

APPENDIX A.2.1

PRE-DESIGN INVESTIGATION DATA SUMMARY REPORT GUNTHER SALT NORTH VICINITY PROPERTY (DT-4) FUSRAP ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI

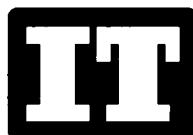
TOTAL ENVIRONMENTAL RESTORATION CONTRACT CONTRACT NO. DACW41-98-D-9006 TASK ORDER NO. 0002

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1.0 Introduction

This Pre-Design Investigation Data Summary Report (Report) summarizes investigation activities conducted at the Gunther Salt North Vicinity Property (DT-4) (GSNVP) of the St. Louis Downtown Site (SLDS) and results obtained during these activities. Gunther Salt currently operates a salt packaging and storage facility on two separate parcels of property. The northern-most parcel (GSNVP) is occupied by storage and packaging buildings and is located on the southwestern corner of the intersection of Angelrodt and Hall Streets. The southern-most parcel, located on the southeast corner of the intersection of Hall and Buchanan Streets, is occupied by administrative offices and open storage areas. This parcel is referred to as the Gunther Salt South Vicinity Property (DT-4) and will be investigated separately.

Investigation activities included in this summary report include the Remedial Investigation (RI) (BNI, 1990, 1994; SAIC, 1995) and the pre-design investigation activities performed by IT Corporation (IT) from April 18, 2000 through October 24, 2000 at the GSNVP. Investigation activities at the GSNVP were performed for the U.S. Army Corps of Engineers (USACE), St. Louis District, under the Formerly Utilized Sites Remedial Action Program (FUSRAP).

Based on data from the RI, eight vicinity properties were initially identified adjacent to the SLDS potentially requiring additional soil characterization, including the GSNVP. Data collected during the RI indicated shallow radiological contamination near the north-central boundary of the property along Angelrodt Street to a maximum depth of 1 foot (ft) below ground surface (bgs). Contamination boundaries were estimated based on the results of the RI. However, additional delineation of contaminant extent was necessary to further refine the proposed contamination boundaries. For the purposes of this pre-design investigation report, “radiological contamination” is defined as the presence of radiological contaminants of concern (COCs) in soil at concentrations exceeding the remediation criteria as established by the Record of Decision (ROD) for the SLDS (USACE, 1998). In accordance with the ROD, the radiological COCs at SLDS are radium-226, radium-228, thorium-230, thorium-232, and uranium-238.

The purpose of the pre-design investigation was to delineate the nature and extent of the radiological contamination identified during the RI prior to the initiation of remedial action activities (e.g., soil excavation). The following tasks were completed during the pre-design investigation for the GSNVP:

- SAIC conducted a walkover survey in accordance with the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) to identify potential areas of elevated radiological activity. Samples were collected from areas that indicated elevated activity (Section 3.0).
- Soil samples were collected from six new shallow borings and 36 new near-surface sample locations to further evaluate the depth and horizontal extent of radiological contamination within the GSNVP (Section 2.0).

Concurrent with the pre-design investigation, a final status radiological survey of the Class 2 areas on the GSNVP was performed in accordance with MARSSIM. A total of 25 Class 2 borings was completed to verify the absence of radiological contamination in designated Class 2 areas (Section 3.0).

2.0 Pre-design Investigation

2.1 Overview

Pre-design investigation activities were conducted in four phases in accordance with the *Pre-Design Investigation Work Description, Vicinity Properties* (Work Description) (IT, 2001). The initial near-surface locations presented in the Work Description were completed as part of Phase 1. Phase 2 and 3 borings were completed to further delineate the extent of radiological contamination identified by the Phase 1 sampling efforts. Two additional near-surface borings were completed during Phase 4 to determine if three areas of elevated activity located adjacent to Angelrodt Street were contiguous.

The following sections discuss the location rationale, sampling methods, and results for the 36 near-surface sample locations and for the six shallow borings completed during the Phase 1, 2, 3, and 4 sampling activities. These near-surface and shallow boring locations are shown in Figure GSN-2.

2.2 Near-Surface Sampling

2.2.1 Near-Surface Sample Locations

Analytical data from previous RI sampling efforts indicated one area of radiological contamination identified by boring E1700N984 located adjacent to Angelrodt Street at 0 to 0.5 ft bgs (BNI, 1990, 1994; SAIC, 1995). However, the lateral and vertical extent of the radiological contamination identified in this boring was not sufficiently delineated.

In order to bound this lateral and vertical extent, soil samples were collected during the Phase 1 activities at the GSNVP from five near-surface pre-design sample locations (SLD05261 through SLD05265) adjacent to the RI boring. Eleven additional near-surface locations (SLD05581 through SLD05591) were sampled during Phase 2 activities to further delineate radiological contamination in those areas identified by Class 2 borings SLD05181, SLD05185, SLD05188, SLD05192 and SLD05194 completed during the Phase 1 sampling activities. Eighteen additional near-surface locations (SLD06089 through SLD06101, SLD06144, SLD06146, SLD06148, SLD06150, and SLD06152) were completed during Phase 3 activities in an attempt to further delineate areas of radiological contamination identified during Phase 2 activities.

During Phase 4, samples were collected from near-surface locations SLD06156 and SLD06158

to determine if three areas of elevated activity located adjacent to Angelrodt Street were contiguous.

2.2.2 Near-Surface Sampling Results

Soil samples collected from the 36 near-surface locations were placed in one-quart sample containers with tight-fitting lids and submitted to the SLDS or Hazelwood Interim Storage Site (HISS) laboratories for gamma spectral analysis of radiological COCs. Soil-sample analytical results indicated that 18 of the near-surface sample locations (SLD05581 through SLD05583, SLD05585, SLD05586, SLD05590, SLD06092 through SLD06096, SLD06098, SLD06099, SLD06144, SLD06146, SLD06148, SLD06152, and SLD06156) yielded samples that exhibited radiological contamination. The depth of these samples ranged from 0.5 to 3.0 ft bgs.

Of the 18 near-surface locations yielding samples exhibiting radiological contamination, 14 were located along the northern property boundary along Angelrodt Street within two separate areas of elevated radiological activity (see Figure GSN-2). The remaining four near-surface locations yielding samples exhibiting radiological contamination (SLD05582 and SLD06098, SLD05586, and SLD06099) were located within three isolated areas on the southwest, south, and southeast sides of the brick building, respectively (see Figure GSN-2).

Soil samples were collected from near-surface locations SLD05582 and SLD06098 in an attempt to further delineate radiological contamination in the area surrounding Class 2 boring location SLD05185 that yielded samples exhibiting radiological contamination. Near-surface soil samples were collected from location SLD06099 (along with SLD06100 and SLD06101) to delineate assumed radiological contamination indicated by the sampling results from Class 2 boring SLD05196. This assumption was based on preliminary gamma spectral analytical data indicating elevated thorium-230 levels. However, it was later determined, through a review of available alpha spectral data for thorium-230, that soil samples collected from Class 2 boring SLD05196 did not exhibit radiological contamination.

Radiological COC data for those samples exhibiting contamination are summarized in Table 2-1. Radiological data for all near-surface samples collected during pre-design activities are presented in Attachment 1. It should be noted that samples collected from each near-surface location with the exception of location SLD05582 were subsequently reanalyzed using the alpha spectral analytical method. This additional analysis was performed to improve the minimum detectable activity for thorium and to reduce the reported error resulting from the limitations of gamma

spectroscopy for thorium detection. The thorium values reported in Table 2-1 and in Attachment 1 for these specific samples reflect the alpha spectral analytical results.

2.3 Shallow Boring Sampling

Six shallow borings (SLD05592 through SLD05597) were completed during Phase 2 activities to further delineate the horizontal and vertical extent of radiological contamination greater than 2 ft in depth identified by Class 2 borings SLD05182 and SLD05187. The locations of these borings are shown on Figure GSN-2.

2.3.1 Shallow-Boring Sampling Results

Soil samples collected from the six shallow borings were initially submitted to the SLDS or HISS laboratories for gamma spectral analysis but were later reanalyzed using the alpha spectral analytical method as described in Section 2.2.2. A review of the shallow boring analytical results indicates that the sample collected from a depth of 2.0 to 2.5 ft bgs in shallow boring SLD05592 exhibited radiological contamination. This boring was completed adjacent to Class 2 boring SLD05182 in an attempt to delineate the vertical and horizontal extent of radiological contamination. Radiological contamination was not encountered in the remaining five shallow borings.

Radiological COC data for the one shallow boring sample exhibiting contamination is summarized in Table 2-1. Radiological data for samples collected from the six shallow boring locations during pre-design activities are presented in Attachment 1.

3.0 Final Status Survey

3.1 Overview

Final status surveys, including radiological walkover surveys and biased and systematic soil sampling, are conducted in accordance with the MARSSIM. Final status surveys of areas requiring remediation (Class 1 areas) are performed after remediation to verify compliance with ROD criteria. Final status surveys of Class 2 and Class 3 areas are performed prior to remediation to allow inclusion of any elevated areas of contamination in the remedial design. A Post-Remedial Action Report (PRAR) summarizing remedial action information and final status survey results is prepared upon completion of remediation to document residual site conditions. A copy of the PRAR is provided to the U. S. Environmental Protection Agency Region VII, the Missouri Department of Natural Resources, and each property owner concurrent with transmittal of official notification of completion of remediation of the property.

Class 1 and Class 2 areas were initially identified in the Work Description (IT, 2001). No Class 3 areas were identified within the GSNVP investigation area. Class 1 and Class 2 areas are discussed in Section 3.3. The pre-design investigation included the completion of 25 MARSSIM Class 2 borings to verify the absence of radiological contamination in designated Class 2 areas.

3.2 Walkover Survey and Sampling

A walkover survey was conducted in accordance with the MARSSIM to identify potential areas of elevated radiological activity. The walkover survey was completed in unobstructed areas of the GSNVP utilizing a 2x2-sodium iodide detector. The presence of salt (possibly containing potassium-40, a naturally occurring radioactive material) throughout the GSNVP may have contributed to elevated radiological activity recorded by the 2x2-sodium iodide detector.

The walkover survey results are shown on Figure GSN-1. Areas depicted as solid white or yellow on this figure indicate the presence of buildings that prevented the completion of survey efforts in these areas. Areas of elevated radiological activity detected during this survey were marked on the ground surface. SAIC personnel collected one discrete walkover sample (HTZ00134) near the northwest corner of the property from a location with elevated radiological activity as indicated by the 2x2-sodium iodide detector (see Figure GSN-1). However, analytical results did not verify the presence of radiological contamination. The 2x2-sodium iodide detector indicated a second area of elevated radiological activity located near a loading dock on

the south side of the main brick building. Walkover samples were not collected by SAIC at this location; however, the area was further investigated by collecting soil samples from near-surface sample locations as discussed previously in Section 2.2.1. Several other small isolated areas of elevated activity detected during the walkover survey, specifically those locations adjacent to salt storage areas, were investigated and determined to be attributable to naturally occurring potassium-40 in the salt. These areas were not identified as requiring further investigation.

3.3 Class 1 and 2 Areas

The locations of Class 1 and Class 2 areas within the GSNVP are shown on Figure GSN-3. The total surface area of Class 1 areas in the GSNVP is approximately 782 m². The Class 1 areas depicted on Figure GSN-3 were identified utilizing data from the walkover survey and the pre-design investigation.

The Class 2 area and associated borings were initially identified as described in the Work Description (IT, 2001). A total of 25 Class 2 borings was completed within the designated Class 2 area to verify the absence of radiological contamination. Soil samples from eight Class 2 borings (SLD05173, SLD05181, SLD05182, SLD05185, SLD05187, SLD05188, SLD05192, and SLD05194) completed in the GSNVP contained radiological contamination. The analytical results for these samples are included in Table 2-1. The PRAR prepared by SAIC at a later date will include complete results of the Class 2 sampling activities. Radiological contamination was noted in samples collected from a maximum depth of 3 ft bgs. Additional delineation borings were completed during Phase 2, 3, and 4 activities to bound the contamination detected by these Class 2 borings. Class 2 borings that yielded samples exhibiting radiological contamination are identified on Figure GSN-2 as Class 2 borings within associated depth-to-contamination contours.

4.0 Summary and Evaluation of Radiological Results

4.1 Summary of Radiological Results

The following presents a summary of the radiological sampling results for GSNVP. A total of 150 soil samples was collected during walkover, near-surface, and Class 2 sampling within the GSNVP. Thirty-four (23 percent) of the soil samples collected at the GSNVP exhibited radiological contamination.

The percentages of the individual radiological COCs contributing to the radiological contamination are as follows:

Thorium-230 74%
Uranium-238 26%

4.2 Evaluation of Pre-Design Investigation Results

The subsurface of the GSNVP was investigated to a maximum depth of approximately 4.5 ft bgs during pre-design investigation activities. According to lithologic descriptions from boring logs completed for each near-surface sample location, shallow boring, and Class 2 boring location, the upper 4.5 ft of the GSNVP subsurface is comprised of fill material consisting of slag, loosely compacted cinders, silty clay, and gravel.

The majority of the samples exhibiting radiological contamination were collected from an area immediately south of Angelrodt Street near the northwest corner of the main brick building and northeast of the storage structures. This area of contamination has an elongated surface area with a maximum depth of 2 ft bgs. In addition, there are eight isolated contaminated areas scattered throughout the property with a maximum contamination depth of 3 ft bgs. Areas of contamination are depicted on Figure GSN-2.

Pre-design investigation data were used to determine the location of Class 1 and Class 2 areas within the GSNVP as they are shown on Figure GSN-3. The remediation of Class 1 areas will be addressed in the GSNVP Remediation Activity Work Description (RA WD).

5.0 References

- Bechtel National, Incorporated (BNI), 1994, *Remedial Investigation Report for the St. Louis Downtown Site, St. Louis, Missouri*, DOE/OR/21949-280, Oak Ridge, TN.
- Bechtel National, Incorporated (BNI), 1990, *Radiological, Chemical, and Hydrogeological Characterization Report for the St. Louis Downtown Site in St. Louis, Missouri*, Revision 1, DOE/OR/20722-258, Oak Ridge, TN.
- DoD 1997. *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)*, NUREG-1575, EPA 402-R-97-016, Department of Defense et al., December 1997.
- IT Corporation (IT), 2001 *Pre-Design Investigation Work Description Vicinity Properties St. Louis Downtown Site, St. Louis, Missouri*, Revision 1, St. Louis, MO.
- Science Applications International Corporation (SAIC), 1995, *Remedial Investigation Addendum for the St. Louis Site, St. Louis, Missouri*, DOE/OR/21950-132, St. Louis, MO.
- U.S Army Corps of Engineers, St. Louis District (USACE), 1998, *Record of Decision for the St. Louis Downtown Site, St. Louis, Missouri*, Formerly Utilized Sites Remedial Action Program (FUSRAP), St. Louis, MO.

TABLE

Table 2-1
Gunther Salt Vicinity Property Pre-Design Investigation Summary of
COC Analytical Results for Near Surface, Shallow, and Class 2 Borings Exhibiting Radiological Contamination
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Sample Location	Sample ID	Collection Date	Start Depth (ft bgs)	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
SLD05173	SLD05173	4/20/00	0.3	0.9	0.3	RADIUM-226	1.68	0.11	0.07	pCi/g	1.27
SLD05173	SLD05173					RADIUM-228	0.49	0.08	0.09	pCi/g	
SLD05173	SLD05173					THORIUM-230	7.15	1.69	0.29	pCi/g	
SLD05173	SLD05173					THORIUM-232	0.58	0.35	0.13	pCi/g	
SLD05173	SLD05173					URANIUM-238	12.39	1.76	3.98	pCi/g	
SLD05181	SLD05181	4/18/00	1	1.5	1	RADIUM-226	2.90	0.16	0.08	pCi/g	2.61
SLD05181	SLD05181					RADIUM-228	0.82	0.11	0.11	pCi/g	
SLD05181	SLD05181					THORIUM-230	19.59	3.90	0.13	pCi/g	
SLD05181	SLD05181					THORIUM-232	1.02	0.49	0.30	pCi/g	
SLD05181	SLD05181					URANIUM-238	72.63	6.10	4.36	pCi/g	
SLD05182	SLD05207	4/19/00	1.5	2		RADIUM-226	7.78	0.39	0.17	pCi/g	6.01
SLD05182	SLD05207					RADIUM-228	1.50	0.17	0.22	pCi/g	
SLD05182	SLD05207					THORIUM-230	46.80	8.04	0.23	pCi/g	
SLD05182	SLD05207					THORIUM-232	1.08	0.47	0.12	pCi/g	
SLD05182	SLD05207					URANIUM-238	150.30	12.13	8.35	pCi/g	
SLD05182	SLD05526	4/19/00	2.3	2.8		RADIUM-226	3.03	0.18	0.09	pCi/g	1.26
SLD05182	SLD05526					RADIUM-228	1.14	0.13	0.14	pCi/g	
SLD05182	SLD05526					THORIUM-230	7.50	1.74	0.29	pCi/g	
SLD05182	SLD05526					THORIUM-232	1.54	0.60	0.13	pCi/g	
SLD05182	SLD05526					URANIUM-238	43.80	4.36	5.59	pCi/g	
SLD05185	SLD05185	4/18/00	1.1	1.6	1.1	RADIUM-226	0.69	0.05	0.04	pCi/g	1.44
SLD05185	SLD05185					RADIUM-228	0.45	0.07	0.07	pCi/g	
SLD05185	SLD05185					THORIUM-230	23.58	4.65	0.33	pCi/g	
SLD05185	SLD05185					THORIUM-232	0.97	0.47	0.25	pCi/g	
SLD05185	SLD05185					URANIUM-238	0.97	0.70	2.99	pCi/g	
SLD05187	SLD05187	4/18/00	0.4	0.9	0.4	RADIUM-226	3.17	0.20	0.08	pCi/g	1.46
SLD05187	SLD05187					RADIUM-228	1.37	0.15	0.11	pCi/g	
SLD05187	SLD05187					THORIUM-230	7.72	2.12	0.19	pCi/g	
SLD05187	SLD05187					THORIUM-232	1.75	0.79	0.36	pCi/g	
SLD05187	SLD05187					URANIUM-238	8.34	2.42	4.46	pCi/g	
SLD05187	SLD05212	4/18/00	2	2.5		RADIUM-226	6.83	0.58	0.34	pCi/g	4.80
SLD05187	SLD05212					RADIUM-228	1.06	0.41	0.56	pCi/g	
SLD05187	SLD05212					THORIUM-230	15.48	2.95	0.11	pCi/g	
SLD05187	SLD05212					THORIUM-232	1.34	0.52	0.11	pCi/g	
SLD05187	SLD05212					URANIUM-238	195.00	27.31	22.05	pCi/g	
SLD05187	SLD05525	4/18/00	2.7	3		RADIUM-226	5.94	0.46	0.31	pCi/g	1.36
SLD05187	SLD05525					RADIUM-228	1.73	0.36	0.47	pCi/g	
SLD05187	SLD05525					THORIUM-230	7.44	1.83	0.27	pCi/g	
SLD05187	SLD05525					THORIUM-232	1.45	0.61	0.15	pCi/g	
SLD05187	SLD05525					URANIUM-238	48.49	7.37	22.42	pCi/g	
SLD05188	SLD05188	4/18/00	0.5	1	0.5	RADIUM-226	5.49	0.32	0.13	pCi/g	4.41
SLD05188	SLD05188					RADIUM-228	1.59	0.18	0.18	pCi/g	
SLD05188	SLD05188					THORIUM-230	29.35	6.00	0.30	pCi/g	
SLD05188	SLD05188					THORIUM-232	2.09	0.80	0.16	pCi/g	
SLD05188	SLD05188					URANIUM-238	126.50	12.35	5.55	pCi/g	
SLD05192	SLD05192	4/18/00	0.5	1	0.5	RADIUM-226	3.68	0.21	0.08	pCi/g	1.72
SLD05192	SLD05192					RADIUM-228	0.93	0.11	0.11	pCi/g	
SLD05192	SLD05192					THORIUM-230	21.55	4.60	0.17	pCi/g	
SLD05192	SLD05192					THORIUM-232	1.13	0.57	0.37	pCi/g	
SLD05192	SLD05192					URANIUM-238	21.44	3.64	4.34	pCi/g	
SLD05194	SLD05194	4/18/00	0.7	1.2	0.7	RADIUM-226	2.15	0.13	0.06	pCi/g	1.06
SLD05194	SLD05194					RADIUM-228	0.51	0.08	0.09	pCi/g	
SLD05194	SLD05194					THORIUM-230	4.51	1.18	0.12	pCi/g	
SLD05194	SLD05194					THORIUM-232	0.69	0.37	0.12	pCi/g	
SLD05194	SLD05194					URANIUM-238	45.67	4.80	3.16	pCi/g	
SLD05581	SLD05598	7/12/00	2.5	3	0	RADIUM-226	2.86	0.06	0.12	pCi/g	1.30
SLD05581	SLD05598					RADIUM-228	0.89	0.04	0.19	pCi/g	
SLD05581	SLD05598					THORIUM-230	7.29	1.69	0.13	pCi/g	
SLD05581	SLD05598					THORIUM-232	1.15	0.51	0.13	pCi/g	
SLD05581	SLD05598					URANIUM-238	47.94	1.89	1.35	pCi/g	
SLD05582	SLD05599	7/13/00	2.1	2.6		RADIUM-226	3.70	0.39	0.29	pCi/g	1.62
SLD05582	SLD05599					RADIUM-228	1.39	0.40	0.49	pCi/g	
SLD05582	SLD05599					THORIUM-230	11.84	2.59	0.14	pCi/g	
SLD05582	SLD05599					THORIUM-232	0.90	0.46	0.14	pCi/g	
SLD05582	SLD05599					URANIUM-238	47.81	11.68	19.93	pCi/g	
SLD05583	SLD05583	7/12/00	0.4	1	0.4	RADIUM-226	1.94	0.04	0.10	pCi/g	1.60
SLD05583	SLD05583					RADIUM-228	1.00	0.04	0.15	pCi/g	
SLD05583	SLD05583					THORIUM-230	3.89	1.07	0.13	pCi/g	
SLD05583	SLD05583					THORIUM-232	1.18	0.51	0.13	pCi/g	
SLD05583	SLD05583					URANIUM-238	59.16	2.01	1.07	pCi/g	
SLD05585	SLD05602	7/12/00	?	3.6	0	RADIUM-226	2.59	0.06	0.15	pCi/g	1.05
SLD05585	SLD05602					RADIUM-228	1.27	0.06	0.24	pCi/g	
SLD05585	SLD05602					THORIUM-230	7.52	1.75	0.25	pCi/g	
SLD05585	SLD05602					THORIUM-232	1.17	0.52	0.24	pCi/g	
SLD05585	SLD05602					URANIUM-238	34.07	1.49	1.49	pCi/g	

