



Kennecott Uranium Company
Source Material License SUA-1350
Docket Number 40-8584

Sweetwater Uranium Project
Catchment Basin Excavation Completion Report
Volume I of II

6 May 2008

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6 May 2008

Mr. Keith McConnell
Deputy Director
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission
11545 Rockville Pike, Mail Stop T7-E18
Rockville, Maryland 20852

Dear Mr. McConnell:

**Subject: Source Material License SUA-1350 – Docket Number 40-8584
License Condition 9.10 – Catchment Basin Excavation Completion Report**

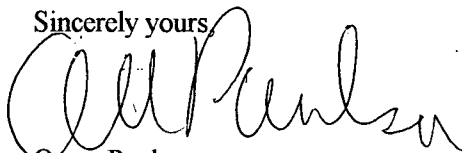
Enclosed please find the completion report for the Catchment Basin excavation performed by Kennecott Uranium Company at the Sweetwater Uranium Project as authorized by Source Material License SUA-1350, License Condition 9.10.

This work and the information presented in this document have been discussed extensively in both e-mails and telephone conversations with Stephen Cohen of your staff. In addition, Stephen Cohen visited the site twice during the excavation process; once on April 26, 2006 while contaminated material was being excavated, and once on July 10 to 11, 2007 when it was being backfilled.

Kennecott Uranium Company apologizes for the delay in preparing and submitting this report. Kennecott Uranium Company believes that with the exception of materials beneath existing infrastructure isolated from the backfill by synthetic liner material, any remaining radionuclides within the excavated area are either naturally occurring or below site release limits.

If you have any questions please do not hesitate to contact me.

Sincerely yours



Oscar Paulson
Facility Supervisor

ENC.

cc: Stephen Cohen, Project Manager (2)
Director, Division of Nuclear Materials Safety – Region IV (without enclosure)
Rio Tinto Energy America (RTEA) – Gillette, Wyoming



Kennecott Uranium Company
Source Material License SUA-1350
Docket Number 40-8584

Sweetwater Uranium Project
Catchment Basin Excavation Completion Report
Volume I of II

6 May 2008

Executive Summary

This report documents the excavation of soils contaminated by seepage from the Catchment Basin at the Sweetwater Uranium Project.

The report addresses background site radionuclide concentrations, pre-excavation dewatering of perched fluids, excavation of the contaminated materials and placement in the tailings impoundment, sampling results for the ten (10) meter by ten (10) meter grids in the excavated area, installation of seepage collectors, protection/preservation of monitor wells within the excavation footprint, application of liner material to contaminated highwalls, excavation of backfill material, backfilling, topsoiling and seeding of the excavated area, the separation crack between the footing and the slab beneath the east wall of the Mill Building and steps that will be taken to stabilize it and the results of health physics monitoring during the excavation work.

The document also contains a request for the approval of site specific background radionuclides for the subsurface.

Introduction

This completion report describes the excavation of the contaminated soils associated with the Catchment Basin at the Sweetwater Uranium Project. The contamination itself was described in detail in the following submittals to the Commission:

- Original submittal – May 12, 2004
- Response to Comments – July 22, 2004
- Response to Comments – December 15, 2004
- Response to Request for Additional Information – January 18, 2005.

This report describes the removal of perched fluids prior to excavation, health physics monitoring and radiation safety protocols before and during excavation, the excavation itself, sampling results of the grids, protection of monitor wells in the excavation footprint, considerations regarding background radionuclides encountered in the excavation, installation of fluid recovery drains, installation of liner material to separate unexcavated contaminated materials beneath slabs from clean fill, excavation of backfill from the Ore Pad, backfilling of the excavation and separation of the slab and footing along the east wall of the Mill Building.

This report is divided into the following sections:

Executive Summary

Summarizes the report in brief.

Introduction

Describes the report and its contents.

- I. Background**
Describes issues related to site background, especially subsurface background.
- II. Fluid Recovery**
Describes the recovery of perched fluids from the excavation area prior to the start of excavation.
- III. Contaminated Material Excavation and Placement in the Tailings Impoundment**
Describes the excavation process and work performed.
- IV. Excavation/Grid Release**
Describes the grids used, sampling procedures and sampling results for grids that exceeded initial release parameters.
- V. Ore Pad Clean Fill Excavation**
Describes the clean fill excavated from the site's Ore Pad base and problems encountered in the excavation of that material.
- VI. Backfilling**
Describes excavation backfilling.
- VII. Highwall Liner Installation**
Describes the installation of liner material to separate unexcavated contaminated material beneath slabs from clean fill material.
- VIII. Drains, Seeps/Seepage Collectors and Remaining Perched Fluids**
Describes the installation of drains to collect any fluids that may collect at the excavation bottom after backfilling.

- IX. Monitor Wells**
Describes steps taken to preserve monitor wells in the excavation footprint.
- X. Topsoiling and Seeding**
Describes topsoiling and seeding of the excavation.
- XI. Health Physics**
Describes health physics monitoring results for the excavation.
- XII. Mill Floor Crack**
Describes the separation between the Mill Building slab and footing beneath the east wall of the Mill Building and steps that will be taken to address the separation prior to resumption of mill operations.

The report contains the following maps that describe the excavation:

- A. Pre-Excavation (October 2005)**
This map shows the area prior to excavation.
- B. Total Excavation (October 2006 – June 2007)**
This map shows the excavation at its maximum size with associated fencing, Shower/Change/Monitoring Trailer and other features.
- C. Post Excavation (November 2007)**
This map shows the area as it is now following backfilling and the Ore Pad following removal of the clean fill.
- D. Volume Calculation Pre Construction versus Post Construction**
This map shows the thicknesses of additional fill material placed over the Catchment Basin Excavation area to promote consolidation by loading.
- E. Sample Point Locations and I.D.**
This map shows the locations of the final composite and spot/point samples collected in the excavation.
- F. Total Extractable Hydrocarbons (milligrams per kilogram)**
This map shows the ten (10) meter by ten (10) meter grid composite sampling results as well as the results of any spot samples collected for Total Extractable Hydrocarbons (TEH).
- G. Diesel Range Organics (milligrams per kilogram)**
This map shows the ten (10) meter by ten (10) meter grid composite sampling results as well as the results of any spot samples collected for Diesel Range Organics (DRO).
- H. Oil Range Hydrocarbons (milligrams per kilogram)**
This map shows the ten (10) meter by ten (10) meter grid composite sampling results as well as the results of any spot samples collected for Oil Range Hydrocarbons (ORO).
- I. Radium-226 Final Results**
This map shows the final ten (10) meter by ten (10) meter grid composite sampling results as well as the results of any spot samples collected for Radium-226.
- J. Thorium-230 Data (picoCuries per gram)**
This map shows the final ten (10) meter by ten (10) meter grid composite sampling results as well as results of any spot samples collected for Thorium-230.

K. Natural Uranium Data (picoCuries per gram)

This map shows the final ten (10) meter by ten (10) meter grid composite sampling results as well as the results of any spot samples collected for natural uranium.

L. pH (Standard Units)

This map shows the final ten (10) meter by ten (10) meter grid composite sampling results as well as the results of any spot samples collected for pH.

M. Sulphate (milligrams per kilogram)

This map shows the final ten (10) meter by ten (10) meter grid composite sampling results as well as the results of any spot samples collected for sulphate.

N. Radium-226 Final Results Contours

This map shows Radium-226 contours for the excavation bottom for the results of spot (not composite) samples collected for Radium-226.

O. Gamma Reading (microR/hour)

Release of the excavation was based upon sampling; however, gamma readings based in one (1) minute shielded/collimated counts of surveyed points were performed in the excavation bottom. The results of these surveys are recorded on this map.

P. Gamma Reading Contours (microR/hour)

Release of the excavation was based upon sampling; however, gamma readings based in one (1) minute shielded/collimated counts of surveyed points was performed in the excavation bottom. The results of these surveys are recorded and contoured on this map.

Excavation History Maps

The excavation was surveyed monthly by Robert Jack Smith and Associates (licensed surveyors), primarily to calculate volumes of material excavated or placed as fill in order to compensate the contractor. These surveys, however, provide monthly "snapshots" of the excavation during excavation and backfilling and are provided to show excavation progress. They are provided in Appendix 1 of Section III – Contaminated Material Excavation and Placement in the Tailings Impoundment.

Restricted Area Map

A map of the restricted area used during excavation is provided in Appendix 10 of Section XI – Health Physics.

Ore Pad Sampling Map

A map of sample locations for hydrocarbons is provided in Appendix 2 of Section V - Ore Pad Clean Fill Excavation.

Preoperational Background Sampling Map

A map of the locations of preoperational background sampling is provided in Appendix 2 of Section I – Background.

This report contains the following externally generated reports:

- **Petrographic Evaluation of Sample #C07051289-001A from P.O. # 1845**

This report prepared by Gareth D. Mitchell Consulting Geologist contains a petrographic evaluation of a sample from the excavation clearly showing that the materials containing elevated concentrations of radionuclides are in fact natural. (Appendix 1 of Section I – Background)

- **Structural Assessment Report**

This report by JVA Consulting Engineers describes the separation between the Mill Building slab and footing and the steps that should be taken prior to resumption of operations to address the problem. (Appendix 1 of Section XII – Mill Floor Crack)

This report contains the following appendices listed below by report section:

- I. Background**
 - 1. Final Report – Petrographic Evaluation
 - 2. Diesel Contaminated Soil Excavation – South Pit Wall Uranium Study
 - 3. Bulk Samples – South Wall Diesel Contaminated Soil Excavation
 - 4. Lost Creek Trench Sampling – Section 1
 - 5. Lost Creek Trench Sampling – Sections 2 – 7
 - 6. Lost Creek Trench Sampling – Sections 8 – 13
 - 7. Baseline Soil Data
 - 8. Monitor Well (TMW-103, 106, 107, 108, 109 and 110) Subsurface Radiologic Background Data
 - 9. Background Soil Samples – Diesel Contaminated Soil Excavation
 - 10. Background Radionuclide Sample Locations – Diesel Contaminated Soil Excavation
 - 11. Preoperational Radiologic Soil Sampling Locations

- II. Fluid Recovery Preparatory to Excavation**
 - 1. Control Charts, Flow Rate and Cumulative Volume Sheets for TMW 90 and 105
 - 2. Sample Results – Perched Fluid

- III. Contaminated Material Excavation and Placement in the Tailings Impoundment**
 - 1. Monthly Excavation Progress Maps
 - 2. Topsoil Volumes
 - 3. Contaminated Soil Volumes

- IV. Excavation/Grid Release**
 - 1. Collimator Drawing
 - 2. Final Sample Results
 - 3. Superseded Samples
 - 4. Samples Removed by Excavation
 - 5. Samples without Surveyed Locational Data
 - 6. Ore Pad Radiometrics
 - 7. Natural Material K Minus 3 Naturally Occurring Radioactive Material (NORM) Radiometrics
 - 8. July 31, 2006 Excavation Gamma Readings
 - 9. October 2006 Excavation Gamma Readings
 - 10. Gamma Instrument Data
 - 11. Emails December 21, 2006
 - 12. Emails November 7, 2006 and December 7, 2006
 - 13. Emails October 6, 2006, October 10, 2006 and October 31, 2006
 - 14. Email Dated June 24, 2007

- V. Ore Pad Clean Fill Excavation**
 - 1. Discovery of Buried Gear Oil Drum
 - 2. Ore Pad Area – Hydrocarbon Sampling Results

- VI. Backfilling**
 - 1. Sweetwater Mill Contaminated Ground Excavation Slope Review
 - 2. Kerosene Excavation Stability Consultation - Kennecott Uranium Company, Sweetwater Uranium Project
 - 3. Excavation Observation – Catch Basin

- VII. Highwall Liner Installation**

No appendices

- VIII. Drains, Seeps/Seepage Collectors and Remaining Perched Fluids**
 - 1. Request for Amendment to Final Design – Volume IV – Part 2
 - 2. Approval of Request

IX. Monitor Wells

No appendices

X. Topsoil and Seeding

No appendices

XI. Health Physics

1. Radiation Training
2. Radiation Safety Meetings
3. Bioassay Assessment
4. Instrument Calibrations
5. External Gamma Radiation Exposure Assessment
6. Releases of Equipment for Unrestricted Use
7. Internal occupational Exposure Assessment
8. Dose Assessment/Determination of No Requirement for Individual Monitoring or Dose Calculation
9. Gamma Exposures
10. Restricted Area Map
11. Constraint Limit Reports
12. 10CFR40.65 Reports – Second Half 2006 and 2007
13. Catchment Basin Ambient Gamma Radiation Surveys
14. Consumption of Water within the Restricted Area

XII. Mill Floor Crack

1. Structural Assessment Report

This report documents the excavation of contaminated soils related to the Catchment Basin east of the Solvent Extraction (SX) Building. This work was authorized by License Condition 9.10 to Source Materials License SUA-1350.

This report documents site background sampling data, the removal of perched fluids preparatory to excavation, actual excavation of the contaminated soils, release criteria for grids in the excavation area, excavation of clean fill from the Ore Pad, backfilling techniques, installation of liner on contaminated highwalls, installation of seepage collectors, steps taken to protect monitor wells within the excavation footprint, topsoiling and seeding work, health physics data related to the work, the crack between the footing and slab along the east wall of the mill Building and future steps to be taken to repair it.

The key discussion in this report is the release of the ten (10) meter by ten (10) meter grids in the excavated area. This discussion is key since site background is based on pre operational near surface soil sampling. It is clear from data gathered elsewhere around the site as well as from the excavation itself, that naturally occurring background radionuclide concentrations in subsurface soils can be substantially higher than near surface concentrations. This makes sense since the site is near a uranium deposit. Distinguishing background radionuclide concentrations from contamination in the excavation was difficult. Sampling results for individual grids are discussed in detail in the report as well as why the radionuclides present in them are in fact naturally occurring.

The release values for each grid based upon the nine-point composite sample, as discussed in the pre-excavation submittals, are as follows:

Total Extractable Hydrocarbons (THE): 2300 milligrams per kilogram
Radium-226: 16.4 picoCuries per gram (1.4 picoCuries per gram (background) plus 15 picoCuries per gram)
Natural uranium: 35 picoCuries per gram
Thorium-230: 15 picoCuries per gram above background (in subsurface soils)

Some grids did not strictly meet release criteria for either Radium-226, natural uranium or Thorium-230. While not directly pertinent for release, some spot samples did not meet the release limits for Radium-226, natural uranium or Thorium-230. These grids or spot samples belong to the following six categories of grids or samples for which justification is provided later in the text:

1. **Grids or spot samples that, when analytical uncertainty is considered, could be at or below the release limit:**
This consideration applies to some grids and spot samples slightly above the release limit for Radium-226, and in the case of grid N4, this justification was considered acceptable by Commission Staff in an email dated October 10, 2006, included in Appendix 13 of Section IV Excavation/Grid Release.
2. **Grids or spot samples in which the Uranium-238/Radium-226 ratio is at or near the average ratio for the preoperational background sample set:**
This applies to some grids and spot samples in the excavation.
3. **Grids or spot samples within the documented K minus 3 naturally occurring radioactive material (NORM) area:**
This applies to grids and spot samples in the reddish-brown shaded area on the sampling maps. This area is defined roughly by anomalous high background gamma radiation (Please see **Gamma Reading Contour Map**) from which the sample described in Appendix 1 of Section I - Background, was collected.
4. **Grids or spot samples in the area east of Grid T5 with naturally occurring radioactive material (NORM):**
This applies to grids and spot samples in the blue shaded T5 NORM area. This area is also defined roughly by anomalous high background gamma radiation (**Gamma Reading Contour Map**) and by the fact that the elevation of this area is too high for the area to have been contaminated by seepage from the Catchment Basin. This justification was accepted by Commission Staff for Grids S5 and S6 in an email dated October 10, 2006, included in Appendix 13 of Section IV Excavation/Grid Release.
5. **Grids or spot samples in the area east of Grid T5 with naturally occurring radioactive material (NORM):**
These grids and spot samples are in an area east of Grid T5 which is at a higher elevation than Grid T5. This area is also at an elevation that is too high to have been contaminated by seepage from the Catchment Basin.
6. **Grids in unexcavatable areas (beneath the Raffinate Slab, beneath the east wall of the Mill Building, beneath the water and/or sulphuric acid tanks, or approaching the facility power line), which are covered by a synthetic liner curtain:**
These grids and spot samples are in areas that could not be excavated since excavation would damage or destroy site infrastructure. These grids were covered with liner material to isolate them from the clean backfill. These areas will be remediated upon final facility decommissioning reclamation and closure.

These six categories of grids and spot samples are summarized in the two (2) tables following this text.

The report also contains detailed information on the backfilling of the excavation, installation of the liner on the highwall and seepage collectors, preservation and restoration of the monitor wells and the crack between the footing and slab along the east wall of the Mill Building.

The Background section contains a request for specific background radionuclide concentrations for subsurface - fifteen to fifty-five (15 – 55) feet below surface.

Kennecott Uranium Company believes that, based on the detailed sampling and analysis conducted during the course of this project, any remaining radionuclides in the excavation area, not in highwalls covered by liner material, are naturally occurring.

Kennecott Uranium Company							
Sweetwater Uranium Project							
Catchment Basin Excavation							
Grid Release Matrix							
This matrix lists grids whose composite samples did not meet release limits for either Radium-226, Natural Uranium and/or Thorium-230 and why they were not excavated further.							
These grids are discussed in detail in the text that follows							
Parameter	When Analytical Uncertainty is Considered Grid Could be at or Below Release Limit	Grid Uranium-238/Radium-226 Ratio is at or Near the Average Ratio for the Pre-operational Background Sample Set	Grid is Within the Documented Kminus3 Naturally Occurring Radioactive Material (NORM) Area	Grid is Within the Documented T5 Naturally Occurring Radioactive Material (NORM) Area	Grid is in Area East of Grid T5 with Naturally Occurring Radioactive Material (NORM)	Grid is Within an Unexcavatable Area (Beneath the Raffinate Tank Slab, Beneath the East Wall of the Mill Building, Beneath the Water and/or Sulphuric Acid Tanks or Approaching the Facility Power line) and is Behind a Synthetic Liner Curtain	Release Limit
Total Extractable Hydrocarbons (TEH)	None	None	None	None	None	None	2300 milligrams per kilogram
Radium-226	H0, I1, J2, J3, N4, P7	H0, I1, J2, J3, N4, P7	L1, M minus 1, M minus 2, M minus 4	T5	None	D5, G1, G0, G minus 1, F0, H minus 1, I minus 3	16.4 picoCuries per gram (Background of 1.4 picoCuries per gram plus 15.0 picoCuries per gram)
Natural Uranium	None	None	M minus 2	T5	X4	G minus 1, G0	35 picoCuries per gram
Thorium-230	None	None	L minus 1, M minus 1, M minus 2, M minus 4	T5	None	D5, G0, I minus 3	16.57 picoCuries per gram (Background of 1.57 picoCuries per gram plus 15.0 picoCuries per gram)
OAP:04/23/2008							
Grid Release Matrix.xls							

Kennecott Uranium Company							
Sweetwater Uranium Project							
Catchment Basin Excavation							
Point Sample Release Matrix							
This matrix lists grids whose composite samples did not meet release limits for either Radium-226, Natural Uranium and/or Thorium-230 and why they were not excavated further.							
These grids are discussed in detail in the text that follows							
Parameter	When Analytical Uncertainty is Considered Grid Could be at or Below Release Limit	Grid Uranium-238/Radium-226 Ratio is at or Near the Average Ratio for the Pre-operational Background Sample Set	Grid is Within the Documented Kminus3 Naturally Occurring Radioactive Material (NORM) Area	Grid is Within the Documented T5 Naturally Occurring Radioactive Material (NORM) Area	Grid is in Area East of Grid T5 with Naturally Occurring Radioactive Material (NORM)	Grid is Within an Unexcavatable Area (Beneath the Raffinate Tank Slab, East Wall of the Mill Building, Beneath the Water and/or Sulphuric Acid Tanks or Approaching the Facility Power line) and is Behind a Synthetic Liner curtain	Release Limit
Total Extractable Hydrocarbons (TEH)		None	None	None	None	Hot Spots #2, 3, 4, and 5, Hot Spot in Wall, Under Tails Line Pit Bottom and 45 feet N of SE Corner Mill Building	2300 milligrams per kilogram
Radium-226		J1, J4, M7, O6 and Q7	K minus 3, L minus 3, M minus 2, M minus 1, N minus 1, and N minus 3,	T5 and S6 center	W4 center and Y4	I minus 1, Under Tails Line Pit Bottom and 45 feet N of SE Corner Mill Building	16.4 picoCuries per gram (Background of 1.4 picoCuries per gram plus 15.0 picoCuries per gram)
Natural Uranium				S7, T5, and T6		Hot Spot #3, Under Tails Line Pit Bottom and 45 feet N of SE Corner Mill Building	35 picoCuries per gram
Thorium-230				T5, U5 and S6 Center	X4 Center and Y4 center		16.57 picoCuries per gram (Background of 1.57 picoCuries per gram plus 15.0 picoCuries per gram)
OAP:04/23/2008							
Point Sample Release Matrix.xls							

Background

Background for natural uranium, thorium-230 and radium-226 for the Sweetwater Uranium Project was determined from a series of near surface soil samples collected prior to the commencement of operations. This sample data is included in Appendix 7. The background concentrations and related statistics for each of the radionuclides are as follows:

Sample Location	Ra-226 pCi/g	U-nat ug/g	U-nat pCi/g	U-238 pCi/g	Th-230 pCi/g	Pb-210 pCi/g	U-238/TH-230 Ratio	TH-230/Ra-226 Ratio	U-238/Ra-226 Ratio
Mill Area Average	1.44	2.44	1.66	0.83	1.57	1.61	0.53	1.09	0.57
Std Dev	1.16	3.00	2.03	1.01	1.19	1.12	0.85	1.03	0.88

The above values are the currently accepted ones submitted in the Final Design, Volume VI, Part 2 – “Mill Decommissioning Addendum to the Existing Impoundment Reclamation Plan”, as part of the facility’s application for a performance based operating license. The locations of these samples are provided in the map in Appendix 11 entitled “Pre-Operational Radiological Soil Sampling Locations”.

NUREG-1620 - *Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act of 1978- Final Report* discusses site background in Section 5.2 *Decommissioning Plan for Land and Structures*, stating:

Soil Background Radioactivity

Determine that the background level of Ra-226 (and U-nat, Th-230 and Th-232, as needed) in surface {15 cm [6 in.]} soil has been estimated using representative soil samples from nearby {within 3.2 km [2 mi] of site boundary} undisturbed areas that are not affected by site activities and are geologically and chemically similar to the contaminated areas. The number of samples will depend partly on the variability in background values, but at least 30 samples should be obtained at the typical site to determine the average value, standard deviation, and distribution. The arithmetic mean of the sample data is used in the cleanup criteria unless appropriate statistical analysis demonstrates a log normal distribution (three tests) of the data.

Several different background values may be required if contaminated areas have distinctly different soil types. For example, if a portion of the site has a natural uranium and/or radium mineralization zone in/near the surface, the cleanup criterion for that area would use a background (reference) U-238 or Ra-226 value from a similarly mineralized area. A geologic site map with the background values placed on the sample location can be used to help identify whether more than one background value should be considered.

If the plan indicates that in situ ore is in the clean-up area, it should be characterized by Ra-226/U-238 ratios, visual criteria, and/or other means.

The following applies to existing and accepted background soil data:

- All of this data was collected in 1978, 1979 and 1980 prior to operation of the facility.
- It is near surface data (collected within two (2) feet or less of ground surface)
- It was collected within nine (9) miles of the facility.
- It was collected from *undisturbed areas that are not affected by site activities and are geologically and chemically similar to the contaminated areas*
- These samples are not representative of natural background in the Catchment Basin excavation since
 - They are shallow samples
 - They do not represent background conditions at depth.

Regardless of the above facts the average values represented in the table above are the only currently accepted values.

Additional analysis was then performed on the existing accepted sample data. Uranium-238/Radium-226, Thorium-230/Radium-226 and Uranium-238/Thorium-230 ratios were calculated for the background samples. Uranium-238/Radium-226, Thorium-230/Radium-226 and Uranium-238/Thorium-230 regression plots were created for this

existing background sample data. These are included in Appendix 7. Uranium-238/Radium-226 ratios were examined for the data to determine the state of equilibrium between Radium-226 and Uranium-238. This was done because NUREG-1620 - *Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act of 1978- Final Report*, states in part:

If the plan indicates that in situ ore is in the clean-up area, it should be characterized by Ra-226/U-238 ratios, visual criteria, and/or other means.

Ore was unambiguously present in the Catchment Basin Excavation area. An area of anomalous material was discovered in and around Grid K minus 3. Sample results for it are in the following table.

This anomalous material was sampled and tested as per the results above and photographed. Images of the material are shown below. A pen has been included for scale. This image was taken on April 25, 2007, the sample date that the samples were collected.



A close-up image taken on the same date is included below. Please note the yellowish grains in the image's center. These grains are undoubtedly an oxidized uranium mineral such as gummite, autunite, carnotite, or zipeite.



Following receipt of the analytical results from the laboratory, the sample was sent for petrographic analysis. The results for the petrographic analysis are included in Appendix 1.

The analysis concludes:

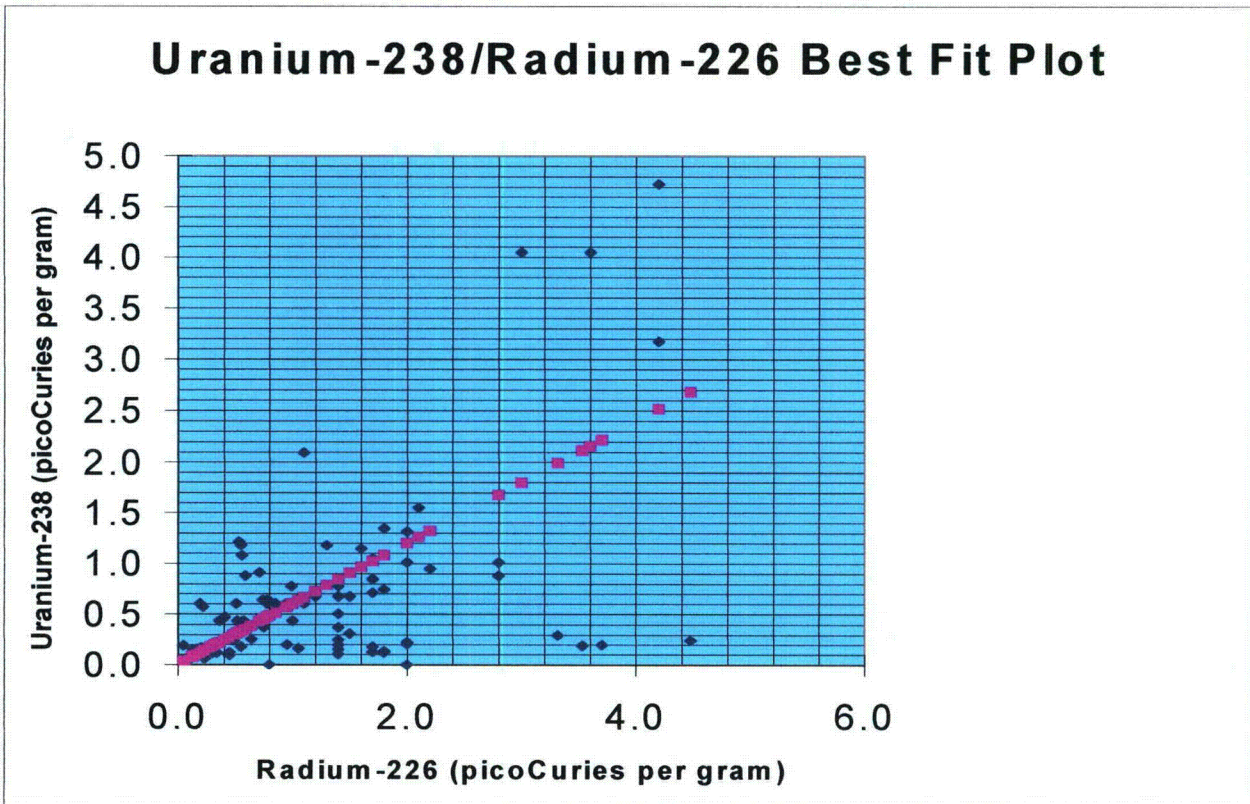
“...the organic matter contained in sample #C07051289-001A were derived from terrestrial plants with secondary woody tissues that have gone through at least the initial stage of coalification. Depending upon stratigraphy and sample location in the field, the type and condition of organic matter and mineralization observed suggests that it is naturally occurring.”

The organic matter, the natural uranium occurring with it along with any decay products are natural and part of background and the radiation emitted from it is background radiation as defined in 10 CFR Part 20.1003 Definitions which states:

“Background radiation means radiation from cosmic sources; naturally occurring radioactive material, including radon (except as a decay product of source or special nuclear material); and global fallout as it exists in the environment from the testing of nuclear explosive devices or from past nuclear accidents such as Chernobyl that contribute to background radiation and are not under the control of the licensee. “Background radiation” does not include radiation from source, byproduct, or special nuclear materials regulated by the Commission.”

Clearly some of the material encountered in the excavation was not contaminated by site operations but contained naturally occurring radionuclides. The background samples also contain naturally occurring radionuclides. In order to distinguish between contamination and naturally occurring radionuclides NUREG-1620 was consulted. It provides for the use of “...Ra-226/U-238 ratios, visual criteria, and/or other means.”

While the two (2) samples from this particular occurrence exhibited higher activities of Uranium-238 than Radium-226 all of the pre-existing site background samples were examined to determine an overall Radium-226/Uranium-238 ratio for material around the site prior to operations. A Radium-226/Uranium-238 Best Fit Plot was prepared and is shown below:



This plot which was not forced through the origin yielded the following results:

- Slope: 0.597307646
- Intercept 0.009814403

These values correlate well with the average ratio of 0.57. Thus a ratio of Uranium-238 to Radium-226 of 0.30 to 0.70 was considered to be indicative of naturally occurring radionuclides in samples. Also, the intercept is very close to zero, which is realistic. Thus the activity of the Uranium-238 is roughly 60% of that of the Radium-226. This agrees with the general tenor of the Sweetwater Pit deposit since its predicted grade based on gamma ray logging was estimated at 0.07% while the actual mill feed over the life of operations (2.5 million tons of ore) was approximately 0.03% chemical uranium.

NUREG-1620 - Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act of 1978- Final Report also discusses "other means".

In addition, in order to better distinguish natural background from contamination, all composite samples and some spot samples collected from the excavation were tested for pH and sulfate. High sulfate concentration could be indicative of sulfuric acid laden mill fluids and low soil pH would be indicative of them as well since the mill fluids were at approximately pH 2.0.

In the period from 2001 to 2003 a large (approximately 350,000 cubic yard), deep (ninety (90) foot) excavation was completed west of the Mill Building to remediate diesel contaminated soils resulting from piping leaks from two 200,000 gallon mine related diesel fuel storage tanks. Included in Appendices 2, 3, 9 and 10 is data from that excavation. Since the excavation provided a window into the subsurface, samples were collected from the unfilled excavation to assess radionuclide concentrations at depth.

In order to improve monitoring of groundwater at the top (upper fifteen (15) feet) of the Battle Spring Aquifer a monitor well, TMW-10 was dug in the bottom of the Diesel Contaminated Soil Excavation. A large hole was dug with a trackhoe until it was well beneath the water table. An 18.67 foot long, fifteen (15) inch diameter slotted polyethylene pipe was placed vertically in the hole. Conventional five- (5) inch internal diameter well casing with a slotted section on bottom was placed inside the polyethylene pipe. The space between the outer wall of the well casing and inner wall of the polyethylene pipe was filled with gravel. The hole outside of the polyethylene pipe was filled with gravel as well. The top of the excavation was capped with bentonite and cement to complete the well. The well is shown in the images below. The image below shows the gravel filled fifteen (15) inch diameter slotted polyethylene pipe set in the dug hole surrounded by gravel.





The image above shows the completed well with five (5) inch casing protruding from the surface. The area around the well has been sealed with cement.

When the hole was dug, the fluid was bailed out of it with the trackhoe and samples were collected in the excavation wall. The results of this sampling as well as an image of the hole wall are provided in Appendix 2. While these samples come from much deeper than the bottom of the Catchment Basin excavation and are near the water table, they show very high Radium-226 concentrations. The average concentration for fourteen (14) samples is 219 picoCuries per gram. Natural chemical uranium concentration averages 25.1 milligrams per kilogram.

When the excavation was dug four (4) bulk samples were collected (two (2) above the water table, one (1) at the water table and one (1) below the water table). The average concentration for fourteen (14) samples is 201.4 picoCuries per gram. Natural chemical uranium concentrations average 26.0 milligrams per kilogram. The data for these samples is shown in Appendix 3.

Appendix 9 contains the results of four (4) soil samples collected from various places in the Diesel Contaminated Soil Excavation. A map showing these sample locations is included in Appendix 10.

These samples average 12.3 picoCuries per gram Radium-226 and 21.8 milligrams per kilogram natural uranium.

In order to better assess the site's groundwater plume, six monitor wells (three (3) nested pairs each containing one (1) shallow well completed from 95 to 115 feet below surface and one (1) deep well completed from 95 to 145 feet below surface) were completed in a north-south line west of the Mill and Solvent Extraction (SX) Buildings, in May and June 2007. These wells are numbered TMW103, 106, 107, 108, 109 and 110. The odd numbered wells are shallow and the even numbered wells are deep wells. During drilling five (5) foot composite soil samples were collected for each five (5) foot interval from the surface to the top of the water table. TMW's 103 and 109 were also cored from the top of the water table down and the core was sampled and analyzed at 0.5-foot intervals.

This data is provided in Appendix 8. The data was analyzed and the following conclusions were drawn:

- TMW's-103 and 106 were drilled immediately Northeast of the old Diesel contaminated Soil Excavation. Any hydrocarbons in samples from these holes are related to the mine related diesel spill.

- Any hydrocarbons detected in TMW's-108 and 109 are trace in nature. They may be related to the Catchment Basin or related to a leaking diesel fuel line that was discovered running North-South near those wells. This fuel line was removed and these contaminated soils were excavated and landfarmed in 2002 when the Diesel contaminated Soil Excavation was completed.
- Any hydrocarbons found in TMW's-107 and 110 are trace in nature and their source is unclear. Contractors used the area around these wells as a parking area when the facility was constructed.
- The data from fifteen (15) feet to fifty-five (55) feet below surface was examined.
 - Fifteen (15) feet below surface was judged sufficiently deep to be below any windblown surface contamination
 - Fifty-five (55) feet below surface was the bottom cutoff since it was the deepest that any excavation work related to the Catchment basin could have gone.
 - All samples showing any trace whatsoever of hydrocarbons were not considered since hydrocarbons are indicative of some form of anthropogenic activity.
 - As a result forty-one (41) samples were averaged and statistically analyzed with the following results:
 - Average Radium-226 activity: 10.7 picoCuries per gram
 - Average Natural Uranium activity: 31.4 milligrams per kilogram
 - Average Thorium-230 activity: 4.9 picoCuries per gram

Kennecott Uranium Company also examined the following United States Geological Survey (USGS) publication:

Geology of the Lost Creek Schroeckingerite Deposits Sweetwater County, Wyoming
Geological Survey Bulletin 1087-J

By Douglas M. Sheridan, Charles H. Maxwell and John T. Collier; U.S. Government Printing Office, 1961

This report contains a substantial amount of soil sample data collected from the Lost Creek area in Sweetwater and Fremont Counties, in an elongate area covering approximately half a square mile on the east side of Lost Creek in northern Sweetwater County, in parts of sections 29-33, T. 26 N., R. 94 W., and in part of section 25, T. 26 N., R 95 W., sixth principal meridian, approximately twelve to sixteen (12 – 16) miles northwest of the facility.

The soil sample data is presented in the spreadsheets in Appendices 4, 5 and 6. Data (natural uranium analysis and calculated Radium-226 activities (from gamma equivalent uranium analysis results) is presented. The data is summarized below:

Area	Average Natural Uranium Activity	Average Calculated Radium-226 Activity
	(picocuries per gram)	(picocuries per gram)
Lost Creek – Section 1	165.1	56.2
Lost Creek – Sections 2 to 7	324.0	65.1
Lost Creek – Sections 8 to 13	100.4	35.0

This report shows that high naturally occurring natural uranium concentrations and high Radium-226 activities can be found near to the surface in the vicinity of the facility.

