13.0					
13.0 - 14.0					archive sample from 5.5 - 6.0' BGS
14.0 - 15.0					
15.0 - 16.0					archive sample from 5.5 - 6.0' BGS
16.0 - 17.0					
17.0 - 18.0					archive sample from 5.5 - 6.0' BGS
18.0 - 19.0					
19.0 - 20.0					archive sample from 5.5 - 6.0' BGS
20.0 - 21.0					
21.0 - 22.0					archive sample from 5.5 - 6.0' BGS
22.0 - 23.0					
23.0 - 24.0					archive sample from 5.5 - 6.0' BGS
24.0 - 25.0					
25.0 - 26.0					archive sample from 5.5 - 6.0' BGS
26.0 - 27.0					
27.0 - 28.0					archive sample from 5.5 - 6.0' BGS
28.0 - 29.0					
29.0 - 30.0					archive sample from 5.5 - 6.0' BGS
30.0 - 31.0					
31.0 - 32.0					archive sample from 5.5 - 6.0' BGS
32.0 - 33.0					
33.0 - 34.0					archive sample from 5.5 - 6.0' BGS
34.0 - 35.0					
35.0 - 36.0					archive sample from 5.5 - 6.0' BGS
36.0 - 37.0					
37.0 - 38.0					archive sample from 5.5 - 6.0' BGS
38.0 - 39.0					
39.0 - 40.0					archive sample from 5.5 - 6.0' BGS
40.0 - 41.0					
41.0 - 42.0					archive sample from 5.5 - 6.0' BGS
42.0 - 43.0					
43.0 - 44.0					archive sample from 5.5 - 6.0' BGS
44.0 - 45.0					
45.0 - 46.0					archive sample from 5.5 - 6.0' BGS
46.0 - 47.0					
47.0 - 48.0					archive sample from 5.5 - 6.0' BGS
48.0 - 49.0					
49.0 - 50.0					archive sample from 5.5 - 6.0' BGS
50.0 - 51.0					
51.0 - 52.0					archive sample from 5.5 - 6.0' BGS
52.0 - 53.0					
53.0 - 54.0					archive sample from 5.5 - 6.0' BGS
54.0 - 55.0					
55.0 - 56.0					archive sample from 5.5 - 6.0' BGS
56.0 - 57.0					
57.0 - 58.0					archive sample from 5.5 - 6.0' BGS
58.0 - 59.0					
59.0 - 60.0					archive sample from 5.5 - 6.0' BGS
60.0 - 61.0					
61.0 - 62.0					archive sample from 5.5 - 6.0' BGS
62.0 - 63.0					
63.0 - 64.0					archive sample from 5.5 - 6.0' BGS
64.0 - 65.0					
65.0 - 66.0					archive sample from 5.5 - 6.0' BGS
66.0 - 67.0					
67.0 - 68.0					archive sample from 5.5 - 6.0' BGS
68.0 - 69.0					
69.0 - 70.0					archive sample from 5.5 - 6.0' BGS
70.0 - 71.0					
71.0 - 72.0					archive sample from 5.5 - 6.0' BGS
72.0 - 73.0					
73.0 - 74.0					archive sample from 5.5 - 6.0' BGS
74.0 - 75.0					
75.0 - 76.0					archive sample from 5.5 - 6.0' BGS
76.0 - 77.0					
77.0 - 78.0					archive sample from 5.5 - 6.0' BGS
78.0 - 79.0					
79.0 - 80.0					archive sample from 5.5 - 6.0' BGS
80.0 - 81.0					
81.0 - 82.0					archive sample from 5.5 - 6.0' BGS
82.0 - 83.0					
83.0 - 84.0					archive sample from 5.5 - 6.0' BGS
84.0 - 85.0					
85.0 - 86.0					archive sample from 5.5 - 6.0' BGS
86.0 - 87.0					
87.0 - 88.0					archive sample from 5.5 - 6.0' BGS
88.0 - 89.0					
89.0 - 90.0					archive sample from 5.5 - 6.0' BGS
90.0 - 91.0					
91.0 - 92.0					archive sample from 5.5 - 6.0' BGS
92.0 - 93.0					
93.0 - 94.0					archive sample from 5.5 - 6.0' BGS
94.0 - 95.0					
95.0 - 96.0					archive sample from 5.5 - 6.0' BGS
96.0 - 97.0					
97.0 - 98.0					archive sample from 5.5 - 6.0' BGS
98.0 - 99.0					
99.0 - 100.0					archive sample from 5.5 - 6.0' BGS
100.0 - 101.0					

TD: 6.0' BGS  
10-31-02  
1430

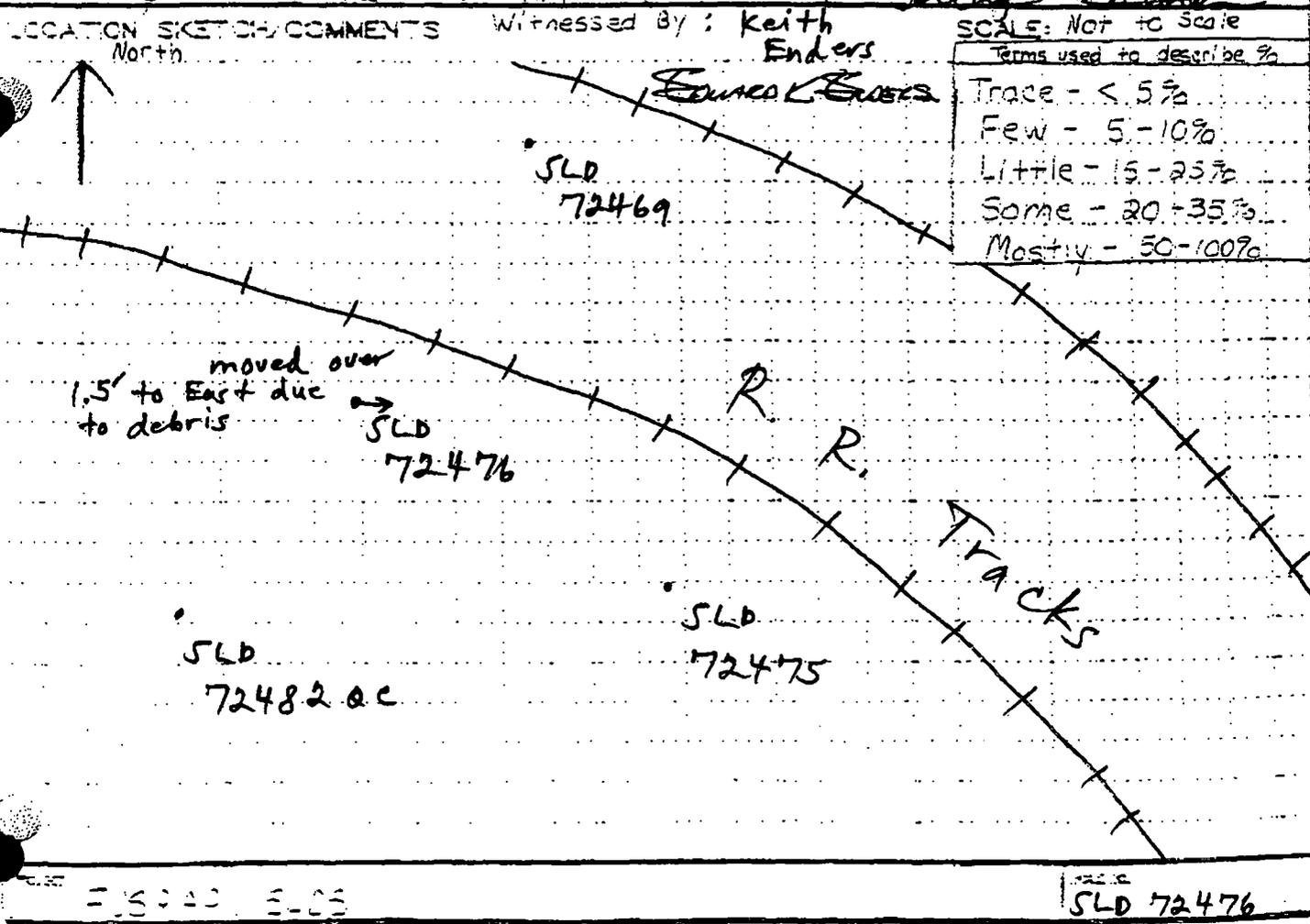
Background:  
NAT = 4200  
PTD = 0.0  
Backfilled  
boring w/  
3.0 bags of  
bentonite  
chips. Capped  
w/ soil.

# TRW DRILLING LOG

STATION **St. Louis**

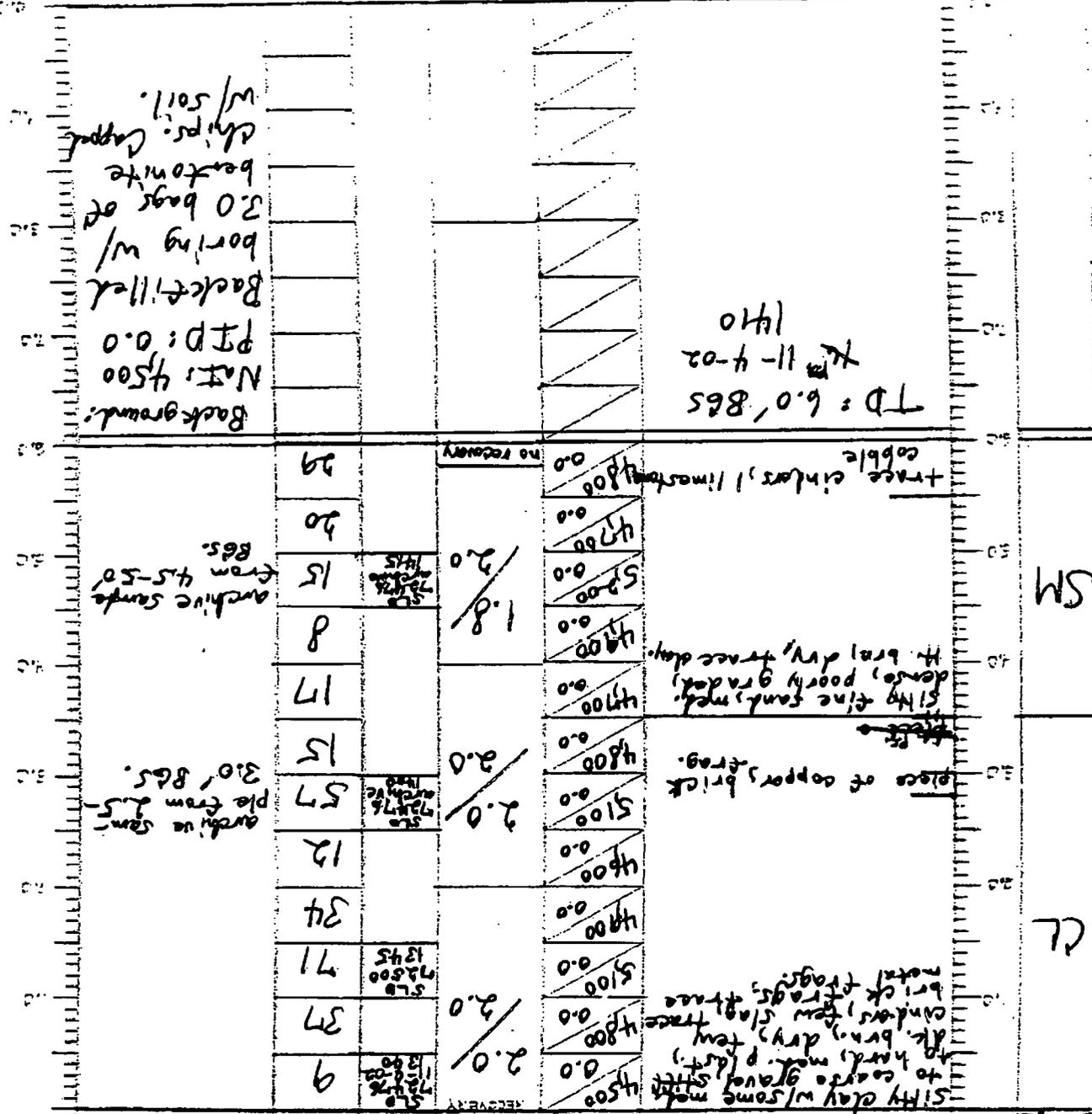
WELL NUMBER **SLD 72476**

1. COMPANY NAME <b>Shaw F &amp; I</b>		2. DRILLING CONTRACTOR <b>M.E.S., Inc.</b>		3. SHEET NUMBER <b>1 = 2</b>	
4. PROJECT <b>FUSRAP / SLDs</b>		5. LOCATION <b>PSC Metals North Tract v.p.</b>			
6. NAME OF DRILLER <b>Chris Anthony</b>		7. MANUFACTURER DESIGNATION OF DRILL <b>Diedrich D-120</b>			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 1 1/4 HSA and 3" x 2" split spoon</b>		9. HOLE LOCATION <b>See location sketch</b>			
10. DATE STARTED <b>11-4-02</b>		11. DATE COMPLETED <b>11-4-02</b>			
12. WELL SCREEN THICKNESS <b>N/A</b>		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETES <b>N/A</b>			
14. TOTAL DEPTH OF HOLE <b>6.0 FT BGS</b>		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>			
16. TEST TECHNIQUE SAMPLES	UNDISTURBED	DISTURBED	19. TOTAL NUMBER OF CORE BOXES		
0	0	0	0		
17. SAMPLES FOR CHEMICAL ANALYSIS	NO	METAL	OTHER SPECIFY	OTHER SPECIFY	OTHER SPECIFY
0	0	0	RAD	0	0
18. DEPOSITION OF HOLE	SAMPLED	MONITORING WEL	OTHER SPECIFY	20. SIGNATURE OF INSPECTOR	
0	Yes	N/A	N/A	<i>Keith M. Enders</i>	



15000 1-02

SLD 72476



SLD 72476  
 PHILLIP STASLER  
 SLS 200/SLS

# TRW DRILLING LOG

St. Louis

SLD 72477

1. COMPANY NAME: Shaw F + I  
 2. DRILLING CONTRACTOR: M.E.S., Inc.

3. PROJECT: FUSRAP/SLOS  
 4. LOCATION: PSC Metals North Tract V.P.

5. NAME OF WELL: Chris Anthony  
 6. MANUFACTURER'S DESIGNATION OF DRILL: Diedrich D-120

7. TYPES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using 3/4 HSA and 3" x 3" split spoon  
 8. HOLE LOCATION: see location sketch

9. SURFACE ELEVATION: N/A

10. DATE STARTED: 12-9-02  
 11. DATE COMPLETED: 12-9-02

12. OVERBURDEN THICKNESS: N/A  
 13. DEPTH DRILLED INTO ROCK: N/A

14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A  
 15. DEPTH GROUNDWATER ENCOUNTERED: N/A

16. TOTAL DEPTH OF HOLE: 6.0 FT BGS  
 17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

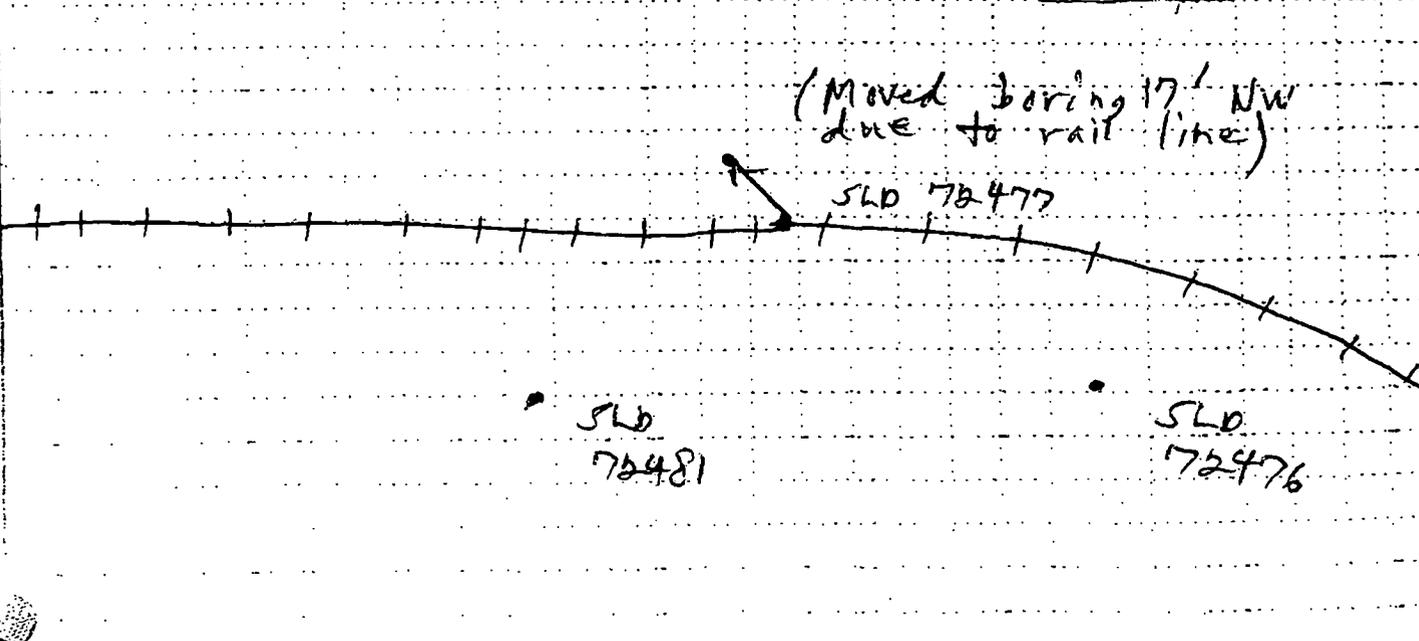
18. GEOTECHNICAL SAMPLES: 0  
 19. TOTAL NUMBER OF CORE BOXES: 0

20. SAMPLES FOR CHEMICAL ANALYSIS: TO: 0, METAL: 0, OTHER SPECIFY: RAD, OTHER SPECIFY: 0, OTHER SPECIFY: 0  
 21. TOTAL CORE RECOVERED: 0

22. DEPTH OF HOLE: 0  
 23. MONITORING WELLS: N/A, OTHER SPECIFY: NA  
 24. SIGNATURE OF INSPECTOR: Kelly M. Hester

LOCATION SKETCH/COMMENTS: Witnessed By: Keith Enders

North  
 SLD 72478  
 SCALE: Not to Scale  
 Terms used to describe %:  
 Trace - < 5%  
 Few - 5-10%  
 Little - 15-25%  
 Some - 20-35%  
 Mostly - 50-100%



FUSRAP/SLOS  
 SLD 72477

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72477
PROJECT FUSRAP / SLD5		INSPECTOR Phillip Stabler			SHEET 2 of 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	DEPTH (ft)	RECOVERY (%)	ANALYTICAL SAMPLE NO.	BLOW COUNT (ft)	REMARKS (ft)
1.0	silty fine sand w/ fine clay, loose to med. dense, poorly graded, dk. brn.; dry, few cinders.	7900 0.0	RECOVERY	SLD 72477 1945	15	
		6100 0.0	1.3 / 2.0		12	
	trace med. gravel.	7000 0.0		SLD 72501 1445	10	
2.0		N/A N/A	no recovery		8	
	clay increasing	7600 0.0			5	
	few limestone frags, trace brick frags.	6500 0.0	1.8 / 2.0	SLD 72515 1425	5	
3.0		7900 0.0			5	
		7400 0.0			7	
4.0	clay absent	7200 0.0	no recovery		3	
		7500 0.0			6	
5.0		7400 0.0	2.0 / 2.0	SLD 72503 1435	7	
6.0	silty sand textured	6700 0.0			10	
7.0	TD: 6.0' BGS 12-9-02 1425					Background: Net: 7,400 PTD: 0.0 Back-filled boring w/ 3.0 bags of bentonite chips.
8.0						
9.0						
10.0						

# HTPW DRILLING LOG

ST. LOUIS

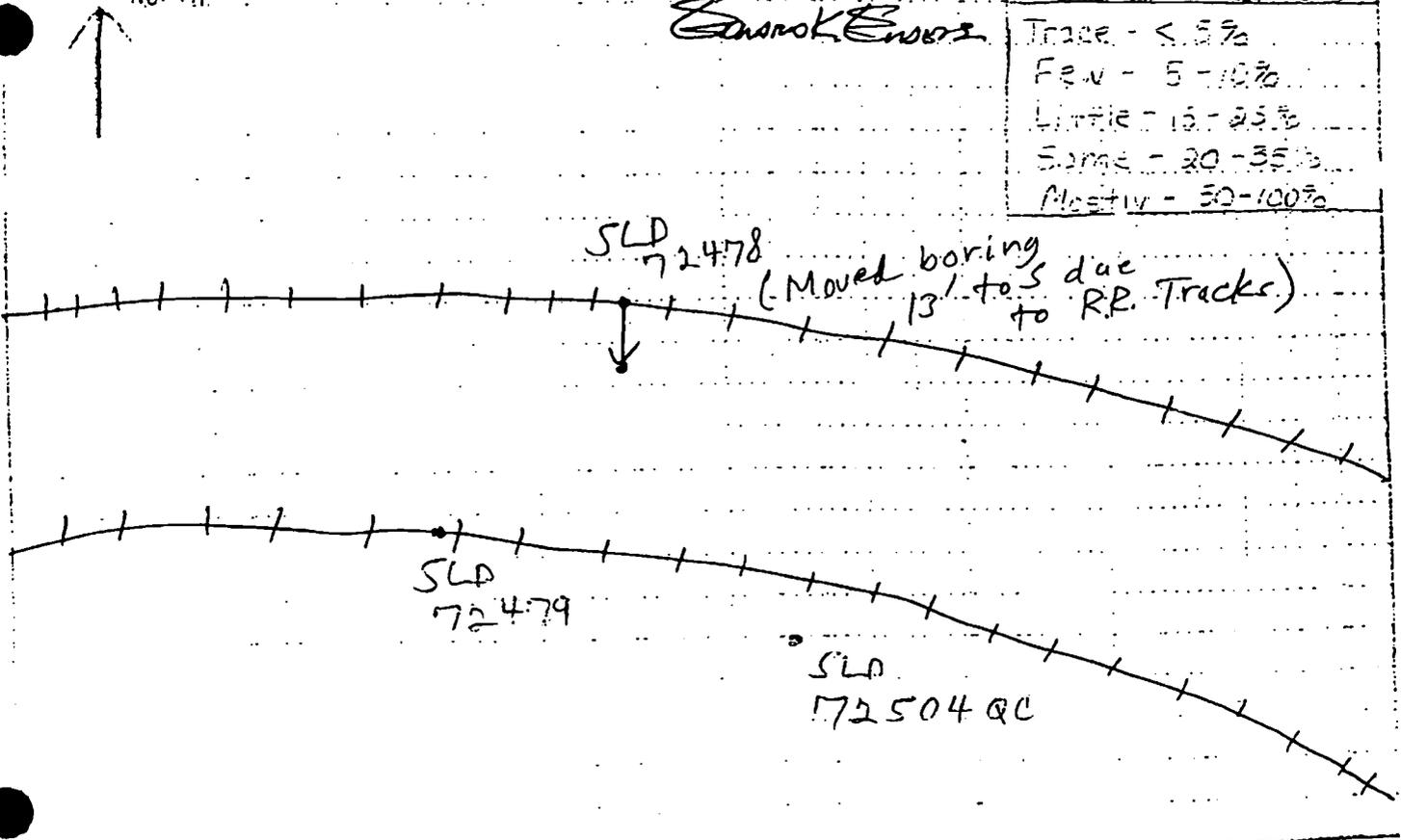
SLD 72478

PROJECT: FUSRAP/SLAS		LOCATION: PSC Metals North Trust V.P.	
NAME OF OPERATOR: Chris Anthony		MANUFACTURER/IDENTIFICATION OF DRILL: Diedrich D-120	
DRILL AND TYPE OF DRILLING AND SAMPLING EQUIPMENT: Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon		HOLE LOCATION: see location sketch	
DATE STARTED: 12-10-02		DATE OF LOG: 12-10-02	
DEPTH TO WATER ENCOUNTERED: N/A		DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A	
TOTAL DEPTH OF HOLE: 6.0 FT BGS		OTHER WATER LEVEL MEASUREMENTS SPECIFY: N/A	
DIAMETER OF HOLE: 3	NUMBER OF SPINDLES: 2	NUMBER OF FEET OF CORE LOGS: 0	TOTAL NUMBER OF CORE LOGS: 0
NUMBER OF SPINDLES: 2	NUMBER OF FEET OF CORE LOGS: 0	NUMBER OF SPINDLES: 2	TOTAL NUMBER OF CORE LOGS: 0
NUMBER OF SPINDLES: 2	NUMBER OF FEET OF CORE LOGS: 0	NUMBER OF SPINDLES: 2	TOTAL NUMBER OF CORE LOGS: 0

LOCATION SKETCH OR COMMENTS

Witnessed by: Keith Ender  
*Keith Ender*

SCALE: Not to scale  
 Terms used to describe %  
 Trace - < 5%  
 Few - 5-10%  
 Little - 10-25%  
 Some - 20-35%  
 Most - 50-100%



SLD 72478

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLP 72478
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statler				SHEET 2 OF 2 SHEETS
DEPTH (ft)	DESCRIPTION OF MATERIALS (1)	WATER SAMPLE NO. (2)	RECOVERY (3)	ANALYTICAL SAMPLE NO. (4)	BLOW COUNT (5)	REMARKS (6)
1.0 2.0 3.0 4.0 5.0 6.0	Silty fine sand w/ few med. gravel, loose to med. dense, poorly graded, dk. brn. to blk, few clay, some undrs, some slag.  cinders and slag increasing.  silty sand becoming lt. gray, cinders, slag, and med. gravel absent.  trace wood frags	7,800	RECOVERY	SLP 72478	16	
		0.0	1.9	12-10-02		
		7,900	2.0	1030		18
		0.0				
		7,500		419.2		14
		0.0				
		8,000	no recovery	SLP 72502	7	
		0.0		418.7		
		7,900	1.8		7	
		0.0	2.0		5	
7.0 8.0 9.0 10.0	TD: 6.0' 865 12-10-02 1050	7,100		SLP 72516	5	Background: NAT: 7800 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips
		0.0		1050		
		8,700	no recovery		5	
		0.0				
		8,100			6	
		0.0				
		8,200	2.0	SLP 72524	12	
		0.0	2.0	1100+		
8,000			11			
0.0						
7,300			11			
0.0						

12-10-02

SM

WATER DRILLING LOG

ST. LOUIS

FILE NUMBER  
SLD 72479

CLIENT NAME  
SPAW F&I

DRILLING CONTRACTOR  
MES, Inc.

WELL # 2

ROD TYPE  
FUS RAP / SLAS

LOCATION  
PSC Metals North Tract v.p.

NAME OF WELL  
Chris Anthony

MANUFACTURER DESIGNATION OF DRILL  
Diedrich D-120

ROD TYPE OF RODS AND TAPPING EQUIPMENT  
Diedrich D-120  
Using 4 1/4" HSA and  
3" x 2" split spoon

WELL LOCATION  
see location sketch

SURFACE ELEVATION  
N/A

DATE 12-10-02 N/A LWD 172046  
DATE 4-15-03 SK# 7800

DATE STARTED 12-10-02 DATE COMPLETED 12-10-02

DEPTH TO WATER SIGNIFIED  
N/A

DEPTH TO WATER SIGNIFIED  
N/A

DEPTH TO WATER AND SAMPLE TIME AFTER DRILLING COMPLETED  
N/A

DEPTH TO WATER AND SAMPLE TIME AFTER DRILLING COMPLETED  
N/A

TOTAL DEPTH OF HOLE  
6.0 FT BGS

OTHER WATER LEVEL MEASUREMENTS SPECIFY  
N/A

TESTER NAME	TESTED	INDICATED	TOTAL NUMBER OF CORE SAMPLES
0	0	0	0
TESTER NAME	TESTED	INDICATED	TOTAL NUMBER OF CORE SAMPLES
0	0	0	0
TESTER NAME	TESTED	INDICATED	TOTAL NUMBER OF CORE SAMPLES
0	0	0	0

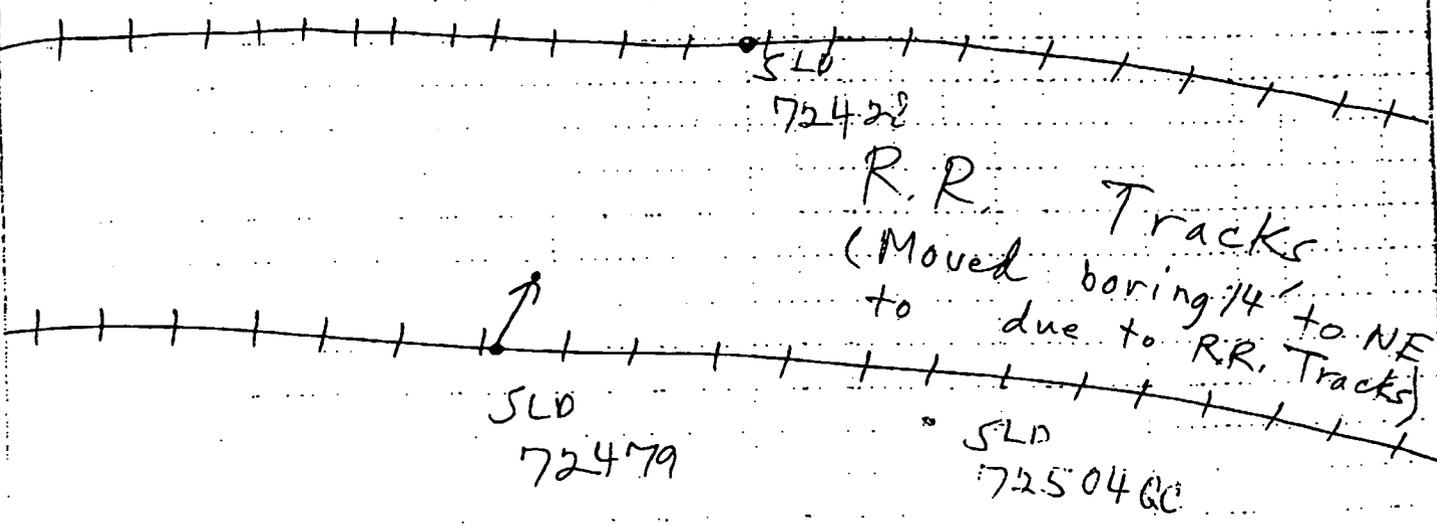
LOCATION SKETCH COMMENTS  
North

Witnessed by: Robin Parks

Scale: Not to Scale

Terms used to describe %

Trace	< 5%
Few	5 - 10%
Little	15 - 25%
Some	20 - 35%
Mostly	50 - 100%



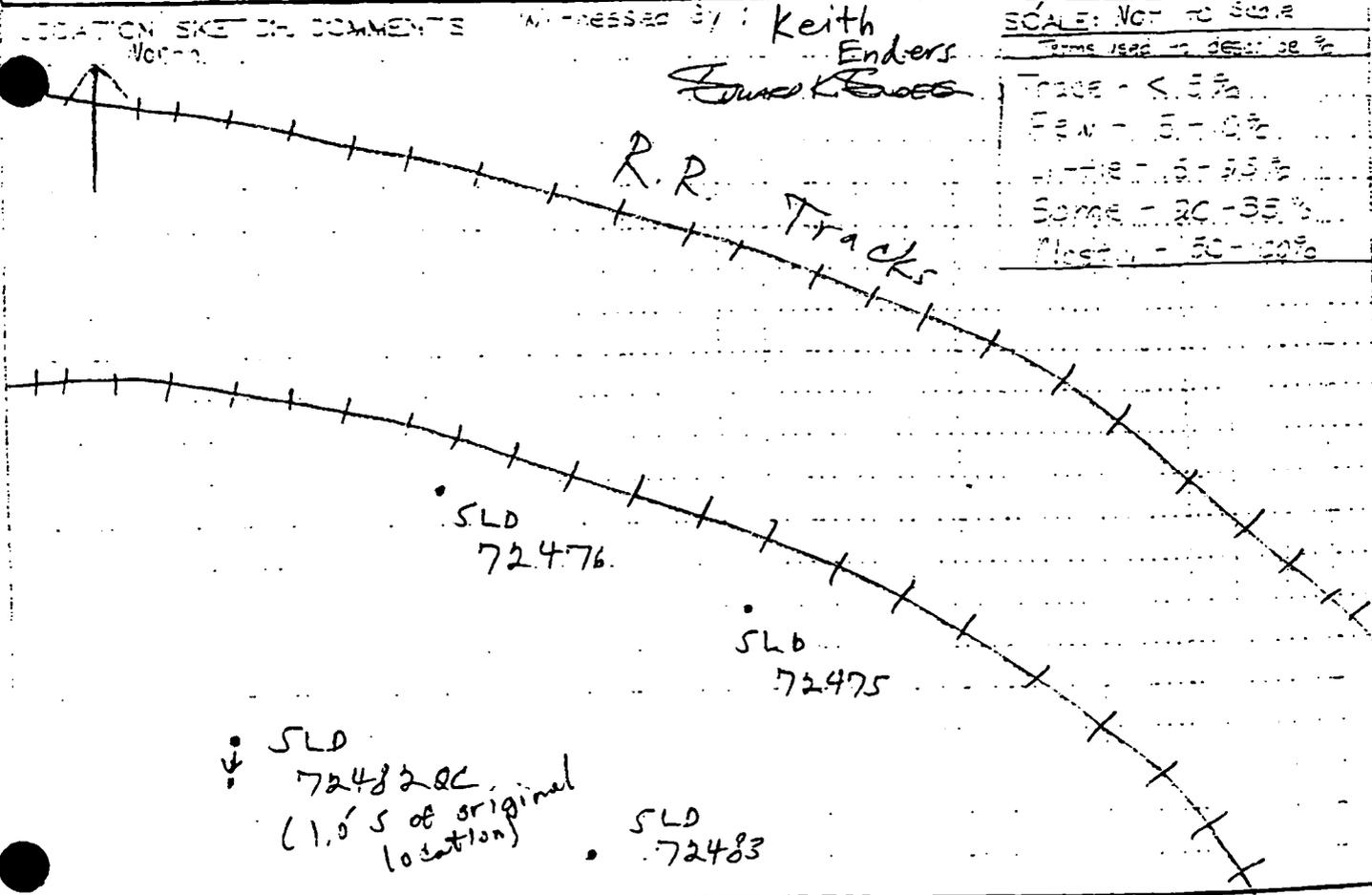
FILE NUMBER  
SLD 72479

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT: FUSRAP/SLDS		INSPECTOR: Phillip Statler		HOLE NUMBER: SLD 72479	
DEPTH (ft)	DESCRIPTION OF MATERIALS	NEUTRON LOG (cpm)	GAMMA LOG (cpm)	RECOVERY (%)	SLOW COUNT (cpm)	REMARKS	
0.0 - 1.0	silty clay w/ few fine sand med. silt. to stiff, med. plast. dk. brn. to blk. dry, few med. gravel, few cinders, few slag, trace wood frags.	7600 0.0	7400 0.0	2.0	SLD 72479 12-10-02 1335	6	
1.0 - 2.0		8200 0.0	8000 0.0	2.0	SLD 72503 1335	8 10	
2.0 - 3.0		7300 0.0	7100 0.0	1.5		8 5	
3.0 - 4.0	cinders and slag increasing	N/A N/A		2.0		3	
4.0 - 5.0	moist	8500 0.0			SLD 72479 archive 1340	6	
5.0 - 6.0	day turning lt. brn.	6300 0.0	7800 0.0	1.8		4	
6.0 - 6.6		8000 0.0	8100 0.0	2.0		3 4 5	
6.0 - 6.6				no recovery	SLD 72479 archive 1350-53	6	
6.6 - 6.0	TD: 6.0' BGS 12-10-02 1340					archive sam- ple from 30-35' BGS	
6.0 - 7.0						SLD 72479 archive sample (1358)	
7.0 - 8.0						archive sam- ple from 5.5' 6.0' BGS (1353-58)	
8.0 - 9.0						Background: NaI: 7800 PID: 0.0	
9.0 - 10.0						Backfilled boring w/ 3.0 bags of bentonite chips.	

# WELL DRILLING LOG

SLD 72482QC

WELL NAME EUSRAD 45.05		WELL CONTRACTOR M.E.S., Inc.		WELL NUMBER 2	
WELL USER Chris Anthony		WELL LOCATION 252 Metairie Vesta Tract V.P.			
WELL TYPE OF WELL DIRECTION 2-120 USING 4 1/2" 45A and 3" x 2" 50A7 5000A		WELL DEPTH DIRECTION 2-120 SEE LOCATION SKETCH			
DATE STARTED 11-4-02		DATE COMPLETED 11-9-02			
WELL DEPTH TO TOP OF CASING N/A		WELL DEPTH TO TOP OF FIRST CASING N/A			
TOTAL DEPTH OF WELL 6.0 = 605		OTHER WATER LEVEL MEASUREMENTS SPECIFY N/A			
WELL DEPTH TO TOP OF CASING	WELL DEPTH TO TOP OF FIRST CASING	WELL DEPTH TO TOP OF SECOND CASING	WELL DEPTH TO TOP OF THIRD CASING	WELL DEPTH TO TOP OF FOURTH CASING	WELL DEPTH TO TOP OF FIFTH CASING
0	2	0	0	0	0
WELL DEPTH TO TOP OF CASING	WELL DEPTH TO TOP OF FIRST CASING	WELL DEPTH TO TOP OF SECOND CASING	WELL DEPTH TO TOP OF THIRD CASING	WELL DEPTH TO TOP OF FOURTH CASING	WELL DEPTH TO TOP OF FIFTH CASING
0	2	0	0	0	0



SLD 72482QC

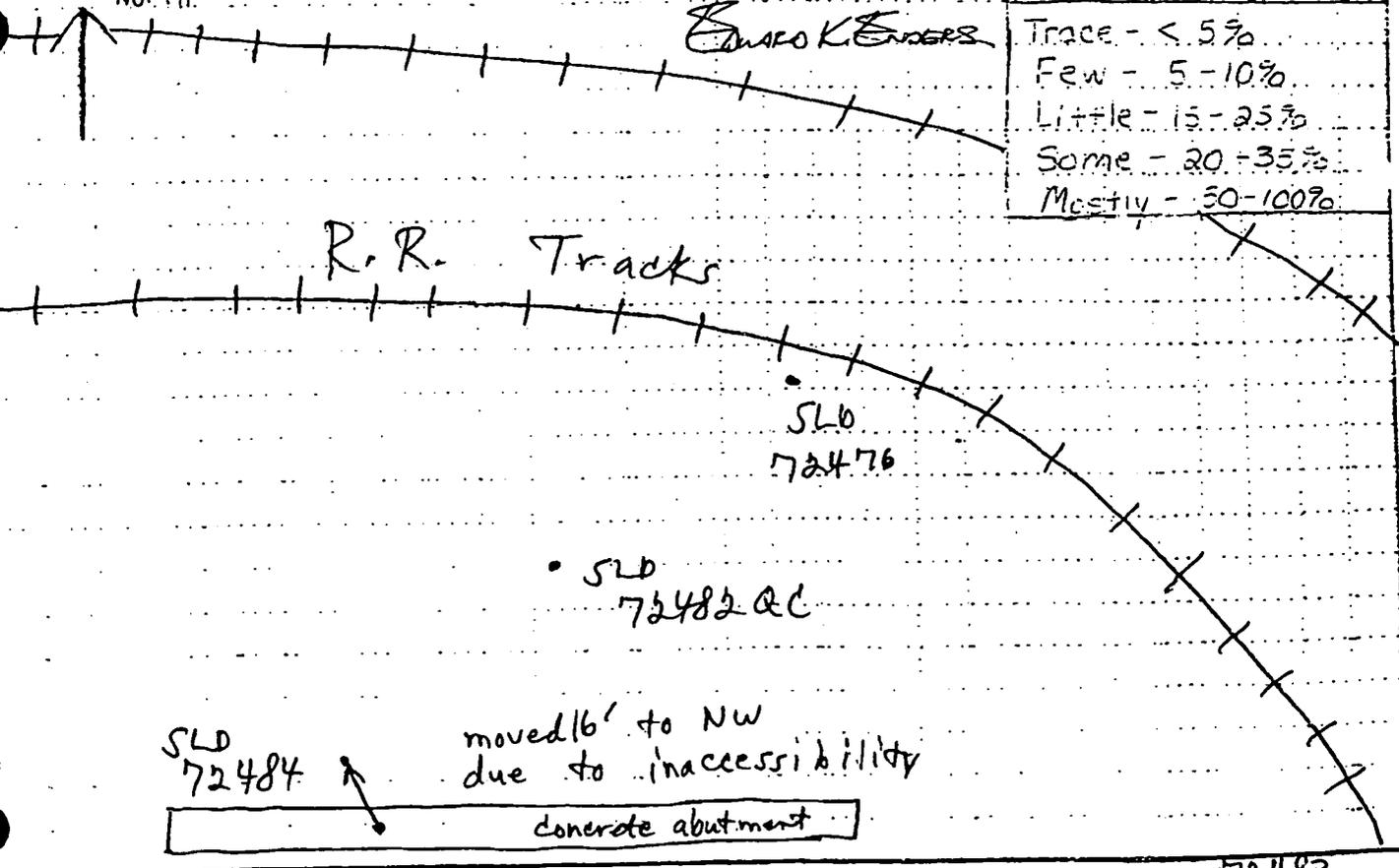
4130.6

WATER DRILLING LOG		CONTINUATION SHEET		SLB 72482 GC	
PROJECT: 11-4-02		OPERATOR: Phillip Statler		SHEET: 2	
DEPTH (FEET)	DESCRIPTION OF MATERIAL	RECOVERY	SLB NO.	DEPTH (FEET)	REMARKS
19.0	silty fine sand w/ some med. to coarse gravel, med dense to very dense, poorly gradat, dk. brn.; few wood frags, trace broken glass, dry, trace slag.  Piece of copper; 2 bolts.	1.7	SLB 72482, -1, -2	19	
35.0		2.0	11-4-02 1115	35	
57.0		N/A	SLB 72506 1120	57	
99.0		N/A	no recovery	99	
13.0		silty clay, med. stiff to very stiff, med plast, dk. brn.; few cinders, few slag, few brick frags, few med. to coarse gravel, dry.  cinders and slag absent. few broken glass frags. trace cinders and slag.	2.0		13
16.0	2.0			16	
16.0				16	
19.0			SLB 72482 GC archive 1125	19	archive sample from 3.5-4.0' BGS.
8.0	2.0			8	
8.0	2.0		SLB 72482 GC archive 1125	8	archive sample from 4.5-5.0' BGS
12.0				12	
8.0			8		
TD: 6.0' BGS 11-4-02 1125					Background: NaI: 4500 PID: 0.0  Backfilled boring w/ 3.0 bags of bentonite chips. Capped w/ soil.

SLB 72482 GC

-TRW DRILLING LOG		St. Louis		WELL NUMBER: 72483
1. CONTRACT NAME Shaw E & I		2. DRILLING CONTRACTOR MES, Inc.		SLD 72484
3. PROJECT FUSRAP/SLDS		7. LOCATION PSC Metals North Tract V.P.		1 = 2
8. NAME OF WELLER Chris Anthony		4. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
5. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon		6. HOLE LOCATION see location sketch		
		9. SURFACE ELEVATION N/A		
11. DATE STARTED 11-4-02		10. DATE STOPPED 11-4-02		
12. DEPTH GROUNDWATER ENCOUNTERED N/A		13. DEPTH TO WATER AND SLATED TIME AFTER DRILLING COMPLETED N/A		
14. TOTAL DEPTH OF HOLE 2.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS SPECIFY N/A		
18. TOTAL NUMBER OF CORE SAMPLES 0		19. TOTAL NUMBER OF CORE SECTIONS 0		
20. SAMPLES FOR CHEMICAL ANALYSIS 0		21. SAMPLES FOR METAL ANALYSIS 0		
22. SAMPLES FOR RADIOLOGICAL ANALYSIS 0		23. SAMPLES FOR OTHER ANALYSIS 0		
24. CORRECTIONS TO LOG Yes		25. SIGNATURE OF WELLER Chris Anthony		

LOCATION SKETCH COMMENTS: North. Witnessed by: Keith Enders



WATER DRILLING LOG (CONTINUATION SHEET)

PROJECT: 505 94015 05 OPERATOR: Phillip Statler

Fig 5

DEPTH (ft)	DESCRIPTION OF MATERIALS	RECOVERY (%)	SLD #	REMARKS
0.0 - 1.0	Silty clay w/ some med. and some coarse gravel, very stiff to hard, med. plastic, blk brn, dry, few cinders and slag, few broken glass, trace blk frags, trace metal, trace rubber.	5100 0.0	17495	SLD 72483
1.0 - 2.0		4800 0.0	17495	18
2.0 - 3.0		4500 6.0	17495	50
3.0 - 4.0		4400 0.0	17495	97
4.0 - 5.0		no recovery	PS 72508 1450	75 Hit refusal at 2.0' BGS (Concrete and metal)

5.0 - 6.0	TD: 2.0' BGS 11-4-02 1445			Background: NAT: 4500 PID: 0.0 Back-filled boring w/ 1.0 bags of bentonite chips. Capped w/ soil.
6.0 - 7.0				
7.0 - 8.0				
8.0 - 9.0				
9.0 - 10.0				
10.0 - 11.0				
11.0 - 12.0				
12.0 - 13.0				
13.0 - 14.0				
14.0 - 15.0				
15.0 - 16.0				
16.0 - 17.0				
17.0 - 18.0				
18.0 - 19.0				
19.0 - 20.0				

**-TRW DRILLING LOG**

St. Louis

SLD 72484

1. COMPANY NAME ECON F&I		2. DRILLING CONTRACTOR MES, Inc.		3. WELL NUMBER SLD 72484	
4. PROJECT FUS RAD / SLOS		5. LOCATION PSC Metals North Tract v.p.			
6. NAME OF WELL Chris Anthony		7. MANUFACTURER/DESCRIPTION OF DRILL Diedrich D-120			
8. TYPES AND TYPES OF LOGGING AND SURFACE EQUIPMENT Diedrich D-120 Using 3/4" HSA and 3" x 2" split spoon		9. HOLE LOCATION see location sketch		10. DATE STARTED 12-9-02	
11. DEPTH TO TOP OF CASING N/A		12. DEPTH TO TOP OF BGS N/A		13. DATE COMPLETED 12-9-02	
14. DEPTH TO WATER TABLE N/A		15. DEPTH TO FIRST LOG ELAPSED TIME AFTER COLLING COMPLETED N/A			
16. TOTAL DEPTH OF HOLE 6.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. ESTERIALIZED SAMPLE 0		19. UNDESIGNED 0		20. TOTAL NUMBER OF CORE LOGS 0	
21. NUMBER OF BENCH MARKS 0		22. OTHER SPECIF RAD		23. OTHER SPECIF 0	
24. LOCATION OF HOLE 0		25. IGNORING VE. N/A		26. QUALITY OF SAMPLES N/A	

LOCATION SKETCH COMMENTS  
North

Witnessed by: Robin Parks SCALE: Not to Scale

*Robin Parks*

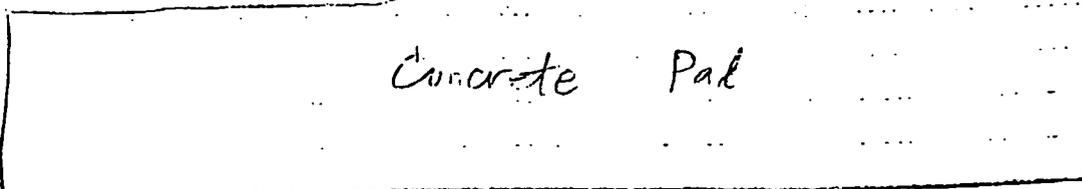
Terms used to describe %  
Trace - < 5%  
Fem - 5-10%  
Little - 15-25%  
Some - 20-35%  
Mostly - 50-100%



• SLD 72481

• SLD 72485 (Moved 18' NW away from concrete pad/debris)

SLD 72484      SLD 72483



SLD 72484

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 72484
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statler				SHEET 2 of 2
DEPTH (ft)	RECEPTION OF MATERIALS (ft)	RECOVERY	QUALITY CONTROL SAMPLE NO.	BLOW COUNT (ft)	REMARKS	
1.0	See SLD 72484.B for information	N/A		12	Poor recovery from 0.0 to 2.0' BGS.	
		N/A		106		
		N/A		6		
		N/A		36		
2.0	Silty clay w/ some cinders, stiff to hard, med. plast. dk. brn. to blk.; dry; few slag; few brick frags.	4800 0.0	2.0 / 2.0	12		
3.0		4900 0.0		25		
		5400 0.0		52		
4.0		5200 0.0		16		
		5100 0.0		6		
5.0	Silty fine sandy loess, poorly graded, H. brn, dry, few brick frags; trace cinders.	5100 0.0	2.0 / 2.0	6		
		4800 0.0		8		
6.0		4800 0.0		17		
7.0	turning lt. gry.					
7.0	TD: 6.0' BGS 12-9-02 1100				Back ground WAT: 4,500 PIP: 0.0 Backfilled boring w/ 3.0 bags of benton- ite chips.	
8.0						
9.0						
10.0						

11/9/5

2.0

# STRW DRILLING LOG

St. Louis

WELL NUMBER: **SLB 72484B**

1. COMPANY NAME <b>Shaw F &amp; I</b>		2. DRILLING CONTRACTOR <b>MES, Inc.</b>		3. SHEET <b>1 of 2</b>	
4. PROJECT <b>FUSRAP / SLDs</b>			5. LOCATION <b>PSC Metals North Tract V.P.</b>		
6. NAME OF WELL <b>Chris Anthony</b>			7. MANUFACTURER, DESIGNATION OF WELL <b>Diedrich D-120</b>		
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 3 1/4" HSA and 3" x 2" split spoon</b>			9. HOLE LOCATION <b>See location sketch</b>		
			10. SURFACE ELEVATION <b>N/A</b>		
11. P.E.O. 1A-9-02 AE + 1A1/1-0 Col Date 4-15-07 BRG = 4500		LWD 172046		10. DATE STARTED <b>1A-9-02</b>	
12. DEPTH TO WATER ENCOUNTERED <b>N/A</b>			13. DATE COMPLETED <b>12-9-02</b>		
14. DEPTH DRILLS INTO ROCK <b>N/A</b>			15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		
16. TOTAL DEPTH OF HOLE <b>1.0 FT BGS</b>			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>		
18. GEOLOGICAL SAMPLE		19. TOTAL NUMBER OF CORE LOGS			
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERED			
22. DEPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR			

LOCATION SKETCH/COMMENTS

Witnessed By: **Robin Parks**

SCALE: Not to Scale



Terms used to describe %  
 Trace - < 5%  
 Few - 5-10%  
 Little - 15-25%  
 Some - 20-35%  
 Mostly - 50-100%

SLD 72485

SLD 72481

SLD 72484B

(Drilled having due to poor recovery in 1st interval of SLD 72484B)

SLD 72484

SLD 72483

Concrete Pad

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER JLD 72484B
PROJECT FUSRAP / SLDS		INSPECTOR Phillip Statler			SHEET 2 of 2 SHEETS		
DEPTH (ft)	DESCRIPTION OF MATERIALS (1)	NO. OF SAMPLES (2)	RECOVERY (3)	ANALYTICAL SUPPLY NO. (4)	BLOW COUNT (5)	REMARKS (6)	
1.0	Silty clay w/ some med. gravel, med. stiff to very stiff, lty brn. dry fracture and ex. and slag	4900 0.0	0.5 1.0	SLP 72484 12-9-02 1115	6 24	hit refusal at 1.0' EGS	
1.0 - 10.0	TD : 1.0' BGS 12-9-02 1115		no recovery			Background: NIT: 4500 PIP: 0.0  Backfilled boring w/ 1 bag of bentonite chips	

PROJECT: FUSRAP / SLDS      WELL NO.: SLP 72484B

**HTRW DRILLING LOG** St. Louis HOLE NUMBER: SLD 72485

CLIENT NAME: **Shaw F & I** DRILLING CONTRACTOR: **MES, Inc.** SHEET: **1 of 2**

PROJECT: **FUSRAP / SLOS** LOCATION: **PSC Metals North Tract V.P.**

NAME OF DRILLER: **Chris Anthony** MANUFACTURER/DESCRIPTION OF DRILL: **Diedrich D-120**

AGES AND TYPES OF DRILLING AND CAMPING EQUIPMENT: **Diedrich D-120 using 3/4" HSA and 3" x 2" split spoon** HOLE LOCATION: **See location sketch**

SURFACE ELEVATION: **N/A**

DATE STARTED: **11-26-02** DATE COMPLETED: **11-26-02**

WEIGHTS UNDER TRIANGLE: **N/A** DEPTH GROUNDWATER ENCOUNTERED: **N/A**

DEPTH DRILLED INTO SOIL: **N/A** DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: **N/A**

TOTAL DEPTH OF HOLE: **6.0 FT BGS** OTHER WATER LEVEL MEASUREMENTS (SPECIFY): **N/A**

1. TESTED FOR CONTAMINANTS	2. DISTURBED	3. UNDISTURBED	4. TOTAL NUMBER OF CORE BOXES
0	0	0	0

5. SAMPLES FOR CHEMICAL ANALYSIS	6. ANALYSIS	7. ANALYSIS	8. ANALYSIS	9. ANALYSIS	10. ANALYSIS	11. TOTAL CORE RECOVERED
0	0	0	RAD	0	0	0

12. REPORT ON HOLE	13. SAMPLES	14. MONITORING RE.	15. ANALYSIS
0	Yes	N/A	N/A

LOCATION SKETCH/COMMENTS: Witnessed By: **Keith Endos** SCALE: Not to Scale



*Edmond K. Endos*

Terms used to describe %

- Trace - < 5%
- Few - 5-10%
- Little - 15-25%
- Some - 20-35%
- Mostly - 50-100%

SLD 72418

SLD 72486

SLD 72481

SLD 72485 (moved boring 5' to NW due to debris)

**HTRW DRILLING LOG (CONTINUATION SHEET)**

PROJECT: **EUSRAP/SLOS**      INSPECTOR: **Philip Statter**      HOLE NUMBER: **SLD 72485**

DEPTH (ft)	DESCRIPTION OF MATERIALS	RECOVERY	SLD NUMBER	BLOW COUNT	REMARKS				
SM	silty fine sand w/some med. to coarse gravel, med. dense to very dense, poorly graded, lt. brn, dry, few cinders, few slag, trace brick frags, trace broken glass, trace metal frags.	4800 / 0.0	2.0	SLD 72485 11-26-02 1320	23	(1315)			
		4500 / 0.0	2.0	SLD 72509 1320	125				
		3800 / 0.0			23				
		4800 / 0.0			15				
		4400 / 0.0	13 / 2.0		19		archive sample from 2.8-3.3 BGS		
		4700 / 0.0			19				
		5000 / 0.0		SLD 72485 archive	11			(1330)	
		4.0	N/A	no recovery			14		
		CL	silty clay, med. stiff to stiff, med. plast, lt. brn, dry.  few brick frags  few wood frags	4700 / 0.0	2.0 / 2.0			3	archive sample from 5.5-6.0 BGS (1340)
				4600 / 0.0				5	
4700 / 0.0				7					
5100 / 0.0	SLD 72485 archive			13					
6.0	TD: 6.0' BGS 11-26-02 1320					Background Nat: 4,300 PID: 0.0 Back filled boring w/ 3.0 bags of bentonite chips.			

PROJECT: **EUSRAP/SLOS**      HOLE NUMBER: **SLD 72485**

# FTRW DRILLING LOG

1. COMPANY NAME Sraw F & I		2. DRILLING CONTRACTOR MES, Inc.		3. FILE NUMBER SLD 72486	
4. PROJECT FUSRAP / SLOS		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF DRILLER Chris Anthony		7. MANUFACTURER, DESIGNATION OF DRILL Diedrich D-120			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" H.S.A and 3" x 2' split spoon		9. HOLE LOCATION see location sketch		10. DATE STARTED 11-26-02	
11. DATE COMPLETED 11-26-02		12. DATE OF LOGGING 11-26-02			
13. DEPTH DRILLS INTO ROCK N/A		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETION N/A			
15. TOTAL DEPTH OF HOLE 6.0 FT BGS		16. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
17. DEPTH OF SAMPLES		18. TOTAL NUMBER OF CORE LOGS		19. TOTAL CORE LENGTH	
20. DEPOSITION OF HOLE		21. OTHER SPECIFY		22. SIGNATURE OF INSPECTOR	

LOCATION SKETCH/COMMENTS: North

Witnessed By: Robin Parks  
  
 SCALE: NOT TO SCALE

Terms used to describe %  
 Trace - < 5%  
 Few - 5-10%  
 Little - 15-25%  
 Some - 20-35%  
 Mostly - 50-100%

SLD 72418

SLD 72486 (moved 15' SE due to debris)

SLD 72481

SLD 72485

HEAVY DRILLING LOG (CONTINUATION SHEET)

PROJECT: EUSRAP/SLDS      SUPERVISOR: Phillip Statler      FILE NUMBER: SLD 72486

DATE: 2 OF 2 SHEETS

419.5

DEPTH	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	RECOVERY (%)	SLD NO.	SLOW CORE	REMARKS	
SM 1.0	Silty fine sand w/ few med. gravel, med. dense to dense, poorly graded dk. brn., dry, few cinders, few slag, few brick frags, trace broken glass.	4400	0.0	RECOVERY	SLD 72486 11-26-02	32 (no Ps. (11-26-02) (1020)	
		4600	0.0	1.6 / 2.0		28	
		4500	0.0		SLD 72516 1025	40	
		4200	0.0	no recovery		35	
CL 3.0	Silty clay, med. stiff to stiff, med. plastic, dk. brn. to gray, dry, few brick frags, trace cinders.	4900	0.0	2.0 / 2.0		7	
		4800	0.0		13		
		4500	0.0		12		
		5100	0.0		SLD 72486 archive 1036	14	archive sample from 3.5 - 4.0 BGS
		4800	0.0	1.9 / 2.0		4	
		4500	0.0		P.S.	6	archive sample from 5.4 - 5.9 BGS
4800	0.0			5			
5000	0.0		SLD 72486 archive	5	(5.4 - 5.9 BGS) (1040)		
TD: 6.0' BGS 11-26-02 1025	Background: NAT: 4300 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips.						

PROJECT: EUSRAP/SLDS      FILE NO: SLD 72486

HTRW DRILLING LOG			DISTRICT	St. Louis			HOLE NUMBER	SLD 72504QC					
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET		1 OF 2 SHEETS					
3. PROJECT FUSRAP/SLDS				4. LOCATION PSC Metals North Tract V.P.				5. NAME OF DRILLER Chris Anthony					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon.				6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				8. HOLE LOCATION See location sketch					
12. OVERBURDEN THICKNESS N/A				15. DEPTH GROUNDWATER ENCOUNTERED N/A				9. SURFACE ELEVATION N/A					
13. DEPTH DRILLED INTO ROCK N/A				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A				10. DATE STARTED 12-10-02		11. DATE COMPLETED 12-10-02			
14. TOTAL DEPTH OF HOLE 6.0 FT BGS				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A				PID 12-10-02 NAI LUD 17204b to 100/100 Cal. Date: 4-15-03 Bkg: 7800					
18. GEOTECHNICAL SAMPLES			DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES						
20. SAMPLES FOR CHEMICAL ANALYSIS			VOC		METALS		OTHER (SPECIFY)		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY		
22. DISPOSITION OF HOLE			BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		OTHER (SPECIFY)		%		
23. SIGNATURE OF INSPECTOR			Yes		N/A		N/A		Gerald Allen		SCALE: Not to Scale		
<p>LOCATION SKETCH/COMMENTS Witnessed by: Gerald Allen</p> <div style="float: right; border: 1px solid black; padding: 5px;"> <p>Terms used to describe %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p> </div>													
PROJECT							FUSRAP/SLDS					HOLE NO. SLD 72504QC	

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 72504 ac
PROJECT FUSRAP / SLDs		INSPECTOR Philip Stotler				SHEET 2 of 2 SHEETS
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	NO. OF SAMPLES COLLECTED	RECOVERY (%)	ANALYTICAL LABORATORY NO.	BLOW COUNT (ft)	REMARKS
1.0	silty clay w/ few med. gravel, med. stiff, med. plast. dk. brn. to blk. dry) some cinders, some slag.	7,000	RECOVERY	SLD 72504	5	
		7,200	2.0	-1, -2	4	
		7,800	2.0	12-10-02	5	
		7,800		1445	6	
		7,800		SLD 72430	4	
		7,800		1455	5	
2.0	cinders and slag in creasing	7,000			4	
		6,400	1.6		5	
		6,800	2.0		3	archive sample from 3.1-3.6 BGS
		7,000	no recovery	SLD 72504 ac	4	
		8,000		1410	2	
		8,100	1.9		5	archive sample from 4.5-5.0' BGS.
3.0	silty fine sand, loose, poorly graded, (brn. to dry.) dry.	7,000			7	
		7,000			9	
		7,000				
		7,000				
4.0		8,000				
		8,100				
		7,000				
		7,000				
5.0		7,000				
		7,000				
		7,000				
		7,000				
6.0		7,000				
		7,000				
		7,000				
		7,000				
7.0	TD: 6.0' BGS 1455 12-10-02					Background:
						NAT: 7,800
						PID: 0.0
						Backfilled
						boring w/
						3.0 bags
						of bentonite
						chips.
8.0						
9.0						
10.0						

# HTRW DRILLING LOG

DISTRICT: St. Louis  
 HOLE NUMBER: SLD 72527  
 SHEET: 1 of 3

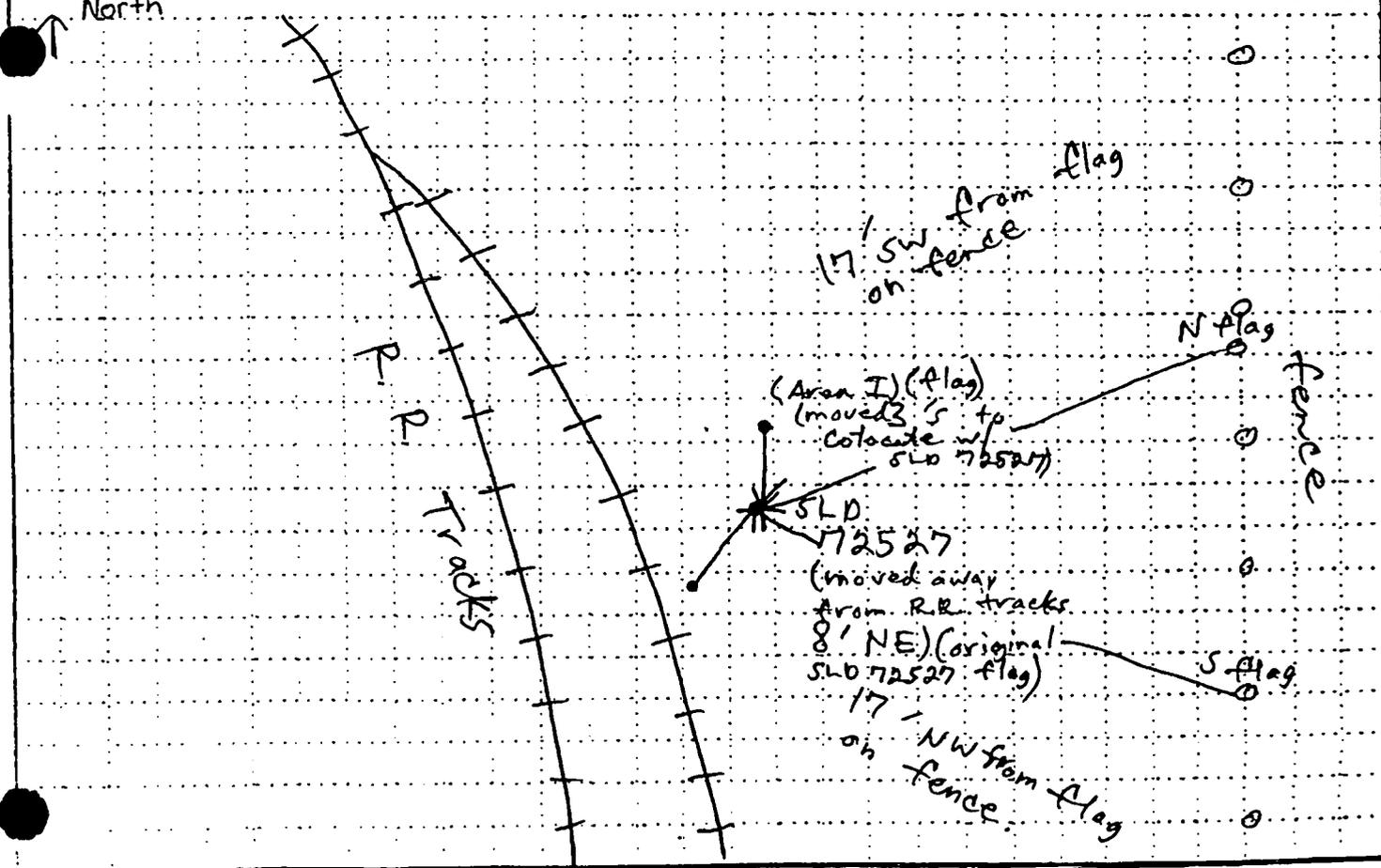
EMPLOYER NAME: Shaw E + I

DRILLING SUBCONTRACTOR: MES, Inc.

3. PROJECT FUS RAP / SLDs		4. LOCATION PSC Metals North tract W.P. City of Venice, IL VPP.s															
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120															
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4" HSA and 3" x 2" Split Spoon		8. HOLE LOCATION N/A															
8. DATE STARTED 10-9-02		9. DATE COMPLETED PSX 10-10-02															
10. OVERBURDEN THICKNESS N/A		11. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A															
12. DEPTH DRILLED INTO ROCK N/A		13. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A															
13. TOTAL DEPTH OF HOLE 20.0' BGS		14. TOTAL NUMBER OF CORE BOXES 0															
14. GEOTECHNICAL SAMPLES		15. SAMPLES FOR CHEMICAL ANALYSIS															
<table border="1"> <tr> <th>DISTURBED</th> <th>UNDISTURBED</th> </tr> <tr> <td>0</td> <td>0</td> </tr> </table>		DISTURBED	UNDISTURBED	0	0	<table border="1"> <tr> <th>ROCK</th> <th>METALS</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>0</td> <td>0</td> <td>RAD</td> <td>0</td> <td>0</td> </tr> </table>		ROCK	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	0	0	RAD	0	0
DISTURBED	UNDISTURBED																
0	0																
ROCK	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)													
0	0	RAD	0	0													
20. DEPOSITION OF HOLE 0		21. SIGNATURE OF INSPECTOR Chris Anthony															

## LOCATION SKETCH/COMMENTS

SCALE: Not to scale



420.4

HTRW DRILLING LOG (CONTINUATION SHEET)				HOLE NUMBER SLD 72527		
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Stalter		SHEET 2 OF 3 SHEETS		
DEPTH (ft)	DESCRIPTION OF MATERIALS (1)	WATER SAMPLE NO. (2)	RECOVERY (3)	ANALYTICAL LABORATORY NO. (4)	BLOW COUNT (5)	REMARKS (6)
1.0	silty fine sand w/ some clay and med. gravel, poorly graded, dry, dk. brn, med. dense.	6500	1.9 / 2.0	SLD 72527 10-9-02 1040	7	
		6800	0.0		16	
		6500	0.0		32	
		6400	0.0		12	
2.0	some limestone gravel (med), trace limestone cobbles, trace rusty metal			SLD 72533 1055		
	trace clay (blk)					
3.0	silty clay, med. stiff, med. plast., (1), brn, dry, trace med. gravel, trace limst. cobbles.	6600	1.6 / 2.0		7	
		6700	0.0		10	
		6306	0.0	SLD 72539 1105	10	
		6200	0.0	no recovery	11	
4.0	trace cinders and limestone cobbles.	6400	1.7 / 2.0		5	
		5900	0.0		6	
		5700	0.0	SLD 72544 1115	8	
		5700	0.0	no recovery	8	
6.0	fine sand, loose, poorly graded, lt. brn, dry.	6100	1.7 / 2.0	SLD 72547 archive	6	archive sample from 6.0-6.5 BGS, (1130)
	piece of flake, silty clay, med. stiff, med. plast., dk. gray to tan, dry.	5600	0.0		4	trace well-rounded gravel.
7.0	traces of wood, flaky, dk. brn.	5900	0.0	SLD 72547 archive 1135	6	archive sample from 7.2-7.4 BGS (1135)
		5700	0.0	no recovery	4	
		5600	0.0		4	
		5300	0.0	SLD 72527 archive 1105	4	archive sample from 8.3-8.8 BGS
8.0	traces of wood, flaky, dk. brn.	N/A	no recovery		21	
		N/A	no recovery		5	
9.0		N/A				
		N/A				
10.0						

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statler		WELL NO. SLD 72527	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER LOSS (gals/ft)	RECOVERY (%)	QUALITY OF SAMPLE NO.	BLOW COUNT	REMARKS	
11.0	SM Silty fine sand, loose, poorly graded, lt. gray, moist, traces of blk. flaky wood.	6400 0.0	2.0 / 2.0		2		
		5800 0.0			weight of hammer		
		6400 0.0			2		
12.0	pieces of brn. wood, industrial wood (plywood)	6300 0.0		SLD 72527 archive 1425	4	archive sample from 11.5-12.0 BGS.	
13.0	pieces of black flaky wood	5300 0.0	2.0 / 2.0	SLD 72843 10/17/02	3	archive sample from 12.4-12.9 BGS	
		5700 0.0			SLD 72527 archive 1435		4
		5900 0.0					8
14.0		6300 0.0			6		
15.0		6100 0.0	1.8 / 2.0		3		
		6300 0.0			6		
		6300 0.0			6	archive sample from 15.3-15.8 BGS	
16.0	pieces of round, north, blk. wood.	6500 0.0		SLD 72527 archive 1440	7	appears to be very old drift wood	
17.0	pieces of flaky brn. wood (L.R. appears industrial)	6700 0.0			3		
		5800 0.0	2.0 / 2.0	SLD 72527 archive 1500	3	archive sample from 16.5-17.0 BGS	
		5900 0.0			7	archive sample from 18.5-19.0 BGS	
		6000 0.0			8	TD: 20.0 BGS	
18.0	pieces of flaky, brn. wood, weathered.	5600 0.0			3	10-9-02 1515	
19.0	trace roots (fln)	5800 0.0	2.0 / 2.0	SLD 72527 archive 1518	3	Backfilled boring w/ strength grout. capped/sail in situ	
		5900 0.0			SLD 72844 1525 (1985)	4	encountered
		5600 0.0				6	swampy odor

**-TRW DRILLING LOG**

St. Louis

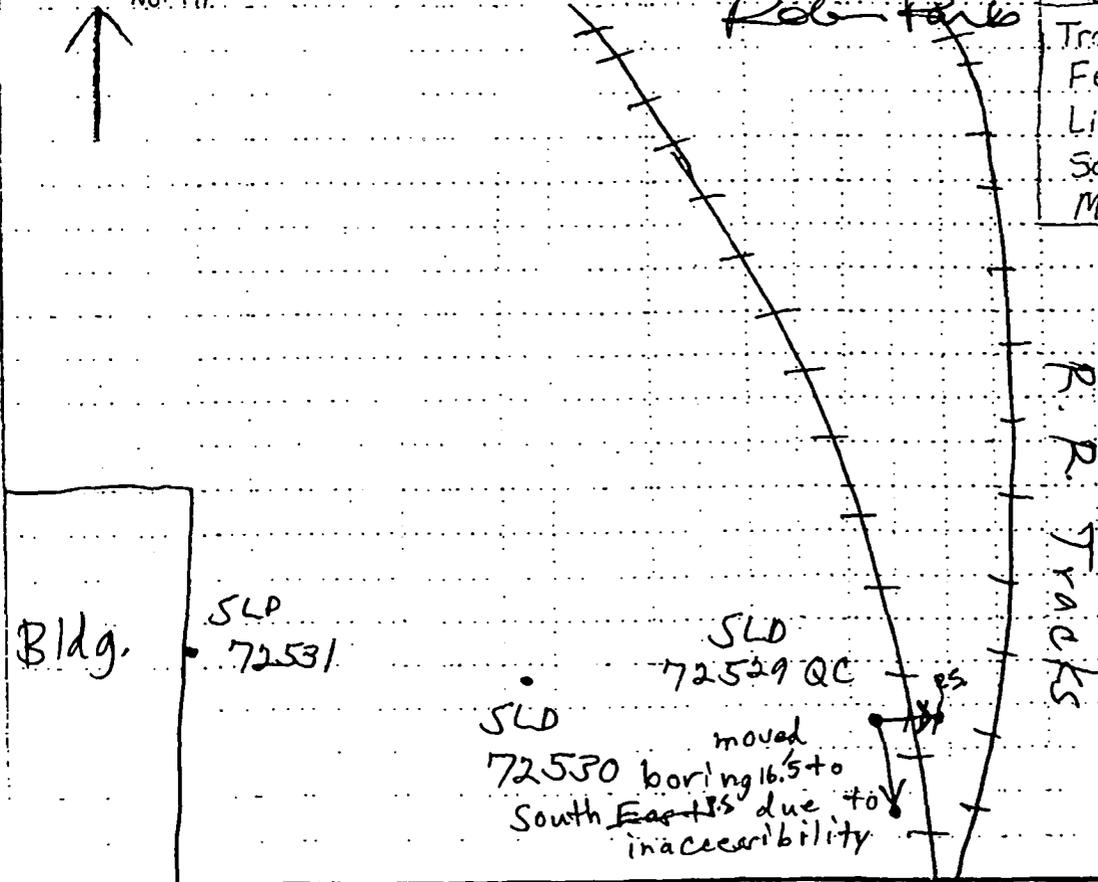
SLD 72529 QC

1. COMPANY NAME Shaw F & I		2. DRILLING CONTRACTOR MES, Inc.		3. SHEET 1 of 2	
4. PROJECT FUSRAP / SLOS		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF DRILLER Chris Anthony		7. MANUFACTURER, DESIGNATION OF DRILL Diedrich D-120			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon		9. HOLE LOCATION See location sketch		10. SURFACE ELEVATION N/A	
11. DATE STARTED 10-30-02		12. DATE COMPLETED 10-30-02			
13. DEPTH DRILLS INTO ROCK N/A		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
15. TOTAL DEPTH OF HOLE 6.0 FT BGS		16. OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A			
17. TECHNICAL SAMPLES		18. TOTAL NUMBER OF CORE BOXES		19. TOTAL CORE RECOVERED	
20. DEPOSITION OF HOLE		21. QUALITY OF DRILLING		22. SIGNATURE OF SUPERVISOR	

LOCATION SKETCH/COMMENTS

Witnessed By: Robin Parks  
Robin Parks

SCALE: Not to Scale  
Terms used to describe %  
Trace - < 5%  
Few - 5-10%  
Little - 15-25%  
Some - 20-35%  
Mostly - 50-100%



**MTW DRILLING LOG (CONTINUATION SHEET)**

PROJECT: **FUSRAP/SLDS**      INSPECTOR: **Phillip Statter**      HOLE NUMBER: **SLD 72529 QC**

SHEET: **2** OF **2** SHEETS

421.8

DEPTH (ft)	DESCRIPTION OF MATERIALS	WIRE LOG (ft)	RECOVERY (%)	SLD NO.	SLOW COUNT	REMARKS
0.0 - 1.0	Silty clay w/ few med. gravel, stiff to very stiff, med. plast., dk. brn., dry, few brick frags, trace slag.	5400 0.0	2.0 / 2.0	SLD 72529 -1-2 10-30-02 1130	16	
		5600 0.0			14	
		5500 0.0			16	
		5400 0.0			22	
1.0 - 2.0	large piece of slag	5600 0.0	1.9 / 2.0		17	
		5400 0.0			13	
2.0 - 3.0	some limestone cobbles	4900 0.0			12	
3.0 - 4.0	few well-rounded sand	5000 0.0			10	
4.0 - 5.0	few large brick frags some well-rounded sand.	5500 0.0	1.8 / 2.0		7	
		5400 0.0			9	
		5400 0.0			12	
5.0 - 6.0	few limestone cobbles	5500 0.0	no recovery	SLD 72542 1200	8	

CL

425.8

6.0 - 7.0	TD: 6.0' BGS 1145 10-30-02					Background: NAI: 5,400 PID: 0.0  Back-filled boring w/ 20 bags of bentonite chips. Capped boring w/ soil.
7.0 - 8.0						
8.0 - 9.0						
9.0 - 10.0						

PROJECT: **FUSRAP/SLDS**      HOLE NO: **SLD 72529 QC**

# STEM DRILLING LOG

5-1-2008

FILE NUMBER  
SLD 72530

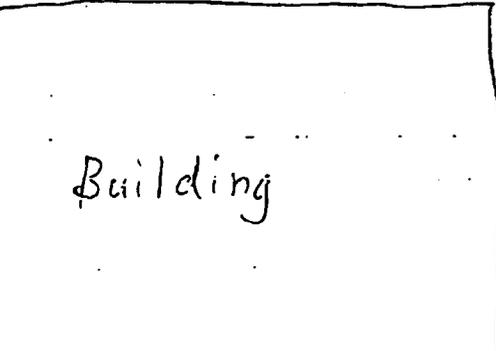
1. COMPANY NAME ECON F&I		2. DRILLING CONTRACTOR MES, Inc.		3. SHEET NUMBER 2	
4. PROJECT ENSRAP / S.L.S		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF DRILLER Chris Anthony		7. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
8. DRILL AND TYPE OF DRILLING AND CIRCULATING SYSTEM Diedrich D-120 using a 3 1/2" HSA and 3" x 2" solid SDA01		9. HOLE LOCATION See location sketch			
10. DATE LOGGED DEC 10-29-02 N/A + a 100/100 Co. 20-47-02 3SG = 3600		11. DATE CORRECTED 10-29-02 110-29-02			
12. MESSAGE INCHES N/A		13. DEPTH DOWNHOLE SIGHTED N/A			
14. DEPTH DRILL ATC LOG N/A		15. DEPTH TO WATER AND ELVED THE ARTS DRILLING CHARGE N/A			
16. TOTAL DEPTH OF HOLE 6.0 XPS FT EGS		17. OTHER WATER LEVEL MEASUREMENTS SPECIFY N/A			
18. BENTONITE SAMPLE	19. SAMPLE	20. SAMPLE	21. TOTAL NUMBER OF CORE BOXES		
0	2	0	2		
22. SAMPLES FOR GENERAL ANALYSIS	23. SAMPLE	24. SAMPLE	25. OTHER SPECIM	26. OTHER SPECIM	27. TOTAL CORE RECOVERED
0	2	0	2	0	2
28. DEPOSITIVE OF HOLE	29. SAMPLE	30. SAMPLE	31. OTHER SPECIM	32. SIGNATURE OF DRILLER	
0	YES	N/A	N/A	Chris Anthony	

LOCATION SKETCH OR COMMENTS

WITNESSED BY: *R. W. Wertz*

SCALE: NOT TO SCALE

- Trace - 5-10%
- Few - 5-10%
- Little - 15-25%
- Some - 20-35%
- Mostly - 50-100%



FILE NUMBER  
SLD 72530

TRW DRILLING LOG (CONTINUATION SHEET)

PROJECT: ESRAP/SLS OPERATOR: Phillip Statler SHEET: 2 OF 2

SM

DEPTH (FEET)	DESCRIPTION OF MATERIALS	RECOVERY	LOG NUMBER	DEPTH (FEET)	REMARKS	
1.0	Silty fine sand w/ few med. gravel, med. coarse, pos. fine gravel, k. brn., dry, few cinders and slag, trace rust frags.	1.6 / 2.0	SLD 72530 10-29-02 1636	10		
2.0			PC	12		
3.0			SLD 72530 10-29-02 1635	14		
4.0			N/A	11		
5.0	See SLD 72530 V.B. 10-29-02	no recovery	N/A	5	Poor recovery between 2.0-4.0' BGS.	
6.0			N/A	5		
7.0			N/A	10	(1.0/2.0 recovery)	
8.0			N/A	12		
9.0	Silty clay w/ trace coarse gravel, stiff, med. plastic, ft. brn., dry	2.0 / 2.0	SLD 72530 archive 1645	13	archive sample from 4.5-5.0' BGS	
10.0			4200	11		
11.0			4000	10		
12.0			3900	14		
13.0	Some cinders, some slag, few coal frags.				Background: NFI: 3600 PSID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips. Capped w/ soil.	
14.0						
15.0						
16.0						
17.0						
18.0						
19.0	TD: 6.0' BGS 15 ps. 1640 10-29-02					
20.0						

ESRAP/SLS SLD 72530

# TRW DRILLING LOG

City: **St. Louis**

WELL NUMBER: **SLD 72530B**

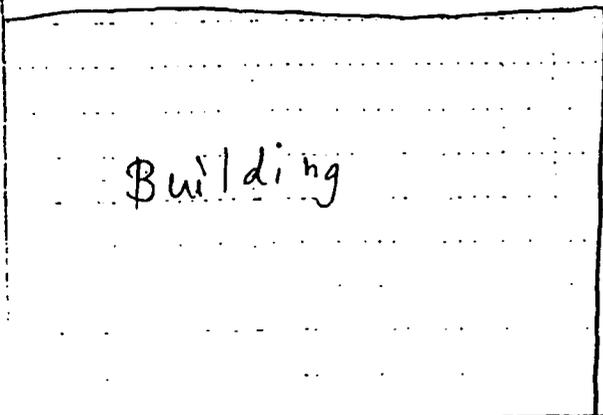
1. COMPANY NAME <b>Shaw F &amp; I</b>		2. DRILLING CONTRACTOR <b>MES, Inc.</b>		3. SHEET NUMBER <b>1 of 2</b>	
4. PROJECT <b>FUSRAP / SLDs</b>			5. LOCATION <b>PSC Metals North Tract V.P.</b>		
6. NAME OF DRILLER <b>Chris Anthony</b>			7. MANUFACTURER DESIGNATION OF DRILL <b>Diedrich D-120</b>		
8. TYPES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 4/44SA and 3" x 2' split spoon</b>			9. HOLE LOCATION <b>See location sketch</b>		
10. DATE STARTED <b>10-30-02</b>			11. DATE COMPLETED <b>10-30-02</b>		
12. DEPTH DRILLED INTO SOIL <b>N/A</b>			13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		
14. TOTAL DEPTH OF HOLE <b>4.0 FT BGS</b>			15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>		
16. DISTURBED SAMPLES <b>0</b>		17. UNDISTURBED SAMPLES <b>0</b>		18. TOTAL NUMBER OF CORE BOXES <b>0</b>	
19. SAMPLES FOR CHEMICAL ANALYSIS <b>0</b>		20. METALS <b>0</b>		21. OTHER SPECIMENS <b>0</b>	
22. REPRODUCTION OF CORE <b>0</b>		23. MONITORING WELL <b>Yes</b>		24. SOURCE OF SAMPLES <b>See location sketch</b>	

LOCATION SKETCH/COMMENTS  
North

Witnessed By: **Robin Parks** SCALE: Not to Scale

*Robin Parks*

Terms used to describe %  
Trace - < 5%  
Few - 5-10%  
Little - 15-25%  
Some - 20-35%  
Mostly - 50-100%



SLD 72531

SLD 72530B  
Moved 5.5' S from SLD 72530

WELL NUMBER: **SLD 72530B**

PROJECT: **FUSRAP / SLDs**

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 72530B	
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statler				SHEET 2 OF 2	
DEPTH (FEET)	DESCRIPTION OF MATERIALS	WATER LEVEL (FEET)	RECOVERY (%)	WALL THICKNESS (INCHES)	BLOW COUNT (BL)	REMARKS	
1.0	SEE SLD 72530 for description	N/A			N/A	Augered down to 2.0' BGS and drove spoons.	
2.0	CL silty clay, med. stiff to stiff, med. plast., dk. brn, dry, few med. gravel, few fine sand. few coal frags. brick frags.	5300 0.0	2.0/ 2.0		5		
3.0		5400 0.0			6		
3.5		5700 0.0			9	archive sample from 3.0-3.5' BGS	
4.0		5400 0.0			9		
4.0	TD: 4.0' BGS 10-30-02 1180					Background: NFI: 5400 PID: 0.0 Back-filled boring w/ 2.0 bags of bentonite chips. Capped boring w/ soil.	
5.0							
6.0							
7.0							
8.0							
9.0							
10.0							

**STRW DRILLING LOG**      **St. Louis**      **FILE NUMBER: SLD 72531**

**CLIENT NAME:** Shaw F & I      **DRILLING CONTRACTOR:** MES, Inc.      **SHEET:** 1 of 2

**PROJECT:** FUSRAP / SLDs      **LOCATION:** PSC Metals North Tract V.P.

**NAME OF DRILLER:** Chris Anthony      **MANUFACTURER / DESIGNATION OF DRILL:** Diedrich D-120

**SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:** Diedrich D-120 using 3 1/4" HSA and 3" x 2" split spoon      **HOLE LOCATION:** see location sketch

**DATE STARTED:** 11-6-02      **DATE COMPLETED:** 11-6-02

**OVERBURDEN THICKNESS:** N/A      **DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED:** N/A

**DEPTH DRILLED INTO ROCK:** N/A      **OTHER WATER LEVEL MEASUREMENTS (SPECIFY):** N/A

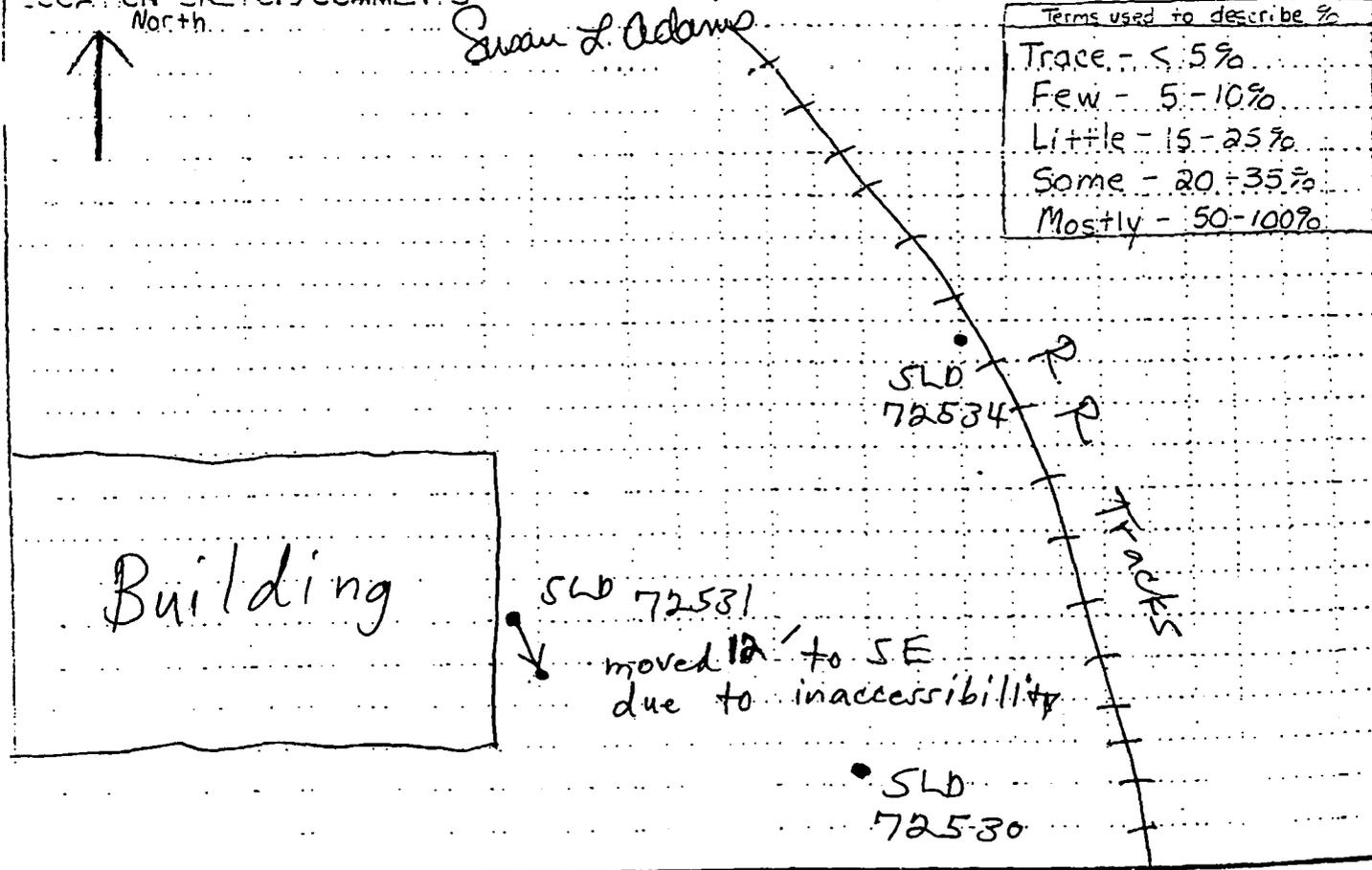
**TOTAL DEPTH OF HOLE:** 6.0 FT BGS

**TEST TECHNIQUE SAMPLES:** 0      **ADJUSTED:** 0      **TOTAL NUMBER OF CORE BOXES:** 0

**SAMPLES FOR CHEMICAL ANALYSIS:** 0      **OTHER SPECIFY:** RAD      **TOTAL CORE RECOVERED:** 0%

**REPRODUCTION OF LOG:** 0      **RECORDED:** Yes      **MONITORING FE:** N/A      **OTHER SPECIFY:** N/A      **QUALITY CHECK INSPECTOR:** [Signature]

**LOCATION SKETCH/COMMENTS:** Witnessed By: Susan Adams      **SCALE:** Not to Scale



ITRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER  
SLD 72531  
SHEET 2 of 2 SHEETS

PROJECT		INSPECTOR		HOLE NUMBER		SHEET	
FUSRAP/SLDS		Phillip Statler		SLD 72531		2 of 2 SHEETS	
ELEV. (1)	DEPTH (2)	DESCRIPTION OF MATERIALS (3)	FIELD SOLENOID RESULTS (4)	DETERMINED SAMPLE OR OTHER USE NO. (5)	ANALYTICAL SAMPLE NO. (6)	BLOW COUNT (7)	REMARKS (8)
		Concrete Cover			SLD 72531 COVER 11-6-02	(1425)	
	1	Silty fine sand w/ some med. to coarse gravel, med. dense to dense, poorly graded, dk. brn. to blk.; moist; trace metal shavings; few brick frags, few sp.	5300 0.0	1.8/ 2.0	SLD 72531 1450	9	
SM	5200 0.0				32		
	2		5900 0.0		SLD 72531 1455	46	
			5900 0.0	no recovery	2.5	19	
	3	Silty clay, med. stiff, med. plast.; 14% brn.; moist.	5500 0.0	1.3/ 2.0		4	
CL			5500 0.0			5	archive sample from 3.3-3.8' BGS
	4	Silty fine sand w/ some med. gravel, loose, poorly graded, dk. brn.; moist; few cinders and slag; few brick frags, 1 piece of red slag.	5600 0.0	no recovery	SLD 72531 archive 1500	6	
			N/A N/A			6	
	5		5400 0.0	1.7/ 2.0		2	
			5700 0.0			3	
	6	5900 0.0			SLD 72531 archive 1510	2	archive sample from 5.7-6.2' BGS.
		N/A N/A	no recovery		2	5.7-6.2'	
		TD: 6.5' BGS 11-6-02 1450					Background: Nat: 5,500 PID: 0.0 Backfilled boring w/ 3.0 bags of bestonite chips. Capped w/ Quickrete

11-6-02

6.25

HTRW DRILLING LOG		City: St. Louis		SLS NUMBER: SLD 72532	
1. COMPANY NAME Shaw E & I		2. DRILLING CONTRACTOR MES, Inc.		3. SHEET NUMBER 1 of 2	
4. PROJECT FUSRAP/SLDS		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF FIELD Chris Anthony		7. MANUFACTURER, DESIGNATION OF DRILL Diedrich D-120			
8. TYPES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4 ASA and 3" x 2' split spoon		9. HOLE LOCATION see location sketch		10. SURFACE ELEVATION N/A	
11. PEO 11-21-02 NAI to 100/100 Col Date		12. LUD 172040 BKG = 5/100		13. DATE STARTED 11-21-02	
14. DEPTH TO WATER ENCOUNTERED N/A		15. DATE STOPPED 11-21-02			
16. DEPTH DRILLS INTO SOIL N/A		17. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETE N/A			
18. TOTAL DEPTH OF HOLE 6.0 FT BGS		19. OTHER WATER LEVEL MEASUREMENTS SPECIFY N/A			
20. GEOTECHNICAL SAMPLES 0		21. TESTS PERFORMED 0		22. ANALYSES PERFORMED 0	
23. SAMPLES FOR CHEMICAL ANALYSIS 0		24. TOXICITY 0		25. METALS 0	
26. OTHER SPECIFY 0		27. OTHER SPECIFY RAD		28. OTHER SPECIFY 0	
29. TOTAL CORE RECOVERY 0		30. LOCATION OF HOLE 0		31. TACKLED Yes	
32. MONITORING VE N/A		33. OTHER SPECIFY N/A		34. SIGNATURE OF SUPERVISOR D. H. Adams	
35. LOCATION SKETCH/COMMENTS North		36. WITNESSED BY: Susan Adams			
		SCALE: NOT TO SCALE Terms used to describe % Trace - < 5% Few - 5-10% Little - 15-25% Some - 20-35% Mostly - 50-100%			
		Building			
		McKinley Bridge			
FUSRAP/SLDS		SLD 72532			

HTRW DRILLING LOG (CONTINUATION SHEET)

WELL NUMBER: SLD 72532

PROJECT: FUSRAP/SLDS INSPECTOR: Philip Statter SHEET: 2 OF 2

DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	RECOVERY	SLP (psi)	BLOW COUNT (blows/ft)	REMARKS
0.0 - 1.0	Silty fine sand w/ some med to coarse gravel, very dense, poorly graded, dk brn, dry	5,000 0.0	2.0	SLP 72532 11-21-02 7420	50	
1.0 - 2.0	few metal frags, few broken glass.	5,100 0.0	2.0		85	
2.0 - 3.0	few brick frags, few cinders and slag	4,900 0.0	2.0		69	
3.0 - 4.0		5,000 0.0		SLP 72532 11-21-02 7420	85	
4.0 - 5.0	few silty clay, few med. to coarse gravel.	5,100 0.0	1.7/2.0		43	
5.0 - 6.0		5,400 0.0			38	
6.0 - 7.0		5,800 0.0		SLP 72532 11-21-02 7425	13	archive sample from 3.2-3.7' BGS
7.0 - 8.0		N/A	no recovery		7	
8.0 - 9.0		5,100 0.0	1.4/6.0		6	
9.0 - 10.0		5,500 0.0			6	archive sample from 4.9-5.4' BGS.
10.0 - 11.0		5,400 0.0		SLP 72532 11-21-02 7425	7	
11.0 - 12.0		N/A	no recovery		6	
12.0 - 13.0		N/A				
13.0 - 14.0		N/A				
14.0 - 15.0		N/A				
15.0 - 16.0		N/A				
16.0 - 17.0		N/A				
17.0 - 18.0		N/A				
18.0 - 19.0		N/A				
19.0 - 20.0		N/A				
20.0 - 21.0		N/A				
21.0 - 22.0		N/A				
22.0 - 23.0		N/A				
23.0 - 24.0		N/A				
24.0 - 25.0		N/A				
25.0 - 26.0		N/A				
26.0 - 27.0		N/A				
27.0 - 28.0		N/A				
28.0 - 29.0		N/A				
29.0 - 30.0		N/A				
30.0 - 31.0		N/A				
31.0 - 32.0		N/A				
32.0 - 33.0		N/A				
33.0 - 34.0		N/A				
34.0 - 35.0		N/A				
35.0 - 36.0		N/A				
36.0 - 37.0		N/A				
37.0 - 38.0		N/A				
38.0 - 39.0		N/A				
39.0 - 40.0		N/A				
40.0 - 41.0		N/A				
41.0 - 42.0		N/A				
42.0 - 43.0		N/A				
43.0 - 44.0		N/A				
44.0 - 45.0		N/A				
45.0 - 46.0		N/A				
46.0 - 47.0		N/A				
47.0 - 48.0		N/A				
48.0 - 49.0		N/A				
49.0 - 50.0		N/A				
50.0 - 51.0		N/A				
51.0 - 52.0		N/A				
52.0 - 53.0		N/A				
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54.0 - 55.0		N/A				
55.0 - 56.0		N/A				
56.0 - 57.0		N/A				
57.0 - 58.0		N/A				
58.0 - 59.0		N/A				
59.0 - 60.0		N/A				
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65.0 - 66.0		N/A				
66.0 - 67.0		N/A				
67.0 - 68.0		N/A				
68.0 - 69.0		N/A				
69.0 - 70.0		N/A				
70.0 - 71.0		N/A				
71.0 - 72.0		N/A				
72.0 - 73.0		N/A				
73.0 - 74.0		N/A				
74.0 - 75.0		N/A				
75.0 - 76.0		N/A				
76.0 - 77.0		N/A				
77.0 - 78.0		N/A				
78.0 - 79.0		N/A				
79.0 - 80.0		N/A				
80.0 - 81.0		N/A				
81.0 - 82.0		N/A				
82.0 - 83.0		N/A				
83.0 - 84.0		N/A				
84.0 - 85.0		N/A				
85.0 - 86.0		N/A				
86.0 - 87.0		N/A				
87.0 - 88.0		N/A				
88.0 - 89.0		N/A				
89.0 - 90.0		N/A				
90.0 - 91.0		N/A				
91.0 - 92.0		N/A				
92.0 - 93.0		N/A				
93.0 - 94.0		N/A				
94.0 - 95.0		N/A				
95.0 - 96.0		N/A				
96.0 - 97.0		N/A				
97.0 - 98.0		N/A				
98.0 - 99.0		N/A				
99.0 - 100.0		N/A				

PROJECT: FUSRAP/SLDS WELL NUMBER: SLD 72532

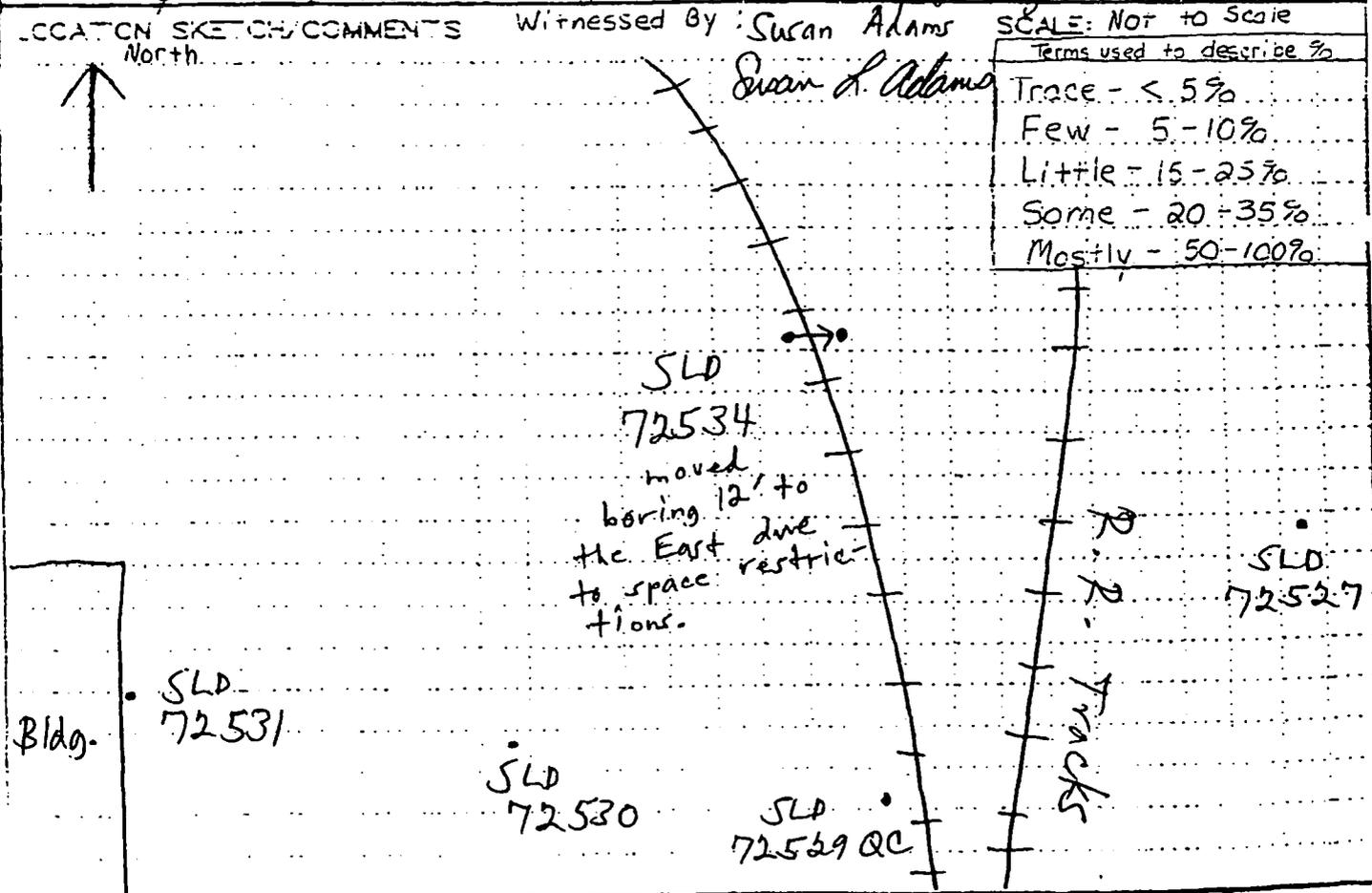
72528

# TRW DRILLING LOG

St. Louis

WELL NUMBER  
SLD 72534

1. COMPANY NAME Shaw F & I		2. DRILLING CONTRACTOR MES, Inc.		3. SHEET 1 of 2	
4. PROJECT FUSRAP / SLDs			5. LOCATION PSC Metals North Tract V.P.		
6. NAME OF DRILLER Chris Anthony			7. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
8. TYPES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon		9. HOLE LOCATION see location sketch		10. SURFACE ELEVATION N/A	
11. DATE STARTED 10-30-02		12. DATE COMPLETED 10-30-02		13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		15. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		16. TOTAL NUMBER OF CORE LOGS 0	
17. TOTAL DEPTH OF HOLE 6.0 FT BGS		18. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		19. TOTAL NUMBER OF CORE LOGS 0	
20. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		21. TOTAL NUMBER OF CORE LOGS 0		22. TOTAL CORE RECOVERY 0%	
23. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		24. TOTAL NUMBER OF CORE LOGS 0		25. TOTAL CORE RECOVERY 0%	
26. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		27. TOTAL NUMBER OF CORE LOGS 0		28. TOTAL CORE RECOVERY 0%	
29. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		30. TOTAL NUMBER OF CORE LOGS 0		31. TOTAL CORE RECOVERY 0%	
32. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		33. TOTAL NUMBER OF CORE LOGS 0		34. TOTAL CORE RECOVERY 0%	
35. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		36. TOTAL NUMBER OF CORE LOGS 0		37. TOTAL CORE RECOVERY 0%	
38. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		39. TOTAL NUMBER OF CORE LOGS 0		40. TOTAL CORE RECOVERY 0%	
41. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		42. TOTAL NUMBER OF CORE LOGS 0		43. TOTAL CORE RECOVERY 0%	
44. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		45. TOTAL NUMBER OF CORE LOGS 0		46. TOTAL CORE RECOVERY 0%	
47. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		48. TOTAL NUMBER OF CORE LOGS 0		49. TOTAL CORE RECOVERY 0%	
50. DEPTH TO OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A		51. TOTAL NUMBER OF CORE LOGS 0		52. TOTAL CORE RECOVERY 0%	



HTRW DRILLING LOG (CONTINUATION SHEET)						NO. SHEETS
PROJECT		INSPECTOR	NO. SHEETS		SHEET	
FUSRAP/SLDS		Phillip Statler	72534		2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	NO. OF BAGS	RECOVERY	ANALYTICAL SAMPLE NO.	BLOW COUNT	REMARKS
1.0	silty clay w/ trace med. gravel, med. silt, med. plast. dk. brn., dry, some cinders, some slag, trace brick frags.	5400	1.9 / 2.0	SLD 72534 10-26-02 1330	5	
		5100		7		
		5500	6			
		5000	6			
2.0			no recovery			
3.0	See SLD 72534B for information				2	Poor recovery from 2.0-4.0' BGS
					5	
					5	
					4	
4.0	absence of cinders, slag, and bricks. few weathered wood frags.	5500	1.8 / 2.0	SLD 72534 10-26-02 1335	4	archive sample from 4.5-5.0' BGS
		5400			5	
		5200			4	
		5100	5			
		5000	5			
6.0			no recovery			
7.0	TD: 6.0' BGS 10-30-02 1340					Backgrounds: NAT: 5400 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips. Capped w/ soil.
8.0						
9.0						
10.0						

# TRW DRILLING LOG

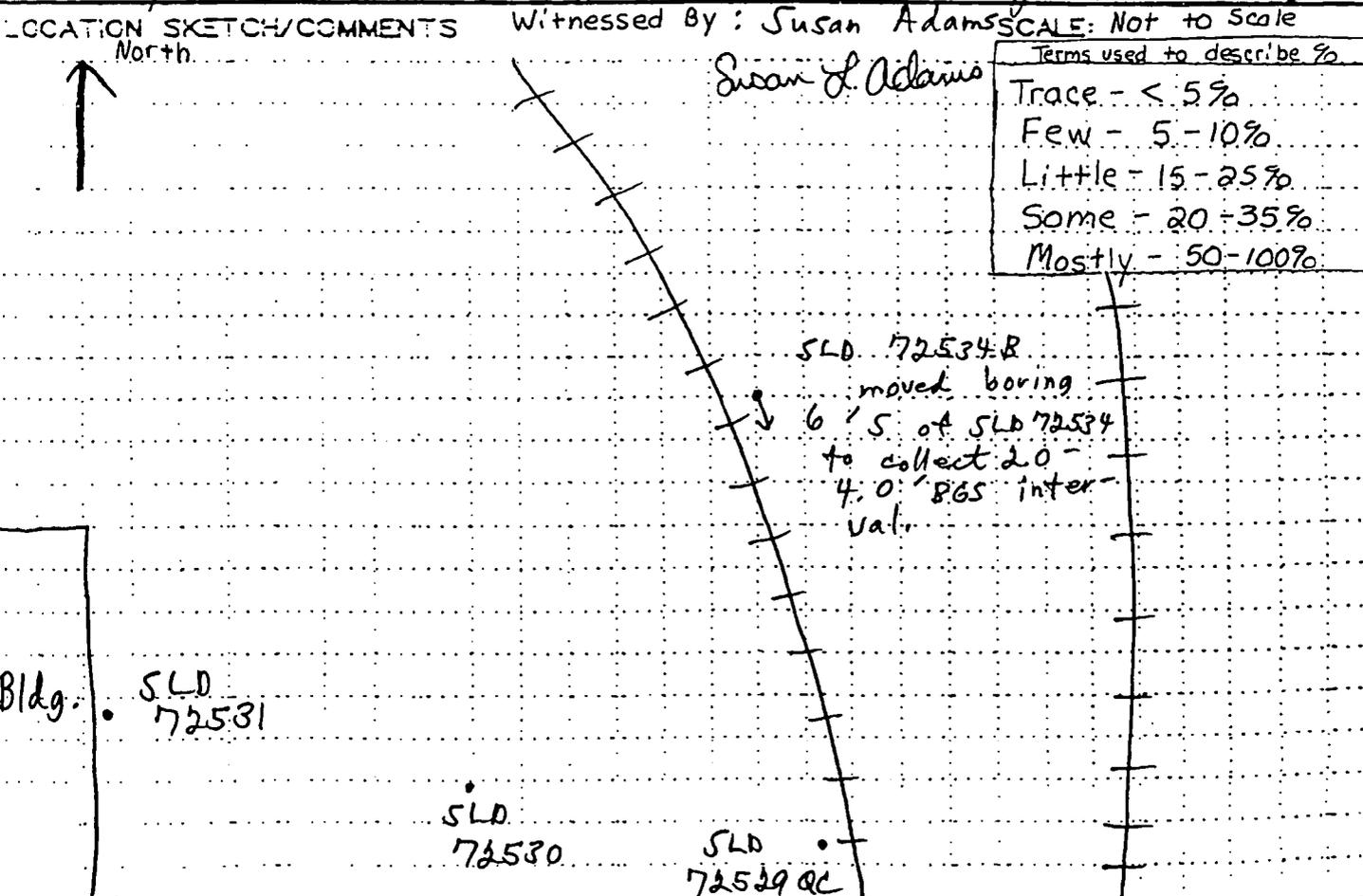
DISTRICT

St. Louis

HOLE NUMBER

SLD 72534B

1. COMPANY NAME Shaw F & I		2. DRILLING SUBCONTRACTOR MES, Inc.		3. SHEET 1 of 2	
5. PROJECT FUSRAP / SLDS			4. LOCATION PSC Metals North Tract V.P.		
6. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4" HSA and 3" x 2' split spoon		8. HOLE LOCATION see location sketch			
8. OVERBURDEN THICKNESS N/A		9. SURFACE ELEVATION N/A			
10. DATE STARTED 10-30-02		11. DATE COMPLETED 10-30-02			
12. DEPTH DRILLED INTO ROCK N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A			
13. TOTAL DEPTH OF HOLE 4.0 FT BGS		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. GEOTECHNICAL SAMPLES 0		18. TOTAL NUMBER OF CORE ZONES 0		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A	
19. DEPOSITION OF HOLE 0		20. DEPTH OF HOLE Yes		21. IDENTIFICATION OF INSPECTOR Philip M. [Signature]	



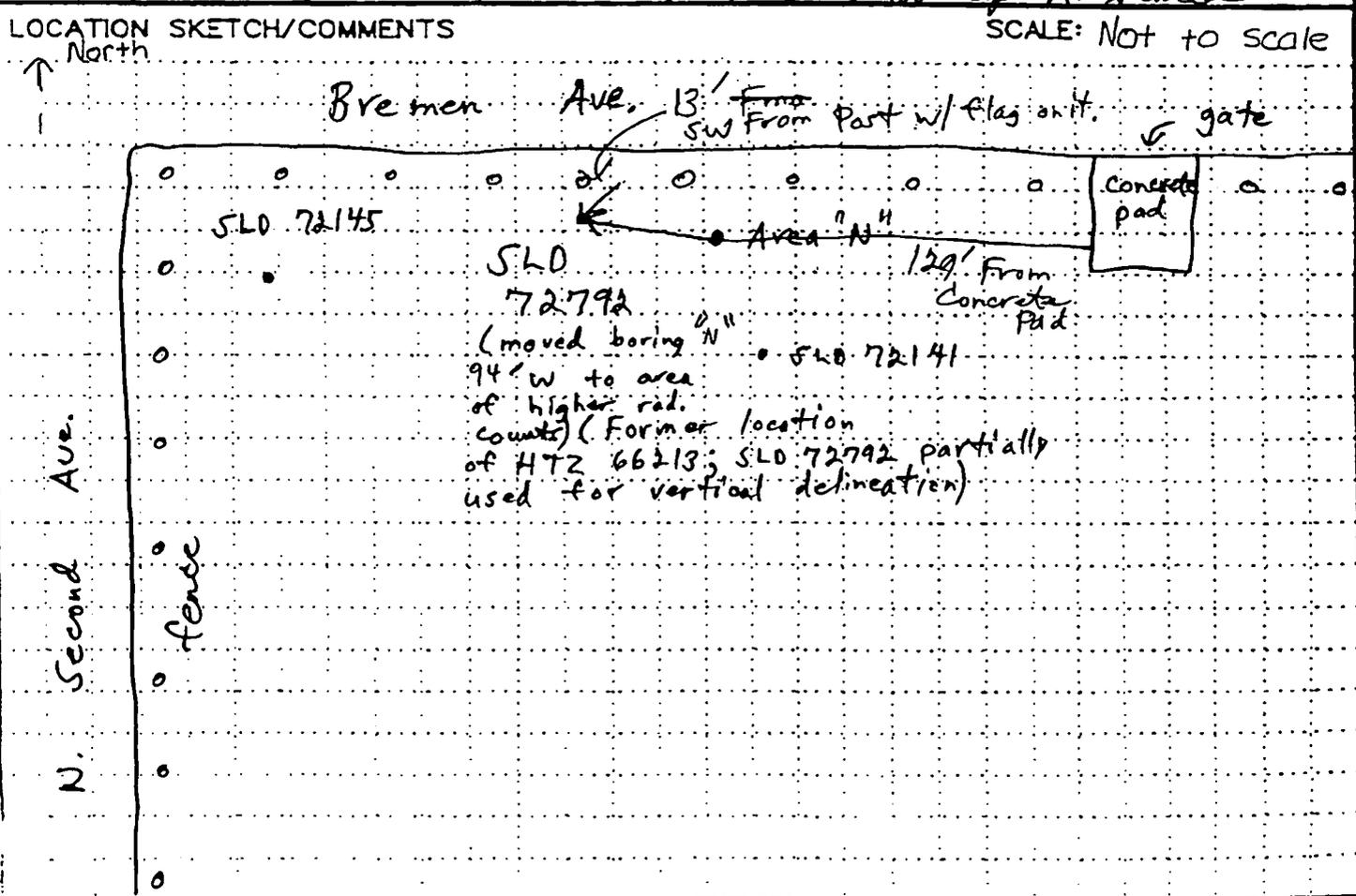
FUSRAP / SLDS

SLD 72534B

HTRW DRILLING LOG (CONTINUATION SHEET)							HOLE NUMBER SLD 72534B
PROJECT FUSRAP/SLDS		INSPECTOR Phil M Sp Stafler			SHEET 2 OF 2		
DEPTH (FEET)	DESCRIPTION OF MATERIALS	WATER SAMPLE NO. (FT. PID)	RECOVERY	SAMPLE NO. (SLD)	BLOW COUNT (FEET)	REMARKS	
1.0	See SLD 72534 for information					Angered down to 2.0' BGS and drove spoons.	
2.0	CL Silty clay w/ few med gravel, med silt, med. plast., M. brn, dry, trace brick frags, trace fine sand. granite cobble stuck in tip.	5400 0.0	1.3 / 2.0	SLD 72534B archive	6	(10-30-02, 1400) archive sample taken from 2.0 - 2.5' BGS.	
3.0		5200 0.0		6			
		N/A N/A	12				
4.0		N/A N/A	23	no recovery			
4.0	TD: 4.0' BGS 10-30-02 1350					Backgrounds NAI: 5400 PID: 0.0 Back-filled boring w/ 20 bags of bentonite chips. Capped boring w/ soil.	
5.0							
6.0							
7.0							
8.0							
9.0							
10.0							

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<b>HTRW DRILLING LOG</b>		DISTRICT St. Louis	HOLE NUMBER SLD 72792
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.	
3. PROJECT FUS RAP / SLDs		4. LOCATION PSC Metals North Tract (Tract I) <del>City of Venice, IL</del> VP P.S. (Area N)	
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" HSA and 3" x 2' split spoon		8. HOLE LOCATION N/A	
9. SURFACE ELEVATION N/A		10. DATE STARTED 10-1-02	
11. DATE COMPLETED 10-7-02		12. OVERBURDEN THICKNESS N/A	
13. DEPTH DRILLED INTO ROCK N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A	
14. TOTAL DEPTH OF HOLE 10.0' BGS		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		18. GEOTECHNICAL SAMPLES	
19. TOTAL NUMBER OF CORE BOXES 0		20. SAMPLES FOR CHEMICAL ANALYSIS	
21. TOTAL CORE RECOVERY 0%		22. DISPOSITION OF HOLE	
23. SIGNATURE OF INSPECTOR Phillip D. Statten		DISTURBED 0	
UNDISTURBED 0		ROCK 0	
METALS 0		MONITORING WELL 0	
OTHER (SPECIFY) RAD		OTHER (SPECIFY) 0	
OTHER (SPECIFY) 0		OTHER (SPECIFY) 0	

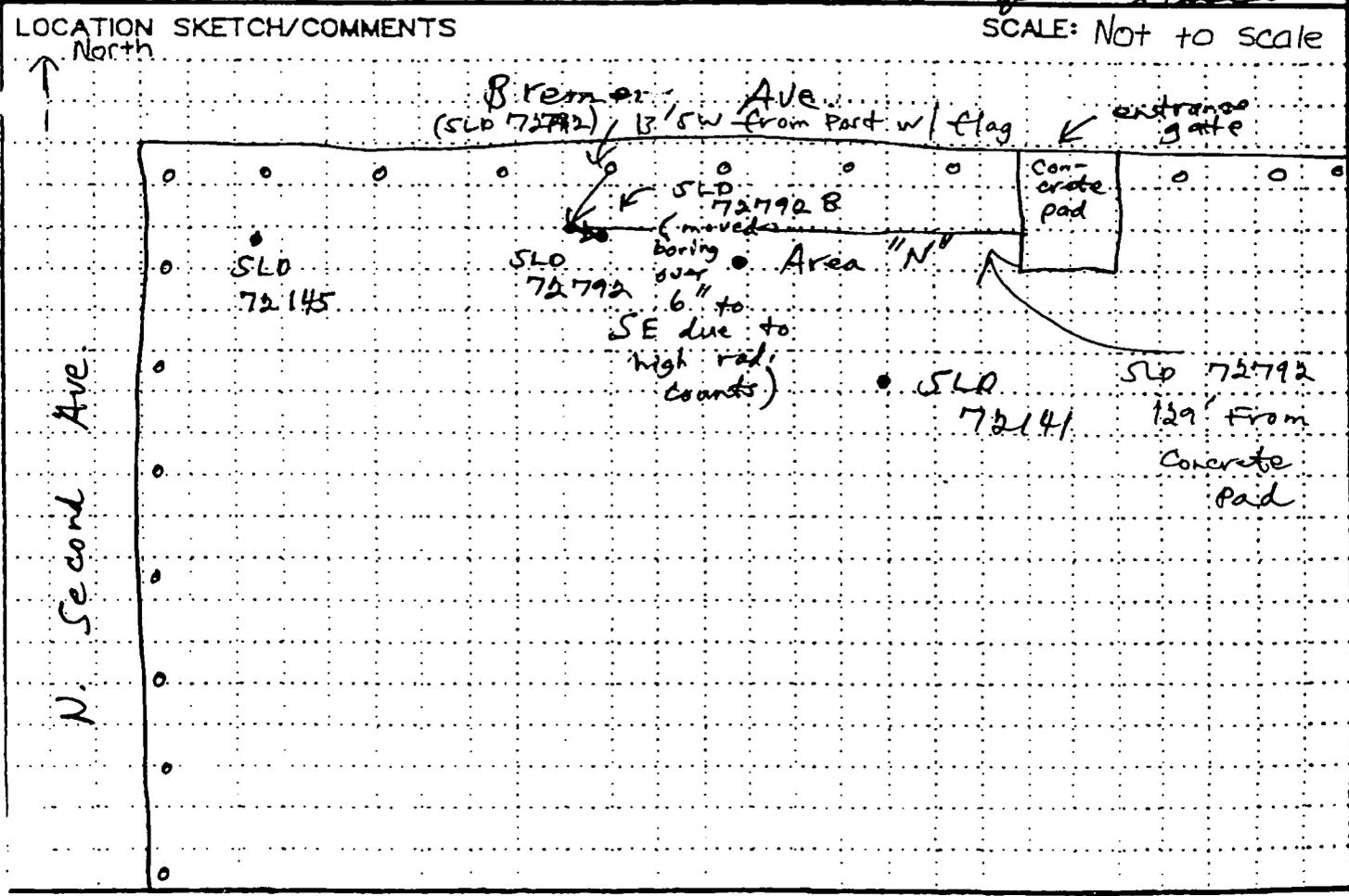


424

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT FUSRAP/SLDS		INSPECTOR Phillip Stolar		HOLE NUMBER SLD 72792		SHEET 2 of 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	RECOVERY (%)	LABORATORY SAMPLE NO.	BLOW COUNT	REMARKS			
1.0	silty fine sand, loose, poorly graded, dk. brn, dry.	8300 0.0	0.5	SLD 72792 archive 1100	5	archive taken @ (10-1-02, 1100) 0.0-0.5' BGS Readings from cuttings: 13-14 K ↓ archive sample taken from 2.0-2.5' BGS			
		N/A	1.0		9				
		N/A	no recovery		7				
		N/A			6				
		N/A			4				
2.0	PS sand trace cinders, slag and brick frags.	9300 0.0	0.7/2.0	SLD 72792 1115	4				
		N/A			5				
		N/A	no recovery		6				
		N/A			6				
		N/A			3				
3.0		9300 0.0	2.0/2.0	SLD 72792 1145	3	in-situ encountered at 4.3' BGS * Boring back-filled w/ 2 bags of bentonite chips. Capped w/ soil			
		7900 0.0		4					
		7200 0.0		7					
		7000 0.0		9					
		7900 0.0		3					
4.0		7900 0.0	1.9/2.0		5				
		6900 0.0		9					
		6300 0.0		9					
		6500 0.0		7					
		6500 0.0		4					
5.0	mottled, gray/brown, trace fine sand.	6500 0.0	2.0/2.0	SLD 72792 1150	7	archive sample taken from 7.4-7.9' BGS			
		6700 0.0		6					
		6700 0.0		6					
		6700 0.0		6					
		5300 0.0		6					
6.0	PS trace cinders, slag	7900 0.0	1.9/2.0		3	archive sample taken from 9.0-9.5' BGS TD: 10.0' BGS 10-1-02, 1315 *			
		6900 0.0		5					
		6300 0.0		9					
		6500 0.0		7					
		6500 0.0		4					
7.0	mottled, gray/brown, trace fine sand.	6300 0.0	2.0/2.0		9				
		6500 0.0		7					
		6500 0.0		4					
		6700 0.0		6					
		6700 0.0		6					
8.0	silty fine sand, loose, poorly graded, mottled gray/brown, dry, textured.	6500 0.0	2.0/2.0		4				
		6700 0.0		6					
		6700 0.0		6					
		6700 0.0		6					
		5300 0.0		6					

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<b>HTRW DRILLING LOG</b>		DISTRICT St. Louis	HOLE NUMBER: SLD 72792B
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.	
3. PROJECT FUS RAP / SLDS		4. LOCATION PSC Metal North Tract <del>City of Venice, IL VA</del> V.P.	
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3 1/2" HSA and 3" x 2" split spoon		8. HOLE LOCATION N/A	
12. OVERBURDEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A	
13. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
14. TOTAL DEPTH OF HOLE 4.0' BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A	
18. GEOTECHNICAL SAMPLES DISTURBED <input type="checkbox"/> UNDISTURBED <input type="checkbox"/>		19. TOTAL NUMBER OF CORE BOXES <input type="checkbox"/>	
20. SAMPLES FOR CHEMICAL ANALYSIS ROC <input type="checkbox"/> METALS <input type="checkbox"/> OTHER (SPECIFY) <input type="checkbox"/>		21. TOTAL CORE RECOVER <input type="checkbox"/>	
22. DISPOSITION OF HOLE SACRIFICED <input type="checkbox"/> MONITORING WELL <input type="checkbox"/> OTHER (SPECIFY) <input type="checkbox"/>		23. SIGNATURE OF INSPECTOR Phillip M. Staller	



PROJECT: FUS RAP / SLDS	HOLE NO. SLD 72792B
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HTRW DRILLING LOG (CONTINUATION SHEET)						FILE NUMBER SLD 72792 B	
PROJECT FUSRAP/SLDS			INSPECTOR Philip Statler			SHEET 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER NO.	RECOVERY (%)	SLUG COUNT	REMARKS	DEPTH (ft)	
SM 1.0 2.0 3.0 4.0	silty fine sand, loose, poorly graded, dk. brn, dry, piece of slag, trace chlds.	17,000	0.0	RECOVERY 8.2/2.0	5	slag is sub-angular w/ reddish tint.	
		N/A	N/A	no	17		
	pieces of slag	N/A	N/A	recovery	20	slag is sub-angular / reddish tint.	
		N/A	N/A		20		
	N/A	N/A	0.5/2.0	17			
	N/A	N/A	no	5			
	N/A	N/A	recovery	5			
	N/A	N/A		8			
4.0	TD: 4.0' BGS 10-1-02 1350				Background: NAI: 6,400 PID: 0.0	4.0	
5.0					Boring back filled w/ 1/8 bags of bentonite chips.	5.0	
6.0					Boring drilled to collect lithological data, radiological data not found in SLD 72792.	6.0	
7.0						7.0	
8.0						8.0	
9.0						9.0	
10.0						10.0	

FUSRAP/SLDS

SLD 72792 B

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72806	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 OF 3 SHEETS	
3. PROJECT FUSRAP/SLDS				4. LOCATION PSC Metals North Tract V.P.			
5. NAME OF DRILLER Chris Anthony				6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 Using 4 1/2" HSA and 3" x 2" split spoon.				8. HOLE LOCATION See location sketch			
				9. SURFACE ELEVATION N/A			
PED 1-13-03 NAT LUD 172046 to 100/100 Cal. Date: 1-13-03 Bkg: 5/11/03				10. DATE STARTED 1-13-03		11. DATE COMPLETED 1-13-03	
12. OVERBURDEN THICKNESS N/A				15. DEPTH GROUNDWATER ENCOUNTERED N/A			
13. DEPTH DRILLED INTO ROCK N/A				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 16.0 FT BGS				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
		RAD		OTHER (SPECIFY)		OTHER (SPECIFY)	
21. TOTAL CORE RECOVERY		22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
		Yes		N/A		N/A	
23. SIGNATURE OF INSPECTOR <i>Phillip Statter</i>				SCALE: Not to scale			
<p>LOCATION SKETCH/COMMENTS Witnessed by: Phillip Statter</p> <p>Terms used to describe %  Trace - &lt; 5%  Few - 5-10%  Little - 15-25%  Some - 20-35%  Mostly - 50-100%</p> <p>SLD 72806 (Area M)</p> <p>Green Bldg.</p>							
PROJECT FUSRAP/SLDS					HOLE NO. SLD 72806		

HTRW DRILLING LOG (CONTINUATION SHEET)						
PROJECT	INSPECTOR	HOLE NUMBER	SHEET	TOTAL SHEETS		
FUSRAP / SLDS	Phillip Stator	SLD 72806	2 of 3			
DEPTH (ft)	DESCRIPTION OF MATERIALS	LOG TIME (min)	RECOVERY (%)	QUALITY CONTROL SAMPLE NO.	RELATIVE CORRECTION	REMARKS
1.0	silty clay w/ some fine sand, and few med. gravel, silt, to very silty, med. plant, dk. br, dry, trace brick frags, trace cinders, trace slag.	5700 0.0	RECOVERY	SLD 72806 1-13-03 115	19	
		6000 0.0	2.0	SLD 72807 1120	18	
		5700 0.0	2.0		18	
	piece of metal	5600 0.0			15	
2.0	few fine sand, gravel absent, some brick frags.	5700 0.0	2.0		14	
		6300 0.0	2.0	SLD 72808 1130	19	
		5800 0.0	2.0		18	
		5900 0.0			14	
4.0	cinders and slag absent, brick frags absent	5700 0.0	1.8		5	
		6900 0.0	2.0		4	
5.0		6100 0.0		SLD 72809 1140	6	
		5900 0.0			5	
6.0	few cinders, few slag.	5900 0.0	no recovery		4	
		6200 0.0	2.0	SLD 72806 archive 1150	5	archive sample from 6.5-7.0' BAS
	few brick frags, bone frag.	5700 0.0	2.0		5	
	few pieces of porcelain, few brick frags.	5600 0.0			5	
8.0	few cinders, few slag, few brick frags, trace glass.	5800 0.0	1.8		3	
		5700 0.0	2.0	SLD 72806 archive 1150	4	archive sample from 8.5-9.0' BAS
		5500 0.0			6	
9.0	T nail	5400 0.0	no recovery		10	
10.0						

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 72806
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Stator			SHEET 3 of 3		SHEET #
DEPTH (ft)	DESCRIPTION OF MATERIALS	NO. OF SAMPLES COLLECTED	RECOVERY	ANALYTICAL LABORATORY NO.	BLOW COUNT (ft)	REMARKS	
CL	trace limestone cobbles	5400 0.0	1.6 2.0	SLD 72806 archive 1300	7	archive sample from 11.1-11.6' BGS.	
	trace wood frags.	5500 0.0			5		
	clay turning lt. gray	5900 0.0	5				
		6100 0.0	no recovery	6			
	trace brick frags	5100 0.0	1.7 2.0	SLD 72806 archive 1300	3		
		6500 0.0			8		
		5300 0.0			11		
	SM	Silty fine sand, loose to med. dense, poorly graded, lt. brn, moist.	5500 0.0	no recovery	SLD 72806 archive 1350		13
		6000 0.0	2.0 2.0	SLD 72810 1400	4		
textured, trace roots.		5700 0.0			3		
		5700 0.0	6				
		5800 0.0	5				
						in-situ encountered.	
TD: 16.0' BGS 1-13-03 1330						Background: NaI: 5,418 PID: 0.0 Backfilled boring w/ strength grout (@20-30% solids).	