Table 2-1
 Gunther Salt Vicinity Property Pre-Design Investigation Summary of
 COC Analytical Results for Near Surface, Shallow, and Class 2 Borings Exhibiting Radiological Contamination
 Page 2 of 3

Sample Location	Sample ID	Collection Date	Start Depth (ft bgs)	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
SLD05586	SLD05586	7/13/00	0.5	1	0.5	RADIUM-226	2.25	0.14	0.06	pCi/g	1.87
SLD05586	SLD05586					RADIUM-228	0.69	0.08	0.08	pCi/g	
SLD05586	SLD05586					THORIUM-230	15.21	3.07	0.24	pCi/g	
SLD05586	SLD05586					THORIUM-232	0.62	0.36	0.13	pCi/g	
SLD05586	SLD05586					URANIUM-238	50.77	5.30	2.97	pCi/g	
SLD05590	SLD05590	7/13/00	0.5	1.1	0.5	RADIUM-226	2.76	0.17	0.07	pCi/g	1.49
SLD05590	SLD05590					RADIUM-228	0.84	0.11	0.10	pCi/g	
SLD05590	SLD05590					THORIUM-230	11.52	2.50	0.26	pCi/g	
SLD05590	SLD05590					THORIUM-232	1.08	0.51	0.14	pCi/g	
SLD05590	SLD05590					URANIUM-238	43.53	4.90	3.97	pCi/g	
SLD05592	SLD05609	7/18/00	2	2.5		RADIUM-226	2.90	0.06	0.11	pCi/g	1.03
SLD05592	SLD05609					RADIUM-228	0.89	0.04	0.16	pCi/g	
SLD05592	SLD05609					THORIUM-230	12.99	2.85	0.33	pCi/g	
SLD05592	SLD05609					THORIUM-232	0.88	0.47	0.15	pCi/g	
SLD05592	SLD05609					URANIUM-238	16.14	0.77	0.95	pCi/g	
SLD06092	SLD06092	9/7/00	0.5	1	0.5	RADIUM-226	15.34	0.74	0.26	pCi/g	34.62
SLD06092	SLD06092					RADIUM-228	1.91	0.24	0.35	pCi/g	
SLD06092	SLD06092					THORIUM-230	181.00	74.01	93.87	pCi/g	
SLD06092	SLD06092					THORIUM-232	1.91	0.24	0.35	pCi/g	
SLD06092	SLD06092					URANIUM-238	1132.00	77.26	10.94	pCi/g	
SLD06092	SLD06105	9/7/00	2	2.5		RADIUM-226	2.15	0.23	0.21	pCi/g	3.89
SLD06092	SLD06105					RADIUM-228	0.91	0.23	0.33	pCi/g	
SLD06092	SLD06105					THORIUM-230	3.61	1.00	0.12	pCi/g	
SLD06092	SLD06105					THORIUM-232	0.76	0.39	0.12	pCi/g	
SLD06092	SLD06105					URANIUM-238	190.40	18.50	14.43	pCi/g	
SLD06093	SLD06093	9/7/00	0.5	1	0.5	RADIUM-226	2.45	0.15	0.08	pCi/g	2.96
SLD06093	SLD06093					RADIUM-228	0.79	0.11	0.13	pCi/g	
SLD06093	SLD06093					THORIUM-230	9.92	2.10	0.22	pCi/g	
SLD06093	SLD06093					THORIUM-232	1.08	0.47	0.12	pCi/g	
SLD06093	SLD06093					URANIUM-238	122.40	9.44	5.28	pCi/g	
SLD06094	SLD06094	9/7/00	0.5	1	0.5	RADIUM-226	1.90	0.11	0.06	pCi/g	1.05
SLD06094	SLD06094					RADIUM-228	0.67	0.09	0.08	pCi/g	
SLD06094	SLD06094					THORIUM-230	15.50	3.15	0.14	pCi/g	
SLD06094	SLD06094					THORIUM-232	0.40	0.29	0.14	pCi/g	
SLD06094	SLD06094					URANIUM-238	8.80	1.57	4.14	pCi/g	
SLD06095	SLD06095	9/7/00	0.5	1	0.5	RADIUM-226	3.17	0.18	0.07	pCi/g	3.89
SLD06095	SLD06095					RADIUM-228	1.11	0.11	0.11	pCi/g	
SLD06095	SLD06095					THORIUM-230	15.57	3.05	0.12	pCi/g	
SLD06095	SLD06095					THORIUM-232	1.09	0.48	0.12	pCi/g	
SLD06095	SLD06095					URANIUM-238	149.70	10.98	4.25	pCi/g	
SLD06096	SLD06096	9/7/00	0.5	1	0.5	RADIUM-226	3.23	0.18	0.10	pCi/g	5.23
SLD06096	SLD06096					RADIUM-228	1.25	0.14	0.16	pCi/g	
SLD06096	SLD06096					THORIUM-230	16.69	3.46	0.14	pCi/g	
SLD06096	SLD06096					THORIUM-232	1.25	0.57	0.32	pCi/g	
SLD06096	SLD06096					URANIUM-238	212.70	15.51	5.45	pCi/g	
SLD06098	SLD06111	9/11/00	2	2.5		RADIUM-226	3.85	0.22	0.07	pCi/g	1.48
SLD06098	SLD06111					RADIUM-228	1.12	0.12	0.11	pCi/g	
SLD06098	SLD06111					THORIUM-230	11.02	2.57	0.16	pCi/g	
SLD06098	SLD06111					THORIUM-232	0.95	0.50	0.16	pCi/g	
SLD06098	SLD06111					URANIUM-238	44.33	3.87	4.71	pCi/g	
SLD06099	SLD06099	9/7/00	0.2	0.7	0.2	RADIUM-226	1.83	0.11	0.04	pCi/g	1.10
SLD06099	SLD06099					RADIUM-228	0.28	0.05	0.06	pCi/g	
SLD06099	SLD06099					THORIUM-230	7.30	1.72	0.13	pCi/g	
SLD06099	SLD06099					THORIUM-232	0.90	0.46	0.33	pCi/g	
SLD06099	SLD06099					URANIUM-238	2.15	0.48	2.46	pCi/g	
SLD06144	SLD06144	9/11/00	0.5	1	0.5	RADIUM-226	4.08	0.23	0.08	pCi/g	4.30
SLD06144	SLD06144					RADIUM-228	1.31	0.12	0.11	pCi/g	
SLD06144	SLD06144					THORIUM-230	20.46	3.82	0.12	pCi/g	
SLD06144	SLD06144					THORIUM-232	1.47	0.57	0.30	pCi/g	
SLD06144	SLD06144					URANIUM-238	153.00	11.19	4.70	pCi/g	
SLD06146	SLD06146	9/11/00	0.5	1	0.5	RADIUM-226	13.68	0.69	0.20	pCi/g	15.08
SLD06146	SLD06146					RADIUM-228	1.05	0.16	0.25	pCi/g	
SLD06146	SLD06146					THORIUM-230	88.64	25.82	37.95	pCi/g	
SLD06146	SLD06146					THORIUM-232	1.05	0.16	0.25	pCi/g	
SLD06146	SLD06146					URANIUM-238	466.10	35.96	8.07	pCi/g	
SLD06146	SLD06147	9/11/00	1.9	2.4	0	RADIUM-226	2.94	0.17	0.07	pCi/g	4.37
SLD06146	SLD06147					RADIUM-228	0.98	0.11	0.10	pCi/g	
SLD06146	SLD06147					THORIUM-230	40.90	14.55	12.03	pCi/g	
SLD06146	SLD06147					THORIUM-232	0.98	0.11	0.10	pCi/g	
SLD06146	SLD06147					URANIUM-238	89.99	6.92	4.29	pCi/g	

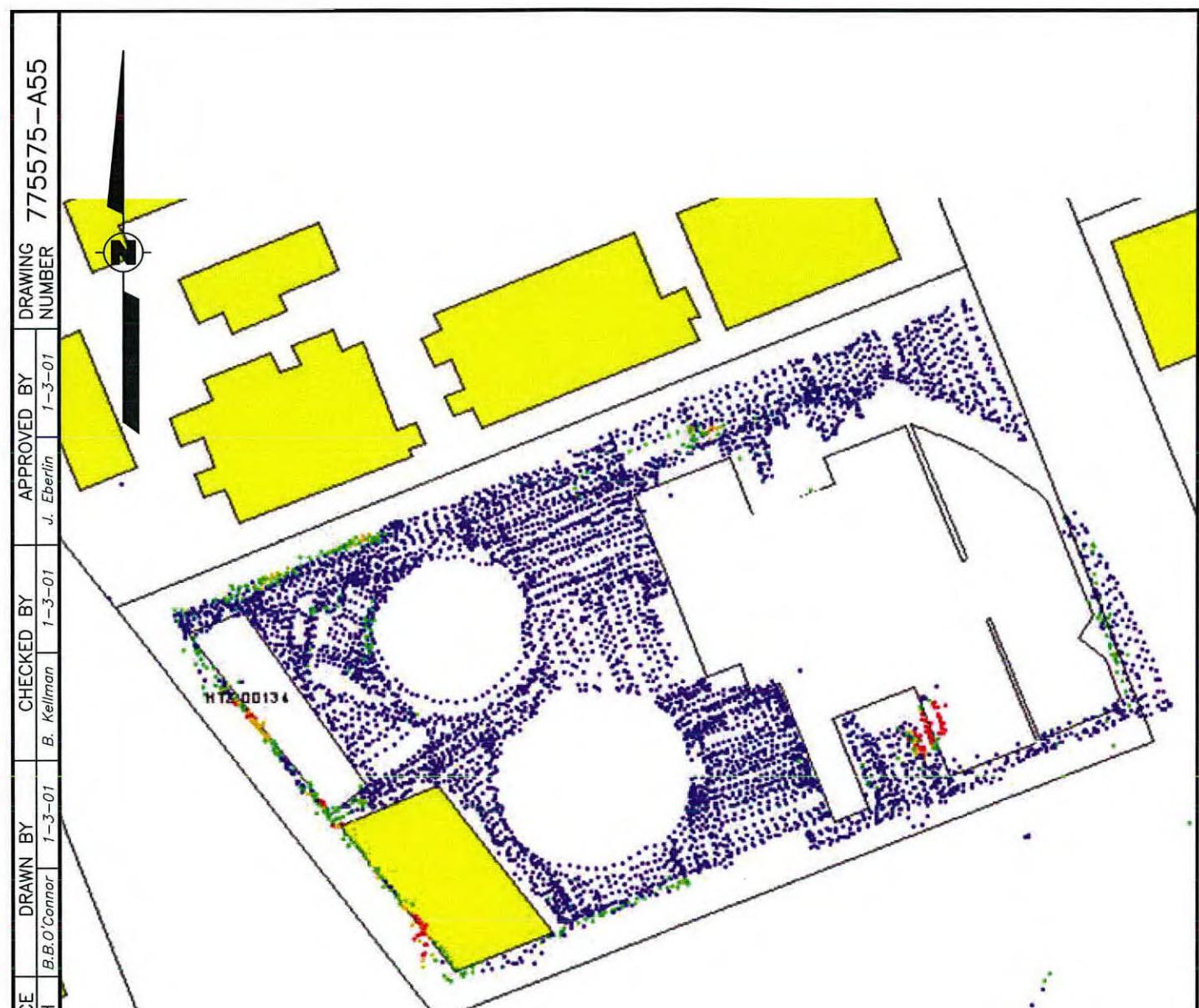
Table 2-1
Gunther Salt Vicinity Property Pre-Design Investigation Summary of
COC Analytical Results for Near Surface, Shallow, and Class 2 Borings Exhibiting Radiological Contamination
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Note:

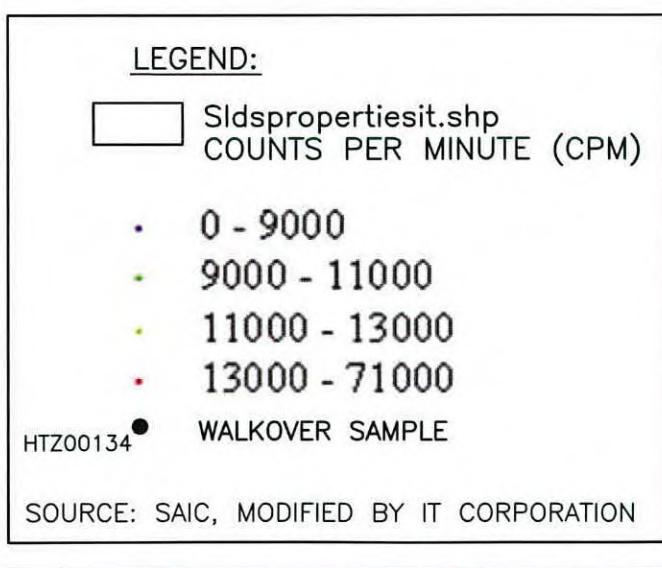
Prior to the calculating the SDR, background values for each radionuclide were subtracted from their respective gross radionuclide values. Analytical data results include background values (i.e., concentrations reflect gross radionuclide values.)

Background Values (pCi/g):						
Ra-226	2.80					
Ra-228	0.95					
Th-232	0.95					
Th-230	1.90					
U-238	1.40					

FIGURES



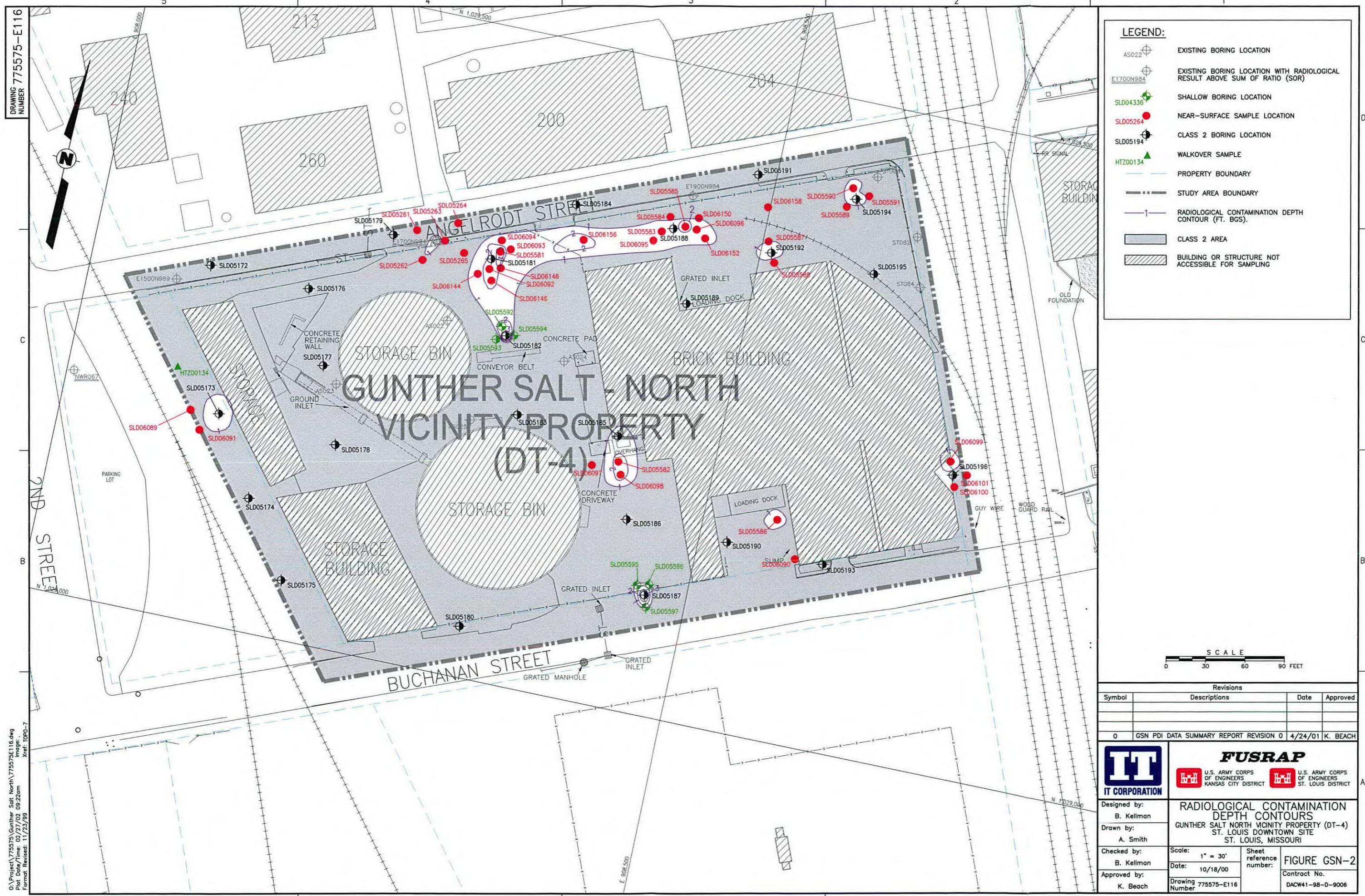
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Plot Date/Time: 02/27/02 09:11am Image: GUNTHER_SALT2
Xref: .
Format Revised: 12/15/99



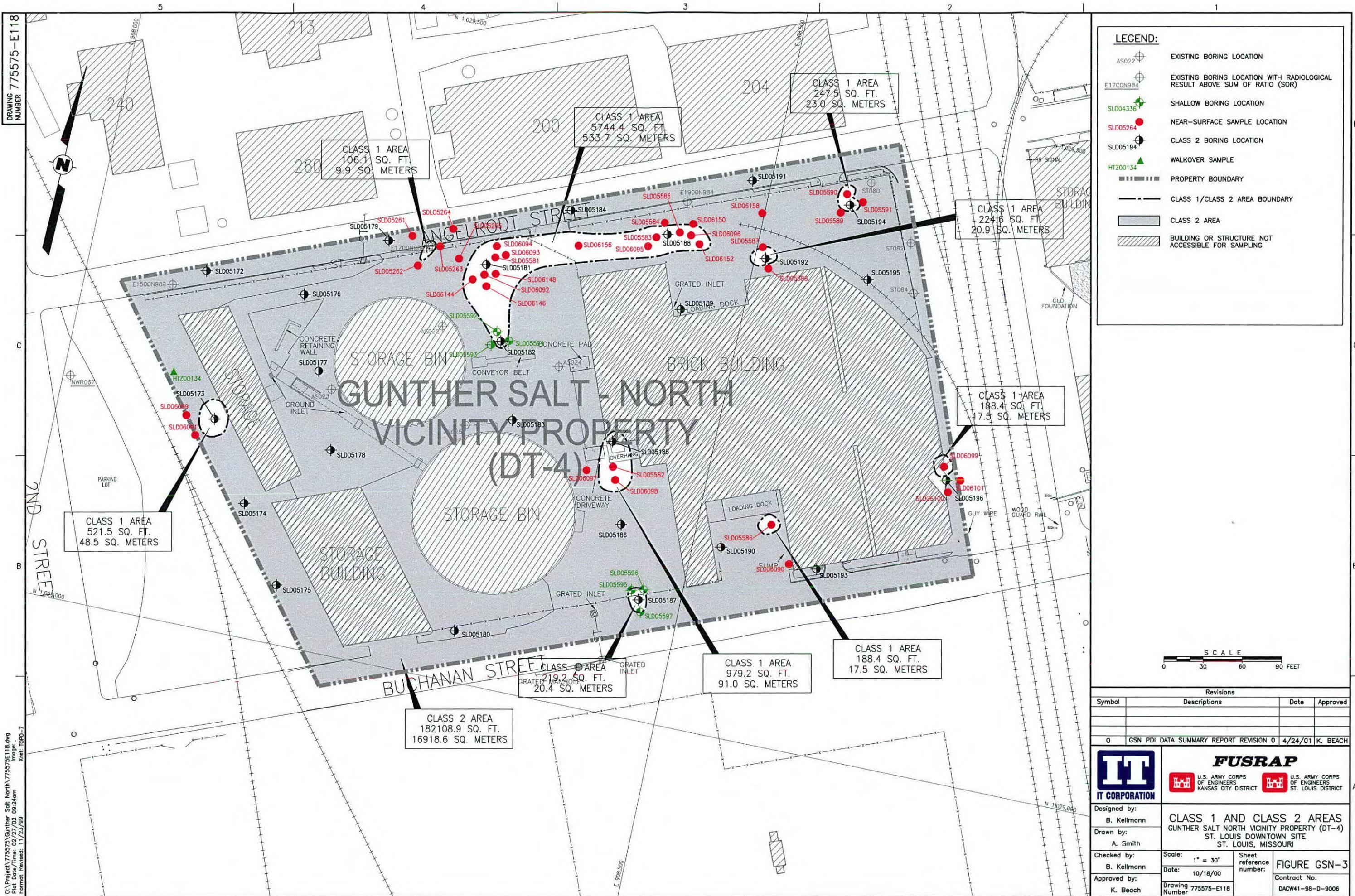
FUSRAP

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

FIGURE GSN-1
WALKOVER SURVEY DATA
GUNTHER SALT NORTH VICINITY PROPERTY (DT-4)
ST. LOUIS DOWNTOWN SITE
ST. LOUIS, MISSOURI



APPENDIX A.2.1. PRE-DESIGN INVESTIGATION DATA SUMMARY REPORT, GUNTHER SALT PROPERTY, ST. LOUIS DOWNTOWN SITE, ST. LOUIS, MISSOURI



APPENDIX A.2.1, PRE-DESIGN INVESTIGATION DATA SUMMARY REPORT, GUNTHER SALT PROPERTY, ST. LOUIS DOWNTOWN SITE, ST. LOUIS, MISSOURI