Kennecott Uranium Company, based on the above discussion and the existence of high levels of naturally occurring radionuclides in the subsurface based on evidence collected from bulk and spot sampling in the diesel contaminated soil excavation, published sampling data from areas northwest of the facility, a sample collected from the Catchment Basin excavation itself and subsurface soil/data gathered through monitor well drilling, hereby applies for a subsurface background standard for natural uranium, Radium-226 and Thorium-230 as follows:

Parameter	Concentration or Activity	Units
Natural Uranium	31.4	milligrams per kilogram
Radium-226	10.7	picoCuries per gram
Thorium-230	4.9	picoCuries per gram

These proposed subsurface background radionuclide standards are based solely on samples collected via drilling monitor wells TMW-103, 106, 107, 108, 109 and 110, from depths of fifteen (15) to fifty-five (55) feet below surface in samples deemed not anthropogenically impacted. Only these samples were used since:

- They are closest to the Catchment Basin,
- Most representative since they are five-foot composites,
- Most random since the six sites were selected at random as far as subsurface soil radionuclide concentrations are concerned. The samples collected in the diesel contaminated soil excavation were not random since they were collected in areas of high gamma exposure.

The following applies to these concentrations and activities:

- These proposed parameters shall apply to depths from fifteen (15) feet to fifty-five (55) feet below surface only.
- The existing background values shall apply to materials within fifteen (15) feet of the surface.
- Kennecott Uranium Company believes that these values are conservative since they do not include the very high Radium-226 values observed in samples collected in and around TMW-10 or in the Diesel Contaminated Soil Excavation.
- Should values for contamination deeper than fifty-five (55) feet ever be required, the values from TMW's 103, 106, 107, 108, 109, and 110, below fifty-five feet below surface that contain no hydrocarbons, will be used.

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June 13, 2007

Mr. Steve Dobos
Energy Laboratories, Inc.
2393 Salt Creek Hwy.
Casper, WY 82602

RE: Petrographic Evaluation of Sample #C07051289-001A from P.O. # 1845

Dear Mr. Dobos,

Work requested in your purchase order of 5-29-07 for sample #C07051289-001A to perform carbon identification using reflected-light optical microscopy has been completed and the final report is attached.

If there are any questions or concerns, please call or e-mail me directly.

Thank you.

Sincerely,

Gareth Mitchell

Enclosure: Report

Final Report

To: Mr. Steve Dobos
From: Gareth D. Mitchell
Date: June 13, 2007
Subject: Petrographic Evaluation of Sample #C07051289-001A from P.O. # 1845

Request

A sample identified as #C07051289-001A was received 6-7-07 for petrographic evaluation. The sample had been shipped in a cooler containing bags of ice and was still cold when received. Consequently, the specimen was placed under refrigeration until sample preparation was initiated. As established from our email conversation of 5-24-07, optical microscopy was to be employed to determine the nature of the organic matter found in the sample and specifically to determine if "any naturally-occurring organic matter" (such as lignin, kerogen, bitumen, etc. that might have precipitated uranium at this location) was present.

Procedures

The sample was found to be composed of three fairly large angular particles (~10 g) and a coarse powder (~11 g). These components were separated and allowed to come to room temperature before they were inspected. The largest particle was soft, organic matter which had prominent bedding and considerable surface moisture, whereas the particulate matter ranged in particle size (0.5 – 3.0 mm), appeared to be a mixture of light and dark colored materials and was agglomerated with surface moisture. To prepare an optical mount suitable for reflected-light microscopy, the moisture content had to be reduced. The large particle was placed in a drying pan and a one-quarter split of the particulate sample retrieved by riffling was placed in second pan. Both samples were placed in a vacuum oven between 30-50°C for about 18 hrs with the result that the large particle had become swollen, desiccated and broken into smaller segments, while the particulate sample was composed of individual loose particles.

Remnants of the large particle were glued fast to the bottom of a 28 mm sample mold and embedded under vacuum with a cold-setting epoxy (EL01). The particulate sample (EL02) was vacuum impregnated in epoxy resin and placed in a centrifuge to establish a density/particle-size gradient. After hardening, the sample was cut longitudinally to expose the particle gradation and mounted 25 mm sample mold with additional epoxy. Both specimen surfaces were ground using 400 and 600 grit papers and polished using 0.3 and 0.05 micron alumina slurries on a high-nap cloth and silk, respectively. The sample was examined first in air using blue-light (436 nm) irradiation inspecting the 520 nm emission surface at 500X magnification and then using white light employing an oil immersion objective at 625X magnification using Zeiss research microscopes. In addition, a few reflectance readings were taken from the main organic

component identified in EL01. A Leitz MPV2 reflectance photometer system at 625 X magnification in oil immersion and polarized white-light was used to collect maximum reflectance values from 11 different areas and the mean value is provided below. Mean reflectance values are an acceptable procedure for determination of organic maturity.

Results

The organic matter observed in both specimens (EL01 and EL02) separated from sample #C07051289-001A is basically humified woody tissue of very low maturity (mean maximum reflectance in oil of 0.18 % \pm 0.01) that contains fluorescent and presumably resinous material within open cell lumens and along some open fractures. A few fluorescent bodies appearing to be amorphous organic matter were the only other organic matter observed in either sample.

As seen in the photomicrographs below, the regular alignment of cell wall and filled or open lumens taken from EL01 are compared with a fragment of humified and gelified woody tissue found in specimen EL02. The large particle separated as EL01 was composed entirely



EL01

EL02

of woody tissue that had gone through the biochemical stage of coalification in which the cell walls were gelified and converted to humic matter. The tissue observed in the EL01 photograph exhibits little detail within the remnant cell walls and most of the lumens were filled with amorphous humic material or a fluorescing resin (dark areas), suggesting that the tissue has gone beyond the peat stage. However, the very low mean reflectance suggests that it may not have reached the rank of lignite in terms of coal maturity.

The photograph of the dominant organic matter in specimen EL02 shows many rounded bodies which in brown coal terminology are referred to as gelinite. As the name implies the

humic matter from which they were derived were once gelatinous and have since formed into these amorphous bodies surrounded by the remnants of cell walls. In addition to organic matter, specimen EL02 contained mostly angular fragments of minerals and rocks composed of quartz, other silicates and carbonate. Furthermore, some of the organic material had been infilled and was in the early stage of being replaced by silica.

These observations demonstrate that the organic matter contained in sample #C07051289-001A were derived from terrestrial plants with secondary woody tissues that have gone through at least the initial stage of coalification. Depending upon stratigraphy and sample location in the field, the type and condition of organic matter and mineralization observed suggests that it is naturally occurring.

KENNECOTT URANIUM COMPANY								
LOST CREEK TRENCH SAMPLING								
	Section 1							
Source: Geology of the Lost Creek Schroeckingerite Deposits Sweetwater County, Wyoming								
Geological Survey Bulletin 1087-J								
SAMPLE #	AREA	LENGTH	PERCENT EQUIVALENT URANIUM	PERCENT EQUIVALENT URANIUM-238	EQUIVALENT URANIUM-238 ACTIVITY (picoCuries per gram)	RADIUM-226 ACTIVITY (picoCuries per gram)	PERCENT URANIUM	NATURAL URANIUM ACTIVITY (picoCuries per gram)
DS-H-185		1.3	0.005	0.005	16.9	16.9	0.004	27.1
DS-51-179		0.7	0.006	0.006	20.3	20.3	0.002	13.5
DS-H-187		3.8	0.006	0.006	20.3	20.3	0.007	47.4
DS-H-188		1.9	0.005	0.005	16.9	16.9	0.005	33.9
DS-H-189		4.3	0.01	0.010	33.8	33.8	0.011	74.5
DS-H-190		0.7	0.005	0.005	16.9	16.9	0.006	40.6
DS-H-192		2.7	0.013	0.013	43.9	43.9	0.015	101.6
DS-51-191		0.3	0.008	0.008	27.0	27.0	0.009	60.9
DS-51-192		0.4	0.013	0.013	43.9	43.9	0.018	121.9
DS-51-193		0.7	0.013	0.013	43.9	43.9	0.02	135.4
DS-51-194		0.4	0.03	0.030	101.3	101.3	0.052	352.0
DS-H-198		0.6	0.009	0.009	30.4	30.4	0.01	67.7
DS-H-200		0.4	0.008	0.008	27.0	27.0	0.007	47.4
DS-H-205		3.7	0.007	0.007	23.6	23.6	0.008	54.2
DS-H-207		1	0.008	0.008	27.0	27.0	0.01	67.7
DS-H-208		6.1	0.011	0.011	37.1	37.1	0.015	101.6
DS-H-213		2.5	0.016	0.016	54.0	54.0	0.02	135.4
DS-51-178		0.7	0.003	0.003	10.1	10.1	0.001	6.8
DS-51-180		0.09	0.011	0.011	37.1	37.1	0.01	67.7
DS-51-181		1	0.011	0.011	37.1	37.1	0.011	74.5
DS-51-182		1.4	0.007	0.007	23.6	23.6	0.005	33.9
DS-51-183		1.2	0.006	0.006	20.3	20.3	0.004	27.1
DS-51-184		0.9	0.013	0.013	43.9	43.9	0.013	88.0
DS-51-185		1.2	0.008	0.008	27.0	27.0	0.006	40.6
DS-51-186		1.4	0.005	0.005	16.9	16.9	0.003	20.3
DS-51-187		0.7	0.005	0.005	16.9	16.9	0.003	20.3
DS-51-188		1.4	0.01	0.010	33.8	33.8	0.011	74.5
DS-51-189		1.2	0.01	0.010	33.8	33.8	0.012	81.2
DS-51-190		1.1	0.13	0.129	438.8	438.8	0.018	121.9
DS-51-195		0.3	0.011	0.011	37.1	37.1	0.016	108.3
DS-51-196		0.4	0.007	0.007	23.6	23.6	0.006	40.6
DS-51-197		0.7	0.006	0.006	20.3	20.3	0.006	40.6
DS-51-198		0.8	0.018	0.018	60.8	60.8	0.033	223.4
DS-51-199		0.4	0.007	0.007	23.6	23.6	0.008	54.2
DS-51-200		0.6	0.012	0.012	40.5	40.5	0.018	121.9
DS-51-201		1.1	0.018	0.018	60.8	60.8	0.033	223.4
DS-51-202		2.1	0.008	0.008	27.0	27.0	0.011	74.5
DS-51-203		1.3	0.011	0.011	37.1	37.1	0.015	101.6
DS-51-204		0.9	0.01	0.010	33.8	33.8	0.014	94.8
DS-51-205		1.1	0.016	0.016	54.0	54.0	0.032	216.6
DS-51-206		1.4	0.039	0.039	131.6	131.6	0.096	649.9
DS-51-78		0.5	0.005	0.005	16.9	16.9	0.004	27.1
DS-H-98		5.9	0.031	0.031	104.6	104.6	0.051	345.3
DS-51-81		1	0.016	0.016	54.0	54.0	0.022	148.9
DS-51-84		0.6	0.007	0.007	23.6	23.6	0.004	27.1
DS-H-100		0.9	0.017	0.017	57.4	57.4	0.023	155.7
DS-H-101		2.9	0.004	0.004	13.5	13.5	0.004	27.1
DS-H-102		1.4	0.022	0.022	74.3	74.3	0.039	264.0
DS-51-88		0.6	0.012	0.012	40.5	40.5	0.013	88.0
DS-51-90		0.5	0.014	0.014	47.3	47.3	0.021	142.2
DS-H-104		4	0.029	0.029	97.9	97.9	0.044	297.9
DS-51-96		1.3	0.022	0.022	74.3	74.3	0.039	264.0
DS-H-106		4.4	0.021	0.021	70.9	70.9	0.032	216.6
DS-H-111		2.4	0.026	0.026	87.8	87.8	0.035	237.0
DS-H-112		3.1	0.014	0.014	47.3	47.3	0.014	94.8
DS-H-114		1.3	0.014	0.014	47.3	47.3	0.021	142.2
DS-52-138		2.2	0.01	0.010	33.8	33.8	0.011	74.5
DS-H-122		6	0.027	0.027	91.1	91.1	0.043	291.1

SAMPLE #	AREA	LENGTH	PERCENT EQUIVALENT URANIUM	PERCENT EQUIVALENT URANIUM-238	EQUIVALENT URANIUM-238 ACTIVITY (picoCuries per gram)	RADIUM-226 ACTIVITY (picoCuries per gram)	PERCENT URANIUM	NATURAL URANIUM ACTIVITY (picoCuries per gram)
DS-H-149		1.3	0.19	0.189	641.4	641.4	0.035	237.0
DS-51-151		0.8	0.019	0.019	64.1	64.1	0.032	216.6
DS-H-150		3.2	0.048	0.048	162.0	162.0	0.09	609.3
DS-51-153		0.7	0.023	0.023	77.6	77.6	0.032	216.6
DS-51-156		1	0.022	0.022	74.3	74.3	0.049	331.7
DS-H-151		1.9	0.008	0.008	27.0	27.0	0.009	60.9
DS-H-156		0.8	0.011	0.011	37.1	37.1	0.011	74.5
DS-51-158		0.4	0.008	0.008	27.0	27.0	0.007	47.4
DS-H-157		4.3	0.031	0.031	104.6	104.6	0.051	345.3
DS-H-158		1.2	0.011	0.011	37.1	37.1	0.007	47.4
DS-H-164		0.9	0.01	0.010	33.8	33.8	0.014	94.8
DS-H-165		1.3	0.013	0.013	43.9	43.9	0.019	128.6
DS-51-173		0.7	0.008	0.008	27.0	27.0	0.002	13.5
DS-H-166		1.1	0.008	0.008	27.0	27.0	0.007	47.4
DS-51-174		0.8	0.013	0.013	43.9	43.9	0.012	81.2
DS-H-168		1	0.01	0.010	33.8	33.8	0.008	54.2
DS-H-169		0.9	0.009	0.009	30.4	30.4	0.006	40.6
DS-H-170		0.4	0.019	0.019	64.1	64.1	0.021	142.2
DS-H-172		1	0.012	0.012	40.5	40.5	0.012	81.2
DS-51-79		0.3	0.005	0.005	16.9	16.9	0.005	33.9
DS-51-80		0.6	0.017	0.017	57.4	57.4	0.018	121.9
DS-51-82		2.1	0.054	0.054	182.3	182.3	0.096	649.9
DS-51-83		1.4	0.013	0.013	43.9	43.9	0.022	148.9
DS-51-85		0.5	0.016	0.016	54.0	54.0	0.03	203.1
DS-51-86		0.9	0.012	0.012	40.5	40.5	0.016	108.3
DS-51-87		0.6	0.027	0.027	91.1	91.1	0.027	182.8
DS-51-89		1.2	0.004	0.004	13.5	13.5	0.002	13.5
DS-51-91		0.5	0.043	0.043	145.2	145.2	0.083	561.9
DS-51-92		1.4	0.041	0.041	138.4	138.4	0.043	291.1
DS-51-93		1.5	0.03	0.030	101.3	101.3	0.055	372.4
DS-51-94		1.5	0.031	0.031	104.6	104.6	0.05	338.5
DS-51-95		1.7	0.02	0.020	67.5	67.5	0.03	203.1
DS-H-105		3.5	0.005	0.005	16.9	16.9	0.007	47.4
DS-51-97		1.3	0.015	0.015	50.6	50.6	0.026	176.0
DS-51-98		1.3	0.013	0.013	43.9	43.9	0.023	155.7
DS-51-99		0.4	0.009	0.009	30.4	30.4	0.01	67.7
DS-51-100		0.5	0.012	0.012	40.5	40.5	0.02	135.4
DS-51-101		1	0.015	0.015	50.6	50.6	0.019	128.6
DS-51-102		0.8	0.016	0.016	54.0	54.0	0.023	155.7
DS-51-103		0.7	0.007	0.007	23.6	23.6	0.008	54.2
DS-51-104		0.6	0.015	0.015	50.6	50.6	0.018	121.9
DS-51-105		0.5	0.012	0.012	40.5	40.5	0.016	108.3
DS-51-105		0.5	0.012	0.012	40.5	40.5	0.016	108.3
DS-51-106		0.7	0.006	0.006	20.3	20.3	0.006	40.6
DS-51-107		1.3	0.018	0.018	60.8	60.8	0.033	223.4
DS-51-108		1.8	0.018	0.018	60.8	60.8	0.028	189.6
DS-51-109		2.8	0.021	0.021	70.9	70.9	0.032	216.6
DS-51-110		1.5	0.022	0.022	74.3	74.3	0.038	257.3
DS-51-111		1.5	0.034	0.034	114.8	114.8	0.06	406.2
DS-51-112		1	0.039	0.039	131.6	131.6	0.082	555.1
DS-51-152		0.5	0.068	0.068	229.5	229.5	0.07	473.9
DS-51-154		1.4	0.1	0.099	337.6	337.6	0.2	1354.0
DS-51-155		0.7	0.091	0.090	307.2	307.2	0.26	1760.2
DS-51-157		1	0.011	0.011	37.1	37.1	0.017	115.1
DS-51-159		1.2	0.035	0.035	118.1	118.1	0.055	372.4
DS-51-160		1	0.02	0.020	67.5	67.5	0.023	155.7
DS-51-161		1.1	0.019	0.019	64.1	64.1	0.023	155.7
DS-51-162		1	0.011	0.011	37.1	37.1	0.0004	2.7
DS-51-282		0.9	0.008	0.008	27.0	27.0	0.004	27.1
DS-51-172		1.2	0.014	0.014	47.3	47.3	0.018	121.9
DS-51-175		0.6	0.012	0.012	40.5	40.5	0.011	74.5
DS-51-177		0.8	0.011	0.011	37.1	37.1	0.008	54.2
DS-H-65		2.5	0.009	0.009	30.4	30.4	0.014	94.8
DS-H-66		3.9	0.007	0.007	23.6	23.6	0.012	81.2

SAMPLE #	AREA	LENGTH	PERCENT	PERCENT	EQUIVALENT	RADIUM-226	PERCENT	NATURAL
			EQUIVALENT URANIUM	EQUIVALENT URANIUM-238	URANIUM-238 ACTIVITY (picoCuries per gram)	ACTIVITY (picoCuries per gram)	URANIUM	URANIUM ACTIVITY (picoCuries per gram)
DS-H-67		3.9	0.016	0.016	54.0	54.0	0.03	203.1
DS-H-68		3.2	0.003	0.003	10.1	10.1	0.001	6.8
DS-H-69		3.3	0.014	0.014	47.3	47.3	0.024	162.5
DS-H-72		10	0.013	0.013	43.9	43.9	0.027	182.8
DS-H-73		4.4	0.014	0.014	47.3	47.3	0.025	169.3
DS-H-77		1.5	0.008	0.008	27.0	27.0	0.014	94.8
DS-H-78		7.9	0.009	0.009	30.4	30.4	0.016	108.3
DS-H-79		3.5	0.016	0.016	54.0	54.0	0.02	135.4
DS-H-80		9.3	0.004	0.004	13.5	13.5	0.003	20.3
DS-51-42A		0.6	0.004	0.004	13.5	13.5	0.003	20.3
DS-H-81		10.1	0.011	0.011	37.1	37.1	0.017	115.1
DS-H-82		0.6	0.004	0.004	13.5	13.5	0.005	33.9
DS-H-83		6.2	0.013	0.013	43.9	43.9	0.021	142.2
DS-H-84		1.3	0.005	0.005	16.9	16.9	0.005	33.9
DS-H-85		2.1	0.009	0.009	30.4	30.4	0.001	6.8
DS-H-86		2.5	0.008	0.008	27.0	27.0	0.004	27.1
DS-H-87		3.3	0.038	0.038	128.3	128.3	0.071	480.7
DS-H-89		0.7	0.008	0.008	27.0	27.0	0.005	33.9
DS-H-94		10	0.018	0.018	60.8	60.8	0.026	176.0
DS-H-95		1.3	0.006	0.006	20.3	20.3	0.006	40.6
DS-H-96		3.7	0.005	0.005	16.9	16.9	0.004	27.1
DS-H-97		3	0.019	0.019	64.1	64.1	0.039	264.0
DS-51-6		0.8	0.01	0.010	33.8	33.8	0.019	128.6
DS-51-7		0.5	0.009	0.009	30.4	30.4	0.016	108.3
DS-51-8		0.9	0.009	0.009	30.4	30.4	0.019	128.6
DS-51-9		1.9	0.011	0.011	37.1	37.1	0.018	121.9
DS-51-10		0.7	0.02	0.020	67.5	67.5	0.031	209.9
DS-51-11		1	0.006	0.006	20.3	20.3	0.012	81.2
DS-51-12		1.3	0.028	0.028	94.5	94.5	0.057	385.9
DS-51-13		1	0.01	0.010	33.8	33.8	0.015	101.6
DS-51-14		1.7	0.019	0.019	64.1	64.1	0.034	230.2
DS-51-15		0.7	0.017	0.017	57.4	57.4	0.034	230.2
DS-51-16		1	0.009	0.009	30.4	30.4	0.014	94.8
DS-51-17		1	0.012	0.012	40.5	40.5	0.026	176.0
DS-51-18		0.6	0.012	0.012	40.5	40.5	0.02	135.4
DS-51-36		0.4	0.032	0.032	108.0	108.0	0.052	352.0
DS-51-37		0.4	0.01	0.010	33.8	33.8	0.012	81.2
DS-51-38		0.5	0.012	0.012	40.5	40.5	0.013	88.0
DS-51-39		0.4	0.004	0.004	13.5	13.5	0.003	20.3
DS-51-40		0.6	0.006	0.006	20.3	20.3	0.008	54.2
DS-51-41		2.3	0.011	0.011	37.1	37.1	0.022	148.9
DS-51-42B		0.9	0.027	0.027	91.1	91.1	0.04	270.8
DS-51-43		1.4	0.007	0.007	23.6	23.6	0.008	54.2
DS-51-44		1.2	0.019	0.019	64.1	64.1	0.039	264.0
DS-51-45		1	0.007	0.007	23.6	23.6	0.012	81.2
DS-51-46		1	0.01	0.010	33.8	33.8	0.018	121.9
DS-51-47		0.6	0.018	0.018	60.8	60.8	0.037	250.5
DS-51-48		1	0.027	0.027	91.1	91.1	0.035	237.0
DS-51-49		1	0.033	0.033	111.4	111.4	0.063	426.5
DS-51-50		0.8	0.077	0.076	259.9	259.9	0.007	47.4
DS-51-51		3.5	0.008	0.008	27.0	27.0	0.013	88.0
DS-51-52		1.3	0.025	0.025	84.4	84.4	0.041	277.6
DS-51-53		20	0.028	0.028	94.5	94.5	0.051	345.3
DS-51-54		0.8	0.026	0.026	87.8	87.8	0.047	318.2
DS-51-55		0.8	0.021	0.021	70.9	70.9	0.035	237.0
DS-51-56		1.2	0.009	0.009	30.4	30.4	0.012	81.2
DS-51-77		1.1	0.023	0.023	77.6	77.6	0.048	325.0
DS-52-114	0.8		0.014	0.014	47.3	47.3	0.016	108.3
DS-52-115	12.9		0.013	0.013	43.9	43.9	0.017	115.1
DS-52-116	8.7		0.01	0.010	33.8	33.8	0.01	67.7
DS-52-117	7.7		0.005	0.005	16.9	16.9	0.006	40.6
DS-52-118	5		0.012	0.012	40.5	40.5	0.015	101.6
DS-52-119	3.8		0.014	0.014	47.3	47.3	0.018	121.9
DS-52-120	8		0.013	0.013	43.9	43.9	0.014	94.8

SAMPLE #	AREA	LENGTH	PERCENT EQUIVALENT URANIUM	PERCENT EQUIVALENT URANIUM-238	EQUIVALENT URANIUM-238 ACTIVITY (picoCurles per gram)	RADIUM-226 ACTIVITY (picoCurles per gram)	PERCENT URANIUM	NATURAL URANIUM ACTIVITY (picoCurles per gram)
DS-52-121	10.7		0.011	0.011	37.1	37.1	0.01	67.7
DS-52-122	1.2		0.006	0.006	20.3	20.3	0.001	6.8
DS-52-123	637		0.009	0.009	30.4	30.4	0.009	60.9
DS-52-124	10.3		0.012	0.012	40.5	40.5	0.013	88.0
DS-52-125	6		0.013	0.013	43.9	43.9	0.02	135.4
DS-52-126	6.2		0.022	0.022	74.3	74.3	0.033	223.4
DS-52-127	6.8		0.013	0.013	43.9	43.9	0.016	108.3
DS-52-131	6		0.015	0.015	50.6	50.6	0.015	101.6
DS-52-129	5.9		0.011	0.011	37.1	37.1	0.012	81.2
DS-52-130	9		0.023	0.023	77.6	77.6	0.045	304.7
DS-52-131	6		0.015	0.015	50.6	50.6	0.015	101.6
DS-52-132	5.3		0.004	0.004	13.5	13.5	0.005	33.9
DS-52-133	4.8		0.008	0.008	27.0	27.0	0.013	88.0
DS-52-134	7.5		0.013	0.013	43.9	43.9	0.024	162.5
DS-52-135	6.5		0.021	0.021	70.9	70.9	0.033	223.4
DS-52-136	5.5		0.013	0.013	43.9	43.9	0.024	162.5
DS-51-19		0.5	0.008	0.008	27.0	27.0	0.009	60.9
DS-51-20		1.2	0.014	0.014	47.3	47.3	0.021	142.2
DS-51-21		0.8	0.009	0.009	30.4	30.4	0.014	94.8
DS-51-22		0.7	0.014	0.014	47.3	47.3	0.019	128.6
DS-51-23		1	0.01	0.010	33.8	33.8	0.014	94.8
DS-51-24		0.7	0.015	0.015	50.6	50.6	0.019	128.6
DS-51-25		1.3	0.013	0.013	43.9	43.9	0.024	162.5
DS-51-26		0.9	0.002	0.002	6.8	6.8	0.002	13.5
DS-51-27		0.5	0.004	0.004	13.5	13.5	0.003	20.3
DS-51-28		1.2	0.008	0.008	27.0	27.0	0.009	60.9
DS-51-29		1.3	0.033	0.033	111.4	111.4	0.062	419.7
DS-51-30		0.3	0.017	0.017	57.4	57.4	0.025	169.3
DS-51-31		1	0.024	0.024	81.0	81.0	0.04	270.8
DS-51-32		0.5	0.01	0.010	33.8	33.8	0.015	101.6
DS-51-33		0.7	0.011	0.011	37.1	37.1	0.02	135.4
DS-51-34		0.4	0.009	0.009	30.4	30.4	0.013	88.0
DS-51-35		0.8	0.01	0.010	33.8	33.8	0.019	128.6
DS-51-57		0.6	0.016	0.016	54.0	54.0	0.021	142.2
DS-51-58	0.06	Sample missing		0.000	0.0	0.0		0.0
DS-51-59		0.5	0.03	0.030	101.3	101.3	0.052	352.0
DS-51-60		2	0.021	0.021	70.9	70.9	0.024	162.5
DS-51-61		1.6	0.017	0.017	57.4	57.4	0.028	189.6
DS-51-62		1.5	0.003	0.003	10.1	10.1	0.002	13.5
DS-51-63		1.5	0.009	0.009	30.4	30.4	0.012	81.2
DS-51-64		1	0.011	0.011	37.1	37.1	0.012	81.2
DS-51-65		2	0.013	0.013	43.9	43.9	0.022	148.9
DS-51-66		1.4	0.016	0.016	54.0	54.0	0.027	182.8
DS-51-67		1.3	0.01	0.010	33.8	33.8	0.014	94.8
DS-51-69		1.6	0.012	0.012	40.5	40.5	0.016	108.3
DS-51-69		3	0.008	0.008	27.0	27.0	0.011	74.5
DS-51-72		1.9	0.011	0.011	37.1	37.1	0.015	101.6
DS-51-73		1.3	0.026	0.026	87.8	87.8	0.042	284.3
DS-51-74		1.6	0.025	0.025	84.4	84.4	0.036	243.7
DS-51-75		1.7	0.02	0.020	67.5	67.5	0.028	189.6
DS-51-76		2.8	0.006	0.006	20.3	20.3	0.004	27.1
Mean:			0.017	0.017	56.2	56.2	0.023	156.6
Median:			0.012	0.012	40.5	40.5	0.016	108.3
Standard Deviation:			0.019	0.018	62.5	62.5	0.026	177.6
Maximum:			0.190	0.189	641.4	641.4	0.260	1760.2
Minimum:			0.002	0.000	0.0	0.0	0.000	0.0
Values computed by Kennecott Uranium Company from data in paper								
OAP:02/17/08								

KENNECOTT URANIUM COMPANY								
LOST CREEK TRENCH SAMPLING								
Sections 2-7								
Source:	Geology of the Lost Creek Schroeckingerite Deposits Sweetwater County, Wyoming							
	Geological Survey Bulletin 1087-J							
SAMPLE #	SAMPLE AREA	SAMPLE LENGTH	PERCENT	PERCENT	EQUIVALENT			NATURAL
			EQUIVALENT URANIUM	EQUIVALENT URANIUM-238	URANIUM-238 ACTIVITY	RADIUM-226 ACTIVITY	URANIUM	URANIUM ACTIVITY
					(picoCuries per gram)	(picoCuries per gram)		(picoCuries per gram)
DS-52-237	1.9		0.004	0.004	13.5	13.5	0.004	27.1
DS-52-238	4.9		0.005	0.005	16.9	16.9	0.004	27.1
DS-52-239	4.8		0.007	0.007	23.6	23.6	0.012	81.2
DS-52-242	1.2		0.008	0.008	27.0	27.0	0.015	101.6
DS-52-248	0.6		0.021	0.021	70.9	70.9	0.048	325.0
DS-52-249	4.4		0.027	0.027	91.1	91.1	0.06	406.2
DS-52-250	3		0.014	0.014	47.3	47.3	0.024	162.5
DS-52-251	0.8		0.008	0.008	27.0	27.0	0.012	81.2
DS-52-256	1.3		0.008	0.008	27.0	27.0	0.012	81.2
DS-52-257	5.7		0.012	0.012	40.5	40.5	0.018	121.9
DS-52-258	2.6		0.01	0.010	33.8	33.8	0.019	128.6
DS-52-259	2		0.014	0.014	47.3	47.3	0.015	101.6
DS-52-262	0.7		0.021	0.021	70.9	70.9	0.035	237.0
DS-52-263	2.9		0.025	0.025	84.4	84.4	0.049	331.7
DS-52-264	5.5		0.027	0.027	91.1	91.1	0.053	358.8
DS-52-265	3.2		0.015	0.015	50.6	50.6	0.029	196.3
DS-52-265A	4.1		0.029	0.029	97.9	97.9	0.06	406.2
DS-52-266	6.9		0.017	0.017	57.4	57.4	0.034	230.2
DS-52-267	0.4		0.007	0.007	23.6	23.6	0.015	101.6
DS-52-275	6.4		0.039	0.039	131.6	131.6	0.08	541.6
DS-52-207	1.2		0.013	0.013	43.9	43.9	0.021	142.2
DS-52-213	0.8		0.047	0.047	158.7	158.7	0.087	589.0
DS-52-214	3		0.014	0.014	47.3	47.3	0.022	148.9
DS-52-216	1.3		0.012	0.012	40.5	40.5	0.022	148.9
DS-52-218	5.6		0.016	0.016	54.0	54.0	0.035	237.0
DS-52-220	4.9		0.019	0.019	64.1	64.1	0.038	257.3
DS-52-222	3.3		0.012	0.012	40.5	40.5	0.024	162.5
DS-52-227	0.7		0.029	0.029	97.9	97.9	0.065	440.1
DS-52-228	1.3		0.037	0.037	124.9	124.9	0.072	487.4
DS-52-230	1.5		0.016	0.016	54.0	54.0	0.03	203.1
DS-51-199	1.2		0.008	0.008	27.0	27.0	0.013	88.0
DS-52-200	0.3		0.007	0.007	23.6	23.6	0.008	54.2
DS-52-204	1.2		0.012	0.012	40.5	40.5	0.022	148.9
DS-52-224	4		0.016	0.016	54.0	54.0	0.031	209.9
DS-52-233	1.2		0.01	0.010	33.8	33.8	0.012	81.2
DS-52-236	4		0.01	0.010	33.8	33.8	0.016	108.3
DS-52-184	3.5		0.023	0.023	77.6	77.6	0.041	277.6
DS-52-186	1.5		0.011	0.011	37.1	37.1	0.015	101.6
DS-52-190	2		0.02	0.020	67.5	67.5	0.043	291.1
DS-52-193	1		0.011	0.011	37.1	37.1	0.013	88.0
DS-52-194	0.2		0.03	0.030	101.3	101.3	0.062	419.7
DS-52-197	0.5		0.024	0.024	81.0	81.0	0.051	345.3
DS-52-149	4.3		0.015	0.015	50.6	50.6	0.015	101.6
DS-52-150	6.8		0.023	0.023	77.6	77.6	0.037	250.5
DS-52-152	0.3		0.009	0.009	30.4	30.4	0.01	67.7
DS-52-153	7.3		0.013	0.013	43.9	43.9	0.019	128.6
DS-52-155	1.4		0.004	0.004	13.5	13.5	0.004	27.1
DS-52-158	4.1		0.011	0.011	37.1	37.1	0.016	108.3
DS-52-141	20		0.011	0.011	37.1	37.1	0.013	88.0
DS-52-143	1.6		0.01	0.010	33.8	33.8	0.007	47.4
DS-52-145	1.7		0.005	0.005	16.9	16.9	0.003	20.3
DS-52-146	0.2		0.008	0.008	27.0	27.0	0.007	47.4
DS-52-99	2.8		0.034	0.034	114.8	114.8	0.055	372.4
DS-52-100	1.2		0.028	0.028	94.5	94.5	0.05	338.5
DS-52-101	4.5		0.03	0.030	101.3	101.3	0.053	358.8
DS-52-102	0.6		0.018	0.018	60.8	60.8	0.022	148.9
DS-52-103	3.7		0.026	0.026	87.8	87.8	0.036	243.7
DS-52-104	0.2		0.044	0.044	148.5	148.5	0.072	487.4
DS-52-107	7.6		0.037	0.037	124.9	124.9	0.066	446.8
DS-52-109	1		3.024	3.002	10207.9	10207.9	0.037	250.5
DS-52-110	0.6		0.035	0.035	118.1	118.1	0.055	372.4
DS-52-113	2		0.042	0.042	141.8	141.8	0.051	345.3
DS-52-24	0.5		0.024	0.024	81.0	81.0	0.035	237.0