PROJECT FUSRAP/SLDS

WELL NO. SLD 72806

PROJECT		FUS RAP / SLOS	
1. COMPANY NAME		Show E + I	
2. HOLE IDENTIFICATION		ST. LOUIS	
3. LOCATION		886 Metrol North Blvd. W.P.	
4. MANUFACTURER'S IDENTIFICATION OF DRILL		Diedrich D-120	
5. HOLE LOCATION		Diedrich D-120	
6. HOLE DEPTH		3" x 2" split 5000	
7. SIZE AND TYPE OF DRILLING AND SAMPLING EQUIPMENT		using XTRMSA and	
8. NAME OF DRILLER		Chris Anthony	
9. PROJECT		FUS RAP / SLOS	
10. DATE STARTED		LUD 12/20/96	
11. DATE COMPLETED		10-7-02	
12. OBSERVED THICKNESSES		To 100/100 GOLDRATE 4-1-02 Bgk = 4100	
13. DEPTH CORRECTED TO ROCK		N/A	
14. DEPTH CORRECTED TO SOIL		N/A	
15. TOTAL DEPTH OF HOLE		10.0' BGS	
16. DISTURBED SAMPLES		OBTAINED	
17. UNDISTURBED		OBTAINED	
18. TOTAL NUMBER OF CORE BOLES		0	
19. SAMPLES FOR CHEMICAL ANALYSIS		YES	
20. SAMPLES FOR METALS ANALYSIS		YES	
21. OTHER (SPECIFY)		METALS	
22. OTHER (SPECIFY)		RAD	
23. OTHER (SPECIFY)		OTHER (SPECIFY)	
24. OTHER (SPECIFY)		OTHER (SPECIFY)	
25. OTHER (SPECIFY)		OTHER (SPECIFY)	
26. OTHER (SPECIFY)		OTHER (SPECIFY)	
27. TOTAL CORE LENGTH		0	
28. OTHER (SPECIFY)		OTHER (SPECIFY)	

LOCATION SKETCH/COMMENTS

SCALE: NOT TO SCALE

North ↓

R.R. Tracks  
 State House 186' W. House  
 21.5' of length  
 LUD 12/20/96  
 Wall  
 Green pig.

ENG FORM 3056A-R, AUG 98

HTRW DRILLING LOG (CONTINUATION SHEET)		EUSRAP/SIDS	
DEPTH (FEET)	LOG DESCRIPTION	LOG DESCRIPTION	DEPTH (FEET)
100.0	6	9.5-10.0' BDS	9.5-10.0' BDS
95.0	5	archive sample from 10-7-01	archive sample from 10-7-01
90.0	3	1500	1500
85.0	4	7D: 10.0' BDS	7D: 10.0' BDS
80.0	13	7.0-7.5' BDS	7.0-7.5' BDS
75.0	14	archive sample from 10-7-01	archive sample from 10-7-01
70.0	12	1.7' / 2.0'	1.7' / 2.0'
65.0	6	1.7' / 2.0'	1.7' / 2.0'
60.0	11	5.1' / 2.0'	5.1' / 2.0'
55.0	12	brick frags, some	brick frags, some
50.0	8	2.0' / 2.0'	2.0' / 2.0'
45.0	11	clay (b/f)	clay (b/f)
40.0	22	clay (b/f)	clay (b/f)
35.0	14	brick frags piece of wood	brick frags piece of wood
30.0	23	1.7' / 2.0'	1.7' / 2.0'
25.0	13	brick frags (b/f)	brick frags (b/f)
20.0	13	brick frags in tip	brick frags in tip
15.0	29	Some limestone frags	Some limestone frags
10.0	33	1.7' / 2.0'	1.7' / 2.0'
5.0	48	1.7' / 2.0'	1.7' / 2.0'

SM

CL

SM

HTRW DRILLING LOG (CONTINUATION SHEET) EUSRAP/SIDS  
 P. 11 of 12  
 2 = 5  
 72112

HTRW DRILLING LOG		FUS RAP / SLOS	
1. CONTACT NAME	SHOW E + I	2. DRILLING CONTRACTOR	MES, INC.
3. PROJECT	FUS RAP / SLOS	4. LOCATION	RSC Metals North West N.R. Rd. City of Venice, La.
5. NAME OF WELL	Chris Anthony	6. HANDBOOK'S NUMBER OR SERIAL	
7. SIZE AND TYPE OF CASING AND CASING DEPTH	Drillch D-120	8. WELL LOCATION	N/A
8. SURFACE ELEVATION	3' ± 8" Soil 5000	9. SURFACE ELEVATION	N/A
9. DATE OF LOG	10-16-02	10. DEPTH TO WATER	10-7-02
11. DATE OF LOG	10-8-02	12. OBSERVATIONS / COMMENTS	10-16-02 NBI LUD 175040 TO 100/100 SANDY 4-1-02 BGR = 4100
13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETION	N/A	14. TOTAL DEPTH OF HOLE	10.0' BGS
15. TOTAL NUMBER OF CORE BOXES	UNREGISTERED	16. TOTAL NUMBER OF CORE BOXES	UNREGISTERED
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	N/A	18. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETION	N/A
19. TOTAL NUMBER OF CORE BOXES	UNREGISTERED	20. TOTAL NUMBER OF CORE BOXES	UNREGISTERED
21. TOTAL NUMBER OF CORE BOXES	UNREGISTERED	22. POSITIVE DEPTH	UNREGISTERED
23. TOTAL NUMBER OF CORE BOXES	UNREGISTERED	24. TOTAL NUMBER OF CORE BOXES	UNREGISTERED

LOCATION SKETCH/COMMENTS

SCALE: NOT TO SCALE

North ↓

SLO 72820

FUS RAP / SLOS

ENG FORM 888A-2, AUG 94

HTRW DRILLING LOG (CONTRIBUTION SHEET)		PHILIP S. STAFFOR		EUSRAP/SLDS	
DEPTH (FEET)	LOG	TEST	LOG	TEST	LOG
10.0	8	4800	0.0	5000	0.0
9.0	11	4800	0.0	5100	0.0
8.0	10	4800	0.0	4900	0.0
7.0	5	4800	0.0	5300	0.0
6.0	11	4800	0.0	4900	0.0
5.0	6	4800	0.0	4900	0.0
4.0	3	4800	0.0	4900	0.0
3.0	5	4800	0.0	4800	0.0
2.0	10	3900	0.0	3900	0.0
1.0	8	3700	0.0	3700	0.0
0.0	8	3800	0.0	3800	0.0
	5	4900	0.0	4900	0.0
	7	4700	0.0	4700	0.0
	7	4900	0.0	4900	0.0
	8	3900	0.0	3900	0.0
	7	4900	0.0	4900	0.0
	21	N/A	N/A	N/A	N/A
	41	N/A	N/A	N/A	N/A
	48	3800	0.0	3800	0.0
	13	4900	0.0	4900	0.0

5LD 72820

EUSRAP/SLDS

archival sample from 0.5-1.0' EGS

backfilling 11.05

TD: 10.8' EGS

archival sample from 6.0-6.5' EGS

Background 10/8/02: 4200

in-situ encountered

Strong diesel odor

2.0' / 2.0'

2.0' / 2.0'

1.7' / 2.0'

2.0' / 2.0'

2.0' / 2.0'

1.3' / 2.0'

very silty sand + m in color

very fine.

tan in color, sand is very fine.

trace cinders and/or

some cinders

clay impregnated bank

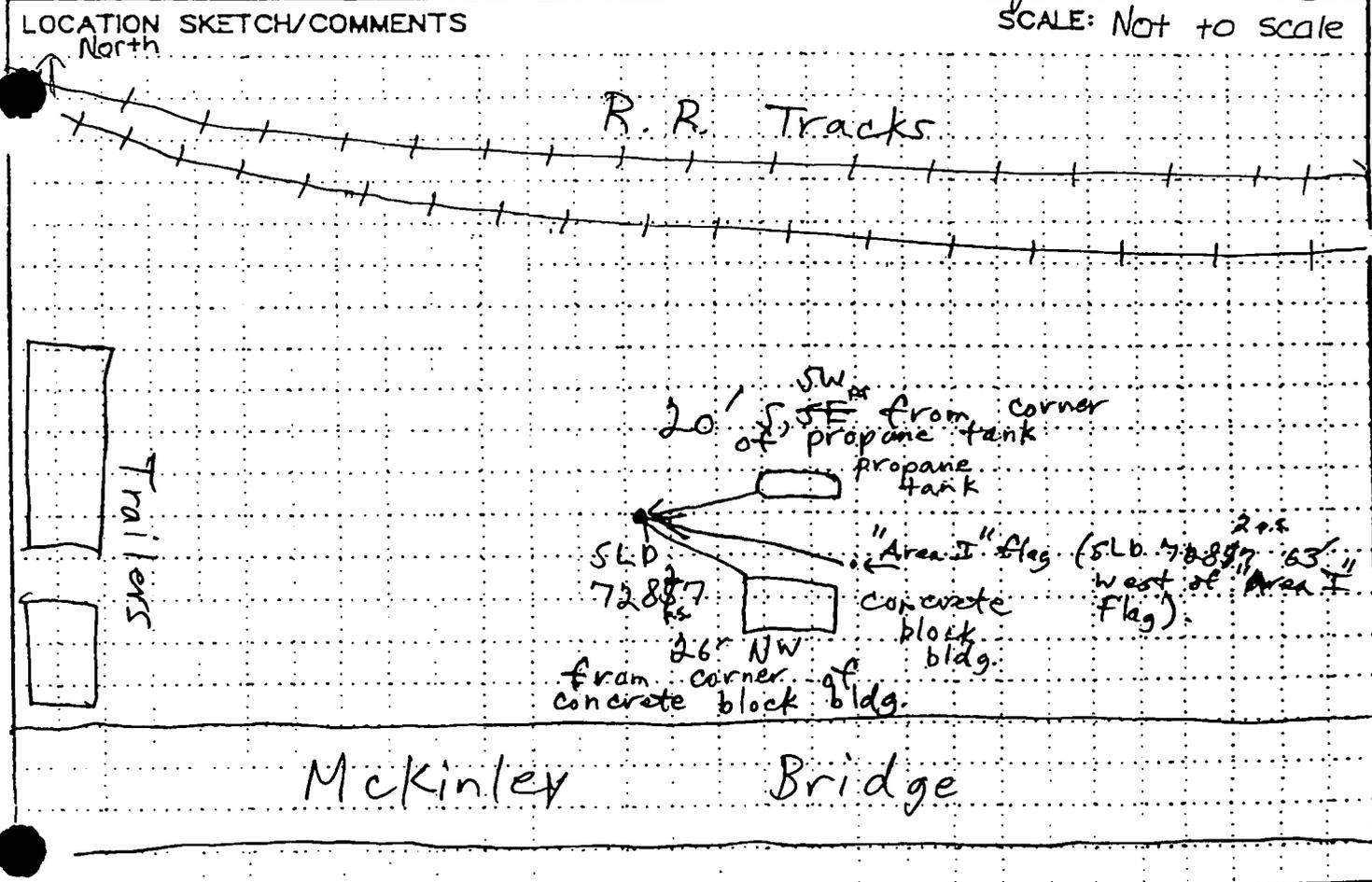
trace clay

fine sand w/ some gravel, red, some clay & some silt. Poorly sorted & some fine sand.

SM

# HTRW DRILLING LOG

1. PROJECT <b>FUS RAP / SLDS</b>		DISTRICT <b>St. Louis</b>		HOLE NUMBER: <b>SLD 72827</b>	
CLIENT NAME <b>Shaw E + I</b>		2. DRILLING SUBCONTRACTOR <b>MES, Inc.</b>		SHEET <b>1 of 3</b>	
3. NAME OF DRILLER <b>Chris Anthony</b>		4. LOCATION <b>PSC Metals North Tract V.P. City of Venice, IL V.P. #6</b>		5. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120</b>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 4/4" HSA and 3" x 2' split spoon</b>		8. HOLE LOCATION <b>N/A</b>		9. SURFACE ELEVATION <b>N/A</b>	
10. DATE STARTED <b>10-10-02</b>		11. DATE COMPLETED <b>10-10-02</b>		12. OVERBURDEN THICKNESS <b>N/A</b>	
13. DEPTH DRILLED INTO ROCK <b>N/A</b>		15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>	
14. TOTAL DEPTH OF HOLE <b>20.0' BGS</b>		17. OTHER WATER LEVEL MEASUREMENTS (SPECFY) <b>N/A</b>		18. GEOTECHNICAL SAMPLES	
19. TOTAL NUMBER OF CORE BOXES <b>0</b>		20. DEPOSITION OF HOLE <b>SAG FILLED Yes</b>		21. TOTAL CORE RECOVERY <b>0%</b>	
22. DEPOSITION OF HOLE <b>SAG FILLED Yes</b>		23. SIGNATURE OF INSPECTOR <b>Phillip R. Staller</b>		24. OTHER (SPECIFY)	



HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLP 72827	
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statler				SHEET 2 OF 3 SHEETS	
DEPTH (ft)	DESCRIPTION OF MATERIALS (11)	WATER SAMPLE NO. (12)	GRAVIMETER SAMPLE NO. (13)	NUMERICAL SAMPLE NO. (14)	SLOW CORE BIT (15)	REMARKS (16)	
SM	silty fine sand w/ some med gravel, med dense, poorly graded, dry, blk, some cinders and slag, trace brick frags.	6300	RECOVERY	SLP 72827 1077-02 1000	13		
		7700	2.0		13		
		7000	2.0	SLP 72828 1010	13		
		6200			10		
		5900	1.7		6		
		5900	2.0		5		
		6500		SLP 72829 1025	4		
		6300	no recovery		4		
		5700	1.6		3		
		5800	2.0		3		
CL	trace clay; trace med. gravel.  silty clay, med stiff, med. plast, lt. brn, dry, some med. gravel, trace brick frags, trace cinders, trace slag.  trace glass  clay turning lt gray, moist, no brick frags, cinders or slag	6300		SLP 72830 1035	4		
		N/A	no recovery		4		
		5900	1.6	SLP 72832 1050	5	archive sample from 6.3-6.8 BGS.	
		6500	2.0		5		
		6200			3		
		N/A	no recovery		5		
		5800			5		
		5900	2.0		8		
		6600	2.0	SLP 72837 1105	13	archive sample from 9.3-9.8 BGS.	
		6500			7		

SLP 72827

PROJECT FUSRAP/SLDS

HOLE NO SLP 72827

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 72827	
PROJECT FUSRAP/SLDS		INSPECTOR Philip Statler				SHEET 3 OF 3	
DEPTH (ft)	DESCRIPTION OF MATERIALS	LOG CORRECTION IN FEET	RECOVERY %	WATER SAMPLE NO.	BLOW COUNT	REMARKS	DEPTH (ft)
		5800 0.0	RECOVERY		3		
		6300 0.0	1.8/ 2.0		4		
11.0	wood frags, weathered, flaky piece of large limestone	6400 0.0		SLD 72827 archive 1120	5	archive sample from 10.8-11.3 BGS	11.0
	silty fine sand, loose, poorly graded, H. gry, moist	5800 0.0	no recovery	SLD 72827 archive 1125	5	archive sample from 11.3-11.8 BGS	
12.0		5400 0.0			2		12.0
	wood frags, weathered, flaky, blk, some larger frags (possibly driftwood)	6000 0.0	1.6/ 2.0		2		
13.0		6800 0.0			3	archive sample from 13.1-13.6 BGS	13.0
		6100 0.0	No recovery	SLD 72827 archive 1180	10	driftwood at 13.3-13.6 BGS	14.0
14.0		5900 0.0			2		14.0
		6000 0.0	2.0/ 2.0		2		
15.0		5900 0.0			2		15.0
		6200 0.0			4	archive sample from 15.5-16.0 BGS	
SM	trace flaky weath. wood frags textured, wet	5400 0.0		SLD 72827 archive 1185	4		16.0
		5300 0.0	2.0/ 2.0	SLD 72831 1320	4	← in-situ encountered	
17.0		5300 0.0			7		17.0
		6200 0.0	2.0/ 2.0		8		
18.0		5600 0.0			7		18.0
		5800 0.0	2.0/ 2.0	SLD 72827 archive 1320	3	archive sample from 18.0-18.5 BGS	
CL	silty clay, soft to med. stiff, med. plastic, gry, wet.	6300 0.0			3	TD: 20.0' BGS 1325 10-10-02	19.0
		6200 0.0			4	Backfilled w/ strength grout.	
19.0		6000 0.0			6	Cap and soil.	20.0

HTRW DRILLING LOG			DISTRICT			HOLE NUMBER																																	
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc.			St. Louis SLB 72939																																	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.			SHEET 1 of 2																																	
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120																																				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 Using 3/4" HSA and 3" x 3" split spear.			8. HOLE LOCATION See location sketch			9. SURFACE ELEVATION N/A																																	
12. OVERBURDEN THICKNESS N/A			10. DATE STARTED 2-12-03			11. DATE COMPLETED 2-12-03																																	
13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A																																	
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A																																				
18. GEOTECHNICAL SAMPLES			19. TOTAL NUMBER OF CORE BOXES																																				
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERY																																				
22. DISPOSITION OF HOLE			23. SIGNATURE OF INSPECTOR																																				
<table border="1"> <tr> <th>DISTURBED</th> <th>UNDISTURBED</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>0</td> <td>0</td> <td>RAD</td> <td>0</td> <td>0</td> </tr> </table>			DISTURBED	UNDISTURBED	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	0	0	RAD	0	0	<table border="1"> <tr> <th>ROCK</th> <th>METALS</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>0</td> <td>0</td> <td>RAD</td> <td>0</td> <td>0</td> </tr> </table>			ROCK	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	0	0	RAD	0	0	<table border="1"> <tr> <th>BACKFILLED</th> <th>MONITORING WELL</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>0</td> <td>N/A</td> <td>N/A</td> </tr> </table>			BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	0	N/A	N/A	<table border="1"> <tr> <th>SCALE</th> </tr> <tr> <td>Not to scale</td> </tr> </table>			SCALE	Not to scale
DISTURBED	UNDISTURBED	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)																																			
0	0	RAD	0	0																																			
ROCK	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)																																			
0	0	RAD	0	0																																			
BACKFILLED	MONITORING WELL	OTHER (SPECIFY)																																					
0	N/A	N/A																																					
SCALE																																							
Not to scale																																							
LOCATION SKETCH/COMMENTS Witnessed by: Phillip Statler Bremen St. HTZ 66222 fence HTZ 66254 SLB 72939 N SLB 72943 HTZ 66219			Terms used to describe % Trace - < 5% Few - 5-10% Little - 15-25% Some - 20-35% Mostly - 50-100%																																				
PROJECT FUSRAP/SLDS			HOLE NO. SLB 72939																																				

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72939
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Statler				DATE 2-2-98
DEPTH (ft)	DESCRIPTION OF MATERIALS	DEPTH (ft)	RECOVERY (%)	DEPTH (ft)	DEPTH (ft)	REMARKS
SM	Silty fine sand w/ few med. gravel, loose to med. dense, poorly graded, lt. brn, dry, some clinders, some slag, few "reddish" slag.	7100 0.0	RECOVERY	0.0-0.5' 1020	14	SLD 72939 7020
		6600 0.0	1.8/ 2.0	0.5-1.0' 1022	8	
		7200 0.0		1.0-1.5' 1025	5	SLD 72940 1025
		7000 0.0		1.5-1.8' 1027	4	
		6900 0.0	no recovery	2.0-2.5' 1033	3	
		7200 0.0	1.4/ 2.0	2.5-3.0' 1035	2	SLD 72941 1035
		7200 0.0		3.0- 3.14 (104)	2	
		N/A N/A	no recovery		1	
		6500 0.0	1.4/ 2.0	4.0-4.5' 1010	1	SLD 72942 1010
		6600 0.0		4.5-5.0' 1012	1	SLD 72942 1012
CL	Silty clay, soft, med. plastic, lt. brn, dry.	6100 0.0		5.0- 5.4' (105)	1	
		N/A N/A	no recovery		1	
70.0	Td: 6.0' BG5 2-12-03 1035					Back ground: NaI: 6047 PIB: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips. * Samples will be coun- ted using gas proportional meter (See attached sheet)
8.0						
9.0						
10.0						

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72939

Date Sample was collected: 2-12-03

Date Sample was analyzed: 2-20-03

Instrument #1 Background 6833 cpm

Instrument #2 Background 4817 cpm

Count rate of Empty Pan: Beta 98 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	7100	267	4708	-109	106	8
6-12	6600	-233	5183	366	135	37
12-18	7200	367	5214	397	186	88
18-24	7000	167	5015	198	151	53
24-30	6900	67	5095	278	144	46
30-36	7200	367	5699	882	215	117
36-42	7200	367	5417	600	182	84
42-48	N/A	N/A	N/A	N/A	N/A	N/A
48-54	6300	-533	5177	360	153	55
54-60	6600	-233	5051	234	161	63
60-66	6100	-733	5002	185	149	51
66-72	N/A	N/A	N/A	N/A	N/A	N/A

SLD 72939

SLD 72940

SLD 72941

SLD 72939 (archive)

SLD 72942

HTRW DRILLING LOG			DISTRICT			HOLE NUMBER		
1. COMPANY NAME Shaw E & I			St. Louis			SLD 72943		
2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET			1 OF 2 SHEETS		
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.			5. NAME OF DRILLER Chris Anthony		
6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			7. HOLE LOCATION See location sketch			8. SURFACE ELEVATION N/A		
9. DATE STARTED 2-6-03			10. DATE COMPLETED 2-6-03			11. OVERBURDEN THICKNESS N/A		
12. DEPTH DRILLED INTO ROCK N/A			13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			14. TOTAL DEPTH OF HOLE 6.0 FT BGS		
15. GEOTECHNICAL SAMPLES			16. TOTAL NUMBER OF CORE BOXES			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
18. SAMPLES FOR CHEMICAL ANALYSIS			19. DEPTH GROUNDWATER ENCOUNTERED N/A			20. DEPOSITION OF HOLE		
21. TOTAL CORE RECOVERY			22. SIGNATURE OF INSPECTOR			23. SIGNATURE OF INSPECTOR		
<p>LOCATION SKETCH/COMMENTS Witnessed by: Phillip Statler SCALE: Not to Scale</p> <p>Terms used to describe %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p>								
PROJECT FUSRAP/SLDS						HOLE NO. SLD 72943		

HTRW DRILLING LOG (CONTINUATION SHEET)							LOG NUMBER SLO 72943
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Statler		SHEET NO. 2 of 2		SHEETS	
DEPTH ft	DESCRIPTION OF MATERIALS	DEPTH ft	RECOVER	LOG NO.	DEPTH ft	LOG NO.	
SM 1.0	Silty fine sand w/ some med. gravel (loose, poorly graded, dk. brn. to blk, dry, some cin- ders, some slag	5900	RECOVER	1605	6	510 72943 1605	
		5900	2.0	1607	8	510 72944 1807	
		5900	2.0	1610	8	510 72943 1610	
CL 2.0 3.0 4.0 5.0 6.0	Silty clay and silt, med. plastic to brn, moist.  few med. gravel	5900		1613	2		
		5900	1.6	1615	5		
		5900	2.0	1617	3	510 72943 1617	
		4700		1620	8		
		N/A	no recovery		8		
		4800	1.8	1450	3		
7.0 8.0 9.0 10.0	TD: 6.0' BBS 2-6-03 1615	4800	2.0	1452	5		
		5100		1455	8	510 72946 1455	
		4800	no recovery	1458	8		
Background: 4.6 SS NAT: 1172040 PID: 00 AS  Back-filled boring w/ 3.0 bags of bentonite chips.							

PROJECT FUSRAP / SLDs

LOG NO. SLO 72943

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72943 PDI Date Sample was collected: 2-6-03 Date Sample was analyzed: 2-11-03

Instrument #1 Background 4655cpm Instrument #2 Background 4851cpm

Count rate of Empty Pan: Beta ~~24cpm~~ 99cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	5900	1245	7231	2380	639	540
6-12	5600	945	5587	736	269	170
12-18	5000	345	4951	100	152	53
18-24	5400	745	5122	271	138	39
24-30	5000	345	4822	-29	166	67
30-36	5600	945	5209	358	129	30
36-42	4700	45	4930	79	150	151
42-48	N/A	N/A	N/A	N/A	N/A	N/A
48-54	4800	145	5277	426	172	73
54-60	4800	145	5168	317	150	51
60-66	5100	445	5321	470	159	60
66-72	N/A	N/A	N/A	N/A	N/A	N/A

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72943 PDI

Date Sample was collected: 2-6-03

Date Sample was analyzed: 2-11-03

Instrument #1 Background 4655cpm

Instrument #2 Background 4851cpm

Count rate of Empty Pan: Beta ~~84cpm~~ 99cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	5900	1245	7231	2380	639	540
6-12	5600	945	5587	736	269	170
12-18	5000	345	4951	100	152	53
18-24	5400	745	5122	271	138	39
24-30	5000	345	4822	-29	166	67
30-36	5600	945	5209	358	129	30
36-42	4700	45	4930	79	150	151
42-48	N/A	N/A	N/A	N/A	N/A	N/A
48-54	4800	145	5277	426	172	73
54-60	4800	145	5168	317	150	51
60-66	5100	445	5321	470	159	60
66-72	N/A	N/A	N/A	N/A	N/A	N/A

HTRW DRILLING LOG			DISTRICT <u>St. Louis</u>			HOLE NUMBER <u>SLD 72947 AC</u>																																																								
1. COMPANY NAME <u>Shaw E &amp; I</u>			2. DRILLING SUBCONTRACTOR <u>MES, Inc.</u>			SHEET <u>1</u> OF <u>2</u>																																																								
3. PROJECT <u>FUSRAP/SLDS</u>			4. LOCATION <u>PSC Metals North Tract V.P.</u>																																																											
5. NAME OF DRILLER <u>Chris Anthony</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>Diedrich D-120</u>																																																											
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Diedrich D-120</u> <u>using 1/4" HSA and</u> <u>3" x 2" split spasn.</u>			8. HOLE LOCATION <u>See location sketch</u>			9. SURFACE ELEVATION <u>N/A</u>																																																								
12. OVERBURDEN THICKNESS <u>N/A</u>			10. DATE STARTED <u>2-11-03</u>			11. DATE COMPLETED <u>2-11-03</u>																																																								
13. DEPTH DRILLED INTO ROCK <u>N/A</u>			15. DEPTH GROUNDWATER ENCOUNTERED <u>N/A</u>			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>N/A</u>																																																								
14. TOTAL DEPTH OF HOLE <u>6.0 FT BGS</u>			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>N/A</u>																																																											
18. GEOCHEMICAL SAMPLES			19. TOTAL NUMBER OF CORE BOXES																																																											
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERY																																																											
22. DISPOSITION OF HOLE			23. SIGNATURE OF INSPECTOR																																																											
<table border="1"> <tr> <td><input type="checkbox"/> DISTURBED</td> <td><input type="checkbox"/> METALS</td> <td><input type="checkbox"/> OTHER (SPECIFY)</td> <td><input type="checkbox"/> OTHER (SPECIFY)</td> <td><input type="checkbox"/> OTHER (SPECIFY)</td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input type="checkbox"/> RAD</td> <td><input type="checkbox"/> OTHER (SPECIFY)</td> <td><input type="checkbox"/> OTHER (SPECIFY)</td> <td><input type="checkbox"/> OTHER (SPECIFY)</td> </tr> </table>			<input type="checkbox"/> DISTURBED	<input type="checkbox"/> METALS	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> YES	<input type="checkbox"/> RAD	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> OTHER (SPECIFY)	<table border="1"> <tr> <td><input type="checkbox"/> UNDISTURBED</td> <td><input type="checkbox"/> MONITORING WELL</td> <td><input type="checkbox"/> OTHER (SPECIFY)</td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input type="checkbox"/> N/A</td> <td><input type="checkbox"/> N/A</td> </tr> </table>			<input type="checkbox"/> UNDISTURBED	<input type="checkbox"/> MONITORING WELL	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input type="checkbox"/> N/A	<u>Phillip M. Stalter</u>																																								
<input type="checkbox"/> DISTURBED	<input type="checkbox"/> METALS	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> OTHER (SPECIFY)																																																										
<input type="checkbox"/> YES	<input type="checkbox"/> RAD	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> OTHER (SPECIFY)	<input type="checkbox"/> OTHER (SPECIFY)																																																										
<input type="checkbox"/> UNDISTURBED	<input type="checkbox"/> MONITORING WELL	<input type="checkbox"/> OTHER (SPECIFY)																																																												
<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input type="checkbox"/> N/A																																																												
LOCATION SKETCH/COMMENTS Witnessed by: <u>Phillip Stalter</u> SCALE: <u>Not to Scale</u>																																																														
<table border="1"> <tr> <td colspan="9">Terms used to describe %</td> </tr> <tr> <td colspan="9">Trace - &lt; 5 %</td> </tr> <tr> <td colspan="9">Few - 5-10 %</td> </tr> <tr> <td colspan="9">Little - 15-25 %</td> </tr> <tr> <td colspan="9">Some - 20-35 %</td> </tr> <tr> <td colspan="9">Mostly - 50-100 %</td> </tr> </table>									Terms used to describe %									Trace - < 5 %									Few - 5-10 %									Little - 15-25 %									Some - 20-35 %									Mostly - 50-100 %								
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PROJECT <u>FUSRAP/SLDS</u>						HOLE NO. <u>SLD 72947 AC</u>																																																								

HTRW DRILLING LOG (CONTINUATION SHEET)						LOG NUMBER SLP 729478C		
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Statler		SHEET 2 of 2 SHEETS				
DEPTH (ft)	DESCRIPTION OF MATERIALS	DEPTH (ft)	RECOVERY (%)	DEPTH (ft)	DEPTH (ft)	REMARKS		
SM 1.0	Silty fine sand w/ few med. gravel, poorly grad. dk. brn. to blk. dry; few cinders, few slag; trace brick frags.	7500 0.0	1.9 / 2.0	2.0-2.5 1600	4	SLP 72947-1-2		
		7550 0.0	2.0	2.5-3.0 1603	4			
		7600 0.0	2.0	3.0-3.5 1605	4	SLP 72948 1605		
		7650 0.0	2.0	3.5-4.0 1607	2			
CL 2.0 3.0 4.0 5.0 6.0	Silty clay; med. stiff to stiff; med. plastic; lt. brn. to lt. grv; dry.	7700 0.0	1.7 / 2.0	4.0-4.5 1610	3	SLP 72948 1610		
		6700 0.0	2.0	4.5-5.0 1612	6			
		6500 0.0	2.0	5.0-5.5 1615	7	SLP 72949 1615		
		6500 0.0	no recovery	5.5-6.0 1617	11	(1617)		
		7400 0.0	1.9 / 2.0	6.0-6.5 1550	4			
		7000 0.0	2.0	6.5-7.0 1553	7			
		7400 0.0	no recovery	7.0-7.5 1555	10	SLP 72950 1555		
		7500 0.0	no recovery	7.5-8.0 1557	13			
		TD: 6.0' BGS 2-11-03 1600				Background: NAT: 6833 PSD: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips. Samples will be counted w/ gas proportional meter (See att. sheet)		

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72947 QC

Date Sample was collected: 2-11-03

Date Sample was analyzed: 2-12-03

Instrument #1 Background 6833cpm

Instrument #2 Background 4500cpm

Count rate of Empty Pan: Beta 100cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	7500	667	6061	1561	554	454
6-12	7200	367	4775	275	181	81
12-18	7600	767	5071	571	385	285
18-24	7400	567	4801	301	220	120
24-30	6300	-533	4982	482	282	182
30-36	6700	-133	4609	109	145	45
36-42	6500	-333	4740	240	135	35
42-48	6500	-333	4509	9	144	44
48-54	7400	567	4778	278	210	110
54-60	7000	167	4550	50	152	52
60-66	7400	567	4565	65	147	47
66-72	7500	667	4488	-12	162	62

SLD 72947, -1, -2

SLD 72948  
SLD 72947 QC  
archive

←  
SLD P.S.

SLD 72949

SLD 72950

285  
2-12-02

HTRW DRILLING LOG			DISTRICT	MOLE NUMBER
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.		SLD 72947 QC (A)
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.	
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using HSA and PS. 5" x 2" split spoon.		8. HOLE LOCATION See location sketch		
9. SURFACE ELEVATION N/A		10. DATE STARTED 2-11-03		
11. DATE COMPLETED 2-11-03		12. OVERBURDEN THICKNESS N/A		
13. DEPTH DRILLED INTO ROCK N/A		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
15. DEPTH TO GROUNDWATER ENCOUNTERED N/A		16. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
17. TOTAL DEPTH OF HOLE 0.5 FT BGS		18. GEOTECHNICAL SAMPLES		
19. TOTAL NUMBER OF CORE BOXES 0		20. SAMPLES FOR CHEMICAL ANALYSIS		
21. TOTAL CORE RECOVERY 0%		22. DISPOSITION OF HOLE		
23. SIGNATURE OF INSPECTOR Philip Stadler		24. LOCATION SKETCH/COMMENTS		
<p>Witnessed by: Philip Stadler SCALE: Not to Scale</p> <p>Terms used to describe %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p>				
<p>Bremers St.</p> <p>HTZ 66213</p> <p>SLD 72947 QC (A)</p> <p>SLD 72947 QC (b)</p> <p>SLD 72947 QC (c)</p> <p>SLD 72951</p> <p>HTZ 66256</p>				
PROJECT FUSRAP/SLDS			MOLE NO. SLD 72947 QC (A)	

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NO. SLD 72947 QC(b)
PROJECT FUSRAP/SLDS		SUPERVISOR Phillip Statler			PAGE 2 of 2 SHEETS	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	SHRINKAGE (%)	ANALYTICAL CORRECTED W.C. (%)	GROUND CORRECTED W.C. (%)	REMARKS
SM	silty, fine sand w/ some gravel, loose, poorly graded, dk. brn. to blk.; dry, fine silts.	7100 0.0	RECOVERY 0.5/0.5	0.0-0.5 1617	N/A	dug w/hand trowel.
1.0	TD: 0.5' @ 65 2-11-03 1617	/		SLD 72947 2-11-03 (1617)		Back grounds
2.0						Nat: 6833
3.0						PID: 0.0
4.0						Backfilled
5.0						boring w/ native soil.
6.0						* Sample
7.0						will be
8.0						counted using
9.0						gas propor-
10.0						tional meter.
	(see att-					
	ached sheet)					
	Sample					
	collected					
	to ensure					
	sufficient					
	volume in					
	QC sample					

RADIOLOGICAL SURVEY FORM

Sample ID SLD72947 QC (b)

Date Sample was collected: 2-11-03

Date Sample was analyzed: 2-12-03

Instrument #1 Background 6833cpm

Instrument #2 Background 4500cpm

Count rate of Empty Pan: Beta 100cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	7100	267	5022	522	225	125
6-12						
12-18						
18-24						
24-30						
30-36						
36-42						
42-48						
48-54						
54-60						
60-66						
66-72						

HTRW DRILLING LOG			DISTRICT	St. Louis		HOLE NUMBER	SLD 72951	
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc.			3. SHEET 1 of		
2. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.					
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 Using HSA and 3" x 2" split spear.			8. HOLE LOCATION See location sketch			9. SURFACE ELEVATION		
8. PTD PLUMB N/A Cal. Date: 4-11-03 Bkg: 7475			10. DATE STARTED 2-5-03			11. DATE COMPLETED		
12. OVERBURDEN THICKNESS N/A			15. DEPTH GROUNDWATER ENCOUNTERED					
13. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
14. TOTAL DEPTH OF HOLE FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES			DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS			VOC		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE			SACRIFICED		MONITORING WELL		OTHER (SPECIFY)	
			Yes		N/A		N/A	
LOCATION SKETCH/COMMENTS			Witnessed by:			SCALE: Not to Scale		
<p>Bremen</p>						<p>Terms used to describe %</p> <p>Trace - &lt; 5. %</p> <p>Few - 5 - 10. %</p> <p>Little - 15 - 25. %</p> <p>Some - 20 - 35. %</p> <p>Mostly - 50 - 100. %</p>		
PROJECT FUSRAP/SLDS			PSC Metals N. Tract 1			HOLE NO. SLD 72951		

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 72951
PROJECT FUSRAP / SLDs		OPERATOR Mark Cummings					SHEET 2
DEPTH (ft)	DESCRIPTION OF MATERIALS	WELL LOG (ft)	RECOVERY (%)	GRAIN COUNT (gr)	GRAIN COUNT (gr)	REMARKS	
GM	Gravel w/ few Silty, Fine to coarse, Loose to Med Dense, Partly Sandy, Dk Brng, Dk	7600	RECOVERY	40-5	13	* Samples will be counted w/ Gas Proportional Detector. See Attached Results Sheet.	
		7600	1.8 / 2.0	1600	10		
SM	Silty Sand, Fine to Med, Loose, Partly Gravel, Dk Brng to Blk, Dry, True clay, True Few Brick Frag, Few Cinders.	7500	No Recovery	1-1.5	6	SLD 72951 1600	
		7000		1.5-2	7		
		6000		2-2.5	4		
		7100		2.5-3	6		
CL	Silty Clay, Med Plas, Stiff, Dk Brown, Few Brick Frag, Few Cinders	6000	No Recovery	3-3.5	4	SLD 72951 1615	
		7100		3.5-4	8		
		6200		4-4.5	5		
		6600		4.5-5	7		
		6900		5-5.5	8		
		6500		5.5-6	11		
CL	Brick Frag and Fine Gravel Silty clay, Med Plas, Stiff, Lt. Brown	7100	No Recovery	6-6.5	5	Backfilled w/ 3 Bags Bentonite chips.	
		6900		6.5-7	7		
		6500		7-7.5	8		
		6200		7.5-8	11		
6.0	TO 6' BGS 2-5-03 1620	9.8					

**RADIOLOGICAL SURVEY FORM**

Sample ID SLD 72951 PDI

Date Sample was collected: 2-5-03

Date Sample was analyzed: 2-6-03

Instrument #1 Background 7475 cpm

Instrument #2 Background 4864 cpm

Count rate of Empty Pan: Beta 98 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm		
					Gross Beta	Net Beta	
0-6	7000	-475	4728	-136	121	23	SLD 72951
6-12	7600	125	5757	893	333	235	SLD 72951 Archive
12-18	7500	25	5883	1019	553	435	SLD 72952
18-24	7000	-475	5116	252	278	180	SLD 72951 Archive
24-30	6100	-1375	4839	-25	305	207	SLD 72953
30-36	7100	-375	4920	56	191	93	SLD 72951 Archive
36-42	6700	-775	4849	-15	161	63	
42-48	6600	-875	4926	62	171	73	
48-54	7100	-375	5356	492	260	162	SLD 72954
54-60	6900	-575	4920	56	161	63	SLD 72951 Archive
60-66	6500	-975	5355	491	144	46	
66-72	N/A	N/A	N/A	N/A	2-10-03 N/A 182	84 N/A	

HTRW DRILLING LOG			DISTRICT		HOLE NUMBER	
1. COMPANY NAME Shaw E & I			St. Louis		SLD 72955	
2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET		SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.		1 OF 2	
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4" HSA and 3" X 2" split spoon.			8. HOLE LOCATION See location sketch			
9. SURFACE ELEVATION N/A			10. DATE STARTED 3-4-03		11. DATE COMPLETED 3-4-03	
12. OVERBURDEN THICKNESS N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A			
13. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CONE BOXES				
DISTURBED		UNDISTURBED				
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CONE RECOVERY				
YES		NO				
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR				
BAGGED		MONITORING WELL				
Yes		N/A		Philip Statter		
LOCATION SKETCH/COMMENTS Witnessed by: Philip Statter SCALE: Not to Scale						
<p>Terms used to describe % Trace - &lt; 5 % Few - 5 - 10 % Little - 15 - 25 % Some - 20 - 35 % Mostly - 50 - 100 %</p>						
PROJECT			HOLE NO.			
FUSRAP/SLDS			SLD 72955			

HTRW DRILLING LOG (CONTINUATION SHEET)		DATE					
PROJECT		NO.					
FUSRAP / SLDS		SLD 72955					
OPERATOR		2 of 2					
OPERATOR		Phillip Statler					
DEPTH (ft)	DESCRIPTION OF MATERIALS	DEPTH (ft)	RECOVERY (%)	DEPTH (ft)	REMARKS		
1.0	silty clay w/ some fine sand, stiff, med. plastic, dk. brn. to silty dry, few nodules, few slag, few brick, fragry few med. gravel.	6200	RECOVERY	0.0-0.5	SLD 72955 5-1015		
		0.0	1.7	0.5-1.0	1015		
		6205	2.0	1.0-1.5	1020		
		0.0		15			
		6100	0.0	1.0-1.5	1025	SLD 72956 1025 (1025)	
		5800	0.0	1.5-1.7	1028	9	
2.0		CL clay turning to grey, debris and sand absent.	5700	no recovery	20-25	6	
			0.0	1.6	1025		
			5500	2.0	25-30	1040	5
			0.0		1040		
	6000		0.0	3.0-3.4	1045	7	
	5900		0.0	no recovery		11	
	5900		0.0	1.8	40-45	4	
	6200		2.0	1050			
	0.0			45-50	1053	8	
	6700		0.0	50-55	1055	8	
	5800	0.0	55-58	1100	11		
6.0	TD = 6.0' BGS 3-4-03 1050	no recovery					
PROJECT		FUSRAP / SLDS		NOTE NO. SLD 72955			

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72955

Date Sample was collected: 3-4-03

Date Sample was analyzed: 3-4-03

Instrument #1 Background 5844 cpm

Instrument #2 Background 4226 cpm

Count rate of Empty Pan: Beta 90 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	6200	356	4127	-99	116	26
6-12	6000	156	4859	633	203	113
12-18	6100	256	4695	469	241	151
18-24	5800	-44	4378	152	176	86
24-30	5700	-144	4266	40	147	57
30-36	5500	-344	4391	165	172	82
36-42	6000	156	4421	195	139	49
42-48	N/A	N/A	N/A	N/A	N/A	N/A
48-54	5900	56	4427	201	158	68
54-60	6200	356	4510	284	196	106
60-66	6300	456	4369	143	173	83
66-72	5800	-44	4335	109	164	74

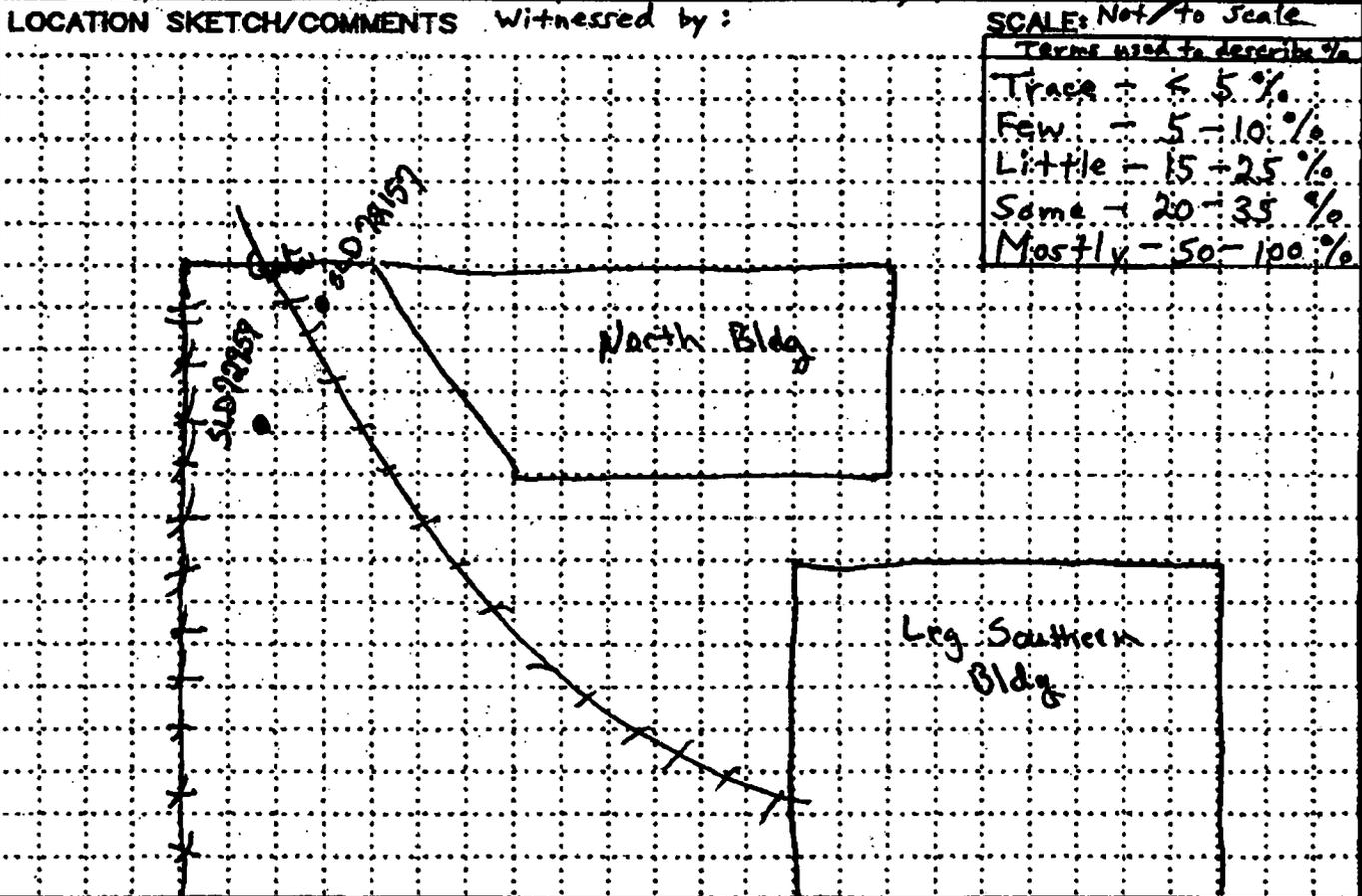
SLD 72955

SLD 72956

SLD 72957

SLD 72958

<b>HTRW DRILLING LOG</b>		DISTRICT	St. Louis	HOLE NUMBER	SLD22959
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.		SHEET	1 of 2
3. PROJECT FUSRAP/SLDS		4. LOCATION PSC Metals North Tract V.P.			
5. NAME OF DRILLER Chris Anthony		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 Using 4 1/2" HSA and 3" x 2" split spear.		8. HOLE LOCATION See location sketch		9. SURFACE ELEVATION	
PED Phos. N/A Cal. Date: 4-11-03 BKG: 7475		10. DATE STARTED 2-5-03		11. DATE COMPLETED 2-5-03	
12. OVERBURDEN THICKNESS N/A		13. DEPTH GROUNDWATER ENCOUNTERED			
13. DEPTH DRILLED INTO ROCK N/A		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 6 bgs FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		NO		METALS	
22. DISPOSITION OF HOLE		LACQUERED		MONITORING WELL	
		Yes		N/A	
				RAD	
				OTHER (SPECIFY)	
				OTHER (SPECIFY)	
				OTHER (SPECIFY)	
				21. TOTAL CORE RECOVERY %	
				23. SIGNATURE OF INSPECTOR Mark J. Conway	



PROJECT	FUSRAP/SLDS	HOLE NO.	PSC Metals N. Tract 1	SLD22959
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HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 72959
PROJECT FUSRAP / SLDS		OPERATOR Mark Cummings					DATE 2-2-98
DEPTH FEET	DEPTH METERS	DESCRIPTION OF MATERIALS	RECOVERY %	RECOVERY IN IN	RECOVERY IN IN	DRIFT COUNT	REMARKS
SP		Silty Sand w/ fine gravel, med. coarse Moist, med. moist, wet, med. size	7000 0.0	RECOVERY	0-.5	3	SLD 72959 1120
CL	1.0	Silty clay, med. plus, med. fine to soft, Fe <sup>2+</sup> cinders, Dk Gray, 6185	6600 0.0	1.6	.5-1	5	(1120) SLD 72960 1120
			6400 0.0	2.0	1-1.5	5	SLD 72960 1120
			6500 0.0	No recovery	1.6-2	4	SLD 72961 1135
			6600 0.0	2.0	2-2.5	3	SLD 72959 1135
SP		Silty sand, med. coarse, med. loose Partly graded, trace silt, Dk Brown	6600 0.0	2.0	2.5-3	2	SLD 72959 1135
CL	3.0	Silty clay, med. plus, silt, trace cinders, Dk Brown to Dk Gray	7000 0.0	2.0	3-3.5	4	
			6600 0.0		3.5-4	5	
			6300 0.0		4-4.5	2	SLD 72962 1140
			7000 0.0		4.5-5	4	
			7600 0.0		5-5.5	7	
			6000 0.0		5.5-6	8	SLD 72959 1140 (archive)
			7800 0.0				
TD 6.0' bgs 2-5-03 1145						Backfilled w/ 3 Bags Bentonite chips	
							BKG MNI 7475 PID 0.0

**RADIOLOGICAL SURVEY FORM**

Sample ID SLD 72959 POI

Date Sample was collected: 2-5-03

Date Sample was analyzed: 2-5-03

Instrument #1 Background 7475 cpm

Instrument #2 Background 4346 cpm

Count rate of Empty Pan: Beta 82 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	7000	-475	4854	508	141	59
6-12	6600	-875	4511	165	128	46
12-18	6400	-1075	4576	230	150	68
18-24	6500	-975	4645	299	170	88
24-30	6600	-875	5024	678	176	94
30-36	7000	-475	4775	429	156	74
36-42	6600	-875	4660	314	132	50
42-48	6300	-1175	4523	177	136	54
48-54	7000	-475	4811	465	170	88
54-60	7600	125	4538	192	147	65
60-66	6900	-575	4783	437	148	66
66-72	7800	325	4805	459	143	61

SLD 72959

SLD 72960

SLD 72961

SLD 72959  
Archive

SLD 72962

SLD 72959  
Archive

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72963	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET 1 OF 2 SHEETS		
3. PROJECT FUSRAP/SLDS				4. LOCATION PSC Metals North Tract V.P.			
5. NAME OF DRILLER Chris Anthony				6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4" VHS and 3" x 2" split spoon.		8. HOLE LOCATION See location sketch		9. SURFACE ELEVATION N/A		10. DATE STARTED 2-6-03	
11. DATE COMPLETED 2-6-03		12. OVERBURDEN THICKNESS N/A		13. DEPTH GROUNDWATER ENCOUNTERED N/A		14. DEPTH DRILLED INTO ROCK N/A	
15. DATE COMPLETED 2-6-03		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		18. TOTAL DEPTH OF HOLE 60 FT BGS	
19. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		YES		NO		21. TOTAL CORE RECOVERY %	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
23. SIGNATURE OF INSPECTOR Phillip Statler		Yes		N/A		N/A	
<p>LOCATION SKETCH/COMMENTS Witnessed by: Phillip Statler SCALE: Not to scale</p> <p>Terms used to describe %</p> <p>Trace - &lt; 5 %            Few - 5 - 10 %            Little - 15 - 25 %            Some - 20 - 35 %            Mostly - 50 - 100 %</p>							
PROJECT FUSRAP/SLDS					HOLE NO. SLD 72963		

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT		DATE		SHEET	
FUSRAP / SLDS		Phillip Statler		7/29/98		2 of 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	DEPTH (ft)	RECOVERY (%)	TEST NO.	DEPTH (ft)	TEST NO.	REMARKS
SM 1.0 2.0	Silty fine sand w/ few med. gravel, loose to med. dense, poorly graded, lt. brn, dry, some liners, some (rag) few clay.	5100	0.0	RECOVERY	0.0-0.5	12	SLD 72963
		5100	0.0	2.0	0.5-1.0	12	SLD 72964
		4700	0.0	2.0	1.0-1.5	15	PS.
		4800	0.0		1.5-2.0	8	
		4700	0.0	1.8	2.0-2.5	3	SLD 72963
		4800	0.0	2.0	2.5-3.0	3	archaic (1125)
		4900	0.0		3.0-3.8	6	SLD 72965
		5500	0.0		1130	7	1130
CL 4.0 5.0 6.0	city clay soft to med. stiff, med. platy, lt. brn. to gray, dry.		no recovery				
		4600	0.0	1.6	4.0-4.5	3	
		4900	0.0	2.0	4.5-5.0	4	SLD 72966
		4800	0.0		5.0-5.6	8	1135
		N/A	N/A	no recovery		7	
2.0 8.0 9.6 10.0	TD = 6.0' BGS 2-6-03 1130						Background: Nat: 4/55 PIB: 0.0 Backfilled boring w/ 3.0 bags of bentonite ite chips. *Samples will be coun- ted using gas proportional meter.

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72963 POI

Date Sample was collected: 2-6-03

Date Sample was analyzed: 2-11-03

Instrument #1 Background 4655 cpm

Instrument #2 Background 4820 cpm

Count rate of Empty Pan: Beta 84 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	5100	445	5124	304	124	40
6-12	5100	445	5155	335	165	81
12-18	4700	45	5178	358	139	55
18-24	4800	145	5116	296	132	48
24-30	4300	-355	5046	226	139	55
30-36	4800	145	5089	269	147	63
36-42	4900	245	5219	399	154	70
42-48	N/A	N/A	N/A	N/A	N/A	N/A
48-54	4600	-55	4952	132	121	37
54-60	4900	245	5308	488	173	89
60-66	4800	145	5445	625	148	64
66-72	N/A	N/A	N/A	N/A	N/A	N/A

# TRW DRILLING LOG

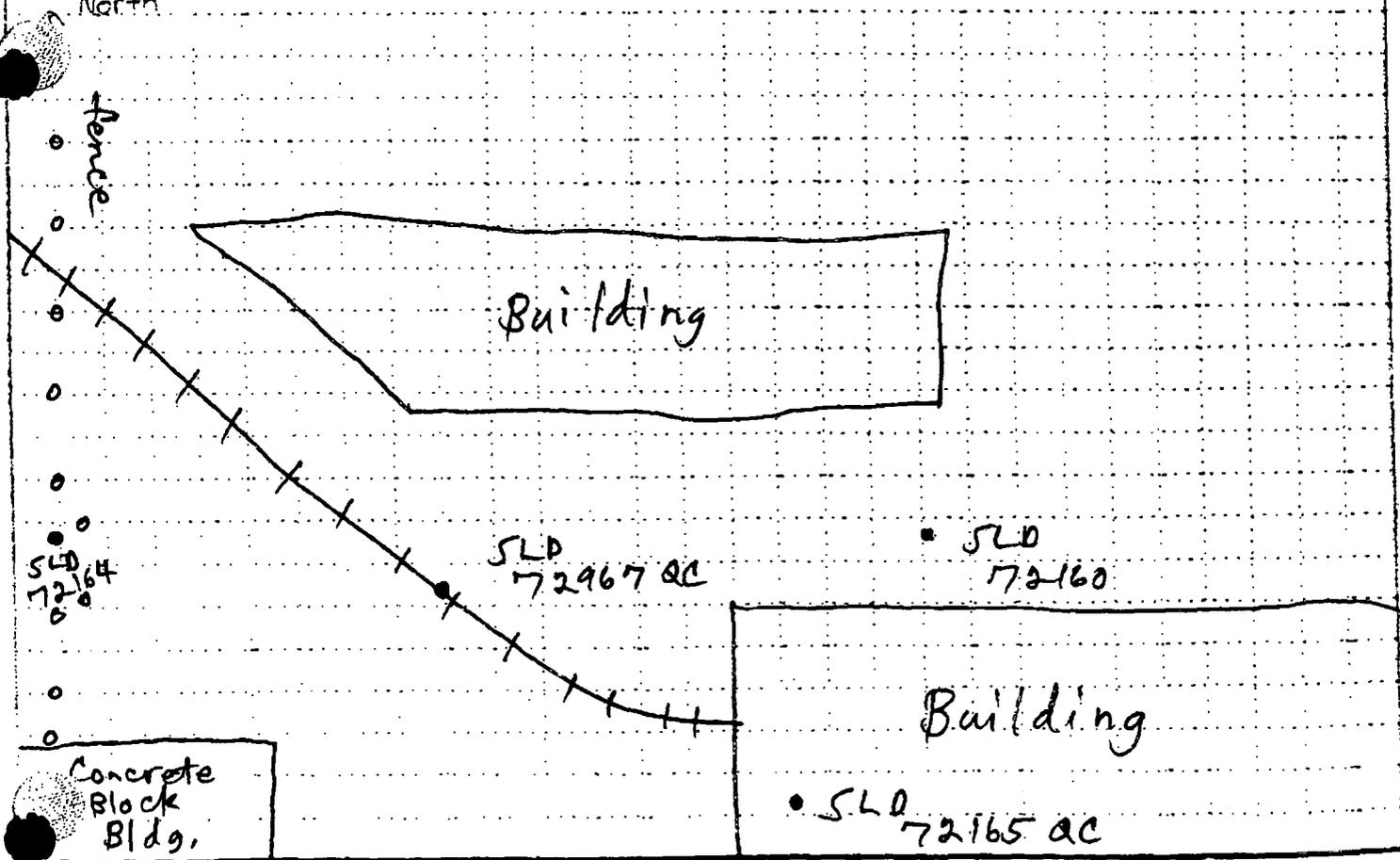
ST. LOUIS

WELL NUMBER: **SLD 72967 QC**

1. PROJECT <b>FUS RAP / SLOS</b>		4. LOCATION <b>PSC Metals North Tract U.P.</b> <i>City of Venice IL VA</i>	
2. DRILLING CONTRACTOR <b>MES, Inc.</b>		6. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-12C</b>	
3. NAME OF DRILLER <b>Chris Anthony</b>		8. HOLE LOCATION <b>N/A</b>	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-12C using 4 1/2" HSA and 3' x 3' spli - 5000</b>		9. SURFACE ELEVATION <b>N/A</b>	
10. DATE STARTED <b>10-23-02</b>		11. DATE COMPLETED <b>10-23-02</b>	
12. OVERBURDEN THICKNESS <b>N/A</b>		15. DEPTH GROUNDWATER ENCOUNTERED <b>N/A</b>	
13. DEPTH DRILLED INTO ROCK <b>N/A</b>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>	
14. TOTAL DEPTH OF HOLE <b>6.0' BGS</b>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>	
18. GEOTECHNICAL SAMPLES	<input type="checkbox"/> DISTURBED	<input type="checkbox"/> INDISTURBED	19. TOTAL NUMBER OF CORE BOXES <input type="checkbox"/>
20. SAMPLES FOR CHEMICAL ANALYSIS	<input type="checkbox"/> TOC	<input type="checkbox"/> METALS	OTHER (SPECIFY): <b>RAD</b>
22. DISPOSITION OF LOGS	<input checked="" type="checkbox"/> SACRIFICED	<input checked="" type="checkbox"/> MONITORING WELL	23. SIGNATURE OF INSPECTOR <i>Phillip D. Hall</i>

## LOCATION SKETCH/COMMENTS

SCALE: Not to scale



FUS RAP SLOS

WELL NO. **SLD 72967 QC**

HTRW DRILLING LOG (CONTINUATION SHEET)

PROJECT: EUSRAP/SLDS INSPECTOR: Phillip Statter

WELL NUMBER: SLD 72967 RC  
SHEET: 2 OF 2

DEPTH (ft)	DESCRIPTION OF MATERIALS	NO. OF SAMPLES	RECOVERY	SLD TAG NO.	SLOW COUNT	REMARKS
1.0	silty fine sand w/ some med. gravel, med. dense, poorly graded, lt. brn, dry, some cinders, some slag, few brick frags.	6300 0.0	2.0 / 2.0	SLD 72967-2	12	
		6500 0.0		10-23-02	9	
		6300 0.0		1600 PC	15	
2.0 3.0 4.0 5.0	silty clay, med. stiff, med. plast., lt. brn., dry.  limestone frag. clay turning lt. gry.	6500 0.0	2.0 / 2.0	SLD 72968	13	
		5600 0.0		6X <sup>PC</sup>		
		6000 0.0		3		
		5800 0.0		4		
		5900 0.0		5		
		5800 0.0		4		
		5900 0.0		5		
		6200 0.0		9		
6.0	N/A N/A	no recovery	SLD 72970	11		
7.0 8.0 9.0 10.0	TP: 6.0 BGS 10-23-02 1600					Background: NAI: 6900 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips. Capped w/ soil.

PROJECT: EUSRAP/SLDS WELL NUMBER: SLD 72967 RC

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	72971	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 Using HSA and 3" x 3" split spoon.			8. HOLE LOCATION See location sketch			9. SURFACE ELEVATION	
PED Photo: NAT LUD 72040 Cal. Date: 4-11-03 Bkg: 7475			10. DATE STARTED 2-5-03		11. DATE COMPLETED 2-5-03		
12. OVERSPIDER THICKNESS N/A			15. DEPTH GROUNDWATER ENCOUNTERED				
13. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A				
14. TOTAL DEPTH OF HOLE 0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SFEFT) N/A				
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOLES	
20. SAMPLES FOR CHEMICAL ANALYSIS		YES		METALS		OTHER (SPECIFY)	
		NO		RAD		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
		Yes		N/A		N/A	
23. SIGNATURE OF INSPECTOR <i>Mark Cummins</i>							
LOCATION SKETCH/COMMENTS Witnessed by:			SCALE: Not to Scale				
			Terms used to describe % Trace - < 5 % Few - 5 - 10 % Little - 15 - 25 % Some - 20 - 35 % Mostly - 50 - 100 %				
			PROJECT FUSRAP/SLDS PSC Metals N. Tract 1 HOLE NO. SLD 72971				

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72977	
PROJECT FUSRAP / SLDs			OPERATOR Mark Cummings			SHEET NO. 2 of 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	DEPTH (ft)	RECOVERY (%)	LOG NO.	SHOT COUNT	REMARKS	
GM	Gravel w/ few Silt, Fine w/ Trace Cobble size, fine loamed bones, fine gravel, Gog.	6700 0.0	RECOVERY 100%	1345	14	SLD 72977 1345	# Samples will be count w/ gas Proportion Detector. See Attached Results Sheet. For Read 1/2
SP	Silty sand with Trace Fine Gravel, Loose, Both Graded, Dk Brown to Dk Dry, little cinders, Few slag (Both Fine gravel to coarse sand size).	6600 0.0	2.0	1345	26		
		7100 0.0	2.0	1345	11	SLD 72972 1345	
Cinders	coarse gravel size cinders	6000 0.0		1345	6		
		9200 0	1.8	1355	3	SLD 72974 1355	
CL	Silty clay, med. Plus, silt, Dk Brown to Dk grey, Trace cinders	7400 0	2.0	1355	3	SLD 72973 1355	
		7500 0		1355	5		
		7300 0		1355	6		
		7900 0	No Recd.	1355	6		
		7200 0	1.8	1410	2		
		7200 0	2.0	1410	5	SLD 72974 1410	
		7300 0		1410	6	SLD 72974 1410	
		6900 0	No Recd.	1410	9		
TD 6' BGS 2-5-03 1415						Back filled w/ 3 Bags Bentonite chips	
						NaI Bkg: 7425 PID Bkg: 0.0	

**Inc. Corporation**  
**FUSRAP SLDS 775575**

**RADIOLOGICAL SURVEY FORM**

Sample ID SLD 72971

Date Sample was collected: 2-5-03

Date Sample was analyzed: 2-6-03

Instrument #1 Background 7475 cpm

Instrument #2 Background 4708 cpm

Count rate of Empty Pan: Beta 93 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	6700	-775	4515	-193	120	27
6-12	6600	-875	4926	218	149	56
12-18	7100	-375	5132	424	224	131
18-24	6000	-1475	5046	338	199	106
24-30	7200	-275	4683	-25	130	37
30-36	7400	-75	4844	136	144	51
36-42	7500	25	4821	113	146	53
42-48	7300	-175	4757	49	151	58
48-54	7900	425	4943	235	126	33
54-60	7200	-275	4954	246	146	53
60-66	7300	-175	4804	96	127	34
66-72	6900	-575	5267	559	160	67

SLD 72971

SLD 72972

SLD 72971  
Archive

SLD 72973

SLD 72971  
Archive

SLD 72974

HTRW DRILLING LOG			DISTRICT	St. Louis		WELL NUMBER	SLD 72975	
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.			5. NAME OF DRILLER Chris Anthony		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using HSA and 3" x 2" split spoon.			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			8. HOLE LOCATION See location sketch		
12. OVERBURDEN THICKNESS N/A			9. SURFACE ELEVATION N/A			10. DATE STARTED 1-21-03		
13. DEPTH DRILLED INTO ROCK N/A			11. DATE COMPLETED 1-21-03			15. DEPTH GROUNDWATER ENCOUNTERED N/A		
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY %
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		%
		Yes		N/A		N/A		23. SIGNATURES OF INSPECTOR Phillip Statter
LOCATION SKETCH/COMMENTS			Witnessed by: Phillip Statter			SCALE: Not to Scale		
<p>TERMS USED TO DESCRIBE %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p> <p>• SLD 72975</p> <p>• SLD 72975</p> <p>HTZ: 69453</p> <p>• SLD 72975</p> <p>Bldg.</p>								
PROJECT FUSRAP/SLDS						WELL NO. SLD 72975		

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NO. SLB 72975			
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statler		SHEET 2 of 2		FRENCH			
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	RECOVERY (%)	GRAIN SIZE (mm)	WATER CONTENT (%)	REMARKS			
SM 1.0	silty fine sand w/ some med. to coarse gravel, med. dense to very dense, poorly graded, lt. brn, dry, few brick frags	4300	0.0	2.0 / 2.0	0.0-0.5	50	SLB 72975 1310		
		4400	0.0		0.5-1.0	64			
		4500	0.0		1.0-1.5	36			
		4600	0.0	1.5-2.0	24	SLB 72976 1318			
		SM 2.0	trace slag.	5000	0.0	1.8 / 2.0	2.0-2.5	11	
				5000	0.0		2.5-3.0	11	SLB 72977 1322
				4800	0.0	3.0-3.8	9		
				N/A	N/A	1327	10		
		CL 4.0	silty clay, med. stiff, med. plast, lt. brn, dry, trace brick frags, trace slag.	5100	0.0	2.0 / 2.0	4.0-4.5	3	SLB 72978 1330
				5000	0.0		4.5-5.0	5	
4500	0.0			5.5-6.0	7				
4500	0.0			5.5-6.0	6				
7.0	TD: 6.0' BGS 1-21-02 1330						Background: NaF 44662 PIb: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips. * Sampler will be can fed w/ gas proportion. See attached sheet.		
PROJECT FUSRAP/SLDS				HOLE NO. SLB 72975					

RADIOLOGICAL SURVEY FORM

Sample ID SLD 72975 Date: 1-21-03

p 1 of 1

Instrument #1 Background 4662 Instrument #2 Background 4601 cpm

Count rate of Empty Pan: Beta 91 cpm

Sample Depth (inches)	Field Scan of Spoon (Instrument #1) in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
				Gross Beta	Net Beta
0-6	4300	4263	-338	106	15
6-12	4600	4436	-165	104	13
12-18	4500	4917	316	131	40
18-24	4600	5031	430	140	49
24-30	5000	4781	180	131	40
30-36	5000	4924	323	152	61
36-42	4800	4917	316	142	51
42-48	4800	4817	216	143	52
48-54	<sup>5100</sup> <del>5000</del> <sub>41-03</sub>	4878	277	125	34
54-60	5000	4842	241	157	66
60-66	4500	4516	-85	162	71
66-72	4500	4768	167	136	45

HTRW DRILLING LOG			DISTRICT	St. Louis		HOLE NUMBER	SLD 72979	
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.					
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/2" HSA and 3" x 2" split spoon.			8. HOLE LOCATION See location sketch					
			9. SURFACE ELEVATION N/A					
PED 1-14-03 NAI LUD 10339 sto 100/100 Cal. Date: 12-3-03 Bkg: 4/35			10. DATE STARTED 1-14-03		11. DATE COMPLETED 1-14-03			
12. OVERBURDEN THICKNESS N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A					
13. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BORES		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY
		Yes		N/A		RAD		%
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR
		Yes		N/A		N/A		Phillip Statters
LOCATION SKETCH/COMMENTS			Witnessed by: Phillip Statters			SCALE: Not to Scale		
			<p>Terms used to describe %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p>					
PROJECT FUSRAP/SLDS						HOLE NO. SLD 72979		

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL IDENTIFICATION NO.	SHEETS
PROJECT	INSPECTOR	DATE	DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	DEPTH SAMPLED OR CORRECTED (ft)	ANALYTICAL LABORATORY NO.	BLIND COUNT
FUSRAP / SLDS	Philip Statter					SLD 72979 72979 1015	2-2
SM	1.0	silty fine sand w/ few med. to coarse gravel, very dense, poorly graded, lt. brn., dry.	57.00	0.0	RECOVERY		59
			48.00	0.0	2.0 / 2.0		61
CL	2.0	silty clay, hard, med. plast., trace cinders, trace slag, trace brick frags, dk. brn. to blk, dry, few coarse gravel, trace glass	47.00	0.0	2.0 / 2.0	SLD 72980 1035	48
			51.00	0.0			22
	3.0	mostly brick frags.	51.00	0.0	1.8 / 2.0		5
			47.00	0.0			11
			47.00	0.0			15
	4.0	clay turning H. gray, trace brick frags.	49.00	0.0	no recovery		8
			49.00	0.0			4
	5.0	few brick frags.	47.00	0.0	1.5 / 2.0	SLD 72982 1038	6
			46.00	0.0			5
	6.0		N/A	N/A	no recovery		6
7.0							Background: NaI: 4,735 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips.
8.0							
9.0							
10.0							
TD: 6.0' BGS 1-14-03 1030							

PROJECT FUSRAP / SLDS

WELL NO. SLP 72979

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72983	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 OF 2 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 4 1/4 HSA and 3" x 3" split spoon.		8. HOLE LOCATION See location sketch			9. SURFACE ELEVATION N/A		
12. OVERBURDEN THICKNESS N/A		10. DATE STARTED 1-14-03		11. DATE COMPLETED 1-14-03			
13. DEPTH DRILLED INTO ROCK N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 6.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE POINTS	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
		Yes		N/A		N/A	
23. SIGNATURE OF INSPECTOR		Philip Stoffer					
LOCATION SKETCH/COMMENTS		Witnessed by: Philip Stoffer				SCALE: Not to Scale	
		Terms used to describe % Trace - < 5% Few - 5-10% Little - 15-25% Some - 20-35% Mostly - 50-100%					
		Building					
PROJECT		FUSRAP/SLDS				HOLE NO.	
						SLD 72983	

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 72983
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Statler		SHEET 2 of 2 SHEETS		
DEPTH FEET	DESCRIPTION OF MATERIALS (BY)	APPROXIMATE DEPTH FEET	RECOVERY %	WELL LOG NO.	WELL COUNTY NO.	REMARKS (BY)
SM	sl. fly fine sand w/ some med. to coarse gravel, very dense, poorly graded, H. br. dry.	4800 0.0	RECOVERY	SLD 72983 1105	55	(SLD 72983)
1.0	silty clay, very stiff to hard, med. plastic, H. br. dry, few brick frags, few med. gravel, trace cinders, trace slag.	4900 0.0	2.0		27	
		5600 0.0	2.0		24	
2.0		5800 0.0		SLD 72984 110	35	
	little X <sub>2</sub> fine sand.	5100 0.0	1.6		10	
		4800 0.0	2.0		12	
CL		4400 0.0		SLD 72985 1120	12	
	trace glass	5200 0.0	no recovery		10	
4.0		5000 0.0	1.5		8	
		5600 0.0	2.0	SLD 72986 1120	8	
5.0	mostly brick frags.	4700 0.0			8	
		4800 0.0	no recovery		11	
6.0		N/A				
7.0	TD: 6.0' B65 1-14-03 1120					Background: NaI: 4735 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite chips.
8.0						
9.0						
10.0						

PROJECT FUSRAP / SLDs

WELL NO. SLD 72983

HTRW DRILLING LOG			DISTRICT			HOLE NUMBER		
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc.			St. Louis SLD 72987QC		
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.			SHEET 1 of 2 SHEETS		
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using FWHSA and 3" x 2" split spoon.			8. HOLE LOCATION See location sketch					
9. SURFACE ELEVATION N/A			10. DATE STARTED 1-15-03			11. DATE COMPLETED 1-15-03		
12. OVERBURDEN THICKNESS N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A					
13. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		YOC		METALS		OTHER (SPECIFY)		OTHER (SPECIFY)
		0		0		RAD		0
22. DISPOSITION OF HOLE		LACERELLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR
		Yes		N/A		N/A		Phillip Stollar
<p>LOCATION SKETCH/COMMENTS Witnessed by: Phillip Stollar SCALE: Not to Scale</p> <p>Terms used to describe %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p> <p>SLD 72987QC</p> <p>SLD 72987QC (B)</p> <p>SLD 72898</p> <p>Bldg.</p>								
PROJECT FUSRAP/SLDS						HOLE NO. SLD 72987QC		

HTRW DRILLING LOG (CONTINUATION SHEET)							SLO 72987 RC	
PROJECT		INSPECTOR		SHEET NO.		SHEETS		
FUSRAP / SLDS		Phillip Stator		2 of 2		2		
DEPTH (ft)	DESCRIPTION OF MATERIALS	START (ft)	END (ft)	RECOVERY (%)	LOG NO.	DEPTH (ft)	REMARKS	
1.0	Silty fine sand w/ some med. gravel, med dense to very dense, poorly graded, dk, brn to blk, few cinders, thin slag, dx	4190	4200	RECOVERY	0.0-0.5'	104	SLO 72987-6 (1130) (1330) PG	
		4200	4300	2.0	0.5-1.0'	95		
		4300	4400	2.0	1.0-1.5'	63		
		4400	4500		1.5-2.0'	24	SLO 72988 1330	
2.0	mostly brick frags.	4500	4600	1.6	2.0-2.5'	23		
		4600	4700	2.0	2.5-3.0'	19		
		4700	4800		3.0-3.5'	25	SLO 72989 1330	
3.0	cinders and slag increasing.	N/A	N/A	no recovery	N/A	6		
		4800	4900	1.6	4.0-4.5'	5		
5.0	Silty clay, med stiff, med. plast, dk. brn, moist, trace brick frags, trace glass.	5500	5600	2.0	4.5-5.0'	11		
		5600	5700		5.0-5.5'	6	SLO 72990 1410	
		N/A	N/A	no recovery		6		
7.0	TD: 6.0' 865 1-15-03 1330						* Samples will be counted w/ gas proportion detector.	
							Backfilled boring w/ 3.0 bags of bentonite chips.	
							See attached sheet for gas proportion detector results. See attached sheet.	
PROJECT FUSRAP / SLDS						SLO 72987 RC		

RADIOLOGICAL SURVEY FORM

Survey Number \_\_\_\_\_

Background Reading: 4685 cpm

Count rate of Empty Pan: Beta 274 cpm Alpha 0 cpm

Boring Number <u>SLD72987</u>					Boring Number <u>N/A</u>				
Sample ID	Sample Depth (inches)	Activity in Bag (cpm)	Gas Proportional Count rate (cpm)		Sample ID	Sample Depth (inches)	Activity in Bag (cpm)	Gas Proportional Count rate (cpm)	
			Beta	Alpha				Beta	Alpha
SLD 72987	0-6	3987	86	0		0-6			
	6-12	4017	98	1		6-12			
	12-18	4436	109	4		12-18			
	18-24	4732	119	2		18-24			
	24-30	5002	133	0		24-30			
	30-36	5095	128	2		30-36			
↓	36-42	5185	130	0		36-42			
N/A	42-48	No Recovery				42-48			
SLD72987	48-54	5314	144	2		48-54			
	54-60	5247	125	3		54-60			
↓	60-66	5014	143	0		60-66			
N/A	66-72	N/A	N/A	N/A		66-72			

RADIOLOGICAL SURVEY FORM

Survey Number \_\_\_\_\_

Background Reading: 4685 cpm

Count rate of Empty Pan: Beta 77cpm Alpha 0cpm

Boring Number <u>SLD72987</u>					Boring Number <u>N/A</u>				
Sample ID	Sample Depth (inches)	Activity in Bag (cpm)	Gas Proportional Count rate (cpm)		Sample ID	Sample Depth (inches)	Activity in Bag (cpm)	Gas Proportional Count rate (cpm)	
			Beta	Alpha				Beta	Alpha
SLD 72987	0-6	3987	86	0		0-6			
	6-12	4017	98	1		6-12			
	12-18	4436	109	4		12-18			
	18-24	4732	119	2		18-24			
	24-30	5002	133	0		24-30			
	30-36	5095	128	2		30-36			
	36-42	5185	130	0		36-42			
N/A	42-48	No Recovery				42-48			
SLD72987	48-54	5314	144	2		48-54			
	54-60	5247	125	3		54-60			
	60-66	5014	143	0		60-66			
N/A	66-72	N/A	N/A	N/A		66-72			

HTRW DRILLING LOG			DISTRICT			MOLE NUMBER		
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc.			St. Louis SLD 7298706/13		
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.			SHEET 1 of 2 SHEETS		
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 8" HSA and 3" x 2" split spoon.			8. HOLE LOCATION See location sketch					
			9. SURFACE ELEVATION N/A					
12. OVERBURDEN THICKNESS N/A			10. DATE STARTED 6-15-03			11. DATE COMPLETED 7-15-03		
13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED					
14. TOTAL DEPTH OF HOLE 20 FT BGS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
18. GEOTECHNICAL SAMPLES			19. TOTAL NUMBER OF CORE BOXES					
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERY					
22. DISPOSITION OF HOLE			23. SIGNATURE OF INSPECTOR					
LOCATION SKETCH/COMMENTS			Witnessed by: Phil Wp Stocker			SCALE: Not to Scale		
			<p>Terms used to describe %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p>					
			<p>Boring drilled June 23 to ensure sufficient sample volume for Bd sample.</p> <p>SLD 7298706</p> <p>SLD 7298706/13 (moved boring to Pres East)</p> <p>SLD 72938</p> <p>Bldg.</p>					
PROJECT FUSRAP/SLDS			MOLE NO. SLD 7298706/13					

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLB 72987QC(B)
PROJECT FUSRAP/SLDS		INSPECTOR Phillie Staller		SHEET 2 of 2		
DEPTH FEET	DEPTH METERS	DESCRIPTION OF STRATIGRAPHY (if any)	REMARKS (if any)	RECOVERY (if any)	WELL HEAD STRENGTH (if any)	WELLY CORRECTION (if any)
SM	1.0	Silty fine sand w/ some med. to coarse gravel, very dense, poorly graded, H: brn. to dk. brn.; dry; few clasts; few slag	4500	2.0 2.0	0.5-0.5 1415	125
			4500		0.5-1.0 1417	110
			4500		1.0-1.5 1420	90
			4500		1.5-2.0 1425	60
	2.0	TD: 2.0' BGS 1-15-03 1415				
	3.0					
	4.0					
	5.0					
	6.0					
	7.0					
	8.0					
	9.0					
	10.0					
Background: Nat: 5960 PIB: 0.0 Backfilled boring w/ 1.0 bags of bentonite chips.						
*Samples will be counted w/ gas proportion meter to select samples for lab. See attached results for gas proportion readings. See attached sheet						

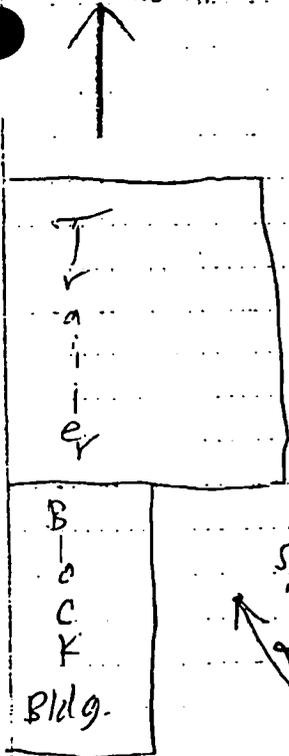
PROJECT FUSRAP/SLDS      WELLY NO. SLB 72987QC(B)

-TRW DRILLING LOG		St. Louis		HOLE NUMBER SLD 72991	
EMPLOYER NAME Shaw F+I		DRILLING CONTRACTOR MES, Inc.		SHEET 1 of 2	
PROJECT FUSRAP/SLDS		LOCATION PSC Metals North Tract V.P.			
NAME OF DRILLER Chris Anthony		MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" HSA and 3" x 2' split spoon		HOLE LOCATION See location sketch			
DATE DEC 11-25-02 AE		LWD 172040		DATE STARTED 11-25-02	
TO 100/100 Cal Date		BKS = 5300		DATE COMPLETED 11-25-02	
DIAMETER THICKNESS N/A		DEPTH TO WATER MEASURED N/A			
DEPTH DRILLED INTO ROCK N/A		DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
TOTAL DEPTH OF HOLE 6.0 FT BGS		OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
ROCK SAMPLES		ROCK SAMPLES		TOTAL NUMBER OF CORE SAMPLES	
SAMPLES FOR CHEMICAL ANALYSIS		SAMPLES		TOTAL CORE RECOVERY	
DEPOSITION OF HOLE		SAMPLING METHOD		DATE OF INSPECTION	
Yes		N/A		N/A	

LOCATION SKETCH/COMMENTS  
North

Witnessed by: Phillip Stoll  
(P.D.I. boring used for delineation of HTZ 69417)

SCALE: Not to Scale  
Terms used to describe %  
Trace - < 5%  
Few - 5-10%  
Little - 15-25%  
Some - 20-35%  
Mostly - 50-100%



SLD 72999 • SLD 73003  
SLD 72991 • SLD 72995  
HTZ 69417

**TRW DRILLING LOG (CONTINUATION SHEET)**

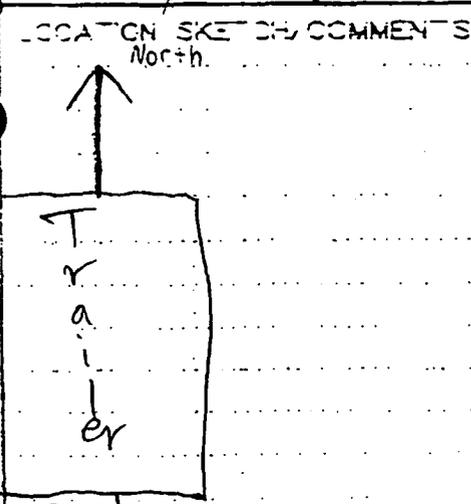
PROJECT: **ESR RAP/SLDS**      INSPECTOR: **Phillip Stastler**      SHEET: **2** OF **2**

1.2/1.7

DEPTH (ft)	DESCRIPTION OF MATERIAL	NEEDLE PENETRATION (psi)	RECOVERY (%)	SLP (psi)	BLOW COUNT	REMARKS
0.0 - 1.0	Silty fine sand w/ some med. gravel, loose to med. dense, poorly graded, dk. brn. dry, few sinders, few slag, trace brick frags.	5100	1.8 / 2.0	SLP 72941 11-25-02 1620	5	
1.0 - 2.0		5400			7	
2.0 - 3.0		5000	18			
3.0 - 4.0		5700	11	SLP 72942 11-25-02 1620		
4.0 - 5.0	SM few brick frags.	N/A	1.6 / 2.0	SLP 72943 11-25-02 1620	4	
5.0 - 6.0		5500			6	
6.0 - 7.0		5600	6			
7.0 - 8.0		N/A	5			
8.0 - 9.0	TD: 6.0' BGS 11-25-02 1620	5800	1.0 / 2.0	SLP 72944 11-25-02 1620	2	
9.0 - 10.0		5700			2	
10.0 - 11.0		N/A	3			
11.0 - 12.0		N/A	6			

Background,  
N/A: 5300  
PTD: 0.0  
Backfilled boring w/  
3.0 bags of  
bentonite  
chips.

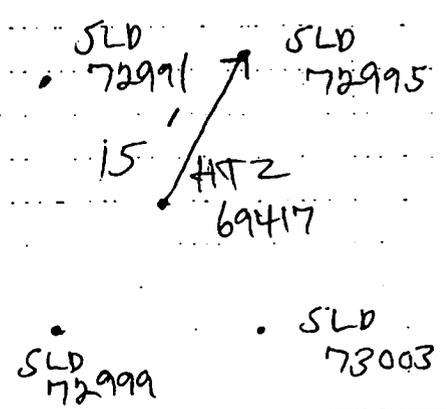
- HTRW DRILLING LOG		ST. LOUIS		SOLE NUMBER SLD 72995	
1. COMPANY NAME Shaw F & I		2. DRILLING CONTRACTOR M.E.S., Inc.		3. SHEET 1 of 2	
4. PROJECT FUSRAP / SLDs		5. LOCATION PSC Metals North Tract V.P.			
6. NAME OF WELLER Chris Anthony		7. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" HSA and 3" x 2" split spoon		9. HOLE LOCATION see location sketch		10. SURFACE ELEVATION N/A	
11. DATE STARTED PEO 11-25-02 NAI LUD 172040 to 100/100 Cal Date 4-7-03 BK9 = \$300		12. DATE COMPLETED 11-25-02		13. DATE DRILLED 11-25-02	
14. DEPTH DRILLED INTO ROCK N/A		15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
16. TOTAL DEPTH OF HOLE 6.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS, SPECIFY N/A			
18. TEST-PIECE SAMPLE		19. TOTAL NUMBER OF CORE BOXES		20. TOTAL CORE RECOVERY	
21. SAMPLES FOR CHEMICAL ANALYSIS		22. DEPTH OF SAMPLE		23. DEPTH OF SAMPLE	
24. DEPOSITION OF SOIL		25. DEPTH OF DEPOSITION		26. DEPTH OF DEPOSITION	



SCALE: NOT TO SCALE

Terms used to describe %

Trace - < 5%
Few - 5-10%
Little - 15-25%
Some - 20-35%
Mostly - 50-100%



HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT NO.	DATE	SHEET
PROJECT: EUS RAP/SLOS		INSPECTOR: Phillip Statler	SLP 72995	2 of 2
DEPTH (ft)	DESCRIPTION OF MATERIALS	REMARKS	SLP NO.	BLW COUNT
10.0	Silty fine sand w/ some med. gravel, med. dense to very dense, poorly graded, lt. brn. to dk. brn., dry		SLP 72995 11-25-02 1416	43
				35
				108
20.0	some cinders and some slag, trace brick frags		SLP 72996 11-25-02 1415	69
				14
				13
			SLP 72997 11-25-02 1420	11
				8
				8
			SLP 72998 11-25-02 1430	9
				5
				7
60.0	Timestone frag.			
70.0				
80.0				
90.0				
100.0				

SM  
 TD: 6.0' BGS  
 11-25-02  
 1415

Background:  
 NAT: 5300  
 PIDs 0.0  
 Backfilled  
 boring w/  
 3.0 bags of  
 bentonite  
 chips.

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 72999	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.		SHEET		1 OF 2 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using 3/4" HSA and 3" x 2" split spoon.		8. HOLE LOCATION See location sketch					
9. SURFACE ELEVATION N/A			10. DATE STARTED 1-28-03				
11. DATE COMPLETED 1-28-03			12. OVERBURDEN THICKNESS N/A				
13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A				
14. TOTAL DEPTH OF HOLE 6.0 FT BGS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A				
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			18. GEOTECHNICAL SAMPLES				
DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
21. TOTAL CORE RECOVERY		RAD		OTHER (SPECIFY)		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
23. SIGNATURE OF INSPECTOR		Yes		N/A		N/A	
LOCATION SKETCH/COMMENTS Witnessed by: Phillip Statter SCALE: Not to Scale Terms used to describe % Trace - < 5% Few - 5-10% Little - 15-25% Some - 20-35% Mostly - 50-100%							
PROJECT FUSRAP/SLDS					HOLE NO. SLD 72999		

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 72999
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Statler				SHEET 2 of 2 SHEETS
DEPTH (ft)	DESCRIPTION OF MATERIALS	RECOVERY (%)	DEPTH SURFACE OF CORE (ft)	ANALYTICAL SAMPLE NO.	SLOW COUNT (%)	REMARKS
0.0 - 1.0	silty fine <sup>pk</sup> clay, med. sh. med. plant, dk. brn. to blk, dry, some cinders, some slag.	0.0	RECOVERY	0.0-0.5' 1-28-03 1620	23	SLD 72999 1620
1.0 - 1.5		2.0		0.5-1.0' 1623	29	
1.5 - 2.0		2.0		1.0-1.5' 1625	16	SLD 73000 1625
2.0 - 2.5	mostly cinders,			1.5-2.0' 1620	6	
2.5 - 3.0	mostly slag	1.3		2.0-2.5' 1633	7	
3.0 - 3.5		2.0		2.5-3.3' 1635	8	SLD 73001 1635
3.5 - 4.0			no recovery		2	
4.0 - 4.5	PSi clay turning lt. brn	2.0		4.0-4.5' 1637	2	
4.5 - 5.0		2.0		4.5-5.0' 1640	3	SLD 73002 1640
5.0 - 5.5				5.0-5.5' 1643	2	
5.5 - 6.0				5.5-6.0' 1645	2	
6.0 - 10.0	TD: 6.0' BGS 1-28-03 1630					Background: NAT: 5000 PID: 0.0 Boring back-filled w/ 30 bags of bentonite chips. * Samples will be counted using gas proportional meter (see attached sheet).

RADIOLOGICAL SURVEY FORM

Sample ID SLA 72999

Date Sample was collected: 1-28-03

Date Sample was analyzed: 1-30-03

PDI

Instrument #1 Background 5000 cpm

Instrument #2 Background 4774

Count rate of Empty Pan: Beta 143 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	4600	-400	4936	162	184	41
6-12	4900	-100	4757	-17	185	42
12-18	4900	-100	4652	-122	220	77
18-24	4900	-100	4627	-147	202	59
24-30	4800	-200	5089	315	214	71
30-36	4700	-300	5037	263	253	110
36-42	N/A	N/A	N/A	N/A	<sup>1-30-03</sup> 231 N/A	N/A
42-48	N/A	N/A	N/A	N/A	<sup>1-30-03</sup> 2 N/A	N/A
48-54	4400	-600	4736	-38	231	88
54-60	4900	-100	4950	176	221	78
60-66	5000	0	4740	-34	200	57
66-72	4700	-300	4897	123	211	68

<b>HEAVY DRILLING LOG</b>		<b>St. Louis</b>		<b>WELL NUMBER</b> <b>SLD 73003</b>	
<b>1. CONTRACTOR</b> Shaw E+I		<b>2. DRILLING CONTRACTOR</b> MES, Inc.		<b>3. SHEET</b> 1 of 2	
<b>4. PROJECT</b> FUSRAP/SLDS		<b>5. LOCATION</b> PSC Metals North Tract V.P.			
<b>6. NAME OF WELL</b> Chris Anthony		<b>7. MANUFACTURER, DESIGNATION OF WELL</b> Diedrich D-120			
<b>8. TYPES AND TYPES OF DRILLING AND CIRCULATING EQUIPMENT</b> Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon		<b>9. HOLE LOCATION</b> See location sketch			
<b>10. DATE STARTED</b> 11-25-02		<b>11. DATE COMPLETED</b> 11-25-02			
<b>12. OVERLAP THICKNESS</b> N/A		<b>13. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETES</b> N/A			
<b>14. TOTAL DEPTH OF HOLE</b> 6.0 FT BGS		<b>15. OTHER WATER LEVEL MEASUREMENTS, SPECIFY</b> N/A			
<b>16. TECHNICAL SAMPLES</b> NONE		<b>17. TOTAL NUMBER OF CORE BOXES</b> 0		<b>18. TOTAL CORE RECOVERED</b> 0	
<b>19. DEPOSITION OF HOLE</b> Yes		<b>20. MONITORING REL.</b> N/A		<b>21. QUALITY OF MESSAGING</b> Phillip A. Stalter	

LOCATION SKETCH COMMENTS  
 North



Witnessed By: Phillip Stalter  
 (PDI Boying)  
 (used for delineation  
 of SLDs HTZ 69417)

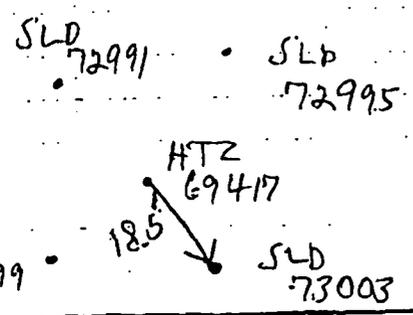
SCALE: NOT TO SCALE

Terms used to describe %

Trace	< 5%
Few	5-10%
Little	15-25%
Some	20-35%
Mostly	50-100%

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MTW DRILLING LOG (CONTINUATION SHEET)

PROJECT: FUSRAP/SLCS      OPERATOR: Phillip Statter      HOLE NUMBER: SLD 73003  
SHEET 2 OF 2 SHEETS

1.00

DEPTH (ft)	DESCRIPTION OF MATERIALS	RECOVERY	SLD	LOW CORE	REMARKS
1.0	Silty fine sand w/ some med. gravel and few silty clay, mod. dense to very dense, poorly graded, dk. brn.; dry, few cinders and few slag.	2.0	SLD 73003 1125 115	90	Diesel odor
		2.0		46	
		2.0	SLD 73004 1130	83	
				32	
2.0	Clay absent, cinders and slag increasing.	1.8		17	
		2.0		9	
			SLD 73005 1150	6	
		no recovery		6	
4.0		1.0	SLD 73006 1155	5	
		2.0		5	
	N/A	no recovery		6	
	N/A	recovery		8	
6.0	TD: 6.0' BGS 11-25-02 1120				Background: NaI: 4200 PID: 0.0 Backfilled boring w/ 3.0 bags of bentonite PS. bentonite chips.

PROJECT: FUSRAP/SLCS      HOLE NUMBER: SLD 73003

<b>HTRW DRILLING LOG</b>			DISTRICT <b>St. Louis</b>			HOLE NUMBER <b>SLD 73007 AC</b>		
1. COMPANY NAME <b>Shaw E &amp; I</b>			2. DRILLING SUBCONTRACTOR <b>MES, Inc.</b>			SHEET <b>1</b> OF <b>2</b>		
3. PROJECT <b>FUSRAP/SLDS</b>			4. LOCATION <b>PSC Metals North Tract V.P.</b>					
5. NAME OF DRILLER <b>Chris Anthony</b>			6. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120</b>					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon.</b>			8. HOLE LOCATION <b>See location sketch</b>					
			9. SURFACE ELEVATION <b>N/A</b>					
12. OVERBURDEN THICKNESS <b>N/A</b>			15. DEPTH GROUNDWATER ENCOUNTERED <b>N/A</b>					
13. DEPTH DRILLED INTO ROCK <b>N/A</b>			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>					
14. TOTAL DEPTH OF HOLE <b>2.0 FT BGS</b>			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR
		Yes		N/A		N/A		<i>Phillip Statter</i>
<b>LOCATION SKETCH/COMMENTS</b> Witnessed by: <i>Phillip Statter</i> SCALE: Not to Scale <div style="float: right; border: 1px solid black; padding: 5px;"> Terms used to describe %  Trace - ≤ 5%  Few - 5-10%  Little - 15-25%  Some - 20-35%  Mostly - 50-100% </div>								
PROJECT <b>FUSRAP/SLDS</b>						HOLE NO. <b>73007 AC</b> <b>SLD HERE</b>		

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 730070C
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Statler			SHEET 2 OF 2 SHEETS		
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	WATER SAMPLE NO. (ft)	RECOVERY (%)	ANALYTICAL SAMPLE NO. (ft)	SLOW COUNT (cpm)	REMARKS	
0.0 - 1.0	Silty fine sand w/ mostly cinders and slag, loose, poorly graded, dk. brown, to blk., dry.	5300 0.0	2.0	1410 0.5-1.0'	5	5 Lb 73507-1 2-12-03 (1410)	
1.0 - 2.0		5500 0.0	2.0	1412 1.0-1.5'	7		
2.0 - 3.0		5400 0.0		1415 1.5-2.0'	7		
3.0 - 4.0		53700 0.0		1420	7		
3.0 - 10.0	TD: 5.0' BGS 2-12-03 1415					Background Nat 14680 PID: 0.0  Backfilled boring w/ 1.0 bags of bentonite chips.  * samples will be counted using gas proportional meter.  (See attached sheet)	

RADIOLOGICAL SURVEY FORM

Sample ID SLD 73007 QC Date Sample was collected: 2-12-03 Date Sample was analyzed: 2-24-03  
POT  
 Instrument #1 Background 4680 cpm Instrument #2 Background 4351 cpm  
 Countrate of Empty Pan: Beta 84 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Countrate in cpm	
					Gross Beta	Net Beta
1410 0-6	5200	520	4669	318	126	42
1412 6-12	5500	820	5053	702	190	106
1415 12-18	5400	720	4541	190	151	67
1420 18-24	5700	1020	4673	322	160	76
24-30						
30-36						
36-42						
42-48						
48-54						
54-60						
60-66						
66-72						

SLD 73007, 1-2.

N A

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 7300700(b)	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 OF 2 SHEETS	
3. PROJECT FUSRAP/SLDS				4. LOCATION PSC Metals North Tract V.P.			
5. NAME OF DRILLER Chris Anthony P.S.				6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120 P.S.			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		Diedrich D-120 using P.S. HSA and 3" x 2" split spoon, Hard to ravel		8. HOLE LOCATION See location sketch		9. SURFACE ELEVATION N/A	
PID 2-10-03 NAI Cal. Date: 4-11-03 BKG: 4/20		LUD 176040		10. DATE STARTED 2-12-03		11. DATE COMPLETED 2-12-03	
12. OVERBURDEN THICKNESS N/A				15. DEPTH GROUNDWATER ENCOUNTERED N/A			
13. DEPTH DRILLED INTO ROCK N/A				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 0.5 FT BGS				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
0		0		0		0	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
0		0		0		RAD	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
0		Yes		N/A		N/A	
23. SIGNATURE OF INSPECTOR Phillip Staller				21. TOTAL CORE RECOVERY 0%			
<p>LOCATION SKETCH/COMMENTS Witnessed by: Phillip Staller SCALE: Not to Scale</p> <p>Terms used to describe %  Trace - ≤ 5 %  Few - 5 - 10 %  Little - 15 - 25 %  Some - 20 - 35 %  Mostly - 50 - 100 %</p>							
PROJECT FUSRAP/SLDS					HOLE NO. SLD 7300700(b)		

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLB 73007QC(b)
PROJECT FUSRAP / SLDS			INSPECTOR Phillip Stoller			SHEET 2 OF 2	
DEPTH (ft)	DESCRIPTION OF MATERIALS	WATER CONTENT (%)	RECOVERY (%)	ANALYTICAL SAMPLE NO. (ID)	BLOW COUNT	REMARKS	
SM	silty fine sand w/ some med. gravel, loose, poorly graded, dry.	53.0 0.0	RECOVERY 0.5/0.5	00-05/ 2-12-03 1410	N/A	SLB 73007QC 2-12-03 (1410)	
1.0	TD = 0.5' BGS 2-12-03 1410					Backgrounds NATS 4680 PIDS 0.0	
2.0						Backfilled boring w/ native soil.	
3.0						Sample will be counted w/ gas pro- portional meter.	
4.0						(See att- ched sheet)	
5.0						Sample collected to ensure sufficient volume in QC sample.	
6.0							
7.0							
8.0							
9.0							
10.0							
PROJECT FUSRAP / SLDS					WELL NO. SLB 73007QC(b)		

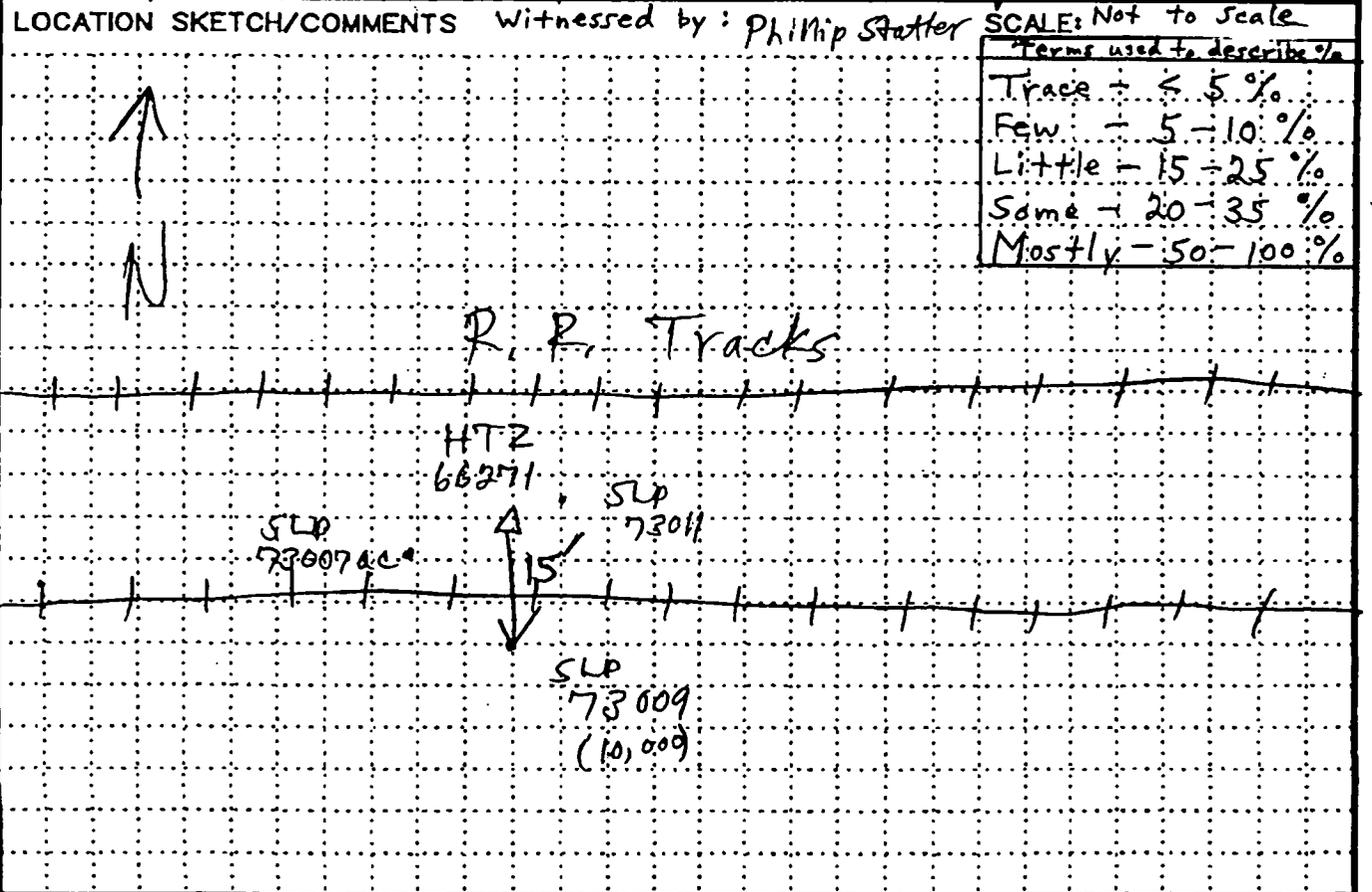
RADIOLOGICAL SURVEY FORM

Sample ID SLD 73007B QC      Date Sample was collected: 2-12-03      Date Sample was analyzed: 2-20-03  
 Instrument #1 Background 6833 cpm      Instrument #2 Background 4861 cpm  
 Countrate of Empty Pan: Beta 81 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Countrate in cpm	
					Gross Beta	Net Beta
0-6	5300	-1533	5556	695	179	98
6-12						
12-18						
18-24						
24-30						
30-36						
36-42			N	A		
42-48						
48-54						
54-60						
60-66						
66-72						

SLD 73007, -1, -2

<b>HTRW DRILLING LOG</b>			DISTRICT <b>St. Louis</b>			HOLE NUMBER <b>SLD 73009</b>		
1. COMPANY NAME <b>Shaw E &amp; I</b>			2. DRILLING SUBCONTRACTOR <b>MES, Inc.</b>			SHEET <b>1</b> OF <b>2</b> SHEETS		
3. PROJECT <b>FUSRAP/SLDS</b>			4. LOCATION <b>PSC Metals North Tract V.P.</b>					
5. NAME OF DRILLER <b>Chris Anthony</b>			6. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120</b>					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using 4 1/4" HSA and 3" x 2" split spoon.</b>			8. HOLE LOCATION <b>See location sketch</b>					
9. SURFACE ELEVATION <b>N/A</b>			10. DATE STARTED <b>2-12-03</b>			11. DATE COMPLETED <b>2-12-03</b>		
12. OVERBURDEN THICKNESS <b>N/A</b>			15. DEPTH GROUNDWATER ENCOUNTERED <b>N/A</b>					
13. DEPTH DRILLED INTO ROCK <b>N/A</b>			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>					
14. TOTAL DEPTH OF HOLE <b>2.0 FT BGS</b>			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR



PROJECT <b>FUSRAP/SLDS</b>	HOLE NO. <b>SLD 73009</b>
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HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 73009
PROJECT FUSRAP / SLD5		INSPECTOR Phillip Statler			SHEET 2 OF 2 SHEETS		
DEPTH (ft)	DESCRIPTION OF MATERIALS (if any)	DEPTH TO TOP OF MATERIAL (ft)	RECOVERY (%)	ANALYTICAL SAMPLE NO. (10)	SLOW CENTRIFUGATION (10)	REMARKS (if any)	
SM 1.0	Silty fine sand w/ trace med. gravel, loose poorly graded, dk. brn. to blk. dry, some cinders, some slag.	4700 0.0	2.0 / 2.0	01-05 1355	6	SLD 73009 1355	
		5300 3.0		05-10 1357	9	SLD 73010 1357	
		5300 0.0		10-15 1400	7		
		4700 0.0		15-20 1405	7	SLD 73009 1405	
2.0							
3.0	TD: 2,0' BGS 2-12-03 1400					Background: NaI #4680 PID: 0.0 Back-filled boring w/ 1.0 bags of bentonite chips. * Samples will be counted using gas proportional meter. (see attached sheet)	
4.0							
5.0							
6.0							
7.0							
8.0							
9.0							
10.0							
10.0							
10.0							

PROJECT: FUSRAP / SLD5

WELL NO. SLD 73009

RADIOLOGICAL SURVEY FORM

Sample ID SLD 73009

Date Sample was collected: 2-12-03

Date Sample was analyzed: 2-20-03

Instrument #1 Background 4680 cpm

Instrument #2 Background 4887 cpm

Count rate of Empty Pan: Beta 82 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
1355 0-6	4700	20	5146	259	171	89
1357 6-12	5200	520	5477	590	172	90
1400 12-18	5300	620	5179	290	119	37
1408 18-24	4700	20	5188	301	141	59
24-30						
30-36						
36-42						
42-48			N	A		
48-54						
54-60						
60-66						
66-72						

SLD 73009

SLD 78010

SLD 73009  
(archive)

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 73011	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR MES, Inc.			SHEET	1 of 2 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.				
5. NAME OF DRILLER Chris Anthony			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Hand auger 3" & 2" split spoon.		7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <del>Diedrich D-120</del> using <del>HSA</del> and		8. HOLE LOCATION See location sketch			
PID 1-29-02 NAI LUD 149947 + 0.100/100 Cal. Date: 9/30/03 Bkg: 2000		10. DATE STARTED 1-29-03			11. DATE COMPLETED 1-29-03		
12. OVERBURDEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A					
13. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
14. TOTAL DEPTH OF HOLE 2.0 FT BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTURBED 0		UNDISTURBED 0		19. TOTAL NUMBER OF CORE BOXES 0	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC 0		METALS 0		OTHER (SPECIFY) RAD	
22. DISPOSITION OF HOLE 0		BACKFILLED Yes		MONITORING WELL N/A		OTHER (SPECIFY) N/A	
						23. SIGNATURE OF INSPECTOR <i>Philip Stolar</i>	
LOCATION SKETCH/COMMENTS Witnessed by: Philip Stolar SCALE: Not to Scale							
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p style="text-align: center;">R. R. Tracks</p> </div> <div style="width: 35%; border: 1px solid black; padding: 5px;"> <p>Terms used to describe %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p> </div> </div>							
PROJECT FUSRAP/SLDS					HOLE NO. SLD 73011		

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLP 73011	
PROJECT FUSRAP / SLDS			INSPECTOR Phillip Statler			SHEET 2 OF 2 SHEETS	
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	NATURAL GRAVITY (pcf)	RECOVERY (%)	ANALYSIS SAMPLE NO. (ft)	SLOW COUNT (cpm)	REMARKS (ft)	
SM 1.0	silty fine sand w/ some med. gravel, loose, poorly graded, dk. brn. to blk, few cinders, few slag, few limestone frags.	8800	0.0	RECOVERY	0.0-0.5 1-29-03 1555	N/A	0.0-0.5 A 0.0-0.5 B
		8800	0.0	2.0	0.5-1.0 1600	N/A	0.5-1.0 A 0.5-1.0 B
		8800	0.0	2.0	1.0-1.5 1610	N/A	
		7500	0.0		1.5-2.0 1615	N/A	
2.0							
3.0	TD: 2.0' BGS 1-29-03 1615						Back ground: NAT: 8000 PID: 0.0 Backfilled boring w/ 1/2 bag of bentonite chips. * Samples will be counted w/ gas propor- tional meter (see attached sheet)
4.0							
5.0							
6.0							
7.0							
8.0							
9.0							
10.0							

RADIOLOGICAL SURVEY FORM

Sample ID SLD 73011 PDE

Date Sample was collected: 1-29-03

Date Sample was analyzed: 1-30-03

Instrument #1 Background 8000

Instrument #2 Background 4865 cpm

Count rate of Empty Pan: Beta 128 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	8000	0	5261	396	180	52
6-12	8800	800	5331	466	197	69
12-18	8800	800	5252	387	209	81
18-24	7800	-200	5004	139	177	49
24-30						
30-36						
36-42				A		
42-48			N			
48-54						
54-60						
60-66						
66-72						

HTRW DRILLING LOG			DISTRICT	HOLE NUMBER	
1. COMPANY NAME Shaw E & I			St. Louis	SLD 73013	
2. DRILLING SUBCONTRACTOR MES, Inc. PS.			SHEET		SHEETS
3. PROJECT FUSRAP/SLDS			1 OF 2		
5. NAME OF DRILLER Chris Anthony PS.			4. LOCATION PSC Metals <sup>PS</sup> North Tract V.P.		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using PS HSA and Hard auger 3" & 2" split spoon.			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120		
8. HOLE LOCATION See location sketch			9. SURFACE ELEVATION N/A		
10. DATE STARTED 2-4-03			11. DATE COMPLETED 2-4-03		
12. OVERBURDEN THICKNESS N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A		
13. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
14. TOTAL DEPTH OF HOLE 2.0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
18. GEOTECHNICAL SAMPLES		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
21. TOTAL CORE RECOVERY		Yes	N/A	N/A	Philip M. [Signature]
<p>LOCATION SKETCH/COMMENTS Witnessed by: Philip Statler SCALE: Not to Scale</p> <p>Terms used to describe %            Trace - ≤ 5 %            Few - 5 - 10 %            Little - 15 - 25 %            Some - 20 - 35 %            Mostly - 50 - 100 %</p>					
PROJECT FUSRAP/SLDS			HOLE NO. SLD 73013		

Y14

HTRW DRILLING LOG (CONTINUATION SHEET)						
PROJECT		RESPECTOR		HOLE NUMBER		
FUSRAP / JLD5		Philip Statler		SLD 73013		
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	DEPTH (ft)	RECOVERY (%)	ANALYTICAL SAMPLE NO. (ft)	BLOW COUNT (ft)	REMARKS (ft)
0.0 - 1.0	Silty fine sand w/ few med. gravel, loose, poorly graded, dk. brn. to blk. moist, few clinters, few slag, few clay, trace brick frags.	8500 0.0 7900 0.0	2.0	0.0-0.5 2-4-03 1355 0.5-1.0 1400	N/A	SLD 73013 2-4-03 1355
1.0 - 2.0	Silty clay, soft, med. plast, dk. to lt. brn, moist, trace wood frags.	8900 0.0 7900 0.0	2.0	1.0-1.5 1405 1.5-2.0 1410	N/A	SLD 73014 1405
2.0 - 10.0	TD: 2.0' BGS 2-4-03 1405			Backgrounds NAT: 7900 PIB: 0.0 Backfilled boring w/ 20 bags of bentonite chips. *Samples will be collected using gas proportion- al meter (See attached sheet).		