ATTACHMENT

Attachment 1
 Gunther Salt Vicinity Property
 Pre-Design Investigation Radiological Data

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Sample Location	Sample ID	Collection Date	Start Depth (ft bgs)	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
SLD05173	SLD05173	4/20/00	0.3	0.9	0.3	ACTINIUM-227	1.29	0.15	0.20	pCi/g	1.27
SLD05173	SLD05173					AMERICIUM-241	0.02	0.11	0.17	pCi/g	
SLD05173	SLD05173					CESIUM-137	0.05	0.03	0.03	pCi/g	
SLD05173	SLD05173					PROTACTINIUM-231	1.88	0.63	0.95	pCi/g	
SLD05173	SLD05173					POTASSIUM-40	5.12	0.77	0.33	pCi/g	
SLD05173	SLD05173					RADIUM-226	1.68	0.11	0.07	pCi/g	
SLD05173	SLD05173					RADIUM-228	0.49	0.08	0.09	pCi/g	
SLD05173	SLD05173					THORIUM-228	0.72	0.41	0.29	pCi/g	
SLD05173	SLD05173					THORIUM-230	7.15	1.69	0.29	pCi/g	
SLD05173	SLD05173					THORIUM-232	0.58	0.35	0.13	pCi/g	
SLD05173	SLD05173					URANIUM-235	0.79	0.25	0.25	pCi/g	
SLD05173	SLD05173					URANIUM-238	12.39	1.76	3.98	pCi/g	
SLD05181	SLD05181	4/18/00	1	1.5	1	ACTINIUM-227	4.20	0.28	0.28	pCi/g	2.61
SLD05181	SLD05181					AMERICIUM-241	0.26	0.19	0.29	pCi/g	
SLD05181	SLD05181					CESIUM-137	0.05	0.03	0.04	pCi/g	
SLD05181	SLD05181					PROTACTINIUM-231	5.54	1.13	1.34	pCi/g	
SLD05181	SLD05181					POTASSIUM-40	5.60	0.87	0.38	pCi/g	
SLD05181	SLD05181					RADIUM-226	2.90	0.16	0.08	pCi/g	
SLD05181	SLD05181					RADIUM-228	0.82	0.11	0.11	pCi/g	
SLD05181	SLD05181					THORIUM-228	1.59	0.63	0.25	pCi/g	
SLD05181	SLD05181					THORIUM-230	19.59	3.90	0.13	pCi/g	
SLD05181	SLD05181					THORIUM-232	1.02	0.49	0.30	pCi/g	
SLD05181	SLD05181					URANIUM-235	4.42	0.43	0.37	pCi/g	
SLD05181	SLD05181					URANIUM-238	72.63	6.10	4.36	pCi/g	
SLD05182	SLD05207	4/19/00	1.5	2		ACTINIUM-227	13.56	0.73	0.59	pCi/g	6.01
SLD05182	SLD05207					AMERICIUM-241	0.41	0.34	0.53	pCi/g	
SLD05182	SLD05207					CESIUM-137	-0.05	0.05	0.07	pCi/g	
SLD05182	SLD05207					PROTACTINIUM-231	14.06	1.92	2.63	pCi/g	
SLD05182	SLD05207					POTASSIUM-40	10.86	1.55	0.61	pCi/g	
SLD05182	SLD05207					RADIUM-226	7.78	0.39	0.17	pCi/g	
SLD05182	SLD05207					RADIUM-228	1.50	0.17	0.22	pCi/g	
SLD05182	SLD05207					THORIUM-228	1.38	0.56	0.30	pCi/g	
SLD05182	SLD05207					THORIUM-230	46.80	8.04	0.23	pCi/g	
SLD05182	SLD05207					THORIUM-232	1.08	0.47	0.12	pCi/g	
SLD05182	SLD05207					URANIUM-235	10.63	0.87	0.76	pCi/g	
SLD05182	SLD05207					URANIUM-238	150.30	12.13	8.35	pCi/g	
SLD05182	SLD05526	4/19/00	2.3	2.8		ACTINIUM-227	1.16	0.19	0.31	pCi/g	1.26
SLD05182	SLD05526					AMERICIUM-241	0.14	0.18	0.28	pCi/g	
SLD05182	SLD05526					CESIUM-137	-0.01	0.03	0.05	pCi/g	
SLD05182	SLD05526					PROTACTINIUM-231	1.32	1.44	1.76	pCi/g	
SLD05182	SLD05526					POTASSIUM-40	10.16	1.36	0.46	pCi/g	
SLD05182	SLD05526					RADIUM-226	3.03	0.18	0.09	pCi/g	
SLD05182	SLD05526					RADIUM-228	1.14	0.13	0.14	pCi/g	
SLD05182	SLD05526					THORIUM-228	1.40	0.58	0.29	pCi/g	
SLD05182	SLD05526					THORIUM-230	7.50	1.74	0.29	pCi/g	
SLD05182	SLD05526					THORIUM-232	1.54	0.60	0.13	pCi/g	
SLD05182	SLD05526					URANIUM-235	2.67	0.34	0.37	pCi/g	
SLD05182	SLD05526					URANIUM-238	43.80	4.36	5.59	pCi/g	
SLD05185	SLD05185	4/18/00	1.1	1.6	1.1	ACTINIUM-227	0.05	0.10	0.15	pCi/g	1.44
SLD05185	SLD05185					AMERICIUM-241	0.01	0.06	0.09	pCi/g	
SLD05185	SLD05185					CESIUM-137	0.00	0.01	0.03	pCi/g	
SLD05185	SLD05185					PROTACTINIUM-231	-0.03	0.41	0.63	pCi/g	
SLD05185	SLD05185					POTASSIUM-40	5.30	0.71	0.21	pCi/g	
SLD05185	SLD05185					RADIUM-226	0.69	0.05	0.04	pCi/g	
SLD05185	SLD05185					RADIUM-228	0.45	0.07	0.07	pCi/g	
SLD05185	SLD05185					THORIUM-228	0.89	0.45	0.25	pCi/g	
SLD05185	SLD05185					THORIUM-230	23.58	4.65	0.33	pCi/g	
SLD05185	SLD05185					THORIUM-232	0.97	0.47	0.25	pCi/g	
SLD05185	SLD05185					URANIUM-235	0.04	0.10	0.15	pCi/g	

Attachment 1
 Gunther Salt Vicinity Property
 Pre-Design Investigation Radiological Data

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Sample Location	Sample ID	Collection Date	Start Depth (ft bgs)	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
SLD05185	SLD05185					URANIUM-238	0.97	0.70	2.99	pCi/g	
SLD05187	SLD05187	4/18/00	0.4	0.9	0.4	ACTINIUM-227	0.76	0.17	0.24	pCi/g	1.46
SLD05187	SLD05187					AMERICIUM-241	0.13	0.25	0.41	pCi/g	
SLD05187	SLD05187					CESIUM-137	-0.01	0.03	0.04	pCi/g	
SLD05187	SLD05187					PROTACTINIUM-231	1.05	0.86	1.37	pCi/g	
SLD05187	SLD05187					POTASSIUM-40	9.54	1.30	0.38	pCi/g	
SLD05187	SLD05187					RADIUM-226	3.17	0.20	0.08	pCi/g	
SLD05187	SLD05187					RADIUM-228	1.37	0.15	0.11	pCi/g	
SLD05187	SLD05187					THORIUM-228	2.18	0.90	0.42	pCi/g	
SLD05187	SLD05187					THORIUM-230	7.72	2.12	0.19	pCi/g	
SLD05187	SLD05187					THORIUM-232	1.75	0.79	0.36	pCi/g	
SLD05187	SLD05187					URANIUM-235	0.66	0.22	0.29	pCi/g	
SLD05187	SLD05187					URANIUM-238	8.34	2.42	4.46	pCi/g	
SLD05187	SLD05212	4/18/00	2	2.5		ACTINIUM-227	0.79	0.79	1.36	pCi/g	4.80
SLD05187	SLD05212					AMERICIUM-241	-0.42	1.52	2.37	pCi/g	
SLD05187	SLD05212					CESIUM-137	-0.04	0.12	0.21	pCi/g	
SLD05187	SLD05212					PROTACTINIUM-231	1.23	3.71	5.87	pCi/g	
SLD05187	SLD05212					POTASSIUM-40	12.94	2.74	1.71	pCi/g	
SLD05187	SLD05212					RADIUM-226	6.83	0.58	0.34	pCi/g	
SLD05187	SLD05212					RADIUM-228	1.06	0.41	0.56	pCi/g	
SLD05187	SLD05212					THORIUM-228	1.36	0.53	0.28	pCi/g	
SLD05187	SLD05212					THORIUM-230	15.48	2.95	0.11	pCi/g	
SLD05187	SLD05212					THORIUM-232	1.34	0.52	0.11	pCi/g	
SLD05187	SLD05212					URANIUM-235	10.22	1.34	1.32	pCi/g	
SLD05187	SLD05212					URANIUM-238	195.00	27.31	22.05	pCi/g	
SLD05187	SLD05525	4/18/00	2.7	3		ACTINIUM-227	0.62	0.64	1.04	pCi/g	1.36
SLD05187	SLD05525					AMERICIUM-241	0.06	0.41	0.65	pCi/g	
SLD05187	SLD05525					CESIUM-137	0.00	0.11	0.18	pCi/g	
SLD05187	SLD05525					PROTACTINIUM-231	0.78	3.09	5.01	pCi/g	
SLD05187	SLD05525					POTASSIUM-40	10.77	2.72	1.94	pCi/g	
SLD05187	SLD05525					RADIUM-226	5.94	0.46	0.31	μ Ci/g	
SLD05187	SLD05525					RADIUM-228	1.73	0.36	0.47	pCi/g	
SLD05187	SLD05525					THORIUM-228	1.87	0.72	0.32	pCi/g	
SLD05187	SLD05525					THORIUM-230	7.44	1.83	0.27	pCi/g	
SLD05187	SLD05525					THORIUM-232	1.45	0.61	0.15	pCi/g	
SLD05187	SLD05525					URANIUM-235	2.95	0.65	0.85	pCi/g	
SLD05187	SLD05525					URANIUM-238	48.49	7.37	22.42	pCi/g	
SLD05188	SLD05188	4/18/00	0.5	1	0.5	ACTINIUM-227	11.81	0.70	0.46	pCi/g	4.41
SLD05188	SLD05188					AMERICIUM-241	0.58	0.59	0.92	pCi/g	
SLD05188	SLD05188					CESIUM-137	0.00	0.04	0.06	pCi/g	
SLD05188	SLD05188					PROTACTINIUM-231	11.49	1.90	2.01	pCi/g	
SLD05188	SLD05188					POTASSIUM-40	10.66	1.45	0.46	pCi/g	
SLD05188	SLD05188					RADIUM-226	5.49	0.32	0.13	pCi/g	
SLD05188	SLD05188					RADIUM-228	1.59	0.18	0.18	pCi/g	
SLD05188	SLD05188					THORIUM-228	1.67	0.71	0.30	pCi/g	
SLD05188	SLD05188					THORIUM-230	29.35	6.00	0.30	pCi/g	
SLD05188	SLD05188					THORIUM-232	2.09	0.80	0.16	pCi/g	
SLD05188	SLD05188					URANIUM-235	7.67	0.74	0.65	pCi/g	
SLD05188	SLD05188					URANIUM-238	126.50	12.35	5.55	pCi/g	
SLD05192	SLD05192	4/18/00	0.5	1	0.5	ACTINIUM-227	2.48	0.22	0.25	pCi/g	1.72
SLD05192	SLD05192					AMERICIUM-241	0.12	0.27	0.42	pCi/g	
SLD05192	SLD05192					CESIUM-137	0.17	0.05	0.04	pCi/g	
SLD05192	SLD05192					PROTACTINIUM-231	2.69	0.90	1.22	pCi/g	
SLD05192	SLD05192					POTASSIUM-40	8.46	1.08	0.32	pCi/g	
SLD05192	SLD05192					RADIUM-226	3.68	0.21	0.08	pCi/g	
SLD05192	SLD05192					RADIUM-228	0.93	0.11	0.11	pCi/g	
SLD05192	SLD05192					THORIUM-228	1.77	0.74	0.31	pCi/g	
SLD05192	SLD05192					THORIUM-230	21.55	4.60	0.17	pCi/g	
SLD05192	SLD05192					THORIUM-232	1.13	0.57	0.37	pCi/g	

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 Gunther Salt Vicinity Property
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Sample Location	Sample ID	Collection Date	Start Depth (ft bgs)	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
SLD05192	SLD05192					URANIUM-235	1.60	0.30	0.33	pCi/g	
SLD05192	SLD05192					URANIUM-238	21.44	3.64	4.34	pCi/g	
SLD05194	SLD05194	4/18/00	0.7	1.2	0.7	ACTINIUM-227	0.35	0.12	0.22	pCi/g	1.06
SLD05194	SLD05194					AMERICIUM-241	0.18	0.25	0.39	pCi/g	
SLD05194	SLD05194					CESIUM-137	0.05	0.03	0.03	pCi/g	
SLD05194	SLD05194					PROTACTINIUM-231	0.18	0.62	0.94	pCi/g	
SLD05194	SLD05194					POTASSIUM-40	5.24	0.76	0.26	pCi/g	
SLD05194	SLD05194					RADIUM-226	2.15	0.13	0.06	pCi/g	
SLD05194	SLD05194					RADIUM-228	0.51	0.08	0.09	pCi/g	
SLD05194	SLD05194					THORIUM-228	0.65	0.36	0.12	pCi/g	
SLD05194	SLD05194					THORIUM-230	4.51	1.18	0.12	pCi/g	
SLD05194	SLD05194					THORIUM-232	0.69	0.37	0.12	pCi/g	
SLD05194	SLD05194					URANIUM-235	2.15	0.25	0.26	pCi/g	
SLD05194	SLD05194					URANIUM-238	45.67	4.80	3.16	pCi/g	
SLD05261	SLD05261	4/25/00	0.5	1	0.5	ACTINIUM-227	0.36	0.18	0.75	pCi/g	0.06
SLD05261	SLD05261					AMERICIUM-241	0.00	0.02	0.12	pCi/g	
SLD05261	SLD05261					CESIUM-137	0.00	0.02	0.10	pCi/g	
SLD05261	SLD05261					PROTACTINIUM-231	2.44	0.00	2.44	pCi/g	
SLD05261	SLD05261					POTASSIUM-40	8.39	0.63	1.06	pCi/g	
SLD05261	SLD05261					RADIUM-226	2.19	0.06	0.16	pCi/g	
SLD05261	SLD05261					RADIUM-228	0.79	0.06	0.26	pCi/g	
SLD05261	SLD05261					THORIUM-228	0.89	0.50	0.12	pCi/g	
SLD05261	SLD05261					THORIUM-230	2.32	0.76	0.30	pCi/g	
SLD05261	SLD05261					THORIUM-232	0.71	0.38	0.23	pCi/g	
SLD05261	SLD05261					URANIUM-235	0.08	0.08	0.42	pCi/g	
SLD05261	SLD05261					URANIUM-238	2.77	0.32	1.15	pCi/g	
SLD05261	SLD05266	4/25/00	2	2.5		ACTINIUM-227	0.25	0.15	0.82	pCi/g	0.02
SLD05261	SLD05266					AMERICIUM-241	-0.01	0.03	0.15	pCi/g	
SLD05261	SLD05266					CESIUM-137	0.02	0.02	0.12	pCi/g	
SLD05261	SLD05266					PROTACTINIUM-231	2.88	0.00	2.88	pCi/g	
SLD05261	SLD05266					POTASSIUM-40	10.13	0.74	1.09	pCi/g	
SLD05261	SLD05266					RADIUM-226	2.37	0.07	0.19	pCi/g	
SLD05261	SLD05266					RADIUM-228	0.77	0.07	0.30	pCi/g	
SLD05261	SLD05266					THORIUM-228	0.96	0.55	0.36	pCi/g	
SLD05261	SLD05266					THORIUM-230	2.01	0.70	0.28	pCi/g	
SLD05261	SLD05266					THORIUM-232	0.55	0.33	0.13	pCi/g	
SLD05261	SLD05266					URANIUM-235	0.23	0.10	0.46	pCi/g	
SLD05261	SLD05266					URANIUM-238	2.11	0.34	1.33	pCi/g	
SLD05262	SLD05262	4/19/00	0.5	1	0.5	ACTINIUM-227	0.85	0.00	0.85	pCi/g	0.28
SLD05262	SLD05262					AMERICIUM-241	0.15	0.00	0.15	pCi/g	
SLD05262	SLD05262					CESIUM-137	0.11	0.00	0.11	pCi/g	
SLD05262	SLD05262					PROTACTINIUM-231	2.70	0.00	2.70	pCi/g	
SLD05262	SLD05262					POTASSIUM-40	10.64	0.52	0.90	pCi/g	
SLD05262	SLD05262					RADIUM-226	3.18	0.06	0.18	pCi/g	
SLD05262	SLD05262					RADIUM-228	1.11	0.06	0.26	pCi/g	
SLD05262	SLD05262					THORIUM-228	2.04	0.84	0.33	pCi/g	
SLD05262	SLD05262					THORIUM-230	4.10	1.14	0.13	pCi/g	
SLD05262	SLD05262					THORIUM-232	1.33	0.56	0.13	pCi/g	
SLD05262	SLD05262					URANIUM-235	0.51	0.00	0.51	pCi/g	
SLD05262	SLD05262					URANIUM-238	6.99	0.51	1.68	pCi/g	
SLD05262	SLD05267	4/19/00	2	2.5		ACTINIUM-227	0.88	0.00	0.88	pCi/g	0.11
SLD05262	SLD05267					AMERICIUM-241	0.15	0.00	0.15	pCi/g	
SLD05262	SLD05267					CESIUM-137	0.12	0.00	0.12	pCi/g	
SLD05262	SLD05267					PROTACTINIUM-231	3.02	0.00	3.02	pCi/g	
SLD05262	SLD05267					POTASSIUM-40	9.69	0.55	1.16	pCi/g	
SLD05262	SLD05267					RADIUM-226	3.20	0.07	0.18	pCi/g	
SLD05262	SLD05267					RADIUM-228	0.95	0.06	0.26	pCi/g	
SLD05262	SLD05267					THORIUM-228	1.19	0.59	0.23	pCi/g	
SLD05262	SLD05267					THORIUM-230	2.96	0.87	0.12	pCi/g	

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SLD05262	SLD05267					THORIUM-232	0.94	0.44	0.12	pCi/g	
SLD05262	SLD05267					URANIUM-235	0.51	0.00	0.51	pCi/g	
SLD05262	SLD05267					URANIUM-238	3.55	0.42	1.66	pCi/g	
SLD05263	SLD05263	4/20/00	0.2	0.8	0.2	ACTINIUM-227	0.85	0.00	0.85	pCi/g	0.98
SLD05263	SLD05263					AMERICIUM-241	0.15	0.00	0.15	pCi/g	
SLD05263	SLD05263					CESIUM-137	0.03	0.01	0.07	pCi/g	
SLD05263	SLD05263					PROTACTINIUM-231	2.88	0.00	2.88	pCi/g	
SLD05263	SLD05263					POTASSIUM-40	6.03	0.47	1.23	pCi/g	
SLD05263	SLD05263					RADIUM-226	1.42	0.04	0.15	pCi/g	
SLD05263	SLD05263					RADIUM-228	0.59	0.05	0.23	pCi/g	
SLD05263	SLD05263					THORIUM-228	1.02	0.57	0.30	pCi/g	
SLD05263	SLD05263					THORIUM-230	6.63	1.61	0.14	pCi/g	
SLD05263	SLD05263					THORIUM-232	0.59	0.05	0.23	pCi/g	
SLD05263	SLD05263					URANIUM-235	0.56	0.00	0.56	pCi/g	
SLD05263	SLD05263					URANIUM-238	2.96	0.40	1.61	pCi/g	
SLD05263	SLD05268	4/20/00	1.7	2.3		ACTINIUM-227	1.07	0.00	1.07	pCi/g	0.05
SLD05263	SLD05268					AMERICIUM-241	0.15	0.00	0.15	pCi/g	
SLD05263	SLD05268					CESIUM-137	0.17	0.00	0.17	pCi/g	
SLD05263	SLD05268					PROTACTINIUM-231	4.03	0.00	4.03	pCi/g	
SLD05263	SLD05268					POTASSIUM-40	8.21	0.71	2.44	pCi/g	
SLD05263	SLD05268					RADIUM-226	2.13	0.06	0.30	pCi/g	
SLD05263	SLD05268					RADIUM-228	1.03	0.08	0.46	pCi/g	
SLD05263	SLD05268					THORIUM-228	1.04	0.59	0.27	pCi/g	
SLD05263	SLD05268					THORIUM-230	2.33	0.82	0.32	pCi/g	
SLD05263	SLD05268					THORIUM-232	1.07	0.51	0.14	pCi/g	
SI D05263	SLD05268					URANIUM-235	0.60	0.00	0.60	pCi/g	
SLD05263	SLD05268					URANIUM-238	2.27	0.44	1.96	pCi/g	
SLD05264	SLD05264	4/25/00	0.5	1	0.5	ACTINIUM-227	0.86	0.00	0.86	pCi/g	0.17
SLD05264	SLD05264					AMERICIUM-241	0.15	0.00	0.15	pCi/g	
SLD05264	SLD05264					CESIUM-137	0.11	0.00	0.11	pCi/g	
SLD05264	SLD05264					PROTACTINIUM-231	2.88	0.00	2.88	pCi/g	
SLD05264	SLD05264					POTASSIUM-40	8.34	0.49	1.20	pCi/g	
SLD05264	SLD05264					RADIUM-226	3.31	0.07	0.18	pCi/g	
SLD05264	SLD05264					RADIUM-228	0.93	0.05	0.24	pCi/g	
SLD05264	SLD05264					THORIUM-228	1.10	0.52	0.36	pCi/g	
SLD05264	SLD05264					THORIUM-230	3.61	1.08	0.14	pCi/g	
SLD05264	SLD05264					THORIUM-232	1.27	0.56	0.14	pCi/g	
SLD05264	SLD05264					URANIUM-235	0.50	0.00	0.50	pCi/g	
SLD05264	SLD05264					URANIUM-238	2.99	0.39	1.63	pCi/g	
SLD05264	SLD05269	4/25/00	2	2.5		ACTINIUM-227	0.89	0.00	0.89	pCi/g	0.00
SLD05264	SLD05269					AMERICIUM-241	0.15	0.00	0.15	pCi/g	
SLD05264	SLD05269					CESIUM-137	0.12	0.00	0.12	pCi/g	
SLD05264	SLD05269					PROTACTINIUM-231	2.82	0.00	2.82	pCi/g	
SLD05264	SLD05269					POTASSIUM-40	8.59	0.55	1.15	pCi/g	
SLD05264	SLD05269					RADIUM-226	1.97	0.05	0.15	pCi/g	
SLD05264	SLD05269					RADIUM-228	0.86	0.06	0.24	pCi/g	
SLD05264	SLD05269					THORIUM-228	0.76	0.38	0.22	pCi/g	
SLD05264	SLD05269					THORIUM-230	1.60	0.59	0.22	pCi/g	
SLD05264	SLD05269					THORIUM-232	0.51	0.31	0.22	pCi/g	
SLD05264	SLD05269					URANIUM-235	0.54	0.00	0.54	pCi/g	
SLD05264	SLD05269					URANIUM-238	1.24	0.40	1.83	pCi/g	
SLD05265	SLD05265	4/20/00	0.5	1	0.5	ACTINIUM-227	0.48	0.05	0.31	pCi/g	0.35
SLD05265	SLD05265					AMERICIUM-241	0.16	0.00	0.16	pCi/g	
SLD05265	SLD05265					CESIUM-137	0.11	0.00	0.11	pCi/g	
SLD05265	SLD05265					PROTACTINIUM-231	2.77	0.00	2.77	pCi/g	
SLD05265	SLD05265					POTASSIUM-40	7.34	0.46	1.04	pCi/g	
SLD05265	SLD05265					RADIUM-226	2.19	0.05	0.18	pCi/g	
SLD05265	SLD05265					RADIUM-228	0.80	0.05	0.27	pCi/g	
SLD05265	SLD05265					THORIUM-228	1.34	0.64	0.28	pCi/g	