SAMPLE #	SAMPLE AREA	SAMPLE LENGTH	PERCENT	PERCENT	EQUIVALENT	RADIUM-226	PERCENT	NATURAL
			EQUIVALENT URANIUM	EQUIVALENT URANIUM-238	URANIUM-238 ACTIVITY	ACTIVITY	URANIUM	URANIUM ACTIVITY
					(picoCuries per gram)	(picoCuries per gram)		(picoCuries per gram)
DS-52-25	1.4		0.032	0.032	108.0	108.0	0.048	325.0
DS-52-27	9.8		0.019	0.019	64.1	64.1	0.026	176.0
DS-52-28	2.8		0.06	0.060	202.5	202.5	0.11	744.7
DS-52-31	4.8		0.025	0.025	84.4	84.4	0.041	277.6
DS-52-32	2		0.05	0.050	168.8	168.8	0.079	534.8
DS-52-33	1.5		0.044	0.044	148.5	148.5	0.071	480.7
DS-52-34	8.7		0.026	0.026	87.8	87.8	0.041	277.6
DS-52-35	4.1		0.014	0.014	47.3	47.3	0.015	101.6
DS-52-45	2		0.024	0.024	81.0	81.0	0.05	338.5
DS-52-46	26.8		0.049	0.049	165.4	165.4	0.097	656.7
DS-52-47	11.8		0.041	0.041	138.4	138.4	0.075	507.8
DS-52-59	5.9		0.028	0.028	94.5	94.5	0.038	257.3
DS-52-60	12.8		0.018	0.018	60.8	60.8	0.023	155.7
DS-52-61	10.7		0.02	0.020	67.5	67.5	0.029	196.3
DS-52-62	12.2		0.034	0.034	114.8	114.8	0.055	372.4
DS-52-63	16		0.06	0.060	202.5	202.5	0.12	812.4
DS-52-64	4		0.013	0.013	43.9	43.9	0.015	101.6
DS-52-65	9.3		0.058	0.058	195.8	195.8	0.11	744.7
DS-52-66	8.8		0.049	0.049	165.4	165.4	0.078	528.1
DS-52-67	0.7		0.016	0.016	54.0	54.0	0.026	176.0
DS-52-79	0.5		0.024	0.024	81.0	81.0	0.031	209.9
DS-52-80	65		0.017	0.017	57.4	57.4	0.021	142.2
DS-52-81	7.5		0.016	0.016	54.0	54.0	0.023	155.7
DS-52-82	7.4		0.032	0.032	108.0	108.0	0.057	385.9
DS-52-53	5.4		0.02	0.020	67.5	67.5	0.031	209.9
DS-52-84	1.3		0.031	0.031	104.6	104.6	0.047	318.2
DS-52-58	4.4		0.021	0.021	70.9	70.9	0.027	182.8
DS-52-86	8.2		0.028	0.028	94.5	94.5	0.037	250.5
DS-52-87	3.1		0.031	0.031	104.6	104.6	0.043	291.1
DS-52-88	1.6		0.049	0.049	165.4	165.4	0.07	473.9
DS-52-2	1.5		0.035	0.035	118.1	118.1	0.079	534.8
DS-52-4	0.3		0.018	0.018	60.8	60.8	0.033	223.4
DS-52-5	0.2		0.011	0.011	37.1	37.1	0.018	121.9
DS-52-22	1.1		0.033	0.033	111.4	111.4	0.045	304.7
DS-52-7	2.2		0.017	0.017	57.4	57.4	0.03	203.1
DS-52-8	3		0.019	0.019	64.1	64.1	0.031	209.9
DS-52-10	6		0.025	0.025	84.4	84.4	0.041	277.6
DS-52-12	0.3		0.022	0.022	74.3	74.3	0.026	176.0
DS-52-13	9.5		0.037	0.037	124.9	124.9	0.063	426.5
DS-52-14	2.4		0.022	0.022	74.3	74.3	0.035	237.0
DS-52-15	2		0.022	0.022	74.3	74.3	0.032	216.6
DS-52-20	0.5		0.096	0.095	324.1	324.1	0.15	1015.5
LRP-28	6.7		0.011	0.011	37.1	37.1	0.017	115.1
LRP-31	5.8		0.008	0.008	27.0	27.0	0.008	54.2
LRP-10	4.5		0.01	0.010	33.8	33.8	0.017	115.1
LRP-7	0.6		0.004	0.004	13.5	13.5	0.002	13.5
LRP-12	2.1		0.017	0.017	57.4	57.4	0.029	196.3
LRP-H-14		10	0.004	0.004	13.5	13.5	0.001	6.8
LRP-13	2.5		0.013	0.013	43.9	43.9	0.019	128.6
LRP-14	3		0.012	0.012	40.5	40.5	0.014	94.8
LRP-15	6.4		0.017	0.017	57.4	57.4	0.026	176.0
LRP-16	2.3		0.015	0.015	50.6	50.6	0.019	128.6
LRP-18	1.6		0.01	0.010	33.8	33.8	0.014	94.8
LRP-19	0.7		0.007	0.007	23.6	23.6	0.005	33.9
LRP-20	0.8		0.02	0.020	67.5	67.5	0.029	196.3
LRP-24	1.7		0.019	0.019	64.1	64.1	0.037	250.5
DS-H-407		10	0.007	0.007	23.6	23.6	0.006	40.6
DS-H-406		10	0.006	0.006	20.3	20.3	0.007	47.4
DS-H-405		10	0.002	0.002	6.8	6.8	0.001	6.8
DS-H-404		10	0.005	0.005	16.9	16.9	0.003	20.3
DS-H-260		10	0.005	0.005	16.9	16.9	0.004	27.1
DS-H-259		10	0.004	0.004	13.5	13.5	0.004	27.1
DS-H-258		10	0.005	0.005	16.9	16.9	0.002	13.5
DS-H-257		10	0.004	0.004	13.5	13.5	0.003	20.3
DS-H-256		10	0.005	0.005	16.9	16.9	0.003	20.3
DS-H-255		10	0.003	0.003	10.1	10.1	0.002	13.5
DS-H-254		10	0.005	0.005	16.9	16.9	0.003	20.3
DS-51-261	7.4		0.017	0.017	57.4	57.4	0.035	237.0
DS-51-259	2.4		0.01	0.010	33.8	33.8	0.013	88.0
DS-H-251		10	0.003	0.003	10.1	10.1	0.002	13.5

SAMPLE #	SAMPLE AREA	SAMPLE LENGTH	PERCENT	PERCENT	EQUIVALENT	RADIUM-226	PERCENT	NATURAL
			EQUIVALENT URANIUM	EQUIVALENT URANIUM-238	URANIUM-238 ACTIVITY	ACTIVITY	URANIUM	URANIUM ACTIVITY
					(picoCuries per gram)	(picoCuries per gram)		(picoCuries per gram)
DS-H-250		10	0.004	0.004	13.5	13.5	0.002	13.5
DS-H-249		10	0.003	0.003	10.1	10.1	0.003	20.3
DS-H-248		10	0.005	0.005	16.9	16.9	0.003	20.3
DS-H-247		10	0.004	0.004	13.5	13.5	0.001	6.8
DS-H-246		10	0.005	0.005	16.9	16.9	0.003	20.3
DS-H-245		10	0.004	0.004	13.5	13.5	0.004	27.1
DS-H-244		10	0.004	0.004	13.5	13.5	0.002	13.5
DS-H-243		10	0.004	0.004	13.5	13.5	0.002	13.5
DS-H-242		10	0.005	0.005	16.9	16.9	0.005	33.9
DS-51244B	0.4		0.004	0.004	13.5	13.5	0.004	27.1
DS-H-241		10	0.004	0.004	13.5	13.5	0.003	20.3
DS-H-240		10	0.004	0.004	13.5	13.5	0.002	13.5
DS-52-161	6.2		0.014	0.014	47.3	47.3	0.02	135.4
DS-52-160	10.3		0.016	0.016	54.0	54.0	0.035	237.0
DS-52-159	4.7		0.019	0.019	64.1	64.1	0.033	223.4
DS-51-266	2		0.006	0.006	20.3	20.3	0.009	60.9
DS-51-264	3.6		0.028	0.028	94.5	94.5	0.05	338.5
DS-51-263	3.1		0.007	0.007	23.6	23.6	0.008	54.2
DS-51-262	1.1		0.008	0.008	27.0	27.0	0.01	67.7
DS-H-253		10	0.003	0.003	10.1	10.1	0.002	13.5
DS-H-252		10	0.003	0.003	10.1	10.1	0.002	13.5
DS-51-258	5.8	Sample missing		0.000	0.0	0.0		0.0
DS-51-252	2.5		0.003	0.003	10.1	10.1	0.003	20.3
DS-51-251	8.8		0.004	0.004	13.5	13.5	0.003	20.3
DS-51-250	8.7		0.004	0.004	13.5	13.5	0.003	20.3
DS-51-246	9		0.007	0.007	23.6	23.6	0.008	54.2
DS-51-245	10		0.017	0.017	57.4	57.4	0.025	169.3
	6.1	Not Sampled		0.000	0.0	0.0		0.0
DS-51-244A	0.6		0.045	0.045	151.9	151.9	0.075	507.8
DS-51-243	1.6		0.005	0.005	16.9	16.9	0.004	27.1
DS-52-164	4.8		0.009	0.009	30.4	30.4	0.013	88.0
DS-52-163	5.1		0.016	0.016	54.0	54.0	0.024	162.5
DS-52-162	7.5		0.018	0.018	60.8	60.8	0.039	264.0
	0.4	Not Sampled		0.000	0.0	0.0		0.0
DS-51-265	6.9		0.021	0.021	70.9	70.9	0.038	257.3
DS-51-260	3.2		0.004	0.004	13.5	13.5	0.006	40.6
DS-51-256	8.4		0.008	0.008	27.0	27.0	0.01	67.7
DS-51-255	2.2		0.004	0.004	13.5	13.5	0.004	27.1
DS-51-254	4.6		0.005	0.005	16.9	16.9	0.008	54.2
DS-51-253	4.4		0.006	0.006	20.3	20.3	0.009	60.9
DS-51-249	8.2		0.008	0.008	27.0	27.0	0.009	60.9
DS-51-248	17.5		0.006	0.006	20.3	20.3	0.008	54.2
DS-51-247	15.5		0.01	0.010	33.8	33.8	0.015	101.6
DS-51-257	4.6		0.008	0.008	27.0	27.0	0.008	54.2
DS-H-431		10	0.003	0.003	10.1	10.1	<.001	
DS-H-428		7	0.009	0.009	30.4	30.4	0.024	162.5
DS-H-427		5	0.006	0.006	20.3	20.3	0.009	60.9
DS-H-426		10	0.003	0.003	10.1	10.1	0.002	13.5
DS-52-172	0.4		0.008	0.008	27.0	27.0	0.011	74.5
DS-H-411		10	0.005	0.005	16.9	16.9	0.002	13.5
DS-52-165	4.9		0.023	0.023	77.6	77.6	0.044	297.9
DS-H-409		10	0.003	0.003	10.1	10.1	0.001	6.8
DS-H-408		10	0.003	0.003	10.1	10.1	<.001	
DS-H-407	continued in E'-F'			0.000	0.0	0.0		0.0
DS-H-430		10	0.003	0.003	10.1	10.1	<.001	
DS-H-429		8	0.004	0.004	13.5	13.5	<.001	
DS-52-179	2.9		0.012	0.012	40.5	40.5	0.027	182.8
DS-52-178	5.6		0.015	0.015	50.6	50.6	0.037	250.5
DS-52-176	2.3		0.012	0.012	40.5	40.5	0.026	176.0
DS-52-175	0.5		0.009	0.009	30.4	30.4	0.021	142.2
DS-H-425		10	0.003	0.003	10.1	10.1	0.001	6.8
DS-H-424		10	0.002	0.002	6.8	6.8	0.001	6.8
DS-H-422		10	0.002	0.002	6.8	6.8	<.001	
DS-H-421		5	0.004	0.004	13.5	13.5	0.004	27.1
DS-H-420		5	0.004	0.004	13.5	13.5	0.005	33.9
DS-H-419		10	0.004	0.004	13.5	13.5	0.004	27.1
DS-H-418		10	0.003	0.003	10.1	10.1	0.001	6.8
DS-H-417		10	0.002	0.002	6.8	6.8	0.001	6.8
DS-H-416		10	0.005	0.005	16.9	16.9	0.004	27.1
DS-H-415		10	0.004	0.004	13.5	13.5	0.003	20.3

SAMPLE #	SAMPLE AREA	SAMPLE LENGTH	PERCENT	PERCENT	EQUIVALENT	RADIUM-226	PERCENT	NATURAL
			EQUIVALENT URANIUM	EQUIVALENT URANIUM-238	URANIUM-238 ACTIVITY	ACTIVITY	URANIUM	URANIUM ACTIVITY
					(picoCuries per gram)	(picoCuries per gram)		(picoCuries per gram)
DS-H-414		10	0.002	0.002	6.8	6.8	0.001	6.8
DS-H-413		10	0.004	0.004	13.5	13.5	0.001	6.8
DS-H-412		10	0.004	0.004	13.5	13.5	0.002	13.5
DS-52-167	7.6		0.012	0.012	40.5	40.5	0.021	142.2
DS-52-166	6		0.009	0.009	30.4	30.4	0.014	94.8
DS-H-410		10	0.003	0.003	10.1	10.1	0.001	6.8
DS-52-182	3.3		0.014	0.014	47.3	47.3	0.031	209.9
DS-52-181	3.7		0.014	0.014	47.3	47.3	0.03	203.1
DS-52-180	7.4		0.015	0.015	50.6	50.6	0.041	277.6
DS-52-177	2.9		0.015	0.015	50.6	50.6	0.033	223.4
DS-52-174	0.8		0.008	0.008	27.0	27.0	0.017	115.1
DS-52-173	0.9		0.006	0.006	20.3	20.3	0.007	47.4
DS-52-171	5.4		0.022	0.022	74.3	74.3	0.046	311.4
DS-52-170	4		0.01	0.010	33.8	33.8	0.018	121.9
DS-52-169	6		0.011	0.011	37.1	37.1	0.015	101.6
DS-52-168	6.4		0.016	0.016	54.0	54.0	0.022	148.9
	0.7	Not Sampled		0.000	0.0	0.0		0.0
LRP-74	2		0.01	0.010	33.8	33.8	0.017	115.1
LRP-73	8.5		0.006	0.006	20.3	20.3	0.009	60.9
LRP-72	1.8		0.014	0.014	47.3	47.3	0.022	148.9
	0.08	Not Sampled		0.000	0.0	0.0		0.0
LRP-64	6		0.017	0.017	57.4	57.4	0.026	176.0
LRP-63	7.8		0.013	0.013	43.9	43.9	0.014	94.8
LRP-H-106		13.5	0.009	0.009	30.4	30.4	0.011	74.5
LRP-H-105		9	0.002	0.002	6.8	6.8	0	0.0
LRP-39	1		0.014	0.014	47.3	47.3	0.02	135.4
LRP-68	3.4		0.012	0.012	40.5	40.5	0.02	135.4
LRP-78	1.5		0.018	0.018	60.8	60.8	0.028	189.6
LRP-H-67		5	0.005	0.005	16.9	16.9	0.007	47.4
LRP-H-108		14	0.004	0.004	13.5	13.5	0.001	6.8
LRP-H-66		13	0.007	0.007	23.6	23.6	0.008	54.2
LRP-70	3		0.017	0.017	57.4	57.4	0.018	121.9
LRP-H-65		4	0.005	0.005	16.9	16.9	0.005	33.9
LRP-69	2.7		0.012	0.012	40.5	40.5	0.015	101.6
LRP-H-64		8	0.003	0.003	10.1	10.1	0.002	13.5
LRP-H-63		10	0.004	0.004	13.5	13.5	0.005	33.9
LRP-67	0.4		0.039	0.039	131.6	131.6	0.061	413.0
LRP-H-62		10	0.004	0.004	13.5	13.5	0.004	27.1
LRP-65	2		0.03	0.030	101.3	101.3	0.064	433.3
LRP-H-61		6	0.005	0.005	16.9	16.9	0.006	40.6
LRP-60		10	0.005	0.005	16.9	16.9	0.003	20.3
LRP-59		10	0.003	0.003	10.1	10.1	0.003	20.3
LRP-H-107		10	0.005	0.005	16.9	16.9	0.004	27.1
LRP-H-58		9	0.005	0.005	16.9	16.9	0.004	27.1
LRP-H-57		10	0.004	0.004	13.5	13.5	0.004	27.1
LRP-H-56		10	0.004	0.004	13.5	13.5	0.006	40.6
LRP-62	2.2		0.022	0.022	74.3	74.3	0.036	243.7
LRP-60	2		0.025	0.025	84.4	84.4	0.043	291.1
LRP-H-55		4	0.005	0.005	16.9	16.9	0.008	54.2
LRP-58	4.4		0.008	0.008	27.0	27.0	0.009	60.9
LRP-57	11.5		0.012	0.012	40.5	40.5	0.018	121.9
LRP-H-54		10	0.004	0.004	13.5	13.5	0.002	13.5
LRP-55	3.7		0.008	0.008	27.0	27.0	0.007	47.4
LRP-53		7	0.005	0.005	16.9	16.9	0.012	81.2
LRP-49	4.7		0.007	0.007	23.6	23.6	0.008	54.2
LRP-48	10.1		0.014	0.014	47.3	47.3	0.017	115.1
LRP-47	14.6		0.01	0.010	33.8	33.8	0.015	101.6
LRP-H-52		10	0.005	0.005	16.9	16.9	0.001	6.8
LRP-H-51		10	0.003	0.003	10.1	10.1	0.001	6.8
LRP-H-50		6	0.004	0.004	13.5	13.5	0.002	13.5
LRP-46	2.9		0.01	0.010	33.8	33.8	0.013	88.0
LRP-45	8.4		0.016	0.016	54.0	54.0	0.019	128.6
LRP-H-49		4	0.003	0.003	10.1	10.1	0.001	6.8
LRP-H-48		10	0.003	0.003	10.1	10.1	0.002	13.5
LRP-41	3.9		0.016	0.016	54.0	54.0	0.02	135.4
LRP-40	6.3		0.012	0.012	40.5	40.5	0.017	115.1
H-47		13	0.003	0.003	10.1	10.1	0.001	6.8
LRP-H-46		10	0.003	0.003	10.1	10.1	0.002	13.5
LRP-H-45		11.5	0.004	0.004	13.5	13.5	0.004	27.1
LRP-37	2.1		0.018	0.018	60.8	60.8	0.027	182.8

SAMPLE #	SAMPLE AREA	SAMPLE LENGTH	PERCENT	PERCENT	EQUIVALENT	RADIUM-226	PERCENT	NATURAL
			EQUIVALENT URANIUM	EQUIVALENT URANIUM-238	URANIUM-238 ACTIVITY	ACTIVITY	URANIUM	URANIUM ACTIVITY
					(picoCuries per gram)	(picoCuries per gram)		
LRP-36	10.6		0.015	0.015	50.6	50.6	0.024	162.5
LRP-H-44		10	0.004	0.004	13.5	13.5	0.004	27.1
LRP-H-43		10	0.004	0.004	13.5	13.5	0.003	20.3
LRP-H-42		10	0.004	0.004	13.5	13.5	0.001	6.8
LRP-H-41		10	0.004	0.004	13.5	13.5	0.004	27.1
LRP-H-40		10	0.005	0.005	16.9	16.9	0.004	27.1
LRP-32	7.3		0.008	0.008	27.0	27.0	0.011	74.5
LRP-H-39		10	0.004	0.004	13.5	13.5	0.004	27.1
LRP-H-38		10	0.004	0.004	13.5	13.5	0.003	20.3
LRP-77	4.2		0.012	0.012	40.5	40.5	0.019	128.6
LRP-76	2.6		0.007	0.007	23.6	23.6	0.011	74.5
LRP-75	4.8		0.015	0.015	50.6	50.6	0.03	203.1
LRP-71	7.2		0.021	0.021	70.9	70.9	0.034	230.2
LRP-66	3.8		0.033	0.033	111.4	111.4	0.06	406.2
LRP-61	3.3		0.026	0.026	87.8	87.8	0.041	277.6
LRP-59	0.5		0.017	0.017	57.4	57.4	0.023	155.7
LRP-56	2.9		0.018	0.018	60.8	60.8	0.028	189.6
LRP-53	3.6		0.007	0.007	23.6	23.6	0.007	47.4
LRP-52	9.7		0.012	0.012	40.5	40.5	0.016	108.3
LRP-51	13.7		0.012	0.012	40.5	40.5	0.017	115.1
LRP-50	9		0.013	0.013	43.9	43.9	0.012	81.2
LRP-44	7.2		0.017	0.017	57.4	57.4	0.027	182.8
LRP-43	9.2		0.013	0.013	43.9	43.9	0.021	142.2
LRP-42	6.1		0.01	0.010	33.8	33.8	0.012	81.2
LRP-38	9.4		0.014	0.014	47.3	47.3	0.021	142.2
LRP-35	9.4		0.025	0.025	84.4	84.4	0.051	345.3
LRP-34	4		0.012	0.012	40.5	40.5	0.019	128.6
LRP-33	5.5		0.009	0.009	30.4	30.4	0.012	81.2
LRP-168	2.6		0.007	0.007	23.6	23.6	0.008	54.2
LRP-H-104		5.5	0.004	0.004	13.5	13.5	0.002	13.5
LRP-162	1.2		0.037	0.037	124.9	124.9	0.078	528.1
LRP-161	2.8		0.014	0.014	47.3	47.3	0.022	148.9
	0.6	Not Sampled		0.000	0.0	0.0		0.0
LRP-H-127		6	0.003	0.003	10.1	10.1	0	0.0
LRP-H-126		10	0.003	0.003	10.1	10.1	0	0.0
LRP-H-125		10.5	0.003	0.003	10.1	10.1	0	0.0
LRP-H-124		10	0.007	0.007	23.6	23.6	0.009	60.9
LRP-H-123		10	0.006	0.006	20.3	20.3	0.004	27.1
LRP-H-122		10	0.004	0.004	13.5	13.5	0.001	6.8
LRP-H-121		10	0.004	0.004	13.5	13.5	0.001	6.8
LRP-H-120		10	0.004	0.004	13.5	13.5	0	0.0
LRP-H-119		10	0.004	0.004	13.5	13.5	0	0.0
LRP-H-118		10	0.004	0.004	13.5	13.5	0	0.0
LRP-H-117		10	0.004	0.004	13.5	13.5	0.001	6.8
LRP-H-116		10	0.008	0.008	27.0	27.0	0.008	54.2
LRP-112	9.2		0.022	0.022	74.3	74.3	0.04	270.8
LRP-111	9.6		0.021	0.021	70.9	70.9	0.039	264.0
LRP-H-114		7	0.004	0.004	13.5	13.5	0	0.0
LRP-H-113		5	0.005	0.005	16.9	16.9	0.003	20.3
LRP-H-112		10	0.005	0.005	16.9	16.9	0.004	27.1
LRP-H-111		10	0.004	0.004	13.5	13.5	0.001	6.8
LRP-H-110		10	0.005	0.005	16.9	16.9	0.007	47.4
LRP-85	4.6		0.016	0.016	54.0	54.0	0.027	182.8
LRP-81	2.8		0.021	0.021	70.9	70.9	0.038	257.3
LRP-79	1.7		0.045	0.045	151.9	151.9	0.085	575.5
LRP-H-103		20	0.005	0.005	16.9	16.9	0.003	20.3
LRP-H-102		10	0.003	0.003	10.1	10.1	0.002	13.5
LRP-167	0.4		0.006	0.006	20.3	20.3	0.006	40.6
LRP-H-101		10	0.003	0.003	10.1	10.1	0.001	6.8
LRP-H-100		10	0.003	0.003	10.1	10.1	0.001	6.8
LRP-H-99		10	0.004	0.004	13.5	13.5	0.001	6.8
LRP-H-98		10.5	0.004	0.004	13.5	13.5	0.001	6.8
LRP-H-97		11.5	0.006	0.006	20.3	20.3	0.002	13.5
LRP-H-96		10	0.006	0.006	20.3	20.3	0.003	20.3
LRP-H-95		10	0.005	0.005	16.9	16.9	0.003	20.3
LRP-H-94		10	0.009	0.009	30.4	30.4	0.011	74.5
LP-H-128		7	0.006	0.006	20.3	20.3	0.008	54.2
LRP-H-93		7	0.005	0.005	16.9	16.9	0.002	13.5
LRP-H-92		10	0.004	0.004	13.5	13.5	0.002	13.5
LRP-H-91		10	0.003	0.003	10.1	10.1	0.001	6.8

SAMPLE #	SAMPLE AREA	SAMPLE LENGTH	PERCENT	PERCENT	EQUIVALENT	RADIUM-226	PERCENT	NATURAL
			EQUIVALENT URANIUM	EQUIVALENT URANIUM-238	URANIUM-238 ACTIVITY	ACTIVITY	URANIUM	URANIUM ACTIVITY
					(picoCuries per gram)	(picoCuries per gram)		(picoCuries per gram)
LRP-H-90		10	0.003	0.003	10.1	10.1	<.001	
LRP-H-89		9.5	0.004	0.004	13.5	13.5	0.002	13.5
LRP-H-88		10	0.004	0.004	13.5	13.5	0.001	6.8
LRP-156	1.6		0.014	0.014	47.3	47.3	0.024	162.5
LRP-155	12.3		0.008	0.008	27.0	27.0	0.012	81.2
LRP-154	12.6		0.009	0.009	30.4	30.4	0.012	81.2
LRP-H-87		12.5	0.003	0.003	10.1	10.1	0.001	6.8
LRP-H-86		10	0.004	0.004	13.5	13.5	<.001	
LRP-149	9.4		0.013	0.013	43.9	43.9	0.026	176.0
LRP-148	7.8		0.01	0.010	33.8	33.8	0.019	128.6
LRP-147	9.5		0.009	0.009	30.4	30.4	0.011	74.5
LRP-146	11.2		0.007	0.007	23.6	23.6	0.009	60.9
LRP-145	12.3		0.007	0.007	23.6	23.6	0.008	54.2
LRP-144	4.2		0.007	0.007	23.6	23.6	0.006	40.6
LRP-143	7.5		0.012	0.012	40.5	40.5	0.021	142.2
LRP-142	3.6	Sample Missing		0.000	0.0	0.0		0.0
LRP-135	3.4		0.011	0.011	37.1	37.1	0.02	135.4
LRP-134	7.3		0.015	0.015	50.6	50.6	0.025	169.3
LRP-133	8.9		0.017	0.017	57.4	57.4	0.031	209.9
LRP-132	6		0.011	0.011	37.1	37.1	0.022	148.9
LRP-H-85		4	0.001	0.001	3.4	3.4	0.001	6.8
LRP-126	8		0.011	0.011	37.1	37.1	0.019	128.6
LRP-125	6.4		0.013	0.013	43.9	43.9	0.022	148.9
LRP-124	8.7		0.007	0.007	23.6	23.6	0.01	67.7
LRP-H-84		2	0.004	0.004	13.5	13.5	0.003	20.3
LRP-H-83		10	0.003	0.003	10.1	10.1	0.001	6.8
LRP-123	1.4		0.013	0.013	43.9	43.9	0.024	162.5
LRP-H-82		4	0.004	0.004	13.5	13.5	0.001	6.8
LRP-122	1		0.012	0.012	40.5	40.5	0.009	60.9
LRP-121	3.2		0.027	0.027	91.1	91.1	0.045	304.7
LRP-H-81		1.5	0.004	0.004	13.5	13.5	0.001	6.8
LRP-113	7.1		0.025	0.025	84.4	84.4	0.04	270.8
LRP-H-80		11	0.005	0.005	16.9	16.9	0.007	47.4
LRP-H-79		10	0.004	0.004	13.5	13.5	0.002	13.5
LRP-H-78		10	0.003	0.003	10.1	10.1	0.001	6.8
LRP-106	1.3		0.018	0.018	60.8	60.8	0.031	209.9
LRP-105	11.7		0.019	0.019	64.1	64.1	0.028	189.6
LRP-H-77		6	0.004	0.004	13.5	13.5	<.001	
LRP-H-76		10	0.006	0.006	20.3	20.3	0.006	40.6
LRP-101	4.6		0.01	0.010	33.8	33.8	0.016	108.3
LRP-100	8		0.009	0.009	30.4	30.4	0.011	74.5
LRP-H-75	2.2	Sample Missing		0.000	0.0	0.0		0.0
LRP-94	3.7		0.009	0.009	30.4	30.4	0.011	74.5
LRP-93	6.8		0.012	0.012	40.5	40.5	0.014	94.8
LRP-92	4.8		0.009	0.009	30.4	30.4	0.009	60.9
LRP-H-74		2	0.004	0.004	13.5	13.5	0.004	27.1
LRP-88	1.8		0.012	0.012	40.5	40.5	0.018	121.9
LRP-87	7.4		0.035	0.035	118.1	118.1	0.067	453.6
LRP-H-73		5	0.007	0.007	23.6	23.6	0.006	40.6
LRP-H-72		10	0.006	0.006	20.3	20.3	0.008	54.2
LRP-86	4.1		0.018	0.018	60.8	60.8	0.025	169.3
LRP-H-109		11	0.006	0.006	20.3	20.3	0.005	33.9
LRP-H-71		11	0.008	0.008	27.0	27.0	0.007	47.4
LRP-H-70		10	0.006	0.006	20.3	20.3	0.008	54.2
LRP-H-69		10	0.005	0.005	16.9	16.9	0.002	13.5
LRP-H-68		10	0.005	0.005	16.9	16.9	0.005	33.9
LRP-169	3.3		0.007	0.007	23.6	23.6	0.008	54.2
LRP-165	5.3		0.006	0.006	20.3	20.3	0.008	54.2
LRP-164	9.9		0.006	0.006	20.3	20.3	0.008	54.2
LRP-163	2.6		0.009	0.009	30.4	30.4	0.011	74.5
LRP-160	1.2		0.005	0.005	16.9	16.9	0.002	13.5
LRP-159	10.1		0.017	0.017	57.4	57.4	0.024	162.5
LRP-158	11.7		0.008	0.008	27.0	27.0	0.01	67.7
LRP-157	9.7		0.008	0.008	27.0	27.0	0.009	60.9
LRP-153	6		0.016	0.016	54.0	54.0	0.028	189.6
LRP-152	7.7		0.012	0.012	40.5	40.5	0.02	135.4
LRP-151	4.7		0.009	0.009	30.4	30.4	0.013	88.0
LRP-150	7.4		0.01	0.010	33.8	33.8	0.011	74.5
LRP-141	5.8		0.009	0.009	30.4	30.4	0.015	101.6
LRP-140	10.3		0.01	0.010	33.8	33.8	0.013	88.0

SAMPLE #	SAMPLE AREA	SAMPLE LENGTH	PERCENT	PERCENT	EQUIVALENT			NATURAL
			EQUIVALENT URANIUM	EQUIVALENT URANIUM-238	URANIUM-238 ACTIVITY	RADIUM-226 ACTIVITY	PERCENT URANIUM	URANIUM ACTIVITY
					(picoCuries per gram)	(picoCuries per gram)		(picoCuries per gram)
LRP-139	7.6		0.007	0.007	23.6	23.6	0.011	74.5
LRP-138	8.4		0.009	0.009	30.4	30.4	0.013	88.0
LRP-137	7.4		0.012	0.012	40.5	40.5	0.021	142.2
LRP-136	5.8		0.009	0.009	30.4	30.4	0.02	135.4
LRP-131	7.4		0.01	0.010	33.8	33.8	0.017	115.1
LRP-130	6.8		0.009	0.009	30.4	30.4	0.016	108.3
LRP-129	10.2		0.011	0.011	37.1	37.1	0.017	115.1
LRP-128	7.7		0.008	0.008	27.0	27.0	0.011	74.5
LRP-127	7.6		0.005	0.005	16.9	16.9	0.006	40.6
LRP-120	2.5		0.027	0.027	91.1	91.1	0.047	318.2
LRP-119	4.6		0.013	0.013	43.9	43.9	0.019	128.6
LRP-118	6.5		0.018	0.018	60.8	60.8	0.012	81.2
LRP-117	4		0.011	0.011	37.1	37.1	0.023	155.7
LRP-116	2.7		0.031	0.031	104.6	104.6	0.053	358.8
LRP-115	13.4		0.02	0.020	67.5	67.5	0.035	237.0
LRP-114	8.5		0.015	0.015	50.6	50.6	0.025	169.3
LRP-110	2.4		0.003	0.003	10.1	10.1	0.005	33.9
LRP-109	3.7		0.006	0.006	20.3	20.3	0.008	54.2
	2	Not Sampled		0.000	0.0	0.0		0.0
LRP-108	10.9		0.01	0.010	33.8	33.8	0.012	81.2
LRP-107	6		0.017	0.017	57.4	57.4	0.023	155.7
LRP-103	1.4		0.005	0.005	16.9	16.9	0.004	27.1
LRP-102	3.9		0.006	0.006	20.3	20.3	0.008	54.2
LRP-99	2		0.007	0.007	23.6	23.6	0.008	54.2
LRP-98	2.4		0.008	0.008	27.0	27.0	0.012	81.2
LRP-97	8.6		0.007	0.007	23.6	23.6	0.009	60.9
LRP-96	7.4		0.009	0.009	30.4	30.4	0.014	94.8
LRP-95	8.1		0.011	0.011	37.1	37.1	0.014	94.8
LRP-91	5.2		0.009	0.009	30.4	30.4	0.009	60.9
LRP-90	5		0.023	0.023	77.6	77.6	0.037	250.5
LRP-89	0.7		0.017	0.017	57.4	57.4	0.027	182.8
LRP-84	4.4		0.021	0.021	70.9	70.9	0.031	209.9
LRP-83	10		0.017	0.017	57.4	57.4	0.025	169.3
LRP-82	6.5		0.023	0.023	77.6	77.6	0.037	250.5
LRP-80	6.3		0.006	0.006	20.3	20.3	0.008	54.2
Mean:			0.020	0.019	65.094	65.094	0.020	132.923
Median:			0.009	0.009	30.381	30.381	0.013	88.010
Standard Deviation:			0.144	0.142	481.791	481.791	0.021	144.308
Maximum:			3.024	3.002	10207.881	10207.881	0.150	1015.500
Minimum:			0.001	0.000	0.000	0.000	0.000	0.000
Values computed by Kennecott Uranium Company from data in paper								
OAP:02/17/08								

KENNECOTT URANIUM COMPANY								
LOST CREEK TRENCH SAMPLING								
Sections 8-13								
Source: Geology of the Lost Creek Schroeckingerite Deposits Sweetwater County, Wyoming Geological Survey Bulletin 1087-J								
SAMPLE #	SAMPLE AREA	SAMPLE LENGTH	PERCENT EQUIVALENT URANIUM	PERCENT EQUIVALENT URANIUM-238	EQUIVALENT URANIUM-238 ACTIVITY (picoCuries per gram)	RADIUM-226 ACTIVITY (picoCuries per gram)	PERCENT URANIUM	NATURAL URANIUM ACTIVITY (picoCuries per gram)
DS-52-294	3.9		0.008	0.008	27.0	27.0	0.008	54.2
DS-52-295	2.9		0.008	0.008	27.0	27.0	0.007	47.4
DS-52-297	1.7		0.005	0.005	16.9	16.9	0.002	13.5
DS-52-284	5		0.016	0.016	54.0	54.0	0.028	189.6
DS-52-285	5.6		0.014	0.014	47.3	47.3	0.024	162.5
DS-52-286	3.5		0.017	0.017	57.4	57.4	0.033	223.4
DS-52-287	0.06		0.006	0.006	20.3	20.3	0.006	40.6
DS-52-371	5		0.014	0.014	47.3	47.3	0.024	162.5
DS-52-372	3.5		0.014	0.014	47.3	47.3	0.018	121.9
DS-52-373	3.6		0.008	0.008	27.0	27.0	0.008	54.2
DS-52-374	3.4		0.009	0.009	30.4	30.4	0.011	74.5
DS-52-375	5.3		0.008	0.008	27.0	27.0	0.015	101.6
DS-52-376	4.5		0.009	0.009	30.4	30.4	0.009	60.9
DS-52-377	5.7		0.008	0.008	27.0	27.0	0.01	67.7
DS-52-378	4.2		0.013	0.013	43.9	43.9	0.02	135.4
DS-52-379	3.7		0.011	0.011	37.1	37.1	0.019	128.6
DS-52-380	4.7		0.011	0.011	37.1	37.1	0.015	101.6
DS-52-382	3.5		0.031	0.031	104.6	104.6	0.065	440.1
DS-52-390	5.8		0.015	0.015	50.6	50.6	0.026	176.0
DS-52-391	5		0.007	0.007	23.6	23.6	0.01	67.7
DS-52-392	6.5		0.005	0.005	16.9	16.9	0.007	47.4
DS-52-393	5.7		0.008	0.008	27.0	27.0	0.012	81.2
DS-52-394	3.9		0.005	0.005	16.9	16.9	0.005	33.9
DS-52-395	3		0.007	0.007	23.6	23.6	0.007	47.4
DS-52-397	5.6		0.004	0.004	13.5	13.5	0.003	20.3
DS-52-399	3.4		0.006	0.006	20.3	20.3	0.004	27.1
DS-52-299	5.6		0.004	0.004	13.5	13.5	0.003	20.3
DS-52-300	5.6		0.009	0.009	30.4	30.4	0.011	74.5
DS-52-301	6		0.005	0.005	16.9	16.9	0.005	33.9
DS-52-304	3.3		0.006	0.006	20.3	20.3	0.006	40.6
DS-52-305	4.9		0.012	0.012	40.5	40.5	0.015	101.6
DS-52-306	4.4		0.011	0.011	37.1	37.1	0.011	74.5
DS-52-307	3.6		0.021	0.021	70.9	70.9	0.032	216.6
DS-52-311	4.4		0.01	0.010	33.8	33.8	0.012	81.2
DS-52-314	2.6		0.006	0.006	20.3	20.3	0.007	47.4
DS-52-315	1.4		0.009	0.009	30.4	30.4	0.007	47.4
DS-52-317	3.2		0.012	0.012	40.5	40.5	0.014	94.8
DS-52-318	4.3		0.012	0.012	40.5	40.5	0.014	94.8
DS-52-320	2.6		0.008	0.008	27.0	27.0	0.008	54.2
DS-52-321	3.8		0.01	0.010	33.8	33.8	0.014	94.8
DS-52-322	4.5		0.009	0.009	30.4	30.4	0.013	88.0
DS-52-323	4.6		0.009	0.009	30.4	30.4	0.011	74.5
DS-52-324	5.1		0.007	0.007	23.6	23.6	0.007	47.4
DS-52-325	5		0.005	0.005	16.9	16.9	0.004	27.1
DS-52-332	1.5		0.005	0.005	16.9	16.9	0.005	33.9
DS-52-333	1.8		0.003	0.003	10.1	10.1	0.001	6.8
DS-52-340	0.7		0.007	0.007	23.6	23.6	0.009	60.9
DS-52-341	4.7		0.009	0.009	30.4	30.4	0.011	74.5
DS-52-342	5		0.011	0.011	37.1	37.1	0.014	94.8
DS-52-343	5.6		0.008	0.008	27.0	27.0	0.011	74.5
DS-52-344	5.1		0.007	0.007	23.6	23.6	0.008	54.2
DS-52-345	4.6		0.011	0.011	37.1	37.1	0.018	121.9
DS-52-346	5.5		0.011	0.011	37.1	37.1	0.017	115.1