RADIOLOGICAL SURVEY FORM

Sample ID SLD 73013 POI

Date Sample was collected: 2-4-03

Date Sample was analyzed: 2-5-03

Instrument #1 Background 7900 cpm

Instrument #2 Background 4814 cpm

Count rate of Empty Pan: Beta 82 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	8500	600	5387	573	141	59
6-12	7900	0	5336	522	142	60
12-18	8000	100	5260	446	124	42
18-24	7900	0	5342	528	127	45
24-30						
30-36						
36-42						
42-48			N	A		
48-54						
54-60						
60-66						
66-72						

SLD 73013

SLD 73014

HTRW DRILLING LOG			DISTRICT			HOLE NUMBER		
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc. P.S.			SLD 73015		
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.			SHEET 1 OF 2		
5. NAME OF DRILLER Chris Anthony P.S.			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120PS. using HSA and 3" x 2" split spoon.			8. HOLE LOCATION See location sketch					
9. SURFACE ELEVATION N/A			10. DATE STARTED 2-3-03			11. DATE COMPLETED 2-3-03		
12. OVERBURDEN THICKNESS N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A					
13. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
14. TOTAL DEPTH OF HOLE 2.0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY
		Yes		N/A		RAD		%
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR
		Yes		N/A		N/A		Phillip M. Statter
LOCATION SKETCH/COMMENTS			Witnessed by: Phillip Statter			SCALE: Not to scale		
			Terms used to describe % Trace - < 5 % Few - 5 - 10 % Little - 15 - 25 % Some - 20 - 35 % Mostly - 50 - 100 %					
			SLD 73015 HTZ 00288 HTZ 662617 R.R. Tracks					
PROJECT FUSRAP/SLDS						HOLE NO. SLD 73015		

414.6

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 73015
PROJECT FUSRAP / SLD5		INSPECTOR Phillip Stutler			SHEET 2 OF 2 SHEETS		
DEPTH (ft)	DESCRIPTION OF MATERIALS (ft)	DEPTH (ft)	RECOVERY (%)	ANALYTICAL SAMPLE NO.	WATER CONTENT (%)	REMARKS	
SM 1.0	Silty fine sand w/ some med gravel, loose, poorly graded silty brh. to blk, moist, few cinders, few slag.	8100	0.0	2-3-93 1335	N/A	SLD 73015 2-3-93 1335	
		7200	0.0	0.5-1.0 1340	N/A		
		8300	0.0	1.0-1.5 1430	N/A		
		8500	0.0	1.5-2.0 1440	N/A		SLD 73016 1440
2.0	trace clay						
3.0	TD: 2.0' BBS 2-3-03 1440					Background; Nat: 17970 PIB: 0.0	
4.0					Boring back-filled w/ 20 bags of bestonite chips.		
5.0					* Sampler will be counted w/ gas proportional meter. (See attached sheet)		
6.0							
7.0							
8.0							
9.0							
10.0							

RADIOLOGICAL SURVEY FORM

Sample ID SLD 73015

Date Sample was collected: 2-3-03

Date Sample was analyzed: 2-5-03

Instrument #1 Background 7970 cpm

Instrument #2 Background 5552 cpm

Count rate of Empty Pan: Beta 81 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	8100	130	5782	230	143	62
6-12	7200	770	5728	176	135	54
12-18	8300	330	5830	278	162	81
18-24	8500	530	5883	331	149	68
24-30						
30-36						
36-42						
42-48						
48-54						
54-60						
60-66						
66-72						

SLD 73015

SLD 73016

N A

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER SLD 73017
PROJECT FUSRAP / SLDs		INSPECTOR Phillip Staller				SHEET 2 OF 2 SHEETS
DEPTH (ft)	DESCRIPTION OF MATERIALS (1)	NUMBER OF SAMPLES (2)	RECOVERY (3)	ANALYTICAL SAMPLE NO. (4)	SLOW COUNT (5)	REMARKS (6)
1.0	Silty fine sand w/ few med. gravel, loose, poorly graded, dk. brn. to blk. mott, few cinders, few clay.	8700 0.0	20/ 20	0.0-0.5 2-3-03 1100	N/A	SLD 73017 27-03 1100
		8900 0.0		0.5-1.0 1115	N/A	SLD 73018 1115
		8400 0.0		1.0-1.5 1125	N/A	
2.0	Silty clay w/ few med. gravel, soft, med. plastic, dk. brn. dry, few cinders, silty	8500 0.0		1.5-2.0 1130	N/A	
3.0	TD: 20' BES 2-3-03 1130					Background: Nat: 7970 PIp: 0.0
4.0						Backfilled boring w/ 2.0 bags of bentonite chips.
5.0						* Samples will be counted using gas propor- tional meter. (see attached sheet).
6.0						
7.0						
8.0						
9.0						
10.0						

Y.H.H.

RADIOLOGICAL SURVEY FORM

Sample ID SLD 73017 PDI

Date Sample was collected: 2-3-03

Date Sample was analyzed: 2-5-03

Instrument #1 Background 7970 cpm

Instrument #2 Background 5552 cpm

Count rate of Empty Pan: Beta 86 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	8700	730	6151	599	179	93
6-12	8900	930	5955	403	180	94
12-18	8400	430	5664	112	156	70
18-24	8200	230	5978	426	122	36
24-30						
30-36						
36-42						
42-48			N	A		
48-54						
54-60						
60-66						
66-72						

SLD 73017

SLD 73018

HTRW DRILLING LOG			DISTRICT			HOLE NUMBER		
1. COMPANY NAME Shaw E & I			St. Louis			SLD 75708		
2. DRILLING SUBCONTRACTOR M.E.J., Inc. P.S.			P.S.			SHEET 1 of 2 SHEETS		
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.					
5. NAME OF DRILLER Chris Anthony P.S.			6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120 P.S.					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich P-120 using HSA and 5" x 2" split spear Hand auger			8. HOLE LOCATION See location sketch					
9. SURFACE ELEVATION N/A			10. DATE STARTED 2-27-03			11. DATE COMPLETED 2-27-03		
12. OVERBURDEN THICKNESS N/A			13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A		
14. TOTAL DEPTH OF HOLE 4.0 FT BGS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		
18. GEOTECHNICAL SAMPLES			18. TOTAL NUMBER OF CORE BOXES					
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERY %					
22. DISPOSITION OF HOLE			23. SUPERVISOR					
LOCATION SKETCH/COMMENTS			Witnessed by: Phillip Statler			SCALE: Not to Scale		
<p>↑ N Southern Bldg. (North Tract.) ↓</p>			<p>Terms used to describe % Trace - &lt; 5% Few - 5-10% Little - 15-25% Some - 20-35% Mostly - 50-100%</p>					
<p>SLD 72161</p>			<p>TRUCK</p>			<p>SLD 75708 (12 K)</p>		
			<p>Rail Car</p>			<p>Trailer</p>		
PROJECT FUSRAP/SLDS						HOLE NO. SLD 75708		

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 75708
PROJECT FUSRAP/SLDS		OPERATOR Phillip Statler					SHEET 2 of 2
DEPTH (ft)	DESCRIPTION OF MATERIALS	START (ft)	END (ft)	RECOVERY (%)	LOGGING CODE	REMARKS	
SM 1.0	Silty fine sand w/ some med. gravel and trace pebbles, loose, poorly graded, dk. brn, dry, few clasts, few slag, trace bricks. 1 large rock	7300	7300	0.0	RECOVERY	0.0-0.5 N/A	
		7400	7400	0.0	2.0	0.5-1.0 N/A	
		7500	7500	0.0	2.0	1.0-1.5 N/A	
		7600	7600	0.0	2.0	1.5-2.0 N/A	
CL 3.0	Silty clay med. stiff, med. pl. dk. brn, moist, few med. gravel. clay forming grys, gravel absent.	7500	7500	2.8	2.0	2.0-2.5 N/A	
		7600	7600	0.0	2.0	2.5-3.0 N/A	
		7700	7700	0.0	2.0	3.0-3.5 N/A	
		7800	7800	0.0	2.0	3.5-4.0 N/A	
5.0	TD: 4.0' BGS 2-27-03 1525					Backgrounds NFI: 7,285 PID: 0.0 (2.0-2.5' BGS: 2.8) Backfilled boring w/ 2.0 bags of bentonite chips. * Sampler will be counted w/ gas propor- tional meter (See attached sheet).	

**RADIOLOGICAL SURVEY FORM**

Sample ID SLD 75708

Date Sample was collected: 2-27-03

Date Sample was analyzed: 3-3-03

Instrument #1 Background 7285 cpm

Instrument #2 Background 4200 cpm

Count rate of Empty Pan: Beta 84 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	7300	15	5758	1558	252	168
6-12	8000	715	5791	1591	322	238
12-18	7600	315	4797	597	232	148
18-24	7500	215	4858	658	192	108
24-30	7800	515	4768	568	163	79
30-36	7600	315	4592	392	165	81
36-42	7600	315	4570	370	154	70
42-48	6900	-385	4606	406	129	45
48-54						
54-60			N	A		
60-66						
66-72						

SLD 75708

SLD 75709

SLD 75710

10-10-03 10:00 AM 10-10-03

EM 1110-1-4000  
1 Nov 98

PSC METALS (Wodok TRAD 1)

5/18/05  
2:50

← GROSS

5/18/05

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 87284
PROJECT FUSRAD SLOS		INSPECTOR MIKE MCCARRIN		SHEET 2 of 2		SHEETS	
REV. 111	DEPTH 111	DESCRIPTION OF MATERIALS 111	TEST DEVELOPER 111	SECTION NUMBER OR CHAIN SURV. NO. 111	ANALYTICAL SAMPLE NO. 111	ALLOY CORRECTION 111	REMARKS 111
CL (Fill)	1.0	Black & brown - silty clay (fill) w/ cinders, some brick frags damp LOOSE	6500	Recovery	SLD 87291	5	
			6700	2.0	Recovery	6	
			6500	2.0	Recovery	4	
			6500		SLD 87290	5	
			6700	2.0	SLD 87290	3	
	2.0	SAME	6700	2.0		2	
ML	3.0	Dark Brown silty clay (no cinder frags) damp - moist	6500	2.0		2	
			6300	Recovery	Recovery	3	INSITU Soils
			6300			4	
			6500	2.0		2	
			6000	2.0		3	
CL	5.0	DK Brown - Gray Layered silt moist MED STIFF (no evd of fill) (with insitu)	6500	2.0		4	
			6500		Recovery	7	
			6300	2.0		2	
			6500	2.0	Recovery	4	
			6500			6	
CL	7.0	Yellow-tan (w/ Mott) silty clay med stiff moist some sand & gravel	6500	2.0	Recovery	4	
			6500			6	
			6500			7	
	8.0	EOB 8.0 5/16/05 3:30					
	9.0	Backfill to 4' Basalite chips					
	10.0	Wodok 6/7/05					

2:50  
2:55  
2:30  
2:50  
2:55

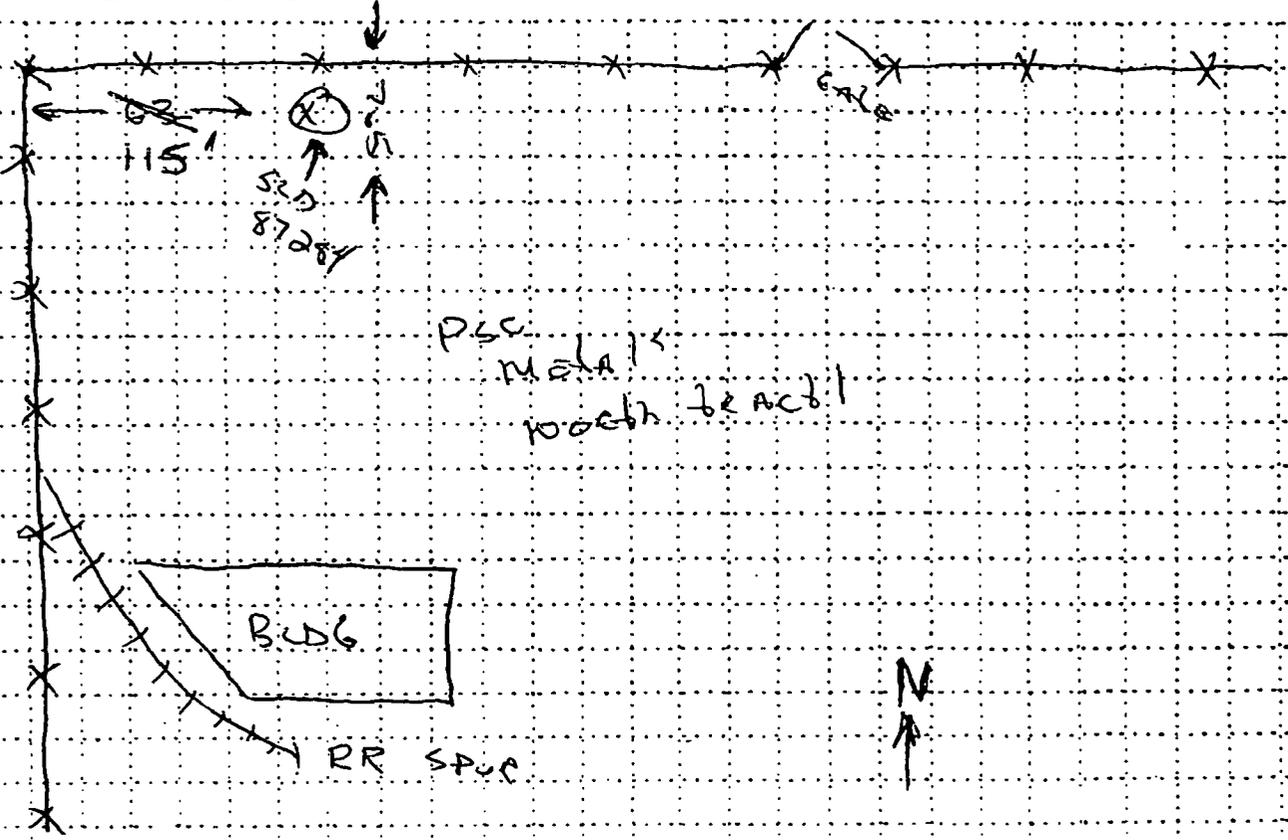
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→ BLK END

<b>HTRW DRILLING LOG</b>		DISTRICT	St. Louis		HOLE NUMBER	SLD 87 284	
1. COMPANY NAME		SHAN EXL		2. DRILLING SUBCONTRACTOR	NA SHAN		SHEET 1 OF 2
3. PROJECT			FUSRAP / SLDs				
4. LOCATION			PSC METALS (NT 1)				
5. NAME OF DRILLER			Dan Gotto				
6. MANUFACTURER'S DESIGNATION OF DRILL			CME 75				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT			4.5 HSA AWT ROD 3.5 SPLD SPOONS, WIRESS, OTHERS NOTED				
8. HOLE LOCATION			NA				
9. SURFACE ELEVATION			423.8				
10. DATE STARTED			5/18/05		11. DATE COMPLETED		
					5/18/05		
12. OVERBURDEN THICKNESS			NA				
13. DEPTH DRILLED INTO ROCK			NA				
14. TOTAL DEPTH OF HOLE			8.0				
15. DEPTH GROUNDWATER ENCOUNTERED			NA				
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED			NA				
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)			NA				
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		TOC		METALS		OTHER (SPECIFY)	
						21. TOTAL CORE RECOVERY %	
22. DISPOSITION OF HOLE		SACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
BACKFILLED GS BENTONITE						23. SIGNATURE OF INSPECTOR	
						ZC ZC	

**LOCATION SKETCH/COMMENTS**

SCALE:



**HWY DRILLING LOG (CONTINUED SHEET)**

SLD

83

FUSRAP / SLOS

M. MCCARRIN

3 3

DEPTH	DESCRIPTION OF MATERIALS	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
1	Slack fill 2000 bbl						Excavate to 2.0'. Disturbed - previously hit @ 2.0 is LS shell possibly float of PKC. Col.
2	North wall Limestone rock (Foundation?)	14900					
3	Wall.	14500					
4	Black cinder & slag fill Loose dump w/ LS RUBBLE	15500					
5	Black cinder & slag fill Loose dump w/ LS RUBBLE (pipes noted embedded in LS found)	16500					
6	Tan & grey sand gravel cinder slag fill	19500					
7	12:40 Finish sampling & excavation	22000					
8		22000					
9	(PID reading by I. Huxley in Ambient.)						
10	TEST ALL backfilled w/ <del>spot</del> material from excavation						

9:00  
12:30  
11:10  
11:05  
11:00

Minimal lateral from SLD 87283

Boulders  
when enc-  
ountered  
are large  
2-3' x  
6-8" thick

11:00 EVAC  
SHEI CAS  
ON FIRE  
- PREV SAMPLE  
SEE BORING  
LOG  
12:20 return  
to site.  
PREVIOUS  
SAMPLE SEE  
BORING LOG

SLD 87283 (PREV)

SLD 87283

SLD 87283

SLD 87324

SLD 87323

SLD 87283 (PREV)

Anchor  
rod

PROJECT:

FUSRAP / SLOS

HOLES NO.:

SLD 87283 (TP)

STONE & WEBSTER ENGINEERING CORPORATION  
 CALCULATION SHEET

▲ 5010.65

CALCULATION IDENTIFICATION NUMBER			
J.O. OR W.O. NO.	DIVISION & GROUP	CALCULATION NO.	OPTIONAL TASK CODE

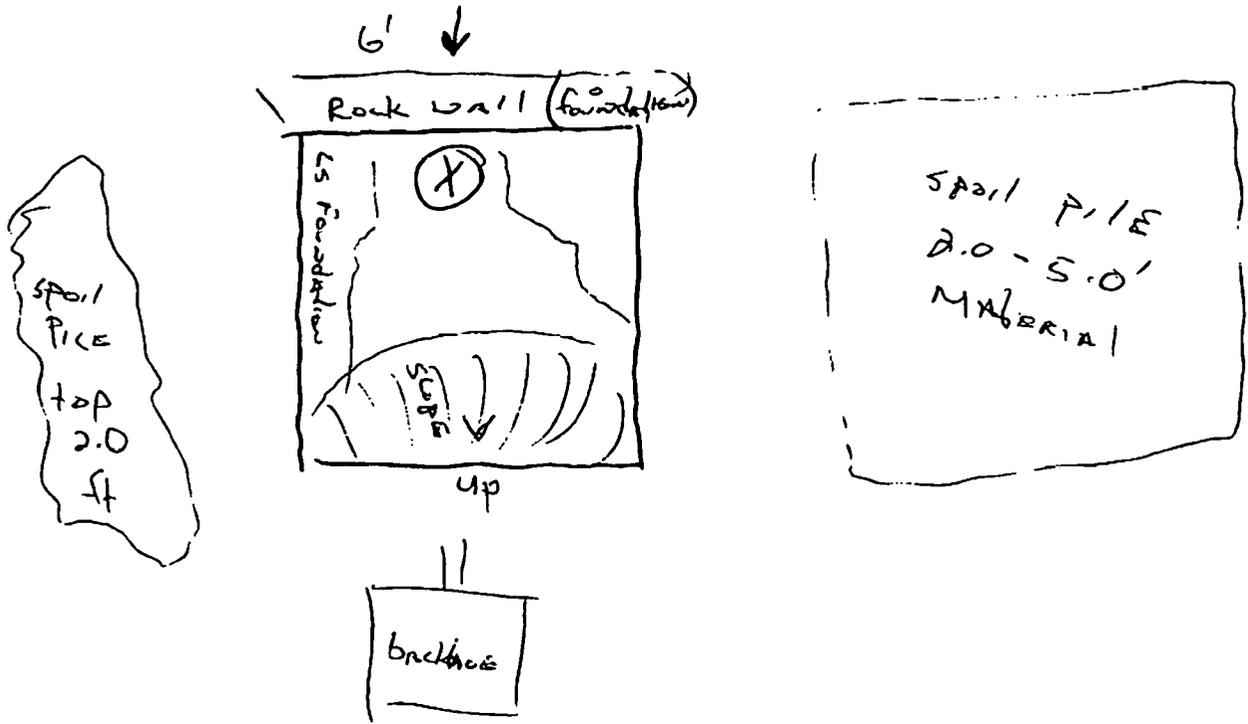
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 SLD 67 253

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Test Pit (SLD 67 253)

N  
 ↑  
 SLD 67 253 TP

Beomen



RESAMPLE

<b>HTRW DRILLING LOG</b>		DISTRICT ST. LOUIS		HOLE NUMBER SLD 67263	
1. COMPANY NAME SHAW ENVIRONMENTAL		2. DRILLING SUBCONTRACTOR SHAW		SHEET 1 OF 3 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals (NT 2)		
5. NAME OF DRILLER I.E.C. KEVIN MOONEY			6. MANUFACTURER'S DESIGNATION OF DRILL CMET J. DEERE		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT CHE 95 using HSA and RSK-1			8. HOLE LOCATION See location sketch		
9. SURFACE ELEVATION			10. DATE STARTED 6/16/05		
11. DATE COMPLETED 6/16/05			12. OVERBURDEN THICKNESS N/A		
13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED NA		
14. TOTAL DEPTH OF HOLE 6.0			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			18. GEOTECHNICAL SAMPLES		
DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY		23. SIGNATURE OF INSPECTOR	
VOC		METALS		OTHER (SPECIFY)	
OTHER (SPECIFY)		OTHER (SPECIFY)		OTHER (SPECIFY)	
BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
yes		N/A		N/A	

LOCATION SKETCH/COMMENTS Witnessed by: SCALE: Not to Scale

Trace <5%  
 Few 5-10%  
 Little 15-25%  
 Some 20-35%  
 Mostly 50-100%

PSC METALS NORTH TARGET

RESAMPLE attempt of SLD 67263 using test pit procedures.

5/19/05

PSC materials (NTI) 5/19/05

Robt  
Robt

11:20  
Start

11:45

HTRW DRILLING LOG (CONTINUATION SHEET)						
PROJECT: FUSRAP / SLOS		DRILLER: McCARRIN			LOG NO: SCD 87283	
DEPTH (ft)	DESCRIPTION OF MATERIALS	LOG NO.	TEST NO.	TEST DATE	LOG NO.	TEST NO.
1	Bore drill w/ pipe through obstruction.					
2	Rocky bouldery stone & debris fill					
3	Not sampled (from cuttings & borings inside)					
4						
5	Top loose sand gravel under seal fill - mostly missing	6500	201.0 ft	RELU	4	
6					3	
7	FEL - brown moist silty clay (inside)			tip is OK	2	inside soil
8	EOP 7.0 Bore back-filled w/ borings chips	4500				
9						
10	FEL OK 6/7/05					

Fill

CL

CRUSHED  
RELU

LOG NO: SCD 87283

PROJECT: FUSRAP / SLOS

5/19/05

DSC (NT1)

5/19/05

# HTRW DRILLING LOG (CONTINUED SHEET)

PROJECT: FUSRAP / SLDS      OPERATOR: M. McCARRIN      SHEET: 4 of 5

DEPTH (ft)	DESCRIPTION OF MATERIALS	LOG TIME	REMARKS	REMARKS	REMARKS
1	Brown + Tan SAND GRADE DRIVEWAY (fill)	6800		Recharge	9
		6500			9
	Black cinders slag fill	6400		Recharge	6
	ORANGE painted BRICK (stone)	6500			6
2	Fractured LS fill			all recharge	50 B LESS 2" PORE
3	CL	7000			3?
		7000		Recharge	4?
		7000			5?
		7000			6?
4	CL				
5	CL				
6	CL				
7	CL				
8	CL				
9	CL				
10	CL				

Culture show same red - ool material as oolite base - today

HL ubale.

Scaller-2 Recovery 2 8' fill (normal PETRI)

10:23

10:20  
10:25  
11:08

PROJECT: FUSRAP / SLDS      ROLL NO: 3LD57283

7000

1110-1-4000  
Nov 98

PSC METAL (NTI)

5/18/05

SAMPLE #25  
5/20/05  
5/25/05  
5/26/05  
5/28/05  
5/29/05  
5/30/05  
2:30 PM

HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 87283	
PROJECT FUSION 1 SLS		INSPECTOR Mike McCracken		SHEET 3 of 5			
CLV (1)	DEPTH (1)	DESCRIPTION OF MATERIALS (2)	FIELD SCREEN DEPTH (3)	SECTION SAMPLE OR OTHER ID. NO. (4)	ANALYTICAL SAMPLE NO. (5)	ALLOY CODE (6)	REMARKS (7)
CL		GRAY SILT CLAY FILL dry	6500	2.0	SLD 87283	7	hit bkg on OPID
GM	1.0	BRICK SNAIL SHELL FILL	6500	2.0		10	
fill		Red fill brick	6000		SLD 87292	15	send to Lab per Susan
GM	2.0	BRICK SNAIL SHELL FILL	6000			26	hit obstacle
Shove fill	3.0	Rocky bouldery Shove debris & fill		No recovery (to be redrilled)		12	
	4.0					5	(not sampled from cuttings + boring inspector)
	5.0					5	
	6.0					6	
Fill	5.0	Tan & Gray Sand gravel under slur fill		8" recovery from 3.0'		4	
	6.0			No recovery (redrill)		16	
	7.0	Brown Silty clay Med stiff, moist	6500			11	
CL	7.0	Yellow tan (w/mole) Silty clay (?fill) w/ some snail/shell bits	7000	2.0	SLD 87294	12	HARD drilling - 105HU
	7.0	Med stiff Moist	6500	2.0		3	
	8.0		6500			4	
	8.0	EOB 8.0				5	
	9.0	boring backfilled w/ bentonite				8	
	10.0						

3:50

3:54

4:13

4:16

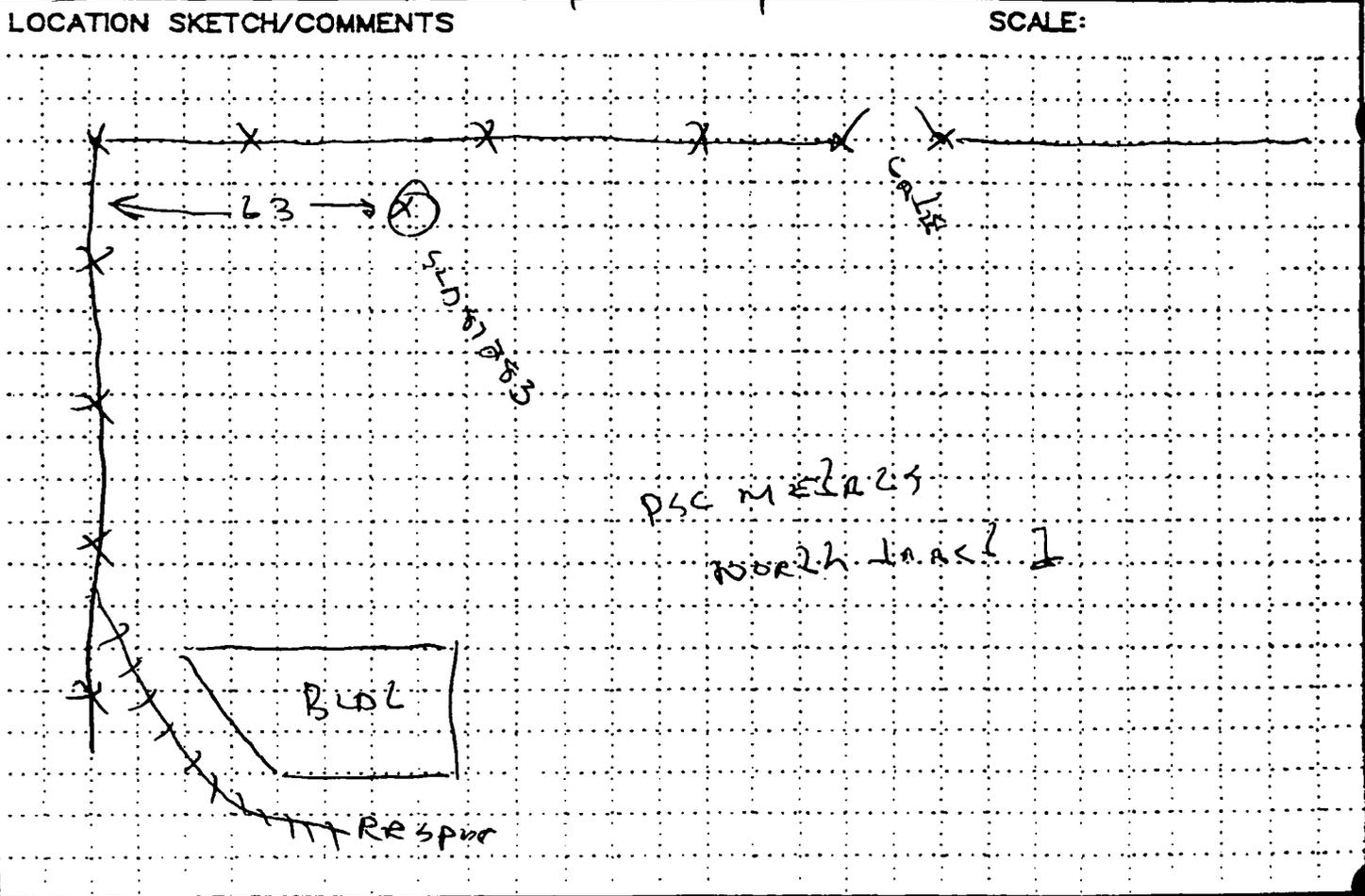
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4:30 finish

5/18/05

4:50

<b>HTRW DRILLING LOG</b>		DISTRICT <u>St. Louis</u>		HOLE NUMBER: <u>SLD 87283</u>	
1. COMPANY NAME <u>SHAW EDI</u>		2. DRILLING SUBCONTRACTOR <u>NA - SHAW</u>		SHEET <u>2</u> OF <u>5</u> SHEETS	
3. PROJECT <u>FURAD SLD</u>			4. LOCATION <u>PSC METALS (NTI)</u>		
5. NAME OF DRILLER <u>DAN GATTO</u>			6. MANUFACTURER'S DESIGNATION OF DRILL <u>CME 75</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION		9. SURFACE ELEVATION	
<u>4.5 HSA</u> <u>AJT RODS</u>		<u>NA</u>		<u>424.5</u>	
<u>3.5 SPIN SPOON SAMPLER UNLESS OTHERWISE NOTED</u>		10. DATE STARTED <u>5/18/05</u>		11. DATE COMPLETED <u>5/19/05</u>	
12. OVERBURDEN THICKNESS <u>NA</u>		15. DEPTH GROUNDWATER ENCOUNTERED <u>NA</u>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>NA</u>	
13. DEPTH DRILLED INTO ROCK <u>NA</u>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>NA</u>			
14. TOTAL DEPTH OF HOLE		18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES	
		DISTURBED <input type="checkbox"/>		UNDISTURBED <input type="checkbox"/>	
20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY <u>4%</u>			
<input type="checkbox"/>		TOC <input type="checkbox"/>		METALS <input type="checkbox"/>	
<input type="checkbox"/>		OTHER (SPECIFY) <u>RAIN LOGS</u>		OTHER (SPECIFY) <u>NA</u>	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR <u>[Signature]</u>			
<input checked="" type="checkbox"/> SACRIFICED		<input type="checkbox"/> MONITORING WELL		<input type="checkbox"/> OTHER (SPECIFY)	



PROJECT	HOLE NO. <u>SLD 87283</u>
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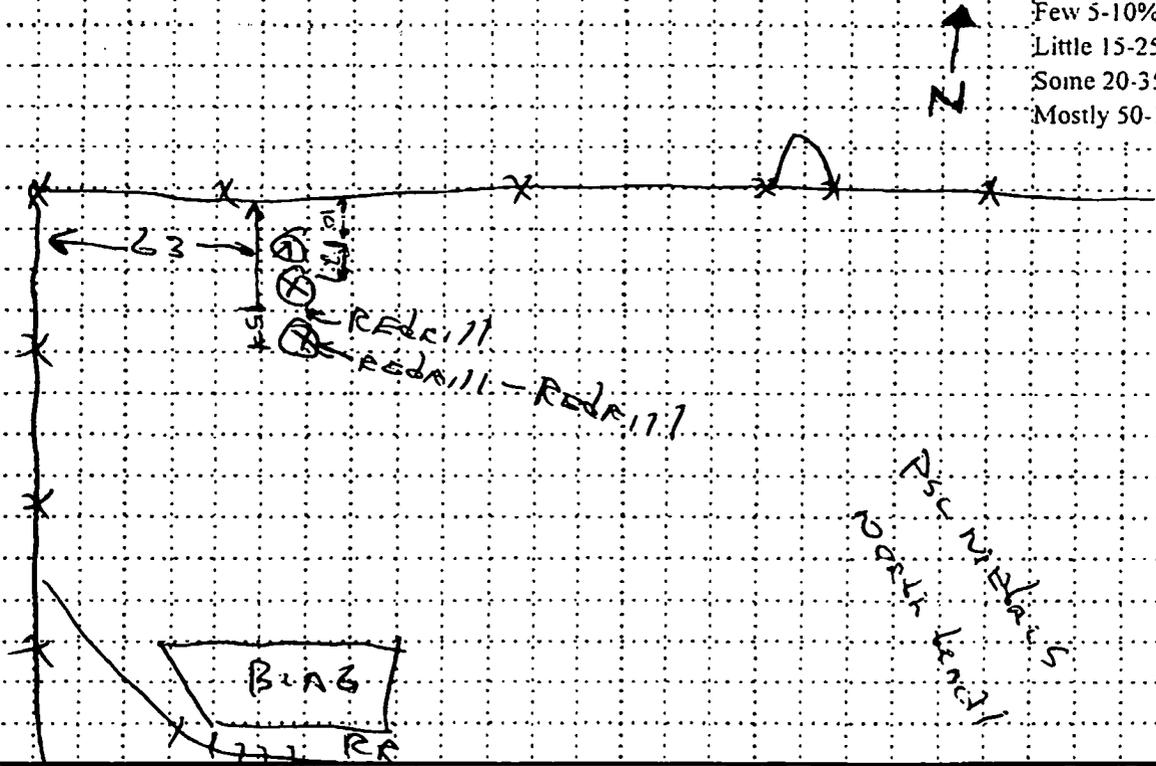
<b>HTRW DRILLING LOG</b>		DISTRICT	ST. LOUIS		HOLE NUMBER	SLD 87283	
1. COMPANY NAME		SHAW ENVIRONMENTAL		2. DRILLING SUBCONTRACTOR	SHAN		SHEET 1 OF 5 SHEETS
3. PROJECT			FUSRAP/SLDS				
4. LOCATION			Psc Metals (North tract 1)				
5. NAME OF DRILLER			DAN GOTTO				
6. MANUFACTURER'S DESIGNATION OF DRILL			CME 75				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT			CME 75 using 1 1/2" HSA and 1 1/2" 3" split speed 40155				
8. HOLE LOCATION			See location sketch				
9. SURFACE ELEVATION			424.5				
10. DATE STARTED			5/19/05		11. DATE COMPLETED		
12. OVERBURDEN THICKNESS			N/A				
13. DEPTH DRILLED INTO ROCK			N/A				
14. TOTAL DEPTH OF HOLE			8.0				
15. DEPTH GROUNDWATER ENCOUNTERED			NA				
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED			N/A				
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)			N/A				
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
21. TOTAL CORE RECOVERY		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		yes		N/A		23. SIGNATURE OF INSPECTOR	

Redrill

LOCATION SKETCH/COMMENTS Witnessed by: SCALE: Not to Scale

(Redrills started 5/19/05)

- Trace <5%
- Few 5-10%
- Little 15-25%
- Some 20-35%
- Mostly 50-100%



PROJECT	FUSRAP/SLDS	HOLE NO.	SLD 87283
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HTRW DRILLING LOG (CONTINUATION SHEET)						WELL NUMBER SLD 76943
PROJECT FUSRAP/SLDS		OPERATOR Phillip Statler		DATE 2-2-03		
WELL ID	DESCRIPTION OF MATERIALS	DEPTH (ft)	WELL TYPE	WELL ID	WELL ID	WELL ID
SM	1/4" pipe sand N/O 3/4" pipe (mass, water)	700 0.0		SLD 76943	6-2-03 1040	
	TD: 0.6' below top surface of gutter  6-2-03 1040					Background NAT: 4800 PSD: 0.0
PROJECT FUSRAP / SLD5					WELL NO. SLD 76943	

HTRW DRILLING LOG			DISTRICT			MOLE NUMBER		
1. COMPANY NAME <b>Shaw E &amp; I</b>			St. Louis			SLD 76943		
2. PROJECT <b>FUSRAP/SLDS</b>			2. DRILLING SUBCONTRACTOR <b>MES, Inc. P.S.</b>			SHEET <b>1</b> OF <b>2</b>		
5. NAME OF DRILLER <b>Chris Anthony P.S.</b>			4. LOCATION <b>PSC Metals N.T.V.P.</b>			6. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120 P.S.</b>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>2" x 3" split screen, hand trowel</b>			8. MOLE LOCATION <b>See location sketch</b>			9. SURFACE ELEVATION <b>N/A</b>		
10. DATE STARTED <b>6-2-03</b>			11. DATE COMPLETED <b>6-2-03</b>			12. OVERSIZING THICKNESS <b>N/A</b>		
13. DEPTH DRILLED INTO ROCK <b>N/A</b>			14. TOTAL DEPTH OF MOLE <b>0.3 FT BGS</b>			15. DEPTH GROUNDWATER ENCOUNTERED <b>N/A</b>		
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>			18. GROUNDCONCRETE SAMPLES		
18. GROUNDCONCRETE SAMPLES			19. TOTAL NUMBER OF CORE BORES			20. SAMPLES FOR CHEMICAL ANALYSIS		
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERY %			22. DEPOSITION OF MOLE		
22. DEPOSITION OF MOLE			23. SIGNATURE OF INSPECTOR			24. LOCATION SKETCH/COMMENTS		
23. SIGNATURE OF INSPECTOR <i>Philip M. Statler</i>			24. LOCATION SKETCH/COMMENTS Witnessed by: <i>Philip Statler</i> SCALE: Not to Scale			<p>Terms used to describe %</p> <p>Trace - &lt; 5. %</p> <p>Few - 5-10. %</p> <p>Little - 15-25. %</p> <p>Some - 20-35. %</p> <p>Mostly - 50-100. %</p>		
24. LOCATION SKETCH/COMMENTS			<p>(Sample collected from lower portion of soil in gutter)</p> <p>gutter ← SLD 76943</p> <p>gutter →</p> <p>Southern Bldg. at PSC Metals North Tract 1</p>			<p>PROJECT <b>FUSRAP/SLDS</b></p> <p>MOLE NO. <b>SLD 76943</b></p>		

HTRW DRILLING LOG (CONTINUATION SHEET)						
PROJECT		DESCRIPTION OF MATERIALS		WELL IDENTIFICATION	WELL NUMBER	WELL COUNTY
FUSPAP/SLOS		st. Hy. fine sand w/ organic matter (mass, roots, etc) blk.		700	SLO 76942	6-2-03 1035
SM		TD: 0.3' below top surface of gutter J.P.S. 6-2-03 1035		0.0		Background Nat = 4800 PSD = 0.0
PROJECT		FUSPAP/SLOS		WELL NO. 520 76942		

HTRW DRILLING LOG			DISTRICT			HOLE NUMBER																																																							
1. COMPANY NAME <b>Shaw E &amp; I</b>			2. DRILLING SUBCONTRACTOR <b>MES, Inc. P.S.</b>			St. Louis <b>SLD 76942</b>																																																							
3. PROJECT <b>FUSRAP/SLDS</b>			4. LOCATION <b>PSC Metals N.T.V.P.</b>			SHEET <b>1</b> OF 2 SHEETS																																																							
5. NAME OF DRILLER <b>Chris Anthony P.S.</b>			6. MANUFACTURER'S DESIGNATION OF DRILL <b>Diedrich D-120 P.S.</b>																																																										
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <b>Diedrich D-120 using DE-HSA and 2" C.I. split case, and Frowell</b>			8. HOLE LOCATION <b>See location sketch</b>																																																										
9. SURFACE ELEVATION <b>N/A</b>			10. DATE STARTED <b>6-2-03</b>			11. DATE COMPLETED <b>6-2-03</b>																																																							
12. OVERBURDEN THICKNESS <b>N/A</b>			13. DEPTH DRILLED INTO ROCK <b>N/A</b>			14. TOTAL DEPTH OF HOLE <b>0.3 FT BGS</b>																																																							
15. DEPTH GROUNDWATER ENCOUNTERED <b>N/A</b>			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <b>N/A</b>																																																							
18. GEOCHEMICAL SAMPLES			19. TOTAL NUMBER OF CORE BOLES																																																										
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERY																																																										
22. DISPOSITION OF HOLE			23. SIGNATURE OF INSPECTOR																																																										
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UNDISTURBED	UNDISTURBED	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)																																																									
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LOCATION SKETCH/COMMENTS Witnessed by: <b>Phillip Statler</b> SCALE: Not to Scale Terms used to describe % Trace - < 5% Few - 5-10% Little - 15-25% Some - 20-35% Mostly - 50-100% (Sample collected from upper portion of soil in gutter) SLD 76942 gutter gutter Southern Bldg. at PSC Metals North Tract 1																																																													
PROJECT <b>FUSRAP/SLDS</b>			HOLE NO. <b>SLD 76942</b>																																																										

EXCAVATION LOG

Excavation Dimensions:

Background Readings:

Excavation ID: Test Pit-76911

Company: Shaw

Start Date: 5-28-03

Length:

NAI:

PID:

Location: P&M Metals

Project: 775575

End Date:

Width:

10K

0.0

East side of CURP Elev.

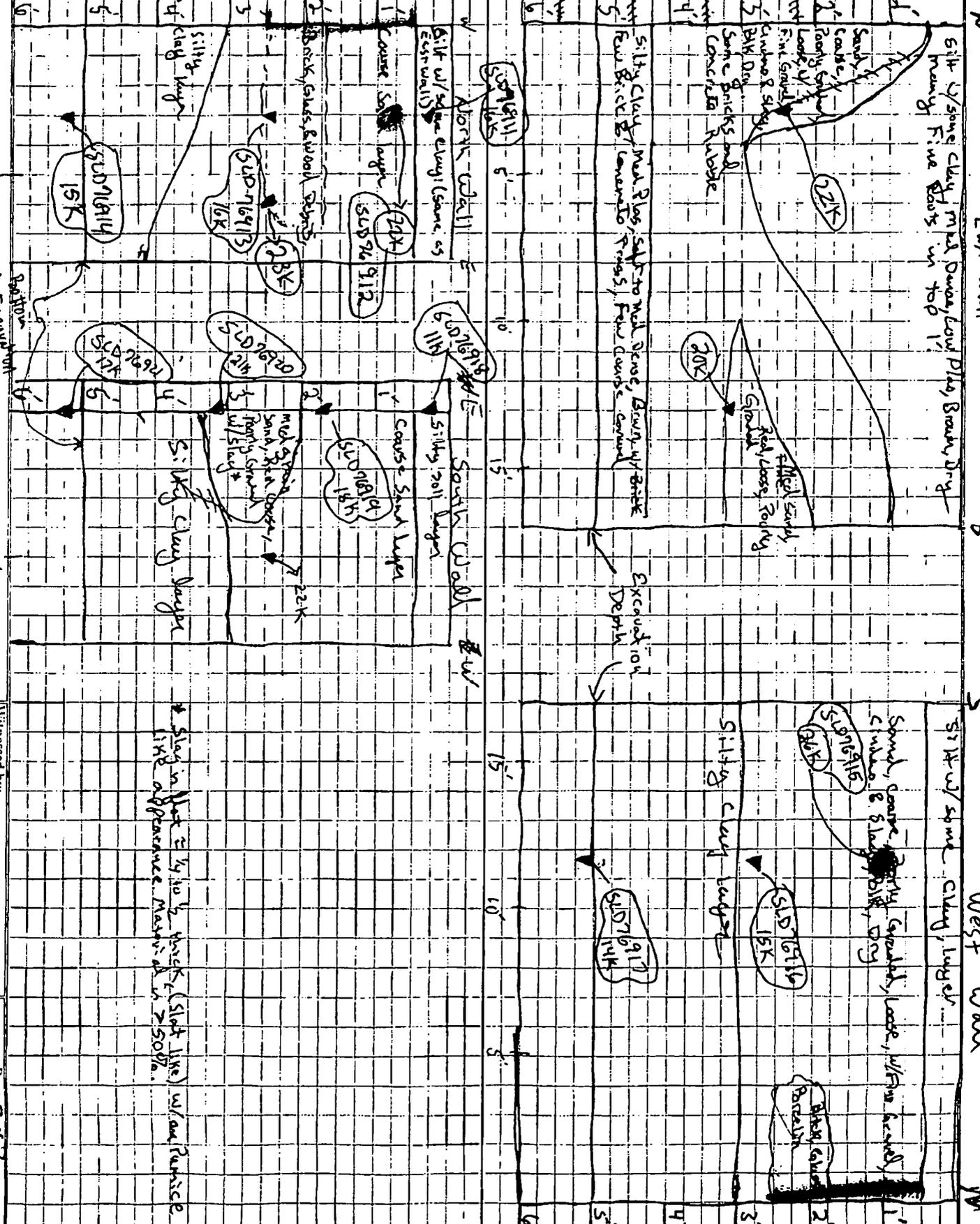
Geologist: M. Cummings

Depth:

Coys

PPM

Tracts (Area H of PSC)



Witnessed by:

Page 2 of 2

EXCAVATION LOG		Excavation Dimensions:		Background Readings:		Excavation ID: SLD Test Pit - 7691	
Company: Shaw	Start Date: 6-28-03	Length: 17'	NAI:	PID:	Location: PSC Metals		
Project: 275575	End Date:	Width: 8'	10k	0.0	East Side of CUIVP Ele		
Geologist: M. Cummings		Depth: 5'	Counts	PPM	Tracts (Area H) PSC		

NOTES:	<p>5/17/04 8:00 AM was <del>excavated</del> <sup>excavated</sup> contaminated at 1 yds w/wh. SOE of 1113 (R-224 driven). This pit is to assess extent of contamination.</p>	

Samples Collected		Samples Collected	
Sample ID	Depth	Sample ID	Depth
76911	0.2-0.5	SLD76911	
76912	1.0-1.5		
76913	2.0-2.8		
76914	3.2-5.5		
76915	1.0-1.5		
76916	2.7-3.0		
76917	5.0-5.3		
76918	0.2-0.5		
76919	1.7-2.0		
76920	3.2-3.5		
76921	5.2-5.3		

RADIOLOGICAL SURVEY FORM

Sample ID SLD 75728  
PSC

Date Sample was collected: 4-8-03

Date Sample was analyzed: 4/30/03

Instrument #1 Background 6900 cpm

Instrument #2 Background 4078

Count rate of Empty Pan: Beta 80

Sample Depth (feet)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-0.5	7600	700	4972	894	151	65
0.5-1.0	7600	700	4293	215	151	65
1.0-1.5	7000	100	4656	528	158	72
1.5-2.0	6800	-100	4475	397	145	59
2.0-2.5	7100	200	4628	550	148	62
2.5-3.0	8100	1200	4457	379	184	98
3.0-3.5	7700	800	4526	448	135	49
3.5-4.0	7300	400	4569	491	143	57
4.0-4.5						
4.5-5.0						
5.0-5.5						
5.5-6.0						

SLD 75728

SLD 75729

SLD 75730

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT		WELL NO.	
FUSRAP / SLDS		Ph/ Nip Statter		SLD 75728	
DEPTH (FEET)	DESCRIPTION OF SOILS	WATER CONTENT (%)	RECOVER (%)	TEST NO.	TEST RESULT
1.0	silty fine sand w/ few med. to coarse gravel, loose, poorly graded, dk. blk. to blk. dk. few brick frags, few broken glass, few cinders, few slag	700 0.0	00-05 4-8-03 1330	N/A	SLD 75728 1330
		700 0.0	05-10 1335	N/A	
		100 0.0	10-15 1340	N/A	SLD 75729 1340
2.0	few silty clay, few cinders, few slag.	-100 0.0	15-20 1343	N/A	
		200 0.0	20-25 1345	N/A	
3.0	few wood frags, few cinders, few slag, few brick frags	1200 0.0	25-30 1347	N/A	SLD 75730 1347
		800 0.0	30-35 1350	N/A	
4.0	silty clay, med. silty, med. plasticity, brn/dk, few cinders	400 0.0	35-40 1400	N/A	
5.0		TD: 4.0 BGS 4-8-03 1350		Background N/A to 900 PTD: 0.0 Backfill Med boring w/ 2.0 bags of boston ite chips. * Samples will be counted w/ gas propor- tional meter (see at- tached sheet)	
6.0					
7.0					
8.0					
9.0					
10.0					

HTRW DRILLING LOG		DISTRICT	St. Louis		WELL NUMBER	SLD 75728									
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR M.E.S., Inc. PS			3. SHEET 1 of 2										
5. PROJECT FUSRAP/SLDS				4. LOCATION PSC Metals N.T.V.P.											
6. NAME OF DRILLER Chris Anthony PS				8. MANUFACTURER'S DESIGNATION OF BORE Diedrich D-120											
7. SIZE AND TYPE OF BORE AND SAMPLING EQUIPMENT Diedrich D-120 Bore Wire HSA and 2 3/4" split spear hard anvil				9. BORE LOCATION See location sketch											
10. DATE STARTED 4-8-03				11. DATE COMPLETED 4-8-03											
12. OVERBURDEN THICKNESS N/A				13. DEPTH GROUNDWATER ENCOUNTERED N/A											
14. DEPTH DRILLED INTO BORE N/A				15. DEPTH TO WATER AND REAPED TIME AFTER DRILLING COMPLETED N/A											
16. TOTAL DEPTH OF BORE 470 FT BGS				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A											
18. GEOTECHNICAL SAMPLES		DISTURBED		SUBSAMPLES		19. TOTAL NUMBER OF CORE BONES									
20. SAMPLES FOR CHEMICAL ANALYSIS		NO		YES		21. TOTAL CORE RECOVERY									
22. DEFORMATION OF BORE		NO		YES		23. OTHER COMMENTS									
Yes		N/A		N/A		All the way to the bottom									
LOCATION SKETCH/COMMENTS Witnessed by: Phillip Strober SCALE: Not to scale															
<table border="1"> <tr> <td>Truck</td> <td>Root Car</td> <td>Trailer</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>								Truck	Root Car	Trailer					
Truck	Root Car	Trailer													
PROJECT FUSRAP/SLDS					WELL NO. SLD 75728										

**RADIOLOGICAL SURVEY FORM**

Sample ID SLD 75726  
PSC

Date Sample was collected: 4-8-03

Date Sample was analyzed: 4/30/03

Instrument #1 Background 6200 cpm

Instrument #2 Background 4078

Count rate of Empty Pan: Beta 86

Sample Depth (feet)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-0.5	6000	-200	4589	511	130	44
0.5-1.0	6300	100	4600	522	187	101
1.0-1.5	6500	300	4887	809	144	58
1.5-2.0	6100	-100	4832	754	139	53
2.0-2.5						
2.5-3.0						
3.0-3.5						
3.5-4.0						
4.0-4.5						
4.5-5.0						
5.0-5.5						
5.5-6.0						

SLD 75726  
 SLD 75727  
 SLD 75726 (archive)

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT		WELL NO.			
FUSRAP / SLDs		Phillip Strider		SLD 75726			
DATE		DATE		DATE			
6-2		6-2		6-2			
SM	1.0	slty fine sand w/ some med. to coarse gravel, loose, poorly graded, dk. brn, to blk, moist.	500 0.0	RECOVERY	0.0-0.5 4-8-03 1030	N/A	SLD 75726 1030
			100 0.0		0.5-1.0 1025	N/A	SLD 75727 1025
		few cinders, few slag, trace brick frags.	300 0.0		1.0-1.5 1030	N/A	SLD 75726 archive (1030)
		low silt/clay	100 0.0		1.5-2.0 1025	N/A	Hit rock / toxic at 2.0' BGS.
	2.0						
	3.0	TD: 2.0' BGS 4-8-03 1030					Backgrounds NAT: 6200 PTD: 0.0 Backfilled holeing w/ native soil
	4.0						* Samples will be counted us- ing gas proportional meter (see attached sheet)
	5.0						
	6.0						
	7.0						
	8.0						
	9.0						
	10.0						

# HTRW DRILLING LOG

DISTRICT

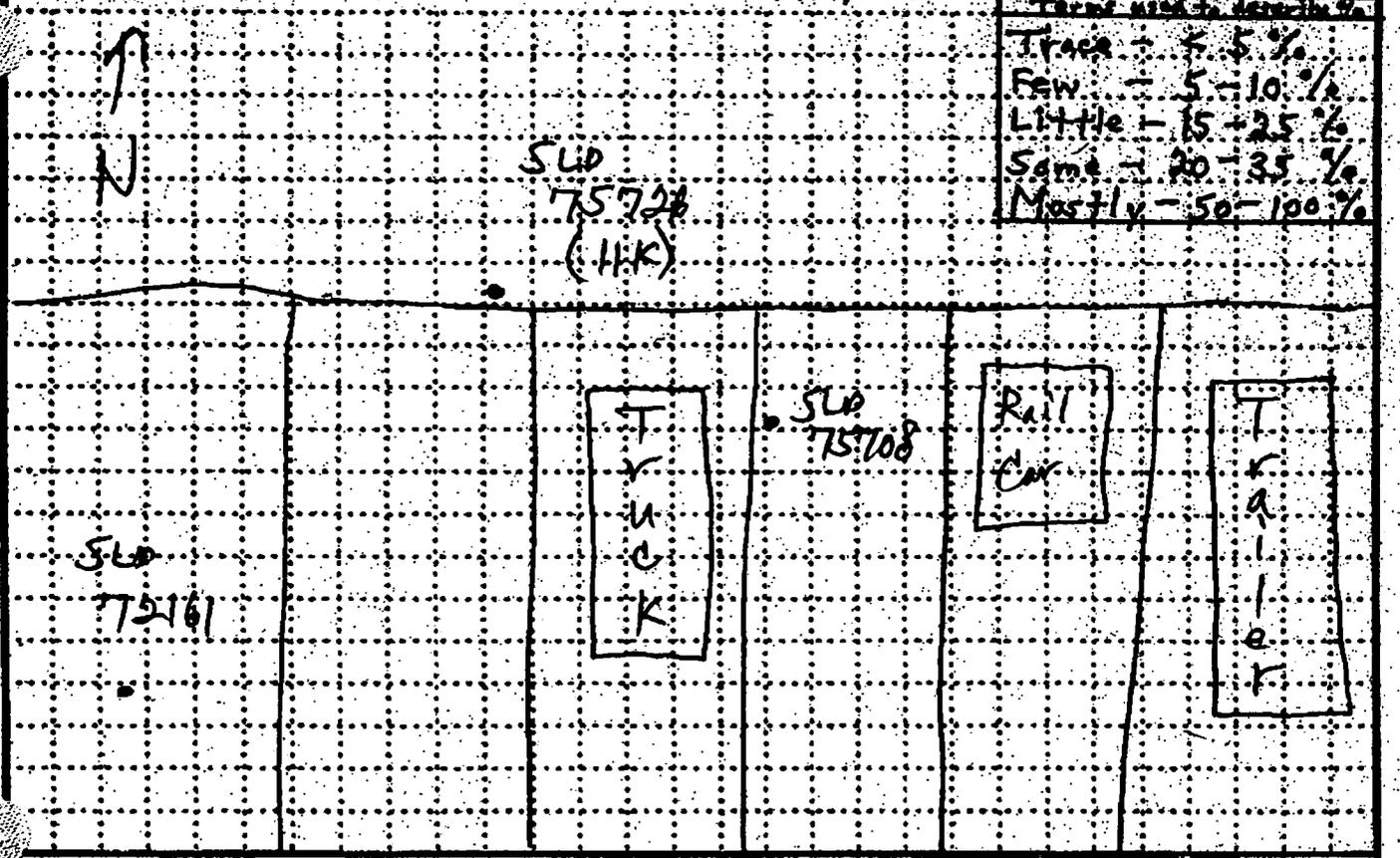
St. Louis

WELL NO. **SLD 75726**

1. COMPANY NAME <b>Shaw E &amp; I</b>		2. DRILLING SUBCONTRACTOR <b>MEI, Inc. PS</b>		3. SHEET NO. <b>1 of 2</b>	
3. PROJECT <b>FUSRAP/SLDS</b>			4. LOCATION <b>PSC Metals N.T.V.P.</b>		
5. NAME OF DRILLER <b>Chris Anthony P.S.</b>			6. MANUFACTURER'S DESIGNATION OF WELL <b>Diedrich D-120 PS</b>		
7. SIZE AND TYPE OF DRILLING AND SAMPLING EQUIPMENT <b>2" dia. split spoon, hand auger</b>		8. HOLE LOCATION <b>See location sketch</b>		9. SURFACE ELEVATION <b>N/A</b>	
10. DATE STARTED <b>4-8-03</b>		11. DATE COMPLETED <b>4-8-03</b>		12. OVERSAMPLING TECHNIQUES <b>N/A</b>	
13. DEPTH BORED INTO ROCK <b>N/A</b>		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <b>N/A</b>		15. OTHER WATER LEVEL MEASUREMENTS (IF ANY) <b>N/A</b>	
16. TOTAL DEPTH OF HOLE <b>2.0 FT BGS</b>		17. TOTAL NUMBER OF CORE POINTS <b>N/A</b>			

18. GEOCHEMICAL SAMPLES	DISTANCE	SUBSTRATE	19. TOTAL NUMBER OF CORE POINTS
20. ANALYSIS OF CHEMICAL ANALYSIS	W/C	PHOS	
21. LOCATION OF WELL			

LOCATION SKETCH/COMMENTS Witnessed by: **Phillip Statler** SCALE: Not to scale



PROJECT	<b>FUSRAP/SLDS</b>	WELL NO.	<b>SLD 75726</b>
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**RADIOLOGICAL SURVEY FORM**

Sample ID SLD 75723  
PSC

Date Sample was collected: 3-17-03

Date Sample was analyzed: 3-18-03

Instrument #1 Background 5600 cpm

Instrument #2 Background 5211 cpm

Count rate of Empty Pan: Beta 74 cpm

Sample Depth (feet)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-0.5	5800	200	5733	522	192	118
0.5-1.0	6400	800	5668	457	157	83
1.0-1.5	6400	800	5774	563	123	49
1.5-2.0	6200	600	5749	538	171	97
2.0-2.5	6000	400	5311	100	153	79
2.5-3.0	6400	800	5395	184	141	67
3.0-3.5	6000	400	5270	59	156	82
3.5-4.0						
4.0-4.5						
4.5-5.0						
5.0-5.5						
5.5-6.0						

SLD 75723

SLD 75724

SLD 75725

N A

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 75723	
PROJECT FUSRAP/SLDS		INSPECTOR Phillip Statler		SHEET NUMBER 2 of 2				
DEPTH IN FEET	DESCRIPTION OF MATERIALS	GRAIN SIZE IN INCHES	PERCENT RECOVERY	WATER CONTENT BY WEIGHT PERCENT	SHRINKAGE BY VOLUME PERCENT	REMARKS		
SM	Silty fine sand w/ few med gravel, loose, poorly graded blk, moist, trace brick frags, few cinders, few clay.	200	0.0	20/ 20	0.0-25	N/A	SLD 75723 1540	
		800	0.0		0.5-10	N/A		SLD 75723 1545
		800	0.0		10-15	N/A		
	few coarse gravel, low clay, wet, cinders and clay absent.	600	0.0	1.5/ 1.5	15-20	N/A	SLD 75724 1550	
		400	0.0		20-25	N/A		
	some clay, fr. brn. some med to coarse gravel.	800	0.0	1.5/ 1.5	25-30	N/A	SLD 75725 1605 Hit rock at 3.5' BGS	
		400	0.0		30-35	N/A		
			0.0		1607	N/A		
	4.0	TD: 3.5' BGS 3-17-03 1607					Backgrounds: NaI: 5600 PID: 0.0 Backfilled boring w/ 2.0 bags of bentonite chips. * Samples counted w/ gas proportional meter (See attached sheet).	
	5.0							
6.0								
7.0								
8.0								
9.0								
10.0								
11.0								
12.0								
13.0								
14.0								

HTRW DRILLING LOG		DISTRICT	St. Louis		SOLE NUMBER	SLD 75723	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR M.E.S., Inc. P.S.		3. PROJECT FUSRAP/SLDS		4. LOCATION PSC Metals - N.T.V.P.	
5. NAME OF DRILLER Chris Anthony P.S.		6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120 P.S.		7. SIZE AND TYPE OF DRILLING AND SAMPLING EQUIPMENT Pladigh D-120 Using HSA and 2" split spin.		8. HOLE LOCATION See location sketch	
9. SURFACE ELEVATION N/A		10. DATE STARTED 3-17-03		11. DATE COMPLETED 3-17-03		12. OVERBURDEN THICKNESS N/A	
13. DEPTH DRILLED INTO ROCK N/A		14. TOTAL DEPTH OF HOLE 3.5 FT BGS		15. DEPTH GROUNDWATER ENCOUNTERED N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)		18. GEOCHEMICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES		20. SAMPLES FOR CHEMICAL ANALYSIS	
RESTORED		UNRESTORED		VOC		METALS	
OTHER (SPECIFY)		OTHER (SPECIFY)		OTHER (SPECIFY)		OTHER (SPECIFY)	
21. TOTAL CORE RECOVERY %		22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR		SKiller N. Statter	
Yes		No/Other		Other (Specify)		N/A	
LOCATION SKETCH/COMMENTS Witnessed by: Phillip Statter SCALE: Not to Scale							
<p>Terms used to describe %</p> <p>Trace - &lt; 5 %</p> <p>Few - 5 - 10 %</p> <p>Little - 15 - 25 %</p> <p>Some - 20 - 35 %</p> <p>Mostly - 50 - 100 %</p>							
<p>SLD 72760</p> <p>SLD 75723</p> <p>SLD 75716</p> <p>SLD 75715</p> <p>R.R. Tracks</p> <p>asphalt</p>							
PROJECT FUSRAP/SLDS						SOLE NO. SLD 75723	

RADIOLOGICAL SURVEY FORM

Sample ID SLD 75720

Date Sample was collected: 3-3-03

Date Sample was analyzed: 3-4-03

Instrument #1 Background 6440 cpm

Instrument #2 Background 4428 cpm

Count rate of Empty Pan: Beta 78 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	7100	660	5267	839	277	199
6-12	8000	1560	5104	676	296	218
12-18	7400	960	4946	418	177	99
18-24	7400	960	4746	318	186	108
24-30	7200	760	4880	452	134	56
30-36	7400	960	4939	511	157	79
36-42	7300	860	4624	196	194	116
42-48	7300	860	4610	182	150	72
48-54						
54-60						
60-66						
66-72						

SLD 75720

SLD 75721

SLD 75720-  
archive

SLD 75722

P A

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER
PROJECT		INSPECTOR		DATE		WELL NO.	
FUSRAP / SLDS		Phillip Statler		2-2		SLD 75720	
DEPTH (ft)	DESCRIPTION OF MATERIALS	RECOVERY	DEPTH (ft)	DEPTH (ft)	DEPTH (ft)	REMARKS	
SM 1.0	Silty fine sand w/ few med. gravel, loose poorly graded, dk. brn. to blk., dry, trace cinders, trace coal.	7100 0.0	2.0	0.0-0.9	N/A	SLD 75720 3-7-03 1320	
		8000 0.0	2.0	0.5-1.0	N/A	SLD 75721 1325	
	low clay	7400 0.0	2.0	1.0-1.5	N/A	1330	
		7400 0.0		1.5-2.0	N/A	SLD 75722 1335	
CL 3.0	Silty clay, med. stiff (med. plast.), dk. brn, wet, few med. gravel	7200 0.0	2.0	2.0-2.5	N/A	1340	
		7400 0.0	2.0	2.5-3.0	N/A	1345	
	clay turning H. gry.	7300 0.0	2.0	3.0-3.5	N/A	SLD 75723 1355 (75720)	
		7300 0.0		3.5-4.0	N/A	1400	
TD: 4.0' BGS						Background	
3-3-03						Nat: 6490	
1400						PFD: 0.0	
						Backfilled	
						boring w/	
						2.0 bags of	
						best onite	
						chips.	
						* Samples	
						will be	
						counted	
						using gas	
						proportional	
						meter (see	
						attached	
						sheet).	
PROJECT		FUSRAP / SLDS		WELL NO.		SLD 75720	

HTRW DRILLING LOG			DISTRICT			MOLE NUMBER		
1. COMPANY NAME Shaw E & I			St. Louis			SLD 75720		
2. PROJECT FUSRAP/SLDS			2. DRILLING SUBCONTRACTOR MES, Inc. - AS			SHEET 1 OF 2		
3. NAME OF DRILLER Chris Anthony - PS			4. LOCATION PSC Metals North Tract V.P.			5. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120 AS		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 using HSA and 2" x 2" split spinn. Hand auger			8. MOLE LOCATION See location sketch			9. SURFACE ELEVATION N/A		
12. OVERBURDEN THICKNESS N/A			10. DATE STARTED 3-3-03			11. DATE COMPLETED 3-3-03		
13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		
14. TOTAL DEPTH OF MOLE 4.0 FT BGS			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			18. GEOTECHNICAL SAMPLES		
18. GEOTECHNICAL SAMPLES			19. TOTAL NUMBER OF CORE BORED			20. SAMPLES FOR CHEMICAL ANALYSIS		
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERY			22. DISPOSITION OF MOLE		
22. DISPOSITION OF MOLE			23. SIGNATURE OF SUPERVISOR			24. LOCATION SKETCH/COMMENTS		
23. SIGNATURE OF SUPERVISOR Phillip J. Stoller			24. LOCATION SKETCH/COMMENTS Witnessed by Phillip Stoller			SCALE: Not to Scale		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			Trace - < 5 %		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			Few - 5-10 %		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			Little - 15-25 %		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			Some - 20-35 %		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			Mostly - 50-100 %		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			truck		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			trail car		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			R.R.		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			Tracks		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			asphalt		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			SLD 72160		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			SLD 75716		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			SLD 75712		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			SLD 75720		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			SLD 72161		
24. LOCATION SKETCH/COMMENTS			Terms used to describe %			SLD 72165A/C		
PROJECT FUSRAP/SLDS			MOLE NO. SLD 75720					

RADIOLOGICAL SURVEY FORM

Sample ID SLD 75716

Date Sample was collected: 3-3-03

Date Sample was analyzed: 3-3-03

Instrument #1 Background 7174

Instrument #2 Background 4589 cpm

Count rate of Empty Pan: Beta 77 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
0-6	8100	926	5117	528	162	85
6-12	7800	626	5228	639	166	89
12-18	8000	826	5099	510	152	75
18-24	7600	426	5165	576	141	64
24-30	8300	1126	5180	591	153	76
30-36	7500	326	5229	640	166	89
36-42	7200	26	4836	247	140	63
42-48	8200	1026	5191	602	129	52
48-54						
54-60			N	A		
60-66						
66-72						

SLD 75716

SLD 75717

SLD 75716  
archive

SLD 75718

HTRW DRILLING LOG (CONTINUATION SHEET)						SLO 75716		
PROJECT		INSPECTOR		DATE		SHEET		
FUSRAP / SLOS		Phillip Stoffer		2		2		
DEPTH (ft)	DESCRIPTION OF MATERIALS	PTED	RECOVERY	TEST NO.	COUNTY	RESULTS		
SM 1.0	Silty fine sand w/ few med. gravel, loose, poorly graded, dk. brn to blk, dry, few cinders, few slag wet.	81.00	0.0	0.0-05'	N/A	SLO 75716		
		78.00	0.0	3-3-08		1045		
		80.00	0.0	0.5-1.0'		1050	SLO 75717	1050
		82.00	0.0	1.0-1.5'		1055	N/A	
CL 2.0	Same clay	76.00	0.0	1.5-2.0'	N/A	SLO 75716	available at 1100	
		83.00	0.0	2.0-2.5'	N/A	1105		
		75.00	0.0	2.5-3.0'	N/A	1110	SLO 75718	1110
		79.00	0.0	3.0-3.5'	N/A	1115		
4.0	Silty clay, med. stiff, med. plastic, dk. brn, moist, few med. gravel.	81.00	0.0	3.5-4.0'	N/A	1120		
		82.00	0.0					
		83.00	0.0					
		84.00	0.0					
5.0	TD: 420' BGS 3-3-03 1120					Background: Natl: 7174 PTED: 0.0 Backfilled boring w/ 2.0 bags of bentonite chips. * Samples will be drilled using gas proportional meter. (See attached sheet).		
6.0								
7.0								
8.0								
9.0								
10.0								
PROJECT FUSRAP / SLOS						LOG # SLO 75716		

HTRW DRILLING LOG		DISTRICT	St. Louis		HOLE NUMBER	SLD 75716	
1. COMPANY NAME Shaw E & I		2. DRILLING SUBCONTRACTOR M.E.S. Inc. PS			SHEET	1 OF 2 SHEETS	
3. PROJECT FUSRAP/SLDS PS				4. LOCATION PSC Metals North Tract V.P.			
5. NAME OF DRILLER Chris Anthony PS.				6. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D-120 P.S.			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich D-120 PE Using HSA and 2" x 2" split spoon. Hand made PID 2/3/03 NAT. LUD 176A 40 to 100/100 Cal. Date: 4-11-03 Bkg: 7174		8. HOLE LOCATION See location sketch		9. SURFACE ELEVATION N/A		10. DATE STARTED 3-3-03	
11. DATE COMPLETED 3-3-03		12. OVERBURDEN THICKNESS N/A		13. DEPTH DRILLED INTO ROCK N/A		14. TOTAL DEPTH OF HOLE 4.0 FT BGS	
15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A		16. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		18. GEOTECHNICAL SAMPLES	
19. TOTAL NUMBER OF CORE BOXES 0		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERED 0 %		22. DISPOSITION OF HOLE	
23. SIGNATURE OF INSPECTOR Phillip Statter		24. DISTURBED 0		25. UNDISTURBED 0		26. YES 0	
27. METALS 0		28. OTHER (SPECIFY) RAD		29. OTHER (SPECIFY) 0		30. OTHER (SPECIFY) 0	
31. YES 0		32. MONITORING WELL N/A		33. OTHER (SPECIFY) N/A		34. YES 0	
<p>LOCATION SKETCH/COMMENTS Witnessed by: Phillip Statter SCALE: Not to Scale</p> <p>Terms used to describe %            Trace - &lt; 5 %            Few - 5 - 10 %            Little - 15 - 25 %            Some - 20 - 35 %            Mostly - 50 - 100 %</p>							
PROJECT FUSRAP/SLDS				HOLE NO. SLD 75716			

**RADIOLOGICAL SURVEY FORM**

Sample ID SLD 75712

Date Sample was collected: 3-3-03

Date Sample was analyzed: 3-3-03

Instrument #1 Background 7174 cpm

Instrument #2 Background 4677 cpm

Count rate of Empty Pan: Beta 93 cpm

Sample Depth (inches)	Gross Field Scan of Spoon (Instrument #1) in cpm	Net Field Scan of Spoon in cpm	Gross Activity in Bag (Instrument #2) in cpm	Net Activity in Bag in cpm	Gas Proportional Count rate in cpm	
					Gross Beta	Net Beta
1000 0-6	7200	26	6130	1453	171	78
1010 6-12	7200	26	5336	659	152	59
1013 12-18	7900	726	5013	336	116	23
1020 18-24	7600	426	5204	527	128	35
1030 24-30	7400	226	5154	477	140	47
30-36						
36-42						
42-48			N	A		
48-54						
54-60						
60-66						
66-72						

SLD 75712

SLD 75713

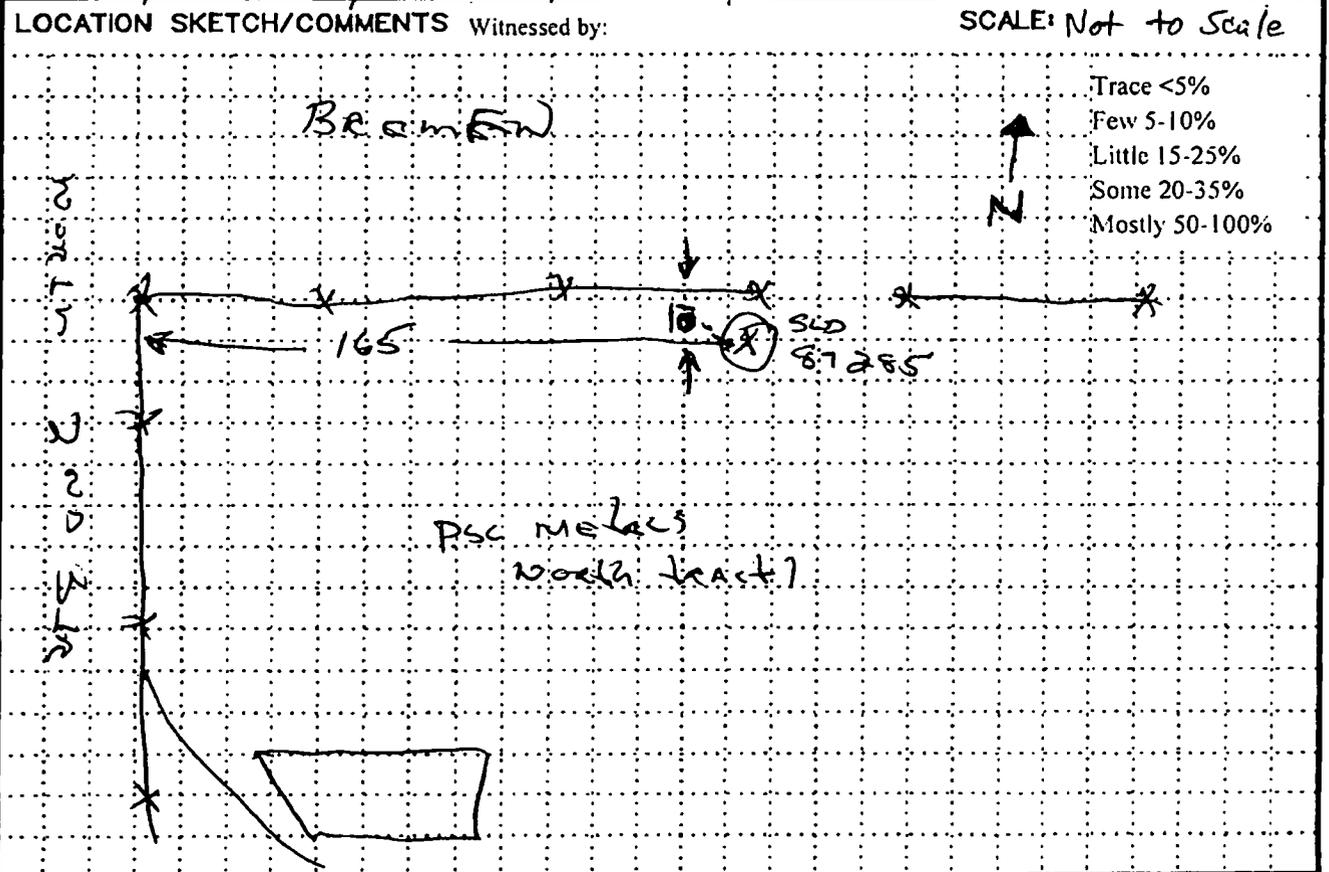
~~SLD 75714~~

SLD 75714

HTRW DRILLING LOG (CONTINUATION SHEET)							WELL NUMBER SLD 75712
PROJECT FUSRAP/SLDS		OPERATOR Phillip Stadler					DATE 2 8 2
DEPTH FEET	DEPTH METERS	DESCRIPTION OF MATERIALS (if known)	DEPTH FEET B.P.T.D.	RECOVERY % B.P.T.D.	DEPTH FEET B.P.T.D.	DEPTH METERS B.P.T.D.	REMARKS (if known)
SM	1.0	Silty fine sand w/ few med. gravel, poorly sorted, dk. brown to blk, dry, few cinders, few slag trace brick frags, trace moist, few clay, trace cobbles.	7800	0.0	0.0-0.5	0.0	SLD 75712
			7820	0.0	0.5-1.0	1.0	SLD 75713
			7900	0.0	1.0-1.5	1.5	SLD 75714
			7960	0.0	1.5-2.0	2.0	1030
			7900	0.0	2.0-2.5	2.5	
	2.0	Wet	7900	0.0	2.0-2.5	2.5	N/A
	3.0	TD: 2.5' BGS 3-3-03 1030					Background: NAI: 7,174 PID: 0.0 Backfilled boring w/ 1.0 bags of heat cure chips.  Samples will be counted using gas proportional meter (See Attached sheet).
	4.0						
	5.0						
	6.0						
	7.0						
	8.0						
	9.0						
	10.0						
PROJECT FUSRAP/SLDS						WELL NO. SLD 75712	

HTRW DRILLING LOG			DISTRICT			HOLE NUMBER																																								
1. COMPANY NAME Shaw E & I			2. DRILLING SUBCONTRACTOR MES, Inc. PS.			St. Louis SLD 75712																																								
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals North Tract V.P.			SHEET 1 of 5																																								
5. NAME OF DRILLER Chris Anthony P.S.			6. MANUFACTURER'S DESIGNATION OF DRILL <del>Diabtech</del> D-120-PS																																											
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Diedrich P-120 using HSA and PC 3" H <sub>2</sub> O split screen. Hand auger			8. HOLE LOCATION See location sketch																																											
9. SURFACE ELEVATION N/A			10. DATE STARTED 3-3-03			11. DATE COMPLETED 3-3-03																																								
12. OVERBURDEN THICKNESS N/A			13. DEPTH DRILLED INTO ROCK N/A			15. DEPTH GROUNDWATER ENCOUNTERED N/A																																								
14. TOTAL DEPTH OF HOLE 2.5 FT BGS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A																																								
18. GEOTECHNICAL SAMPLES			19. TOTAL NUMBER OF CORE BOXES																																											
20. SAMPLES FOR CHEMICAL ANALYSIS			21. TOTAL CORE RECOVERED																																											
22. DISPOSITION OF HOLE			23. SIGNATURE OF INSPECTOR																																											
<table border="1"> <tr> <th>DISTURBED</th> <th>UNDISTURBED</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </table>			DISTURBED	UNDISTURBED	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	0	0	0	0	0	<table border="1"> <tr> <th>ROCK</th> <th>RETAILS</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </table>			ROCK	RETAILS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	0	0	0	0	0	<table border="1"> <tr> <th>BACKFILLED</th> <th>MONITORING WELL</th> <th>OTHER (SPECIFY)</th> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> </tr> </table>			BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	0	0	0	<table border="1"> <tr> <th>YES</th> <th>N/A</th> <th>N/A</th> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> </tr> </table>			YES	N/A	N/A	0	0	0	Signature: Phillip S. Gatter SCALE: Not to Scale		
DISTURBED	UNDISTURBED	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)																																										
0	0	0	0	0																																										
ROCK	RETAILS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)																																										
0	0	0	0	0																																										
BACKFILLED	MONITORING WELL	OTHER (SPECIFY)																																												
0	0	0																																												
YES	N/A	N/A																																												
0	0	0																																												
LOCATION SKETCH/COMMENTS Witnessed by: Phillip S. Gatter																																														
PROJECT FUSRAP/SLDS						HOLE NO. SLD 75712																																								

<b>HTRW DRILLING LOG</b>		DISTRICT	ST. LOUIS		HOLE NUMBER	SLD 67285			
1. COMPANY NAME		SHAW ENVIRONMENTAL			2. DRILLING SUBCONTRACTOR		SHAW		
3. PROJECT		FUSRAP/SLDS			4. LOCATION		PSC Metals (NOT 2)		
5. NAME OF DRILLER		DAN GOHLS			6. MANUFACTURER'S DESIGNATION OF DRILL		CME 75		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		CME 75 using 1" HSA and 1" 3 split spoon unless otherwise noted			8. HOLE LOCATION		See location sketch		
PTD EDIT 227 NAE 149947 LUD cal. date: Bkg:		9. SURFACE ELEVATION			423.4		10. DATE STARTED		
12. OVERBURDEN THICKNESS		N/A			15. DEPTH GROUNDWATER ENCOUNTERED		NA		
13. DEPTH DRILLED INTO ROCK		N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED		N/A		
14. TOTAL DEPTH OF HOLE		8.0			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)		N/A		
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		0	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR	



PROJECT	FUSRAP/SLDS	HOLE NO.	SLD 67285
---------	-------------	----------	-----------

# PSC Metals (INT 1)

5057285  
5057285

HTRW DRILLING LOG (CONTINUATION SHEET)							LOG NUMBER SLD 87285	
PROJECT FUSRAP / SLDs			INSPECTOR MCCARRIN			SHEET 2 of 2		
DEPTH (ft)	DEPTH (m)	DESCRIPTION OF MATERIALS	GROSS (ft)	NET (ft)	WATER (ft)	WATER (ft)	WATER (ft)	REMARKS
GM	0	Brown silty sand coarse deposits (fill) dry	7000	0	2.0	SLD 87285	23	Hard sampling End sample req.
1	1	White stone fragments (fill) dry	7000	0	2.0	SLD 87296	33	Hard sample req.
			7200	0			20	
			7300	0			40	
2	2	Stone rubble	7300	0	2.0	SLD 87296	40	Hard drilling ↓ Rocky rubble & stone ↓ driveway ↓ base
			7300	0			33	
3	3	Dark grey silty clay to tip moist soft	7300	0	2.0	SLD 87296	5	Hard sampling soft sampling
			7300	0			5	
ML	4	Grey silt	7300	0	2.0	SLD 87297	8	inside
			7300	0			3	
CL	5	Vel-tan (or mott) silty clay (fill?) w/ sand & gravel bits moist med stiff	7300	0	2.0	SLD 87297	5	
			7400	0			7	
			7500	0			8	
ML	6	Grey silty clay moist med hard	7500	0	2.0	SLD 87297	2	
			7600	0			4	
SP	7	Brown yellow w/ rust mott sandy silt micro nodules/boulders moist	7600	0	2.0	SLD 87298	5	
			7700	0			8	
8	8	810 EOR						
9	9	Boring backfilled w/ bentonite						
10	10	red OK 6/7/05 wt						

2:00  
2:20

2:35

3:00  
3:00

3:15  
3:20

3:30

3:50

PROJECT FUSRAP / SLDs

LOG. NO. SLD 87 285

HTRW DRILLING LOG		DISTRICT	ST. LOUIS		HOLE NUMBER	SCD 87286	
1. COMPANY NAME SHAW ENVIRONMENTAL		2. DRILLING CONTRACTOR <del>McGraw Hill</del> SHAW			SHEET 1 OF 4 SHEETS		
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals South Level				
5. NAME OF DRILLER Dan Goto			6. MANUFACTURER'S DESIGNATION OF DRILL CME 75				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT CME 75 using 4 1/2" HSA and 30' x 2" split spoon access		8. HOLE LOCATION See location sketch			9. SURFACE ELEVATION 422.4		
Other notes noted PT DEBGH 327 NAE LUD cal. date: Bkg:		10. DATE STARTED 5/23/05		11. DATE COMPLETED 5/23/05			
12. OVERBURDEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED 12.5'					
13. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
14. TOTAL DEPTH OF HOLE 26'		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR		
LOCATION SKETCH/COMMENTS		Witnessed by:		SCALE: Not to Scale			
				<ul style="list-style-type: none"> <li>Trace &lt;5%</li> <li>Few 5-10%</li> <li>Little 15-25%</li> <li>Some 20-35%</li> <li>Mostly 50-100%</li> </ul>			
PROJECT FUSRAP/SLDS					HOLE NO. SCD 87286		

5/23/05

**HTRW DRILLING LOG (CONTINUATION SHEET)**

PROJECT: **FUSRAP / SLDS** OPERATOR: **M. McCARRIN** HOLE NO.: **SLD 87286**

DEPTH (ft)	DESCRIPTION OF MATERIALS	LOG TIME	WATER	TEMPERATURE	REMARKS	DEPTH (ft)
1	White + gray Limestone sandstone fill Loose dry	8100	0	2.0	SLD 87286	12
		8400	0	2.0		10
2	Black sandstone fill Loose dry	8200	0		SLD 87306	10
		9000	0		Red. log	12
3	Black sandstone fill w/ black fragments Loose dry	8100	0	2.0		11
		8400	0	2.0	Red. log	12
		8700	0			12
		8700	0		SLD 87307	13
4		8700	0			4 (Inst. H.?)
5	Black silt - sandy silt Moist	9000	0	2.0	SLD 87308	6
		8800	0	2.0		6
		8500	0			7
6	Black silt - sandy silt Moist	8400	0	2.0	SLD 87309	16
7	White + gray damp granular rock sand	8300	0	2.0	And. log	27
8	Brown + gray w/ yellow mottling + rust mott silty clay weathered Moist mud stuff	8200	0			11
		8200	0		Red. log	12
		8400	0	7.0		5
9		7800	0	2.0	Not sampled	9
						8
					MISSING RECOVERY	7

1:00  
1:06  
1:09  
1:10  
1:18  
1:16  
1:16  
1:59  
2:03

Change to  
2" SS sampler  
for 6600 cut

PROJECT: **FUSRAP / SLDS** HOLE NO.: **SLD 87286**

5/23/05

HTRW DRILLING LOG (CONTINUED SHEET)

FUSRAP / SLOS M. McCARRIN 3 4

DEPTH (ft)	DESCRIPTION OF MATERIAL	ELEVATION (ft)	DIAMETER (ft)	REMARKS	TEST TYPE	TEST RESULT	NOTES
11	Green-brown silty clay moist med stiff	8500	1.5	Not sampled	3		10314 soils 211 SS sample
		8500	2.0				
		85200					
12	Gray-brown silty sandy silt wet soft	8300	Missile Piece	Not sampled	3		
		8300					
13	Brown silty clay moist med stiff	8100	1.5	Not sampled	R		211 SS sample ↓
		8300	2.0				
14	Gray - black silty sand wet	8600		Not sampled	1		211 SS sample
		8300					
		8100	1.5				
15	Black - dk. gray silty sand wet	8300	2.0	Not sampled	2		
		9000					
		9100					
16	Gray sandier silt	8000	2.0	Not sampled	1		211 SS sample
		8400	1.0				
		8200	2.0				
17		8400		Not sampled	1		
		8400					
		8400					
18	Gray silty clay v. moist soft.	7800	2.0	Not sampled	R		211 SS sample
		7900	1.0				
19	Gray silty clay moist soft	8100	2.0	Not sampled	1		
		8100					
		8300					

PROJECT: FUSRAP / SLOS HOLE NO: SLD 87286

3.00  
6.00  
break

5/23/05

**HTRW DRILLING LOG (CONTINUATION SHEET)**

PROJECT: FUSRAP / SLOS OPERATOR: M. McCARRIN

LOG NO: 52867286  
 SHEET: 4 of 4

20

DEPTH (ft)	DESCRIPTION OF MATERIALS	DEPTH (ft)	WATER	TEMPERATURE	LOG	REMARKS
20	Shore vane test setup	8000	2.0			drill out split spoon hole 3" split spoon  (20-22 Geotech SAMPLE)
21	tested	8100	2.0			
21	Then 3' ss sample for LAG test	8400				
22		7900				
23	grey silty clay moist soft (disturbed from shore vane test)		2.0			PROBABLY SHORE VANE TEST ZONE
24	grey CLAYEY SILT moist soft	8200	2.0			2" SS SMPLE (22-24 Geotech SAMPLE)
25		8000	2.0			2" SS SMPLE (24-26 Geotech SAMPLE)
26	EOB 26.0'	8400				
27	Basins backfilled w/ bentonite grout learned from bottom.					
28	1 lb. bentonite grout					
29	Topped w/ gravel					
30						

CL

GREY  
SILTY CLAY  
MOIST SOFT

2" SAMPLE  
2" SAMPLE  
2" SAMPLE

2" SAMPLE

2" SAMPLE

52867286

52867286

PROJECT: FUSRAP / SLOS LOG NO: 52867286

HTRW DRILLING LOG		DISTRICT	ST. LOUIS		HOLE NUMBER	SLA 67287	
1. COMPANY NAME SHAW ENVIRONMENTAL		2. DRILLING <del>SUBCONTRACTOR</del> SHAW		SHEET		1 OF 3 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals - south tract				
5. NAME OF DRILLER DAN GOTO			6. MANUFACTURER'S DESIGNATION OF DRILL CME 75				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT CME 75 using 40" HSA and 30"x2" split spoon unless otherwise noted		8. HOLE LOCATION See location sketch			9. SURFACE ELEVATION 422.6		
PTD ERAC 327 NAE cal. date:		LUD Bkg:		10. DATE STARTED 5/23/05		11. DATE COMPLETED 5/23/05	
12. OVERBURDEN THICKNESS N/A			15. DEPTH GROUNDWATER ENCOUNTERED NA				
13. DEPTH DRILLED INTO ROCK N/A			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A				
14. TOTAL DEPTH OF HOLE 12			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A				
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
		yes		N/A		N/A	
						23. SIGNATURE OF INSPECTOR <i>[Signature]</i>	
LOCATION SKETCH/COMMENTS Witnessed by:				SCALE: Not to Scale			
PROJECT FUSRAP/SLDS					HOLE NO. SLA 67287		

5/23/05

87287  
87288

8:20  
9:00  
9:00

9:10  
9:19

9:20  
9:25

9:34

4:37

9:46

9:58

10:02

PROJECT		DESCRIPTION OF MATERIALS		GROSS		NET		CORRECTION		REMARKS	
FUSRAP / SLDS		M. MCCARRIN		2.3		2.3					
Fill	1	Black + Gray Cinder sand GRASS fill dry Loose	9000 bkg out	8500 0	2.0	SLD 87287	19				
Slow Fill	1	White - buff Grass fill dry Loose	8700 0	8700 0	2.0	SLD 87299	54				
Fill	2	Gray - black dry Loose Cinder slag GRASS fill	8700 0	8700 0	2.0	SLD 87300	52				
Fill	3	Black + Gray oil small (w/ oil) oil small (no oil) (AHOOC Bkg)	8600 0	8600 0	2.0	Archive	13				
CL (fill) Fill	4	GREEN + GRAY Silty clay w/ Rock frags (fill)	8300 0	8300 0	2.0	SLD 87301	14				
CL (fill) Fill	5	Black Cinder slag fill Loose moist	9000 0	9000 0	2.0	Archive	17				
CL (fill) Fill	5	Gray + black Silty clay fill w/ black moisture (bkg?) mod loose moist	9300 0	9300 0	2.0	SLD 87302	3				
CL (fill) Fill	6	Black Cinder slag (fill) Loose moist	9200 0	9200 0	2.0	SLD 87303	4				
CL (fill) Fill	7	Black + Green Moist clay fill Moist mod stiff	9000 0	9000 0	2.0	Archive	7				
CL (fill) Fill	7	Black + brown Cinder slag fill Loose moist	9300 0	9300 0	2.0	SLD 87304	4				
CL (fill) Fill	8	Green + black Silty clay fill Moist mod stiff	9300 0	9300 0	2.0	SLD 87305	9				
CL (fill) Fill	8	Black + Green Cinder slag fill w/ some glass frags Loose moist	8300 0	8300 0	2.0	Archive	5				
CL (fill) Fill	9	MISSING CORE	8800 0	8800 0	MISSING CORE		2				
CL (fill) Fill	9	Black + brown Cinder slag fill moist Loose	6700 0	6700 0	MISSING CORE		2				
CL (fill) Fill	9	Black + brown Cinder slag fill moist Loose	9400 0	9400 0	MISSING CORE		2				
CL (fill) Fill	10	Green + black Silty clay w/ bkg	8500 0	8500 0	MISSING CORE		3				
CL (fill) Fill	10	Green + black Silty clay w/ bkg	8500 0	8500 0	MISSING CORE		5				

FUSRAP / SLDS

NOTE NO: SLD 87287



HTRW DRILLING LOG		DISTRICT ST. LOUIS		HOLE NUMBER SLD 87058	
1. COMPANY NAME SHAW ENVIRONMENTAL		2. DRILLING CONTRACTOR SHAW		SHEET 1 OF 4 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC Metals (S. Locust)		
5. NAME OF DRILLER Dan Gato			6. MANUFACTURER'S DESIGNATION OF DRILL CME 75		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION		9. SURFACE ELEVATION	
CME 75 using 4 1/2" HSA and 3" x 2" split spoon		See location sketch		421.8	
PTD CDL 327 NAE 19999 LUD cal. date: Bkg:		10. DATE STARTED 5/24/05		11. DATE COMPLETED 5/24/05	
12. OVERBURDEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED NA 10.0'		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
13. DEPTH DRILLED INTO ROCK N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A		14. TOTAL DEPTH OF HOLE 12.0'	
18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES		20. SAMPLES FOR CHEMICAL ANALYSIS	
DISTURBED <input type="checkbox"/>		UNDISTURBED <input type="checkbox"/>		VOC <input type="checkbox"/>	
METALS <input type="checkbox"/>		OTHER (SPECIFY) <input type="checkbox"/>		OTHER (SPECIFY) <input type="checkbox"/>	
OTHER (SPECIFY) <input type="checkbox"/>		OTHER (SPECIFY) <input type="checkbox"/>		OTHER (SPECIFY) <input type="checkbox"/>	
21. TOTAL CORE RECOVERY <input type="checkbox"/>		22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR	
BACKFILLED <input type="checkbox"/>		MONITORING WELL <input type="checkbox"/>		OTHER (SPECIFY) <input type="checkbox"/>	
yes		N/A		N/A	
LOCATION SKETCH/COMMENTS Witnessed by: SCALE: Not to Scale					
PROJECT FUSRAP/SLDS				HOLE NO. SLD 87058	

PSC Metals (contract)  
5/24/05

8728  
87310

**NTRW DRILLING LOG (CONTINUED SHEET)**

PROJECT: FUSRAP / SLOS      OPERATOR: M. MCCREAN      SHEET: 2 of 4

DEPTH (ft)	SOIL TYPE	DESCRIPTION OF MATERIAL	START (ft)	END (ft)	THICKNESS (ft)	TESTS	REMARKS	TIME
0	Topsoil	Grass silt loam	6600	6700	2.0	SLD 87298	Green grass Root zone	7:45
1	fill	Black Cinder & slag dry loose	6700	7100	2.0	SLD 87310		8:15
1	CL	Brown silty clay fill metal med stiff	6800	6900		Analysis		8:27
2	fill	Brown silty clay fill moist med stiff rusty mottling weathered	6900	6400	2.0		2nd Root zone	8:40
3	CL	Black cinders & slag fill dry loose	6700	6700	2.0	Analysis		8:30
4	CL	Brown silty clay damp med stiff crumbles org staining weathered	6700	6600		SLD 87311		
5			6600	6900	1.4			
5			6900	6800	2.0		? inside?	
5		Gray silty clay moist med stiff	6600	6600		SLD 87312		8:49
6		White & orange cement chips	6300	6300	Lost Recovery		Had drilling but drilled through	
7		(SEE Redrill note)			1.0 2.0 Coul. left where S&S was Redrill	100% Sampled		
7			7100	7100			207	
8	CL	Gray Brown silty clay w/ oak mott	6500	6500	2.0	SLD 87313	75	9:08
9	ML	Gray sandy silt v. moist med stiff	6700	6800	2.0	Analysis	30	9:11
9			6800	7100				
10			7100	7100		SLD 87314		9:14

PROJECT: FUSRAP / SLOS      NOTE NO: SLD 87288

PSZ METERS (S. LEAD)  
5/24/05

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT	DATE	DEPTH	DESCRIPTION OF MATERIALS	LOG NO.	DEPTH	LOG NO.
FUSRAP / SLOS		M. McCREEN		5/24/05		3 4		
10	ML	6700	0	2.0	500	3		
		6700	0	2.0	87315	5		
		6900	0			6		
		7000	0			7		
11		GRAY CLAY SILT V. moist - soft - med hard						
12		LEAD - 12.0						
13		Hole backfilled w/ bank gravel						
14		Topped w/ gravel ved) ok 6/7/05						
15								
16								
17								
18								
19								
20								

9:28

9:30

PROJECT FUSRAP / SLOS

LOG NO. S-A 87258

PSC Metals (S. tract)  
5/21/05

87316

Redrill

**HTRW DRILLING LOG (CONTINUATION SHEET)**

PROJECT: FUSRAP / SLDS      OPERATOR: M. McCARRIN      HOLE NO: 60 87 056

DEPTH (ft)	DESCRIPTION OF MATERIALS	START (ft)	END (ft)	DIAMETER (in)	LOG TYPE	REMARKS
1						Redrill to 5.0 w/out sampling
2	SEE previous Log					
3						
4						
5	Brown silty clay moist med soft weathered w/ rust fractures	6400	6400	2.0	Amh	3
6	Gray silty clay w/ rust fractures white gray + green gravel + broken rock any	6400	6700	2.0	SLD 87317	3
7	Gray silty clay moist med stiff	6700	6800		SLD 87316	27
8					Amh	17
9	Boring stopped w/ gravel bit + Band ✓ E210K 6/7/05					
10						

10:16

Start 10:20  
10:47

10:39  
10:46



OK

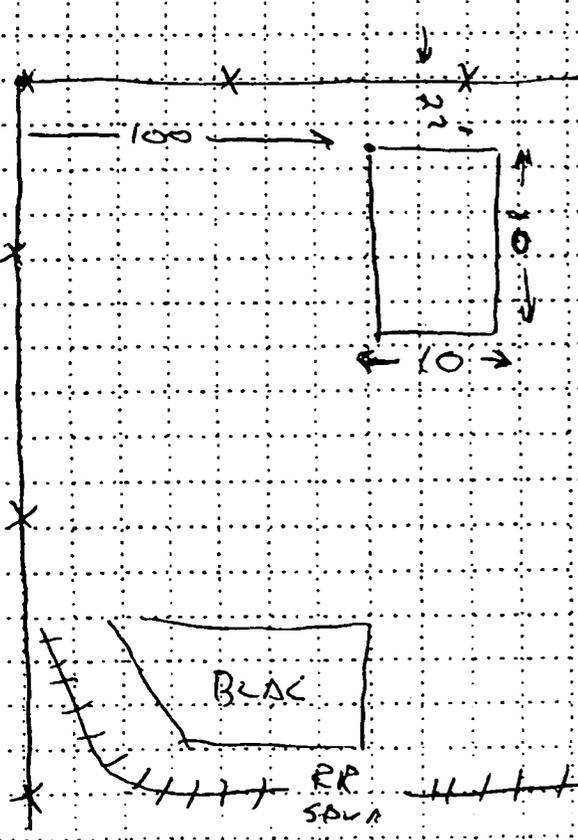
PROJECT: FUSRAP / SLDS      HOLE NO: 60 87 056

Redrill

<b>HTRW DRILLING LOG</b>		DISTRICT	St. Louis		HOLE NUMBER	SLD 67 322	
1. COMPANY NAME SHAW ENVIRONMENTAL		2. DRILLING SPECIFIC FACTOR EXCAVATOR: SHAW			SHEET	1 of 3 SHEETS	
3. PROJECT FUSRAP/SLDS			4. LOCATION PSC METALS (NT 2)				
5. NAME OF DRILLER KEVIN MOONEY			6. MANUFACTURER'S DESIGNATION OF DRILL J. DEERE				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT JD 310E w/ 1 Foot Bucket			8. HOLE LOCATION Psc metals (NT 2)				
			9. SURFACE ELEVATION				
			10. DATE STARTED 6/16/05		11. DATE COMPLETED 6/16/05		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA				
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				
14. TOTAL DEPTH OF HOLE 4.5			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA				
18. GEOTECHNICAL SAMPLES NA		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS NA		TOC NA	METALS NA	OTHER (SPECIFY) RADIOLOGICAL	OTHER (SPECIFY) NA	OTHER (SPECIFY) NA	21. TOTAL CORE RECOVERY NA
22. DISPOSITION OF HOLE BACKFILL w/ CHUCKS		SAC FILLED X	MONITORING WELL NA	OTHER (SPECIFY) NA	23. SIGNATURE OF INSPECTOR <i>[Signature]</i>		

LOCATION SKETCH/COMMENTS

SCALE:



PSC METALS  
100'x10'  
TRACT

PROJECT:

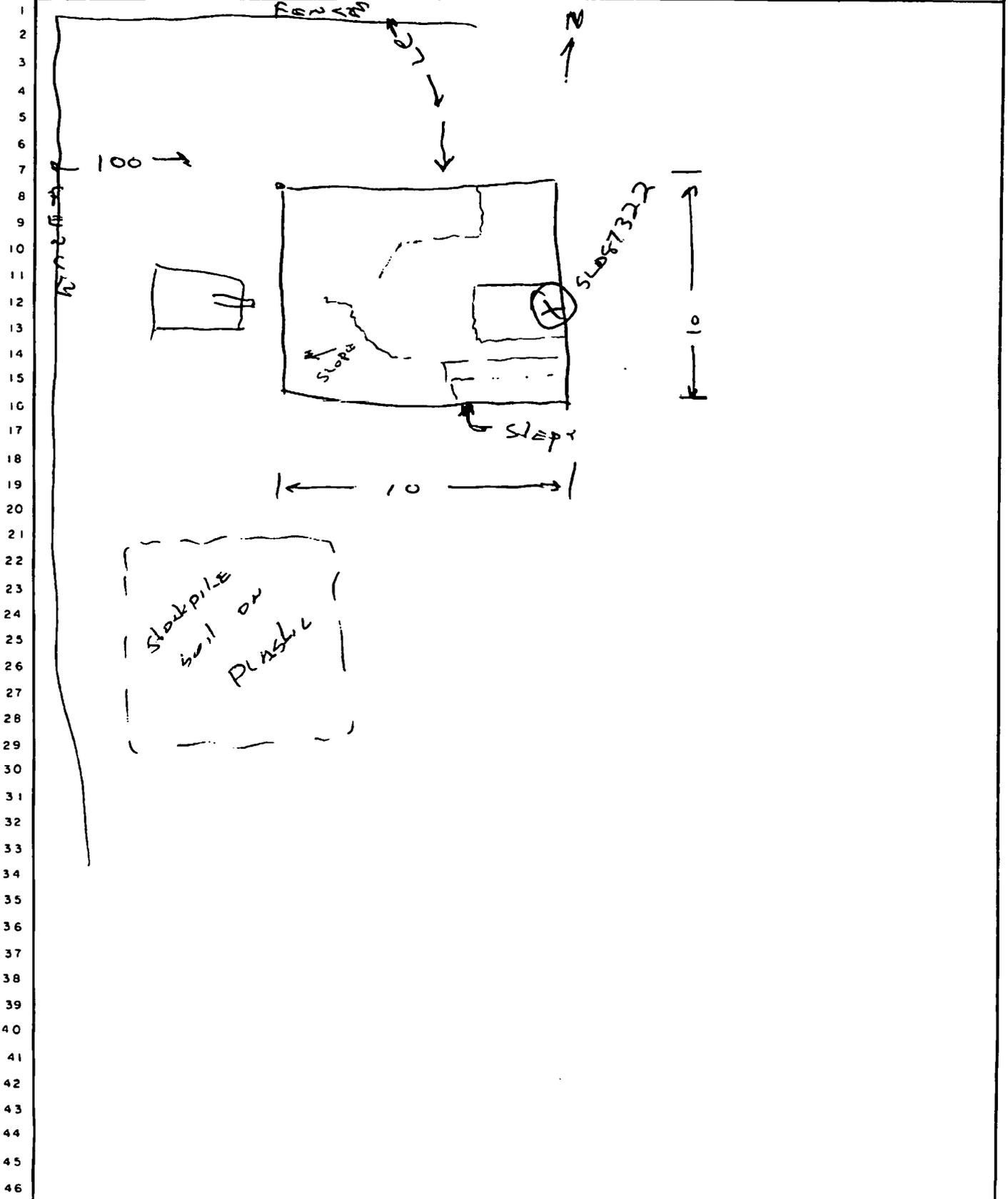
HOLE NO. SLD 67 322

RESAMPLE OF  
HTZ 66 219

STONE & WEBSTER ENGINEERING CORPORATION  
 CALCULATION SHEET

A-5010.65

CALCULATION IDENTIFICATION NUMBER			
J.O. OR W.O. NO.	DIVISION & GROUP	CALCULATION NO.	OPTIONAL TASK CODE
			PAGE 213 SLD67322



SLD 67 322  
 87 322  
 87 327

HTRW DRILLING LOG (CONTINUATION SHEET)		PROJECT	INSPECTOR	DATE	SHEET	TOTAL SHEETS
		FUSRAP / SLOS	M. McCarrin	87 322	3	3
DEPTH	DESCRIPTION OF MATERIALS	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
1	BLACK CINDERS / SLAG MOIST W/ BRIC FRAGS	13000			SLD 67 322	
		14500				
1	GRAY CLAY SILL FILL (POSITIVE FILL @ TOP) MOIST MED STIFF	15000	15000 in bowl		SLD 67 327	
2	(NO BRICKS, ROCKS, CONCRETE OR WOOD)	16000	15000 in bowl		SLD 67 328	
		16000				
		17000	11000 in bowl		SLD 67 329	
3		18000				
		19000	10500 in bowl		SLD 67 330	
4		19000	11000 in bowl		SLD 67 331	
5	YELLOW / GRAY SILTY CLAY (FILL?) MOIST EOTB MED STIFF					
6	2.00 Finish sampling					
7	(PID ED. by J. Hurley in beaching 200K)					
8	TEST PIT BACKFILL W/ ESCAPEABLE FLOW DILLING. Bucket tamped.					
9						
10						

SEE - 11.7  
 THESE LOGS  
 NOT IN HTR  
 LOCATION  
 SEE 4.1

SEE 1.7  
 (duplicate)

Possible inside

12:55  
 1:20  
 1:30  
 1:40  
 1:50

PROJECT: FUSRAP / SLOS

NOTE NO: SLD 67 322

RESAMPLE OF  
 HTR 66219

***Appendix B***

DT-8 Gamma Radiological Walkover Survey Data

SAIC/EEMG

HP-405, REV.0  
Attachment 1

SAIC  
**RADIOLOGICAL SURVEY REPORT**  
**FUSRAP ST. LOUIS, MO**

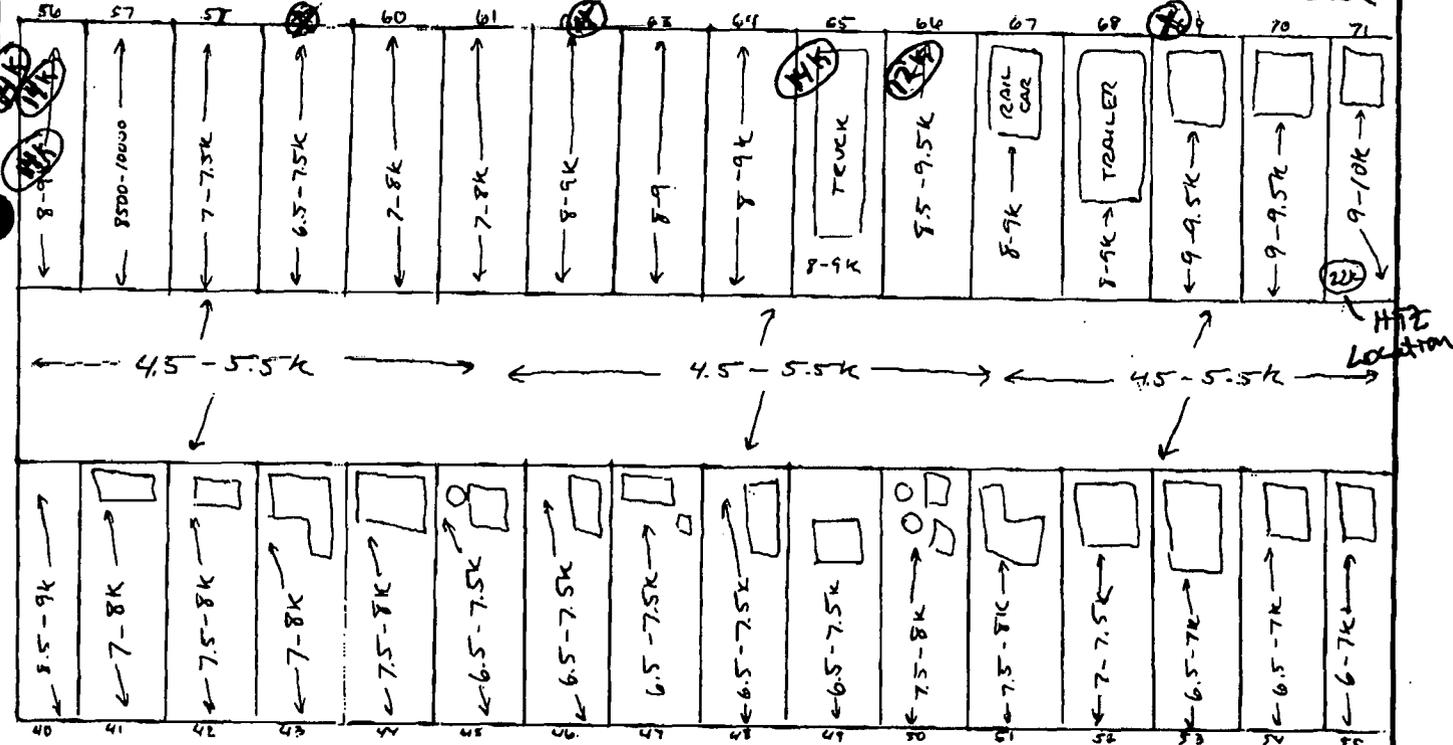
Page 1 of 1

SURVEY LOCATION: PSC METALS  
DATE: 10/25/02 TIME: 1200

PURPOSE OF SURVEY: CHARACTERIZATION

Instrument Type(s): (if used)	Serial Number: (meter/detector)	Cal Due Date: (meter-detector)	Background: (CPM α/β)	Efficiency (α/β)
X Ludlum 2221/44-10				
X Ludlum 2221/44-10				
X Ludlum 2221/44-10				
___ Ludlum 2221/44-10				

Plus Debris in Gutters - 2 locations, 2 Samples each



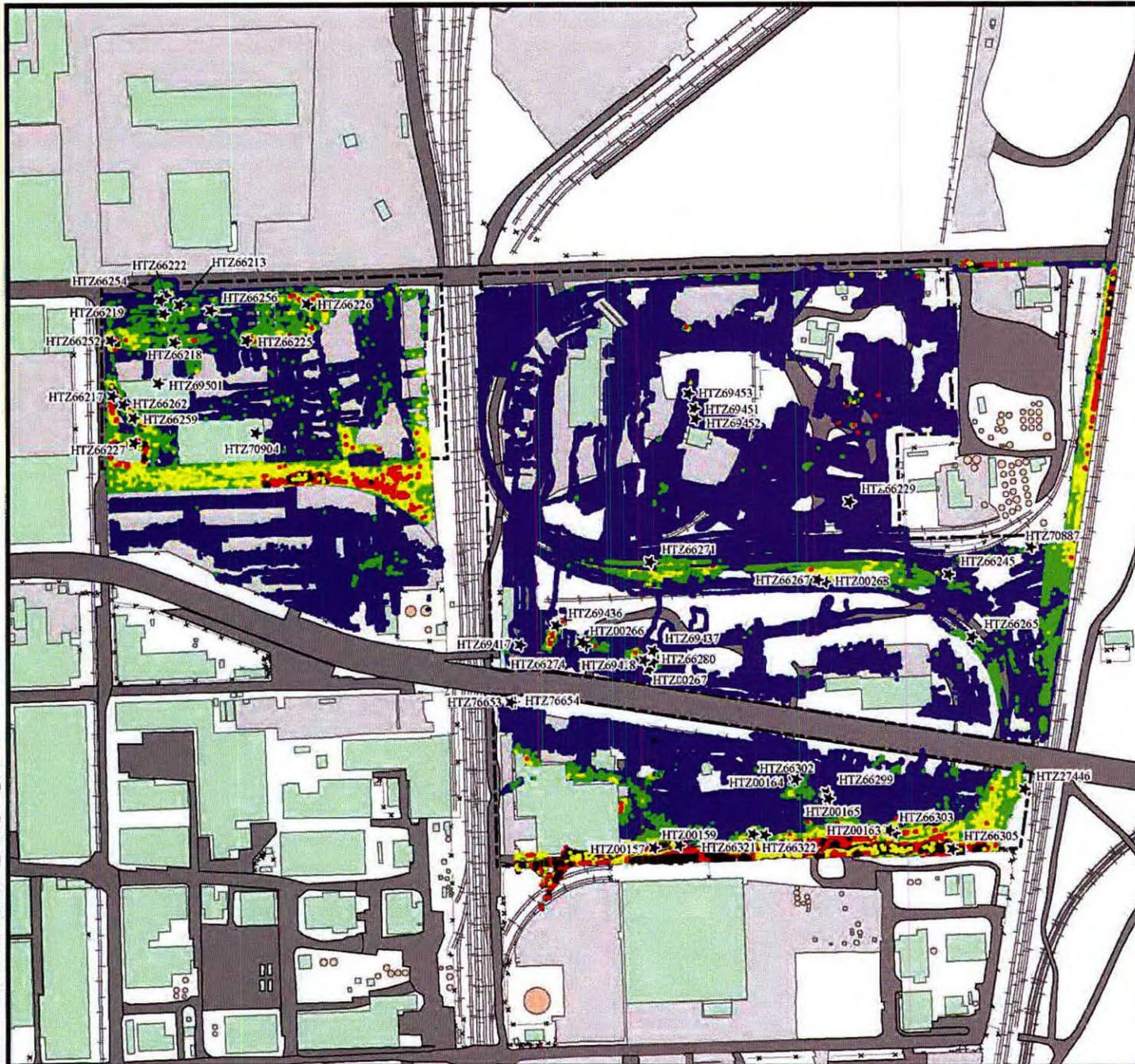
REMARKS: NORTHERN STALLS WERE DIRT AND SAW DUST FLOORS WHILE THE SOUTHERN SIDE WAS MOSTLY GRAVEL - CONCRETE RAN DOWN THE MIDDLE - DEBRIS COVERED APPROX. HALF OF THE CONCRETE (NOT PICTURED)