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SLD05265	SLD05265					THORIUM-230	5.19	1.30	0.23	pCi/g	
SLD05265	SLD05265					THORIUM-232	0.98	0.46	0.13	pCi/g	
SLD05265	SLD05265					URANIUM-235	0.46	0.08	0.55	pCi/g	
SLD05265	SLD05265					URANIUM-238	8.03	0.56	1.71	pCi/g	
SLD05265	SLD05270	4/20/00	2	2.5		ACTINIUM-227	0.89	0.00	0.89	pCi/g	0.16
SLD05265	SLD05270					AMERICIUM-241	0.15	0.00	0.15	pCi/g	
SLD05265	SLD05270					CESIUM-137	0.12	0.00	0.12	pCi/g	
SLD05265	SLD05270					PROTACTINIUM-231	2.96	0.00	2.96	pCi/g	
SLD05265	SLD05270					POTASSIUM-40	12.36	0.62	1.23	pCi/g	
SLD05265	SLD05270					RADIUM-226	3.80	0.08	0.20	pCi/g	
SLD05265	SLD05270					RADIUM-228	1.10	0.06	0.25	pCi/g	
SLD05265	SLD05270					THORIUM-228	1.87	0.81	0.39	pCi/g	
SLD05265	SLD05270					THORIUM-230	3.31	0.98	0.13	pCi/g	
SLD05265	SLD05270					THORIUM-232	1.20	0.54	0.33	pCi/g	
SLD05265	SLD05270					URANIUM-235	0.53	0.00	0.53	pCi/g	
SLD05265	SLD05270					URANIUM-238	4.07	0.43	1.68	pCi/g	
SLD05581	SLD05581	7/12/00	0.6	1.1	0.6	ACTINIUM-227	0.84	0.00	0.84	pCi/g	0.26
SLD05581	SLD05581					AMERICIUM-241	0.16	0.00	0.16	pCi/g	
SLD05581	SLD05581					CESIUM-137	0.11	0.00	0.11	pCi/g	
SLD05581	SLD05581					PROTACTINIUM-231	2.74	0.00	2.74	pCi/g	
SLD05581	SLD05581					POTASSIUM-40	8.55	0.50	1.03	pCi/g	
SLD05581	SLD05581					RADIUM-226	2.41	0.06	0.17	pCi/g	
SLD05581	SLD05581					RADIUM-228	0.82	0.06	0.30	pCi/g	
SLD05581	SLD05581					THORIUM-228	1.39	0.62	0.33	pCi/g	
SLD05581	SLD05581					THORIUM-230	3.37	1.05	0.37	pCi/g	
SLD05581	SLD05581					THORIUM-232	1.54	0.64	0.15	pCi/g	
SLD05581	SLD05581					URANIUM-235	0.46	0.07	0.53	pCi/g	
SLD05581	SLD05581					URANIUM-238	7.74	0.54	1.67	pCi/g	
SLD05581	SLD05598	7/12/00	2.5	3		ACTINIUM-227	0.65	0.10	0.52	pCi/g	1.30
SLD05581	SLD05598					AMERICIUM-241	-0.06	0.03	0.15	pCi/g	
SLD05581	SLD05598					CESIUM-137	0.04	0.02	0.07	pCi/g	
SLD05581	SLD05598					PROTACTINIUM-231	0.70	0.58	2.13	pCi/g	
SLD05581	SLD05598					POTASSIUM-40	8.14	0.43	0.56	pCi/g	
SLD05581	SLD05598					RADIUM-226	2.86	0.06	0.12	pCi/g	
SLD05581	SLD05598					RADIUM-228	0.89	0.04	0.19	pCi/g	
SLD05581	SLD05598					THORIUM-228	0.79	0.47	0.24	pCi/g	
SLD05581	SLD05598					THORIUM-230	7.29	1.69	0.13	pCi/g	
SLD05581	SLD05598					THORIUM-232	1.15	0.51	0.13	pCi/g	
SLD05581	SLD05598					URANIUM-235	2.85	0.12	0.37	pCi/g	
SLD05581	SLD05598					URANIUM-238	47.94	1.89	1.35	pCi/g	
SLD05582	SLD05582	7/13/00	1	1.5	1	ACTINIUM-227	0.21	0.12	0.19	pCi/g	0.17
SLD05582	SLD05582					AMERICIUM-241	-0.01	0.15	0.23	pCi/g	
SLD05582	SLD05582					CESIUM-137	0.03	0.02	0.03	pCi/g	
SLD05582	SLD05582					PROTACTINIUM-231	0.25	0.51	0.77	pCi/g	
SLD05582	SLD05582					POTASSIUM-40	12.96	1.50	0.22	pCi/g	
SLD05582	SLD05582					RADIUM-226	1.30	0.09	0.05	pCi/g	
SLD05582	SLD05582					RADIUM-228	0.78	0.09	0.07	pCi/g	
SLD05582	SLD05582					THORIUM-228	0.73	0.36	0.11	pCi/g	
SLD05582	SLD05582					THORIUM-230	4.30	1.07	0.11	pCi/g	
SLD05582	SLD05582					THORIUM-232	0.90	0.40	0.20	pCi/g	
SLD05582	SLD05582					URANIUM-235	0.10	0.15	0.19	pCi/g	
SLD05582	SLD05582					URANIUM-238	2.02	1.45	3.13	pCi/g	
SLD05582	SLD05599	7/13/00	2.1	2.6		ACTINIUM-227	2.10	0.79	1.29	pCi/g	1.62
SLD05582	SLD05599					AMERICIUM-241	0.01	1.05	1.70	pCi/g	
SLD05582	SLD05599					CESIUM-137	-0.06	0.12	0.17	pCi/g	
SLD05582	SLD05599					PROTACTINIUM-231	2.88	3.17	5.35	pCi/g	
SLD05582	SLD05599					POTASSIUM-40	9.36	2.69	1.49	pCi/g	
SLD05582	SLD05599					RADIUM-226	3.70	0.39	0.29	pCi/g	
SLD05582	SLD05599					RADIUM-228	1.39	0.40	0.49	pCi/g	

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SLD05582	SLD05599					THORIUM-228	1.01	0.51	0.32	pCi/g	
SLD05582	SLD05599					THORIUM-230	11.84	2.59	0.14	pCi/g	
SLD05582	SLD05599					THORIUM-232	0.90	0.46	0.14	pCi/g	
SLD05582	SLD05599					URANIUM-235	2.64	0.73	1.01	pCi/g	
SLD05582	SLD05599					URANIUM-238	47.81	11.68	19.93	pCi/g	
SLD05583	SLD05583	7/12/00	0.4	1	0.4	ACTINIUM-227	0.52	0.07	0.42	pCi/g	1.60
SLD05583	SLD05583					AMERICIUM-241	-0.04	0.03	0.12	pCi/g	
SLD05583	SLD05583					CESIUM-137	0.00	0.01	0.06	pCi/g	
SLD05583	SLD05583					PROTACTINIUM-231	1.57	0.00	1.57	pCi/g	
SLD05583	SLD05583					POTASSIUM-40	7.82	0.36	0.45	pCi/g	
SLD05583	SLD05583					RADIUM-226	1.94	0.04	0.10	pCi/g	
SLD05583	SLD05583					RADIUM-228	1.00	0.04	0.15	pCi/g	
SLD05583	SLD05583					THORIUM-228	1.19	0.59	0.32	pCi/g	
SLD05583	SLD05583					THORIUM-230	3.89	1.07	0.13	pCi/g	
SLD05583	SLD05583					THORIUM-232	1.18	0.51	0.13	pCi/g	
SLD05583	SLD05583					URANIUM-235	2.79	0.10	0.29	pCi/g	
SLD05583	SLD05583					URANIUM-238	59.16	2.01	1.07	pCi/g	
SLD05583	SLD05600	7/12/00	2.1	2.6		ACTINIUM-227	0.80	0.00	0.80	pCi/g	0.78
SLD05583	SLD05600					AMERICIUM-241	0.19	0.00	0.19	pCi/g	
SLD05583	SLD05600					CESIUM-137	0.10	0.00	0.10	pCi/g	
SLD05583	SLD05600					PROTACTINIUM-231	2.59	0.00	2.59	pCi/g	
SLD05583	SLD05600					POTASSIUM-40	7.76	0.39	0.56	pCi/g	
SLD05583	SLD05600					RADIUM-226	1.99	0.04	0.10	pCi/g	
SLD05583	SLD05600					RADIUM-228	1.17	0.04	0.16	pCi/g	
SLD05583	SLD05600					THORIUM-228	1.87	0.77	0.25	pCi/g	
SLD05583	SLD05600					THORIUM-230	3.65	1.06	0.14	pCi/g	
SLD05583	SLD05600					THORIUM-232	1.15	0.52	0.14	pCi/g	
SLD05583	SLD05600					URANIUM-235	1.87	0.08	0.29	pCi/g	
SLD05583	SLD05600					URANIUM-238	33.79	1.38	1.01	pCi/g	
SLD05584	SLD05584	7/12/00	0.6	1.1	0.6	ACTINIUM-227	0.24	0.04	0.34	pCi/g	0.16
SLD05584	SLD05584					AMERICIUM-241	0.15	0.00	0.15	pCi/g	
SLD05584	SLD05584					CESIUM-137	0.11	0.00	0.11	pCi/g	
SLD05584	SLD05584					PROTACTINIUM-231	2.75	0.00	2.75	pCi/g	
SLD05584	SLD05584					POTASSIUM-40	8.54	0.49	0.91	pCi/g	
SLD05584	SLD05584					RADIUM-226	2.48	0.06	0.19	pCi/g	
SLD05584	SLD05584					RADIUM-228	0.91	0.05	0.25	pCi/g	
SLD05584	SLD05584					THORIUM-228	0.82	0.49	0.14	pCi/g	
SLD05584	SLD05584					THORIUM-230	3.21	0.99	0.35	pCi/g	
SLD05584	SLD05584					THORIUM-232	0.84	0.44	0.14	pCi/g	
SLD05584	SLD05584					URANIUM-235	0.52	0.00	0.52	pCi/g	
SLD05584	SLD05584					URANIUM-238	4.80	0.44	1.64	pCi/g	
SLD05584	SLD05601	7/12/00	2.2	2.7		ACTINIUM-227	0.89	0.00	0.89	pCi/g	0.03
SLD05584	SLD05601					AMERICIUM-241	0.14	0.00	0.14	pCi/g	
SLD05584	SLD05601					CESIUM-137	0.11	0.00	0.11	pCi/g	
SLD05584	SLD05601					PROTACTINIUM-231	2.78	0.00	2.78	pCi/g	
SLD05584	SLD05601					POTASSIUM-40	9.09	0.49	0.70	pCi/g	
SLD05584	SLD05601					RADIUM-226	2.62	0.06	0.12	pCi/g	
SLD05584	SLD05601					RADIUM-228	1.04	0.05	0.19	pCi/g	
SLD05584	SLD05601					THORIUM-228	1.08	0.65	0.48	pCi/g	
SLD05584	SLD05601					THORIUM-230	1.49	0.67	0.36	pCi/g	
SLD05584	SLD05601					THORIUM-232	0.73	0.44	0.16	pCi/g	
SLD05584	SLD05601					URANIUM-235	0.48	0.00	0.48	pCi/g	
SLD05584	SLD05601					URANIUM-238	2.75	0.25	0.86	pCi/g	
SLD05585	SLD05585	7/12/00	0.6	1.1	0.6	ACTINIUM-227	1.33	0.00	1.33	pCi/g	0.10
SLD05585	SLD05585					AMERICIUM-241	0.19	0.00	0.19	pCi/g	
SLD05585	SLD05585					CESIUM-137	0.21	0.00	0.21	pCi/g	
SLD05585	SLD05585					PROTACTINIUM-231	5.22	0.00	5.22	pCi/g	
SLD05585	SLD05585					POTASSIUM-40	7.87	0.77	2.01	pCi/g	
SLD05585	SLD05585					RADIUM-226	2.07	0.07	0.34	pCi/g	

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SLD05585	SLD05585					RADIUM-228	0.72	0.10	0.56	pCi/g	
SLD05585	SLD05585					THORIUM-228	0.86	0.51	0.34	pCi/g	
SLD05585	SLD05585					THORIUM-230	3.19	0.96	0.14	pCi/g	
SLD05585	SLD05585					THORIUM-232	0.72	0.10	0.56	pCi/g	
SLD05585	SLD05585					URANIUM-235	0.79	0.00	0.79	pCi/g	
SLD05585	SLD05585					URANIUM-238	1.98	0.53	2.32	pCi/g	
SLD05585	SLD05602	7/12/00	2	2.5		ACTINIUM-227	1.17	0.00	1.17	pCi/g	1.05
SLD05585	SLD05602					AMERICIUM-241	0.27	0.00	0.27	pCi/g	
SLD05585	SLD05602					CESIUM-137	0.13	0.00	0.13	pCi/g	
SLD05585	SLD05602					PROTACTINIUM-231	3.93	0.00	3.93	pCi/g	
SLD05585	SLD05602					POTASSIUM-40	9.59	0.54	0.74	pCi/g	
SLD05585	SLD05602					RADIUM-226	2.59	0.06	0.15	pCi/g	
SLD05585	SLD05602					RADIUM-228	1.27	0.06	0.24	pCi/g	
SLD05585	SLD05602					THORIUM-228	1.65	0.71	0.25	pCi/g	
SLD05585	SLD05602					THORIUM-230	7.52	1.75	0.25	pCi/g	
SLD05585	SLD05602					THORIUM-232	1.17	0.52	0.24	pCi/g	
SLD05585	SLD05602					URANIUM-235	1.96	0.12	0.47	pCi/g	
SLD05585	SLD05602					URANIUM-238	34.07	1.49	1.49	pCi/g	
SLD05586	SLD05586	7/13/00	0.5	1	0.5	ACTINIUM-227	2.30	0.19	0.20	pCi/g	1.87
SLD05586	SLD05586					AMERICIUM-241	0.07	0.27	0.43	pCi/g	
SLD05586	SLD05586					CESIUM-137	0.19	0.05	0.03	pCi/g	
SLD05586	SLD05586					PROTACTINIUM-231	2.35	0.62	0.91	pCi/g	
SLD05586	SLD05586					POTASSIUM-40	6.08	0.80	0.25	pCi/g	
SLD05586	SLD05586					RADIUM-226	2.25	0.14	0.06	pCi/g	
SLD05586	SLD05586					RADIUM-228	0.69	0.08	0.08	pCi/g	
SLD05586	SLD05586					THORIUM-228	1.53	0.08	0.29	pCi/g	
SLD05586	SLD05586					THORIUM-230	15.21	3.07	0.24	pCi/g	
SLD05586	SLD05586					THORIUM-232	0.62	0.36	0.13	pCi/g	
SLD05586	SLD05586					URANIUM-235	2.78	0.30	0.29	pCi/g	
SLD05586	SLD05586					URANIUM-238	50.77	5.30	2.97	pCi/g	
SLD05586	SLD05603	7/13/00	2	2.5		ACTINIUM-227	0.13	0.19	0.29	pCi/g	0.51
SLD05586	SLD05603					AMERICIUM-241	0.12	0.28	0.45	pCi/g	
SLD05586	SLD05603					CESIUM-137	0.02	0.03	0.04	pCi/g	
SLD05586	SLD05603					PROTACTINIUM-231	0.79	0.82	1.27	pCi/g	
SLD05586	SLD05603					POTASSIUM-40	9.12	1.20	0.39	pCi/g	
SLD05586	SLD05603					RADIUM-226	3.45	0.21	0.07	pCi/g	
SLD05586	SLD05603					RADIUM-228	1.16	0.14	0.11	pCi/g	
SLD05586	SLD05603					THORIUM-228	1.50	0.71	0.32	pCi/g	
SLD05586	SLD05603					THORIUM-230	3.34	1.03	0.00	pCi/g	
SLD05586	SLD05603					THORIUM-232	0.62	0.36	0.15	pCi/g	
SLD05586	SLD05603					URANIUM-235	1.12	0.25	0.31	pCi/g	
SLD05586	SLD05603					URANIUM-238	21.21	3.72	4.99	pCi/g	
SLD05587	SLD05587	7/12/00	0.5	1	0.5	ACTINIUM-227	0.79	0.03	0.28	pCi/g	0.93
SLD05587	SLD05587					AMERICIUM-241	0.16	0.00	0.16	pCi/g	
SLD05587	SLD05587					CESIUM-137	0.08	0.00	0.08	pCi/g	
SLD05587	SLD05587					PROTACTINIUM-231	1.10	0.16	1.37	pCi/g	
SLD05587	SLD05587					POTASSIUM-40	7.66	0.36	0.66	pCi/g	
SLD05587	SLD05587					RADIUM-226	2.67	0.05	0.12	pCi/g	
SLD05587	SLD05587					RADIUM-228	0.92	0.04	0.18	pCi/g	
SLD05587	SLD05587					THORIUM-228	1.04	0.53	0.33	pCi/g	
SLD05587	SLD05587					THORIUM-230	7.06	1.76	0.15	pCi/g	
SLD05587	SLD05587					THORIUM-232	0.60	0.40	0.40	pCi/g	
SLD05587	SLD05587					URANIUM-235	1.91	0.07	0.33	pCi/g	
SLD05587	SLD05587					URANIUM-238	30.57	1.27	1.65	pCi/g	
SLD05587	SLD05604	7/12/00	2	2.5		ACTINIUM-227	0.82	0.00	0.82	pCi/g	0.19
SLD05587	SLD05604					AMERICIUM-241	0.15	0.00	0.15	pCi/g	
SLD05587	SLD05604					CESIUM-137	0.10	0.00	0.10	pCi/g	
SLD05587	SLD05604					PROTACTINIUM-231	2.87	0.00	2.87	pCi/g	
SLD05587	SLD05604					POTASSIUM-40	6.46	0.39	0.59	pCi/g	