SAMPLE #	SAMPLE AREA	SAMPLE LENGTH	PERCENT	PERCENT	EQUIVALENT	RADIUM-226	PERCENT	NATURAL
			EQUIVALENT URANIUM	EQUIVALENT URANIUM-238	URANIUM-238 ACTIVITY		URANIUM	URANIUM ACTIVITY
					(picoCuries per gram)	(picoCuries per gram)		(picoCuries per gram)
DS-52-347	5.8		0.015	0.015	50.6	50.6	0.022	148.9
DS-52-348	6.1		0.018	0.018	60.8	60.8	0.03	203.1
DS-52-349	6.8		0.015	0.015	50.6	50.6	0.025	169.3
DS-52-312	4.8		0.009	0.009	30.4	30.4	0.012	81.2
DS-52-313	4		0.009	0.009	30.4	30.4	0.016	108.3
DS-52-316	3.3		0.009	0.009	30.4	30.4	0.01	67.7
DS-52-319	2.6		0.01	0.010	33.8	33.8	0.01	67.7
DS-52-326	4.5		0.028	0.028	94.5	94.5	0.019	128.6
DS-52-327	0.8		0.004	0.004	13.5	13.5	0.002	13.5
DS-52-328	3.8		0.004	0.004	13.5	13.5	0.005	33.9
DS-52-329	3.3		0.008	0.008	27.0	27.0	0.011	74.5
DS-52-330	3.5		0.005	0.005	16.9	16.9	0.005	33.9
DS-52-331	2.6		0.005	0.005	16.9	16.9	0.006	40.6
DS-52-352	2.7		0.005	0.005	16.9	16.9	0.004	27.1
DS-52-302	6		0.007	0.007	23.6	23.6	0.007	47.4
DS-52-303	4.9		0.005	0.005	16.9	16.9	0.005	33.9
DS-52-308	3.1		0.008	0.008	27.0	27.0	0.007	47.4
DS-52-309	4.7		0.011	0.011	37.1	37.1	0.013	88.0
DS-52-310	3.9		0.019	0.019	64.1	64.1	0.029	196.3
DS-52-334	3.2		0.005	0.005	16.9	16.9	0.02	135.4
DS-52-335	3		0.004	0.004	13.5	13.5	0.001	6.8
DS-52-336	0.9		0.004	0.004	13.5	13.5	0.002	13.5
DS-52-337	6		0.012	0.012	40.5	40.5	0.017	115.1
DS-52-338	6.1		0.012	0.012	40.5	40.5	0.018	121.9
DS-52-339	6.2		0.012	0.012	40.5	40.5	0.018	121.9
DS-52-350	5.3		0.011	0.011	37.1	37.1	0.018	121.9
DS-52-351	4.8		0.01	0.010	33.8	33.8	0.016	108.3
DS-52-353	3.1		0.01	0.010	33.8	33.8	0.012	81.2
DS-52-354	5.2		0.009	0.009	30.4	30.4	0.012	81.2
DS-52-355	5.7		0.014	0.014	47.3	47.3	0.02	135.4
DS-52-356	6.2		0.01	0.010	33.8	33.8	0.013	88.0
DS-52-357	5.7		0.015	0.015	50.6	50.6	0.024	162.5
DS-52-278	1		0.007	0.007	23.6	23.6	0.009	60.9
DS-52-281	3.1		0.021	0.021	70.9	70.9	0.034	230.2
DS-52-282	2.4		0.006	0.006	20.3	20.3	0.007	47.4
DS-52-283	4.7		0.012	0.012	40.5	40.5	0.021	142.2
DS-52-408	4.3		0.017	0.017	57.4	57.4	0.031	209.9
DS-52-409	3.8		0.017	0.017	57.4	57.4	0.033	223.4
DS-52-410	4		0.018	0.018	60.8	60.8	0.035	237.0
DS-52-411	3.2		0.016	0.016	54.0	54.0	0.035	237.0
DS-52-414	0.9		0.009	0.009	30.4	30.4	0.014	94.8
DS-52-415	2.7		0.008	0.008	27.0	27.0	0.014	94.8
DS-52-418	1.6		0.011	0.011	37.1	37.1	0.023	155.7
DFS-52-403	1.3		0.028	0.028	94.5	94.5	0.051	345.3
Mean:			0.010	0.010	34.661	34.661	0.015	99.107
Median:			0.009	0.009	30.381	30.381	0.012	81.240
Standard Deviation:			0.005	0.005	17.905	17.905	0.011	72.634
Maximum:			0.031	0.031	104.644	104.644	0.065	440.050
Minimum:			0.003	0.003	10.127	10.127	0.001	6.770
Values computed by Kennecott Uranium Company from data in paper								
OAP:02/17/08								

Baseline Soil Data

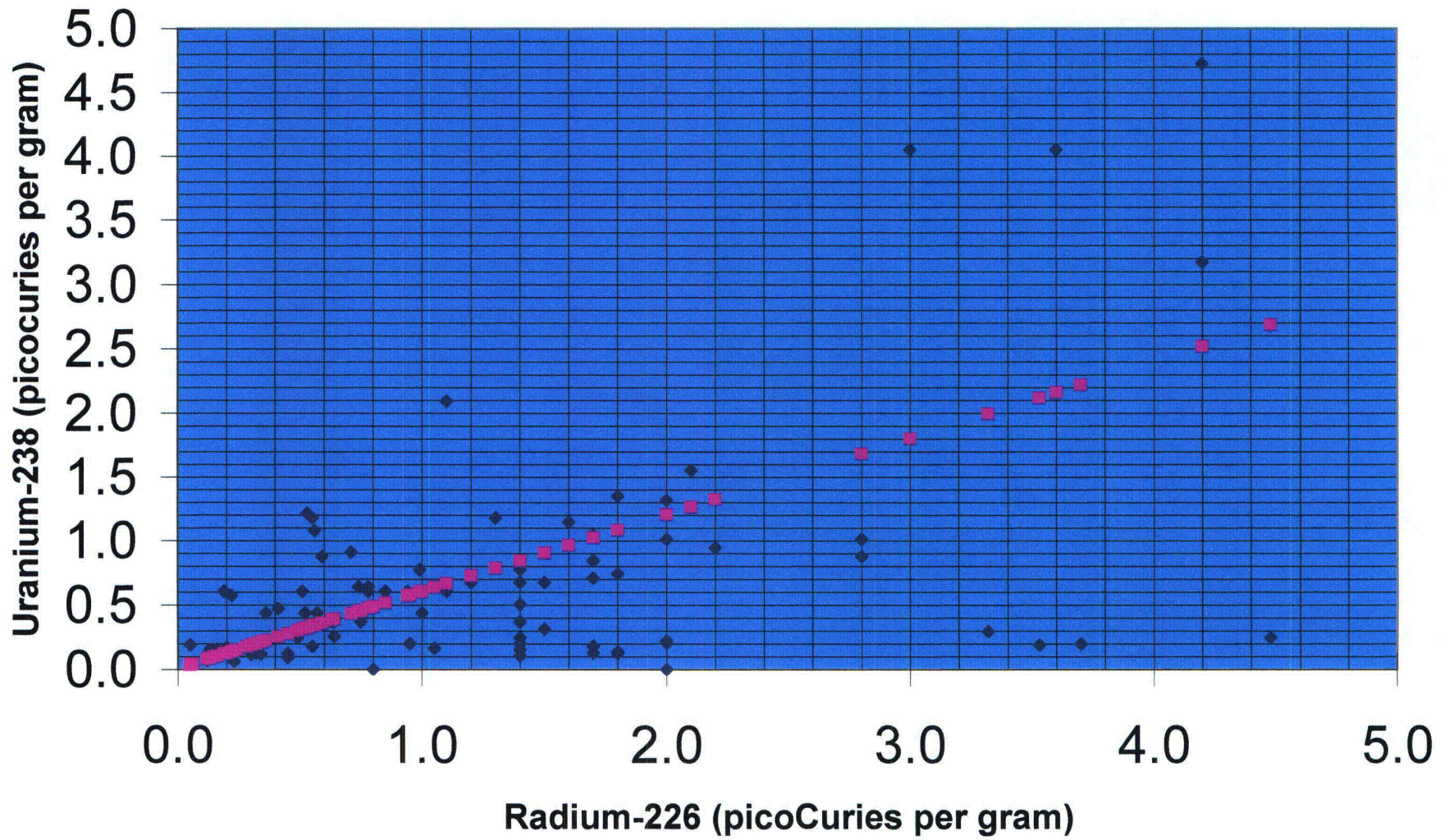
Sample Location	Date	Ra-226 pCi/g	U-nat ug/g	U-nat pCi/g	U-238 pCi/gr	Th-230 pCi/g	Pb-210 pCi/g	U-238/Th-230	Th-230/Ra-226	U-238/Ra-226	Comments
MA (A)	5/10/1979	0.08	0.41	0.28	0.14					1.73	Mill Area Survey
MA (B)	5/10/1979	0.49	0.73	0.49	0.25					0.50	
M-1-B(A)	5/10/1979	0.23	0.19	0.13	0.06					0.28	
M-1-B (B)	5/10/1979	0.32	0.38	0.26	0.13					0.40	
M-2-B(A)	5/10/1979	0.3	0.35	0.24	0.12					0.39	
M-2-B(B)	5/10/1979	0.16	0.47	0.32	0.16					0.99	
M-3-B(A)	5/10/1979	0.06	0.13	0.09	0.04					0.73	
M-3-B(B)	5/10/1979	0.45	0.28	0.19	0.09					0.21	
M-4-B(A)	5/10/1979	0.12	0.2	0.14	0.07					0.56	
M-4-B(B)	5/10/1979	0.64	0.76	0.51	0.26					0.40	
1A	4/13/1978	3	12	8.12	4.05	3.2	4.4	1.27	1.07	1.35	Soil Station Sampling
1B	4/13/1978	4.2	9.4	6.36	3.17	2.4	3.3	1.32	0.57	0.76	#1 same location as Air 3
2A	4/13/1978	4.2	14	9.48	4.73	2.8	2.7	1.69	0.67	1.13	
2B	4/13/1978	3.6	12	8.12	4.05	2.9	1.6	1.40	0.81	1.13	#2 same location as SVS 1
3A	4/13/1978	1	1.3	0.88	0.44	0.74	1.1	0.59	0.74	0.44	
3B	4/13/1978	0.19	1.8	1.22	0.61	0.87	0	0.70	4.58	3.20	#3 same location as SVS 2
4A	4/13/1978	1.7	3.1	2.10	1.05	1.3	2.3	0.80	0.76	0.62	
4B	4/13/1978	1.7	3.1	2.10	1.05	1.2	1.4	0.87	0.71	0.62	#4 same location as SVS 3
5A	4/13/1978	0.55	3.5	2.37	1.18	1.1	2	1.07	2.00	2.15	
5B	4/13/1978	2.2	2.8	1.90	0.95	1.3	1.8	0.73	0.59	0.43	#5 same location as SVS 5
6A	4/13/1978	1.8	4	2.71	1.35	1.6	1.9	0.84	0.89	0.75	
6B	4/13/1978	1.1	6.2	4.20	2.09	2.7	2.1	0.78	2.45	1.90	
7A	4/13/1978	1.8	2.2	1.49	0.74	2	2.2	0.37	1.11	0.41	
7B	4/13/1978	1.7	2.5	1.69	0.84	1.1	1.7	0.77	0.65	0.50	
#8	4/13/1978	2.8	2.6	1.76	0.88	3.1	1.7	0.28	1.11	0.31	
#9	4/13/1978	1.3	3.5	2.37	1.18	1.1	2	1.07	0.85	0.91	
T1-A	4/13/1978	0.13	0.46	0.31	0.16	0.31	0.41	0.50	2.38	1.19	T-series sampling
T1-B	4/13/1978	0.28	0.55	0.37	0.19	0.49	0.38	0.38	1.75	0.66	Located SW of Mill
T2-A	4/13/1978	0.55	0.53	0.36	0.18	0.28	0.35	0.64	0.51	0.33	
T2-B	6/16/1978	0.45	0.37	0.25	0.12	0.56	0.43	0.22	1.24	0.28	
T3-A	6/16/1978	0.2	0.51	0.35	0.17	0.2	0.5	0.86	1.00	0.86	
T3-B	8/29/1978	0.2	0.43	0.29	0.15	0.84	0.63	0.17	4.20	0.73	
T4-A	8/29/1978	0.05	0.57	0.39	0.19	0.14	0.25	1.37	2.80	3.85	
T4-B	8/29/1978	0.24	0.45	0.30	0.15	0.42	0.27	0.36	1.75	0.63	
T5-A	8/29/1978	0.34	0.36	0.24	0.12	0.51	0.85	0.24	1.50	0.36	
T5-B	8/28/1978	0.15	0.45	0.30	0.15	0.27	0.28	0.56	1.80	1.01	
A	9/27/1978	2	0.66	0.45	0.22	2.3	1	0.10	1.15	0.11	Center point of survey
A-1	9/26/1978	3.32	0.88	0.60	0.30	2.28	1.76	0.13	0.69	0.09	
A-2	9/27/1978	4.48	0.73	0.49	0.25	2.38	3.21	0.10	0.53	0.06	Series located in T24N, R93W, Sections 10,
A-3	9/27/1978	3.53	0.57	0.39	0.19	0.95	2.02	0.20	0.27	0.05	11,14,15,22 and 23
1-C	9/26/1978	2.4									
1-E	9/27/1978	2.5									
1F-1	9/27/1978	2									Radial survey (8 radials) from point A,
1F-2	9/27/1978	1.6									located approx. 800' east of mill building
1F-3	9/27/1978	1.7									(i.e. SE Mill)
1G	9/27/1978	1.5									
1-I	9/27/1978	1.4	0.32	0.22	0.11	1.3	1.1	0.08	0.93	0.08	
1K	9/27/1978	2.2									
2-C	9/27/1978	1.2									
2-E	9/27/1978	2.3									
2-G	9/27/1978	2.1									
2-I	9/27/1978	1.7	0.54	0.37	0.18	1.2	1.2	0.15	0.71	0.11	
2-K	9/27/1978	0.55									
3-C	9/27/1978	1.2									
3-E	9/27/1978	2	0.62	0.42	0.21	1.8	1.4	0.12	0.90	0.10	
3F-1	9/27/1978	1.8									
3F-2	9/27/1978	1									
3F-3	9/27/1978	0.29									
3-G	9/27/1978	0.93									
3-I	9/27/1978	4									
3-K	9/27/1978	1.6									
4-C	9/27/1978	4.6									
4-E	9/27/1978	0.78									
4-G	9/27/1978	1.7									
4-I	9/28/1978	1									
4-K	9/28/1978	0.62									
5-C	9/27/1978	2.3									
5-E	9/27/1978	0.97									
5F-1	9/27/1978	1.5	0.93	0.63	0.31	2	1.1	0.16	1.33	0.21	
5F-2	9/27/1978	1.4	1.1	0.74	0.37	1.8	1.2	0.21	1.29	0.27	
5F-3	9/27/1978	1.4	0.74	0.50	0.25	2.1	1.2	0.12	1.50	0.18	
5-G	9/26/1978	0.36									
5-I	9/26/1978	0.24									
5-K	9/28/1978	1.2									
6-C	9/28/1978	0.95	0.6	0.41	0.20	0.97	1.1	0.21	1.02	0.21	
6-E	9/28/1978	7.3									
6-G	9/26/1978	1.5									
6-I	9/26/1978	1.4									
6-K	9/28/1978	2.3									
7-C	9/26/1978	2.8									
7-E	9/29/1978	1.5									
7F-1	9/29/1978	1.4	0.6	0.41	0.20	1.6	0.82	0.13	1.14	0.14	
7F-2	9/29/1978	1.4	0.46	0.31	0.16	1.5	1.5	0.10	1.07	0.11	
7F-3	9/29/1978	1.8	0.37	0.25	0.12	1.6	0.63	0.08	0.89	0.07	
7-G	9/26/1978	0.51									
7-I	9/26/1978	0.87									
7-K	9/28/1978	1.6									
8-C	9/28/1978	1.86									
8-E	9/28/1978	2.07									
8-G	9/26/1978	1.7	0.38	0.26	0.13	1.5	1.6	0.09	0.88	0.08	
8-I	9/26/1978	0.99									
8-K	9/26/1978	1.03									
Air-1	8/28/1978	1.05	0.49	0.33	0.17	0.98	1.16	0.17	0.93	0.16	1978 Pre-Op Sampling
Air-2	8/28/1978	0.3	0.47	0.32	0.16	0.2	1.47	0.79	0.67	0.53	
Air-3	8/28/1978	1.8	0.41	0.28	0.14	1.51	2.18	0.09	0.84	0.08	
Air-4	8/28/1978	3.7	0.59	0.40	0.20	4.27	8.64	0.05	1.15	0.05	
Air-5	8/28/1978	0.3	0.37	0.25	0.12	1.42	1.33	0.09	4.73	0.42	
PRO 1A	4/13/1978	3	12	8.12	4.05	3.2	4.4	1.27	1.07	1.35	
PRO 1B	4/13/1978	4.2	9.4	6.36	3.17	2.4	3.3	1.32	0.57	0.76	
PRO 6A	4/13/1978	1.8	4	2.71	1.35	1.6	1.9	0.84	0.89	0.75	
PRO 6B	10/20/1979	1.1	3.5	2.37	1.18						
PRO 6B	4/13/1978	1.1	6.2	4.20	2.09	2.7	2.1	0.78	2.45	1.90	
AIR 1	10/20/1979	1.8	1.22	0.61							
AIR 2	10/20/1979	1.8	1.22	0.61							

Baseline Soil Data

Sample Location	Date	Ra-226 pCi/g	U-nat ug/g	U-nat pCi/g	U-238 pCi/gr	Th-230 pCi/g	Pb-210 pCi/g	U-238/Th-230	Th-230/Ra-226	U-238/Ra-226	Comments		
AIR 4	10/20/1979		2	1.35	0.68								
PRO 6	10/20/1979		3.5	2.37	1.18								
SVS 1A	10/16/1979	2	3.9	2.64	1.32	1.8	2.4	0.73	0.90	0.66	SVS Series Sampling		
SVS 1A	4/13/1978	4.2	14	9.48	4.73	2.8	2.7	1.69	0.67	1.13		Data Summary Sheet	
SVS 1A	10/30/1980	1.6	3.4	2.30	1.15	1.6	2.4	0.72	1.00	0.72		Eberline Lab Data	
SVS 1B	10/16/1979	2.1	4.6	3.11	1.55	1.7	0.76	0.91	0.81	0.74		Eberline	
SVS 1B	4/13/1978	3.6	12	8.12	4.05	2.9	1.6	1.40	0.81	1.13		Summary Sheet	
SVS 1B	10/30/1980	2	3	2.03	1.01	2.4	0.74	0.42	1.20	0.51		Eberline	
SVS 2A	10/16/1979	0.63	1.1	0.74	0.37	0.82	1.8	0.45	1.30	0.59		Eberline	
SVS 2A	10/16/1979	0.8	1.3	0.86	0.44	3.8	ND		4.75			Hazen Lab Data	
SVS 2A	4/13/1978	1	1.3	0.88	0.44	0.74	1.1	0.59	0.74	0.44		Summary Sheet	
SVS 2A	10/29/1980	0.49	0.87	0.59	0.29	0.57	0.25	0.52	1.16	0.60		Eberline	
SVS 2B	10/22/1979	0.74	1.9	1.29	0.64	1.2	1.1	0.53	1.62	0.87		Eberline	
SVS 2B	4/13/1978	0.19	1.8	1.22	0.61	0.87	ND	0.70	4.58	3.20		Summary Sheet	
SVS 2B	10/30/1980	0.75	1.1	0.74	0.37	0.55	0.78	0.68	0.73	0.50		Eberline	
SVS 3A	10/16/1979	1.4	2.3	1.56	0.78	1.2	2.2	0.65	0.86	0.55		Eberline	
SVS 3A	10/16/1979	2	3	0.00	0.00	3.2	0.7		1.60			Hazen	
SVS 3A	4/13/1978	1.7	2.1	1.42	0.71	1.3	2.3	0.55	0.76	0.42		Summary Sheet	
SVS 3A	10/29/1980	1.2	2	1.35	0.68	0.97	1.9	0.70	0.81	0.56		Eberline	
SVS 3B	10/16/1979	1.4	2	1.35	0.68	1.4	1.4	0.48	1.00	0.48		Eberline	
SVS 3B	4/13/1978	1.7	3.1	2.10	1.05	1.2	1.4	0.87	0.71	0.62		Summary Sheet	
SVS 3B	10/29/1980	1.5	2	1.35	0.68	1.5	1.2	0.45	1.00	0.45		Eberline	
SVS 4A	10/20/1979	0.99	2.3	1.56	0.78	1.1	1.7	0.71	1.11	0.78		Eberline	
SVS 4A	4/13/1978	1.8	2.2	1.49	0.74	2	2.2	0.37	1.11	0.41		Summary Sheet	
SVS 4A	10/29/1980	0.41	1.4	0.95	0.47	1.1	2.3	0.43	2.68	1.15		Eberline	
SVS 4B	10/20/1979	2.8	3	2.03	1.01	9.1	2.7	0.11	3.25	0.36		Eberline	
SVS 4B	4/13/1978	1.7	2.51	1.70	0.85	1.1	1.7	0.77	0.65	0.50		Summary Sheet	
SVS 4B	10/29/1980	0.78	1.9	1.29	0.64	0.91	0.9	0.70	1.17	0.82		Eberline	
SVS 5A	10/20/1979	0.22	1.7	1.15	0.57	0.78	1.7	0.74	3.55	2.61		Eberline	
SVS 5A	10/20/1979	1.2				3.5	2.4		2.92			Hazen	
SVS 5A	4/13/1978	0.55	3.5	2.37	1.18	1.1	2	1.07	2.00	2.15		Summary Sheet	
SVS 5A	10/29/1980	0.85	1.8	1.22	0.61	1.1	2.1	0.55	1.29	0.71		Eberline	
SVS 5B	10/20/1979	0.78	1.8	1.22	0.61	1	1.1	0.61	1.28	0.78		Eberline	
SVS 5B	4/13/1978	2.2	2.8	1.90	0.95	1.3	1.8	0.73	0.59	0.43		Summary Sheet	
SVS 5B	10/29/1980	1.1	1.8	1.22	0.61	2.1	1.2	0.29	1.91	0.55		Eberline	
SVS 6A	10/20/1979	0.59	2.6	1.76	0.88	1	1.6	0.88	1.69	1.49		Eberline	
SVS 6A	10/30/1980	0.64	1.1	0.74	0.37	0.61	2	0.61	0.95	0.58		Eberline	
SVS 6B	10/20/1979	0.71	2.7	1.83	0.91	2.2	0.84	0.41	3.10	1.28		Eberline	
SVS 6B	10/30/1980	0.53	3.6	2.44	1.22	0.2	0.96	6.08	0.38	2.29		Eberline	
SVS 7A	10/20/1979	0.52	1.3	0.88	0.44	1.7	1.3	0.26	3.27	0.84		Eberline	
SVS 7A	10/30/1980	1.4	1.5	1.02	0.51	0.8	1.1	0.63	0.57	0.36		Eberline	
SVS 7B	10/20/1979	0.36	1.3	0.88	0.44	1.2	0.44	0.37	3.33	1.22		Eberline	
SVS 7B	10/30/1980	0.56	3.2	2.17	1.08	0.16	2.3	6.75	0.29	1.93		Eberline	
SVS 8A	10/20/1979	0.57	1.3	0.88	0.44	1.8	1.2	0.24	3.16	0.77		Eberline	
SVS 8A	10/30/1980	0.51	1.8	1.22	0.61	0.31	1.8	1.96	0.61	1.19		Eberline	
SVS 8B	10/20/1979	0.94	1.8	1.22	0.61	1.3	0.7	0.47	1.38	0.65		Eberline	
SVS 8B	10/30/1980	0.85	1.6	1.08	0.54	2.3	0.96	0.23	2.71	0.64		Eberline	
SL 1	3/3/1980	1				1.5	1.8		1.50			Eberline	
SL 2	3/3/1980	0.4				1.7	2.2		4.25			Eberline	
SL 2-A	3/3/1980	0.6				8.7	6.4		14.50			Eberline	
SL 3	3/3/1980	1				1.4	2		1.40			Eberline	
SL 4	3/3/1980	2				4	3.3		2.00			Eberline	
SL 5	3/3/1980	0.97				1.5	2.2		1.55			Eberline	
C-1 1-A	7/16/1980												
C-1 1-B	7/16/1980												
C-1 1-C	7/16/1980												
C-1 1-D	7/16/1980												
C-1 1-E	7/16/1980												
C-1 1-F	7/16/1980												
C-1 1-G	7/16/1980	3.6											
C-1 1-H	7/16/1980	2.8											Eberline
C-1 1-I	7/16/1980	2.9											Eberline
C-1 1-J	7/16/1980	4											Eberline
C-1 1-K	7/16/1980	3.7											Eberline
C-1 1-L	7/16/1980	7.6											Eberline
C-1 1-M	7/16/1980	5.5											Eberline
C-1 1-N	7/16/1980	3.3											Eberline
C-1 1-O	7/16/1980	2.1											Eberline
C-1 1-P	7/16/1980	2.6											Eberline
C-1 1-Q	7/16/1980	2.3											Eberline
C-1 1-R	7/16/1980	2											Eberline
C-1 1-S	7/16/1980	2.6											Eberline
C-1 1-T	7/16/1980	4											Eberline
C-1 1-U	7/16/1980	3.3											Eberline
C-1 1-V	7/16/1980	4.3											Eberline
C-1 1-W	7/16/1980	2.5											Eberline
C-1 1-X	7/16/1980	2.6											Eberline
MILL AREA AVERAGE		1.44	2.44	1.66	0.83	1.57	1.61	0.53	1.09	0.57			n = 146 (radium samples)
Std Dev		1.16	3.00	2.03	1.01	1.19	1.12	0.85	1.03	0.88			
MILL AVG		0.29	0.39	0.26	0.13					0.46			n = 10
SOIL STATION SERIES AVG		2.05	5.25	3.55	1.77	1.84	2.01	0.96	0.90	0.86			n = 16
T-SERIES AVG		0.26	0.47	0.32	0.16	0.40	0.44	0.39	1.55	0.61			n = 10
1978 MILL RADIALS		1.80	0.63	0.43	0.21	1.69	1.39	0.13	0.94	0.12			n = 56
1978/79 PRO/Air		1.92	3.32	2.25	1.12	2.03	2.94	0.55	1.06	0.59			n = 9
SVS SERIES AVG		1.21	2.69	1.82	0.91	1.61	1.53	0.57	1.32	0.75			n = 45
PIT STOCKPILE AVG		1.00				3.13	2.98		3.15				n = 6
C-1 WASTE DUMP AVG		3.43											n = 18
Note:		indicates a data population not used in the calculation of overall mean											

Ra-226 pCi/g	U-nat ug/g	U-nat pCi/g	U-238 pCi/gr	U-238 pCi/gr	Uranium-238/ Radium-226 Ratio															
0.08	0.41	0.28	0.14	0.14	1.73	SUMMARY OUTPUT														
0.49	0.73	0.49	0.25	0.25	0.50	Regression Statistics														
0.23	0.19	0.13	0.06	0.06	0.28	Multiple R					0.634941756									
0.32	0.38	0.26	0.13	0.13	0.40	R Square					0.403151033									
0.3	0.35	0.24	0.12	0.12	0.39	Adjusted R Square					0.397241637									
0.16	0.47	0.32	0.16	0.16	0.99	Standard Error					0.80329535									
0.06	0.13	0.09	0.04	0.04	0.73	Observations					103									
0.45	0.28	0.19	0.09	0.09	0.21	ANOVA														
0.12	0.2	0.14	0.07	0.07	0.56		df	SS	MS	F	Significance F									
0.64	0.76	0.51	0.26	0.26	0.40	Regression	1	44.02255153	44.0225515	68.22204042	5.90321E-13									
3	12	8.12	4.05	4.05	1.35	Residual	101	65.17362538	0.64528342											
4.2	9.4	6.36	3.17	3.17	0.76	Total	102	109.1961769												
4.2	14	9.48	4.73	4.73	1.13	Coefficients														
3.6	12	8.12	4.05	4.05	1.13	Intercept	0.009814403	0.125539991	0.0781775	0.937841533	-0.239223163	0.25885197	-0.23922316	0.258851968						
1	1.3	0.88	0.44	0.44	0.44		0.597307646	0.072316221	8.25966346	5.90321E-13	0.453851721	0.74076357	0.453851721	0.740763572						
0.19	1.8	1.22	0.61	0.61	3.20	RESIDUAL OUTPUT														
1.7	3.1	2.10	1.05	1.05	0.62	Observation	Predicted	0.138400502	Residuals											
1.7	3.1	2.10	1.05	1.05	0.62	1	0.302495149	-0.056074743												
0.55	3.5	2.37	1.18	1.18	2.15	2	0.147195161	-0.083058343												
2.2	2.8	1.90	0.95	0.95	0.43	3	0.200952849	-0.072679213												
1.8	4	2.71	1.35	1.35	0.75	4	0.189006696	-0.070859926												
1.1	6.2	4.20	2.09	2.09	1.90	5	0.105383626	0.053270608												
1.8	2.2	1.49	0.74	0.74	0.41	6	0.045652861	-0.001769775												
1.7	2.5	1.69	0.84	0.84	0.50	7	0.278602843	-0.184085427												
2.8	2.6	1.76	0.88	0.88	0.31	8	0.08149132	-0.01397888												
1.3	3.5	2.37	1.18	1.18	0.91	9	0.392091296	-0.135544024												
0.13	0.46	0.31	0.16	0.16	1.19	10	1.801737341	2.249009059												
0.28	0.55	0.37	0.19	0.19	0.66	11	2.518506517	0.654578163												
0.55	0.53	0.36	0.18	0.18	0.33	12	2.518506517	2.207364283												
0.45	0.37	0.25	0.12	0.12	0.28	13	2.160121929	1.890624471												
0.2	0.51	0.35	0.17	0.17	0.86	14	0.607122049	-0.168291189												
0.2	0.43	0.29	0.15	0.15	0.73	15	0.123302855	0.484309105												
0.05	0.57	0.39	0.19	0.19	3.85	16	1.025237401	0.021205419												
0.24	0.45	0.30	0.15	0.15	0.63	17	1.025237401	0.021205419												
0.34	0.36	0.24	0.12	0.12	0.36	18	0.338333608	0.843134092												
0.15	0.45	0.30	0.15	0.15	1.01	19	1.323891224	-0.378717064												
2	0.66	0.45	0.22	0.22	0.11	20	1.084968166	0.265280634												
3.32	0.88	0.60	0.30	0.30	0.09	21	0.666852813	1.426032827												
4.48	0.73	0.49	0.25	0.25	0.06	22	1.084968166	-0.342331328												
3.53	0.57	0.39	0.19	0.19	0.05	23	1.025237401	-0.181331901												
1.4	0.32	0.22	0.11	0.11	0.08	24	1.682275812	-0.804614092												
1.7	0.54	0.37	0.18	0.18	0.11	25	0.786314343	0.395153357												
2	0.62	0.42	0.21	0.21	0.10	26	0.087464397	0.067814215												
1.5	0.93	0.63	0.31	0.31	0.21	27	0.177060543	0.008598667												
1.4	1.1	0.74	0.37	0.37	0.27	28	0.338333608	-0.159425642												
1.4	0.74	0.50	0.25	0.25	0.18	29	0.278602843	-0.153704829												
0.95	0.6	0.41	0.20	0.20	0.21	30	0.129275932	0.04288079												
1.4	0.6	0.41	0.20	0.20	0.14	31	0.129275932	0.015875814												
1.4	0.46	0.31	0.16	0.16	0.11	32	0.039679785	0.152730669												
1.8	0.37	0.25	0.12	0.12	0.07															
1.7	0.38	0.26	0.13	0.13	0.08															
1.05	0.49	0.33	0.17	0.17	0.16															
0.3	0.47	0.32	0.16	0.16	0.53															
1.8	0.41	0.28	0.14	0.14	0.08															
3.7	0.59	0.40	0.20	0.20	0.05															

Uranium-238/Radium-226 Best Fit Plot



U238Th230 BestFit

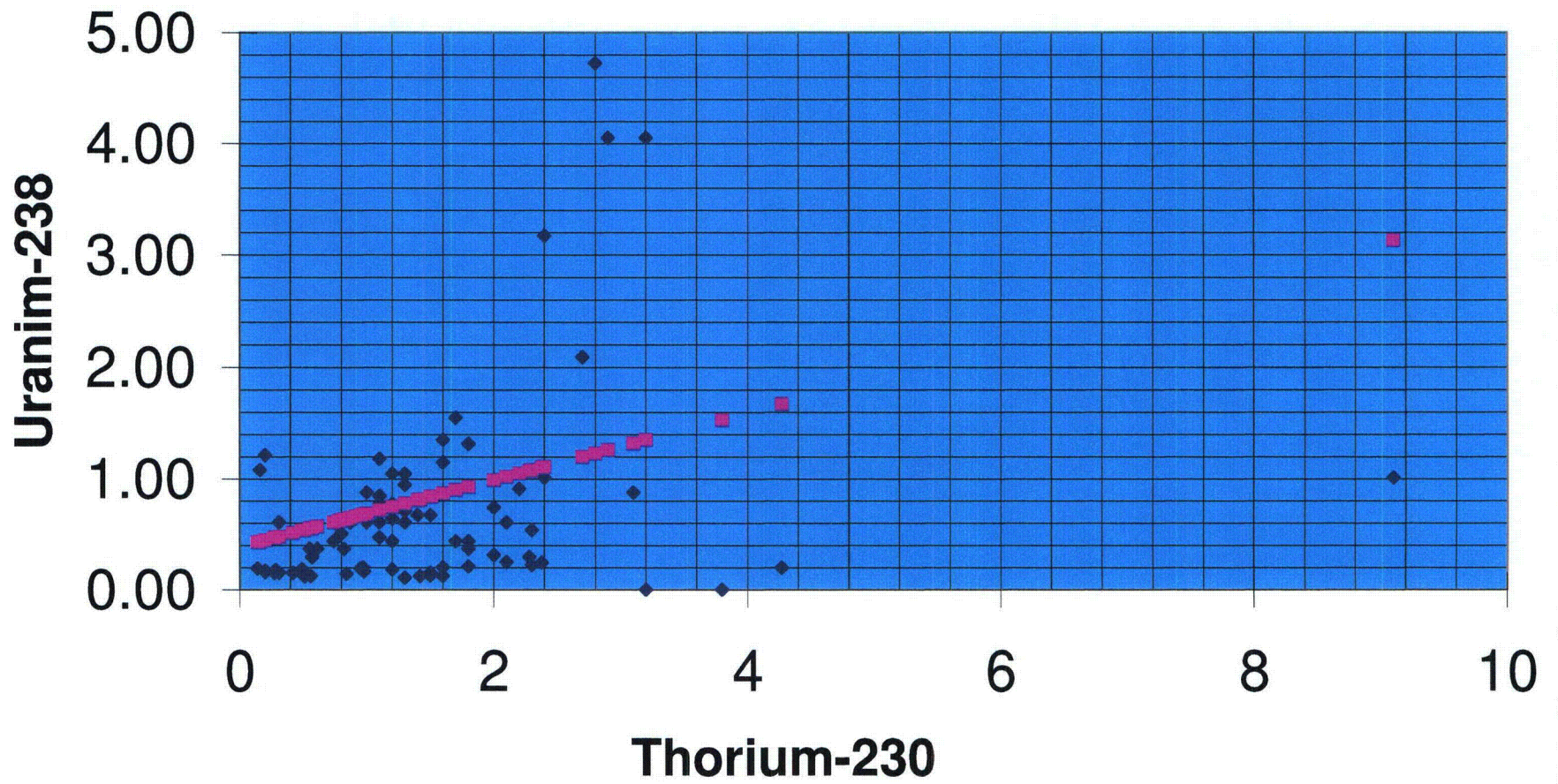
U-nat	U-nat	U-238	Th-230																
ug/g	pCi/g	pCi/gr	pCi/g																
12	8.12	4.05	3.2	SUMMARY OUTPUT															
9.4	6.36	3.17	2.4																
14	9.48	4.73	2.8	<i>Regression Statistics</i>															
12	8.12	4.05	2.9	Multiple R	0.347950098														
1.3	0.88	0.44	0.74	R Square	0.121069271														
1.8	1.22	0.61	0.87	Adjusted R Square	0.111410691														
3.1	2.10	1.05	1.3	Standard Error	0.954750604														
3.1	2.10	1.05	1.2	Observations	93														
3.5	2.37	1.18	1.1																
2.8	1.90	0.95	1.3	ANOVA															
4	2.71	1.35	1.6		<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>										
6.2	4.20	2.09	2.7	Regression	1	11.42616663	11.42616663	12.5348941	0.000631815										
2.2	1.49	0.74	2	Residual	91	82.95093315	0.911548716												
2.5	1.69	0.84	1.1	Total	92	94.37709978													
2.6	1.76	0.88	3.1																
3.5	2.37	1.18	1.1		<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>							
0.46	0.31	0.16	0.31	Intercept	0.383921233	0.163825696	2.343473832	0.021283159	0.058501579	0.709340887	0.058501579	0.709340887							
0.55	0.37	0.19	0.49		3.2	0.301428661	0.08513815	3.540465238	0.000631815	0.132312168	0.470545155	0.132312168	0.470545155						
0.53	0.36	0.18	0.28																
0.37	0.25	0.12	0.56	RESIDUAL OUTPUT															
0.51	0.35	0.17	0.2	<i>Observation</i>	<i>Predicted</i>	<i>4.0507464</i>	<i>Residuals</i>												
0.43	0.29	0.15	0.84	1	1.10735002	2.06573466													
0.57	0.39	0.19	0.14	2	1.227921485	3.497949315													
0.45	0.30	0.15	0.42	3	1.258064351	2.792682049													
0.36	0.24	0.12	0.51	4	0.606978442	-0.168147582													
0.45	0.30	0.15	0.27	5	0.646164168	-0.038552208													
0.66	0.45	0.22	2.3	6	0.775778493	0.270664327													
0.88	0.60	0.30	2.28	7	0.745635627	0.300807193													
0.73	0.49	0.25	2.38	8	0.71549276	0.46597494													
0.57	0.39	0.19	0.95	9	0.775778493	0.169395667													
0.32	0.22	0.11	1.3	10	0.866207091	0.484041709													
0.54	0.37	0.18	1.2	11	1.197778619	0.895107021													
0.62	0.42	0.21	1.8	12	0.986778556	-0.244141716													
0.93	0.63	0.31	2	13	0.71549276	0.12841274													
1.1	0.74	0.37	1.8	14	1.318350083	-0.440688363													
0.74	0.50	0.25	2.1	15	0.71549276	0.46597494													
0.6	0.41	0.20	0.97	16	0.477364118	-0.322085506													
0.6	0.41	0.20	1.6	17	0.531621277	-0.345962067													
0.46	0.31	0.16	1.5	18	0.468321258	-0.289413292													
0.37	0.25	0.12	1.6	19	0.552721283	-0.427823269													
0.38	0.26	0.13	1.5	20	0.444206965	-0.272050243													
0.49	0.33	0.17	0.98	21	0.637121308	-0.491969562													
0.47	0.32	0.16	0.2	22	0.426121245	-0.233710791													
0.41	0.28	0.14	1.51	23	0.510521271	-0.358618281													
0.59	0.40	0.20	4.27	24	0.53764985	-0.416127458													
0.37	0.25	0.12	1.42	25	0.465306971	-0.313403981													
12	8.12	4.05	3.2	26	1.077207154	-0.854416102													
9.4	6.36	3.17	2.4	27	1.071178581	-0.774123845													