Lrg. Southern Bldg. (MFC)

TECHNICIAN(S) SIGNATURE/DATE: [Signature] 10/25/02 [Signature] 11-0-02

VIEWER SIGNATURE/DATE: [Signature] 10-29-02

U:\GIS\SLDS\PSC Metals\Projects\PSC\_Metals\_GHS\_rev1.mxd



Legend:

- ★ SLDS HTZ Sample Locations

Soil CPM

- 0 - 6000
- 6001 - 8000
- 8001 - 10000
- 10001 - 12000
- 12001 - 1000000

Gravel CPM

- 0 - 8000
- 8001 - 10000
- 10001 - 12000
- 12001 - 14000
- 14001 - 1000000

Asphalt CPM

- 0 - 5000
- 5001 - 7000
- 7001 - 9000
- 9001 - 15000
- 15001 - 1000000

Concrete CPM

- 0 - 6000
- 6001 - 8000
- 8001 - 10000
- 10001 - 12000
- 12001 - 100000

0 195 390 Feet

**DRAFT**

PSC Metals (DT-8)  
St. Louis Downtown Site  
St. Louis, Missouri



DRAWN BY: DLL, JAL	REV: 0	DATE: 02/21/2006
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PSC Metals - SLDS HTZ Sample Locations

***Appendix C***

Table C-1: PSC Metals Vicinity Property  
Pre-Design Investigation Radiological Data Results

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ00157	HTZ00157	08/07/00	0	0.5	0.0	Actinium-227	0.67	0.18	0.29	3.53
						Americium-241	0.25	0.14	0.23	
						Cesium-137	0.58	0.09	0.04	
						Potassium-40	6.26	0.94	0.51	
						Protactinium-231	-0.12	1.08	1.56	
						Radium-226	7.15	0.34	0.10	
						Radium-228	0.59	0.10	0.13	
						Thorium-228	0.80	0.45	0.27	
						Thorium-230	18.00	3.82	0.15	
						Thorium-232	0.92	0.48	0.15	
						Uranium-235	0.98	0.30	0.35	
						Uranium-238	17.41	2.38	6.11	
	HTZ00158	08/07/00	2	2.5		Actinium-227	0.20	0.13	0.26	0.26
						Americium-241	0.09	0.10	0.16	
						Cesium-137	0.06	0.03	0.03	
						Potassium-40	6.84	1.03	0.43	
						Protactinium-231	0.18	0.66	1.11	
						Radium-226	2.36	0.14	0.08	
						Radium-228	0.83	0.12	0.11	
						Thorium-228	0.91	0.48	0.33	
Thorium-230	4.99	1.37	0.15							
Thorium-232	1.52	0.64	0.28							
Uranium-235	0.28	0.18	0.25							
Uranium-238	3.43	1.22	5.98							
HTZ00159	HTZ00159	08/07/00	0	0.5	0.0	Actinium-227	0.28	0.17	0.27	1.11
						Americium-241	-0.01	0.06	0.09	
						Cesium-137	0.28	0.05	0.04	
						Potassium-40	8.70	1.12	0.42	
						Protactinium-231	-0.37	0.76	1.11	
						Radium-226	3.70	0.21	0.07	
						Radium-228	0.94	0.10	0.11	
						Thorium-228	1.10	0.54	0.28	
						Thorium-230	6.63	1.69	0.15	
						Thorium-232	0.54	0.37	0.28	
						Uranium-235	0.62	0.20	0.24	
						Uranium-238	10.05	1.26	4.77	
	HTZ00160	08/07/00	1	1.5		Actinium-227	2.04	0.33	0.48	1.81
						Americium-241	-0.10	0.50	0.77	
						Cesium-137	0.07	0.05	0.07	
						Potassium-40	7.36	1.36	0.74	
						Protactinium-231	1.41	1.77	2.59	
						Radium-226	22.26	1.11	0.16	
						Radium-228	0.85	0.18	0.20	
						Thorium-228	1.16	0.53	0.26	
Thorium-230	24.48	4.77	0.14							
Thorium-232	0.65	0.38	0.26							
Uranium-235	1.79	0.49	0.59							
Uranium-238	17.02	5.09	9.16							

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
HTZ00163	HTZ00163	08/16/00	0	0.5	0.0	Actinium-227	0.30	0.14	0.22	0.71
						Americium-241	0.04	0.21	0.33	
						Cesium-137	0.04	0.03	0.03	
						Potassium-40	10.26	1.24	0.28	
						Protactinium-231	0.15	0.66	0.98	
						Radium-226	2.24	0.14	0.06	
						Radium-228	1.00	0.11	0.08	
						Thorium-228	1.16	0.64	0.53	
						Thorium-230	3.28	1.17	0.43	
						Thorium-232	1.30	0.66	0.19	
						Uranium-235	0.95	0.20	0.24	
						Uranium-238	21.35	3.08	3.31	
HTZ00164	HTZ00164	08/16/00	0	0.5	0.0	Actinium-227	0.15	0.09	0.14	1.05
						Americium-241	-0.02	0.02	0.04	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	2.19	0.35	0.19	
						Protactinium-231	0.09	0.39	0.59	
						Radium-226	2.66	0.14	0.03	
						Radium-228	0.78	0.07	0.05	
						Thorium-228	1.97	0.92	0.60	
						Thorium-230	7.20	2.17	0.68	
						Thorium-232	0.87	0.60	0.64	
						Uranium-235	0.25	0.11	0.14	
						Uranium-238	1.72	0.42	2.14	
HTZ00165	HTZ00165	08/16/00	0	0.5	0.0	Actinium-227	0.12	0.12	0.17	0.21
						Americium-241	0.04	0.06	0.10	
						Cesium-137	0.07	0.02	0.02	
						Potassium-40	4.23	0.56	0.19	
						Protactinium-231	-0.16	0.49	0.70	
						Radium-226	1.10	0.07	0.04	
						Radium-228	1.66	0.12	0.06	
						Thorium-228	2.45	0.84	0.27	
						Thorium-230	2.12	0.77	0.14	
						Thorium-232	1.96	0.73	0.14	
						Uranium-235	0.04	0.10	0.17	
						Uranium-238	1.21	1.03	2.93	
HTZ00266	HTZ00266	10/11/00	0	0.5	0.0	Actinium-227	0.33	0.20	0.32	2.50
						Americium-241	0.10	0.27	0.42	
						Cesium-137	0.02	0.03	0.05	
						Potassium-40	10.57	1.36	0.46	
						Protactinium-231	0.00	0.94	1.41	
						Radium-226	5.26	0.29	0.09	
						Radium-228	1.04	0.13	0.14	
						Thorium-228	1.04	0.13	0.14	
						Thorium-230	5.62	16.78	27.77	
						Thorium-232	1.04	0.13	0.14	
						Uranium-235	0.62	0.29	0.35	
						Uranium-238	6.10	2.69	5.17	

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ00267	HTZ00267	10/11/00	0	0.5	0.0	Actinium-227	0.18	0.14	0.22	1.62
						Americium-241	0.06	0.20	0.31	
						Cesium-137	0.00	0.02	0.04	
						Potassium-40	9.76	1.20	0.33	
						Protactinium-231	0.22	0.64	0.98	
						Radium-226	3.14	0.18	0.06	
						Radium-228	1.03	0.12	0.09	
						Thorium-228	1.03	0.12	0.09	
						Thorium-230	-7.76	13.16	19.84	
						Thorium-232	1.03	0.12	0.09	
						Uranium-235	0.37	0.20	0.24	
						Uranium-238	2.33	1.86	3.98	
HTZ00268	HTZ00268	10/11/00	0	0.5	0.0	Actinium-227	-0.05	0.22	0.24	1.88
						Americium-241	0.03	0.22	0.34	
						Cesium-137	0.50	0.10	0.04	
						Potassium-40	7.95	1.10	0.32	
						Protactinium-231	-0.01	0.69	1.04	
						Radium-226	3.33	0.19	0.07	
						Radium-228	0.78	0.10	0.10	
						Thorium-228	0.78	0.10	0.10	
						Thorium-230	-6.43	13.10	21.15	
						Thorium-232	0.78	0.10	0.10	
						Uranium-235	0.42	0.18	0.26	
						Uranium-238	9.02	2.32	4.14	
HTZ27446	HTZ27446	11/02/01	0	0.5	0.0	Actinium-227	0.05	0.18	0.27	0.92
						Americium-241	-0.02	0.12	0.19	
						Cesium-137	0.27	0.04	0.04	
						Potassium-40	9.96	1.00	0.40	
						Protactinium-231	0.78	0.79	1.28	
						Radium-226	2.57	0.11	0.07	
						Radium-228	0.85	0.09	0.11	
						Thorium-228	0.85	0.49	0.31	
						Thorium-230	5.21	1.48	0.31	
						Thorium-232	1.40	0.64	0.31	
						Uranium-235	0.74	0.21	0.26	
						Uranium-238	11.64	1.79	1.58	
	HTZ27447	11/02/01	0.5	1.0	0.5	Actinium-227	0.25	0.13	0.22	0.31
						Americium-241	0.10	0.10	0.16	
						Cesium-137	0.05	0.03	0.04	
						Potassium-40	10.16	1.01	0.36	
						Protactinium-231	-0.08	0.70	1.08	
						Radium-226	2.46	0.11	0.06	
Radium-228	0.87	0.10	0.11							
Thorium-228	1.19	0.55	0.31							
Thorium-230	5.48	1.43	0.31							
Thorium-232	0.99	0.49	0.14							
Uranium-235	0.23	0.18	0.25							
Uranium-238	5.04	1.42	1.39							

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft <sup>1</sup> bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66213	HTZ66213	01/04/02	0	0.5	0.0	Actinium-227	45.16	1.26	0.45	53.07
						Americium-241	3.18	0.46	0.32	
						Cesium-137	0.02	0.04	0.06	
						Potassium-40	12.49	0.88	0.33	
						Protactinium-231	46.74	2.27	2.08	
						Radium-226	4.23	0.16	0.11	
						Radium-228	1.53	0.12	0.16	
						Thorium-228	3.40	1.37	0.57	
						Thorium-230	95.53	17.01	0.31	
						Thorium-232	2.38	1.11	0.31	
						Uranium-235	86.96	2.93	0.66	
						Uranium-238	1706.00	75.11	2.93	
						HTZ66214	HTZ66214	01/04/02	0.5	
Americium-241	3.87	0.68	0.85							
Cesium-137	0.00	0.05	0.08							
Potassium-40	12.91	1.08	0.40							
Protactinium-231	32.78	2.00	2.46							
Radium-226	4.07	0.17	0.14							
Radium-228	1.85	0.16	0.18							
Thorium-228	3.42	1.44	0.34							
Thorium-230	103.10	18.90	0.64							
Thorium-232	2.64	1.24	0.34							
Uranium-235	75.59	2.63	0.86							
Uranium-238	1504.00	66.99	5.45							
HTZ66215	HTZ66215	01/04/02	1	1.5	1.0					Actinium-227
						Americium-241	0.60	0.20	0.13	
						Cesium-137	0.01	0.03	0.04	
						Potassium-40	11.60	0.95	0.32	
						Protactinium-231	1.16	0.75	1.17	
						Radium-226	3.47	0.13	0.07	
						Radium-228	1.11	0.09	0.10	
						Thorium-228	1.17	0.51	0.31	
						Thorium-230	5.98	1.43	0.12	
						Thorium-232	1.19	0.51	0.12	
						Uranium-235	7.90	0.39	0.30	
						Uranium-238	154.60	8.16	1.21	
						HTZ66216	HTZ66216	01/04/02	1.5	2.0
Americium-241	0.87	0.15	0.15							
Cesium-137	0.00	0.02	0.03							
Potassium-40	13.68	0.92	0.20							
Protactinium-231	9.72	0.83	0.98							
Radium-226	1.88	0.07	0.05							
Radium-228	0.97	0.07	0.08							
Thorium-228	1.45	0.57	0.27							
Thorium-230	23.41	4.34	0.23							
Thorium-232	1.35	0.55	0.27							
Uranium-235	23.22	0.82	0.31							
Uranium-238	455.50	20.45	1.36							

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66217	HTZ66217	01/04/02	0	0.5	0.0	Actinium-227	24.65	0.86	0.71	12.99
						Americium-241	1.06	0.40	0.60	
						Cesium-137	0.05	0.06	0.09	
						Potassium-40	6.81	1.08	0.80	
						Protactinium-231	26.50	2.26	3.39	
						Radium-226	37.53	1.03	0.17	
						Radium-228	0.99	0.15	0.26	
						Thorium-228	1.75	0.67	0.14	
						Thorium-230	11.30	2.46	0.45	
						Thorium-232	0.60	0.39	0.41	
						Uranium-235	25.70	1.11	0.87	
						Uranium-238	302.80	18.11	5.01	
HTZ66218	HTZ66218	01/04/02	0	0.5	0.0	Actinium-227	0.32	0.17	0.27	0.47
						Americium-241	0.04	0.05	0.08	
						Cesium-137	0.05	0.03	0.04	
						Potassium-40	10.00	0.94	0.38	
						Protactinium-231	0.07	0.75	1.13	
						Radium-226	3.19	0.12	0.07	
						Radium-228	1.67	0.12	0.09	
						Thorium-228	2.35	0.84	0.46	
						Thorium-230	3.35	1.04	0.15	
						Thorium-232	1.54	0.64	0.15	
						Uranium-235	0.29	0.22	0.26	
						Uranium-238	3.75	0.85	0.81	
HTZ66219	HTZ66219	01/04/02	0	0.5	0.0	Actinium-227	8.47	0.29	0.23	11.42
						Americium-241	0.55	0.19	0.15	
						Cesium-137	0.02	0.02	0.03	
						Potassium-40	10.52	0.78	0.24	
						Protactinium-231	10.49	0.92	1.10	
						Radium-226	2.90	0.11	0.06	
						Radium-228	1.10	0.08	0.09	
						Thorium-228	1.06	0.47	0.12	
						Thorium-230	34.53	6.10	0.12	
						Thorium-232	1.50	0.57	0.12	
						Uranium-235	13.64	0.54	0.33	
						Uranium-238	242.40	11.56	1.39	
	HTZ66220	01/04/02	0.5	1.0	0.5	Actinium-227	5.89	0.23	0.21	4.11
						Americium-241	0.52	0.20	0.14	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	13.78	0.98	0.21	
						Protactinium-231	7.05	0.76	0.98	
						Radium-226	1.79	0.08	0.05	
						Radium-228	0.97	0.07	0.08	
Thorium-228	1.31	0.54	0.40							
Thorium-230	15.26	2.93	0.12							
Thorium-232	0.91	0.42	0.12							
Uranium-235	9.00	0.39	0.30							
Uranium-238	162.40	8.11	1.27							

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
HTZ66219	HTZ66221	01/04/02	1	1.5	1.0	Actinium-227	0.27	0.11	0.18	1.69
						Americium-241	0.05	0.07	0.11	
						Cesium-137	-0.02	0.02	0.02	
						Potassium-40	15.39	1.10	0.21	
						Protactinium-231	0.36	0.49	0.76	
						Radium-226	1.25	0.06	0.04	
						Radium-228	0.91	0.07	0.07	
						Thorium-228	1.53	0.61	0.14	
						Thorium-230	3.75	1.08	0.14	
						Thorium-232	1.01	0.48	0.14	
						Uranium-235	3.77	0.21	0.20	
						Uranium-238	79.92	4.51	0.92	
HTZ66222	HTZ66222	01/07/02	0	0.5	0.0	Actinium-227	7.69	0.29	0.23	5.70
						Americium-241	1.25	0.46	0.28	
						Cesium-137	0.14	0.04	0.03	
						Potassium-40	9.84	0.81	0.21	
						Protactinium-231	8.24	0.80	1.02	
						Radium-226	2.15	0.09	0.06	
						Radium-228	1.05	0.08	0.08	
						Thorium-228	1.66	0.62	0.28	
						Thorium-230	15.59	3.10	0.23	
						Thorium-232	0.63	0.36	0.28	
						Uranium-235	8.26	0.40	0.34	
						Uranium-238	148.90	7.82	2.28	
	HTZ66223	01/07/02	0.5	1.0	0.5	Actinium-227	0.61	0.11	0.20	2.34
						Americium-241	0.31	0.16	0.25	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	16.93	1.25	0.25	
						Protactinium-231	0.90	0.64	1.01	
						Radium-226	2.11	0.09	0.05	
						Radium-228	1.22	0.09	0.08	
						Thorium-228	1.27	0.56	0.34	
						Thorium-230	4.51	1.22	0.14	
						Thorium-232	1.50	0.60	0.14	
						Uranium-235	5.32	0.28	0.27	
						Uranium-238	108.60	6.17	1.91	
HTZ66224	01/07/02	1	1.5	1.0	Actinium-227	0.03	0.12	0.18	1.00	
					Americium-241	0.18	0.13	0.21		
					Cesium-137	-0.01	0.02	0.03		
					Potassium-40	13.36	1.05	0.22		
					Protactinium-231	0.29	0.51	0.81		
					Radium-226	0.79	0.05	0.05		
					Radium-228	0.73	0.08	0.07		
					Thorium-228	1.02	0.47	0.13		
					Thorium-230	2.30	0.76	0.23		
					Thorium-232	0.65	0.36	0.13		
					Uranium-235	2.39	0.20	0.22		
					Uranium-238	50.10	3.44	1.62		

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**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66225	HTZ66225	01/07/02	0	0.5	0.0	Actinium-227	0.14	0.18	0.28	0.59
						Americium-241	0.02	0.11	0.18	
						Cesium-137	0.09	0.03	0.04	
						Potassium-40	9.78	1.05	0.41	
						Protactinium-231	0.71	0.71	1.32	
						Radium-226	3.13	0.13	0.07	
						Radium-228	1.09	0.11	0.12	
						Thorium-228	1.31	0.58	0.26	
						Thorium-230	4.21	1.20	0.14	
						Thorium-232	1.53	0.63	0.14	
						Uranium-235	0.20	0.17	0.27	
						Uranium-238	3.85	1.45	1.51	
HTZ66226	HTZ66226	01/07/02	0	0.5	0.0	Actinium-227	0.12	0.19	0.29	0.76
						Americium-241	0.06	0.12	0.18	
						Cesium-137	0.28	0.04	0.04	
						Potassium-40	10.87	1.02	0.45	
						Protactinium-231	0.46	0.86	1.34	
						Radium-226	4.16	0.15	0.07	
						Radium-228	1.29	0.11	0.11	
						Thorium-228	1.94	0.75	0.34	
						Thorium-230	5.05	1.40	0.15	
						Thorium-232	1.33	0.60	0.28	
						Uranium-235	0.43	0.24	0.28	
						Uranium-238	5.05	1.41	1.54	
HTZ66227	HTZ66227	01/07/02	0	0.5	0.0	Actinium-227	0.07	0.14	0.21	0.04
						Americium-241	0.06	0.08	0.13	
						Cesium-137	0.14	0.03	0.03	
						Potassium-40	8.43	0.84	0.30	
						Protactinium-231	0.04	0.63	0.98	
						Radium-226	1.55	0.08	0.05	
						Radium-228	0.84	0.09	0.09	
						Thorium-228	0.92	0.49	0.33	
						Thorium-230	2.10	0.78	0.28	
						Thorium-232	1.11	0.53	0.15	
						Uranium-235	0.42	0.21	0.22	
						Uranium-238	1.78	0.90	1.13	
HTZ66229	HTZ66229	01/07/02	0	0.5	0.0	Actinium-227	0.02	0.08	0.13	0.00
						Americium-241	0.02	0.05	0.08	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	5.66	0.56	0.17	
						Protactinium-231	-0.24	0.33	0.57	
						Radium-226	0.66	0.04	0.03	
						Radium-228	0.26	0.05	0.05	
						Thorium-228	0.41	0.31	0.33	
						Thorium-230	0.73	0.41	0.25	
						Thorium-232	0.69	0.39	0.13	
						Uranium-235	0.03	0.07	0.13	
						Uranium-238	0.72	0.54	0.67	

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66230	HTZ66230	01/07/02	0	0.5	0.0	Actinium-227	0.22	0.17	0.24	0.89
						Americium-241	0.13	0.10	0.16	
						Cesium-137	0.11	0.03	0.03	
						Potassium-40	8.52	0.85	0.37	
						Protactinium-231	0.07	0.71	1.09	
						Radium-226	3.43	0.13	0.06	
						Radium-228	0.91	0.10	0.09	
						Thorium-228	1.36	0.61	0.38	
						Thorium-230	5.74	1.52	0.28	
						Thorium-232	1.40	0.61	0.15	
						Uranium-235	0.29	0.20	0.26	
						Uranium-238	4.82	1.03	1.30	
HTZ66232	HTZ66232	01/09/02	0	0.5	0.0	Actinium-227	0.14	0.10	0.16	0.11
						Americium-241	0.04	0.03	0.05	
						Cesium-137	0.04	0.02	0.02	
						Potassium-40	4.56	0.46	0.22	
						Protactinium-231	0.13	0.45	0.68	
						Radium-226	2.37	0.08	0.04	
						Radium-228	0.86	0.06	0.06	
						Thorium-228	1.39	0.57	0.13	
						Thorium-230	2.41	0.80	0.13	
						Thorium-232	0.69	0.39	0.13	
						Uranium-235	0.17	0.13	0.10	
						Uranium-238	2.47	0.55	0.47	
HTZ66245	HTZ66245	01/22/02	0	0.5	0.0	Actinium-227	0.08	0.13	0.20	0.19
						Americium-241	0.07	0.13	0.21	
						Cesium-137	0.12	0.03	0.03	
						Potassium-40	5.88	0.68	0.30	
						Protactinium-231	0.25	0.56	0.89	
						Radium-226	1.61	0.08	0.05	
						Radium-228	0.56	0.07	0.08	
						Thorium-228	1.12	0.57	0.36	
						Thorium-230	2.75	0.98	0.58	
						Thorium-232	1.07	0.56	0.48	
						Uranium-235	0.17	0.14	0.22	
						Uranium-238	2.82	1.46	1.63	
HTZ66246	HTZ66246	01/22/02	0	0.5	0.0	Actinium-227	0.12	0.13	0.19	0.09
						Americium-241	0.04	0.12	0.19	
						Cesium-137	0.43	0.04	0.03	
						Potassium-40	5.45	0.59	0.25	
						Protactinium-231	0.15	0.53	0.83	
						Radium-226	1.56	0.07	0.04	
						Radium-228	0.69	0.07	0.07	
						Thorium-228	1.19	0.54	0.39	
						Thorium-230	2.32	0.79	0.30	
						Thorium-232	0.21	0.23	0.34	
						Uranium-235	0.24	0.16	0.21	
						Uranium-238	2.28	1.11	1.47	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66252	HTZ66252	01/22/02	0	0.5	0.0	Actinium-227	0.31	0.16	0.24	0.53
						Americium-241	0.02	0.16	0.25	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	12.19	1.07	0.35	
						Protactinium-231	-0.62	0.99	1.05	
						Radium-226	3.88	0.14	0.06	
						Radium-228	1.33	0.10	0.10	
						Thorium-228	3.82	1.18	0.44	
						Thorium-230	3.83	1.15	0.15	
						Thorium-232	1.29	0.58	0.15	
						Uranium-235	0.42	0.20	0.24	
						Uranium-238	5.10	1.61	1.97	
	HTZ66253	01/22/02	0.5	1.0	0.5	Actinium-227	0.00	0.13	0.19	0.29
						Americium-241	0.02	0.12	0.19	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	12.52	1.08	0.25	
						Protactinium-231	0.13	0.54	0.85	
						Radium-226	1.35	0.07	0.05	
						Radium-228	0.71	0.08	0.08	
						Thorium-228	0.71	0.08	0.08	
Thorium-230	-3.54	8.14	12.54							
Thorium-232	0.71	0.08	0.08							
Uranium-235	0.14	0.14	0.20							
Uranium-238	1.43	1.51	1.50							
HTZ66254	HTZ66254	01/22/02	0	0.5	0.0	Actinium-227	13.05	0.45	0.37	21.10
						Americium-241	2.13	0.60	0.87	
						Cesium-137	0.15	0.04	0.05	
						Potassium-40	7.81	0.72	0.30	
						Protactinium-231	14.52	1.21	1.63	
						Radium-226	3.14	0.13	0.09	
						Radium-228	0.95	0.10	0.12	
						Thorium-228	0.95	0.10	0.12	
						Thorium-230	-123.40	35.49	54.92	
						Thorium-232	0.95	0.10	0.12	
						Uranium-235	40.33	1.44	0.61	
						Uranium-238	801.00	36.39	3.76	
	HTZ66255	01/22/02	0.5	1.0	1.0	Actinium-227	14.55	0.49	0.40	18.98
						Americium-241	2.50	0.66	0.95	
						Cesium-137	-0.01	0.04	0.05	
						Potassium-40	14.14	1.08	0.33	
						Protactinium-231	15.83	1.29	1.77	
						Radium-226	3.09	0.13	0.10	
						Radium-228	1.35	0.12	0.15	
						Thorium-228	1.35	0.12	0.15	
Thorium-230	-98.39	37.78	59.66							
Thorium-232	1.35	0.12	0.15							
Uranium-235	43.10	1.54	0.65							
Uranium-238	855.90	38.86	4.00							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
HTZ66256	HTZ66256	01/22/02	0	0.5	0.0	Actinium-227	0.22	0.20	0.30	0.66
						Americium-241	0.07	0.19	0.30	
						Cesium-137	0.15	0.03	0.04	
						Potassium-40	9.85	0.96	0.38	
						Protactinium-231	-0.02	0.79	1.21	
						Radium-226	3.70	0.14	0.07	
						Radium-228	1.19	0.11	0.11	
						Thorium-228	1.65	0.67	0.26	
						Thorium-230	4.06	1.15	0.14	
						Thorium-232	1.35	0.58	0.14	
						Uranium-235	0.66	0.26	0.33	
						Uranium-238	10.50	2.28	2.29	
	HTZ66257	01/22/02	0.5	1.0	1.0	Actinium-227	0.49	0.24	0.34	1.12
						Americium-241	0.19	0.24	0.39	
						Cesium-137	0.03	0.03	0.05	
						Potassium-40	11.95	1.20	0.47	
						Protactinium-231	0.25	0.98	1.52	
						Radium-226	3.79	0.15	0.08	
						Radium-228	1.24	0.11	0.13	
						Thorium-228	1.24	0.11	0.13	
						Thorium-230	12.25	14.79	24.88	
						Thorium-232	1.24	0.11	0.13	
						Uranium-235	1.07	0.26	0.34	
						Uranium-238	21.34	3.15	2.89	
	HTZ66258	01/22/02	1	1.5	1.0	Actinium-227	0.22	0.17	0.26	0.04
						Americium-241	0.09	0.17	0.27	
						Cesium-137	0.01	0.02	0.04	
						Potassium-40	12.48	1.15	0.34	
						Protactinium-231	0.48	0.71	1.14	
						Radium-226	2.07	0.09	0.07	
						Radium-228	1.08	0.09	0.10	
						Thorium-228	1.35	0.58	0.25	
						Thorium-230	1.77	0.66	0.13	
Thorium-232						1.33	0.56	0.13		
Uranium-235						0.23	0.15	0.27		
Uranium-238						2.68	1.75	2.07		
HTZ66259	01/22/02	0	0.5	0.0	Actinium-227	2.81	0.23	0.35	5.47	
					Americium-241	0.78	0.38	0.60		
					Cesium-137	0.03	0.04	0.05		
					Potassium-40	10.99	1.20	0.50		
					Protactinium-231	2.41	0.95	1.53		
					Radium-226	4.33	0.17	0.10		
					Radium-228	1.28	0.13	0.14		
					Thorium-228	1.28	0.13	0.14		
					Thorium-230	-44.92	25.47	37.84		
					Thorium-232	1.28	0.13	0.14		
					Uranium-235	5.66	0.45	0.47		
					Uranium-238	101.70	7.04	4.44		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66259	HTZ66260	01/22/02	0.5	1.0	0.5	Actinium-227	1.95	0.24	0.41	7.34
						Americium-241	0.78	0.55	0.87	
						Cesium-137	0.01	0.04	0.06	
						Potassium-40	11.21	1.19	0.45	
						Protactinium-231	3.14	1.45	1.82	
						Radium-226	3.51	0.16	0.11	
						Radium-228	0.97	0.13	0.18	
						Thorium-228	0.97	0.13	0.18	
						Thorium-230	-14.84	33.18	54.05	
						Thorium-232	0.97	0.13	0.18	
						Uranium-235	13.90	0.72	0.61	
						Uranium-238	284.70	15.52	6.30	
	HTZ66261	01/22/02	1	1.5	1.0	Actinium-227	0.38	0.18	0.32	1.74
						Americium-241	0.37	0.28	0.44	
						Cesium-137	0.00	0.03	0.04	
						Potassium-40	12.26	1.22	0.43	
						Protactinium-231	0.83	0.86	1.40	
						Radium-226	2.35	0.11	0.08	
						Radium-228	0.96	0.12	0.12	
						Thorium-228	0.96	0.12	0.12	
						Thorium-230	-9.56	16.87	27.50	
						Thorium-232	0.96	0.12	0.12	
						Uranium-235	2.46	0.28	0.35	
Uranium-238	49.02	4.43	3.21							
HTZ66262	HTZ66262	01/22/02	0	0.5	0.0	Actinium-227	3.73	0.29	0.45	10.48
						Americium-241	1.01	0.55	0.85	
						Cesium-137	0.02	0.04	0.07	
						Potassium-40	9.97	1.02	0.50	
						Protactinium-231	3.83	1.24	2.05	
						Radium-226	5.65	0.21	0.12	
						Radium-228	1.25	0.13	0.18	
						Thorium-228	1.25	0.13	0.18	
						Thorium-230	-93.76	36.80	53.97	
						Thorium-232	1.25	0.13	0.18	
						Uranium-235	14.53	0.74	0.66	
						Uranium-238	271.90	14.49	6.37	
	HTZ66263	01/22/02	0.5	1.0	0.5	Actinium-227	0.49	0.15	0.26	1.46
						Americium-241	0.08	0.24	0.38	
						Cesium-137	0.02	0.03	0.04	
						Potassium-40	11.58	1.08	0.33	
						Protactinium-231	0.69	0.81	1.31	
						Radium-226	3.11	0.13	0.07	
						Radium-228	1.03	0.11	0.11	
						Thorium-228	1.03	0.11	0.11	
						Thorium-230	10.23	16.08	25.35	
						Thorium-232	1.03	0.11	0.11	
						Uranium-235	2.02	0.25	0.32	
Uranium-238	38.43	3.82	2.90							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>	
HTZ66264	HTZ66264	01/22/02	0	0.5		Actinium-227	0.06	0.19	0.28	0.31	
						Americium-241	0.02	0.19	0.29		
						Cesium-137	0.04	0.04	0.04		
						Potassium-40	9.05	0.91	0.37		
						Protactinium-231	0.06	0.78	1.20		
						Radium-226	3.60	0.14	0.07		
						Radium-228	0.90	0.11	0.11		
						Thorium-228	2.06	0.81	0.16		
						Thorium-230	3.33	1.07	0.16		
						Thorium-232	0.98	0.51	0.29		
						Uranium-235	0.39	0.22	0.28		
						Uranium-238	3.13	1.77	2.32		
HTZ66265	HTZ66265	01/23/02	0	0.5	0.0	Actinium-227	0.27	0.19	0.29	0.39	
						Americium-241	0.03	0.11	0.18		
						Cesium-137	0.07	0.03	0.04		
						Potassium-40	11.68	1.15	0.44		
						Protactinium-231	0.24	0.81	1.26		
						Radium-226	3.42	0.14	0.07		
						Radium-228	1.07	0.12	0.11		
						Thorium-228	1.69	0.54	0.22		
						Thorium-230	3.43	0.82	0.09		
						Thorium-232	1.12	0.41	0.09		
						Uranium-235	0.28	0.17	0.29		
						Uranium-238	5.01	1.40	1.59		
		HTZ66266	01/23/02	0.5	1.0	0.5	Actinium-227	0.08	0.17	0.25	0.09
							Americium-241	0.05	0.10	0.15	
							Cesium-137	0.02	0.02	0.03	
							Potassium-40	11.06	1.07	0.31	
							Protactinium-231	-0.09	0.72	1.09	
							Radium-226	2.77	0.12	0.07	
							Radium-228	0.83	0.10	0.09	
							Thorium-228	0.74	0.32	0.08	
						Thorium-230	2.50	0.64	0.16		
						Thorium-232	1.21	0.41	0.08		
						Uranium-235	0.36	0.27	0.25		
						Uranium-238	3.84	1.42	1.29		
HTZ66267	HTZ66267	01/23/02	0	0.5	0.0	Actinium-227	0.42	0.17	0.27	1.13	
						Americium-241	0.10	0.12	0.19		
						Cesium-137	0.57	0.06	0.04		
						Potassium-40	11.01	0.97	0.40		
						Protactinium-231	-0.01	0.80	1.21		
						Radium-226	5.42	0.18	0.07		
						Radium-228	1.02	0.10	0.10		
						Thorium-228	1.23	0.46	0.32		
						Thorium-230	5.41	1.12	0.24		
						Thorium-232	1.26	0.43	0.17		
						Uranium-235	1.18	0.19	0.26		
Uranium-238	21.42	2.22	1.58								

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66267	HTZ66268	01/23/02	0.5	1.0	0.5	Actinium-227	0.20	0.15	0.24	0.05
						Americium-241	-0.01	0.09	0.15	
						Cesium-137	0.05	0.03	0.03	
						Potassium-40	14.59	1.29	0.35	
						Protactinium-231	0.09	0.64	1.00	
						Radium-226	1.54	0.08	0.06	
						Radium-228	1.01	0.10	0.09	
						Thorium-228	1.07	0.41	0.26	
						Thorium-230	2.05	0.57	0.08	
						Thorium-232	0.89	0.35	0.17	
						Uranium-235	0.13	0.13	0.23	
						Uranium-238	3.22	1.09	1.22	
	HTZ66269	01/23/02	1	1.5	1.0	Actinium-227	0.11	0.14	0.21	0.05
						Americium-241	0.04	0.09	0.15	
						Cesium-137	0.04	0.03	0.03	
						Potassium-40	15.15	1.27	0.32	
						Protactinium-231	0.11	0.61	0.96	
						Radium-226	1.61	0.08	0.06	
						Radium-228	0.84	0.09	0.09	
						Thorium-228	1.34	0.46	0.21	
						Thorium-230	2.28	0.62	0.21	
						Thorium-232	0.77	0.33	0.17	
						Uranium-235	0.05	0.13	0.22	
						Uranium-238	2.65	1.12	1.22	
	HTZ66270	01/23/02	1.5	2.0	1.5	Actinium-227	0.19	0.15	0.23	0.06
						Americium-241	0.04	0.09	0.14	
						Cesium-137	0.00	0.03	0.04	
						Potassium-40	16.73	1.40	0.32	
						Protactinium-231	0.02	0.67	1.03	
						Radium-226	1.42	0.08	0.06	
						Radium-228	0.97	0.10	0.10	
						Thorium-228	1.29	0.46	0.22	
						Thorium-230	2.29	0.63	0.18	
Thorium-232						0.90	0.36	0.18		
Uranium-235						0.14	0.15	0.22		
Uranium-238						3.18	1.32	1.21		
HTZ66271	01/23/02	0	0.5	0.0	Actinium-227	0.29	0.23	0.35	1.15	
					Americium-241	-0.02	0.14	0.22		
					Cesium-137	0.30	0.05	0.05		
					Potassium-40	9.44	1.17	0.49		
					Protactinium-231	-0.10	1.00	1.52		
					Radium-226	5.60	0.20	0.09		
					Radium-228	1.03	0.12	0.15		
					Thorium-228	1.64	0.52	0.08		
					Thorium-230	6.81	1.34	0.08		
					Thorium-232	1.28	0.44	0.08		
					Uranium-235	0.60	0.33	0.37		
					Uranium-238	8.56	2.02	1.94		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
HTZ66271	HTZ66272	01/23/02	0.5	1.0	0.5	Actinium-227	0.18	0.19	0.28	0.17
						Americium-241	0.21	0.11	0.18	
						Cesium-137	0.00	0.03	0.04	
						Potassium-40	9.54	1.02	0.41	
						Protactinium-231	0.11	0.80	1.23	
						Radium-226	3.01	0.13	0.07	
						Radium-228	1.06	0.12	0.11	
						Thorium-228	1.34	0.47	0.26	
						Thorium-230	3.58	0.83	0.24	
						Thorium-232	1.21	0.42	0.08	
						Uranium-235	0.32	0.20	0.26	
						Uranium-238	4.08	1.54	1.52	
	HTZ66273	01/23/02	1	1.5	1.0	Actinium-227	0.18	0.17	0.26	0.03
						Americium-241	0.11	0.10	0.16	
						Cesium-137	0.02	0.02	0.04	
						Potassium-40	8.96	0.99	0.38	
						Protactinium-231	0.57	0.70	1.14	
						Radium-226	2.27	0.10	0.06	
						Radium-228	0.88	0.11	0.09	
						Thorium-228	1.24	0.46	0.09	
						Thorium-230	2.12	0.61	0.09	
						Thorium-232	0.40	0.24	0.09	
HTZ66274	HTZ66274	01/23/02	0	0.5	0.0	Actinium-227	0.20	0.18	0.27	0.44
						Americium-241	0.07	0.11	0.17	
						Cesium-137	-0.03	0.03	0.03	
						Potassium-40	11.46	1.10	0.38	
						Protactinium-231	0.29	0.77	1.19	
						Radium-226	3.73	0.14	0.07	
						Radium-228	1.02	0.10	0.11	
						Thorium-228	1.66	0.54	0.09	
						Thorium-230	3.64	0.88	0.09	
						Thorium-232	1.18	0.43	0.09	
						Uranium-235	0.21	0.22	0.28	
						Uranium-238	5.47	1.46	1.48	
	HTZ66275	01/23/02	0.5	1.0	0.5	Actinium-227	0.16	0.19	0.26	0.16
						Americium-241	0.10	0.11	0.17	
						Cesium-137	0.01	0.02	0.04	
						Potassium-40	9.67	0.98	0.39	
						Protactinium-231	0.14	0.78	1.20	
						Radium-226	3.68	0.14	0.07	
						Radium-228	1.07	0.11	0.11	
						Thorium-228	1.14	0.40	0.19	
						Thorium-230	3.68	0.81	0.07	
						Thorium-232	1.03	0.36	0.07	
Uranium-235	0.29	0.19	0.25							
Uranium-238	3.26	1.19	1.50							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft <sup>1</sup> bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66274	HTZ66276	01/23/02	1	1.5	1.0	Actinium-227	0.21	0.16	0.29	0.16
						Americium-241	0.08	0.11	0.17	
						Cesium-137	-0.01	0.02	0.04	
						Potassium-40	8.64	0.97	0.35	
						Protactinium-231	0.55	0.72	1.17	
						Radium-226	2.81	0.12	0.07	
						Radium-228	0.96	0.11	0.10	
						Thorium-228	1.37	0.45	0.08	
						Thorium-230	3.65	0.81	0.19	
						Thorium-232	0.61	0.27	0.08	
						Uranium-235	0.21	0.15	0.25	
						Uranium-238	3.68	1.28	1.42	
						HTZ66277	01/23/02	1.5	2.0	1.5
Americium-241	0.11	0.12	0.20							
Cesium-137	0.00	0.03	0.04							
Potassium-40	9.37	1.05	0.42							
Protactinium-231	-0.37	0.88	1.32							
Radium-226	3.24	0.14	0.07							
Radium-228	0.94	0.11	0.12							
Thorium-228	1.39	0.47	0.08							
Thorium-230	3.05	0.74	0.08							
Thorium-232	0.97	0.37	0.08							
Uranium-235	0.20	0.17	0.30							
Uranium-238	4.27	1.47	1.67							
HTZ66278	01/23/02	2	2.5	2.0	Actinium-227					
					Americium-241	0.04	0.04	0.07		
					Cesium-137	0.00	0.02	0.03		
					Potassium-40	11.65	0.95	0.30		
					Protactinium-231	-0.02	0.61	0.92		
					Radium-226	3.24	0.12	0.05		
					Radium-228	1.06	0.09	0.08		
					Thorium-228	1.32	0.64	0.43		
					Thorium-230	4.71	1.35	0.16		
					Thorium-232	0.82	0.46	0.16		
					Uranium-235	0.26	0.16	0.20		
					Uranium-238	3.63	0.56	0.63		
					HTZ66279	01/23/02	2.5	3.0	2.5	Actinium-227
Americium-241	0.03	0.04	0.06							
Cesium-137	0.00	0.02	0.03							
Potassium-40	12.35	1.00	0.32							
Protactinium-231	0.39	0.56	0.87							
Radium-226	3.42	0.12	0.05							
Radium-228	1.02	0.08	0.08							
Thorium-228	1.97	0.78	0.16							
Thorium-230	3.47	1.09	0.16							
Thorium-232	1.27	0.59	0.16							
Uranium-235	0.26	0.14	0.19							
Uranium-238	3.15	0.61	0.62							

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HTZ66280	HTZ66280	01/23/02	0	0.5	0.0	Actinium-227	0.24	0.15	0.24	1.11
						Americium-241	0.01	0.05	0.07	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	11.65	0.93	0.33	
						Protactinium-231	0.60	0.61	0.94	
						Radium-226	4.64	0.15	0.05	
						Radium-228	1.10	0.09	0.08	
						Thorium-228	1.86	0.74	0.39	
						Thorium-230	7.00	1.72	0.39	
						Thorium-232	1.01	0.49	0.14	
						Uranium-235	0.27	0.15	0.20	
						Uranium-238	4.90	0.89	0.63	
	HTZ66281	01/23/02	0.5	1.0	0.5	Actinium-227	0.32	0.25	0.41	0.30
						Americium-241	0.02	0.08	0.12	
						Cesium-137	0.00	0.03	0.05	
						Potassium-40	11.73	1.24	0.55	
						Protactinium-231	1.09	1.03	1.67	
						Radium-226	5.29	0.20	0.09	
						Radium-228	1.15	0.14	0.15	
						Thorium-228	2.10	0.75	0.24	
						Thorium-230	5.03	1.29	0.24	
						Thorium-232	1.00	0.47	0.24	
						Uranium-235	0.57	0.41	0.39	
						Uranium-238	5.46	1.41	1.15	
	HTZ66282	01/23/02	1	1.5	1.0	Actinium-227	0.39	0.12	0.19	0.06
						Americium-241	0.04	0.04	0.05	
						Cesium-137	0.01	0.02	0.02	
						Potassium-40	15.19	1.10	0.25	
						Protactinium-231	0.10	0.50	0.75	
						Radium-226	2.56	0.09	0.04	
						Radium-228	0.99	0.07	0.06	
						Thorium-228	1.57	0.63	0.24	
						Thorium-230	2.35	0.78	0.13	
Thorium-232						0.67	0.37	0.13		
Uranium-235						0.17	0.15	0.17		
Uranium-238						2.75	0.44	0.52		
HTZ66299	HTZ66299	01/29/02	0	0.5	0.0	Actinium-227	0.06	0.09	0.14	0.24
						Americium-241	0.02	0.03	0.04	
						Cesium-137	0.06	0.02	0.02	
						Potassium-40	4.67	0.43	0.21	
						Protactinium-231	0.09	0.42	0.63	
						Radium-226	3.96	0.12	0.03	
						Radium-228	0.39	0.04	0.05	
						Thorium-228	0.39	0.04	0.05	
						Thorium-230	-0.12	2.91	4.23	
						Thorium-232	0.39	0.04	0.05	
						Uranium-235	0.13	0.11	0.14	
						Uranium-238	0.95	0.44	0.40	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66299	HTZ66300	01/29/02	0.5	1.0	0.5	Actinium-227	0.46	0.30	0.49	4.09
						Americium-241	-0.01	0.10	0.15	
						Cesium-137	0.20	0.05	0.06	
						Potassium-40	6.21	0.99	0.85	
						Protactinium-231	-1.25	1.61	2.34	
						Radium-226	64.09	1.72	0.13	
						Radium-228	0.45	0.11	0.20	
						Thorium-228	0.45	0.11	0.20	
						Thorium-230	9.47	10.07	15.39	
						Thorium-232	0.45	0.11	0.20	
						Uranium-235	0.34	0.35	0.52	
						Uranium-238	1.60	1.15	1.49	
	HTZ66301	01/29/02	1	1.5	1.0	Actinium-227	0.12	0.16	0.25	0.83
						Americium-241	0.07	0.05	0.08	
						Cesium-137	0.07	0.03	0.03	
						Potassium-40	8.84	0.81	0.39	
						Protactinium-231	-0.36	0.69	1.15	
						Radium-226	14.85	0.42	0.06	
						Radium-228	0.55	0.07	0.10	
						Thorium-228	0.55	0.07	0.10	
Thorium-230	-2.08	5.59	8.04							
Thorium-232	0.55	0.07	0.10							
Uranium-235	0.25	0.18	0.27							
Uranium-238	2.72	0.80	0.78							
HTZ66302	HTZ66302	01/29/02	0	0.5	0.0	Actinium-227	0.27	0.09	0.15	0.21
						Americium-241	0.02	0.03	0.04	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	2.48	0.30	0.19	
						Protactinium-231	0.31	0.41	0.62	
						Radium-226	3.61	0.11	0.03	
						Radium-228	1.03	0.06	0.05	
						Thorium-228	1.03	0.06	0.05	
						Thorium-230	3.78	3.04	4.05	
						Thorium-232	1.03	0.06	0.05	
						Uranium-235	0.23	0.09	0.14	
						Uranium-238	2.69	0.49	0.38	
HTZ66303	HTZ66303	01/29/02	0	0.5	0.0	Actinium-227	0.23	0.12	0.19	0.51
						Americium-241	0.04	0.05	0.07	
						Cesium-137	0.09	0.02	0.03	
						Potassium-40	11.49	0.92	0.27	
						Protactinium-231	0.23	0.51	0.79	
						Radium-226	2.24	0.09	0.05	
						Radium-228	1.03	0.08	0.07	
						Thorium-228	1.03	0.08	0.07	
						Thorium-230	3.83	4.06	6.56	
						Thorium-232	1.03	0.08	0.07	
						Uranium-235	0.82	0.13	0.17	
						Uranium-238	12.94	1.24	0.64	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66303	HTZ66304	01/29/02	0.5	1.0	0.5	Actinium-227	0.23	0.12	0.20	0.18
						Americium-241	-0.02	0.04	0.06	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	11.51	0.95	0.28	
						Protactinium-231	0.02	0.54	0.82	
						Radium-226	2.21	0.09	0.05	
						Radium-228	0.90	0.08	0.07	
						Thorium-228	0.90	0.08	0.07	
						Thorium-230	1.87	4.21	6.25	
						Thorium-232	0.90	0.08	0.07	
						Uranium-235	0.47	0.14	0.17	
						Uranium-238	6.52	0.90	0.60	
HTZ66305	HTZ66305	01/29/02	0	0.5	0.0	Actinium-227	0.42	0.18	0.29	2.36
						Americium-241	0.08	0.09	0.13	
						Cesium-137	1.11	0.09	0.04	
						Potassium-40	11.99	1.05	0.39	
						Protactinium-231	0.86	0.83	1.28	
						Radium-226	4.89	0.17	0.07	
						Radium-228	1.11	0.10	0.11	
						Thorium-228	1.11	0.10	0.11	
						Thorium-230	-1.13	8.13	11.77	
						Thorium-232	1.11	0.10	0.11	
						Uranium-235	4.22	0.30	0.29	
						Uranium-238	78.23	4.85	1.17	
	HTZ66306	01/29/02	0.5	1.0	0.5	Actinium-227	0.22	0.16	0.27	0.26
						Americium-241	0.03	0.06	0.09	
						Cesium-137	0.06	0.03	0.04	
						Potassium-40	11.52	1.08	0.42	
						Protactinium-231	0.59	0.73	1.16	
						Radium-226	3.12	0.13	0.07	
						Radium-228	1.16	0.11	0.10	
						Thorium-228	1.16	0.11	0.10	
						Thorium-230	1.33	5.19	8.37	
						Thorium-232	1.16	0.11	0.10	
						Uranium-235	0.42	0.19	0.24	
						Uranium-238	6.47	1.00	0.83	
HTZ66307	01/29/02	1	1.5	1.0	Actinium-227	0.15	0.12	0.19	0.12	
					Americium-241	0.03	0.04	0.06		
					Cesium-137	0.08	0.02	0.03		
					Potassium-40	15.22	1.18	0.25		
					Protactinium-231	0.23	0.53	0.82		
					Radium-226	2.08	0.08	0.05		
					Radium-228	0.80	0.08	0.08		
					Thorium-228	0.80	0.08	0.08		
					Thorium-230	2.40	4.08	6.10		
					Thorium-232	0.80	0.08	0.08		
					Uranium-235	0.21	0.11	0.18		
					Uranium-238	3.66	0.76	0.59		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft <sup>1</sup> bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ66321	HTZ66321	02/07/02	0	0.5	0.0	Actinium-227	0.07	0.09	0.13	0.51
						Americium-241	0.00	0.02	0.04	
						Cesium-137	0.11	0.02	0.02	
						Potassium-40	3.24	0.35	0.22	
						Protactinium-231	0.14	0.39	0.59	
						Radium-226	4.20	0.13	0.03	
						Radium-228	0.25	0.04	0.05	
						Thorium-228	0.52	0.32	0.30	
						Thorium-230	4.27	1.09	0.22	
						Thorium-232	0.34	0.25	0.11	
						Uranium-235	0.27	0.09	0.13	
						Uranium-238	3.55	0.54	0.35	
						HTZ66322	HTZ66322	02/07/02	0	0.5
Americium-241	0.12	0.05	0.08							
Cesium-137	0.05	0.02	0.03							
Potassium-40	4.91	0.55	0.40							
Protactinium-231	0.30	0.74	1.11							
Radium-226	20.15	0.55	0.06							
Radium-228	0.43	0.06	0.10							
Thorium-228	2.23	0.67	0.10							
Thorium-230	10.21	1.96	0.34							
Thorium-232	0.44	0.30	0.39							
Uranium-235	1.15	0.18	0.25							
Uranium-238	16.73	1.47	0.76							
HTZ66323	02/07/02	0.5	1.0	0.5	Actinium-227					
					Americium-241		0.11	0.05	0.08	
					Cesium-137		0.07	0.03	0.03	
					Potassium-40		4.60	0.54	0.41	
					Protactinium-231		-0.08	0.77	1.14	
					Radium-226		22.26	0.61	0.06	
					Radium-228		0.50	0.07	0.09	
					Thorium-228		1.65	0.59	0.29	
					Thorium-230		11.99	2.32	0.11	
					Thorium-232		0.57	0.32	0.11	
HTZ69417	HTZ69417	03/19/02	0	0.5	0.0		Actinium-227	-0.79	0.92	1.30
						Americium-241	0.45	0.33	0.39	
						Cesium-137	0.11	0.11	0.19	
						Potassium-40	8.50	2.18	2.44	
						Protactinium-231	-11.22	4.42	6.36	
						Radium-226	501.45	13.35	0.53	
						Radium-228	1.07	0.29	0.54	
						Thorium-228	1.07	0.29	0.54	
						Thorium-230	33.71	26.40	41.66	
						Thorium-232	1.07	0.29	0.54	
Uranium-235	-1.05	1.93	1.34							
Uranium-238	-0.74	2.83	4.12							

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
HTZ69418	HTZ69418	03/19/02	0	0.5	0.0	Actinium-227	522.00	32.06	11.55	793.48
						Americium-241	-7.32	1.93	2.56	
						Cesium-137	-1.93	1.09	1.53	
						Potassium-40	197.30	14.36	14.74	
						Protactinium-231	141.60	27.19	39.34	
						Radium-226	4.18	2.46	3.68	
						Radium-228	2252.00	73.55	3.88	
						Thorium-228	2252.00	73.55	3.88	
						Thorium-230	1713.00	353.90	240.30	
						Thorium-232	2252.00	73.55	3.88	
						Uranium-235	-5.59	11.09	7.06	
						Uranium-238	54.36	16.63	23.51	
HTZ69432	HTZ69432	03/20/02	0	0.5	0.0	Actinium-227	-2.54	1.94	2.71	115.75
						Americium-241	-0.36	3.30	5.38	
						Cesium-137	0.64	0.26	0.38	
						Potassium-40	0.80	2.70	4.54	
						Protactinium-231	-1.30	10.15	13.02	
						Radium-226	578.70	15.54	1.01	
						Radium-228	2.10	0.73	1.08	
						Thorium-228	2.10	0.73	1.08	
						Thorium-230	-49.73	167.60	271.20	
						Thorium-232	2.10	0.73	1.08	
						Uranium-235	-0.23	4.03	2.92	
						Uranium-238	-5.00	22.29	36.23	
HTZ69436	HTZ69436	03/21/02	0	0.5	0.0	Actinium-227	0.41	0.10	0.18	0.81
						Americium-241	0.03	0.04	0.06	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	9.76	0.82	0.31	
						Protactinium-231	-0.09	0.59	0.88	
						Radium-226	6.49	0.22	0.08	
						Radium-228	0.99	0.08	0.08	
						Thorium-228	0.99	0.08	0.08	
						Thorium-230	3.04	4.30	6.44	
						Thorium-232	0.99	0.08	0.08	
						Uranium-235	0.49	0.14	0.18	
						Uranium-238	4.62	0.83	0.62	
HTZ69437	HTZ69437	03/21/02	0	0.5	0.0	Actinium-227	0.16	0.11	0.19	0.68
						Americium-241	0.02	0.04	0.06	
						Cesium-137	0.00	0.02	0.02	
						Potassium-40	9.28	0.82	0.31	
						Protactinium-231	0.32	0.56	0.87	
						Radium-226	5.94	0.20	0.07	
						Radium-228	0.86	0.07	0.07	
						Thorium-228	0.86	0.07	0.07	
						Thorium-230	1.39	3.78	6.10	
						Thorium-232	0.86	0.07	0.07	
						Uranium-235	0.30	0.12	0.18	
						Uranium-238	3.94	0.65	0.59	

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
HTZ69451	HTZ69451	04/12/02	0	0.5	0.0	Actinium-227	3.02	0.41	0.62	11.06
						Americium-241	-0.12	0.39	0.55	
						Cesium-137	0.05	0.05	0.08	
						Potassium-40	1.23	0.70	0.76	
						Protactinium-231	1.66	1.79	2.72	
						Radium-226	50.67	1.40	0.20	
						Radium-228	6.24	0.29	0.22	
						Thorium-228	6.24	0.29	0.22	
						Thorium-230	-1.61	22.96	35.30	
						Thorium-232	6.24	0.29	0.22	
						Uranium-235	1.79	0.66	1.40	
						Uranium-238	22.66	4.02	4.15	
HTZ69452	HTZ69452	04/12/02	0	0.5	0.0	Actinium-227	1.93	0.22	0.42	12.03
						Americium-241	0.03	0.30	0.42	
						Cesium-137	-0.03	0.04	0.06	
						Potassium-40	1.59	0.59	0.59	
						Protactinium-231	1.01	1.35	2.03	
						Radium-226	54.23	1.47	0.16	
						Radium-228	8.03	0.31	0.16	
						Thorium-228	8.03	0.31	0.16	
						Thorium-230	18.59	21.78	26.68	
						Thorium-232	8.03	0.31	0.16	
						Uranium-235	1.93	0.54	1.04	
						Uranium-238	17.82	2.73	3.18	
HTZ69453	HTZ69453	04/12/02	0	0.5	0.0	Actinium-227	1.42	0.18	0.34	8.24
						Americium-241	0.28	0.24	0.34	
						Cesium-137	-0.01	0.03	0.05	
						Potassium-40	1.75	0.49	0.47	
						Protactinium-231	1.08	1.08	1.64	
						Radium-226	38.34	1.05	0.13	
						Radium-228	5.04	0.21	0.13	
						Thorium-228	5.04	0.21	0.13	
						Thorium-230	12.35	14.21	22.08	
						Thorium-232	5.04	0.21	0.13	
						Uranium-235	1.13	0.43	0.86	
						Uranium-238	17.00	2.61	2.58	
HTZ69501	HTZ69501	06/14/02	0	0.5	0.0	Actinium-227	0.02	0.15	0.22	0.37
						Americium-241	0.05	0.09	0.15	
						Cesium-137	0.07	0.03	0.03	
						Potassium-40	9.72	0.92	0.38	
						Protactinium-231	0.32	0.67	1.05	
						Radium-226	4.00	0.16	0.09	
						Radium-228	0.95	0.09	0.10	
						Thorium-228	1.34	0.68	0.47	
						Thorium-230	3.38	1.18	0.35	
						Thorium-232	0.57	0.43	0.47	
						Uranium-235	0.17	0.29	0.49	
						Uranium-238	5.68	1.49	1.24	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
HTZ70904	HTZ70904	10/28/02	0	0.5	0.0	Actinium-227	2.26	0.15	0.20	3.86
						Americium-241	0.44	0.32	0.51	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	7.80	0.66	0.23	
						Protactinium-231	2.07	0.60	1.06	
						Radium-226	3.30	0.13	0.08	
						Radium-228	0.89	0.08	0.09	
						Thorium-228	0.97	0.45	0.32	
						Thorium-230	7.23	1.58	0.26	
						Thorium-232	0.92	0.43	0.12	
						Uranium-235	6.18	0.46	0.55	
	Uranium-238	141.50	7.88	3.64						
	HTZ70906	10/28/02	1	1.5		Actinium-227	0.65	0.09	0.16	1.04
						Americium-241	0.23	0.19	0.31	
						Cesium-137	0.01	0.02	0.02	
						Potassium-40	9.31	0.72	0.19	
						Protactinium-231	0.81	0.51	0.81	
						Radium-226	2.79	0.11	0.06	
						Radium-228	0.85	0.07	0.06	
						Thorium-228	0.94	0.45	0.24	
						Thorium-230	4.86	1.23	0.24	
						Thorium-232	0.75	0.40	0.13	
						Uranium-235	2.03	0.26	0.40	
Uranium-238						43.95	3.42	2.26		
MIP60307	MIP60307	06/19/02	2.5	3.0		Actinium-227	0.00	0.00	0.52	0.13
						Americium-241	0.00	0.00	0.11	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	6.77	0.33	0.44	
						Protactinium-231	0.00	0.00	1.70	
						Radium-226	1.66	0.03	0.07	
						Radium-228	0.70	0.03	0.10	
						Thorium-228	0.70	0.03	0.10	
						Thorium-230	0.00	0.00	10.10	
						Thorium-232	0.70	0.03	0.10	
						Uranium-235	0.33	0.04	0.15	
						Uranium-238	8.10	0.43	0.84	
						MIP60712	MIP60712	10/07/02	1	
Americium-241	0.00	0.00	0.10							
Cesium-137	0.00	0.00	0.07							
Potassium-40	0.00	0.00	1.55							
Protactinium-231	0.70	0.26	1.15							
Radium-226	1.57	0.04	0.10							
Radium-228	0.49	0.03	0.12							
Thorium-228	0.49	0.03	0.12							
Thorium-230	3.38	1.28	5.80							
Thorium-232	0.49	0.03	0.12							
Uranium-235	0.19	0.04	0.20							
Uranium-238	2.51	0.20	0.82							

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**PSC Metals Vicinity Property (DT-8)**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
PSC00135	PSC00135	05/22/02	0	0.5	0.0	Actinium-227	0.22	0.09	0.15	0.96
						Americium-241	-0.01	0.03	0.05	
						Cesium-137	0.00	0.02	0.02	
						Potassium-40	2.90	0.48	0.26	
						Protactinium-231	0.09	0.52	0.79	
						Radium-226	4.78	0.17	0.07	
						Radium-228	0.92	0.07	0.07	
						Thorium-228	0.92	0.07	0.07	
						Thorium-230	6.59	3.83	5.04	
						Thorium-232	0.92	0.07	0.07	
						Uranium-235	0.09	0.23	0.38	
						Uranium-238	3.07	0.58	0.47	
						PSC00136	PSC00136	05/22/02	1.5	
Americium-241	0.00	0.00	0.12							
Cesium-137	0.00	0.00	0.07							
Potassium-40	6.64	0.36	0.53							
Protactinium-231	0.00	0.00	1.98							
Radium-226	1.98	0.04	0.08							
Radium-228	0.68	0.03	0.11							
Thorium-228	0.68	0.03	0.11							
Thorium-230	0.00	0.00	10.60							
Thorium-232	0.68	0.03	0.11							
Uranium-235	0.18	0.04	0.17							
Uranium-238	3.77	0.29	0.88							
PSC00137	PSC00137	05/22/02	2	2.5						Actinium-227
						Americium-241	0.02	0.01	0.06	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	10.14	0.46	0.51	
						Protactinium-231	0.00	0.00	1.71	
						Radium-226	1.33	0.03	0.06	
						Radium-228	0.56	0.03	0.10	
						Thorium-228	0.56	0.03	0.10	
						Thorium-230	0.00	0.00	9.61	
						Thorium-232	0.56	0.03	0.10	
						Uranium-235	0.00	0.00	0.31	
						Uranium-238	1.97	0.21	0.76	
						PSC00138	PSC00138	05/22/02	0	0.5
Americium-241	0.01	0.04	0.06							
Cesium-137	0.03	0.02	0.03							
Potassium-40	7.50	0.76	0.28							
Protactinium-231	0.09	0.58	0.88							
Radium-226	3.71	0.14	0.08							
Radium-228	2.42	0.13	0.08							
Thorium-228	2.42	0.13	0.08							
Thorium-230	2.14	4.27	6.36							
Thorium-232	2.42	0.13	0.08							
Uranium-235	0.02	0.26	0.44							
Uranium-238	2.59	0.74	0.61							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
PSC00138	PSC00151	06/06/02	1.5	2.0		Actinium-227	0.00	0.00	0.56	0.00
						Americium-241	0.00	0.00	0.09	
						Cesium-137	0.03	0.01	0.05	
						Potassium-40	3.53	0.31	0.49	
						Protactinium-231	0.00	0.00	1.82	
						Radium-226	0.54	0.02	0.08	
						Radium-228	0.34	0.03	0.12	
						Thorium-228	0.34	0.03	0.12	
						Thorium-230	0.00	0.00	8.23	
						Thorium-232	0.34	0.03	0.12	
						Uranium-235	0.00	0.00	0.32	
						Uranium-238	0.74	0.16	0.65	
	PSC00152	06/06/02	2.5	3.0		Actinium-227	0.34	0.21	0.29	0.43
						Americium-241	0.05	0.11	0.18	
						Cesium-137	0.00	0.02	0.04	
						Potassium-40	10.75	1.03	0.41	
						Protactinium-231	-0.35	0.82	1.22	
						Radium-226	5.45	0.22	0.11	
						Radium-228	1.22	0.11	0.12	
						Thorium-228	1.22	0.11	0.12	
						Thorium-230	-5.65	8.96	14.47	
						Thorium-232	1.22	0.11	0.12	
						Uranium-235	-0.01	0.38	0.63	
						Uranium-238	4.55	1.54	1.57	
	PSC00153	06/06/02	4	4.5		Actinium-227	0.00	0.00	0.56	0.02
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.03	0.01	0.05	
						Potassium-40	4.61	0.28	0.49	
						Protactinium-231	0.00	0.00	1.84	
						Radium-226	1.56	0.03	0.07	
						Radium-228	0.68	0.03	0.10	
						Thorium-228	0.68	0.03	0.10	
						Thorium-230	0.00	0.00	9.77	
						Thorium-232	0.68	0.03	0.10	
						Uranium-235	0.12	0.03	0.16	
						Uranium-238	2.33	0.22	0.81	
	PSC00154	06/06/02	4	4.5		Actinium-227	0.00	0.00	0.62	0.02
						Americium-241	0.02	0.01	0.06	
						Cesium-137	0.05	0.01	0.05	
						Potassium-40	4.97	0.29	0.49	
						Protactinium-231	0.00	0.00	2.02	
						Radium-226	1.45	0.03	0.07	
Radium-228						1.14	0.04	0.11		
Thorium-228						1.14	0.04	0.11		
Thorium-230						0.00	0.00	9.98		
Thorium-232						1.14	0.04	0.11		
Uranium-235						0.19	0.04	0.16		
Uranium-238						1.90	0.21	0.81		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
PSC00139	PSC00139	05/22/02	0	0.5	0.0	Actinium-227	0.18	0.29	0.45	1.18
						Americium-241	-0.04	0.11	0.16	
						Cesium-137	0.00	0.05	0.08	
						Potassium-40	9.32	1.45	0.75	
						Protactinium-231	-0.77	1.24	1.82	
						Radium-226	4.54	0.25	0.19	
						Radium-228	0.90	0.17	0.19	
						Thorium-228	0.90	0.17	0.19	
						Thorium-230	-2.24	9.03	14.49	
						Thorium-232	0.90	0.17	0.19	
						Uranium-235	0.79	0.76	0.93	
						Uranium-238	7.56	1.69	1.50	
						PSC00140	PSC00140	05/22/02	0.5	
Americium-241	-0.03	0.11	0.16							
Cesium-137	-0.04	0.04	0.07							
Potassium-40	13.56	1.43	0.62							
Protactinium-231	1.28	1.03	1.82							
Radium-226	4.39	0.22	0.17							
Radium-228	1.07	0.16	0.17							
Thorium-228	1.07	0.16	0.17							
Thorium-230	-3.71	9.16	14.59							
Thorium-232	1.07	0.16	0.17							
Uranium-235	1.53	0.58	0.85							
Uranium-238	28.05	2.80	1.44							
PSC00141	PSC00141	05/22/02	2.9	3.4						Actinium-227
						Americium-241	0.00	0.00	0.13	
						Cesium-137	0.00	0.00	0.08	
						Potassium-40	9.43	0.44	0.58	
						Protactinium-231	0.00	0.00	2.17	
						Radium-226	2.85	0.05	0.09	
						Radium-228	0.65	0.03	0.13	
						Thorium-228	0.65	0.03	0.13	
						Thorium-230	5.40	1.59	7.14	
						Thorium-232	0.65	0.03	0.13	
						Uranium-235	0.21	0.04	0.19	
						Uranium-238	4.07	0.30	0.98	
						PSC00142	PSC00142	05/22/02	0	0.5
Americium-241	0.00	0.00	0.14							
Cesium-137	0.09	0.01	0.05							
Potassium-40	9.31	0.43	0.47							
Protactinium-231	0.00	0.00	2.01							
Radium-226	1.77	0.04	0.08							
Radium-228	0.91	0.04	0.11							
Thorium-228	0.91	0.04	0.11							
Thorium-230	0.00	0.00	12.40							
Thorium-232	0.91	0.04	0.11							
Uranium-235	0.62	0.05	0.18							
Uranium-238	14.68	0.71	1.03							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
PSC00142	PSC00143	05/22/02	0.5	1.0		Actinium-227	0.00	0.00	0.60	0.18
						Americium-241	0.00	0.00	0.12	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	7.60	0.39	0.56	
						Protactinium-231	0.00	0.00	2.07	
						Radium-226	2.31	0.05	0.08	
						Radium-228	0.67	0.03	0.12	
						Thorium-228	0.67	0.03	0.12	
						Thorium-230	3.46	1.49	6.79	
						Thorium-232	0.67	0.03	0.12	
						Uranium-235	0.21	0.04	0.18	
						Uranium-238	5.77	0.36	0.92	
	PSC00144	05/22/02	3	3.5		Actinium-227	0.00	0.00	0.77	0.04
						Americium-241	0.00	0.00	0.14	
						Cesium-137	0.00	0.00	0.10	
						Potassium-40	6.59	0.41	0.72	
						Protactinium-231	0.00	0.00	2.58	
						Radium-226	2.44	0.05	0.10	
						Radium-228	0.66	0.04	0.16	
						Thorium-228	0.66	0.04	0.16	
						Thorium-230	0.00	0.00	14.00	
						Thorium-232	0.66	0.04	0.16	
						Uranium-235	0.11	0.05	0.22	
Uranium-238	3.27	0.31	1.12							
PSC00145	PSC00145	05/22/02	0	0.5	0.0	Actinium-227	0.20	0.28	0.42	2.18
						Americium-241	0.06	0.12	0.18	
						Cesium-137	0.54	0.08	0.06	
						Potassium-40	11.05	1.23	0.64	
						Protactinium-231	1.10	1.63	2.00	
						Radium-226	7.27	0.29	0.18	
						Radium-228	1.13	0.14	0.19	
						Thorium-228	1.13	0.14	0.19	
						Thorium-230	-2.40	11.03	16.19	
						Thorium-232	1.13	0.14	0.19	
						Uranium-235	2.41	0.58	0.88	
						Uranium-238	47.30	3.97	1.61	
	PSC00146	05/22/02	0.5	1.0		Actinium-227	0.00	0.00	0.87	0.01
						Americium-241	0.00	0.00	0.15	
						Cesium-137	0.00	0.00	0.11	
						Potassium-40	9.29	0.54	0.88	
						Protactinium-231	0.00	0.00	2.84	
						Radium-226	1.88	0.05	0.11	
						Radium-228	0.86	0.05	0.18	
						Thorium-228	0.86	0.05	0.18	
						Thorium-230	0.00	0.00	14.10	
						Thorium-232	0.86	0.05	0.18	
						Uranium-235	0.00	0.00	0.47	
Uranium-238	2.09	0.30	1.19							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
PSC00145	PSC00147	05/22/02	2	2.5		Actinium-227	0.00	0.00	0.57	0.01
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	10.02	0.45	0.50	
						Protactinium-231	0.00	0.00	1.79	
						Radium-226	1.34	0.03	0.07	
						Radium-228	0.80	0.03	0.10	
						Thorium-228	0.80	0.03	0.10	
						Thorium-230	0.00	0.00	9.35	
						Thorium-232	0.80	0.03	0.10	
						Uranium-235	0.00	0.00	0.31	
						Uranium-238	1.79	0.20	0.78	
PSC00148	PSC00148	05/23/02	0	0.5	0.0	Actinium-227	0.05	0.15	0.23	0.43
						Americium-241	0.03	0.05	0.07	
						Cesium-137	0.07	0.03	0.03	
						Potassium-40	9.59	0.92	0.37	
						Protactinium-231	0.87	0.66	1.07	
						Radium-226	4.75	0.18	0.09	
						Radium-228	1.01	0.10	0.10	
						Thorium-228	1.01	0.10	0.10	
						Thorium-230	-3.08	4.83	6.98	
						Thorium-232	1.01	0.10	0.10	
						Uranium-235	0.01	0.29	0.48	
						Uranium-238	2.57	0.81	0.70	
	PSC00149	05/23/02	1	1.5		Actinium-227	0.00	0.00	0.57	0.37
						Americium-241	0.04	0.02	0.08	
						Cesium-137	0.00	0.00	0.10	
						Potassium-40	2.68	0.22	0.67	
						Protactinium-231	0.00	0.00	2.45	
						Radium-226	7.07	0.11	0.09	
						Radium-228	0.35	0.03	0.15	
						Thorium-228	0.35	0.03	0.15	
PSC00150	05/23/02	2.5	3.0		Actinium-227	0.34	0.23	0.43	0.56	
					Americium-241	-0.04	0.10	0.14		
					Cesium-137	-0.03	0.04	0.07		
					Potassium-40	9.46	1.29	0.75		
					Protactinium-231	0.57	1.10	1.93		
					Radium-226	9.02	0.34	0.17		
					Radium-228	0.98	0.14	0.18		
					Thorium-228	0.98	0.14	0.18		
Thorium-230	11.02	9.92	13.20							
Thorium-232	0.98	0.14	0.18							
Uranium-235	0.26	0.53	0.90							
Uranium-238	8.45	1.29	1.38							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
PSC00176	PSC00176	06/25/02	0	0.5	0.0	Actinium-227	0.39	0.18	0.29	1.34
						Americium-241	0.04	0.06	0.09	
						Cesium-137	0.05	0.03	0.04	
						Potassium-40	13.24	1.16	0.44	
						Protactinium-231	0.75	0.76	1.20	
						Radium-226	8.43	0.28	0.11	
						Radium-228	1.44	0.12	0.11	
						Thorium-228	1.44	0.12	0.11	
						Thorium-230	7.74	7.13	8.50	
						Thorium-232	1.44	0.12	0.11	
						Uranium-235	0.44	0.28	0.57	
						Uranium-238	7.01	1.17	0.81	
PSC00177	PSC00177	06/25/02	0	0.5	0.0	Actinium-227	0.01	0.30	0.44	1.31
						Americium-241	0.10	0.10	0.16	
						Cesium-137	0.56	0.09	0.08	
						Potassium-40	10.61	1.46	0.72	
						Protactinium-231	0.48	1.26	1.99	
						Radium-226	4.68	0.25	0.18	
						Radium-228	1.03	0.15	0.20	
						Thorium-228	1.03	0.15	0.20	
						Thorium-230	5.43	9.37	14.36	
						Thorium-232	1.03	0.15	0.20	
						Uranium-235	0.75	0.58	0.99	
						Uranium-238	13.67	2.15	1.45	
PSC00205	PSC00205	07/22/02	0	0.5	0.0	Actinium-227	0.00	0.00	1.40	1.22
						Americium-241	0.00	0.00	0.28	
						Cesium-137	0.07	0.03	0.11	
						Potassium-40	7.81	0.67	1.55	
						Protactinium-231	0.00	0.00	4.67	
						Radium-226	4.02	0.10	0.20	
						Radium-228	0.97	0.07	0.28	
						Thorium-228	0.97	0.07	0.28	
						Thorium-230	14.12	3.54	15.40	
						Thorium-232	0.97	0.07	0.28	
						Uranium-235	0.00	0.00	0.85	
						Uranium-238	4.87	0.57	2.14	
PSC00206	PSC00206	07/22/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.57	0.00
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.10	0.01	0.04	
						Potassium-40	5.43	0.32	0.60	
						Protactinium-231	0.00	0.00	1.83	
						Radium-226	1.20	0.03	0.07	
						Radium-228	0.62	0.03	0.11	
						Thorium-228	0.62	0.03	0.11	
						Thorium-230	0.00	0.00	9.68	
						Thorium-232	0.62	0.03	0.11	
						Uranium-235	0.00	0.00	0.33	
						Uranium-238	1.17	0.19	0.79	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
PSC00207	PSC00207	07/22/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.56	0.00
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	7.63	0.39	0.58	
						Protactinium-231	0.00	0.00	1.78	
						Radium-226	0.95	0.03	0.07	
						Radium-228	0.77	0.03	0.10	
						Thorium-228	0.77	0.03	0.10	
						Thorium-230	0.00	0.00	9.49	
						Thorium-232	0.77	0.03	0.10	
						Uranium-235	0.16	0.03	0.15	
						Uranium-238	1.04	0.19	0.80	
PSC00208	PSC00208	07/22/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.57	0.27
						Americium-241	0.00	0.00	0.11	
						Cesium-137	0.00	0.00	0.06	
						Potassium-40	2.64	0.19	0.43	
						Protactinium-231	0.00	0.00	1.84	
						Radium-226	1.48	0.03	0.07	
						Radium-228	1.29	0.04	0.11	
						Thorium-228	1.29	0.04	0.11	
						Thorium-230	2.51	1.29	5.93	
						Thorium-232	1.29	0.04	0.11	
						Uranium-235	0.11	0.03	0.16	
						Uranium-238	1.47	0.20	0.80	
PSC00209	PSC00209	07/22/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.55	0.21
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.06	0.01	0.04	
						Potassium-40	3.34	0.23	0.49	
						Protactinium-231	0.00	0.00	1.80	
						Radium-226	1.59	0.03	0.07	
						Radium-228	0.66	0.03	0.10	
						Thorium-228	0.66	0.03	0.10	
						Thorium-230	2.83	1.27	5.81	
						Thorium-232	0.66	0.03	0.10	
						Uranium-235	0.00	0.00	0.33	
						Uranium-238	2.08	0.21	0.78	
PSC00212	PSC00212	07/22/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.65	0.39
						Americium-241	0.00	0.00	0.12	
						Cesium-137	0.05	0.01	0.05	
						Potassium-40	7.07	0.35	0.62	
						Protactinium-231	0.00	0.00	2.10	
						Radium-226	3.14	0.06	0.09	
						Radium-228	1.14	0.04	0.12	
						Thorium-228	1.14	0.04	0.12	
						Thorium-230	3.20	1.51	6.94	
						Thorium-232	1.14	0.04	0.12	
						Uranium-235	0.00	0.00	0.38	
						Uranium-238	3.88	0.29	0.94	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
PSC00215	PSC00215	07/23/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.59	0.00
						Americium-241	0.02	0.01	0.06	
						Cesium-137	0.03	0.01	0.05	
						Potassium-40	8.70	0.46	0.76	
						Protactinium-231	0.00	0.00	1.89	
						Radium-226	0.75	0.02	0.08	
						Radium-228	0.62	0.03	0.11	
						Thorium-228	0.62	0.03	0.11	
						Thorium-230	0.00	0.00	9.63	
						Thorium-232	0.62	0.03	0.11	
						Uranium-235	0.13	0.03	0.15	
						Uranium-238	1.49	0.20	0.79	
PSC00216	PSC00216	07/23/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.53	0.24
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.14	0.01	0.04	
						Potassium-40	6.20	0.32	0.54	
						Protactinium-231	0.00	0.00	1.75	
						Radium-226	1.96	0.04	0.07	
						Radium-228	0.69	0.03	0.10	
						Thorium-228	0.69	0.03	0.10	
						Thorium-230	2.24	1.27	5.86	
						Thorium-232	0.69	0.03	0.10	
						Uranium-235	0.27	0.03	0.15	
						Uranium-238	3.77	0.26	0.80	
PSC00217	PSC00217	07/23/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.54	0.23
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.12	0.01	0.04	
						Potassium-40	6.94	0.35	0.53	
						Protactinium-231	0.00	0.00	1.79	
						Radium-226	1.59	0.03	0.07	
						Radium-228	0.66	0.03	0.11	
						Thorium-228	0.66	0.03	0.11	
						Thorium-230	3.67	1.27	5.73	
						Thorium-232	0.66	0.03	0.11	
						Uranium-235	0.00	0.00	0.32	
						Uranium-238	3.87	0.27	0.79	
PSC00218	PSC00218	07/23/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.52	0.20
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.05	0.01	0.04	
						Potassium-40	6.53	0.34	0.55	
						Protactinium-231	0.00	0.00	1.68	
						Radium-226	1.36	0.03	0.07	
						Radium-228	0.63	0.03	0.10	
						Thorium-228	0.63	0.03	0.10	
						Thorium-230	2.78	1.24	5.64	
						Thorium-232	0.63	0.03	0.10	
						Uranium-235	0.18	0.03	0.14	
						Uranium-238	2.86	0.23	0.75	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
PSC00220	PSC00220	07/24/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.60	0.00
						Americium-241	0.00	0.00	0.11	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	9.56	0.47	0.55	
						Protactinium-231	0.00	0.00	1.85	
						Radium-226	0.98	0.03	0.08	
						Radium-228	0.63	0.03	0.11	
						Thorium-228	0.63	0.03	0.11	
						Thorium-230	0.00	0.00	9.95	
						Thorium-232	0.63	0.03	0.11	
						Uranium-235	0.00	0.00	0.32	
						Uranium-238	1.38	0.20	0.82	
PSC00233	PSC00233	10/23/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.88	0.03
						Americium-241	0.00	0.00	0.16	
						Cesium-137	0.12	0.02	0.06	
						Potassium-40	7.47	0.48	0.49	
						Protactinium-231	0.00	0.00	2.92	
						Radium-226	2.75	0.06	0.10	
						Radium-228	0.95	0.04	0.15	
						Thorium-228	0.95	0.04	0.15	
						Thorium-230	0.00	0.00	15.30	
						Thorium-232	0.95	0.04	0.15	
						Uranium-235	0.00	0.00	0.49	
						Uranium-238	2.96	0.23	0.96	
	PSC00234	10/23/02	1	1.5		Actinium-227	0.00	0.00	0.92	0.03
						Americium-241	0.00	0.00	0.16	
						Cesium-137	0.00	0.00	0.11	
						Potassium-40	7.27	0.47	0.46	
						Protactinium-231	0.00	0.00	2.90	
						Radium-226	2.38	0.05	0.10	
						Radium-228	0.99	0.04	0.16	
						Thorium-228	0.99	0.04	0.16	
Thorium-230	0.00	0.00	15.20							
Thorium-232	0.99	0.04	0.16							
Uranium-235	0.00	0.00	0.48							
Uranium-238	2.81	0.26	0.97							
PSC00235	PSC00235	10/23/02	0	0.5	0.0	Actinium-227	0.00	0.00	0.88	0.02
						Americium-241	0.00	0.00	0.15	
						Cesium-137	0.00	0.00	0.11	
						Potassium-40	7.09	0.62	0.44	
						Protactinium-231	0.00	0.00	2.75	
						Radium-226	2.19	0.05	0.10	
						Radium-228	0.96	0.04	0.14	
						Thorium-228	0.96	0.04	0.14	
						Thorium-230	0.00	0.00	14.90	
						Thorium-232	0.96	0.04	0.14	
						Uranium-235	0.00	0.00	0.45	
						Uranium-238	2.57	0.21	0.91	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
PSC00235	PSC00236	10/23/02	1	1.5		Actinium-227	0.00	0.00	0.89	0.01
						Americium-241	0.00	0.00	0.16	
						Cesium-137	0.00	0.00	0.11	
						Potassium-40	5.52	0.45	0.54	
						Protactinium-231	0.00	0.00	2.78	
						Radium-226	1.77	0.05	0.09	
						Radium-228	0.82	0.04	0.15	
						Thorium-228	0.82	0.04	0.15	
						Thorium-230	0.00	0.00	14.80	
						Thorium-232	0.82	0.04	0.15	
						Uranium-235	0.00	0.00	0.46	
						Uranium-238	1.83	0.19	0.92	
SLD02670	SLD02670	08/25/99	0	0.5	0.0	Actinium-227	0.37	0.19	0.29	1.26
						Americium-241	-0.04	0.26	0.41	
						Cesium-137	0.02	0.03	0.04	
						Potassium-40	7.89	1.14	0.34	
						Protactinium-231	0.04	0.76	1.16	
						Radium-226	2.76	0.17	0.07	
						Radium-228	0.80	0.12	0.10	
						Thorium-228	0.98	0.46	0.27	
						Thorium-230	6.28	1.48	0.31	
						Thorium-232	0.95	0.44	0.12	
						Uranium-235	1.28	0.24	0.29	
						Uranium-238	21.18	3.48	4.76	
	SLD02747	08/25/99	3	3.5		Actinium-227	0.25	0.16	0.26	0.32
						Americium-241	0.09	0.20	0.31	
						Cesium-137	0.01	0.02	0.04	
						Potassium-40	9.44	1.25	0.35	
						Protactinium-231	0.17	0.67	1.03	
						Radium-226	2.80	0.17	0.06	
						Radium-228	0.96	0.11	0.10	
						Thorium-228	2.39	0.88	0.30	
						Thorium-230	6.22	1.67	0.16	
						Thorium-232	1.46	0.66	0.36	
						Uranium-235	0.25	0.16	0.24	
						Uranium-238	2.00	1.82	4.35	
SLD02824	08/25/99	5	5.5		Actinium-227	0.15	0.15	0.24	0.02	
					Americium-241	0.14	0.20	0.32		
					Cesium-137	0.00	0.02	0.04		
					Potassium-40	13.75	1.72	0.31		
					Protactinium-231	-0.43	0.62	1.04		
					Radium-226	2.21	0.14	0.07		
					Radium-228	1.00	0.12	0.10		
					Thorium-228	1.17	0.52	0.29		
					Thorium-230	1.96	0.70	0.32		
					Thorium-232	1.08	0.49	0.24		
					Uranium-235	0.34	0.18	0.24		
					Uranium-238	3.43	1.94	4.60		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD02671	SLD02671	08/25/99	0	0.5	0.0	Actinium-227	0.41	0.16	0.28	0.51
						Americium-241	0.16	0.23	0.37	
						Cesium-137	0.06	0.03	0.04	
						Potassium-40	10.18	1.36	0.32	
						Protactinium-231	0.20	0.81	1.25	
						Radium-226	3.98	0.23	0.08	
						Radium-228	0.98	0.12	0.12	
						Thorium-228	0.67	0.36	0.26	
						Thorium-230	3.87	1.03	0.12	
						Thorium-232	0.60	0.34	0.12	
						Uranium-235	0.30	0.19	0.29	
						Uranium-238	7.13	2.40	4.80	
						SLD02748	SLD02748	08/25/99	3	
Americium-241	0.16	0.22	0.35							
Cesium-137	0.00	0.02	0.04							
Potassium-40	11.44	1.50	0.37							
Protactinium-231	0.29	0.70	1.10							
Radium-226	2.68	0.17	0.07							
Radium-228	0.96	0.12	0.10							
Thorium-228	1.01	0.49	0.26							
Thorium-230	1.97	0.72	0.26							
Thorium-232	0.92	0.46	0.14							
Uranium-235	0.10	0.24	0.27							
Uranium-238	5.34	2.11	4.91							
SLD02825	SLD02825	08/25/99	5	5.5						Actinium-227
						Americium-241	0.17	0.17	0.27	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	15.64	1.93	0.32	
						Protactinium-231	-0.06	0.62	0.94	
						Radium-226	1.55	0.11	0.06	
						Radium-228	1.04	0.11	0.08	
						Thorium-228	1.37	0.64	0.36	
						Thorium-230	1.90	0.77	0.36	
						Thorium-232	1.87	0.75	0.16	
						Uranium-235	0.12	0.13	0.22	
						Uranium-238	1.32	1.94	4.19	
						SLD02672	SLD02672	08/25/99	0	0.5
Americium-241	0.05	0.25	0.39							
Cesium-137	-0.02	0.03	0.04							
Potassium-40	10.56	1.41	0.42							
Protactinium-231	0.49	0.81	1.26							
Radium-226	3.35	0.21	0.08							
Radium-228	1.15	0.13	0.12							
Thorium-228	1.02	0.51	0.35							
Thorium-230	3.97	1.15	0.32							
Thorium-232	1.51	0.62	0.26							
Uranium-235	0.71	0.22	0.29							
Uranium-238	13.06	2.94	5.29							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD02672	SLD02749	08/25/99	2.5	0.3		Actinium-227	0.20	0.13	0.21	0.02
						Americium-241	-0.03	0.17	0.26	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	17.67	2.13	0.25	
						Protactinium-231	0.38	0.77	0.91	
						Radium-226	1.07	0.08	0.06	
						Radium-228	1.04	0.11	0.08	
						Thorium-228	1.01	0.43	0.20	
						Thorium-230	1.09	0.45	0.11	
						Thorium-232	1.24	0.48	0.11	
						Uranium-235	0.04	0.13	0.20	
	Uranium-238	0.84	1.46	3.67						
	SLD02826	08/25/99	5	5.5		Actinium-227	0.15	0.11	0.18	0.01
						Americium-241	0.07	0.15	0.24	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	14.70	1.79	0.22	
						Protactinium-231	-0.02	0.52	0.79	
						Radium-226	0.93	0.07	0.05	
						Radium-228	0.84	0.10	0.08	
						Thorium-228	0.92	0.44	0.12	
						Thorium-230	1.15	0.50	0.12	
						Thorium-232	0.87	0.42	0.12	
Uranium-235						0.07	0.12	0.18		
Uranium-238	0.99	1.65	3.65							
SLD02673	SLD02673	08/24/99	0	0.5	0.0	Actinium-227	0.24	0.10	0.18	0.36
						Americium-241	0.02	0.04	0.06	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	12.24	1.36	0.33	
						Protactinium-231	0.44	0.59	0.93	
						Radium-226	3.21	0.17	0.06	
						Radium-228	1.16	0.11	0.08	
						Thorium-228	1.10	0.56	0.34	
						Thorium-230	3.49	1.09	0.15	
						Thorium-232	1.01	0.51	0.15	
						Uranium-235	0.29	0.19	0.20	
	Uranium-238	3.22	0.72	4.06						
	SLD02750	08/24/99	3.5	4.0		Actinium-227	0.42	0.15	0.24	0.12
						Americium-241	0.03	0.04	0.07	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	11.38	1.35	0.34	
						Protactinium-231	0.58	0.62	1.00	
						Radium-226	2.14	0.13	0.06	
						Radium-228	1.15	0.12	0.10	
						Thorium-228	1.55	0.65	0.27	
						Thorium-230	3.05	0.97	0.27	
						Thorium-232	1.64	0.65	0.14	
Uranium-235						0.16	0.14	0.19		
Uranium-238	2.40	0.72	3.79							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD02673	SLD02827	08/24/99	5	5.5		Actinium-227	0.12	0.12	0.19	0.02
						Americium-241	0.08	0.15	0.25	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	16.02	1.95	0.22	
						Protactinium-231	-0.13	0.56	0.84	
						Radium-226	1.07	0.08	0.05	
						Radium-228	0.89	0.11	0.09	
						Thorium-228	1.50	0.61	0.30	
						Thorium-230	1.32	0.57	0.37	
						Thorium-232	1.21	0.54	0.14	
						Uranium-235	0.06	0.11	0.19	
						Uranium-238	2.53	1.83	4.11	
						SLD02674	SLD02674	08/25/99	0	0.5
Americium-241	-0.12	0.21	0.33							
Cesium-137	0.00	0.02	0.04							
Potassium-40	10.85	1.43	0.38							
Protactinium-231	0.27	0.76	1.18							
Radium-226	2.80	0.17	0.08							
Radium-228	1.07	0.13	0.11							
Thorium-228	1.07	0.13	0.11							
Thorium-230	6.30	13.70	22.92							
Thorium-232	1.07	0.13	0.11							
Uranium-235	0.12	0.22	0.28							
Uranium-238	5.25	2.26	4.45							
SLD02751	08/25/99	2.5	4.0		Actinium-227					
					Americium-241		0.11	0.16	0.28	
					Cesium-137		-0.01	0.02	0.03	
					Potassium-40		15.87	1.94	0.27	
					Protactinium-231		0.62	0.65	0.96	
					Radium-226		1.21	0.09	0.06	
					Radium-228		0.95	0.11	0.09	
					Thorium-228		0.95	0.11	0.09	
Thorium-230	-1.02	10.42	18.02							
SLD02828	08/25/99	5	5.5		Actinium-227	0.00	0.12	0.19	0.43	
					Americium-241	0.04	0.14	0.24		
					Cesium-137	0.00	0.02	0.03		
					Potassium-40	16.22	1.96	0.23		
					Protactinium-231	0.11	0.51	0.79		
					Radium-226	0.99	0.07	0.05		
					Radium-228	0.94	0.10	0.07		
					Thorium-228	0.94	0.10	0.07		
					Thorium-230	7.27	9.28	16.38		
					Thorium-232	0.94	0.10	0.07		
Uranium-235	0.16	0.13	0.19							
Uranium-238	0.86	2.13	3.80							

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SLD02675	SLD02675	08/24/99	0	0.5	0.0	Actinium-227	0.06	0.18	0.28	0.32
						Americium-241	0.00	0.23	0.36	
						Cesium-137	0.02	0.03	0.04	
						Potassium-40	11.02	1.46	0.38	
						Protactinium-231	0.81	0.80	1.27	
						Radium-226	3.36	0.20	0.08	
						Radium-228	1.11	0.14	0.12	
						Thorium-228	1.55	0.67	0.35	
						Thorium-230	3.02	1.00	0.29	
						Thorium-232	0.87	0.48	0.16	
						Uranium-235	0.25	0.23	0.29	
						Uranium-238	4.80	2.34	4.77	
	SLD02752	08/24/99	3	3.5		Actinium-227	0.16	0.11	0.18	0.01
						Americium-241	0.08	0.15	0.24	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	15.62	1.88	0.23	
						Protactinium-231	0.23	0.49	0.77	
						Radium-226	0.95	0.07	0.05	
						Radium-228	0.96	0.10	0.08	
						Thorium-228	0.93	0.45	0.31	
						Thorium-230	0.76	0.40	0.23	
						Thorium-232	0.62	0.36	0.23	
						Uranium-235	0.07	0.10	0.18	
						Uranium-238	1.38	1.64	3.97	
	SLD02829	08/24/99	5.5	6.0		Actinium-227	0.21	0.10	0.25	0.03
						Americium-241	-0.04	0.18	0.28	
						Cesium-137	0.01	0.03	0.04	
						Potassium-40	16.63	2.10	0.30	
						Protactinium-231	0.09	0.65	1.01	
						Radium-226	1.08	0.09	0.07	
						Radium-228	1.02	0.13	0.10	
						Thorium-228	0.98	0.49	0.34	
						Thorium-230	1.46	0.60	0.26	
Thorium-232						0.80	0.43	0.25		
Uranium-235						0.05	0.14	0.23		
Uranium-238						3.78	2.14	5.03		
SLD03903	SLD03903	10/14/99	0.5	1.0	0.5	Actinium-227	0.07	0.12	0.19	0.57
						Americium-241	0.04	0.18	0.26	
						Cesium-137	0.09	0.03	0.03	
						Potassium-40	6.75	0.90	0.27	
						Protactinium-231	0.21	0.54	0.85	
						Radium-226	2.10	0.13	0.06	
						Radium-228	0.52	0.08	0.08	
						Thorium-228	0.52	0.08	0.08	
						Thorium-230	-7.52	10.63	16.47	
						Thorium-232	0.52	0.08	0.08	
						Uranium-235	0.53	0.14	0.19	
						Uranium-238	9.05	2.05	3.50	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD03903	SLD03904	10/14/99	1.5	2.0		Actinium-227	0.35	0.17	0.26	0.65
						Americium-241	-0.10	0.23	0.33	
						Cesium-137	0.00	0.03	0.04	
						Potassium-40	11.91	1.53	0.32	
						Protactinium-231	0.23	0.74	1.15	
						Radium-226	3.45	0.20	0.07	
						Radium-228	1.22	0.13	0.10	
						Thorium-228	1.22	0.13	0.10	
						Thorium-230	-2.08	13.83	21.96	
						Thorium-232	1.22	0.13	0.10	
						Uranium-235	0.26	0.17	0.27	
						Uranium-238	4.50	2.43	5.86	
SLD03905	SLD03905	10/14/99	0.5	1.0	0.5	Actinium-227	0.10	0.09	0.16	0.38
						Americium-241	-0.01	0.14	0.20	
						Cesium-137	0.24	0.05	0.02	
						Potassium-40	5.31	0.77	0.25	
						Protactinium-231	0.65	0.45	0.75	
						Radium-226	1.21	0.08	0.05	
						Radium-228	0.48	0.07	0.07	
						Thorium-228	0.48	0.07	0.07	
						Thorium-230	3.16	9.21	13.93	
						Thorium-232	0.48	0.07	0.07	
						Uranium-235	0.00	0.12	0.18	
						Uranium-238	3.60	1.46	3.19	
	SLD03906	10/14/99	1.5	2.0		Actinium-227	0.10	0.09	0.16	0.37
						Americium-241	0.03	0.13	0.22	
						Cesium-137	0.06	0.02	0.03	
						Potassium-40	8.26	1.07	0.22	
						Protactinium-231	0.19	0.50	0.79	
						Radium-226	1.40	0.09	0.05	
						Radium-228	0.67	0.08	0.06	
						Thorium-228	0.67	0.08	0.06	
Thorium-230	-0.04	9.64	14.26							
Thorium-232	0.67	0.08	0.06							
Uranium-235	0.13	0.14	0.18							
Uranium-238	2.61	1.19	2.60							
SLD03907	SLD03907	10/14/99	0.5	1.0		Actinium-227	0.29	0.10	0.14	0.42
						Americium-241	0.16	0.13	0.20	
						Cesium-137	0.22	0.05	0.02	
						Potassium-40	6.74	0.88	0.20	
						Protactinium-231	0.09	0.50	0.77	
						Radium-226	1.31	0.09	0.05	
						Radium-228	0.43	0.07	0.06	
						Thorium-228	0.43	0.07	0.06	
						Thorium-230	2.51	8.45	13.74	
						Thorium-232	0.43	0.07	0.06	
						Uranium-235	0.28	0.12	0.16	
						Uranium-238	6.21	1.58	2.63	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value						
SLD03907	SLD03908	10/14/99	1.5	2.0		Actinium-227	0.78	0.11	0.14	0.47						
						Americium-241	-0.07	0.14	0.22							
						Cesium-137	0.10	0.03	0.02							
						Potassium-40	5.89	0.79	0.22							
						Protactinium-231	1.19	0.61	0.90							
						Radium-226	1.32	0.09	0.04							
						Radium-228	0.46	0.07	0.06							
						Thorium-228	0.46	0.07	0.06							
						Thorium-230	1.21	10.62	15.73							
						Thorium-232	0.46	0.07	0.06							
						Uranium-235	0.49	0.14	0.18							
						Uranium-238	4.96	1.65	2.70							
SLD04122	SLD04122	11/05/99	0.5	1.0	0.5	Actinium-227	0.17	0.16	0.24	0.10						
						Americium-241	0.20	0.16	0.31							
						Cesium-137	0.04	0.03	0.03							
						Potassium-40	10.99	1.41	0.32							
						Protactinium-231	-0.16	0.72	1.08							
						Radium-226	2.58	0.16	0.07							
						Radium-228	1.03	0.13	0.10							
						Thorium-228	1.09	0.49	0.28							
						Thorium-230	2.38	0.78	0.28							
						Thorium-232	1.01	0.46	0.13							
						Uranium-235	0.37	0.17	0.23							
						Uranium-238	4.60	1.66	4.31							
	SLD04176	11/05/99	2.5	3.0	0.5	Actinium-227	0.21	0.12	0.18	0.01						
						Americium-241	0.09	0.15	0.23							
						Cesium-137	0.01	0.02	0.03							
						Potassium-40	13.84	1.69	0.24							
						Protactinium-231	0.00	0.49	0.76							
						Radium-226	1.25	0.09	0.05							
						Radium-228	0.85	0.09	0.07							
						Thorium-228	0.85	0.43	0.28							
						Thorium-230	1.13	0.50	0.24							
						Thorium-232	0.69	0.37	0.12							
						Uranium-235	0.13	0.12	0.17							
						Uranium-238	1.60	1.33	3.47							
						SLD04230	11/05/99	4.5	5.0		0.5	Actinium-227	0.08	0.11	0.17	0.01
												Americium-241	-0.03	0.14	0.22	
												Cesium-137	0.00	0.02	0.03	
												Potassium-40	15.42	1.86	0.24	
												Protactinium-231	-0.03	0.68	0.75	
												Radium-226	0.90	0.07	0.05	
Radium-228	0.94	0.10	0.07													
Thorium-228	1.37	0.51	0.20													
Thorium-230	1.22	0.49	0.27													
Thorium-232	0.93	0.41	0.20													
Uranium-235	0.02	0.10	0.18													
Uranium-238	0.86	1.55	3.70													

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD04133	SLD04133	11/02/99	0.2	0.8	0.2	Actinium-227	0.28	0.16	0.25	0.61
						Americium-241	0.05	0.10	0.15	
						Cesium-137	0.22	0.05	0.04	
						Potassium-40	11.11	1.28	0.40	
						Protactinium-231	0.14	0.67	1.04	
						Radium-226	2.67	0.15	0.07	
						Radium-228	0.95	0.11	0.10	
						Thorium-228	1.89	0.71	0.35	
						Thorium-230	3.31	1.01	0.14	
						Thorium-232	1.45	0.60	0.14	
						Uranium-235	0.89	0.19	0.23	
						Uranium-238	14.58	1.99	4.44	
	SLD04187	11/02/99	2.2	2.7	0.2	Actinium-227	0.34	0.12	0.21	0.10
						Americium-241	0.00	0.07	0.12	
						Cesium-137	0.08	0.03	0.03	
						Potassium-40	10.61	1.18	0.30	
						Protactinium-231	-0.18	0.57	0.87	
						Radium-226	2.23	0.12	0.06	
						Radium-228	0.86	0.10	0.08	
						Thorium-228	1.02	0.45	0.12	
						Thorium-230	2.38	0.75	0.12	
						Thorium-232	0.61	0.34	0.12	
						Uranium-235	0.28	0.15	0.21	
						Uranium-238	4.89	1.16	3.65	
	SLD04241	11/02/99	4.5	5.0	0.2	Actinium-227	0.13	0.10	0.15	0.00
						Americium-241	0.01	0.12	0.19	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	14.62	1.74	0.19	
						Protactinium-231	0.24	0.43	0.69	
						Radium-226	0.86	0.07	0.05	
						Radium-228	0.84	0.09	0.07	
						Thorium-228	0.92	0.47	0.37	
						Thorium-230	1.24	0.55	0.30	
Thorium-232						0.90	0.46	0.25		
Uranium-235						-0.02	0.09	0.15		
Uranium-238						0.49	1.15	3.31		
SLD04143	SLD04143	11/02/99	0.5	1.0	0.5	Actinium-227	0.07	0.08	0.12	0.12
						Americium-241	0.01	0.13	0.20	
						Cesium-137	0.02	0.01	0.03	
						Potassium-40	4.47	0.68	0.18	
						Protactinium-231	0.05	0.40	0.62	
						Radium-226	0.90	0.07	0.04	
						Radium-228	0.32	0.06	0.06	
						Thorium-228	0.52	0.32	0.28	
						Thorium-230	1.18	0.48	0.11	
						Thorium-232	0.63	0.34	0.06	
						Uranium-235	0.34	0.10	0.16	
						Uranium-238	7.30	1.65	2.31	

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD04143	SLD04197	11/02/99	2.5	3.0	0.5	Actinium-227	0.08	0.12	0.18	0.01
						Americium-241	0.04	0.14	0.23	
						Cesium-137	0.02	0.03	0.03	
						Potassium-40	12.21	1.51	0.21	
						Protactinium-231	-0.29	0.53	0.78	
						Radium-226	1.19	0.08	0.05	
						Radium-228	0.90	0.10	0.08	
						Thorium-228	1.24	0.54	0.35	
						Thorium-230	1.56	0.60	0.13	
						Thorium-232	0.95	0.45	0.13	
						Uranium-235	0.12	0.13	0.18	
						Uranium-238	2.45	1.32	3.62	
						SLD04251	11/02/99	4.5	5.0	0.5
	Americium-241	0.02	0.13	0.22						
	Cesium-137	0.01	0.02	0.03						
	Potassium-40	9.70	1.24	0.25						
	Protactinium-231	-0.07	0.51	0.77						
	Radium-226	1.48	0.10	0.05						
	Radium-228	0.79	0.09	0.07						
	Thorium-228	1.23	0.54	0.14						
	Thorium-230	2.45	0.82	0.14						
	Thorium-232	1.02	0.49	0.14						
	Uranium-235	0.18	0.14	0.16						
Uranium-238	2.88	1.37	3.46							
SLD04152	SLD04152	11/02/99	0.3	0.8	0.3	Actinium-227	-0.08	0.11	0.16	0.05
						Americium-241	0.05	0.14	0.22	
						Cesium-137	0.03	0.02	0.03	
						Potassium-40	6.23	0.86	0.22	
						Protactinium-231	0.36	0.60	0.72	
						Radium-226	1.44	0.10	0.05	
						Radium-228	0.40	0.07	0.07	
						Thorium-228	0.87	0.43	0.13	
						Thorium-230	1.96	0.69	0.13	
						Thorium-232	0.43	0.30	0.13	
						Uranium-235	0.21	0.12	0.17	
						Uranium-238	3.78	1.46	2.86	
						SLD04206	11/02/99	2.5	3.0	
	Americium-241	0.06	0.14	0.21						
	Cesium-137	0.00	0.02	0.03						
	Potassium-40	11.82	1.47	0.21						
	Protactinium-231	0.15	0.47	0.74						
	Radium-226	1.07	0.08	0.05						
	Radium-228	0.73	0.09	0.07						
	Thorium-228	1.07	0.50	0.36						
	Thorium-230	1.40	0.57	0.13						
	Thorium-232	1.35	0.56	0.13						
	Uranium-235	0.10	0.10	0.17						
Uranium-238	1.72	1.25	3.08							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value					
SLD04152	SLD04260	11/02/99	5	5.5		Actinium-227	0.11	0.12	0.19	0.03					
						Americium-241	-0.03	0.15	0.23						
						Cesium-137	0.01	0.02	0.03						
						Potassium-40	14.83	1.82	0.23						
						Protactinium-231	-0.03	0.50	0.78						
						Radium-226	1.05	0.08	0.05						
						Radium-228	0.84	0.10	0.08						
						Thorium-228	1.37	0.67	0.57						
						Thorium-230	2.20	0.85	0.37						
						Thorium-232	0.71	0.45	0.37						
						Uranium-235	0.07	0.11	0.19						
						Uranium-238	1.57	1.37	3.96						
						SLD04160	SLD04160	11/08/99	0.3	0.8	0.3	Actinium-227	1.86	1.18	3.29
Americium-241	0.14	0.09	0.14												
Cesium-137	-0.03	0.11	0.17												
Potassium-40	-0.05	0.39	0.59												
Protactinium-231	0.04	0.02	0.02												
Radium-226	11.23	1.36	0.19												
Radium-228	0.94	0.07	0.04												
Thorium-228	0.65	0.41	0.39												
Thorium-230	2.85	0.93	0.15												
Thorium-232	0.86	0.45	0.15												
Uranium-235	0.62	0.07	0.06												
Uranium-238	0.04	0.12	0.15												
SLD04214	11/08/99	2.5	3.0		Actinium-227							3.21	1.57	2.74	0.65
					Americium-241		0.08	0.11	0.17						
					Cesium-137		0.02	0.13	0.22						
					Potassium-40		-0.09	0.49	0.74						
					Protactinium-231		0.00	0.02	0.03						
					Radium-226		12.32	1.51	0.25						
					Radium-228		1.12	0.08	0.05						
					Thorium-228		1.06	0.50	0.35						
					Thorium-230		1.78	0.66	0.13						
					Thorium-232		0.91	0.45	0.13						
					Uranium-235		0.86	0.09	0.07						
					Uranium-238		0.00	0.16	0.18						
					SLD04268		11/08/99	4.5	5.0		Actinium-227	1.39	2.23	3.76	0.74
											Americium-241	0.10	0.11	0.16	
											Cesium-137	-0.12	0.14	0.20	
											Potassium-40	-0.23	0.46	0.68	
											Protactinium-231	0.04	0.02	0.03	
Radium-226	13.86	1.66	0.19												
Radium-228	0.95	0.07	0.05												
Thorium-228	0.94	0.45	0.13												
Thorium-230	1.36	0.55	0.13												
Thorium-232	0.84	0.42	0.13												
Uranium-235	0.88	0.10	0.07												
Uranium-238	0.12	0.15	0.17												

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD04347	SLD04347	02/21/00	1.5	2.2	0.5	Actinium-227	0.00	0.00	0.63	0.04
						Americium-241	0.00	0.00	0.14	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	6.42	0.39	0.67	
						Protactinium-231	0.00	0.00	2.04	
						Radium-226	1.38	0.04	0.11	
						Radium-228	0.59	0.03	0.14	
						Thorium-228	0.59	0.03	0.14	
						Thorium-230	0.00	0.00	12.90	
						Thorium-232	0.59	0.03	0.14	
						Uranium-235	0.00	0.00	0.42	
						Uranium-238	3.42	0.37	1.44	
SLD04348	SLD04348	02/21/00	1.6	2.2	0.5	Actinium-227	0.00	0.00	0.71	0.10
						Americium-241	0.00	0.00	0.16	
						Cesium-137	0.00	0.00	0.08	
						Potassium-40	11.28	0.52	0.80	
						Protactinium-231	0.00	0.00	2.25	
						Radium-226	1.93	0.04	0.14	
						Radium-228	1.05	0.05	0.17	
						Thorium-228	1.05	0.05	0.17	
						Thorium-230	0.00	0.00	14.80	
						Thorium-232	1.05	0.05	0.17	
						Uranium-235	0.30	0.09	0.46	
						Uranium-238	6.02	0.50	1.82	
SLD04349	SLD04349	02/21/00	1.8	2.2	0.2	Actinium-227	0.37	0.03	0.30	0.44
						Americium-241	0.00	0.00	0.15	
						Cesium-137	0.12	0.01	0.04	
						Potassium-40	10.05	0.41	0.70	
						Protactinium-231	0.00	0.00	2.08	
						Radium-226	5.60	0.08	0.11	
						Radium-228	0.95	0.04	0.12	
						Thorium-228	0.95	0.04	0.12	
						Thorium-230	0.00	0.00	14.60	
						Thorium-232	0.95	0.04	0.12	
						Uranium-235	0.67	0.07	0.45	
						Uranium-238	13.87	0.75	1.85	
SLD04350	SLD04350	02/21/00	1.4	2.0	0.2	Actinium-227	0.00	0.00	0.68	0.09
						Americium-241	0.00	0.00	0.15	
						Cesium-137	0.02	0.01	0.05	
						Potassium-40	9.51	0.44	0.64	
						Protactinium-231	0.00	0.00	2.22	
						Radium-226	2.64	0.05	0.11	
						Radium-228	0.86	0.04	0.17	
						Thorium-228	0.86	0.04	0.17	
						Thorium-230	0.00	0.00	14.70	
						Thorium-232	0.86	0.04	0.17	
						Uranium-235	0.00	0.00	0.46	
						Uranium-238	5.87	0.49	1.78	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD04351	SLD04351	02/21/00	1.6	2.2	0.2	Actinium-227	0.00	0.00	0.61	0.18
						Americium-241	0.00	0.00	0.13	
						Cesium-137	0.10	0.01	0.04	
						Potassium-40	9.57	0.40	0.64	
						Protactinium-231	0.00	0.00	1.90	
						Radium-226	3.20	0.06	0.12	
						Radium-228	0.99	0.04	0.17	
						Thorium-228	0.99	0.04	0.17	
						Thorium-230	0.00	0.00	12.90	
						Thorium-232	0.99	0.04	0.17	
						Uranium-235	0.38	0.06	0.40	
						Uranium-238	8.79	0.58	1.97	
SLD04352	SLD04352	02/21/00	1.7	2.1	0.2	Actinium-227	0.38	0.04	0.32	0.17
						Americium-241	0.00	0.00	0.15	
						Cesium-137	0.04	0.01	0.05	
						Potassium-40	12.71	0.51	0.74	
						Protactinium-231	0.00	0.00	2.16	
						Radium-226	3.61	0.06	0.11	
						Radium-228	0.90	0.04	0.17	
						Thorium-228	0.90	0.04	0.17	
						Thorium-230	0.00	0.00	14.80	
						Thorium-232	0.90	0.04	0.17	
						Uranium-235	0.00	0.00	0.46	
						Uranium-238	6.96	0.52	1.77	
	SLD04485	02/21/00	3.4	4.2	0.2	Actinium-227	0.00	0.00	0.68	0.11
						Americium-241	0.00	0.00	0.16	
						Cesium-137	0.04	0.01	0.05	
						Potassium-40	7.00	0.38	0.75	
						Protactinium-231	0.00	0.00	2.23	
						Radium-226	2.55	0.05	0.13	
						Radium-228	0.64	0.04	0.18	
						Thorium-228	0.64	0.04	0.18	
Thorium-230	0.00	0.00	14.70							
Thorium-232	0.64	0.04	0.18							
Uranium-235	0.42	0.09	0.46							
Uranium-238	7.08	0.55	1.94							
SLD04353	SLD04353	02/21/00	1.7	2.2	0.2	Actinium-227	0.24	0.03	0.30	0.14
						Americium-241	0.00	0.00	0.15	
						Cesium-137	0.08	0.01	0.05	
						Potassium-40	7.86	0.38	0.71	
						Protactinium-231	0.00	0.00	2.02	
						Radium-226	3.13	0.06	0.11	
						Radium-228	0.74	0.04	0.17	
						Thorium-228	0.74	0.04	0.17	
						Thorium-230	0.00	0.00	14.60	
						Thorium-232	0.74	0.04	0.17	
						Uranium-235	0.36	0.06	0.46	
						Uranium-238	7.14	0.51	1.70	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD04353	SLD04486	02/21/00	3.5	4.2		Actinium-227	0.00	0.00	0.69	0.05
						Americium-241	0.00	0.00	0.13	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	2.40	0.31	0.75	
						Protactinium-231	0.00	0.00	2.26	
						Radium-226	0.48	0.03	0.13	
						Radium-228	0.27	0.04	0.16	
						Thorium-228	0.27	0.04	0.16	
						Thorium-230	0.00	0.00	12.90	
						Thorium-232	0.27	0.04	0.16	
						Uranium-235	0.00	0.00	0.41	
						Uranium-238	4.18	0.53	2.03	
SLD04355	SLD04355	02/21/00	1.6	2.2	0.2	Actinium-227	3.74	0.17	1.52	3.81
						Americium-241	0.00	0.00	0.69	
						Cesium-137	0.00	0.00	0.37	
						Potassium-40	5.34	0.89	3.78	
						Protactinium-231	3.89	0.87	7.11	
						Radium-226	52.52	0.73	0.53	
						Radium-228	0.52	0.07	0.54	
						Thorium-228	0.52	0.07	0.54	
						Thorium-230	34.74	15.65	72.20	
						Thorium-232	0.52	0.07	0.54	
						Uranium-235	2.50	0.45	2.29	
						Uranium-238	26.19	1.90	6.46	
	SLD04535	02/21/00	3.5	4.2		Actinium-227	0.22	0.04	0.33	0.43
						Americium-241	0.00	0.00	0.15	
						Cesium-137	0.00	0.00	0.08	
						Potassium-40	4.80	0.33	0.72	
						Protactinium-231	0.00	0.00	2.19	
						Radium-226	2.09	0.05	0.11	
						Radium-228	0.43	0.04	0.21	
						Thorium-228	0.43	0.04	0.21	
Thorium-230	6.54	3.15	14.50							
Thorium-232	0.43	0.04	0.21							
Uranium-235	0.34	0.08	0.43							
Uranium-238	5.34	0.52	2.05							
SLD04356	SLD04356	02/21/00	1.7	2.3	0.2	Actinium-227	0.40	0.03	0.28	0.31
						Americium-241	0.00	0.00	0.14	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	8.78	0.38	0.71	
						Protactinium-231	0.00	0.00	2.03	
						Radium-226	4.99	0.08	0.11	
						Radium-228	0.87	0.03	0.12	
						Thorium-228	0.87	0.03	0.12	
						Thorium-230	6.84	1.25	9.80	
						Thorium-232	0.87	0.03	0.12	
						Uranium-235	0.40	0.07	0.43	
						Uranium-238	7.20	0.53	1.87	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD04357	SLD04357	02/21/00	1.6	2.2	0.2	Actinium-227	0.00	0.00	0.47	0.28
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.02	0.00	0.03	
						Potassium-40	10.24	0.39	0.50	
						Protactinium-231	0.00	0.00	1.44	
						Radium-226	2.13	0.04	0.08	
						Radium-228	0.94	0.03	0.12	
						Thorium-228	0.94	0.03	0.12	
						Thorium-230	4.10	2.09	9.64	
						Thorium-232	0.94	0.03	0.12	
						Uranium-235	0.21	0.04	0.30	
						Uranium-238	5.74	0.45	1.70	
						SLD04358	SLD04358	02/21/00	1.5	
Americium-241	0.00	0.00	0.15							
Cesium-137	0.03	0.01	0.05							
Potassium-40	7.94	0.36	0.77							
Protactinium-231	0.00	0.00	2.18							
Radium-226	5.86	0.09	0.11							
Radium-228	0.71	0.03	0.13							
Thorium-228	0.71	0.03	0.13							
Thorium-230	0.00	0.00	14.70							
Thorium-232	0.71	0.03	0.13							
Uranium-235	0.00	0.00	0.47							
Uranium-238	8.39	0.56	1.82							
SLD05704	SLD05704	10/18/00	0.6	1.1	0.8					Actinium-227
						Americium-241	0.04	0.04	0.05	
						Cesium-137	0.08	0.02	0.04	
						Potassium-40	3.65	0.56	0.27	
						Protactinium-231	0.03	0.41	0.64	
						Radium-226	1.41	0.09	0.04	
						Radium-228	0.27	0.05	0.06	
						Thorium-228	0.76	0.44	0.16	
						Thorium-230	3.34	1.07	0.29	
						Thorium-232	0.69	0.42	0.16	
						Uranium-235	0.21	0.10	0.13	
						Uranium-238	3.06	0.44	2.46	
						SLD05746	10/18/00	2	2.6	
	Americium-241	0.02	0.04	0.06						
	Cesium-137	0.01	0.02	0.03						
	Potassium-40	11.36	1.26	0.27						
	Protactinium-231	-0.04	0.50	0.77						
	Radium-226	1.13	0.08	0.05						
	Radium-228	0.60	0.08	0.07						
Thorium-228	0.88	0.48	0.16							
Thorium-230	2.37	0.85	0.16							
Thorium-232	1.04	0.52	0.16							
Uranium-235	0.29	0.18	0.18							
Uranium-238	1.88	0.59	3.92							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD05705	SLD05705	10/24/00	0.3	0.8	0.3	Actinium-227	0.01	0.07	0.10	0.00
						Americium-241	0.02	0.04	0.06	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	2.19	0.37	0.17	
						Protactinium-231	-0.01	0.28	0.50	
						Radium-226	0.63	0.05	0.03	
						Radium-228	0.08	0.03	0.05	
						Thorium-228	0.36	0.33	0.44	
						Thorium-230	1.08	0.54	0.16	
						Thorium-232	0.24	0.24	0.16	
						Uranium-235	0.06	0.06	0.11	
						Uranium-238	0.91	0.60	2.89	
	SLD05747	10/24/00	1.7	2.3		Actinium-227	0.00	0.06	0.09	0.00
						Americium-241	0.01	0.03	0.05	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	1.61	0.30	0.16	
						Protactinium-231	0.05	0.26	0.48	
						Radium-226	0.63	0.04	0.03	
						Radium-228	0.08	0.03	0.04	
						Thorium-228	0.30	0.28	0.33	
						Thorium-230	0.82	0.45	0.15	
						Thorium-232	0.16	0.19	0.15	
Uranium-235	0.02	0.06	0.10							
Uranium-238	0.89	0.52	2.57							
SLD05706	SLD05706	10/24/00	0.5	1.0	0.5	Actinium-227	0.39	0.13	0.20	0.48
						Americium-241	0.07	0.09	0.15	
						Cesium-137	0.02	0.02	0.04	
						Potassium-40	8.22	1.05	0.34	
						Protactinium-231	0.60	0.67	1.08	
						Radium-226	7.64	1.97	0.17	
						Radium-228	1.05	0.11	0.10	
						Thorium-228	1.75	0.74	0.17	
						Thorium-230	7.64	1.97	0.17	
						Thorium-232	0.74	0.45	0.17	
						Uranium-235	0.64	0.22	0.23	
						Uranium-238	6.05	1.59	4.36	
SLD05707	SLD05707	10/23/00	0.4	0.9	0.4	Actinium-227	0.05	0.11	0.16	0.01
						Americium-241	0.03	0.07	0.10	
						Cesium-137	0.06	0.05	0.03	
						Potassium-40	6.02	0.80	0.23	
						Protactinium-231	0.21	0.46	0.75	
						Radium-226	1.32	0.08	0.05	
						Radium-228	0.54	0.07	0.08	
						Thorium-228	0.71	0.43	0.34	
						Thorium-230	1.35	0.60	0.15	
						Thorium-232	0.62	0.39	0.15	
						Uranium-235	0.16	0.13	0.17	
						Uranium-238	1.79	0.81	3.68	