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SLD05587	SLD05604					RADIUM-226	2.08	0.05	0.11	pCi/g	
SLD05587	SLD05604					RADIUM-228	0.79	0.04	0.17	pCi/g	
SLD05587	SLD05604					THORIUM-228	1.10	0.59	0.27	pCi/g	
SLD05587	SLD05604					THORIUM-230	2.94	0.95	0.32	pCi/g	
SLD05587	SLD05604					THORIUM-232	0.86	0.46	0.15	pCi/g	
SLD05587	SLD05604					URANIUM-235	0.59	0.07	0.30	pCi/g	
SLD05587	SLD05604					URANIUM-238	7.38	0.43	0.90	pCi/g	
SLD05588	SLD05588	7/12/00	0.6	1.1	0.6	ACTINIUM-227	0.92	0.04	0.31	pCi/g	0.53
SLD05588	SLD05588					AMERICIUM-241	0.16	0.00	0.16	pCi/g	
SLD05588	SLD05588					CESIUM-137	0.04	0.01	0.06	pCi/g	
SLD05588	SLD05588					PROTACTINIUM-231	0.72	0.19	1.86	pCi/g	
SLD05588	SLD05588					POTASSIUM-40	8.96	0.45	0.81	pCi/g	
SLD05588	SLD05588					RADIUM-226	2.82	0.06	0.15	pCi/g	
SLD05588	SLD05588					RADIUM-228	0.87	0.05	0.19	pCi/g	
SLD05588	SLD05588					THORIUM-228	1.55	0.70	0.40	pCi/g	
SLD05588	SLD05588					THORIUM-230	6.41	1.57	0.14	pCi/g	
SLD05588	SLD05588					THORIUM-232	1.09	0.53	0.15	pCi/g	
SLD05588	SLD05588					URANIUM-235	0.92	0.08	0.48	pCi/g	
SLD05588	SLD05588					URANIUM-238	12.28	0.67	1.68	pCi/g	
SLD05588	SLD05605	7/12/00	2.2	2.7		ACTINIUM-227	0.85	0.00	0.85	pCi/g	0.14
SLD05588	SLD05605					AMERICIUM-241	0.16	0.00	0.16	pCi/g	
SLD05588	SLD05605					CESIUM-137	0.11	0.00	0.11	pCi/g	
SLD05588	SLD05605					PROTACTINIUM-231	2.80	0.00	2.80	pCi/g	
SLD05588	SLD05605					POTASSIUM-40	8.98	0.49	0.64	pCi/g	
SLD05588	SLD05605					RADIUM-226	2.02	0.05	0.12	pCi/g	
SLD05588	SLD05605					RADIUM-228	1.00	0.05	0.20	pCi/g	
SLD05588	SLD05605					THORIUM-228	1.13	0.57	0.28	pCi/g	
SLD05588	SLD05605					THORIUM-230	2.25	0.75	0.13	pCi/g	
SLD05588	SLD05605					THORIUM-232	0.66	0.37	0.13	pCi/g	
SLD05588	SLD05605					URANIUM-235	0.49	0.07	0.30	pCi/g	
SLD05588	SLD05605					URANIUM-238	7.17	0.43	0.90	pCi/g	
SLD05589	SLD05589	7/11/00	0.4	0.9		ACTINIUM-227	0.31	0.07	0.41	pCi/g	0.85
SLD05589	SLD05589					AMERICIUM-241	0.00	0.02	0.10	pCi/g	
SLD05589	SLD05589					CESIUM-137	0.00	0.01	0.06	pCi/g	
SLD05589	SLD05589					PROTACTINIUM-231	0.06	0.42	1.54	pCi/g	
SLD05589	SLD05589					POTASSIUM-40	8.74	0.38	0.55	pCi/g	
SLD05589	SLD05589					RADIUM-226	4.04	0.07	0.10	pCi/g	
SLD05589	SLD05589					RADIUM-228	0.89	0.04	0.15	pCi/g	
SLD05589	SLD05589					THORIUM-228	2.44	0.95	0.34	pCi/g	
SLD05589	SLD05589					THORIUM-230	6.87	1.74	0.28	pCi/g	
SLD05589	SLD05589					THORIUM-232	1.40	0.61	0.15	pCi/g	
SLD05589	SLD05589					URANIUM-235	1.28	0.07	0.29	pCi/g	
SLD05589	SLD05589					URANIUM-238	25.60	1.06	0.90	pCi/g	
SLD05589	SLD05606	7/11/00	2	2.5		ACTINIUM-227	0.66	0.00	0.66	pCi/g	0.84
SLD05589	SLD05606					AMERICIUM-241	0.16	0.00	0.16	pCi/g	
SLD05589	SLD05606					CESIUM-137	0.09	0.00	0.09	pCi/g	
SLD05589	SLD05606					PROTACTINIUM-231	2.45	0.00	2.45	pCi/g	
SLD05589	SLD05606					POTASSIUM-40	7.38	0.36	0.57	pCi/g	
SLD05589	SLD05606					RADIUM-226	3.48	0.06	0.10	pCi/g	
SLD05589	SLD05606					RADIUM-228	0.75	0.04	0.15	pCi/g	
SLD05589	SLD05606					THORIUM-228	1.25	0.61	0.30	pCi/g	
SLD05589	SLD05606					THORIUM-230	8.82	1.96	0.29	pCi/g	
SLD05589	SLD05606					THORIUM-232	0.84	0.43	0.13	pCi/g	
SLD05589	SLD05606					URANIUM-235	1.16	0.07	0.29	pCi/g	
SLD05589	SLD05606					URANIUM-238	20.57	0.90	0.90	pCi/g	
SLD05590	SLD05590	7/13/00	0.5	1.1	0.5	ACTINIUM-227	1.27	0.17	0.23	pCi/g	1.49
SLD05590	SLD05590					AMERICIUM-241	0.11	0.28	0.44	pCi/g	
SLD05590	SLD05590					CESIUM-137	0.22	0.05	0.04	pCi/g	
SLD05590	SLD05590					PROTACTINIUM-231	1.23	0.84	1.30	pCi/g	

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SLD05590	SLD05590					POTASSIUM-40	7.80	1.04	0.31	pCi/g	
SLD05590	SLD05590					RADIUM-226	2.76	0.17	0.07	pCi/g	
SLD05590	SLD05590					RADIUM-228	0.84	0.11	0.10	pCi/g	
SLD05590	SLD05590					THORIUM-228	1.29	0.64	0.35	pCi/g	
SLD05590	SLD05590					THORIUM-230	11.52	2.50	0.26	pCi/g	
SLD05590	SLD05590					THORIUM-232	1.08	0.51	0.14	pCi/g	
SLD05590	SLD05590					URANIUM-235	2.36	0.28	0.30	pCi/g	
SLD05590	SLD05590					URANIUM-238	43.53	4.90	3.97	pCi/g	
SLD05590	SLD05607	7/13/00	2.2	2.7		ACTINIUM-227	0.04	0.16	0.24	pCi/g	0.57
SLD05590	SLD05607					AMERICIUM-241	0.02	0.24	0.38	pCi/g	
SLD05590	SLD05607					CESIUM-137	0.08	0.04	0.03	pCi/g	
SLD05590	SLD05607					PROTACTINIUM-231	0.44	0.75	1.14	pCi/g	
SLD05590	SLD05607					POTASSIUM-40	9.86	1.24	0.26	pCi/g	
SLD05590	SLD05607					RADIUM-226	2.51	0.16	0.07	pCi/g	
SLD05590	SLD05607					RADIUM-228	0.98	0.12	0.10	pCi/g	
SLD05590	SLD05607					THORIUM-228	2.04	0.87	0.34	pCi/g	
SLD05590	SLD05607					THORIUM-230	3.70	1.14	0.29	pCi/g	
SLD05590	SLD05607					THORIUM-232	1.54	0.65	0.15	pCi/g	
SLD05590	SLD05607					URANIUM-235	1.01	0.23	0.27	pCi/g	
SLD05590	SLD05607					URANIUM-238	21.75	3.32	4.03	pCi/g	
SLD05591	SLD05591	7/13/00	0.5	1	0.5	ACTINIUM-227	0.23	0.12	0.17	pCi/g	0.27
SLD05591	SLD05591					AMERICIUM-241	0.04	0.15	0.25	pCi/g	
SLD05591	SLD05591					CESIUM-137	0.05	0.02	0.02	pCi/g	
SLD05591	SLD05591					PROTACTINIUM-231	0.40	0.50	0.78	pCi/g	
SLD05591	SLD05591					POTASSIUM-40	5.44	0.75	0.22	pCi/g	
SLD05591	SLD05591					RADIUM-226	1.25	0.09	0.05	pCi/g	
SLD05591	SLD05591					RADIUM-228	0.39	0.07	0.07	pCi/g	
SLD05591	SLD05591					THORIUM-228	1.86	0.83	0.35	pCi/g	
SLD05591	SLD05591					THORIUM-230	3.97	1.20	0.16	pCi/g	
SLD05591	SLD05591					THORIUM-232	0.47	0.34	0.16	pCi/g	
SLD05591	SLD05591					URANIUM-235	0.35	0.14	0.18	pCi/g	
SLD05591	SLD05591					URANIUM-238	7.83	1.67	2.57	pCi/g	
SLD05591	SLD05608	7/13/00	2	2.5		ACTINIUM-227	0.21	0.16	0.22	pCi/g	0.08
SLD05591	SLD05608					AMERICIUM-241	0.18	0.18	0.31	pCi/g	
SLD05591	SLD05608					CESIUM-137	0.06	0.04	0.03	pCi/g	
SLD05591	SLD05608					PROTACTINIUM-231	0.27	0.62	0.96	pCi/g	
SLD05591	SLD05608					POTASSIUM-40	5.09	0.81	0.28	pCi/g	
SLD05591	SLD05608					RADIUM-226	1.20	0.09	0.06	pCi/g	
SLD05591	SLD05608					RADIUM-228	0.35	0.07	0.09	pCi/g	
SLD05591	SLD05608					THORIUM-228	0.35	0.07	0.09	pCi/g	
SLD05591	SLD05608					THORIUM-230	-10.91	12.78	19.30	pCi/g	
SLD05591	SLD05608					THORIUM-232	0.35	0.07	0.09	pCi/g	
SLD05591	SLD05608					URANIUM-235	0.36	0.13	0.21	pCi/g	
SLD05591	SLD05608					URANIUM-238	5.59	2.03	3.69	pCi/g	
SLD05592	SLD05592	7/18/00	0.5	1	0.5	ACTINIUM-227	0.87	0.00	0.87	pCi/g	0.89
SLD05592	SLD05592					AMERICIUM-241	0.16	0.00	0.16	pCi/g	
SLD05592	SLD05592					CESIUM-137	0.14	0.00	0.14	pCi/g	
SLD05592	SLD05592					PROTACTINIUM-231	3.36	0.00	3.36	pCi/g	
SLD05592	SLD05592					POTASSIUM-40	12.33	0.60	0.97	pCi/g	
SLD05592	SLD05592					RADIUM-226	2.53	0.05	0.15	pCi/g	
SLD05592	SLD05592					RADIUM-228	0.93	0.05	0.22	pCi/g	
SLD05592	SLD05592					THORIUM-228	2.16	0.86	0.15	pCi/g	
SLD05592	SLD05592					THORIUM-230	8.80	2.06	0.36	pCi/g	
SLD05592	SLD05592					THORIUM-232	1.12	0.53	0.27	pCi/g	
SLD05592	SLD05592					URANIUM-235	1.37	0.08	0.32	pCi/g	
SLD05592	SLD05592					URANIUM-238	22.34	1.08	1.08	pCi/g	
SLD05592	SLD05609	7/18/00	2	2.5		ACTINIUM-227	0.80	0.00	0.80	pCi/g	1.03
SLD05592	SLD05609					AMERICIUM-241	0.17	0.00	0.17	pCi/g	
SLD05592	SLD05609					CESIUM-137	0.10	0.00	0.10	pCi/g	

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Sample Location	Sample ID	Collection Date	Start Depth (ft bgs)	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
SLD05592	SLD05609					PROTACTINIUM-231	2.92	0.00	2.92	pCi/g	
SLD05592	SLD05609					POTASSIUM-40	9.41	0.44	0.60	pCi/g	
SLD05592	SLD05609					RADIUM-226	2.90	0.06	0.11	pCi/g	
SLD05592	SLD05609					RADIUM-228	0.89	0.04	0.16	pCi/g	
SLD05592	SLD05609					THORIUM-228	1.86	0.73	0.28	pCi/g	
SLD05592	SLD05609					THORIUM-230	12.99	2.85	0.33	pCi/g	
SLD05592	SLD05609					THORIUM-232	0.88	0.47	0.15	pCi/g	
SLD05592	SLD05609					URANIUM-235	1.17	0.08	0.31	pCi/g	
SLD05592	SLD05609					URANIUM-238	16.14	0.77	0.95	pCi/g	
SLD05592	SLD05615	7/18/00	4	4.5		ACTINIUM-227	0.06	0.10	0.16	pCi/g	0.04
SLD05592	SLD05615					AMERICIUM-241	-0.06	0.14	0.22	pCi/g	
SLD05592	SLD05615					CESIUM-137	-0.01	0.02	0.03	pCi/g	
SLD05592	SLD05615					PROTACTINIUM-231	-0.01	0.50	0.74	pCi/g	
SLD05592	SLD05615					POTASSIUM-40	16.84	1.97	0.24	pCi/g	
SLD05592	SLD05615					RADIUM-226	0.40	0.04	0.04	pCi/g	
SLD05592	SLD05615					RADIUM-228	0.27	0.06	0.07	pCi/g	
SLD05592	SLD05615					THORIUM-228	0.34	0.37	0.41	pCi/g	
SLD05592	SLD05615					THORIUM-230	1.72	0.72	0.17	pCi/g	
SLD05592	SLD05615					THORIUM-232	0.43	0.33	0.17	pCi/g	
SLD05592	SLD05615					URANIUM-235	0.25	0.14	0.16	pCi/g	
SLD05592	SLD05615					URANIUM-238	3.60	1.44	3.42	pCi/g	
SLD05593	SLD05593	7/18/00	0.5	1	0.5	ACTINIUM-227	0.89	0.00	0.89	pCi/g	0.12
SLD05593	SLD05593					AMERICIUM-241	0.16	0.00	0.16	pCi/g	
SLD05593	SLD05593					CESIUM-137	0.13	0.00	0.13	pCi/g	
SLD05593	SLD05593					PROTACTINIUM-231	2.98	0.00	2.98	pCi/g	
SLD05593	SLD05593					POTASSIUM-40	11.77	0.59	0.81	pCi/g	
SLD05593	SLD05593					RADIUM-226	3.05	0.07	0.13	pCi/g	
SLD05593	SLD05593					RADIUM-228	0.77	0.05	0.21	pCi/g	
SLD05593	SLD05593					THORIUM-228	1.17	0.59	0.33	pCi/g	
SLD05593	SLD05593					THORIUM-230	3.36	0.99	0.13	pCi/g	
SLD05593	SLD05593					THORIUM-232	0.99	0.47	0.13	pCi/g	
SLD05593	SLD05593					URANIUM-235	0.53	0.00	0.53	pCi/g	
SLD05593	SLD05593					URANIUM-238	2.46	0.25	0.91	pCi/g	
SLD05593	SLD05610	7/18/00	2	2.5		ACTINIUM-227	0.78	0.00	0.78	pCi/g	0.98
SLD05593	SLD05610					AMERICIUM-241	0.17	0.00	0.17	pCi/g	
SLD05593	SLD05610					CESIUM-137	0.13	0.00	0.13	pCi/g	
SLD05593	SLD05610					PROTACTINIUM-231	3.10	0.00	3.10	pCi/g	
SLD05593	SLD05610					POTASSIUM-40	10.61	0.52	0.88	pCi/g	
SLD05593	SLD05610					RADIUM-226	3.53	0.07	0.14	pCi/g	
SLD05593	SLD05610					RADIUM-228	0.89	0.05	0.23	pCi/g	
SLD05593	SLD05610					THORIUM-228	1.13	0.57	0.25	pCi/g	
SLD05593	SLD05610					THORIUM-230	4.91	1.28	0.13	pCi/g	
SLD05593	SLD05610					THORIUM-232	0.98	0.47	0.13	pCi/g	
SLD05593	SLD05610					URANIUM-235	2.09	0.09	0.31	pCi/g	
SLD05593	SLD05610					URANIUM-238	40.42	1.66	1.11	pCi/g	
SLD05593	SLD05616	7/18/00	4	4.5		ACTINIUM-227	0.81	0.00	0.81	pCi/g	0.53
SLD05593	SLD05616					AMERICIUM-241	0.16	0.00	0.16	pCi/g	
SLD05593	SLD05616					CESIUM-137	0.12	0.00	0.12	pCi/g	
SLD05593	SLD05616					PROTACTINIUM-231	2.85	0.00	2.85	pCi/g	
SLD05593	SLD05616					POTASSIUM-40	12.41	0.54	0.76	pCi/g	
SLD05593	SLD05616					RADIUM-226	5.38	0.09	0.13	pCi/g	
SLD05593	SLD05616					RADIUM-228	1.08	0.05	0.19	pCi/g	
SLD05593	SLD05616					THORIUM-228	2.01	0.89	0.48	pCi/g	
SLD05593	SLD05616					THORIUM-230	7.94	2.01	0.36	pCi/g	
SLD05593	SLD05616					THORIUM-232	1.63	0.69	0.16	pCi/g	
SLD05593	SLD05616					URANIUM-235	0.53	0.00	0.53	pCi/g	
SLD05593	SLD05616					URANIUM-238	5.45	0.35	0.91	pCi/g	
SLD05594	SLD05594	7/18/00	0.5	1	0.5	ACTINIUM-227	0.98	0.00	0.98	pCi/g	0.00
SLD05594	SLD05594					AMERICIUM-241	0.16	0.00	0.16	pCi/g	

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Sample Location	Sample ID	Collection Date	Start	End	Thickness of	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
			Depth (ft bgs)	Depth (ft bgs)	Cover Material (ft)						
SLD05594	SLD05594					CESIUM-137	0.12	0.00	0.12	pCi/g	
SLD05594	SLD05594					PROTACTINIUM-231	3.07	0.00	3.07	pCi/g	
SLD05594	SLD05594					POTASSIUM-40	12.85	0.74	0.85	pCi/g	
SLD05594	SLD05594					RADIUM-226	0.98	0.04	0.12	pCi/g	
SLD05594	SLD05594					RADIUM-228	0.70	0.05	0.22	pCi/g	
SLD05594	SLD05594					THORIUM-228	1.37	0.67	0.40	pCi/g	
SLD05594	SLD05594					THORIUM-230	1.95	0.71	0.14	pCi/g	
SLD05594	SLD05594					THORIUM-232	0.78	0.43	0.34	pCi/g	
SLD05594	SLD05594					URANIUM-235	0.54	0.00	0.54	pCi/g	
SLD05594	SLD05594					URANIUM-238	1.48	0.24	0.94	pCi/g	
SLD05594	SLD05611	7/18/00	2	2.5		ACTINIUM-227	1.08	0.00	1.08	pCi/g	0.01
SLD05594	SLD05611					AMERICIUM-241	0.16	0.00	0.16	pCi/g	
SLD05594	SLD05611					CESIUM-137	0.17	0.00	0.17	pCi/g	
SLD05594	SLD05611					PROTACTINIUM-231	4.02	0.00	4.02	pCi/g	
SLD05594	SLD05611					POTASSIUM-40	12.26	0.76	1.34	pCi/g	
SLD05594	SLD05611					RADIUM-226	1.72	0.05	0.19	pCi/g	
SLD05594	SLD05611					RADIUM-228	0.92	0.07	0.30	pCi/g	
SLD05594	SLD05611					THORIUM-228	1.39	0.67	0.32	pCi/g	
SLD05594	SLD05611					THORIUM-230	1.79	0.69	0.14	pCi/g	
SLD05594	SLD05611					THORIUM-232	0.68	0.00	0.30	pCi/g	
SLD05594	SLD05611					URANIUM-235	0.61	0.40	0.14	pCi/g	
SLD05594	SLD05611					URANIUM-238	1.68	0.28	1.13	pCi/g	
SLD05594	SLD05617	7/18/00	4	4.5		ACTINIUM-227	1.02	0.00	1.02	pCi/g	0.11
SLD05594	SLD05617					AMERICIUM-241	0.15	0.00	0.15	pCi/g	
SLD05594	SLD05617					CESIUM-137	0.16	0.00	0.16	pCi/g	
SLD05594	SLD05617					PROTACTINIUM-231	3.72	0.00	3.72	pCi/g	
SLD05594	SLD05617					POTASSIUM-40	10.01	0.60	1.09	pCi/g	
SLD05594	SLD05617					RADIUM-226	3.31	0.07	0.18	pCi/g	
SLD05594	SLD05617					RADIUM-228	0.99	0.06	0.28	pCi/g	
SLD05594	SLD05617					THORIUM-228	1.01	0.50	0.21	pCi/g	
SLD05594	SLD05617					THORIUM-230	1.86	0.63	0.25	pCi/g	
SLD05594	SLD05617					THORIUM-232	1.21	0.49	0.11	pCi/g	
SLD05594	SLD05617					URANIUM-235	0.25	0.07	0.36	pCi/g	
SLD05594	SLD05617					URANIUM-238	4.16	0.34	1.05	pCi/g	
SLD05595	SLD05595	7/12/00	0.7	1.2	0.7	ACTINIUM-227	0.80	0.00	0.80	pCi/g	0.02
SLD05595	SLD05595					AMERICIUM-241	0.14	0.00	0.14	pCi/g	
SLD05595	SLD05595					CESIUM-137	0.10	0.00	0.10	pCi/g	
SLD05595	SLD05595					PROTACTINIUM-231	2.63	0.00	2.63	pCi/g	
SLD05595	SLD05595					POTASSIUM-40	10.05	0.61	0.67	pCi/g	
SLD05595	SLD05595					RADIUM-226	0.83	0.03	0.18	pCi/g	
SLD05595	SLD05595					RADIUM-228	0.51	0.05	0.25	pCi/g	
SLD05595	SLD05595					THORIUM-228	0.71	0.42	0.31	pCi/g	
SLD05595	SLD05595					THORIUM-230	1.37	0.59	0.26	pCi/g	
SLD05595	SLD05595					THORIUM-232	1.27	0.56	0.26	pCi/g	
SLD05595	SLD05595					URANIUM-235	0.47	0.00	0.47	pCi/g	
SLD05595	SLD05595					URANIUM-238	1.31	0.36	1.61	pCi/g	
SLD05595	SLD05612	7/12/00	2.3	2.7		ACTINIUM-227	1.70	0.00	1.70	pCi/g	0.27
SLD05595	SLD05612					AMERICIUM-241	0.32	0.00	0.32	pCi/g	
SLD05595	SLD05612					CESIUM-137	0.23	0.00	0.23	pCi/g	
SLD05595	SLD05612					PROTACTINIUM-231	5.39	0.00	5.39	pCi/g	
SLD05595	SLD05612					POTASSIUM-40	9.36	0.80	1.49	pCi/g	
SLD05595	SLD05612					RADIUM-226	3.99	0.11	0.25	pCi/g	
SLD05595	SLD05612					RADIUM-228	0.95	0.09	0.41	pCi/g	
SLD05595	SLD05612					THORIUM-228	1.75	0.71	0.28	pCi/g	
SLD05595	SLD05612					THORIUM-230	4.21	1.22	0.15	pCi/g	
SLD05595	SLD05612					THORIUM-232	1.38	0.60	0.15	pCi/g	
SLD05595	SLD05612					URANIUM-235	1.02	0.00	1.02	pCi/g	
SLD05595	SLD05612					URANIUM-238	5.93	0.56	1.80	pCi/g	
SLD05595	SLD05618	7/13/00	4.1	4.7		ACTINIUM-227	0.10	0.16	0.25	pCi/g	0.12