U238Th230 BestFit

U-nat				RESIDUAL OUTPUT		
ug/g	pCi/g	pCi/gr	pCi/g	Observation	Predicted 4.0507464	Residuals
4	2.71	1.35	1.6	28	1.101321447	-0.854901041
6.2	4.20	2.09	2.7	29	0.670278461	-0.477868007
3.9	2.64	1.32	1.8	30	0.775778493	-0.667758589
14	9.48	4.73	2.8	31	0.745635627	-0.563352039
3.4	2.30	1.15	1.6	32	0.926492823	-0.717204259
4.6	3.11	1.55	1.7	33	0.986778556	-0.67284571
12	8.12	4.05	2.9	34	0.926492823	-0.555174403
3	2.03	1.01	2.4	35	1.016921422	-0.767125394
1.1	0.74	0.37	0.82	36	0.676307034	-0.473769714
	0.00	0.00	3.8	37	0.866207091	-0.663669771
1.3	0.88	0.44	0.74	38	0.836064225	-0.680785613
0.87	0.59	0.29	0.57	39	0.866207091	-0.741309077
1.9	1.29	0.64	1.2	40	0.836064225	-0.707790589
1.8	1.22	0.61	0.87	41	0.679321321	-0.513915843
1.1	0.74	0.37	0.55	42	0.444206965	-0.285552731
2.3	1.56	0.78	1.2	43	0.839078512	-0.70067801
	0.00	0.00	3.2	44	1.671021617	-1.471859919
2.1	1.42	0.71	1.3	45	0.811949932	-0.687051918
2	1.35	0.68	0.97	46	1.348492949	2.702253451
2	1.35	0.68	1.4	47	1.10735002	2.06573466
3.1	2.10	1.05	1.2	48	0.866207091	0.484041709
2	1.35	0.68	1.5	49	1.197778619	0.895107021
2.3	1.56	0.78	1.1	50	0.926492823	0.389999757
2.2	1.49	0.74	2	51	1.227921485	3.497949315
1.4	0.95	0.47	1.1	52	0.866207091	0.281504389
3	2.03	1.01	9.1	53	0.896349957	0.656436163
2.51	1.70	0.85	1.1	54	1.258064351	2.792682049
1.9	1.29	0.64	0.91	55	1.10735002	-0.09466342
1.7	1.15	0.57	0.78	56	0.631092735	-0.259774315
3.5	2.37	1.18	1.1	57	1.529350146	-1.529350146
1.8	1.22	0.61	1.1	58	0.606978442	-0.168147582
1.8	1.22	0.61	1	59	0.55573557	-0.262056456
2.8	1.90	0.95	1.3	60	0.745635627	-0.104267447
1.8	1.22	0.61	2.1	61	0.646164168	-0.038552208
2.6	1.76	0.88	1	62	0.549706997	-0.178388577
1.1	0.74	0.37	0.61	63	0.745635627	0.030757433
2.7	1.83	0.91	2.2	64	1.348492949	-1.348492949
3.6	2.44	1.22	0.2	65	0.775778493	-0.066897873
1.3	0.88	0.44	1.7	66	0.676307034	-0.001182634
1.5	1.02	0.51	0.8	67	0.805921359	-0.130796959
1.3	0.88	0.44	1.2	68	0.745635627	0.300807193
3.2	2.17	1.08	0.16	69	0.836064225	-0.160939825
1.3	0.88	0.44	1.8	70	0.71549276	0.0609003
1.8	1.22	0.61	0.31	71	0.986778556	-0.244141716
1.8	1.22	0.61	1.3	72	0.71549276	-0.24290568
1.6	1.08	0.54	2.3	73	3.126922052	-2.114235452
				74	0.71549276	0.131788362
				75	0.658221315	-0.016853135

RESIDUAL OUTPUT									
	<i>Observation</i>	<i>Predicted 4.0507464</i>	<i>Residuals</i>						
	76	0.619035589	-0.045179849						
	77	0.71549276	0.46597494						
	78	0.71549276	-0.1078808						
	79	0.685349894	-0.077737934						
	80	0.775778493	0.169395667						
	81	1.016921422	-0.409309462						
	82	0.685349894	0.192311826						
	83	0.567792716	-0.196474296						
	84	1.047064288	-0.135646348						
	85	0.444206965	0.771016955						
	86	0.896349957	-0.457519097						
	87	0.625064162	-0.118720862						
	88	0.745635627	-0.306804767						
	89	0.432149819	0.648049221						
	90	0.926492823	-0.487661963						
	91	0.477364118	0.130247842						
	92	0.775778493	-0.168166533						
	93	1.077207154	-0.537107634						

Uranium-238/Thorium-230 Best Fit Plot

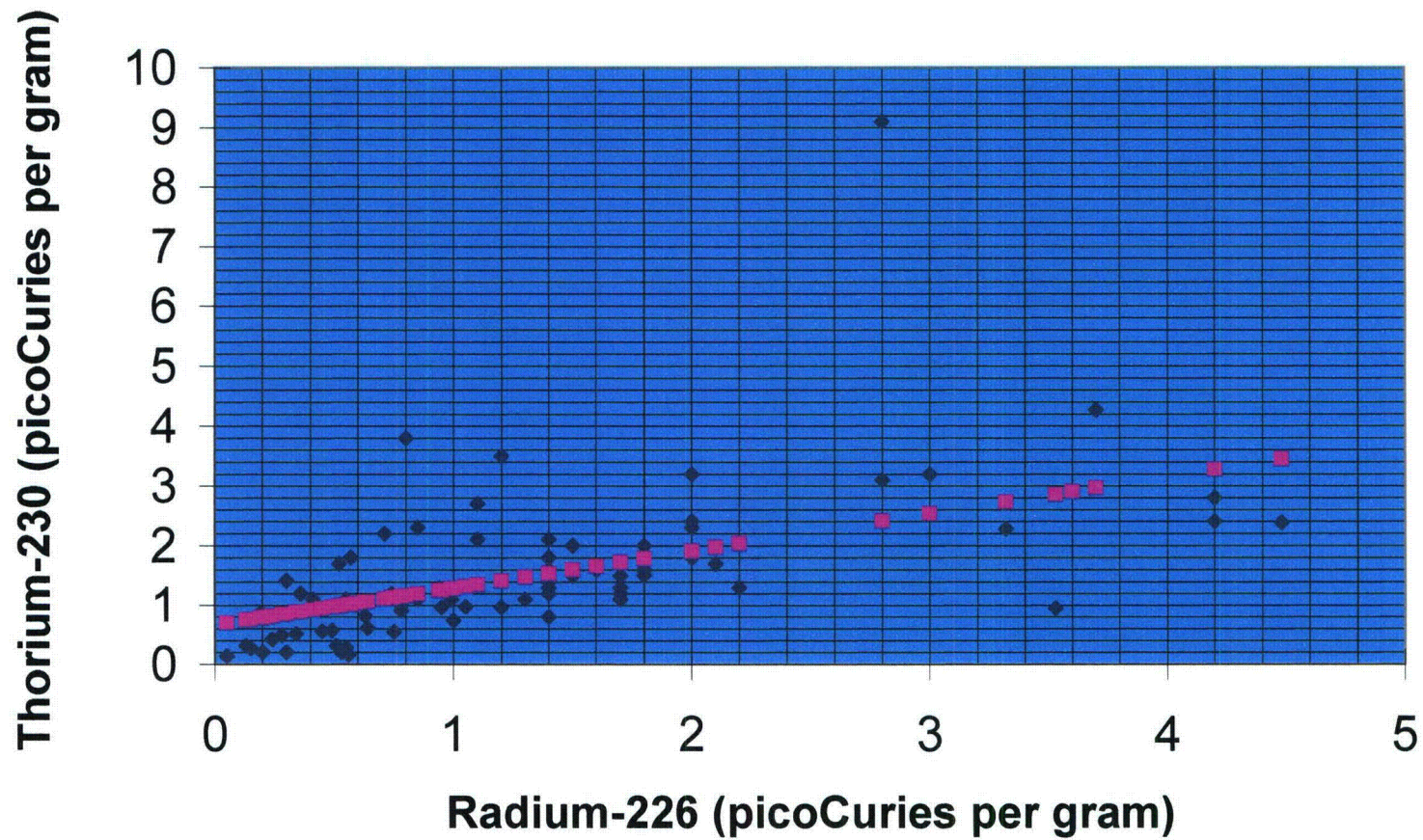


Th-230	Ra-226	SUMMARY OUTPUT									
pCi/g	pCi/g										
3.2	3	<i>Regression Statistics</i>									
2.4	4.2	Multiple R	0.571849324								
2.8	4.2	R Square	0.32701165								
2.9	3.6	Adjusted R Square	0.319696559								
0.74	1	Standard Error	0.973612167								
0.87	0.19	Observations	94								
1.3	1.7										
1.2	1.7	ANOVA									
1.1	0.55		<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>				
1.3	2.2	Regression	1	42.37556388	42.37556388	44.70370364	1.74135E-09				
1.6	1.8	Residual	92	87.20869995	0.947920652						
2.7	1.1	Total	93	129.5842638							
2	1.8										
1.1	1.7		<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>	
3.1	2.8	Intercept	0.668028299	0.166267267	4.017798035	0.000119949	0.337807155	0.998249443	0.337807155	0.998249443	
1.1	1.3		3	0.620513634	0.092806752	6.686082832	1.74135E-09	0.436191413	0.804835855	0.436191413	0.804835855
0.31	0.13										
0.49	0.28										
0.28	0.55										
0.56	0.45										
0.2	0.2	RESIDUAL OUTPUT									
0.84	0.2	<i>Observation</i>	<i>Predicted 3.2</i>	<i>Residuals</i>							
0.14	0.05	1	3.27418556	-0.87418556							
0.42	0.24	2	3.27418556	-0.47418556							
0.51	0.34	3	2.90187738	-0.00187738							
0.27	0.15	4	1.288541933	-0.548541933							
2.3	2	5	0.785925889	0.084074111							
2.28	3.32	6	1.722901476	-0.422901476							
2.38	4.48	7	1.722901476	-0.522901476							
0.95	3.53	8	1.009310797	0.090689203							
1.3	1.4	9	2.033158293	-0.733158293							
1.2	1.7	10	1.784952839	-0.184952839							
1.8	2	11	1.350593296	1.349406704							
2	1.5	12	1.784952839	0.215047161							
1.8	1.4	13	1.722901476	-0.622901476							
2.1	1.4	14	2.405466473	0.694533527							
0.97	0.95	15	1.474696023	-0.374696023							
1.6	1.4	16	0.748695071	-0.438695071							
1.5	1.4	17	0.841772116	-0.351772116							
1.6	1.8	18	1.009310797	-0.729310797							
1.5	1.7	19	0.947259434	-0.387259434							

Th-230	Ra-226	RESIDUAL OUTPUT		
pCi/g	pCi/g	Observation	Predicted 3.2	Residuals
0.98	1.05	20	0.792131026	-0.592131026
0.2	0.3	21	0.792131026	0.047868974
1.51	1.8	22	0.699053981	-0.559053981
4.27	3.7	23	0.816951571	-0.396951571
1.42	0.3	24	0.879002934	-0.369002934
3.2	3	25	0.761105344	-0.491105344
2.4	4.2	26	1.909055566	0.390944434
1.6	1.8	27	2.728133562	-0.448133562
2.7	1.1	28	3.447929377	-1.067929377
1.8	2	29	2.858441425	-1.908441425
2.8	4.2	30	1.536747386	-0.236747386
1.6	1.6	31	1.722901476	-0.522901476
1.7	2.1	32	1.909055566	-0.109055566
2.9	3.6	33	1.598798749	0.401201251
2.4	2	34	1.536747386	0.263252614
0.82	0.63	35	1.536747386	0.563252614
3.8	0.8	36	1.257516251	-0.287516251
0.74	1	37	1.536747386	0.063252614
0.57	0.49	38	1.536747386	-0.036747386
1.2	0.74	39	1.784952839	-0.184952839
0.87	0.19	40	1.722901476	-0.222901476
0.55	0.75	41	1.319567614	-0.339567614
1.2	1.4	42	0.854182389	-0.654182389
3.2	2	43	1.784952839	-0.274952839
1.3	1.7	44	2.963928743	1.306071257
0.97	1.2	45	0.854182389	0.565817611
1.4	1.4	46	2.5295692	0.6704308
1.2	1.7	47	3.27418556	-0.87418556
1.5	1.5	48	1.784952839	-0.184952839
1.1	0.99	49	1.350593296	1.349406704
2	1.8	50	1.909055566	-0.109055566
1.1	0.41	51	3.27418556	-0.47418556
9.1	2.8	52	1.660850113	-0.060850113
1.1	1.7	53	1.971106929	-0.271106929
0.91	0.78	54	2.90187738	-0.00187738
0.78	0.22	55	1.909055566	0.490944434
3.5	1.2	56	1.058951888	-0.238951888
1.1	0.55	57	1.164439206	2.635560794
1.1	0.85	58	1.288541933	-0.548541933
1	0.78	59	0.972079979	-0.402079979
1.3	2.2	60	1.127208388	0.072791612

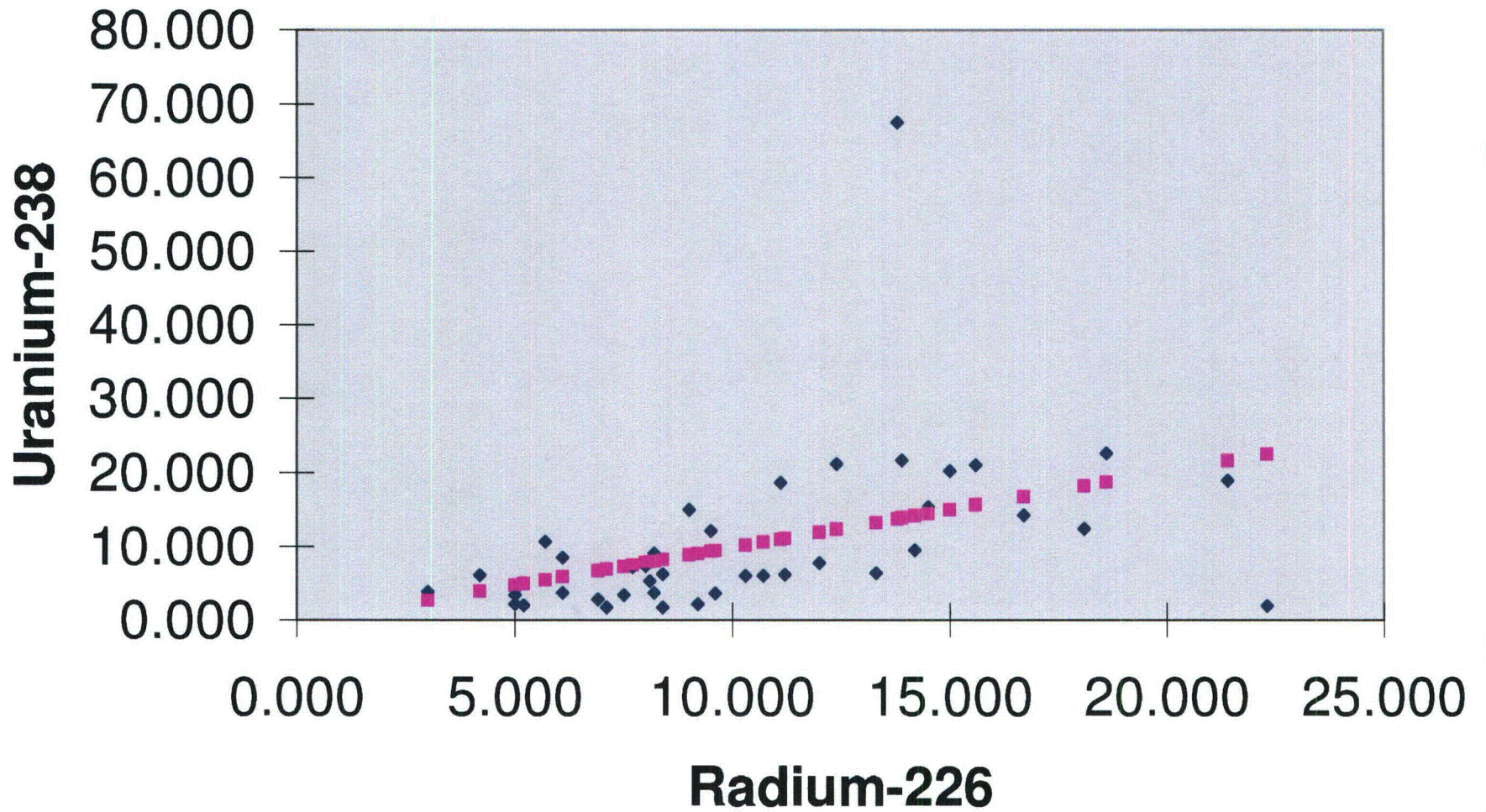
Th-230	Ra-226	RESIDUAL OUTPUT		
pCi/g	pCi/g	Observation	Predicted 3.2	Residuals
2.1	1.1	61	0.785925889	0.084074111
1	0.59	62	1.133413524	-0.583413524
0.61	0.64	63	1.536747386	-0.336747386
2.2	0.71	64	1.909055566	1.290944434
0.2	0.53	65	1.722901476	-0.422901476
1.7	0.52	66	1.412644659	-0.442644659
0.8	1.4	67	1.536747386	-0.136747386
1.2	0.36	68	1.722901476	-0.522901476
0.16	0.56	69	1.598798749	-0.098798749
1.8	0.57	70	1.282336796	-0.182336796
0.31	0.51	71	1.784952839	0.215047161
1.3	0.94	72	0.922438889	0.177561111
2.3	0.85	73	2.405466473	6.694533527
		74	1.722901476	-0.622901476
		75	1.152028933	-0.242028933
		76	0.804541298	-0.024541298
		77	1.412644659	2.087355341
		78	1.009310797	0.090689203
		79	1.195464887	-0.095464887
		80	1.152028933	-0.152028933
		81	2.033158293	-0.733158293
		82	1.350593296	0.749406704
		83	1.034131343	-0.034131343
		84	1.065157024	-0.455157024
		85	1.108592979	1.091407021
		86	0.996900525	-0.796900525
		87	0.990695388	0.709304612
		88	1.536747386	-0.736747386
		89	0.891413207	0.308586793
		90	1.015515934	-0.855515934
		91	1.02172107	0.77827893
		92	0.984490252	-0.674490252
		93	1.251311115	0.048688885
		94	1.195464887	1.104535113

Thorium-230/Radium-226 Best Fit Plot



Kennebec Uranium Company Sweetwater Uranium Project Subsurface Radiologic Background Data																			
TMW-103																			
Depth	Total Extractable Hydrocarbons (TEH) (milligrams per kilogram)	Natural Uranium (micrograms per kilogram)	Natural Uranium (picocuries per gram)	Uranium-238 Activity (picocuries per gram)	Thorium-230 (picocuries per gram)	Radium-226 Final result (picocuries per gram)	Equilibrium			Uranium-238 Activity (picocuries per gram)	Radium-226 Final result (picocuries per gram)	SUMMARY OUTPUT							
							Thorium-230/ Uranium-238	Thorium-230/ Radium-226	Uranium-238/ Radium-226			Regression Statistics							
15-20'	ND	6.05	4.10	2.04	7.3	9.2	0.28	0.79	0.22	2,042	9,200								
20-25'	ND	6.19	4.19	2.09	2.8	5.0	0.75	0.56	0.42	2,090	5,000	Multiple R 0.42630638							
25-30'	ND	11.3	7.65	3.81	0.6	3.0	6.36	0.20	1.27	3,814	3,000	R Square 0.18173713							
30-35'	ND	26.9	18.21	9.08	5.2	8.2	1.75	0.63	1.11	9,080	8,200	Adjusted R Square 0.160203896							
35-40'	ND	36	24.37	12.15	3.1	9.5	3.92	0.33	2.28	12,152	9,500	Standard Error 10.38904027							
40-45'	ND	62.3	42.18	21.03	5.1	15.6	4.12	0.33	1.35	21,030	15,600	Observations 40							
45-50'	ND	18.8	12.73	6.35	3.4	13.3	1.87	0.26	0.48	6,346	13,300								
50-55'	ND	67	45.36	22.62	8.7	18.6	2.60	0.47	1.22	22,617	18,600								
TMW-106																			
15-20'	ND	5.59	3.78	1.89	21	22.3	0.09	0.94	0.08	1,887	22,300								
20-25'	23	3.49	2.36	1.18	7.4	11.8	0.2	0.6	0.1	14,988	9,000	ANOVA							
25-30'	190	8.64	5.85	2.92	2.4	5.8	1.2	0.4	0.5	10,701	5,700	df SS MS F Significance F							
30-35'	ND	44.4	30.06	14.99	4.4	9.0	3.41	0.49	1.67	10,701	5,700	Regression 1 910.9305688 910.9305688 8.439843949 0.006088898							
35-40'	ND	31.7	21.46	10.70	1.3	5.7	8.23	0.23	1.88	10,701	5,700	Residual 38 4101.421996 107.9321578							
40-45'	248	33.1	22.41	11.17	3.3	10.1	3.4	0.3	1.1	20,254	15,000	Total 39 5012.352565							
45-50'	12	80.5	54.50	27.17	5.6	16.2	4.9	0.3	1.7	Coefficients Standard Error t Stat P-value Lower 95% Upper 95% Lower 95.0% Upper 95.0%									
50-55'	ND	28.2	19.09	9.52	3.6	14.2	2.64	0.25	0.67	Intercept -0.387890781 4.080690791 -0.095055176 0.924770495 -8.648817334 7.873035772 -8.648817334 7.873035772									
TMW-107											RESIDUAL OUTPUT								
15-20'	ND	200	135.40	67.51	11	13.8	6.14	0.80	4.89	1,711	7,100	Observation Predicted 2.04225137 Residuals							
20-25'	ND	60	40.62	20.25	7.5	15.0	2.70	0.50	1.35	1,684	8,400	1 4.765036954 -2.675526936							
25-30'	ND	21.3	14.42	7.19	3.4	7.7	2.11	0.44	0.93	2,144	9,200	2 2.70386586 1.110587							
30-35'	ND	21.6	14.62	7.29	2.6	8.0	2.80	0.33	0.91	21,671	13,900	3 8.062910704 1.017512476							
35-40'	ND	10.9	7.38	3.68	2.4	6.1	1.53	0.39	0.60	6,177	8,400	4 9.402671915 2.749567285							
40-45'	ND	9.87	6.68	3.33	1.4	5.0	2.38	0.28	0.67	15,359	14,500	5 15.68924375 5.340881309							
45-50'	ND	15.5	10.49	5.23	3.1	8.1	1.69	0.38	0.65	6,042	4,200	6 13.31889699 -6.972727633							
50-55'	ND	5.07	3.43	1.71	1.5	7.1	1.14	0.21	0.24	18,600	11,100	7 18.78100039 3.835667008							
TMW-108																			
15-20'	ND	4.99	3.38	1.68	4.3	8.4	0.39	0.51	0.20	18,937	21,400	8 22.59416692 -20.070719422							
20-25'	ND	6.35	4.30	2.14	7.2	9.2	0.30	0.78	0.23	8,439	6,100	9 8.887379142 6.100382538							
25-30'	ND	17.8	12.05	6.01	7	10.7	0.86	0.65	0.56	14,245	16,700	10 5.486446837 5.214274903							
30-35'	45	63.8	43.19	21.54	6.6	11.4	3.3	0.6	1.9	3,578	9,600	11 14.24642399 -4.727169946							
35-40'	ND	5.82	3.94	1.96	5.4	5.2	0.36	1.04	0.38	2,805	6,900	12 13.83418977 53.67825023							
40-45'	ND	64.2	43.46	21.67	7.6	13.9	2.85	0.55	1.56	21,165	12,400	13 15.07089242 5.182839577							
45-50'	13	11.3	7.65	3.81	1.3	3.6	2.9	0.4	1.1	12,456	18,100	14 7.547617931 -0.357543071							
50-55'	ND	18.3	12.39	6.18	3.4	8.4	1.82	0.40	0.74	6,110	11,200	15 7.856793595 -0.565450075							
TMW-109																			
15-20'	ND	45.5	30.80	15.36	11	14.5	1.40	0.76	1.06	5,898	8,200	16 5.898681055 -2.219253075							
20-25'	ND	17.9	12.12	6.04	2.7	4.2	2.24	0.64	1.44	4,765	6,000	17 4.765036954 -1.43329804							
25-30'	ND	55.1	37.30	18.60	4.5	11.1	4.13	0.41	1.68	6,009	10,300	18 7.959852149 -2.727638049							
30-35'	ND	56.1	37.98	18.94	7.8	21.4	2.43	0.36	0.88	6,929	26,600	19 6.929266602 -5.217826248							
35-40'	ND	25	16.93	8.44	2.1	6.1	4.02	0.34	1.38	8,269	27,813	20 8.269027813 -6.584592435							
40-45'	ND	42.2	28.57	14.25	8.3	16.7	1.72	0.50	0.85	9,093	49,625	21 9.093496251 -6.949976281							
45-50'	ND	10.6	7.18	3.58	1.9	9.6	1.88	0.20	0.37	10,639	37,457	22 10.63937457 -4.630767411							
50-55'	ND	8.31	5.63	2.81	1.2	6.9	2.34	0.17	0.41	4,971	11,540	23 4.971154063 -3.006542059							
TMW-110																			
15-20'	ND	62.7	42.45	21.17	3.9	12.4	5.43	0.31	1.71	13,972	4,832	24 13.9724832 7.734244919							
20-25'	14	59.4	40.21	20.05	7.7	24.4	2.6	0.3	0.8	8,269	27,813	25 8.269027813 -2.091639553							
25-30'	ND	36.9	24.98	12.46	6.5	18.1	1.92	0.36	0.69	14,555	9,965	26 14.5559965 8.00348045							
30-35'	ND	18.1	12.25	6.11	3.6	11.2	1.70	0.32	0.55	3,940	5,858	27 3.940568516 2.101794864							
35-40'	ND	10.8	7.31	3.65	2	8.2	1.82	0.24	0.44	11,051	16,087	28 11.05160879 7.54306843							
40-45'	ND	17.8	12.05	6.01	2.2	10.3	2.73	0.21	0.58	2,166	6,392	29 2.166603992 -2.729400503							
45-50'	ND	22.9	15.50	7.73	5.8	12	1.33	0.48	0.64	5,898	10,555	30 5.898681055 2.540373945							
50-55'	ND	9.98	6.76	3.37	2.6	7.5	1.30	0.35	0.45	16,822	8,875	31 16.82288785 -2.577763013							
Average:											Sample Notes:								
Median:											To calculate a subsurface radiologic background data from fifteen (15) feet to fifty-five (55) feet below surface was used for six (6) bore holes								
Maximum:											This interval places the samples below any potential surface windblown contamination								
Minimum:											This interval places the samples at depths encountered in the Catchment Basin excavation (above fifty-five (55) feet below surface)								
STD DEV:											Any samples containing hydrocarbons were excluded in spite of the fact that TMW-103 and TMW-106 are on the edge of the diesel contaminated soil excavation and any organics are probably due to a mine-related diesel fuel spill.								
Data not used due to presence of hydrocarbons																			

Uranium-238/Radium-226 Plot



Kennebecott Uranium Company		Sweetwater Uranium Project		ND entered as 0.0																			
TMW-103																							
Location	Sample Type	Northing	Easting	Elevation											RADIUM-226								Moisture
					Dicel Range Organics	Oil Range Hydrocarbons	Total Extractable Hydrocarbons	pH	Sulphate	Natural Uranium	Natural Uranium	Uranium-238	Thorium-230	Th-230 - Uncertainty	INITIAL		FINAL		Equilibrium				
					(milligrams per kilogram)	(milligrams per kilogram)	(milligrams per kilogram)	(Standard units)	(milligrams per kilogram)	(milligrams per kilogram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	Uranium-238/Thorium-230	Thorium-230/Radium-226	Uranium-238/Radium-226	
0-5'	Soil	149144.44	323576.50	6640.81	ND	ND	ND		77	6.50	4.40	2.19	3.0	0.7	5.8	1.0	7.2	1.0	0.7	0.4	0.3	8.2	
5-10'					87	15	114		573	5.49	3.72	1.85	1.7	0.6	4.5	0.9	6.3	0.9	1.1	0.3	0.3	9.4	
10-15'					32	ND	33		385	8.41	5.69	2.84	4.6	1	7.7	1.0	9.8	1.1	0.6	0.5	0.3	7.7	
15-20'					ND	ND	ND		25	6.05	4.10	2.04	7.3	1.3	7.0	1.1	9.2	1.1	0.3	0.8	0.2	7.8	
20-25'					ND	ND	ND		ND	6.19	4.19	2.09	2.8	0.7	4.0	1.0	5.0	1.0	0.7	0.6	0.4	10.9	
25-30'					ND	ND	ND		ND	11.3	7.65	3.81	0.6	0.4	2.6	0.9	3.0	0.9	6.4	0.2	1.3	7.6	
30-35'					ND	ND	ND		ND	26.9	18.21	9.08	5.2	1	6.7	1.1	8.2	1.1	1.7	0.6	1.1	6.2	
35-40'					ND	ND	ND		25	36	24.37	12.15	3.1	0.9	6.3	1.1	9.5	1.2	3.9	0.3	1.3	12.5	
40-45'					ND	ND	ND		16	62.3	42.18	21.03	5.1	1.1	12.8	1.3	15.6	1.4	4.1	0.3	1.3	13.8	
45-50'					ND	ND	ND		19	18.8	12.73	6.35	3.4	1	12.6	1.2	13.3	1.2	1.9	0.3	0.5	11.5	
50-55'					ND	ND	ND		22	67	45.36	22.62	8.7	1.6	15.0	1.4	18.6	1.4	2.6	0.5	1.2	11.9	
55-60'					ND	ND	ND		25	45.9	31.07	15.49	4.5	0.9	11.9	1.3	14.8	1.4	3.4	0.3	1.0	12.7	
60-65'					ND	ND	ND		41	55.3	37.44	18.67	2.2	0.7	5.8	1.1	7.3	1.2	8.5	0.3	2.6	15.6	
65-70'					ND	ND	ND		54	12.7	8.60	4.29	2.1	0.7	6.0	1.1	6.2	1.1	2.0	0.3	0.7	12.0	
70-75'					ND	ND	ND		21	2.61	1.77	0.88	0.8	0.4	3.0	1.0	3.4	0.9	1.1	0.2	0.3	8.2	
75-80'					ND	ND	ND		317	3.6	2.44	1.22	0.6	0.4	3.8	1.0	4.2	1.0	2.0	0.1	0.3	6.7	
80-85'					ND	ND	ND		178	22.4	15.16	7.56	4.2	1	13.6	1.3	16.1	1.3	1.8	0.3	0.5	11.2	
85-90'					ND	ND	ND		84	7.71	5.22	2.60	1	0.5	5.7	1.0	7.9	1.1	2.6	0.1	0.3	9.8	
90-95'					ND	ND	ND		ND	2.23	1.51	0.75	0.5	0.3	2.7	0.9	3.5	0.9	1.5	0.1	0.2	4.1	
95-100'					ND	ND	ND		12	2.6	1.76	0.88	0.5	0.3	2.2	0.9	4.5	0.9	1.8	0.1	0.2	4.8	
100.5-101	Core				21	ND	21			2.5	1.69	0.84			2.9	0.9							
101-101.5					39	ND	39			1.85	1.25	0.62			4.1	0.9							
101.5-102					18	ND	18			2.82	1.91	0.95			4.2	0.9							
102-102.5					ND	ND	ND			2.33	1.58	0.79			3.6	1.0							
102.5-103					21	ND	21			2.57	1.74	0.87			3.4	0.8							
103-103.5					ND	ND	ND			4.61	3.12	1.56			3.2	0.9							
103.5-104					28	ND	28			2.25	1.52	0.76			1.5	0.8							
104-104.5					11	ND	11			2.3	1.56	0.78			3.1	0.9							
104.5-105					ND	ND	ND			3.03	2.05	1.02			3.3	0.8							
105-105.5					ND	ND	ND			2.13	1.44	0.72			3.9	0.9							
105.5-106					10	ND	10			3.43	2.32	1.16			3.0	0.9							
106-106.5					ND	ND	ND			4.6	3.11	1.55			4.2	0.9							
106.5-107					ND	ND	ND			3.67	2.48	1.24			4.3	0.9							
107-107.5					ND	ND	ND			7.31	4.95	2.47			4.2	0.9							
107.5-108					ND	ND	ND			6.89	4.66	2.33			3.5	0.9							
108-108.5					ND	ND	ND			15.1	10.2227	5.0971892			7.6	1.1							
108.5-109					ND	ND	ND			16.4	11.1028	5.5360201			6.4	1.1							
109-109.5					ND	ND	ND			10.6	7.1762	3.5781593			5.6	1							
109.5-110					ND	ND	ND			9.33	6.31641	3.1494553			7.1	1.2							