Table C-1  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05707	SLD05749	10/23/00	1.9	2.4		Actinium-227	0.03	0.16	0.24	0.16
						Americium-241	-0.07	0.09	0.14	
						Cesium-137	-0.01	0.03	0.04	
						Potassium-40	8.46	1.04	0.31	
						Protactinium-231	0.41	0.71	1.14	
						Radium-226	2.68	0.15	0.07	
						Radium-228	1.26	0.13	0.10	
						Thorium-228	1.12	0.55	0.16	
						Thorium-230	3.64	1.13	0.29	
						Thorium-232	1.56	0.66	0.16	
						Uranium-235	0.23	0.20	0.25	
						Uranium-238	1.83	1.30	4.32	
SLD05708	SLD05708	10/23/00	0	0.5	0.0	Actinium-227	0.14	0.16	0.24	1.35
						Americium-241	0.14	0.10	0.15	
						Cesium-137	0.12	0.04	0.04	
						Potassium-40	8.90	1.09	0.34	
						Protactinium-231	0.64	0.65	1.06	
						Radium-226	2.88	0.16	0.07	
						Radium-228	0.81	0.10	0.10	
						Thorium-228	1.02	0.54	0.17	
						Thorium-230	8.22	2.10	0.17	
						Thorium-232	0.94	0.52	0.17	
						Uranium-235	0.39	0.19	0.26	
						Uranium-238	6.00	1.38	4.07	
	SLD05750	10/23/00	1.4	2.0		Actinium-227	0.13	0.17	0.25	0.20
						Americium-241	0.07	0.09	0.15	
						Cesium-137	0.00	0.03	0.04	
						Potassium-40	9.69	1.21	0.38	
						Protactinium-231	-0.16	0.72	1.11	
						Radium-226	2.80	0.15	0.07	
						Radium-228	1.29	0.13	0.10	
						Thorium-228	1.95	0.81	0.39	
Thorium-230	3.76	1.21	0.33							
Thorium-232	1.89	0.78	0.18							
Uranium-235	0.20	0.19	0.26							
Uranium-238	2.70	1.16	5.40							
SLD05709	SLD05709	10/18/00	0.5	1.1	0.5	Actinium-227	0.00	0.16	0.22	0.15
						Americium-241	0.02	0.04	0.07	
						Cesium-137	0.25	0.04	0.03	
						Potassium-40	9.20	1.11	0.32	
						Protactinium-231	0.89	0.62	0.99	
						Radium-226	3.23	0.18	0.06	
						Radium-228	0.51	0.08	0.09	
						Thorium-228	0.80	0.45	0.43	
						Thorium-230	3.97	1.14	0.47	
						Thorium-232	0.58	0.37	0.30	
						Uranium-235	0.31	0.17	0.20	
						Uranium-238	3.36	0.69	3.92	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD05709	SLD05751	10/18/00	2.3	2.6		Actinium-227	0.55	0.17	0.28	0.68	
						Americium-241	0.08	0.06	0.10		
						Cesium-137	0.11	0.04	0.04		
						Potassium-40	5.83	0.91	0.40		
						Protactinium-231	0.46	0.77	1.19		
						Radium-226	4.85	0.27	0.08		
						Radium-228	0.60	0.09	0.11		
						Thorium-228	0.85	0.50	0.44		
						Thorium-230	6.29	1.69	0.30		
						Thorium-232	0.54	0.37	0.16		
						Uranium-235	1.10	0.22	0.25		
						Uranium-238	20.86	2.15	5.00		
SLD05710	SLD05710	10/18/00	0.6	1.1	0.6	Actinium-227	0.05	0.07	0.11	0.00	
						Americium-241	-0.01	0.03	0.03		
						Cesium-137	0.01	0.01	0.02		
						Potassium-40	2.48	0.43	0.19		
						Protactinium-231	0.06	0.32	0.50		
						Radium-226	0.89	0.06	0.03		
						Radium-228	0.16	0.04	0.05		
						Thorium-228	0.11	0.18	0.30		
						Thorium-230	1.81	0.75	0.44		
						Thorium-232	0.30	0.27	0.16		
						Uranium-235	0.00	0.09	0.11		
						Uranium-238	0.89	0.28	2.51		
		SLD05752	10/18/00	2.1	2.6		Actinium-227	0.13	0.10	0.16	0.04
							Americium-241	0.01	0.03	0.05	
							Cesium-137	-0.01	0.02	0.02	
							Potassium-40	15.99	1.62	0.24	
							Protactinium-231	0.31	0.44	0.69	
							Radium-226	0.92	0.07	0.04	
							Radium-228	0.83	0.08	0.07	
							Thorium-228	1.14	0.64	0.50	
							Thorium-230	2.05	0.88	0.37	
						Thorium-232	1.47	0.72	0.20		
						Uranium-235	0.05	0.08	0.14		
						Uranium-238	1.29	0.50	3.18		
SLD05711	SLD05711	10/31/00	2	2.5	2.0	Actinium-227	0.00	0.14	0.18	0.03	
						Americium-241	0.01	0.07	0.11		
						Cesium-137	0.00	0.02	0.03		
						Potassium-40	10.70	1.20	0.26		
						Protactinium-231	0.20	0.53	0.84		
						Radium-226	1.28	0.08	0.05		
						Radium-228	0.85	0.10	0.08		
						Thorium-228	1.63	0.67	0.15		
						Thorium-230	2.06	0.77	0.15		
						Thorium-232	1.34	0.59	0.15		
						Uranium-235	0.17	0.14	0.20		
						Uranium-238	2.13	1.01	3.48		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05711	SLD05753	10/31/00	3.5	4.0		Actinium-227	0.05	0.13	0.20	0.03
						Americium-241	0.03	0.17	0.26	
						Cesium-137	0.02	0.02	0.03	
						Potassium-40	14.42	1.67	0.21	
						Protactinium-231	0.22	0.55	0.87	
						Radium-226	1.43	0.10	0.05	
						Radium-228	0.85	0.10	0.08	
						Thorium-228	1.73	0.73	0.44	
						Thorium-230	2.20	0.83	0.16	
						Thorium-232	0.93	0.47	0.30	
						Uranium-235	0.27	0.15	0.21	
						Uranium-238	3.09	1.46	3.73	
SLD05712	SLD05712	10/18/00	0.5	1.0	0.5	Actinium-227	0.09	0.13	0.22	0.00
						Americium-241	0.03	0.04	0.06	
						Cesium-137	0.00	0.02	0.04	
						Potassium-40	2.67	0.63	0.32	
						Protactinium-231	0.21	0.58	1.07	
						Radium-226	0.54	0.06	0.06	
						Radium-228	0.11	0.05	0.09	
						Thorium-228	0.24	0.25	0.32	
						Thorium-230	1.12	0.53	0.14	
						Thorium-232	0.43	0.31	0.14	
						Uranium-235	0.10	0.13	0.21	
						Uranium-238	0.79	0.57	3.37	
	SLD05754	10/18/00	2	2.5		Actinium-227	0.20	0.13	0.19	0.08
						Americium-241	0.00	0.04	0.06	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	13.18	1.44	0.31	
						Protactinium-231	0.44	0.48	0.91	
						Radium-226	1.49	0.10	0.05	
						Radium-228	0.84	0.09	0.08	
						Thorium-228	1.39	0.63	0.16	
Thorium-230	2.75	0.96	0.16							
Thorium-232	1.32	0.61	0.16							
Uranium-235	0.14	0.15	0.19							
Uranium-238	1.61	0.52	4.43							
SLD05713	SLD05713	10/30/00	0.5	1.0	0.5	Actinium-227	0.02	0.09	0.13	0.01
						Americium-241	0.06	0.05	0.08	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	4.32	0.61	0.23	
						Protactinium-231	-0.09	0.45	0.70	
						Radium-226	0.70	0.05	0.04	
						Radium-228	0.30	0.06	0.06	
						Thorium-228	0.74	0.40	0.28	
						Thorium-230	1.28	0.54	0.13	
						Thorium-232	0.24	0.22	0.13	
						Uranium-235	0.06	0.08	0.15	
						Uranium-238	1.04	0.56	3.53	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05713	SLD05755	10/30/00	2	2.5		Actinium-227	0.03	0.07	0.11	0.00
						Americium-241	-0.02	0.05	0.07	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	7.60	0.88	0.14	
						Protactinium-231	-0.05	0.36	0.56	
						Radium-226	0.51	0.04	0.03	
						Radium-228	0.34	0.05	0.06	
						Thorium-228	0.45	0.32	0.33	
						Thorium-230	0.68	0.38	0.13	
						Thorium-232	0.34	0.26	0.13	
						Uranium-235	0.06	0.07	0.12	
						Uranium-238	0.78	0.64	3.10	
						SLD05714	SLD05714	10/18/00	0.5	1.0
Americium-241	0.00	0.02	0.03							
Cesium-137	0.01	0.01	0.02							
Potassium-40	3.09	0.47	0.17							
Protactinium-231	0.03	0.30	0.47							
Radium-226	0.78	0.05	0.03							
Radium-228	0.11	0.03	0.04							
Thorium-228	0.35	0.29	0.32							
Thorium-230	1.54	0.63	0.14							
Thorium-232	0.11	0.15	0.14							
Uranium-235	0.18	0.09	0.11							
Uranium-238	0.61	0.29	2.10							
SLD05756	10/18/00	1.9	2.4		Actinium-227					
					Americium-241		0.00	0.02	0.03	
					Cesium-137		-0.01	0.01	0.02	
					Potassium-40		2.22	0.38	0.14	
					Protactinium-231		0.25	0.29	0.48	
					Radium-226		0.73	0.05	0.03	
					Radium-228		0.10	0.04	0.04	
					Thorium-228		0.40	0.31	0.15	
Thorium-230	1.60	0.67	0.34							
Thorium-232	0.22	0.23	0.15							
Uranium-235	0.03	0.06	0.11							
Uranium-238	0.57	0.30	2.30							
SLD05715	SLD05715	10/23/00	0.5	1.0	0.5	Actinium-227	-0.01	0.10	0.15	0.02
						Americium-241	0.05	0.05	0.09	
						Cesium-137	0.05	0.02	0.04	
						Potassium-40	2.89	0.49	0.26	
						Protactinium-231	0.40	0.54	0.69	
						Radium-226	1.25	0.08	0.04	
						Radium-228	0.24	0.05	0.05	
						Thorium-228	0.79	0.48	0.44	
						Thorium-230	2.09	0.80	0.16	
						Thorium-232	0.16	0.21	0.30	
						Uranium-235	0.00	0.14	0.16	
Uranium-238	1.99	0.64	3.58							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05715	SLD05757	10/23/00	1.5	2.0		Actinium-227	0.17	0.18	0.26	0.28
						Americium-241	-0.05	0.11	0.15	
						Cesium-137	0.07	0.04	0.04	
						Potassium-40	7.17	1.00	0.35	
						Protactinium-231	0.49	0.77	1.24	
						Radium-226	3.65	0.19	0.08	
						Radium-228	0.70	0.10	0.11	
						Thorium-228	1.10	0.63	0.45	
						Thorium-230	5.40	1.67	0.20	
						Thorium-232	1.48	0.73	0.38	
						Uranium-235	0.41	0.23	0.25	
						Uranium-238	4.59	1.53	5.22	
SLD05716	SLD05716	10/18/00	0	0.5	0.0	Actinium-227	0.07	0.11	0.17	0.19
						Americium-241	0.03	0.03	0.05	
						Cesium-137	0.18	0.03	0.02	
						Potassium-40	6.61	0.84	0.24	
						Protactinium-231	0.40	0.51	0.80	
						Radium-226	1.86	0.12	0.05	
						Radium-228	0.50	0.07	0.07	
						Thorium-228	0.44	0.31	0.28	
						Thorium-230	2.87	0.87	0.13	
						Thorium-232	0.51	0.32	0.13	
						Uranium-235	0.18	0.13	0.17	
						Uranium-238	2.25	0.49	3.09	
	SLD05758	10/18/00	1.5	2.0		Actinium-227	0.20	0.65	0.78	0.26
						Americium-241	0.00	0.14	0.22	
						Cesium-137	-0.09	0.09	0.14	
						Potassium-40	11.34	2.85	1.44	
						Protactinium-231	-0.70	2.28	3.95	
						Radium-226	2.54	0.27	0.25	
						Radium-228	1.51	0.36	0.39	
						Thorium-228	1.93	0.76	0.29	
Thorium-230	3.07	1.01	0.29							
Thorium-232	1.34	0.61	0.16							
Uranium-235	0.46	0.70	0.78							
Uranium-238	5.79	2.41	17.64							
SLD05717	SLD05717	10/24/00	0.5	1.0	0.5	Actinium-227	0.06	0.03	0.11	0.00
						Americium-241	0.04	0.04	0.07	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	4.25	0.55	0.16	
						Protactinium-231	-0.13	0.29	0.51	
						Radium-226	0.70	0.05	0.04	
						Radium-228	0.19	0.04	0.05	
						Thorium-228	0.21	0.22	0.14	
						Thorium-230	0.90	0.46	0.14	
						Thorium-232	0.26	0.24	0.14	
						Uranium-235	-0.01	0.07	0.12	
						Uranium-238	1.30	0.58	2.86	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05717	SLD05759	10/24/00	2	2.5		Actinium-227	-0.04	0.08	0.12	0.00
						Americium-241	0.00	0.05	0.07	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	2.12	0.44	0.20	
						Protactinium-231	-0.27	0.31	0.53	
						Radium-226	0.87	0.06	0.03	
						Radium-228	0.16	0.04	0.05	
						Thorium-228	0.47	0.33	0.27	
						Thorium-230	1.52	0.63	0.27	
						Thorium-232	0.53	0.35	0.14	
						Uranium-235	0.12	0.11	0.13	
						Uranium-238	1.17	0.58	2.55	
SLD05718	SLD05718	10/30/00	0	0.5	0.0	Actinium-227	0.04	0.09	0.14	0.00
						Americium-241	-0.04	0.05	0.08	
						Cesium-137	0.05	0.02	0.02	
						Potassium-40	4.06	0.61	0.22	
						Protactinium-231	0.05	0.39	0.62	
						Radium-226	0.89	0.06	0.04	
						Radium-228	0.41	0.06	0.06	
						Thorium-228	0.33	0.29	0.35	
						Thorium-230	1.25	0.55	0.14	
						Thorium-232	0.63	0.38	0.14	
						Uranium-235	0.07	0.12	0.15	
						Uranium-238	0.80	0.65	2.74	
	SLD05760	10/30/00	1.5	2.0		Actinium-227	0.01	0.07	0.12	0.00
						Americium-241	0.04	0.05	0.07	
						Cesium-137	0.06	0.02	0.02	
						Potassium-40	2.45	0.42	0.17	
						Protactinium-231	0.12	0.36	0.60	
						Radium-226	0.59	0.05	0.04	
						Radium-228	0.27	0.05	0.05	
						Thorium-228	0.57	0.40	0.42	
Thorium-230	1.25	0.58	0.15							
Thorium-232	0.51	0.35	0.15							
Uranium-235	0.06	0.09	0.13							
Uranium-238	0.85	0.65	2.61							
SLD05719	SLD05719	10/30/00	0	0.5	0.0	Actinium-227	0.08	0.08	0.12	0.01
						Americium-241	0.00	0.05	0.07	
						Cesium-137	0.04	0.02	0.02	
						Potassium-40	3.48	0.52	0.18	
						Protactinium-231	-0.12	0.37	0.57	
						Radium-226	0.94	0.06	0.04	
						Radium-228	0.36	0.05	0.06	
						Thorium-228	0.46	0.32	0.14	
						Thorium-230	1.97	0.71	0.14	
						Thorium-232	0.30	0.25	0.14	
						Uranium-235	0.06	0.09	0.13	
						Uranium-238	1.45	0.61	2.17	

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD05719	SLD05761	10/30/00	1.7	2.1		Actinium-227	0.23	0.11	0.20	0.03	
						Americium-241	0.04	0.07	0.11		
						Cesium-137	0.23	0.05	0.03		
						Potassium-40	3.79	0.59	0.24		
						Protactinium-231	0.13	0.55	0.89		
						Radium-226	1.29	0.08	0.06		
						Radium-228	0.38	0.07	0.09		
						Thorium-228	0.58	0.42	0.40		
						Thorium-230	2.36	0.92	0.18		
						Thorium-232	0.47	0.37	0.18		
						Uranium-235	0.31	0.14	0.19		
						Uranium-238	2.32	0.99	3.28		
SLD05720	SLD05720	10/17/00	0	0.5	0.0	Actinium-227	0.12	0.11	0.16	1.24	
						Americium-241	0.10	0.12	0.20		
						Cesium-137	0.12	0.03	0.02		
						Potassium-40	4.30	0.62	0.23		
						Protactinium-231	0.21	0.43	0.68		
						Radium-226	1.13	0.08	0.04		
						Radium-228	0.36	0.06	0.07		
						Thorium-228	0.89	0.52	0.32		
						Thorium-230	8.01	2.08	0.17		
						Thorium-232	0.70	0.44	0.17		
						Uranium-235	0.21	0.17	0.17		
						Uranium-238	2.83	1.22	2.29		
		SLD05762	10/17/00	1.6	2.0		Actinium-227	0.34	0.16	0.25	0.25
							Americium-241	-0.02	0.23	0.35	
							Cesium-137	0.00	0.03	0.04	
							Potassium-40	9.77	1.28	0.35	
							Protactinium-231	0.50	0.79	1.23	
							Radium-226	3.83	0.22	0.08	
							Radium-228	0.92	0.12	0.10	
							Thorium-228	1.05	0.55	0.36	
						Thorium-230	4.51	1.32	0.16		
						Thorium-232	1.07	0.54	0.16		
						Uranium-235	0.36	0.17	0.27		
						Uranium-238	5.64	2.36	5.04		
SLD05721	SLD05721	10/19/00	0	0.6	0.0	Actinium-227	0.02	0.07	0.11	0.00	
						Americium-241	-0.01	0.02	0.03		
						Cesium-137	0.00	0.01	0.02		
						Potassium-40	2.83	0.43	0.20		
						Protactinium-231	-0.19	0.33	0.49		
						Radium-226	0.21	0.04	0.06		
						Radium-228	0.21	0.04	0.06		
						Thorium-228	0.62	0.39	0.32		
						Thorium-230	1.47	0.62	0.27		
						Thorium-232	0.30	0.27	0.27		
						Uranium-235	0.15	0.09	0.10		
						Uranium-238	0.61	0.31	2.31		

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD05721	SLD05763	10/19/00	1.5	2.0		Actinium-227	0.10	0.11	0.16	0.10
						Americium-241	0.00	0.03	0.05	
						Cesium-137	0.13	0.03	0.02	
						Potassium-40	5.67	0.72	0.25	
						Protactinium-231	-0.13	0.47	0.70	
						Radium-226	1.13	0.08	0.05	
						Radium-228	0.48	0.07	0.07	
						Thorium-228	1.28	0.54	0.24	
						Thorium-230	3.50	1.01	0.32	
						Thorium-232	0.66	0.37	0.13	
						Uranium-235	0.12	0.09	0.15	
						Uranium-238	0.86	0.40	2.67	
						SLD05722	SLD05722	10/30/00	0	0.5
Americium-241	0.02	0.04	0.06							
Cesium-137	0.03	0.01	0.02							
Potassium-40	2.09	0.34	0.12							
Protactinium-231	0.14	0.29	0.48							
Radium-226	0.62	0.05	0.03							
Radium-228	0.21	0.04	0.04							
Thorium-228	0.42	0.35	0.44							
Thorium-230	1.73	0.72	0.16							
Thorium-232	0.22	0.24	0.30							
Uranium-235	0.09	0.09	0.11							
Uranium-238	0.95	0.51	1.86							
SLD05764	10/30/00	1.2	1.7		Actinium-227					
					Americium-241		0.04	0.05	0.07	
					Cesium-137		0.03	0.02	0.02	
					Potassium-40		3.90	0.52	0.18	
					Protactinium-231		0.04	0.35	0.56	
					Radium-226		0.97	0.06	0.04	
					Radium-228		0.27	0.06	0.05	
					Thorium-228		0.75	0.42	0.31	
					Thorium-230		2.72	0.88	0.26	
					Thorium-232		0.44	0.32	0.31	
Uranium-235	0.09	0.08	0.14							
Uranium-238	1.47	0.70	2.54							
SLD05723	SLD05723	11/14/00	0.7	1.2	0.7	Actinium-227	0.03	0.08	0.13	0.02
						Americium-241	0.02	0.11	0.17	
						Cesium-137	0.04	0.02	0.02	
						Potassium-40	4.91	0.66	0.20	
						Protactinium-231	-0.16	0.38	0.56	
						Radium-226	0.85	0.06	0.03	
						Radium-228	0.35	0.06	0.06	
						Thorium-228	0.51	0.40	0.46	
						Thorium-230	2.29	0.87	0.31	
						Thorium-232	0.86	0.49	0.31	
						Uranium-235	0.08	0.08	0.14	
Uranium-238	1.58	1.12	2.68							

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

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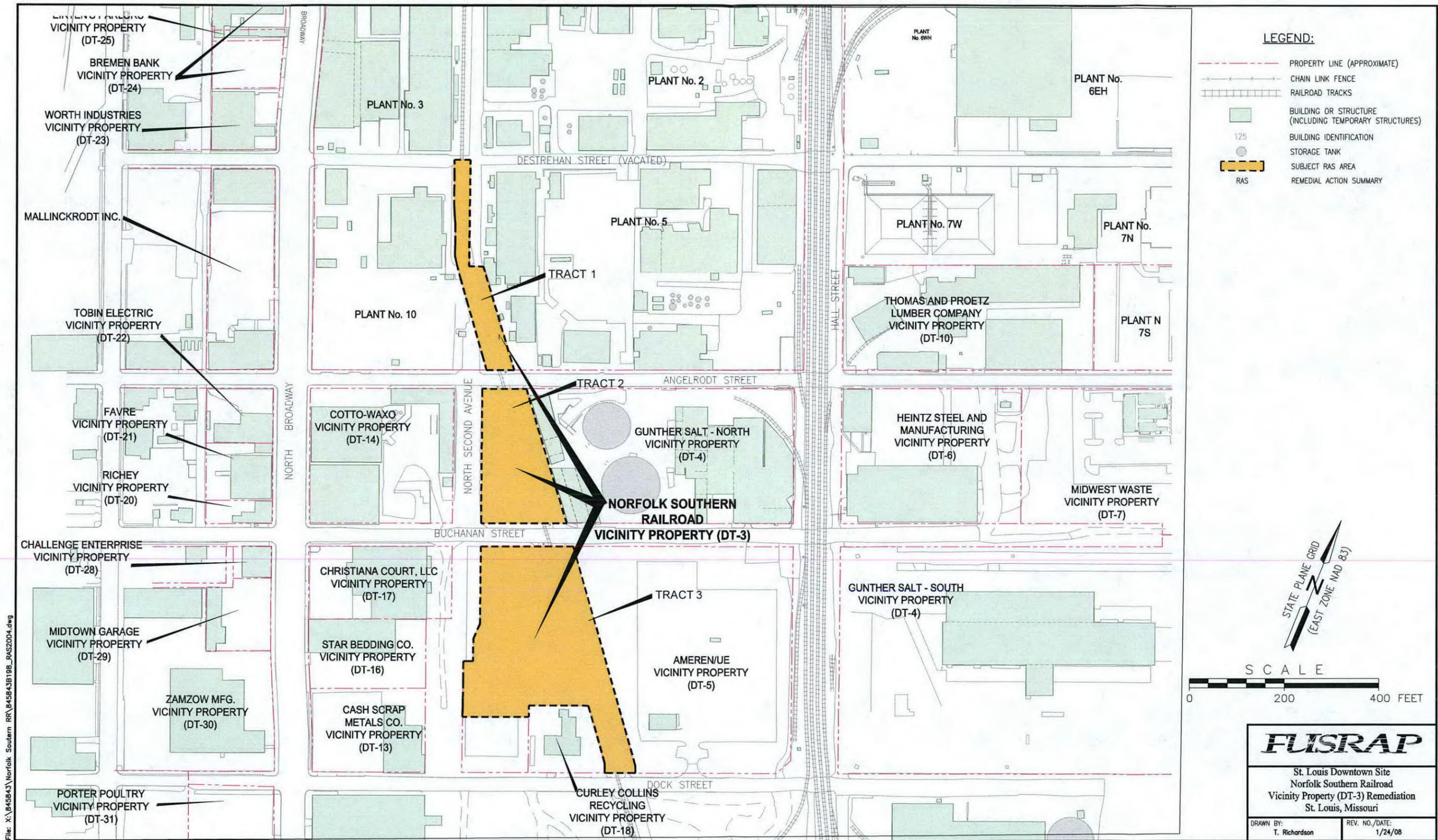
Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD05723	SLD05765	11/14/00	2.2	2.7		Actinium-227	0.06	0.11	0.18	0.01	
						Americium-241	0.00	0.14	0.23		
						Cesium-137	0.01	0.02	0.03		
						Potassium-40	5.54	0.76	0.26		
						Protactinium-231	0.13	0.50	0.78		
						Radium-226	1.63	0.11	0.05		
						Radium-228	0.51	0.08	0.07		
						Thorium-228	0.52	0.36	0.32		
						Thorium-230	1.87	0.72	0.27		
						Thorium-232	0.59	0.37	0.15		
						Uranium-235	0.27	0.16	0.20		
						Uranium-238	1.72	1.47	3.39		
SLD05724	SLD05724	11/14/00	0	0.5	0.0	Actinium-227	0.00	0.06	0.09	0.00	
						Americium-241	0.02	0.08	0.13		
						Cesium-137	0.03	0.01	0.01		
						Potassium-40	2.41	0.38	0.16		
						Protactinium-231	0.58	0.31	0.46		
						Radium-226	0.64	0.05	0.03		
						Radium-228	0.16	0.03	0.05		
						Thorium-228	0.19	0.21	0.30		
						Thorium-230	1.03	0.46	0.12		
						Thorium-232	0.22	0.20	0.12		
						Uranium-235	0.07	0.08	0.11		
						Uranium-238	0.57	0.91	2.04		
		SLD05766	11/14/00	1.3	2.0		Actinium-227	0.10	0.09	0.15	0.03
	Americium-241						0.07	0.11	0.19		
	Cesium-137						0.06	0.02	0.02		
	Potassium-40						4.27	0.59	0.21		
	Protactinium-231						0.09	0.37	0.65		
	Radium-226						1.02	0.07	0.04		
	Radium-228						0.42	0.06	0.06		
	Thorium-228						0.66	0.36	0.22		
	Thorium-230						0.95	0.45	0.35		
	Thorium-232						0.47	0.32	0.35		
	Uranium-235						0.14	0.12	0.16		
	Uranium-238						3.13	1.13	2.75		
SLD05725	SLD05725	10/30/00	0	0.5	0.0	Actinium-227	0.04	0.09	0.13	0.00	
						Americium-241	0.04	0.05	0.08		
						Cesium-137	0.01	0.02	0.02		
						Potassium-40	2.32	0.37	0.21		
						Protactinium-231	0.13	0.36	0.58		
						Radium-226	1.01	0.06	0.04		
						Radium-228	0.41	0.06	0.05		
						Thorium-228	0.85	0.46	0.15		
						Thorium-230	1.68	0.68	0.15		
						Thorium-232	0.39	0.30	0.15		
						Uranium-235	0.12	0.08	0.14		
						Uranium-238	0.82	0.61	2.54		

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD05725	SLD05767	10/30/00	1	1.6		Actinium-227	0.00	0.13	0.19	0.03
						Americium-241	0.00	0.07	0.11	
						Cesium-137	-0.03	0.02	0.03	
						Potassium-40	2.08	0.40	0.28	
						Protactinium-231	0.31	0.56	0.88	
						Radium-226	2.97	0.15	0.06	
						Radium-228	0.91	0.09	0.07	
						Thorium-228	0.54	0.36	0.31	
						Thorium-230	2.24	0.78	0.26	
						Thorium-232	0.46	0.32	0.14	
						Uranium-235	0.27	0.19	0.21	
						Uranium-238	1.74	0.80	3.42	
SLD05726	SLD05726	10/12/00	0	0.5	0.0	Actinium-227	0.04	0.06	0.10	0.00
						Americium-241	0.02	0.03	0.06	
						Cesium-137	-0.01	0.01	0.01	
						Potassium-40	1.01	0.28	0.18	
						Protactinium-231	-0.06	0.27	0.43	
						Radium-226	0.54	0.04	0.03	
						Radium-228	0.18	0.04	0.04	
						Thorium-228	0.51	0.36	0.37	
						Thorium-230	0.98	0.49	0.15	
						Thorium-232	0.60	0.37	0.15	
						Uranium-235	0.06	0.08	0.11	
						Uranium-238	0.65	0.41	2.32	
	SLD05768	10/12/00	1.2	1.8		Actinium-227	0.02	0.09	0.14	0.00
						Americium-241	0.01	0.05	0.08	
						Cesium-137	0.00	0.02	0.02	
						Potassium-40	2.07	0.41	0.20	
						Protactinium-231	0.39	0.38	0.65	
						Radium-226	0.68	0.05	0.04	
						Radium-228	0.26	0.05	0.05	
						Thorium-228	0.76	0.44	0.16	
						Thorium-230	0.84	0.47	0.32	
						Thorium-232	0.40	0.31	0.16	
Uranium-235	0.05	0.08	0.15							
Uranium-238	1.12	0.73	2.31							
SLD05727	SLD05727	10/12/00	0	0.6	0.0	Actinium-227	-0.01	0.09	0.13	0.00
						Americium-241	0.00	0.05	0.08	
						Cesium-137	0.01	0.01	0.03	
						Potassium-40	2.32	0.43	0.20	
						Protactinium-231	-0.30	0.38	0.56	
						Radium-226	0.75	0.06	0.04	
						Radium-228	0.21	0.04	0.05	
						Thorium-228	0.17	0.19	0.25	
						Thorium-230	1.24	0.52	0.12	
						Thorium-232	0.35	0.27	0.25	
						Uranium-235	0.06	0.11	0.14	
						Uranium-238	0.98	0.52	2.68	

**FIGURES**



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Figure 1. Location Map

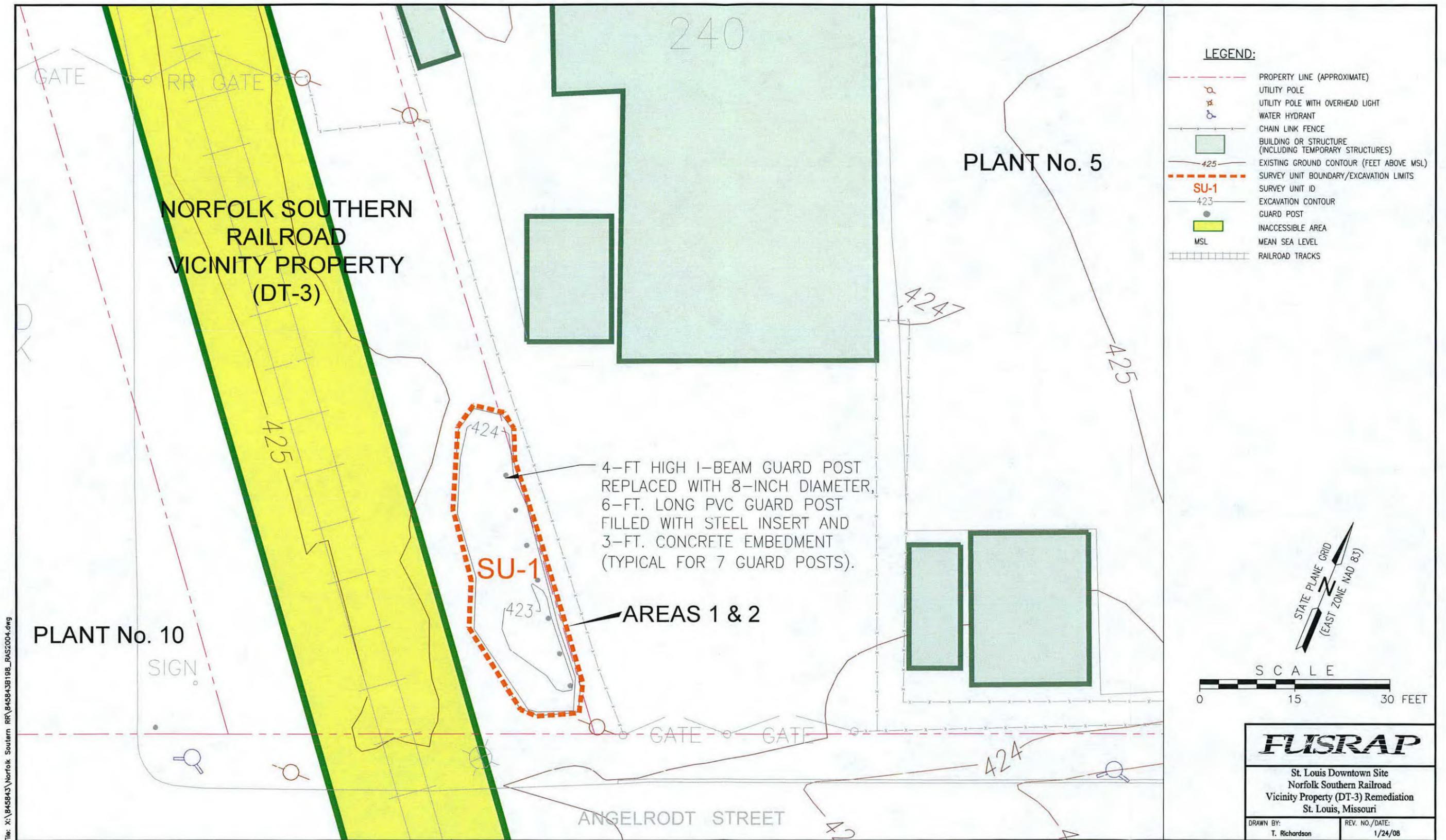
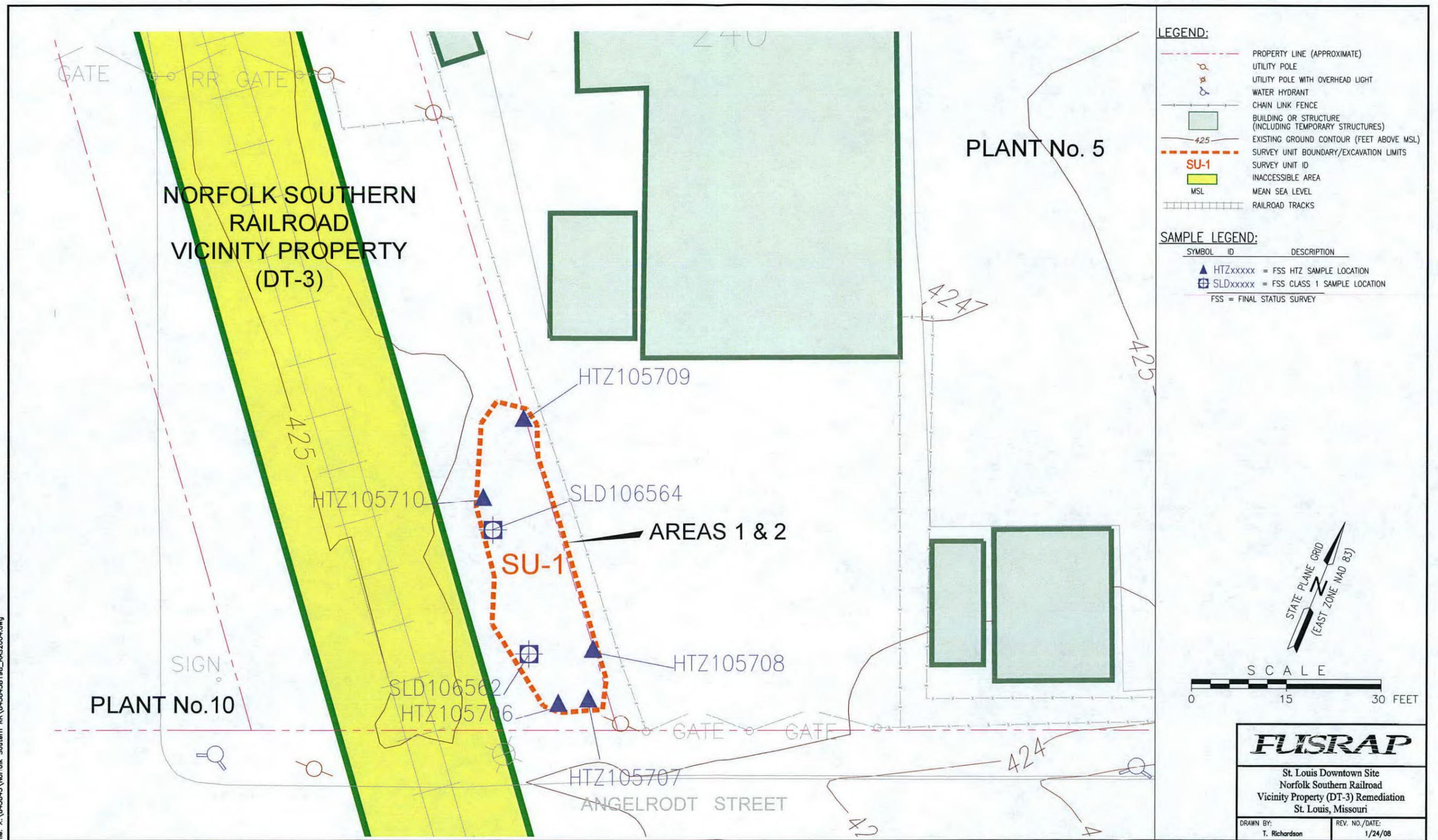


Figure 2. Tract 1 As-Built Excavation/Survey Unit Boundary

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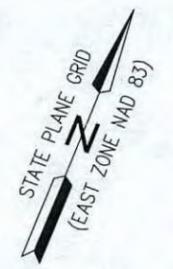
**LEGEND:**

- PROPERTY LINE (APPROXIMATE)
- UTILITY POLE
- UTILITY POLE WITH OVERHEAD LIGHT
- WATER HYDRANT
- CHAIN LINK FENCE
- BUILDING OR STRUCTURE (INCLUDING TEMPORARY STRUCTURES)
- EXISTING GROUND CONTOUR (FEET ABOVE MSL)
- SURVEY UNIT BOUNDARY/EXCAVATION LIMITS
- SURVEY UNIT ID
- INACCESSIBLE AREA
- MEAN SEA LEVEL
- RAILROAD TRACKS

**SAMPLE LEGEND:**

SYMBOL	ID	DESCRIPTION
	HTZxxxxx	FSS HTZ SAMPLE LOCATION
	SLDxxxxx	FSS CLASS 1 SAMPLE LOCATION

FSS = FINAL STATUS SURVEY

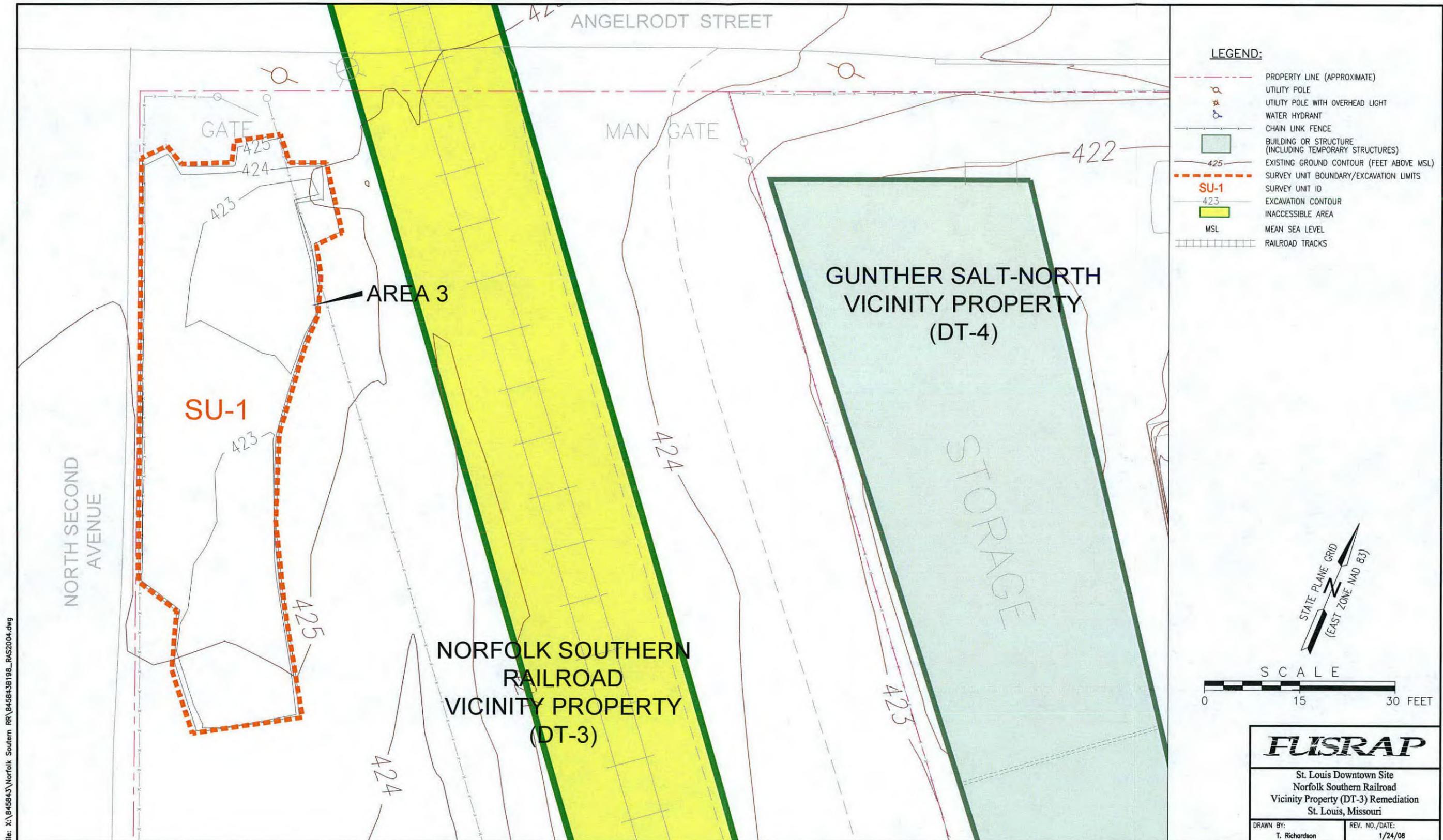


**FUSRAP**

St. Louis Downtown Site  
 Norfolk Southern Railroad  
 Vicinity Property (DT-3) Remediation  
 St. Louis, Missouri

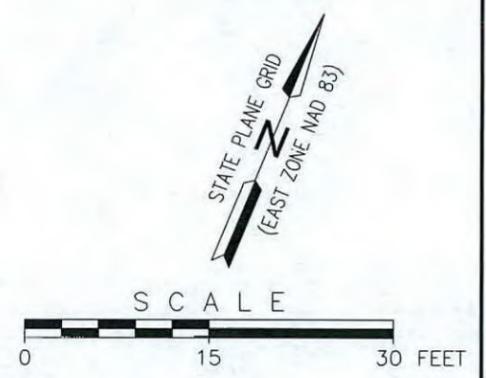
DRAWN BY: T. Richardson	REV. NO./DATE: 1/24/08
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Figure 3. Tract 1 As-Built Sample Locations/Survey Unit Boundary



**LEGEND:**

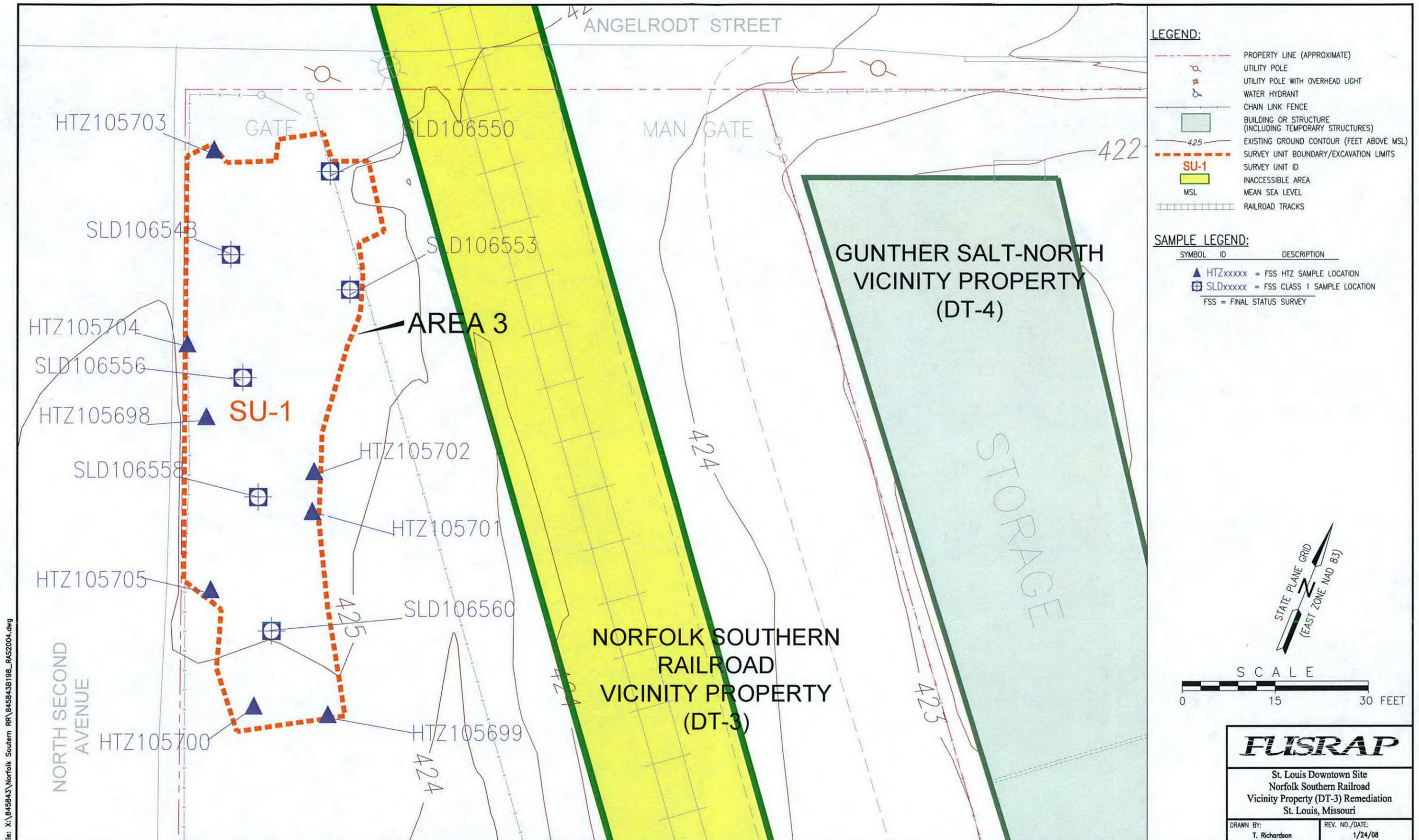
	PROPERTY LINE (APPROXIMATE)
	UTILITY POLE
	UTILITY POLE WITH OVERHEAD LIGHT
	WATER HYDRANT
	CHAIN LINK FENCE
	BUILDING OR STRUCTURE (INCLUDING TEMPORARY STRUCTURES)
	EXISTING GROUND CONTOUR (FEET ABOVE MSL)
	SURVEY UNIT BOUNDARY/EXCAVATION LIMITS
<b>SU-1</b>	SURVEY UNIT ID
	EXCAVATION CONTOUR
	INACCESSIBLE AREA
	MSL
	RAILROAD TRACKS



<b>FUSRAP</b>	
St. Louis Downtown Site Norfolk Southern Railroad Vicinity Property (DT-3) Remediation St. Louis, Missouri	
DRAWN BY: T. Richardson	REV. NO./DATE: 1/24/08

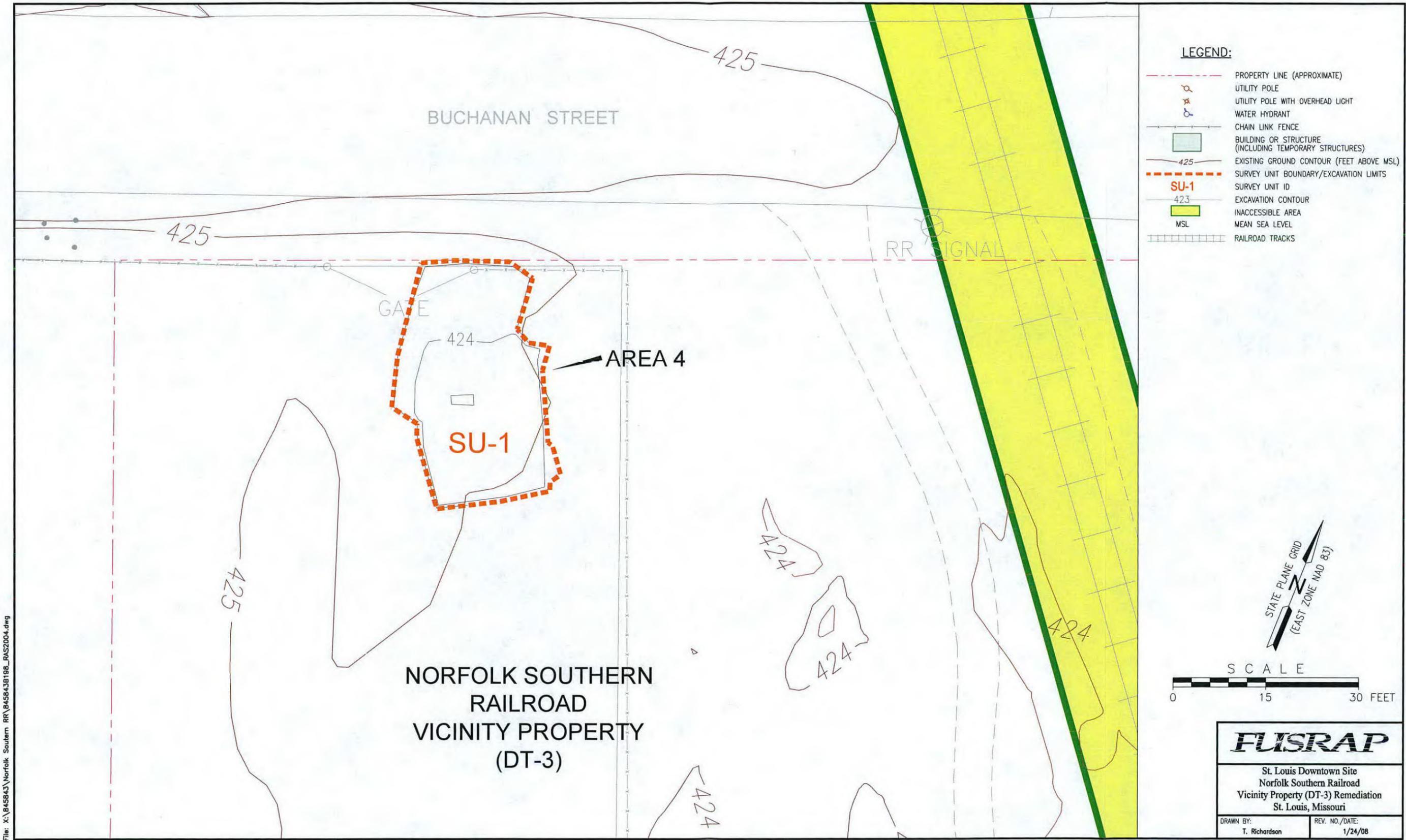
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Figure 4. Tract 2 As-Built Excavation/Survey Unit Boundary



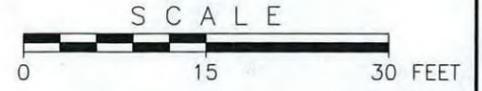
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Figure 5. Tract 2 As-Built Sample Locations/Survey Unit Boundary



**LEGEND:**

-  PROPERTY LINE (APPROXIMATE)
-  UTILITY POLE
-  UTILITY POLE WITH OVERHEAD LIGHT
-  WATER HYDRANT
-  CHAIN LINK FENCE
-  BUILDING OR STRUCTURE (INCLUDING TEMPORARY STRUCTURES)
-  EXISTING GROUND CONTOUR (FEET ABOVE MSL)
-  SURVEY UNIT BOUNDARY/EXCAVATION LIMITS
- SU-1** SURVEY UNIT ID
-  EXCAVATION CONTOUR
-  INACCESSIBLE AREA
-  MSL
-  RAILROAD TRACKS



**FUSRAP**

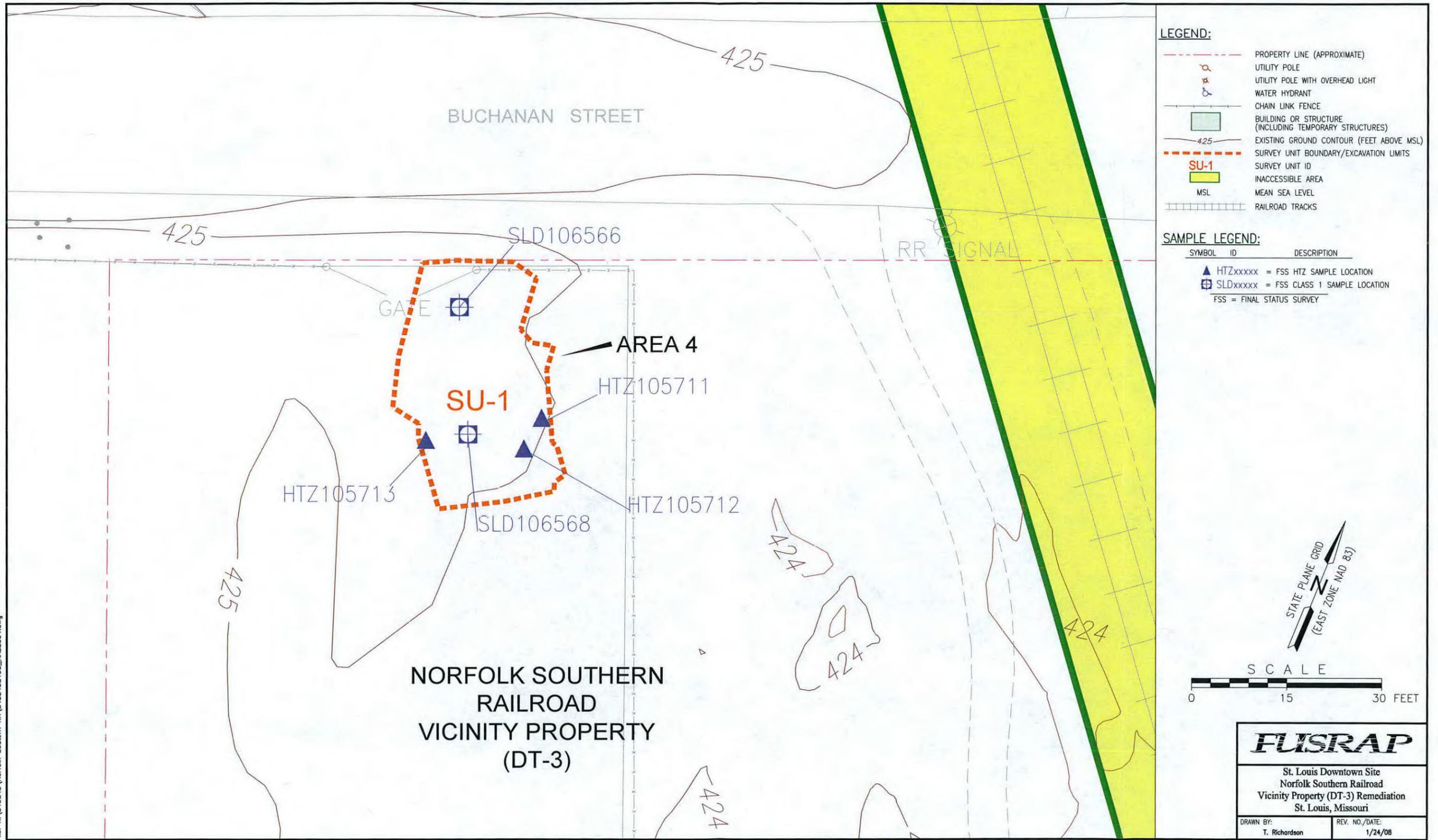
St. Louis Downtown Site  
 Norfolk Southern Railroad  
 Vicinity Property (DT-3) Remediation  
 St. Louis, Missouri

DRAWN BY: T. Richardson      REV. NO./DATE: 1/24/08

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Figure 6. Tract 3 As-Built Excavation/Survey Unit Boundary

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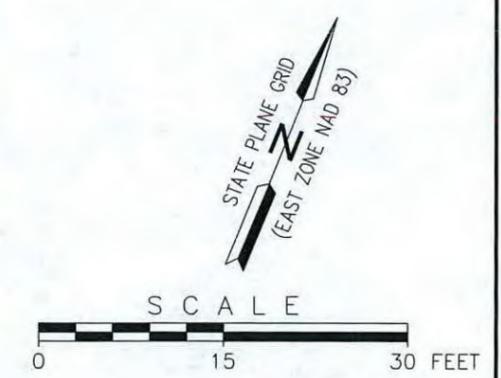


**LEGEND:**

	PROPERTY LINE (APPROXIMATE)
	UTILITY POLE
	UTILITY POLE WITH OVERHEAD LIGHT
	WATER HYDRANT
	CHAIN LINK FENCE
	BUILDING OR STRUCTURE (INCLUDING TEMPORARY STRUCTURES)
	EXISTING GROUND CONTOUR (FEET ABOVE MSL)
	SURVEY UNIT BOUNDARY/EXCAVATION LIMITS
	SURVEY UNIT ID
	INACCESSIBLE AREA
	MSL
	RAILROAD TRACKS

**SAMPLE LEGEND:**

SYMBOL	ID	DESCRIPTION
	HTZxxxxx	FSS HTZ SAMPLE LOCATION
	SLDxxxxx	FSS CLASS 1 SAMPLE LOCATION
FSS = FINAL STATUS SURVEY		



**FUSRAP**

St. Louis Downtown Site  
Norfolk Southern Railroad  
Vicinity Property (DT-3) Remediation  
St. Louis, Missouri

DRAWN BY: T. Richardson	REV. NO./DATE: 1/24/08
----------------------------	---------------------------

Figure 7. Tract 3 As-Built Sample Locations/Survey Unit Boundary

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05727	SLD05769	10/12/00	0.8	1.4		Actinium-227	0.10	0.10	0.15	0.01
						Americium-241	0.03	0.06	0.10	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	4.56	0.65	0.26	
						Protactinium-231	0.22	0.43	0.71	
						Radium-226	0.83	0.06	0.04	
						Radium-228	0.39	0.06	0.10	
						Thorium-228	1.20	0.55	0.15	
						Thorium-230	1.46	0.62	0.15	
						Thorium-232	0.54	0.35	0.15	
						Uranium-235	0.16	0.09	0.17	
						Uranium-238	2.33	0.95	3.95	
SLD05728	SLD05728	10/17/00	0	0.4	0.0	Actinium-227	0.04	0.09	0.14	0.00
						Americium-241	0.05	0.11	0.18	
						Cesium-137	0.04	0.02	0.02	
						Potassium-40	3.27	0.51	0.17	
						Protactinium-231	0.09	0.39	0.61	
						Radium-226	0.96	0.07	0.04	
						Radium-228	0.28	0.05	0.05	
						Thorium-228	0.31	0.31	0.47	
						Thorium-230	1.89	0.73	0.28	
						Thorium-232	0.33	0.28	0.15	
						Uranium-235	0.12	0.09	0.14	
						Uranium-238	0.88	0.92	2.41	
	SLD05770	10/17/00	1.4	2.0		Actinium-227	-0.05	0.36	0.57	0.15
						Americium-241	0.19	0.50	0.92	
						Cesium-137	-0.01	0.06	0.10	
						Potassium-40	9.07	2.06	2.80	
						Protactinium-231	0.06	1.72	3.09	
						Radium-226	2.61	0.26	0.18	
						Radium-228	0.74	0.23	0.30	
						Thorium-228	1.46	0.70	0.40	
Thorium-230	2.42	0.93	0.18							
Thorium-232	0.94	0.53	0.18							
Uranium-235	0.50	0.39	0.64							
Uranium-238	2.24	7.64	15.07							
SLD05729	SLD05729	10/19/00	0	0.6	0.0	Actinium-227	0.03	0.08	0.13	0.00
						Americium-241	0.00	0.02	0.04	
						Cesium-137	0.07	0.03	0.02	
						Potassium-40	7.84	0.87	0.13	
						Protactinium-231	-0.09	0.37	0.56	
						Radium-226	0.68	0.05	0.04	
						Radium-228	0.37	0.06	0.06	
						Thorium-228	0.24	0.25	0.32	
						Thorium-230	1.40	0.60	0.15	
						Thorium-232	0.38	0.29	0.15	
						Uranium-235	0.10	0.10	0.13	
						Uranium-238	0.76	0.31	2.99	

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD05729	SLD05771	10/19/00	1.5	2.0		Actinium-227	0.36	0.13	0.21	0.65
						Americium-241	0.09	0.07	0.07	
						Cesium-137	0.22	0.04	0.03	
						Potassium-40	3.41	0.64	0.36	
						Protactinium-231	0.29	0.69	1.07	
						Radium-226	5.13	0.27	0.07	
						Radium-228	0.36	0.07	0.09	
						Thorium-228	0.83	0.45	0.32	
						Thorium-230	9.38	2.16	0.32	
						Thorium-232	0.74	0.41	0.14	
						Uranium-235	0.74	0.18	0.23	
						Uranium-238	8.99	1.17	4.23	
SLD05730	SLD05730	10/16/00	0	0.5	0.0	Actinium-227	0.04	0.10	0.16	0.00
						Americium-241	0.06	0.13	0.21	
						Cesium-137	0.16	0.05	0.03	
						Potassium-40	4.05	0.62	0.21	
						Protactinium-231	-0.12	0.49	0.74	
						Radium-226	0.73	0.06	0.04	
						Radium-228	0.46	0.07	0.06	
						Thorium-228	0.80	0.42	0.13	
						Thorium-230	1.66	0.64	0.27	
						Thorium-232	0.67	0.39	0.27	
						Uranium-235	-0.01	0.10	0.17	
						Uranium-238	1.35	1.38	3.00	
	SLD05772	10/16/00	1.5	2.0		Actinium-227	0.11	0.16	0.24	0.15
						Americium-241	0.01	0.20	0.32	
						Cesium-137	0.01	0.03	0.03	
						Potassium-40	12.57	1.52	0.31	
						Protactinium-231	0.24	0.72	1.10	
						Radium-226	3.34	0.20	0.07	
						Radium-228	0.77	0.11	0.10	
						Thorium-228	1.17	0.53	0.37	
						Thorium-230	4.06	1.14	0.27	
						Thorium-232	0.68	0.38	0.13	
						Uranium-235	0.34	0.20	0.24	
						Uranium-238	1.31	1.70	4.12	
SLD05731	SLD05731	10/17/00	0	0.5	0.0	Actinium-227	0.10	0.10	0.17	0.08
						Americium-241	0.01	0.13	0.22	
						Cesium-137	0.13	0.03	0.02	
						Potassium-40	5.28	0.70	0.17	
						Protactinium-231	0.58	0.47	0.78	
						Radium-226	1.18	0.08	0.05	
						Radium-228	0.46	0.07	0.07	
						Thorium-228	0.86	0.49	0.46	
						Thorium-230	1.64	0.69	0.51	
						Thorium-232	0.19	0.22	0.33	
						Uranium-235	0.15	0.13	0.17	
						Uranium-238	5.44	3.58	3.82	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05731	SLD05773	10/17/00	1.5	2.0		Actinium-227	0.12	0.09	0.16	0.17
						Americium-241	0.00	0.14	0.22	
						Cesium-137	0.25	0.05	0.02	
						Potassium-40	2.80	0.48	0.21	
						Protactinium-231	-0.21	0.49	0.73	
						Radium-226	1.57	0.10	0.05	
						Radium-228	0.39	0.06	0.06	
						Thorium-228	1.00	0.53	0.17	
						Thorium-230	3.92	1.22	0.37	
						Thorium-232	0.86	0.49	0.17	
						Uranium-235	0.24	0.11	0.17	
						Uranium-238	3.42	1.33	2.61	
SLD05732	SLD05732	10/17/00	1	1.5	1.0	Actinium-227	0.03	0.09	0.14	0.00
						Americium-241	0.08	0.12	0.19	
						Cesium-137	0.05	0.02	0.02	
						Potassium-40	6.27	0.80	0.20	
						Protactinium-231	-0.14	0.41	0.60	
						Radium-226	0.91	0.07	0.04	
						Radium-228	0.52	0.07	0.06	
						Thorium-228	0.63	0.40	0.32	
						Thorium-230	1.81	0.71	0.32	
						Thorium-232	0.70	0.41	0.15	
						Uranium-235	0.18	0.12	0.14	
						Uranium-238	1.78	0.92	2.49	
	SLD05774	10/17/00	2.5	3.0		Actinium-227	-0.05	0.21	0.31	0.23
						Americium-241	0.01	0.28	0.44	
						Cesium-137	0.05	0.03	0.04	
						Potassium-40	12.37	1.52	0.41	
						Protactinium-231	0.60	0.91	1.42	
						Radium-226	4.32	0.25	0.18	
						Radium-228	1.37	0.16	0.12	
						Thorium-228	1.59	0.73	0.44	
Thorium-230	4.59	1.40	0.33							
Thorium-232	1.21	0.61	0.33							
Uranium-235	0.44	0.29	0.35							
Uranium-238	4.95	2.29	5.38							
SLD05733	SLD05733	10/11/00	0	0.5	0.0	Actinium-227	0.07	0.09	0.15	0.38
						Americium-241	0.05	0.12	0.20	
						Cesium-137	0.10	0.03	0.04	
						Potassium-40	3.80	0.56	0.23	
						Protactinium-231	0.46	0.54	0.70	
						Radium-226	0.72	0.06	0.04	
						Radium-228	0.34	0.06	0.07	
						Thorium-228	1.14	0.52	0.27	
						Thorium-230	3.83	1.09	0.28	
						Thorium-232	0.83	0.44	0.27	
						Uranium-235	0.14	0.13	0.16	
						Uranium-238	1.29	0.98	2.45	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD05733	SLD05775	10/11/00	1.2	1.7		Actinium-227	0.00	0.10	0.13	0.00	
						Americium-241	-0.09	0.10	0.15		
						Cesium-137	0.21	0.05	0.02		
						Potassium-40	6.23	0.81	0.18		
						Protactinium-231	0.16	0.36	0.58		
						Radium-226	0.50	0.05	0.04		
						Radium-228	0.35	0.05	0.05		
						Thorium-228	0.47	0.34	0.30		
						Thorium-230	1.19	0.55	0.15		
						Thorium-232	0.48	0.33	0.15		
						Uranium-235	0.08	0.09	0.12		
						Uranium-238	1.55	0.80	2.66		
SLD05734	SLD05734	10/16/00	0	0.4	0.0	Actinium-227	0.00	0.09	0.14	0.06	
						Americium-241	0.12	0.13	0.21		
						Cesium-137	0.20	0.05	0.02		
						Potassium-40	3.33	0.50	0.23		
						Protactinium-231	0.33	0.46	0.74		
						Radium-226	0.86	0.07	0.05		
						Radium-228	0.35	0.06	0.06		
						Thorium-228	0.67	0.40	0.29		
						Thorium-230	1.73	0.67	0.14		
						Thorium-232	0.26	0.24	0.14		
						Uranium-235	0.27	0.14	0.16		
						Uranium-238	4.35	1.46	2.09		
		SLD05776	10/16/00	1.5	2.0		Actinium-227	0.20	0.16	0.21	0.07
						Americium-241	0.21	0.18	0.29		
						Cesium-137	0.02	0.02	0.03		
						Potassium-40	11.72	1.40	0.28		
						Protactinium-231	0.46	0.59	0.95		
						Radium-226	1.81	0.12	0.06		
						Radium-228	0.64	0.09	0.09		
						Thorium-228	0.73	0.41	0.14		
						Thorium-230	2.18	0.77	0.14		
						Thorium-232	0.57	0.36	0.14		
	Uranium-235	0.00	0.14	0.21							
	Uranium-238	4.30	1.84	3.86							
SLD05735	SLD05735	10/12/00	0	0.5	0.0	Actinium-227	0.05	0.10	0.16	0.01	
						Americium-241	0.00	0.13	0.21		
						Cesium-137	0.05	0.02	0.02		
						Potassium-40	6.23	0.83	0.21		
						Protactinium-231	0.35	0.41	0.75		
						Radium-226	1.21	0.08	0.04		
						Radium-228	0.49	0.06	0.07		
						Thorium-228	0.74	0.40	0.13		
						Thorium-230	1.67	0.64	0.13		
						Thorium-232	0.93	0.45	0.13		
						Uranium-235	0.13	0.12	0.18		
						Uranium-238	2.11	1.22	3.50		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05735	SLD05777	10/12/00	1.5	2.0		Actinium-227	0.13	0.19	0.29	0.09
						Americium-241	0.02	0.10	0.17	
						Cesium-137	-0.01	0.03	0.04	
						Potassium-40	8.60	1.17	0.49	
						Protactinium-231	0.26	0.71	1.28	
						Radium-226	3.10	0.17	0.08	
						Radium-228	1.11	0.13	0.11	
						Thorium-228	1.23	0.54	0.14	
						Thorium-230	2.78	0.89	0.14	
						Thorium-232	1.26	0.55	0.14	
						Uranium-235	0.16	0.09	0.17	
						Uranium-238	2.77	1.24	4.97	
SLD05736	SLD05736	10/17/00	0	0.5	0.0	Actinium-227	0.04	0.11	0.17	0.00
						Americium-241	0.10	0.18	0.24	
						Cesium-137	0.06	0.03	0.03	
						Potassium-40	1.66	0.36	0.17	
						Protactinium-231	0.09	0.51	0.81	
						Radium-226	1.04	0.08	0.05	
						Radium-228	0.37	0.07	0.07	
						Thorium-228	0.45	0.34	0.29	
						Thorium-230	1.83	0.74	0.42	
						Thorium-232	0.46	0.33	0.15	
						Uranium-235	-0.05	0.11	0.18	
						Uranium-238	2.01	1.31	2.59	
	SLD05778	10/17/00	1.3	1.5		Actinium-227	0.03	0.09	0.14	0.01
						Americium-241	0.01	0.11	0.17	
						Cesium-137	0.04	0.02	0.03	
						Potassium-40	6.75	0.85	0.23	
						Protactinium-231	1.38	1.12	0.64	
						Radium-226	0.98	0.07	0.04	
						Radium-228	0.41	0.06	0.06	
						Thorium-228	0.53	0.34	0.14	
Thorium-230	2.02	0.74	0.14							
Thorium-232	0.41	0.30	0.14							
Uranium-235	0.03	0.10	0.15							
Uranium-238	1.10	1.09	2.84							
SLD05737	SLD05737	10/11/00	0	0.5	0.0	Actinium-227	0.17	0.14	0.29	1.21
						Americium-241	0.14	0.31	0.48	
						Cesium-137	0.76	0.14	0.04	
						Potassium-40	10.65	1.35	0.36	
						Protactinium-231	0.17	0.85	1.30	
						Radium-226	3.36	0.20	0.08	
						Radium-228	0.82	0.12	0.11	
						Thorium-228	1.14	0.52	0.27	
						Thorium-230	4.28	1.18	0.13	
						Thorium-232	0.80	0.42	0.13	
						Uranium-235	2.09	0.31	0.31	
						Uranium-238	38.63	4.89	4.76	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>	
SLD05737	SLD05779	10/11/00	1.5	2.0		Actinium-227	0.16	0.13	0.21	0.02	
						Americium-241	0.11	0.18	0.28		
						Cesium-137	0.00	0.02	0.03		
						Potassium-40	15.74	1.82	0.28		
						Protactinium-231	-0.04	0.64	0.96		
						Radium-226	1.30	0.09	0.06		
						Radium-228	1.03	0.11	0.09		
						Thorium-228	0.90	0.45	0.13		
						Thorium-230	1.29	0.55	0.13		
						Thorium-232	1.18	0.52	0.13		
						Uranium-235	0.11	0.15	0.21		
						Uranium-238	1.95	1.59	3.96		
SLD05738	SLD05738	10/12/00	0	0.5	0.0	Actinium-227	0.02	0.11	0.17	0.01	
						Americium-241	-0.01	0.06	0.10		
						Cesium-137	0.24	0.05	0.03		
						Potassium-40	4.82	0.72	0.26		
						Protactinium-231	0.24	0.43	0.73		
						Radium-226	0.83	0.07	0.05		
						Radium-228	0.40	0.07	0.08		
						Thorium-228	0.36	0.28	0.26		
						Thorium-230	1.27	0.54	0.31		
						Thorium-232	0.42	0.29	0.13		
						Uranium-235	0.25	0.16	0.19		
						Uranium-238	2.09	0.98	3.85		
		SLD05780	10/12/00	1.5	2.0		Actinium-227	0.40	0.36	0.61	0.18
							Americium-241	0.04	0.21	0.32	
							Cesium-137	0.02	0.06	0.12	
							Potassium-40	9.59	2.08	1.21	
							Protactinium-231	-0.65	1.66	2.57	
							Radium-226	2.89	0.26	0.19	
							Radium-228	1.26	0.29	0.33	
							Thorium-228	1.25	0.57	0.29	
						Thorium-230	2.39	0.83	0.29		
						Thorium-232	1.15	0.53	0.14		
						Uranium-235	0.25	0.30	0.56		
						Uranium-238	4.52	3.31	16.14		
SLD05739	SLD05739	10/19/00	0	0.5	0.0	Actinium-227	0.04	0.06	0.09	0.02	
						Americium-241	0.00	0.02	0.03		
						Cesium-137	0.00	0.01	0.02		
						Potassium-40	2.18	0.36	0.14		
						Protactinium-231	0.22	0.27	0.44		
						Radium-226	0.81	0.05	0.03		
						Radium-228	0.16	0.03	0.04		
						Thorium-228	0.39	0.33	0.35		
						Thorium-230	2.06	0.79	0.16		
						Thorium-232	0.47	0.34	0.16		
						Uranium-235	0.05	0.06	0.10		
						Uranium-238	0.78	0.29	1.58		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft <sup>1</sup> bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05739	SLD05781	10/19/00	1.5	2.0		Actinium-227	0.17	0.10	0.16	0.00
						Americium-241	0.04	0.03	0.05	
						Cesium-137	0.08	0.02	0.02	
						Potassium-40	5.18	0.68	0.24	
						Protactinium-231	0.36	0.43	0.71	
						Radium-226	0.82	0.06	0.04	
						Radium-228	0.44	0.07	0.06	
						Thorium-228	0.68	0.43	0.45	
						Thorium-230	1.72	0.70	0.50	
						Thorium-232	0.78	0.44	0.32	
						Uranium-235	0.13	0.14	0.15	
						Uranium-238	1.15	0.41	3.25	
SLD05740	SLD05740	10/11/00	0	0.5	0.0	Actinium-227	0.43	0.24	0.33	0.47
						Americium-241	0.11	0.28	0.44	
						Cesium-137	0.00	0.03	0.05	
						Potassium-40	9.96	1.32	0.40	
						Protactinium-231	0.50	0.90	1.41	
						Radium-226	4.46	0.26	0.09	
						Radium-228	1.00	0.13	0.14	
						Thorium-228	0.57	0.40	0.50	
						Thorium-230	1.24	0.58	0.50	
						Thorium-232	0.45	0.32	0.29	
						Uranium-235	0.34	0.26	0.33	
						Uranium-238	7.55	2.84	5.16	
	SLD05782	10/11/00	1.5	2.0		Actinium-227	0.09	0.12	0.19	0.02
						Americium-241	0.09	0.14	0.26	
						Cesium-137	0.02	0.02	0.03	
						Potassium-40	13.32	1.57	0.26	
						Protactinium-231	-0.29	0.55	0.80	
						Radium-226	0.92	0.07	0.05	
						Radium-228	0.85	0.10	0.07	
						Thorium-228	1.38	0.57	0.26	
Thorium-230	1.43	0.58	0.13							
Thorium-232	1.24	0.53	0.13							
Uranium-235	0.23	0.14	0.18							
Uranium-238	1.72	1.19	3.50							
SLD05741	SLD05741	10/10/00	0	0.4	0.0	Actinium-227	0.06	0.08	0.12	0.00
						Americium-241	0.03	0.02	0.04	
						Cesium-137	0.04	0.02	0.02	
						Potassium-40	1.83	0.40	0.23	
						Protactinium-231	-0.28	0.39	0.56	
						Radium-226	0.48	0.05	0.04	
						Radium-228	0.18	0.05	0.06	
						Thorium-228	0.54	0.33	0.12	
						Thorium-230	1.34	0.54	0.25	
						Thorium-232	0.36	0.26	0.12	
						Uranium-235	0.04	0.07	0.12	
						Uranium-238	0.63	0.39	2.73	

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD05741	SLD05783	10/10/00	1.5	2.0		Actinium-227	0.24	0.13	0.20	0.46
						Americium-241	0.03	0.04	0.06	
						Cesium-137	0.16	0.03	0.03	
						Potassium-40	13.70	1.47	0.27	
						Protactinium-231	0.30	0.53	0.83	
						Radium-226	1.77	0.11	0.05	
						Radium-228	0.82	0.09	0.08	
						Thorium-228	0.89	0.41	0.11	
						Thorium-230	8.00	1.72	0.11	
						Thorium-232	0.91	0.42	0.23	
						Uranium-235	0.22	0.14	0.17	
						Uranium-238	4.00	0.74	3.42	
SLD05742	SLD05742	10/11/00	0	0.5	0.0	Actinium-227	0.04	0.11	0.17	0.12
						Americium-241	-0.08	0.15	0.23	
						Cesium-137	0.24	0.05	0.03	
						Potassium-40	8.19	1.01	0.19	
						Protactinium-231	0.59	0.48	0.79	
						Radium-226	1.11	0.08	0.05	
						Radium-228	0.41	0.07	0.07	
						Thorium-228	0.54	0.34	0.13	
						Thorium-230	1.31	0.56	0.27	
						Thorium-232	0.29	0.25	0.13	
						Uranium-235	0.44	0.13	0.18	
						Uranium-238	7.37	1.87	2.98	
	SLD05784	10/11/00	1.5	2.0		Actinium-227	0.20	0.18	0.28	0.19
						Americium-241	0.25	0.28	0.38	
						Cesium-137	0.01	0.03	0.04	
						Potassium-40	10.97	1.43	0.40	
						Protactinium-231	0.46	0.81	1.26	
						Radium-226	3.32	0.20	0.08	
						Radium-228	1.23	0.14	0.12	
						Thorium-228	1.37	0.60	0.40	
SLD05743	SLD05743	10/11/00	0	0.5	0.0	Actinium-227	0.34	0.30	0.64	0.67
						Americium-241	0.26	0.59	0.98	
						Cesium-137	0.29	0.13	0.15	
						Potassium-40	10.82	2.33	1.35	
						Protactinium-231	-0.55	1.99	3.03	
						Radium-226	3.07	0.29	0.22	
						Radium-228	1.57	0.34	0.33	
						Thorium-228	1.38	0.59	0.14	
						Thorium-230	3.99	1.14	0.14	
						Thorium-232	1.50	0.62	0.29	
						Uranium-235	0.48	0.45	0.63	
						Uranium-238	14.59	6.28	16.12	

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05743	SLD05785	10/11/00	1.5	2.0		Actinium-227	0.10	0.14	0.22	0.02
						Americium-241	0.05	0.17	0.31	
						Cesium-137	0.01	0.02	0.04	
						Potassium-40	12.10	1.52	0.36	
						Protactinium-231	0.13	0.62	0.97	
						Radium-226	1.15	0.09	0.06	
						Radium-228	0.90	0.12	0.09	
						Thorium-228	1.09	0.50	0.13	
						Thorium-230	1.68	0.65	0.33	
						Thorium-232	0.73	0.40	0.13	
						Uranium-235	0.07	0.14	0.23	
						Uranium-238	0.74	2.35	4.40	
SLD05744	SLD05744	10/11/00	0	0.4	0.0	Actinium-227	0.27	0.27	0.53	0.49
						Americium-241	-0.14	0.52	0.82	
						Cesium-137	0.46	0.15	0.10	
						Potassium-40	10.79	1.97	0.97	
						Protactinium-231	0.75	1.71	2.82	
						Radium-226	2.09	0.22	0.19	
						Radium-228	0.96	0.22	0.27	
						Thorium-228	0.89	0.46	0.39	
						Thorium-230	2.46	0.80	0.26	
						Thorium-232	0.86	0.43	0.13	
						Uranium-235	0.68	0.36	0.56	
						Uranium-238	20.53	6.14	11.81	
	SLD05786	10/11/00	1.5	2.0		Actinium-227	0.09	0.43	0.68	0.35
						Americium-241	0.42	0.61	1.04	
						Cesium-137	-0.11	0.09	0.13	
						Potassium-40	10.96	2.48	1.15	
						Protactinium-231	1.49	2.60	3.27	
						Radium-226	3.85	0.34	0.23	
						Radium-228	1.20	0.30	0.46	
						Thorium-228	1.77	0.76	0.18	
Thorium-230	5.15	1.51	0.18							
Thorium-232	1.34	0.65	0.36							
Uranium-235	0.11	0.42	0.71							
Uranium-238	7.26	6.61	14.96							
SLD05745	SLD05745	11/02/00	0	0.5	0.0	Actinium-227	0.36	0.21	0.34	0.05
						Americium-241	0.00	0.05	0.09	
						Cesium-137	0.01	0.04	0.07	
						Potassium-40	10.94	1.67	0.61	
						Protactinium-231	-0.35	0.83	1.42	
						Radium-226	0.96	0.10	0.10	
						Radium-228	0.66	0.13	0.15	
						Thorium-228	1.36	0.66	0.52	
						Thorium-230	1.90	0.78	0.37	
						Thorium-232	1.00	0.53	0.17	
						Uranium-235	0.08	0.18	0.30	
						Uranium-238	0.62	0.88	8.07	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05745	SLD05787	11/02/00	1.5	2.0		Actinium-227	0.31	0.13	0.21	0.01
						Americium-241	0.03	0.04	0.06	
						Cesium-137	0.01	0.02	0.02	
						Potassium-40	12.18	1.35	0.27	
						Protactinium-231	0.06	0.50	0.83	
						Radium-226	1.31	0.09	0.05	
						Radium-228	0.80	0.09	0.12	
						Thorium-228	0.93	0.49	0.36	
						Thorium-230	1.62	0.66	0.32	
						Thorium-232	1.06	0.51	0.14	
						Uranium-235	0.25	0.12	0.16	
						Uranium-238	3.31	0.71	3.58	
SLD05912	SLD05912	08/14/00	0.3	0.8	0.3	Actinium-227	0.09	0.13	0.20	0.63
						Americium-241	0.09	0.08	0.13	
						Cesium-137	0.02	0.02	0.03	
						Potassium-40	13.23	1.45	0.28	
						Protactinium-231	-0.10	0.55	0.80	
						Radium-226	1.48	0.09	0.06	
						Radium-228	0.77	0.09	0.08	
						Thorium-228	0.77	0.09	0.08	
						Thorium-230	-0.02	5.82	10.07	
						Thorium-232	0.77	0.09	0.08	
						Uranium-235	0.11	0.15	0.19	
						Uranium-238	2.48	0.98	3.80	
	SLD05930	08/14/00	1.8	2.3		Actinium-227	0.33	0.14	0.22	0.24
						Americium-241	0.03	0.08	0.13	
						Cesium-137	-0.02	0.02	0.03	
						Potassium-40	15.35	1.66	0.29	
						Protactinium-231	-0.09	0.60	0.87	
						Radium-226	1.32	0.09	0.06	
						Radium-228	0.87	0.10	0.09	
						Thorium-228	0.87	0.10	0.09	
					Thorium-230	2.37	6.42	10.74		
					Thorium-232	0.87	0.10	0.09		
					Uranium-235	0.07	0.12	0.20		
					Uranium-238	2.44	0.93	4.29		
SLD05913	SLD05913	08/14/00	0.3	0.8	0.3	Actinium-227	0.08	0.12	0.19	0.66
						Americium-241	0.08	0.11	0.12	
						Cesium-137	0.20	0.04	0.03	
						Potassium-40	6.21	0.85	0.30	
						Protactinium-231	-0.07	0.53	0.78	
						Radium-226	1.19	0.08	0.05	
						Radium-228	0.39	0.07	0.07	
						Thorium-228	0.39	0.07	0.07	
						Thorium-230	-0.26	6.22	9.71	
						Thorium-232	0.39	0.07	0.07	
						Uranium-235	0.51	0.17	0.18	
						Uranium-238	5.52	1.26	3.56	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD05913	SLD05931	08/14/00	1.8	2.3		Actinium-227	0.08	0.07	0.13	0.07
						Americium-241	0.02	0.05	0.08	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	3.83	0.57	0.23	
						Protactinium-231	-0.15	0.38	0.54	
						Radium-226	0.77	0.05	0.04	
						Radium-228	0.21	0.05	0.06	
						Thorium-228	0.21	0.05	0.06	
						Thorium-230	-3.98	3.74	5.92	
						Thorium-232	0.21	0.05	0.06	
						Uranium-235	0.07	0.08	0.13	
						Uranium-238	1.39	0.68	2.62	
SLD06164	SLD06164	11/08/00	0.5	1.0	0.5	Actinium-227	0.06	0.05	0.14	0.02
						Americium-241	-0.02	0.05	0.08	
						Cesium-137	0.03	0.02	0.02	
						Potassium-40	4.20	0.59	0.20	
						Protactinium-231	0.40	0.39	0.66	
						Radium-226	1.10	0.07	0.04	
						Radium-228	0.37	0.05	0.06	
						Thorium-228	1.15	0.54	0.42	
						Thorium-230	2.25	0.78	0.30	
						Thorium-232	1.11	0.51	0.14	
						Uranium-235	0.07	0.08	0.14	
						Uranium-238	1.00	0.69	2.87	
	SLD06188	11/08/00	1.5	2.0		Actinium-227	-0.01	0.12	0.18	0.01
						Americium-241	0.00	0.07	0.11	
						Cesium-137	0.07	0.03	0.03	
						Potassium-40	8.63	1.06	0.28	
						Protactinium-231	-0.17	0.54	0.83	
						Radium-226	1.33	0.08	0.05	
						Radium-228	0.60	0.09	0.08	
						Thorium-228	0.81	0.44	0.26	
Thorium-230	1.69	0.66	0.14							
Thorium-232	0.72	0.40	0.14							
Uranium-235	0.15	0.17	0.20							
Uranium-238	2.02	1.00	4.30							
SLD06165	SLD06165	11/13/00	0	0.5	0.0	Actinium-227	0.00	0.09	0.13	0.00
						Americium-241	0.05	0.06	0.07	
						Cesium-137	0.00	0.01	0.03	
						Potassium-40	2.72	0.49	0.25	
						Protactinium-231	0.52	0.68	0.66	
						Radium-226	0.71	0.06	0.04	
						Radium-228	0.18	0.05	0.07	
						Thorium-228	0.87	0.51	0.45	
						Thorium-230	1.46	0.65	0.16	
						Thorium-232	0.42	0.33	0.16	
						Uranium-235	0.02	0.08	0.14	
						Uranium-238	0.52	0.59	2.96	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft <sup>1</sup> bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD06165	SLD06189	11/13/00	1.7	2.2		Actinium-227	0.32	0.19	0.30	0.24
						Americium-241	-0.06	0.11	0.17	
						Cesium-137	0.03	0.03	0.04	
						Potassium-40	9.75	1.24	0.53	
						Protactinium-231	0.90	0.81	1.35	
						Radium-226	3.39	0.19	0.08	
						Radium-228	1.12	0.13	0.12	
						Thorium-228	1.68	0.76	0.38	
						Thorium-230	4.96	1.49	0.32	
						Thorium-232	1.32	0.64	0.18	
						Uranium-235	0.38	0.20	0.27	
						Uranium-238	3.23	1.40	5.09	
SLD06166	SLD06166	11/13/00	0.6	1.1	0.6	Actinium-227	0.03	0.07	0.11	0.00
						Americium-241	0.01	0.04	0.06	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	2.44	0.38	0.11	
						Protactinium-231	-0.05	0.27	0.48	
						Radium-226	0.79	0.05	0.03	
						Radium-228	0.11	0.03	0.04	
						Thorium-228	0.40	0.32	0.28	
						Thorium-230	1.63	0.69	0.37	
						Thorium-232	0.17	0.20	0.16	
						Uranium-235	0.08	0.07	0.12	
						Uranium-238	0.75	0.55	2.60	
	SLD06190	11/13/00	2.2	2.7		Actinium-227	0.12	0.12	0.18	0.01
						Americium-241	-0.02	0.07	0.10	
						Cesium-137	0.00	0.02	0.04	
						Potassium-40	12.11	1.35	0.25	
						Protactinium-231	0.12	0.46	0.74	
						Radium-226	1.16	0.08	0.05	
						Radium-228	0.65	0.08	0.07	
						Thorium-228	0.83	0.49	0.34	
						Thorium-230	1.12	0.56	0.29	
						Thorium-232	0.69	0.43	0.34	
					Uranium-235	0.14	0.14	0.18		
					Uranium-238	1.52	0.67	3.99		
SLD06167	SLD06167	11/13/00	0.7	1.2	0.7	Actinium-227	0.03	0.07	0.12	0.00
						Americium-241	0.03	0.09	0.15	
						Cesium-137	0.03	0.02	0.02	
						Potassium-40	4.18	0.58	0.16	
						Protactinium-231	0.21	0.33	0.53	
						Radium-226	0.77	0.06	0.03	
						Radium-228	0.24	0.04	0.05	
						Thorium-228	0.66	0.36	0.22	
						Thorium-230	0.95	0.45	0.35	
						Thorium-232	0.47	0.32	0.35	
						Uranium-235	0.04	0.08	0.13	
						Uranium-238	1.31	1.07	2.53	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD06167	SLD06191	11/13/00	2.2	2.7		Actinium-227	0.11	0.11	0.18	0.01
						Americium-241	0.02	0.14	0.23	
						Cesium-137	0.12	0.03	0.03	
						Potassium-40	13.37	1.53	0.22	
						Protactinium-231	-0.02	0.75	0.82	
						Radium-226	1.04	0.08	0.05	
						Radium-228	0.78	0.09	0.07	
						Thorium-228	1.16	0.52	0.32	
						Thorium-230	1.35	0.55	0.24	
						Thorium-232	0.47	0.31	0.13	
						Uranium-235	-0.03	0.11	0.17	
						Uranium-238	1.82	1.50	3.62	
						SLD06168	SLD06168	11/08/00	0	0.5
Americium-241	0.03	0.04	0.06							
Cesium-137	0.00	0.01	0.01							
Potassium-40	1.08	0.30	0.16							
Protactinium-231	-0.14	0.26	0.44							
Radium-226	0.61	0.04	0.03							
Radium-228	0.23	0.04	0.04							
Thorium-228	0.60	0.38	0.31							
Thorium-230	1.04	0.50	0.14							
Thorium-232	0.52	0.34	0.14							
Uranium-235	0.04	0.06	0.10							
Uranium-238	0.77	0.45	2.11							
SLD06192	11/08/00	1.3	1.8		Actinium-227					
					Americium-241		-0.02	0.04	0.05	
					Cesium-137		0.00	0.01	0.02	
					Potassium-40		1.60	0.29	0.15	
					Protactinium-231		-0.03	0.30	0.48	
					Radium-226		0.52	0.04	0.03	
					Radium-228		0.17	0.04	0.05	
Thorium-228	0.74	0.40	0.13							
Thorium-230	0.77	0.41	0.25							
Thorium-232	0.28	0.24	0.25							
Uranium-235	0.08	0.07	0.10							
Uranium-238	0.89	0.54	2.06							
SLD06169	SLD06169	11/14/00	0.4	0.9	0.4	Actinium-227	0.05	0.06	0.10	0.00
						Americium-241	-0.02	0.08	0.13	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	3.10	0.45	0.11	
						Protactinium-231	0.04	0.29	0.51	
						Radium-226	0.44	0.04	0.03	
						Radium-228	0.13	0.03	0.05	
						Thorium-228	0.35	0.31	0.37	
						Thorium-230	0.76	0.44	0.28	
						Thorium-232	0.44	0.32	0.15	
						Uranium-235	0.05	0.07	0.11	
Uranium-238	1.08	1.02	2.03							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD06169	SLD06193	11/14/00	1.9	2.4		Actinium-227	0.07	0.12	0.18	0.01	
						Americium-241	0.08	0.15	0.24		
						Cesium-137	0.07	0.03	0.03		
						Potassium-40	9.11	1.14	0.21		
						Protactinium-231	0.09	0.54	0.83		
						Radium-226	1.07	0.08	0.05		
						Radium-228	0.54	0.08	0.07		
						Thorium-228	0.75	0.42	0.37		
						Thorium-230	1.65	0.63	0.35		
						Thorium-232	0.81	0.42	0.32		
						Uranium-235	0.16	0.11	0.20		
						Uranium-238	2.17	1.32	3.89		
SLD06170	SLD06170	11/14/00	0	0.5	0.0	Actinium-227	0.04	0.06	0.10	0.00	
						Americium-241	0.03	0.08	0.14		
						Cesium-137	0.00	0.00	0.01		
						Potassium-40	2.72	0.42	0.17		
						Protactinium-231	0.14	0.26	0.43		
						Radium-226	0.60	0.05	0.03		
						Radium-228	0.13	0.04	0.05		
						Thorium-228	0.30	0.25	0.13		
						Thorium-230	0.83	0.43	0.25		
						Thorium-232	0.14	0.17	0.25		
						Uranium-235	0.02	0.07	0.11		
						Uranium-238	0.58	0.78	2.37		
		SLD06194	11/14/00	1.5	2.0		Actinium-227	0.03	0.09	0.15	0.00
	Americium-241						0.15	0.13	0.22		
	Cesium-137						0.06	0.02	0.02		
	Potassium-40						11.21	1.31	0.17		
	Protactinium-231						0.14	0.46	0.71		
	Radium-226						0.86	0.07	0.04		
	Radium-228						0.57	0.08	0.06		
	Thorium-228						0.91	0.48	0.35		
	Thorium-230						1.56	0.63	0.14		
	Thorium-232						0.57	0.36	0.14		
Uranium-235	0.20	0.15	0.17								
Uranium-238	1.46	1.22	3.29								
SLD06172	SLD06172	10/31/00	0	0.5	0.0	Actinium-227	0.00	0.08	0.13	0.03	
						Americium-241	0.04	0.05	0.07		
						Cesium-137	0.01	0.02	0.02		
						Potassium-40	5.84	0.74	0.16		
						Protactinium-231	0.24	0.44	0.64		
						Radium-226	0.60	0.05	0.04		
						Radium-228	0.25	0.05	0.06		
						Thorium-228	0.50	0.34	0.31		
						Thorium-230	1.25	0.55	0.14		
						Thorium-232	1.23	0.55	0.26		
						Uranium-235	0.07	0.09	0.13		
						Uranium-238	0.42	0.67	3.30		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD06172	SLD06197	10/31/00	1.8	2.3		Actinium-227	0.01	0.11	0.16	0.01
						Americium-241	0.00	0.06	0.10	
						Cesium-137	0.05	0.03	0.03	
						Potassium-40	11.61	1.29	0.30	
						Protactinium-231	0.06	0.50	0.79	
						Radium-226	0.94	0.07	0.06	
						Radium-228	0.73	0.09	0.08	
						Thorium-228	1.00	0.53	0.43	
						Thorium-230	1.57	0.67	0.16	
						Thorium-232	1.05	0.53	0.16	
						Uranium-235	-0.03	0.10	0.17	
						Uranium-238	0.57	0.76	4.29	
SLD06173	SLD06173	11/07/00	0	0.5	0.0	Actinium-227	0.08	0.06	0.09	0.00
						Americium-241	-0.01	0.02	0.02	
						Cesium-137	0.02	0.01	0.01	
						Potassium-40	1.96	0.28	0.11	
						Protactinium-231	-0.23	0.23	0.38	
						Radium-226	0.50	0.04	0.02	
						Radium-228	0.22	0.03	0.03	
						Thorium-228	0.40	0.32	0.30	
						Thorium-230	1.29	0.60	0.16	
						Thorium-232	0.41	0.32	0.16	
						Uranium-235	0.05	0.05	0.09	
						Uranium-238	0.41	0.22	1.70	
	SLD06196	11/07/00	1.5	2.0		Actinium-227	0.16	0.07	0.11	0.00
						Americium-241	0.01	0.02	0.03	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	6.13	0.69	0.17	
						Protactinium-231	0.13	0.21	0.43	
						Radium-226	0.72	0.05	0.03	
						Radium-228	0.32	0.04	0.04	
						Thorium-228	0.87	0.49	0.17	
Thorium-230	1.84	0.76	0.31							
Thorium-232	0.66	0.43	0.31							
Uranium-235	0.00	0.08	0.09							
Uranium-238	0.65	0.32	2.00							
SLD06174	SLD06174	11/07/00	0	0.5	0.0	Actinium-227	0.13	0.09	0.14	0.00
						Americium-241	0.03	0.03	0.05	
						Cesium-137	0.14	0.03	0.02	
						Potassium-40	3.99	0.56	0.19	
						Protactinium-231	-0.02	0.40	0.62	
						Radium-226	1.11	0.08	0.04	
						Radium-228	0.33	0.05	0.05	
						Thorium-228	0.62	0.40	0.29	
						Thorium-230	1.96	0.76	0.16	
						Thorium-232	0.62	0.40	0.29	
						Uranium-235	0.09	0.10	0.13	
						Uranium-238	1.19	0.45	2.89	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD06174	SLD06198	11/07/00	1.5	2.0		Actinium-227	0.38	0.14	0.21	0.02	
						Americium-241	0.00	0.05	0.06		
						Cesium-137	0.00	0.02	0.03		
						Potassium-40	15.41	1.62	0.26		
						Protactinium-231	-0.05	0.52	0.80		
						Radium-226	1.58	0.10	0.05		
						Radium-228	0.95	0.10	0.08		
						Thorium-228	1.40	0.68	0.19		
						Thorium-230	2.07	0.86	0.35		
						Thorium-232	0.83	0.51	0.19		
						Uranium-235	0.05	0.15	0.18		
						Uranium-238	1.54	0.62	3.78		
SLD06175	SLD06175	10/31/00	0	0.5	0.0	Actinium-227	0.05	0.11	0.16	0.04	
						Americium-241	-0.01	0.06	0.09		
						Cesium-137	0.10	0.04	0.03		
						Potassium-40	6.53	0.83	0.25		
						Protactinium-231	0.27	0.47	0.76		
						Radium-226	1.32	0.08	0.05		
						Radium-228	0.47	0.06	0.06		
						Thorium-228	0.85	0.45	0.26		
						Thorium-230	2.16	0.76	0.26		
						Thorium-232	1.01	0.48	0.14		
						Uranium-235	0.28	0.15	0.16		
						Uranium-238	2.46	0.85	2.65		
		SLD06199	10/31/00	1.5	2.0		Actinium-227	0.14	0.12	0.21	0.04
							Americium-241	0.04	0.08	0.13	
							Cesium-137	-0.01	0.02	0.03	
							Potassium-40	17.05	1.80	0.29	
							Protactinium-231	0.30	0.58	0.95	
							Radium-226	1.08	0.08	0.05	
							Radium-228	1.14	0.12	0.09	
							Thorium-228	1.08	0.50	0.37	
						Thorium-230	1.44	0.58	0.28		
						Thorium-232	1.34	0.56	0.28		
						Uranium-235	0.16	0.15	0.21		
						Uranium-238	1.33	1.02	5.12		
SLD06176	SLD06176	11/07/00	0	0.6	0.0	Actinium-227	0.35	0.16	0.24	0.60	
						Americium-241	0.05	0.05	0.07		
						Cesium-137	0.39	0.06	0.03		
						Potassium-40	11.15	1.28	0.33		
						Protactinium-231	0.43	0.61	0.97		
						Radium-226	1.88	0.13	0.06		
						Radium-228	0.73	0.09	0.08		
						Thorium-228	1.11	0.59	0.33		
						Thorium-230	4.49	1.38	0.18		
						Thorium-232	0.66	0.44	0.18		
						Uranium-235	0.33	0.15	0.20		
						Uranium-238	5.97	0.93	4.27		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD06176	SLD06200	11/07/00	1.5	2.0		Actinium-227	0.47	0.16	0.24	0.10	
						Americium-241	0.03	0.04	0.07		
						Cesium-137	0.00	0.03	0.03		
						Potassium-40	14.61	1.53	0.28		
						Protactinium-231	-0.05	0.62	0.93		
						Radium-226	2.80	0.17	0.06		
						Radium-228	1.27	0.13	0.09		
						Thorium-228	1.69	0.68	0.15		
						Thorium-230	2.94	0.97	0.28		
						Thorium-232	1.32	0.60	0.28		
						Uranium-235	0.00	0.15	0.22		
						Uranium-238	2.85	0.81	4.30		
SLD06177	SLD06177	11/07/00	0	0.5	0.0	Actinium-227	0.16	0.19	0.30	0.03	
						Americium-241	-0.01	0.05	0.08		
						Cesium-137	0.05	0.03	0.07		
						Potassium-40	4.93	1.02	0.44		
						Protactinium-231	-0.02	0.87	1.36		
						Radium-226	0.39	0.08	0.10		
						Radium-228	0.41	0.11	0.15		
						Thorium-228	0.71	0.43	0.16		
						Thorium-230	1.23	0.59	0.30		
						Thorium-232	0.64	0.41	0.30		
						Uranium-235	0.13	0.15	0.27		
						Uranium-238	0.66	0.73	5.68		
		SLD06201	11/07/00	1.5	2.0		Actinium-227	0.15	0.14	0.22	0.02
							Americium-241	0.01	0.04	0.06	
							Cesium-137	0.07	0.03	0.04	
							Potassium-40	5.62	0.83	0.33	
							Protactinium-231	-0.62	0.51	0.82	
							Radium-226	0.94	0.08	0.06	
							Radium-228	0.40	0.07	0.08	
							Thorium-228	0.62	0.42	0.57	
						Thorium-230	1.52	0.60	0.32		
						Thorium-232	0.65	0.37	0.24		
						Uranium-235	0.21	0.15	0.19		
						Uranium-238	1.30	0.53	4.59		
SLD06178	SLD06178	11/07/00	0	0.5	0.0	Actinium-227	0.14	0.07	0.11	0.00	
						Americium-241	0.01	0.02	0.03		
						Cesium-137	0.01	0.02	0.02		
						Potassium-40	3.06	0.41	0.15		
						Protactinium-231	0.07	0.30	0.47		
						Radium-226	0.76	0.05	0.03		
						Radium-228	0.34	0.05	0.04		
						Thorium-228	0.83	0.50	0.33		
						Thorium-230	1.62	0.72	0.18		
						Thorium-232	0.78	0.47	0.18		
						Uranium-235	0.06	0.09	0.10		
						Uranium-238	0.82	0.31	1.82		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>	
SLD06178	SLD06202	11/07/00	1.7	2.4		Actinium-227	0.23	0.11	0.17	0.38	
						Americium-241	0.00	0.03	0.05		
						Cesium-137	0.28	0.05	0.02		
						Potassium-40	3.65	0.56	0.22		
						Protactinium-231	0.08	0.46	0.71		
						Radium-226	0.82	0.06	0.05		
						Radium-228	0.66	0.08	0.06		
						Thorium-228	1.01	0.49	0.29		
						Thorium-230	7.51	1.75	0.13		
						Thorium-232	1.22	0.53	0.13		
						Uranium-235	0.12	0.11	0.14		
						Uranium-238	0.76	0.40	2.95		
SLD06179	SLD06179	10/10/00	0	0.4	0.0	Actinium-227	0.06	0.06	0.10	0.00	
						Americium-241	0.00	0.02	0.03		
						Cesium-137	0.02	0.01	0.01		
						Potassium-40	2.49	0.37	0.18		
						Protactinium-231	0.07	0.28	0.44		
						Radium-226	0.79	0.05	0.03		
						Radium-228	0.21	0.04	0.04		
						Thorium-228	0.22	0.25	0.40		
						Thorium-230	1.65	0.63	0.26		
						Thorium-232	0.24	0.22	0.13		
						Uranium-235	0.09	0.08	0.10		
						Uranium-238	0.74	0.31	2.17		
		SLD06203	10/10/00	1.5	2.0		Actinium-227	0.12	0.07	0.18	0.09
	Americium-241						0.03	0.03	0.05		
	Cesium-137						0.01	0.02	0.03		
	Potassium-40						6.48	0.81	0.27		
	Protactinium-231						-0.26	0.51	0.75		
	Radium-226						2.33	0.13	0.05		
	Radium-228						0.54	0.07	0.07		
	Thorium-228						0.67	0.39	0.27		
Thorium-230	2.75	0.87	0.13								
Thorium-232	0.69	0.38	0.13								
Uranium-235	0.26	0.12	0.15								
Uranium-238	3.37	0.64	2.99								
SLD06180	SLD06180	11/08/00	0	0.5	0.0	Actinium-227	0.00	0.10	0.16	0.09	
						Americium-241	0.00	0.06	0.09		
						Cesium-137	0.05	0.03	0.02		
						Potassium-40	4.07	0.56	0.20		
						Protactinium-231	0.14	0.41	0.67		
						Radium-226	1.31	0.08	0.04		
						Radium-228	0.45	0.06	0.07		
						Thorium-228	0.55	0.38	0.36		
						Thorium-230	2.39	0.84	0.32		
						Thorium-232	0.64	0.39	0.15		
						Uranium-235	0.05	0.12	0.15		
						Uranium-238	1.61	0.90	3.10		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD06180	SLD06204	11/08/00	1.5	2.0		Actinium-227	0.07	0.12	0.17	0.03	
						Americium-241	0.06	0.07	0.10		
						Cesium-137	0.00	0.02	0.03		
						Potassium-40	6.91	0.92	0.25		
						Protactinium-231	-0.23	0.50	0.76		
						Radium-226	1.66	0.10	0.05		
						Radium-228	0.58	0.08	0.08		
						Thorium-228	1.54	0.60	0.13		
						Thorium-230	2.28	0.76	0.24		
						Thorium-232	0.51	0.33	0.24		
						Uranium-235	0.09	0.13	0.17		
						Uranium-238	2.81	1.11	3.28		
SLD06181	SLD06181	11/13/00	0	0.5	0.0	Actinium-227	0.04	0.07	0.11	0.00	
						Americium-241	0.02	0.04	0.06		
						Cesium-137	0.00	0.01	0.02		
						Potassium-40	2.29	0.39	0.18		
						Protactinium-231	-0.18	0.31	0.53		
						Radium-226	0.83	0.05	0.03		
						Radium-228	0.10	0.03	0.05		
						Thorium-228	0.34	0.34	0.50		
						Thorium-230	1.49	0.66	0.29		
						Thorium-232	0.23	0.24	0.29		
						Uranium-235	0.08	0.07	0.12		
						Uranium-238	1.04	0.51	2.31		
		SLD06205	11/13/00	1.5	2.0		Actinium-227	0.03	0.11	0.17	0.01
							Americium-241	0.04	0.06	0.09	
							Cesium-137	0.01	0.02	0.03	
							Potassium-40	8.96	1.07	0.27	
							Protactinium-231	0.40	0.47	0.79	
							Radium-226	0.71	0.06	0.05	
							Radium-228	0.61	0.07	0.07	
							Thorium-228	0.92	0.52	0.35	
						Thorium-230	1.54	0.68	0.17		
						Thorium-232	0.86	0.49	0.17		
						Uranium-235	0.15	0.12	0.17		
						Uranium-238	1.22	0.90	3.72		
SLD06182	SLD06182	11/13/00	0	0.5	0.0	Actinium-227	0.05	0.09	0.14	0.07	
						Americium-241	0.00	0.05	0.08		
						Cesium-137	0.05	0.02	0.02		
						Potassium-40	3.94	0.53	0.24		
						Protactinium-231	0.72	0.50	0.63		
						Radium-226	1.12	0.07	0.04		
						Radium-228	0.26	0.05	0.06		
						Thorium-228	0.85	0.52	0.43		
						Thorium-230	2.27	0.89	0.18		
						Thorium-232	0.33	0.30	0.18		
						Uranium-235	0.14	0.10	0.13		
						Uranium-238	1.28	0.69	2.85		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>	
SLD06182	SLD06206	11/13/00	1.5	2.0		Actinium-227	0.12	0.25	0.38	0.22	
						Americium-241	0.10	0.13	0.20		
						Cesium-137	0.01	0.04	0.07		
						Potassium-40	12.33	1.92	0.70		
						Protactinium-231	0.35	0.94	1.75		
						Radium-226	2.18	0.17	0.12		
						Radium-228	1.03	0.18	0.15		
						Thorium-228	1.57	0.67	0.27		
						Thorium-230	3.89	1.17	0.32		
						Thorium-232	1.70	0.69	0.15		
						Uranium-235	0.08	0.20	0.35		
						Uranium-238	2.95	1.43	8.06		
SLD06212	SLD06212	11/14/00	0	0.6	0.0	Actinium-227	0.06	0.06	0.09	0.00	
						Americium-241	0.00	0.02	0.02		
						Cesium-137	0.00	0.01	0.01		
						Potassium-40	0.61	0.17	0.12		
						Protactinium-231	0.05	0.24	0.38		
						Radium-226	0.50	0.04	0.02		
						Radium-228	0.14	0.03	0.04		
						Thorium-228	0.14	0.03	0.04		
						Thorium-230	-0.27	1.38	2.17		
						Thorium-232	0.14	0.03	0.04		
						Uranium-235	0.10	0.06	0.08		
						Uranium-238	0.39	0.23	1.51		
		SLD06237	11/14/00	1.5	2.0		Actinium 227	0.55	0.14	0.21	0.13
							Americium-241	0.02	0.04	0.06	
							Cesium-137	0.05	0.02	0.03	
							Potassium-40	13.11	1.40	0.29	
							Protactinium-231	0.49	0.56	0.87	
							Radium-226	2.35	0.14	0.05	
							Radium-228	0.96	0.10	0.07	
							Thorium-228	0.96	0.10	0.07	
						Thorium-230	2.19	3.47	6.09		
						Thorium-232	0.96	0.10	0.07		
						Uranium-235	0.43	0.16	0.17		
						Uranium-238	4.30	0.75	3.24		
SLD06213	SLD06213	10/26/00	0	0.6	0.0	Actinium-227	0.47	0.13	0.21	1.82	
						Americium-241	0.00	0.04	0.06		
						Cesium-137	0.21	0.04	0.03		
						Potassium-40	6.25	0.79	0.30		
						Protactinium-231	0.35	0.58	0.89		
						Radium-226	4.35	0.23	0.06		
						Radium-228	0.59	0.07	0.07		
						Thorium-228	0.58	0.41	0.32		
						Thorium-230	10.50	2.57	0.18		
						Thorium-232	0.90	0.51	0.17		
						Uranium-235	0.48	0.14	0.19		
						Uranium-238	6.83	0.88	3.44		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD06213	SLD06238	10/26/00	1.5	2.0		Actinium-227	0.53	0.14	0.25	0.71
						Americium-241	0.05	0.06	0.09	
						Cesium-137	0.01	0.03	0.04	
						Potassium-40	11.46	1.29	0.44	
						Protactinium-231	0.55	0.83	1.27	
						Radium-226	8.05	0.41	0.08	
						Radium-228	0.87	0.12	0.12	
						Thorium-228	0.87	0.12	0.12	
						Thorium-230	10.79	6.47	8.92	
						Thorium-232	0.87	0.12	0.12	
						Uranium-235	0.60	0.24	0.27	
						Uranium-238	7.64	1.26	5.44	
SLD06215	SLD06215	10/26/00	0	0.5	0.0	Actinium-227	0.31	0.12	0.17	1.28
						Americium-241	0.02	0.04	0.06	
						Cesium-137	0.13	0.03	0.03	
						Potassium-40	6.74	0.82	0.28	
						Protactinium-231	0.30	0.56	0.86	
						Radium-226	3.97	0.21	0.05	
						Radium-228	0.64	0.08	0.08	
						Thorium-228	0.99	0.54	0.31	
						Thorium-230	8.01	2.04	0.17	
						Thorium-232	0.72	0.45	0.31	
						Uranium-235	0.48	0.18	0.21	
						Uranium-238	4.85	0.66	3.29	
	SLD06240	10/26/00	1.5	2.0		Actinium-227	1.31	0.22	0.33	1.08
						Americium-241	0.11	0.07	0.12	
						Cesium-137	0.02	0.04	0.05	
						Potassium-40	9.97	1.30	0.61	
						Protactinium-231	1.36	1.16	1.77	
						Radium-226	17.32	0.83	0.11	
						Radium-228	0.77	0.12	0.15	
						Thorium-228	0.77	0.12	0.15	
						Thorium-230	11.56	8.70	11.75	
						Thorium-232	0.77	0.12	0.15	
						Uranium-235	0.82	0.26	0.36	
						Uranium-238	6.97	1.34	6.77	
SLD06216	SLD06216	10/26/00	0.5	1.1	0.5	Actinium-227	0.03	0.07	0.10	0.00
						Americium-241	0.01	0.02	0.03	
						Cesium-137	0.07	0.02	0.01	
						Potassium-40	4.18	0.54	0.15	
						Protactinium-231	-0.04	0.28	0.42	
						Radium-226	0.45	0.04	0.03	
						Radium-228	0.22	0.04	0.04	
						Thorium-228	0.22	0.04	0.04	
						Thorium-230	-0.92	1.63	2.51	
						Thorium-232	0.22	0.04	0.04	
						Uranium-235	0.11	0.07	0.10	
						Uranium-238	0.57	0.29	2.21	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD06216	SLD06241	10/26/00	2	2.5		Actinium-227	0.24	0.14	0.19	0.15
						Americium-241	0.05	0.04	0.06	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	4.22	0.59	0.31	
						Protactinium-231	0.07	0.54	0.82	
						Radium-226	4.27	0.23	0.05	
						Radium-228	0.24	0.05	0.07	
						Thorium-228	0.24	0.05	0.07	
						Thorium-230	0.18	3.43	5.69	
						Thorium-232	0.24	0.05	0.07	
						Uranium-235	0.36	0.15	0.18	
						Uranium-238	3.92	0.66	3.56	
						SLD06217	SLD06217	10/26/00	0	
Americium-241	0.04	0.04	0.06							
Cesium-137	0.10	0.03	0.03							
Potassium-40	4.41	0.68	0.32							
Protactinium-231	0.17	0.57	0.88							
Radium-226	3.53	0.19	0.05							
Radium-228	0.44	0.07	0.07							
Thorium-228	0.44	0.07	0.07							
Thorium-230	4.43	3.58	5.73							
Thorium-232	0.44	0.07	0.07							
Uranium-235	0.38	0.15	0.18							
Uranium-238	5.50	0.81	3.18							
SLD06242	10/26/00	1.5	2.0		Actinium-227					0.04
					Americium-241		0.01	0.02	0.03	
					Cesium-137		0.00	0.01	0.01	
					Potassium-40		2.20	0.37	0.12	
					Protactinium-231		0.25	0.28	0.47	
					Radium-226		0.37	0.03	0.03	
					Radium-228		0.23	0.04	0.04	
					Thorium-228		0.23	0.04	0.04	
					Thorium-230		0.84	1.47	2.54	
					Thorium-232		0.23	0.04	0.04	
SLD06218	SLD06218	10/23/00	0	0.5	0.0		Actinium-227	0.09	0.10	0.15
						Americium-241	0.00	0.03	0.05	
						Cesium-137	0.05	0.02	0.02	
						Potassium-40	5.33	0.69	0.20	
						Protactinium-231	0.01	0.44	0.67	
						Radium-226	1.58	0.10	0.04	
						Radium-228	0.52	0.07	0.06	
						Thorium-228	0.52	0.07	0.06	
						Thorium-230	4.25	2.63	4.52	
						Thorium-232	0.52	0.07	0.06	
Uranium-235	0.21	0.11	0.14							
Uranium-238	2.14	0.46	2.65							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD06218	SLD06243	10/23/00	1.5	2.0		Actinium-227	0.17	0.12	0.19	0.07
						Americium-241	0.05	0.04	0.06	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	8.29	1.00	0.27	
						Protactinium-231	0.29	0.54	0.84	
						Radium-226	1.94	0.12	0.05	
						Radium-228	0.76	0.09	0.08	
						Thorium-228	0.76	0.09	0.08	
						Thorium-230	2.01	3.59	5.73	
						Thorium-232	0.76	0.09	0.08	
						Uranium-235	0.23	0.12	0.16	
						Uranium-238	2.13	0.61	3.89	
SLD06219	SLD06219	10/26/00	0	0.5	0.0	Actinium-227	0.03	0.07	0.11	0.00
						Americium-241	0.02	0.02	0.03	
						Cesium-137	0.03	0.01	0.02	
						Potassium-40	2.87	0.41	0.19	
						Protactinium-231	0.10	0.33	0.51	
						Radium-226	0.82	0.06	0.03	
						Radium-228	0.29	0.05	0.05	
						Thorium-228	0.29	0.05	0.05	
						Thorium-230	-0.08	1.92	3.02	
						Thorium-232	0.29	0.05	0.05	
						Uranium-235	0.12	0.08	0.10	
						Uranium-238	0.92	0.34	2.03	
	SLD06244	10/26/00	1.5	2.0		Actinium-227	0.61	0.09	0.12	0.05
						Americium-241	0.02	0.03	0.04	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	2.47	0.38	0.18	
						Protactinium-231	0.64	0.37	0.56	
						Radium-226	2.08	0.12	0.04	
						Radium-228	0.26	0.04	0.05	
						Thorium-228	0.26	0.04	0.05	
Thorium-230	2.87	3.28	4.02							
Thorium-232	0.26	0.04	0.05							
Uranium-235	0.62	0.13	0.13							
Uranium-238	3.62	0.54	2.47							
SLD06220	SLD06220	10/26/00	0	0.5	0.0	Actinium-227	0.46	0.37	0.57	1.44
						Americium-241	0.05	0.12	0.16	
						Cesium-137	0.54	0.12	0.08	
						Potassium-40	6.88	1.47	1.08	
						Protactinium-231	0.06	1.73	2.64	
						Radium-226	8.60	0.47	0.18	
						Radium-228	0.69	0.19	0.26	
						Thorium-228	0.69	0.19	0.26	
						Thorium-230	5.82	9.83	15.72	
						Thorium-232	0.69	0.19	0.26	
						Uranium-235	1.06	0.40	0.51	
						Uranium-238	14.49	2.31	11.42	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD06220	SLD06245	10/26/00	1.4	2.0		Actinium-227	0.00	0.09	0.23	0.22
						Americium-241	0.04	0.05	0.07	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	10.83	1.17	0.33	
						Protactinium-231	-0.17	0.64	0.95	
						Radium-226	3.94	0.21	0.06	
						Radium-228	1.05	0.11	0.09	
						Thorium-228	1.05	0.11	0.09	
						Thorium-230	-2.68	4.47	6.87	
						Thorium-232	1.05	0.11	0.09	
						Uranium-235	0.45	0.17	0.21	
						Uranium-238	7.11	1.01	3.87	
						SLD06221	SLD06221	10/17/00	0	0.5
Americium-241	0.02	0.04	0.07							
Cesium-137	0.00	0.02	0.02							
Potassium-40	3.66	0.53	0.20							
Protactinium-231	-0.11	0.34	0.52							
Radium-226	0.82	0.06	0.03							
Radium-228	0.34	0.05	0.05							
Thorium-228	0.34	0.05	0.05							
Thorium-230	0.69	3.41	5.83							
Thorium-232	0.34	0.05	0.05							
Uranium-235	0.22	0.12	0.14							
Uranium-238	1.23	0.53	2.98							
SLD06246	10/17/00	1.5	2.0		Actinium 227					
					Americium-241		0.10	0.11	0.17	
					Cesium-137		0.02	0.02	0.04	
					Potassium-40		3.12	0.59	0.43	
					Protactinium-231		-0.08	0.72	1.25	
					Radium-226		5.30	0.26	0.08	
					Radium-228		0.34	0.08	0.12	
					Thorium-228		0.34	0.08	0.12	
					Thorium-230		2.90	8.77	13.90	
					Thorium-232	0.34	0.08	0.12		
					Uranium-235	1.21	0.23	0.27		
					Uranium-238	13.55	1.87	4.82		
SLD06222	SLD06222	10/30/00	0	0.5	0.0	Actinium-227	-0.05	0.09	0.13	0.24
						Americium-241	0.03	0.04	0.07	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	3.09	0.46	0.19	
						Protactinium-231	0.13	0.35	0.57	
						Radium-226	0.83	0.05	0.04	
						Radium-228	0.34	0.05	0.05	
						Thorium-228	0.34	0.05	0.05	
						Thorium-230	1.86	3.82	6.24	
						Thorium-232	0.34	0.05	0.05	
						Uranium-235	0.18	0.13	0.14	
Uranium-238	1.10	0.58	2.55							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD06222	SLD06247	10/30/00	1.1	1.8		Actinium-227	0.06	0.09	0.13	0.09
						Americium-241	-0.02	0.05	0.07	
						Cesium-137	0.03	0.02	0.02	
						Potassium-40	3.41	0.51	0.15	
						Protactinium-231	0.20	0.39	0.64	
						Radium-226	0.78	0.05	0.04	
						Radium-228	0.39	0.06	0.06	
						Thorium-228	0.39	0.06	0.06	
						Thorium-230	-0.84	4.01	6.35	
						Thorium-232	0.39	0.06	0.06	
						Uranium-235	0.05	0.12	0.15	
						Uranium-238	1.54	0.76	3.49	
SLD06223	SLD06223	10/17/00	0	0.5	0.0	Actinium-227	0.09	0.11	0.17	0.45
						Americium-241	0.02	0.06	0.10	
						Cesium-137	0.11	0.04	0.03	
						Potassium-40	4.14	0.62	0.24	
						Protactinium-231	-0.01	0.47	0.74	
						Radium-226	1.45	0.09	0.05	
						Radium-228	0.41	0.07	0.08	
						Thorium-228	0.41	0.07	0.08	
						Thorium-230	-2.53	5.18	8.06	
						Thorium-232	0.41	0.07	0.08	
						Uranium-235	0.38	0.15	0.16	
						Uranium-238	3.18	0.86	2.63	
	SLD06248	10/17/00	1.5	2.0		Actinium-227	0.02	0.10	0.15	0.32
						Americium-241	0.09	0.09	0.10	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	1.30	0.40	0.22	
						Protactinium-231	-0.23	0.42	0.73	
						Radium-226	0.66	0.05	0.04	
						Radium-228	0.15	0.05	0.07	
						Thorium-228	0.15	0.05	0.07	
Thorium-230	4.53	6.41	8.69							
Thorium-232	0.15	0.05	0.07							
Uranium-235	0.65	0.15	0.16							
Uranium-238	9.39	1.20	2.91							
SLD06224	SLD06224	10/19/00	0	0.5	0.0	Actinium-227	0.16	0.16	0.24	0.77
						Americium-241	-0.02	0.08	0.13	
						Cesium-137	0.24	0.05	0.04	
						Potassium-40	5.01	0.70	0.35	
						Protactinium-231	-0.02	0.63	0.97	
						Radium-226	2.88	0.16	0.06	
						Radium-228	0.66	0.09	0.09	
						Thorium-228	0.66	0.09	0.09	
						Thorium-230	-2.34	6.68	11.10	
						Thorium-232	0.66	0.09	0.09	
						Uranium-235	0.30	0.17	0.24	
						Uranium-238	4.08	1.07	3.75	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD06224	SLD06249	10/19/00	1.5	2.0		Actinium-227	0.13	0.33	0.52	0.65
						Americium-241	0.01	0.18	0.28	
						Cesium-137	0.00	0.06	0.10	
						Potassium-40	9.16	1.80	0.91	
						Protactinium-231	0.31	1.53	2.51	
						Radium-226	3.32	0.26	0.15	
						Radium-228	1.24	0.24	0.22	
						Thorium-228	1.24	0.24	0.22	
						Thorium-230	-18.72	13.91	20.18	
						Thorium-232	1.24	0.24	0.22	
						Uranium-235	0.48	0.31	0.45	
						Uranium-238	4.14	2.82	11.99	
SLD06225	SLD06225	11/14/00	0	0.5	0.0	Actinium-227	0.13	0.10	0.15	0.01
						Americium-241	0.01	0.03	0.04	
						Cesium-137	0.04	0.02	0.03	
						Potassium-40	5.84	0.75	0.23	
						Protactinium-231	0.07	0.42	0.65	
						Radium-226	0.86	0.06	0.04	
						Radium-228	0.34	0.06	0.07	
						Thorium-228	0.34	0.06	0.07	
						Thorium-230	-0.37	2.27	3.97	
						Thorium-232	0.34	0.06	0.07	
						Uranium-235	0.00	0.11	0.13	
						Uranium-238	0.90	0.34	3.05	
	SLD06250	11/14/00	1.5	2.0		Actinium-227	0.00	0.09	0.14	0.01
	Americium-241	0.02	0.03	0.04						
	Cesium-137	0.34	0.05	0.02						
	Potassium-40	6.03	0.69	0.21						
	Protactinium-231	-0.11	0.38	0.58						
	Radium-226	1.15	0.07	0.04						
	Radium-228	0.41	0.06	0.05						
	Thorium-228	0.41	0.06	0.05						
	Thorium-230	1.02	2.46	4.15						
	Thorium-232	0.41	0.06	0.05						
Uranium-235	0.11	0.09	0.13							
Uranium-238	1.51	0.39	2.45							
SLD06226	SLD06226	10/19/00	0	0.5	0.0	Actinium-227	0.33	0.20	0.30	1.72
						Americium-241	0.15	0.14	0.21	
						Cesium-137	0.63	0.10	0.04	
						Potassium-40	6.73	0.95	0.40	
						Protactinium-231	0.41	0.82	1.32	
						Radium-226	3.34	0.19	0.09	
						Radium-228	0.79	0.12	0.12	
						Thorium-228	0.79	0.12	0.12	
						Thorium-230	0.15	10.11	16.94	
						Thorium-232	0.79	0.12	0.12	
						Uranium-235	1.46	0.25	0.32	
						Uranium-238	22.14	2.63	4.74	