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Sample Location	Sample ID	Collection Date	Start Depth (ft bgs)	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
SLD05595	SLD05618					AMERICIUM-241	-0.03	0.21	0.33	pCi/g	
SLD05595	SLD05618					CESIUM-137	0.00	0.02	0.04	pCi/g	
SLD05595	SLD05618					PROTACTINIUM-231	0.23	0.76	1.14	pCi/g	
SLD05595	SLD05618					POTASSIUM-40	9.91	1.32	0.33	pCi/g	
SLD05595	SLD05618					RADIUM-226	2.35	0.16	0.07	pCi/g	
SLD05595	SLD05618					RADIUM-228	1.17	0.13	0.10	pCi/g	
SLD05595	SLD05618					THORIUM-228	2.58	0.99	0.44	pCi/g	
SLD05595	SLD05618					THORIUM-230	3.11	1.00	0.15	pCi/g	
SLD05595	SLD05618					THORIUM-232	0.96	0.50	0.37	pCi/g	
SLD05595	SLD05618					URANIUM-235	0.31	0.22	0.28	pCi/g	
SLD05595	SLD05618					URANIUM-238	2.74	2.52	5.70	pCi/g	
SLD05596	SLD05596	7/12/00	0.5	1	0.5	ACTINIUM-227	0.93	0.00	0.93	pCi/g	0.01
SLD05596	SLD05596					AMERICIUM-241	0.15	0.00	0.15	pCi/g	
SLD05596	SLD05596					CESIUM-137	0.12	0.00	0.12	pCi/g	
SLD05596	SLD05596					PROTACTINIUM-231	2.92	0.00	2.92	pCi/g	
SLD05596	SLD05596					POTASSIUM-40	12.63	0.69	0.81	pCi/g	
SLD05596	SLD05596					RADIUM-226	1.31	0.04	0.12	pCi/g	
SLD05596	SLD05596					RADIUM-228	0.76	0.05	0.20	pCi/g	
SLD05596	SLD05596					THORIUM-228	1.07	0.50	0.36	pCi/g	
SLD05596	SLD05596					THORIUM-230	1.74	0.63	0.12	pCi/g	
SLD05596	SLD05596					THORIUM-232	0.95	0.45	0.23	pCi/g	
SLD05596	SLD05596					URANIUM-235	0.52	0.00	0.52	pCi/g	
SLD05596	SLD05596					URANIUM-238	1.73	0.23	0.87	pCi/g	
SLD05596	SLD05613	7/12/00	2	2.5		ACTINIUM-227	2.95	0.00	2.95	pCi/g	0.32
SLD05596	SLD05613					AMERICIUM-241	0.44	0.00	0.44	pCi/g	
SLD05596	SLD05613					CESIUM-137	0.56	0.00	0.56	pCi/g	
SLD05596	SLD05613					PROTACTINIUM-231	2.39	1.54	7.00	pCi/g	
SLD05596	SLD05613					POTASSIUM-40	9.36	1.53	4.13	pCi/g	
SLD05596	SLD05613					RADIUM-226	4.19	0.17	0.55	pCi/g	
SLD05596	SLD05613					RADIUM-228	0.86	0.20	0.96	pCi/g	
SLD05596	SLD05613					THORIUM-228	1.43	0.64	0.34	pCi/g	
SLD05596	SLD05613					THORIUM-230	5.96	1.58	0.15	pCi/g	
SLD05596	SLD05613					THORIUM-232	0.95	0.50	0.29	pCi/g	
SLD05596	SLD05613					URANIUM-235	1.76	0.00	1.76	pCi/g	
SLD05596	SLD05613					URANIUM-238	3.94	0.77	2.96	pCi/g	
SLD05596	SLD05619	7/13/00	4	4.5		ACTINIUM-227	0.10	0.08	0.13	pCi/g	0.00
SLD05596	SLD05619					AMERICIUM-241	0.08	0.10	0.17	pCi/g	
SLD05596	SLD05619					CESIUM-137	0.00	0.01	0.02	pCi/g	
SLD05596	SLD05619					PROTACTINIUM-231	-0.17	0.34	0.55	pCi/g	
SLD05596	SLD05619					POTASSIUM-40	7.10	0.89	0.18	pCi/g	
SLD05596	SLD05619					RADIUM-226	0.63	0.05	0.03	pCi/g	
SLD05596	SLD05619					RADIUM-228	0.36	0.06	0.05	pCi/g	
SLD05596	SLD05619					THORIUM-228	1.02	0.52	0.22	pCi/g	
SLD05596	SLD05619					THORIUM-230	1.18	0.50	0.27	pCi/g	
SLD05596	SLD05619					THORIUM-232	0.53	0.32	0.12	pCi/g	
SLD05596	SLD05619					URANIUM-235	0.07	0.09	0.13	pCi/g	
SLD05596	SLD05619					URANIUM-238	0.54	0.94	2.23	pCi/g	
SLD05597	SLD05597	7/17/00	0.5	1	0.5	ACTINIUM-227	0.28	0.16	0.21	pCi/g	0.23
SLD05597	SLD05597					AMERICIUM-241	0.10	0.18	0.29	pCi/g	
SLD05597	SLD05597					CESIUM-137	-0.01	0.02	0.03	pCi/g	
SLD05597	SLD05597					PROTACTINIUM-231	0.17	0.61	0.90	pCi/g	
SLD05597	SLD05597					POTASSIUM-40	7.12	0.96	0.23	pCi/g	
SLD05597	SLD05597					RADIUM-226	1.83	0.12	0.06	pCi/g	
SLD05597	SLD05597					RADIUM-228	0.83	0.10	0.07	pCi/g	
SLD05597	SLD05597					THORIUM-228	1.83	0.74	0.29	pCi/g	
SLD05597	SLD05597					THORIUM-230	3.11	1.02	0.35	pCi/g	
SLD05597	SLD05597					THORIUM-232	0.87	0.48	0.16	pCi/g	
SLD05597	SLD05597					URANIUM-235	0.35	0.15	0.21	pCi/g	
SLD05597	SLD05597					URANIUM-238	8.91	2.31	3.05	pCi/g	

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Sample Location	Sample ID	Collection Date	Start	End	Thickness of	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
			Depth (ft bgs)	Depth (ft bgs)	Cover Material (ft)						
SLD05597	SLD05614	7/17/00	2	2.5		ACTINIUM-227	0.15	0.18	0.28	pCi/g	0.30
SLD05597	SLD05614					AMERICIUM-241	0.04	0.23	0.37	pCi/g	
SLD05597	SLD05614					CESIUM-137	0.00	0.02	0.04	pCi/g	
SLD05597	SLD05614					PROTACTINIUM-231	0.08	0.81	1.19	pCi/g	
SLD05597	SLD05614					POTASSIUM-40	10.38	1.35	0.37	pCi/g	
SLD05597	SLD05614					RADIUM-226	3.59	0.21	0.08	pCi/g	
SLD05597	SLD05614					RADIUM-228	1.29	0.14	0.11	pCi/g	
SLD05597	SLD05614					THORIUM-228	1.84	0.70	0.26	pCi/g	
SLD05597	SLD05614					THORIUM-230	4.23	1.19	0.26	pCi/g	
SLD05597	SLD05614					THORIUM-232	1.07	0.51	0.26	pCi/g	
SLD05597	SLD05614					URANIUM-235	0.21	0.22	0.30	pCi/g	
SLD05597	SLD05614					URANIUM-238	7.34	2.27	4.63	pCi/g	
SLD05597	SLD05620	7/17/00	4	4.5		ACTINIUM-227	0.10	0.15	0.22	pCi/g	0.17
SLD05597	SLD05620					AMERICIUM-241	-0.10	0.19	0.29	pCi/g	
SLD05597	SLD05620					CESIUM-137	0.00	0.02	0.03	pCi/g	
SLD05597	SLD05620					PROTACTINIUM-231	0.02	0.65	0.95	pCi/g	
SLD05597	SLD05620					POTASSIUM-40	10.29	1.23	0.31	pCi/g	
SLD05597	SLD05620					RADIUM-226	2.82	0.17	0.06	pCi/g	
SLD05597	SLD05620					RADIUM-228	1.10	0.12	0.09	pCi/g	
SLD05597	SLD05620					THORIUM-228	1.17	0.64	0.35	pCi/g	
SLD05597	SLD05620					THORIUM-230	3.42	1.09	0.29	pCi/g	
SLD05597	SLD05620					THORIUM-232	1.28	0.59	0.16	pCi/g	
SLD05597	SLD05620					URANIUM-235	0.52	0.28	0.24	pCi/g	
SLD05597	SLD05620					URANIUM-238	3.93	1.97	3.42	pCi/g	
SLD06089	SLD06089	9/12/00	0.2	0.7	0.2	ACTINIUM-227	0.02	0.08	0.13	pCi/g	0.14
SLD06089	SLD06089					AMERICIUM-241	-0.01	0.10	0.17	pCi/g	
SLD06089	SLD06089					CESIUM-137	0.32	0.06	0.02	pCi/g	
SLD06089	SLD06089					PROTACTINIUM-231	0.07	0.33	0.60	pCi/g	
SLD06089	SLD06089					POTASSIUM-40	3.83	0.55	0.20	pCi/g	
SLD06089	SLD06089					RADIUM-226	0.98	0.07	0.04	pCi/g	
SLD06089	SLD06089					RADIUM-228	0.36	0.05	0.05	pCi/g	
SLD06089	SLD06089					THORIUM-228	1.34	0.59	0.22	pCi/g	
SLD06089	SLD06089					THORIUM-230	2.55	0.79	0.27	pCi/g	
SLD06089	SLD06089					THORIUM-232	0.75	0.38	0.12	pCi/g	
SLD06089	SLD06089					URANIUM-235	0.14	0.11	0.15	pCi/g	
SLD06089	SLD06089					URANIUM-238	2.09	0.97	2.48	pCi/g	
SLD06089	SLD06102	9/12/00	2	2.5		ACTINIUM-227	0.00	0.13	0.19	pCi/g	0.08
SLD06089	SLD06102					AMERICIUM-241	0.06	0.16	0.25	pCi/g	
SLD06089	SLD06102					CESIUM-137	-0.01	0.02	0.03	pCi/g	
SLD06089	SLD06102					PROTACTINIUM-231	0.21	0.58	0.92	pCi/g	
SLD06089	SLD06102					POTASSIUM-40	9.68	1.24	0.30	pCi/g	
SLD06089	SLD06102					RADIUM-226	1.63	0.11	0.06	pCi/g	
SLD06089	SLD06102					RADIUM-228	0.91	0.11	0.09	pCi/g	
SLD06089	SLD06102					THORIUM-228	1.39	0.63	0.33	pCi/g	
SLD06089	SLD06102					THORIUM-230	2.88	0.89	0.13	pCi/g	
SLD06089	SLD06102					THORIUM-232	0.88	0.44	0.13	pCi/g	
SLD06089	SLD06102					URANIUM-235	0.28	0.19	0.19	pCi/g	
SLD06089	SLD06102					URANIUM-238	2.28	1.45	3.45	pCi/g	
SLD06090	SLD06090	9/13/00	0.5	1	0.5	ACTINIUM-227	0.35	0.11	0.18	pCi/g	0.37
SLD06090	SLD06090					AMERICIUM-241	0.05	0.18	0.27	pCi/g	
SLD06090	SLD06090					CESIUM-137	0.63	0.12	0.03	pCi/g	
SLD06090	SLD06090					PROTACTINIUM-231	0.22	0.61	0.96	pCi/g	
SLD06090	SLD06090					POTASSIUM-40	6.17	0.85	0.27	pCi/g	
SLD06090	SLD06090					RADIUM-226	2.04	0.13	0.06	pCi/g	
SLD06090	SLD06090					RADIUM-228	0.72	0.09	0.08	pCi/g	
SLD06090	SLD06090					THORIUM-228	1.48	0.63	0.27	pCi/g	
SLD06090	SLD06090					THORIUM-230	6.07	1.45	0.23	pCi/g	
SLD06090	SLD06090					THORIUM-232	0.82	0.41	0.12	pCi/g	
SLD06090	SLD06090					URANIUM-235	0.39	0.15	0.21	pCi/g	

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Sample Location	Sample ID	Collection Date	Start Depth (ft bgs)	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
SLD06090	SLD06090					URANIUM-238	5.87	1.95	3.35	pCi/g	
SLD06090	SLD06103	9/13/00	2	2.5		ACTINIUM-227	-0.06	0.17	0.24	pCi/g	0.26
SLD06090	SLD06103					AMERICIUM-241	0.00	0.21	0.31	pCi/g	
SLD06090	SLD06103					CESIUM-137	0.00	0.02	0.04	pCi/g	
SLD06090	SLD06103					PROTACTINIUM-231	0.51	0.72	1.14	pCi/g	
SLD06090	SLD06103					POTASSIUM-40	8.95	1.11	0.37	pCi/g	
SLD06090	SLD06103					RADIUM-226	3.40	0.20	0.07	pCi/g	
SLD06090	SLD06103					RADIUM-228	0.99	0.12	0.10	pCi/g	
SLD06090	SLD06103					THORIUM-228	1.91	0.81	0.34	pCi/g	
SLD06090	SLD06103					THORIUM-230	3.51	1.09	0.29	pCi/g	
SLD06090	SLD06103					THORIUM-232	1.19	0.56	0.15	pCi/g	
SLD06090	SLD06103					URANIUM-235	0.39	0.16	0.25	pCi/g	
SLD06090	SLD06103					URANIUM-238	8.30	2.21	3.83	pCi/g	
SLD06091	SLD06091	9/12/00	0.2	0.6	0.2	ACTINIUM-227	-0.02	0.06	0.09	pCi/g	0.00
SLD06091	SLD06091					AMERICIUM-241	-0.06	0.09	0.12	pCi/g	
SLD06091	SLD06091					CESIUM-137	0.08	0.02	0.02	pCi/g	
SLD06091	SLD06091					PROTACTINIUM-231	-0.06	0.29	0.45	pCi/g	
SLD06091	SLD06091					POTASSIUM-40	3.51	0.51	0.13	pCi/g	
SLD06091	SLD06091					RADIUM-226	0.48	0.04	0.03	pCi/g	
SLD06091	SLD06091					RADIUM-228	0.28	0.04	0.04	pCi/g	
SLD06091	SLD06091					THORIUM-228	0.72	0.48	0.43	pCi/g	
SLD06091	SLD06091					THORIUM-230	1.36	0.59	0.15	pCi/g	
SLD06091	SLD06091					THORIUM-232	0.34	0.30	0.37	pCi/g	
SLD06091	SLD06091					URANIUM-235	0.12	0.07	0.10	pCi/g	
SLD06091	SLD06091					URANIUM-238	1.11	0.72	2.03	pCi/g	
SLD06091	SLD06104	9/12/00	1.6	2.2		ACTINIUM-227	0.09	0.12	0.19	pCi/g	0.05
SLD06091	SLD06104					AMERICIUM-241	-0.02	0.15	0.23	pCi/g	
SLD06091	SLD06104					CESIUM-137	0.01	0.02	0.03	pCi/g	
SLD06091	SLD06104					PROTACTINIUM-231	0.07	0.52	0.81	pCi/g	
SLD06091	SLD06104					POTASSIUM-40	10.24	1.24	0.27	pCi/g	
SLD06091	SLD06104					RADIUM-226	1.24	0.09	0.05	pCi/g	
SLD06091	SLD06104					RADIUM-228	0.93	0.10	0.08	pCi/g	
SLD06091	SLD06104					THORIUM-228	1.02	0.65	0.43	pCi/g	
SLD06091	SLD06104					THORIUM-230	2.17	0.00	15.41	pCi/g	
SLD06091	SLD06104					THORIUM-232	0.93	0.90	0.20	pCi/g	
SLD06091	SLD06104					URANIUM-235	0.08	0.11	0.19	pCi/g	
SLD06091	SLD06104					URANIUM-238	3.16	1.33	3.67	pCi/g	
SLD06092	SLD06092	9/7/00	0.5	1	0.5	ACTINIUM-227	88.90	3.65	1.05	pCi/g	34.62
SLD06092	SLD06092					AMERICIUM-241	3.46	1.27	1.16	pCi/g	
SLD06092	SLD06092					CESIUM-137	-0.01	0.09	0.13	pCi/g	
SLD06092	SLD06092					PROTACTINIUM-231	95.33	6.98	4.53	pCi/g	
SLD06092	SLD06092					POTASSIUM-40	11.05	1.66	0.90	pCi/g	
SLD06092	SLD06092					RADIUM-226	15.34	0.74	0.26	pCi/g	
SLD06092	SLD06092					RADIUM-228	1.91	0.24	0.35	pCi/g	
SLD06092	SLD06092					THORIUM-228	1.91	0.24	0.35	pCi/g	
SLD06092	SLD06092					THORIUM-230	181.00	74.01	93.87	pCi/g	
SLD06092	SLD06092					THORIUM-232	1.91	0.24	0.35	pCi/g	
SLD06092	SLD06092					URANIUM-235	65.98	3.74	1.49	pCi/g	
SLD06092	SLD06092					URANIUM-238	1132.00	77.26	10.94	pCi/g	
SLD06092	SLD06105	9/7/00	2	2.5		ACTINIUM-227	-0.05	0.41	0.61	pCi/g	3.89
SLD06092	SLD06105					AMERICIUM-241	0.24	0.50	0.75	pCi/g	
SLD06092	SLD06105					CESIUM-137	-0.03	0.08	0.11	pCi/g	
SLD06092	SLD06105					PROTACTINIUM-231	1.29	2.14	3.26	pCi/g	
SLD06092	SLD06105					POTASSIUM-40	8.03	1.70	1.07	pCi/g	
SLD06092	SLD06105					RADIUM-226	2.15	0.23	0.21	pCi/g	
SLD06092	SLD06105					RADIUM-228	0.91	0.23	0.33	pCi/g	
SLD06092	SLD06105					THORIUM-228	0.84	0.46	0.30	pCi/g	
SLD06092	SLD06105					THORIUM-230	3.61	1.00	0.12	pCi/g	
SLD06092	SLD06105					THORIUM-232	0.76	0.39	0.12	pCi/g	

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			Depth (ft bgs)	Depth (ft bgs)	Cover Material (ft)						
SLD06092	SLD06105					URANIUM-235	9.61	0.92	0.83	pCi/g	
SLD06092	SLD06105					URANIUM-238	190.40	18.50	14.43	pCi/g	
SLD06092	SLD06140	9/7/00	2.5	3		ACTINIUM-227	0.26	0.34	0.56	pCi/g	0.24
SLD06092	SLD06140					AMERICIUM-241	0.07	0.23	0.36	pCi/g	
SLD06092	SLD06140					CESIUM-137	0.00	0.07	0.13	pCi/g	
SLD06092	SLD06140					PROTACTINIUM-231	-0.46	1.64	2.93	pCi/g	
SLD06092	SLD06140					POTASSIUM-40	8.07	2.11	1.62	pCi/g	
SLD06092	SLD06140					RADIUM-226	1.90	0.20	0.18	pCi/g	
SLD06092	SLD06140					RADIUM-228	1.06	0.26	0.24	pCi/g	
SLD06092	SLD06140					THORIUM-228	1.33	0.67	0.16	pCi/g	
SLD06092	SLD06140					THORIUM-230	1.94	0.78	0.40	pCi/g	
SLD06092	SLD06140					THORIUM-232	1.06	0.26	0.24	pCi/g	
SLD06092	SLD06140					URANIUM-235	0.83	0.54	0.52	pCi/g	
SLD06092	SLD06140					URANIUM-238	13.00	3.68	14.58	pCi/g	
SLD06092	SLD06141	9/7/00	4	4.5		ACTINIUM-227	-0.04	0.14	0.20	pCi/g	0.09
SLD06092	SLD06141					AMERICIUM-241	0.02	0.10	0.14	pCi/g	
SLD06092	SLD06141					CESIUM-137	0.01	0.02	0.04	pCi/g	
SLD06092	SLD06141					PROTACTINIUM-231	0.29	0.61	0.99	pCi/g	
SLD06092	SLD06141					POTASSIUM-40	8.96	1.12	0.34	pCi/g	
SLD06092	SLD06141					RADIUM-226	1.42	0.09	0.06	pCi/g	
SLD06092	SLD06141					RADIUM-228	0.78	0.10	0.09	pCi/g	
SLD06092	SLD06141					THORIUM-228	0.77	0.44	0.30	pCi/g	
SLD06092	SLD06141					THORIUM-230	1.56	0.59	0.26	pCi/g	
SLD06092	SLD06141					THORIUM-232	0.61	0.34	0.12	pCi/g	
SLD06092	SLD06141					URANIUM-235	0.33	0.16	0.21	pCi/g	
SLD06092	SLD06141					URANIUM-238	5.68	1.37	4.77	pCi/g	
SLD06093	SLD06093	9/7/00	0.5	1	0.5	ACTINIUM-227	1.95	0.20	0.28	pCi/g	2.96
SLD06093	SLD06093					AMERICIUM-241	0.49	0.37	0.32	pCi/g	
SLD06093	SLD06093					CESIUM-137	0.01	0.03	0.05	pCi/g	
SLD06093	SLD06093					PROTACTINIUM-231	2.68	0.82	1.30	pCi/g	
SLD06093	SLD06093					POTASSIUM-40	6.84	0.89	0.35	pCi/g	
SLD06093	SLD06093					RADIUM-226	2.45	0.15	0.08	pCi/g	
SLD06093	SLD06093					RADIUM-228	0.79	0.11	0.13	pCi/g	
SLD06093	SLD06093					THORIUM-228	1.25	0.56	0.26	pCi/g	
SLD06093	SLD06093					THORIUM-230	9.92	2.10	0.22	pCi/g	
SLD06093	SLD06093					THORIUM-232	1.08	0.47	0.12	pCi/g	
SLD06093	SLD06093					URANIUM-235	6.78	0.50	0.40	pCi/g	
SLD06093	SLD06093					URANIUM-238	122.40	9.44	5.28	pCi/g	
SLD06093	SLD06106	9/7/00	1.9	2.5		ACTINIUM-227	0.18	0.15	0.26	pCi/g	0.10
SLD06093	SLD06106					AMERICIUM-241	0.02	0.10	0.15	pCi/g	
SLD06093	SLD06106					CESIUM-137	-0.02	0.03	0.04	pCi/g	
SLD06093	SLD06106					PROTACTINIUM-231	0.22	0.72	1.15	pCi/g	
SLD06093	SLD06106					POTASSIUM-40	7.64	1.07	0.31	pCi/g	
SLD06093	SLD06106					RADIUM-226	2.47	0.14	0.08	pCi/g	
SLD06093	SLD06106					RADIUM-228	1.37	0.13	0.12	pCi/g	
SLD06093	SLD06106					THORIUM-228	1.58	0.76	0.31	pCi/g	
SLD06093	SLD06106					THORIUM-230	2.28	0.87	0.31	pCi/g	
SLD06093	SLD06106					THORIUM-232	1.30	0.62	0.17	pCi/g	
SLD06093	SLD06106					URANIUM-235	0.06	0.15	0.26	pCi/g	
SLD06093	SLD06106					URANIUM-238	3.61	1.55	4.95	pCi/g	
SLD06094	SLD06094	9/7/00	0.5	1	0.5	ACTINIUM-227	0.45	0.13	0.19	pCi/g	1.05
SLD06094	SLD06094					AMERICIUM-241	0.11	0.09	0.14	pCi/g	
SLD06094	SLD06094					CESIUM-137	0.02	0.02	0.04	pCi/g	
SLD06094	SLD06094					PROTACTINIUM-231	0.93	0.62	1.05	pCi/g	
SLD06094	SLD06094					POTASSIUM-40	5.72	0.81	0.25	pCi/g	
SLD06094	SLD06094					RADIUM-226	1.90	0.11	0.06	pCi/g	
SLD06094	SLD06094					RADIUM-228	0.67	0.09	0.08	pCi/g	
SLD06094	SLD06094					THORIUM-228	0.90	0.51	0.30	pCi/g	
SLD06094	SLD06094					THORIUM-230	15.50	3.15	0.14	pCi/g	