Kenecott Uranium Company																							
Sweetwater Uranium Project																							
TMW-106																							
														ND entered as 0.0									
Location	Sample Type	Northing	Easting	Elevation	Diesel Range Organics (milligrams per kilogram)	Oil Range Hydrocarbons (milligrams per kilogram)	Total Extractable Hydrocarbons (milligrams per kilogram)	pH (Standard units)	Sulphate (milligrams per kilogram)	Natural Uranium (milligrams per kilogram)	Natural Uranium (picocuries per gram)	Uranium-238 (picocuries per gram)	Thorium-230 (picocuries per gram)	Th-230 - Uncertainty (picocuries per gram)	RADIUM-226				Uranium-238/Thorium-230	Equilibrium		Moisture (percent)	
															INITIAL		FINAL			Uranium-238/Radium-226	Thorium-230/Radium-226		Uranium-238/Radium-226
															Result (picocuries per gram)	Uncertainty (picocuries per gram)	Result (picocuries per gram)	Uncertainty (picocuries per gram)					
0-5'	Soil	149120.61	323577.45	6640.56	11	ND	11		565	3.74	2.53	1.26	1.6	0.6	3.9	1.0	4.8	1.1	0.8	0.3	0.3	7.8	
5-10'					31	ND	32		501	3.75	2.54	1.27	0.7	0.5	4.4	1.0	5.9	1.0	1.8	0.1	0.2	5.4	
10-15'					ND	ND	ND		75	2.27	1.54	0.77	0	0	2.5	0.9	3.8	1.0		0.0	0.2	4.2	
15-20'					ND	ND	ND		37	5.59	3.78	1.89	21	2.4	17.5	1.5	22.3	1.7	0.1	0.9	0.1	5.6	
20-25'					22	ND	23		57	3.49	2.36	1.18	7.4	1.4	9.2	1.2	11.8	1.4	0.2	0.6	0.1	6.1	
25-30'					138	52	190		14	8.64	5.85	2.92	2.4	0.8	5.6	1.0	5.8	1.0	1.2	0.4	0.5	4.9	
30-35'					ND	ND	ND		49	44.4	30.06	14.99	4.4	1	6.2	1.0	9.0	1.1	3.4	0.5	1.7	4.3	
35-40'					ND	ND	ND		25	31.7	21.46	10.70	1.3	0.5	5.7	1.0	5.7	1.1	8.2	0.2	1.9	6.9	
40-45'					180	67	248		20	33.1	22.41	11.17	3.3	0.9	8.2	1.1	10.1	1.3	3.4	0.3	1.1	7.8	
45-50'					11	ND	12		28	80.5	54.50	27.17	5.6	1.1	13.7	1.3	16.2	1.4	4.9	0.3	1.7	8.6	
50-55'					ND	ND	ND		14	28.2	19.09	9.52	3.6	0.9	11.8	1.2	14.2	1.3	2.6	0.3	0.7	8.2	
55-60'					ND	ND	11		19	6.95	4.71	2.35	1.7	0.6	3.6	1.1	4.1	1.1	1.4	0.4	0.6	6.8	
60-65'					16	ND	17		120	15.6	10.56	5.27	1.2	0.5	5.8	1.1	8.3	1.3	4.4	0.1	0.6	8.4	
65-70'					ND	ND	ND		95	5.93	4.01	2.00	1.2	0.7	5.1	1.1	6.2	1.2	1.7	0.2	0.3	6.8	
70-75'					27	ND	30		63	3.58	2.42	1.21	1	0.5	3.9	1.0	4.1	1.0	1.2	0.2	0.3	4.7	
75-80'					ND	ND	ND		305	6.41	4.34	2.16	0.6	0.4	6.8	1.0	7.7	1.1	3.6	0.1	0.3	6.3	
80-85'					22	ND	24		183	15.2	10.29	5.13	2.2	0.7	13.5	1.3	13.7	1.4	2.3	0.2	0.4	7.8	
85-90'					16	ND	20		109	9.69	6.56	3.27	0.9	0.6	7.1	1.1	9.0	1.1	3.6	0.1	0.4	7.1	
90-95'					56	ND	60		0	2.84	1.92	0.96	0.7	0.4	3.6	0.9	4.0	0.9	1.4	0.2	0.2	2.9	
95-100'					ND	ND	ND		15	4.84	3.28	1.63	0.7	0.5	3.5	0.9	3.8	0.9	2.3	0.2	0.4	2.8	
100-105'					12	ND	13		37	2.04	1.38	0.69	0.7	0.5	3.2	0.9	3.2	0.9	1.0	0.2	0.2	2.4	

Kennecott Uranium Company																						
Sweetwater Uranium Project																						
TMW-107																						
															ND entered as 0.0							
Location	Sample Type	Northing	Easting	Elevation	Total										RADIUM-226							
					Dioxid Range Organics	Oil Range Hydrocarbons	Total Extractable Hydrocarbons	pH	Sulphate	Natural Uranium	Natural Uranium	Uranium-238	Thorium-230	Tl-230 - Uncertainty	INITIAL		FINAL		Equilibrium			Moisture
					(milligrams per kilogram)	(milligrams per kilogram)	(milligrams per kilogram)	(Standard units)	(milligrams per kilogram)	(milligrams per kilogram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	Uranium-238/Thorium-230	
0-5'	Soil	148109.87	323621.68	6637.26	ND	ND	ND	9.46	563	17.50	11.85	5.91	50.0	3.1	55.2	2.3	69.2	2.5	0.1	0.7	0.1	4.3
5-10'					ND	ND	ND	10.1	338	85.70	58.02	28.93	64.0	3.9	52.6	2.2	68.4	2.5	0.5	0.9	0.4	5.4
10-15'					ND	ND	ND	9.52	165	103	69.73	34.77	50	3.3	30.8	1.7	35.8	1.8	0.7	1.4	1.0	5.6
15-20'					ND	ND	ND	8.88	127	200	135.40	67.51	11	1.8	12.8	1.3	13.8	1.3	6.1	0.8	4.9	7.3
20-25'					ND	ND	ND	8.67	183	60	40.62	20.25	7.5	1.5	17.3	1.4	15.0	1.3	2.7	0.5	1.4	10.0
25-30'					ND	ND	ND	8.53	110	21.3	14.42	7.19	3.4	1	7.8	1.1	7.7	1.1	2.1	0.4	0.9	9.1
30-35'					ND	ND	ND	8.72	147	21.6	14.62	7.29	2.6	0.8	10.1	1.2	8.0	1.1	2.8	0.3	0.9	9.9
35-40'					ND	ND	ND	8.92	195	10.9	7.38	3.68	2.4	0.7	8.8	1.2	6.1	1.0	1.5	0.4	0.6	9.7
40-45'					ND	ND	ND	8.75	360	9.87	6.68	3.33	1.4	0.6	7.7	1.2	5.0	1.0	2.4	0.3	0.7	9.3
45-50'					ND	ND	ND	9.41	176	15.5	10.49	5.23	3.1	0.8	10.3	1.2	8.1	1.1	1.7	0.4	0.6	6.2
50-55'					ND	ND	ND	9.37	87	5.07	3.43	1.71	1.5	0.5	5.6	1.0	7.1	1.1	1.1	0.2	0.2	4.1
55-60'					ND	ND	ND	9.34	252	19.4	13.13	6.55	3.4	0.7	10.4	1.2	9.6	1.0	1.9	0.4	0.7	6.0
60-65'					ND	ND	ND	9.53	242	16.6	11.24	5.60	1.7	0.6	7.6	1.1	8.0	1.0	3.3	0.2	0.7	3.9
65-70'					ND	ND	ND	9.78	173	19	12.86	6.41	2.3	0.8	6.5	1.0	6.1	1.0	2.8	0.4	1.1	3.0
70-75'					ND	ND	ND	9.89	54	8.23	5.57	2.78	2.7	0.8	4.3	0.9	5.0	0.9	1.0	0.5	0.6	2.1
75-80'					ND	ND	ND	9.86	23	3.25	2.20	1.10	1.2	0.5	5.0	0.9	6.0	1.0	0.9	0.2	0.2	2.3
80-85'					ND	ND	ND	9.71	0	2.73	1.85	0.92	0.8	0.4	3.2	0.9	3.5	0.9	1.2	0.2	0.3	2.8
85-90'					ND	ND	ND	9.75	0	3.31	2.24	1.12	0.6	0.3	4.0	0.9	3.3	0.9	1.9	0.2	0.3	3.1
90-95'					ND	13	19	9.54	31	3.62	2.45	1.22	2.8	1	4.8	0.9	6.1	1.1	0.4	0.5	0.2	4.7
95-100'					ND	ND	ND	9.54	226	3.2	2.17	1.08	0.7	0.4	4.6	1.0	4.7	1.0	1.5	0.1	0.2	8.3

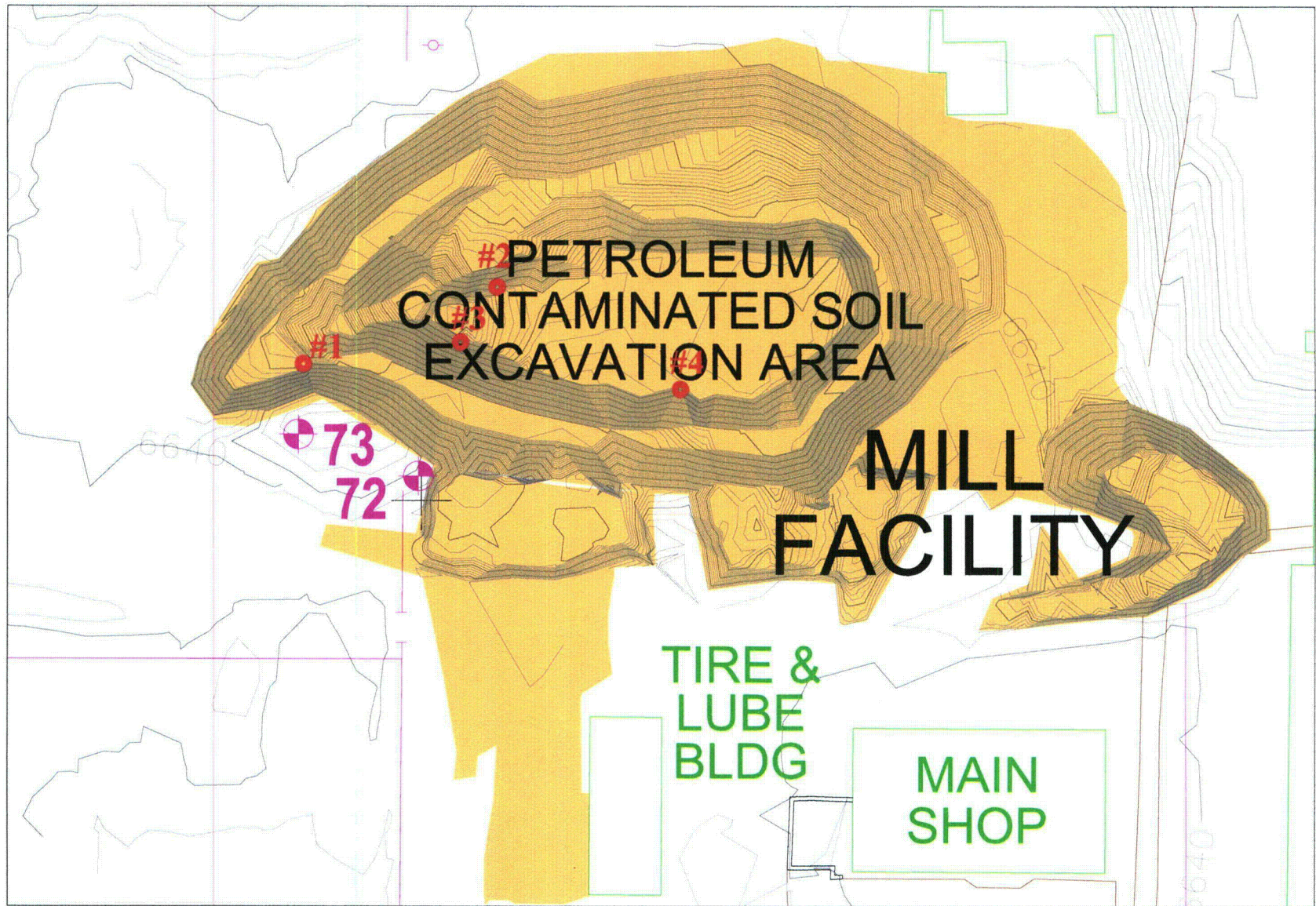
Kenecott Uranium Company																											
Sweetwater Uranium Project																											
TMW-108																											
ND entered as 0.0																											
															RADIUM-226												
Location	Sample Type	Northing	Easting	Elevation	Dioxin Range Organics (milligrams per kilogram)	Oil Range Hydrocarbons (milligrams per kilogram)	Total Extractable Hydrocarbons (milligrams per kilogram)	pH (Standard units)	Sulphate (milligrams per kilogram)	Natural Uranium (milligrams per kilogram)	Natural Uranium (picocuries per gram)	Uranium-238 (picocuries per gram)	Thorium-230 (picocuries per gram)	Th-230 - Uncertainty (picocuries per gram)	INITIAL				FINAL				Moisture (percent)				
															Result		Uncertainty		Result		Uncertainty			Equilibrium			
															(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	Uranium-238/Thorium-230	Thorium-230/Radium-226	Uranium-238/Radium-226	(percent)					
0-5'	Soil	148581.99	323650.69	6639.67	18	ND	19	9.47	16	2.51	1.70	0.85	1.1	0.5	2.1	0.9	3.4	0.9	0.8	0.3	0.2	25.0					
5-10'					ND	ND	ND	9.69	128	3.31	2.24	1.12	2.2	0.8	9.1	1.1	10.6	1.1	0.5	0.2	0.1	25.8					
10-15'					ND	ND	ND	10	38	16.4	11.10	5.54	38	3.9	22.9	1.5	41.1	1.9	0.1	0.9	0.1	30.3					
15-20'					ND	ND	ND	9.78	0	4.99	3.38	1.68	4.3	1.2	6.1	1.1	8.4	1.1	0.4	0.5	0.2	26.3					
20-25'					ND	ND	ND	9.88	0	6.35	4.30	2.14	7.2	1.6	6.1	1.1	9.2	1.2	0.3	0.8	0.2	26.2					
25-30'					ND	ND	ND	9.82	33	17.8	12.05	6.01	7	1.3	7.3	1.1	10.7	1.2	0.9	0.7	0.6	26.3					
30-35'					43	ND	45	9.26	16	63.8	43.19	21.54	6.6	1.4	8.2	1.2	11.4	1.2	3.3	0.6	1.9	31.4					
35-40'					ND	ND	ND	8.8	0	5.82	3.94	1.96	5.4	1.1	4.2	1.0	5.2	1.0	0.4	1.0	0.4	25.0					
40-45'					ND	ND	ND	9.24	61	64.2	43.46	21.67	7.6	1.5	4.0	1.0	13.9	1.2	2.9	0.5	1.6	29.8					
45-50'					12	ND	13	8.97	54	11.3	7.65	3.81	1.3	0.6	3.1	1.0	3.6	0.9	2.9	0.4	1.1	27.0					
50-55'					ND	ND	ND	9.14	111	18.3	12.39	6.18	3.4	1.1	7.2	1.2	8.4	1.2	1.8	0.4	0.7	30.7					
55-60'					ND	ND	ND	9.11	183	14	9.48	4.73	1.6	0.7	6.2	1.1	7.6	1.1	3.0	0.2	0.6	30.2					
60-65'					ND	ND	ND	9	1030	11	7.45	3.71	0.7	0.4	4.7	1.0	4.8	1.0	5.3	0.1	0.8	24.9					
65-70'					ND	ND	ND	8.54	344	11.2	7.58	3.78	2	0.7	4.4	1.0	5.1	1.0	1.9	0.4	0.7	24.6					
70-75'					ND	ND	ND	8.83	295	6.37	4.31	2.15	0.9	0.6	5.1	1.1	5.8	1.1	2.4	0.2	0.4	31.1					
75-80'					ND	ND	ND	9.44	142	8.74	5.92	2.95	0.9	0.5	3.9	1.0	5.0	1.0	3.3	0.2	0.6	29.0					
80-85'					ND	ND	ND	9.57	162	6.92	4.68	2.34	1.1	0.6	4.0	1.0	4.9	0.9	2.1	0.2	0.5	26.4					
85-90'					ND	ND	ND	9.45	50	6.16	4.17	2.08	0.6	0.4	3.5	1.0	3.2	0.9	3.5	0.2	0.6	25.6					
90-95'					ND	ND	ND	9.67	33	5.23	3.54	1.77	0.3	0.3	3.2	0.9	3.9	0.9	5.9	0.1	0.5	23.7					
95-100'					ND	ND	ND	9.46	49	5.65	3.83	1.91	0.5	0.4	3.1	0.9	3.5	0.9	3.8	0.1	0.5	23.8					
100-105'					ND	ND	ND	9.51	75	3.93	2.66	1.33	0.7	0.4	2.1	0.9	3.1	0.9	1.9	0.2	0.4	24.8					

Kennecott Uranium Company																						
Sweetwater Uranium Project																						
TMW-109																						
ND entered as 0.0																						
Location	Sample Type	Northing	Easting	Elevation	Total										RADIUM-226							
					Diesel Range Organics	Oil Range Hydrocarbons	Total Extractable Hydrocarbons	pH	Sulphur	Natural Uranium	Natural Uranium	Uranium-238	Thorium-230	Th-230 - Uncertainty	INITIAL		FINAL		Equilibrium			Moisture
					(milligrams per kilogram)	(milligrams per kilogram)	(milligrams per kilogram)	(Standard units)	(milligrams per kilogram)	(milligrams per kilogram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	Uranium-238/Thorium-230
0-5'	Soil	148563.38	323651.83	6639.06	ND	ND	ND	8.88	17	3.04	2.06	1.03	1.2	0.5	3.0	0.9	3.8	1.0	0.9	0.3	0.3	4.9
5-10'					ND	ND	ND	9.08	44	2.58	1.75	0.87	1.0	0.4	4.2	0.9	4.2	1.0	0.9	0.2	0.2	4.9
10-15'					ND	ND	ND	8.75	31	3.17	2.15	1.07	1.9	0.7	6.8	1.2	7.8	1.2	0.6	0.2	0.1	6.4
15-20'					ND	ND	ND	9.36	20	45.5	30.80	15.36	11	1.5	11.3	1.3	14.5	1.5	1.4	0.8	1.1	6.3
20-25'					ND	ND	ND	8.69	42	17.9	12.12	6.04	2.7	0.9	4.0	1.1	4.2	1.1	2.2	0.6	1.4	5.5
25-30'					ND	ND	ND	8.83	84	55.1	37.30	18.60	4.5	1.1	9.9	1.3	11.1	1.4	4.1	0.4	1.7	9.0
30-35'					ND	ND	ND	8.49	97	56.1	37.98	18.94	7.8	1.5	18.5	1.6	21.4	1.7	2.4	0.4	0.9	11.0
35-40'					ND	ND	ND	8.63	61	25	16.93	8.44	2.1	0.6	6.3	1.1	6.1	1.1	4.0	0.3	1.4	7.5
40-45'					ND	ND	ND	8.69	112	42.2	28.57	14.25	8.3	1.4	12.6	1.3	16.7	1.5	1.7	0.5	0.9	9.7
45-50'					ND	ND	ND	8.71	123	10.6	7.18	3.58	1.9	0.6	7.6	1.2	9.6	1.3	1.9	0.2	0.4	8.7
50-55'					ND	ND	ND	8.73	175	8.31	5.63	2.81	1.2	0.5	6.5	1.1	6.9	1.2	2.3	0.2	0.4	9.0
55-60'					ND	ND	ND	8.91	66	3.53	2.39	1.19	0.6	0.3	3.7	0.9	3.7	1.0	2.0	0.2	0.3	3.7
60-65'					ND	ND	ND	8.37	734	11.3	7.65	3.81	1.6	0.6	5.4	0.9	5.8	1.0	2.4	0.3	0.7	3.3
65-70'					ND	ND	ND	8.26	540	10.2	6.91	3.44	1.4	0.5	5.6	1.0	5.3	1.0	2.5	0.3	0.6	3.4
70-75'					ND	ND	ND	8.49	80	8.07	5.46	2.72	0.6	0.4	3.2	0.9	4.1	1.0	4.5	0.1	0.7	4.0
75-80'					ND	ND	ND	8.61	69	8.62	5.84	2.91	1.2	0.5	4.0	1.1	4.7	1.1	2.4	0.3	0.6	6.8
80-85'					ND	ND	ND	9.21	56	4.64	3.14	1.57	0.6	0.4	3.5	1.1	3.5	1.1	2.6	0.2	0.4	6.3
85-90'					ND	ND	ND	9.23	70	6.94	4.70	2.34	1.3	0.5	5.5	1.0	5.5	1.0	1.8	0.2	0.4	8.0
90-95'					ND	ND	ND	9.09	31	4.37	2.96	1.48	0	0	3.5	0.9	3.9	1.0		0.0	0.4	4.2
95-100'					ND	18	22	7.46	0	4.56	3.09	1.54	0	0	4.6	0.9						8.8
100-100.5'	Core				ND	ND	ND	6.74	20	4.02	2.72	1.36	0.6	0.4	3.8	0.9			2.3			9.0
100.5-101.1'					ND	ND	ND	6.75	23	2.47	1.67	0.83	0	0	3.6	0.9						8.7
101-101.5'					ND	ND	ND	6.85	24	2.83	1.92	0.96	0	0	4.5	0.9						9.1
101.5-102'					ND	ND	ND	7.32	32	3.25	2.20	1.10	0	0	3.6	1.0						10.1
102-102.5'					ND	ND	ND	7.35	57	3.48	2.36	1.17	0	0	4.2	0.9						8.4
102.5-103'					ND	ND	ND	7.46	89	3.19	2.16	1.08	0	0	2.9	1.0						9.4
103-103.5'					ND	ND	ND	7.64	92	3.48	2.36	1.17	0	0	3.6	1.1						11.4
103.5-104'					ND	ND	ND	8.18	198	5.31	3.59	1.79	0	0	8.0	1.2						12.9
104-104.5'					ND	ND	ND	8.16	63	2.43	1.65	0.82	0.6	0.4	4.8	1.0			1.4			10.9
104.5-105'					ND	ND	ND	8.49	288	3.62	2.45	1.22	0	0	6.5	1.1						14.5
105-105.5'					ND	ND	ND	7.78	98	2.98	2.02	1.01	1.1	0.6	5.2	1.2			0.9			10.1
105.5-106					ND	ND	ND	8.5	182	3.55	2.40	1.20	0.5	0.3	4.4	1.0			2.4			11.0
106-106.5					ND	ND	ND	8.17	70	2.76	1.87	0.93	0	0	3.9	0.9						9.1
106.5-107'					ND	ND	ND	8.33	31	3.28	2.22	1.11	0.5	0.4	4.1	0.9			2.2			8.8
107-107.5'					ND	ND	ND	8.23	244	4.66	3.15	1.57	0.6	0.4	6.2	1.0			2.6			12.2
107.5-108'					ND	ND	ND	8.06	70	2.7	1.8279	0.9114179	0.5	0.4	6.6	1.1			1.8			9.7
108-108.5'					ND	ND	ND	7.75	133	2.2	1.4894	0.7426368	0.5	0.3	3.5	0.9			1.5			9.9
108.5-109'					ND	ND	ND	7.87	90	2.24	1.51648	0.7561393	0	0	3.7	0.9						9.1
109-109.5'					ND	ND	ND	8.03	46	1.62	1.09674	0.5468508	0	0	3.7	0.8						9.9
109.5-110'					ND	ND	ND	7.5	46	2.3	1.5571	0.7763931	0	0	2.9	0.8						10

Kennebec Uranium Company																								
Sweetwater Uranium Project																								
TMW-110																								
											ND entered as 0.0													
Location	Sample Type	Northing	Easting	Elevation	Diesel Range Organics (milligrams per kilogram)	Oil Range Hydrocarbons (milligrams per kilogram)	Total Extrastable Hydrocarbons (milligrams per kilogram)	pH (Standard units)	Sulphate (milligrams per kilogram)	Natural Uranium (milligrams per kilogram)	Natural Uranium (picocuries per gram)	Uranium-238 (picocuries per gram)	Thorium-230 (picocuries per gram)	Th-230 - Uncertainty (picocuries per gram)	RADIUM-226						Moisture (percent)			
															INITIAL			FINAL				Equilibrium		
															Result (picocuries per gram)	Uncertainty (picocuries per gram)	Result (picocuries per gram)	Uncertainty (picocuries per gram)	Result (picocuries per gram)	Uncertainty (picocuries per gram)		Uranium-238/ Thorium-230	Thorium-230/ Radium-226	Uranium-238/ Radium-226
0-5'	Soil	148088.65	323625.57	6637.02	11	ND	12		96	11.60	7.85	3.92	41.0	2.8	79.8	2.6	104	3	0.10	0.39	0.04	4.1		
5-10'					ND	ND	ND		260	55.10	37.30	18.60	60.0	3.5	85.4	2.8	88.4	3	0.31	0.68	0.21	6.4		
10-15'					ND	ND	ND		100	227	153.68	76.63	17	1.8	12.6	1.3	19	1.6	4.51	0.89	4.03	5.2		
15-20'					ND	ND	ND		64	62.7	42.45	21.17	3.9	0.9	9.9	1.2	12.4	1.4	5.43	0.31	1.71	10.2		
20-25'					13	ND	14		105	59.4	40.21	20.05	7.7	1.4	18.8	1.4	24.4	1.7	2.60	0.32	0.82	10.2		
25-30'					ND	ND	ND		68	36.9	24.98	12.46	6.5	1.2	14.2	1.3	18.1	1.6	1.92	0.36	0.69	10.4		
30-35'					ND	ND	ND		67	18.1	12.25	6.11	3.6	1	8.4	1.1	11.2	1.3	1.70	0.32	0.55	9		
35-40'					ND	ND	ND		177	10.8	7.31	3.65	2	0.6	7.3	1.1	8.2	1.2	1.82	0.24	0.44	10.3		
40-45'					ND	ND	ND		898	17.8	12.05	6.01	2.2	0.6	8.2	1.1	10.3	1.2	2.73	0.21	0.58	9		
45-50'					ND	ND	ND		142	22.9	15.50	7.73	5.8	1.1	9.2	1.1	12	1.2	1.33	0.48	0.64	5.5		
50-55'					ND	ND	ND		63	9.98	6.76	3.37	2.6	0.9	5.7	0.9	7.5	1	1.30	0.35	0.45	3.4		
55-60'					86	ND	92		222	18.6	12.59	6.28	3.6	0.9	8.3	1	9.9	1.1	1.74	0.36	0.63	5.9		
60-65'					ND	ND	ND		1480	8.33	5.64	2.81	1.9	0.7	5.9	0.9	7.1	1	1.48	0.27	0.40	3.9		
65-70'					13	ND	14		2840	16.7	11.31	5.64	1.8	0.7	6.9	1.1	6.8	1.1	3.13	0.26	0.83	3.5		
70-75'					ND	ND	ND		342	7.1	4.81	2.40	1	0.5	3.9	0.8	4.1	0.9	2.40	0.24	0.58	2.5		
75-80'					ND	ND	ND		96	2.79	1.89	0.94	0.6	0.3	3.5	0.8	3.9	0.8	1.57	0.15	0.24	2.1		
80-85'					ND	ND	ND		64	2.45	1.66	0.83	1	0.4	3	0.8	3.7	0.9	0.83	0.27	0.22	2.5		
85-90'					15	ND	17		53	3.93	2.66	1.33	1	0.4	3.8	0.9	4.4	0.9	1.33	0.23	0.30	3.3		
90-95'					(NO RESULT)							0.00	0.00			7.4	1.2	7.4	1.3		0.00	0.00	6.6	

Kennecott Uranium Company																			
Sweetwater Uranium Project																			
Background Soil Samples																			
Diesel Contaminated Soil Excavation																			
Location	Sample Type	Diesel Range Organics (milligrams per kilogram)	Oil Range Hydrocarbons (milligrams per kilogram)	Total Extractable Hydrocarbons (milligrams per kilogram)	pH (Standard units)	Sulphate (milligrams per kilogram)	Natural Uranium (milligrams per kilogram)	Natural Uranium (picocuries per gram)	Uranium-238 (picocuries per gram)	Thorium-230 (picocuries per gram)	Th-230 - Uncertainty (picocuries per gram)	INITIAL		FINAL		Equilibrium			Moisture (percent)
												Result	Uncertainty	Result	Uncertainty	Uranium-238/ Thorium-230	Thorium-230/ Radium-226	Uranium-238/ Radium-226	
												(picocuries per gram)	(picocuries per gram)	(picocuries per gram)	(picocuries per gram)				
Southwest Corner Diesel Excavation - Bench #1	Soil	ND	ND	ND	8.93	63	43.3	29.31	14.62	6.4	1.2	12.7	1.4	18.3	1.4	2.28	0.35	0.80	4.5
Diesel Excavation North Wall West End Bottom Redox Area - #2	Soil	ND	ND	ND	8.45	94	17.5	11.85	5.91	5.9	1.3	4.4	1.1	4.6	1.1	1.00	1.28	1.28	3.1
Diesel Excavation South Wall at Bottom - #3	Soil	ND	ND	ND	8.1	321	9.85	6.67	3.32	1.7	0.7	16.5	1.8	20.2	109	1.96	0.08	0.16	11.8
Diesel Excavation South Wall at Bottom - #4	Soil	ND	ND	ND	8.56	81	16.4	11.10	5.54	0.7	0.5	5	1.3	6	1.3	7.91	0.12	0.92	7.4
Average:		0.0	0.0	0.0	8.51	140	21.8	14.73	7.35	3.7	0.9	9.7	1.4	12.3	28.2	3.29	0.46	0.79	6.7
Median:		0.0	0.0	0.0	8.51	88	17.0	11.48	5.72	3.8	1.0	8.9	1.4	12.2	1.4	2.12	0.23	0.86	6.0
Maximum:		0.0	0.0	0.0	8.93	321	43.3	29.31	14.62	6.4	1.3	16.5	1.8	20.2	109.0	7.91	1.28	1.28	11.8
Minimum:		0.0	0.0	0.0	8.10	63	9.9	6.67	3.32	0.7	0.5	4.4	1.1	4.6	1.1	1.00	0.08	0.16	3.1
STD DEV:		0.0	0.0	0.0	0.34	122	14.8	9.99	4.98	2.9	0.4	5.9	0.3	8.1	53.9	3.13	0.56	0.47	3.8

Background Radionuclide Sample Locations – West End Diesel Contaminated Soil Excavation



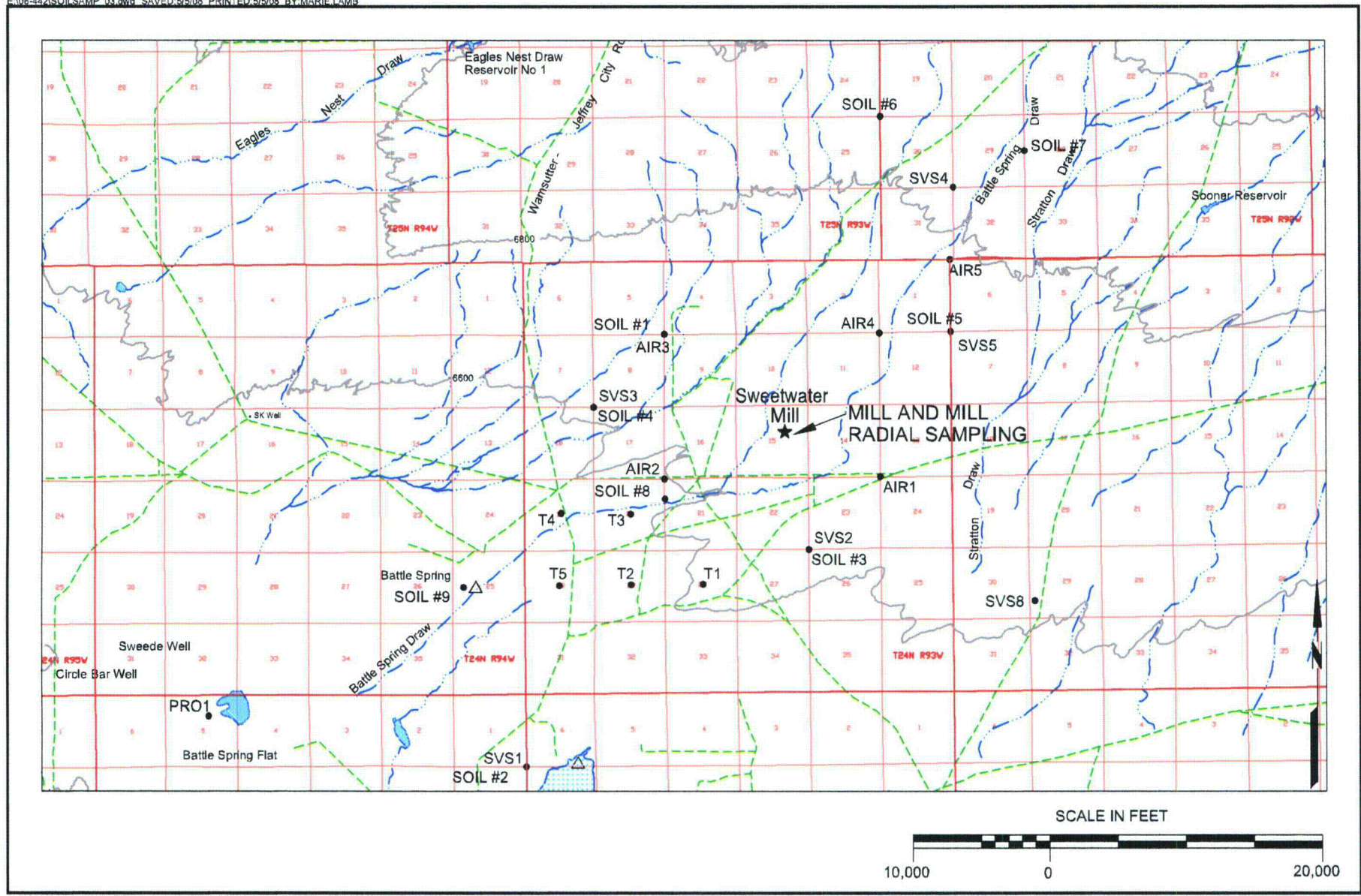


FIGURE 4-1
PRE-OPERATIONAL RADIOLOGICAL SOIL
SAMPLING LOCATIONS

Date:	AUGUST 1997
Project:	06-308
File:	SOILSAMP

Fluid Recovery Preparatory to Excavation

Prior to and in preparation for excavation perched fluids from the Catchment Basin were recovered via two (2) shallow wells, TMW-90 and TMW-105. These wells were completed from 35 to 55 feet below surface (TMW-90) and 20 to 40 feet below surface (TMW-105) to allow the perched fluid to be sampled and collected. The excavation bottom in the area of these wells exceeded the well depths and these wells were destroyed by the excavation as was discussed in previous excavation related submittals. Once the excavation was completed they were no longer required.

Fluid recovery via TMWs-90 and 105 was not perfect. A small quantity of perched fluid was encountered in the excavation bottom near monitor well TMW-90 near the west highwall of the excavation, beneath the raffinate tank slab.



This image of the perched fluid (wet spot between the wells) was taken on July 10, 2006. The fluid was sampled and the results are included in Appendix 2. There was only a very small amount of fluid present and it evaporated rapidly. The elevation of the fluid was approximately 6600 feet above mean sea level. The bottom elevation of TMW-105 was approximately 6598.28 above mean sea level while the bottom elevation of TMW-90 was approximately 6584.82 above mean sea level. This fluid was in the interception zone of TMW-90.

These wells and the fluids recovered from them are described in detail below.

Catchment Basin Fluid Recovery Preparatory to Excavation

Beginning on August 18, 2003 a drilling program to test for subsurface contamination around the Catchment Basin was begun. This initial program involved, among other things, the completion of TMW-90, a shallow perched fluid recovery well designed to recover fluids leaked from the bottom of the Catchment Basin at a depth of 35 to 55 feet below ground surface (at the bottom depth of the final excavation). The initial phase of drilling was completed on August 22, 2003.

Drilling was resumed on December 2, 2003. An additional shallow fluid recovery well, TMW-105 was completed.

In the course of drilling the sampling bore holes, perched fluid was encountered in one bore hole at a depth of forty (40) feet. It was decided to complete this hole as the shallow monitor well, TMW-90, to evaluate and collect this perched fluid. Thus, this well is screened at a depth of 35 to 55 feet. This well was completed in August 2003 and glued (not threaded) screen and pipe was used because threaded materials were not available since completion of wells was not planned.

In the course of drilling sample bore hole CB-22, perched fluid was also encountered at a depth of 30 to 35 feet. This hole was also completed as the shallow well TMW-105, screened from 20 to 40 feet below surface, to allow the perched fluid to be sampled and collected.

These wells are shown on the **Pre-Excavation Map**. The locations of these wells were surveyed by Robert Jack Smith and Associates, licensed surveyors.

Shallow perched fluids (at depths of 35 to 55 feet below surface) were found in both wells. Wells TMW-90 and -105 intercepted these fluids. Data from samples from these wells is included in control charts at the end of Appendix 1. Samples from both of these wells are contaminated with diesel range organics (DRO), indicative of contamination by Solvent Extraction (SX) fluid.

Upon receipt of the sampling results for TMW-90, a Safety and Environmental Evaluation (SEE) was prepared (SEE #6) to allow fluids from this well to be recovered on a test basis by pumping them into a nearby, already contaminated, open-top tank associated with the Solvent Extraction (SX) Circuit, and allowing them to evaporate. This worked because the recoverable volume of fluid was small and site evaporation rates high. The table (Table II) and chart in Appendix 1 document the flow rate from the well. Pumping was suspended from the well from October 30, 2003 until January 15, 2004 due to freezing. During this period an insulated pumping system was installed, allowing pumping to resume.