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD06226	SLD06251	10/19/00	1.5	2.0		Actinium-227	0.16	0.17	0.36	0.45
						Americium-241	0.05	0.11	0.19	
						Cesium-137	0.03	0.04	0.08	
						Potassium-40	8.68	1.59	0.79	
						Protactinium-231	0.18	1.10	1.81	
						Radium-226	1.73	0.16	0.11	
						Radium-228	0.80	0.18	0.19	
						Thorium-228	0.80	0.18	0.19	
						Thorium-230	-1.76	9.52	15.30	
						Thorium-232	0.80	0.18	0.19	
						Uranium-235	0.11	0.19	0.35	
						Uranium-238	1.57	1.35	10.12	
SLD06227	SLD06227	10/12/00	0	0.5	0.0	Actinium-227	-0.01	0.11	0.16	0.00
						Americium-241	0.06	0.06	0.10	
						Cesium-137	0.08	0.03	0.03	
						Potassium-40	3.90	0.63	0.24	
						Protactinium-231	-0.06	0.49	0.77	
						Radium-226	0.89	0.07	0.05	
						Radium-228	0.38	0.07	0.07	
						Thorium-228	0.79	0.44	0.30	
						Thorium-230	1.29	0.58	0.36	
						Thorium-232	0.32	0.27	0.14	
						Uranium-235	0.09	0.13	0.18	
						Uranium-238	1.68	0.81	3.28	
	SLD06252	10/12/00	1	1.5		Actinium-227	0.11	0.06	0.17	0.01
						Americium-241	-0.03	0.06	0.10	
						Cesium-137	0.13	0.03	0.02	
						Potassium-40	3.85	0.61	0.29	
						Protactinium-231	0.01	0.48	0.76	
						Radium-226	1.64	0.10	0.05	
						Radium-228	0.36	0.07	0.07	
						Thorium-228	1.14	0.56	0.38	
Thorium-230	1.67	0.68	0.15							
Thorium-232	0.45	0.32	0.15							
Uranium-235	0.11	0.10	0.18							
Uranium-238	1.09	0.83	3.75							
SLD06228	SLD06228	10/12/00	0	0.5	0.0	Actinium-227	0.07	0.09	0.14	0.00
						Americium-241	0.00	0.06	0.08	
						Cesium-137	0.00	0.02	0.02	
						Potassium-40	3.29	0.51	0.27	
						Protactinium-231	1.42	0.71	0.70	
						Radium-226	0.96	0.07	0.04	
						Radium-228	0.33	0.06	0.09	
						Thorium-228	0.80	0.41	0.34	
						Thorium-230	1.89	0.65	0.12	
						Thorium-232	0.48	0.30	0.12	
						Uranium-235	0.18	0.09	0.14	
						Uranium-238	1.33	0.84	3.33	

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD06228	SLD06253	10/12/00	1.5	2.0		Actinium-227	-0.01	0.18	0.26	0.18	
						Americium-241	0.12	0.10	0.17		
						Cesium-137	-0.03	0.03	0.04		
						Potassium-40	9.22	1.17	0.47		
						Protactinium-231	-0.38	0.81	1.23		
						Radium-226	2.64	0.15	0.07		
						Radium-228	1.08	0.14	0.12		
						Thorium-228	2.07	0.82	0.17		
						Thorium-230	3.95	1.24	0.35		
						Thorium-232	1.28	0.62	0.34		
						Uranium-235	0.14	0.20	0.27		
						Uranium-238	4.46	1.32	6.14		
SLD06229	SLD06229	10/12/00	0	0.5	0.0	Actinium-227	0.06	0.09	0.14	0.00	
						Americium-241	-0.03	0.05	0.08		
						Cesium-137	0.06	0.02	0.02		
						Potassium-40	3.73	0.51	0.21		
						Protactinium-231	0.15	0.38	0.61		
						Radium-226	1.03	0.07	0.04		
						Radium-228	0.32	0.06	0.06		
						Thorium-228	1.03	0.50	0.29		
						Thorium-230	1.61	0.64	0.14		
						Thorium-232	0.52	0.34	0.14		
						Uranium-235	0.07	0.08	0.14		
						Uranium-238	0.57	0.60	2.89		
		SLD06254	10/12/00	1.5	2.0		Actinium-227	0.04	0.09	0.14	n n n
	Americium-241						-0.03	0.05	0.08		
	Cesium-137						0.05	0.02	0.02		
	Potassium-40						7.24	0.87	0.21		
	Protactinium-231						0.13	0.42	0.68		
	Radium-226						0.76	0.06	0.05		
	Radium-228						0.44	0.06	0.07		
	Thorium-228						0.65	0.41	0.46		
	Thorium-230						0.86	0.44	0.32		
	Thorium-232						0.51	0.34	0.36		
Uranium-235	0.12	0.13	0.15								
Uranium-238	2.12	0.80	3.13								
SLD06230	SLD06230	10/23/00	0	0.5	0.0	Actinium-227	0.19	0.17	0.25	1.01	
						Americium-241	0.05	0.06	0.10		
						Cesium-137	0.10	0.03	0.04		
						Potassium-40	12.60	1.36	0.33		
						Protactinium-231	0.63	0.72	1.12		
						Radium-226	3.30	0.19	0.07		
						Radium-228	1.09	0.12	0.10		
						Thorium-228	1.09	0.12	0.10		
						Thorium-230	1.50	5.38	8.94		
						Thorium-232	1.09	0.12	0.10		
						Uranium-235	1.37	0.22	0.24		
						Uranium-238	25.20	2.37	4.72		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD06230	SLD06255	10/23/00	1.5	2.0		Actinium-227	0.23	0.09	0.19	0.06
						Americium-241	0.02	0.04	0.06	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	15.09	1.55	0.31	
						Protactinium-231	0.61	0.54	0.85	
						Radium-226	1.87	0.12	0.05	
						Radium-228	1.04	0.10	0.07	
						Thorium-228	1.04	0.10	0.07	
						Thorium-230	4.12	4.57	5.42	
						Thorium-232	1.04	0.10	0.07	
						Uranium-235	0.13	0.13	0.17	
						Uranium-238	2.33	0.64	3.37	
SLD06231	SLD06231	10/10/00	0	0.5	0.0	Actinium-227	0.12	0.14	0.25	1.02
						Americium-241	0.05	0.06	0.10	
						Cesium-137	0.31	0.05	0.04	
						Potassium-40	11.55	1.33	0.35	
						Protactinium-231	0.35	0.77	1.02	
						Radium-226	3.08	0.18	0.07	
						Radium-228	0.88	0.11	0.09	
						Thorium-228	1.39	0.64	0.17	
						Thorium-230	4.57	1.36	0.17	
						Thorium-232	0.94	0.51	0.17	
						Uranium-235	1.46	0.21	0.24	
						Uranium-238	26.36	2.43	4.16	
	SLD06256	10/10/00	1.5	2.0		Actinium-227	0.37	0.17	0.25	0.06
						Americium-241	0.05	0.05	0.07	
						Cesium-137	0.00	0.02	0.04	
						Potassium-40	14.50	1.57	0.33	
						Protactinium-231	0.24	0.67	1.04	
						Radium-226	2.66	0.16	0.07	
						Radium-228	1.19	0.13	0.09	
						Thorium-228	1.22	0.57	0.31	
Thorium-230	2.36	0.84	0.15							
Thorium-232	1.23	0.57	0.15							
Uranium-235	0.31	0.17	0.21							
Uranium-238	2.53	0.78	4.51							
SLD70093	SLD70093	05/07/02	0	0.5	0.0	Actinium-227	0.24	0.15	0.19	0.51
						Americium-241	-0.01	0.03	0.05	
						Cesium-137	0.02	0.01	0.02	
						Potassium-40	2.42	0.36	0.26	
						Protactinium-231	-0.18	0.48	0.71	
						Radium-226	5.10	0.17	0.06	
						Radium-228	1.03	0.08	0.06	
						Thorium-228	1.03	0.08	0.06	
						Thorium-230	2.38	3.06	4.96	
						Thorium-232	1.03	0.08	0.06	
						Uranium-235	0.43	0.33	0.37	
						Uranium-238	3.07	0.53	0.46	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD70093	SLD70094	05/07/02	1.5	2.0		Actinium-227	0.04	0.10	0.14	0.07
						Americium-241	0.01	0.03	0.04	
						Cesium-137	0.06	0.02	0.02	
						Potassium-40	4.59	0.49	0.19	
						Protactinium-231	0.15	0.37	0.57	
						Radium-226	2.29	0.09	0.05	
						Radium-228	0.33	0.05	0.06	
						Thorium-228	0.33	0.05	0.06	
						Thorium-230	0.14	2.53	4.08	
						Thorium-232	0.33	0.05	0.06	
						Uranium-235	0.38	0.17	0.28	
						Uranium-238	4.71	0.58	0.41	
	SLD70095	05/07/02	3.5	4.0		Actinium-227	0.07	0.05	0.13	0.00
						Americium-241	0.01	0.02	0.04	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	11.34	0.83	0.16	
						Protactinium-231	-0.25	0.31	0.45	
						Radium-226	1.04	0.05	0.04	
						Radium-228	0.63	0.05	0.04	
						Thorium-228	0.63	0.05	0.04	
						Thorium-230	2.09	2.10	3.47	
						Thorium-232	0.63	0.05	0.04	
						Uranium-235	-0.01	0.13	0.23	
						Uranium-238	0.78	0.37	0.34	
	SLD70108	05/07/02	4	4.5		Actinium-227	0.05	0.10	0.13	0.00
						Americium-241	-0.01	0.02	0.04	
						Cesium-137	-0.02	0.01	0.02	
						Potassium-40	11.66	0.89	0.18	
						Protactinium-231	-0.09	0.35	0.53	
						Radium-226	0.96	0.05	0.05	
						Radium-228	0.36	0.05	0.05	
						Thorium-228	0.36	0.05	0.05	
						Thorium-230	1.14	2.22	3.67	
						Thorium-232	0.36	0.05	0.05	
						Uranium-235	-0.03	0.15	0.25	
						Uranium-238	0.65	0.36	0.36	
	SLD70109	05/07/02	6.7	7.2		Actinium-227	0.52	0.33	0.57	0.41
						Americium-241	-0.03	0.11	0.16	
						Cesium-137	0.00	0.05	0.08	
Potassium-40						13.55	1.74	0.76		
Protactinium-231						0.47	1.29	2.07		
Radium-226						3.49	0.23	0.21		
Radium-228						1.17	0.18	0.19		
Thorium-228						1.17	0.18	0.19		
Thorium-230						1.46	9.55	14.60		
Thorium-232						1.17	0.18	0.19		
Uranium-235						0.42	0.57	1.00		
Uranium-238						3.25	1.54	1.45		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70093	PSC00127	05/07/02	8.5	9.0		Actinium-227	0.00	0.00	0.58	0.00
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	12.03	0.53	0.48	
						Protactinium-231	0.00	0.00	1.76	
						Radium-226	0.82	0.02	0.07	
						Radium-228	0.76	0.03	0.11	
						Thorium-228	0.76	0.03	0.11	
						Thorium-230	0.00	0.00	9.58	
						Thorium-232	0.76	0.03	0.11	
						Uranium-235	0.00	0.00	0.32	
						Uranium-238	0.47	0.18	0.82	
						PSC00128	05/07/02	8.5	9.0	
	Americium-241	0.00	0.00	0.22						
	Cesium-137	0.00	0.00	0.15						
	Potassium-40	13.60	0.96	1.20						
	Protactinium-231	0.00	0.00	3.98						
	Radium-226	0.75	0.04	0.14						
	Radium-228	0.74	0.07	0.27						
	Thorium-228	0.74	0.07	0.27						
	Thorium-230	5.11	2.57	11.60						
	Thorium-232	0.74	0.07	0.27						
	Uranium-235	0.00	0.00	0.61						
	Uranium-238	0.00	0.00	2.18						
	PSC00129	05/07/02	8.5	9.0						
						Americium-241	0.00	0.00	0.11	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	12.44	0.56	0.50	
						Protactinium-231	0.00	0.00	1.94	
						Radium-226	0.77	0.02	0.08	
						Radium-228	0.74	0.03	0.12	
						Thorium-228	0.74	0.03	0.12	
						Thorium-230	0.00	0.00	9.81	
						Thorium-232	0.74	0.03	0.12	
						Uranium-235	0.00	0.00	0.32	
						Uranium-238	0.95	0.19	0.83	
						SLD70110	05/07/02	11.2	11.7	
	Americium-241	-0.01	0.07	0.12						
	Cesium-137	0.01	0.03	0.06						
	Potassium-40	17.52	1.81	0.56						
	Protactinium-231	-1.37	1.16	1.60						
Radium-226	1.42	0.14	0.15							
Radium-228	0.90	0.14	0.14							
Thorium-228	0.90	0.14	0.14							
Thorium-230	-4.03	6.82	10.88							
Thorium-232	0.90	0.14	0.14							
Uranium-235	0.04	0.39	0.68							
Uranium-238	0.37	0.76	1.34							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70096	SLD70096	05/08/02	0	0.5	0.0	Actinium-227	0.51	0.19	0.34	1.55
						Americium-241	0.01	0.10	0.15	
						Cesium-137	0.14	0.04	0.05	
						Potassium-40	6.65	0.94	0.48	
						Protactinium-231	-1.34	0.86	1.38	
						Radium-226	2.89	0.16	0.14	
						Radium-228	0.53	0.10	0.13	
						Thorium-228	0.53	0.10	0.13	
						Thorium-230	-1.31	7.61	12.21	
						Thorium-232	0.53	0.10	0.13	
						Uranium-235	1.51	0.41	0.71	
						Uranium-238	37.28	3.20	1.26	
						SLD70097	05/08/02	1.5	2.0	
	Americium-241	0.02	0.03	0.05						
	Cesium-137	0.01	0.01	0.02						
	Potassium-40	14.68	1.05	0.21						
	Protactinium-231	-0.05	0.41	0.62						
	Radium-226	2.14	0.09	0.06						
	Radium-228	0.90	0.07	0.06						
	Thorium-228	0.90	0.07	0.06						
	Thorium-230	3.59	2.87	4.72						
	Thorium-232	0.90	0.07	0.06						
	Uranium-235	0.06	0.18	0.30						
	Uranium-238	1.86	0.48	0.45						
	SLD70098	05/08/02	2	2.5						Actinium-227
						Americium-241	-0.05	0.08	0.12	
						Cesium-137	0.06	0.05	0.06	
						Potassium-40	9.51	1.17	0.54	
						Protactinium-231	-0.02	0.88	1.55	
						Radium-226	1.86	0.13	0.14	
						Radium-228	0.61	0.13	0.14	
						Thorium-228	0.61	0.13	0.14	
						Thorium-230	-0.06	6.69	10.96	
						Thorium-232	0.61	0.13	0.14	
						Uranium-235	0.34	0.39	0.70	
						Uranium-238	6.50	1.29	1.11	
						PSC00130	05/08/02	2.5	3.0	
	Americium-241	0.00	0.00	0.10						
	Cesium-137	0.00	0.00	0.07						
	Potassium-40	10.18	0.48	0.60						
	Protactinium-231	0.82	0.26	1.14						
Radium-226	0.73	0.02	0.07							
Radium-228	0.66	0.03	0.11							
Thorium-228	0.66	0.03	0.11							
Thorium-230	0.00	0.00	9.73							
Thorium-232	0.66	0.03	0.11							
Uranium-235	0.00	0.00	0.32							
Uranium-238	0.79	0.18	0.82							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70096	PSC00131	05/08/02	5	5.2		Actinium-227	0.00	0.00	0.54	0.00
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.00	0.00	0.06	
						Potassium-40	9.79	0.48	0.70	
						Protactinium-231	0.00	0.00	1.76	
						Radium-226	0.59	0.02	0.07	
						Radium-228	0.66	0.03	0.11	
						Thorium-228	0.66	0.03	0.11	
						Thorium-230	0.00	0.00	9.62	
						Thorium-232	0.66	0.03	0.11	
						Uranium-235	0.00	0.00	0.32	
						Uranium-238	0.66	0.18	0.79	
	SLD70111	05/08/02	5.2	5.7		Actinium-227	0.40	0.11	0.18	0.02
						Americium-241	0.00	0.03	0.05	
						Cesium-137	0.01	0.02	0.02	
						Potassium-40	12.38	0.97	0.24	
						Protactinium-231	0.06	0.40	0.62	
						Radium-226	1.37	0.07	0.06	
						Radium-228	0.70	0.06	0.06	
						Thorium-228	0.70	0.06	0.06	
						Thorium-230	0.76	2.70	4.42	
						Thorium-232	0.70	0.06	0.06	
						Uranium-235	-0.05	0.17	0.29	
						Uranium-238	1.26	0.52	0.43	
	PSC00132	05/08/02	8.5	9.0		Actinium-227	0.00	0.00	0.56	0.00
						Americium-241	0.00	0.00	0.10	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	11.06	0.52	0.58	
						Protactinium-231	0.00	0.00	1.63	
						Radium-226	0.64	0.02	0.07	
						Radium-228	0.61	0.03	0.10	
						Thorium-228	0.61	0.03	0.10	
						Thorium-230	0.00	0.00	9.85	
						Thorium-232	0.61	0.03	0.10	
						Uranium-235	0.00	0.00	0.31	
						Uranium-238	0.94	0.19	0.79	
	PSC00133	05/08/02	10.5	11.0		Actinium-227	0.00	0.00	0.56	0.00
						Americium-241	0.00	0.00	0.11	
						Cesium-137	0.00	0.00	0.07	
						Potassium-40	10.30	0.50	0.58	
						Protactinium-231	0.00	0.00	1.82	
						Radium-226	0.59	0.02	0.08	
Radium-228						0.60	0.03	0.12		
Thorium-228						0.60	0.03	0.12		
Thorium-230						0.00	0.00	9.86		
Thorium-232						0.60	0.03	0.12		
Uranium-235						0.00	0.00	0.32		
Uranium-238						0.37	0.18	0.85		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>	
SLD70096	PSC00134	05/08/02	15	15.5		Actinium-227	0.00	0.00	0.61	0.00	
						Americium-241	0.00	0.00	0.11		
						Cesium-137	0.00	0.00	0.07		
						Potassium-40	10.62	0.52	0.63		
						Protactinium-231	0.00	0.00	1.81		
						Radium-226	0.67	0.02	0.07		
						Radium-228	0.61	0.03	0.11		
						Thorium-228	0.61	0.03	0.11		
						Thorium-230	0.00	0.00	9.98		
						Thorium-232	0.61	0.03	0.11		
						Uranium-235	0.00	0.00	0.32		
						Uranium-238	0.00	0.00	1.10		
SLD70099	SLD70099	05/09/02	0	0.5	0.0	Actinium-227	0.06	0.12	0.18	0.30	
						Americium-241	0.03	0.04	0.06		
						Cesium-137	0.34	0.04	0.02		
						Potassium-40	9.59	0.81	0.25		
						Protactinium-231	-0.01	0.51	0.77		
						Radium-226	2.73	0.12	0.07		
						Radium-228	0.60	0.07	0.07		
						Thorium-228	0.60	0.07	0.07		
						Thorium-230	3.31	3.74	5.72		
						Thorium-232	0.60	0.07	0.07		
						Uranium-235	0.31	0.21	0.37		
						Uranium-238	7.49	0.90	0.56		
		SLD70100	05/09/02	1.5	2.0		Actinium-227	0.20	0.12	0.18	0.06
	Americium-241						0.02	0.04	0.05		
	Cesium-137						0.00	0.02	0.02		
	Potassium-40						15.33	1.15	0.25		
	Protactinium-231						-0.18	0.47	0.71		
	Radium-226						2.30	0.10	0.06		
	Radium-228						1.01	0.08	0.06		
	Thorium-228						1.01	0.08	0.06		
	Thorium-230						3.21	3.14	5.19		
	Thorium-232						1.01	0.08	0.06		
	Uranium-235						0.29	0.28	0.36		
	Uranium-238						2.21	0.60	0.49		
		SLD70101	05/09/02	2.4	2.9		Actinium-227	0.70	0.30	0.51	0.40
	Americium-241						0.01	0.10	0.16		
	Cesium-137						-0.05	0.05	0.08		
	Potassium-40						12.41	1.72	0.78		
	Protactinium-231						1.45	1.52	2.35		
	Radium-226						4.29	0.24	0.21		
Radium-228	1.40						0.18	0.22			
Thorium-228	1.40						0.18	0.22			
Thorium-230	1.51						8.85	14.60			
Thorium-232	1.40						0.18	0.22			
Uranium-235	-0.20						0.55	0.92			
Uranium-238	2.17						1.62	1.45			

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70099	SLD70112	05/09/02	5.2	5.7		Actinium-227	0.30	0.09	0.15	0.01
						Americium-241	0.01	0.03	0.04	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	15.32	1.08	0.18	
						Protactinium-231	0.11	0.37	0.58	
						Radium-226	1.74	0.08	0.05	
						Radium-228	0.69	0.06	0.05	
						Thorium-228	0.69	0.06	0.05	
						Thorium-230	0.23	2.51	4.05	
						Thorium-232	0.69	0.06	0.05	
						Uranium-235	-0.01	0.16	0.27	
						Uranium-238	1.05	0.45	0.40	
						SLD70113	05/09/02	8.1	8.6	
Americium-241	0.02	0.06	0.09							
Cesium-137	0.00	0.03	0.05							
Potassium-40	18.79	1.58	0.37							
Protactinium-231	0.33	0.73	1.16							
Radium-226	1.40	0.11	0.11							
Radium-228	0.88	0.11	0.11							
Thorium-228	0.88	0.11	0.11							
Thorium-230	-0.48	4.83	7.82							
Thorium-232	0.88	0.11	0.11							
Uranium-235	-0.19	0.31	0.50							
Uranium-238	1.13	0.78	0.79							
SLD70114	05/09/02	11.2	11.7		Actinium-227					
					Americium-241	0.03	0.03	0.05		
					Cesium-137	0.00	0.02	0.02		
					Potassium-40	20.08	1.43	0.24		
					Protactinium-231	0.25	0.41	0.72		
					Radium-226	1.53	0.08	0.06		
					Radium-228	0.94	0.08	0.07		
					Thorium-228	0.94	0.08	0.07		
					Thorium-230	1.16	3.12	5.08		
					Thorium-232	0.94	0.08	0.07		
					Uranium-235	-0.01	0.19	0.31		
					Uranium-238	0.86	0.54	0.49		
					SLD70102	SLD70102	05/13/02	0	0.5	0.0
Americium-241	0.03	0.08	0.11							
Cesium-137	0.17	0.06	0.05							
Potassium-40	5.70	1.01	0.65							
Protactinium-231	-0.65	0.91	1.53							
Radium-226	3.16	0.18	0.13							
Radium-228	0.62	0.12	0.14							
Thorium-228	0.62	0.12	0.14							
Thorium-230	1.36	6.30	9.71							
Thorium-232	0.62	0.12	0.14							
Uranium-235	0.73	0.64	0.73							
Uranium-238	4.63	1.37	0.94							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70102	SLD70103	05/13/02	0.5	1.0		Actinium-227	0.08	0.32	0.46	1.03
						Americium-241	0.09	0.22	0.34	
						Cesium-137	0.39	0.07	0.07	
						Potassium-40	10.65	1.35	0.87	
						Protactinium-231	-0.23	1.40	2.11	
						Radium-226	12.83	0.47	0.19	
						Radium-228	0.75	0.17	0.19	
						Thorium-228	0.75	0.17	0.19	
						Thorium-230	11.22	15.43	25.76	
						Thorium-232	0.75	0.17	0.19	
						Uranium-235	1.03	0.82	1.07	
						Uranium-238	16.29	3.05	2.78	
SLD70104	05/13/02	2.5	3.0		Actinium-227	0.32	0.19	0.29	0.39	
					Americium-241	0.02	0.13	0.17		
					Cesium-137	0.03	0.03	0.04		
					Potassium-40	8.74	0.94	0.38		
					Protactinium-231	0.72	0.79	1.27		
					Radium-226	4.31	0.18	0.10		
					Radium-228	1.32	0.12	0.11		
					Thorium-228	1.32	0.12	0.11		
					Thorium-230	-0.52	8.85	13.68		
					Thorium-232	1.32	0.12	0.11		
					Uranium-235	0.35	0.35	0.60		
					Uranium-238	3.41	1.36	1.44		
SLD70121	05/13/02	4	4.5		Actinium-227	0.16	0.11	0.24	0.28	
					Americium-241	0.13	0.09	0.16		
					Cesium-137	0.02	0.03	0.04		
					Potassium-40	15.63	1.40	0.30		
					Protactinium-231	-0.11	0.67	1.03		
					Radium-226	2.07	0.12	0.10		
					Radium-228	0.99	0.10	0.10		
					Thorium-228	0.99	0.10	0.10		
					Thorium-230	0.11	7.25	12.03		
					Thorium-232	0.99	0.10	0.10		
					Uranium-235	-0.03	0.31	0.51		
					Uranium-238	1.97	1.19	1.31		
SLD70122	05/13/02	7.2	7.7		Actinium-227	0.02	0.14	0.20	0.22	
					Americium-241	0.00	0.08	0.13		
					Cesium-137	-0.01	0.02	0.03		
					Potassium-40	17.28	1.40	0.25		
					Protactinium-231	-0.40	0.64	0.95		
					Radium-226	1.62	0.10	0.09		
					Radium-228	1.03	0.10	0.09		
					Thorium-228	1.03	0.10	0.09		
					Thorium-230	1.98	6.12	10.23		
					Thorium-232	1.03	0.10	0.09		
					Uranium-235	0.03	0.26	0.43		
					Uranium-238	0.95	0.92	1.13		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70102	SLD70123	05/13/02	9.3	9.8		Actinium-227	0.11	0.17	0.26	0.78
						Americium-241	0.00	0.09	0.16	
						Cesium-137	0.00	0.02	0.04	
						Potassium-40	17.55	1.56	0.39	
						Protactinium-231	-0.30	0.70	1.20	
						Radium-226	1.57	0.11	0.10	
						Radium-228	0.98	0.11	0.12	
						Thorium-228	0.98	0.11	0.12	
						Thorium-230	13.54	10.12	12.27	
						Thorium-232	0.98	0.11	0.12	
						Uranium-235	-0.17	0.31	0.51	
						Uranium-238	1.28	0.81	1.49	
	SLD70124	05/13/02	11.2	11.7		Actinium-227	0.16	0.14	0.23	0.26
						Americium-241	0.03	0.08	0.14	
						Cesium-137	-0.03	0.02	0.04	
						Potassium-40	17.61	1.52	0.31	
						Protactinium-231	0.88	0.63	1.09	
						Radium-226	1.42	0.10	0.10	
						Radium-228	0.88	0.10	0.11	
						Thorium-228	0.88	0.10	0.11	
						Thorium-230	-4.36	7.52	11.44	
						Thorium-232	0.88	0.10	0.11	
SLD70105	SLD70105	05/15/02	0.5	1.0	0.5	Actinium-227	0.07	0.10	0.16	0.13
						Americium-241	0.01	0.06	0.09	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	2.18	0.39	0.22	
						Protactinium-231	-0.53	0.41	0.67	
						Radium-226	1.61	0.09	0.06	
	SLD70106	05/15/02	2	2.5		Actinium-227	0.12	0.25	0.37	0.56
						Americium-241	0.10	0.17	0.27	
						Cesium-137	0.01	0.04	0.06	
						Potassium-40	11.56	1.35	0.61	
						Protactinium-231	0.46	1.06	1.69	
						Radium-226	5.45	0.25	0.15	
Radium-228	1.23	0.16	0.17							
Thorium-228	1.23	0.16	0.17							
Thorium-230	-1.10	12.36	19.16							
Thorium-232	1.23	0.16	0.17							
Uranium-235	0.70	0.72	0.80							
Uranium-238	2.80	1.88	2.20							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70105	SLD70107	05/15/02	4	4.5		Actinium-227	0.24	0.27	0.42	0.64
						Americium-241	0.18	0.19	0.31	
						Cesium-137	-0.04	0.04	0.07	
						Potassium-40	9.39	1.37	0.77	
						Protactinium-231	0.43	1.19	1.90	
						Radium-226	5.03	0.25	0.17	
						Radium-228	1.23	0.18	0.21	
						Thorium-228	1.23	0.18	0.21	
						Thorium-230	-1.34	13.49	21.00	
						Thorium-232	1.23	0.18	0.21	
						Uranium-235	0.08	0.52	0.87	
						Uranium-238	3.74	2.11	2.41	
						SLD70125	05/15/02	8.5	9.0	
Americium-241	0.11	0.11	0.18							
Cesium-137	-0.01	0.03	0.04							
Potassium-40	8.34	1.06	0.47							
Protactinium-231	0.45	0.79	1.29							
Radium-226	2.65	0.14	0.11							
Radium-228	0.95	0.11	0.11							
Thorium-228	0.95	0.11	0.11							
Thorium-230	0.09	8.41	13.19							
Thorium-232	0.95	0.11	0.11							
Uranium-235	0.21	0.34	0.59							
Uranium-238	1.87	1.48	1.46							
SLD70126	05/15/02	11.2	11.7		Actinium-227					-0.02
					Americium-241	0.01	0.10	0.16		
					Cesium-137	-0.01	0.02	0.04		
					Potassium-40	16.25	1.48	0.36		
					Protactinium-231	0.31	0.78	1.24		
					Radium-226	1.50	0.11	0.10		
					Radium-228	0.98	0.11	0.10		
					Thorium-228	0.98	0.11	0.10		
					Thorium-230	-0.60	7.77	12.13		
					Thorium-232	0.98	0.11	0.10		
					Uranium-235	0.15	0.30	0.52		
					Uranium-238	1.76	1.14	1.34		
					SLD70127	05/15/02	12.5	13.0		Actinium-227
Americium-241	0.02	0.10	0.15							
Cesium-137	-0.01	0.02	0.04							
Potassium-40	15.99	1.46	0.34							
Protactinium-231	0.11	0.68	1.08							
Radium-226	1.82	0.11	0.05							
Radium-228	1.09	0.11	0.11							
Thorium-228	1.09	0.11	0.11							
Thorium-230	7.12	7.02	12.15							
Thorium-232	1.09	0.11	0.11							
Uranium-235	0.23	0.31	0.53							
Uranium-238	2.74	1.39	1.26							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70115	SLD70115	05/20/02	0	0.7	0.0	Actinium-227	0.56	0.36	0.42	0.82
						Americium-241	0.04	0.10	0.15	
						Cesium-137	0.09	0.04	0.07	
						Potassium-40	4.63	0.80	0.61	
						Protactinium-231	1.19	1.08	1.80	
						Radium-226	5.10	0.23	0.14	
						Radium-228	0.53	0.13	0.15	
						Thorium-228	0.70	0.45	0.41	
						Thorium-230	2.65	0.95	0.41	
						Thorium-232	1.57	0.69	0.31	
						Uranium-235	0.98	0.57	0.81	
						Uranium-238	14.33	1.96	1.32	
						SLD70116	SLD70116	05/20/02	1.1	1.6
Americium-241	0.00	0.08	0.12							
Cesium-137	0.01	0.02	0.03							
Potassium-40	4.41	0.64	0.31							
Protactinium-231	-0.27	0.53	0.80							
Radium-226	1.45	0.09	0.07							
Radium-228	0.41	0.08	0.08							
Thorium-228	0.41	0.08	0.08							
Thorium-230	-4.56	5.94	8.94							
Thorium-232	0.41	0.08	0.08							
Uranium-235	0.10	0.25	0.41							
Uranium-238	2.38	1.32	1.04							
SLD70117	SLD70117	05/20/02	2	2.5						
						Americium-241	-0.02	0.09	0.15	
						Cesium-137	0.02	0.02	0.04	
						Potassium-40	6.59	0.76	0.34	
						Protactinium-231	-0.04	0.63	0.97	
						Radium-226	2.63	0.13	0.09	
						Radium-228	0.53	0.08	0.08	
						Thorium-228	0.53	0.08	0.08	
						Thorium-230	2.70	7.09	11.88	
						Thorium-232	0.53	0.08	0.08	
						Uranium-235	0.37	0.36	0.48	
						Uranium-238	3.92	1.29	1.28	
						SLD70128	SLD70128	05/20/02	4	4.5
Americium-241	0.09	0.12	0.19							
Cesium-137	0.00	0.03	0.04							
Potassium-40	15.95	1.52	0.40							
Protactinium-231	0.51	0.71	1.19							
Radium-226	2.56	0.15	0.13							
Radium-228	0.94	0.12	0.13							
Thorium-228	0.94	0.12	0.13							
Thorium-230	4.95	9.11	14.57							
Thorium-232	0.94	0.12	0.13							
Uranium-235	0.23	0.36	0.59							
Uranium-238	3.47	1.64	1.59							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70115	SLD70129	05/20/02	6.8	7.3		Actinium-227	0.08	0.14	0.22	0.26
						Americium-241	-0.02	0.09	0.14	
						Cesium-137	0.00	0.02	0.04	
						Potassium-40	16.64	1.42	0.27	
						Protactinium-231	0.21	0.66	1.05	
						Radium-226	1.55	0.10	0.09	
						Radium-228	1.04	0.11	0.09	
						Thorium-228	1.04	0.11	0.09	
						Thorium-230	-2.82	6.96	11.36	
						Thorium-232	1.04	0.11	0.09	
						Uranium-235	0.21	0.27	0.47	
						Uranium-238	1.33	1.13	1.24	
SLD70118	SLD70118	05/21/02	0	0.5	0.0	Actinium-227	0.05	0.11	0.17	0.32
						Americium-241	0.02	0.06	0.10	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	3.89	0.55	0.26	
						Protactinium-231	0.15	0.43	0.79	
						Radium-226	0.97	0.08	0.06	
						Radium-228	0.27	0.06	0.07	
						Thorium-228	0.27	0.06	0.07	
						Thorium-230	-1.11	4.27	7.09	
						Thorium-232	0.27	0.06	0.07	
						Uranium-235	0.00	0.21	0.33	
						Uranium-238	1.03	0.62	0.82	
	SLD70119	05/21/02	1.3	1.8		Actinium-227	0.34	0.10	0.28	0.30
						Americium-241	-0.02	0.11	0.17	
						Cesium-137	0.00	0.02	0.04	
						Potassium-40	8.07	0.92	0.40	
						Protactinium-231	0.66	0.72	1.32	
						Radium-226	3.35	0.17	0.10	
						Radium-228	0.57	0.09	0.12	
						Thorium-228	0.57	0.09	0.12	
						Thorium-230	-4.41	8.50	12.96	
						Thorium-232	0.57	0.09	0.12	
						Uranium-235	0.11	0.33	0.56	
						Uranium-238	1.37	1.45	1.43	
SLD70120	05/21/02	2	2.5		Actinium-227	0.23	0.13	0.25	0.29	
					Americium-241	0.01	0.09	0.15		
					Cesium-137	0.00	0.02	0.04		
					Potassium-40	6.71	0.88	0.38		
					Protactinium-231	0.45	0.65	1.05		
					Radium-226	3.50	0.16	0.09		
					Radium-228	0.66	0.09	0.09		
					Thorium-228	0.66	0.09	0.09		
					Thorium-230	0.71	7.50	11.68		
					Thorium-232	0.66	0.09	0.09		
					Uranium-235	0.20	0.30	0.51		
					Uranium-238	3.18	1.22	1.21		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70118	SLD70130	05/21/02	4	4.5		Actinium-227	0.12	0.10	0.24	0.25
						Americium-241	0.01	0.10	0.15	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	11.09	1.07	0.30	
						Protactinium-231	0.32	0.71	1.14	
						Radium-226	2.23	0.13	0.09	
						Radium-228	0.71	0.10	0.09	
						Thorium-228	0.71	0.10	0.09	
						Thorium-230	-0.80	7.23	11.22	
						Thorium-232	0.71	0.10	0.09	
						Uranium-235	-0.09	0.30	0.49	
						Uranium-238	1.68	1.29	1.23	
						SLD85202	05/21/02	6.3	6.8	
Americium-241	0.04	0.06	0.09							
Cesium-137	0.02	0.03	0.05							
Potassium-40	10.07	1.13	0.35							
Protactinium-231	-0.25	0.87	1.34							
Radium-226	1.09	0.12	0.12							
Radium-228	0.36	0.10	0.12							
Thorium-228	0.66	0.37	0.23							
Thorium-230	1.31	0.53	0.12							
Thorium-232	0.23	0.20	0.12							
Uranium-235	-0.06	0.35	0.56							
Uranium-238	1.06	0.64	0.80							
SLD85203	05/21/02	10.6	11.1		Actinium-227					
					Americium-241	0.03	0.03	0.05		
					Cesium-137	-0.02	0.02	0.02		
					Potassium-40	10.50	0.79	0.18		
					Protactinium-231	0.02	0.43	0.61		
					Radium-226	1.18	0.07	0.06		
					Radium-228	0.65	0.06	0.06		
					Thorium-228	0.85	0.44	0.14		
					Thorium-230	1.44	0.59	0.25		
					Thorium-232	0.44	0.31	0.25		
					Uranium-235	0.11	0.19	0.32		
					Uranium-238	0.96	0.44	0.49		
					SLD70131	05/21/02	15.1	15.5		Actinium-227
Americium-241	-0.05	0.10	0.15							
Cesium-137	-0.02	0.04	0.08							
Potassium-40	16.32	1.80	0.68							
Protactinium-231	-0.33	1.24	2.15							
Radium-226	2.14	0.19	0.19							
Radium-228	1.08	0.18	0.19							
Thorium-228	0.67	0.38	0.31							
Thorium-230	9.00	1.94	0.23							
Thorium-232	0.68	0.37	0.23							
Uranium-235	-0.14	0.49	0.82							
Uranium-238	1.59	1.35	1.46							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70118	SLD85204	05/21/02	17.5	18.0		Actinium-227	0.09	0.16	0.24	0.00
						Americium-241	0.02	0.04	0.06	
						Cesium-137	-0.02	0.01	0.02	
						Potassium-40	17.69	1.10	0.18	
						Protactinium-231	0.15	0.45	0.64	
						Radium-226	1.50	0.07	0.06	
						Radium-228	0.93	0.07	0.06	
						Thorium-228	1.54	0.58	0.12	
						Thorium-230	1.50	0.57	0.12	
						Thorium-232	1.04	0.46	0.12	
						Uranium-235	-0.09	0.19	0.31	
						Uranium-238	1.09	0.38	0.54	
						SLD70466	SLD70466	09/05/02	0	0.5
Americium-241	0.07	0.08	0.13							
Cesium-137	0.03	0.02	0.03							
Potassium-40	8.57	0.89	0.28							
Protactinium-231	-0.43	0.56	0.81							
Radium-226	1.68	0.10	0.08							
Radium-228	0.57	0.07	0.08							
Thorium-228	0.57	0.07	0.08							
Thorium-230	1.74	6.20	9.82							
Thorium-232	0.57	0.07	0.08							
Uranium-235	0.02	0.25	0.41							
Uranium-238	1.44	0.93	1.07							
SLD70467	09/05/02	0.7	1.2		Actinium-227					
					Americium-241		0.04	0.08	0.13	
					Cesium-137		0.00	0.02	0.03	
					Potassium-40		5.14	0.70	0.37	
					Protactinium-231		0.11	0.54	0.87	
					Radium-226		1.92	0.11	0.07	
					Radium-228		0.43	0.07	0.09	
					Thorium-228		0.43	0.07	0.09	
					Thorium-230		-2.11	6.28	9.67	
					Thorium-232		0.43	0.07	0.09	
					Uranium-235		0.11	0.28	0.46	
					Uranium-238		1.69	1.09	1.11	
SLD70468	09/05/02	3.1	3.6		Actinium-227		0.09	0.17	0.26	0.30
					Americium-241		0.06	0.10	0.16	
					Cesium-137		0.00	0.02	0.04	
					Potassium-40		8.14	0.97	0.38	
					Protactinium-231		0.69	0.74	1.20	
					Radium-226		3.25	0.16	0.10	
					Radium-228		0.99	0.10	0.11	
					Thorium-228		0.99	0.10	0.11	
					Thorium-230		0.78	7.59	12.58	
					Thorium-232	0.99	0.10	0.11		
Uranium-235	0.10	0.32	0.54							
Uranium-238	1.70	1.14	1.40							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70466	SLD70469	09/05/02	4.5	5.0		Actinium-227	-0.15	0.25	0.35	0.44
						Americium-241	0.01	0.14	0.23	
						Cesium-137	0.02	0.03	0.06	
						Potassium-40	11.70	1.24	0.58	
						Protactinium-231	0.46	1.07	1.67	
						Radium-226	7.41	0.29	0.14	
						Radium-228	1.12	0.12	0.12	
						Thorium-228	2.71	0.94	0.29	
						Thorium-230	5.27	1.43	0.16	
						Thorium-232	1.68	0.69	0.29	
						Uranium-235	-0.17	0.47	0.77	
						Uranium-238	6.17	1.83	1.93	
						SLD70486	SLD70486	09/12/02	0	0.5
Americium-241	-0.01	0.08	0.13							
Cesium-137	0.05	0.03	0.03							
Potassium-40	14.48	1.22	0.29							
Protactinium-231	0.22	0.57	0.90							
Radium-226	1.65	0.09	0.07							
Radium-228	0.92	0.09	0.09							
Thorium-228	0.92	0.09	0.09							
Thorium-230	-2.94	6.10	9.90							
Thorium-232	0.92	0.09	0.09							
Uranium-235	0.06	0.26	0.44							
Uranium-238	1.76	0.92	1.12							
SLD70487	09/12/02	0.5	1.0		Actinium-227					
					Americium-241		0.05	0.18	0.28	
					Cesium-137		0.01	0.04	0.06	
					Potassium-40		10.35	1.14	0.67	
					Protactinium-231		0.65	1.35	2.07	
					Radium-226		18.69	0.60	0.17	
					Radium-228		1.05	0.14	0.16	
					Thorium-228		2.12	0.77	0.26	
					Thorium-230		4.05	1.13	0.26	
					Thorium-232		1.46	0.60	0.14	
					Uranium-235		-0.17	0.60	0.97	
Uranium-238	3.06	1.91	2.33							
SLD76915	05/28/03	1.2	1.5		Actinium-227	1.93	0.20	0.32	0.10	
					Americium-241	0.03	0.19	0.28		
					Cesium-137	-0.01	0.02	0.03		
					Potassium-40	7.38	0.70	0.29		
					Protactinium-231	0.45	0.65	0.96		
					Radium-226	3.39	0.13	0.08		
					Radium-228	0.82	0.08	0.08		
					Thorium-228	1.81	0.74	0.40		
					Thorium-230	3.33	1.06	0.40		
					Thorium-232	1.15	0.57	0.35		
Uranium-235	0.73	0.43	0.48							
Uranium-238	1.83	1.66	2.06							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD70486	SLD76916	05/28/03	2.7	3.0		Actinium-227	3.18	0.30	0.42	0.27
						Americium-241	0.25	0.27	0.40	
						Cesium-137	0.03	0.02	0.04	
						Potassium-40	12.98	1.02	0.35	
						Protactinium-231	1.11	0.82	1.23	
						Radium-226	5.22	0.18	0.10	
						Radium-228	1.30	0.09	0.09	
						Thorium-228	1.81	0.68	0.25	
						Thorium-230	5.00	1.29	0.25	
						Thorium-232	1.00	0.48	0.14	
						Uranium-235	0.48	0.36	0.61	
	Uranium-238	3.34	2.25	2.93						
	SLD76917	05/28/03	5	5.3		Actinium-227	0.06	0.04	0.13	0.00
						Americium-241	0.00	0.03	0.04	
						Cesium-137	-0.02	0.01	0.02	
						Potassium-40	13.21	0.94	0.18	
						Protactinium-231	-0.13	0.37	0.55	
						Radium-226	1.44	0.07	0.05	
						Radium-228	0.67	0.05	0.05	
						Thorium-228	0.90	0.44	0.27	
						Thorium-230	1.16	0.50	0.31	
						Thorium-232	0.23	0.21	0.12	
Uranium-235						0.04	0.15	0.26		
Uranium-238	0.93	0.36	0.37							
SLD71088	SLD71088	07/09/02	0	0.5	0.0	Actinium-227	0.27	0.10	0.15	0.07
						Americium-241	0.01	0.03	0.04	
						Cesium-137	0.03	0.02	0.02	
						Potassium-40	7.78	0.70	0.21	
						Protactinium-231	0.27	0.42	0.66	
						Radium-226	2.72	0.11	0.06	
						Radium-228	0.64	0.06	0.06	
						Thorium-228	0.64	0.06	0.06	
						Thorium-230	2.22	2.71	4.44	
						Thorium-232	0.64	0.06	0.06	
						Uranium-235	0.13	0.18	0.31	
	Uranium-238	1.93	0.50	0.42						
	SLD71089	07/09/02	1.5	2.0		Actinium-227	0.17	0.18	0.28	0.64
						Americium-241	0.03	0.06	0.09	
						Cesium-137	0.00	0.03	0.04	
						Potassium-40	11.58	1.06	0.40	
						Protactinium-231	0.36	0.78	1.21	
						Radium-226	6.93	0.25	0.10	
						Radium-228	1.09	0.11	0.11	
						Thorium-228	1.09	0.11	0.11	
						Thorium-230	10.29	7.14	8.35	
						Thorium-232	1.09	0.11	0.11	
Uranium-235						0.22	0.34	0.58		
Uranium-238	5.07	0.86	0.82							

Table C-1  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD71088	SLD71090	07/09/02	2.5	3.0		Actinium-227	0.30	0.16	0.26	0.37
						Americium-241	0.00	0.06	0.09	
						Cesium-137	0.01	0.03	0.04	
						Potassium-40	12.27	1.07	0.43	
						Protactinium-231	-0.19	0.79	1.19	
						Radium-226	7.20	0.25	0.10	
						Radium-228	1.13	0.11	0.10	
						Thorium-228	1.13	0.11	0.10	
						Thorium-230	5.07	5.59	8.45	
						Thorium-232	1.13	0.11	0.10	
						Uranium-235	0.46	0.33	0.58	
						Uranium-238	4.51	0.96	0.82	
	SLD71087	07/09/02	4	4.5		Actinium-227	0.25	0.16	0.23	0.14
						Americium-241	0.00	0.05	0.07	
						Cesium-137	-0.03	0.02	0.04	
						Potassium-40	12.18	1.11	0.37	
						Protactinium-231	0.61	0.67	1.07	
						Radium-226	4.43	0.17	0.09	
						Radium-228	0.91	0.09	0.10	
						Thorium-228	0.91	0.09	0.10	
						Thorium-230	5.10	4.32	7.17	
						Thorium-232	0.91	0.09	0.10	
						Uranium-235	-0.07	0.29	0.49	
						Uranium-238	2.93	0.72	0.69	
	SLD71091	07/09/02	6.6	7.2		Actinium-227	0.20	0.12	0.19	0.09
						Americium-241	0.01	0.04	0.06	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	13.21	1.03	0.33	
						Protactinium-231	0.85	0.50	0.83	
						Radium-226	3.21	0.13	0.08	
						Radium-228	1.01	0.09	0.08	
						Thorium-228	1.01	0.09	0.08	
						Thorium-230	1.79	4.00	6.01	
						Thorium-232	1.01	0.09	0.08	
						Uranium-235	0.21	0.23	0.40	
						Uranium-238	2.12	0.65	0.58	
SLD71092	07/09/02	9.3	9.8		Actinium-227	0.11	0.10	0.15	0.33	
					Americium-241	0.00	0.03	0.05		
					Cesium-137	0.00	0.02	0.02		
					Potassium-40	17.18	1.25	0.24		
					Protactinium-231	0.26	0.43	0.68		
					Radium-226	1.49	0.08	0.06		
					Radium-228	0.94	0.08	0.06		
					Thorium-228	0.94	0.08	0.06		
					Thorium-230	6.67	3.87	4.51		
					Thorium-232	0.94	0.08	0.06		
					Uranium-235	0.02	0.18	0.31		
					Uranium-238	2.23	0.57	0.43		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD71440	SLD71440	07/23/02	0	0.5	0.0	Actinium-227	0.21	0.10	0.15	0.77
						Americium-241	0.00	0.03	0.05	
						Cesium-137	0.29	0.03	0.02	
						Potassium-40	12.43	0.89	0.22	
						Protactinium-231	-0.13	0.45	0.67	
						Radium-226	5.29	0.17	0.06	
						Radium-228	1.25	0.08	0.06	
						Thorium-228	1.62	0.64	0.30	
						Thorium-230	5.03	1.31	0.25	
						Thorium-232	1.37	0.57	0.25	
						Uranium-235	0.35	0.17	0.31	
						Uranium-238	6.17	0.67	0.48	
SLD71441	SLD71441	07/23/02	0	0.5	0.0	Actinium-227	0.13	0.12	0.29	0.71
						Americium-241	0.12	0.12	0.19	
						Cesium-137	0.33	0.05	0.04	
						Potassium-40	9.60	1.02	0.40	
						Protactinium-231	0.90	0.80	1.30	
						Radium-226	5.27	0.21	0.11	
						Radium-228	1.23	0.13	0.12	
						Thorium-228	1.94	0.74	0.28	
						Thorium-230	4.92	1.36	0.15	
						Thorium-232	1.26	0.57	0.28	
						Uranium-235	0.57	0.46	0.66	
						Uranium-238	4.23	1.56	1.65	
SLD71442	SLD71442	07/24/02	0	0.5	0.0	Actinium-227	0.17	0.06	0.11	0.46
						Americium-241	0.02	0.03	0.04	
						Cesium-137	0.22	0.02	0.02	
						Potassium-40	9.72	0.71	0.20	
						Protactinium-231	0.20	0.37	0.57	
						Radium-226	4.45	0.14	0.05	
						Radium-228	0.85	0.06	0.05	
						Thorium-228	1.25	0.53	0.23	
						Thorium-230	3.90	1.07	0.13	
						Thorium-232	1.07	0.48	0.13	
						Uranium-235	0.27	0.16	0.26	
						Uranium-238	4.43	0.59	0.39	
SLD72139	SLD72139	10/21/02	0	0.5	0.0	Actinium-227	0.16	0.14	0.23	0.79
						Americium-241	0.00	0.09	0.14	
						Cesium-137	0.12	0.03	0.03	
						Potassium-40	5.63	0.68	0.33	
						Protactinium-231	-0.18	0.61	1.04	
						Radium-226	2.67	0.13	0.09	
						Radium-228	0.54	0.08	0.09	
						Thorium-228	0.54	0.08	0.09	
						Thorium-230	-0.37	7.62	11.76	
						Thorium-232	0.54	0.08	0.09	
						Uranium-235	0.19	0.29	0.49	
						Uranium-238	1.76	1.28	1.24	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72139	SLD72166	10/21/02	1.1	1.6		Actinium-227	0.17	0.13	0.22	0.22
						Americium-241	0.01	0.08	0.13	
						Cesium-137	0.02	0.02	0.03	
						Potassium-40	16.39	1.29	0.28	
						Protactinium-231	0.05	0.62	0.95	
						Radium-226	1.66	0.10	0.09	
						Radium-228	1.01	0.09	0.09	
						Thorium-228	1.01	0.09	0.09	
						Thorium-230	-6.58	6.53	10.32	
						Thorium-232	1.01	0.09	0.09	
						Uranium-235	-0.09	0.26	0.42	
						Uranium-238	1.24	0.91	1.14	
	SLD72192	10/21/02	3	3.5		Actinium-227	0.30	0.14	0.23	0.27
						Americium-241	-0.01	0.10	0.15	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	15.33	1.23	0.26	
						Protactinium-231	0.07	0.60	0.93	
						Radium-226	2.21	0.12	0.09	
						Radium-228	0.89	0.10	0.08	
						Thorium-228	0.89	0.10	0.08	
						Thorium-230	1.32	7.12	11.73	
						Thorium-232	0.89	0.10	0.08	
						Uranium-235	0.25	0.29	0.48	
						Uranium-238	1.88	1.06	1.28	
	SLD72201	10/21/02	5	5.5		Actinium-227	0.23	0.13	0.21	0.21
						Americium-241	-0.05	0.08	0.13	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	14.86	1.20	0.23	
						Protactinium-231	0.24	0.59	0.93	
						Radium-226	1.46	0.09	0.09	
						Radium-228	0.92	0.09	0.09	
						Thorium-228	0.92	0.09	0.09	
						Thorium-230	1.49	5.92	10.23	
Thorium-232						0.92	0.09	0.09		
Uranium-235						-0.10	0.25	0.40		
Uranium-238						0.93	0.70	1.24		
SLD72140	SLD72140	10/17/02	0	0.5	0.0	Actinium-227	0.06	0.10	0.15	0.12
						Americium-241	0.01	0.03	0.05	
						Cesium-137	0.38	0.04	0.02	
						Potassium-40	6.79	0.61	0.24	
						Protactinium-231	0.17	0.45	0.69	
						Radium-226	3.25	0.12	0.06	
						Radium-228	0.62	0.05	0.06	
						Thorium-228	0.62	0.05	0.06	
						Thorium-230	0.02	3.12	4.62	
						Thorium-232	0.62	0.05	0.06	
						Uranium-235	0.11	0.19	0.33	
						Uranium-238	2.76	0.63	0.44	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72140	SLD72167	10/17/02	1.5	2.0		Actinium-227	0.21	0.15	0.23	0.19
						Americium-241	0.04	0.05	0.08	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	15.60	1.23	0.33	
						Protactinium-231	0.48	0.63	1.00	
						Radium-226	4.16	0.16	0.09	
						Radium-228	1.55	0.11	0.09	
						Thorium-228	1.55	0.11	0.09	
						Thorium-230	5.89	4.47	7.41	
						Thorium-232	1.55	0.11	0.09	
						Uranium-235	0.11	0.28	0.47	
						Uranium-238	2.86	0.69	0.70	
SLD72141	SLD72141	10/15/02	0	0.5	0.0	Actinium-227	0.08	0.09	0.15	0.31
						Americium-241	0.04	0.06	0.09	
						Cesium-137	0.07	0.02	0.03	
						Potassium-40	3.19	0.44	0.25	
						Protactinium-231	0.16	0.40	0.64	
						Radium-226	1.79	0.09	0.06	
						Radium-228	0.25	0.05	0.05	
						Thorium-228	0.25	0.05	0.05	
						Thorium-230	0.79	4.48	6.99	
						Thorium-232	0.25	0.05	0.05	
						Uranium-235	-0.11	0.19	0.31	
						Uranium-238	1.37	0.65	0.78	
	SLD72168	10/15/02	1.3	1.8		Actinium-227	0.14	0.15	0.24	0.33
	Americium-241	0.07	0.10	0.16						
	Cesium-137	-0.01	0.02	0.04						
	Potassium-40	9.82	1.02	0.41						
	Protactinium-231	0.09	0.67	1.05						
	Radium-226	2.38	0.13	0.11						
	Radium-228	0.74	0.10	0.10						
	Thorium-228	0.74	0.10	0.10						
	Thorium-230	0.89	7.55	12.48						
	Thorium-232	0.74	0.10	0.10						
	Uranium-235	0.14	0.31	0.52						
	Uranium-238	3.37	1.23	1.36						
SLD72193	10/15/02	3.2	3.7		Actinium-227	0.26	0.14	0.23	0.22	
Americium-241	-0.01	0.08	0.13							
Cesium-137	-0.01	0.02	0.03							
Potassium-40	14.80	1.32	0.34							
Protactinium-231	0.09	0.63	0.97							
Radium-226	1.33	0.09	0.09							
Radium-228	0.91	0.09	0.08							
Thorium-228	0.91	0.09	0.08							
Thorium-230	4.42	5.95	10.48							
Thorium-232	0.91	0.09	0.08							
Uranium-235	-0.03	0.26	0.43							
Uranium-238	0.50	0.68	1.20							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72141	SLD72202	10/15/02	5.3	5.8		Actinium-227	0.19	0.13	0.22	0.23
						Americium-241	0.06	0.09	0.14	
						Cesium-137	0.01	0.02	0.04	
						Potassium-40	15.84	1.31	0.31	
						Protactinium-231	0.69	0.66	0.99	
						Radium-226	1.67	0.10	0.09	
						Radium-228	1.01	0.10	0.09	
						Thorium-228	1.01	0.10	0.09	
						Thorium-230	1.72	6.22	10.80	
						Thorium-232	1.01	0.10	0.09	
						Uranium-235	-0.06	0.26	0.43	
						Uranium-238	1.22	0.87	1.19	
SLD72142	SLD72142	10/21/02	0	0.5	0.0	Actinium-227	0.05	0.13	0.20	0.57
						Americium-241	0.02	0.07	0.12	
						Cesium-137	0.04	0.02	0.03	
						Potassium-40	3.41	0.58	0.35	
						Protactinium-231	-0.28	0.52	0.89	
						Radium-226	1.74	0.10	0.08	
						Radium-228	0.25	0.06	0.07	
						Thorium-228	0.25	0.06	0.07	
						Thorium-230	0.56	6.04	9.49	
						Thorium-232	0.25	0.06	0.07	
						Uranium-235	-0.21	0.24	0.38	
						Uranium-238	2.04	1.08	1.01	
	SLD72169	10/21/02	1.4	1.9		Actinium-227	0.26	0.14	0.23	0.24
						Americium-241	0.09	0.08	0.14	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	16.02	1.31	0.28	
						Protactinium-231	0.67	0.54	0.92	
						Radium-226	1.74	0.10	0.09	
						Radium-228	1.02	0.10	0.09	
						Thorium-228	1.02	0.10	0.09	
						Thorium-230	1.82	6.80	10.60	
						Thorium-232	1.02	0.10	0.09	
						Uranium-235	0.02	0.28	0.44	
						Uranium-238	1.99	1.10	1.13	
SLD72143	SLD72143	10/17/02	0	0.5	0.0	Actinium-227	0.03	0.05	0.08	0.00
						Americium-241	0.00	0.02	0.03	
						Cesium-137	0.02	0.01	0.01	
						Potassium-40	2.72	0.28	0.13	
						Protactinium-231	-0.11	0.22	0.33	
						Radium-226	1.18	0.05	0.03	
						Radium-228	0.10	0.03	0.03	
						Thorium-228	0.10	0.03	0.03	
						Thorium-230	1.01	1.59	2.43	
						Thorium-232	0.10	0.03	0.03	
						Uranium-235	0.12	0.10	0.17	
						Uranium-238	0.92	0.30	0.22	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft <sup>1</sup> bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72143	SLD72170	10/17/02	1.5	2.0		Actinium-227	0.28	0.13	0.21	0.36
						Americium-241	0.15	0.07	0.07	
						Cesium-137	0.04	0.02	0.03	
						Potassium-40	10.51	0.87	0.30	
						Protactinium-231	-0.05	0.54	0.82	
						Radium-226	4.15	0.15	0.08	
						Radium-228	0.98	0.08	0.08	
						Thorium-228	0.98	0.08	0.08	
						Thorium-230	1.87	4.23	6.84	
						Thorium-232	0.98	0.08	0.08	
						Uranium-235	0.77	0.26	0.41	
						Uranium-238	14.44	1.28	0.64	
SLD72144	SLD72144	10/15/02	0	0.5	0.0	Actinium-227	0.06	0.13	0.21	0.64
						Americium-241	-0.07	0.09	0.13	
						Cesium-137	0.13	0.03	0.03	
						Potassium-40	7.31	0.79	0.34	
						Protactinium-231	0.41	0.59	0.98	
						Radium-226	1.76	0.10	0.09	
						Radium-228	0.50	0.08	0.09	
						Thorium-228	0.50	0.08	0.09	
						Thorium-230	1.51	6.49	10.22	
						Thorium-232	0.50	0.08	0.09	
						Uranium-235	0.18	0.26	0.45	
						Uranium-238	1.92	1.17	1.09	
	SLD72171	10/15/02	1.4	1.9		Actinium-227	0.18	0.27	0.43	0.71
						Americium-241	0.16	0.20	0.32	
						Cesium-137	-0.01	0.04	0.07	
						Potassium-40	14.20	1.69	0.69	
						Protactinium-231	1.04	1.80	2.03	
						Radium-226	4.82	0.25	0.18	
						Radium-228	1.28	0.17	0.19	
						Thorium-228	1.28	0.17	0.19	
						Thorium-230	8.27	13.84	22.14	
						Thorium-232	1.28	0.17	0.19	
						Uranium-235	0.47	0.52	0.90	
						Uranium-238	5.25	2.27	2.54	
SLD72194	10/15/02	2.4	2.9		Actinium-227	0.03	0.14	0.22	0.24	
					Americium-241	0.01	0.09	0.14		
					Cesium-137	-0.02	0.02	0.04		
					Potassium-40	11.39	1.10	0.32		
					Protactinium-231	-0.21	0.66	0.99		
					Radium-226	1.72	0.11	0.09		
					Radium-228	0.79	0.10	0.09		
					Thorium-228	0.79	0.10	0.09		
					Thorium-230	-6.22	7.24	10.75		
					Thorium-232	0.79	0.10	0.09		
Uranium-235	0.11	0.28	0.47							
Uranium-238	1.93	1.16	1.18							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72144	SLD72203	10/15/02	5.3	5.8		Actinium-227	0.35	0.16	0.28	0.32
						Americium-241	0.05	0.10	0.18	
						Cesium-137	0.01	0.03	0.04	
						Potassium-40	17.34	1.49	0.43	
						Protactinium-231	0.31	0.76	1.20	
						Radium-226	1.95	0.12	0.10	
						Radium-228	1.18	0.12	0.12	
						Thorium-228	1.18	0.12	0.12	
						Thorium-230	-3.46	7.65	12.99	
						Thorium-232	1.18	0.12	0.12	
						Uranium-235	-0.03	0.32	0.52	
						Uranium-238	0.80	0.90	1.59	
SLD72145	SLD72145	10/14/02	0	0.5	0.0	Actinium-227	0.04	0.11	0.16	0.16
						Americium-241	0.02	0.03	0.05	
						Cesium-137	0.11	0.02	0.02	
						Potassium-40	6.90	0.66	0.26	
						Protactinium-231	0.07	0.47	0.72	
						Radium-226	2.90	0.12	0.06	
						Radium-228	0.63	0.07	0.07	
						Thorium-228	0.63	0.07	0.07	
						Thorium-230	2.54	3.48	5.29	
						Thorium-232	0.63	0.07	0.07	
						Uranium-235	0.16	0.20	0.35	
						Uranium-238	2.42	0.61	0.49	
	SLD72172	10/14/02	0.8	1.3		Actinium-227	0.17	0.11	0.15	0.04
						Americium-241	0.00	0.03	0.05	
						Cesium-137	0.00	0.02	0.02	
						Potassium-40	9.75	0.81	0.21	
						Protactinium-231	0.22	0.45	0.71	
						Radium-226	2.39	0.10	0.07	
						Radium-228	0.73	0.07	0.06	
						Thorium-228	0.73	0.07	0.06	
Thorium-230	2.34	2.95	4.87							
Thorium-232	0.73	0.07	0.06							
Uranium-235	0.12	0.19	0.33							
Uranium-238	1.78	0.50	0.46							
SLD72146	SLD72146	10/15/02	0	0.8	0.0	Actinium-227	0.17	0.28	0.43	0.52
						Americium-241	0.09	0.37	0.60	
						Cesium-137	0.17	0.09	0.07	
						Potassium-40	9.20	1.35	0.61	
						Protactinium-231	-0.26	1.25	1.92	
						Radium-226	4.43	0.24	0.20	
						Radium-228	0.96	0.16	0.19	
						Thorium-228	1.38	0.61	0.33	
						Thorium-230	3.95	1.15	0.15	
						Thorium-232	1.61	0.66	0.15	
						Uranium-235	-0.09	0.54	0.89	
						Uranium-238	4.06	4.33	4.36	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD72146	SLD72173	10/15/02	0.8	1.6		Actinium-227	0.12	0.27	0.41	0.07	
						Americium-241	0.02	0.32	0.56		
						Cesium-137	-0.04	0.04	0.07		
						Potassium-40	11.34	1.52	0.60		
						Protactinium-231	0.21	1.25	1.97		
						Radium-226	3.02	0.20	0.18		
						Radium-228	0.90	0.17	0.20		
						Thorium-228	2.51	0.91	0.41		
						Thorium-230	2.26	0.85	0.31		
						Thorium-232	1.50	0.67	0.37		
						Uranium-235	-0.59	0.52	0.80		
						Uranium-238	1.67	2.63	4.60		
SLD72147	SLD72147	10/22/02	0	0.5	0.0	Actinium-227	0.05	0.13	0.21	0.00	
						Americium-241	0.04	0.09	0.15		
						Cesium-137	0.00	0.03	0.04		
						Potassium-40	2.16	0.54	0.38		
						Protactinium-231	0.07	0.58	1.05		
						Radium-226	1.24	0.11	0.09		
						Radium-228	0.18	0.06	0.09		
						Thorium-228	0.33	0.29	0.35		
						Thorium-230	1.75	0.67	0.26		
						Thorium-232	0.19	0.21	0.26		
						Uranium-235	0.10	0.27	0.47		
						Uranium-238	1.20	1.10	1.22		
		SLD72174	10/22/02	1	1.5		Actinium-227	0.03	0.10	0.15	0.00
	Americium-241						0.02	0.06	0.09		
	Cesium-137						0.00	0.01	0.02		
	Potassium-40						8.21	0.76	0.18		
	Protactinium-231						0.04	0.41	0.64		
	Radium-226						1.19	0.07	0.05		
	Radium-228						0.45	0.05	0.06		
	Thorium-228						0.81	0.41	0.27		
	SLD72148	10/21/02	0	0.5	0.0	Actinium-227	0.09	0.11	0.19	0.58	
Americium-241						0.05	0.07	0.12			
Cesium-137						0.07	0.02	0.03			
Potassium-40						4.73	0.59	0.26			
Protactinium-231						-0.22	0.52	0.78			
Radium-226						2.32	0.11	0.07			
Radium-228						0.34	0.06	0.07			
Thorium-228						0.34	0.06	0.07			
Thorium-230	3.41	6.02	9.53								
Thorium-232	0.34	0.06	0.07								
Uranium-235	0.09	0.24	0.41								
Uranium-238	2.11	1.01	1.02								

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD72148	SLD72175	10/21/02	1.3	1.8		Actinium-227	0.12	0.08	0.19	0.17	
						Americium-241	0.06	0.07	0.12		
						Cesium-137	0.00	0.02	0.03		
						Potassium-40	10.93	0.98	0.26		
						Protactinium-231	0.36	0.51	0.83		
						Radium-226	1.28	0.08	0.07		
						Radium-228	0.69	0.07	0.08		
						Thorium-228	0.69	0.07	0.08		
						Thorium-230	-0.39	5.78	8.93		
						Thorium-232	0.69	0.07	0.08		
						Uranium-235	0.12	0.22	0.37		
						Uranium-238	1.03	0.94	0.95		
SLD72149	SLD72149	10/16/02	0	0.5	0.0	Actinium-227	0.11	0.06	0.17	0.01	
						Americium-241	0.07	0.06	0.11		
						Cesium-137	0.01	0.01	0.03		
						Potassium-40	2.44	0.51	0.30		
						Protactinium-231	-0.06	0.42	0.73		
						Radium-226	1.52	0.09	0.06		
						Radium-228	0.19	0.05	0.06		
						Thorium-228	0.25	0.27	0.38		
						Thorium-230	1.73	0.70	0.34		
						Thorium-232	0.11	0.16	0.15		
						Uranium-235	0.10	0.20	0.34		
						Uranium-238	1.99	0.93	0.87		
		SLD72176	10/16/02	1.5	2.0		Actinium-227	0.26	0.13	0.22	0.00
	Americium-241						0.07	0.08	0.14		
	Cesium-137						-0.03	0.02	0.03		
	Potassium-40						12.98	1.13	0.31		
	Protactinium-231						-0.62	0.62	0.88		
	Radium-226						1.54	0.10	0.09		
	Radium-228						0.81	0.09	0.09		
	Thorium-228						1.46	0.65	0.35		
	Thorium-230						1.98	0.76	0.16		
	Thorium-232						0.93	0.49	0.16		
	Uranium-235						0.13	0.27	0.45		
	Uranium-238						1.44	0.98	1.13		
SLD72150	SLD72150	10/02/02	0	0.5	0.0	Actinium-227	0.07	0.10	0.16	0.00	
						Americium-241	0.10	0.11	0.21		
						Cesium-137	0.09	0.02	0.02		
						Potassium-40	3.79	0.45	0.23		
						Protactinium-231	0.30	0.42	0.68		
						Radium-226	1.56	0.08	0.05		
						Radium-228	0.30	0.05	0.06		
						Thorium-228	0.46	0.29	0.21		
						Thorium-230	1.48	0.56	0.21		
						Thorium-232	0.67	0.36	0.21		
						Uranium-235	0.18	0.20	0.35		
						Uranium-238	0.75	0.94	1.71		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72150	SLD72177	10/02/02	1.5	2.0		Actinium-227	0.20	0.11	0.18	0.01
						Americium-241	0.00	0.13	0.23	
						Cesium-137	-0.01	0.02	0.02	
						Potassium-40	6.95	0.63	0.21	
						Protactinium-231	0.18	0.47	0.73	
						Radium-226	2.91	0.12	0.06	
						Radium-228	0.57	0.06	0.06	
						Thorium-228	1.04	0.47	0.23	
						Thorium-230	1.76	0.64	0.23	
						Thorium-232	0.50	0.31	0.12	
						Uranium-235	0.12	0.24	0.39	
						Uranium-238	1.80	1.08	1.96	
	SLD72195	10/02/02	3.1	3.6		Actinium-227	0.18	0.11	0.18	0.00
						Americium-241	-0.07	0.13	0.22	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	15.90	1.15	0.24	
						Protactinium-231	0.19	0.48	0.74	
						Radium-226	1.64	0.08	0.06	
						Radium-228	0.91	0.07	0.07	
						Thorium-228	1.14	0.52	0.33	
						Thorium-230	1.05	0.49	0.29	
						Thorium-232	1.12	0.51	0.13	
						Uranium-235	0.31	0.29	0.38	
						Uranium-238	1.30	1.05	1.89	
	SLD72204	10/03/02	5.5	6.0		Actinium-227	0.09	0.07	0.11	0.00
						Americium-241	-0.01	0.02	0.03	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	11.63	0.81	0.12	
						Protactinium-231	0.30	0.31	0.50	
						Radium-226	1.16	0.06	0.04	
						Radium-228	0.47	0.04	0.04	
						Thorium-228	0.47	0.04	0.04	
						Thorium-230	0.12	2.02	3.27	
						Thorium-232	0.47	0.04	0.04	
						Uranium-235	0.01	0.14	0.22	
						Uranium-238	0.75	0.36	0.32	
	SLD72799	10/02/02	9	9.5		Actinium-227	0.07	0.11	0.17	0.05
						Americium-241	0.02	0.04	0.05	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	15.71	1.15	0.23	
						Protactinium-231	0.19	0.52	0.81	
						Radium-226	1.85	0.09	0.07	
Radium-228						0.84	0.08	0.07		
Thorium-228						0.84	0.08	0.07		
Thorium-230						-1.67	3.31	5.26		
Thorium-232						0.84	0.08	0.07		
Uranium-235						-0.01	0.20	0.34		
Uranium-238						1.32	0.53	0.51		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72150	SLD72800	10/02/02	11.1	11.6		Actinium-227	0.08	0.10	0.15	0.02
						Americium-241	-0.03	0.03	0.05	
						Cesium-137	-0.01	0.02	0.02	
						Potassium-40	14.43	1.07	0.22	
						Protactinium-231	0.25	0.43	0.69	
						Radium-226	1.56	0.07	0.06	
						Radium-228	0.72	0.06	0.06	
						Thorium-228	0.72	0.06	0.06	
						Thorium-230	-1.81	2.83	4.48	
						Thorium-232	0.72	0.06	0.06	
						Uranium-235	0.05	0.18	0.31	
						Uranium-238	0.60	0.46	0.46	
						SLD72801	10/02/02	18.3	18.8	
	Americium-241	-0.01	0.09	0.14						
	Cesium-137	-0.01	0.05	0.08						
	Potassium-40	22.28	2.22	0.70						
	Protactinium-231	-0.75	1.45	2.15						
	Radium-226	1.71	0.17	0.22						
	Radium-228	1.13	0.19	0.22						
	Thorium-228	1.13	0.19	0.22						
	Thorium-230	6.68	8.37	14.35						
	Thorium-232	1.13	0.19	0.22						
	Uranium-235	0.20	0.55	0.95						
Uranium-238	2.12	1.54	1.30							
SLD72151	SLD72151	10/14/02	0	0.5	0.0	Actinium-227	0.05	0.06	0.10	0.00
						Americium-241	0.01	0.02	0.03	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	3.23	0.35	0.16	
						Protactinium-231	0.14	0.26	0.47	
						Radium-226	1.43	0.07	0.04	
						Radium-228	0.17	0.03	0.04	
						Thorium-228	0.17	0.03	0.04	
						Thorium-230	-0.32	1.88	3.02	
						Thorium-232	0.17	0.03	0.04	
						Uranium-235	0.06	0.13	0.22	
						Uranium-238	1.16	0.34	0.30	
						SLD72178	10/14/02	1.3	1.8	
	Americium-241	-0.02	0.04	0.07						
	Cesium-137	0.02	0.02	0.03						
	Potassium-40	15.37	1.17	0.32						
	Protactinium-231	0.09	0.60	0.92						
	Radium-226	3.96	0.16	0.08						
	Radium-228	1.04	0.09	0.08						
	Thorium-228	1.04	0.09	0.08						
	Thorium-230	4.69	4.83	6.58						
	Thorium-232	1.04	0.09	0.08						
	Uranium-235	0.00	0.29	0.44						
Uranium-238	2.57	0.74	0.64							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72152	SLD72152	10/15/02	0	0.5	0.0	Actinium-227	0.29	0.19	0.36	1.45
						Americium-241	-0.11	0.16	0.25	
						Cesium-137	0.27	0.06	0.06	
						Potassium-40	8.84	1.18	0.58	
						Protactinium-231	0.63	1.05	1.69	
						Radium-226	3.87	0.21	0.16	
						Radium-228	0.92	0.14	0.16	
						Thorium-228	0.92	0.14	0.16	
						Thorium-230	4.28	11.31	17.87	
						Thorium-232	0.92	0.14	0.16	
						Uranium-235	0.67	0.61	0.77	
						Uranium-238	3.98	2.03	1.99	
	SLD72179	10/15/02	1.1	1.6		Actinium-227	0.22	0.17	0.29	0.33
						Americium-241	-0.01	0.11	0.17	
						Cesium-137	0.01	0.04	0.04	
						Potassium-40	13.69	1.36	0.31	
						Protactinium-231	-0.15	0.76	1.16	
						Radium-226	2.00	0.13	0.12	
						Radium-228	1.03	0.12	0.11	
						Thorium-228	1.03	0.12	0.11	
						Thorium-230	-10.11	9.12	13.31	
						Thorium-232	1.03	0.12	0.11	
SLD72153	SLD72153	10/16/02	0	0.5	0.0	Actinium-227	0.09	0.09	0.15	0.01
						Americium-241	0.01	0.07	0.10	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	2.54	0.42	0.23	
						Protactinium-231	0.03	0.38	0.68	
						Radium-226	1.61	0.09	0.06	
						Radium-228	0.14	0.05	0.06	
						Thorium-228	0.62	0.43	0.44	
						Thorium-230	1.85	0.75	0.36	
						Thorium-232	0.36	0.30	0.16	
						Uranium-235	0.21	0.20	0.34	
						Uranium-238	2.19	1.06	0.86	
	SLD72180	10/16/02	1.5	2.0		Actinium-227	0.12	0.10	0.16	0.00
						Americium-241	-0.04	0.05	0.09	
						Cesium-137	0.01	0.01	0.01	
						Potassium-40	8.81	0.78	0.22	
						Protactinium-231	-0.11	0.45	0.68	
						Radium-226	1.18	0.07	0.06	
						Radium-228	0.50	0.06	0.05	
						Thorium-228	1.30	0.59	0.28	
						Thorium-230	1.36	0.60	0.33	
						Thorium-232	0.65	0.40	0.28	
Uranium-235	-0.06	0.19	0.31							
Uranium-238	0.30	0.49	0.87							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72153	SLD72196	10/16/02	3.3	3.8		Actinium-227	0.32	0.16	0.27	0.03
						Americium-241	0.02	0.09	0.15	
						Cesium-137	-0.01	0.02	0.04	
						Potassium-40	16.44	1.47	0.31	
						Protactinium-231	-0.09	0.63	0.97	
						Radium-226	1.60	0.11	0.10	
						Radium-228	1.02	0.12	0.10	
						Thorium-228	1.03	0.55	0.17	
						Thorium-230	1.62	0.70	0.32	
						Thorium-232	1.51	0.67	0.17	
						Uranium-235	0.09	0.28	0.48	
						Uranium-238	0.43	0.80	1.42	
	SLD72205	10/16/02	5.5	6.0		Actinium-227	0.19	0.14	0.22	0.04
						Americium-241	0.00	0.09	0.13	
						Cesium-137	-0.02	0.02	0.03	
						Potassium-40	17.44	1.38	0.27	
						Protactinium-231	0.07	0.59	0.91	
						Radium-226	1.34	0.09	0.08	
						Radium-228	1.09	0.10	0.09	
						Thorium-228	0.86	0.48	0.35	
						Thorium-230	1.67	0.68	0.16	
						Thorium-232	1.73	0.70	0.16	
SLD72154	SLD72154	10/16/02	0	0.5	0.0	Actinium-227	0.07	0.08	0.14	0.03
						Americium-241	0.02	0.05	0.09	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	2.60	0.39	0.20	
						Protactinium-231	-0.03	0.35	0.61	
						Radium-226	1.44	0.08	0.05	
						Radium-228	0.16	0.04	0.06	
						Thorium-228	0.29	0.28	0.36	
						Thorium-230	2.07	0.75	0.27	
						Thorium-232	0.37	0.29	0.14	
						Uranium-235	0.12	0.17	0.30	
						Uranium-238	1.45	0.72	0.73	
	SLD72181	10/16/02	1.2	1.7		Actinium-227	0.18	0.13	0.29	0.22
						Americium-241	0.07	0.11	0.18	
						Cesium-137	-0.01	0.03	0.04	
						Potassium-40	7.43	0.88	0.41	
						Protactinium-231	0.47	0.74	1.16	
						Radium-226	4.84	0.19	0.10	
						Radium-228	1.51	0.12	0.11	
						Thorium-228	2.09	0.82	0.41	
						Thorium-230	4.08	1.23	0.31	
						Thorium-232	1.14	0.57	0.31	
Uranium-235	0.10	0.34	0.57							
Uranium-238	3.56	1.54	1.55							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72155	SLD72155	10/17/02	0	0.5	0.0	Actinium-227	0.10	0.07	0.10	0.00
						Americium-241	-0.01	0.02	0.03	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	2.56	0.34	0.17	
						Protactinium-231	0.15	0.38	0.45	
						Radium-226	1.62	0.07	0.04	
						Radium-228	0.13	0.03	0.05	
						Thorium-228	0.13	0.03	0.05	
						Thorium-230	1.52	1.95	3.23	
						Thorium-232	0.13	0.03	0.05	
	Uranium-235	0.04	0.13	0.23						
	Uranium-238	1.26	0.30	0.30						
	SLD72182	10/17/02	1.2	1.7		Actinium-227	0.13	0.09	0.14	0.09
						Americium-241	-0.02	0.03	0.04	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	7.12	0.58	0.18	
						Protactinium-231	0.48	0.33	0.56	
						Radium-226	1.65	0.07	0.04	
						Radium-228	0.44	0.05	0.05	
						Thorium-228	0.44	0.05	0.05	
Thorium-230						1.51	2.62	4.28		
Thorium-232						0.44	0.05	0.05		
Uranium-235	0.36	0.16	0.25							
Uranium-238	5.36	0.56	0.41							
SLD72156	SLD72156	10/21/02	0	0.5	0.0	Actinium-227	0.01	0.08	0.13	0.31
						Americium-241	0.01	0.05	0.09	
						Cesium-137	0.04	0.01	0.02	
						Potassium-40	2.89	0.41	0.23	
						Protactinium-231	0.13	0.35	0.63	
						Radium-226	1.46	0.08	0.05	
						Radium-228	0.14	0.04	0.06	
						Thorium-228	0.14	0.04	0.06	
						Thorium-230	2.30	4.34	6.90	
						Thorium-232	0.14	0.04	0.06	
	Uranium-235	0.21	0.20	0.30						
	Uranium-238	1.65	0.81	0.73						
	SLD72183	10/21/02	1.5	2.0		Actinium-227	0.17	0.15	0.23	0.30
						Americium-241	0.04	0.09	0.15	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	8.13	0.82	0.32	
						Protactinium-231	0.04	0.67	1.02	
						Radium-226	4.02	0.16	0.09	
						Radium-228	0.85	0.07	0.08	
						Thorium-228	0.85	0.07	0.08	
Thorium-230						0.62	7.69	11.82		
Thorium-232						0.85	0.07	0.08		
Uranium-235	-0.07	0.30	0.47							
Uranium-238	3.00	1.22	1.27							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72156	SLD72197	10/21/02	2.7	3.3		Actinium-227	0.14	0.12	0.20	0.18
						Americium-241	0.00	0.07	0.12	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	6.97	0.75	0.16	
						Protactinium-231	0.31	0.37	0.82	
						Radium-226	1.40	0.09	0.08	
						Radium-228	0.44	0.06	0.07	
						Thorium-228	0.44	0.06	0.07	
						Thorium-230	2.14	5.45	9.18	
						Thorium-232	0.44	0.06	0.07	
						Uranium-235	-0.06	0.23	0.38	
						Uranium-238	1.53	0.90	0.98	
	SLD72206	10/21/02	5	5.5		Actinium-227	0.18	0.16	0.25	0.36
						Americium-241	0.05	0.10	0.16	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	11.70	1.01	0.35	
						Protactinium-231	0.22	0.69	1.07	
						Radium-226	4.09	0.17	0.10	
						Radium-228	0.91	0.10	0.10	
						Thorium-228	0.91	0.10	0.10	
						Thorium-230	5.05	8.32	13.02	
						Thorium-232	0.91	0.10	0.10	
SLD72157	SLD72157	10/21/02	0	0.5	0.0	Actinium-227	1.35	0.14	0.21	1.54
						Americium-241	0.05	0.12	0.18	
						Cesium-137	0.08	0.03	0.03	
						Potassium-40	9.67	0.82	0.28	
						Protactinium-231	1.24	0.73	1.18	
						Radium-226	5.27	0.19	0.09	
						Radium-228	1.19	0.10	0.09	
						Thorium-228	1.19	0.10	0.09	
						Thorium-230	-1.64	9.38	14.23	
						Thorium-232	1.19	0.10	0.09	
						Uranium-235	1.26	0.34	0.53	
						Uranium-238	24.18	2.16	1.52	
	SLD72184	10/21/02	0.8	2.0		Actinium-227	0.36	0.38	0.56	0.32
						Americium-241	-0.18	0.59	0.93	
						Cesium-137	-0.04	0.05	0.08	
						Potassium-40	10.99	1.63	0.94	
						Protactinium-231	-1.53	1.35	2.17	
						Radium-226	3.23	0.22	0.21	
						Radium-228	1.00	0.18	0.20	
						Thorium-228	0.78	0.45	0.28	
						Thorium-230	3.10	0.99	0.15	
						Thorium-232	1.24	0.57	0.15	
Uranium-235	0.54	0.66	1.17							
Uranium-238	13.32	5.73	6.60							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72159	SLD72159	02/11/03	0	0.5	0.0	Actinium-227	-0.02	0.23	0.36	0.00
						Americium-241	0.04	0.07	0.12	
						Cesium-137	0.03	0.05	0.09	
						Potassium-40	4.86	1.65	0.87	
						Protactinium-231	-0.32	1.07	1.85	
						Radium-226	1.05	0.16	0.17	
						Radium-228	0.28	0.13	0.19	
						Thorium-228	0.28	0.24	0.29	
						Thorium-230	0.92	0.40	0.11	
						Thorium-232	0.12	0.14	0.11	
						Uranium-235	0.28	0.47	0.82	
						Uranium-238	1.16	0.90	1.06	
	SLD72185	02/11/03	1	1.5		Actinium-227	0.22	0.34	0.53	0.24
						Americium-241	0.03	0.10	0.17	
						Cesium-137	0.01	0.06	0.09	
						Potassium-40	10.52	2.14	0.88	
						Protactinium-231	0.85	1.56	2.47	
						Radium-226	4.02	0.25	0.23	
						Radium-228	1.11	0.21	0.24	
						Thorium-228	0.93	0.49	0.47	
						Thorium-230	4.04	1.10	0.14	
						Thorium-232	1.97	0.70	0.14	
SLD72160	SLD72160	10/16/02	0	0.5	0.0	Actinium-227	0.06	0.09	0.15	0.00
						Americium-241	0.01	0.06	0.10	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	2.21	0.39	0.29	
						Protactinium-231	0.19	0.40	0.65	
						Radium-226	1.50	0.08	0.06	
						Radium-228	0.18	0.04	0.06	
						Thorium-228	0.31	0.29	0.17	
						Thorium-230	1.57	0.68	0.31	
						Thorium-232	0.06	0.12	0.17	
						Uranium-235	0.04	0.20	0.32	
						Uranium-238	0.90	0.52	0.96	
	SLD72186	10/16/02	1.2	1.7		Actinium-227	0.24	0.14	0.24	0.04
						Americium-241	0.04	0.09	0.14	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	9.10	0.96	0.28	
						Protactinium-231	-0.09	0.66	1.01	
						Radium-226	2.44	0.13	0.09	
						Radium-228	0.72	0.09	0.09	
						Thorium-228	1.40	0.64	0.40	
						Thorium-230	2.16	0.81	0.30	
						Thorium-232	1.22	0.58	0.30	
Uranium-235	0.42	0.36	0.49							
Uranium-238	2.13	1.19	1.21							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72160	SLD72198	10/16/02	3.2	3.7		Actinium-227	0.22	0.14	0.23	0.03
						Americium-241	0.01	0.09	0.14	
						Cesium-137	0.01	0.03	0.03	
						Potassium-40	9.92	0.97	0.32	
						Protactinium-231	0.07	0.64	1.00	
						Radium-226	2.14	0.12	0.09	
						Radium-228	0.64	0.08	0.09	
						Thorium-228	1.97	0.80	0.17	
						Thorium-230	2.09	0.82	0.32	
						Thorium-232	1.28	0.61	0.17	
						Uranium-235	0.08	0.27	0.46	
						Uranium-238	1.56	1.07	1.17	
	SLD72207	10/16/02	5	5.5		Actinium-227	0.20	0.16	0.27	0.02
						Americium-241	0.09	0.11	0.15	
						Cesium-137	-0.01	0.02	0.04	
						Potassium-40	16.80	1.43	0.27	
						Protactinium-231	-0.08	0.61	1.05	
						Radium-226	1.58	0.10	0.10	
						Radium-228	1.22	0.12	0.10	
						Thorium-228	1.63	0.65	0.26	
						Thorium-230	1.43	0.59	0.26	
						Thorium-232	1.38	0.58	0.26	
SLD72161	SLD72161	10/29/02	0.5	1.0	0.5	Actinium-227	0.07	0.08	0.12	0.02
						Americium-241	0.01	0.02	0.04	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	5.93	0.54	0.16	
						Protactinium-231	0.24	0.32	0.51	
						Radium-226	1.17	0.06	0.05	
						Radium-228	0.36	0.04	0.05	
						Thorium-228	0.91	0.48	0.33	
						Thorium-230	1.81	0.70	0.15	
						Thorium-232	0.44	0.32	0.15	
						Uranium-235	0.30	0.17	0.25	
						Uranium-238	2.45	0.45	0.36	
	SLD72187	10/29/02	1.7	2.2		Actinium-227	0.18	0.09	0.14	0.00
						Americium-241	0.02	0.02	0.04	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	9.65	0.75	0.20	
						Protactinium-231	-0.04	0.39	0.59	
						Radium-226	1.56	0.07	0.05	
						Radium-228	0.69	0.06	0.05	
						Thorium-228	1.14	0.55	0.29	
						Thorium-230	1.92	0.75	0.34	
						Thorium-232	0.95	0.50	0.34	
Uranium-235	0.01	0.16	0.27							
Uranium-238	1.05	0.46	0.36							

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SLD72162	SLD72162	10/23/02	0.5	1.0	0.5	Actinium-227	-0.04	0.17	0.26	0.01
						Americium-241	-0.07	0.12	0.18	
						Cesium-137	0.01	0.03	0.05	
						Potassium-40	5.64	0.95	0.35	
						Protactinium-231	0.05	0.71	1.29	
						Radium-226	1.27	0.12	0.12	
						Radium-228	0.31	0.09	0.12	
						Thorium-228	0.66	0.42	0.30	
						Thorium-230	1.31	0.61	0.30	
						Thorium-232	0.42	0.33	0.16	
						Uranium-235	0.21	0.33	0.58	
						Uranium-238	1.78	1.71	1.52	
	SLD72188	10/23/02	2	2.5		Actinium-227	0.62	0.17	0.29	0.20
						Americium-241	0.11	0.11	0.17	
						Cesium-137	-0.03	0.02	0.04	
						Potassium-40	11.63	1.10	0.38	
						Protactinium-231	0.10	0.75	1.15	
						Radium-226	4.24	0.17	0.10	
						Radium-228	1.11	0.11	0.10	
						Thorium-228	2.55	0.86	0.28	
						Thorium-230	4.08	1.17	0.33	
						Thorium-232	1.18	0.55	0.33	
SLD72163	SLD72163	10/22/02	0	0.5	0.0	Actinium-227	-0.13	0.17	0.25	0.09
						Americium-241	0.08	0.03	0.16	
						Cesium-137	0.00	0.02	0.04	
						Potassium-40	2.88	0.65	0.41	
						Protactinium-231	-0.51	0.76	1.29	
						Radium-226	1.39	0.12	0.12	
						Radium-228	0.17	0.07	0.13	
						Thorium-228	0.17	0.24	0.40	
						Thorium-230	2.32	0.89	0.18	
						Thorium-232	0.13	0.19	0.18	
						Uranium-235	-0.02	0.32	0.55	
						Uranium-238	1.96	1.25	1.51	
	SLD72189	10/22/02	1	1.5		Actinium-227	0.30	0.18	0.29	0.22
						Americium-241	0.05	0.11	0.17	
						Cesium-137	0.34	0.06	0.05	
						Potassium-40	10.04	1.02	0.42	
						Protactinium-231	0.18	0.76	1.18	
						Radium-226	3.23	0.16	0.10	
						Radium-228	1.00	0.11	0.10	
						Thorium-228	2.36	0.87	0.31	
						Thorium-230	4.10	1.23	0.31	
						Thorium-232	1.78	0.73	0.17	
Uranium-235	0.20	0.34	0.57							
Uranium-238	3.15	1.76	1.43							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72163	SLD72199	10/22/02	3	3.5		Actinium-227	0.10	0.10	0.20	0.00
						Americium-241	0.04	0.08	0.13	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	10.73	0.96	0.21	
						Protactinium-231	0.66	0.52	0.89	
						Radium-226	1.47	0.09	0.08	
						Radium-228	0.56	0.07	0.08	
						Thorium-228	1.08	0.51	0.14	
						Thorium-230	1.43	0.60	0.14	
						Thorium-232	0.58	0.36	0.14	
						Uranium-235	0.17	0.23	0.39	
						Uranium-238	1.59	0.95	1.05	
	SLD72208	10/22/02	5.2	5.7		Actinium-227	0.14	0.15	0.24	0.01
						Americium-241	-0.03	0.09	0.14	
						Cesium-137	-0.01	0.02	0.04	
						Potassium-40	14.11	1.22	0.35	
						Protactinium-231	0.40	0.67	1.08	
						Radium-226	1.57	0.10	0.10	
						Radium-228	0.77	0.09	0.10	
						Thorium-228	1.12	0.56	0.39	
						Thorium-230	1.65	0.68	0.29	
						Thorium-232	1.19	0.56	0.29	
SLD72164	SLD72164	10/22/02	0	0.5	0.0	Actinium-227	0.19	0.14	0.24	0.03
						Americium-241	0.00	0.08	0.13	
						Cesium-137	0.03	0.02	0.04	
						Potassium-40	5.32	0.79	0.40	
						Protactinium-231	0.03	0.63	0.99	
						Radium-226	1.91	0.12	0.09	
						Radium-228	0.47	0.08	0.10	
						Thorium-228	1.59	0.67	0.39	
						Thorium-230	1.78	0.71	0.16	
						Thorium-232	0.80	0.45	0.16	
						Uranium-235	-0.09	0.29	0.48	
						Uranium-238	2.96	1.25	1.18	
	SLD72190	10/22/02	1.5	2.0		Actinium-227	0.06	0.11	0.17	0.01
						Americium-241	0.09	0.07	0.12	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	8.43	0.92	0.30	
						Protactinium-231	0.05	0.47	0.74	
						Radium-226	1.35	0.09	0.07	
						Radium-228	0.53	0.07	0.07	
						Thorium-228	0.84	0.46	0.36	
						Thorium-230	1.68	0.66	0.15	
						Thorium-232	0.80	0.44	0.27	
Uranium-235	0.10	0.23	0.39							
Uranium-238	1.70	1.03	0.98							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72165	SLD72165	10/29/02	0.5	1.4	0.5	Actinium-227	0.42	0.27	0.44	0.11
						Americium-241	0.03	0.08	0.12	
						Cesium-137	-0.03	0.04	0.06	
						Potassium-40	7.02	1.32	0.65	
						Protactinium-231	1.10	1.13	1.85	
						Radium-226	2.89	0.19	0.15	
						Radium-228	0.83	0.14	0.16	
						Thorium-228	2.06	0.86	0.47	
						Thorium-230	3.27	1.13	0.35	
						Thorium-232	0.91	0.53	0.19	
						Uranium-235	0.35	0.43	0.78	
						Uranium-238	2.52	1.40	1.15	
						SLD72191	SLD72191	10/29/02	1.7	2.2
Americium-241	0.02	0.03	0.04							
Cesium-137	0.00	0.01	0.02							
Potassium-40	8.50	0.67	0.17							
Protactinium-231	-0.07	0.38	0.58							
Radium-226	1.83	0.08	0.05							
Radium-228	0.60	0.06	0.05							
Thorium-228	1.33	0.61	0.29							
Thorium-230	2.14	0.80	0.29							
Thorium-232	1.05	0.52	0.16							
Uranium-235	0.09	0.16	0.27							
Uranium-238	1.40	0.45	0.39							
SLD72200	SLD72200	10/29/02	3.9	4.4						
						Americium-241	0.04	0.09	0.15	
						Cesium-137	-0.07	0.05	0.07	
						Potassium-40	14.93	1.77	0.78	
						Protactinium-231	0.07	1.38	2.17	
						Radium-226	2.33	0.22	0.22	
						Radium-228	1.05	0.21	0.21	
						Thorium-228	1.12	0.54	0.33	
						Thorium-230	1.74	0.68	0.15	
						Thorium-232	1.23	0.56	0.27	
						Uranium-235	0.04	0.51	0.88	
						Uranium-238	2.51	1.65	1.43	
						SLD72209	SLD72209	10/29/02	5	5.5
Americium-241	0.01	0.04	0.06							
Cesium-137	-0.01	0.02	0.03							
Potassium-40	19.20	1.37	0.30							
Protactinium-231	-0.24	0.50	0.75							
Radium-226	1.81	0.09	0.07							
Radium-228	0.96	0.08	0.08							
Thorium-228	1.13	0.55	0.16							
Thorium-230	1.53	0.66	0.16							
Thorium-232	1.35	0.61	0.16							
Uranium-235	-0.18	0.22	0.36							
Uranium-238	1.11	0.55	0.54							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72210	SLD72210	01/16/03	0	0.5	0.0	Actinium-227	0.17	0.07	0.11	0.06
						Americium-241	0.00	0.02	0.03	
						Cesium-137	0.01	0.01	0.01	
						Potassium-40	1.74	0.27	0.12	
						Protactinium-231	0.24	0.25	0.40	
						Radium-226	1.11	0.05	0.03	
						Radium-228	0.32	0.04	0.03	
						Thorium-228	0.94	0.51	0.43	
						Thorium-230	2.22	0.81	0.16	
						Thorium-232	0.17	0.20	0.16	
						Uranium-235	0.01	0.11	0.19	
						Uranium-238	0.58	0.29	0.26	
						SLD72401	01/16/03	0.5	1.0	
	Americium-241	0.01	0.02	0.03						
	Cesium-137	0.06	0.01	0.01						
	Potassium-40	4.92	0.42	0.13						
	Protactinium-231	-0.20	0.25	0.37						
	Radium-226	1.09	0.05	0.03						
	Radium-228	0.25	0.03	0.03						
	Thorium-228	0.40	0.28	0.23						
	Thorium-230	1.28	0.52	0.12						
	Thorium-232	0.18	0.18	0.12						
	SLD72211	SLD72211	01/16/03	0	0.5	0.0	Actinium-227	0.04	0.04	0.09
Americium-241							0.01	0.01	0.02	
Cesium-137							0.00	0.01	0.01	
Potassium-40							1.70	0.23	0.12	
Protactinium-231							0.07	0.22	0.36	
Radium-226							1.13	0.05	0.03	
Radium-228							0.17	0.03	0.03	
Thorium-228							0.11	0.35	0.84	
Thorium-230							1.11	0.77	0.58	
Thorium-232							0.57	0.53	0.31	
Uranium-235							0.03	0.10	0.17	
Uranium-238							0.51	0.21	0.23	
SLD72402							01/16/03	1.5	2.0	
		Americium-241	0.00	0.03	0.04					
		Cesium-137	0.05	0.02	0.02					
		Potassium-40	8.04	0.66	0.18					
		Protactinium-231	0.05	0.36	0.56					
		Radium-226	1.43	0.07	0.05					
		Radium-228	0.42	0.05	0.05					
		Thorium-228	0.56	0.35	0.29					
		Thorium-230	1.20	0.52	0.25					
		Thorium-232	0.61	0.36	0.29					
Uranium-235		0.28	0.15	0.27						
Uranium-238	0.98	0.37	0.36							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72212	SLD72212	01/15/03	0	0.5	0.0	Actinium-227	0.13	0.10	0.15	0.77
						Americium-241	-0.15	0.12	0.19	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	1.75	0.27	0.16	
						Protactinium-231	-0.15	0.39	0.64	
						Radium-226	1.13	0.06	0.06	
						Radium-228	0.11	0.04	0.05	
						Thorium-228	0.11	0.04	0.05	
						Thorium-230	-3.35	8.08	11.58	
						Thorium-232	0.11	0.04	0.05	
						Uranium-235	0.01	0.18	0.31	
						Uranium-238	0.80	0.89	1.56	
						SLD72403	SLD72403	01/15/03	1	
Americium-241	-0.15	0.19	0.30							
Cesium-137	-0.01	0.02	0.03							
Potassium-40	11.45	0.93	0.22							
Protactinium-231	0.98	0.63	0.98							
Radium-226	2.02	0.10	0.08							
Radium-228	0.81	0.08	0.07							
Thorium-228	0.81	0.08	0.07							
Thorium-230	-6.54	11.49	18.09							
Thorium-232	0.81	0.08	0.07							
Uranium-235	-0.12	0.27	0.45							
Uranium-238	0.93	1.36	2.31							
SLD72409	SLD72409	01/15/03	3	3.5						Actinium-227
						Americium-241	0.04	0.20	0.30	
						Cesium-137	0.02	0.02	0.03	
						Potassium-40	15.34	1.19	0.29	
						Protactinium-231	1.30	0.64	1.03	
						Radium-226	1.60	0.09	0.08	
						Radium-228	0.77	0.08	0.08	
						Thorium-228	0.77	0.08	0.08	
						Thorium-230	-5.74	13.65	18.08	
						Thorium-232	0.77	0.08	0.08	
						Uranium-235	0.12	0.27	0.46	
						Uranium-238	1.41	1.51	2.31	
						SLD72411	SLD72411	01/15/03	4.5	5.0
Americium-241	-0.10	0.16	0.27							
Cesium-137	0.02	0.01	0.03							
Potassium-40	16.31	1.15	0.20							
Protactinium-231	0.88	0.55	0.86							
Radium-226	1.36	0.08	0.07							
Radium-228	0.85	0.08	0.07							
Thorium-228	0.85	0.08	0.07							
Thorium-230	3.54	11.07	16.27							
Thorium-232	0.85	0.08	0.07							
Uranium-235	-0.05	0.24	0.41							
Uranium-238	0.38	1.23	2.05							

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72213	SLD72213	01/21/03	0	0.5	0.0	Actinium-227	0.72	0.12	0.23	1.08
						Americium-241	0.06	0.15	0.23	
						Cesium-137	0.02	0.02	0.03	
						Potassium-40	4.45	0.49	0.23	
						Protactinium-231	0.16	0.53	0.79	
						Radium-226	1.08	0.07	0.05	
						Radium-228	0.34	0.05	0.06	
						Thorium-228	0.34	0.05	0.06	
						Thorium-230	5.45	11.55	14.71	
						Thorium-232	0.34	0.05	0.06	
						Uranium-235	0.06	0.21	0.37	
						Uranium-238	1.74	1.03	1.76	
						SLD72404	01/21/03	1.5	2.0	
	Americium-241	0.18	0.22	0.33						
	Cesium-137	0.05	0.02	0.03						
	Potassium-40	14.04	1.10	0.30						
	Protactinium-231	0.96	0.71	1.09						
	Radium-226	2.68	0.12	0.09						
	Radium-228	0.85	0.08	0.09						
	Thorium-228	0.85	0.08	0.09						
	Thorium-230	-6.29	14.37	20.50						
	Thorium-232	0.85	0.08	0.09						
	SLD72397	SLD72397	01/27/03	0	0.5	0.0	Actinium-227	0.36	0.12	0.19
Americium-241							-0.09	0.14	0.23	
Cesium-137							0.02	0.01	0.01	
Potassium-40							1.87	0.34	0.22	
Protactinium-231							0.39	0.46	0.72	
Radium-226							1.03	0.05	0.04	
Radium-228							0.11	0.05	0.05	
Thorium-228							0.34	0.34	0.23	
Thorium-230							2.99	1.15	0.23	
Thorium-232							0.00	0.00	0.22	
Uranium-235							0.19	0.22	0.36	
Uranium-238							0.18	1.08	1.81	
SLD72405							01/27/03	1.5	2.0	
		Americium-241	-0.12	0.15	0.24					
		Cesium-137	0.00	0.01	0.03					
		Potassium-40	10.10	0.81	0.18					
		Protactinium-231	-0.15	0.47	0.76					
		Radium-226	0.91	0.05	0.04					
		Radium-228	0.39	0.05	0.07					
		Thorium-228	0.86	0.48	0.16					
		Thorium-230	1.92	0.76	0.30					
		Thorium-232	0.66	0.42	0.16					
Uranium-235						Uranium-235	-0.10	0.26	0.38	
	Uranium-238					0.82	1.13	1.92		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72398	SLD72398	01/22/03	1	1.5	1.0	Actinium-227	0.08	0.04	0.18	0.27
						Americium-241	-0.07	0.12	0.21	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	3.81	0.51	0.19	
						Protactinium-231	0.05	0.41	0.66	
						Radium-226	1.02	0.06	0.05	
						Radium-228	0.19	0.04	0.05	
						Thorium-228	0.19	0.04	0.05	
						Thorium-230	-1.86	8.25	11.98	
						Thorium-232	0.19	0.04	0.05	
						Uranium-235	-0.02	0.19	0.32	
						Uranium-238	1.09	0.94	1.65	
	SLD72406	01/22/03	2	2.6		Actinium-227	0.43	0.11	0.19	0.28
						Americium-241	-0.04	0.14	0.20	
						Cesium-137	0.02	0.02	0.02	
						Potassium-40	3.86	0.49	0.21	
						Protactinium-231	0.15	0.46	0.68	
						Radium-226	1.02	0.06	0.05	
						Radium-228	0.22	0.04	0.06	
						Thorium-228	0.22	0.04	0.06	
Thorium-230	0.47	8.26	12.19							
SLD72399	SLD72399	02/13/03	0	0.5		Actinium-227	0.22	0.12	0.20	0.51
						Americium-241	0.04	0.07	0.12	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	8.14	0.77	0.19	
						Protactinium-231	-0.04	0.70	0.78	
						Radium-226	1.56	0.09	0.07	
						Radium-228	0.43	0.07	0.07	
						Thorium-228	0.43	0.07	0.07	
						Thorium-230	2.51	5.33	8.94	
						Thorium-232	0.43	0.07	0.07	
						Uranium-235	0.08	0.22	0.37	
						Uranium-238	1.19	0.76	0.99	
	SLD72407	02/13/03	1.5	2.0		Actinium-227	0.28	0.18	0.30	0.39
						Americium-241	0.05	0.11	0.18	
						Cesium-137	-0.01	0.03	0.05	
						Potassium-40	11.57	1.16	0.36	
						Protactinium-231	0.73	0.79	1.22	
						Radium-226	3.53	0.17	0.12	
						Radium-228	1.01	0.12	0.10	
						Thorium-228	1.01	0.12	0.10	
Thorium-230	6.30	8.43	14.18							
Thorium-232	1.01	0.12	0.10							
Uranium-235	0.29	0.36	0.61							
Uranium-238	3.69	1.52	1.47							

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**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72399	SLD72410	02/13/03	3	3.5		Actinium-227	0.12	0.14	0.22	0.22
						Americium-241	-0.11	0.09	0.13	
						Cesium-137	0.01	0.02	0.04	
						Potassium-40	15.13	1.26	0.33	
						Protactinium-231	0.66	0.59	0.97	
						Radium-226	1.92	0.11	0.09	
						Radium-228	0.98	0.09	0.09	
						Thorium-228	0.98	0.09	0.09	
						Thorium-230	-5.11	7.03	10.52	
						Thorium-232	0.98	0.09	0.09	
						Uranium-235	-0.21	0.27	0.43	
						Uranium-238	1.45	1.15	1.15	
	SLD72412	02/13/03	5	5.5		Actinium-227	0.36	0.14	0.24	0.24
						Americium-241	0.08	0.09	0.14	
						Cesium-137	-0.01	0.02	0.04	
						Potassium-40	13.56	1.22	0.34	
						Protactinium-231	0.46	0.62	1.00	
						Radium-226	1.87	0.11	0.08	
						Radium-228	0.74	0.10	0.09	
						Thorium-228	0.74	0.10	0.09	
						Thorium-230	0.03	7.22	11.15	
						Thorium-232	0.74	0.10	0.09	
						Uranium-235	0.17	0.28	0.45	
Uranium-238	1.37	1.17	1.17							
SLD72400	SLD72400	01/28/03	0	0.5	0.0	Actinium-227	0.03	0.06	0.09	0.00
						Americium-241	0.01	0.02	0.03	
						Cesium-137	0.00	0.01	0.01	
						Potassium-40	1.56	0.30	0.17	
						Protactinium-231	-0.01	0.24	0.41	
						Radium-226	0.85	0.05	0.04	
						Radium-228	0.13	0.03	0.04	
						Thorium-228	0.38	0.45	0.34	
						Thorium-230	1.19	0.83	0.70	
						Thorium-232	0.25	0.35	0.34	
						Uranium-235	-0.03	0.12	0.20	
						Uranium-238	0.61	0.27	0.27	
	SLD72408	01/28/03	1	1.8		Actinium-227	0.25	0.09	0.15	0.00
						Americium-241	0.01	0.03	0.05	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	11.23	0.88	0.23	
						Protactinium-231	0.15	0.38	0.59	
						Radium-226	1.27	0.07	0.05	
						Radium-228	0.71	0.06	0.05	
						Thorium-228	1.12	0.62	0.37	
						Thorium-230	1.83	0.81	0.37	
						Thorium-232	0.50	0.40	0.37	
						Uranium-235	-0.03	0.17	0.28	
Uranium-238	0.97	0.44	0.44							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72413	SLD72413	11/20/02	0	0.5	0.0	Actinium-227	0.26	0.14	0.21	0.01
						Americium-241	0.10	0.08	0.13	
						Cesium-137	0.03	0.02	0.04	
						Potassium-40	2.66	0.52	0.28	
						Protactinium-231	-0.39	0.51	0.86	
						Radium-226	2.36	0.12	0.07	
						Radium-228	0.35	0.06	0.08	
						Thorium-228	0.67	0.41	0.36	
						Thorium-230	1.50	0.62	0.14	
						Thorium-232	0.32	0.27	0.14	
						Uranium-235	0.15	0.26	0.44	
						Uranium-238	1.99	0.97	1.07	
	SLD72431	11/20/02	0.5	1.0		Actinium-227	0.37	0.16	0.27	0.07
						Americium-241	0.07	0.10	0.15	
						Cesium-137	0.16	0.04	0.03	
						Potassium-40	7.51	0.83	0.35	
						Protactinium-231	0.61	0.92	1.15	
						Radium-226	3.19	0.15	0.10	
						Radium-228	0.52	0.09	0.10	
						Thorium-228	1.18	0.55	0.32	
						Thorium-230	2.36	0.82	0.27	
						Thorium-232	1.17	0.54	0.27	
						Uranium-235	0.12	0.31	0.53	
						Uranium-238	3.12	1.14	1.30	
	SLD72449	11/20/02	2.5	3.0		Actinium-227	0.21	0.16	0.26	0.01
						Americium-241	0.11	0.10	0.16	
						Cesium-137	-0.01	0.02	0.04	
						Potassium-40	11.51	1.15	0.43	
						Protactinium-231	0.38	0.70	1.12	
						Radium-226	2.52	0.14	0.11	
						Radium-228	0.85	0.10	0.10	
						Thorium-228	1.33	0.59	0.28	
						Thorium-230	2.02	0.75	0.28	
						Thorium-232	0.71	0.41	0.15	
						Uranium-235	0.01	0.32	0.53	
						Uranium-238	1.51	1.24	1.35	
	SLD72456	11/20/02	5	5.5		Actinium-227	0.12	0.07	0.12	0.00
						Americium-241	0.00	0.02	0.04	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	13.25	0.91	0.17	
						Protactinium-231	0.07	0.31	0.48	
						Radium-226	0.99	0.05	0.04	
Radium-228						0.64	0.05	0.04		
Thorium-228						0.64	0.05	0.04		
Thorium-230						0.84	2.13	3.51		
Thorium-232						0.64	0.05	0.04		
Uranium-235						0.06	0.13	0.22		
Uranium-238						0.67	0.32	0.33		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72414	SLD72414	12/11/02	0	0.5	0.0	Actinium-227	1.66	0.20	0.30	0.21
						Americium-241	0.11	0.21	0.30	
						Cesium-137	0.24	0.03	0.03	
						Potassium-40	9.19	0.75	0.24	
						Protactinium-231	0.66	0.50	0.98	
						Radium-226	3.17	0.13	0.08	
						Radium-228	0.70	0.07	0.08	
						Thorium-228	1.11	0.50	0.28	
						Thorium-230	2.71	0.83	0.24	
						Thorium-232	0.98	0.46	0.13	
						Uranium-235	0.20	0.29	0.48	
						Uranium-238	4.38	1.81	2.46	
	SLD72432	12/11/02	0.5	1.0		Actinium-227	1.90	0.24	0.38	0.21
						Americium-241	0.26	0.26	0.40	
						Cesium-137	0.19	0.03	0.03	
						Potassium-40	9.59	0.91	0.32	
						Protactinium-231	1.01	1.19	1.23	
						Radium-226	3.81	0.16	0.10	
						Radium-228	0.77	0.08	0.09	
						Thorium-228	0.75	0.44	0.38	
SLD72415	SLD72415	11/18/02	0	0.5	0.0	Actinium-227	0.12	0.23	0.38	0.09
						Americium-241	0.11	0.17	0.29	
						Cesium-137	0.15	0.07	0.08	
						Potassium-40	6.21	1.25	0.60	
						Protactinium-231	-0.02	1.14	1.80	
						Radium-226	2.12	0.18	0.16	
						Radium-228	0.61	0.14	0.15	
						Thorium-228	0.67	0.39	0.29	
						Thorium-230	2.38	0.78	0.13	
						Thorium-232	0.67	0.38	0.24	
						Uranium-235	-0.02	0.45	0.77	
						Uranium-238	1.42	1.27	2.10	
	SLD72433	11/18/02	1.5	2.0		Actinium-227	0.34	0.38	0.65	0.23
						Americium-241	-0.02	0.25	0.45	
						Cesium-137	-0.01	0.07	0.12	
						Potassium-40	11.90	1.97	0.96	
						Protactinium-231	-1.84	2.03	2.87	
						Radium-226	4.13	0.30	0.25	
						Radium-228	1.35	0.25	0.28	
						Thorium-228	2.16	0.79	0.28	
Thorium-230	4.55	1.27	0.28							
Thorium-232	1.80	0.70	0.15							
Uranium-235	0.69	0.70	1.27							
Uranium-238	1.32	2.23	4.08							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72416	SLD72416	11/21/02	0	0.5	0.0	Actinium-227	0.12	0.15	0.24	0.05
						Americium-241	-0.02	0.09	0.14	
						Cesium-137	0.08	0.03	0.03	
						Potassium-40	4.88	0.69	0.35	
						Protactinium-231	0.08	0.63	0.99	
						Radium-226	1.95	0.11	0.09	
						Radium-228	0.51	0.08	0.10	
						Thorium-228	0.73	0.43	0.28	
						Thorium-230	2.21	0.80	0.15	
						Thorium-232	0.72	0.43	0.28	
						Uranium-235	0.28	0.28	0.49	
						Uranium-238	1.15	1.05	1.24	
	SLD72434	11/21/02	0.5	1.0		Actinium-227	0.29	0.15	0.24	0.09
						Americium-241	0.01	0.04	0.06	
						Cesium-137	0.07	0.02	0.02	
						Potassium-40	10.79	0.98	0.34	
						Protactinium-231	0.25	0.57	0.91	
						Radium-226	2.94	0.13	0.08	
						Radium-228	0.92	0.09	0.09	
						Thorium-228	1.34	0.61	0.29	
						Thorium-230	2.95	0.97	0.29	
						Thorium-232	1.34	0.60	0.16	
						Uranium-235	-0.05	0.27	0.45	
Uranium-238	1.65	0.66	0.65							
SLD72417	SLD72417	02/19/03	0	0.5	0.0	Actinium-227	0.11	0.11	0.18	0.02
						Americium-241	0.05	0.04	0.06	
						Cesium-137	0.11	0.03	0.03	
						Potassium-40	7.05	0.71	0.28	
						Protactinium-231	0.10	0.52	0.79	
						Radium-226	1.92	0.10	0.07	
						Radium-228	0.63	0.06	0.07	
						Thorium-228	0.51	0.34	0.42	
						Thorium-230	2.01	0.66	0.28	
						Thorium-232	0.69	0.36	0.12	
						Uranium-235	-0.02	0.22	0.37	
						Uranium-238	1.97	0.57	0.53	
	SLD72435	02/19/03	1.5	2.0		Actinium-227	0.32	0.25	0.43	0.00
						Americium-241	0.01	0.07	0.13	
						Cesium-137	0.00	0.04	0.07	
						Potassium-40	7.84	1.60	0.82	
						Protactinium-231	-0.94	1.15	1.89	
						Radium-226	1.09	0.14	0.19	
						Radium-228	0.45	0.14	0.18	
						Thorium-228	0.61	0.30	0.09	
						Thorium-230	1.54	0.50	0.09	
						Thorium-232	0.57	0.29	0.09	
						Uranium-235	-0.20	0.47	0.77	
Uranium-238	0.64	0.74	1.37							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72417	SLD72450	02/19/03	3.5	3.8		Actinium-227	1.21	0.36	0.63	0.11
						Americium-241	-0.04	0.10	0.16	
						Cesium-137	0.01	0.05	0.09	
						Potassium-40	13.31	1.65	0.77	
						Protactinium-231	-1.00	1.29	2.18	
						Radium-226	3.90	0.25	0.22	
						Radium-228	1.31	0.20	0.20	
						Thorium-228	1.16	0.58	0.44	
						Thorium-230	3.16	1.01	0.30	
						Thorium-232	0.82	0.47	0.30	
						Uranium-235	0.13	0.57	0.98	
						Uranium-238	1.36	1.04	1.88	
	SLD72457	02/19/03	5.5	6.0		Actinium-227	0.08	0.07	0.24	0.01
						Americium-241	0.00	0.03	0.05	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	19.72	1.38	0.26	
						Protactinium-231	0.03	0.45	0.69	
						Radium-226	1.49	0.08	0.07	
						Radium-228	0.94	0.09	0.07	
						Thorium-228	1.20	0.49	0.35	
						Thorium-230	1.68	0.58	0.21	
						Thorium-232	1.20	0.48	0.11	
SLD72418	SLD72418	12/11/02	0	0.5	0.0	Actinium-227	0.66	0.14	0.24	0.00
						Americium-241	-0.06	0.15	0.24	
						Cesium-137	0.04	0.03	0.03	
						Potassium-40	3.52	0.45	0.21	
						Protactinium-231	0.16	0.46	0.81	
						Radium-226	0.93	0.07	0.06	
						Radium-228	0.29	0.05	0.07	
						Thorium-228	0.30	0.26	0.26	
						Thorium-230	1.33	0.57	0.14	
						Thorium-232	0.51	0.33	0.14	
						Uranium-235	0.12	0.22	0.38	
						Uranium-238	0.11	1.13	1.91	
	SLD72436	12/11/02	1.5	2.0		Actinium-227	1.62	0.22	0.34	0.21
						Americium-241	0.18	0.24	0.36	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	7.29	0.75	0.34	
						Protactinium-231	1.29	0.75	1.16	
						Radium-226	4.24	0.17	0.09	
						Radium-228	0.63	0.08	0.09	
						Thorium-228	1.43	0.60	0.27	
						Thorium-230	4.18	1.17	0.27	
						Thorium-232	0.90	0.46	0.14	
Uranium-235	0.08	0.35	0.58							
Uranium-238	4.41	2.01	2.77							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72419	SLD72419	11/13/02	0	0.5	0.0	Actinium-227	0.02	0.10	0.16	0.06
						Americium-241	0.03	0.06	0.10	
						Cesium-137	0.05	0.03	0.02	
						Potassium-40	3.65	0.52	0.25	
						Protactinium-231	0.09	0.46	0.74	
						Radium-226	1.38	0.09	0.07	
						Radium-228	0.33	0.06	0.07	
						Thorium-228	0.50	0.38	0.40	
						Thorium-230	2.21	0.82	0.16	
						Thorium-232	0.66	0.41	0.16	
						Uranium-235	-0.08	0.22	0.36	
						Uranium-238	1.53	0.80	0.97	
	SLD72437	11/13/02	1.5	2.0		Actinium-227	0.11	0.36	0.59	0.17
						Americium-241	-0.08	0.24	0.37	
						Cesium-137	0.04	0.06	0.11	
						Potassium-40	9.63	1.96	1.28	
						Protactinium-231	2.24	1.55	2.98	
						Radium-226	2.99	0.25	0.29	
						Radium-228	1.13	0.23	0.25	
						Thorium-228	1.77	0.75	0.17	
						Thorium-230	2.97	1.02	0.17	
						Thorium-232	1.67	0.72	0.17	
SLD72420	SLD72420	11/18/02	0	0.5	0.0	Actinium-227	0.09	0.10	0.17	0.00
						Americium-241	0.05	0.06	0.11	
						Cesium-137	0.02	0.02	0.03	
						Potassium-40	2.43	0.45	0.19	
						Protactinium-231	0.10	0.42	0.76	
						Radium-226	1.01	0.08	0.07	
						Radium-228	0.33	0.06	0.08	
						Thorium-228	0.31	0.34	0.49	
						Thorium-230	1.79	0.80	0.36	
						Thorium-232	0.43	0.36	0.20	
						Uranium-235	-0.10	0.22	0.36	
						Uranium-238	1.57	0.97	0.87	
	SLD72438	11/18/02	1.5	2.0		Actinium-227	0.75	0.45	0.79	0.26
						Americium-241	0.03	0.29	0.51	
						Cesium-137	-0.08	0.07	0.11	
						Potassium-40	11.62	2.09	1.26	
						Protactinium-231	0.84	2.59	3.15	
						Radium-226	6.17	0.39	0.32	
						Radium-228	1.23	0.26	0.27	
						Thorium-228	1.44	0.63	0.33	
						Thorium-230	3.68	1.09	0.15	
						Thorium-232	0.95	0.49	0.15	
Uranium-235	0.37	0.79	1.38							
Uranium-238	3.83	2.61	4.72							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72420	SLD72451	11/18/02	3.5	4.0		Actinium-227	0.04	0.11	0.18	0.00
						Americium-241	0.03	0.07	0.11	
						Cesium-137	-0.02	0.02	0.02	
						Potassium-40	9.69	0.92	0.26	
						Protactinium-231	-0.03	0.49	0.76	
						Radium-226	1.11	0.08	0.07	
						Radium-228	0.40	0.06	0.08	
						Thorium-228	0.60	0.39	0.34	
						Thorium-230	1.24	0.57	0.15	
						Thorium-232	0.56	0.37	0.15	
						Uranium-235	0.06	0.21	0.35	
						Uranium-238	1.18	0.80	0.91	
	SLD72458	11/18/02	5.5	6.0		Actinium-227	0.10	0.12	0.20	0.00
						Americium-241	0.06	0.07	0.12	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	10.38	0.99	0.33	
						Protactinium-231	-0.05	0.56	0.86	
						Radium-226	1.29	0.09	0.08	
						Radium-228	0.50	0.07	0.08	
						Thorium-228	0.70	0.42	0.33	
SLD72421	SLD72421	02/18/03	0	0.5	0.0	Actinium-227	0.12	0.06	0.11	0.01
						Americium-241	0.01	0.02	0.03	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	1.79	0.31	0.15	
						Protactinium-231	0.21	0.29	0.46	
						Radium-226	0.81	0.05	0.04	
						Radium-228	0.24	0.04	0.04	
						Thorium-228	0.53	0.31	0.28	
						Thorium-230	1.98	0.61	0.20	
						Thorium-232	0.53	0.29	0.10	
	Uranium-235	0.01	0.13	0.22						
	Uranium-238	0.98	0.31	0.30						
	SLD72439	02/18/03	1.5	2.0		Actinium-227	0.03	0.11	0.17	0.00
						Americium-241	0.02	0.03	0.05	
						Cesium-137	0.04	0.02	0.02	
						Potassium-40	5.76	0.65	0.26	
						Protactinium-231	0.21	0.49	0.75	
						Radium-226	1.80	0.09	0.07	
Radium-228						0.70	0.07	0.07		
Thorium-228						0.98	0.40	0.10		
Thorium-230	1.83	0.57	0.10							
Thorium-232	0.94	0.40	0.23							
Uranium-235	0.31	0.21	0.35							
Uranium-238	1.50	0.55	0.50							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72422	SLD72422	02/19/03	0	0.5	0.0	Actinium-227	0.41	0.19	0.33	0.00
						Americium-241	-0.02	0.05	0.08	
						Cesium-137	0.02	0.03	0.05	
						Potassium-40	2.24	0.61	0.61	
						Protactinium-231	-0.16	0.72	1.27	
						Radium-226	1.00	0.11	0.12	
						Radium-228	0.25	0.09	0.12	
						Thorium-228	0.35	0.36	0.58	
						Thorium-230	1.24	0.58	0.30	
						Thorium-232	0.34	0.30	0.30	
						Uranium-235	0.05	0.33	0.51	
						Uranium-238	-0.24	0.53	0.92	
						SLD72440	02/19/03	1.5	2.0	
	Americium-241	-0.02	0.06	0.07						
	Cesium-137	0.01	0.02	0.03						
	Potassium-40	18.27	1.32	0.35						
	Protactinium-231	1.10	0.66	1.08						
	Radium-226	5.31	0.19	0.09						
	Radium-228	1.59	0.11	0.10						
	Thorium-228	1.71	0.63	0.13						
	Thorium-230	4.47	1.15	0.13						
	Thorium-232	1.39	0.56	0.13						
	SLD72423	SLD72423	11/20/02	0	0.5	0.0	Actinium-227	0.01	0.09	0.15
Americium-241							0.01	0.05	0.08	
Cesium-137							0.01	0.01	0.03	
Potassium-40							1.60	0.33	0.20	
Protactinium-231							0.05	0.36	0.65	
Radium-226							1.03	0.07	0.06	
Radium-228							0.24	0.05	0.06	
Thorium-228							0.46	0.35	0.37	
Thorium-230							1.99	0.74	0.15	
Thorium-232							0.21	0.22	0.28	
Uranium-235							-0.03	0.18	0.30	
Uranium-238							0.33	0.45	0.82	
SLD72441							11/20/02	1.5	2.0	
		Americium-241	0.08	0.08	0.14					
		Cesium-137	0.02	0.02	0.04					
		Potassium-40	5.92	0.76	0.39					
		Protactinium-231	-0.03	0.63	0.96					
		Radium-226	2.55	0.13	0.08					
		Radium-228	0.55	0.08	0.08					
		Thorium-228	0.73	0.45	0.39					
		Thorium-230	1.50	0.65	0.35					
		Thorium-232	0.64	0.40	0.16					
Uranium-235		0.08	0.27	0.45						
Uranium-238	1.91	1.25	1.16							

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft <sup>1</sup> bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72423	SLD72452	11/20/02	3.1	3.6		Actinium-227	0.23	0.12	0.28	0.13
						Americium-241	0.02	0.10	0.16	
						Cesium-137	-0.03	0.02	0.04	
						Potassium-40	13.69	1.24	0.41	
						Protactinium-231	0.28	0.75	1.18	
						Radium-226	3.11	0.15	0.10	
						Radium-228	1.03	0.11	0.11	
						Thorium-228	1.46	0.63	0.37	
						Thorium-230	3.55	1.06	0.15	
						Thorium-232	1.36	0.59	0.15	
						Uranium-235	0.20	0.33	0.55	
						Uranium-238	1.87	1.28	1.41	
						SLD72459	11/20/02	5.1	5.6	
	Americium-241	0.04	0.08	0.12						
	Cesium-137	-0.01	0.02	0.03						
	Potassium-40	15.55	1.27	0.30						
	Protactinium-231	0.33	0.54	0.87						
	Radium-226	1.38	0.09	0.09						
	Radium-228	0.85	0.09	0.08						
	Thorium-228	1.50	0.63	0.36						
	Thorium-230	2.16	0.77	0.15						
	Thorium-232	0.91	0.47	0.15						
	SLD72424	SLD72424	11/13/02	0	0.5	0.0	Actinium-227	0.03	0.06	0.10
Americium-241							0.01	0.02	0.03	
Cesium-137							0.02	0.01	0.02	
Potassium-40							2.59	0.36	0.20	
Protactinium-231							-0.21	0.27	0.44	
Radium-226							0.82	0.05	0.04	
Radium-228							0.18	0.03	0.04	
Thorium-228							0.18	0.03	0.04	
Thorium-230							-0.01	1.83	2.85	
Thorium-232							0.18	0.03	0.04	
Uranium-235							0.09	0.12	0.21	
Uranium-238							0.72	0.32	0.28	
SLD72442							11/13/02	0.5	1.0	
		Americium-241	0.01	0.02	0.03					
		Cesium-137	0.04	0.01	0.01					
		Potassium-40	3.32	0.35	0.13					
		Protactinium-231	0.08	0.24	0.38					
		Radium-226	1.05	0.05	0.03					
		Radium-228	0.24	0.03	0.03					
		Thorium-228	0.24	0.03	0.03					
		Thorium-230	0.88	1.54	2.57					
		Thorium-232	0.24	0.03	0.03					
Uranium-235		0.12	0.13	0.18						
Uranium-238	0.70	0.26	0.25							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72425	SLD72425	11/07/02	0	0.5	0.0	Actinium-227	0.16	0.07	0.12	0.00
						Americium-241	0.00	0.02	0.03	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	3.65	0.39	0.15	
						Protactinium-231	0.00	0.31	0.48	
						Radium-226	1.28	0.06	0.04	
						Radium-228	0.19	0.04	0.04	
						Thorium-228	0.39	0.32	0.36	
						Thorium-230	1.39	0.60	0.27	
						Thorium-232	0.43	0.31	0.15	
						Uranium-235	-0.03	0.13	0.22	
						Uranium-238	0.83	0.32	0.30	
	SLD72443	11/07/02	1.5	2.0		Actinium-227	0.18	0.10	0.16	0.02
						Americium-241	-0.04	0.03	0.04	
						Cesium-137	0.03	0.02	0.02	
						Potassium-40	11.86	0.91	0.23	
						Protactinium-231	0.11	0.41	0.64	
						Radium-226	1.55	0.08	0.06	
						Radium-228	0.63	0.06	0.06	
						Thorium-228	0.87	0.46	0.37	
						Thorium-230	1.57	0.62	0.14	
						Thorium-232	1.35	0.57	0.25	
SLD72426	SLD72426	11/13/02	0	0.9	0.0	Actinium-227	0.10	0.07	0.11	0.00
						Americium-241	0.00	0.02	0.03	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	2.77	0.32	0.16	
						Protactinium-231	0.07	0.29	0.46	
						Radium-226	1.22	0.06	0.04	
						Radium-228	0.19	0.03	0.04	
						Thorium-228	0.19	0.03	0.04	
						Thorium-230	2.20	1.81	3.13	
						Thorium-232	0.19	0.03	0.04	
						Uranium-235	0.01	0.13	0.22	
						Uranium-238	0.93	0.31	0.29	
	SLD72444	11/13/02	1.5	2.0		Actinium-227	-0.02	0.06	0.09	0.00
						Americium-241	0.01	0.02	0.03	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	1.75	0.28	0.16	
						Protactinium-231	-0.18	0.25	0.42	
						Radium-226	0.86	0.05	0.03	
						Radium-228	0.08	0.03	0.04	
						Thorium-228	0.08	0.03	0.04	
						Thorium-230	-0.07	1.58	2.72	
						Thorium-232	0.08	0.03	0.04	
Uranium-235	-0.03	0.12	0.19							
Uranium-238	0.65	0.26	0.29							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72426	SLD72453	11/13/02	3	3.5		Actinium-227	0.36	0.10	0.16	0.01
						Americium-241	0.01	0.03	0.04	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	9.23	0.71	0.21	
						Protactinium-231	0.14	0.39	0.61	
						Radium-226	2.35	0.10	0.05	
						Radium-228	0.90	0.07	0.06	
						Thorium-228	0.90	0.07	0.06	
						Thorium-230	2.41	2.56	4.27	
						Thorium-232	0.90	0.07	0.06	
						Uranium-235	0.40	0.26	0.30	
						Uranium-238	1.48	0.45	0.42	
						SLD72460	11/13/02	5	5.5	
	Americium-241	0.03	0.02	0.03						
	Cesium-137	0.01	0.01	0.01						
	Potassium-40	2.53	0.31	0.14						
	Protactinium-231	0.14	0.29	0.45						
	Radium-226	1.10	0.05	0.04						
	Radium-228	0.26	0.04	0.04						
	Thorium-228	0.26	0.04	0.04						
	Thorium-230	-0.24	1.88	2.90						
	Thorium-232	0.26	0.04	0.04						
	SLD72427	SLD72427	11/07/02	0	0.5	0.0	Actinium-227	0.05	0.07	0.11
Americium-241							0.02	0.02	0.03	
Cesium-137							0.01	0.01	0.02	
Potassium-40							1.69	0.30	0.16	
Protactinium-231							-0.09	0.29	0.44	
Radium-226							0.97	0.05	0.04	
Radium-228							0.23	0.04	0.04	
Thorium-228							0.85	0.48	0.41	
Thorium-230							1.22	0.56	0.28	
Thorium-232							0.11	0.16	0.15	
Uranium-235							0.01	0.12	0.21	
Uranium-238							0.69	0.26	0.26	
SLD72445							11/07/02	1	2.0	
		Americium-241	0.02	0.09	0.14					
		Cesium-137	0.02	0.05	0.08					
		Potassium-40	10.86	1.42	0.82					
		Protactinium-231	1.10	1.28	2.11					
		Radium-226	6.46	0.30	0.21					
		Radium-228	1.00	0.17	0.21					
		Thorium-228	1.22	0.56	0.42					
		Thorium-230	6.51	1.59	0.14					
		Thorium-232	0.61	0.38	0.32					
Uranium-235		-0.18	0.56	0.95						
Uranium-238	3.34	1.55	1.31							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72428	SLD72428	02/04/03	0	0.5	0.0	Actinium-227	0.19	0.16	0.25	0.76
						Americium-241	0.04	0.05	0.08	
						Cesium-137	0.00	0.02	0.04	
						Potassium-40	9.59	0.94	0.36	
						Protactinium-231	0.47	0.68	1.05	
						Radium-226	5.12	0.19	0.09	
						Radium-228	0.86	0.09	0.09	
						Thorium-228	1.57	0.59	0.29	
						Thorium-230	5.12	1.22	0.29	
						Thorium-232	1.51	0.56	0.12	
						Uranium-235	0.06	0.32	0.53	
						Uranium-238	3.56	0.84	0.77	
						SLD72446	02/04/03	1.5	2.0	
	Americium-241	0.09	0.10	0.17						
	Cesium-137	0.02	0.06	0.09						
	Potassium-40	5.65	1.67	1.09						
	Protactinium-231	0.84	1.47	2.37						
	Radium-226	3.06	0.23	0.22						
	Radium-228	0.73	0.18	0.22						
	Thorium-228	0.81	0.40	0.32						
	Thorium-230	1.96	0.63	0.22						
	Thorium-232	0.48	0.29	0.11						
	SI D72429	SI D72429	11/07/02	0	0.5	0.0	Actinium-227	0.09	0.08	0.12
Americium-241							0.02	0.02	0.04	
Cesium-137							0.02	0.01	0.02	
Potassium-40							4.09	0.43	0.18	
Protactinium-231							0.12	0.35	0.55	
Radium-226							2.51	0.09	0.05	
Radium-228							0.33	0.04	0.05	
Thorium-228							0.88	0.46	0.26	
Thorium-230							1.86	0.69	0.26	
Thorium-232							0.26	0.24	0.14	
Uranium-235							0.03	0.15	0.26	
Uranium-238							2.04	0.38	0.35	
SLD72447							11/07/02	1.5	2.0	
		Americium-241	0.03	0.05	0.08					
		Cesium-137	-0.01	0.03	0.04					
		Potassium-40	13.50	1.13	0.39					
		Protactinium-231	0.00	0.74	1.12					
		Radium-226	7.15	0.25	0.10					
		Radium-228	1.30	0.12	0.10					
		Thorium-228	1.16	0.55	0.28					
		Thorium-230	4.26	1.20	0.15					
		Thorium-232	1.27	0.57	0.15					
Uranium-235		0.49	0.46	0.57						
Uranium-238	4.78	0.72	0.78							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72429	SLD72454	11/07/02	3.5	4.0		Actinium-227	0.18	0.12	0.22	0.10
						Americium-241	0.02	0.04	0.06	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	16.24	1.24	0.31	
						Protactinium-231	0.11	0.57	0.88	
						Radium-226	3.43	0.15	0.08	
						Radium-228	0.93	0.09	0.09	
						Thorium-228	1.35	0.60	0.39	
						Thorium-230	3.04	0.95	0.14	
						Thorium-232	0.69	0.40	0.14	
						Uranium-235	0.07	0.25	0.43	
						Uranium-238	2.81	0.66	0.61	
	SLD72461	11/07/02	5.5	6.0		Actinium-227	0.10	0.08	0.18	0.00
						Americium-241	0.00	0.04	0.05	
						Cesium-137	-0.02	0.02	0.03	
						Potassium-40	16.02	1.19	0.26	
						Protactinium-231	0.36	0.46	0.75	
						Radium-226	2.11	0.10	0.07	
						Radium-228	0.94	0.08	0.07	
						Thorium-228	1.11	0.54	0.28	
						Thorium-230	1.84	0.71	0.15	
						Thorium-232	1.11	0.53	0.15	
SLD72430	SLD72430	01/29/03	0	0.5	0.0	Actinium-227	0.04	0.06	0.09	0.00
						Americium-241	0.00	0.02	0.03	
						Cesium-137	0.01	0.01	0.01	
						Potassium-40	1.65	0.29	0.15	
						Protactinium-231	-0.27	0.26	0.42	
						Radium-226	0.97	0.05	0.04	
						Radium-228	0.16	0.03	0.04	
						Thorium-228	0.42	0.27	0.25	
						Thorium-230	1.41	0.50	0.20	
						Thorium-232	0.18	0.16	0.10	
						Uranium-235	0.09	0.12	0.21	
						Uranium-238	0.72	0.27	0.28	
	SLD72448	01/29/03	1.5	2.0		Actinium-227	0.07	0.08	0.13	0.00
						Americium-241	0.02	0.03	0.04	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	6.88	0.63	0.19	
						Protactinium-231	0.10	0.36	0.55	
						Radium-226	1.41	0.07	0.05	
						Radium-228	0.42	0.05	0.05	
						Thorium-228	1.09	0.42	0.19	
						Thorium-230	1.90	0.57	0.09	
						Thorium-232	0.16	0.16	0.19	
Uranium-235	0.05	0.16	0.26							
Uranium-238	1.32	0.46	0.36							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72430	SLD72455	01/29/03	3.5	4.0		Actinium-227	-0.02	0.31	0.48	0.11
						Americium-241	-0.01	0.10	0.16	
						Cesium-137	-0.05	0.05	0.08	
						Potassium-40	11.19	1.74	0.93	
						Protactinium-231	0.16	1.50	2.29	
						Radium-226	4.09	0.25	0.22	
						Radium-228	0.95	0.19	0.23	
						Thorium-228	1.77	0.63	0.33	
						Thorium-230	3.36	0.91	0.24	
						Thorium-232	1.04	0.45	0.12	
						Uranium-235	-0.64	0.59	0.91	
	Uranium-238	2.11	1.38	1.44						
	SLD72462	01/29/03	5	5.6		Actinium-227	0.21	0.13	0.21	0.02
						Americium-241	0.03	0.04	0.07	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	9.76	0.94	0.35	
						Protactinium-231	-0.49	0.54	0.89	
						Radium-226	2.70	0.12	0.08	
						Radium-228	0.78	0.08	0.08	
						Thorium-228	1.69	0.60	0.32	
						Thorium-230	1.93	0.63	0.11	
						Thorium-232	1.08	0.46	0.28	
Uranium-235						-0.29	0.26	0.40		
Uranium-238	2.40	0.78	0.63							
SLD72463	SLD72463	11/20/02	0	1.0	0.0	Actinium-227	-0.02	0.26	0.41	0.00
						Americium-241	-0.02	0.17	0.30	
						Cesium-137	0.02	0.04	0.09	
						Potassium-40	12.73	1.83	0.68	
						Protactinium-231	0.28	1.04	1.75	
						Radium-226	1.87	0.19	0.21	
						Radium-228	0.90	0.18	0.20	
						Thorium-228	0.97	0.49	0.27	
						Thorium-230	1.54	0.63	0.27	
						Thorium-232	0.79	0.43	0.27	
						Uranium-235	0.13	0.51	0.88	
	Uranium-238	0.48	1.52	2.75						
	SLD72487	11/20/02	1.3	1.8		Actinium-227	0.31	0.14	0.24	0.13
						Americium-241	0.06	0.09	0.15	
						Cesium-137	0.05	0.03	0.04	
						Potassium-40	14.30	1.21	0.29	
						Protactinium-231	-0.48	0.65	0.94	
						Radium-226	2.23	0.12	0.09	
						Radium-228	0.88	0.09	0.09	
						Thorium-228	1.25	0.60	0.17	
						Thorium-230	3.25	1.06	0.17	
						Thorium-232	1.33	0.62	0.31	
Uranium-235						0.22	0.29	0.49		
Uranium-238	2.63	1.07	1.22							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72464	SLD72464	11/14/02	1	1.5	1.0	Actinium-227	0.73	0.24	0.45	0.00
						Americium-241	0.02	0.07	0.11	
						Cesium-137	0.01	0.04	0.07	
						Potassium-40	14.20	1.50	0.54	
						Protactinium-231	-0.97	0.93	1.54	
						Radium-226	1.55	0.14	0.14	
						Radium-228	0.69	0.14	0.16	
						Thorium-228	1.12	0.52	0.24	
						Thorium-230	1.19	0.51	0.24	
						Thorium-232	1.01	0.47	0.13	
						Uranium-235	-0.16	0.38	0.63	
						Uranium-238	1.00	1.09	1.03	
						SLD72488	SLD72488	11/14/02	2.2	2.7
Americium-241	0.02	0.03	0.05							
Cesium-137	0.01	0.01	0.02							
Potassium-40	10.56	0.83	0.22							
Protactinium-231	0.39	0.36	0.58							
Radium-226	1.04	0.06	0.05							
Radium-228	0.57	0.06	0.05							
Thorium-228	0.57	0.06	0.05							
Thorium-230	0.51	2.72	4.23							
Thorium-232	0.57	0.06	0.05							
Uranium-235	-0.05	0.17	0.27							
Uranium-238	1.18	0.43	0.42							
SLD72511	SLD72511	11/14/02	3.5	4.0						
						Americium-241	0.02	0.03	0.05	
						Cesium-137	0.02	0.01	0.02	
						Potassium-40	10.14	0.86	0.23	
						Protactinium-231	0.24	0.38	0.60	
						Radium-226	1.14	0.06	0.05	
						Radium-228	0.58	0.06	0.06	
						Thorium-228	0.58	0.06	0.06	
						Thorium-230	-1.45	2.67	4.32	
						Thorium-232	0.58	0.06	0.06	
						Uranium-235	-0.10	0.17	0.27	
						Uranium-238	0.90	0.41	0.45	
						SLD72519	SLD72519	11/14/02	6.3	6.8
Americium-241	0.00	0.02	0.03							
Cesium-137	0.02	0.01	0.02							
Potassium-40	10.79	0.76	0.15							
Protactinium-231	0.29	0.32	0.45							
Radium-226	1.09	0.05	0.04							
Radium-228	0.54	0.05	0.04							
Thorium-228	0.54	0.05	0.04							
Thorium-230	1.48	1.95	3.25							
Thorium-232	0.54	0.05	0.04							
Uranium-235	0.00	0.12	0.21							
Uranium-238	0.89	0.36	0.31							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72465	SLD72465	10/31/02	0	0.5	0.0	Actinium-227	0.08	0.11	0.17	0.00
						Americium-241	0.03	0.13	0.23	
						Cesium-137	0.02	0.02	0.03	
						Potassium-40	6.04	0.66	0.22	
						Protactinium-231	0.22	0.48	0.77	
						Radium-226	1.09	0.07	0.08	
						Radium-228	0.42	0.06	0.07	
						Thorium-228	0.48	0.34	0.35	
						Thorium-230	1.23	0.54	0.26	
						Thorium-232	0.30	0.26	0.26	
						Uranium-235	0.02	0.22	0.37	
						Uranium-238	0.27	0.99	1.77	
	SLD72489	10/31/02	1	1.5		Actinium-227	0.22	0.11	0.18	0.00
						Americium-241	0.04	0.13	0.23	
						Cesium-137	0.06	0.03	0.03	
						Potassium-40	12.99	0.99	0.21	
						Protactinium-231	-0.07	0.50	0.75	
						Radium-226	1.50	0.08	0.07	
						Radium-228	0.77	0.07	0.06	
						Thorium-228	1.18	0.59	0.38	
						Thorium-230	1.52	0.68	0.17	
						Thorium-232	1.14	0.57	0.17	
SLD72466	SLD72466	11/06/02	0	0.5	0.0	Actinium-227	0.17	0.12	0.18	0.04
						Americium-241	0.02	0.03	0.05	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	16.90	1.22	0.25	
						Protactinium-231	0.31	0.48	0.77	
						Radium-226	1.74	0.09	0.07	
						Radium-228	0.83	0.07	0.07	
						Thorium-228	1.64	0.70	0.31	
						Thorium-230	1.52	0.66	0.16	
						Thorium-232	1.26	0.60	0.31	
						Uranium-235	0.10	0.19	0.33	
						Uranium-238	1.61	0.57	0.50	
	SLD72490	11/06/02	1.5	2.0		Actinium-227	0.13	0.11	0.18	0.07
						Americium-241	0.01	0.04	0.06	
						Cesium-137	0.16	0.03	0.03	
						Potassium-40	11.13	0.89	0.25	
						Protactinium-231	0.56	0.47	0.77	
						Radium-226	2.59	0.11	0.07	
						Radium-228	0.63	0.07	0.07	
						Thorium-228	1.31	0.63	0.38	
						Thorium-230	2.33	0.87	0.17	
						Thorium-232	0.63	0.41	0.17	
Uranium-235	0.23	0.22	0.38							
Uranium-238	3.77	0.68	0.52							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72467	SLD72467	11/14/02	0	0.5	0.0	Actinium-227	-0.02	0.09	0.15	0.00
						Americium-241	0.01	0.06	0.09	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	1.40	0.35	0.25	
						Protactinium-231	-0.24	0.41	0.60	
						Radium-226	1.27	0.08	0.07	
						Radium-228	0.09	0.04	0.06	
						Thorium-228	-0.02	0.04	0.43	
						Thorium-230	0.99	0.63	0.52	
						Thorium-232	-0.02	0.04	0.43	
						Uranium-235	-0.01	0.18	0.31	
						Uranium-238	1.35	0.84	0.76	
						SLD72491	SLD72491	11/14/02	1.3	1.8
Americium-241	0.09	0.08	0.13							
Cesium-137	0.05	0.02	0.03							
Potassium-40	8.52	0.84	0.29							
Protactinium-231	-0.31	0.57	0.84							
Radium-226	1.94	0.10	0.08							
Radium-228	0.51	0.08	0.08							
Thorium-228	0.73	0.43	0.32							
Thorium-230	2.28	0.79	0.27							
Thorium-232	0.91	0.46	0.14							
Uranium-235	0.27	0.25	0.43							
Uranium-238	3.12	1.06	1.02							
SLD72512	SLD72512	11/14/02	2.5	3.0						
						Americium-241	0.03	0.10	0.17	
						Cesium-137	-0.02	0.03	0.04	
						Potassium-40	17.66	1.54	0.40	
						Protactinium-231	0.56	0.77	1.25	
						Radium-226	1.98	0.12	0.10	
						Radium-228	1.16	0.12	0.10	
						Thorium-228	1.68	0.71	0.36	
						Thorium-230	1.41	0.64	0.36	
						Thorium-232	1.08	0.54	0.16	
						Uranium-235	-0.13	0.34	0.55	
						Uranium-238	2.14	1.31	1.39	
						SLD72520	SLD72520	11/14/02	4.5	5.0
Americium-241	-0.04	0.22	0.35							
Cesium-137	0.03	0.06	0.11							
Potassium-40	14.16	2.04	0.66							
Protactinium-231	2.18	2.37	2.33							
Radium-226	2.12	0.22	0.22							
Radium-228	1.12	0.22	0.21							
Thorium-228	1.05	0.50	0.14							
Thorium-230	2.06	0.74	0.26							
Thorium-232	1.29	0.56	0.14							
Uranium-235	0.36	0.62	1.07							
Uranium-238	4.05	2.46	3.02							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72468	SLD72468	11/04/02	0	0.5	0.0	Actinium-227	0.21	0.12	0.19	0.16
						Americium-241	0.02	0.04	0.06	
						Cesium-137	0.07	0.02	0.03	
						Potassium-40	10.93	0.87	0.27	
						Protactinium-231	-0.18	0.50	0.76	
						Radium-226	3.26	0.13	0.06	
						Radium-228	0.74	0.07	0.07	
						Thorium-228	1.34	0.61	0.29	
						Thorium-230	2.58	0.89	0.16	
						Thorium-232	0.93	0.49	0.16	
						Uranium-235	0.42	0.24	0.37	
						Uranium-238	3.10	0.67	0.54	
						SLD72492	11/04/02	1.5	2.0	
	Americium-241	0.03	0.03	0.05						
	Cesium-137	-0.02	0.01	0.02						
	Potassium-40	17.07	1.17	0.21						
	Protactinium-231	0.30	0.41	0.65						
	Radium-226	1.70	0.08	0.06						
	Radium-228	0.93	0.07	0.05						
	Thorium-228	1.26	0.57	0.15						
	Thorium-230	2.43	0.83	0.27						
	Thorium-232	1.25	0.56	0.15						
	SLD72469	SLD72469	10/08/02	0	0.5	0.0	Actinium-227	0.09	0.07	0.11
Americium-241							0.01	0.02	0.03	
Cesium-137							0.05	0.01	0.02	
Potassium-40							5.90	0.49	0.17	
Protactinium-231							0.29	0.29	0.47	
Radium-226							1.62	0.07	0.04	
Radium-228							0.42	0.04	0.04	
Thorium-228							0.42	0.04	0.04	
Thorium-230							2.12	2.10	3.48	
Thorium-232							0.42	0.04	0.04	
Uranium-235							0.19	0.14	0.24	
Uranium-238							1.61	0.28	0.32	
SLD72493							10/08/02	1.2	1.7	
		Americium-241	0.03	0.04	0.06					
		Cesium-137	0.00	0.02	0.03					
		Potassium-40	9.72	0.88	0.30					
		Protactinium-231	0.86	0.55	0.90					
		Radium-226	4.43	0.17	0.08					
		Radium-228	1.01	0.09	0.08					
		Thorium-228	1.01	0.09	0.08					
		Thorium-230	3.40	3.86	6.34					
		Thorium-232	1.01	0.09	0.08					
Uranium-235		0.39	0.25	0.42						
Uranium-238	2.94	0.65	0.61							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72469	SLD72834	10/08/02	2.3	2.8		Actinium-227	0.16	0.14	0.23	0.23
						Americium-241	0.02	0.08	0.14	
						Cesium-137	0.01	0.02	0.04	
						Potassium-40	16.40	1.38	0.27	
						Protactinium-231	0.18	0.66	1.03	
						Radium-226	1.42	0.10	0.09	
						Radium-228	0.89	0.09	0.11	
						Thorium-228	0.89	0.09	0.11	
						Thorium-230	-1.16	6.30	10.82	
						Thorium-232	0.89	0.09	0.11	
						Uranium-235	-0.26	0.27	0.43	
						Uranium-238	0.84	0.75	1.34	
	SLD72835	10/08/02	4.8	5.3		Actinium-227	0.09	0.20	0.31	0.40
						Americium-241	-0.01	0.13	0.22	
						Cesium-137	-0.04	0.03	0.05	
						Potassium-40	19.88	1.85	0.52	
						Protactinium-231	-0.63	0.90	1.52	
						Radium-226	1.49	0.12	0.14	
						Radium-228	1.02	0.14	0.15	
						Thorium-228	1.02	0.14	0.15	
						Thorium-230	-0.15	9.04	15.72	
						Thorium-232	1.02	0.14	0.15	
SLD72470	SLD72470	11/06/02	0	0.5	0.0	Actinium-227	0.23	0.18	0.18	0.00
						Americium-241	-0.02	0.13	0.21	
						Cesium-137	0.06	0.02	0.02	
						Potassium-40	4.73	0.53	0.23	
						Protactinium-231	-0.08	0.46	0.80	
						Radium-226	1.50	0.08	0.07	
						Radium-228	0.36	0.06	0.06	
						Thorium-228	0.75	0.43	0.40	
						Thorium-230	1.61	0.63	0.14	
						Thorium-232	0.18	0.21	0.30	
						Uranium-235	0.08	0.23	0.36	
						Uranium-238	1.58	1.70	1.61	
	SLD72494	11/06/02	1	1.5		Actinium-227	0.28	0.20	0.31	0.32
						Americium-241	0.05	0.25	0.39	
						Cesium-137	0.01	0.03	0.04	
						Potassium-40	13.70	1.12	0.42	
						Protactinium-231	-0.13	0.84	1.25	
						Radium-226	5.94	0.22	0.10	
						Radium-228	1.23	0.12	0.12	
						Thorium-228	1.86	0.70	0.27	
						Thorium-230	4.45	1.21	0.14	
						Thorium-232	1.22	0.54	0.14	
Uranium-235	0.25	0.39	0.64							
Uranium-238	6.07	2.34	2.98							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72471	SLD72471	11/06/02	0	0.5	0.0	Actinium-227	0.07	0.08	0.13	0.00
						Americium-241	0.02	0.10	0.16	
						Cesium-137	0.02	0.02	0.02	
						Potassium-40	3.26	0.40	0.19	
						Protactinium-231	0.32	0.43	0.59	
						Radium-226	1.09	0.06	0.04	
						Radium-228	0.19	0.04	0.05	
						Thorium-228	0.39	0.30	0.15	
						Thorium-230	1.09	0.52	0.15	
						Thorium-232	0.11	0.16	0.15	
						Uranium-235	0.05	0.18	0.29	
						Uranium-238	1.01	0.81	1.24	
	SLD72495	11/06/02	1.5	2.0		Actinium-227	0.05	0.11	0.17	0.00
						Americium-241	-0.03	0.14	0.22	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	16.59	1.23	0.26	
						Protactinium-231	0.08	0.50	0.77	
						Radium-226	1.45	0.08	0.07	
						Radium-228	0.54	0.07	0.07	
						Thorium-228	0.73	0.41	0.30	
						Thorium-230	0.89	0.44	0.13	
						Thorium-232	0.64	0.37	0.13	
						Uranium-235	-0.05	0.23	0.37	
						Uranium-238	1.20	1.31	1.92	
	SLD72513	11/06/02	3.3	3.8		Actinium-227	0.10	0.31	0.50	0.28
						Americium-241	0.14	0.55	0.90	
						Cesium-137	0.04	0.05	0.08	
						Potassium-40	9.46	1.31	0.75	
						Protactinium-231	-0.33	1.33	2.01	
						Radium-226	4.18	0.25	0.20	
						Radium-228	0.84	0.17	0.20	
						Thorium-228	0.98	0.48	0.26	
						Thorium-230	5.57	1.40	0.14	
						Thorium-232	0.87	0.45	0.14	
						Uranium-235	-0.57	0.60	0.96	
						Uranium-238	5.19	4.47	6.34	
	SLD72521	11/06/02	5	5.5		Actinium-227	0.20	0.09	0.15	0.00
						Americium-241	0.03	0.11	0.20	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	16.46	1.12	0.22	
Protactinium-231						0.05	0.42	0.64		
Radium-226						1.56	0.08	0.06		
Radium-228						0.93	0.07	0.06		
Thorium-228						1.29	0.55	0.25		
Thorium-230						1.29	0.55	0.13		
Thorium-232						0.88	0.44	0.25		
Uranium-235						0.00	0.19	0.31		
Uranium-238						0.86	0.90	1.59		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72472	SLD72472	10/31/02	0	0.5	0.0	Actinium-227	0.05	0.09	0.15	0.01
						Americium-241	0.13	0.14	0.20	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	5.40	0.57	0.19	
						Protactinium-231	0.05	0.41	0.64	
						Radium-226	1.18	0.07	0.06	
						Radium-228	0.32	0.05	0.06	
						Thorium-228	0.81	0.46	0.30	
						Thorium-230	1.66	0.69	0.40	
						Thorium-232	0.47	0.34	0.16	
						Uranium-235	0.14	0.20	0.34	
						Uranium-238	1.86	1.73	1.55	
	SLD72496	10/31/02	1	1.5		Actinium-227	0.08	0.10	0.19	0.00
						Americium-241	0.05	0.14	0.24	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	14.99	1.13	0.23	
						Protactinium-231	0.36	0.51	0.81	
						Radium-226	1.46	0.08	0.07	
						Radium-228	0.83	0.07	0.07	
						Thorium-228	0.75	0.44	0.33	
SLD72473	SLD72473	10/30/02	0	0.5	0.0	Actinium-227	0.09	0.07	0.17	0.06
						Americium-241	-0.01	0.03	0.05	
						Cesium-137	0.04	0.02	0.02	
						Potassium-40	9.39	0.78	0.24	
						Protactinium-231	0.38	0.40	0.65	
						Radium-226	1.84	0.09	0.06	
						Radium-228	0.61	0.06	0.06	
						Thorium-228	1.07	0.53	0.37	
						Thorium-230	2.14	0.78	0.28	
						Thorium-232	0.54	0.36	0.28	
						Uranium-235	0.17	0.18	0.31	
						Uranium-238	2.27	0.55	0.44	
	SLD72497	10/30/02	1	1.5		Actinium-227	0.53	0.10	0.16	0.04
						Americium-241	0.02	0.03	0.04	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	14.36	0.98	0.16	
						Protactinium-231	0.07	0.35	0.54	
						Radium-226	1.26	0.06	0.05	
						Radium-228	0.81	0.06	0.05	
						Thorium-228	1.14	0.53	0.32	
Thorium-230	1.32	0.57	0.14							
Thorium-232	1.68	0.66	0.14							
Uranium-235	0.08	0.15	0.26							
Uranium-238	1.10	0.35	0.37							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72474	SLD72474	10/30/02	0	0.5	0.0	Actinium-227	0.34	0.30	0.48	0.26
						Americium-241	-0.01	0.10	0.15	
						Cesium-137	0.16	0.08	0.07	
						Potassium-40	8.89	1.38	0.73	
						Protactinium-231	-0.60	1.25	1.87	
						Radium-226	2.38	0.21	0.21	
						Radium-228	0.64	0.14	0.18	
						Thorium-228	1.95	0.84	0.36	
						Thorium-230	2.88	1.06	0.36	
						Thorium-232	0.94	0.55	0.20	
						Uranium-235	0.55	0.54	0.93	
						Uranium-238	5.01	1.73	1.32	
						SLD72498	SLD72498	10/30/02	0.8	1.3
Americium-241	0.03	0.04	0.06							
Cesium-137	0.08	0.02	0.03							
Potassium-40	14.13	1.06	0.27							
Protactinium-231	0.18	0.49	0.77							
Radium-226	1.98	0.10	0.07							
Radium-228	0.81	0.07	0.07							
Thorium-228	1.11	0.51	0.33							
Thorium-230	2.42	0.79	0.13							
Thorium-232	0.84	0.43	0.13							
Uranium-235	-0.02	0.21	0.36							
Uranium-238	2.50	0.61	0.51							
SLD72514	SLD72514	10/30/02	3	3.5						
						Americium-241	-0.02	0.03	0.05	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	14.98	1.10	0.26	
						Protactinium-231	-0.31	0.48	0.70	
						Radium-226	1.64	0.09	0.07	
						Radium-228	0.85	0.07	0.07	
						Thorium-228	0.96	0.48	0.31	
						Thorium-230	1.68	0.65	0.31	
						Thorium-232	1.08	0.50	0.14	
						Uranium-235	0.28	0.19	0.33	
						Uranium-238	1.15	0.60	0.48	
						SLD72522	SLD72522	10/30/02	5	5.5
Americium-241	-0.01	0.03	0.05							
Cesium-137	-0.02	0.02	0.03							
Potassium-40	17.01	1.24	0.21							
Protactinium-231	0.10	0.46	0.72							
Radium-226	1.33	0.08	0.07							
Radium-228	0.83	0.07	0.08							
Thorium-228	1.67	0.68	0.28							
Thorium-230	1.81	0.71	0.33							
Thorium-232	0.98	0.50	0.33							
Uranium-235	0.34	0.25	0.34							
Uranium-238	1.04	0.46	0.52							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72475	SLD72475	10/31/02	0	0.5	0.0	Actinium-227	0.13	0.10	0.14	0.00
						Americium-241	-0.05	0.11	0.19	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	2.51	0.37	0.20	
						Protactinium-231	-0.27	0.36	0.60	
						Radium-226	1.22	0.07	0.06	
						Radium-228	0.13	0.05	0.05	
						Thorium-228	0.21	0.22	0.14	
						Thorium-230	1.21	0.54	0.14	
						Thorium-232	0.20	0.21	0.27	
						Uranium-235	0.00	0.19	0.32	
						Uranium-238	0.68	0.88	1.60	
	SLD72499	10/31/02	1.5	2.0		Actinium-227	0.19	0.11	0.17	0.03
						Americium-241	-0.08	0.14	0.21	
						Cesium-137	0.10	0.02	0.02	
						Potassium-40	13.85	0.97	0.21	
						Protactinium-231	0.39	0.48	0.74	
						Radium-226	2.27	0.09	0.06	
						Radium-228	0.96	0.07	0.06	
						Thorium-228	1.14	0.52	0.26	
						Thorium-230	1.92	0.70	0.14	
						Thorium-232	1.04	0.49	0.14	
SLD72476	SLD72476	11/04/02	0	0.5	0.0	Actinium-227	0.10	0.08	0.13	0.00
						Americium-241	0.02	0.02	0.03	
						Cesium-137	0.03	0.01	0.02	
						Potassium-40	5.49	0.49	0.16	
						Protactinium-231	-0.41	0.32	0.52	
						Radium-226	1.39	0.07	0.05	
						Radium-228	0.26	0.05	0.05	
						Thorium-228	0.49	0.32	0.13	
						Thorium-230	1.22	0.53	0.13	
						Thorium-232	0.29	0.24	0.13	
						Uranium-235	0.07	0.14	0.25	
						Uranium-238	1.01	0.34	0.32	
	SLD72500	11/04/02	1	1.5		Actinium-227	0.16	0.07	0.11	0.03
						Americium-241	0.01	0.02	0.03	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	2.51	0.31	0.15	
						Protactinium-231	0.32	0.30	0.48	
						Radium-226	1.59	0.07	0.04	
						Radium-228	0.30	0.04	0.04	
						Thorium-228	0.78	0.45	0.28	
						Thorium-230	2.38	0.84	0.15	
						Thorium-232	0.51	0.35	0.15	
Uranium-235	0.10	0.13	0.22							
Uranium-238	0.91	0.23	0.30							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72477	SLD72477	12/09/02	0	0.5	0.0	Actinium-227	0.34	0.24	0.41	0.18
						Americium-241	-0.09	0.18	0.27	
						Cesium-137	0.05	0.05	0.08	
						Potassium-40	13.55	1.62	0.69	
						Protactinium-231	-0.82	1.07	1.79	
						Radium-226	2.50	0.18	0.18	
						Radium-228	0.73	0.17	0.17	
						Thorium-228	1.03	0.54	0.31	
						Thorium-230	2.50	0.89	0.17	
						Thorium-232	1.22	0.58	0.17	
						Uranium-235	0.19	0.48	0.80	
						Uranium-238	3.34	2.36	2.08	
						SLD72501	12/09/02	0.8	1.3	
	Americium-241	0.05	0.09	0.14						
	Cesium-137	0.03	0.02	0.04						
	Potassium-40	17.09	1.40	0.29						
	Protactinium-231	0.19	0.59	0.94						
	Radium-226	1.24	0.09	0.08						
	Radium-228	0.92	0.09	0.07						
	Thorium-228	1.56	0.69	0.38						
	Thorium-230	2.13	0.82	0.32						
	Thorium-232	0.88	0.50	0.17						
	Uranium-235	0.07	0.26	0.45						
	Uranium-238	1.49	0.97	1.22						
	SLD72515	12/09/02	2.5	3.0						
						Americium-241	0.12	0.10	0.17	
						Cesium-137	-0.03	0.02	0.04	
						Potassium-40	17.24	1.50	0.37	
						Protactinium-231	-0.10	0.69	1.05	
						Radium-226	1.50	0.11	0.11	
						Radium-228	1.01	0.11	0.11	
						Thorium-228	1.08	0.53	0.15	
						Thorium-230	1.29	0.58	0.28	
						Thorium-232	1.24	0.57	0.15	
						Uranium-235	-0.07	0.29	0.48	
						Uranium-238	1.71	1.21	1.35	
						SLD72523	12/09/02	5	5.5	
	Americium-241	0.01	0.08	0.14						
	Cesium-137	0.00	0.02	0.03						
Potassium-40	17.74	1.41	0.26							
Protactinium-231	0.18	0.58	0.91							
Radium-226	1.51	0.10	0.09							
Radium-228	0.95	0.09	0.09							
Thorium-228	1.39	0.66	0.18							
Thorium-230	1.96	0.80	0.33							
Thorium-232	1.31	0.63	0.18							
Uranium-235	0.18	0.27	0.45							
Uranium-238	0.90	0.73	1.30							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72478	SLD72478	12/10/02	0	0.5	0.0	Actinium-227	0.25	0.14	0.23	0.02
						Americium-241	0.10	0.09	0.14	
						Cesium-137	0.06	0.03	0.04	
						Potassium-40	8.19	0.88	0.35	
						Protactinium-231	0.38	0.62	1.00	
						Radium-226	2.21	0.12	0.09	
						Radium-228	0.68	0.09	0.08	
						Thorium-228	1.16	0.56	0.16	
						Thorium-230	1.61	0.67	0.16	
						Thorium-232	0.92	0.49	0.16	
						Uranium-235	0.14	0.28	0.44	
						Uranium-238	2.60	1.19	1.18	
						SLD72502	SLD72502	12/10/02	1.4	1.9
Americium-241	-0.11	0.20	0.31							
Cesium-137	-0.04	0.05	0.07							
Potassium-40	12.96	1.77	0.75							
Protactinium-231	0.47	1.37	2.20							
Radium-226	3.14	0.22	0.20							
Radium-228	1.77	0.21	0.19							
Thorium-228	3.22	1.14	0.36							
Thorium-230	3.08	1.10	0.19							
Thorium-232	1.93	0.82	0.19							
Uranium-235	-0.09	0.57	0.95							
Uranium-238	2.78	2.90	2.59							
SLD72516	SLD72516	12/10/02	3.3	3.8						
						Americium-241	0.03	0.09	0.16	
						Cesium-137	0.03	0.02	0.05	
						Potassium-40	13.30	1.25	0.32	
						Protactinium-231	-0.64	0.70	1.16	
						Radium-226	2.27	0.13	0.10	
						Radium-228	0.94	0.12	0.11	
						Thorium-228	1.69	0.71	0.30	
						Thorium-230	2.84	0.96	0.16	
						Thorium-232	1.09	0.55	0.16	
						Uranium-235	0.13	0.31	0.52	
						Uranium-238	1.54	0.86	1.55	
						SLD72524	SLD72524	12/10/02	4.5	5.0
Americium-241	0.07	0.09	0.14							
Cesium-137	0.00	0.02	0.04							
Potassium-40	16.38	1.38	0.34							
Protactinium-231	0.59	0.60	0.99							
Radium-226	1.49	0.10	0.09							
Radium-228	0.96	0.09	0.09							
Thorium-228	1.41	0.55	0.27							
Thorium-230	1.59	0.58	0.12							
Thorium-232	0.80	0.39	0.12							
Uranium-235	-0.12	0.28	0.45							
Uranium-238	1.10	1.07	1.23							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72479	SLD72479	12/10/02	0	0.5	0.0	Actinium-227	0.09	0.10	0.17	0.00
						Americium-241	-0.01	0.03	0.05	
						Cesium-137	0.13	0.02	0.03	
						Potassium-40	4.99	0.69	0.26	
						Protactinium-231	0.18	0.46	0.72	
						Radium-226	1.34	0.08	0.06	
						Radium-228	0.38	0.07	0.07	
						Thorium-228	0.52	0.35	0.27	
						Thorium-230	1.38	0.59	0.14	
						Thorium-232	0.42	0.31	0.14	
						Uranium-235	0.17	0.21	0.35	
						Uranium-238	1.27	0.51	0.46	
	SLD72503	12/10/02	1	1.5		Actinium-227	0.41	0.32	0.53	0.11
						Americium-241	0.05	0.10	0.16	
						Cesium-137	0.06	0.05	0.10	
						Potassium-40	6.88	1.82	0.97	
						Protactinium-231	-1.21	1.42	2.30	
						Radium-226	3.58	0.24	0.20	
						Radium-228	0.76	0.18	0.24	
						Thorium-228	1.43	0.63	0.38	
SLD72481	SLD72481	11/27/02	0	0.5	0.0	Actinium-227	0.08	0.20	0.32	0.00
						Americium-241	0.01	0.11	0.20	
						Cesium-137	0.05	0.04	0.06	
						Potassium-40	5.38	0.99	0.53	
						Protactinium-231	-0.14	0.87	1.54	
						Radium-226	1.16	0.13	0.15	
						Radium-228	0.51	0.12	0.14	
						Thorium-228	0.51	0.36	0.32	
						Thorium-230	1.59	0.64	0.14	
						Thorium-232	0.69	0.40	0.14	
						Uranium-235	0.16	0.37	0.62	
						Uranium-238	0.66	1.07	1.93	
	SLD72505	11/27/02	1.5	2.0		Actinium-227	0.05	0.09	0.14	0.00
						Americium-241	0.03	0.05	0.09	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	2.47	0.37	0.14	
						Protactinium-231	0.43	0.48	0.63	
						Radium-226	1.19	0.07	0.06	
						Radium-228	0.19	0.05	0.06	
						Thorium-228	0.60	0.38	0.35	
Thorium-230	1.85	0.69	0.26							
Thorium-232	0.47	0.32	0.14							
Uranium-235	-0.01	0.18	0.30							
Uranium-238	0.81	0.57	0.73							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72481	SLD72517	11/27/02	3.5	4.0		Actinium-227	0.06	0.07	0.14	0.00
						Americium-241	0.01	0.05	0.09	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	12.77	1.02	0.19	
						Protactinium-231	0.01	0.38	0.60	
						Radium-226	0.56	0.05	0.06	
						Radium-228	0.28	0.05	0.06	
						Thorium-228	0.36	0.31	0.41	
						Thorium-230	1.01	0.49	0.31	
						Thorium-232	0.10	0.15	0.14	
						Uranium-235	-0.01	0.16	0.27	
						Uranium-238	0.33	0.45	0.79	
	SLD72525	11/27/02	5.3	5.8		Actinium-227	2.64	0.23	0.33	0.05
						Americium-241	-0.15	0.17	0.28	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	16.70	1.19	0.23	
						Protactinium-231	1.35	0.59	0.94	
						Radium-226	1.68	0.09	0.07	
						Radium-228	0.98	0.08	0.07	
						Thorium-228	2.52	0.89	0.16	
						Thorium-230	2.17	0.81	0.30	
						Thorium-232	1.59	0.67	0.16	
SLD72482	SLD72482	11/04/02	0	1.0	0.0	Actinium-227	0.07	0.17	0.27	0.00
						Americium-241	0.00	0.05	0.08	
						Cesium-137	0.02	0.03	0.06	
						Potassium-40	2.24	0.71	0.54	
						Protactinium-231	0.59	0.69	1.32	
						Radium-226	1.18	0.11	0.12	
						Radium-228	0.18	0.13	0.19	
						Thorium-228	0.67	0.62	0.72	
						Thorium-230	1.41	0.90	0.61	
						Thorium-232	0.21	0.35	0.60	
						Uranium-235	0.02	0.33	0.55	
						Uranium-238	0.41	0.56	1.00	
	SLD72506	11/04/02	1.2	1.7		Actinium-227	0.24	0.11	0.18	0.00
						Americium-241	0.00	0.03	0.04	
						Cesium-137	0.06	0.02	0.02	
						Potassium-40	5.62	0.60	0.25	
						Protactinium-231	0.04	0.47	0.73	
						Radium-226	1.98	0.09	0.07	
						Radium-228	0.42	0.06	0.06	
						Thorium-228	0.45	0.31	0.28	
						Thorium-230	1.83	0.65	0.13	
						Thorium-232	0.61	0.35	0.13	
Uranium-235	0.03	0.19	0.33							
Uranium-238	1.54	0.41	0.42							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72483	SLD72483	11/04/02	0	0.5	0.0	Actinium-227	0.11	0.09	0.14	0.00
						Americium-241	0.01	0.02	0.04	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	8.98	0.79	0.23	
						Protactinium-231	0.10	0.40	0.63	
						Radium-226	1.38	0.07	0.06	
						Radium-228	0.23	0.05	0.06	
						Thorium-228	0.83	0.48	0.39	
						Thorium-230	1.68	0.69	0.16	
						Thorium-232	0.40	0.31	0.16	
						Uranium-235	-0.13	0.16	0.27	
						Uranium-238	0.89	0.40	0.35	
	SLD72507	11/04/02	1.4	1.9		Actinium-227	0.05	0.08	0.12	0.00
						Americium-241	-0.01	0.02	0.03	
						Cesium-137	0.02	0.01	0.02	
						Potassium-40	6.32	0.60	0.17	
						Protactinium-231	0.03	0.33	0.52	
						Radium-226	1.05	0.06	0.05	
						Radium-228	0.23	0.04	0.05	
						Thorium-228	0.92	0.53	0.33	
SLD72484	SLD72484	12/09/02	0	0.7	0.0	Actinium-227	0.09	0.08	0.14	0.01
						Americium-241	0.01	0.03	0.04	
						Cesium-137	0.00	0.01	0.03	
						Potassium-40	4.38	0.52	0.23	
						Protactinium-231	-0.29	0.36	0.60	
						Radium-226	0.88	0.06	0.06	
						Radium-228	0.35	0.05	0.06	
						Thorium-228	0.92	0.51	0.31	
						Thorium-230	1.03	0.54	0.31	
						Thorium-232	1.14	0.57	0.37	
						Uranium-235	0.14	0.17	0.29	
						Uranium-238	0.91	0.67	0.42	
	SLD72518	12/09/02	3	3.5		Actinium-227	0.19	0.12	0.22	0.09
						Americium-241	0.02	0.05	0.07	
						Cesium-137	0.02	0.02	0.04	
						Potassium-40	13.22	1.18	0.37	
						Protactinium-231	0.45	0.62	0.98	
						Radium-226	2.61	0.12	0.09	
						Radium-228	0.82	0.09	0.10	
						Thorium-228	1.46	0.63	0.37	
Thorium-230	2.74	0.90	0.15							
Thorium-232	1.36	0.59	0.28							
Uranium-235	0.09	0.28	0.46							
Uranium-238	2.15	0.73	0.68							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72484	SLD72526	12/09/02	5.5	6.0		Actinium-227	0.12	0.06	0.18	0.01
						Americium-241	0.04	0.04	0.06	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	17.11	1.29	0.29	
						Protactinium-231	0.45	0.50	0.79	
						Radium-226	1.63	0.09	0.07	
						Radium-228	0.87	0.08	0.07	
						Thorium-228	1.18	0.52	0.25	
						Thorium-230	1.76	0.65	0.13	
						Thorium-232	1.17	0.51	0.13	
						Uranium-235	0.06	0.21	0.35	
						Uranium-238	1.22	0.48	0.56	
SLD72485	SLD72485	11/26/02	0	0.5	0.0	Actinium-227	0.11	0.07	0.16	0.01
						Americium-241	-0.05	0.07	0.10	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	2.83	0.50	0.27	
						Protactinium-231	0.34	0.47	0.79	
						Radium-226	1.09	0.08	0.07	
						Radium-228	0.78	0.05	0.07	
						Thorium-228	0.32	0.26	0.14	
						Thorium-230	1.24	0.54	0.14	
						Thorium-232	0.24	0.24	0.26	
						Uranium-235	-0.06	0.21	0.35	
						Uranium-238	1.82	0.79	0.84	
	SLD72509	11/26/02	0.5	1.0		Actinium-227	0.08	0.09	0.15	0.00
						Americium-241	0.06	0.06	0.10	
						Cesium-137	0.04	0.02	0.02	
						Potassium-40	3.31	0.46	0.23	
						Protactinium-231	0.02	0.42	0.75	
						Radium-226	1.20	0.07	0.06	
						Radium-228	0.38	0.05	0.07	
						Thorium-228	0.78	0.46	0.30	
SLD72486	SLD72486	11/26/02	0	0.5	0.0	Actinium-227	0.15	0.22	0.37	0.00
						Americium-241	0.00	0.06	0.10	
						Cesium-137	-0.02	0.04	0.06	
						Potassium-40	2.61	1.01	0.83	
						Protactinium-231	-0.63	1.05	1.76	
						Radium-226	1.22	0.15	0.18	
						Radium-228	0.26	0.18	0.27	
						Thorium-228	0.72	0.44	0.40	
						Thorium-230	1.50	0.63	0.27	
						Thorium-232	0.57	0.37	0.32	
						Uranium-235	-0.04	0.44	0.74	
						Uranium-238	1.22	0.89	0.92	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72486	SLD72510	11/26/02	1.1	1.6		Actinium-227	0.09	0.12	0.19	0.01
						Americium-241	0.02	0.04	0.06	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	12.91	1.09	0.30	
						Protactinium-231	0.27	0.51	0.80	
						Radium-226	1.75	0.09	0.08	
						Radium-228	0.72	0.07	0.08	
						Thorium-228	0.79	0.41	0.30	
						Thorium-230	1.55	0.58	0.23	
						Thorium-232	0.63	0.35	0.12	
						Uranium-235	0.13	0.23	0.38	
						Uranium-238	2.16	0.58	0.56	
SLD72504	SLD72504	12/10/02	0	1.5	0.0	Actinium-227	0.26	0.14	0.22	0.38
						Americium-241	0.04	0.05	0.07	
						Cesium-137	0.19	0.03	0.03	
						Potassium-40	10.27	0.88	0.33	
						Protactinium-231	0.42	0.61	0.97	
						Radium-226	4.10	0.16	0.09	
						Radium-228	1.14	0.09	0.09	
						Thorium-228	1.19	0.57	0.16	
						Thorium-230	2.62	0.91	0.35	
						Thorium-232	1.23	0.58	0.16	
						Uranium-235	0.35	0.42	0.47	
						Uranium-238	5.55	0.88	0.66	
	SLD72480	12/10/02	1.5	2.0		Actinium-227	0.38	0.31	0.48	0.42
						Americium-241	0.04	0.10	0.15	
						Cesium-137	-0.09	0.05	0.06	
						Potassium-40	14.14	1.56	0.77	
						Protactinium-231	-0.42	1.28	1.93	
						Radium-226	5.91	0.28	0.19	
						Radium-228	1.40	0.20	0.19	
						Thorium-228	2.83	0.94	0.47	
						Thorium-230	6.37	1.60	0.28	
						Thorium-232	1.22	0.56	0.15	
						Uranium-235	-0.20	0.52	0.87	
						Uranium-238	6.27	1.58	1.39	
SLD72527	SLD72527	10/09/02	0	0.5	0.0	Actinium-227	0.06	0.07	0.10	0.00
						Americium-241	-0.01	0.02	0.03	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	7.84	0.63	0.16	
						Protactinium-231	0.15	0.28	0.45	
						Radium-226	1.08	0.06	0.04	
						Radium-228	0.30	0.04	0.04	
						Thorium-228	0.30	0.04	0.04	
						Thorium-230	0.82	1.91	3.13	
						Thorium-232	0.30	0.04	0.04	
						Uranium-235	0.04	0.13	0.22	
						Uranium-238	0.64	0.29	0.32	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72527	SLD72533	10/09/02	1.4	1.9		Actinium-227	0.00	0.07	0.10	0.01
						Americium-241	0.00	0.02	0.03	
						Cesium-137	0.13	0.02	0.02	
						Potassium-40	6.13	0.52	0.18	
						Protactinium-231	0.01	0.31	0.47	
						Radium-226	1.40	0.06	0.04	
						Radium-228	0.31	0.04	0.04	
						Thorium-228	0.31	0.04	0.04	
						Thorium-230	0.00	2.26	3.37	
						Thorium-232	0.31	0.04	0.04	
						Uranium-235	0.06	0.13	0.23	
						Uranium-238	2.14	0.43	0.31	
						SLD72539	10/09/02	3.1	3.6	
Americium-241	-0.03	0.03	0.05							
Cesium-137	-0.01	0.02	0.02							
Potassium-40	16.85	1.17	0.20							
Protactinium-231	-0.05	0.41	0.62							
Radium-226	1.65	0.08	0.06							
Radium-228	0.98	0.07	0.05							
Thorium-228	0.98	0.07	0.05							
Thorium-230	-0.63	2.92	4.66							
Thorium-232	0.98	0.07	0.05							
Uranium-235	0.05	0.18	0.30							
Uranium-238	0.95	0.45	0.47							
SLD72541	10/09/02	5.2	5.7		Actinium-227					
					Americium-241	0.00	0.03	0.04		
					Cesium-137	0.00	0.01	0.02		
					Potassium-40	16.52	1.12	0.20		
					Protactinium-231	0.15	0.42	0.64		
					Radium-226	1.64	0.08	0.06		
					Radium-228	0.91	0.06	0.06		
					Thorium-228	0.91	0.06	0.06		
					Thorium-230	-1.06	2.89	4.27		
					Thorium-232	0.91	0.06	0.06		
					Uranium-235	0.11	0.17	0.29		
					Uranium-238	0.91	0.44	0.43		
					SLD72842	10/09/02	7.2	7.9		Actinium-227
Americium-241	0.00	0.03	0.05							
Cesium-137	-0.01	0.02	0.03							
Potassium-40	18.19	1.27	0.24							
Protactinium-231	0.28	0.48	0.76							
Radium-226	1.53	0.08	0.07							
Radium-228	0.95	0.08	0.07							
Thorium-228	0.95	0.08	0.07							
Thorium-230	-0.80	3.13	5.02							
Thorium-232	0.95	0.08	0.07							
Uranium-235	-0.14	0.20	0.33							
Uranium-238	1.09	0.51	0.51							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72527	SLD72843	10/09/02	12.4	12.9		Actinium-227	0.05	0.09	0.14	0.02
						Americium-241	-0.02	0.03	0.04	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	17.32	1.16	0.20	
						Protactinium-231	0.22	0.37	0.58	
						Radium-226	1.42	0.07	0.06	
						Radium-228	0.83	0.07	0.06	
						Thorium-228	0.83	0.07	0.06	
						Thorium-230	0.52	2.71	4.38	
						Thorium-232	0.83	0.07	0.06	
						Uranium-235	-0.03	0.17	0.28	
	Uranium-238	1.15	0.42	0.42						
	SLD72841	10/09/02	19.1	19.6		Actinium-227	0.20	0.13	0.22	0.01
						Americium-241	0.00	0.09	0.14	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	15.83	1.28	0.32	
						Protactinium-231	-0.27	0.61	0.90	
						Radium-226	1.60	0.09	0.09	
						Radium-228	1.01	0.09	0.09	
						Thorium-228	0.95	0.45	0.29	
						Thorium-230	1.36	0.53	0.26	
						Thorium-232	1.25	0.50	0.12	
Uranium-235						-0.07	0.27	0.43		
Uranium-238	1.22	1.03	1.14							
SLD72529	SLD72529	10/30/02	0	0.9	0.0	Actinium-227	0.21	0.21	0.35	0.10
						Americium-241	0.01	0.07	0.11	
						Cesium-137	0.07	0.05	0.05	
						Potassium-40	10.14	1.28	0.49	
						Protactinium-231	0.11	1.06	1.67	
						Radium-226	1.61	0.14	0.15	
						Radium-228	0.52	0.13	0.17	
						Thorium-228	1.02	0.53	0.39	
						Thorium-230	2.29	0.83	0.16	
						Thorium-232	1.16	0.56	0.29	
						Uranium-235	-0.05	0.39	0.67	
	Uranium-238	2.27	1.32	1.02						
	SLD72535	10/30/02	1.5	2.0		Actinium-227	0.16	0.09	0.14	0.04
						Americium-241	0.03	0.03	0.04	
						Cesium-137	0.02	0.01	0.02	
						Potassium-40	13.24	0.96	0.18	
						Protactinium-231	0.01	0.37	0.57	
						Radium-226	1.58	0.07	0.05	
						Radium-228	0.72	0.06	0.05	
						Thorium-228	1.80	0.71	0.34	
						Thorium-230	2.50	0.86	0.15	
						Thorium-232	0.91	0.48	0.15	
Uranium-235						0.11	0.16	0.28		
Uranium-238	1.21	0.42	0.40							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72529	SLD72540	10/30/02	2.5	3.0		Actinium-227	0.05	0.07	0.10	0.00
						Americium-241	0.00	0.02	0.03	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	7.85	0.63	0.17	
						Protactinium-231	-0.05	0.32	0.48	
						Radium-226	1.18	0.06	0.04	
						Radium-228	0.44	0.04	0.04	
						Thorium-228	0.86	0.52	0.41	
						Thorium-230	1.06	0.58	0.41	
						Thorium-232	0.75	0.47	0.18	
						Uranium-235	0.02	0.13	0.23	
						Uranium-238	0.75	0.35	0.34	
	SLD72542	10/30/02	5.3	5.8		Actinium-227	0.07	0.09	0.13	0.00
						Americium-241	0.00	0.03	0.04	
						Cesium-137	-0.02	0.01	0.02	
						Potassium-40	11.47	0.85	0.18	
						Protactinium-231	0.43	0.37	0.61	
						Radium-226	1.25	0.07	0.05	
						Radium-228	0.61	0.06	0.05	
						Thorium-228	0.90	0.45	0.25	
						Thorium-230	1.14	0.52	0.25	
						Thorium-232	0.60	0.36	0.14	
SLD72530	SLD72530	10/29/02	0	0.5	0.0	Actinium-227	0.15	0.18	0.30	0.00
						Americium-241	-0.02	0.05	0.09	
						Cesium-137	0.03	0.04	0.05	
						Potassium-40	2.18	0.62	0.47	
						Protactinium-231	-0.48	0.80	1.36	
						Radium-226	0.55	0.11	0.14	
						Radium-228	0.25	0.10	0.13	
						Thorium-228	0.51	0.39	0.41	
						Thorium-230	0.79	0.47	0.31	
						Thorium-232	0.42	0.33	0.31	
						Uranium-235	0.23	0.31	0.58	
						Uranium-238	0.46	0.60	1.13	
	SLD72536	10/29/02	1.1	1.6		Actinium-227	0.20	0.09	0.14	0.01
						Americium-241	0.01	0.03	0.04	
						Cesium-137	0.07	0.02	0.02	
						Potassium-40	11.05	0.83	0.18	
						Protactinium-231	0.26	0.34	0.56	
						Radium-226	1.31	0.07	0.05	
						Radium-228	0.57	0.06	0.05	
						Thorium-228	1.47	0.65	0.30	
						Thorium-230	0.84	0.48	0.40	
						Thorium-232	0.83	0.46	0.16	
Uranium-235	0.17	0.16	0.28							
Uranium-238	1.82	0.45	0.37							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72531	SLD72531	11/06/02	0.5	1.0	0.5	Actinium-227	0.13	0.18	0.30	0.00
						Americium-241	0.00	0.05	0.09	
						Cesium-137	0.01	0.03	0.06	
						Potassium-40	2.44	0.74	0.53	
						Protactinium-231	-0.39	1.04	1.58	
						Radium-226	0.67	0.11	0.15	
						Radium-228	0.27	0.16	0.24	
						Thorium-228	0.55	0.38	0.16	
						Thorium-230	1.20	0.58	0.16	
						Thorium-232	0.36	0.30	0.16	
						Uranium-235	-0.01	0.35	0.61	
						Uranium-238	0.42	0.60	1.13	
						SLD72537	11/06/02	1.5	2.0	
						Americium-241	-0.04	0.06	0.10	
						Cesium-137	0.01	0.04	0.07	
						Potassium-40	1.03	0.88	0.64	
						Protactinium-231	0.47	1.03	1.71	
						Radium-226	0.89	0.13	0.14	
						Radium-228	0.29	0.13	0.16	
						Thorium-228	0.55	0.36	0.15	
						Thorium-230	0.65	0.39	0.15	
						Thorium-232	0.32	0.27	0.15	
						Uranium-235	0.07	0.38	0.67	
					Uranium-238	0.56	0.69	1.29		
SLD72532	SLD72532	11/21/02	0	0.5	0.0	Actinium-227	0.10	0.03	0.14	0.00
						Americium-241	0.02	0.05	0.08	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	2.22	0.35	0.16	
						Protactinium-231	-0.30	0.35	0.59	
						Radium-226	1.22	0.07	0.06	
						Radium-228	0.19	0.05	0.05	
						Thorium-228	0.21	0.23	0.27	
						Thorium-230	0.93	0.48	0.15	
						Thorium-232	0.22	0.22	0.15	
						Uranium-235	0.01	0.18	0.29	
						Uranium-238	1.16	0.78	0.70	
						SLD72538	11/21/02	1.5	2.0	
						Americium-241	-0.04	0.13	0.20	
						Cesium-137	0.13	0.05	0.05	
						Potassium-40	5.40	0.95	0.55	
						Protactinium-231	0.81	0.77	1.33	
						Radium-226	2.03	0.15	0.12	
						Radium-228	0.49	0.09	0.12	
						Thorium-228	0.71	0.42	0.36	
						Thorium-230	1.96	0.72	0.14	
						Thorium-232	0.48	0.33	0.14	
						Uranium-235	0.39	0.47	0.64	
					Uranium-238	4.30	1.72	1.57		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72534	SLD72534	10/30/02	0	0.5	0.0	Actinium-227	0.15	0.29	0.45	0.86
						Americium-241	0.02	0.09	0.14	
						Cesium-137	0.62	0.11	0.06	
						Potassium-40	10.67	1.31	0.59	
						Protactinium-231	-1.10	1.33	1.93	
						Radium-226	2.74	0.19	0.18	
						Radium-228	0.83	0.16	0.17	
						Thorium-228	1.64	0.69	0.16	
						Thorium-230	5.72	1.53	0.16	
						Thorium-232	0.71	0.43	0.30	
						Uranium-235	0.09	0.48	0.83	
						Uranium-238	6.49	1.76	1.28	
	SLD72528	10/30/02	1	1.5		Actinium-227	0.27	0.30	0.47	0.01
						Americium-241	0.02	0.09	0.14	
						Cesium-137	-0.04	0.05	0.06	
						Potassium-40	13.58	1.69	0.68	
						Protactinium-231	0.27	1.23	1.97	
						Radium-226	2.70	0.20	0.19	
						Radium-228	0.90	0.17	0.18	
						Thorium-228	1.18	0.52	0.25	
						Thorium-230	1.41	0.58	0.25	
						Thorium-232	0.59	0.35	0.13	
SLD72792	SLD72792	10/01/02	0	0.5	0.0	Actinium-227	0.18	0.13	0.20	0.62
						Americium-241	-0.03	0.05	0.08	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	19.82	1.40	0.30	
						Protactinium-231	0.27	0.54	0.85	
						Radium-226	1.68	0.09	0.08	
						Radium-228	1.38	0.09	0.08	
						Thorium-228	1.38	0.09	0.08	
						Thorium-230	-0.12	4.16	6.68	
						Thorium-232	1.38	0.09	0.08	
						Uranium-235	0.83	0.24	0.39	
						Uranium-238	14.04	1.30	0.69	
SLD72806	SLD72806	01/13/03	0	0.5	0.0	Actinium-227	0.19	0.09	0.15	0.02
						Americium-241	0.00	0.03	0.04	
						Cesium-137	0.05	0.02	0.02	
						Potassium-40	8.35	0.72	0.21	
						Protactinium-231	0.27	0.36	0.58	
						Radium-226	1.43	0.07	0.05	
						Radium-228	0.47	0.05	0.05	
						Thorium-228	0.47	0.05	0.05	
						Thorium-230	1.81	2.58	4.00	
						Thorium-232	0.47	0.05	0.05	
						Uranium-235	0.09	0.16	0.27	
						Uranium-238	1.78	0.55	0.39	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft <sup>1</sup> bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72806	SLD72807	01/13/03	0.5	1.0		Actinium-227	0.13	0.08	0.13	0.00
						Americium-241	0.03	0.03	0.04	
						Cesium-137	0.03	0.02	0.02	
						Potassium-40	7.39	0.65	0.22	
						Protactinium-231	0.10	0.35	0.53	
						Radium-226	1.34	0.07	0.05	
						Radium-228	0.50	0.05	0.05	
						Thorium-228	0.50	0.05	0.05	
						Thorium-230	-1.46	2.43	3.97	
						Thorium-232	0.50	0.05	0.05	
						Uranium-235	0.05	0.16	0.27	
						Uranium-238	1.45	0.39	0.40	
	SLD72808	01/13/03	2.5	3.0		Actinium-227	0.13	0.06	0.16	0.03
						Americium-241	0.00	0.03	0.05	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	15.08	1.06	0.21	
						Protactinium-231	0.21	0.38	0.60	
						Radium-226	1.41	0.07	0.06	
						Radium-228	0.79	0.06	0.06	
						Thorium-228	0.79	0.06	0.06	
						Thorium-230	1.99	2.63	4.37	
						Thorium-232	0.79	0.06	0.06	
						Uranium-235	0.06	0.16	0.28	
						Uranium-238	1.95	0.51	0.42	
	SLD72809	01/13/03	5	5.5		Actinium-227	0.21	0.11	0.18	0.05
						Americium-241	0.05	0.04	0.06	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	16.22	1.22	0.26	
						Protactinium-231	0.08	0.48	0.73	
						Radium-226	1.44	0.08	0.07	
						Radium-228	0.92	0.07	0.06	
						Thorium-228	0.92	0.07	0.06	
						Thorium-230	0.08	3.29	5.39	
						Thorium-232	0.92	0.07	0.06	
						Uranium-235	0.22	0.27	0.35	
						Uranium-238	1.18	0.57	0.56	
	SLD72810	01/13/03	14.4	14.9		Actinium-227	0.50	0.12	0.20	0.03
						Americium-241	0.00	0.03	0.05	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	19.52	1.35	0.23	
Protactinium-231						0.08	0.44	0.68		
Radium-226						1.47	0.08	0.06		
Radium-228						0.97	0.08	0.06		
Thorium-228						0.97	0.08	0.06		
Thorium-230						-0.77	2.88	4.66		
Thorium-232						0.97	0.08	0.06		
Uranium-235						0.03	0.18	0.31		
Uranium-238						1.21	0.44	0.47		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72813	SLD72813	10/07/02	0	0.5	0.0	Actinium-227	0.03	0.05	0.08	0.00
						Americium-241	0.00	0.01	0.02	
						Cesium-137	0.01	0.01	0.01	
						Potassium-40	0.98	0.17	0.11	
						Protactinium-231	0.00	0.21	0.33	
						Radium-226	0.83	0.04	0.03	
						Radium-228	0.19	0.03	0.03	
						Thorium-228	0.19	0.03	0.03	
						Thorium-230	0.40	1.26	2.08	
						Thorium-232	0.19	0.03	0.03	
						Uranium-235	0.10	0.10	0.17	
						Uranium-238	0.59	0.20	0.20	
						SLD72814	SLD72814	10/07/02	1.2	1.7
Americium-241	0.00	0.02	0.03							
Cesium-137	0.00	0.01	0.01							
Potassium-40	7.48	0.54	0.11							
Protactinium-231	0.21	0.25	0.39							
Radium-226	0.92	0.04	0.04							
Radium-228	0.44	0.04	0.03							
Thorium-228	0.44	0.04	0.03							
Thorium-230	2.68	2.43	2.49							
Thorium-232	0.44	0.04	0.03							
Uranium-235	-0.08	0.11	0.17							
Uranium-238	0.47	0.23	0.25							
SLD72815	SLD72815	10/07/02	2.7	3.2						
						Americium-241	0.01	0.04	0.06	
						Cesium-137	0.03	0.02	0.03	
						Potassium-40	16.07	1.24	0.27	
						Protactinium-231	0.65	0.54	0.88	
						Radium-226	1.87	0.09	0.08	
						Radium-228	0.96	0.09	0.08	
						Thorium-228	0.96	0.09	0.08	
						Thorium-230	2.07	3.49	5.75	
						Thorium-232	0.96	0.09	0.08	
						Uranium-235	0.11	0.22	0.37	
						Uranium-238	1.33	0.63	0.58	
						SLD72816	SLD72816	10/07/02	5.5	6.0
Americium-241	0.00	0.03	0.05							
Cesium-137	-0.01	0.02	0.03							
Potassium-40	17.57	1.22	0.24							
Protactinium-231	0.05	0.48	0.74							
Radium-226	1.80	0.09	0.07							
Radium-228	1.08	0.08	0.07							
Thorium-228	1.08	0.08	0.07							
Thorium-230	1.42	3.49	5.25							
Thorium-232	1.08	0.08	0.07							
Uranium-235	0.19	0.20	0.34							
Uranium-238	1.30	0.57	0.51							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72820	SLD72820	10/08/02	0	0.5	0.0	Actinium-227	0.02	0.05	0.08	0.00
						Americium-241	0.00	0.01	0.02	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	2.41	0.29	0.14	
						Protactinium-231	0.07	0.25	0.40	
						Radium-226	0.74	0.04	0.04	
						Radium-228	0.15	0.03	0.04	
						Thorium-228	0.15	0.03	0.04	
						Thorium-230	-2.15	1.62	2.23	
						Thorium-232	0.15	0.03	0.04	
						Uranium-235	0.14	0.16	0.19	
						Uranium-238	0.37	0.24	0.23	
	SLD72821	10/08/02	0.8	1.3		Actinium-227	0.02	0.09	0.14	0.05
						Americium-241	-0.02	0.03	0.05	
						Cesium-137	0.06	0.03	0.03	
						Potassium-40	10.99	0.86	0.23	
						Protactinium-231	0.14	0.42	0.66	
						Radium-226	1.39	0.07	0.06	
						Radium-228	0.55	0.06	0.06	
						Thorium-228	0.55	0.06	0.06	
						Thorium-230	-1.65	2.80	4.44	
						Thorium-232	0.55	0.06	0.06	
						Uranium-235	0.24	0.17	0.30	
						Uranium-238	2.90	0.50	0.46	
	SLD72822	10/08/02	3.5	4.0		Actinium-227	0.12	0.11	0.16	0.05
						Americium-241	-0.01	0.04	0.05	
						Cesium-137	0.00	0.02	0.02	
						Potassium-40	12.78	0.96	0.24	
						Protactinium-231	0.24	0.47	0.73	
						Radium-226	2.37	0.10	0.06	
						Radium-228	0.79	0.07	0.07	
						Thorium-228	0.79	0.07	0.07	
						Thorium-230	-0.10	3.41	5.06	
						Thorium-232	0.79	0.07	0.07	
						Uranium-235	-0.03	0.20	0.33	
						Uranium-238	2.07	0.57	0.51	
	SLD72823	10/08/02	5.2	5.7		Actinium-227	0.00	0.09	0.14	0.02
						Americium-241	-0.01	0.03	0.05	
						Cesium-137	0.01	0.02	0.02	
						Potassium-40	18.17	1.23	0.22	
Protactinium-231						0.16	0.40	0.62		
Radium-226						1.47	0.07	0.06		
Radium-228						0.87	0.07	0.05		
Thorium-228						0.87	0.07	0.05		
Thorium-230						0.60	3.01	4.50		
Thorium-232						0.87	0.07	0.05		
Uranium-235						0.17	0.17	0.30		
Uranium-238						1.08	0.48	0.44		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72827	SLD72827	10/10/02	0	0.5	0.0	Actinium-227	0.13	0.29	0.43	1.17
						Americium-241	0.02	0.10	0.15	
						Cesium-137	0.01	0.05	0.07	
						Potassium-40	13.06	1.46	0.71	
						Protactinium-231	0.73	1.32	2.09	
						Radium-226	6.28	0.29	0.18	
						Radium-228	1.18	0.16	0.19	
						Thorium-228	1.18	0.16	0.19	
						Thorium-230	10.27	9.37	14.58	
						Thorium-232	1.18	0.16	0.19	
						Uranium-235	0.72	0.53	0.95	
						Uranium-238	4.19	1.79	1.34	
						SLD72828	SLD72828	10/10/02	1	1.5
Americium-241	-0.05	0.10	0.15							
Cesium-137	0.00	0.04	0.06							
Potassium-40	11.88	1.44	0.75							
Protactinium-231	1.36	1.29	2.09							
Radium-226	7.95	0.33	0.19							
Radium-228	1.27	0.16	0.18							
Thorium-228	1.27	0.16	0.18							
Thorium-230	8.50	9.39	14.37							
Thorium-232	1.27	0.16	0.18							
Uranium-235	0.70	0.53	0.93							
Uranium-238	5.19	1.64	1.37							
SLD72829	SLD72829	10/10/02	3.2	3.7						
						Americium-241	0.33	0.23	0.39	
						Cesium-137	-0.02	0.05	0.08	
						Potassium-40	13.48	1.75	0.90	
						Protactinium-231	-0.52	1.54	2.30	
						Radium-226	8.70	0.38	0.23	
						Radium-228	1.38	0.19	0.24	
						Thorium-228	1.47	0.75	0.46	
						Thorium-230	9.24	2.45	0.39	
						Thorium-232	1.23	0.66	0.21	
						Uranium-235	0.89	0.84	1.11	
						Uranium-238	7.16	2.82	3.09	
						SLD72830	SLD72830	10/10/02	5.1	5.6
Americium-241	-0.11	0.17	0.26							
Cesium-137	-0.02	0.04	0.06							
Potassium-40	11.20	1.46	0.68							
Protactinium-231	0.60	1.13	1.82							
Radium-226	3.54	0.21	0.17							
Radium-228	1.51	0.17	0.18							
Thorium-228	3.40	1.07	0.29							
Thorium-230	3.42	1.06	0.15							
Thorium-232	1.93	0.74	0.15							
Uranium-235	0.46	0.49	0.85							
Uranium-238	2.38	1.99	2.22							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>	
SLD72827	SLD72831	10/10/02	16	16.5		Actinium-227	0.15	0.13	0.21	0.03	
						Americium-241	-0.02	0.08	0.13		
						Cesium-137	-0.02	0.02	0.03		
						Potassium-40	16.42	1.31	0.29		
						Protactinium-231	0.18	0.59	0.92		
						Radium-226	1.56	0.09	0.09		
						Radium-228	0.97	0.09	0.09		
						Thorium-228	1.49	0.62	0.30		
						Thorium-230	1.85	0.69	0.30		
						Thorium-232	1.52	0.61	0.14		
						Uranium-235	0.16	0.26	0.44		
						Uranium-238	0.83	0.81	1.14		
						SLD72939	SLD72939	02/12/03	0	0.5	0.0
Americium-241	0.01	0.03	0.04								
Cesium-137	0.06	0.02	0.02								
Potassium-40	4.28	0.49	0.23								
Protactinium-231	0.24	0.37	0.59								
Radium-226	1.95	0.09	0.05								
Radium-228	0.28	0.05	0.05								
Thorium-228	0.28	0.05	0.05								
Thorium-230	2.48	2.42	4.11								
Thorium-232	0.28	0.05	0.05								
Uranium-235	0.18	0.16	0.29								
Uranium-238	1.46	0.39	0.39								
	SLD72940	02/12/03	1	1.5			Actinium-227	0.44	0.23	0.58	0.43
Americium-241							0.07	0.11	0.17		
Cesium-137							0.06	0.05	0.09		
Potassium-40							11.94	1.40	0.71		
Protactinium-231							-0.21	1.25	2.17		
Radium-226							7.31	0.31	0.20		
Radium-228							1.11	0.20	0.19		
Thorium-228							1.11	0.20	0.19		
Thorium-230							5.45	8.85	14.89		
Thorium-232							1.11	0.20	0.19		
Uranium-235							0.28	0.57	0.98		
Uranium-238							3.99	1.76	1.52		
	SLD72941	02/12/03	2.5	3.0		Actinium-227	0.72	0.25	0.38	0.92	
Americium-241						0.08	0.10	0.16			
Cesium-137						0.03	0.05	0.07			
Potassium-40						11.42	1.49	0.71			
Protactinium-231						0.36	1.33	2.05			
Radium-226						14.40	0.48	0.18			
Radium-228						1.21	0.18	0.20			
Thorium-228						1.21	0.18	0.20			
Thorium-230						12.00	11.21	13.83			
Thorium-232						1.21	0.18	0.20			
Uranium-235						0.44	0.56	0.95			
Uranium-238						7.74	1.66	1.46			

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72939	SLD72942	02/12/03	4.5	5.0		Actinium-227	0.80	0.33	0.56	0.43
						Americium-241	0.07	0.09	0.15	
						Cesium-137	-0.03	0.05	0.08	
						Potassium-40	10.42	1.45	0.79	
						Protactinium-231	6.43	3.20	2.28	
						Radium-226	4.51	0.27	0.21	
						Radium-228	0.83	0.18	0.18	
						Thorium-228	0.83	0.18	0.18	
						Thorium-230	2.60	9.57	14.90	
						Thorium-232	0.83	0.18	0.18	
						Uranium-235	0.03	0.56	0.95	
						Uranium-238	4.60	1.28	1.40	
SLD72943	SLD72943	02/06/03	0	0.5	0.0	Actinium-227	2.31	0.15	0.19	2.26
						Americium-241	0.19	0.09	0.13	
						Cesium-137	0.05	0.02	0.03	
						Potassium-40	5.82	0.60	0.31	
						Protactinium-231	2.75	0.69	0.86	
						Radium-226	4.26	0.16	0.08	
						Radium-228	0.51	0.07	0.09	
						Thorium-228	0.51	0.07	0.09	
						Thorium-230	7.21	6.92	11.79	
						Thorium-232	0.51	0.07	0.09	
						Uranium-235	3.48	0.35	0.53	
						Uranium-238	75.08	4.81	1.15	
	SLD72944	02/06/03	0.5	1.0		Actinium-227	0.21	0.17	0.27	0.59
						Americium-241	0.08	0.03	0.10	
						Cesium-137	0.01	0.02	0.04	
						Potassium-40	11.73	1.04	0.38	
						Protactinium-231	0.47	0.74	1.14	
						Radium-226	4.44	0.18	0.10	
						Radium-228	1.10	0.11	0.09	
						Thorium-228	1.10	0.11	0.09	
						Thorium-230	0.56	5.89	9.62	
SLD72945	02/06/03	2.5	3.0		Actinium-227	0.45	0.32	0.54	0.07	
					Americium-241	0.02	0.11	0.18		
					Cesium-137	-0.01	0.05	0.09		
					Potassium-40	21.54	2.45	1.09		
					Protactinium-231	-0.67	1.49	2.51		
					Radium-226	2.02	0.21	0.23		
					Radium-228	1.39	0.23	0.22		
					Thorium-228	1.50	0.64	0.38		
					Thorium-230	2.47	0.84	0.15		
Thorium-232	1.59	0.66	0.34							
Uranium-235	0.12	0.63	1.06							
Uranium-238	1.59	1.37	1.65							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72943	SLD72946	02/06/03	5	5.8		Actinium-227	0.26	0.12	0.20	0.09
						Americium-241	0.03	0.04	0.07	
						Cesium-137	-0.02	0.02	0.03	
						Potassium-40	18.76	1.37	0.32	
						Protactinium-231	0.34	0.48	0.84	
						Radium-226	1.46	0.08	0.08	
						Radium-228	1.19	0.09	0.08	
						Thorium-228	1.19	0.09	0.08	
						Thorium-230	-0.46	3.96	6.08	
						Thorium-232	1.19	0.09	0.08	
						Uranium-235	0.10	0.23	0.39	
						Uranium-238	1.43	0.62	0.61	
						SLD72947	SLD72947	02/11/03	0	0.5
Americium-241	0.07	0.06	0.09							
Cesium-137	0.04	0.02	0.03							
Potassium-40	4.69	0.58	0.27							
Protactinium-231	0.71	0.68	0.84							
Radium-226	2.10	0.10	0.07							
Radium-228	0.39	0.06	0.07							
Thorium-228	0.70	0.39	0.37							
Thorium-230	2.53	0.76	0.22							
Thorium-232	0.31	0.24	0.12							
Uranium-235	1.34	0.25	0.37							
Uranium-238	24.22	1.99	0.76							
SLD72948	02/11/03	1	1.5		Actinium-227					
					Americium-241		0.09	0.07	0.19	
					Cesium-137		0.02	0.04	0.06	
					Potassium-40		10.91	1.29	0.54	
					Protactinium-231		0.07	1.04	1.61	
					Radium-226		4.25	0.22	0.17	
					Radium-228		1.12	0.15	0.16	
					Thorium-228		1.12	0.15	0.16	
					Thorium-230		6.37	9.65	15.94	
					Thorium-232		1.12	0.15	0.16	
					Uranium-235		3.33	0.68	0.81	
					Uranium-238		66.13	5.17	1.53	
SLD72949	02/11/03	3	3.5		Actinium-227	1.00	0.29	0.51	0.31	
					Americium-241	-0.01	0.09	0.13		
					Cesium-137	0.00	0.04	0.07		
					Potassium-40	19.44	2.02	0.62		
					Protactinium-231	-0.09	1.60	1.81		
					Radium-226	1.75	0.16	0.18		
					Radium-228	1.25	0.18	0.18		
					Thorium-228	1.25	0.18	0.18		
					Thorium-230	0.20	7.44	12.38		
					Thorium-232	1.25	0.18	0.18		
					Uranium-235	0.25	0.46	0.81		
					Uranium-238	1.94	1.48	1.23		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72947	SLD72950	02/11/03	5	5.5		Actinium-227	0.72	0.30	0.50	0.29
						Americium-241	0.03	0.08	0.14	
						Cesium-137	-0.02	0.04	0.07	
						Potassium-40	19.73	1.94	0.61	
						Protactinium-231	-1.41	1.26	1.78	
						Radium-226	1.76	0.16	0.17	
						Radium-228	1.14	0.18	0.16	
						Thorium-228	1.14	0.18	0.16	
						Thorium-230	-4.24	7.58	12.21	
						Thorium-232	1.14	0.18	0.16	
						Uranium-235	-0.29	0.44	0.72	
						Uranium-238	1.18	0.86	1.56	
SLD72951	SLD72951	02/05/03	0	0.5	0.0	Actinium-227	0.14	0.11	0.17	0.16
						Americium-241	0.04	0.03	0.05	
						Cesium-137	0.11	0.02	0.02	
						Potassium-40	4.69	0.54	0.23	
						Protactinium-231	0.42	0.45	0.73	
						Radium-226	2.66	0.11	0.06	
						Radium-228	0.36	0.06	0.06	
						Thorium-228	0.36	0.06	0.06	
						Thorium-230	1.99	3.18	4.92	
						Thorium-232	0.36	0.06	0.06	
						Uranium-235	0.24	0.19	0.35	
						Uranium-238	4.01	0.52	0.45	
	SLD72952	02/05/03	1	1.5		Actinium-227	0.69	0.46	0.48	1.71
						Americium-241	0.05	0.15	0.23	
						Cesium-137	-0.03	0.04	0.07	
						Potassium-40	12.84	1.41	0.64	
						Protactinium-231	-0.19	1.31	2.01	
						Radium-226	2.64	0.18	0.18	
						Radium-228	1.07	0.16	0.19	
						Thorium-228	1.21	0.60	0.32	
						Thorium-230	3.79	1.17	0.17	
						Thorium-232	1.18	0.59	0.32	
						Uranium-235	3.96	0.60	0.97	
						Uranium-238	80.22	6.38	2.01	
SLD72953	02/05/03	2	2.5		Actinium-227	1.04	0.25	0.37	0.95	
					Americium-241	0.08	0.12	0.19		
					Cesium-137	0.08	0.06	0.07		
					Potassium-40	11.50	1.41	0.65		
					Protactinium-231	0.92	1.27	2.05		
					Radium-226	3.68	0.22	0.19		
					Radium-228	1.02	0.16	0.19		
					Thorium-228	0.98	0.51	0.38		
					Thorium-230	4.52	1.24	0.28		
					Thorium-232	1.34	0.59	0.15		
					Uranium-235	1.73	0.66	0.94		
					Uranium-238	39.32	3.83	1.67		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72951	SLD72954	02/05/03	4	4.5		Actinium-227	0.37	0.09	0.14	0.51
						Americium-241	0.01	0.05	0.07	
						Cesium-137	0.04	0.02	0.02	
						Potassium-40	11.84	0.89	0.22	
						Protactinium-231	0.28	0.49	0.77	
						Radium-226	2.51	0.10	0.06	
						Radium-228	0.95	0.07	0.07	
						Thorium-228	0.95	0.07	0.07	
						Thorium-230	2.43	4.00	6.56	
						Thorium-232	0.95	0.07	0.07	
						Uranium-235	1.00	0.24	0.36	
						Uranium-238	22.45	1.85	0.65	
SLD72955	SLD72955	03/04/03	0	0.5		Actinium-227	0.12	0.09	0.13	0.00
						Americium-241	0.00	0.03	0.04	
						Cesium-137	0.07	0.02	0.02	
						Potassium-40	5.74	0.54	0.21	
						Protactinium-231	0.02	0.37	0.57	
						Radium-226	1.67	0.08	0.05	
						Radium-228	0.41	0.05	0.06	
						Thorium-228	0.59	0.34	0.24	
						Thorium-230	0.93	0.42	0.20	
						Thorium-232	0.33	0.24	0.11	
						Uranium-235	0.21	0.26	0.27	
						Uranium-238	1.40	0.41	0.38	
	SLD72956	03/04/03	1	1.5		Actinium-227	0.38	0.32	0.50	0.34
						Americium-241	0.07	0.12	0.18	
						Cesium-137	-0.01	0.04	0.08	
						Potassium-40	15.27	1.78	0.66	
						Protactinium-231	-0.51	1.36	2.06	
						Radium-226	3.35	0.21	0.20	
						Radium-228	1.38	0.18	0.19	
						Thorium-228	1.55	0.61	0.13	
						Thorium-230	2.68	0.83	0.13	
					Thorium-232	1.12	0.49	0.13		
					Uranium-235	1.40	0.58	0.95		
					Uranium-238	14.48	2.50	1.55		
SLD72957	03/04/03	2.5	3.0		Actinium-227	0.08	0.13	0.19	0.11	
					Americium-241	-0.01	0.04	0.06		
					Cesium-137	-0.02	0.02	0.03		
					Potassium-40	20.82	1.49	0.30		
					Protactinium-231	-0.02	0.52	0.81		
					Radium-226	1.53	0.09	0.08		
					Radium-228	1.37	0.10	0.08		
					Thorium-228	1.61	0.67	0.36		
					Thorium-230	2.67	0.88	0.27		
					Thorium-232	1.79	0.69	0.32		
					Uranium-235	0.03	0.22	0.37		
					Uranium-238	2.16	0.70	0.59		

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72955	SLD72958	03/04/03	4.5	5.0		Actinium-227	0.18	0.12	0.18	0.05
						Americium-241	-0.01	0.04	0.06	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	20.68	1.45	0.27	
						Protactinium-231	0.11	0.51	0.79	
						Radium-226	1.55	0.08	0.07	
						Radium-228	1.27	0.10	0.07	
						Thorium-228	1.89	0.74	0.15	
						Thorium-230	2.22	0.80	0.15	
						Thorium-232	1.11	0.53	0.15	
						Uranium-235	-0.16	0.20	0.33	
						Uranium-238	1.72	0.57	0.54	
SLD72959	SLD72959	02/05/03	0	0.5	0.0	Actinium-227	0.37	0.32	0.50	0.54
						Americium-241	0.03	0.10	0.16	
						Cesium-137	0.11	0.07	0.08	
						Potassium-40	10.82	1.54	0.91	
						Protactinium-231	0.20	1.38	2.18	
						Radium-226	4.24	0.24	0.22	
						Radium-228	1.01	0.19	0.20	
						Thorium-228	2.07	0.78	0.39	
						Thorium-230	3.56	1.07	0.16	
						Thorium-232	1.86	0.73	0.34	
						Uranium-235	0.52	0.53	0.96	
						Uranium-238	4.44	1.19	1.43	
	SLD72960	02/05/03	1	1.5		Actinium-227	0.45	0.29	0.47	0.04
						Americium-241	-0.02	0.07	0.12	
						Cesium-137	-0.02	0.04	0.06	
						Potassium-40	13.47	1.58	0.59	
						Protactinium-231	1.13	1.31	1.78	
						Radium-226	1.70	0.15	0.18	
						Radium-228	0.92	0.17	0.18	
						Thorium-228	1.13	0.63	0.49	
						Thorium-230	1.82	0.79	0.20	
						Thorium-232	1.23	0.64	0.20	
						Uranium-235	0.02	0.46	0.79	
						Uranium-238	2.78	1.26	1.15	
SLD72961	02/05/03	2	2.5		Actinium-227	0.40	0.15	0.24	0.18	
					Americium-241	0.02	0.04	0.07		
					Cesium-137	0.11	0.03	0.03		
					Potassium-40	10.37	0.89	0.35		
					Protactinium-231	0.04	0.58	0.89		
					Radium-226	4.36	0.16	0.08		
					Radium-228	1.09	0.09	0.08		
					Thorium-228	1.09	0.09	0.08		
					Thorium-230	5.45	4.82	6.39		
					Thorium-232	1.09	0.09	0.08		
					Uranium-235	0.15	0.25	0.43		
					Uranium-238	4.91	0.87	0.59		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>	
SLD72959	SLD72962	02/05/03	4	4.5		Actinium-227	0.28	0.31	0.50	0.18	
						Americium-241	-0.03	0.11	0.16		
						Cesium-137	-0.01	0.05	0.09		
						Potassium-40	16.78	2.30	0.90		
						Protactinium-231	0.31	1.47	2.26		
						Radium-226	3.42	0.23	0.22		
						Radium-228	1.82	0.22	0.21		
						Thorium-228	2.73	1.13	0.60		
						Thorium-230	3.01	1.18	0.24		
						Thorium-232	2.38	1.02	0.24		
						Uranium-235	-0.13	0.60	0.98		
						Uranium-238	2.75	1.54	1.49		
SLD72963	SLD72963	02/06/03	0	0.5	0.0	Actinium-227	0.14	0.09	0.15	0.10	
						Americium-241	0.02	0.03	0.05		
						Cesium-137	0.04	0.02	0.02		
						Potassium-40	5.83	0.59	0.25		
						Protactinium-231	0.17	0.44	0.68		
						Radium-226	2.02	0.09	0.06		
						Radium-228	0.51	0.06	0.06		
						Thorium-228	0.51	0.06	0.06		
						Thorium-230	0.99	3.09	4.81		
						Thorium-232	0.51	0.06	0.06		
						Uranium-235	0.01	0.20	0.32		
						Uranium-238	1.74	0.43	0.47		
		SLD72964	02/06/03	0.5	1.0		Actinium-227	0.11	0.10	0.19	0.05
							Americium-241	0.02	0.04	0.06	
							Cesium-137	-0.02	0.02	0.03	
							Potassium-40	12.92	1.04	0.25	
							Protactinium-231	0.34	0.50	0.78	
							Radium-226	1.74	0.09	0.07	
							Radium-228	0.77	0.08	0.07	
							Thorium-228	0.77	0.08	0.07	
							Thorium-230	0.68	3.26	5.38	
							Thorium-232	0.77	0.08	0.07	
							Uranium-235	-0.03	0.21	0.35	
							Uranium-238	1.03	0.52	0.56	
		SLD72965	02/06/03	3	3.8		Actinium-227	0.31	0.12	0.20	0.30
							Americium-241	0.02	0.04	0.07	
							Cesium-137	-0.01	0.02	0.03	
							Potassium-40	18.04	1.35	0.32	
							Protactinium-231	0.12	0.57	0.87	
							Radium-226	1.33	0.08	0.08	
						Radium-228	1.21	0.09	0.08		
						Thorium-228	1.21	0.09	0.08		
						Thorium-230	6.11	5.86	5.75		
						Thorium-232	1.21	0.09	0.08		
						Uranium-235	0.12	0.23	0.39		
						Uranium-238	1.87	0.72	0.60		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72963	SLD72966	02/06/03	4.5	5.0		Actinium-227	0.29	0.13	0.22	0.10
						Americium-241	0.02	0.04	0.07	
						Cesium-137	-0.02	0.02	0.03	
						Potassium-40	18.50	1.42	0.36	
						Protactinium-231	-0.18	0.58	0.86	
						Radium-226	1.43	0.09	0.08	
						Radium-228	1.19	0.10	0.08	
						Thorium-228	1.19	0.10	0.08	
						Thorium-230	-1.05	3.99	6.49	
						Thorium-232	1.19	0.10	0.08	
						Uranium-235	0.12	0.24	0.41	
						Uranium-238	1.11	0.60	0.64	
SLD72967	SLD72967	10/23/02	0	1.2	0.0	Actinium-227	0.36	0.25	0.41	0.39
						Americium-241	0.17	0.41	0.67	
						Cesium-137	0.01	0.04	0.06	
						Potassium-40	9.89	1.24	0.59	
						Protactinium-231	-0.02	1.08	1.64	
						Radium-226	4.39	0.21	0.15	
						Radium-228	0.96	0.13	0.16	
						Thorium-228	1.36	0.58	0.30	
						Thorium-230	2.99	0.92	0.14	
						Thorium-232	0.71	0.40	0.14	
						Uranium-235	0.12	0.49	0.81	
						Uranium-238	4.95	3.72	4.80	
	SLD72968	10/23/02	1.5	2.0		Actinium-227	0.20	0.12	0.21	0.00
						Americium-241	-0.01	0.07	0.12	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	6.57	0.80	0.29	
						Protactinium-231	-0.02	0.49	0.87	
						Radium-226	1.06	0.08	0.08	
						Radium-228	0.64	0.09	0.09	
						Thorium-228	1.33	0.63	0.32	
						Thorium-230	1.09	0.57	0.42	
						Thorium-232	0.82	0.48	0.17	
						Uranium-235	-0.01	0.24	0.40	
						Uranium-238	0.98	0.64	1.17	
	SLD72969	10/23/02	3.5	4.0		Actinium-227	0.19	0.17	0.28	0.33
						Americium-241	0.03	0.11	0.17	
						Cesium-137	-0.02	0.03	0.04	
						Potassium-40	17.05	1.46	0.40	
						Protactinium-231	0.23	0.69	1.09	
						Radium-226	1.81	0.11	0.12	
Radium-228						1.18	0.12	0.11		
Thorium-228						1.18	0.12	0.11		
Thorium-230						0.83	7.89	13.06		
Thorium-232						1.18	0.12	0.11		
Uranium-235						0.09	0.30	0.51		
Uranium-238						1.82	1.26	1.39		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72967	SLD72970	10/23/02	5.2	5.7		Actinium-227	0.26	0.14	0.23	0.29
						Americium-241	0.01	0.09	0.15	
						Cesium-137	0.00	0.02	0.04	
						Potassium-40	19.60	1.50	0.27	
						Protactinium-231	0.04	0.68	1.05	
						Radium-226	1.66	0.10	0.09	
						Radium-228	1.25	0.11	0.09	
						Thorium-228	1.25	0.11	0.09	
						Thorium-230	5.29	7.43	11.76	
						Thorium-232	1.25	0.11	0.09	
						Uranium-235	0.29	0.34	0.47	
						Uranium-238	2.00	1.21	1.21	
SLD72971	SLD72971	02/05/03	0	0.5	0.0	Actinium-227	0.04	0.07	0.11	0.00
						Americium-241	0.01	0.02	0.04	
						Cesium-137	0.02	0.01	0.02	
						Potassium-40	2.13	0.33	0.16	
						Protactinium-231	0.06	0.27	0.46	
						Radium-226	1.24	0.06	0.04	
						Radium-228	0.18	0.04	0.04	
						Thorium-228	0.18	0.04	0.04	
						Thorium-230	0.77	2.10	3.49	
						Thorium-232	0.18	0.04	0.04	
						Uranium-235	0.06	0.14	0.23	
						Uranium-238	1.54	0.37	0.33	
	SLD72972	02/05/03	1	1.5		Actinium-227	0.29	0.34	0.54	0.52
						Americium-241	0.02	0.12	0.20	
						Cesium-137	0.00	0.06	0.09	
						Potassium-40	14.08	2.01	0.95	
						Protactinium-231	2.59	2.27	2.63	
						Radium-226	5.68	0.30	0.23	
						Radium-228	1.40	0.20	0.23	
						Thorium-228	2.32	1.03	0.25	
						Thorium-230	4.82	1.62	0.25	
						Thorium-232	1.64	0.83	0.25	
						Uranium-235	0.81	0.50	1.12	
						Uranium-238	15.92	2.29	1.74	
SLD72973	02/05/03	2.5	3.0		Actinium-227	0.44	0.37	0.61	0.02	
					Americium-241	-0.06	0.12	0.19		
					Cesium-137	-0.02	0.06	0.10		
					Potassium-40	20.53	2.61	1.17		
					Protactinium-231	1.73	1.72	2.84		
					Radium-226	1.56	0.20	0.28		
					Radium-228	1.21	0.27	0.28		
					Thorium-228	1.39	0.77	0.25		
					Thorium-230	1.27	0.72	0.25		
					Thorium-232	1.13	0.69	0.54		
Uranium-235	-0.03	0.67	1.11							
Uranium-238	1.70	1.54	1.66							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72971	SLD72974	02/05/03	5	5.5		Actinium-227	0.48	0.33	0.54	0.06
						Americium-241	0.06	0.11	0.18	
						Cesium-137	-0.01	0.06	0.09	
						Potassium-40	20.62	2.52	0.92	
						Protactinium-231	-0.02	1.58	2.40	
						Radium-226	1.85	0.18	0.23	
						Radium-228	1.57	0.22	0.25	
						Thorium-228	0.82	0.53	0.38	
						Thorium-230	2.07	0.87	0.38	
						Thorium-232	1.40	0.70	0.38	
						Uranium-235	0.36	0.60	1.02	
						Uranium-238	1.82	1.25	1.56	
SLD72975	SLD72975	01/21/03	0	0.5	0.0	Actinium-227	0.05	0.06	0.10	0.00
						Americium-241	0.02	0.02	0.03	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	0.69	0.23	0.17	
						Protactinium-231	-0.13	0.27	0.46	
						Radium-226	0.72	0.05	0.04	
						Radium-228	0.15	0.03	0.04	
						Thorium-228	0.15	0.03	0.04	
						Thorium-230	-0.28	1.60	2.75	
						Thorium-232	0.15	0.03	0.04	
						Uranium-235	-0.05	0.12	0.20	
						Uranium-238	0.45	0.23	0.28	
	SLD72976	01/21/03	1.5	2.0		Actinium-227	0.36	0.13	0.22	0.08
						Americium-241	0.01	0.04	0.07	
						Cesium-137	0.10	0.03	0.03	
						Potassium-40	13.81	1.18	0.35	
						Protactinium-231	0.31	0.56	0.88	
						Radium-226	2.17	0.11	0.08	
						Radium-228	0.83	0.09	0.08	
						Thorium-228	0.83	0.09	0.08	
						Thorium-230	-0.36	4.12	6.34	
						Thorium-232	0.83	0.09	0.08	
						Uranium-235	0.24	0.27	0.42	
						Uranium-238	1.53	0.67	0.64	
	SLD72977	01/21/03	2.5	3.0		Actinium-227	0.31	0.14	0.23	0.13
						Americium-241	0.00	0.05	0.07	
						Cesium-137	-0.03	0.02	0.03	
						Potassium-40	13.61	1.17	0.31	
						Protactinium-231	0.41	0.59	0.93	
						Radium-226	2.43	0.12	0.09	
Radium-228						0.84	0.09	0.09		
Thorium-228						0.84	0.09	0.09		
Thorium-230						5.73	6.01	6.80		
Thorium-232						0.84	0.09	0.09		
Uranium-235						0.13	0.27	0.44		
Uranium-238						3.11	0.81	0.69		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72975	SLD72978	01/21/03	4	4.5		Actinium-227	0.50	0.34	0.57	0.39
						Americium-241	0.04	0.10	0.16	
						Cesium-137	-0.04	0.05	0.09	
						Potassium-40	19.43	2.42	0.74	
						Protactinium-231	0.77	1.63	2.56	
						Radium-226	2.16	0.20	0.24	
						Radium-228	1.22	0.23	0.23	
						Thorium-228	1.22	0.23	0.23	
						Thorium-230	-1.34	9.44	14.62	
						Thorium-232	1.22	0.23	0.23	
						Uranium-235	0.22	0.59	1.00	
						Uranium-238	2.05	1.76	1.48	
SLD72979	SLD72979	01/14/03	0	0.5	0.0	Actinium-227	0.06	0.06	0.10	0.00
						Americium-241	0.03	0.02	0.03	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	2.06	0.34	0.18	
						Protactinium-231	0.04	0.30	0.46	
						Radium-226	0.94	0.05	0.04	
						Radium-228	0.23	0.04	0.04	
						Thorium-228	0.23	0.04	0.04	
						Thorium-230	0.28	1.70	2.95	
						Thorium-232	0.23	0.04	0.04	
						Uranium-235	0.04	0.13	0.21	
						Uranium-238	0.60	0.25	0.30	
	SLD72980	01/14/03	1.5	2.0		Actinium-227	0.19	0.08	0.13	0.00
						Americium-241	0.00	0.02	0.04	
						Cesium-137	0.06	0.02	0.02	
						Potassium-40	9.03	0.71	0.16	
						Protactinium-231	0.03	0.32	0.49	
						Radium-226	1.27	0.06	0.05	
						Radium-228	0.51	0.05	0.05	
						Thorium-228	0.51	0.05	0.05	
						Thorium-230	0.14	2.10	3.44	
						Thorium-232	0.51	0.05	0.05	
						Uranium-235	0.06	0.14	0.24	
						Uranium-238	1.08	0.39	0.34	
SLD72981	01/14/03	3.3	3.8		Actinium-227	0.27	0.11	0.18	0.05	
					Americium-241	0.04	0.04	0.06		
					Cesium-137	0.00	0.01	0.02		
					Potassium-40	13.57	1.03	0.25		
					Protactinium-231	0.41	0.54	0.72		
					Radium-226	1.68	0.08	0.06		
					Radium-228	0.90	0.07	0.07		
					Thorium-228	0.90	0.07	0.07		
					Thorium-230	1.68	3.45	5.37		
					Thorium-232	0.90	0.07	0.07		
					Uranium-235	0.18	0.20	0.34		
					Uranium-238	1.48	0.54	0.54		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value	
SLD72979	SLD72982	01/14/03	4.5	5.0		Actinium-227	0.34	0.09	0.15	0.01	
						Americium-241	0.00	0.03	0.04		
						Cesium-137	-0.01	0.01	0.02		
						Potassium-40	15.91	1.10	0.19		
						Protactinium-231	0.00	0.37	0.56		
						Radium-226	1.36	0.07	0.05		
						Radium-228	0.88	0.06	0.05		
						Thorium-228	0.88	0.06	0.05		
						Thorium-230	0.42	2.54	4.15		
						Thorium-232	0.88	0.06	0.05		
						Uranium-235	0.13	0.15	0.27		
						Uranium-238	1.11	0.46	0.41		
SLD72983	SLD72983	01/14/03	0	0.5	0.0	Actinium-227	0.03	0.06	0.09	0.00	
						Americium-241	0.01	0.02	0.03		
						Cesium-137	0.01	0.01	0.02		
						Potassium-40	3.29	0.37	0.17		
						Protactinium-231	-0.18	0.25	0.42		
						Radium-226	1.00	0.05	0.03		
						Radium-228	0.21	0.03	0.04		
						Thorium-228	0.21	0.03	0.04		
						Thorium-230	-0.30	1.68	2.87		
						Thorium-232	0.21	0.03	0.04		
						Uranium-235	0.01	0.12	0.20		
						Uranium-238	0.90	0.29	0.28		
		SLD72984	01/14/03	1.5	2.0		Actinium-227	0.15	0.09	0.15	0.02
	Americium-241						0.04	0.03	0.05		
	Cesium-137						-0.01	0.01	0.02		
	Potassium-40						11.92	0.92	0.23		
	Protactinium-231						-0.07	0.40	0.60		
	Radium-226						1.39	0.07	0.06		
	Radium-228						0.61	0.06	0.07		
	Thorium-228						0.61	0.06	0.07		
	Thorium-230						-1.38	2.77	4.47		
	Thorium-232						0.61	0.06	0.07		
	Uranium-235						0.16	0.19	0.29		
	Uranium-238						1.06	0.44	0.46		
	SLD72985	01/14/03	3.1	3.6		Actinium-227	0.20	0.10	0.16	0.03	
Americium-241						0.02	0.03	0.05			
Cesium-137						-0.01	0.02	0.02			
Potassium-40						12.13	0.97	0.27			
Protactinium-231						0.09	0.39	0.61			
Radium-226						1.52	0.08	0.06			
Radium-228						0.64	0.06	0.06			
Thorium-228						0.64	0.06	0.06			
Thorium-230						1.38	2.94	4.87			
Thorium-232						0.64	0.06	0.06			
Uranium-235						0.05	0.18	0.31			
Uranium-238						1.08	0.44	0.48			