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SLD06094	SLD06094					THORIUM-232	0.40	0.29	0.14	pCi/g	
SLD06094	SLD06094					URANIUM-235	0.50	0.17	0.21	pCi/g	
SLD06094	SLD06094					URANIUM-238	8.80	1.57	4.14	pCi/g	
SLD06094	SLD06107	9/7/00	1.9	2.5		ACTINIUM-227	0.26	0.23	0.50	pCi/g	0.07
SLD06094	SLD06107					AMERICIUM-241	0.15	0.16	0.29	pCi/g	
SLD06094	SLD06107					CESIUM-137	-0.04	0.07	0.11	pCi/g	
SLD06094	SLD06107					PROTACTINIUM-231	-0.68	1.39	2.45	pCi/g	
SLD06094	SLD06107					POTASSIUM-40	8.56	1.92	0.85	pCi/g	
SLD06094	SLD06107					RADIUM-226	1.92	0.20	0.18	pCi/g	
SLD06094	SLD06107					RADIUM-228	1.16	0.24	0.30	pCi/g	
SLD06094	SLD06107					THORIUM-228	1.12	0.56	0.35	pCi/g	
SLD06094	SLD06107					THORIUM-230	2.56	0.83	0.29	pCi/g	
SLD06094	SLD06107					THORIUM-232	0.81	0.42	0.13	pCi/g	
SLD06094	SLD06107					URANIUM-235	-0.12	0.28	0.48	pCi/g	
SLD06094	SLD06107					URANIUM-238	2.13	1.99	15.96	pCi/g	
SLD06095	SLD06095	9/7/00	0.5	1	0.5	ACTINIUM-227	3.59	0.27	0.24	pCi/g	3.89
SLD06095	SLD06095					AMERICIUM-241	0.21	0.11	0.17	pCi/g	
SLD06095	SLD06095					CESIUM-137	0.00	0.03	0.04	pCi/g	
SLD06095	SLD06095					PROTACTINIUM-231	4.64	0.93	1.18	pCi/g	
SLD06095	SLD06095					POTASSIUM-40	8.32	0.96	0.31	pCi/g	
SLD06095	SLD06095					RADIUM-226	3.17	0.18	0.07	pCi/g	
SLD06095	SLD06095					RADIUM-228	1.11	0.11	0.11	pCi/g	
SLD06095	SLD06095					THORIUM-228	1.32	0.59	0.27	pCi/g	
SLD06095	SLD06095					THORIUM-230	15.57	3.05	0.12	pCi/g	
SLD06095	SLD06095					THORIUM-232	1.09	0.48	0.12	pCi/g	
SLD06095	SLD06095					URANIUM-235	8.29	0.55	0.35	pCi/g	
SLD06095	SLD06095					URANIUM-238	149.70	10.98	4.25	pCi/g	
SLD06095	SLD06108	9/7/00	2	2.5		ACTINIUM-227	0.22	0.13	0.21	pCi/g	0.17
SLD06095	SLD06108					AMERICIUM-241	0.01	0.04	0.07	pCi/g	
SLD06095	SLD06108					CESIUM-137	-0.01	0.02	0.03	pCi/g	
SLD06095	SLD06108					PROTACTINIUM-231	0.18	0.56	0.87	pCi/g	
SLD06095	SLD06108					POTASSIUM-40	9.02	1.06	0.31	pCi/g	
SLD06095	SLD06108					RADIUM-226	2.29	0.14	0.06	pCi/g	
SLD06095	SLD06108					RADIUM-228	0.91	0.10	0.08	pCi/g	
SLD06095	SLD06108					THORIUM-228	1.41	0.64	0.25	pCi/g	
SLD06095	SLD06108					THORIUM-230	2.18	0.77	0.34	pCi/g	
SLD06095	SLD06108					THORIUM-232	1.36	0.57	0.14	pCi/g	
SLD06095	SLD06108					URANIUM-235	0.46	0.15	0.19	pCi/g	
SLD06095	SLD06108					URANIUM-238	7.81	1.05	3.88	pCi/g	
SLD06096	SLD06096	9/7/00	0.5	1	0.5	ACTINIUM-227	4.04	0.30	0.34	pCi/g	5.23
SLD06096	SLD06096					AMERICIUM-241	0.22	0.30	0.43	pCi/g	
SLD06096	SLD06096					CESIUM-137	-0.03	0.04	0.06	pCi/g	
SLD06096	SLD06096					PROTACTINIUM-231	4.23	1.19	1.58	pCi/g	
SLD06096	SLD06096					POTASSIUM-40	9.24	1.15	0.42	pCi/g	
SLD06096	SLD06096					RADIUM-226	3.23	0.18	0.10	pCi/g	
SLD06096	SLD06096					RADIUM-228	1.25	0.14	0.16	pCi/g	
SLD06096	SLD06096					THORIUM-228	1.02	0.56	0.32	pCi/g	
SLD06096	SLD06096					THORIUM-230	16.69	3.46	0.14	pCi/g	
SLD06096	SLD06096					THORIUM-232	1.25	0.57	0.32	pCi/g	
SLD06096	SLD06096					URANIUM-235	10.93	0.74	0.50	pCi/g	
SLD06096	SLD06096					URANIUM-238	212.70	15.51	5.45	pCi/g	
SLD06096	SLD06109	9/7/00	2	2.5		ACTINIUM-227	0.41	0.23	0.23	pCi/g	0.17
SLD06096	SLD06109					AMERICIUM-241	-0.02	0.10	0.14	pCi/g	
SLD06096	SLD06109					CESIUM-137	0.02	0.03	0.04	pCi/g	
SLD06096	SLD06109					PROTACTINIUM-231	0.50	0.68	1.14	pCi/g	
SLD06096	SLD06109					POTASSIUM-40	6.31	0.90	0.34	pCi/g	
SLD06096	SLD06109					RADIUM-226	1.75	0.12	0.06	pCi/g	
SLD06096	SLD06109					RADIUM-228	0.67	0.10	0.11	pCi/g	
SLD06096	SLD06109					THORIUM-228	1.15	0.63	0.30	pCi/g	

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Sample Location	Sample ID	Collection Date	Start	End	Thickness of	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
			Depth (ft bgs)	Depth (ft bgs)	Cover Material (ft)						
SLD06096	SLD06109					THORIUM-230	3.10	1.04	0.16	pCi/g	
SLD06096	SLD06109					THORIUM-232	0.67	0.10	0.11	pCi/g	
SLD06096	SLD06109					URANIUM-235	0.31	0.20	0.27	pCi/g	
SLD06096	SLD06109					URANIUM-238	6.01	1.71	6.32	pCi/g	
SLD06096	SLD06142	9/7/00	2.5	3		ACTINIUM-227	0.11	0.09	0.18	pCi/g	0.02
SLD06096	SLD06142					AMERICIUM-241	0.02	0.07	0.11	pCi/g	
SLD06096	SLD06142					CESIUM-137	-0.02	0.02	0.03	pCi/g	
SLD06096	SLD06142					PROTACTINIUM-231	0.28	0.57	0.91	pCi/g	
SLD06096	SLD06142					POTASSIUM-40	10.04	1.16	0.22	pCi/g	
SLD06096	SLD06142					RADIUM-226	1.44	0.09	0.06	pCi/g	
SLD06096	SLD06142					RADIUM-228	0.72	0.10	0.09	pCi/g	
SLD06096	SLD06142					THORIUM-228	1.16	0.58	0.33	pCi/g	
SLD06096	SLD06142					THORIUM-230	1.67	0.64	0.13	pCi/g	
SLD06096	SLD06142					THORIUM-232	1.13	0.51	0.13	pCi/g	
SLD06096	SLD06142					URANIUM-235	0.12	0.16	0.20	pCi/g	
SLD06096	SLD06142					URANIUM-238	1.87	0.91	3.53	pCi/g	
SLD06096	SLD06143	9/7/00	4	4.5		ACTINIUM-227	0.20	0.12	0.22	pCi/g	0.13
SLD06096	SLD06143					AMERICIUM-241	0.04	0.08	0.12	pCi/g	
SLD06096	SLD06143					CESIUM-137	0.02	0.02	0.04	pCi/g	
SLD06096	SLD06143					PROTACTINIUM-231	-0.05	0.54	0.96	pCi/g	
SLD06096	SLD06143					POTASSIUM-40	7.30	0.96	0.39	pCi/g	
SLD06096	SLD06143					RADIUM-226	2.16	0.13	0.07	pCi/g	
SLD06096	SLD06143					RADIUM-228	0.74	0.10	0.09	pCi/g	
SLD06096	SLD06143					THORIUM-228	1.15	0.56	0.24	pCi/g	
SLD06096	SLD06143					THORIUM-230	3.58	1.04	0.24	pCi/g	
SLD06096	SLD06143					THORIUM-232	0.69	0.39	0.24	pCi/g	
SLD06096	SLD06143					URANIUM-235	0.13	0.19	0.23	pCi/g	
SLD06096	SLD06143					URANIUM-238	2.32	1.13	4.88	pCi/g	
SLD06097	SLD06097	9/11/00	0.5	1		ACTINIUM-227	0.07	0.10	0.16	pCi/g	0.11
SLD06097	SLD06097					AMERICIUM-241	0.01	0.03	0.05	pCi/g	
SLD06097	SLD06097					CESIUM-137	-0.01	0.02	0.02	pCi/g	
SLD06097	SLD06097					PROTACTINIUM-231	-0.12	0.44	0.65	pCi/g	
SLD06097	SLD06097					POTASSIUM-40	7.83	0.90	0.24	pCi/g	
SLD06097	SLD06097					RADIUM-226	1.45	0.09	0.04	pCi/g	
SLD06097	SLD06097					RADIUM-228	0.60	0.07	0.10	pCi/g	
SLD06097	SLD06097					THORIUM-228	0.66	0.44	0.28	pCi/g	
SLD06097	SLD06097					THORIUM-230	2.92	0.95	0.15	pCi/g	
SLD06097	SLD06097					THORIUM-232	0.77	0.43	0.15	pCi/g	
SLD06097	SLD06097					URANIUM-235	0.22	0.11	0.15	pCi/g	
SLD06097	SLD06097					URANIUM-238	3.63	0.63	2.77	pCi/g	
SLD06097	SLD06110	9/11/00	2	2.5		ACTINIUM-227	1.00	0.14	0.20	pCi/g	0.59
SLD06097	SLD06110					AMERICIUM-241	0.03	0.06	0.10	pCi/g	
SLD06097	SLD06110					CESIUM-137	0.00	0.02	0.03	pCi/g	
SLD06097	SLD06110					PROTACTINIUM-231	0.87	0.74	1.16	pCi/g	
SLD06097	SLD06110					POTASSIUM-40	12.74	1.41	0.30	pCi/g	
SLD06097	SLD06110					RADIUM-226	1.74	0.11	0.06	pCi/g	
SLD06097	SLD06110					RADIUM-228	0.89	0.11	0.09	pCi/g	
SLD06097	SLD06110					THORIUM-228	0.63	0.40	0.13	pCi/g	
SLD06097	SLD06110					THORIUM-230	3.92	1.08	0.32	pCi/g	
SLD06097	SLD06110					THORIUM-232	0.85	0.42	0.13	pCi/g	
SLD06097	SLD06110					URANIUM-235	1.42	0.22	0.23	pCi/g	
SLD06097	SLD06110					URANIUM-238	23.93	2.33	3.93	pCi/g	
SLD06098	SLD06098	9/11/00	0.5	1	0.5	ACTINIUM-227	0.16	0.10	0.16	pCi/g	0.00
SLD06098	SLD06098					AMERICIUM-241	0.01	0.04	0.05	pCi/g	
SLD06098	SLD06098					CESIUM-137	0.03	0.02	0.02	pCi/g	
SLD06098	SLD06098					PROTACTINIUM-231	0.35	0.43	0.67	pCi/g	
SLD06098	SLD06098					POTASSIUM-40	13.40	1.37	0.23	pCi/g	
SLD06098	SLD06098					RADIUM-226	1.19	0.08	0.04	pCi/g	
SLD06098	SLD06098					RADIUM-228	0.72	0.07	0.06	pCi/g	

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			Depth (ft bgs)	Depth (ft bgs)	Material (ft)						
SLD06098	SLD06098					THORIUM-228	1.21	0.57	0.24	pCi/g	
SLD06098	SLD06098					THORIUM-230	1.63	0.63	0.32	pCi/g	
SLD06098	SLD06098					THORIUM-232	0.85	0.43	0.13	pCi/g	
SLD06098	SLD06098					URANIUM-235	0.09	0.13	0.15	pCi/g	
SLD06098	SLD06098					URANIUM-238	1.56	0.42	3.39	pCi/g	
SLD06098	SLD06111	9/11/00	2	2.5		ACTINIUM-227	1.65	0.19	0.23	pCi/g	1.48
SLD06098	SLD06111					AMERICIUM-241	0.03	0.08	0.12	pCi/g	
SLD06098	SLD06111					CESIUM-137	0.02	0.03	0.04	pCi/g	
SLD06098	SLD06111					PROTACTINIUM-231	1.13	0.66	1.24	pCi/g	
SLD06098	SLD06111					POTASSIUM-40	11.60	1.33	0.40	pCi/g	
SLD06098	SLD06111					RADIUM-226	3.85	0.22	0.07	pCi/g	
SLD06098	SLD06111					RADIUM-228	1.12	0.12	0.11	pCi/g	
SLD06098	SLD06111					THORIUM-228	2.05	0.87	0.40	pCi/g	
SLD06098	SLD06111					THORIUM-230	11.02	2.57	0.16	pCi/g	
SLD06098	SLD06111					THORIUM-232	0.95	0.50	0.16	pCi/g	
SLD06098	SLD06111					URANIUM-235	2.60	0.27	0.28	pCi/g	
SLD06098	SLD06111					URANIUM-238	44.33	3.87	4.71	pCi/g	
SLD06099	SLD06099	9/7/00	0.2	0.7	0.2	ACTINIUM-227	0.23	0.08	0.12	pCi/g	1.10
SLD06099	SLD06099					AMERICIUM-241	0.01	0.03	0.05	pCi/g	
SLD06099	SLD06099					CESIUM-137	0.15	0.03	0.02	pCi/g	
SLD06099	SLD06099					PROTACTINIUM-231	0.33	0.40	0.63	pCi/g	
SLD06099	SLD06099					POTASSIUM-40	3.34	0.49	0.21	pCi/g	
SLD06099	SLD06099					RADIUM-226	1.83	0.11	0.04	pCi/g	
SLD06099	SLD06099					RADIUM-228	0.28	0.05	0.06	pCi/g	
SLD06099	SLD06099					THORIUM-228	1.15	0.58	0.33	pCi/g	
SLD06099	SLD06099					THORIUM-230	7.30	1.72	0.13	pCi/g	
SLD06099	SLD06099					THORIUM-232	0.90	0.46	0.33	pCi/g	
SLD06099	SLD06099					URANIUM-235	0.17	0.10	0.14	pCi/g	
SLD06099	SLD06099					URANIUM-238	2.16	0.48	2.46	pCi/g	
SLD06099	SLD06112	9/7/00	1.5	2		ACTINIUM-227	0.12	0.12	0.19	pCi/g	0.09
SLD06099	SLD06112					AMERICIUM-241	-0.01	0.04	0.06	pCi/g	
SLD06099	SLD06112					CESIUM-137	0.02	0.03	0.03	pCi/g	
SLD06099	SLD06112					PROTACTINIUM-231	-0.03	0.56	0.84	pCi/g	
SLD06099	SLD06112					POTASSIUM-40	11.11	1.22	0.27	pCi/g	
SLD06099	SLD06112					RADIUM-226	1.52	0.10	0.05	pCi/g	
SLD06099	SLD06112					RADIUM-228	1.01	0.10	0.08	pCi/g	
SLD06099	SLD06112					THORIUM-228	1.47	0.63	0.31	pCi/g	
SLD06099	SLD06112					THORIUM-230	2.63	0.82	0.12	pCi/g	
SLD06099	SLD06112					THORIUM-232	1.04	0.47	0.12	pCi/g	
SLD06099	SLD06112					URANIUM-235	0.23	0.13	0.18	pCi/g	
SLD06099	SLD06112					URANIUM-238	3.00	0.63	3.28	pCi/g	
SLD06100	SLD06100	9/7/00	0.2	0.7	0.2	ACTINIUM-227	0.12	0.14	0.22	pCi/g	0.60
SLD06100	SLD06100					AMERICIUM-241	-0.01	0.04	0.07	pCi/g	
SLD06100	SLD06100					CESIUM-137	0.57	0.08	0.03	pCi/g	
SLD06100	SLD06100					PROTACTINIUM-231	0.22	0.64	0.98	pCi/g	
SLD06100	SLD06100					POTASSIUM-40	7.24	0.91	0.32	pCi/g	
SLD06100	SLD06100					RADIUM-226	2.78	0.16	0.06	pCi/g	
SLD06100	SLD06100					RADIUM-228	0.71	0.09	0.08	pCi/g	
SLD06100	SLD06100					THORIUM-228	1.28	0.60	0.29	pCi/g	
SLD06100	SLD06100					THORIUM-230	4.69	1.24	0.24	pCi/g	
SLD06100	SLD06100					THORIUM-232	0.92	0.45	0.13	pCi/g	
SLD06100	SLD06100					URANIUM-235	0.41	0.19	0.19	pCi/g	
SLD06100	SLD06100					URANIUM-238	3.58	0.76	3.73	pCi/g	
SLD06100	SLD06113	9/7/00	1.8	2.2		ACTINIUM-227	0.24	0.13	0.21	pCi/g	0.12
SLD06100	SLD06113					AMERICIUM-241	-0.03	0.04	0.06	pCi/g	
SLD06100	SLD06113					CESIUM-137	0.02	0.02	0.03	pCi/g	
SLD06100	SLD06113					PROTACTINIUM-231	-0.49	0.57	0.82	pCi/g	
SLD06100	SLD06113					POTASSIUM-40	9.36	1.07	0.30	pCi/g	
SLD06100	SLD06113					RADIUM-226	2.21	0.14	0.05	pCi/g	