A pump was also installed in TMW-105. Both wells were pumped into a holding tank in the Mill Building (via downhole venturi pumps). The fluid was then pumped to the tailings impoundment. Control charts, flow rate and cumulative volume sheets and tables showing the mass of contaminants removed from these wells are included in Appendix 1.

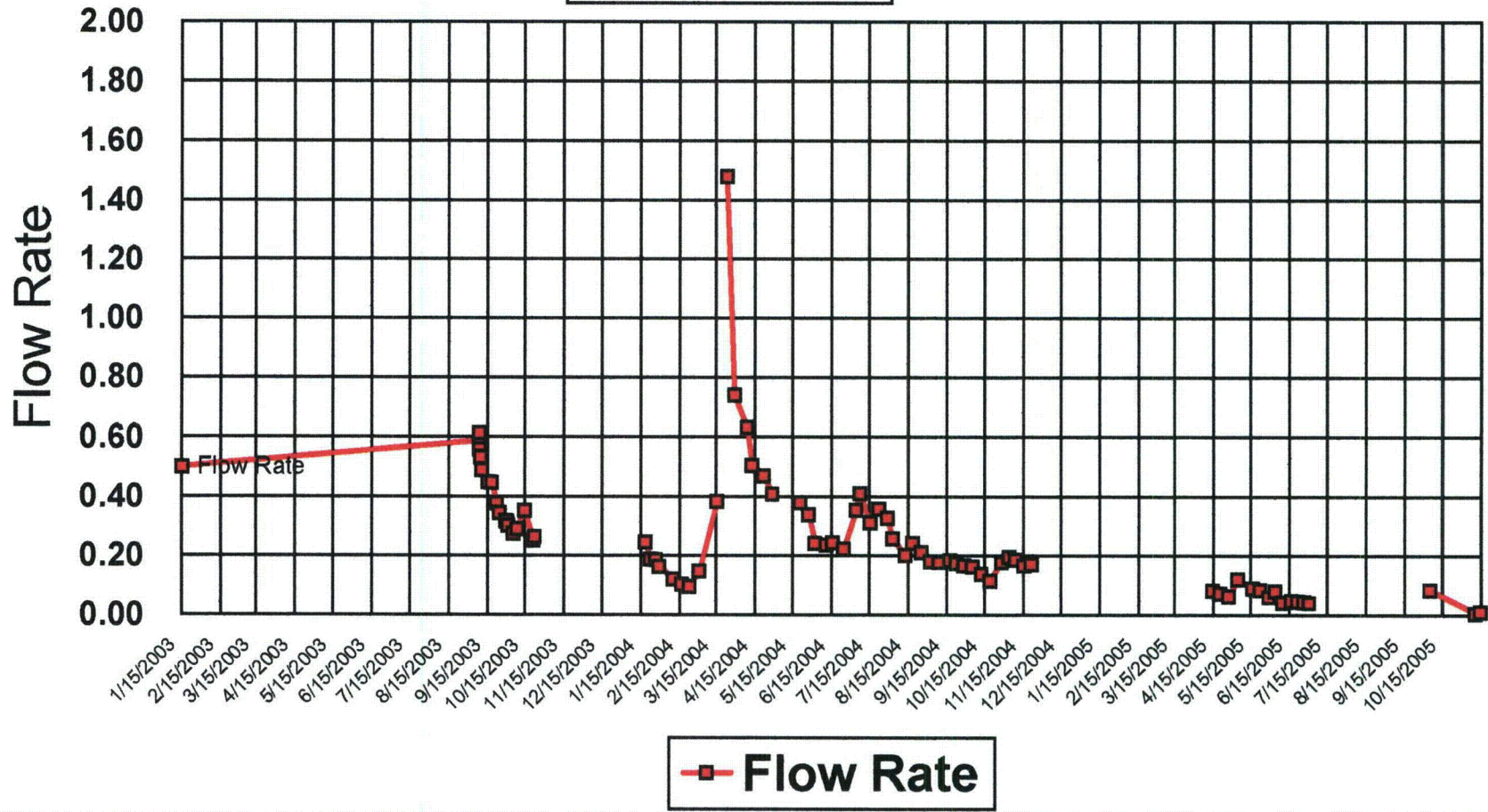
This removal of accumulated fluids was a necessary first step to prepare for excavation since it insured a dry excavation floor. The removed fluids were spilled fluids perched on top of a clay layer. One (1) sample collected from TMW-90 on February 9, 2005 was largely kerosene.

TMW-90 - Flow Rates and Volume Pumped

Volumes Pumped				Flow Rate Liters per minute	Volume Pumped as of Date/Time (Liters)	Cumulative Pumped (Liters)
Start	09/04/03	03:37 PM	37868.00	0.65	37868.65	
	09/08/03	09:45	37872.00	0.41	37872.41	4.0 6.83 0.59 Pumping 3169.0 3169.0
	09/08/03	10:02	37872.00	0.42	37872.42	4.0 6.53 0.61 Pumping 10.2 3179.2
	09/09/03	14:00	37872.00	0.58	37872.58	4.0 7.17 0.56 Pumping 139.3 3318.4
	09/09/03	07:41	37873.00	0.32	37873.32	4.0 7.50 0.53 Pumping 578.8 3897.2
	09/09/03	13:12	37873.00	0.55	37873.55	4.0 7.54 0.53 Pumping 176.1 4073.3
	09/10/03	18:45	37874.00	0.78	37874.78	4.0 8.19 0.49 Pumping 903.5 4976.8
	09/15/03	13:15	37879.00	0.55	37879.55	4.0 8.92 0.45 Pumping 3219.0 8195.8
	09/18/03	12:05	37882.00	0.50	37882.50	4.0 8.97 0.45 Pumping 1900.9 10096.7
	09/22/03	15:42	37886.00	0.65	37886.65	4.0 10.63 0.38 Pumping 2457.0 12553.7
	09/24/03	17:06	37888.00	0.71	37888.71	4.0 11.62 0.34 Pumping 1067.7 13621.4
	09/29/03	11:49	37893.00	0.49	37893.49	4.0 12.61 0.32 Pumping 2276.0 15897.4
	09/30/03	11:49	37894.00	0.49	37894.49	4.0 12.72 0.31 Pumping 454.8 16352.2
	10/01/03	18:10	37895.00	0.76	37895.76	4.0 13.25 0.30 Pumping 561.2 16913.3
	10/05/03	18:15	37899.00	0.76	37899.76	4.0 14.60 0.27 Pumping 1659.9 18573.2
	10/08/03	11:20	37902.00	0.47	37902.47	4.0 13.77 0.29 Pumping 1102.1 19675.3
	10/14/03	09:20	37908.00	0.39	37908.39	4.0 11.35 0.35 Pumping 2738.0 22413.3
	10/21/03	15:15	37915.00	0.64	37915.64	4.0 15.95 0.25 Pumping 3146.7 25560.1
	10/22/03	15:20	37916.00	0.64	37916.64	4.0 15.24 0.26 Pumping 370.8 25930.9
	10/30/03	05:00	37924.00	0.21	37924.21	Froze 2860.9 28791.8
	01/15/04	13:36	38001.00	0.57	38001.57	Restarted
	01/15/04	14:20	38001.00	0.60	38001.60	4.0 8.02 0.50 Pumping 22.0 28813.8
	01/18/04	14:43	38004.00	0.61	38004.61	4.0 16.24 0.25 Pumping 1069.7 29883.5
	01/22/04	17:11	38008.00	0.72	38008.72	4.0 21.23 0.19 Pumping 1113.2 30996.7
	01/26/04	15:53	38012.00	0.66	38012.66	4.0 21.41 0.19 Pumping 1061.8 32058.5
	01/29/04	16:24	38015.00	0.68	38015.68	4.0 24.47 0.16 Pumping 711.2 32769.7
	02/09/04	09:43	38026.00	0.40	38026.40	0.5 4.17 0.12 Pumping 1850.3 34620.0
	02/16/04	09:06	38033.00	0.38	38033.38	0.5 4.89 0.10 Pumping 1027.5 35647.5
	02/22/04	16:52	38039.00	0.70	38039.70	0.5 5.27 0.09 Pumping 864.8 36512.3
	03/01/04	13:50	38047.00	0.58	38047.58	0.5 3.41 0.15 Pumping 1660.8 38173.1
	03/15/04	09:54	38061.00	0.41	38061.41	0.5 1.31 0.38 Pumping 7611.6 45784.6
	03/18/04	15:00	38064.00	0.63	38064.63	Shut Down
	03/22/04	12:00	38068.00	0.50	38068.50	Restarted
	03/23/04	15:59	38069.00	0.67	38069.67	0.4 0.27 1.48 Pumping 2482.0 50033.9
	03/29/04	07:50	38075.00	0.33	38075.33	0.4 0.54 0.74 Pumping 11393.7 61427.6
	04/08/04	07:19	38085.00	0.30	38085.30	0.4 0.63 0.63 Pumping 18793.9 80221.6
	04/12/04	09:36	38089.00	0.40	38089.40	0.4 0.79 0.50 Pumping 15156.0 95377.6
	04/21/04	17:23	38098.00	0.72	38098.72	0.4 0.85 0.47 Pumping 19668.2 115045.7
	04/28/04	12:25	38105.00	0.52	38105.52	0.4 0.98 0.41 Pumping 17708.8 132754.5
	04/30/04	04:00	38107.00	0.17	38107.17	Stopped 967.4 133721.9
	05/18/04	14:30	38125.00	0.60	38125.60	Restarted 0.0 133721.9
	05/20/04	11:32	38127.00	0.48	38127.48	0.4 1.06 0.38 Pumping 1023.2 134745.1
	05/27/04	16:39	38134.00	0.69	38134.69	0.4 1.18 0.34 Pumping 3511.1 137233.0
	06/01/04	16:56	38139.00	0.71	38139.71	0.4 1.65 0.24 Pumping 1749.6 136494.7
	06/10/04	17:28	38148.00	0.73	38148.73	0.4 1.69 0.24 Pumping 3067.8 140300.8
	06/15/04	07:52	38153.00	0.33	38153.33	0.4 1.64 0.24 Pumping 1616.9 138111.6
	06/24/04	11:41	38162.00	0.49	38162.49	0.4 1.79 0.22 Pumping 2948.1 143248.9
	07/04/04	15:14	38172.00	0.63	38172.63	0.4 1.13 0.35 Pumping 5159.8 143271.4
	07/07/04	15:48	38175.00	0.66	38175.66	0.4 0.98 0.41 Pumping 1786.3 145035.1
	07/15/04	07:38	38183.00	0.32	38183.32	0.4 1.29 0.31 Pumping 3430.8 146702.2
	07/22/04	10:10	38190.00	0.42	38190.42	0.4 1.12 0.36 Pumping 3654.3 148689.4
	07/29/04	09:36	38197.00	0.40	38197.40	0.4 1.23 0.33 Pumping 3275.9 149978.1
	08/02/04	17:11	38201.00	0.72	38201.72	0.4 1.55 0.26 Pumping 1601.3 150290.7
	08/12/04	13:14	38211.00	0.55	38211.55	0.4 1.99 0.20 Pumping 2843.7 152821.8
	08/13/04	12:30	38212.00	0.52	38212.52	Stopped 280.3 153102.1
	08/16/04	10:00	38215.00	0.42	38215.42	Restarted
	08/18/04	16:36	38217.00	0.69	38217.69	0.4 1.66 0.24 Pumping 790.9 153893.0
	08/25/04	13:18	38224.00	0.55	38224.55	0.4 1.90 0.21 Pumping 2082.8 155975.8
	09/01/04	17:07	38231.00	0.71	38231.71	0.4 2.22 0.18 Pumping 1856.1 157831.9
	09/08/04	11:30	38238.00	0.48	38238.48	0.4 2.26 0.18 Pumping 1726.8 159558.7
	09/17/04	16:22	38247.00	0.68	38247.68	0.4 2.18 0.18 Pumping 2433.8 161992.5
	09/22/04	10:17	38252.00	0.43	38252.43	0.4 2.29 0.17 Pumping 1193.8 163186.3
	09/28/04	16:53	38258.00	0.70	38258.70	0.4 2.39 0.17 Pumping 1510.2 164696.5
	10/05/04	07:50	38265.00	0.33	38265.33	0.4 2.44 0.16 Pumping 1560.4 166256.9
	10/12/04	11:20	38272.00	0.47	38272.47	0.4 2.90 0.14 Pumping 1417.3 167674.1
	10/19/04	10:30	38279.00	0.44	38279.44	0.4 3.47 0.12 Pumping 1155.5 168829.7
	10/28/04	12:51	38288.00	0.54	38288.54	0.4 2.26 0.18 Pumping 2322.7 171152.4
	11/03/04	12:50	38294.00	0.53	38294.53	0.4 2.05 0.20 Pumping 1688.3 172840.6
	11/08/04	07:06	38299.00	0.30	38299.30	0.4 2.14 0.19 Pumping 1279.6 174120.2
	11/15/04	10:56	38306.00	0.46	38306.46	0.4 2.42 0.17 Pumping 1705.4 175825.7
	11/21/04	16:15	38312.00	0.68	38312.68	0.17 Shut Down 1523.0 177348.7
ReStart	03/01/05	12:00 PM	38412.00	0.50	38412.50	
	04/14/05	16:23	38456.00	0.68	38456.68	0.1 1.22 0.08 Pumping 5213.6 5213.6
	04/20/05	16:37	38462.00	0.69	38462.69	0.1 1.37 0.07 Pumping 631.7 5845.3
	04/27/05	17:24	38469.00	0.73	38469.73	0.1 1.59 0.06 Pumping 636.9 6482.2
	05/04/05	11:37	38476.00	0.48	38476.48	0.1 0.83 0.12 Pumping 1168.0 7650.1
	05/16/05	17:16	38488.00	0.72	38488.72	0.1 1.12 0.09 Pumping 1568.9 9219.1
	05/22/05	15:31	38494.00	0.65	38494.65	0.1 1.19 0.08 Pumping 717.8 9936.9
	05/29/05	17:42	38499.00	0.74	38499.74	0.1 1.69 0.06 Pumping 433.5 10370.4
	06/03/05	11:24	38506.00	0.48	38506.48	0.1 1.25 0.08 Pumping 773.3 11143.7
	06/09/05	16:39	38512.00	0.69	38512.69	0.1 2.48 0.04 Pumping 361.1 11504.8
	06/16/05	14:23	38519.00	0.60	38519.60	0.1 2.16 0.05 Pumping 460.9 11965.7
	06/21/05	15:05	38524.00	0.63	38524.63	0.1 2.20 0.05 Pumping 328.9 12294.6
	06/26/05	15:50	38529.00	0.66	38529.66	0.1 2.29 0.04 Pumping 316.9 12611.5
	06/30/05	12:00	38533.00	0.50	38533.50	0.04 Pumping 221.2 12832.7
	09/28/05	12:00	38623.00	0.50	38623.50	Restarted
	10/05/05	08:54	38630.00	0.37	38630.37	0.1 1.19 0.08 Pumping 828.2 13660.8
	11/10/05	17:47	38666.00	0.74	38666.74	0.0 3.99 0.01 Pumping 262.5 13923.4
	11/14/05	12:00	38670.00	0.50	38670.50	0.01 Shut Down 54.1 13977.5
Shut down due to minimal flows.						
Total Pumped:					193917.5	51,227,739

NOTE: Started March 1, 2005. A total of 5300 gallons pumped to the tailings impoundment on April 14, 2005 from both wells.

TMW-90
Liters per minute



TMW-105 Flow Rates and Volume Pumped

Volumes Pumped							Flow Rate Liters per minute		Volume Pumped as of Date/Time (Liters)	Cumulative Pumped (Liters)	
03/23/04	12:00	38069.00	0.50	38069.50				Started			
03/23/04	15:59	38069.00	0.67	38069.67	0.4	0.35	1.14	Pumping	273.3	273.3	
03/29/04	08:03	38075.00	0.34	38075.34	0.4	0.78	0.51	Pumping	4165.3	4438.6	
04/01/04	16:30	38078.00	0.69	38078.69				Shut Down	2462.8	6901.4	
04/05/04	10:00	38082.00	0.42	38082.42				Restarted	0.0	6901.4	
04/08/04	07:17	38085.00	0.30	38085.30	0.4	0.52	0.77	Pumping	3188.5	10089.9	
04/12/04	09:34	38089.00	0.40	38089.40	0.4	0.91	0.44	Pumping	2592.1	12682.0	
04/21/04	17:21	38098.00	0.72	38098.72	0.4	0.98	0.41	Pumping	5491.6	18173.6	
04/28/04	12:23	38105.00	0.52	38105.52	0.4	0.88	0.46	Pumping	4456.5	22630.1	
04/30/04	04:00	38107.00	0.17	38107.17				Stopped	1082.9	23713.0	
05/03/04	12:00	38110.00	0.50	38110.50				Restarted	0.0	23713.0	
05/06/04	17:06	38113.00	0.71	38113.71	0.4	0.79	0.51	Pumping	2357.2	26070.2	
05/11/04	17:08	38118.00	0.71	38118.71	0.4	0.93	0.43	Pumping	3097.6	29167.8	
05/20/04	11:29	38127.00	0.48	38127.48	0.4	1.45	0.28	Pumping	3472.9	32640.7	
05/27/04	16:38	38134.00	0.69	38134.69	0.4	0.91	0.44	Pumping	4549.1	37189.8	
06/02/04	16:54	38140.00	0.70	38140.70	0.4	1.45	0.28	Pumping	2389.5	39579.3	
06/10/04	08:00	38148.00	0.33	38148.33				Stopped	3032.7	42612.0	
06/14/04	12:00	38152.00	0.50	38152.50				Restarted	0.0	42612.0	
06/15/04	07:52	38153.00	0.33	38153.33	0.4	0.83	0.48	Pumping	574.7	43186.7	
06/24/04	11:37	38162.00	0.48	38162.48	0.4	1.60	0.25	Pumping	3297.3	46484.0	
07/04/04	15:15	38172.00	0.64	38172.64	0.4	2.03	0.20	Pumping	2881.6	49365.6	
07/07/04	15:50	38175.00	0.66	38175.66	0.4	1.18	0.34	Pumping	1477.3	50842.9	
07/15/04	07:42	38183.00	0.32	38183.32	0.4	1.05	0.38	Pumping	4213.4	55056.3	
07/22/04	10:08	38190.00	0.42	38190.42	0.4	2.03	0.20	Pumping	2010.2	57066.5	
07/29/04	09:35	38197.00	0.40	38197.40	0.4	0.84	0.47	Pumping	4758.8	61825.3	
08/02/04	17:09	38201.00	0.71	38201.71	0.4	1.24	0.32	Pumping	1997.0	63822.3	
08/12/04	13:11	38211.00	0.55	38211.55	0.4	1.46	0.27	Pumping	3892.4	67714.7	
08/18/04	16:34	38217.00	0.69	38217.69	0.4	2.25	0.18	Pumping	1575.0	69289.7	
08/25/04	13:15	38224.00	0.55	38224.55	0.4	1.67	0.24	Pumping	2366.9	71656.7	
09/01/04	17:10	38231.00	0.72	38231.72	0.4	1.34	0.30	Pumping	3076.4	74733.1	
09/08/04	11:28	38238.00	0.48	38238.48	0.4	2.06	0.19	Pumping	1894.4	76627.5	
09/17/04	16:20	38247.00	0.68	38247.68	0.4	1.75	0.23	Pumping	3023.3	79650.8	
09/22/04	10:15	38252.00	0.43	38252.43	0.4	1.59	0.25	Pumping	1714.8	81365.6	
09/28/04	16:51	38258.00	0.70	38258.70	0.4	1.68	0.24	Pumping	2155.9	83521.5	
10/05/04	07:48	38265.00	0.33	38265.33	0.4	1.73	0.23	Pumping	2205.5	85727.0	
10/12/04	11:17	38272.00	0.47	38272.47	0.4	2.05	0.20	Pumping	2010.1	87737.1	
10/19/04	10:29	38279.00	0.44	38279.44	0.4	1.34	0.30	Pumping	2994.6	90731.7	
10/28/04	12:49	38288.00	0.53	38288.53	0.4	1.75	0.23	Pumping	2992.6	93724.3	
11/03/04	11:48	38294.00	0.49	38294.49	0.4	0.67	0.60	Pumping	5147.4	98871.7	
11/08/04	07:04	38299.00	0.29	38299.29	0.4	1.81	0.22	Pumping	1526.7	100398.4	
11/15/04	10:59	38306.00	0.46	38306.46	0.4	1.18	0.34	Pumping	3503.5	103901.9	
11/21/04	16:15	38312.00	0.68	38312.68			0.34	Shut Down	3046.5	106948.4	
Restart	03/15/05	12:00	38426.00	0.50	38426.50			Started			
	04/14/05	16:26	38456.00	0.68	38456.68	0.1	0.72	0.14	Pumping	6011.9	6011.9
	04/20/05	16:35	38462.00	0.69	38462.69	0.1	0.73	0.14	Pumping	1184.8	7196.7
	04/27/05	17:27	38469.00	0.73	38469.73	0.1	0.76	0.13	Pumping	1329.7	8526.3
	05/04/05	11:36	38476.00	0.48	38476.48	0.1	0.43	0.23	Pumping	2272.2	10798.6
	05/16/05	17:18	38488.00	0.72	38488.72	0.1	0.53	0.19	Pumping	3312.4	14111.0
	05/22/05	15:29	38494.00	0.65	38494.65	0.1	0.78	0.13	Pumping	1097.9	15208.9
	05/29/05	17:45	38501.00	0.74	38501.74	0.1	0.90	0.11	Pumping	1133.7	16342.7
	06/03/05	11:03	38506.00	0.46	38506.46	0.1	1.04	0.10	Pumping	653.9	16996.5
	06/09/05	16:42	38512.00	0.70	38512.70	0.1	0.98	0.10	Pumping	916.1	17912.6
	06/16/05	14:23	38519.00	0.60	38519.60	0.1	1.12	0.09	Pumping	884.0	18796.6
	06/21/05	15:05	38524.00	0.63	38524.63	0.1	1.24	0.08	Pumping	583.3	19379.9
	06/26/05	15:50	38529.00	0.66	38529.66	0.1	0.69	0.15	Pumping	1054.6	20434.5
	06/30/05	12:00	38533.00	0.50	38533.50			0.15	Shut Down	829.5	21264.0
Restart	09/28/05	12:00	38426.00	0.50	38426.50			Started			
	10/05/05	08:57	38630.00	0.37	38630.37	0.1	1.23	0.08	Pumping	23955.7	23955.7
	11/10/05	17:43	38666.00	0.74	38666.74	0.1	1.78	0.06	Pumping	2949.4	26905.1
	11/14/05	12:00	38670.00	0.50	38670.50			0.06	Shut Down	54.1	26959.2

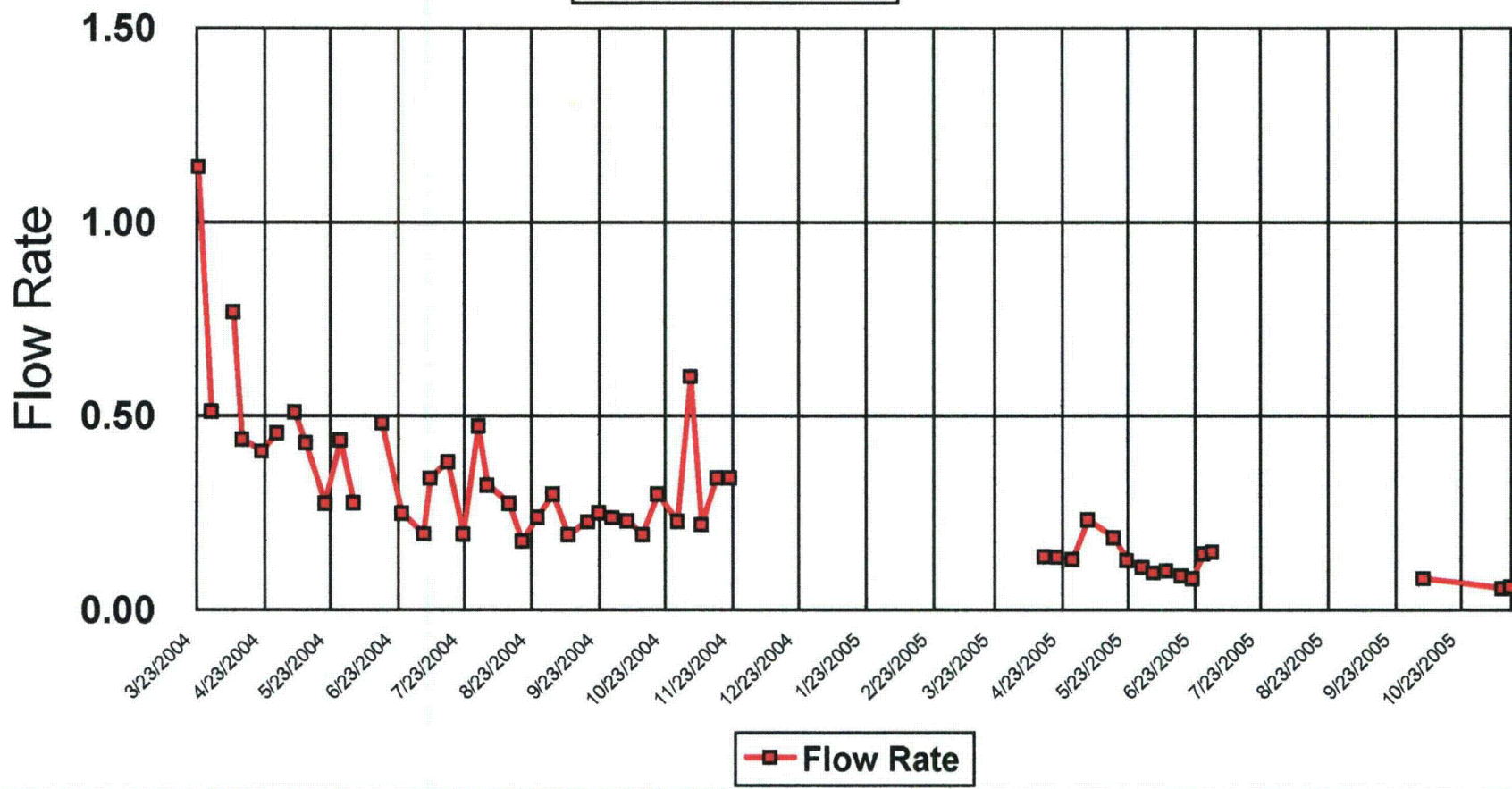
Shut down due to minimal flows.

Total Pumped:

106948.4 28,252.867

Note: Started March 15, 2005. A total of 5300 gallons pumped to the tailings impoundment on April 14, 2005 from both wells.

TMW-105
Liters per minute



Kennecott Uranium Company
Catchment Basin Monitoring Wells
Constituents Removed from the Perched Aquifer and Pumped Back into the Tailings Cell

TMW-90												
CONTAMINANTS REMOVED												
DATE FS	26-Aug-03	4-Oct-03			19-Jan-04			13-Jul-04				
(Started pumping 8/26/03)	VOLUME 2003	CUMULATIVE		VOLUME 2003	CUMULATIVE		VOLUME 2004	CUMULATIVE		VOLUME 2004	CUMULATIVE	
GALLONAGE	3803.00	3803.00		3803.00	7606.00		14540.67	22146.67		14540.67	36687.33	
CONSTITUENTS	ANALYSIS (PPM)	QUANTITY REMOVED (KG)	QUANTITY REMOVED (KG)	ANALYSIS (PPM)	QUANTITY REMOVED (KG)	QUANTITY REMOVED (KG)	ANALYSIS (PPM)	QUANTITY REMOVED (KG)	QUANTITY REMOVED (KG)	ANALYSIS (PPM)	QUANTITY REMOVED (KG)	QUANTITY REMOVED (KG)
MAJOR IONS												
Bicarbonate	48.80	0.70	0.70	2.40	0.03	0.74	3.70	0.20	0.94	4.00	0.22	1.16
Calcium	196.00	2.82	2.82	207.00	2.98	5.80	195.00	10.73	16.53	118.00	6.50	23.03
Carbonate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chloride	33.10	0.48	0.48	47.50	0.68	1.16	45.10	2.48	3.64	26.00	1.43	5.07
Fluoride	0.20	0.00	0.00	0.40	0.01	0.01	0.30	0.02	0.03	0.20	0.01	0.04
Magnesium	28.00	0.40	0.40	33.90	0.49	0.89	32.40	1.78	2.67	20.00	1.10	3.78
Nitrate-N (NO3)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Potassium	6.80	0.10	0.10	5.10	0.07	0.17	5.70	0.31	0.49	4.00	0.22	0.71
Silica	49.80	0.72	0.72	54.80	0.79	1.51	45.60	2.51	4.02	43.00	2.37	6.38
Sodium	55.60	0.80	0.80	52.20	0.75	1.55	52.30	2.88	4.43	40.00	2.20	6.63
Sulfate	733.00	10.55	10.55	861.00	12.39	22.95	767.00	42.22	65.16	476.00	26.20	91.36
Total Dissolved Solids	1140.00	16.41	16.41	1350.00	19.43	35.85	1190.00	65.50	101.35	809.00	44.53	145.88
TRACE METALS												
Aluminum	0.20	0.00	0.00	2.20	0.03	0.03	0.10	0.01	0.04	0.00	0.00	0.04
Arsenic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Barium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beryllium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boron	0.16	0.00	0.00	0.15	0.00	0.00	0.12	0.01	0.01	0.10	0.01	0.02
Cadmium	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cobalt	0.06	0.00	0.00	0.09	0.00	0.00	0.07	0.00	0.01	0.04	0.00	0.01
Copper	0.00	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Cyanide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	28.40	0.41	0.41	49.00	0.71	1.11	29.10	1.60	2.72	15.10	0.83	3.55
Lead	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manganese	1.33	0.02	0.02	1.49	0.02	0.04	1.20	0.07	0.11	0.83	0.05	0.15
Mercury	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Molybdenum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nickel	0.07	0.00	0.00	0.12	0.00	0.00	0.09	0.00	0.01	0.05	0.00	0.01
Selenium	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00
Silver	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thallium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vanadium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Zinc	0.65	0.01	0.01	0.67	0.01	0.02	0.66	0.04	0.06	0.27	0.01	0.07
RADIOMETRICS												
Uranium, Natural (mg/L)	0.24	0.00	0.00	0.35	0.01	0.01	0.19	0.01	0.02	0.06	0.00	0.02
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane, ug/L	33.00	0.00	0.00	2.80	0.00	0.00	2.50	0.00	0.00	2.70	0.00	0.00
1,2,4-Trimethylbenzene, ug/L	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,3,5-Trimethylbenzene, ug/L	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Naphthalene, ug/L	23.00	0.00	0.00	35.00	0.00	0.00	97.60	0.01	0.01	4.70	0.00	0.01
Diesel Range Organics, mg/L	41.00	0.59	0.59	45.00	0.65	1.24	1524.00	83.88	85.12	376.00	20.70	105.82
Gasoline Range Organics, mg/L	0.15	0.00	0.00	0.11	0.00	0.00	105.15	5.79	5.79	0.17	0.01	5.80

Kennecott Uranium Company
Catchment Basin Monitoring Wells
Constituents Removed from the Perched Aquifer and Pumped Back Into the Tailings Cell

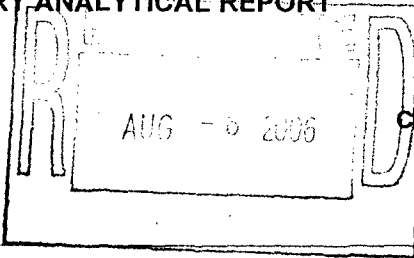
TMW-90													
CONTAMINANTS REMOVED													
DATE FS	12-Oct-04			Restarted March 1, 2005 / Shut down November 14, 2005									
(Started pumping 8/26/03)		VOLUME 2004	CUMULATIVE	11-Apr-05	VOLUME 2005	CUMULATIVE	18-Jul-05	VOLUME 2005	CUMULATIVE	5-Oct-05	VOLUME 2005	CUMULATIVE	
GALLONAGE		14540.67	51228.00		1231.00	52459.00		1231.00	53690.00		1231.00	54921.00	
CONSTITUENTS	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	
	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	
MAJOR IONS													
Bicarbonate	4.00	0.22	1.38	4.00	0.02	1.40	2.00	0.01	1.41	3.00	0.01	1.42	
Calcium	150.00	8.26	31.29	191.00	0.89	32.18	183.00	0.85	33.03	257.00	1.20	34.23	
Carbonate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Chloride	30.00	1.65	6.73	35.00	0.16	6.89	29.00	0.14	7.02	43.00	0.20	7.22	
Fluoride	0.20	0.01	0.05	0.20	0.00	0.05	0.20	0.00	0.05	0.20	0.00	0.05	
Magnesium	25.20	1.39	5.16	32.70	0.15	5.31	30.00	0.14	5.45	37.90	0.18	5.63	
Nitrate-N (NO3)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Potassium	5.90	0.32	1.03	5.80	0.03	1.06	4.80	0.02	1.08	5.50	0.03	1.10	
Silica	44.00	2.42	8.80	34.00	0.16	8.96	50.00	0.23	9.20	38.00	0.18	9.37	
Sodium	43.00	2.37	9.00	54.10	0.25	9.25	55.10	0.26	9.51	67.90	0.32	9.82	
Sulfate	522.00	28.73	120.10	756.00	3.52	123.62	671.00	3.13	126.75	904.00	4.21	130.96	
Total Dissolved Solids	887.00	48.82	194.70	1180.00	5.50	200.20	1080.00	5.03	205.23	1410.00	6.57	211.80	
TRACE METALS													
Aluminum	0.10	0.01	0.05	0.10	0.00	0.05	0.40	0.00	0.05	0.30	0.00	0.05	
Arsenic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Barium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Beryllium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Boron	0.10	0.01	0.02	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.02	
Cadmium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Chromium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Cobalt	0.05	0.00	0.01	0.07	0.00	0.01	0.07	0.00	0.01	0.09	0.00	0.01	
Copper	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.03	0.00	0.00	
Cyanide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.09	
Iron	17.40	0.96	4.50	16.70	0.08	4.58	19.30	0.00	4.58	13.60	0.06	4.65	
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	
Manganese	1.00	0.06	0.21	1.52	0.01	0.21	1.30	0.00	0.21	1.62	0.01	0.22	
Mercury	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Molybdenum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Nickel	0.07	0.00	0.01	0.09	0.00	0.01	0.09	0.00	0.01	0.11	0.00	0.02	
Selenium	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	
Silver	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Thallium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vanadium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Zinc	0.34	0.02	0.09	0.43	0.00	0.09	0.04	0.00	0.09	0.46	0.00	0.09	
RADIOMETRICS													
Uranium, Natural (mg/L)	0.06	0.00	0.03	0.08	0.00	0.03	0.54	0.00	0.03	0.20	0.00	0.03	
VOLATILE ORGANIC COMPOUNDS													
1,1,1-Trichloroethane, ug/L	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,2,4-Trimethylbenzene, ug/L	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,3,5-Trimethylbenzene, ug/L	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Naphthalene, ug/L	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	
Diesel Range Organics, mg/L	33.00	1.82	107.64	14.00	0.07	107.70	11.00	0.05	107.75	13.00	0.06	107.81	
Gasoline Range Organics, mg/L	0.05	0.00	5.80	0.09	0.00	5.80	0.00	0.00	5.80	0.04	0.00	5.80	

Kennecott Uranium Company
Catchment Basin Monitoring Wells
Constituents Removed from the Perched Aquifer and Pumped Back into the Tailings Cell