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>	
SLD72983	SLD72986	01/14/03	4.5	5.0		Actinium-227	0.13	0.10	0.15	0.02	
						Americium-241	0.01	0.03	0.05		
						Cesium-137	-0.01	0.01	0.02		
						Potassium-40	9.62	0.81	0.22		
						Protactinium-231	0.37	0.41	0.65		
						Radium-226	1.28	0.07	0.06		
						Radium-228	0.51	0.06	0.06		
						Thorium-228	0.51	0.06	0.06		
						Thorium-230	0.93	2.91	4.54		
						Thorium-232	0.51	0.06	0.06		
						Uranium-235	0.06	0.18	0.30		
						Uranium-238	1.02	0.50	0.45		
SLD72987	SLD72987	01/15/03	0	0.5	0.0	Actinium-227	-0.01	0.18	0.28	0.00	
						Americium-241	0.00	0.04	0.08		
						Cesium-137	-0.01	0.03	0.05		
						Potassium-40	0.94	0.71	0.52		
						Protactinium-231	-0.22	0.82	1.42		
						Radium-226	0.89	0.11	0.13		
						Radium-228	0.25	0.11	0.22		
						Thorium-228	0.27	0.24	0.14		
						Thorium-230	1.00	0.49	0.14		
						Thorium-232	0.21	0.21	0.14		
						Uranium-235	0.05	0.33	0.57		
						Uranium-238	0.33	0.50	0.90		
		SLD72988	01/15/03	1.5	2.0		Actinium-227	0.10	0.08	0.14	0.08
	Americium-241						0.01	0.05	0.08		
	Cesium-137						0.03	0.01	0.02		
	Potassium-40						4.93	0.51	0.19		
	Protactinium-231						0.46	0.33	0.57		
	Radium-226						1.09	0.06	0.05		
	Radium-228						0.29	0.05	0.05		
	Thorium-228						0.29	0.05	0.05		
	Thorium-230						-1.07	3.87	6.31		
	Thorium-232						0.29	0.05	0.05		
	Uranium-235						0.00	0.16	0.27		
	Uranium-238						0.90	0.56	0.71		
	SLD72989	01/15/03	3	3.5		Actinium-227	0.27	0.29	0.49	0.82	
Americium-241						-0.04	0.20	0.32			
Cesium-137						-0.01	0.05	0.07			
Potassium-40						11.83	1.61	0.77			
Protactinium-231						0.15	1.26	2.24			
Radium-226						4.55	0.26	0.20			
Radium-228						1.17	0.17	0.22			
Thorium-228						1.17	0.17	0.22			
Thorium-230						2.54	15.41	24.33			
Thorium-232						1.17	0.17	0.22			
Uranium-235						0.20	0.61	1.04			
Uranium-238						7.39	3.05	2.61			

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SLU72981	SLD72990	01/15/03	5	5.5		Actinium-227	0.20	0.15	0.25	0.30
						Americium-241	0.05	0.10	0.15	
						Cesium-137	-0.01	0.02	0.04	
						Potassium-40	12.02	1.13	0.30	
						Protactinium-231	-0.12	0.70	1.07	
						Radium-226	2.22	0.13	0.09	
						Radium-228	0.72	0.10	0.10	
						Thorium-228	0.72	0.10	0.10	
						Thorium-230	4.91	7.64	12.19	
						Thorium-232	0.72	0.10	0.10	
						Uranium-235	-0.08	0.30	0.49	
						Uranium-238	2.74	1.23	1.31	
SLD72991	SLD72991	11/25/02	0	0.5	0.0	Actinium-227	0.07	0.06	0.13	0.00
						Americium-241	0.02	0.02	0.03	
						Cesium-137	0.02	0.01	0.01	
						Potassium-40	4.81	0.49	0.17	
						Protactinium-231	-0.23	0.28	0.47	
						Radium-226	1.35	0.06	0.04	
						Radium-228	0.25	0.04	0.04	
						Thorium-228	0.25	0.04	0.04	
						Thorium-230	1.55	2.02	3.38	
						Thorium-232	0.25	0.04	0.04	
						Uranium-235	-0.04	0.13	0.22	
						Uranium-238	1.01	0.34	0.32	
	SLD72992	11/25/02	1.3	1.8		Actinium-227	0.09	0.07	0.17	0.00
						Americium-241	0.02	0.03	0.04	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	8.38	0.66	0.20	
						Protactinium-231	-0.27	0.37	0.54	
						Radium-226	2.05	0.08	0.05	
						Radium-228	0.82	0.06	0.05	
						Thorium-228	0.82	0.06	0.05	
						Thorium-230	0.39	2.43	3.96	
						Thorium-232	0.82	0.06	0.05	
						Uranium-235	0.08	0.16	0.28	
						Uranium-238	1.25	0.41	0.38	
	SLD72993	11/25/02	3.1	3.6		Actinium-227	0.38	0.19	0.36	0.71
						Americium-241	0.00	0.06	0.10	
						Cesium-137	0.01	0.03	0.04	
						Potassium-40	16.08	1.29	0.46	
						Protactinium-231	0.94	0.89	1.40	
						Radium-226	11.20	0.36	0.12	
Radium-228						1.40	0.12	0.12		
Thorium-228						1.40	0.12	0.12		
Thorium-230						6.19	5.88	9.67		
Thorium-232						1.40	0.12	0.12		
Uranium-235						0.61	0.35	0.62		
Uranium-238						7.30	1.26	0.92		

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SLD72991	SLD72994	11/25/02	4	4.5		Actinium-227	0.25	0.11	0.19	0.26	
						Americium-241	0.03	0.04	0.07		
						Cesium-137	0.02	0.03	0.03		
						Potassium-40	12.23	0.97	0.30		
						Protactinium-231	-0.56	0.63	0.92		
						Radium-226	5.61	0.20	0.08		
						Radium-228	1.32	0.10	0.08		
						Thorium-228	1.32	0.10	0.08		
						Thorium-230	4.38	4.16	6.88		
						Thorium-232	1.32	0.10	0.08		
						Uranium-235	0.03	0.27	0.46		
						Uranium-238	3.81	0.59	0.66		
SLD72995	SLD72995	11/25/02	0	0.5	0.0	Actinium-227	0.24	0.08	0.13	0.00	
						Americium-241	0.01	0.02	0.03		
						Cesium-137	0.00	0.01	0.02		
						Potassium-40	4.14	0.39	0.16		
						Protactinium-231	0.21	0.31	0.50		
						Radium-226	1.75	0.07	0.04		
						Radium-228	0.26	0.04	0.04		
						Thorium-228	0.26	0.04	0.04		
						Thorium-230	0.78	1.99	3.29		
						Thorium-232	0.26	0.04	0.04		
						Uranium-235	0.11	0.13	0.23		
						Uranium-238	1.12	0.35	0.33		
		SLD72996	11/25/02	1.5	2.0		Actinium-227	0.27	0.16	0.29	0.61
	Americium-241						0.02	0.05	0.08		
	Cesium-137						0.00	0.02	0.04		
	Potassium-40						12.38	0.98	0.39		
	Protactinium-231						0.08	0.69	1.05		
	Radium-226						8.86	0.28	0.09		
	Radium-228						1.05	0.09	0.09		
	Thorium-228						1.05	0.09	0.09		
	Thorium-230						9.33	6.75	7.44		
	Thorium-232						1.05	0.09	0.09		
	Uranium-235						0.09	0.31	0.52		
	Uranium-238						7.12	0.94	0.75		
		SLD72997	11/25/02	3.2	3.7		Actinium-227	0.53	0.16	0.26	0.22
	Americium-241						0.04	0.05	0.07		
	Cesium-137						0.01	0.02	0.03		
	Potassium-40						12.05	0.99	0.35		
	Protactinium-231						0.32	0.64	1.00		
	Radium-226						5.33	0.19	0.09		
Radium-228	1.12						0.10	0.09			
Thorium-228	1.12						0.10	0.09			
Thorium-230	3.68						4.29	7.10			
Thorium-232	1.12						0.10	0.09			
Uranium-235	0.20						0.29	0.47			
Uranium-238	3.40						0.76	0.68			

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD72995	SLD72998	11/25/02	4.5	5.0		Actinium-227	0.30	0.15	0.25	0.10
						Americium-241	0.00	0.04	0.07	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	9.76	0.92	0.33	
						Protactinium-231	-0.33	0.61	0.92	
						Radium-226	3.91	0.16	0.09	
						Radium-228	0.88	0.09	0.09	
						Thorium-228	0.88	0.09	0.09	
						Thorium-230	1.16	3.84	6.34	
						Thorium-232	0.88	0.09	0.09	
						Uranium-235	-0.01	0.25	0.43	
						Uranium-238	2.43	0.71	0.63	
SLD72999	SLD72999	01/28/03	0	0.5	0.0	Actinium-227	0.69	0.32	0.54	0.03
						Americium-241	0.03	0.09	0.14	
						Cesium-137	-0.02	0.05	0.08	
						Potassium-40	12.65	1.60	0.81	
						Protactinium-231	-0.34	1.34	2.05	
						Radium-226	2.68	0.21	0.18	
						Radium-228	0.93	0.17	0.20	
						Thorium-228	0.98	0.57	0.20	
						Thorium-230	0.88	0.53	0.20	
						Thorium-232	0.51	0.40	0.20	
						Uranium-235	0.31	0.50	0.90	
						Uranium-238	2.85	1.41	1.44	
	SLD73000	01/28/03	1	1.5		Actinium-227	0.47	0.25	0.43	0.06
						Americium-241	-0.02	0.08	0.12	
						Cesium-137	0.04	0.04	0.06	
						Potassium-40	8.66	1.31	0.71	
						Protactinium-231	-0.41	1.04	1.81	
						Radium-226	2.76	0.19	0.15	
						Radium-228	0.64	0.14	0.18	
						Thorium-228	0.90	0.63	0.26	
						Thorium-230	2.44	1.09	0.27	
						Thorium-232	0.34	0.40	0.58	
						Uranium-235	-0.01	0.44	0.76	
						Uranium-238	2.80	1.45	1.19	
SLD73001	01/28/03	2.5	3.3		Actinium-227	0.48	0.31	0.50	0.44	
					Americium-241	0.02	0.10	0.16		
					Cesium-137	0.03	0.04	0.07		
					Potassium-40	11.39	1.56	0.76		
					Protactinium-231	0.62	1.37	2.17		
					Radium-220	7.83	0.33	0.19		
					Radium-228	1.13	0.17	0.19		
					Thorium-228	1.80	0.88	0.45		
					Thorium-230	5.29	1.70	0.45		
					Thorium-232	1.30	0.73	0.45		
					Uranium-235	0.60	0.57	1.00		
					Uranium-238	6.01	1.45	1.45		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD72999	SLD73002	01/28/03	4.5	5.0		Actinium-227	0.33	0.11	0.19	0.04
						Americium-241	0.01	0.03	0.05	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	17.59	1.25	0.26	
						Protactinium-231	0.28	0.46	0.73	
						Radium-226	1.59	0.08	0.06	
						Radium-228	0.90	0.08	0.07	
						Thorium-228	0.90	0.08	0.07	
						Thorium-230	1.09	3.05	5.04	
						Thorium-232	0.90	0.08	0.07	
						Uranium-235	0.00	0.19	0.32	
						Uranium-238	0.85	0.51	0.51	
						SLD73003	SLD73003	11/25/02	0	0.5
Americium-241	0.01	0.02	0.03							
Cesium-137	0.01	0.01	0.01							
Potassium-40	2.12	0.28	0.14							
Protactinium-231	0.11	0.25	0.43							
Radium-226	0.94	0.05	0.04							
Radium-228	0.15	0.03	0.04							
Thorium-228	0.15	0.03	0.04							
Thorium-230	0.73	1.78	2.80							
Thorium-232	0.15	0.03	0.04							
Uranium-235	0.05	0.11	0.19							
Uranium-238	0.67	0.27	0.27							
SLD73004	11/25/02	1	1.5		Actinium-227		0.13	0.09	0.14	0.01
					Americium-241		0.03	0.03	0.04	
					Cesium-137		0.10	0.02	0.02	
					Potassium-40		3.54	0.47	0.23	
					Protactinium-231		-0.13	0.35	0.60	
					Radium-226		1.67	0.08	0.05	
					Radium-228		0.37	0.05	0.05	
					Thorium-228		0.37	0.05	0.05	
					Thorium-230		-0.35	2.67	4.11	
					Thorium-232		0.37	0.05	0.05	
					Uranium-235		-0.02	0.17	0.28	
					Uranium-238		1.52	0.40	0.42	
SLD73005	11/25/02	3	3.5		Actinium-227	0.26	0.16	0.26	0.76	
					Americium-241	-0.01	0.06	0.09		
					Cesium-137	0.00	0.02	0.03		
					Potassium-40	9.98	0.99	0.43		
					Protactinium-231	0.94	0.71	1.13		
					Radium-226	5.07	0.20	0.10		
					Radium-228	0.94	0.10	0.11		
					Thorium-228	0.94	0.10	0.11		
					Thorium-230	12.68	7.84	8.18		
					Thorium-232	0.94	0.10	0.11		
Uranium-235	0.05	0.34	0.55							
Uranium-238	3.89	0.89	0.81							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD73003	SLD73006	11/25/02	4	4.5		Actinium-227	0.22	0.13	0.21	0.17
						Americium-241	0.00	0.04	0.06	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	10.74	0.84	0.26	
						Protactinium-231	-0.13	0.53	0.80	
						Radium-226	4.75	0.17	0.07	
						Radium-228	0.71	0.07	0.07	
						Thorium-228	0.71	0.07	0.07	
						Thorium-230	2.06	3.60	5.93	
						Thorium-232	0.71	0.07	0.07	
						Uranium-235	0.09	0.23	0.40	
						Uranium-238	3.14	0.65	0.57	
SLD73007	SLD73007	02/12/03	0	0.5	0.0	Actinium-227	0.23	0.16	0.26	0.58
						Americium-241	0.08	0.06	0.09	
						Cesium-137	0.20	0.03	0.04	
						Potassium-40	8.36	0.91	0.37	
						Protactinium-231	-0.27	0.74	1.10	
						Radium-226	4.94	0.19	0.10	
						Radium-228	0.95	0.09	0.10	
						Thorium-228	2.00	0.75	0.37	
						Thorium-230	4.50	1.23	0.33	
						Thorium-232	0.77	0.43	0.15	
						Uranium-235	0.38	0.29	0.55	
						Uranium-238	4.92	0.99	0.81	
SLD73009	SLD73009	02/12/03	0	0.5	0.0	Actinium-227	0.17	0.09	0.20	0.13
						Americium-241	0.03	0.03	0.05	
						Cesium-137	0.16	0.03	0.02	
						Potassium-40	8.78	0.74	0.25	
						Protactinium-231	0.09	0.43	0.66	
						Radium-226	2.92	0.12	0.06	
						Radium-228	0.62	0.07	0.06	
						Thorium-228	0.62	0.07	0.06	
						Thorium-230	3.05	2.94	4.91	
						Thorium-232	0.62	0.07	0.06	
						Uranium-235	0.19	0.19	0.33	
						Uranium-238	2.90	0.47	0.48	
	SLD73010	02/12/03	0.5	1.0		Actinium-227	0.47	0.38	0.59	0.47
						Americium-241	0.09	0.11	0.17	
						Cesium-137	0.01	0.05	0.08	
						Potassium-40	12.32	1.57	0.73	
						Protactinium-231	-0.46	1.45	2.19	
						Radium-220	6.97	0.31	0.21	
Radium-228	0.96	0.16	0.19							
Thorium-228	0.96	0.16	0.19							
Thorium-230	1.82	8.94	14.84							
Thorium-232	0.96	0.16	0.19							
Uranium-235	0.24	0.57	0.97							
Uranium-238	6.76	1.61	1.53							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD73011	SLD73011	01/29/03	0	0.5	0.0	Actinium-227	0.12	0.06	0.10	0.00
						Americium-241	0.02	0.02	0.03	
						Cesium-137	0.07	0.01	0.01	
						Potassium-40	3.86	0.35	0.15	
						Protactinium-231	-0.11	0.28	0.42	
						Radium-226	1.80	0.07	0.04	
						Radium-228	0.40	0.04	0.03	
						Thorium-228	0.40	0.04	0.03	
						Thorium-230	0.30	1.75	2.87	
						Thorium-232	0.40	0.04	0.03	
						Uranium-235	0.08	0.12	0.20	
						Uranium-238	1.33	0.34	0.28	
	SLD73012	01/29/03	1	1.5		Actinium-227	0.24	0.09	0.15	0.01
						Americium-241	0.00	0.03	0.04	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	10.55	0.77	0.18	
						Protactinium-231	0.25	0.36	0.57	
						Radium-226	2.12	0.09	0.05	
						Radium-228	0.72	0.06	0.06	
						Thorium-228	0.72	0.06	0.06	
SLD73013	SLD73013	02/04/03	0	0.5	0.0	Actinium-227	0.09	0.08	0.17	0.18
						Americium-241	0.02	0.04	0.06	
						Cesium-137	0.05	0.02	0.03	
						Potassium-40	9.45	0.82	0.26	
						Protactinium-231	-0.25	0.50	0.73	
						Radium-226	2.31	0.10	0.07	
						Radium-228	0.76	0.08	0.06	
						Thorium-228	0.76	0.08	0.06	
						Thorium-230	2.78	3.25	5.44	
						Thorium-232	0.76	0.08	0.06	
						Uranium-235	0.27	0.28	0.36	
						Uranium-238	2.88	0.70	0.53	
	SLD73014	02/04/03	1	1.5		Actinium-227	0.21	0.09	0.16	0.03
						Americium-241	0.00	0.03	0.05	
						Cesium-137	0.00	0.02	0.02	
						Potassium-40	15.04	1.11	0.25	
						Protactinium-231	0.32	0.43	0.68	
						Radium-226	1.22	0.07	0.06	
						Radium-228	0.80	0.07	0.06	
						Thorium-228	0.80	0.07	0.06	
Thorium-230	-2.63	3.15	4.72							
Thorium-232	0.80	0.07	0.06							
Uranium-235	-0.03	0.19	0.30							
Uranium-238	1.25	0.50	0.48							

**Table C-1**  
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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD73015	SLD73015	02/03/03	0	0.5	0.0	Actinium-227	0.22	0.12	0.19	0.29
						Americium-241	0.02	0.04	0.07	
						Cesium-137	0.07	0.03	0.03	
						Potassium-40	6.25	0.73	0.35	
						Protactinium-231	-0.11	0.56	0.84	
						Radium-226	1.98	0.10	0.08	
						Radium-228	0.53	0.07	0.08	
						Thorium-228	0.53	0.07	0.08	
						Thorium-230	-2.00	3.82	6.17	
						Thorium-232	0.53	0.07	0.08	
						Uranium-235	0.40	0.30	0.42	
						Uranium-238	4.73	0.79	0.59	
	SLD73016	02/03/03	1.5	2.0		Actinium-227	0.23	0.13	0.21	0.10
						Americium-241	-0.01	0.04	0.07	
						Cesium-137	-0.02	0.02	0.03	
						Potassium-40	11.38	0.97	0.32	
						Protactinium-231	0.26	0.57	0.87	
						Radium-226	3.00	0.13	0.07	
						Radium-228	0.94	0.09	0.08	
						Thorium-228	0.94	0.09	0.08	
						Thorium-230	4.11	3.80	6.35	
						Thorium-232	0.94	0.09	0.08	
SLD73017	SLD73017	02/03/03	0	0.5	0.0	Actinium-227	0.30	0.12	0.19	0.44
						Americium-241	0.06	0.05	0.08	
						Cesium-137	0.05	0.03	0.03	
						Potassium-40	8.05	0.79	0.27	
						Protactinium-231	0.27	0.53	0.82	
						Radium-226	2.37	0.11	0.08	
						Radium-228	0.80	0.08	0.07	
						Thorium-228	0.80	0.08	0.07	
						Thorium-230	-0.53	4.39	6.72	
						Thorium-232	0.80	0.08	0.07	
						Uranium-235	0.51	0.24	0.39	
						Uranium-238	9.13	1.07	0.67	
	SLD73018	02/03/03	0.5	1.0		Actinium-227	0.12	0.06	0.19	0.13
						Americium-241	0.06	0.04	0.07	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	11.11	0.96	0.31	
						Protactinium-231	0.14	0.53	0.81	
						Radium-226	2.86	0.12	0.07	
						Radium-228	0.77	0.08	0.07	
						Thorium-228	0.77	0.08	0.07	
						Thorium-230	0.50	3.98	6.14	
						Thorium-232	0.77	0.08	0.07	
Uranium-235	0.12	0.24	0.40							
Uranium-238	3.95	0.72	0.62							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD75708	SLD75708	02/27/03	0	0.5		Actinium-227	0.08	0.09	0.15	0.43
						Americium-241	0.02	0.05	0.07	
						Cesium-137	0.02	0.01	0.03	
						Potassium-40	7.94	0.72	0.22	
						Protactinium-231	0.14	0.43	0.65	
						Radium-226	1.56	0.08	0.06	
						Radium-228	0.52	0.05	0.05	
						Thorium-228	0.83	0.44	0.28	
						Thorium-230	1.83	0.66	0.28	
						Thorium-232	0.76	0.40	0.13	
						Uranium-235	1.22	0.20	0.32	
						Uranium-238	23.01	1.76	0.65	
	SLD75709	02/27/03	0.5	1.0		Actinium-227	0.39	0.11	0.15	0.58
						Americium-241	0.04	0.05	0.08	
						Cesium-137	0.02	0.02	0.03	
						Potassium-40	9.33	0.82	0.25	
						Protactinium-231	0.22	0.49	0.75	
						Radium-226	2.43	0.10	0.07	
						Radium-228	0.75	0.07	0.06	
						Thorium-228	0.80	0.42	0.24	
						Thorium-230	3.89	1.06	0.13	
						Thorium-232	0.95	0.45	0.13	
						Uranium-235	1.20	0.24	0.38	
						Uranium-238	23.81	1.97	0.74	
	SLD75710	02/27/03	2	2.5		Actinium-227	0.22	0.11	0.18	0.16
						Americium-241	0.04	0.04	0.06	
						Cesium-137	-0.01	0.02	0.02	
						Potassium-40	10.46	0.88	0.27	
						Protactinium-231	0.55	0.48	0.76	
						Radium-226	2.60	0.11	0.07	
						Radium-228	0.90	0.07	0.06	
						Thorium-228	1.21	0.67	0.21	
						Thorium-230	2.80	1.06	0.21	
Thorium-232						0.96	0.58	0.38		
Uranium-235						0.35	0.20	0.37		
Uranium-238						6.53	0.86	0.60		
SLD75712	SLD75712	03/03/03	0	0.5		Actinium-227	0.29	0.12	0.20	0.13
						Americium-241	0.03	0.04	0.06	
						Cesium-137	0.19	0.03	0.03	
						Potassium-40	9.18	0.84	0.30	
						Protactinium-231	0.14	0.54	0.82	
						Radium-226	2.80	0.12	0.07	
						Radium-228	0.69	0.07	0.08	
						Thorium-228	1.66	0.81	0.46	
						Thorium-230	2.18	0.92	0.46	
						Thorium-232	0.92	0.56	0.21	
						Uranium-235	0.35	0.22	0.39	
						Uranium-238	5.44	0.86	0.60	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD75712	SLD75713	03/03/03	0.5	1.0		Actinium-227	0.13	0.09	0.14	0.05
						Americium-241	-0.02	0.03	0.05	
						Cesium-137	0.02	0.02	0.02	
						Potassium-40	8.62	0.72	0.20	
						Protactinium-231	0.23	0.40	0.62	
						Radium-226	1.57	0.07	0.05	
						Radium-228	0.57	0.06	0.06	
						Thorium-228	0.66	0.50	0.43	
						Thorium-230	1.80	0.87	0.23	
						Thorium-232	1.24	0.71	0.51	
						Uranium-235	0.03	0.18	0.30	
						Uranium-238	3.19	0.61	0.45	
	SLD75714	03/03/03	2	2.5		Actinium-227	0.15	0.10	0.16	0.06
						Americium-241	0.01	0.03	0.05	
						Cesium-137	0.00	0.02	0.02	
						Potassium-40	12.08	0.95	0.25	
						Protactinium-231	0.43	0.42	0.67	
						Radium-226	1.46	0.08	0.06	
						Radium-228	0.66	0.06	0.06	
						Thorium-228	1.01	0.67	0.54	
SLD75716	SLD75716	03/03/03	0	0.5		Actinium-227	0.11	0.09	0.14	0.24
						Americium-241	0.01	0.03	0.05	
						Cesium-137	0.13	0.02	0.02	
						Potassium-40	7.59	0.63	0.19	
						Protactinium-231	0.25	0.40	0.62	
						Radium-226	2.56	0.10	0.05	
	SLD75717	03/03/03	0.5	1.0		Actinium-227	0.07	0.07	0.11	0.07
						Americium-241	0.02	0.02	0.04	
						Cesium-137	0.02	0.01	0.02	
						Potassium-40	7.56	0.59	0.15	
						Protactinium-231	0.22	0.30	0.48	
						Radium-226	1.71	0.07	0.04	
					Radium-228	0.60	0.04	0.04		
					Thorium-228	1.35	0.56	0.24		
					Thorium-230	2.28	0.75	0.32		
					Thorium-232	1.26	0.53	0.24		
					Uranium-235	0.33	0.23	0.24		
					Uranium-238	3.13	0.45	0.36		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD75716	SLD75718	03/03/03	2.5	3.0		Actinium-227	0.10	0.08	0.12	0.05
						Americium-241	0.01	0.03	0.04	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	11.57	0.84	0.17	
						Protactinium-231	-0.02	0.33	0.51	
						Radium-226	1.41	0.06	0.05	
						Radium-228	0.68	0.05	0.05	
						Thorium-228	1.02	0.52	0.27	
						Thorium-230	2.64	0.87	0.15	
						Thorium-232	1.18	0.54	0.15	
						Uranium-235	0.06	0.14	0.24	
						Uranium-238	1.53	0.39	0.37	
SLD75720	SLD75720	03/03/03	0	0.5		Actinium-227	0.41	0.08	0.12	0.75
						Americium-241	0.04	0.04	0.06	
						Cesium-137	0.02	0.01	0.02	
						Potassium-40	8.13	0.62	0.16	
						Protactinium-231	0.46	0.29	0.61	
						Radium-226	2.26	0.09	0.05	
						Radium-228	0.64	0.05	0.05	
						Thorium-228	1.07	0.51	0.29	
						Thorium-230	3.58	1.02	0.13	
						Thorium-232	0.72	0.40	0.25	
						Uranium-235	1.18	0.22	0.30	
						Uranium-238	22.41	1.63	0.54	
	SLD75721	03/03/03	0.5	1.0		Actinium-227	0.57	0.07	0.12	0.60
						Americium-241	0.00	0.04	0.06	
						Cesium-137	0.01	0.01	0.02	
						Potassium-40	8.21	0.63	0.17	
						Protactinium-231	0.81	0.41	0.65	
						Radium-226	2.30	0.09	0.05	
						Radium-228	0.68	0.06	0.05	
						Thorium-228	0.93	0.49	0.32	
						Thorium-230	5.19	1.36	0.27	
						Thorium-232	1.14	0.53	0.32	
						Uranium-235	1.12	0.19	0.31	
						Uranium-238	20.44	1.57	0.54	
SLD75722	03/03/03	3	3.5		Actinium-227	0.04	0.08	0.12	0.03	
					Americium-241	-0.01	0.03	0.04		
					Cesium-137	0.00	0.01	0.02		
					Potassium-40	12.93	0.89	0.16		
					Protactinium-231	0.10	0.32	0.50		
					Radium-226	1.39	0.06	0.04		
					Radium-228	0.70	0.05	0.04		
					Thorium-228	0.88	0.48	0.32		
					Thorium-230	2.18	0.77	0.27		
					Thorium-232	0.61	0.39	0.32		
					Uranium-235	0.06	0.14	0.24		
					Uranium-238	2.04	0.39	0.37		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft <sup>1</sup> bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD75723	SLD75723	03/17/03	0	0.5		Actinium-227	0.03	0.09	0.13	0.33
						Americium-241	0.01	0.03	0.05	
						Cesium-137	0.04	0.02	0.02	
						Potassium-40	9.39	0.69	0.16	
						Protactinium-231	0.14	0.36	0.56	
						Radium-226	2.31	0.09	0.05	
						Radium-228	0.73	0.06	0.05	
						Thorium-228	1.40	0.62	0.37	
						Thorium-230	3.22	1.00	0.28	
						Thorium-232	0.88	0.46	0.15	
						Uranium-235	0.35	0.17	0.28	
						Uranium-238	5.24	0.60	0.43	
						SLD75724	SLD75724	03/17/03	1.5	2.0
Americium-241	0.02	0.02	0.04							
Cesium-137	0.01	0.01	0.02							
Potassium-40	9.63	0.70	0.15							
Protactinium-231	0.36	0.33	0.54							
Radium-226	1.89	0.08	0.04							
Radium-228	0.65	0.05	0.04							
Thorium-228	0.39	0.35	0.20							
Thorium-230	2.56	1.00	0.37							
Thorium-232	0.86	0.54	0.37							
Uranium-235	0.17	0.15	0.26							
Uranium-238	1.53	0.43	0.37							
SLD75725	SLD75725	03/17/03	2.5	3.0						
						Americium-241	0.00	0.02	0.03	
						Cesium-137	0.01	0.01	0.01	
						Potassium-40	7.60	0.59	0.13	
						Protactinium-231	0.02	0.26	0.41	
						Radium-226	1.26	0.06	0.04	
						Radium-228	0.41	0.04	0.04	
						Thorium-228	0.33	0.30	0.17	
						Thorium-230	0.88	0.50	0.17	
						Thorium-232	0.38	0.31	0.17	
						Uranium-235	0.01	0.12	0.21	
						Uranium-238	1.01	0.26	0.29	
						SLD75726	SLD75726	04/08/03	0	0.5
Americium-241	0.07	0.04	0.06							
Cesium-137	0.11	0.04	0.02							
Potassium-40	7.43	0.72	0.26							
Protactinium-231	0.39	0.49	0.77							
Radium-226	2.60	0.11	0.07							
Radium-228	0.71	0.07	0.06							
Thorium-228	1.11	0.58	0.42							
Thorium-230	3.05	1.03	0.32							
Thorium-232	1.00	0.53	0.17							
Uranium-235	0.21	0.22	0.37							
Uranium-238	2.40	0.51	0.56							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft <sup>1</sup> bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD75726	SLD75727	04/08/03	0.5	1.0		Actinium-227	0.20	0.14	0.22	0.09
						Americium-241	0.03	0.04	0.07	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	11.97	1.11	0.34	
						Protactinium-231	0.17	0.59	0.91	
						Radium-226	2.69	0.12	0.07	
						Radium-228	0.95	0.09	0.08	
						Thorium-228	1.27	0.75	0.26	
						Thorium-230	2.91	1.21	0.48	
						Thorium-232	1.11	0.69	0.48	
						Uranium-235	0.01	0.27	0.45	
						Uranium-238	2.54	0.69	0.67	
						SLD75728	SLD75728	04/08/03	0	0.5
Americium-241	-0.01	0.04	0.06							
Cesium-137	0.09	0.02	0.03							
Potassium-40	7.02	0.68	0.25							
Protactinium-231	0.10	0.52	0.79							
Radium-226	3.09	0.12	0.07							
Radium-228	0.63	0.08	0.07							
Thorium-228	1.14	0.59	0.18							
Thorium-230	3.32	1.10	0.18							
Thorium-232	0.65	0.43	0.18							
Uranium-235	0.06	0.23	0.38							
Uranium-238	3.29	0.65	0.56							
Actinium-227	0.24	0.11	0.18	0.08						
Americium-241	0.03	0.04	0.06							
Cesium-137	0.01	0.02	0.03							
Potassium-40	13.17	1.05	0.30							
Protactinium-231	0.54	0.65	0.77							
Radium-226	1.97	0.10	0.07							
Radium-228	0.77	0.07	0.07							
Thorium-228	1.46	0.81	0.26							
Thorium-230	2.36	1.06	0.26							
Thorium-232	1.48	0.82	0.47							
Uranium-235	0.17	0.22	0.37							
Uranium-238	2.59	0.69	0.58							
Actinium-227	0.12	0.13	0.21	0.07						
Americium-241	0.07	0.05	0.07							
Cesium-137	0.00	0.02	0.03							
Potassium-40	12.89	1.07	0.32							
Protactinium-231	0.12	0.58	0.89							
Radium-226	2.37	0.11	0.08							
Radium-228	0.88	0.08	0.08							
Thorium-228	1.52	0.79	0.42							
Thorium-230	2.27	0.99	0.56							
Thorium-232	0.79	0.55	0.50							
Uranium-235	0.30	0.25	0.42							
Uranium-238	4.02	0.61	0.61							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD76911	SLD76911	05/28/03	0.2	0.5		Actinium-227	2.07	0.20	0.27	0.04
						Americium-241	0.15	0.17	0.26	
						Cesium-137	0.08	0.02	0.02	
						Potassium-40	14.42	1.01	0.20	
						Protactinium-231	0.39	0.52	0.78	
						Radium-226	1.44	0.07	0.06	
						Radium-228	0.87	0.06	0.06	
						Thorium-228	0.95	0.49	0.32	
						Thorium-230	1.87	0.70	0.14	
						Thorium-232	1.00	0.49	0.27	
						Uranium-235	0.00	0.22	0.38	
						Uranium-238	3.27	1.32	1.92	
						SLD76912	SLD76912	05/28/03	0.7	1.0
Americium-241	-0.76	0.52	0.83							
Cesium-137	0.07	0.05	0.07							
Potassium-40	11.16	1.18	0.81							
Protactinium-231	0.86	1.57	2.59							
Radium-226	38.66	1.08	0.20							
Radium-228	1.05	0.14	0.19							
Thorium-228	1.04	0.56	0.49							
Thorium-230	4.84	1.38	0.37							
Thorium-232	1.11	0.56	0.17							
Uranium-235	1.24	0.91	1.30							
Uranium-238	-0.32	3.86	6.32							
SLD76913	SLD76913	05/28/03	2.5	2.8						
						Americium-241	0.17	0.76	0.96	
						Cesium-137	0.01	0.05	0.08	
						Potassium-40	12.32	1.48	0.68	
						Protactinium-231	2.02	1.46	2.59	
						Radium-226	5.72	0.27	0.19	
						Radium-228	1.42	0.19	0.21	
						Thorium-228	2.13	0.79	0.15	
						Thorium-230	4.35	1.24	0.29	
						Thorium-232	1.63	0.67	0.28	
						Uranium-235	0.16	0.68	1.17	
						Uranium-238	4.63	4.64	7.10	
						SLD76914	SLD76914	05/28/03	5.2	5.5
Americium-241	0.17	0.17	0.25							
Cesium-137	-0.01	0.02	0.02							
Potassium-40	15.03	1.09	0.22							
Protactinium-231	0.68	0.55	0.85							
Radium-226	1.07	0.06	0.07							
Radium-228	0.64	0.06	0.07							
Thorium-228	1.14	0.53	0.14							
Thorium-230	1.27	0.56	0.27							
Thorium-232	1.32	0.58	0.27							
Uranium-235	-0.12	0.23	0.39							
Uranium-238	1.58	1.34	1.88							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD76918	SLD76918	05/28/03	0.2	0.5		Actinium-227	0.14	0.10	0.15	0.21
						Americium-241	-0.01	0.03	0.04	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	17.62	1.23	0.24	
						Protactinium-231	0.02	0.41	0.64	
						Radium-226	1.22	0.07	0.06	
						Radium-228	0.89	0.07	0.06	
						Thorium-228	1.77	0.70	0.15	
						Thorium-230	2.99	0.96	0.15	
						Thorium-232	1.07	0.52	0.15	
						Uranium-235	0.04	0.18	0.30	
						Uranium-238	1.16	0.53	0.41	
						SLD76919	SLD76919	05/28/03	1.7	2.0
Americium-241	0.03	0.25	0.37							
Cesium-137	0.03	0.02	0.04							
Potassium-40	11.64	0.93	0.33							
Protactinium-231	1.23	0.77	1.16							
Radium-226	5.30	0.19	0.09							
Radium-228	1.03	0.09	0.09							
Thorium-228	1.83	0.73	0.30							
Thorium-230	5.97	1.57	0.30							
Thorium-232	1.23	0.58	0.16							
Uranium-235	0.38	0.38	0.57							
Uranium-238	3.54	1.80	2.81							
SLD76920	SLD76920	05/28/03	3.2	3.5						
						Americium-241	-0.01	0.05	0.07	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	15.39	1.13	0.31	
						Protactinium-231	0.33	0.65	1.01	
						Radium-226	6.47	0.22	0.09	
						Radium-228	1.41	0.09	0.09	
						Thorium-228	1.89	0.72	0.32	
						Thorium-230	6.28	1.57	0.27	
						Thorium-232	1.46	0.61	0.15	
						Uranium-235	0.36	0.39	0.48	
						Uranium-238	4.26	0.71	0.67	
						SLD76921	SLD76921	05/28/03	5.2	5.3
Americium-241	0.02	0.03	0.05							
Cesium-137	-0.01	0.01	0.02							
Potassium-40	15.67	1.08	0.19							
Protactinium-231	0.25	0.35	0.57							
Radium-226	1.40	0.07	0.06							
Radium-228	0.82	0.06	0.06							
Thorium-228	1.55	0.66	0.16							
Thorium-230	1.65	0.68	0.16							
Thorium-232	1.10	0.55	0.30							
Uranium-235	-0.05	0.16	0.27							
Uranium-238	1.15	0.43	0.41							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD76942	SLD76942	06/02/03	0	0.3		Actinium-227	0.18	0.29	0.47	0.88
						Americium-241	0.15	0.22	0.35	
						Cesium-137	0.58	0.09	0.07	
						Potassium-40	9.33	1.44	0.86	
						Protactinium-231	-0.53	1.41	2.42	
						Radium-226	5.28	0.28	0.21	
						Radium-228	1.22	0.20	0.21	
						Thorium-228	1.14	0.58	0.51	
						Thorium-230	4.62	1.31	0.35	
						Thorium-232	2.60	0.90	0.29	
						Uranium-235	0.18	0.62	1.06	
						Uranium-238	3.72	2.66	2.86	
						SLD76943	SLD76943	06/02/03	0	
Americium-241	0.10	0.24	0.39							
Cesium-137	2.79	0.25	0.09							
Potassium-40	9.32	1.56	1.05							
Protactinium-231	1.06	1.63	2.66							
Radium-226	4.92	0.29	0.25							
Radium-228	1.73	0.22	0.25							
Thorium-228	1.58	0.65	0.27							
Thorium-230	4.02	1.15	0.27							
Thorium-232	1.66	0.66	0.15							
Uranium-235	-0.38	0.68	1.11							
Uranium-238	5.41	2.91	3.28							
SLD87283	SLD87283	05/18/05	0	0.5						Actinium-227
						Americium-241	0.04	0.05	0.09	
						Cesium-137	0.03	0.03	0.05	
						Potassium-40	3.63	0.74	0.38	
						Protactinium-231	0.16	0.80	1.31	
						Radium-226	1.28	0.37	0.12	
						Radium-228	0.05	0.12	0.21	
						Thorium-228	0.41	0.29	0.14	
						Thorium-230	1.51	0.61	0.26	
						Thorium-232	0.03	0.11	0.30	
						Uranium-235	-0.01	0.33	0.56	
						Uranium-238	-0.01	0.59	1.03	
						SLD87293	05/18/05	1	1.5	
	Americium-241	0.06	0.04	0.06						
	Cesium-137	-0.02	0.02	0.03						
	Potassium-40	19.48	1.19	0.26						
	Protactinium-231	0.39	0.55	0.80						
	Radium-226	1.76	0.43	0.07						
	Radium-228	0.97	0.07	0.10						
	Thorium-228	1.90	0.70	0.30						
Thorium-230	2.19	0.76	0.14							
Thorium-232	0.76	0.41	0.14							
Uranium-235	0.04	0.22	0.37							
Uranium-238	1.13	0.53	0.58							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD87283	SLD87326	06/16/05	1.5	2.0		Actinium-227	-0.27	0.28	0.40	0.18
						Americium-241	0.02	0.10	0.16	
						Cesium-137	0.08	0.04	0.04	
						Potassium-40	8.46	0.92	0.30	
						Protactinium-231	0.56	0.76	1.19	
						Radium-226	3.78	0.90	0.11	
						Radium-228	0.90	0.09	0.14	
						Thorium-228	0.77	0.45	0.34	
						Thorium-230	4.03	1.18	0.15	
						Thorium-232	1.39	0.62	0.34	
						Uranium-235	0.12	0.35	0.57	
						Uranium-238	2.50	1.27	1.41	
						SLD87325	06/16/05	2.5	3.0	
Americium-241	0.00	0.31	0.48							
Cesium-137	-0.04	0.06	0.08							
Potassium-40	10.65	1.70	0.89							
Protactinium-231	0.40	1.76	2.99							
Radium-226	10.77	2.58	0.30							
Radium-228	1.26	0.21	0.38							
Thorium-228	1.49	0.64	0.16							
Thorium-230	6.20	1.59	0.29							
Thorium-232	1.38	0.61	0.16							
Uranium-235	0.39	0.84	1.39							
Uranium-238	8.36	3.35	3.87							
SLD87324	06/16/05	4	4.5		Actinium-227					
					Americium-241	0.03	0.29	0.44		
					Cesium-137	0.04	0.05	0.08		
					Potassium-40	11.53	1.67	1.06		
					Protactinium-231	-0.91	1.66	2.69		
					Radium-226	9.66	2.32	0.28		
					Radium-228	1.25	0.21	0.38		
					Thorium-228	1.57	0.63	0.27		
					Thorium-230	7.40	1.75	0.14		
					Thorium-232	1.48	0.61	0.14		
					Uranium-235	0.91	1.02	1.30		
					Uranium-238	4.64	3.60	3.83		
					SLD87295	05/19/05	5	6.0		Actinium-227
Americium-241	0.05	0.10	0.16							
Cesium-137	-0.02	0.05	0.07							
Potassium-40	8.41	1.25	0.64							
Protactinium-231	0.05	1.39	2.24							
Radium-226	5.44	1.34	0.20							
Radium-228	0.84	0.16	0.23							
Thorium-228	0.78	0.41	0.28							
Thorium-230	3.73	1.03	0.29							
Thorium-232	0.84	0.42	0.24							
Uranium-235	0.32	0.58	0.99							
Uranium-238	3.57	1.15	1.50							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD87283	SLD87283	06/16/05	5	5.5		Actinium-227	0.12	0.53	0.91	0.45
						Americium-241	-0.12	0.27	0.41	
						Cesium-137	0.02	0.05	0.08	
						Potassium-40	11.77	1.71	0.74	
						Protactinium-231	-1.23	1.67	2.68	
						Radium-226	7.88	1.93	0.26	
						Radium-228	1.34	0.23	0.34	
						Thorium-228	1.13	0.53	0.15	
						Thorium-230	5.47	1.42	0.27	
						Thorium-232	0.95	0.48	0.27	
						Uranium-235	-0.04	0.72	1.16	
						Uranium-238	5.67	3.30	3.26	
	SLD87294	05/18/05	6.5	7.0		Actinium-227	-0.08	0.19	0.30	0.02
						Americium-241	0.00	0.04	0.06	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	20.14	1.25	0.29	
						Protactinium-231	0.92	0.59	0.91	
						Radium-226	1.75	0.43	0.08	
						Radium-228	1.31	0.08	0.11	
						Thorium-228	1.82	0.67	0.14	
						Thorium-230	1.67	0.64	0.14	
						Thorium-232	0.76	0.41	0.14	
SLD87284	SLD87291	05/18/05	0	0.5		Actinium-227	0.72	0.11	0.29	0.15
						Americium-241	0.05	0.04	0.07	
						Cesium-137	0.10	0.02	0.02	
						Potassium-40	7.65	0.65	0.21	
						Protactinium-231	0.61	0.61	0.90	
						Radium-226	2.35	0.56	0.07	
						Radium-228	0.59	0.06	0.09	
						Thorium-228	0.60	0.36	0.24	
						Thorium-230	2.02	0.70	0.28	
						Thorium-232	0.38	0.28	0.13	
						Uranium-235	0.52	0.23	0.39	
						Uranium-238	8.01	0.81	0.64	
	SLD87290	05/18/05	1.5	2.0		Actinium-227	0.07	0.19	0.32	0.09
						Americium-241	0.04	0.05	0.07	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	21.78	1.34	0.28	
						Protactinium-231	0.48	0.58	0.87	
						Radium-226	1.73	0.43	0.08	
						Radium-228	1.19	0.08	0.10	
						Thorium-228	1.51	0.60	0.33	
						Thorium-230	1.68	0.63	0.24	
						Thorium-232	0.63	0.36	0.13	
Uranium-235	0.38	0.20	0.41							
Uranium-238	5.21	0.68	0.67							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD87284	SLD87292	05/18/05	2	2.5		Actinium-227	0.54	0.60	0.66	0.10
						Americium-241	0.10	0.09	0.14	
						Cesium-137	0.03	0.04	0.07	
						Potassium-40	11.35	1.34	0.53	
						Protactinium-231	-0.20	1.25	1.74	
						Radium-226	2.09	0.58	0.17	
						Radium-228	0.75	0.13	0.20	
						Thorium-228	0.53	0.33	0.23	
						Thorium-230	2.27	0.73	0.12	
						Thorium-232	0.82	0.41	0.12	
						Uranium-235	0.44	0.47	0.82	
						Uranium-238	5.45	1.53	1.33	
SLD87285	SLD87285	05/19/05	0	0.5		Actinium-227	-0.18	0.33	0.53	0.00
						Americium-241	0.04	0.07	0.11	
						Cesium-137	0.01	0.03	0.05	
						Potassium-40	3.75	0.75	0.38	
						Protactinium-231	-0.15	0.92	1.46	
						Radium-226	1.40	0.41	0.12	
						Radium-228	0.21	0.20	0.23	
						Thorium-228	0.16	0.22	0.38	
						Thorium-230	1.63	0.70	0.17	
						Thorium-232	0.13	0.18	0.17	
						Uranium-235	0.23	0.38	0.66	
						Uranium-238	1.39	0.99	0.96	
	SLD87296	05/19/05	1	1.5		Actinium-227	-0.10	0.24	0.38	0.00
						Americium-241	0.02	0.05	0.08	
						Cesium-137	0.01	0.03	0.05	
						Potassium-40	1.51	0.44	0.39	
						Protactinium-231	-0.33	0.69	1.07	
						Radium-226	0.86	0.27	0.12	
						Radium-228	0.07	0.09	0.18	
						Thorium-228	0.09	0.18	0.24	
						Thorium-230	0.61	0.49	0.45	
						Thorium-232	-0.02	0.05	0.45	
						Uranium-235	-0.02	0.28	0.47	
						Uranium-238	0.60	0.69	0.73	
	SLD87297	05/19/05	4	4.5		Actinium-227	-0.02	0.13	0.21	0.01
						Americium-241	0.03	0.03	0.04	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	12.61	0.81	0.16	
						Protactinium-231	0.31	0.40	0.59	
						Radium-226	1.10	0.28	0.05	
Radium-228						0.81	0.05	0.07		
Thorium-228						1.48	0.60	0.34		
Thorium-230						2.16	0.75	0.25		
Thorium-232						0.86	0.44	0.14		
Uranium-235						0.10	0.17	0.28		
Uranium-238						1.20	0.44	0.44		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD87285	SLD87298	05/19/05	7.5	8.0		Actinium-227	-0.04	0.16	0.26	0.01
						Americium-241	0.02	0.04	0.05	
						Cesium-137	-0.01	0.02	0.03	
						Potassium-40	17.85	1.11	0.25	
						Protactinium-231	0.29	0.52	0.76	
						Radium-226	1.24	0.31	0.07	
						Radium-228	0.85	0.07	0.09	
						Thorium-228	1.12	0.53	0.27	
						Thorium-230	2.03	0.75	0.32	
						Thorium-232	1.03	0.50	0.15	
						Uranium-235	0.14	0.20	0.34	
						Uranium-238	1.49	0.54	0.53	
SLD87286	SLD87286	05/23/05	0	0.5		Actinium-227	0.23	0.28	0.48	0.00
						Americium-241	0.09	0.07	0.11	
						Cesium-137	-0.02	0.03	0.04	
						Potassium-40	0.84	0.65	0.40	
						Protactinium-231	-0.50	0.88	1.36	
						Radium-226	1.03	0.32	0.13	
						Radium-228	0.03	0.12	0.21	
						Thorium-228	0.13	0.16	0.12	
						Thorium-230	1.34	0.54	0.23	
						Thorium-232	0.09	0.13	0.12	
						Uranium-235	-0.05	0.35	0.59	
						Uranium-238	0.95	0.94	1.02	
	SLD87306	05/23/05	1	1.5		Actinium-227	0.29	0.61	0.90	0.53
						Americium-241	0.02	0.13	0.19	
						Cesium-137	0.34	0.09	0.10	
						Potassium-40	8.30	1.42	0.81	
						Protactinium-231	-1.42	1.56	2.50	
						Radium-226	8.21	1.99	0.25	
						Radium-228	0.77	0.18	0.30	
						Thorium-228	1.24	0.58	0.34	
Thorium-230	4.89	1.35	0.16							
Thorium-232	0.85	0.47	0.29							
Uranium-235	0.97	1.16	1.21							
Uranium-238	9.89	2.05	1.78							
SLD87307	05/23/05	3.5	4.0		Actinium-227	-0.45	0.54	0.82	0.26	
					Americium-241	-0.01	0.12	0.17		
					Cesium-137	0.01	0.05	0.08		
					Potassium-40	8.91	1.67	0.68		
					Protactinium-231	0.38	1.54	2.36		
					Radium-226	4.50	1.16	0.26		
					Radium-228	1.41	0.21	0.31		
					Thorium-228	0.99	0.53	0.36		
					Thorium-230	4.84	1.37	0.36		
					Thorium-232	1.96	0.77	0.30		
Uranium-235	-0.18	0.63	1.01							
Uranium-238	2.12	1.74	1.65							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD87286	SLD87308	05/23/05	4.5	5.0		Actinium-227	0.11	0.21	0.32	0.01
						Americium-241	-0.05	0.04	0.06	
						Cesium-137	-0.02	0.02	0.03	
						Potassium-40	18.05	1.14	0.25	
						Protactinium-231	-0.03	0.57	0.85	
						Radium-226	1.44	0.37	0.08	
						Radium-228	1.05	0.08	0.12	
						Thorium-228	0.77	0.39	0.12	
						Thorium-230	1.13	0.49	0.23	
						Thorium-232	0.98	0.45	0.27	
						Uranium-235	-0.08	0.23	0.38	
						Uranium-238	1.16	0.58	0.57	
						SLD87309	05/23/05	6	6.5	
Americium-241	-0.02	0.10	0.14							
Cesium-137	-0.03	0.06	0.08							
Potassium-40	16.04	1.91	0.71							
Protactinium-231	0.93	1.28	2.07							
Radium-226	1.56	0.48	0.19							
Radium-228	1.11	0.18	0.23							
Thorium-228	1.19	0.52	0.32							
Thorium-230	1.97	0.09	0.24							
Thorium-232	0.66	0.37	0.13							
Uranium-235	0.11	0.49	0.81							
Uranium-238	1.97	1.68	1.28							
SLD87318	05/23/05	6.5	7.0		Actinium-227					
					Americium-241	-0.03	0.04	0.07		
					Cesium-137	-0.01	0.01	0.02		
					Potassium-40	2.19	0.38	0.15		
					Protactinium-231	0.11	0.34	0.59		
					Radium-226	0.80	0.22	0.05		
					Radium-228	0.12	0.04	0.07		
					Thorium-228	0.12	0.24	0.49		
					Thorium-230	1.40	0.73	0.22		
					Thorium-232	-0.04	0.06	0.49		
					Uranium-235	0.09	0.16	0.27		
					Uranium-238	0.32	0.42	0.74		
					SLD87319	05/23/05	7.5	8.0		Actinium-227
Americium-241	0.03	0.09	0.14							
Cesium-137	-0.01	0.02	0.04							
Potassium-40	17.66	1.34	0.22							
Protactinium-231	0.00	0.67	1.00							
Radium-226	1.56	0.41	0.11							
Radium-228	1.12	0.10	0.11							
Thorium-228	1.74	0.68	0.32							
Thorium-230	2.25	0.79	0.15							
Thorium-232	0.90	0.47	0.27							
Uranium-235	-0.16	0.28	0.44							
Uranium-238	1.72	1.05	1.20							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD87287	SLD87287	05/23/05	0	0.5		Actinium-227	-0.16	0.30	0.48	0.01
						Americium-241	0.01	0.07	0.10	
						Cesium-137	0.01	0.03	0.05	
						Potassium-40	3.57	0.73	0.47	
						Protactinium-231	-0.19	0.87	1.39	
						Radium-226	2.27	0.59	0.14	
						Radium-228	0.44	0.09	0.17	
						Thorium-228	0.78	0.41	0.28	
						Thorium-230	1.75	0.64	0.13	
						Thorium-232	0.22	0.22	0.24	
						Uranium-235	0.02	0.38	0.65	
						Uranium-238	2.04	1.24	0.97	
						SLD87299	SLD87299	05/23/05	0.5	1.0
Americium-241	0.05	0.09	0.14							
Cesium-137	0.03	0.04	0.07							
Potassium-40	6.53	0.96	0.48							
Protactinium-231	0.66	1.28	1.89							
Radium-226	3.27	0.84	0.16							
Radium-228	0.55	0.15	0.20							
Thorium-228	0.82	0.42	0.28							
Thorium-230	2.18	0.73	0.24							
Thorium-232	0.37	0.27	0.13							
Uranium-235	0.07	0.48	0.81							
Uranium-238	2.84	1.37	1.26							
SLD87301	SLD87301	05/23/05	3	3.5						
						Americium-241	0.05	0.11	0.17	
						Cesium-137	-0.02	0.05	0.07	
						Potassium-40	11.55	1.82	0.72	
						Protactinium-231	0.94	1.74	2.39	
						Radium-226	6.60	1.59	0.23	
						Radium-228	1.31	0.18	0.29	
						Thorium-228	1.70	0.67	0.31	
						Thorium-230	5.40	1.39	0.14	
						Thorium-232	1.05	0.50	0.14	
						Uranium-235	0.20	0.62	1.05	
						Uranium-238	5.02	1.77	1.70	
						SLD87302	SLD87302	05/23/05	4.5	5.0
Americium-241	0.00	0.03	0.04							
Cesium-137	-0.01	0.01	0.02							
Potassium-40	11.57	0.75	0.17							
Protactinium-231	0.24	0.42	0.65							
Radium-226	1.02	0.26	0.06							
Radium-228	0.62	0.06	0.08							
Thorium-228	0.56	0.32	0.12							
Thorium-230	1.04	0.45	0.12							
Thorium-232	0.55	0.32	0.22							
Uranium-235	0.04	0.16	0.27							
Uranium-238	0.46	0.30	0.51							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD87287	SLD87303	05/23/05	6.5	7.0		Actinium-227	-0.01	0.55	0.87	0.18
						Americium-241	0.09	0.12	0.18	
						Cesium-137	-0.02	0.06	0.10	
						Potassium-40	12.93	1.91	0.95	
						Protactinium-231	2.38	2.11	2.57	
						Radium-226	4.48	1.17	0.23	
						Radium-228	1.31	0.20	0.34	
						Thorium-228	1.26	0.57	0.28	
						Thorium-230	2.82	0.92	0.15	
						Thorium-232	1.32	0.58	0.15	
						Uranium-235	0.40	0.65	1.10	
						Uranium-238	3.65	1.71	1.56	
	SLD87304	05/23/05	9	9.5		Actinium-227	-0.10	0.70	1.10	0.34
						Americium-241	0.03	0.14	0.20	
						Cesium-137	-0.03	0.06	0.10	
						Potassium-40	10.86	1.96	1.05	
						Protactinium-231	-0.51	1.79	2.59	
						Radium-226	6.00	1.54	0.28	
						Radium-228	1.37	0.21	0.34	
						Thorium-228	1.50	0.64	0.34	
						Thorium-230	4.88	1.33	0.15	
						Thorium-232	1.30	0.59	0.15	
						Uranium-235	0.27	0.74	1.24	
						Uranium-238	6.25	1.81	1.75	
	SLD87305	05/23/05	10.3	10.8		Actinium-227	0.08	0.19	0.30	0.02
						Americium-241	-0.01	0.04	0.06	
						Cesium-137	0.01	0.02	0.03	
						Potassium-40	18.88	1.12	0.29	
						Protactinium-231	0.18	0.54	0.83	
						Radium-226	1.44	0.37	0.07	
						Radium-228	0.93	0.08	0.11	
						Thorium-228	1.08	0.49	0.13	
						Thorium-230	1.07	0.49	0.25	
Thorium-232						1.42	0.58	0.13		
Uranium-235						0.20	0.22	0.38		
Uranium-238						1.24	0.62	0.56		
SLD87288	SLD87288	05/24/05	0	0.5		Actinium-227	0.04	0.30	0.49	0.24
						Americium-241	0.04	0.08	0.12	
						Cesium-137	0.32	0.05	0.04	
						Potassium-40	6.19	0.90	0.36	
						Protactinium-231	0.29	0.88	1.28	
						Radium-226	2.09	0.54	0.11	
						Radium-228	0.51	0.09	0.14	
						Thorium-228	0.57	0.36	0.30	
						Thorium-230	2.22	0.75	0.13	
						Thorium-232	0.59	0.35	0.13	
						Uranium-235	0.74	0.44	0.64	
						Uranium-238	10.55	1.45	1.06	

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of Ratios Value <sup>5</sup>
SLD87288	SLD87310	05/24/05	0.5	1.0		Actinium-227	0.15	0.42	0.62	0.64
						Americium-241	-0.01	0.13	0.19	
						Cesium-137	0.53	0.08	0.06	
						Potassium-40	12.31	1.56	0.46	
						Protactinium-231	-0.62	1.33	1.79	
						Radium-226	3.50	0.88	0.17	
						Radium-228	0.85	0.14	0.19	
						Thorium-228	1.69	0.64	0.29	
						Thorium-230	3.11	0.93	0.29	
						Thorium-232	0.97	0.46	0.25	
						Uranium-235	1.52	0.57	0.86	
						Uranium-238	29.72	2.71	1.64	
						SLD87320	05/24/05	1	1.5	
Americium-241	-0.04	0.12	0.18							
Cesium-137	0.00	0.03	0.05							
Potassium-40	12.94	1.21	0.40							
Protactinium-231	0.76	0.84	1.33							
Radium-226	3.66	0.89	0.13							
Radium-228	1.07	0.10	0.15							
Thorium-228	1.18	0.53	0.14							
Thorium-230	2.96	0.92	0.31							
Thorium-232	1.08	0.50	0.14							
Uranium-235	0.33	0.39	0.66							
Uranium-238	4.38	1.69	1.62							
SLD87321	05/24/05	2.5	3.0		Actinium-227					
					Americium-241	-0.01	0.08	0.13		
					Cesium-137	-0.02	0.02	0.03		
					Potassium-40	15.25	1.29	0.33		
					Protactinium-231	0.22	0.69	1.05		
					Radium-226	1.30	0.35	0.09		
					Radium-228	0.91	0.09	0.12		
					Thorium-228	1.50	0.59	0.13		
					Thorium-230	1.60	0.61	0.13		
					Thorium-232	0.83	0.36	0.13		
					Uranium-235	-0.01	0.29	0.46		
					Uranium-238	0.54	0.76	1.33		
					SLD87311	05/24/05	3	3.5		Actinium-227
Americium-241	0.03	0.07	0.11							
Cesium-137	-0.01	0.03	0.05							
Potassium-40	16.31	1.52	0.46							
Protactinium-231	-0.18	1.04	1.43							
Radium-226	1.62	0.45	0.12							
Radium-228	0.95	0.12	0.16							
Thorium-228	0.86	0.43	0.13							
Thorium-230	1.37	0.56	0.24							
Thorium-232	0.60	0.36	0.29							
Uranium-235	0.50	0.39	0.69							
Uranium-238	1.54	1.27	0.98							

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD87288	SLD87312	05/24/05	5	5.5		Actinium-227	0.06	0.15	0.25	0.01
						Americium-241	0.00	0.04	0.06	
						Cesium-137	-0.01	0.02	0.02	
						Potassium-40	17.40	1.10	0.20	
						Protactinium-231	0.53	0.44	0.68	
						Radium-226	1.43	0.36	0.06	
						Radium-228	0.96	0.06	0.07	
						Thorium-228	1.46	0.60	0.34	
						Thorium-230	1.74	0.66	0.25	
						Thorium-232	1.25	0.54	0.14	
						Uranium-235	-0.13	0.20	0.32	
						Uranium-238	1.32	0.63	0.51	
	SLD87317	05/24/05	5.5	6.0		Actinium-227	-0.24	0.32	0.47	0.00
						Americium-241	0.00	0.08	0.11	
						Cesium-137	-0.03	0.03	0.04	
						Potassium-40	14.05	1.45	0.36	
						Protactinium-231	-0.44	0.91	1.37	
						Radium-226	1.50	0.43	0.14	
						Radium-228	0.91	0.13	0.19	
						Thorium-228	1.68	0.62	0.13	
						Thorium-230	1.38	0.56	0.28	
						Thorium-232	1.15	0.50	0.23	
						Uranium-235	-0.07	0.35	0.58	
						Uranium-238	1.00	0.96	1.04	
	SLD87316	05/24/05	6	6.5		Actinium-227	0.02	0.08	0.14	0.00
						Americium-241	0.02	0.02	0.03	
						Cesium-137	0.00	0.01	0.01	
						Potassium-40	5.52	0.41	0.11	
						Protactinium-231	0.02	0.25	0.35	
						Radium-226	1.05	0.25	0.03	
						Radium-228	0.33	0.03	0.04	
						Thorium-228	0.40	0.28	0.12	
						Thorium-230	1.08	0.47	0.12	
						Thorium-232	0.31	0.24	0.12	
						Uranium-235	0.03	0.11	0.18	
						Uranium-238	0.72	0.27	0.29	
	SLD87313	05/24/05	8	8.5		Actinium-227	-0.13	0.13	0.19	0.00
						Americium-241	0.00	0.03	0.05	
						Cesium-137	-0.01	0.01	0.02	
						Potassium-40	17.40	1.00	0.13	
						Protactinium-231	0.15	0.38	0.55	
						Radium-226	1.35	0.33	0.05	
Radium-228						0.92	0.05	0.07		
Thorium-228						1.12	0.49	0.24		
Thorium-230						1.11	0.49	0.28		
Thorium-232						0.94	0.45	0.13		
Uranium-235						0.19	0.19	0.26		
Uranium-238						1.31	0.54	0.44		

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Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD87288	SLD87314	05/24/05	9.5	10.0		Actinium-227	0.00	0.14	0.23	0.00
						Americium-241	0.01	0.04	0.06	
						Cesium-137	0.00	0.01	0.02	
						Potassium-40	17.64	1.06	0.15	
						Protactinium-231	0.22	0.42	0.61	
						Radium-226	1.34	0.33	0.06	
						Radium-228	0.93	0.06	0.07	
						Thorium-228	1.05	0.45	0.25	
						Thorium-230	1.31	0.51	0.21	
						Thorium-232	0.82	0.39	0.11	
						Uranium-235	0.03	0.20	0.29	
						Uranium-238	1.37	0.54	0.50	
	SLD87315	05/24/05	10	10.5		Actinium-227	-0.11	0.16	0.24	0.00
						Americium-241	0.04	0.04	0.06	
						Cesium-137	0.00	0.02	0.03	
						Potassium-40	18.29	1.12	0.21	
						Protactinium-231	0.37	0.53	0.70	
						Radium-226	1.43	0.36	0.07	
						Radium-228	0.94	0.07	0.08	
						Thorium-228	0.90	0.41	0.25	
						Thorium-230	1.50	0.55	0.11	
						Thorium-232	0.87	0.40	0.11	
SLD87322	SLD87322	06/16/05	0	0.5		Actinium-227	0.07	0.20	0.35	0.05
						Americium-241	0.13	0.09	0.15	
						Cesium-137	-0.02	0.02	0.03	
						Potassium-40	13.06	1.06	0.17	
						Protactinium-231	0.11	0.65	0.98	
						Radium-226	2.01	0.51	0.08	
						Radium-228	0.95	0.08	0.12	
						Thorium-228	0.79	0.41	0.31	
						Thorium-230	1.68	0.62	0.23	
						Thorium-232	1.01	0.46	0.12	
SLD87327	SLD87327	06/16/05	1	1.5		Actinium-227	-0.08	0.44	0.74	0.12
						Americium-241	-0.01	0.20	0.31	
						Cesium-137	0.00	0.05	0.07	
						Potassium-40	18.40	2.13	0.63	
						Protactinium-231	1.20	1.22	2.02	
						Radium-226	2.93	0.80	0.19	
						Radium-228	1.39	0.19	0.23	
						Thorium-228	1.04	0.50	0.30	
						Thorium-230	2.78	0.88	0.26	
						Thorium-232	1.70	0.65	0.30	
	Uranium-235	-0.01	0.59	0.96						
	Uranium-238	2.88	2.35	2.55						

Table C-1  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

Page 202 of 203

Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
SLD87322	SLD87328	06/16/05	1.5	2.0		Actinium-227	-0.23	0.38	0.62	0.06
						Americium-241	-0.02	0.20	0.31	
						Cesium-137	0.01	0.04	0.07	
						Potassium-40	20.86	2.31	0.53	
						Protactinium-231	-0.36	1.29	1.84	
						Radium-226	1.79	0.53	0.20	
						Radium-228	1.32	0.18	0.26	
						Thorium-228	1.10	0.49	0.31	
						Thorium-230	1.81	0.64	0.12	
						Thorium-232	0.72	0.38	0.12	
						Uranium-235	0.02	0.53	0.85	
						Uranium-238	3.41	2.54	2.37	
						SLD87329	06/16/05	2.5	3.0	
	Americium-241	0.06	0.17	0.29						
	Cesium-137	0.00	0.05	0.07						
	Potassium-40	20.07	2.18	0.62						
	Protactinium-231	-0.53	1.23	1.73						
	Radium-226	1.73	0.51	0.18						
	Radium-228	1.31	0.18	0.22						
	Thorium-228	1.97	0.74	0.28						
	Thorium-230	2.32	0.81	0.15						
	Thorium-232	1.54	0.64	0.15						
	Uranium-235	0.17	0.52	0.86						
	Uranium-238	0.63	1.54	2.68						
	SLD87330	06/16/05	3.5	4.0						
						Americium-241	0.05	0.17	0.27	
						Cesium-137	-0.01	0.04	0.06	
						Potassium-40	17.77	2.02	0.62	
						Protactinium-231	0.87	1.03	1.69	
						Radium-226	1.63	0.49	0.16	
						Radium-228	1.29	0.16	0.21	
						Thorium-228	1.28	0.50	0.21	
						Thorium-230	1.75	0.60	0.11	
						Thorium-232	1.04	0.44	0.11	
						Uranium-235	0.23	0.48	0.80	
						Uranium-238	1.70	1.43	2.59	
						SLD87331	06/16/05	4	4.5	
	Americium-241	0.05	0.11	0.17						
	Cesium-137	-0.01	0.03	0.04						
	Potassium-40	18.57	1.49	0.35						
	Protactinium-231	-0.78	0.70	1.09						
Radium-226	1.79	0.47	0.12							
Radium-228	1.39	0.12	0.16							
Thorium-228	1.09	0.49	0.24							
Thorium-230	1.83	0.66	0.13							
Thorium-232	1.62	0.62	0.24							
Uranium-235	-0.13	0.33	0.53							
Uranium-238	1.97	1.19	1.43							

**Table C-1**  
**PSC Metals Vicinity Property (DT-8)**  
**Pre-Design Investigation Radiological Data Results**

Page 203 of 203

Sample Location	Sample Identification Number	Collection Date	Start Depth (ft 'bgs) <sup>2</sup>	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result <sup>3</sup> (pCi/g) <sup>4</sup>	Error	Detection Limit (pCi/g)	Sum of <sup>5</sup> Ratios Value
-----------------	------------------------------	-----------------	------------------------------------	--------------------	----------------------------------	-----------	--	-------	-------------------------	----------------------------------

<sup>1</sup> ft - feet

<sup>2</sup> bgs - below ground surface

<sup>3</sup> Analytical data includes background values (i.e., concentrations reflect gross radionuclide values)

<sup>4</sup> pCi/g - Picocuries per gram

<sup>5</sup> Prior to calculating the SOR, background values for each radionuclide were subtracted from their respective gross radionuclide values

Background Values:

Radium-226 =	2.78 pCi/g
Radium-228 =	.95 pCi/g
Thorium-230 =	1.94 pCi/g
Thorium-232 =	1.09 pCi/g
Uranium-238 =	1.44 pCi/g

If Detection Limit exceeds Result, ½ of Detection Limit was substituted for Result value in the SOR calculation.

*Samples in italics indicate MDA > Result*

***Appendix D***

Laboratory Report for Waste Characterization Samples

**SEVERN  
TRENT**

**SERVICES**

STL St. Louis  
13715 R.der Trail North  
Earth City, MO 63045

Tel 314 298 8566  
Fax 314 298 8757  
www.stl-tnc.com

## ANALYTICAL REPORT

St. Louis FUSRAP

Lot #: FOL070285

Vic Samargian

SAIC  
500 Northwest Plaza  
Suite 1250  
St Ann, MO 63074

SEVERN TRENT LABORATORIES, INC.



John D. Powell  
Project Manager

January 8, 2001

## Case Narrative

LOT NUMBER: F0L070285

This report contains the analytical results for the sample received under chain of custody by STL St. Louis on December 7, 2000. This sample is associated with your St. Louis FUSRAP project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

This report is incomplete without the case narrative.

### Observations/Nonconformances

#### Affected Samples:

1: SLD06650

#### Affected Methods:

7.3.3

#### Case Narrative:

Reactive CN LCS had 0% recovery. Confirmed with prep analyst that LCS was positively spiked.

#### Affected Samples:

1: SLD06650

#### Affected Methods:

7470A

#### Case Narrative:

The SOP requires a ICB to be analyzed immediately after the ICV. The correct sequence is ICV,ICB,CRA. Instead the analyst ran ICV, CRA, a non reported QC, ICB. Since this is a deviation from the SOP a nonconformance was initiated

#### Affected Samples:

1: SLD06650

#### Affected Methods:

7470A

#### Case Narrative:

The TCLP procedure requires the samples to be spiked before preservation. Since the initial MS/MSD spikes before preservation were prepped at the wrong level the samples were spiked at the correct level after preservation.

**Affected Samples:**

1: SLD06650

**Affected Methods:**

8081A

**Case Narrative:**

Batch QC for TCLP pesticides consisted of LCS and LCS duplicate.

**Affected Samples:**

1: SLD06650

**Affected Methods:**

8270C

**Case Narrative:**

For organic extraction batch (0349201), the water method blank (DRDX11AA) for TCLP analysis has confirmed low recovery for the surrogates (2-Fluorophenol and Nitrobenzene-d5). It is noted that the extraction-fluid blank (DRDX11AE) had all of its surrogates and internal standards in-control.

**Affected Samples:**

1: SLD06650

**Affected Methods:**

6010B

**Case Narrative:**

The serial dilution for copper and zinc was outside of stated control limits and flagged appropriately.

**Affected Samples:**

1: SLD06650

**Affected Methods:**

8082

**Case Narrative:**

TCMX and DCB were biased high on the primary column CCALs, however, the average %D was less than 15%, which is acceptable per method.

TCMX and DCB were biased high on the confirmation column CCALs, however, this column was not used for quantitation.

**Affected Samples:**

1: SLD06650

**Affected Methods:**

8082

**Case Narrative:**

The sample required a 10 X dilution to bring the analyte response within the calibration range. Subsequently, the surrogate spikes were diluted out and recoveries could not be evaluated.

**Affected Samples:**

1: SLD06650

**Affected Methods:**

8270C

**Case Narrative:**

The surrogate in the blank was not within the QC limits. Since there was a TCLP blank associated with the batch, all other QC criteria was met, the data is reported.

## METHODS SUMMARY

F0L070285

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
pH Non-Aqueous	SW846 9045A	
Chlorinated Herbicides by GC	SW846 8151A	SW846 1311/8150
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 1311/3010
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 1311/7470
Organochlorine Pesticides	SW846 8081A	SW846 1311/3510
Paint Filter Test	SW846 9095	SW846 9095
Pensky-Martens Method for Determining Ignitability	SW846 1010	SW846 1010
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
PCBs by SW-846 8082	SW846 8082	SW846 3550
Reactive Cyanide	SW846 7.3.3	SW846 7.3.3
Reactive Sulfide	SW846 7.3.4	SW846 7.3.4
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 1311/3510
Total Cyanide	SW846 9010A	SW846 9010A
Total Organic Halogens	SW846 9020A	
Volatile Organics by GC/MS	SW846 8260B	SW846 1311/5030

### References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes",  
EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical  
Methods", Third Edition, November 1986 and its updates.

**SAMPLE SUMMARY**

FOLO70285

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
DQ2JX	001	SLD06650	12/06/00	12:44

**NOTE(S) :**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

SAIC

Client Sample ID: SLD06650

GC Semivolatiles

Lot-Sample #...: F0L070285-001    Work Order #...: DQ2JX1A2    Matrix.....: SOLID  
 Date Sampled...: 12/06/00 12:44    Date Received...: 12/07/00  
 Prep Date.....: 12/08/00    Analysis Date...: 12/22/00  
 Prep Batch #...: 0343176    Analysis Time...: 01:32  
 Dilution Factor: 10  
 % Moisture.....: 15    Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	390	ug/kg
Aroclor 1221	ND	390	ug/kg
Aroclor 1232	ND	390	ug/kg
Aroclor 1242	ND	390	ug/kg
Aroclor 1248	ND	390	ug/kg
Aroclor 1254	ND	390	ug/kg
Aroclor 1260	2200	390	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Tetrachloro-m-xylene	0.0 DIL	(10 - 199)
Decachlorobiphenyl	0.0 DIL	(10 - 200)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.  
 Results and reporting limits have been adjusted for dry weight.

SAIC

Client Sample ID: SLD06650

TCLP GC Semivolatiles

Lot-Sample #...: F0L070285-001    Work Order #...: DQ2JX1AU    Matrix.....: SOLID  
 Date Sampled...: 12/06/00 12:44    Date Received...: 12/07/00  
 Leach Date.....: 12/11/00    Prep Date.....: 12/18/00    Analysis Date...: 12/20/00  
 Leach Batch #...: P034605    Prep Batch #...: 0353407    Analysis Time...: 22:42  
 Dilution Factor: 1  
 % Moisture.....: 15    Method.....: SW846 8081A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Chlordane (technical)	ND	5.0	ug/L
Endrin	ND	0.50	ug/L
gamma-BHC (Lindane)	ND	0.50	ug/L
Heptachlor	ND	0.50	ug/L
Heptachlor epoxide	ND	0.50	ug/L
Methoxychlor	ND	1.0	ug/L
Toxaphene	ND	20	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	74	(22 - 138)
Decachlorobiphenyl	94	(10 - 134)

NOTE(S) :

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

SAIC

Client Sample ID: SLD06650

TCLP GC/MS Volatiles

Lot-Sample #...: F0L070285-001    Work Order #...: DQ2JX1AX    Matrix.....: SOLID  
 Date Sampled...: 12/06/00 12:44    Date Received...: 12/07/00  
 Leach Date.....: 12/18/00    Prep Date.....: 12/21/00    Analysis Date...: 12/21/00  
 Leach Batch #...: P035404    Prep Batch #...: 0356205    Analysis Time...: 08:03  
 Dilution Factor: 1  
 % Moisture.....: 15    Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Vinyl chloride	ND	100	ug/L
1,1-Dichloroethene	ND	50	ug/L
2-Butanone	ND	200	ug/L
Chloroform	ND	50	ug/L
Carbon tetrachloride	ND	50	ug/L
1,2-Dichloroethane	ND	50	ug/L
Benzene	ND	50	ug/L
Trichloroethene	ND	50	ug/L
Tetrachloroethene	ND	50	ug/L
Chlorobenzene	ND	50	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	103	(75 - 127)
Toluene-d8	94	(79 - 117)
4-Bromofluorobenzene	92	(60 - 119)
1,2-Dichloroethane-d4	99	(71 - 133)

NOTE (S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

SAIC

Client Sample ID: SLD06650

TCLP GC/MS Semivolatiles

Lot-Sample #...: F0L070285-001    Work Order #...: DQ2JX1AW    Matrix.....: SOLID  
 Date Sampled...: 12/06/00 12:44    Date Received...: 12/07/00  
 Leach Date.....: 12/12/00    Prep Date.....: 12/14/00    Analysis Date...: 12/19/00  
 Leach Batch #...: P034605    Prep Batch #...: 0349201    Analysis Time...: 09:56  
 Dilution Factor: 1  
 % Moisture.....: 15    Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Pyridine	ND	100	ug/L
1,4-Dichlorobenzene	ND	50	ug/L
2-Methylphenol	ND	50	ug/L
4-Methylphenol	ND	50	ug/L
Hexachloroethane	ND	50	ug/L
Nitrobenzene	ND	50	ug/L
Hexachlorobutadiene	ND	50	ug/L
2,4,6-Trichloro- phenol	ND	50	ug/L
2,4,5-Trichloro- phenol	ND	50	ug/L
2,4-Dinitrotoluene	ND	50	ug/L
Hexachlorobenzene	ND	50	ug/L
Pentachlorophenol	ND	250	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	50	(10 - 90 )
Phenol-d5	41	(10 - 91 )
Nitrobenzene-d5	76	(32 - 113)
2-Fluorobiphenyl	79	(32 - 110)
Terphenyl-d14	86	(22 - 106)
2,4,6-Tribromophenol	82	(22 - 133)

**NOTE(S) :**

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

SAIC

Client Sample ID: SLD06650

TCLP GC Semivolatiles

Lot-Sample #...: F0L070285-001 Work Order #...: DQ2JX1AV Matrix.....: SOLID  
Date Sampled...: 12/06/00 12:44 Date Received...: 12/07/00  
Leach Date.....: 12/11/00 Prep Date.....: 12/17/00 Analysis Date...: 12/20/00  
Leach Batch #...: P034605 Prep Batch #...: 0354435 Analysis Time...: 11:01  
Dilution Factor: 1  
% Moisture.....: 15 Method.....: SW846 8151A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
2,4-D	ND	40	ug/L
2,4,5-TP (Silvex)	ND	10	ug/L

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
2,4-Dichlorophenylacetic acid	91	(34 - 156)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

SAIC

Client Sample ID: SLD06650

General Chemistry

Lot-Sample #...: F0L070285-001    Work Order #...: DQ2JX    Matrix.....: SOLID  
 Date Sampled...: 12/06/00 12:44    Date Received...: 12/07/00  
 % Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH (solid)	9.3		No Units	SW846 9045A	12/28/00	0363473
				Dilution Factor: 1    Analysis Time...: 00:00		
Flashpoint	>60.0	25.0	deg C	SW846 1010	12/15/00	0350253
				Dilution Factor: 1    Analysis Time...: 00:00		
Paint Filter Test	PAS,S		No Units	SW846, 9095	12/18/00	0353451
				Dilution Factor: 1    Analysis Time...: 00:00		
Percent Moisture	14.9 %	0.10	%	MCAWW 160.3 MOD	12/08/00	0343381
				Dilution Factor: 1    Analysis Time...: 08:43		
Reactive Cyanide	ND	0.029	mg/kg	SW846 7.3.3	12/11/00	0346370
				Dilution Factor: 1    Analysis Time...: 12:00		
Reactive Sulfide	ND	5.2	mg/kg	SW846 7.3.4	12/15/00	0353493
				Dilution Factor: 1    Analysis Time...: 00:00		
Total Cyanide	0.36	0.29	mg/kg	SW846 9010A	12/18/00	0353482
				Dilution Factor: 1    Analysis Time...: 12:00		
TOX	65.3	58.7	mg/kg	SW846 9020A	12/21/00	0361184
				Dilution Factor: 1    Analysis Time...: 00:00		

NOTE (S) :

RL Reporting Limit

S The result was determined using the Method of Standard Additions (MSA).

Results and reporting limits have been adjusted for dry weight.

SAIC

Client Sample ID: SLD06650

TCLP Metals

Lot-Sample #...: FOL070285-001

Matrix.....: SOLID

Date Sampled...: 12/06/00 12:44 Date Received...: 12/07/00

Leach Date.....: 12/11/00 Leach Batch #...: P034605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0349167						
Mercury	ND B	1.0	ug/L	SW846 7470A	12/14-12/15/00	DQ2JX1AM
		Dilution Factor: 5		Analysis Time...: 16:18		
Prep Batch #...: 0349269						
Arsenic	ND	750	ug/L	SW846 6010B	12/14-12/15/00	DQ2JX1AC
		Dilution Factor: 2.5		Analysis Time...: 13:22		
Barium	955	500	ug/L	SW846 6010B	12/14-12/15/00	DQ2JX1AD
		Dilution Factor: 2.5		Analysis Time...: 13:22		
Cadmium	273	125	ug/L	SW846 6010B	12/14-12/15/00	DQ2JX1AE
		Dilution Factor: 2.5		Analysis Time...: 13:22		
Chromium	2.3 B	250	ug/L	SW846 6010B	12/14-12/15/00	DQ2JX1AF
		Dilution Factor: 2.5		Analysis Time...: 13:22		
Lead	101 B	250	ug/L	SW846 6010B	12/14-12/15/00	DQ2JX1AG
		Dilution Factor: 2.5		Analysis Time...: 13:22		
Silver	ND	250	ug/L	SW846 6010B	12/14-12/15/00	DQ2JX1AH
		Dilution Factor: 2.5		Analysis Time...: 13:22		
Selenium	6.5 B	125	ug/L	SW846 6010B	12/14-12/15/00	DQ2JX1AJ
		Dilution Factor: 2.5		Analysis Time...: 13:22		
Copper	254 BE	625	ug/L	SW846 6010B	12/14-12/15/00	DQ2JX1AK
		Dilution Factor: 2.5		Analysis Time...: 13:22		
Zinc	2960 E	500	ug/L	SW846 6010B	12/14-12/15/00	DQ2JX1AL
		Dilution Factor: 2.5		Analysis Time...: 13:22		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

E Matrix interference.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: FOL070285      Work Order #...: DQ3NT1AA      Matrix.....: SOLID  
 MB Lot-Sample #: FOL080000-176  
 Prep Date.....: 12/08/00      Analysis Time...: 07:22  
 Analysis Date...: 12/11/00      Prep Batch #...: 0343176  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	99	(10 - 199)
Decachlorobiphenyl	113	(10 - 200)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results

METHOD BLANK REPORT

TCLP GC/MS Volatiles

Client Lot #...: F0L070285      Work Order #...: DQ7M01AA      Matrix.....: SOLID  
 MB Lot-Sample #: F0L110000-242  
 Leach Date.....: 12/18/00      Prep Date.....: 12/21/00      Analysis Date...: 12/21/00  
 Leach Batch #...: P034601      Prep Batch #...: 0356205      Analysis Time...: 06:17  
 Dilution Factor: 1

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Vinyl chloride	ND	100	ug/L	SW846 8260B
1,1-Dichloroethene	ND	50	ug/L	SW846 8260B
2-Butanone	ND	200	ug/L	SW846 8260B
Chloroform	ND	50	ug/L	SW846 8260B
Carbon tetrachloride	ND	50	ug/L	SW846 8260B
1,2-Dichloroethane	ND	50	ug/L	SW846 8260B
Benzene	ND	50	ug/L	SW846 8260B
Trichloroethene	ND	50	ug/L	SW846 8260B
Tetrachloroethene	ND	50	ug/L	SW846 8260B
Chlorobenzene	ND	50	ug/L	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Dibromofluoromethane	105	(75 - 127)
Toluene-d8	94	(79 - 117)
4-Bromofluorobenzene	91	(60 - 119)
1,2-Dichloroethane-d4	100	(71 - 133)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: FOL070285  
 MB Lot-Sample #: FOL140000-201  
 Analysis Date...: 12/19/00  
 Dilution Factor: 1

Work Order #...: DRDX11AA  
 Prep Date.....: 12/14/00  
 Prep Batch #...: 0349201

Matrix.....: SOLID  
 Analysis Time...: 07:06

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Pyridine	ND	100	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	50	ug/L	SW846 8270C
2-Methylphenol	ND	50	ug/L	SW846 8270C
4-Methylphenol	ND	50	ug/L	SW846 8270C
Hexachloroethane	ND	50	ug/L	SW846 8270C
Nitrobenzene	ND	50	ug/L	SW846 8270C
Hexachlorobutadiene	ND	50	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	50	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	50	ug/L	SW846 8270C
Hexachlorobenzene	ND	50	ug/L	SW846 8270C
Pentachlorophenol	ND	250	ug/L	SW846 8270C
		PERCENT	RECOVERY	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>		
2-Fluorophenol	1.9 *	(10 - 90)		
Phenol-d5	14	(10 - 91)		
Nitrobenzene-d5	21 *	(32 - 113)		
2-Fluorobiphenyl	57	(32 - 110)		
Terphenyl-d14	85	(22 - 106)		
2,4,6-Tribromophenol	65	(22 - 133)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

- \* Surrogate recovery is outside stated control limits.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: FOL070285  
 MB Lot-Sample #: FOL140000-201  
 Analysis Date...: 12/19/00  
 Dilution Factor: 1

Work Order #...: DRDX11AE  
 Prep Date.....: 12/14/00  
 Prep Batch #...: 0349201

Matrix.....: SOLID  
 Analysis Time...: 07:40

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Pyridine	ND	100	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	50	ug/L	SW846 8270C
2-Methylphenol	ND	50	ug/L	SW846 8270C
4-Methylphenol	ND	50	ug/L	SW846 8270C
Hexachloroethane	ND	50	ug/L	SW846 8270C
Nitrobenzene	ND	50	ug/L	SW846 8270C
Hexachlorobutadiene	ND	50	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	50	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	50	ug/L	SW846 8270C
Hexachlorobenzene	ND	50	ug/L	SW846 8270C
Pentachlorophenol	ND	250	ug/L	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	82	(10 - 90)
Phenol-d5	84	(10 - 91)
Nitrobenzene-d5	83	(32 - 113)
2-Fluorobiphenyl	99	(32 - 110)
Terphenyl-d14	89	(22 - 106)
2,4,6-Tribromophenol	82	(22 - 133)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0L070285      Work Order #...: DRLRP1AA      Matrix.....: SOLID  
 MB Lot-Sample #: F0L180000-407  
 Prep Date.....: 12/18/00      Analysis Time...: 20:40  
 Analysis Date...: 12/20/00      Prep Batch #...: 0353407  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Chlordane (technical)	ND	5.0	ug/L	SW846 8081A
Endrin	ND	0.50	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.50	ug/L	SW846 8081A
Heptachlor	ND	0.50	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.50	ug/L	SW846 8081A
Methoxychlor	ND	1.0	ug/L	SW846 8081A
Toxaphene	ND	20	ug/L	SW846 8081A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	71	(22 - 138)
Decachlorobiphenyl	74	(10 - 134)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP GC/MS Volatiles

Client Lot #...: F0L070285      Work Order #...: DRMNQ1AA      Matrix.....: SOLID  
 MB Lot-Sample #: F0L190000-185  
 Leach Date.....: 12/18/00      Prep Date.....: 12/21/00      Analysis Date...: 12/21/00  
 Leach Batch #...: P035404      Prep Batch #...: 0356205      Analysis Time...: 02:45  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
Vinyl chloride	ND	100	ug/L	SW846 8260B
1,1-Dichloroethene	ND	50	ug/L	SW846 8260B
2-Butanone	ND	200	ug/L	SW846 8260B
Chloroform	ND	50	ug/L	SW846 8260B
Carbon tetrachloride	ND	50	ug/L	SW846 8260B
1,2-Dichloroethane	ND	50	ug/L	SW846 8260B
Benzene	ND	50	ug/L	SW846 8260B
Trichloroethene	ND	50	ug/L	SW846 8260B
Tetrachloroethene	ND	50	ug/L	SW846 8260B
Chlorobenzene	ND	50	ug/L	SW846 8260B

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluoromethane	100	(75 - 127)
Toluene-d8	90	(79 - 117)
4-Bromofluorobenzene	90	(60 - 119)
1,2-Dichloroethane-d4	95	(71 - 133)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F0L070285      Work Order #...: DRPG01AA      Matrix.....: SOLID  
MB Lot-Sample #: F0L190000-435  
Prep Date.....: 12/17/00      Analysis Time...: 09:44  
Analysis Date...: 12/20/00      Prep Batch #...: 0354435  
Dilution Factor: 1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
2,4-D	ND	40	ug/L	SW846 8151A
2,4,5-TP (Silvex)	ND	10	ug/L	SW846 8151A

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
2,4-Dichlorophenylacetic acid	93	(34 - 156)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F0L070285  
 MB Lot-Sample #: F0L210000-205  
 Analysis Date...: 12/21/00  
 Dilution Factor: 1

Work Order #...: DRTL81AA  
 Prep Date.....: 12/21/00  
 Prep Batch #...: 0356205

Matrix.....: SOLID  
 Analysis Time...: 00:59

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Vinyl chloride	ND	100	ug/L	SW846 8260B
1,1-Dichloroethene	ND	50	ug/L	SW846 8260B
2-Butanone	ND	200	ug/L	SW846 8260B
Chloroform	ND	50	ug/L	SW846 8260B
Carbon tetrachloride	ND	50	ug/L	SW846 8260B
1,2-Dichloroethane	ND	50	ug/L	SW846 8260B
Benzene	ND	50	ug/L	SW846 8260B
Trichloroethene	ND	50	ug/L	SW846 8260B
Tetrachloroethene	ND	50	ug/L	SW846 8260B
Chlorobenzene	ND	50	ug/L	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Dibromofluoromethane	92	(75 - 127)
Toluene-d8	88	(79 - 117)
4-Bromofluorobenzene	90	(60 - 119)
1,2-Dichloroethane-d4	91	(71 - 133)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results

METHOD BLANK REPORT

General Chemistry

Client Lot #....: FOL070285

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH (solid)	5.8	Work Order #: DR34R1AA	No Units	MB Lot-Sample #: SW846 9045A	FOL280000-473 12/28/00	0363473
		Dilution Factor: 1 Analysis Time...: 00:00				
Reactive Cyanide	ND	Work Order #: DQ7291AA	mg/kg	MB Lot-Sample #: SW846 7.3.3	FOL110000-370 12/11/00	0346370
		Dilution Factor: 1 Analysis Time...: 12:00				
Reactive Sulfide	ND	Work Order #: DRL5H1AA	mg/kg	MB Lot-Sample #: SW846 7.3.4	FOL180000-493 12/15/00	0353493
		Dilution Factor: 1 Analysis Time...: 00:00				
Total Cyanide	ND	Work Order #: DRL2F1AA	mg/kg	MB Lot-Sample #: SW846 9010A	FOL180000-482 12/18/00	0353482
		Dilution Factor: 1 Analysis Time...: 12:00				
TOX	ND	Work Order #: DR08M1AA	mg/kg	MB Lot-Sample #: SW846 9020A	FOL260000-184 12/21/00	0361184
		Dilution Factor: 1 Analysis Time...: 06:30				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: FOL070285

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MB Lot-Sample #: FOL110000-380 Prep Batch #...: 0349269						
Leach Date.....: 12/11/00 Leach Batch #...: P034605						
Arsenic	ND	750	ug/L	SW846 6010B	12/14-12/15/00	DQ73Q1AA
Dilution Factor: 2.5						
Analysis Time...: 13:13						
Barium	ND B	500	ug/L	SW846 6010B	12/14-12/15/00	DQ73Q1AC
Dilution Factor: 2.5						
Analysis Time...: 13:13						
***Cadmium	INVALID DATA ON FOLLOWING	25	ug/L***	SW846 6010B	12/14-12/15/00	DQ73Q1AD
Dilution Factor: 2.5						
Analysis Time...: 13:13						
***Chromium	INVALID DATA ON FOLLOWING	50	ug/L***	SW846 6010B	12/14-12/15/00	DQ73Q1AE
Dilution Factor: 2.5						
Analysis Time...: 13:13						
Lead	6.6 B	250	ug/L	SW846 6010B	12/14-12/15/00	DQ73Q1AF
Dilution Factor: 2.5						
Analysis Time...: 13:13						
***Silver	INVALID DATA ON FOLLOWING	50	ug/L***	SW846 6010B	12/14-12/15/00	DQ73Q1AG
Dilution Factor: 2.5						
Analysis Time...: 13:13						
Selenium	7.2 B	625	ug/L	SW846 6010B	12/14-12/15/00	DQ73Q1AH
Dilution Factor: 2.5						
Analysis Time...: 13:13						
***Copper	INVALID DATA ON FOLLOWING	25	ug/L***	SW846 6010B	12/14-12/15/00	DQ73Q1AJ
Dilution Factor: 2.5						
Analysis Time...: 13:13						
***Zinc	INVALID DATA ON FOLLOWING	500	ug/L***	SW846 6010B	12/14-12/15/00	DQ73Q1AK
Dilution Factor: 2.5						
Analysis Time...: 13:13						

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METHOD BLANK REPORT

TCLP Metals

Client Lot #...: FOL070285

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
MB Lot-Sample #:	FOL110000-380	Prep Batch #...:	0349167			
Leach Date.....:	12/11/00	Leach Batch #...:	P034605			
Mercury	ND B	1	ug/L	SW846 7470A	12/14-12/15/00	DQ73Q1AL
		Dilution Factor:	5			
		Analysis Time...:	16:11			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.  
B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: F0L070285      Work Order #....: DRDX11AC-LCS      Matrix.....: SOLID  
 LCS Lot-Sample#: F0L140000-201      DRDX11AD-LCSD  
 Prep Date.....: 12/14/00      Analysis Date...: 12/19/00  
 Prep Batch #....: 0349201      Analysis Time...: 08:14  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Pyridine	35	(10 - 88)			SW846 8270C
1,4-Dichlorobenzene	29	(10 - 88)	18	(0-40)	SW846 8270C
	67	(19 - 102)			SW846 8270C
2-Methylphenol	62	(19 - 102)	8.7	(0-40)	SW846 8270C
	71	(17 - 114)			SW846 8270C
4-Methylphenol	60	(17 - 114)	18	(0-40)	SW846 8270C
	65	(14 - 104)			SW846 8270C
Hexachloroethane	57	(14 - 104)	13	(0-40)	SW846 8270C
	65	(10 - 100)			SW846 8270C
Nitrobenzene	60	(10 - 100)	8.2	(0-40)	SW846 8270C
	72	(37 - 112)			SW846 8270C
Hexachlorobutadiene	66	(37 - 112)	8.5	(0-40)	SW846 8270C
	72	(10 - 102)			SW846 8270C
2,4,6-Trichloro-phenol	71	(10 - 102)	2.1	(0-40)	SW846 8270C
	80	(29 - 115)			SW846 8270C
	73	(29 - 115)	9.4	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	76	(29 - 120)			SW846 8270C
	71	(29 - 120)	6.4	(0-40)	SW846 8270C
2,4-Dinitrotoluene	72	(36 - 117)			SW846 8270C
	69	(36 - 117)	5.4	(0-40)	SW846 8270C
Hexachlorobenzene	61	(37 - 127)			SW846 8270C
	53	(37 - 127)	13	(0-40)	SW846 8270C
Pentachlorophenol	28 J	(10 - 124)			SW846 8270C
	28 J	(10 - 124)	1.6	(0-40)	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	54	(10 - 90)
	47	(10 - 90)
Phenol-d5	45	(10 - 91)
	38	(10 - 91)
Nitrobenzene-d5	73	(32 - 113)
	67	(32 - 113)
2-Fluorobiphenyl	84	(32 - 110)
	76	(32 - 110)
Terphenyl-d14	104	(22 - 106)
	101	(22 - 106)

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F0L070285      Work Order #...: DRLRP1AC-LCS      Matrix.....: SOLID  
 LCS Lot-Sample#: F0L180000-407      DRLRP1AD-LCSD  
 Prep Date.....: 12/18/00      Analysis Date...: 12/20/00  
 Prep Batch #...: 0353407      Analysis Time...: 21:21  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Endrin	68	(44 - 162)			SW846 8081A
	65	(44 - 162)	3.3	(0-20)	SW846 8081A
gamma-BHC (Lindane)	77	(46 - 166)			SW846 8081A
	74	(46 - 166)	3.3	(0-20)	SW846 8081A
Heptachlor	69	(41 - 136)			SW846 8081A
	66	(41 - 136)	3.8	(0-20)	SW846 8081A
Heptachlor epoxide	71	(44 - 147)			SW846 8081A
	69	(44 - 147)	3.1	(0-20)	SW846 8081A
Methoxychlor	81	(50 - 148)			SW846 8081A
	75	(50 - 148)	7.1	(0-20)	SW846 8081A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	74	(22 - 138)
	70	(22 - 138)
Decachlorobiphenyl	63	(10 - 134)
	69	(10 - 134)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: FOL070285      Work Order #...: DRPG01AC-LCS      Matrix.....: SOLID  
 LCS Lot-Sample#: FOL190000-435      DRPG01AD-LCSD  
 Prep Date.....: 12/17/00      Analysis Date...: 12/20/00  
 Prep Batch #...: 0354435      Analysis Time...: 10:09  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
2,4-D	93	(62 - 136)			SW846 8151A
	92	(62 - 136)	0.54	(0-40)	SW846 8151A
2,4,5-TP (Silvex)	104	(67 - 160)			SW846 8151A
	106	(67 - 160)	2.2	(0-40)	SW846 8151A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2,4-Dichlorophenylacetic acid	101	(34 - 156)
	97	(34 - 156)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: F0L070285      Work Order #....: DRTL81AC-LCS      Matrix.....: SOLID  
 LCS Lot-Sample#: F0L210000-205      DRTL81AD-LCSD  
 Prep Date.....: 12/21/00      Analysis Date...: 12/21/00  
 Prep Batch #....: 0356205      Analysis Time...: 01:35  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Vinyl chloride	35	(17 - 169)			SW846 8260B
	32	(17 - 169)	10	(0-40)	SW846 8260B
1,1-Dichloroethene	79	(46 - 161)			SW846 8260B
	57	(46 - 161)	33	(0-40)	SW846 8260B
2-Butanone	146	(39 - 172)			SW846 8260B
	132	(39 - 172)	11	(0-40)	SW846 8260B
Chloroform	99	(64 - 141)			SW846 8260B
	99	(64 - 141)	0.28	(0-40)	SW846 8260B
Carbon tetrachloride	99	(56 - 155)			SW846 8260B
	97	(56 - 155)	1.8	(0-40)	SW846 8260B
1,2-Dichloroethane	95	(69 - 145)			SW846 8260B
	94	(69 - 145)	0.59	(0-40)	SW846 8260B
Benzene	92	(69 - 142)			SW846 8260B
	93	(69 - 142)	0.81	(0-40)	SW846 8260B
Trichloroethene	94	(63 - 129)			SW846 8260B
	94	(63 - 129)	0.42	(0-40)	SW846 8260B
Tetrachloroethene	84	(50 - 131)			SW846 8260B
	89	(50 - 131)	5.9	(0-40)	SW846 8260B
Chlorobenzene	96	(77 - 120)			SW846 8260B
	100	(77 - 120)	3.9	(0-40)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	92	(75 - 127)
	90	(75 - 127)
Toluene-d8	90	(79 - 117)
	96	(79 - 117)
4-Bromofluorobenzene	89	(60 - 119)
	92	(60 - 119)
1,2-Dichloroethane-d4	91	(71 - 133)
	91	(71 - 133)

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: F0L070285

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Reactive Cyanide		WO#:DQ7291AC-LCS/DQ7291AD-LCSD			LCS Lot-Sample#: F0L110000-370		
	0.0	(0.0- 0.0)			SW846 7.3.3	12/11/00	0346370
	0.0	(0.0- 0.0)	0.0	(0-0.0)	SW846 7.3.3	12/11/00	0346370
		Dilution Factor: 1					
Reactive Sulfide		WO#:DRL3H1AC-LCS/DRL3H1AD-LCSD			LCS Lot-Sample#: F0L180000-493		
	44 N	(66 - 116)			SW846 7.3.4	12/15/00	0353493
	44 N	(66 - 116)	0.0	(0-35)	SW846 7.3.4	12/15/00	0353493
		Dilution Factor: 1					
Total Cyanide		WO#:DRL2F1AC-LCS/DRL2F1AD-LCSD			LCS Lot-Sample#: F0L180000-482		
	97	(90 - 110)			SW846 9010A	12/18/00	0353482
	97	(90 - 110)	0.0	(0-35)	SW846 9010A	12/18/00	0353482
		Dilution Factor: 1					

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TCLP Metals

Lot-Sample #...: F0L070285

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP- BATCH #</u>
Mercury	93	(80 - 120)			SW846 7470A	12/14-12/15/00	0349167
	91	(80 - 120)	1.5	(0-20)	SW846 7470A	12/14-12/15/00	0349167

Dilution Factor: 5

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: FOL070285      Work Order #...: DQ3NT1AC      Matrix.....: SOLID  
 LCS Lot-Sample#: FOL080000-176  
 Prep Date.....: 12/08/00      Analysis Date..: 12/11/00  
 Prep Batch #...: 0343176      Analysis Time..: 07:39  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Aroclor 1016	119	(74 - 127)	SW846 8082
Aroclor 1260	116	(74 - 129)	SW846 8082
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene		121	(62 - 162)
Decachlorobiphenyl		119	(53 - 145)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: FOL070285

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Flashpoint	101	Work Order #: DRGX11AA (96 - 104)	LCS Lot-Sample#: FOL150000-253 SW846 1010	12/15-12/18/00	0350253
		Dilution Factor: 1 Analysis Time...: 00:00			
TOX	86	Work Order #: DR08M1AC (80 - 120)	LCS Lot-Sample#: FOL260000-184 SW846 9020A	12/21/00	0361184
		Dilution Factor: 1 Analysis Time...: 00:00			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

***Appendix E***  
PARCC Parameter Analyses

**PSC Metals**  
**Summary of Data Quality Assessment**

August 2005

1. **Precision.** Did field and laboratory duplicate samples analyzed in the laboratory meet SAG Table 3-1 DQOs for precision?

The data have been evaluated and/or validated by the SAIC Data Management Group. Generally, the Relative Percent Difference (RPD) and/or Normalized Absolute Difference (NAD) were within the control limits for the field duplicate samples. Tables 1 and 2 demonstrate the exceptions. Laboratory duplicates are analyzed at the time of data package review. The sample data was within the control limits for 100.0 % of the data. The data can be used for their intended purpose.

2. **Accuracy.** Did laboratory control samples and/or tracer samples analyzed in the laboratory meet SAG Table 3-1 DQOs for accuracy?

The data have been evaluated and/or validated by the SAIC Data Management Group. Generally, the Relative Percent Difference (RPD) and/or Normalized Absolute Difference (NAD) were within the control limits for the field duplicate samples. Tables 3 and 4 demonstrate the exceptions. The laboratory control sample and/or the tracer was within the control limits for 100.0 % of the data. The data can be used for their intended purpose.

3. **Representativeness.** Were the analytical procedures specified in the SAG and work description followed? Were holding times exceeded?

The data have been evaluated and/or validated by the SAIC Data Management Group. The proper analytical methods were utilized in the analyses of these samples. Holding times were met for 100.0% of the analyses. The data can be used for their intended purpose.

4. **Completeness.** Are results usable for at least 90% of laboratory samples?

The percent completeness for this sampling effort is 99.9 %.

5. **Comparability.** Are data sets sufficiently comparable to allow reasonable conclusions to be drawn?

Standardized and consistent procedures used to obtain analytical data are expected to provide comparable results. Current and historical information are sufficiently comparable to allow a reasonable determination of the nature and extent of the radiological contamination.

**Table 1: Duplicate Precision for Alpha Spec. Analyses for PSC Metals**

SampleName	Thorium-228		Thorium-230		Thorium-232	
	RPD	NAD	RPD	NAD	RPD	NAD
SLD70115/SLD70115-1	N/A	0.94	NC	NC	NC	NC
SLD70131/SLD70131-1	N/A	0.61	26.1%	N/A	NC	NC
SLD72146/SLD72146-1	N/A	0.57	16.3%	N/A	NC	NC
SLD72165/SLD72165-1	N/A	0.38	14.4%	N/A	NC	NC
SLD72173/SLD72173-1	<b>N/A</b>	<b>1.68</b>	NC	NC	NC	NC
SLD72184/SLD72184-1	N/A	0.72	4.6%	N/A	NC	NC
SLD72435/SLD72435-1	N/A	1.33	NC	NC	NC	NC
SLD72445/SLD72445-1	N/A	0.30	14.1%	N/A	NC	NC
SLD72463/SLD72463-1	N/A	0.78	NC	NC	NC	NC
SLD72467/SLD72467-1	NC	NC	NC	NC	NC	NC
SLD72482/SLD72482-1	NC	NC	NC	NC	NC	NC
SLD72504/SLD72504-1	N/A	0.10	3.1%	N/A	NC	NC
SLD72529/SLD72529-1	N/A	0.52	NC	NC	NC	NC
SLD72836/SLD72836-1	N/A	0.05	NC	NC	NC	NC
SLD72947/SLD72947-1	N/A	0.02	5.0%	N/A	NC	NC
SLD72967/SLD72967-1	N/A	0.29	<b>33.9%</b>	<b>N/A</b>	NC	NC
SLD72987/SLD72987-1	NC	NC	NC	NC	NC	NC
SLD73007/SLD73007-1	23.8%	N/A	8.1%	N/A	NC	NC
SLD87327/SLD87327-1	N/A	0.74	17.1%	N/A	NC	NC

N/A – Not Applicable.

NC – Not Calculable when one or both samples non-detect.

Shaded and Boldface – RPD / NAD pair exceeds the control limit.

**Table 2: Duplicate Precision for Gamma Spec. Analyses for PSC Metals**

SampleName	Actinium-227		Americium-241		Cesium-137		Potassium-40		Protactinium-231		Radium-226		Radium-228		Uranium-235		Uranium-238	
	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD
SLD70115/SLD70115-1	NC	NC	NC	NC	N/A	0.47	7.1%	N/A	NC	NC	6.1%	N/A	NC	NC	N/A	0.15	NC	NC
SLD70131/SLD70131-1	NC	NC	NC	NC	NC	NC	8.2%	N/A	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72146/SLD72146-1	NC	NC	NC	NC	N/A	0.17	12.7%	N/A	NC	NC	13.1%	N/A	NC	NC	NC	NC	NC	NC
SLD72165/SLD72165-1	NC	NC	NC	NC	NC	NC	25.9%	N/A	NC	NC	11.1%	N/A	NC	NC	NC	NC	NC	NC
SLD72173/SLD72173-1	NC	NC	NC	NC	NC	NC	10.9%	N/A	NC	NC	0.7%	N/A	NC	NC	NC	NC	NC	NC
SLD72184/SLD72184-1	NC	NC	NC	NC	NC	NC	28.8%	N/A	NC	NC	3.8%	N/A	NC	NC	NC	NC	NC	NC
SLD72435/SLD72435-1	NC	NC	NC	NC	NC	NC	<b>35.3%</b>	N/A	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72445/SLD72445-1	NC	NC	NC	NC	NC	NC	1.9%	N/A	NC	NC	5.6%	N/A	NC	NC	NC	NC	NC	NC
SLD72463/SLD72463-1	NC	NC	NC	NC	NC	NC	19.9%	N/A	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72467/SLD72467-1	NC	NC	NC	NC	NC	NC	N/A	0.24	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72482/SLD72482-1	NC	NC	NC	NC	NC	NC	N/A	1.56	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72504/SLD72504-1	NC	NC	NC	NC	N/A	1.31	16.0%	N/A	NC	NC	4.5%	N/A	NC	NC	NC	NC	NC	NC
SLD72529/SLD72529-1	NC	NC	NC	NC	N/A	0.74	6.7%	N/A	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72836/SLD72836-1	NC	NC	NC	NC	NC	NC	0.0%	N/A	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72947/SLD72947-1	N/A	0.59	NC	NC	N/A	0.35	3.6%	N/A	NC	NC	NC	NC	NC	NC	NC	N/A	0.09	NC
SLD72967/SLD72967-1	NC	NC	NC	NC	NC	NC	0.9%	N/A	NC	NC	0.5%	N/A	NC	NC	NC	NC	NC	NC
SLD72987/SLD72987-1	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD73007/SLD73007-1	NC	NC	NC	NC	N/A	0.15	17.1%	N/A	NC	NC	12.0%	N/A	NC	NC	NC	NC	NC	NC
SLD87327/SLD87327-1	NC	NC	NC	NC	NC	NC	3.9%	N/A	NC	NC	11.0%	N/A	NC	NC	NC	NC	NC	NC

N/A – Not Applicable.

NC – Not Calculable.

Shaded and Boldface – RPD / NAD pair exceeds the control limit.

**Table 3: Split Precision for Alpha Spec. Analyses for PSC Metals**

SampleName	Thorium-228		Thorium-230		Thorium-232	
	RPD	NAD	RPD	NAD	RPD	NAD
SLD70115/SLD70115-2	N/A	0.24	<b>140.3%</b>	<b>N/A</b>	NC	NC
SLD70131/SLD70131-2	N/A	0.86	NC	NC	NC	NC
SLD72146/SLD72146-2	N/A	0.03	21.6%	N/A	NC	NC
SLD72165/SLD72165-2	N/A	1.31	6.2%	N/A	NC	NC
SLD72173/SLD72173-2	<b>93.6%</b>	<b>N/A</b>	NC	NC	NC	NC
SLD72184/SLD72184-2	N/A	0.31	20.6%	N/A	NC	NC
SLD72435/SLD72435-2	N/A	0.02	NC	NC	NC	NC
SLD72445/SLD72445-2	N/A	0.23	<b>30.2%</b>	<b>N/A</b>	NC	NC
SLD72463/SLD72463-2	N/A	0.25	NC	NC	NC	NC
SLD72467/SLD72467-2	NC	NC	NC	NC	NC	NC
SLD72482/SLD72482-2	NC	NC	NC	NC	NC	NC
SLD72504/SLD72504-2	N/A	0.65	NC	NC	NC	NC
SLD72529/SLD72529-2	N/A	0.65	NC	NC	NC	NC
SLD72836/SLD72836-2	N/A	0.09	NC	NC	NC	NC
SLD72947/SLD72947-2	N/A	0.27	<b>72.4%</b>	<b>N/A</b>	NC	NC
SLD72967/SLD72967-2	N/A	0.30	23.3%	N/A	NC	NC
SLD72987/SLD72987-2	NC	NC	NC	NC	NC	NC
SLD73007/SLD73007-2	N/A	1.01	<b>30.2%</b>	<b>N/A</b>	NC	NC

N/A – Not Applicable.

NC – Not Calculable when one or both samples non-detect.

Shaded and Boldface – RPD / NAD pair exceeds the control limit.

**Table 4: Split Precision for Gamma Spec. Analyses for PSC Metals**

SampleName	Actinium-227		Americium-241		Cesium-137		Potassium-40		Protactinium-231		Radium-226		Radium-228		Uranium-235		Uranium-238		
	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD	
SLD70115/SLD70115-2	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	8.3%	N/A	NC	NC	N/A	0.10	NC	NC
SLD70131/SLD70131-2	NC	NC	NC	NC	NC	NC	21.9%	N/A	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72146/SLD72146-2	NC	NC	NC	NC	NC	NC	2.2%	N/A	NC	NC	25.6%	N/A	NC	NC	NC	NC	NC	NC	NC
SLD72165/SLD72165-2	NC	NC	NC	NC	NC	NC	4.7%	N/A	NC	NC	9.6%	N/A	NC	NC	NC	NC	NC	NC	NC
SLD72173/SLD72173-2	NC	NC	NC	NC	NC	NC	23.8%	N/A	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72184/SLD72184-2	NC	NC	NC	NC	NC	NC	10.5%	N/A	NC	NC	3.5%	N/A	NC	NC	NC	NC	NC	NC	NC
SLD72426/SLD72426-2	NC	NC	NC	NC	NC	NC	N/A	0.76	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72435/SLD72435-2	NC	NC	NC	NC	NC	NC	<b>45.8%</b>	N/A	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72445/SLD72445-2	NC	NC	NC	NC	NC	NC	<b>40.9%</b>	N/A	NC	NC	26.2%	N/A	NC	NC	NC	NC	NC	NC	NC
SLD72463/SLD72463-2	NC	NC	NC	NC	NC	NC	15.3%	N/A	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72467/SLD72467-2	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72482/SLD72482-2	NC	NC	NC	NC	NC	NC	N/A	1.72	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72504/SLD72504-2	NC	NC	NC	NC	NC	NC	<b>39.5%</b>	N/A	NC	NC	<b>45.5%</b>	N/A	NC	NC	NC	NC	NC	NC	NC
SLD72529/SLD72529-2	NC	NC	NC	NC	NC	NC	8.2%	N/A	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72836/SLD72836-2	NC	NC	NC	NC	NC	NC	1.6%	N/A	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72947/SLD72947-2	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD72967/SLD72967-2	NC	NC	NC	NC	NC	NC	15.1%	N/A	NC	NC	3.1%	N/A	NC	NC	NC	NC	NC	NC	NC
SLD72987/SLD72987-2	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
SLD73007/SLD73007-2	NC	NC	NC	NC	N/A	3.33	N/A	3.36	NC	NC	<b>48.9%</b>	N/A	NC	NC	NC	NC	NC	NC	NC

N/A – Not Applicable.  
 NC – Not Calculable when one or both samples non-detect.  
 Shaded and Boldface – RPD / NAD pair exceeds the control limit.

**AR-075**