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Sample Location	Sample ID	Collection Date	Start Depth (ft bgs)	End Depth (ft bgs)	Thickness of Cover Material (ft)	Parameter	Result	Error	Detection Limit	Units	Sum of Ratios Value
SLD06100	SLD06113					RADIUM-228	0.88	0.10	0.09	pCi/g	
SLD06100	SLD06113					THORIUM-228	1.62	0.68	0.29	pCi/g	
SLD06100	SLD06113					THORIUM-230	2.86	0.88	0.24	pCi/g	
SLD06100	SLD06113					THORIUM-232	1.20	0.52	0.13	pCi/g	
SLD06100	SLD06113					URANIUM-235	0.30	0.12	0.19	pCi/g	
SLD06100	SLD06113					URANIUM-238	3.52	0.72	3.49	pCi/g	
SLD06101	SLD06101	9/7/00	0.2	0.6	0.2	ACTINIUM-227	0.09	0.07	0.10	pCi/g	0.00
SLD06101	SLD06101					AMERICIUM-241	0.00	0.02	0.03	pCi/g	
SLD06101	SLD06101					CESIUM-137	0.09	0.02	0.01	pCi/g	
SLD06101	SLD06101					PROTACTINIUM-231	0.19	0.30	0.47	pCi/g	
SLD06101	SLD06101					POTASSIUM-40	2.04	0.32	0.15	pCi/g	
SLD06101	SLD06101					RADIUM-226	0.79	0.05	0.03	pCi/g	
SLD06101	SLD06101					RADIUM-228	0.11	0.03	0.04	pCi/g	
SLD06101	SLD06101					THORIUM-228	0.76	0.46	0.35	pCi/g	
SLD06101	SLD06101					THORIUM-230	1.60	0.62	0.29	pCi/g	
SLD06101	SLD06101					THORIUM-232	0.33	0.26	0.13	pCi/g	
SLD06101	SLD06101					URANIUM-235	0.08	0.07	0.09	pCi/g	
SLD06101	SLD06101					URANIUM-238	0.91	0.34	1.97	pCi/g	
SLD06101	SLD06114	9/7/00	1.5	2		ACTINIUM-227	0.16	0.09	0.15	pCi/g	0.04
SLD06101	SLD06114					AMERICIUM-241	-0.01	0.03	0.05	pCi/g	
SLD06101	SLD06114					CESIUM-137	0.00	0.01	0.02	pCi/g	
SLD06101	SLD06114					PROTACTINIUM-231	0.24	0.45	0.69	pCi/g	
SLD06101	SLD06114					POTASSIUM-40	6.32	0.76	0.21	pCi/g	
SLD06101	SLD06114					RADIUM-226	1.58	0.10	0.04	pCi/g	
SLD06101	SLD06114					RADIUM-228	0.54	0.06	0.06	pCi/g	
SLD06101	SLD06114					THORIUM-228	1.00	0.51	0.28	pCi/g	
SLD06101	SLD06114					THORIUM-230	2.41	0.78	0.13	pCi/g	
SLD06101	SLD06114					THORIUM-232	0.53	0.33	0.13	pCi/g	
SLD06101	SLD06114					URANIUM-235	0.17	0.13	0.15	pCi/g	
SLD06101	SLD06114					URANIUM-238	1.61	0.45	3.01	pCi/g	
SLD06144	SLD06144	9/11/00	0.5	1	0.5	ACTINIUM-227	4.60	0.32	0.27	pCi/g	4.30
SLD06144	SLD06144					AMERICIUM-241	0.56	0.21	0.16	pCi/g	
SLD06144	SLD06144					CESIUM-137	0.05	0.04	0.04	pCi/g	
SLD06144	SLD06144					PROTACTINIUM-231	4.75	0.93	1.24	pCi/g	
SLD06144	SLD06144					POTASSIUM-40	11.19	1.26	0.41	pCi/g	
SLD06144	SLD06144					RADIUM-226	4.08	0.23	0.08	pCi/g	
SLD06144	SLD06144					RADIUM-228	1.31	0.12	0.11	pCi/g	
SLD06144	SLD06144					THORIUM-228	1.47	0.62	0.33	pCi/g	
SLD06144	SLD06144					THORIUM-230	20.46	3.82	0.12	pCi/g	
SLD06144	SLD06144					THORIUM-232	1.47	0.57	0.30	pCi/g	
SLD06144	SLD06144					URANIUM-235	8.43	0.57	0.38	pCi/g	
SLD06144	SLD06144					URANIUM-238	153.00	11.19	4.70	pCi/g	
SLD06144	SLD06145	9/11/00	2	2.5		ACTINIUM-227	0.16	0.14	0.22	pCi/g	0.87
SLD06144	SLD06145					AMERICIUM-241	0.03	0.07	0.10	pCi/g	
SLD06144	SLD06145					CESIUM-137	0.01	0.02	0.04	pCi/g	
SLD06144	SLD06145					PROTACTINIUM-231	0.56	0.64	1.00	pCi/g	
SLD06144	SLD06145					POTASSIUM-40	8.51	1.01	0.31	pCi/g	
SLD06144	SLD06145					RADIUM-226	2.26	0.14	0.06	pCi/g	
SLD06144	SLD06145					RADIUM-228	0.73	0.10	0.08	pCi/g	
SLD06144	SLD06145					THORIUM-228	1.32	0.65	0.33	pCi/g	
SLD06144	SLD06145					THORIUM-230	3.30	1.04	0.15	pCi/g	
SLD06144	SLD06145					THORIUM-232	0.82	0.45	0.15	pCi/g	
SLD06144	SLD06145					URANIUM-235	2.01	0.24	0.23	pCi/g	
SLD06144	SLD06145					URANIUM-238	40.28	3.55	4.13	pCi/g	
SLD06146	SLD06146	9/11/00	0.5	1	0.5	ACTINIUM-227	68.06	3.21	0.75	pCi/g	15.08
SLD06146	SLD06146					AMERICIUM-241	0.06	0.24	0.39	pCi/g	
SLD06146	SLD06146					CESIUM-137	-0.01	0.06	0.09	pCi/g	
SLD06146	SLD06146					PROTACTINIUM-231	72.15	7.25	3.39	pCi/g	
SLD06146	SLD06146					POTASSIUM-40	12.50	1.46	0.57	pCi/g	

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SLD06146	SLD06146					RADIUM-226	13.68	0.69	0.20	pCi/g	
SLD06146	SLD06146					RADIUM-228	1.05	0.16	0.25	pCi/g	
SLD06146	SLD06146					THORIUM-228	1.05	0.16	0.25	pCi/g	
SLD06146	SLD06146					THORIUM-230	88.64	25.82	37.95	pCi/g	
SLD06146	SLD06146					THORIUM-232	1.05	0.16	0.25	pCi/g	
SLD06146	SLD06146					URANIUM-235	37.59	2.26	0.96	pCi/g	
SLD06146	SLD06146					URANIUM-238	466.10	35.96	8.07	pCi/g	
SLD06146	SLD06147	9/11/00	1.9	2.4		ACTINIUM-227	0.33	0.17	0.26	pCi/g	4.37
SLD06146	SLD06147					AMERICIUM-241	0.50	0.18	0.12	pCi/g	
SLD06146	SLD06147					CESIUM-137	0.01	0.02	0.04	pCi/g	
SLD06146	SLD06147					PROTACTINIUM-231	-0.08	1.04	1.11	pCi/g	
SLD06146	SLD06147					POTASSIUM-40	17.11	1.77	0.30	pCi/g	
SLD06146	SLD06147					RADIUM-226	2.94	0.17	0.07	pCi/g	
SLD06146	SLD06147					RADIUM-228	0.98	0.11	0.10	pCi/g	
SLD06146	SLD06147					THORIUM-228	0.98	0.11	0.10	pCi/g	
SLD06146	SLD06147					THORIUM-230	40.90	14.55	12.03	pCi/g	
SLD06146	SLD06147					THORIUM-232	0.98	0.11	0.10	pCi/g	
SLD06146	SLD06147					URANIUM-235	4.69	0.35	0.28	pCi/g	
SLD06146	SLD06147					URANIUM-238	89.99	6.92	4.29	pCi/g	
SLD06146	SLD06154	9/11/00	2.9	3.4		ACTINIUM-227	0.28	0.13	0.25	pCi/g	0.20
SLD06146	SLD06154					AMERICIUM-241	0.03	0.04	0.07	pCi/g	
SLD06146	SLD06154					CESIUM-137	0.03	0.02	0.04	pCi/g	
SLD06146	SLD06154					PROTACTINIUM-231	0.28	0.65	1.00	pCi/g	
SLD06146	SLD06154					POTASSIUM-40	9.40	1.14	0.34	pCi/g	
SLD06146	SLD06154					RADIUM-226	2.69	0.16	0.06	pCi/g	
SLD06146	SLD06154					RADIUM-228	0.97	0.11	0.09	pCi/g	
SLD06146	SLD06154					THORIUM-228	1.80	0.80	0.36	pCi/g	
SLD06146	SLD06154					THORIUM-230	4.07	1.23	0.16	pCi/g	
SLD06146	SLD06154					THORIUM-232	1.19	0.58	0.16	pCi/g	
SLD06146	SLD06154					URANIUM-235	0.27	0.16	0.20	pCi/g	
SLD06146	SLD06154					URANIUM-238	3.47	0.75	4.15	pCi/g	
SLD06146	SLD06155	9/11/00	3.9	4.5		ACTINIUM-227	0.25	0.11	0.17	pCi/g	0.07
SLD06146	SLD06155					AMERICIUM-241	-0.01	0.03	0.05	pCi/g	
SLD06146	SLD06155					CESIUM-137	-0.01	0.02	0.02	pCi/g	
SLD06146	SLD06155					PROTACTINIUM-231	0.06	0.45	0.68	pCi/g	
SLD06146	SLD06155					POTASSIUM-40	10.95	1.16	0.22	pCi/g	
SLD06146	SLD06155					RADIUM-226	1.59	0.10	0.04	pCi/g	
SLD06146	SLD06155					RADIUM-228	0.65	0.07	0.07	pCi/g	
SLD06146	SLD06155					THORIUM-228	0.62	0.43	0.37	pCi/g	
SLD06146	SLD06155					THORIUM-230	2.99	0.93	0.30	pCi/g	
SLD06146	SLD06155					THORIUM-232	0.65	0.38	0.14	pCi/g	
SLD06146	SLD06155					URANIUM-235	0.21	0.14	0.15	pCi/g	
SLD06146	SLD06155					URANIUM-238	1.34	0.49	3.11	pCi/g	
SLD06148	SLD06148	9/11/00	0.5	1	0.5	ACTINIUM-227	5.44	0.33	0.22	pCi/g	2.42
SLD06148	SLD06148					AMERICIUM-241	0.10	0.07	0.12	pCi/g	
SLD06148	SLD06148					CESIUM-137	0.04	0.03	0.03	pCi/g	
SLD06148	SLD06148					PROTACTINIUM-231	5.85	1.02	1.03	pCi/g	
SLD06148	SLD06148					POTASSIUM-40	9.30	1.04	0.31	pCi/g	
SLD06148	SLD06148					RADIUM-226	3.31	0.18	0.06	pCi/g	
SLD06148	SLD06148					RADIUM-228	1.27	0.12	0.09	pCi/g	
SLD06148	SLD06148					THORIUM-228	1.68	0.72	0.31	pCi/g	
SLD06148	SLD06148					THORIUM-230	23.07	4.51	0.26	pCi/g	
SLD06148	SLD06148					THORIUM-232	0.88	0.45	0.14	pCi/g	
SLD06148	SLD06148					URANIUM-235	3.52	0.33	0.28	pCi/g	
SLD06148	SLD06148					URANIUM-238	50.63	4.14	3.70	pCi/g	
SLD06148	SLD06149	9/11/00	1.8	2.5		ACTINIUM-227	0.16	0.11	0.23	pCi/g	1.07
SLD06148	SLD06149					AMERICIUM-241	0.09	0.06	0.09	pCi/g	
SLD06148	SLD06149					CESIUM-137	0.01	0.02	0.04	pCi/g	
SLD06148	SLD06149					PROTACTINIUM-231	0.46	0.67	1.03	pCi/g	

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SLD06148	SLD06149					POTASSIUM-40	8.35	0.96	0.32	pCi/g	
SLD06148	SLD06149					RADIUM-226	2.64	0.15	0.06	pCi/g	
SLD06148	SLD06149					RADIUM-228	0.65	0.09	0.09	pCi/g	
SLD06148	SLD06149					THORIUM-228	1.47	0.71	0.35	pCi/g	
SLD06148	SLD06149					THORIUM-230	3.04	1.01	0.30	pCi/g	
SLD06148	SLD06149					THORIUM-232	1.11	0.55	0.16	pCi/g	
SLD06148	SLD06149					URANIUM-235	2.87	0.28	0.25	pCi/g	
SLD06148	SLD06149					URANIUM-238	50.60	4.16	3.88	pCi/g	
SLD06150	SLD06150	9/12/00	0.5	1	0.5	ACTINIUM-227	0.46	0.15	0.19	pCi/g	0.43
SLD06150	SLD06150					AMERICIUM-241	0.00	0.23	0.34	pCi/g	
SLD06150	SLD06150					CESIUM-137	0.05	0.03	0.04	pCi/g	
SLD06150	SLD06150					PROTACTINIUM-231	-0.01	0.65	1.01	pCi/g	
SLD06150	SLD06150					POTASSIUM-40	7.45	1.01	0.29	pCi/g	
SLD06150	SLD06150					RADIUM-226	2.21	0.14	0.06	pCi/g	
SLD06150	SLD06150					RADIUM-228	0.81	0.10	0.09	pCi/g	
SLD06150	SLD06150					THORIUM-228	1.19	0.64	0.40	pCi/g	
SLD06150	SLD06150					THORIUM-230	3.02	1.02	0.36	pCi/g	
SLD06150	SLD06150					THORIUM-232	0.90	0.49	0.16	pCi/g	
SLD06150	SLD06150					URANIUM-235	1.01	0.20	0.24	pCi/g	
SLD06150	SLD06150					URANIUM-238	19.29	3.08	3.77	pCi/g	
SLD06150	SLD06151	9/12/00	2	2.5		ACTINIUM-227	0.09	0.15	0.23	pCi/g	0.03
SLD06150	SLD06151					AMERICIUM-241	-0.01	0.20	0.29	pCi/g	
SLD06150	SLD06151					CESIUM-137	0.00	0.02	0.04	pCi/g	
SLD06150	SLD06151					PROTACTINIUM-231	0.01	0.64	1.00	pCi/g	
SLD06150	SLD06151					POTASSIUM-40	7.68	1.02	0.30	pCi/g	
SLD06150	SLD06151					RADIUM-226	2.16	0.14	0.07	pCi/g	
SLD06150	SLD06151					RADIUM-228	0.79	0.12	0.09	pCi/g	
SLD06150	SLD06151					THORIUM-228	1.61	0.77	0.42	pCi/g	
SLD06150	SLD06151					THORIUM-230	1.61	0.70	0.17	pCi/g	
SLD06150	SLD06151					THORIUM-232	0.99	0.53	0.17	pCi/g	
SLD06150	SLD06151					URANIUM-235	0.15	0.17	0.24	pCi/g	
SLD06150	SLD06151					URANIUM-238	2.68	1.73	3.69	pCi/g	
SLD06152	SLD06152	9/12/00	0.5	1	0.5	ACTINIUM-227	2.21	0.21	0.26	pCi/g	2.06
SLD06152	SLD06152					AMERICIUM-241	0.16	0.35	0.52	pCi/g	
SLD06152	SLD06152					CESIUM-137	-0.03	0.03	0.04	pCi/g	
SLD06152	SLD06152					PROTACTINIUM-231	3.19	1.43	1.61	pCi/g	
SLD06152	SLD06152					POTASSIUM-40	9.12	1.17	0.35	pCi/g	
SLD06152	SLD06152					RADIUM-226	3.42	0.20	0.08	pCi/g	
SLD06152	SLD06152					RADIUM-228	1.13	0.13	0.11	pCi/g	
SLD06152	SLD06152					THORIUM-228	1.06	0.56	0.26	pCi/g	
SLD06152	SLD06152					THORIUM-230	9.82	2.22	0.14	pCi/g	
SLD06152	SLD06152					THORIUM-232	1.13	0.13	0.11	pCi/g	
SLD06152	SLD06152					URANIUM-235	3.85	0.38	0.37	pCi/g	
SLD06152	SLD06152					URANIUM-238	77.55	7.49	4.76	pCi/g	
SLD06152	SLD06153	9/12/00	2	2.5		ACTINIUM-227	0.01	0.17	0.25	pCi/g	0.25
SLD06152	SLD06153					AMERICIUM-241	-0.14	0.21	0.31	pCi/g	
SLD06152	SLD06153					CESIUM-137	-0.03	0.03	0.04	pCi/g	
SLD06152	SLD06153					PROTACTINIUM-231	0.35	0.96	1.12	pCi/g	
SLD06152	SLD06153					POTASSIUM-40	9.05	1.18	0.33	pCi/g	
SLD06152	SLD06153					RADIUM-226	2.68	0.17	0.07	pCi/g	
SLD06152	SLD06153					RADIUM-228	1.11	0.14	0.10	µCi/g	
SLD06152	SLD06153					THORIUM-228	1.45	0.70	0.16	pCi/g	
SLD06152	SLD06153					THORIUM-230	3.87	1.19	0.00	pCi/g	
SLD06152	SLD06153					THORIUM-232	1.60	0.68	0.16	pCi/g	
SLD06152	SLD06153					URANIUM-235	0.18	0.18	0.25	pCi/g	
SLD06152	SLD06153					URANIUM-238	5.17	2.31	5.09	pCi/g	
SLD06156	SLD05629	10/24/00	2.3	2.8		ACTINIUM-227	0.07	0.29	0.43	pCi/g	0.25
SLD06156	SLD05629					AMERICIUM-241	-0.03	0.08	0.12	pCi/g	
SLD06156	SLD05629					CESIUM-137	-0.01	0.05	0.07	pCi/g	

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			Depth (ft bgs)	Depth (ft bgs)	Cover Material (ft)						
SLD06156	SLD05629					PROTACTINIUM-231	0.12	1.30	2.03	pCi/g	
SLD06156	SLD05629					POTASSIUM-40	7.90	1.72	0.78	pCi/g	
SLD06156	SLD05629					RADIUM-226	2.01	0.17	0.13	pCi/g	
SLD06156	SLD05629					RADIUM-228	0.86	0.18	0.20	pCi/g	
SLD06156	SLD05629					THORIUM-228	0.90	0.54	0.39	pCi/g	
SLD06156	SLD05629					THORIUM-230	4.40	1.28	0.16	pCi/g	
SLD06156	SLD05629					THORIUM-232	0.69	0.42	0.16	pCi/g	
SLD06156	SLD05629					URANIUM-235	0.68	0.31	0.37	pCi/g	
SLD06156	SLD05629					URANIUM-238	5.41	1.52	10.18	pCi/g	
SLD06156	SLD05630	10/24/00	3.9	4		ACTINIUM-227	0.04	0.10	0.14	pCi/g	0.00
SLD06156	SLD05630					AMERICIUM-241	-0.01	0.03	0.05	pCi/g	
SLD06156	SLD05630					CESIUM-137	-0.01	0.01	0.02	pCi/g	
SLD06156	SLD05630					PROTACTINIUM-231	0.23	0.42	0.66	pCi/g	
SLD06156	SLD05630					POTASSIUM-40	10.38	1.11	0.23	pCi/g	
SLD06156	SLD05630					RADIUM-226	1.03	0.07	0.04	pCi/g	

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Sample Location	Sample ID	Collection Date	Start	End	Thickness of					Detection Limit	Units	Sum of Ratios Value
			Depth (ft bgs)	Depth (ft bgs)	Cover Material (ft)	Parameter	Result	Error				
SLD06156	SLD05630					RADIUM-228	0.55	0.07	0.06	pCi/g		
SLD06156	SLD05630					THORIUM-228	0.98	0.50	0.24	pCi/g		
SLD06156	SLD05630					THORIUM-230	1.45	0.58	0.24	pCi/g		
SLD06156	SLD05630					THORIUM-232	0.46	0.31	0.24	pCi/g		
SLD06156	SLD05630					URANIUM-235	0.12	0.10	0.13	pCi/g		
SLD06156	SLD05630					URANIUM-238	1.49	0.50	3.55	pCi/g		
SLD06156	SLD06156	10/24/00	0.4	1.1	0.4	ACTINIUM-227	21.23	1.08	0.46	pCi/g		14.98
SLD06156	SLD06156					AMERICIUM-241	0.31	0.18	0.29	pCi/g		
SLD06156	SLD06156					CESIUM-137	0.03	0.04	0.06	pCi/g		
SLD06156	SLD06156					PROTACTINIUM-231	22.33	2.55	2.02	pCi/g		
SLD06156	SLD06156					POTASSIUM-40	10.12	1.17	0.45	pCi/g		
SLD06156	SLD06156					RADIUM-226	7.47	0.40	0.12	pCi/g		
SLD06156	SLD06156					RADIUM-228	1.31	0.16	0.16	pCi/g		
SLD06156	SLD06156					THORIUM-228	1.31	0.16	0.16	pCi/g		
SLD06156	SLD06156					THORIUM-230	45.97	17.85	26.86	pCi/g		
SLD06156	SLD06156					THORIUM-232	1.31	0.16	0.16	pCi/g		
SLD06156	SLD06156					URANIUM-235	19.20	1.20	0.63	pCi/g		
SLD06156	SLD06156					URANIUM-238	306.10	22.07	6.31	pCi/g		
SLD06156	SLD06157	10/24/00	1.8	2.3		ACTINIUM-227	0.00	0.32	0.47	pCi/g		1.11
SLD06156	SLD06157					AMERICIUM-241	0.10	0.12	0.19	pCi/g		
SLD06156	SLD06157					CESIUM-137	-0.05	0.05	0.08	pCi/g		
SLD06156	SLD06157					PROTACTINIUM-231	-0.38	1.55	2.34	pCi/g		
SLD06156	SLD06157					POTASSIUM-40	6.51	1.51	0.82	pCi/g		
SLD06156	SLD06157					RADIUM-226	1.83	0.17	0.15	pCi/g		
SLD06156	SLD06157					RADIUM-228	0.80	0.20	0.21	pCi/g		
SLD06156	SLD06157					THORIUM-228	0.85	0.45	0.30	pCi/g		
SLD06156	SLD06157					THORIUM-230	2.33	0.75	0.27	pCi/g		
SLD06156	SLD06157					THORIUM-232	0.58	0.33	0.12	pCi/g		
SLD06156	SLD06157					URANIUM-235	3.35	0.50	0.48	pCi/g		
SLD06156	SLD06157					URANIUM-238	55.66	5.69	9.15	pCi/g		
SLD06158	SLD06158	10/24/00	0.4	1.1	0.4	ACTINIUM-227	0.35	0.08	0.11	pCi/g		0.91
SLD06158	SLD06158					AMERICIUM-241	0.03	0.03	0.05	pCi/g		
SLD06158	SLD06158					CESIUM-137	0.08	0.02	0.02	pCi/g		
SLD06158	SLD06158					PROTACTINIUM-231	0.53	0.37	0.60	pCi/g		
SLD06158	SLD06158					POTASSIUM-40	5.20	0.61	0.22	pCi/g		
SLD06158	SLD06158					RADIUM-226	1.29	0.08	0.03	pCi/g		
SLD06158	SLD06158					RADIUM-228	0.33	0.05	0.05	pCi/g		
SLD06158	SLD06158					THORIUM-228	0.74	0.43	0.13	pCi/g		
SLD06158	SLD06158					THORIUM-230	6.10	1.50	0.33	pCi/g		
SLD06158	SLD06158					THORIUM-232	1.01	0.48	0.24	pCi/g		
SLD06158	SLD06158					URANIUM-235	0.34	0.11	0.13	pCi/g		
SLD06158	SLD06158					URANIUM-238	4.43	0.65	2.39	pCi/g		
SLD06158	SLD06159	10/24/00	1.9	2.4		ACTINIUM-227	0.89	0.00	0.89	pCi/g		0.18
SLD06158	SLD06159					AMERICIUM-241	0.16	0.00	0.16	pCi/g		
SLD06158	SLD06159					CESIUM-137	0.13	0.00	0.13	pCi/g		
SLD06158	SLD06159					PROTACTINIUM-231	2.98	0.00	2.98	pCi/g		
SLD06158	SLD06159					POTASSIUM-40	11.77	0.59	0.81	pCi/g		
SLD06158	SLD06159					RADIUM-226	3.05	0.07	0.13	pCi/g		
SLD06158	SLD06159					RADIUM-228	0.77	0.05	0.21	pCi/g		
SLD06158	SLD06159					THORIUM-228	0.77	0.05	0.21	pCi/g		

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