TMW 105												
CONTAMINANTS REMOVED												
DATE FS	12-Apr-04											
(Started pumping 3/23/04)		VOLUME 2004	CUMULATIVE		VOLUME 2004	CUMULATIVE		VOLUME 2004	CUMULATIVE		VOLUME 2005	CUMULATIVE
GALLONAGE		9417.67	9417.67		9417.67	18835.33		9417.67	28253.00		1780.75	30033.75
CONSTITUENTS	ANALYSIS	QUANTITY	QUANTITY	ANALYSIS	QUANTITY	QUANTITY	ANALYSIS	QUANTITY	QUANTITY	ANALYSIS	QUANTITY	QUANTITY
	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)
MAJOR IONS												
Bicarbonate	1.90	0.07	0.07	0.00	0.00	0.07	0.00	0.00	0.07	0.00	0.00	0.07
Calcium	303.00	10.80	10.80	334.00	11.91	22.71	328.00	11.69	34.40	333.00	2.24	36.65
Carbonate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chloride	67.30	2.40	2.40	56.00	2.00	4.40	66.00	2.35	6.75	84.00	0.57	7.31
Fluoride	0.40	0.01	0.01	0.40	0.01	0.03	0.40	0.01	0.04	0.40	0.00	0.05
Magnesium	51.40	1.83	1.83	62.90	2.24	4.07	49.60	1.77	5.84	54.00	0.36	6.21
Nitrate-N (NO3)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Potassium	6.50	0.23	0.23	6.00	0.21	0.45	6.90	0.25	0.69	7.20	0.05	0.74
Silica	53.10	1.89	1.89	51.00	1.82	3.71	53.00	1.89	5.60	50.00	0.34	5.94
Sodium	73.00	2.60	2.60	92.00	3.28	5.88	70.00	2.50	8.38	84.00	0.57	8.94
Sulfate	1160.00	41.35	41.35	1290.00	45.99	87.34	1060.00	37.79	125.13	1210.00	8.16	133.29
Total Dissolved Solids	1880.00	67.02	67.02	2330.00	83.06	150.09	1850.00	65.95	216.04	2080.00	14.02	230.06
TRACE METALS												
Aluminum	2.40	0.09	0.09	2.90	0.10	0.19	2.80	0.10	0.29	3.70	0.02	0.31
Arsenic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Barium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beryllium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boron	0.16	0.01	0.01	0.20	0.01	0.01	0.20	0.01	0.02	0.00	0.00	0.02
Cadmium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromium	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cobalt	0.14	0.00	0.00	0.16	0.01	0.01	0.15	0.01	0.02	0.18	0.00	0.02
Copper	0.01	0.00	0.00	0.03	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00
Cyanide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	50.50	1.80	1.80	50.00	1.78	3.58	49.10	1.75	5.33	58.30	0.39	5.73
Lead	0.04	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.05	0.00	0.00
Manganese	2.26	0.08	0.08	2.54	0.09	0.17	2.58	0.09	0.26	3.07	0.02	0.28
Mercury	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Molybdenum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nickel	0.13	0.00	0.00	0.15	0.01	0.01	0.17	0.01	0.02	0.19	0.00	0.02
Selenium	0.01	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.05	0.00	0.00
Silver	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thallium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vanadium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Zinc	0.43	0.02	0.02	0.77	0.03	0.04	0.74	0.03	0.07	0.70	0.00	0.07
RADIOMETRICS												
Uranium, Natural (mg/L)	1.27	0.05	0.05	1.02	0.04	0.08	1.10	0.04	0.12	0.86	0.01	0.13
VOLATILE ORGANIC COMPOUNDS												
1,1-Dichloroethene, mg/L	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,1,1-Trichloroethane, ug/L	0.00	0.00	0.00	0.00	0.00	0.00	14.15	0.00	0.00	0.00	0.00	0.00
1,2,4-Trimethylbenzene, ug/L	0.00	0.00	0.00	1.30	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00
Methyl ethyl ketone, ug/L	25.00	0.00	0.00	23.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Naphthalene, ug/L	39.33	0.00	0.00	18.20	0.00	0.00	48.33	0.00	0.00	0.07	0.00	0.00
Diesel Range Organics, mg/L	83.00	2.96	2.96	20.07	0.72	3.67	239.67	8.54	12.22	190.00	1.28	13.50
Gasoline Range Organics, mg/L	0.10	0.00	0.00	0.08	0.00	0.01	0.14	0.00	0.01	0.18	0.00	0.01

KENNECOTT URANIUM COMPANY																								
TMW-105																								
NORTHING: 148,581.02 EASTING: 323,943.82																								
		2003	2004															2005				2006		
ND = Non-detectable		12/30/03	1/19/04	2/11/04	3/23/04	4/12/04	5/11/04	6/15/04	7/13/04	8/5/04	9/20/04	10/12/04	11/4/04	12/7/04	1/12/05	2/9/05	3/16/05	4/11/05	5/10/05	7/18/05	10/5/05	10/31/05	1/19/06	
FIELD DATA mg/l:																								
Temperature (C)		8	8	8	19	21	28	40	24	21	27	11	11		10	13	12	18	20	32	11.3	N/A	9.5	
pH (Std. Units)		6.8	5	5.11	3.6	3.9	3.5	51	3.8	4	4.3				4.4	5	4.4	3.9	3.9	3.5	4.38		5.15	
Cond. (umho/cm)		800	1420	1100	1120	1380	1400	580	1100	1080	1140	920	960		980	160	340	1400	1440	1240	980		860	
TDS																								
MAJOR IONS mg/l:																								
Alk-CaCO3		39.5			1.6			-1							20			-1		-1	2	-1	5	
Bicarbonate (HCO3)		48.2			1.9			-1							25			-1		-1	3	-1	6	
Calcium (Ca)		168			303			334							322			333		429	406	427	310	
Carbonate (CO3)		-1			-1			-1							-1			-1		-1	-1	-1	-1	
Chloride (Cl)		23			67.3			56							54			84		113	118	128	89	
Fluoride (F)		0.2			0.4			0.4							0.3			0.4		0.4	0.5	-0.1	0.4	
Magnesium (Mg)		24.8			51.4			62.9							51.7			54		64.8	67.3	68.7	48.2	
Nitrate-N (NO3)		-0.1			-0.1			-0.1							-0.1			-0.1		-0.1	-0.1	-0.1	-0.1	
Potassium (K)		5.8			6.5			6							6.8			7.2		6.4	7	7.2	7.4	
Silica (SiO2)		28			53.1			51							43			50		55	52	51	44	
Sodium (Na)		60.5			73			92							71.5			84		106	107	104	85.9	
Sulfate (SO4)		637			1160			1290							1100			1210		1490	1440	1500	1160	
NON-METALS:																								
Cyanide (CN)		-0.005			-0.005			-0.005							-0.005			-0.005		-0.005	-0.005	-0.005	-0.005	
PHYSICAL PROPERTIES:																								
Cond (umho/cm)		1300			2180			5840							2380			2410		2700	2710	2890	2390	
pH		6.54			4.7			2.01							4.66			5.5		4.54	4.99	4.85	5.11	
TDS @ 180° C.		964			1880			2330							1830			2080		2430	2420	2400	1980	
METALS-DISSOLVED mg/l:																								
Aluminum (Al)		-0.1			2.4			2.9							1.3			3.7		3.5	2.8	2.8	1.1	
Arsenic (As)		-0.001			-0.001			0.002							0.001			0.003		0.001	0.001	0.001	0.001	
Barium (Ba)		-0.1			-0.1			-0.1							-0.1			-0.1		-0.1	-0.1	-0.1	-0.1	
Beryllium (Be)		-0.01			-0.01			-0.01							-0.01			-0.01		-0.01	-0.01	-0.01	-0.01	
Boron (B)		-0.1			0.16			0.2							-0.1			-0.1		0.1	0.1	0.2	-0.1	
Cadmium (Cd)		-0.005			-0.005			-0.005							-0.005			-0.005		-0.005	-0.005	-0.005	-0.005	
Chromium (Cr)		-0.01			-0.01			0.01							-0.01			-0.01		-0.01	-0.01	-0.01	-0.01	
Cobalt (Co)		0.087			0.138			0.16							0.117			0.184		0.193	0.197	0.202	0.177	
Copper (Cu)		-0.01			0.01			0.03							0.02			0.04		0.04	0.03	0.03	0.14	
Iron (Fe)		9.41			50.5			50							30.3			58.3		57.5	56.8	57.4	57.4	
Lead (Pb)		-0.01			0.04			-0.03							0.03			0.05		0.04	0.03	0.03	0.05	
Manganese (Mn)		1.09			2.28			2.54							2.19			3.07		3.21	3.22	3.42	2.45	
Mercury (Hg)		-0.0002			-0.0002			-0.0002							-0.0002			-0.0002		-0.0002	-0.0002	-0.0002	-0.0002	
Molybdenum (Mo)		-0.01			-0.01			-0.08							-0.01			-0.01		-0.01	-0.01	-0.01	-0.01	
Nickel (Ni)		0.08			0.13			0.15							0.13			0.19		0.21	0.2	0.23	0.2	
Selenium (Se)		0.01			0.013			0.018							0.01			0.054		0.084	0.083	0.086	0.031	
Silver (Ag)		-0.01			-0.01			-0.01							-0.01			-0.01		-0.01	-0.01	-0.01	-0.01	
Thallium (Tl)		-0.01			-0.01			-0.01							-0.01			-0.01		-0.01	-0.01	-0.01	-0.01	
Vanadium (V2O5)		-0.1			-0.1			-0.1							-0.1			-0.1		-0.1	-0.1	-0.1	-0.1	
Zinc (Zn)		0.17			0.43			0.77							0.5			0.7		0.72	0.67	0.67	0.69	
RADIOMETRIC pCi/l:																								
Uranium, natural		228			858			892							560			582		1100	589	687	183	
Radium 226		18.7			10.7			14.1							12			11.9		18.3	16.7	13.4	6.3	
Radium Precision +/-		1.5			1.1			1.3							1.1			1.2		1.6	1.6	1.3	1.2	
Radium 228		3.7			25.8			13.1							9.1			14.3		17	20.3	15.7	10.3	
Radium Precision +/-		1.5			2.4			1.2							1.1			1.2		1.7	1.8	1.6	1.4	
Comb. Ra226/228		22.4			36.5			27.2							18.6			26.2		35.3	37	29.1	16.8	
Thorium 230		-0.2			-0.2			-0.2							1.1			-0.2		3.9	-0.2	0.6	-0.2	
Thorium Precision +/-															0.4					1.1		0.4		
Lead (Pb210)		-1			-1			-1							-1			-1		-1	-1	-1	-1	
Lead Precision +/-																								
Gross Alpha		19.1			22.4			23.6							12.8			14.7		27.7	15.9	18.2	8.8	
Gross Alpha Precision +/-		1.4			1.3			1.5							1.1			1.3		3.4	2.7	2.5	1.7	
QUALITY ASSURANCE DATA:																								
TDS A/C Balance (dec. %)			1.02			1.13			1.23						1.1			1.14		1.08	1.1	1.05	1.13	
ORGANICS mg/L:																								
Diesel Range Organics (DRO)		22	25	290	20	15	220	14	5.2	15	40	57	32	630	40000	24000	420	190	130	50	110	52	800000	
Gasoline Range Organics (GRO)		ND	0.073		0.134	0.125	0.083	0.092	0.06	0.063	0.102	ND	ND	0.137	ND	ND	0.159	0.176	0.147	0.084	0.173	0.132	ND	
VOLATILE ORGANIC COMPOUNDS mg/L:																								
1,1-Dichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethene		ND	ND	0.0028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Naphthalene		ND	ND	0.12	0.048	0.041	0.054	0.023	0.0094	ND	ND	0.036	0.036	0.07	0.17	0.033	0.042	0.072	0.061	0.058	0.062	0.066	0.088	
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane		ND	0.013	0.02	ND	ND	ND	ND	ND	ND	ND	ND	0.0013	0.027	ND	0.034	ND	ND	0.0029	ND	0.0041	0.0019	ND	
1,2,4-Trimethylbenzene		ND	ND	0.0062	ND	ND	ND	ND	ND	ND	0.0013	0.001	0.0015	ND	ND	0.0079	ND	ND	0.0031	0.0029	0.003	0.0027	ND	
1,3,5-Trimethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
m+p Xylenes		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methyl ethyl ketone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND	
(1) - EPA MCL																								
(2) - WY Drinking Water Equivalent Level																								
(3) - WY VRP, Fact Sheet 12																								
(4) - EPA RBC - Tap Water																								

LABORATORY ANALYTICAL REPORT



Client: Kennecott Uranium Company
 Project: Sweetwater Uranium Project
 Lab ID: C06070363-001
 Client Sample ID: Perched Fluid by TMW 90 = 6600'

Report Date: 08/01/06
 Collection Date: 07/10/06
 Date Received: 07/11/06
 Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Total as CaCO3	8	mg/L		1		A2320 B	07/13/06 12:55 / th
Carbonate as CO3	ND	mg/L		1		A2320 B	07/13/06 12:55 / th
Bicarbonate as HCO3	10	mg/L		1		A2320 B	07/13/06 12:55 / th
Calcium	125	mg/L		0.5		E200.7	07/17/06 12:30 / cp
Chloride	31	mg/L		1		E200.7	07/17/06 12:30 / cp
Fluoride	0.1	mg/L		0.1		A4500-F C	07/13/06 14:09 / th
Magnesium	20.6	mg/L		0.5		E200.7	07/17/06 12:30 / cp
Nitrogen, Nitrate+Nitrite as N	0.9	mg/L		0.1		E353.2	07/12/06 13:42 / jal
Potassium	7.1	mg/L		0.5		E200.7	07/17/06 12:30 / cp
Silica	26	mg/L		1		E200.7	07/17/06 12:30 / cp
Sodium	44.9	mg/L		0.5		E200.7	07/17/06 12:30 / cp
Sulfate	486	mg/L		1		E200.7	07/17/06 12:30 / cp
NON-METALS							
Cyanide, Total Automated	ND	mg/L		0.005		E335.3	07/14/06 11:34 / eli-b
PHYSICAL PROPERTIES							
Conductivity	1030	umhos/cm		1.0		A2510 B	07/13/06 15:50 / jdh
pH	5.96	s.u.		0.01		A4500-H B	07/13/06 15:50 / jdh
Solids, Total Dissolved TDS @ 180 C	700	mg/L		10		A2540 C	07/13/06 15:59 / jdh
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	07/12/06 15:14 / sml
Arsenic	ND	mg/L		0.001		E200.8	07/12/06 15:14 / sml
Barium	ND	mg/L		0.1		E200.8	07/12/06 15:14 / sml
Beryllium	ND	mg/L		0.01		E200.8	07/12/06 15:14 / sml
Boron	0.2	mg/L		0.1		E200.7	07/17/06 12:30 / cp
Cadmium	ND	mg/L		0.005		E200.8	07/12/06 15:14 / sml
Chromium	ND	mg/L		0.01		E200.8	07/12/06 15:14 / sml
Cobalt	0.064	mg/L		0.001		E200.8	07/12/06 15:14 / sml
Copper	ND	mg/L		0.01		E200.8	07/12/06 15:14 / sml
Iron	0.32	mg/L		0.05		E200.7	07/17/06 12:30 / cp
Lead	ND	mg/L		0.01		E200.8	07/12/06 15:14 / sml
Manganese	0.98	mg/L		0.01		E200.8	07/12/06 15:14 / sml
Mercury	ND	mg/L		0.0002		E200.8	07/12/06 15:14 / sml
Molybdenum	ND	mg/L		0.01		E200.8	07/12/06 15:14 / sml
Nickel	0.05	mg/L		0.01		E200.8	07/12/06 15:14 / sml
Selenium	ND	mg/L		0.001		E200.8	07/13/06 15:48 / bws
Silver	ND	mg/L		0.01		E200.8	07/12/06 15:14 / sml

Report RL - Analyte reporting limit.
 Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Kennecott Uranium Company
 Project: Sweetwater Uranium Project
 Lab ID: C06070363-001
 Client Sample ID: Perched Fluid by TMW 90 = 6600'

Report Date: 08/01/06
 Collection Date: 07/10/06
 Date Received: 07/11/06
 Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - DISSOLVED							
Thallium	ND	mg/L		0.01		E200.8	07/12/06 15:14 / sml
Vanadium	ND	mg/L		0.1		E200.8	07/12/06 15:14 / sml
Zinc	0.09	mg/L		0.01		E200.8	07/12/06 15:14 / sml
RADIONUCLIDES - DISSOLVED							
Gross Alpha minus Rn & U	15.4	pCi/L		1.0		E900.1	07/12/06 11:55 / rs
Gross Alpha minus Rn & U Precision (±)	2.1	pCi/L				E900.1	07/12/06 11:55 / rs
Lead 210	ND	pCi/L		1.0		NERHL-65-4	07/13/06 12:00 / df
Radium 226	3.3	pCi/L		0.2		E903.0	07/25/06 14:06 / trs
Radium 226 precision (±)	0.4	pCi/L				E903.0	07/25/06 14:06 / trs
Radium 228	1.6	pCi/L		1.0		RA-05	07/20/06 15:00 / pj
Radium 228 precision (±)	0.8	pCi/L				RA-05	07/20/06 15:00 / pj
Thorium 230	0.5	pCi/L		0.2		E907.0	07/18/06 00:00 / df
Thorium 230 precision (±)	0.3	pCi/L				E907.0	07/18/06 00:00 / df
Uranium	0.102	mg/L		0.0003		E200.8	07/12/06 15:14 / sml
Uranium, Activity	68.8	pCi/L		0.2		E200.8	07/12/06 15:14 / sml
DATA QUALITY							
A/C Balance (± 5)	-4.92	%				Calculation	07/18/06 14:14 / cp
Anions	11.2	meq/L				Calculation	07/18/06 14:14 / cp
Cations	10.2	meq/L				Calculation	07/18/06 14:14 / cp
Solids, Total Dissolved Calculated	750	mg/L				Calculation	07/18/06 14:14 / cp
TDS Balance (0.80 - 1.20)	0.930	dec. %				Calculation	07/18/06 14:14 / cp
VOLATILE ORGANIC COMPOUNDS							
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,1-Dichloropropene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,2,3-Trichlorobenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,2,4-Trichlorobenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,2,4-Trimethylbenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr

Report RL - Analyte reporting limit.
 Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Kennecott Uranium Company
 Project: Sweetwater Uranium Project
 Lab ID: C06070363-001
 Client Sample ID: Perched Fluid by TMW 90 = 6600'

Report Date: 08/01/06
 Collection Date: 07/10/06
 Date Received: 07/11/06
 Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,3,5-Trimethylbenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,3-Dichlorobenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,3-Dichloropropane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
2,2-Dichloropropane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
2-Chloroethyl vinyl ether	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
2-Chlorotoluene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
4-Chlorotoluene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Benzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Bromobenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Bromochloromethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Bromodichloromethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Bromoform	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Bromomethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Chlorobenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Chloroethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Dibromomethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Ethylbenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Hexachlorobutadiene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Isopropylbenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
m+p-Xylenes	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Methyl ethyl ketone	ND	ug/L		20		SW8260B	07/19/06 16:19 / jlr
Methyl tert-butyl ether (MTBE)	ND	ug/L		2.0		SW8260B	07/19/06 16:19 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Naphthalene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
n-Butylbenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
n-Propylbenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
o-Xylene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
p-Isopropyltoluene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
sec-Butylbenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Styrene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr

Report RL - Analyte reporting limit.
 Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Kennecott Uranium Company
 Project: Sweetwater Uranium Project
 Lab ID: C06070363-001
 Client Sample ID: Perched Fluid by TMW 90 = 6600'

Report Date: 08/01/06
 Collection Date: 07/10/06
 Date Received: 07/11/06
 Matrix: Aqueous

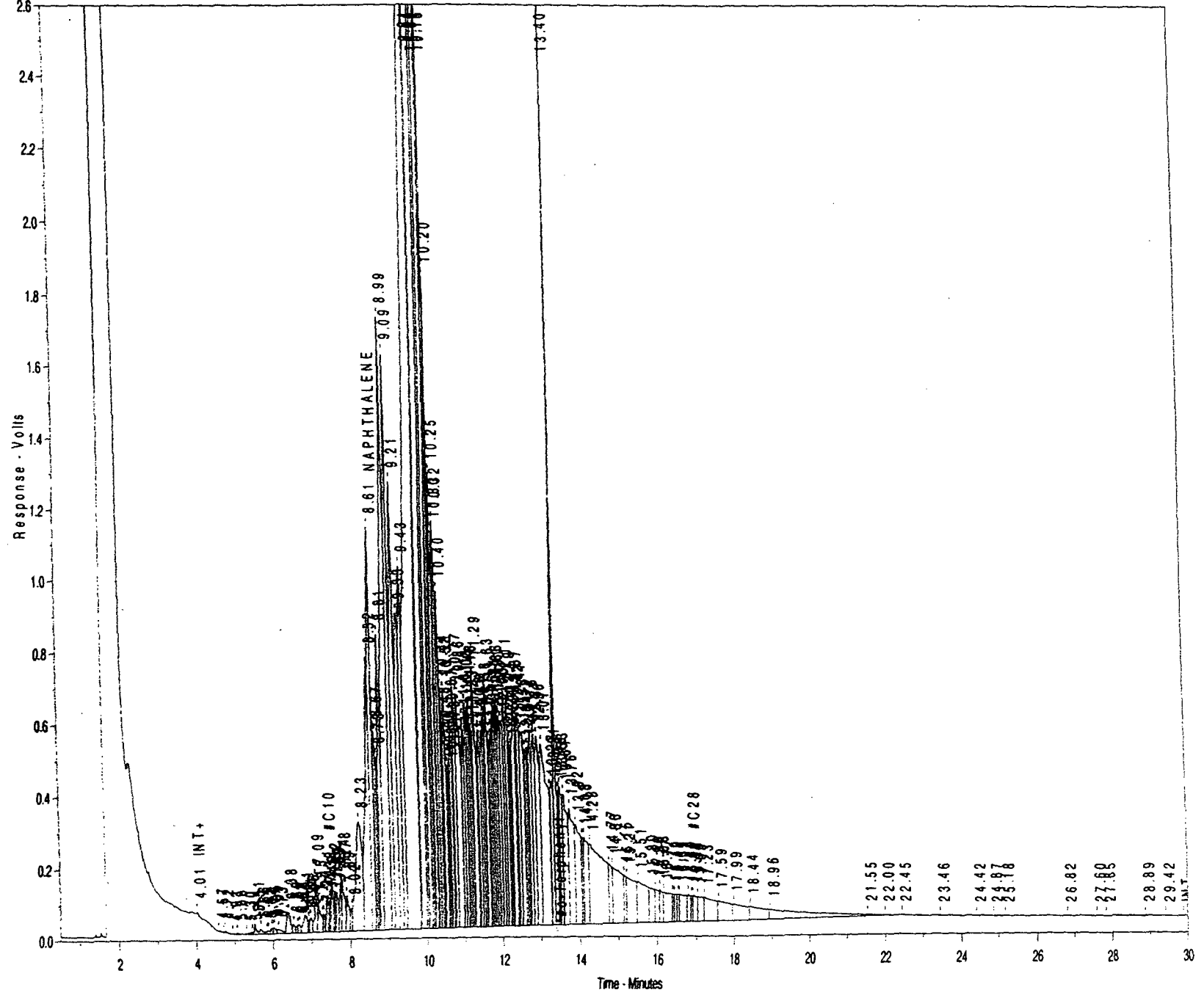
Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
tert-Butylbenzene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Tetrachloroethene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Toluene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Trichloroethene	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Vinyl chloride	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Xylenes, Total	ND	ug/L		1.0		SW8260B	07/19/06 16:19 / jlr
Surr: 1,2-Dichlorobenzene-d4	100	%REC			80-120	SW8260B	07/19/06 16:19 / jlr
Surr: Dibromofluoromethane	112	%REC			70-130	SW8260B	07/19/06 16:19 / jlr
Surr: p-Bromofluorobenzene	86.0	%REC			80-120	SW8260B	07/19/06 16:19 / jlr
Surr: Toluene-d8	100	%REC			80-120	SW8260B	07/19/06 16:19 / jlr
ORGANIC CHARACTERISTICS							
Diesel Range Organics (DRO)	12	mg/L		1.0		SW8015M as	07/18/06 00:03 / dj
Surr: o-Terphenyl	88.0	%REC			60-120	SW8015M as	07/18/06 00:03 / dj
Gasoline Range Organics (GRO)	0.043	mg/L	D	0.036		SW8015M as	07/13/06 13:18 / dh
Surr: Trifluorotoluene	103	%REC	D		80-120	SW8015M as	07/13/06 13:18 / dh

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

g:\org\hp1\0717DROH.0013.RAW

C06070363-001F ;0717DROH, \$HC-DRO-API-W,



Contaminated Material Excavation and Placement in the Tailings Impoundment

Operations began on December 5, 2005. A map showing the pre-excavation condition of the site is included and entitled **Catchment Basin Pre-Excavation (October 2005)**. Excavation of the contaminated soils was accomplished in the following steps:

- Fence removal/Site Preparation
 - Fencing and other items that would impede the excavation were removed.
- Topsoil removal
 - Topsoil east of the chain link fence was removed and the northern half of Topsoil Pile TS-2 was moved and all of it was placed on Topsoil Pile TS-9.
 - A total of 44,747 cubic yards of topsoil was added to Topsoil Pile TS -9 of which 33,950 cubic yards came from the northern half of Topsoil Pile TS-2 and 1,680 cubic yards were scraped from the ground. The additional fill in Topsoil Pile TS-9 is accounted for by swell.
 - This is outlined in a spreadsheet in Appendix 2.
 - An image of topsoil being loaded taken on December 15, 2005 is included below:



The following photographs were taken showing the thickness of the topsoil at various locations on December 15, 2005:



Taken December 15, 2005



Taken December 15, 2005



Taken January 16, 2006



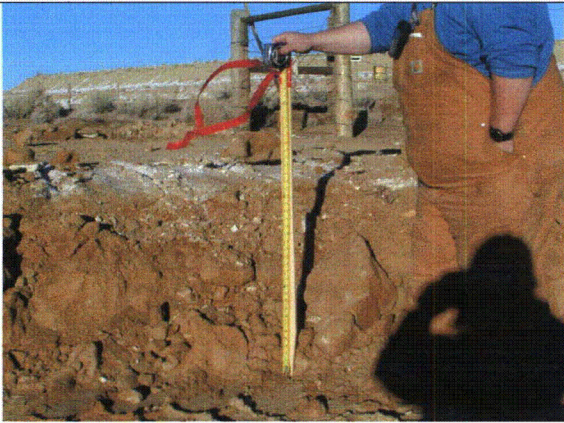
Taken January 16, 2006



Taken January 23, 2006



Taken January 23, 2006



Taken January 23, 2006



Taken January 23, 2006



Taken January 23, 2006



Taken January 23, 2006



Taken January 23, 2006



Taken January 23, 2006



- All topsoil was removed from the main excavation area by January 24, 2006.
- Topsoil removal was performed in a careful manner with thicknesses documented.
- All removed topsoil was stockpiled.
- The images shown above are of the topsoil along the eastern edge of the excavation from north to south.

Excavation Procedures

- Excavation operations were conducted in accordance with Standard Operating Procedures (SOPs)
 - MOP – 14 - Contaminated Soil Excavation – Catchment Basin Pre-Excavation Procedures (Training/Pre-Job Bioassay), Monitoring and Restricted Area Definition
 - MOP-15 - Contaminated Soil Excavation – Catchment Basin Pre-Excavation, Excavation, Sampling, Waste Placement, Backfilling, Topsoiling and Seeding Procedures
 - MOP – 16 - Contaminated Soil Excavation – Catchment Basin Health Physics Monitoring/Personnel Protection During Excavation
 - MOP-17 - Contaminated Soil Excavation – Catchment Basin Environmental Monitoring Procedures
- A restricted area was defined and fenced as per the drawing in Appendix 10 of Section XI – Health Physics.
- To facilitate decontamination a Shower/Change/Monitoring Trailer was installed in the fence surrounding the restricted area. All workers had to pass through this trailer when leaving the restricted area.
- This trailer was plumbed so that all gray water from the sinks, showers and washing machine went to a holding tank that was periodically pumped to the tailings impoundment.
- All sewerage from this trailer went to a separate septic system installed for that purpose.
- An image of the trailer being installed in January 18, 2006 is provided below:



- The locations of the trailer, gray water holding tank and septic system are shown on the maps of the excavation area.
- Excavation work was performed with trackhoes and the material hauled with twenty (20) ton Volvo haul trucks
- The excavation was wetted with a water truck to control dusting. In addition, magnesium chloride was applied to haul roads as a dust suppressant.
- Dust control efforts were successful as evidenced by the low concentrations of natural uranium, radium-226 and thorium-230 in high volume air samples, breathing zone samples and the low volume environmental air samples collected downwind of the facility.

The image below taken on March 27, 2006 shows a trackhoe filling a haul truck with a water truck wetting the excavated area for dust control:



The image below taken on April 20, 2006 shows two (2) track hoes filling haul trucks:



The image below taken on May 11, 2006 shows excavation work near the clarifier.

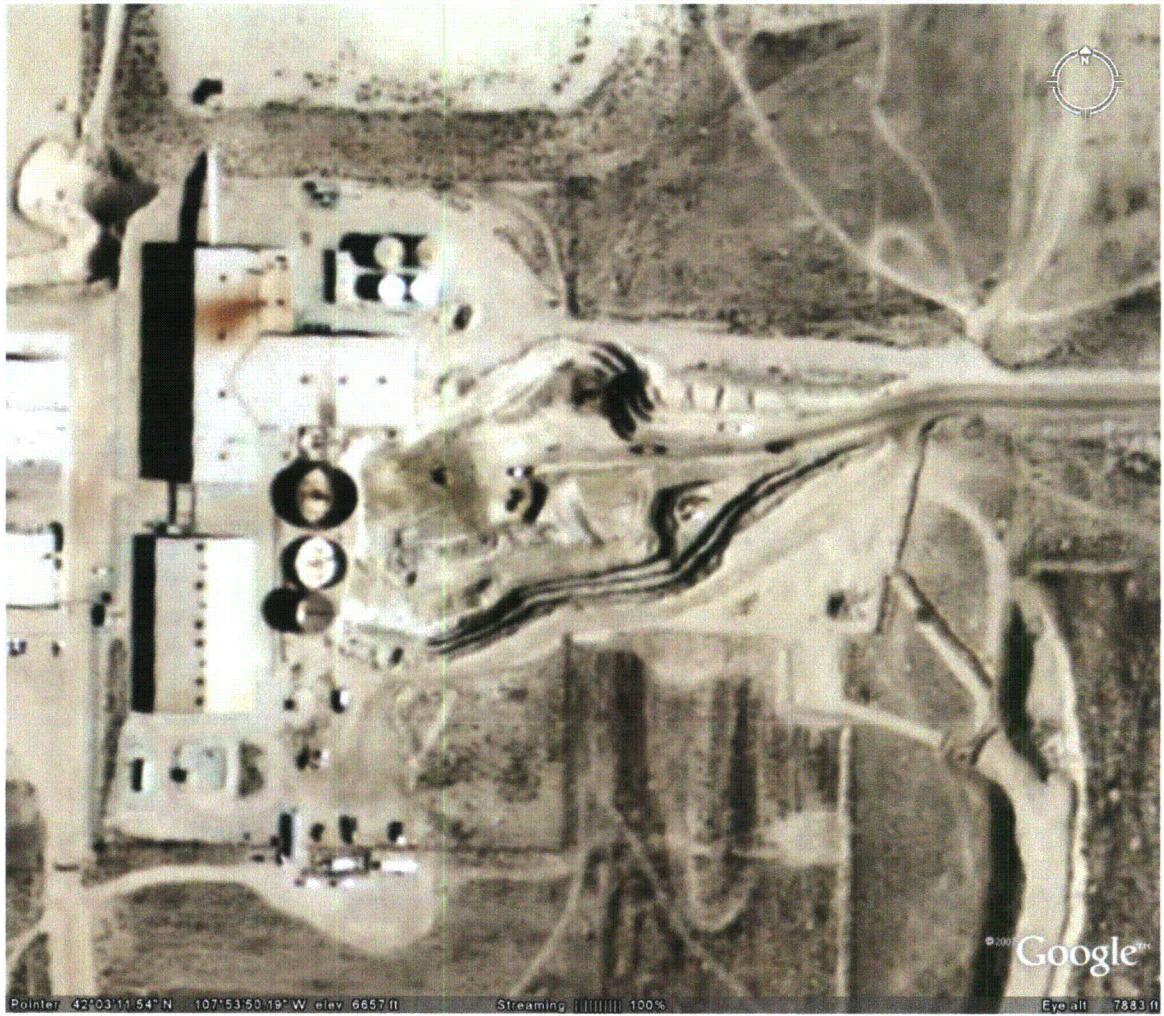


- The material was removed and hauled to the tailings impoundment and placed. A GoogleEarth image in this section shows the placement of the material in the impoundment.

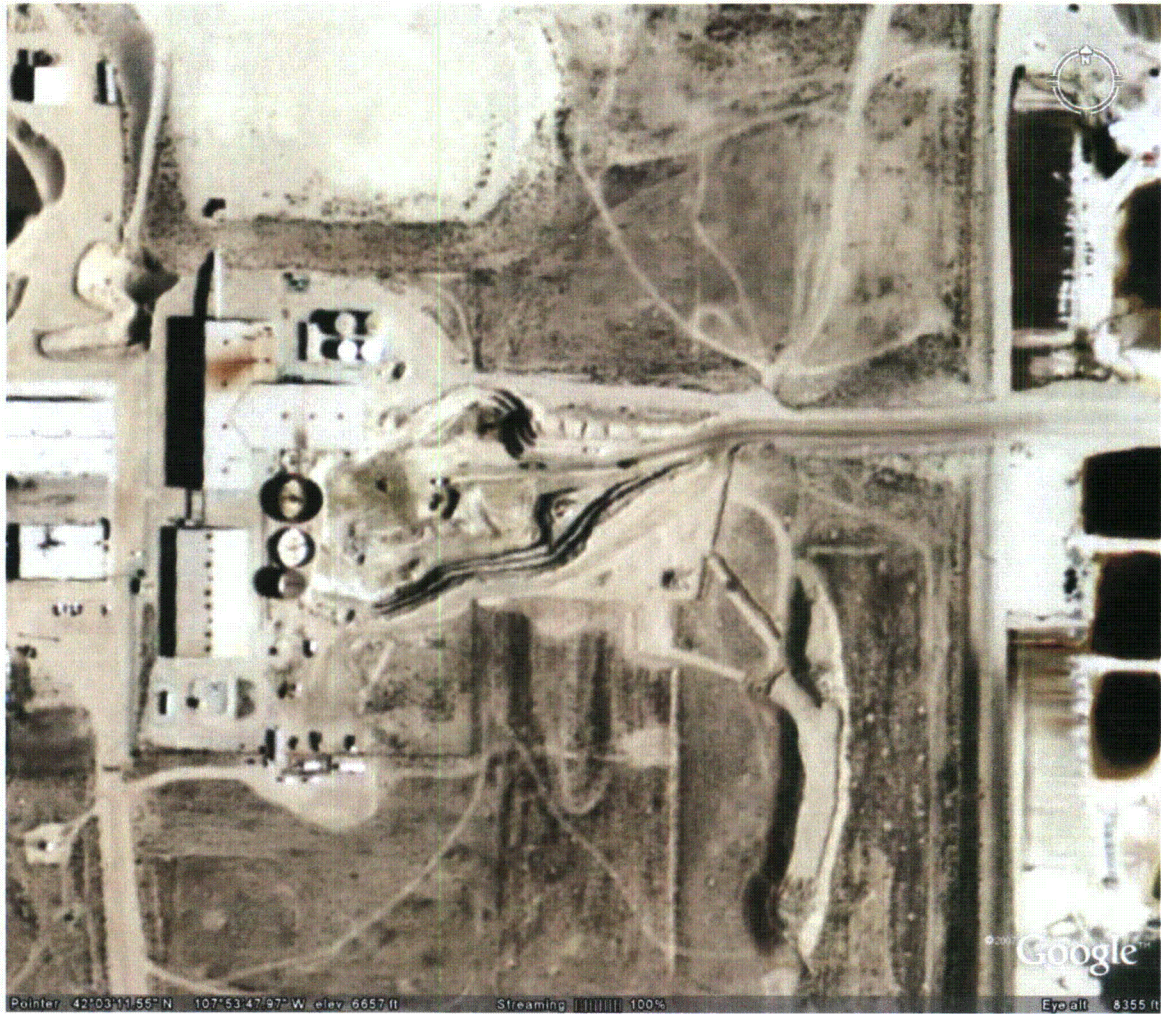
- The image below shows the placement of the material in the impoundment. The material was placed in the impoundment bottom and spread in lifts with a loader.



- To eliminate the hazards of operation of haul trucks on the tailings impoundment embankment (an unbermed roadway) a new ramp inside the impoundment was constructed of excavated material which led due east and straight down into the impoundment from the top where the exterior access road connected with the top.
 - A month by month accounting of the excavated material based on surveys conducted by a licensed surveyor is provided in Appendix 3.
 - Month by month contour maps showing excavation progress are provided in Appendix 1.
 - The excavation became quite large as shown in the image below taken in August 2006 and obtained from GoogleEarth:



The excavation at its greatest extent is shown on the map entitled **Catchment Basin Excavation Map**. The image below shows both the excavation and the tailings impoundment with the new access ramp:



The image below shows the excavation and the tailings impoundment showing the distribution of the excavated material in the impoundment:



The panorama below taken on July 14, 2006 shows the main portion of the excavation looking west into the highwall beneath the Raffinate Tank Slab:



The panorama shown below was taken on June 20, 2006 looking east from the top of the Raffinate Tank:

