

**Completion Report for Reclamation of Off-Pile Areas
at the Homestake Mining Company of California Uranium Mill**

Grants Operation

License No. SUA-1471

November 1995

Prepared for:

**Homestake Mining Company of California
Grants Operations
P. O. Box 98
Grants, NM 87020**

Prepared By:

**Environmental Restoration Group, Inc.
12809 Arroyo de Vista NE
Albuquerque, NM 87111**

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Completion Report for Reclamation of Off-Pile Areas at the Homestake Mining Company Uranium Mill

Grants Operation

1. Introduction

Homestake Mining Company of California (HMC), owner of the uranium mill near Grants, New Mexico, has completed the reclamation of the off-pile areas in compliance with the NRC-approved Reclamation Plan (HMC, 1993a) and the Radioactive Materials License Conditions (SUA-1471). The uranium mill facilities were decommissioned in 1994 and 1995 according to the Decommissioning Plan, as approved by the NRC as License Condition No. 29. Byproduct contaminated asbestos containing material was placed in the Large Tailings Pile. Mill debris containing process residues or yellowcake contamination was placed in the Large Tailings Pile. Structures and other less contaminated debris were placed in pits on the east and south side of the Large Tailings Pile. Mill site surface soils containing the majority of the radiological source term were removed and placed on the tailings pile. A clean soil cover was then placed over the entire 50-acre mill site. A report on the decommissioning of the mill and reclamation of the mill site is currently being prepared for submittal to the NRC (HMC, 1995a).

The cleanup of the windblown contaminated soils began early in 1988. A February 16, 1989 plan approved by the NRC as License Condition No. 19 committed HMC to remediate certain areas near the tailings piles that exceeded the 10.5 pCi/g cleanup criteria for Ra-226. After the mill decommissioning was complete, cleanup of the windblown contamination and other off-pile contaminated materials resumed in 1993 using cleanup criteria and verification procedures specified in License Condition 29C. Areas that were to be covered with clean materials were verified according to the NRC-approved procedure applicable at the time. Cleanup continued throughout 1994 and 1995 with the final verification completed on September 20, 1995. A new verification plan was approved by the NRC on March 1, 1995 and used for the verification of cleanup for the major portion of the decontaminated areas.

Figure 1-1 shows the Mill Site and Tailings Features as they currently exist. The Large Tailings Pile currently has radon barrier and an erosion protection layer placed on the side slopes according to the NRC-approved reclamation plan. The top of the pile currently has an interim cover and is awaiting final settlement before radon barrier placement. Evaporation Pond No. 1 was built on the small tailings pile. The new Evaporation Pond No. 2 was constructed in the spring of 1995.

Areas of the site currently used for activities associated with the groundwater restoration project include the collection ponds and evaporation ponds. Evaporation Pond No. 2 was placed on an area that had been decontaminated to meet the cleanup criteria. This pond along with the older collection ponds and Evaporation No. 1 will be decommissioned after the groundwater restoration project has been completed. All liners and contaminated residues and soils will be placed in Evaporation Pond No. 1 on the small tailings pile. Upon decommissioning, these off-

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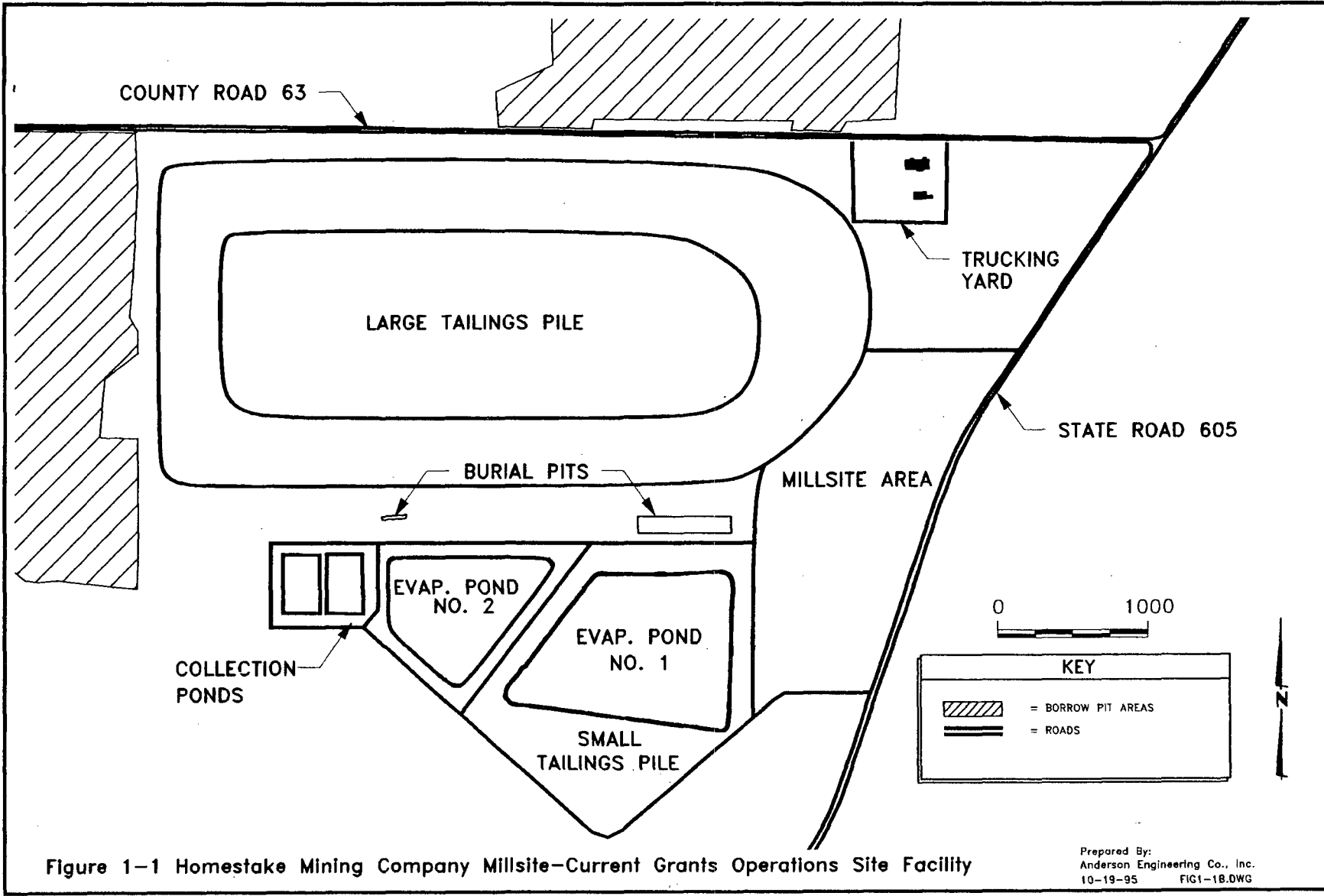


Figure 1-1 Homestake Mining Company Millsite-Current Grants Operations Site Facility

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10-19-95 FIG1-1B.DWG

pile areas will be resurveyed and verified as meeting the soil cleanup criteria. The Small Tailings Pile will then be reclaimed according to 10 CFR Part 40, Appendix A.

Other areas shown on the map that do not require verification are the borrow areas where several feet of borrow material have recently been removed. Prior to removal, some decontamination of the surface layer occurred by removal and placement on the top of the tailings pile. Surface soil samples were taken to assure that the area was suitable as a borrow source for radon barrier material. The characterization data are presented in Section 5.0. Additional confirmation that the borrow material was not contaminated with windblown tailings was presented in Table 3-1 of the report, Final Radon Barrier Design for the Large Tailings Pile (HMC, 1995b).

This report consolidates all data taken over the three-year reclamation period to demonstrate that the areas have been decontaminated to the 10 CFR Part 40, Appendix A criteria. During the reclamation period, new technology became available that enabled site characterization and verification data to be obtained in a much more accurate and less costly manner than had been used previously. Verification plans were developed based on this technology and approved by the NRC. For work completed prior to the new technology, the areas were verified using the plan that was approved at that time. Therefore this report includes data for areas verified using the two different verification methods.

2. Cleanup Criteria

The soil cleanup criteria for the site are specified in 10 CFR Part 40, Appendix A, Criterion 6. The Ra-226 cleanup for land, averaged over 100 m², may not exceed the background concentrations by more than 5 pCi/g in the top 15-cm layer beneath the surface. For 15-cm layers more than 15 cm below the surface, the average Ra-226 concentration is limited to 15 pCi/g above natural background levels. For areas not meeting the soil cleanup limits, the radon emissions must be limited to 20 pCi/m²s and the area must meet the criterion for longevity of stabilization.

The NRC-approved Ra-226 background concentration for the site is 5.5 pCi/g which was incorporated in the cleanup criteria in Amendment No. 15 of License SUA-1471. Therefore the cleanup criteria for the HMC site limits the Ra-226 concentration to 10.5 pCi/g and 20.5 pCi/g for the surface and subsurface 15-cm thick layers, respectively.

3. Verification Procedures

3.1 Verification Procedure Based on Soil Samples and Gamma Measurements at Grid Intersection Points

The verification procedure used in the initial verification activities was based on License Condition No. 39 of License Amendment No 15 (NRC, 1993). Two areas were identified as shown in Figure 3-1. Within the line shown in the figure, the verification plan called for soil samples to be collected at a minimum of every 50-meter grid point and gamma-ray measurements made at ground level at every 10-meter grid point. Outside the boundary, soil samples were to be collected at every 100-meter grid point with the gamma measurements made at every 10-meter grid point. This procedure was implemented for those areas verified prior to March 1, 1995 at which time the NRC approved a new procedure (NRC, 1995) based on the use of the Global Positioning System (GPS)-based radiological surveys and soil samples as discussed below. This was approved in License Amendment No. 20.

A slight modification to the procedure approved as License Amendment No. 15 was implemented for the road ways. The modification was necessary since the roadways were long narrow strips of land which did not lend themselves to the 50-meter grid for soil sampling. This modified procedure was approved for use in the roadways as a part of License Amendment No. 20.

The License Amendments and Procedures for verifying the off-pile areas are included as Appendix A.

3.2 Verification Procedure Using Global Positioning System-Based Gamma Surveys and Soil Samples

The Global Positioning System(GPS)-based radiological surveys generate high density gamma survey data with relative ease since the gamma data are recorded automatically every two seconds along with the corresponding location coordinates. Studies were done to correlate the gamma-ray count rate data to the Ra-226 concentration in soil. Action levels were developed based on the gamma data to indicate where additional cleanup was required. After all cleanup was completed, the area was resurveyed according to the following procedure approved for use by the NRC (NRC, 1995).

Two zones were considered for soil verification purposes with different approaches taken for each zone. The inner zone encompasses the area in the immediate vicinity of the large and small tailings piles and mill site as shown in Figure 3-2. All surface soil within the inner zone excluding the tailings piles, the two debris disposal pits, and the mill site are included in the inner zone. All areas noted as excluded have or will be covered with fill or radon barrier as indicated in the NRC-approved Reclamation Plan. This inner zone has a higher probability of the existence of localized contaminated areas and is also influenced by gamma-ray shine from the small tailings pile. The outer zone includes all of the area outside of the inner zone that has

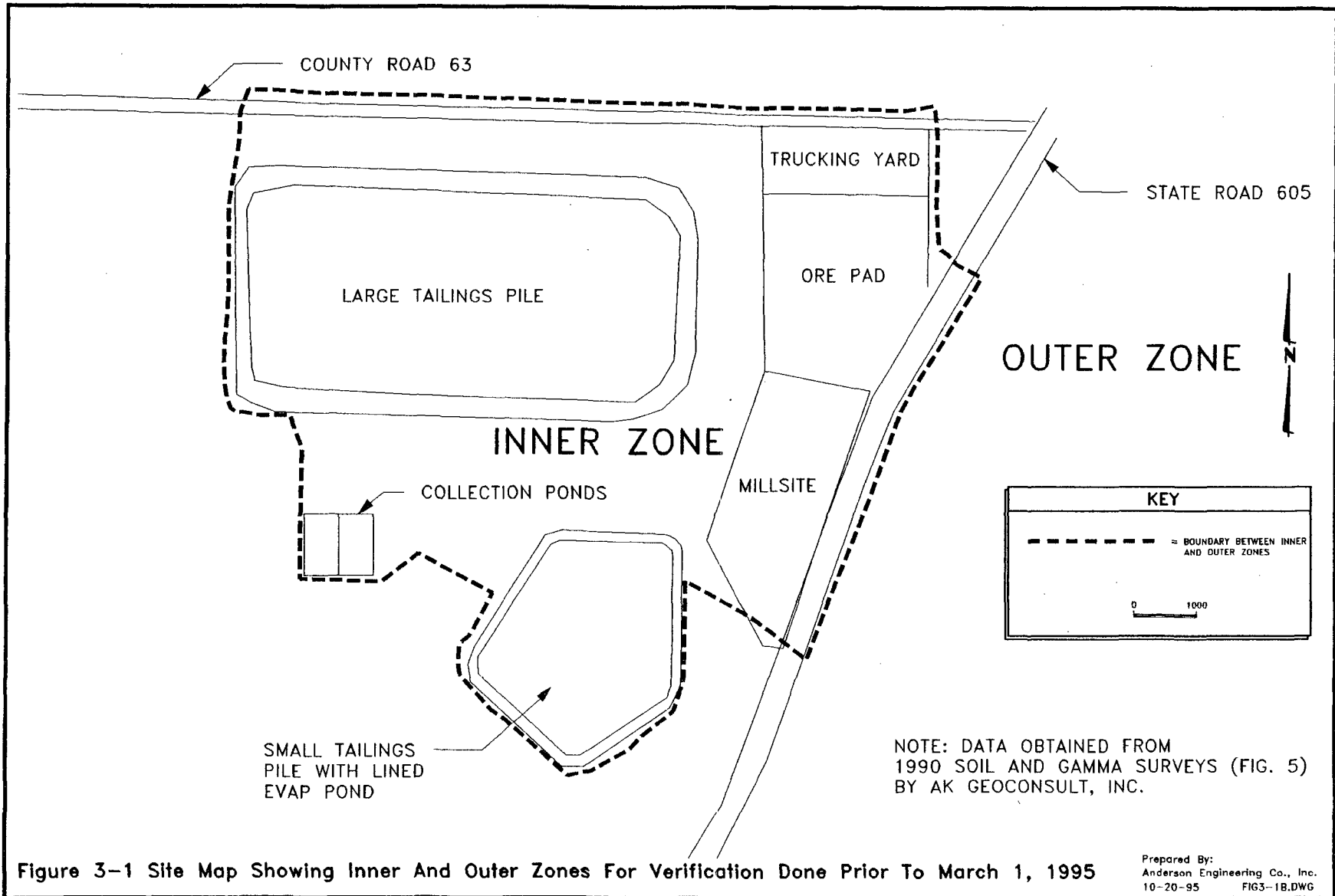


Figure 3-1 Site Map Showing Inner And Outer Zones For Verification Done Prior To March 1, 1995

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10-20-95 FIG3-1B.DWG

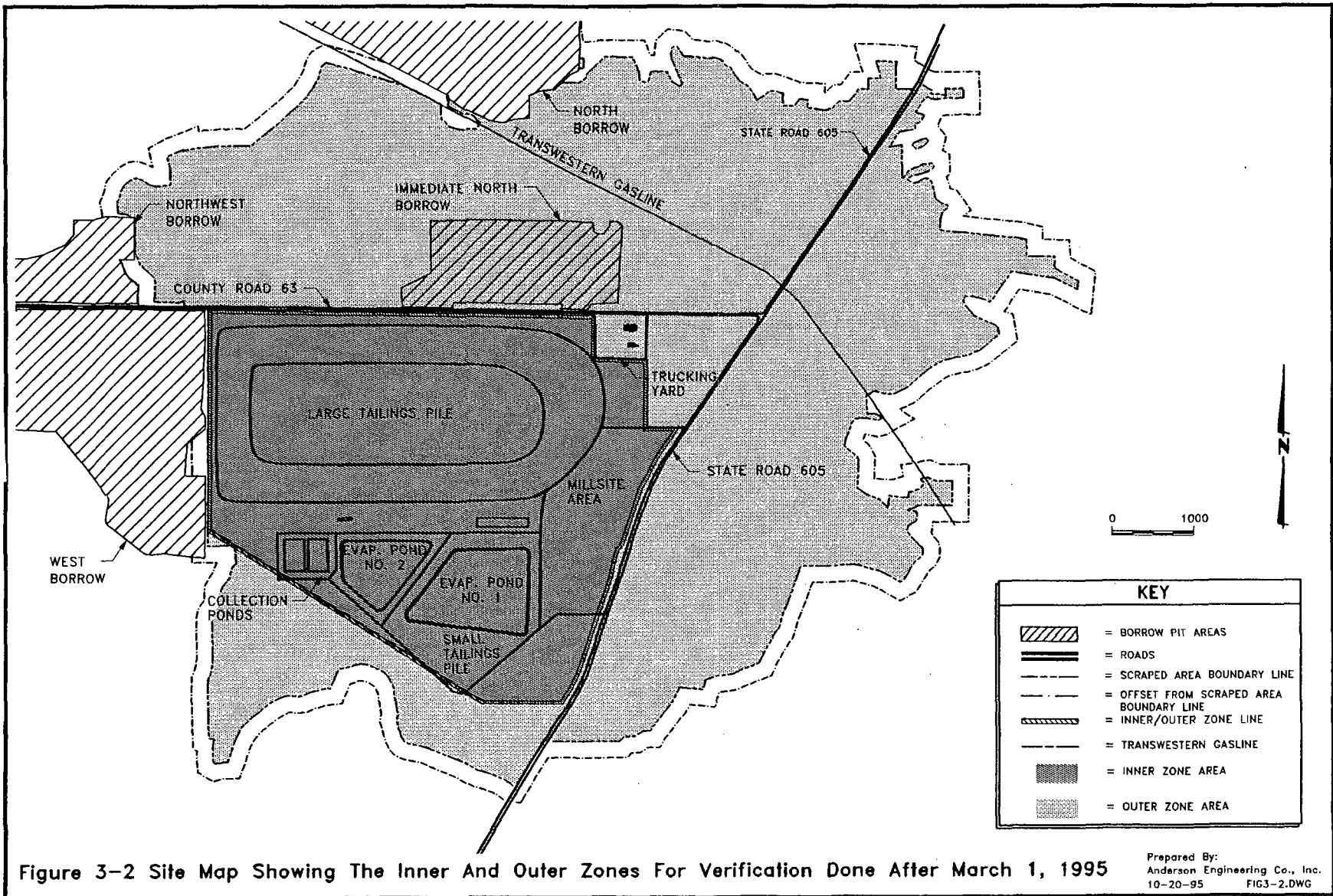


Figure 3-2 Site Map Showing The Inner And Outer Zones For Verification Done After March 1, 1995

been affected by windblown tailings or ore dust. The outer zone is more homogeneous in that the characteristic size of contaminated areas was normally hundreds of meters across. Because of the difference in the two zones, individual verification plans were prepared for each zone.

For the inner zone, a GPS-based gamma survey was conducted to assure that all 100-m² areas had an average count rate of less than 28,000 cpm. If gamma shine from the uncovered small tailings pile did not allow removal to the 28,000 cpm action level to be achieved, the entire area above 28,000 cpm was divided into 100-m² grids and sampled using a five point composite sample and analyzed for Ra-226. All other areas were divided into 500-ft grids. The gamma survey map was used to identify the 100-m² grid block within each 500-ft by 500-ft grid having the highest average gamma count rate. A five point composite sample was prepared for each grid block by taking 6-inch deep surface samples. The NRC-approved procedure provided for areas exceeding the 10.5 pCi/g Ra-226 cleanup criterion to be further excavated and a new gamma survey done. If any sampled area required additional decontamination, the second highest area within the grid block was to have been sampled and evaluated. This procedure was to have been followed until it was evident that the entire 500-ft grid block meets the cleanup criterion of 10.5 pCi/g.

For the outer zone, beginning at the closest point near the northwest corner of the Large Tailings Pile (but within the outer zone), 500-ft grids were established in an easterly direction extending to the State Highway 605. All areas had been cleaned so that the average gamma reading for any area of 100-m² size was 21,000 cpm or less. The 100-m² grid block within each 500-ft by 500-ft grid block having the highest average gamma reading was sampled and analyzed for Ra-226. A five-point composite sample was prepared from each of 30 five hundred-ft grids from the north side of the Large Tailings Pile. An additional 10 grids were sampled in a similar manner from each of the areas in the southerly direction and easterly direction at the boundary of the inner zone and outer zone.

A statistical test was specified to determine whether the mean concentration of the 50 grid blocks is 10.5 pCi/g or less at the 95 per cent confidence level using equation 8-13 of NUREG/CR-5849. Since this represents the mean of a set of 50 biased samples (selected from the grid that has the highest gamma exposure rate), the passing of this test provides assurance that the error rate is very low for the entire sample set made up of all the possible grids that could have been sampled.

If any sample was found to exceed the 10.5 pCi/g limit, the area was to have been recleaned and a new gamma survey done. For any grid block that failed the 10.5 pCi/g criterion, the 100 m² grid block with the second highest average gamma reading was to have been sampled and analyzed in a similar manner. This procedure was to have been followed until it was evident that there is a high probability that all portions of the grid block meets the cleanup criteria.

If the data passed the statistical test (equation 8-13 of NUREG/CR-5849), HMC was allowed to establish 1000-ft grids for the remaining portion of the outer zone. The 100-m² grid block having the highest average count rate within each 1000-ft grid was then sampled and analyzed

for Ra-226 in a manner as described above. Equation 8-13 of NUREG/CR-5849 was used for this set of samples to demonstrate compliance with the desire to clean all grid blocks to meet the 10.5 pCi/g cleanup criterion with a low error rate.

The test provided for the situation where if the mean of the samples is less than the 10.5 pCi/g criterion but the data fails the statistical test, HMC would follow procedures similar to those recommended in Section 8.6 of NUREG/CR-5849. The number of samples would have been increased to include the grids with the second highest average gamma levels and again perform the statistical test. This could have been done until the statistical test is met. In any case, all grid blocks that were sampled and measured to exceed the 10.5 pCi/g were to have been recleaned and resurveyed.

If the statistical test for the samples from the highest samples within the 1000-ft grid blocks would have failed, HMC would have established 500-ft grids over the entire outer area and sampled the 100-m² grid block lying to the northeast of each 500-ft grid line intersection. The northeast grid was proposed to assure that no bias was factored into the sampling strategy.

The gamma-ray count rate from the GPS-based radiological survey equipment is recorded once every 2 seconds and represents an average count rate over the field of view of the detector (placed 18 inches above the ground surface). The fact that the detector is moving slowly along the traverses also indicates that the count rate is influenced by the count rate behind the moving system. Therefore, each number represents an average over an area with dimensions of approximately 3 meters by 2 meters, or approximately 6 square meters. In order to obtain a good estimate of the mean gamma count rate for a large area, fewer measurements are required compared to point measurements since each number represents an average over a rather large area.

The density of measurements within any 100 m² grid block averaged between 8 and 9. However the uniformity of data depends on operator skill and topography. In some cases, areas on maps may have as few as 5 or 6 records. Homestake reviewed all data maps and where the density was considered too low to assure a good average gamma level, additional data were obtained and added to the data base. For the outer zone where gamma levels are uniform and slowly varying, as few as 5 records were considered adequate; for the inner zone where the characteristic size of contaminated areas may be smaller, a minimum of 7 records per 100 m² was considered adequate.

The verification procedure has been included in Appendix A.

4.0 Site Coordinate Systems

The major coordinate system used by HMC for the site is expressed in State Plane Coordinates. However, in the expression of sampling points and grids it is normally desirable to adopt naming conventions for points and grid blocks. During the initial cleanups and verification where the verification plan was based on the soil samples taken at grid intersection points as described in Section 3.1, the nomenclature shown in Figure 4-1 was used to reference points. Three points were established, A, B, and C as shown. The numerical increments to the north, south, east, and west represent 300 feet. A point directly north of point "C" at a distance of 300 ft is labeled CN1.0. Each 300 feet segment is divided into 100 feet segments. A point 100 feet north of point CN1.0 is CN1.1, a point 200 feet north of CN1.0 is CN1.2, and a point 300 feet north of CN1.0 is CN2.0. Similarly, points in the three other directions are similarly referenced and may be referenced relative to point A, B, and C. The only exception to this is CW7.0, CW8.0, and CW9.0 which lie on even increments of 100 feet from point C as shown in Figure 4-1 but do not follow the 300-ft unit convention described above. The only place that these references were used, however, is in the cleanup of the mill site which is not addressed in this report. Points off the principal axes are referenced using the conventional (x,y) coordinate nomenclature, where x and y are defined above.

The coordinate labeling convention described above was not used for the areas where the GPS radiological surveys were performed. For ease in computerized data management, the state plane coordinates were used for all gamma data recorded. All grid blocks were referenced by the coordinates of the northwest corner, regardless of size. Grid blocks were named according to the convention shown in Figure 4-2. Major grid lines one thousand feet apart were created from north to south and east to west across the site corresponding to thousand feet increments of state plane coordinate system grid spacing. The East-West rows were labeled from A to L while the North-South columns were labeled from 1 to 15. Each 1000-ft by 1000-ft grid block is named by its row and column position such as E02. If the major grid block as shown in Figure 4-2 is E02, then it can be seen that E02 is divided into four 500-ft square grid blocks, E021, E022, E023, and E024. These 500-ft grid blocks are further divided into 100-ft square grid blocks as seen in the figure. Reference to these 100-ft grid blocks shown in the figure would be E02401, E02402, ... E02425. Further subdividing into the 33.3-ft square grid blocks would be done by adding the respective number of the 33.3-ft square grid block as given in the figure. The use of 33.3-ft grid blocks for verification was used since the area is approximately 100 m² which relates to the cleanup criteria which averages the Ra-226 and gamma count rate over areas of 100 m².

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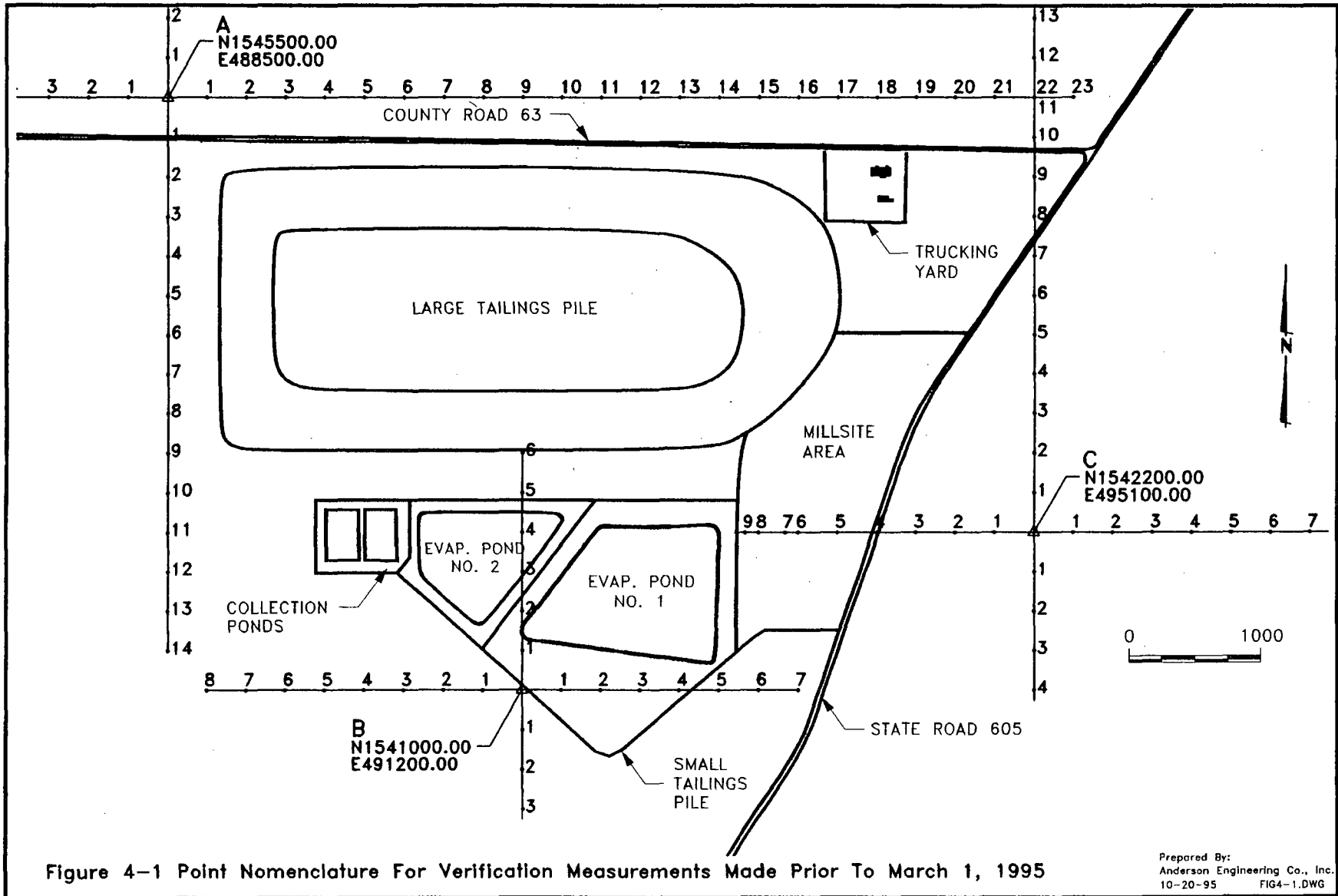


Figure 4-1 Point Nomenclature For Verification Measurements Made Prior To March 1, 1995

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10-20-95 FIG4-1.DWG

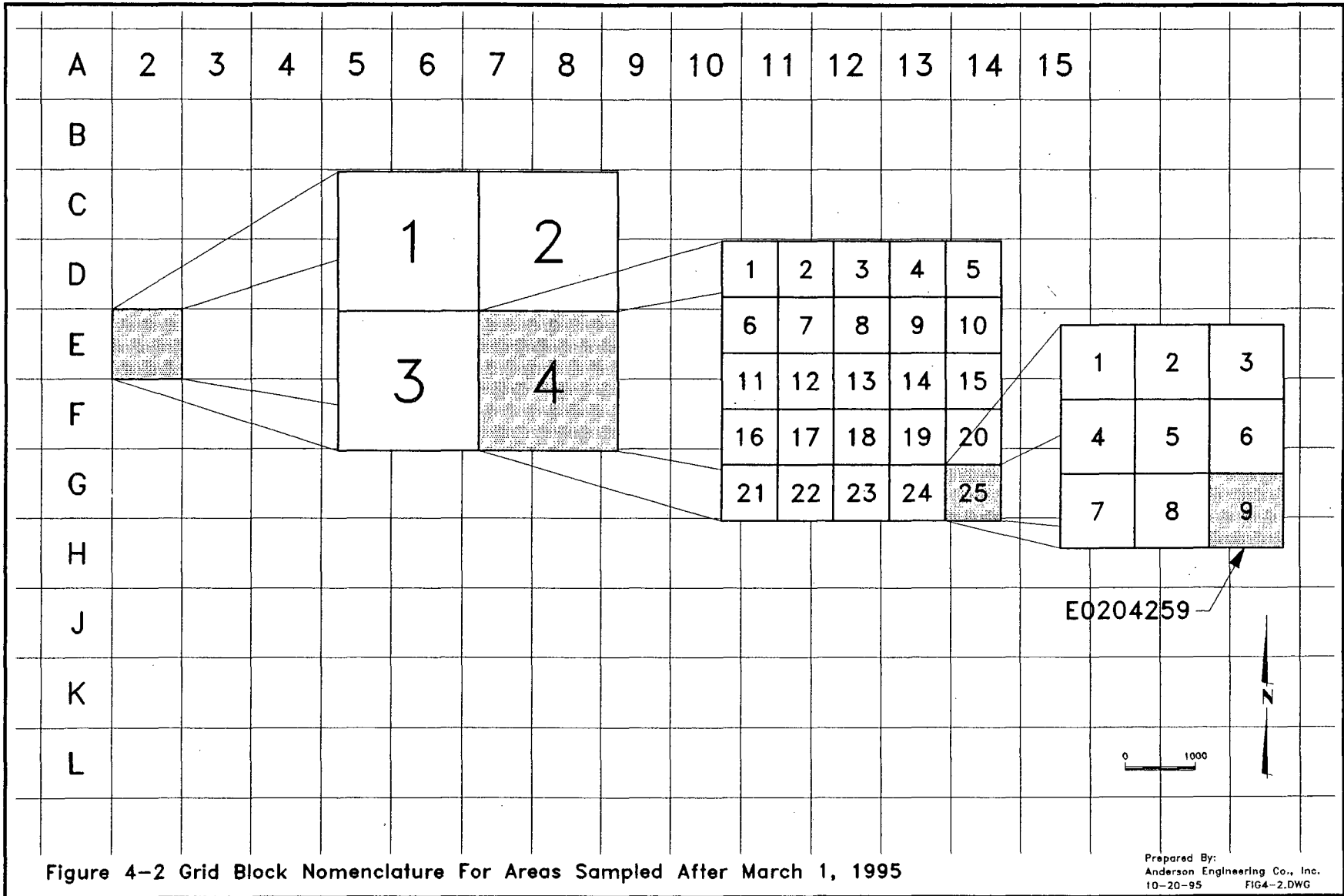


Figure 4-2 Grid Block Nomenclature For Areas Sampled After March 1, 1995

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10-20-95 FIG4-2.DWG

5.0 Characterization of Areas to be Used for Material Borrow

The areas used for borrow material are shown in Figure 3-2. The North, Northwest, and West Borrow Areas are located primarily out of the influence of windblown tailings from the pile as can be observed from the contamination zone boundary also shown in Figure 3-2. A comprehensive borrow area study was conducted to identify borrow sources near the site (HMC, 1994). Twenty-one soil samples randomly selected from the North Borrow Area showed near or below normal background values for the site. The Northwest Borrow Area was sampled on February 21, February 23, and March 8-9, 1994 by taking 0-6 inch deep and 6-12 inch deep samples at 34 locations on a grid of 300 feet. All results were at background levels. The data and sampling locations are provided in Appendix B.

The West Borrow Area was sampled on March 5, 1993, February 17, 1994, and March 8-9, 1994 by taking 110 samples up to depths of six feet. All samples taken met the cleanup criteria with the highest sample having 6.28 pCi/g Ra-226. The data and a map showing the sampling locations are provided in Appendix D.

The development of the Immediate North Borrow Area was done in May-June 1994. Prior to the use of the area, the top surface layer was removed and placed on the large tailings pile. Soil samples were taken to confirm that the area had been decontaminated. The results of 86 soil samples were taken which averaged 3.6 pCi/g. In reviewing the data, a few samples were reported as above the 10.5 pCi/g criterion for unrestricted release. While HMC staff believe that these areas were further remediated, no documentation could be found. The material was then used as radon barrier on the West and North Side Slope of the Large Tailings Pile. Characterization data for the Immediate North Borrow Area is provided in Appendix B.

As indicated in earlier, the borrow material from all of these areas, with the exception of the North Borrow Area, was used as interim cover on the top and side slopes of the Large Tailings Pile and for radon barrier on the North, West, and South side slopes. These materials were sampled after placement on the Large Tailings Pile (see Table 3-1 of HMC, 1995) and found to have background levels of Ra-226. The North Borrow material has been used for the radon barrier on the east side slope, aprons of the north and south side slope, and will be used for radon barrier on the top of the Large Tailings Pile.

Since the tailings on the Large Tailings Pile have been covered, there is no potential for the areas used for borrow to have become contaminated by windblown tailings. Therefore no verification measurements were required for the borrow areas.

6.0 Verification of Soil Cleanup

The verification measurements were done under two different sets of NRC-approved procedures using the two different conventions for labeling sampling points. The verification procedures and grid-naming and point-location conventions have been discussed in Section 3 and Section 4.

6.1 Areas Verified Using Procedures Based on Grid Intersection Sampling and Gamma Measurements

Areas verified using this procedure consist of a few areas that were verified prior to the revision to the Verification Plan approved by the NRC on March 1, 1995. These areas include the Trucking Yard, areas immediately adjacent to the toe of the large tailings pile, county road removal, State Road 605 right-of-way, and other areas where it was desirable to decontaminate and verify early in the reclamation period. The data for these areas are presented below.

6.1.1 Trucking Yard Area

The area known as the Trucking Yard Area shown in Figure 1-1 was decontaminated and verified in preparation for further use in managing the decommissioning of the site. After the contaminated soil was removed, thirty-one soil samples were taken and analyzed. All sample results were below the Ra-226 cleanup criterion with the maximum measured value of 6.9 pCi/g. Because of the high shine from the large tailings pile, no gamma readings were recorded. The data are presented in Appendix C along with a map showing the location of the Trucking Yard Area. In reviewing the data, no soil samples were taken from an small area near the southwest corner of the parcel. This was the location of the fuel area which was later excavated to a significant depth to remove fuel contaminated soils.

While no additional soil samples were taken, a radiological survey was done on all accessible areas of the Trucking Yard area using the GPS-based radiological survey equipment. This survey was done after the Large Tailings Pile had been covered and therefore was not influenced by gamma shine from the pile. An isocontour map is included as Figure C-1 in Appendix C which shows that the gamma-ray count rates in the area that was not sampled meets the gamma-ray action levels for the outer perimeter. The gamma map indicates elevated gamma count rates in other portions of the Trucking Yard. These levels were due to the shine from water processing equipment that was stored on the site. The soil sample results along with the gamma survey data provide reasonable assurance that the area meets the cleanup criteria. Clean soil was applied to the area which was then used for management of the remedial construction activities.

6.1.2 North Toe Area

The north toe of the Large Tailings Pile lies within a few yards of the County Road

63 right of way. To assure that this narrow strip of land meets the cleanup criteria, a line along the strip was sampled at 100-ft intervals, with the sampling points identified by the site control point "A". A total of 44 samples were taken on February 24, 1994 and analyzed for Ra-226. None of the samples exceeded the 10.5 pCi/g Ra-226 criterion with the exception of samples No. 4634 and No. 4646. These samples were reported to have Ra-226 concentrations of 27.65 and 11.5 pCi/g, respectively. All samples were sent to a vendor laboratory for Ra-226 analysis and U-nat analysis. The Ra-226 analyses agreed well with the analyses of the HMC on-site laboratory. The uranium concentrations on the samples taken near the northeastern corner of the Large Tailings Pile were elevated in uranium, probably as a result of precipitate from water seepage from the Large tailings Pile. The aprons were added to the pile in part to cover this contamination that extended to several feet beneath the surface. The data for the North Toe area is included in Appendix D.

6.1.3 West Toe Area

One hundred ten samples were taken on February 17, 1994, March 5, 1993, and March 8-9, 1994 to demonstrate that the area west of the Large Tailings Pile was free of contamination, including the area later to be known as the West Borrow Area. Locations of these samples were identified using Control Point A of the site coordinate system. The data are presented in Appendix D.

Soil samples were taken at depths up to six feet deep in the area to be used as borrow. Samples were taken down to 12 inches near the West Toe of the Large Tailings Pile. All samples taken met the cleanup criteria with the highest measured concentration being 6.28 pCi/g Ra-226. Because of the high gamma shine from the pile, no gamma measurements were documented.

6.1.4 Ore Spillage Area Near the North Ore Storage Pad

During the cleanup of the north ore storage pad, the area contiguous to the ore pad had become contaminated with ore and windblown tailings. As a part of decommissioning the ore pad, the surface soils were removed and consolidated with the tailings. This area lies north of mill site between the mill site and the Trucking Yard Area.

Confirmation 6-inch deep soil samples were taken using the site control point coordinate system using control point "C". The soil samples were taken on March 8-9, 1994, February 21, 1994, and February 23, 1994. The laboratory results are included in Appendix E where the sampling locations are shown on a map that is enclosed. Thirty five sampling locations representing a grid spacing of 100 feet are shown on the map. Forty-seven soil sample results are provided in the table, with 12 being duplicate samples. Only one sample was measured above 10.5 pCi/g (13.52 pCi/g). However, another sample reportedly taken at the same location was reported

as 3.33 pCi/g. This may have been a second sampling after the area had additional material removed. Five QA samples submitted to Eberline Laboratory indicated agreement that the Ra-226 concentrations were below 10.5 pCi/g. The U-nat concentrations were also measured and were below 35 pCi/g, a value normally accepted for unrestricted release of property. Splits of these samples were also analyzed by Energy Laboratory with similar results for Ra-226. However, the U-nat concentration for one of the samples was measured at 69 pCi/g.

After the area was verified as clean, approximately two feet of clean borrow material was placed on the area to restore it to the initial grade. Because of the gamma shine from the Large Tailings Pile, no gamma measurements were documented.

6.2 Verification of Road Right of Ways

The cleanup of the State and County roads was done under agreements where backfilling excavated areas was required prior to obtaining the final radiological assay results. Soils on both sides of State Highway 605 were removed where the contamination could or was known to have arisen from site operations. This included the impact from windblown tailings as well as the two ore storage pads. However, a decision was made to limit the distance from the mill site at which the cleanup would be done since most of the roads in this region have uranium ore spillage from the transport of ore. Characterization data are presented that demonstrate that the contamination along State Highway 605 north of the mill site arises from ore spillage and therefore is not the responsibility of HMC. All data for the road ways is included in Appendix F.

6.2.1 Verification of State Highway 605 Right of Way along Mill Site

The verification of the State Highway 605 right of way along the mill site was done using the NRC-approved verification procedure included in Appendix A. Stations were surveyed at 25-ft intervals along each side of the road extending from the County Road 63 intersection to the entrance to Hamilton Construction south of mill site. The width of the right of way was variable, extending to the fence line in both directions. Gamma-ray measurements were made by walking within the 25-ft interval along each side of the road and recording the readings for each interval. After being convinced that the area met the gamma-ray action levels, soil samples were collected at approximately one-half the excavation width along each side of the road at 150-ft intervals. These samples were analyzed for Ra-226 using gamma-ray spectroscopy.

The excavation of tailings contaminated soils was done under an agreement with the State of New Mexico whereby HMC agreed to backfill the excavated area at the end of each day. This made it impossible to obtain soil sample results prior to placing backfill.

Two different gamma measurement instruments were used to guide the excavation and

to take the required gamma measurements. A Ludlum 2221 ratemeter/scaler and a Ludlum 44-10 NaI detector with a lead collimating shield was used with an action level of 10 kcpm. The second instrument was a Ludlum Model 3 ratemeter coupled to a shielded 44-2 NaI detector. The action level for this instrument was 10-12 μ R/h. In both cases, an allowance for higher levels was made to correct for better geometry conditions when surveying deep excavations where side-wall shine increases the count rate significantly. The NRC reviewed and approved this procedure (NRC, 1995).

The gamma measurements are given in Table F-1 and show that all values were below the action levels of the instruments with the exception of a few. When levels exceeded the action levels, grab soil samples were taken and analyzed immediately using the HMC spectrometer. A safety factor of 1.5 was normally used to account for the disequilibrium of radon and its daughters with Ra-226. The elevated readings were normally attributable to geometry effects. If the soil samples showed levels that approached the cleanup limits, additional soil was removed.

A total of 78 soil samples were taken on July 28, August 1, 2, 8 and 11, 1994. The results of the soil samples are presented in Table F-2. The samples at stations 270, 446, and 547 were found to exceed 10.5 pCi/g. However the depth of excavation at these points was 3.1, 4.7, and 2.8 feet where the cleanup criterion is 20.5 pCi/g. Only the sample at station 446 exceeded the cleanup criterion (29.27 pCi/g). A review of the data suggest that the spectrometer operator made an error in recording a number by recording only 4 digits of a 5 digit number for a region of interest attributable to Th-232 decay. This results in an erroneously high Ra-226 concentration result rather than a result of approximately 6 pCi/g which is believed to be the actual value. The low gamma value for that area support the conclusion that the soil sample result is an anomaly.

The results of the Highway 605 right-of-way verification are presented in Appendix F.

6.2.2 Characterization of State Highway 605 Right of Way South of Hamilton Construction Company Entrance.

The area south of the entrance to Hamilton Construction Company entrance was done to assure that all contamination south of the mill site had been removed. Soil samples were taken from an additional 1600 feet of right of way. Stations were located by survey at 25-ft intervals and soil samples taken according in the same manner as specified in the verification plan.

The results of the soil sample analyses show that all samples were below the Ra-226 cleanup criterion of 10.5 pCi/g. Gamma readings were not documented. The Ra-226 concentration data are presented in Table F-3 of Appendix F.

6.2.3 Verification of County Road 63 Road Base

In June 1994, the rock and upper road base material was removed from County Road 63 along with right-of-way surface soils. The excavation began approximately 1000 feet west of the west end of the Large Tailings Pile and extended 7700 feet to State Highway 605. Soil samples (0-6 inch and 6-12 inch) were taken from the center of the road base at 100-ft intervals. Approximately two feet of road base material was then placed and the road immediately reconstructed prior to obtaining the sample results. Seven of the 154 soil samples exceeded the 10.5 pCi/g cleanup criterion for surface soils. Five of the elevated samples were taken from the excavated surface (0-6 inches) exceeded the 10.5 pCi/g cleanup criterion for the surface layer with a maximum Ra-226 concentration of 15.14 pCi/g. Only one sample exceeded the 20.5 pCi/g cleanup criterion for subsurface soils. The sample was taken at 6-12 inches beneath the excavated surface and was analyzed to have a Ra-226 concentration of 23.8 pCi/g and a U-nat concentration of 14.3 pCi/g. Since the 0-6 inch sample at that location had very low radioactivity, the 23.8 pCi/g probably represents the activity of a sample of the original road base material which commonly has a high uranium content in the area. The data are presented in Table F-4 of Appendix F.

HMC contends that the cleanup of the County Road 63 meets the intent of the standards since the 0-6 inch samples were taken below grade where the criterion is 20.5 pCi/g. The 23.8 pCi/g sample, because of the high uranium content, probably was taken from the original road base material.

No gamma exposure rate measurements were documented since the high gamma-ray shine from the uncovered north side slope of the Large Tailings Pile masked any radiation emitted from the road base at the time.

6.2.4 Characterization of Ore Spillage on State Highway 605 Right of Way North of County Road 93 Intersection.

Highway 605 was used to haul ore to the Homestake Mill and other mills in the area. Because the ore was hauled in open trucks, ore and ore dust is present in the soils along the roads throughout the region. This contamination has been found at significant depths due to regrading and ditching activities.

HMC decided to characterize the right of way north of the County Road 63 intersection to determine the character and depth of contamination. Samples were taken north of the intersection on both sides of the highway at approximately 150-foot intervals for approximately 2500 feet. Six-inch deep samples were taken to a total depth of 2 feet. The data showed that contaminated soils exceeding the Ra-226 cleanup criterion extended to 2 feet or more for much of the 2500 feet. No correlation with proximity to the HMC mill site is apparent.

The quality control samples that were split and sent to an outside laboratory were analyzed for Ra-226 and U-nat. As anticipated, the results of these twelve quality control samples showed that most of the Ra-226 activity in the samples could be attributed to uranium ore rather than tailings, especially since much of uranium would have been solubilized and transported away over the long period of time. Table F-5 and a map are included in Appendix F which provide the radiological data and sample locations.

HMC concluded that it was not their responsibility to decontaminate the right of way since the contamination did not result from HMC site operations.

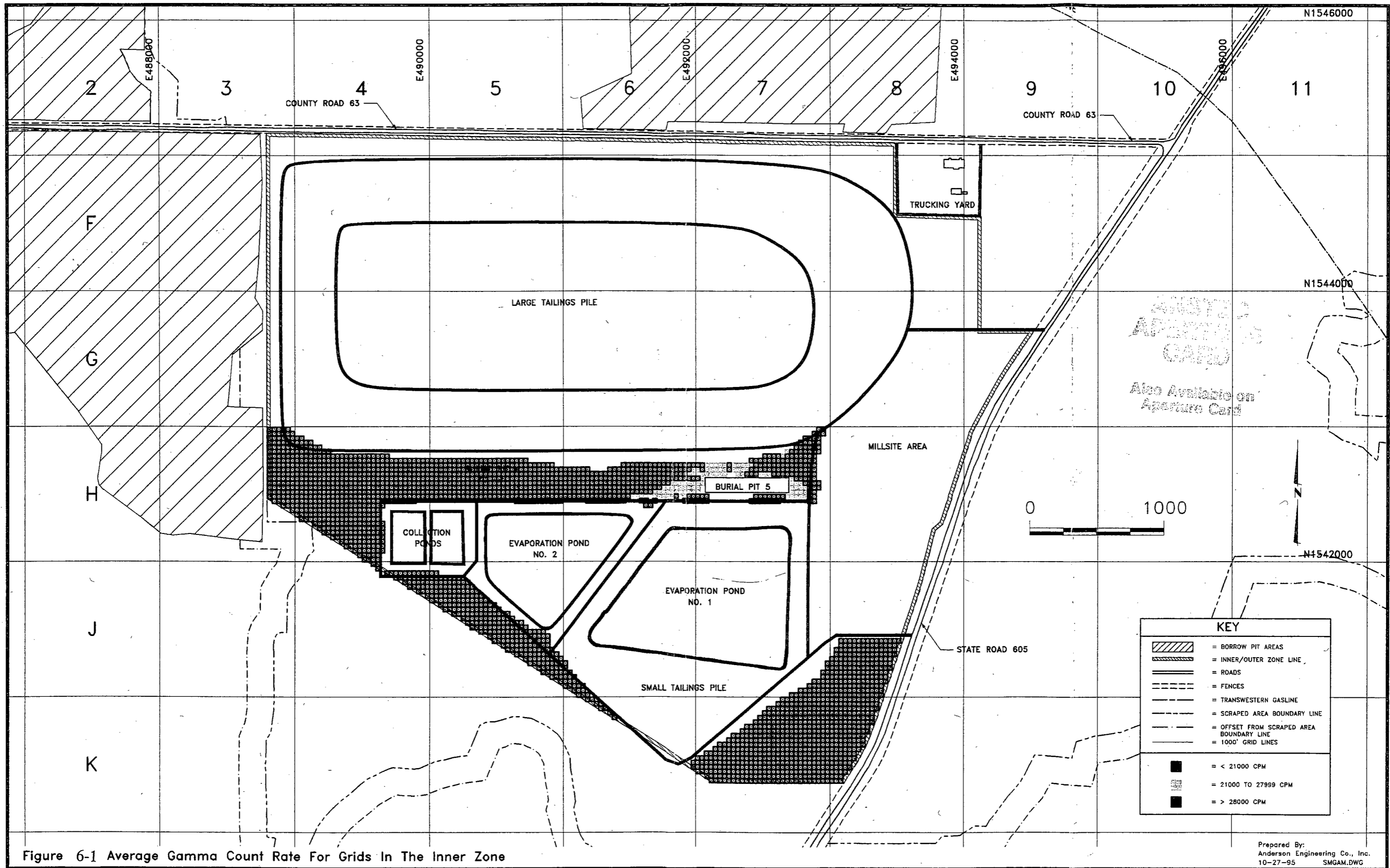
6.3 Verification of Areas Using GPS-Based Radiological Survey Data and Soil Sampling Data

The GPS-based radiological survey data was down loaded into the AutoCADD computer application where site features, isocontours, and the state plane reference coordinates were shown on 24-in by 36-in maps. A set of 83 maps displaying this information is included as Appendix J. Isocontour lines at the action level of 21,000 cpm for the outer zone and 28,000 cpm for the inner zone are shown. Areas exceeding the action levels were either further decontaminated or the area was sampled to demonstrate compliance with the standard.

In order to implement the NRC-approved verification plan, it was necessary to evaluate each 33.3-ft by 33.3-ft grid block in order to determine that there were the required minimum number of gamma data points within the grid block, to determine the average gamma count rate within the grid block, and to identify those 33.3-ft by 33.3-ft grid blocks that exceeded the gamma action level of 21,000 cpm for the outer zone and 28,000 cpm for the inner zone. In addition, the location of the 33.3-ft by 33.3-ft grid blocks with the highest average count rates within the 500-ft by 500-ft (inner zone) and 1000-ft by 1000-ft (outer zone) were required for sampling purposes. This was accomplished by importing the data into a data base manager and sorting the data into the 33.3-ft by 33.3-ft grids. Note that each 500-ft by 500-ft grid block has 225 of the 33.3-ft by 33.3-ft grid blocks. For each 500-ft by 500-ft grid block, a summary sheet was created where the 33.3-ft grid block with the maximum average gamma was identified by name and location, the average gamma value, and the number of points that were available in calculating the average gamma count rate. In addition, those grid blocks having fewer than five data points for outer zone and fewer than seven data points for the inner zone were identified. Also all grids having average gamma count rates higher than the action level are listed. These GPS Data Sort Summary Sheets are included in Appendix I.

6.3.1 Verification of the Inner Zone

The verification of the portions of the inner zone (Figure 3-2) that were not previously discussed in Section 6-1 and Section 6-2 consist of areas to the south and east of the Large Tailings Piles. In some instances, there is overlap in the data due to the disturbance of an area from construction activities and the area was reverified or it



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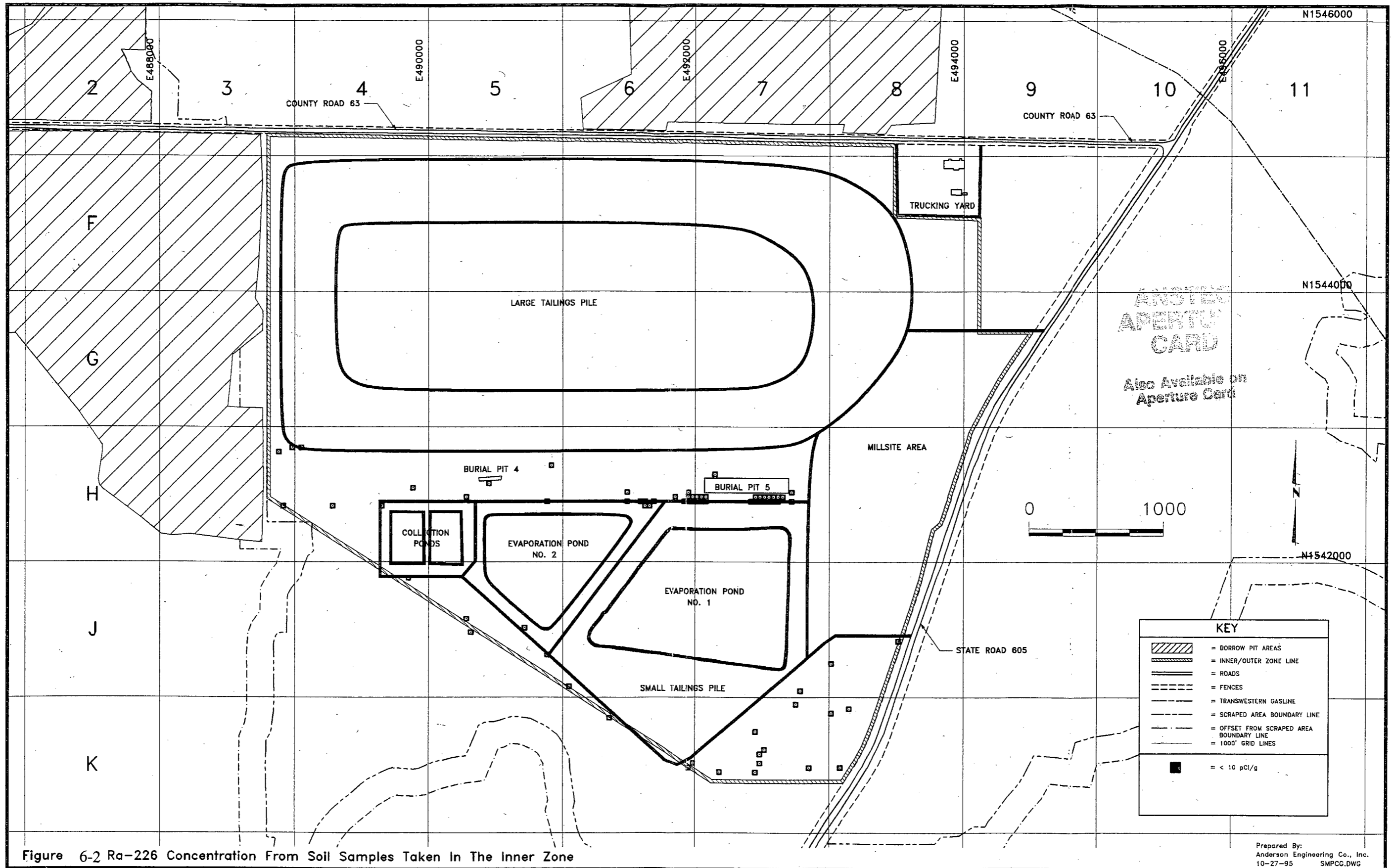


Figure 6-2 Ra-226 Concentration From Soil Samples Taken In The Inner Zone

Prepared By:
Anderson Engineering Co., Inc.
10-27-95 SMPCG.DWG

9512210244-02

was unknown to the verification field crew that the area had already been verified using the previously approved verification method.

Areas within the Inner Zone that will not be verified at this time are the tailings piles, the areas where the evaporation ponds and collection ponds are placed, the Mill Site Area, and the two Debris Disposal Pits. The reclamation of the Mill Site and two Debris Disposal Pits is addressed in the Uranium Mill Decommissioning Report. Evaporation Pond No. 2 was constructed during the summer of 1995. The area on which the pond was constructed was decontaminated and verified. However, since the license condition requires that, upon decommissioning of the facility, the pond will be removed and the underlying area verified, these data are not presented in this report.

The gamma-ray data resulting from averaging the gamma-ray count rates for each 33.3-ft by 33.3-ft grid block is represented in Figure 6-1, where the colors indicate areas where the average gamma-ray count rate is above 28,000 cpm, between 21,000 cpm and 28,000 cpm, and below 21,000. All areas above 28,000 required soil samples since the shine from the area prevented verification based on gamma-ray count rate. For 500-ft by 500-ft grid blocks having no areas higher than 28,000 cpm, the 33.3-ft by 33.3-ft grid block having the highest gamma count rate was sampled and analyzed for Ra-226. Also any grid that did not meet the minimum number of data records was either sampled or additional data obtained and added to the data base.

The grid blocks that were sampled are shown in Figure 6-2. The results of the Ra-226 analyses are presented in Table H-1 of Appendix H. The results show that this approach has been very conservative since no soil samples exceeded the 10.5 pCi/g cleanup criterion. In fact, no sample exceeded 5 pCi/g. The mean of the 72 samples is 1.11 pCi/g with a standard deviation of 1.05 pCi/g. This clearly indicates that the area has been remediated to meet the unrestricted release criteria.

The data in Figures 6-1 and 6-2 do not always align with the site features. In most cases, the exact boundary of the site feature had not been determined. In others, an overlap is shown where a portion of a grid block was sampled whereby the resolution of each point on the maps is 33.3-ft by 33.3-ft. Near the Large Tailings Pile, aprons had been constructed to cover the area where no radiological data are shown. The only area known to not have verification data is the area immediately north of Evaporation Pond No. 1 between the pond and Burial Pit No. 5. The soil from this area was removed to a large depth leaving a hole where water collected. Since the area will be disturbed during the reclamation of the Small Tailings Pile, it was decided to verify the area at that time.

6.3.2 Verification of Outer Zone

6.3.2.1 Statistical Test for Study Area within the Innermost Portion of the Outer Zone

A statistical test was developed in accordance with the verification plan to assure that the use of the 21,000 cpm gamma action level resulted in a high probability that each 100 m² (33.3-ft by 33.3-ft) grid block meets the cleanup criterion of 5 pCi/g above background, or 10.5 pCi/g. The test was applied to the 33.3-ft by 33.3-ft grid blocks within each 500-ft by 500-ft grid block that has the highest average gamma reading in the innermost portion of the outer zone. The verification plan indicated that if the mean concentration of this set of measurements met the soil concentration cleanup criterion at the 95 percent confidence level, then the soil sampling strategy would be to sample only the grid block within each 1000' by 1000' grid block that has the highest average gamma-ray count rate.

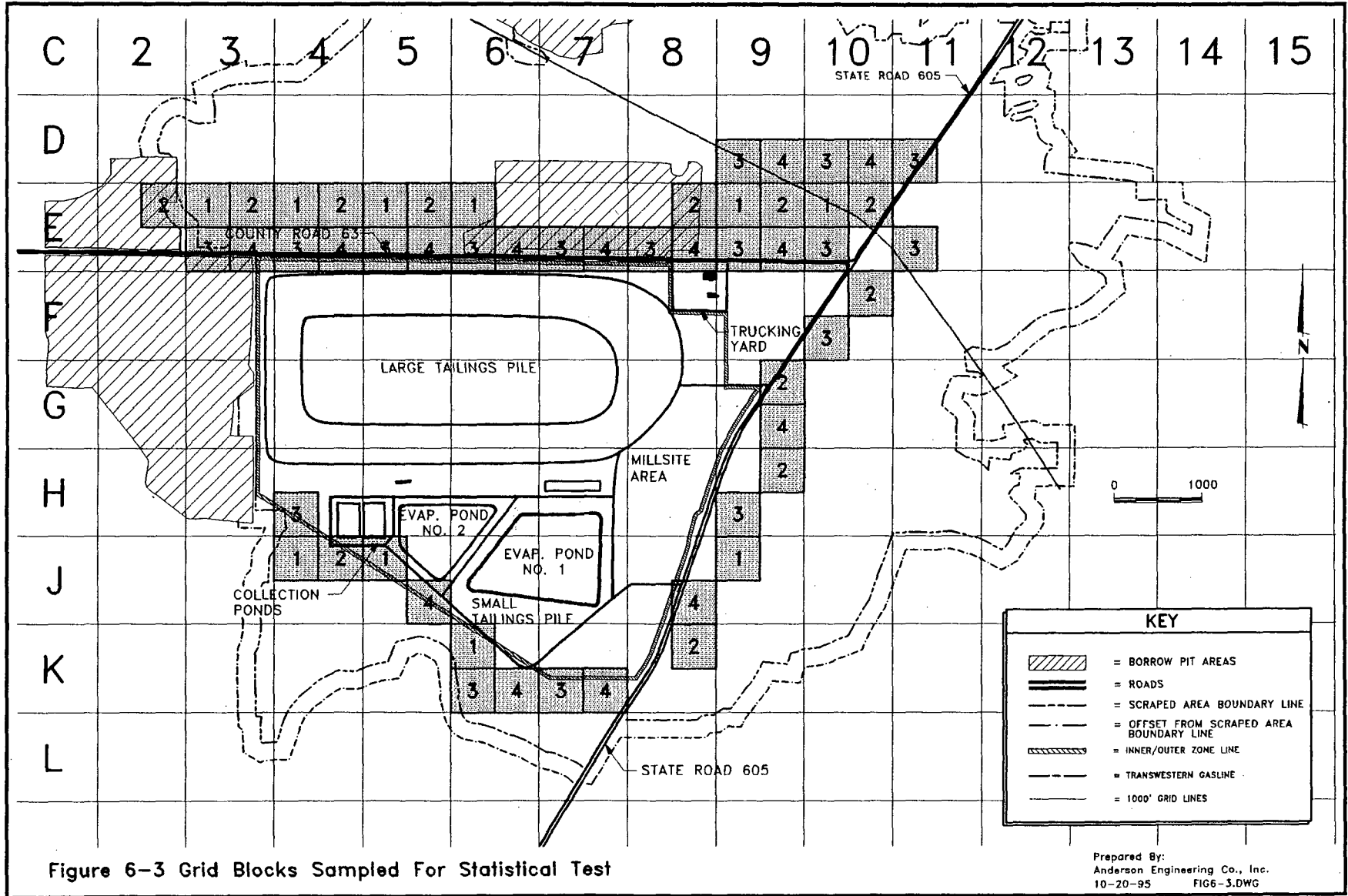
Fifty-two 500-ft by 500-ft grid blocks were evaluated for this test. The grid blocks were chosen according to the NRC-approved verification procedure and are highlighted in Figure 6-3. Data sorts were done to establish the 33.3-ft by 33.3-ft grid block having the highest average gamma-ray count rate. These data sort sheets are provided in Appendix G. Table 6-1 presents the data for each 33.3-ft by 33.3-ft grid block representing the average highest gamma count rate within each of the 52 larger grid blocks. The table shows that the average count rate is 16,629 cpm with a standard deviation of 2,460 cpm. The average Ra-226 concentration is 2.51 pCi/g with a standard deviation of 0.52 pCi/g.

The EPA recommended procedure for testing data for compliance with a guideline value at a desired level of confidence (NUREG/CR-5849, Equation 8-13) was applied to this set of data. The test is to calculate the mean plus the standard error corresponding to the desired level of confidence and compare that value to the cleanup criterion of 10.5 pCi/g. In equation form,

$$\mu_{\alpha} = \bar{X} + t_{1-\alpha, df} \frac{S}{\sqrt{n}}$$

where $t_{1-\alpha, df}$ is the "t" statistic for the 95% level for the degrees of freedom, df, taken from statistical tables, \bar{X} is the arithmetic mean, s is the standard deviation, and n is the number of data points.

From the "student t" tables, the "t" statistic is 1.68 for 51 degrees of freedom at the 95 percent confidence (one sided) level. Substituting the numbers in the above equation gives 2.6 pCi/g. This value of 2.6 pCi/g must be less than the 10.5 pCi/g



Homestake Mining Company of California
Grants Operations

Table 6-1 Ra-226 and Gamma Count Rate Data for the Outer Zone Statistical Test

Grid Number	HMC Laboratory (pCi/g)	Gamma (avg cpm)
E031222	3.54	15818
E032142	1.21	14898
E033049	1.65	12839
E034114	2.24	12936
E041056	1.77	13051
E042169	0.10	16630
E043111	1.00	13085
E044145	1.46	13569
E051195	2.72	13934
E052153	2.64	16153
E053151	1.75	15472
E054059	1.28	15365
E061067	2.22	15732
E063127	3.27	15801
E064147	3.29	15539
E073127	1.15	15075
E074147	2.45	15433
E082251	4.18	17779
E083203	1.12	16087
E084171	1.25	18796
E091155	5.86	19093
E092248	4.24	20767
E093135	5.47	19030
E094059	4.89	19882
E101114	5.49	21766
E102084	3.17	20674
E103101	4.86	20059
E113166	4.10	17927

Homestake Mining Company of California
Grants Operations

Table 6-1 Ra-226 and Gamma Count Rate Data for the Outer Zone Statistical Test

Grid Number	HMC Laboratory (pCi/g)	Gamma (avg cpm)
D093206	2.02	15253
D094229	2.79	17648
D103249	2.38	20918
D104176	4.02	21964
D113084	2.04	20785
F102237	1.74	18906
F103039	3.19	15298
G092096	2.38	13361
G094067	1.67	12833
H092225	1.37	17007
H093095	0.79	18226
J091041	2.10	17219
J084225	2.34	15199
K082076	3.38	16690
K073084	3.46	13934
K074174	0.47	15601
K061142	1.58	18007
K063196	3.07	17974
K064177	1.22	16043
J051164	2.26	14390
J054255	1.15	18230
J041053	2.27	15650
J042218	1.71	15408
H043239	2.79	14980
Mean	2.51	16629.12
Std. Deviation	1.33	2460.06
Number	52	52
Standard Error	0.03	47.31

cleanup criterion in order to pass the test, which obviously passes with ease. The data in Table 6-1 confirm the conservatism of the 21,000 cpm action level in that of the 52 grids tested, eight of the grids actually exceeded 20,000 cpm with two slightly above 21,000 cpm. However the maximum Ra-226 concentration was 5.9 pCi/g, much lower than the 10.5 pCi/g cleanup criterion.

Since the data passed the statistical test, the verification plan specifies that the 33.3-ft by 33.3-ft grid block having the highest average gamma count rate within each 1000-ft by 1000-ft grid block will be sampled. A similar statistical test will be done on the set of data from the grids sampled from the 1000-ft by 1000-ft grids.

6.3.2.2 Verification Data for Outer Zone

Upon passing the statistical test addressed in Section 6.3.2.1, the GPS-radiological survey maps were examined visually and by the data sort technique to assure that the minimum number of gamma data records existed for each grid block. In some grid blocks requiring additional data, more data were obtained and added to the data base; in others, a soil sample was taken from the grid block to demonstrate compliance with the 10.5 pCi/g cleanup criterion. The data sort provided the name of the 33.3-ft by 33.3-ft grid block having the highest average gamma count rate within each 500-ft grid block. These grid blocks made up the four possible grid blocks to be sampled for each 1000-ft by 1000-ft grid.

The Ra-226 concentration values for the grid blocks having the highest gamma-ray count rate within each 1000-ft by 1000-ft grid block are provided in Table H-2 of Appendix H. No samples were found to exceed the cleanup criterion and therefore no further decontamination was required. All samples were less than 8 pCi/g.

The set of Ra-226 concentration data for the 78 samples taken in the outer zone (not including the statistical test data presented in Section 6.3.2.1) has a mean of 2.95 pCi/g and a standard deviation of 1.89 pCi/g. Applying the statistical test as described in Section 5.3.2.1, the mean plus the standard error at the 95 percent confidence level is equal to 3.5 pCi/g. This clearly passes the statistical test and confirms the verification of the outer zone.

7.0 Quality Control

Condition 29C of License SUA-1471 requires that a minimum of 15 percent of soil verification samples be recounted by an off-site vendor laboratory using gamma-ray spectroscopy or chemical analysis. The condition also specifies that a minimum of 5 percent of the samples must be analyzed by chemical analysis. This has been interpreted and implemented by HMC as a minimum of 10 percent of the samples will be analyzed by gamma-ray spectroscopy and a minimum of one half of those ten percent will also be analyzed by chemical analysis.

The verification data presented in the tables shows the results of all analyses done on the samples. For example, Appendix H consists of the verification soil sample results using the verification procedure based on sampling the grid blocks with the highest gamma-ray count rate (post March 1, 1995 procedure). This procedure was applied to more than 90 percent of the area. The data in Appendix H shows that 150 verification soil samples were taken and analyzed by the on-site HMC laboratory. Of those 150 samples, 15 samples were analyzed by an off-site laboratory using gamma-ray spectroscopy. An additional 21 samples were analyzed at off-site laboratories using chemical analyses. Additional QC data are presented in the remaining appendices.

The results of the QC program were evaluated by the Radiation Protection Administrator at least monthly. Agreement was within normal analytical accuracy and precision.

8.0 Summary

The data presented in this report indicate that the cleanup of the off-pile windblown contaminated areas within the HMC site has been accomplished using procedures approved by the NRC. The extensive gamma-ray data as presented on the maps provide a high degree of assurance that every 100 m² grid block is either below the action level or has been sampled and demonstrated to be below the cleanup criteria. The statistical tests have also demonstrated that the action levels used were very conservative in that the set of samples representing 100 m² area grid blocks having the highest average gamma-ray count rates all were beneath the cleanup criteria. The statistical test showed that the means of these data sets for the inner zone, the outer zone, and the special statistical test within the outer zone were all below the cleanup criteria at the 95 percent level. In fact, the mean Ra-226 concentration of these samples was 1.1 pCi/g and 2.5 pCi/g for the inner zone and outer zone, respectively.

The cleanup of the road right of ways was done under somewhat more difficult conditions in that immediate backfilling was required by the state and local government agencies. However it was demonstrated that this was accomplished with a high degree of certainty that the cleanup criteria were met.

The application of the verification plan approved prior to March 15, 1995 was applied for the Trucking Yard Area, the area around the North Ore Storage Pad, and at the north and west toe of the Large Tailings Pile. These areas were verified using the soil sampling procedure in the NRC-approved verification plan. However, at the time of the cleanup, the north and west side slopes of the Large Tailings Pile had not been covered and thus the gamma-shine from the pile was the major contributor to the exposure rate. Therefore while the exposure rate measurements were used to guide the excavation, the levels were not documented. These areas were then backfilled to the original grade. The fact that the soil samples demonstrated that the surface cleanup criteria (10.5 pCi/g) had been met and that the area required extensive backfill to bring it back to grade provides additional assurance that these areas meet the cleanup criteria. This area constitutes a very small fraction of the total remediated area.

9. Bibliography

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- HMC,1994Borrow Investigation, Homestake Mining Company, Grants Operation, P. O. Box 98, Grants, New Mexico 87020. Prepared by Knight Piesold and Company, Denver, Colorado.
- HMC,1995aUranium Mill Decommissioning Report, Homestake Mining Company of California, Grants Operation, P. O. Box 98, Grants, New Mexico 871020.
- HMC,1995bFinal Radon Barrier Design for the Large Tailings Pile, June 1995, Homestake Mining Company of California, Grants Operation, P. O. Box 98, Grants, New Mexico 87020
- NRC,1995License Amendment No. 20 to Radioactive Materials License SUA-1471, March 1, 1995, U. S. Nuclear Regulatory Commission, Washington D. C.

**Completion Report for Reclamation of Off-Pile Areas
at the Homestake Mining Company of California Uranium Mill**

Grants Operation

License No. SUA-1471

Appendices A-G

November 1995

Prepared for:

**Homestake Mining Company of California
Grants Operations
P. O. Box 98
Grants, NM 87020**

Prepared By:

**Environmental Restoration Group, Inc.
12809 Arroyo de Vista NE
Albuquerque, NM 87111**

Appendix A

Verification Procedures and License Amendments Related to Verification of the Cleanup of Windblown Tailings



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
URANIUM RECOVERY FIELD OFFICE
BOX 25325
DENVER, COLORADO 80225

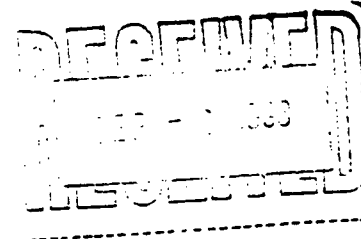
AUG 25 1993

RECEIVED

AUG 27 1993
EHSGA DEPT.

Docket No. 40-8903
SUA-1471, Amendment No. 15

Homestake Mining Company
ATTN: Harold Barnes
650 California Street
San Francisco, California 94108-2788



Dear Mr. Barnes:

Pursuant to Title 10, Code of Federal Regulations, Part 40, and in accordance with your submittals by letters dated December 31, 1990; August 28, 1991; and April 3, 1992; as modified by the staff, Source Material License SUA-1471 is hereby amended to incorporate a mill decommissioning plan by revising Condition No. 29 to read as follows:

29. The licensee shall decommission the Homestake Uranium Mill in accordance with Section 2 of the reclamation plan dated January 1991; the licensee's August 28, 1991, response to comments 1-10 of the NRC's August 2, 1991, letter; and Technical Specifications B1 and B2 of the reclamation plan as revised on April 3, 1992. In addition, the licensee shall perform a soil cleanup verification survey and sampling program as specified below.
- A. Soil samples shall be collected for determination of Ra-226 content as a minimum at every 50-meter gridpoint and the results of gamma surveys conducted at ground level documented at every 10-meter gridpoint in areas designated as requiring soil cleanup on Figure 5 of the reclamation plan (shown within dotted green line on Figure 5).
 - B. Soil samples shall be collected for determination of Ra-226 content as a minimum at every 100-meter gridpoint and the results of gamma surveys conducted at ground level documented at every 10-meter gridpoint in areas outside of that specified in (A) above until results indicate background levels of Ra-226 in soil.
 - C. The licensee shall establish a gamma action level which results in investigation and/or remediation. This action level shall be based on a correlation of gamma levels to Ra-226 concentrations in soil established after the main tailings pile has been covered, and shall provide at least a 95 percent probability of identifying a Ra-226 concentration of 10.5 pCi/g. The action and correlation shall be based on surface gamma readings conducted using appropriately sensitive and shielded survey instruments and soil samples collected at a minimum of 15 locations where expected

AUG 25 1993

Ra-226 concentrations are 20 pCi/g or less. The action level, as well as the methodology and all data used in determining the action level and the gamma:Ra-226 correlation, shall be submitted to NRC for review and approval at least 90 days prior to beginning the survey program described in (A) or (B) above.

- D. The licensee shall use only soils obtained from borrow areas outside the restricted area which have not been impacted by site operations to cover the mill disposal area. The location of these borrow areas shall be documented.
- E. The licensee shall implement a quality control (QC) program for the soil cleanup verification program which consists of recounting using offsite gamma spectroscopy equipment or chemical analysis by a vendor laboratory of at least 15 percent of all soil samples collected. In addition, a minimum of 5 percent of the QC samples shall be chemically analyzed. Results of the QC program shall be evaluated by the Radiation Protection Administrator and the evaluation documented at least monthly during the verification sampling program.
- F. All decommissioning activities shall be documented. Within 90 days following the completion of mill demolition and disposal activities, the licensee shall submit to the NRC a report documenting the activities and providing summaries of all data generated as part of the radiation safety program for mill decommissioning. In addition, within 90 days following the completion of the soil cleanup and verification program, the licensee shall submit to the NRC a report documenting the cleanup activities and providing the results of all soil sampling and gamma surveys conducted to verify the adequacy of cleanup.

[Applicable Amendments: 15]

All other conditions of this license shall remain the same. The license is being reissued to incorporate the above revision.

An environmental assessment regarding the proposed decommissioning plan was completed by the staff on May 12, 1993. Based on the environmental assessment, a Finding of No Significant Impact and Notice of Intent to Amend License was published in the Federal Register on June 11, 1993 (58 FR 32734).

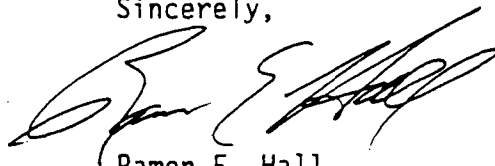
Homestake Mining Company

-3-

AUG 25 1993

The issuance of this amendment was discussed via telecon between Mr. Fred Craft of Homestake and Mr. Pete Garcia of my staff on August 16, 1993.

Sincerely,

A handwritten signature in black ink, appearing to read "Ramon E. Hall". The signature is fluid and cursive, with a large initial "R" and "H".

Ramon E. Hall
Director

Enclosure:
Source Material License SUA-1471

cc:
H. Barnes, HMC
B. Garcia, RCPD, NM
E. Montoya, NMED

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee

1. Homestake Mining Company
2. P.O. Box 98
Grants, New Mexico 87020

3. License number
SUA-1471, Amendment No. 15

4. Expiration date
Until NRC determines site reclamation is adequate.

5. Docket or Reference No.
[Applicable Amendments: 12]
40-8903

6. Byproduct, source, and/or special nuclear material

Uranium

7. Chemical and/or physical form

Any

8. Maximum amount that licensee may possess at any one time under this license

Unlimited

9. Authorized Place of Use: The licensee's uranium mill located in Cibola County, New Mexico, and the licensee's auxiliary ion exchange facility located in McKinley County, New Mexico. [Applicable Amendments: 12]

10. This license authorizes only the possession of residual uranium and byproduct material in the form of uranium waste tailings and other byproduct waste generated by the licensee's past milling operations in accordance with the programs listed below:

- A. "ALARA-Radiation Protection Program," submitted on February 28, 1990.
- B. "Quality Assurance Program for Radiological Monitoring," submitted on February 28, 1990.
- C. "Mill Respiratory Protection," submitted on February 28, 1990.
- D. "Occupational and Environmental Monitoring and Surveillance Program," submitted on April 6, 1990.
- E. "Emission Control Device Program," submitted on June 19, 1987.
- F. "Uranium Mill Bioassay Program," submitted on June 19, 1987.

Anywhere the word "will" is used, it shall denote a requirement.

[Applicable Amendments: 2, 6, 12]

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License number

SUA-1471, Amendment No. 15

Docket or Reference number

40-8903

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11. The licensee shall determine that employees leaving work are not contaminated with radioactive materials. When an employee has showered and changed clothes prior to leaving work, he may be assumed to be free of contamination.
12. The licensee shall implement an embankment inspection program as specified in the submittal dated September 21, 1987, with the exception that quarterly dam evaluations need no longer be performed. The annual training of site personnel responsible for dam inspections shall be conducted by a registered professional engineer.

An annual technical evaluation report of the large and small tailings impoundments shall be prepared under the direction of a registered professional engineer experienced in dam design and construction. The evaluation should include an inspection of the large and small tailings impoundments, a review and assessment of all associated monitoring data and inspection reports, and an overall judgement of the effectiveness of the inspection program. A copy of the report shall be submitted to the NRC, Uranium Recovery Field Office, within 1 month of completion of the report.

[Applicable Amendments: 2, 12, 14]

13. The licensee is hereby authorized to possess byproduct material in the form of uranium waste tailings and other byproduct wastes generated by the licensee's milling operations.
14. Release of equipment or packages from the restricted area shall be in accordance with the attachment to SUA-1471 entitled, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct or Source Materials," dated September 1984.
15. The results of all effluent and environmental monitoring required by this license shall be reported in accordance with 10 CFR 40, Section 40.65, with copies of the report sent to the NRC, Uranium Recovery Field Office. Monitoring data shall be reported in the format shown in the attachment to SUA-1471 entitled, "Sample Format for Reporting Monitoring Data." All ground-water monitoring data shall be reported as described in License Condition No. 35. [Applicable Amendments: 5]
16. Before engaging in any activity not previously assessed by the NRC, the licensee shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not previously assessed or that is greater than that previously assessed, the licensee shall provide a written evaluation of such activities and obtain prior approval of the NRC in the form of a license amendment.

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17. Prior to termination of this license, the licensee shall provide for transfer of title to byproduct material and land, including any interests therein (other than land owned by the United States or the State of New Mexico), which is used for the disposal of such byproduct material or is essential to ensure the long-term stability of such disposal site to the United States or the State of New Mexico, at the State's option.
18. The licensee shall not make any changes to the approved tailings retention system without specific prior approval of the NRC, Uranium Recovery Field Office, in the form of a license amendment.
19. The licensee shall implement an interim stabilization program for all tailings not covered by standing water as specified in the submittal dated February 16, 1989, with the following additional requirements:
- A. Application of chemical stabilizer shall be performed and the application documented at least annually.
 - B. Detailed quarterly inspections of the effectiveness of measures implemented to control blowing of tailings shall be performed and documented by the Radiation Protection Administrator (RPA).
 - C. An annual technical evaluation of the effectiveness of measures implemented to control blowing of tailings shall be performed by a team which includes at a minimum the RPA and the Resident Manager. The evaluation shall specifically address the effectiveness of the erosion control blanket in light of the continuing deposition of windblown material, the need for additional application of chemical stabilizer, and the need for modification of the sprinkler system in response to changes in available beach area. A report documenting the evaluation shall be prepared and a copy submitted to the NRC by October 1 of each year.
 - D. An annual soil sampling and gamma survey program shall be performed to verify the effectiveness of measures used to control blowing of tailings. The results of the sampling and survey program as well as proposals for corrective actions for areas exceeding 10.5 pCi/g Ra-226 shall be submitted to the NRC by October 1 of each year. The results of the program shall specifically be considered as part of the evaluation required by 19(C) above.

[Applicable Amendments: 2, 6]

20. The licensee is hereby exempted from the requirements of Section 20.203(e)(2) of 10 CFR 20 for areas within the mill provided that all entrances to the mill are conspicuously posted in accordance with Section 20.203(e)(2) and with the words, "Any area within this mill may contain radioactive material."

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21. The mill Radiation Protection Administrator (RPA), who is responsible for conducting the mill radiation safety program, shall possess the minimum qualifications as specified in Section 2.4.1 of Regulatory Guide 8.31, "Information Relevant to Ensuring that Occupational Radiation Exposures at Uranium Mills will be As Low As is Reasonably Achievable."
22. The results of sampling, analyses, surveys and monitoring; the results of calibration of equipment, reports on audits and inspections; all meetings and training courses required by this license and any subsequent reviews, investigations, and corrective actions, shall be documented. Unless otherwise specified in the NRC regulations, all such documentation shall be maintained for a period of at least 5 years.
23. Standard operating procedures (SOPs) shall be established for all operational process activities involving radioactive materials that are handled, processed, or stored. Standard operating procedures for operational activities shall enumerate pertinent radiation safety practices to be followed. Additionally, written procedures shall be established for nonoperational activities to include in-plant and environmental monitoring, bioassay analyses, and instrument calibrations. An up-to-date copy of each written procedure shall be kept in the mill area to which it applies.

All written procedures for both operational and nonoperational activities shall be reviewed and approved in writing by the RPA before implementation and whenever a change in procedure is proposed to ensure that proper radiation protection principles are being applied. In addition, the RPA shall perform a documented review of all existing operating procedures at least annually.
24. The licensee shall be required to use a Radiation Work Permit (RWP) for all work or nonroutine maintenance jobs where the potential for significant exposure to radioactive material exists and for which no standard written procedure already exists. The RWP shall be approved by the RPA or his designee, qualified by way of specialized radiation protection training, and shall at least describe the following:
 - A. The scope of work to be performed.
 - B. Any precautions necessary to reduce exposure to uranium and its daughters.
 - C. The supplemental radiological monitoring and sampling necessary prior to, during, and following completion of the work.
25. Occupational exposure calculations shall be performed and documented within 1 week of the end of each regulatory compliance period as specified in 10 CFR 20.103(a)(2) and 10 CFR 20.103(b)(2). Routine airborne ore dust and yellowcake samples shall be analyzed in a timely manner to allow exposure

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calculations to be performed in accordance with this condition. Required nonroutine monitoring for ore dust and yellowcake exposure shall be analyzed and the results reviewed by the RPA within 2 working days after sample collection.

26. Mill tailings, other than small samples for purposes such as research or analysis, shall not be transferred from the site without specific prior approval of the NRC in the form of a license amendment. The licensee shall maintain a permanent record of all transfers made under the provisions of this condition.
27. All liquid effluents from mill process buildings, with the exception of sanitary wastes, shall be discharged to the tailings impoundment.
28. The licensee shall maintain an NRC-approved financial surety arrangement consistent with 10 CFR 40, Criteria 9 and 10, adequate to cover the estimated costs, if accomplished by a third party, for decommissioning and decontamination of the mill and mill site, reclamation of tailings or waste disposal areas, ground-water restoration, and the long-term surveillance fee. Within 3 months of NRC approval of a revised reclamation plan, the licensee shall submit for NRC review and approval a proposed revision to the financial surety arrangement if estimated costs for the newly approved plan exceed the amount covered in the existing financial surety. The revised surety arrangement shall then be in effect within 3 months of written NRC approval. Along with each proposed revision or annual update, the licensee shall submit supporting documentation showing a breakdown of costs and the basis for the cost estimate. The attachment to the license entitled, "Recommended Outline for Site Specific Reclamation and Stabilization Cost Estimates," outlines the minimum considerations used by the NRC in the review of site closure cost estimates.

The licensee's currently approved surety, a Parent Company Guarantee issued by Homestake Mining Company, shall be continuously maintained in an amount no less than \$20,000,000 for the purpose of complying with 10 CFR 40, Criteria 9 and 10, until a replacement is authorized by the NRC. The use of a parent company guarantee necessitates an evaluation of the corporate parent as part of the annual surety update. In addition to the cost information required above, the annual submittal must include updated documentation of the (1) letter from the chief financial officer of the parent company, (2) auditor's special report confirmation of chief financial officer's letter, (3) schedule reconciling amounts in chief financial officer's letter to amounts in financial statements, and (4) parent company guarantee if any changes are appropriate.

[Applicable Amendments: 9, 12]

29. The licensee shall decommission the Homestake Uranium Mill in accordance with Section 2 of the reclamation plan dated January 1991; the licensee's August 28, 1991, response to comments 1-10 of the NRC's August 2, 1991, letter; and Technical

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Specifications B1 and B2 of the reclamation plan as revised on April 3, 1992. In addition, the licensee shall perform a soil cleanup verification survey and sampling program as specified below.

- A. Soil samples shall be collected for determination of Ra-226 content as a minimum at every 50-meter gridpoint and the results of gamma surveys conducted at ground level documented at every 10-meter gridpoint in areas designated as requiring soil cleanup on Figure 5 of the reclamation plan (shown within dotted green line on Figure 5).
- B. Soil samples shall be collected for determination of Ra-226 content as a minimum at every 100-meter gridpoint and the results of gamma surveys conducted at ground level documented at every 10-meter gridpoint in areas outside of that specified in (A) above until results indicate background levels of Ra-226 in soil.
- C. The licensee shall establish a gamma action level which results in investigation and/or remediation. This action level shall be based on a correlation of gamma levels to Ra-226 concentrations in soil established after the main tailings pile has been covered, and shall provide at least a 95 percent probability of identifying a Ra-226 concentration of 10.5 pCi/g. The action and correlation shall be based on surface gamma readings conducted using appropriately sensitive and shielded survey instruments and soil samples collected at a minimum of 15 locations where expected Ra-226 concentrations are 20 pCi/g or less. The action level, as well as the methodology and all data used in determining the action level and the gamma:Ra-226 correlation, shall be submitted to NRC for review and approval at least 90 days prior to beginning the survey program described in (A) or (B) above.
- D. The licensee shall use only soils obtained from borrow areas outside the restricted area which have not been impacted by site operations to cover the mill disposal area. The location of these borrow areas shall be documented.
- E. The licensee shall implement a quality control (QC) program for the soil cleanup verification program which consists of recounting using offsite gamma spectroscopy equipment or chemical analysis by a vendor laboratory of at least 15 percent of all soil samples collected. In addition, a minimum of 5 percent of the QC samples shall be chemically analyzed. Results of the QC program shall be evaluated by the Radiation Protection Administrator and the evaluation documented at least monthly during the verification sampling program.
- F. All decommissioning activities shall be documented. Within 90 days following the completion of mill demolition and disposal activities, the licensee shall submit to the NRC a report documenting the activities and providing summaries

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of all data generated as part of the radiation safety program for mill decommissioning. In addition, within 90 days following the completion of the soil cleanup and verification program, the licensee shall submit to the NRC a report documenting the cleanup activities and providing the results of all soil sampling and gamma surveys conducted to verify the adequacy of cleanup.

[Applicable Amendments: 15]

30. The licensee shall implement a program to minimize dispersal of dust from the ore stockpile area(s). This program shall include written operating procedures. The effectiveness of the control method used shall be evaluated weekly by means of a documented inspection.
31. The licensee is authorized to construct and operate a lined brine evaporation pond in accordance with plans, conditions, revisions, and commitments made in conjunction with Ground Water Discharge Plan DP-339, approved by the Ground Water/Hazardous Bureau of the State of New Mexico by a letter dated January 17, 1986, signed by Ernest Rebeck. Such plans, conditions, revisions, and commitments are contained in submittals and correspondence from Homestake Mining Company dated March 22, 1984, April 9, 1984, and April 17, 1986; and includes a commitment by letter dated April 11, 1986, to reclaim the pond area in accordance with applicable reclamation standards after the cessation of operations.
- [Applicable Amendments: 5, 8]
32. The licensee shall comply with the following:
- A. The quantity of air sampled and the method of analysis shall result in a lower limit of detection (LLD) for all in-plant air sampling of at least 10 percent of the respective maximum permissible concentration for restricted areas.
 - B. Analysis of urine samples shall utilize an LLD of at least 5 ug/l uranium.
 - C. A copy of the report documenting the annual ALARA audit shall be submitted to the NRC, Uranium Recovery Field Office, for review within 30 days of completion of the audit.

[Applicable Amendments: 2]

33. All eating areas and change rooms located in mill process areas shall be spot-checked weekly for removable surface contamination. Areas shall be promptly cleaned if surface contamination levels exceed the values listed in Table 1 of Regulatory Guide 8.30. In addition, all laboratory surfaces used for preparation

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of bioassay samples shall be spot-checked prior to sample analysis and decontaminated if removable contamination levels exceed 200 dpm alpha/100 cm².

The results of all surveys and spot checks shall be documented.

[Applicable Amendments: 2]

34. DELETED by Amendment No. 4.

35. The licensee shall implement a compliance monitoring program containing the following:

A. Implement the monitoring program shown in Table 5-1 of the September 15, 1989, submittal. Additionally, the volumes of water injected and recovered as part of the corrective action program shall be monitored and documented quarterly.

B. Comply with the following ground-water protection standards at brine evaporation pond point-of-compliance Wells D1 and BP, at the inactive tailings impoundment point-of-compliance Wells Y and X, and at the active tailings impoundment point-of-compliance Wells S4, S3, M5, and DQ with background being recognized in Well P:

chromium = 0.06 mg/l, molybdenum = 0.03 mg/l, selenium = 0.10 mg/l, vanadium = 0.02 mg/l, uranium = 0.04 mg/l, radium-226 and -228 = 5.0 pCi/l, and thorium-230 = 0.30 pCi/l.

C. Implement the corrective action program described in the September 15, 1989, submittal due to exceeding ground-water protection standards, with the objective of returning the concentrations of chromium, molybdenum, selenium, thorium-230, uranium, and vanadium to the concentration limits specified in 35(B) above.

D. Operate the lined evaporation pond and enhanced evaporation system as described in the June 8 and 28, 1990, submittals.

E. Submit a semiannual ground-water monitoring report in accordance with the reporting requirements of 10 CFR 40.65. Also, submit, by February 28 of each year, a performance review of the corrective action program that details the progress towards attaining ground-water protection standards.

[Applicable Amendments: 3, 4, 5, 7, 8, 10, 11]

36. The licensee shall complete site reclamation in accordance with an approved reclamation plan. The ground-water corrective action plan shall be conducted as authorized by License Condition No. 35. All activities shall be completed in accordance with the following schedules.

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- A. To ensure timely compliance with target completion dates established in the Memorandum of Understanding with the Environmental Protection Agency (56 FR 55432, October 25, 1991), the licensee shall complete reclamation to control radon emissions as expeditiously as practicable, considering technological feasibility, in accordance with the following schedule:
- (1) Windblown tailings retrieval and placement on the pile:

For the Large Impoundment - December 31, 1996.

For the Small Impoundment - May 31, 1997.
 - (2) Placement of the interim cover to decrease the potential for tailings dispersal and erosion:

For the Large Impoundment - December 31, 1996.

For the Small Impoundment - May 31, 1997.
 - (3) Placement of final radon barrier designed and constructed to limit radon emissions to an average flux of no more than 20 pCi/m²/s above background:

For the Large Impoundment which has no evaporation ponds - December 31, 1996.

For the Small Impoundment, tailings pile surface areas are essentially covered by evaporation ponds constructed as part of the ground-water corrective action program. Prior to December 31, 2001, the areas not covered by the evaporation ponds shall have final radon barrier in place. Final radon barrier placement over the entire pile shall be completed within 2 years of completion of ground-water corrective actions.
- B. Reclamation, to ensure required longevity of the covered tailings and ground-water protection, shall be complete as expeditiously as is reasonably achievable, in accordance with the following target dates for completion:
- (1) Placement of erosion protection as part of reclamation to comply with Criterion 6 of Appendix A of 10 CFR Part 40:

For the Large Impoundment - September 30, 1999.

For the Small Impoundment - July 1, 2014.

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(2) Projected completion of ground-water corrective actions to meet performance objectives specified in the ground-water corrective action plan - May 1, 2010.

- C. Any license amendment request to revise the completion dates specified in Section A must demonstrate that compliance was not technologically feasible (including inclement weather, litigation which compels delay to reclamation, or other factors beyond the control of the licensee).
- D. Any license amendment request to change the target dates in Section B above, must address added risk to the public health and safety and the environment, with due consideration to the economic costs involved and other factors justifying the request such as delays caused by inclement weather, regulatory delays, litigation, and other factor beyond the control of the licensee.

[Applicable Amendments: 13]

37. The licensee shall reclaim the large and small tailings impoundments as stated in their January 31, 1991, Reclamation Plan, as revised by submittals dated August 28, 1991, April 3, April 30, and December 21, 1992, and June 30, 1993, submittals, with the following additional requirements.

- A. The cover system for the large tailings impoundment shall be as defined on Figure 3.4 of Attachment #5 to the licensee's June 30, 1993, submittal except the clayey sand radon barrier shall be 8 feet thick and shall consist of minus 3/4-inch material, containing at least 25 percent passing the No. 200 sieve, Atterberg limits plotting above the "A" line; and shall be compacted in 6-inch lifts to at least 95 percent of Standard Proctor density within minus 2 to plus 2 percent of the optimum moisture content.
- B. The radon barrier for the small impoundment shall be 14 feet thick and shall consist of minus 3/4-inch material, containing at least 25 percent passing the No. 200 sieve, Atterberg limits plotting above the "A" line; and shall be compacted in 6-inch lifts to at least 95 percent of Standard Proctor density within minus 2 to plus 2 percent of the optimum moisture content.
- C. The licensee shall submit a construction quality control program for NRC review and approval prior to placing any portion of the radon barrier that will ensure that the specification which limits the activity of the radon barrier material to 5 pCi/g above background is not exceeded.
- D. The construction quality assurance and control program shall be as defined in the Staff Technical Position On Testing and Inspection (NRC, 1989). The acceptable correlation between ASTM D 2922 and ASTM D 1556 shall be as defined in the licensee's April 30, 1992, submittal.

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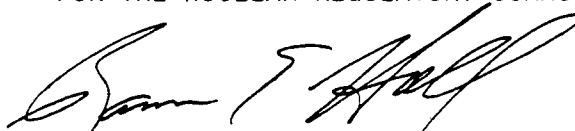
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- F. The radon barrier shall not be placed on the top surface of the large tailings impoundment until the settlement has been demonstrated to be at least 90 percent of expected settlement, and the results of this determination have been reviewed and accepted by the NRC. The radon barrier may be placed on the large impoundment side slopes following final grading of the impoundment. Care shall be taken to preclude the possibility of ponding. Before the erosion protection is placed, it shall be verified that the radon barrier material meets the specifications.
- G. The adequacy of the erosion protection proposed for the side slopes of both the large and small impoundments shall be reevaluated considering any increases in impoundment heights due to the revised radon attenuation cover design.
- H. All reclamation plan requirements shall be incorporated into a single comprehensive document by October 31, 1993. This may be accomplished by providing appropriate revisions to the January 31, 1991, reclamation plan drawings and technical specifications, or by providing new drawings and technical specifications.
- I. A completion report shall be provided within 6 months of the completion of construction. This report, including as-built drawings, shall verify that reclamation of the site has been performed according to the approved plan. The report shall also include summaries of results of the quality assurance and control testing to demonstrate that approved specifications were met.

[Applicable Amendments: 14]

FOR THE NUCLEAR REGULATORY COMMISSION



Ramon E. Hall, Director
Uranium Recovery Field Office
Region IV

Date AUG 25 1993



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 1, 1995

Mr. F. R. Craft, Resident Manager
Homestake Mining Company
P.O. Box 98
Grants, New Mexico 87020

SUBJECT: SOIL CLEANUP VERIFICATION SURVEY AND SAMPLING PLAN

Dear Mr. Craft:

The U.S. Nuclear Regulatory Commission staff has completed its review of your amendment request submitted in your letter dated September 15, 1994. The review found the proposed "Soil Cleanup Verification Survey and Sampling Plan for Use at the Grants Uranium Mill Tailing Site," dated September 1994, acceptable, and the amendment is approved.

Therefore, pursuant to Title 10 of the Code of Federal Regulations, Part 40, Source Material License SUA-1471 is hereby amended by revising License Condition No. 29. All other conditions of this license shall remain the same. A copy of the staff's Technical Evaluation Report for the license amendment is Enclosure 1. The license is being revised to incorporate the above modification (Enclosure 2).

If you have any questions regarding this letter or the enclosures, please contact Ken Hooks at (301) 415-7777.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joseph J. Holonich".

Joseph J. Holonich, Chief
High-Level Waste and Uranium
Recovery Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 40-8903
SUA-1471, Amendment No. 20

Enclosures: As stated

cc: Shawn Ghose, USEPA, Region 6
Kerrie Neet, NMED Superfund
Section
Diana Malone, Navajo Superfund
Project

TECHNICAL EVALUATION REPORT

E: January 11, 1995

DOCKET NO. 40-8903

LICENSE NO. SUA-1471

LICENSEE: Homestake Mining Company of California

FACILITY: Homestake (Grants Uranium Mill)

PROJECT MANAGER: Kenneth Hooks

TECHNICAL REVIEWER: Elaine Brummett

SUMMARY AND CONCLUSIONS:

By letter dated September 15, 1994, Homestake Mining Company (Homestake) requested that License Condition 29 be amended to approve its "Soil Cleanup Verification Survey and Sampling Plan." After discussions with the Nuclear Regulatory Commission staff, Homestake provided additional data by letter dated October 31, 1994, and a revised plan by letter dated December 13, 1994. The plan relies on an improved gamma survey procedure and a conservative gamma action (cleanup) level. The plan places greater reliance on gamma levels by requiring fewer soil sample analyses, to demonstrate cleanup to the radium (Ra-226) surface soil standard of 5 pCi/g above background. The NRC staff has determined that the revised plan (verification procedure) should provide adequate data to demonstrate compliance with the soil cleanup standard.

KGROUND:

The soil cleanup standards in Criterion 6 of Appendix A to Title 10 Code of Federal Regulations (CFR) Part 40, require that the concentration of Ra-226 in land, averaged over areas of 100 square meters (m^2), which as a result of uranium byproduct material, does not exceed the background level by more than 5 pCi/g averaged over the first 15 cm below the surface, and 15 pCi/g averaged over 15-cm thick layers more than 15 cm below the surface.

License Conditions 29A, 29B, and 29C require Homestake, in part, to:

- 1) collect soil samples for Ra-226 analysis as a minimum at every 50 meters and document the ground level gamma reading every 10 meters for the area around the tailings piles (inner zone, see Attachment A);
- 2) collect soils samples as a minimum at every 100 meters and document the ground level gamma reading every 100 meters for the windblown areas (outer zone) until results indicate background levels of Ra-226 in soil; and
- 3) the gamma action level shall be based on a correlation with Ra-226 concentration that provides at least a 95 percent probability of identifying a Ra-226 concentration of 10.5 pCi/g.

Homestake proposes to use a new gamma survey procedure and a conservative gamma action level. In addition, the site is to be cleaned to the surface soil Ra-226 concentration standard of 5 pCi/g plus background (5.5 pCi/g is the approved background value for this site), even though some areas are to be backfilled. Homestake proposes to demonstrate compliance with the soil cleanup standard utilizing a verification procedure that includes specifications to:

- 1) collect five soil samples to composite from the 100 m² area with the highest gamma values in every 152 by 152-meter (500 by 500-foot) area of the inner zone (see Attachment A), and document a minimum of 7 gamma measurements for each 100 m² area;
- 2) collect five soil samples to composite from the 100 m² area with the highest gamma values in every 305 by 305-meter (1000 by 1000-foot) area in the outer zone, except for 50 blocks next to the inner zone, and document a minimum of 5 gamma measurements for each 100 m² area; and
- 3) demonstrate that the mean Ra-226 concentration of the sampled grids is 10.5 pCi/g or less at the 95 percent confidence level.

AMENDMENT REQUEST:

Homestake requests that License Condition 29 be amended to approve the "Soil Cleanup Verification Survey and Sampling Plan" of September 15, 1994, as modified by the submittal of December 13, 1994. This would replace the verification survey and sampling program specified by License Conditions 29A, 29B, and 29C. In addition, Homestake requested (page 12, September 15, 1994) acceptance of the slight modification to the verification procedure that was used along the highway right-of-way.

TECHNICAL EVALUATION:

Gamma Survey Procedure

Homestake proposes (September 15, 1994) to use a Global Positioning System (GPS) land surveyor and computer mapping system coupled to radiological survey data. This gamma-mapping system consists of digital gamma-ray monitoring equipment using a 2 by 2-inch sodium iodide detector. This provides a gamma count rate every 2 seconds to the survey system that tags the data with the coordinates. The data is loaded into AutoCAD software for mapping and developing isocontours. Apparently, the accuracy of the coordinates is better than 1 meter. Homestake indicates that the proposed verification plan utilizing this high-density gamma survey provides greater assurance of compliance with the cleanup standards than that originally proposed.

For the survey, the gamma detector is placed 18 inches above the ground surface and is moved slowly so that each reading (count rate) represents approximately 3 meters by 2 meters. Generally there are 8 or 9 count rates recorded for each 100 m², and the average distance between data points is less than 20 feet. NRC staff determined that this method provides a better approximation of the average gamma field than the ground level measurement every 10 meters required by License Condition 29 A.

Gamma Action Levels

The gamma action level for the outer zone is based on data provided October 31, 1994. Homestake took composite soil samples from 20 10-m by 10-m grids for Ra-226 analysis. The Ra-226 values were correlated to gamma count rates obtained using the GPS

equipment. Ra-226 values ranged from 6.6 to 14.0 pCi/g. At these low levels, the correlation coefficient was understandably low. Homestake chose what it considered to be a conservative gamma action of 21,000 counts/minute (cpm). Background values for the site are about 15,000 to 18,000 cpm. The 11 grids that exceeded the 10.5 pCi/g Ra-226 level and 2 grids that met the Ra-226 standard had average count rates above 21,000 cpm. The proposed gamma survey for the inner zone will assure that all areas are below 28,000 cpm. This value is based on the September 15, 1994, data and takes into consideration the shine from the uncovered portions of the small tailings pile and that the area will be covered by more than 1 foot of fill. NRC staff determined that the gamma action levels are acceptable, considering the limitations of the correlation method.

Soil Sampling Plan

Homestake proposes to composite 5 soil samples from 100 m² areas (verification grids) to determine the Ra-226 concentration. This is a standard method and meets the regulation by providing an average value. Homestake's rationale for sampling fewer grids in the outer zone is that the contamination level is less, is all surficial, and is more uniform than the contamination in the inner zone. NRC staff determined that this sampling approach is acceptable.

If any Ra-226 analysis exceeds the criterion, Homestake proposes to clean the grid and resurvey it. Then the grid within that same block that has the highest gamma levels would be sampled. Also, Homestake proposes to perform a statistical test to demonstrate that the mean Ra-226 concentration meets the surface soil criterion at the 95 percent confidence level. Passing this test provides assurance that the error rate is very low, since the samples are from the grids most likely to have the highest Ra-226 concentration.

Homestake estimated (December 28, 1994, telephone communication) that the area undergoing soil cleanup is approximately 1700 acres. The proposed sampling plan would substantially reduce costs for this large area, because fewer soil samples (approximately 10 percent of the number specified in the license condition) would be taken and analyzed for Ra-226. NRC staff determined that, considering the cost savings and the revised gamma verification system, the proposed soil sampling plan and statistical analysis should provide adequate assurance that the soil cleanup standard has been met.

Highway Right-of-Way Verification

Homestake modified the NRC-approved cleanup verification procedure for the right-of-way along State Highway 605 (September 15, 1994). Since the excavated areas required immediate backfill to protect the public health and safety, a gamma action level for use with the shielded microR meter was used. An integrated count was taken while walking over the excavated area and recorded at 7.6-meter (25-foot) intervals. Soil samples were taken at 45.7-meter (150-foot) intervals. NRC staff determined that the modifications result in a higher density of gamma and Ra-226 data than originally proposed, and the gamma action level is adequate. Therefore, this verification procedure for the highway right-of-way is acceptable.

CONCLUSION:

The staff finds the proposed changes to Source Material License SUA-1471, License

Condition 29, to reflect: 1) the new gamma survey procedure to be used for soil cleanup verification (September 15, 1994); and 2) the proposed gamma action levels and the soil sampling plan (December 13, 1994) acceptable. In addition, the staff finds the proposed deletion of Parts A, B, and C of License Condition 29 that provided the previous soil cleanup program acceptable.

ENVIRONMENTAL IMPACT EVALUATION:

In accordance with the categorical exclusion contained in paragraph (c)(11) of 10 CFR 51.22, an environmental assessment is not required for this licensing action. That paragraph states that the categorical exclusion applies to the issuance of amendments to licenses for uranium mills provided that: (1) there is no significant change in the types or significant increase in the amounts of any effluents that may be released off site; (2) there is no significant increase in individual or cumulative occupational radiation exposure; (3) there is no significant construction impact; and (4) there is no significant increase in the potential for or consequences from radiological accidents.

The licensing action discussed in this memorandum modifies the radon barrier design in accordance with Criterion 6 of 10 CFR Part 40, Appendix A. An environmental report is not required from the licensee since the amendment does not meet the criteria of 10 CFR 51.60 (b)(2).

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		3. License number
1. Homestake Mining Company		SUA-1471, Amendment No. 20
2. P.O. Box 98 Grants, New Mexico 87020		4. Expiration date Until NRC determines site reclamation is adequate.
		5. Docket or Reference No [Applicable Amendment: 12] 40-8903

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
Uranium	Any	Unlimited

9. Authorized Place of Use: The licensee's uranium mill located in Cibola County, New Mexico, and the licensee's auxiliary ion exchange facility located in McKinley County, New Mexico. [Applicable Amendment: 12]

10. This license authorizes only the possession of residual uranium and byproduct material in the form of uranium waste tailings and other byproduct waste generated by the licensee's past milling operations in accordance with Tables 1 and 3 and the procedures submitted by letter dated September 2, 1993.

Anywhere the word "will" is used, it shall denote a requirement.

[Applicable Amendments: 2, 6, 12, 16]

11. The licensee shall determine that employees leaving work are not contaminated with radioactive materials. When an employee has showered and changed clothes prior to leaving work, he may be assumed to be free of contamination.

12. The licensee shall implement an embankment inspection program as specified in the submittal dated September 21, 1987, with the exception that quarterly dam evaluations need no longer be performed. The annual training of site personnel responsible for dam inspections shall be conducted by a registered professional engineer.

An annual technical evaluation report of the large and small tailings impoundments shall be prepared under the direction of a registered professional engineer experienced in dam design and construction. The evaluation should include an inspection of the large and small tailings impoundments, a review and assessment

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of all associated monitoring data and inspection reports, and an overall judgement of the effectiveness of the inspection program. A copy of the report shall be submitted to the NRC, within 1 month of completion of the report.

[Applicable Amendments: 2, 12, 14]

13. The licensee is hereby authorized to possess byproduct material in the form of uranium waste tailings and other byproduct wastes generated by the licensee's milling operations.
14. Release of equipment or packages from the restricted area shall be in accordance with the attachment to SUA-1471 entitled, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct or Source Materials," dated September 1984.
15. The results of all effluent and environmental monitoring required by this license shall be reported in accordance with 10 CFR 40, Section 40.65, with copies of the report sent to the NRC. Monitoring data shall be reported in the format shown in the attachment to SUA-1471 entitled, "Sample Format for Reporting Monitoring Data." All ground-water monitoring data shall be reported as described in License Condition No. 35. [Applicable Amendments: 5]
16. Before engaging in any activity not previously assessed by the NRC, the licensee shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not previously assessed or that is greater than that previously assessed, the licensee shall provide a written evaluation of such activities and obtain prior approval of the NRC in the form of a license amendment.
17. Prior to termination of this license, the licensee shall provide for transfer of title to byproduct material and land, including any interests therein (other than land owned by the United States or the State of New Mexico), which is used for the disposal of such byproduct material or is essential to ensure the long-term stability of such disposal site, to the United States or the State of New Mexico, at the State's option.
18. The licensee shall not make any changes to the approved tailings retention system without specific prior approval of the NRC, in the form of a license amendment.
19. DELETED by Amendment No. 17.
20. The licensee is hereby exempted from the requirements of Section 20.203(e)(2) of 10 CFR 20 for areas within the mill provided that all entrances to the mill are conspicuously posted in accordance with Section 20.203(e)(2) and with the words, "Any area within this mill may contain radioactive material."

The mill Radiation Protection Administrator (RPA), who is responsible for conducting the mill radiation safety program, shall possess the minimum

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qualifications as specified in Section 2.4.1 of Regulatory Guide 8.31, "Information Relevant to Ensuring that Occupational Radiation Exposures at Uranium Mills will be As Low As is Reasonably Achievable."

22. The results of sampling, analyses, surveys and monitoring; the results of calibration of equipment, reports on audits and inspections; all meetings and training courses required by this license and any subsequent reviews, investigations; and corrective actions, shall be documented. Unless otherwise specified in the NRC regulations, all such documentation shall be maintained for a period of at least 5 years.
23. Standard operating procedures (SOPs) shall be established for all operational process activities involving radioactive materials that are handled, processed, or stored. Standard operating procedures for operational activities shall enumerate pertinent radiation safety practices to be followed. Additionally, written procedures shall be established for nonoperational activities to include in-plant and environmental monitoring, bioassay analyses, and instrument calibrations. An up-to-date copy of each written procedure shall be kept in the mill area to which it applies.
- All written procedures for both operational and nonoperational activities shall be reviewed and approved in writing by the RPA before implementation and whenever a change in procedure is proposed to ensure that proper radiation protection principles are being applied. In addition, the RPA shall perform a documented review of all existing operating procedures at least annually.
24. The licensee shall be required to use a Radiation Work Permit (RWP) for all work or nonroutine maintenance jobs where the potential for significant exposure to radioactive material exists and for which no standard written procedure already exists. The RWP shall be approved by the RPA or his designee, qualified by way of specialized radiation protection training, and shall at least describe the following:
- A. The scope of work to be performed.
 - B. Any precautions necessary to reduce exposure to uranium and its daughters.
 - C. The supplemental radiological monitoring and sampling necessary prior to, during, and following completion of the work.
25. Occupational exposure calculations shall be performed and documented within 1 week of the end of each regulatory compliance period as specified in 10 CFR 20.103(a)(2) and 10 CFR 20.103(b)(2). Routine airborne ore dust and yellowcake samples shall be analyzed in a timely manner to allow exposure calculations to be performed in accordance with this condition. Required nonroutine monitoring for ore dust and yellowcake exposure shall be analyzed and the results reviewed by the RPA within 2 working days after sample collection.

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26. Mill tailings, other than small samples for purposes such as research or analysis, shall not be transferred from the site without specific prior approval of the NRC in the form of a license amendment. The licensee shall maintain a permanent record of all transfers made under the provisions of this condition.
27. All liquid effluents from mill process buildings, with the exception of sanitary wastes, shall be discharged to the tailings impoundment.
28. The licensee shall maintain an NRC-approved financial surety arrangement consistent with 10 CFR 40, Criteria 9 and 10, adequate to cover the estimated costs, if accomplished by a third party, for decommissioning and decontamination of the mill and mill site, reclamation of tailings or waste disposal areas, ground-water restoration, and the long-term surveillance fee. Within 3 months of NRC approval of a revised reclamation plan, the licensee shall submit for NRC review and approval a proposed revision to the financial surety arrangement if estimated costs for the newly approved plan exceed the amount covered in the existing financial surety. The revised surety arrangement shall then be in effect within 3 months of written NRC approval. Along with each proposed revision or annual update, the licensee shall submit supporting documentation showing a breakdown of costs and the basis for the cost estimate. The attachment to the license entitled, "Recommended Outline for Site Specific Reclamation and Stabilization Cost Estimates," outlines the minimum considerations used by the NRC in the review of site closure cost estimates.

The licensee's currently approved surety, a Parent Company Guarantee issued by Homestake Mining Company, shall be continuously maintained in an amount no less than \$20,000,000 for the purpose of complying with 10 CFR 40, Criteria 9 and 10, until a replacement is authorized by the NRC. The use of a parent company guarantee necessitates an evaluation of the corporate parent as part of the annual surety update. In addition to the cost information required above, the annual submittal must include updated documentation of the (1) letter from the chief financial officer of the parent company, (2) auditor's special report confirmation of chief financial officer's letter, (3) schedule reconciling amounts in chief financial officer's letter to amounts in financial statements, and (4) parent company guarantee if any changes are appropriate.

[Applicable Amendments: 9, 12]

29. The licensee shall decommission the Homestake Uranium Mill in accordance with Section 2 of the reclamation plan dated January 1991; the licensee's August 28, 1991, response to comments 1-10 of the NRC's August 2, 1991, letter; and Technical Specifications B1 and B2 of the reclamation plan as revised on April 3, 1992. In addition, the licensee shall perform a soil cleanup verification gamma survey and soil sampling program as specified in the submittal of September 15, 1994, and as modified by the submittal of December 13, 1994.

[Applicable Amendment: 20]

A. Deleted by Amendment No. 20

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- B. Deleted by Amendment No. 20
- C. Deleted by Amendment No. 20
- D. The licensee shall use only soils obtained from borrow areas outside the restricted area which have not been impacted by site operations to cover the mill disposal area. The location of these borrow areas shall be documented.
- E. The licensee shall implement a quality control (QC) program for the soil cleanup verification program which consists of recounting using offsite gamma spectroscopy equipment or chemical analysis by a vendor laboratory of at least 15 percent of all soil samples collected. In addition, a minimum of 5 percent of the QC samples shall be chemically analyzed. Results of the QC program shall be evaluated by the Radiation Protection Administrator and the evaluation documented at least monthly during the verification sampling program.
- F. All decommissioning activities shall be documented. Within 90 days following the completion of mill demolition and disposal activities, the licensee shall submit to the NRC a report documenting the activities and providing summaries of all data generated as part of the radiation safety program for mill decommissioning. In addition, within 90 days following the completion of the soil cleanup and verification program, the licensee shall submit to the NRC a report documenting the cleanup activities and providing the results of all soil sampling and gamma surveys conducted to verify the adequacy of cleanup.

[Applicable Amendment: 15]

30. The licensee shall implement a program to minimize dispersal of dust from the ore stockpile area(s). This program shall include written operating procedures. The effectiveness of the control method used shall be evaluated weekly by means of a documented inspection.
31. The licensee is authorized to construct and operate a lined brine evaporation pond in accordance with plans, conditions, revisions, and commitments made in conjunction with Ground Water Discharge Plan DP-339, approved by the Ground Water/Hazardous Bureau of the State of New Mexico by a letter dated January 17, 1986, signed by Ernest Rebeck. Such plans, conditions, revisions, and commitments are contained in submittals and correspondence from Homestake Mining Company dated March 22, 1984, April 9, 1984, and April 17, 1986; and includes a commitment by letter dated April 11, 1986, to reclaim the pond area in accordance with applicable reclamation standards after the cessation of operations.

[Applicable Amendments: 5, 8]

32. The licensee shall comply with the following:

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- A. The quantity of air sampled and the method of analysis shall result in a lower limit of detection (LLD) for all in-plant air sampling of at least 10 percent of the respective maximum permissible concentration for restricted areas.
- B. Analysis of urine samples shall utilize an LLD of at least 5 ug/l uranium.
- C. A copy of the report documenting the annual ALARA audit shall be submitted to the NRC, review within 30 days of completion of the audit.

[Applicable Amendment: 2]

- 33. All eating areas and change rooms located in mill process areas shall be spot-checked weekly for removable surface contamination. Areas shall be promptly cleaned if surface contamination levels exceed the values listed in Table 1 of Regulatory Guide 8.30. In addition, all laboratory surfaces used for preparation of bioassay samples shall be spot-checked prior to sample analysis and decontaminated if removable contamination levels exceed 200 dpm alpha/100 cm². The results of all surveys and spot checks shall be documented.

[Applicable Amendment: 2]

DELETED by Amendment No. 4.

- 35. The licensee shall implement a compliance monitoring program containing the following:

- A. Implement the monitoring program shown in Table 2 of the licensee's September 2, 1993 submittal.
- B. Comply with the following ground-water protection standards at brine evaporation pond point-of-compliance Wells D1 and BP, at the inactive tailings impoundment point-of-compliance Wells Y and X, and at the active tailings impoundment point-of-compliance Wells S4, S3, M5, and DQ with background being recognized in Well P:

chromium = 0.06 mg/l, molybdenum = 0.03 mg/l, selenium = 0.10 mg/l, vanadium = 0.02 mg/l, uranium = 0.04 mg/l, radium-226 and -228 = 5.0 pCi/l, and thorium-230 = 0.30 pCi/l.

- C. Implement the corrective action program described in the September 15, 1989, submittal due to exceeding ground-water protection standards, with the objective of returning the concentrations of chromium, molybdenum, selenium, thorium-230, uranium, and vanadium to the concentration limits specified in 35(B) above.
- D. Operate the lined evaporation pond and enhanced evaporation system as described in the June 8 and 28, 1990, submittals.

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E. Submit a semiannual ground-water monitoring report in accordance with the reporting requirements of 10 CFR 40.65. Also, submit, by February 28 of each year, a performance review of the corrective action program that details the progress towards attaining ground-water protection standards.

[Applicable Amendments: 3, 4, 5, 7, 8, 10, 11, 16]

36. The licensee shall complete site reclamation in accordance with an approved reclamation plan. The ground-water corrective action plan shall be conducted as authorized by License Condition No. 35. All activities shall be completed in accordance with the following schedules.

A. To ensure timely compliance with target completion dates established in the Memorandum of Understanding with the Environmental Protection Agency (56 FR 55432, October 25, 1991), the licensee shall complete reclamation to control radon emissions as expeditiously as practicable, considering technological feasibility, in accordance with the following schedule:

(1) Windblown tailings retrieval and placement on the pile:

For the Large Impoundment - December 31, 1996.

For the Small Impoundment - May 31, 1997.

(2) Placement of the interim cover to decrease the potential for tailings dispersal and erosion:

For the Large Impoundment - December 31, 1996.

For the Small Impoundment - May 31, 1997.

(3) Placement of final radon barrier designed and constructed to limit radon emissions to an average flux of no more than 20 pCi/m²/s above background:

For the Large Impoundment which has no evaporation ponds - December 31, 1996.

For the Small Impoundment, tailings pile surface areas are essentially covered by evaporation ponds constructed as part of the ground-water corrective action program. Prior to December 31, 2001, the areas not covered by the evaporation ponds shall have final radon barrier in place. Final radon barrier placement over the entire pile shall be completed within 2 years of completion of ground-water corrective actions.

B. Reclamation, to ensure required longevity of the covered tailings and ground-water protection, shall be complete as expeditiously as is reasonably achievable, in accordance with the following target dates for completion:

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- (1) Placement of erosion protection as part of reclamation to comply with Criterion 6 of Appendix A of 10 CFR Part 40:

For the Large Impoundment - September 30, 1999.

For the Small Impoundment - July 1, 2014.

- (2) Projected completion of ground-water corrective actions to meet performance objectives specified in the ground-water corrective action plan - May 1, 2010.

- C. Any license amendment request to revise the completion dates specified in Section A must demonstrate that compliance was not technologically feasible (including inclement weather, litigation which compels delay to reclamation, or other factors beyond the control of the licensee).
- D. Any license amendment request to change the target dates in Section B above, must address added risk to the public health and safety and the environment, with due consideration to the economic costs involved and other factors justifying the request such as delays caused by inclement weather, regulatory delays, litigation, and other factor beyond the control of the licensee.

[Applicable Amendment: 13]

37. The licensee shall reclaim the large and small tailings impoundments as stated in their January 31, 1991, Reclamation Plan, as revised by submittals dated August 28, 1991, April 3, April 30, and December 21, 1992, and June 30, 1993, submittals, with the following additional requirements.

- A. The cover system for the large tailings impoundment shall be as defined on Figure 3.4 of Attachment #5 to the licensee's June 30, 1993, submittal except the clayey sand radon barrier shall be 8 feet thick and shall consist of minus 3/4-inch material, containing at least 25 percent passing the No. 200 sieve, Atterberg limits plotting above the "A" line; and shall be compacted in 6-inch lifts to at least 95 percent of Standard Proctor density within minus 2 to plus 2 percent of the optimum moisture content.
- B. The radon barrier for the small impoundment shall be 14 feet thick and shall consist of minus 3/4-inch material, containing at least 25 percent passing the No. 200 sieve, Atterberg limits plotting above the "A" line; and shall be compacted in 6-inch lifts to at least 95 percent of Standard Proctor density within minus 2 to plus 2 percent of the optimum moisture content.
- C. The licensee shall submit a construction quality control program for NRC review and approval prior to placing any portion of the radon barrier that will ensure that the specification which limits the activity of the radon barrier material to 5 pCi/g above background is not exceeded.

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- D. The construction quality assurance and control program shall be as defined in the Staff Technical Position On Testing and Inspection (NRC, 1989). The acceptable correlation between ASTM D 2922 and ASTM D 1556 shall be as defined in the licensee's April 30, 1992, submittal.
- F. The radon barrier shall not be placed on the top surface of the large tailings impoundment until the settlement has been demonstrated to be at least 90 percent of expected settlement, and the results of this determination have been reviewed and accepted by the NRC. The radon barrier may be placed on the large impoundment side slopes following final grading of the impoundment. Care shall be taken to preclude the possibility of ponding. Before the erosion protection is placed, it shall be verified that the radon barrier material meets the specifications.
- G. The adequacy of the erosion protection proposed for the side slopes of both the large and small impoundments shall be reevaluated considering any increases in impoundment heights due to the revised radon attenuation cover design.
- H. All reclamation plan requirements shall be incorporated into a single comprehensive document by October 31, 1993. This may be accomplished by providing appropriate revisions to the January 31, 1991, reclamation plan drawings and technical specifications, or by providing new drawings and technical specifications.
- I. A completion report shall be provided within 6 months of the completion of construction. This report, including as-built drawings, shall verify that reclamation of the site has been performed according to the approved plan. The report shall also include summaries of results of the quality assurance and control testing to demonstrate that approved specifications were met.

[Applicable Amendments: 14]

38. The licensee is authorized to use water collected as part of the site ground-water corrective action program for conditioning soils during placement of the interim cover or the radon barrier on the tailings impoundments. The licensee shall also analyze samples of the collection water being used for this purpose for radium-226 and 228 content semiannually. If sample results exceed 30 pCi/l combined radium, the licensee shall perform an evaluation of the potential impacts of using this water on the required design of the radon barrier and submit the evaluation for NRC review within 30 days of receipt of sample results.

[Applicable Amendment: 18]

39. The licensee is authorized to construct and operate a lined evaporation pond, located between the existing evaporation pond (#1) and the existing brine ponds, in accordance with plans and commitments contained in submittals and correspondence from Homestake Mining Company dated July 26, 1994; August 16, 1994; August 19, 1994; and September 2, 1994; and September 15, 1994. The NRC shall be

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notified by the licensee of any changes or revisions to the design. The licensee shall notify the NRC 30 days prior to start of filling the pond, at which time the NRC may choose to inspect the pond and construction records. Final reclamation shall consist of movement of liner and dike material to the small tailings impoundment. Underlying soils will be sampled for radium-226 content, and if above site standard of 5.5 pCi/gram, soils will be excavated and placed on the small impoundment.

[Applicable Amendment: 19]

FOR THE NUCLEAR REGULATORY COMMISSION



Joseph J. Holonich, Chief
High-Level Waste and Uranium Recovery
Projects Branch
Division of Waste Management, NMSS

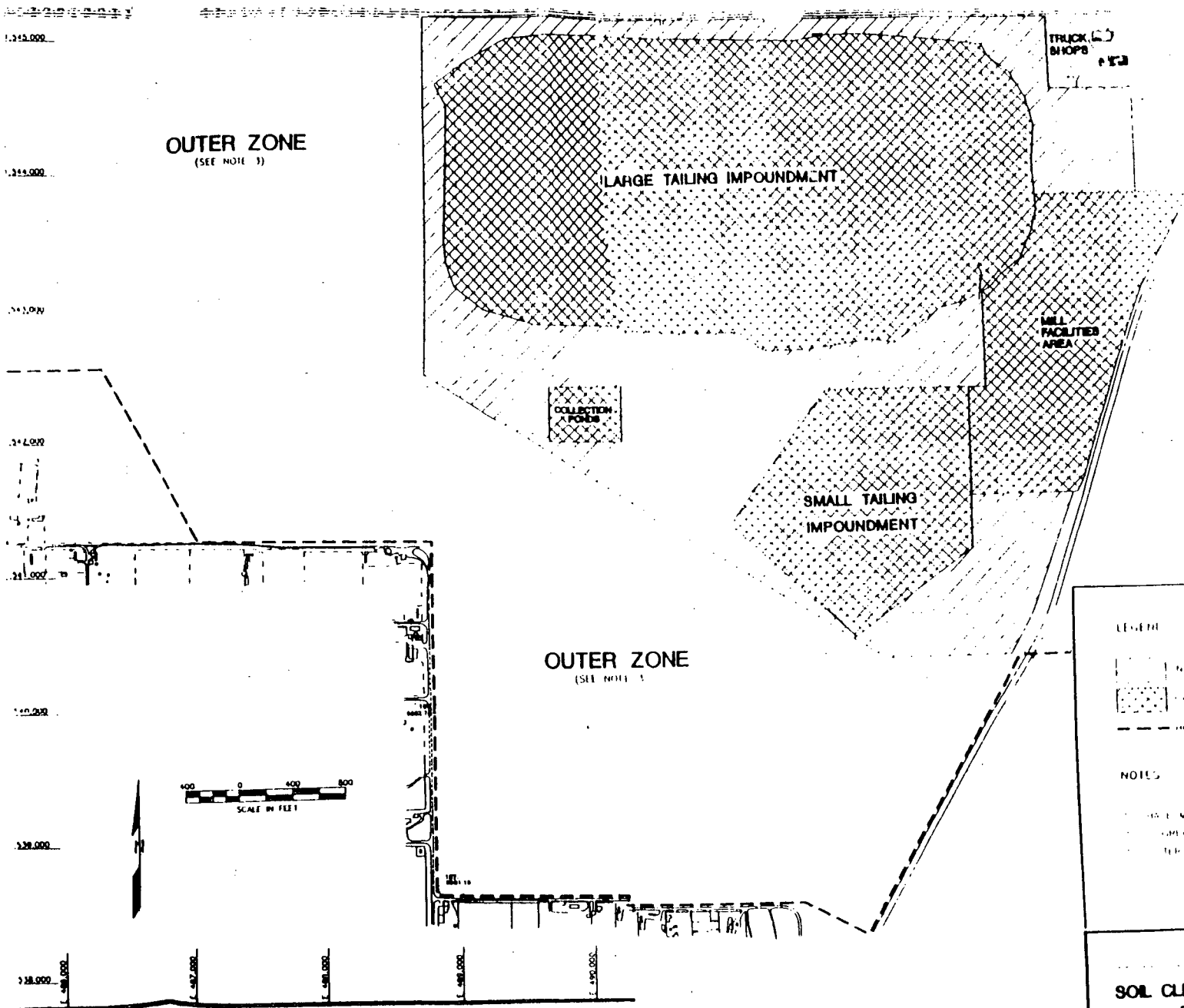
Date 14 Jun 11, 1995

OUTER ZONE
(SEE NOTE 3)

OUTER ZONE
(SEE NOTE 3)

OUTER ZONE
(SEE NOTE 3)

OUTER ZONE
(SEE NOTE 3)



LEGEND

- TAILING PILE AND TAILING PILE AREA
- TAILING AREA
- COMPLETE PROPERTY BOUNDARY

NOTES

1. THIS MAP WAS PREPARED BY THE CONSULTING ENGINEER, JANUARY 1993.
 2. OPERATE UNDER THE NEW MEXICO STATE PLATE GRID, WEST ZONE.
 3. THE STATE PLATE NUMBER IS 7N0641000.

**SOIL CLEANUP VERIFICATION
SURVEY PLAN**

**HOMESTAKE MINING COMPANY
OF CALIFORNIA
GRANTS OPERATION**

Prepared by: _____

December 13, 1994

NEXT DAY UPS TRACKING NO.: 1078 5569 431

U.S. Nuclear Regulatory Commission
Division of Waste Management, MS5E2
Attn. Mr. Joseph J. Holonich, Chief
High Level Waste and Uranium
Recovery Projects Branch
11555 Rockville Pike
Rockville, MD 20850

Re: License SUA-1471 - Docket No. 40-8903

Dear Mr. Holonich:

On September 15, 1994, Homestake Mining Company of California (HMC), owner of the Grants Uranium Mill, submitted a report, "Soil Cleanup Verification Survey and Sampling Plan for Use at the Grants Uranium mill Tailings Site" which was to be used as a basis for a license amendment for verifying the cleanup of windblown tailings and other off-pile contaminated areas. After informal discussions with Ms. Elaine Brummett and Mr. Ken Hooks, HMC conducted an additional study to support a gamma-ray action level for the windblown contaminated areas. A revision to the original action level was evident from the study. The study results were presented in our October 31, 1994 submittal to you.

Informal comments on these submittals on November 8, 1994 in a telephone conversation between myself and NRC staff resulted in the following discussions and revised verification plan.

A. Verification Plan

- A.1 Two zones will be considered for soil verification purposes with different approaches taken for each zone. The inner zone encompasses the area in the immediate vicinity of the large and small tailings piles and mill site as shown on the enclosed drawing. All surface soil within the inner zone excluding the tailings piles, the two debris disposal pits, and the mill site are included in the inner zone. All areas noted as excluded have or will be covered with fill or radon barrier as indicated in the NRC-approved Reclamation Plan. This inner zone has a higher probability of localized contaminated areas and is also influenced by gamma-ray shine from the small tailings pile.

The outer zone includes all of the area outside of the inner zone that has been affected by windblown tailings or ore dust. The outer zone is more homogeneous in that the characteristic size of contaminated area is expected to be hundreds of meters across. Because of the difference in the two zones, individual verification plans have been prepared for each zone. This results in an allocation of resources which provide a high probability of compliance with the Ra-226 cleanup criteria.

A.2 For the inner zone, a GPS-based gamma survey will be conducted to assure all areas are below 28,000 cpm. If gamma shine, from the uncovered small tailings pile, does not allow the 28,000 cpm action level to be achieved, the entire area above 28,000 cpm will be gridded into 100 m² grids and sampled using a five point composite sample and analyzed for Ra-226. All other areas will be divided into 500 ft grids. The gamma survey map will be used to identify the 100 m² grid block within each 500-ft by 500-ft grid having the highest average gamma count rate. A five point composite sample will be prepared for each grid block by taking 6-inch deep surface samples. Each area exceeding the 10.5 pCi/g Ra-226 cleanup criterion will be further excavated and a new gamma survey done. If any sampled area requires additional decontamination, the second highest area within the grid block will be sampled and evaluated. This procedure will be followed until it is evident that the entire 500-ft grid block will meet the cleanup criterion of 10.5 pCi/g.

A.3 For the outer zone, beginning at the closest point near the northwest corner of the Large Tailings Pile (but within the outer zone), 500-ft grids will be established in an easterly direction extending to the State Highway 605. All areas will have been cleaned so that the average gamma reading for any area of 100 m² size will be 21,000 cpm or less. The hundred m² grid block within each 500-ft by 500-ft grid block having the highest average gamma reading will be sampled and analyzed for Ra-226. A five-point composite sample will be prepared from each of 30 five hundred-ft grids from the north side of the Large Tailings Pile. An additional 10 grids will be sampled in a similar manner from each of the areas in the southerly direction and easterly direction at the boundary of the inner zone and outer zone.

A statistical test will be done to determine whether the mean concentration of the 50 grid blocks is 10.5 pCi/g or less at the 95 per cent confidence level using formula 8-13 of NUREG/CR-5849. Since this represents the mean of a set of 50 biased samples (selected from the grid that has the highest gamma exposure rate), the passing of this test provides assurance that the error rate is very low for the entire sample set made up of all the possible grids that could have been sampled.

If any sample exceeds the 10.5 pCi/g limit, the area will be recleaned and a new gamma survey done. For any grid block that failed the 10.5 pCi/g criterion, the 100 m² grid block with the second highest average gamma reading will also be sampled and analyzed in a similar manner. This procedure will be followed until it is evident that there is a high probability that all portions of the grid block meets the cleanup criteria.

- A.4 If the statistical test (equation 8-13) is satisfied, HMC will establish 1000-ft grids for the remaining portion of the outer zone. When this occurs, the 100 m² grid block having the highest average count rate within each 1000-ft grid will be sampled and analyzed for Ra-226 in a manner as described in No. A.3 above. Equation 8-13 of NUREG/CR-5849 will be used for this set of samples to demonstrate compliance with the desire to clean all grid blocks to meet the 10.5 pCi/g cleanup criterion with a low error rate.

If the mean of the samples is less than the 10.5 pCi/g criterion but the data fails the statistical test, HMC will follow procedures similar to those recommended in Section 8.6 of NUREG/CR-5849. The number of samples will be increased to include the grids with the second highest average gamma levels and again perform the statistical test. This will be done until the statistical test is met. In any case, all grid blocks that were sampled and measured to exceed the 10.5 pCi/g will be recleaned and resurveyed.

If the statistical test in A.3 above fails, HMC will establish 500-ft grids over the entire outer area and sample the 100-m² grid block lying to the northeast of each 500-ft grid line intersection. The northeast grid is proposed to assure that no bias is factored into the sampling strategy.

B. Excavation Control Monitoring

Excavation control monitoring is done by a combination of two methods. The GPS-based radiological survey results in a plot of gamma count rates over large areas. Isocontour lines corresponding to action levels are used to delineate the excavation boundaries for scrapers or other large equipment to use while removing the contaminated material. The action level is determined from the correlation studies included in the October 31, 1994 submittal, currently 21,000 cpm.

For small areas such as near utility lines, roads, and areas where contamination may be found at considerable depth, ground control technicians using shielded NaI detectors conduct radiological surveys and guide the excavation effort. This real-time monitoring information

Mr. Joseph J. Holonich, Chief
December 13, 1994
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provides a high level of confidence that once the removal is complete, the area will meet the cleanup criteria. Correlation studies for the shielded detectors were performed at the same time as those for the unshielded detectors. The data were provided in the original September 15, 1994 submittal, "Soil Cleanup Survey and Sampling Plan for Use at the Grants Uranium Mill Tailings Site." With the detector placed at a height of six inches above the surface, an action level of 10,000 cpm is used. Experience has shown that normally an area of 100 m² size averages less than 9,000 cpm using an action level of 10,000 cpm.

C. Density of Gamma-Ray Measurements

The gamma-ray count rate from the GPS-based radiological survey equipment is recorded once every 2 seconds and represents an average count rate over the field of view of the detector (placed 18 inches above the ground surface). The fact that the detector is moving slowly along the traverses also indicates that the count rate is influenced by the count rate behind the moving system. Therefore, each number represents an average over an area with dimensions of approximately 3 meters by 2 meters, or approximately 6 square meters. In order to obtain a good estimate of the mean gamma count rate for a large area, fewer measurements are required compared to point measurements since each number represents an average over a rather large area.

The density of measurements within any 100 will be considered m² grid block averages between 8 and 9. However the uniformity of data depends on operator skill and topography. In some cases, areas on maps may have as few as 5 or 6 records. Homestake reviews all data maps and where the density is considered too low to assure a good average gamma level, additional data are obtained and added to the data base. For outlying areas where gamma levels are consistent and slowly varying, as few as 5 records will be considered adequate; for near-pile areas where the characteristic size of contaminated areas may be smaller, HMC will insist on a minimum of 7 records per 100 m².

D. External Influences on Gamma Measurements

NRC staff has raised questions regarding the effects of soil moisture and topography on gamma measurements. It is true that high moisture content retards radon diffusion and thus limits the release of radon from surficially contaminated soils. The maximum effect would be a percentage reduction equal to the emanating fraction. This of course assumes that under dry conditions (or conditions which the calibration studies were done) all of the radon released into the pore space was released to the atmosphere while under wet conditions, none of the radon was released to the atmosphere. Naturally this is not the case and influences as high as 10 percent are difficult to find. For areas where large amounts of rainfall exist, the ground may become moist to great depths preventing the normal diffusion of radon to the surface. This will result in a decrease

Mr. Joseph J. Holonich, Chief
December 13, 1994
Page 5

in the gamma exposure rate of up to approximately ten percent. Similarly, snow has been shown to decrease the count rates up to ten percent. The semiarid conditions at HMC seldom result in deep penetration of soil moisture. Also, the area near the HMC site does not receive a large amount of snow which stays for a few days at most. Therefore weather conditions (a light rain) at HMC would more likely result in a short-term increase in gamma exposure rate. Since the gamma surveys are not conducted when the soil is wet or snow is on the ground, HMC considers that the effect of soil moisture on the gamma count rate is minimal.

Local topography can be a factor with the greatest influences being on top of ridges (lower levels) and in valleys (higher levels). Experience has shown that these influences are normally less than a few percent. Monitoring in deep trenches however can increase the count rate by up to 2000 cpm on a bare NaI (2-in by 2-in) detector under near background conditions. While these are real influences, most situations tend to increase the count rates rather than decrease the count rates.

The action levels were developed using measurements made while the surface soils were dry and in areas that were relatively flat. Therefore the only influences discussed above that would be nonconservative are the measurements made on sharp ridges. The Grants Uranium Mill Site topography is generally flat near the piles and mill yard and west of Highway 605. The area east of the highway is in some areas generally rolling terrain with elevation changes over a few hundred yards of less than 30 feet. It is not considered a significant source of error for this site.

We believe that this verification plan takes advantage of the very comprehensive gamma data available at the site. The soil sampling strategy, based on a biased sampling of the areas having the highest gamma count rates, provides additional assurance that the site will be meet the cleanup criteria. Please advise me if we can provide additional information.

Sincerely,

HOMESTAKE MINING COMPANY

F. R. Craft
Resident Manager

Enclosure (3 drawings)
xc: H. Barnes
S. Collins - NRC

**Standard Operating Procedure
Homestake Mining Company**

Verification of Highway Right-of-Way

1. Purpose

To describe the radiological measurements necessary for assuring that the highway right-of-way has been cleaned up to meet the cleanup criteria.

2. Discussion

The highway right-of-way that divides the HMC property is known to be contaminated by windblown tailings. Because of public safety concerns, HMC plans to backfill the excavated areas contiguous to both sides of the pavement prior to obtaining the verification data from soil sample results. Gamma-ray count rate action levels will be developed for detectors that have known correlations between the gamma-ray count rate and Ra-226 concentrations in soil. These action levels will be conservatively chosen in order to minimize the probability for error (estimated 95 % confidence interval).

3. Gamma-Ray Count Rates for Use in Determining Adequacy of Cleanup

Two separate studies were conducted to develop correlations between radiation detector readings and Ra-226 concentrations in soil. The first study focussed on areas south of the Large Tailings Pile where windblown and tailings liquids had contaminated the area. The area is representative of contamination where the uranium content is higher than that that exists in tailings.

A procedure was developed whereby detectors were held at a fixed height and one or more measurements recorded. A five-plug composite sample was taken from the top six-inch soil layer within an area having a radius of approximately 18 inches. Locations where the Ra-226 concentrations ranged from near background to approximately 30 pCi/g were used to develop the correlations shown in the attached figures.

Action Levels were chosen as follows:

Detector	Height	Action Level
Ludlum 3/44-2	36 in	10-12 microR/h*
Ludlum 44-10 (shielded)	6 in	10 kcpm*

* May be higher when geometry conditions increase gamma exposure levels

4. Procedure

- 4.1 Land survey stakes or other markers will be placed adjacent to the area to be excavated on both sides of the highway at intervals of 25 feet. Each stake will have a unique identifier with at least one stake referenced to the site coordinate system.
- 4.2 Scrapers will excavate to the prescribed depth, based on prior soil sample results.
- 4.3 The excavation control technician will scan the area. Areas exceeding the action level will be marked with pin flags for additional excavation. This will be done until it appears that all contamination above the cleanup criterion has been removed.
- 4.4 The width of the excavation on each side of the highway will range from 15 to 50 feet. A gamma-ray measurement representing each 25-ft long segment (parallel to the highway) will be recorded on the attached form according to the following procedure.
 - 4.4.1 Follow the HMC procedure for function checking the meter at the beginning of each work shift.
 - 4.4.2 Walk within the excavated area at a fast pace while observing the meter reading, assuring that time is spent in all areas. Record the average reading on the line corresponding to the number on the land survey marker on the northernmost part of the area.

Mark any area that exceeds the action level and immediately advise the field supervisor.
- 4.5 After areas have been shown to be below the gamma-ray action level, take a 6-inch deep soil sample at approximately one-half the excavation width along each side of the road at 150-ft intervals.

Appendix B

Radiological Characterization Data for Areas Used as Material Borrow Areas

Homestake Mining Company - Grants Operation

Table B-1 Soil Sample Results For North Borrow Pit

Table B-2 Soil Sample Results Taken From The Northwest Borrow Pit

Table B-3 Soil Sample Results Taken From The Near North Borrow Pit

Homestake Mining Company - Grants Operation
Table B-1 Soil Sample Results For North Borrow Pit

HMC Lab ID	HMC Sample ID	Energy Lab ID	Ra-226 Chem. pCi/g	Ra-226 Prec. pCi/g
3421	AN-12-AE-12	94-32126	1.5	0.3
3422	AN-9-AE-12	94-32127	2.0	0.3
3423	AN-10-AE-14	94-32128	0.5	0.2
3424	AN-13-AE-10	94-32129	1.7	0.3
3425	AN-11-AE-12	94-32130	1.0	0.2
3426	AN-14-AE-9	94-32131	1.8	0.3
3427	AN-14-AE-14	94-32132	1.4	0.3
3428	AN-13-AE-13	94-32133	1.1	0.2
3429	AN-12-AE-10	94-32134	0.1	0.1
3430	AN-9-AE-14	94-32135	1.4	0.3
3431	AN-14-AE-15	94-32136	1.7	0.3
3432	AN-12-AE-14	94-32137	1.3	0.3
3433	AN-12-AE-8	94-32138	1.7	0.3
3434	AN-14-AE-8	94-32139	1.2	0.2
3435	AN-8-AE-12	94-32140	2.5	0.3
3436	AN-12-AE-14	94-32141	1.3	0.3
3437	AN-9-AE-9	94-32142	1.5	0.3

B 1.1

HMC Lab ID	HMC Sample ID	Energy Lab ID	Ra-226 Chem. pCi/g	Ra-226 Prec. pCi/g
3438	AN-11-AE-14	94-32143	1.7	0.3
3439	AN-10-AE-12	94-32144	0.7	0.2
3440	AN-14-AE-11	94-32145	1.2	0.2
3441	AN-14-AE-17	94-32146	0.5	0.2

Homestake Mining Company - Grants Operation

Table B-2 Soil Samples Taken From The Northwest Borrow Pit

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
755	AW - 1 - 6"	4.40					
756	AW - 1 - 12"	-0.40					
757	AW - 2 - 6"	1.05					
758	AW - 2 - 12"	-0.42					
759	AW - 3 - 6"	1.82					
760	AW - 3 - 12"	0.41					
761	AW - 4 - 6"	1.17					
762	AW - 4 - 12"	-0.23					
763	AW - 5 - 6"	0.94	1.68	5.00		<1.7	
764	AW - 5 - 12"	-0.19					
765	AW - 6 - 6"	0.58					
766	AW - 6 - 12"	-0.29					
767	AW - 7 - 6"	2.44					
768	AW - 7 - 12"	-0.03					

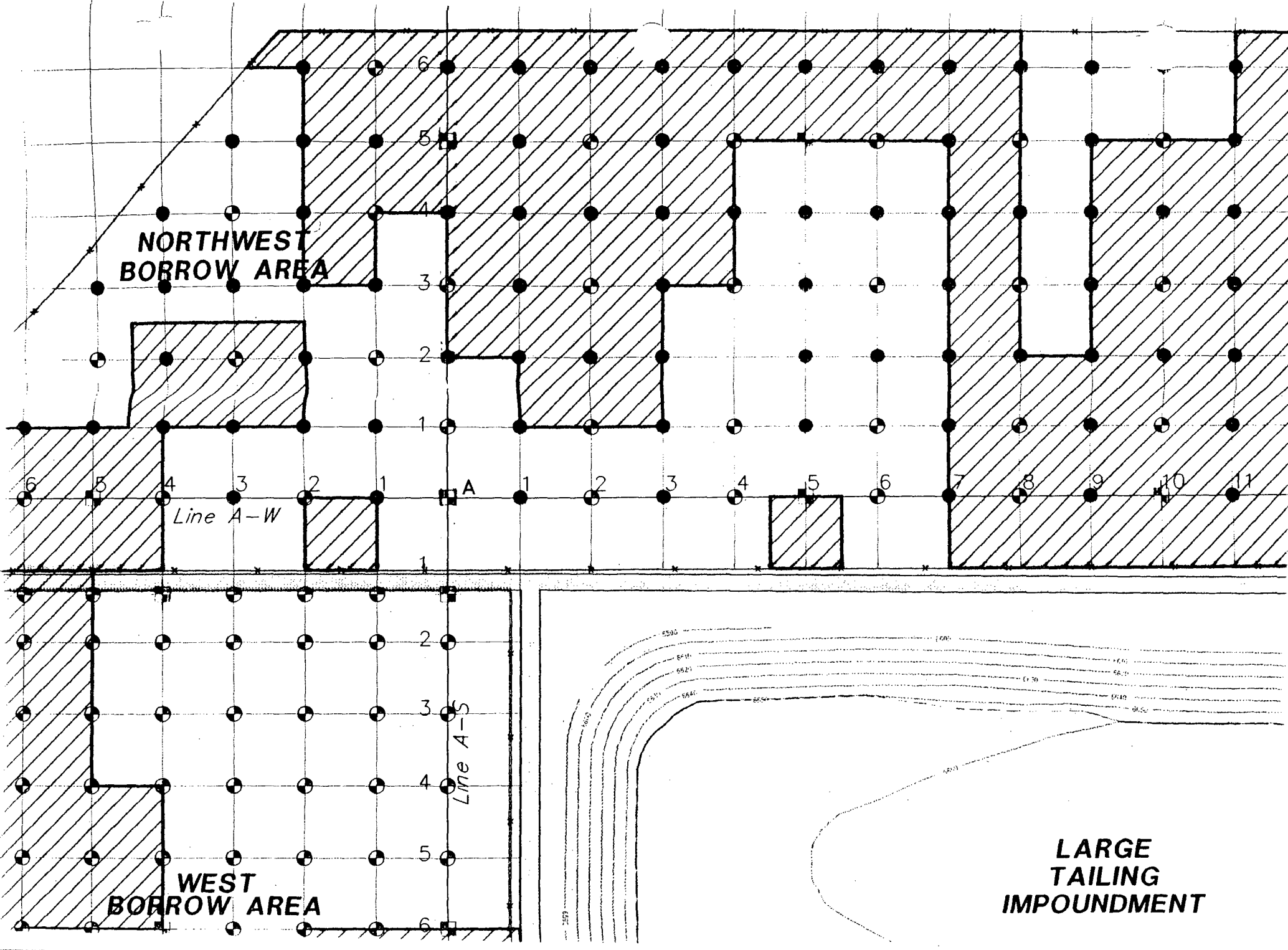
B- 2.1

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
769	AN1, AW 1, 6"	4.12					
770	AN1, AW 1, 12"	0.11					
771	AN1, AW 2, 6"	1.16					
772	AN1, AW 2, 12"	0.14					
773	AN1, AW 3, 6"	1.11	1.57	3.40	1.80	<1.7	0.90
774	AN1, AW 3, 12"	-0.42					
775	AN1, AW 4, 6"	-0.03					
776	AN1, AW 4, 12"	-0.36					
777	AN1, AW 5, 6"	0.64					
778	AN1, AW 5, 12"	-0.54					
779	AN1, AW 6, 6"	-0.01					
780	AN1, AW 6, 12"	-0.48					
781	AN1, AW 7, 6"	1.49					
782	AN1, AW 7, 12"	-0.29					
783	AN2, AW 1, 6"	5.96	6.22	8.80		<2.1	
784	AN2, AW 1, 12"	0.20					
785	AN2, AW 2, 6"	2.11					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
786	AN2, AW 2, 12"	-0.09					
787	AN2, AW 3, 6"	2.73					
788	AN2, AW 3, 12"	-0.37					
789	AN2, AW 4, 6"	2.29					
790	AN2, AW 4, 12"	-0.32					
791	AN2, AW 5, 6"	0.88					
792	AN2, AW 5, 12"	-0.79					
793	AN2, AW 6, 6"	0.06	1.10	4.90	1.20	<0.90	3.30
794	AN2, AW 6, 12"	-0.38					
795	AN3, AW 1, 6"	3.95					
796	AN3, AW 1, 12"	-0.28					
797	AN3, AW 2, 6"	3.50					
798	AN3, AW 2, 12"	-0.41					
799	AN3, AW 3, 6"	1.17					
800	AN3, AW 3, 12"	-0.17					
801	AN3, AW 4, 6"	0.74					
802	AN3, AW 4, 12"	-0.19					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
803	AN3, AW 5, 6"	0.16	1.33	1.90		<1.5	
804	AN3, AW 5, 12"	-0.55					
805	AN4, AW 2, 6"	-0.55					
806	AN4, AW 2, 12"	0.46					
807	AN4, AW 3, 6"	0.54					
808	AN4, AW 3, 12"	-0.50					
809	AN4, AW 4, 6"	1.17					
810	AN4, AW 4, 12"	-0.80					
811	AN 4 , AW 1 6"	1.85					
812	AN 4 , AW 1 12"	-0.55					
813	AN 5 , AW 1 6"	4.87	5.43	7.90	5.90	3.90	4.30
814	AN 5 , AW 1 12"	0.43					
815	AN 5 , AW 2 6"	4.66					
816	AN 5 , AW 2 12"	0.06					
817	AN 5 , AW 3 6"	3.78					
818	AN 5 , AW 3 12"	-0.35					
819	AN 6 , AW 1 6"	7.07					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
820	AN 6 , AW 1 12"	0.08					
821	AN 6 , AW 2 6"	5.19					
822	AN 6 , AW 2 12"	1.01					



Homestake Mining Company - Grants Operation
Table B-3 Soil Sample Results Taken From The Near North Barrow Area

HMC Lab ID	HMC Sample ID	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	TMA Eberline Ra 238 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Unat pCi/g
662	AN - 1, AE-7, 6"	3.08				
663	AN - 1, AE-7, 12"	-0.39	0.87	<1.10		
664	AN - 1, AE-8, 6"	6.90				
665	AN - 1, AE-8, 12"	1.25				
666	AN - 1, AE-9, 6"	9.77				
667	AN - 1, AE-9, 12"	1.06				
668	AN - 1, AE-10, 6"	1.82				
669	AN - 1, AE-10, 12"	-0.37				
670	AN - 1, AE-11, 6"	-0.20				
671	AN - 1, AE-11, 12"	-1.30				
672	AN - 1, AE-12, 6"	4.01				
673	AN - 1, AE-12, 12"	0.15	2.64	<2.00	2.4	1.9
674	AN - 1, AE-13, 6"	2.92				
675	AN - 1, AE-13, 12"	-0.81				
729	AN - 2, AE-7, 6"	0.16				
730	AN - 2, AE-7, 12"	-0.91				

B-3.1

B- 3.2

HMC Lab ID	HMC Sample ID	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	TMA Eberline Ra 238 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Unat pCi/g
731	AN - 2, AE-8, 6"	0.31				
732	AN - 2, AE-8, 12"	-0.61				
733	AN - 2, AE-9, 6"	0.86	2.13	2.70	2.7	7.2
734	AN - 2, AE-9, 12"	-0.23				
735	AN - 2, AE-10, 6"	0.79				
736	AN - 2, AE-10, 12"	-0.79				
737	AN - 2, AE-11, 6"	-0.86				
738	AN - 2, AE-11, 12"	-0.64				
739	AN - 2, AE-12, 6"	2.31				
740	AN - 2, AE-12, 12"	-0.93				
741	AN - 2, AE-13, 6"	0.19				
742	AN - 2, AE-13, 12"	-0.31				
837	AN - 3, AE-7, 6"	9.26				
838	AN - 3, AE-7, 12"	0.10				
839	AN - 3, AE-8, 6"	1.68				
840	AN - 3, AE-8, 12"	-0.98				
841	AN - 3, AE-9, 6"	29.66				
842	AN - 3, AE-9, 12"	3.86				
843	AN - 3, AE-10, 6"	7.07	8.71	<3.40		

B-3.3

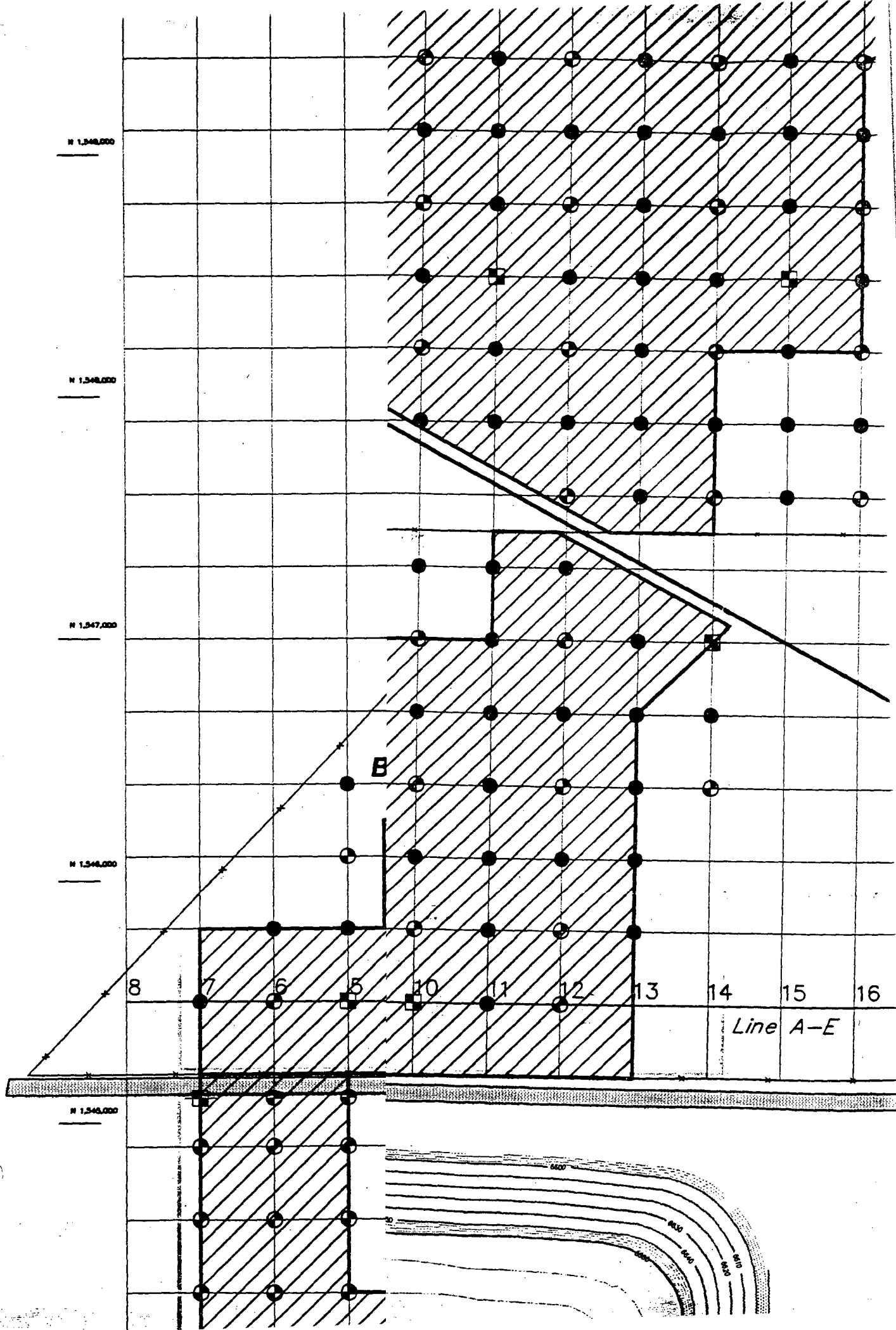
HMC Lab ID	HMC Sample ID	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	TMA Eberline Ra 238 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Unat pCi/g
844	AN - 3, AE-10, 12"	3.55				
845	AN - 3, AE-11, 6"	22.12				
846	AN - 3, AE-11, 12"	7.07				
847	AN - 3, AE-12, 6"	-0.22				
848	AN - 3, AE-12, 12"	-0.60				
849	AN - 3, AE-13, 6"	0.96				
850	AN - 3, AE-13, 12"	-1.00				
877	AN - 4, AE-7, 6"	1.56				
878	AN - 4, AE-7, 12"	-0.82				
879	AN - 4, AE-8, 6"	2.56				
880	AN - 4, AE-8, 12"	1.22				
881	AN - 4, AE-9, 6"	15.27				
882	AN - 4, AE-9, 12"	-0.28				
883	AN - 4, AE-10, 6"	11.05	11.81	<5.20		
884	AN - 4, AE-10, 12"	0.21				
885	AN - 4, AE-11, 6"	11.50				
886	AN - 4, AE-11, 12"	4.77				
887	AN - 4, AE-12, 6"	8.24				
888	AN - 4, AE-12, 12"	-0.83				

B-3.4

HMC Lab ID	HMC Sample ID	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	TMA Eberline Ra 238 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Unat pCi/g
889	AN - 4, AE-13, 6"	19.58				
890	AN - 4, AE-13, 12"	-0.78				
917	AN - 5, AE-7, 6"	4.21				
918	AN - 5, AE-7, 12"	-1.34				
919	AN - 5, AE-8, 6"	23.34				
920	AN - 5, AE-8, 12"	-0.26				
921	AN - 5, AE-9, 6"	4.54				
922	AN - 5, AE-9, 12"	-0.93				
923	AN - 5, AE-10, 6"	4.84	6.08	<2.20		
924	AN - 5, AE-10, 12"	-1.26				
925	AN - 5, AE-11, 6"	16.25				
926	AN - 5, AE-11, 12"	-0.62				
927	AN - 5, AE-12, 6"	7.05				
928	AN - 5, AE-12, 12"	2.77				
929	AN - 5, AE-13, 6"	9.70				
930	AN - 5, AE-13, 12"	9.86				
931	AN - 5, AE-14, 6"	10.18				
932	AN - 5, AE-14, 12"	-1.05				
957	AN - 6, AE-7, 6"	4.22				

B-3.5

HMC Lab ID	HMC Sample ID	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	TMA Eberline Ra 238 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Unat pCi/g
958	AN - 6, AE-7, 12"	-0.79				
959	AN - 6, AE-8, 6"	3.73				
960	AN - 6, AE-8, 12"	-1.04				
961	AN - 6, AE-9, 6"	1.21				
962	AN - 6, AE-9, 12"	-1.05				
963	AN - 6, AE-10, 6"	2.74	3.81	<1.70		
964	AN - 6, AE-10, 12"	-0.58				
965	AN - 6, AE-11, 6"	1.95				
966	AN - 6, AE-11, 12"	-0.89				
967	AN - 6, AE-12, 6"	1.94				
968	AN - 6, AE-12, 12"	-0.44				
969	AN - 6, AE-13, 6"	1.20				
970	AN - 6, AE-13, 12"	-0.25				

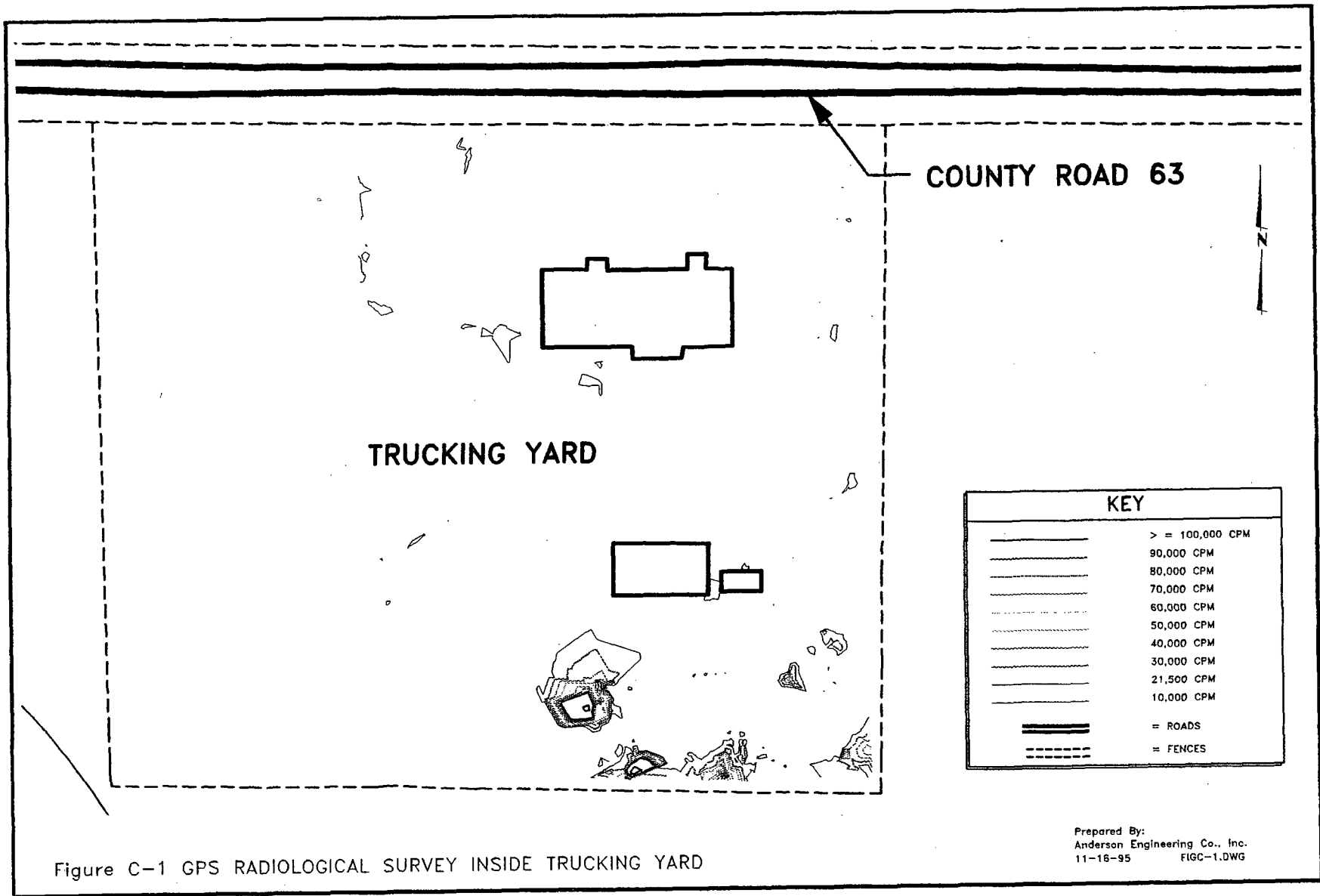


Appendix C

Verification Data-Trucking Yard Area

Homestake Mining Company - Grants Operation

Table C-1 Soil Sample Results Taken in The Trucking Yard



Homestake Mining Company - Grants Operation

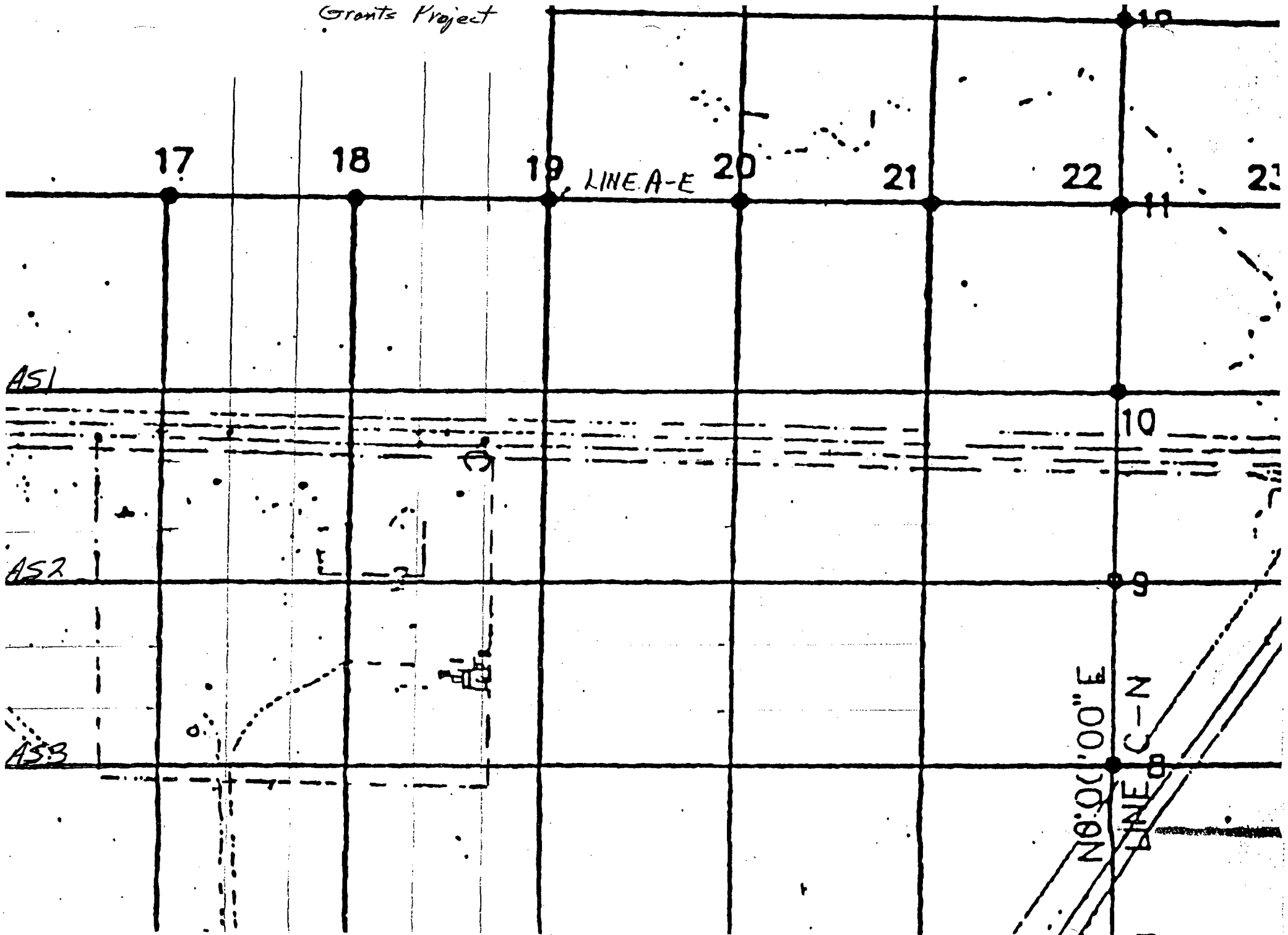
Table C-1 Soil Sample Results Taken in The Trucking Yard

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3930	STA. # AE-17 - AS-3	1.66					
3931	STA. # AE-18 - AS-2.1	0.61					
3932	STA. # AE-18.2 - AS-3	4.18					
3933	STA. # AE-18.2 - AS-2.2	5.07					
3934	STA. # AE-18.1 - AS-3	0.44					
3935	STA. # AE-18.1- AS-1.2	0.62					
3936	ST.# AE-18.1-AS-1.2 30'	0.70					
3937	STA. # AE-17.1- AS-2.1	3.16					
3938	STA. # AE-18- AS-2.2	0.59	0.58		0.50	1.88	3.00
3939	STA. # AE-18.1- AS-1.1	1.60					
3940	STA. # AE-17.1 - AS-3	1.62					
3941	STA. # AE-18.1- AS-2.2	0.63					
3942	STA. # AE-18 - AS-2	1.58					
3943	STA. # AE-17.1- AS-2.2	-3.23					

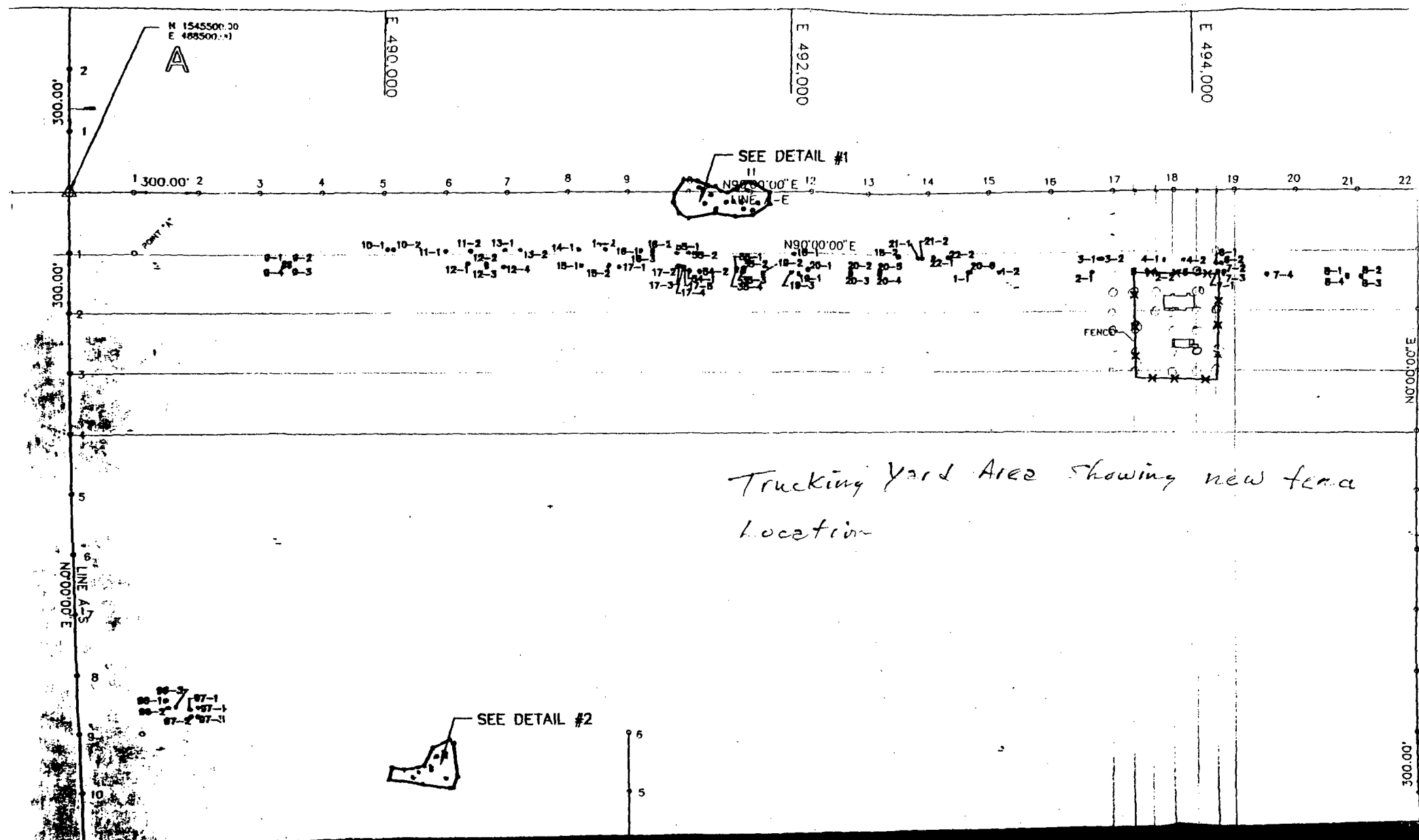
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LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3944	STA. # AE-17.1-	1.64					
3945	STA. # AE-18 - AS-3	6.91					
3946	STA. # AE-17 - AS-2	1.58					
3947	STA. # AE-18.2- AS-2.1	0.47					
3948	STA. # AE-18.1- AS-2	1.56	2.34			2.80	
3949	STA. # AE-18.1- AS-1.2	1.21					
3950	STA. # AE-17.2 - AS-2	0.84					
3951	STA. # AE-17.2 - AS-1.2	2.28					
3952	STA. # AE-18.1- AS-2	1.90					
3953	STA. # AE-17 - AS-1.2	0.72					
3954	STA. # AE-17.1 - AS-1.2	1.60					
3955	STA. # AE-17 - AS-2.1	2.14					
3956	STA. # AE-17.1 - AS-2.1	3.06					
3957	STA. # AE-17 - AS-2	1.41					
3958	STA. # AE-17.1 - AS-2	6.93	6.52		5.20	4.02	7.40
3959	STA. # AE-18.2- AS-1	1.14					
3960	STA. # AE-18.2- AS-2	0.92					

Grants Project



100 90408.00000	RS 12-1	11050.00000 88970.00000	RS 23-2	40819.00000 90112.00000	RS 29-3	41142.00000 90.
		40982.00000 88933.00000	RS 23	40655.00000 90043.00000	RS 29-4	160.00000 90.
					RS 30-1	385.00000 90.



Trucking Yard Area showing new fence location

SEE DETAIL #2

Appendix D

Verification Data for Toe of Large Tailings Pile and Characterization Data for the West Borrow Area

Homestake Mining Company - Grants Operation

Table D-1 Soil Sample Results For The North Toe of The Large Tailings Pile

**Table D-2 Soil Sample Results For The West Toe of The Large Tailings Pile And West
Barrow Area**

Homestake Mining Company - Grants Operation
 Table D-1 Soil Sample Results For The North Toe of The Large Tailings Pile

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4603	AS1.1-E1	4.20			3.80		8.80
4604	AS1.1-E1.1	1.77			1.90		16.50
4605	AS1.1-E1.2	2.44			2.50		10.60
4606	AS1.1-E2	1.42			1.90		17.40
4607	AS1.1-E2.1	1.00			0.90		3.30
4608	AS1.1-E2.2	1.18	0.58		0.60	<1.5	1.20
4609	AS1.1-E3	1.25			0.60		1.00
4610	AS1.1-E3.1	1.63			0.90		2.10
4611	AS1.1-E3.2	2.18			1.50		3.80
4612	AS1.1-E4	1.68			1.30		3.50
4613	AS1.1-E4.1	2.36			2.50		11.70
4614	AS1.1-E4.2	0.92			0.50		0.50
4617	AS1.1 E5	0.38			0.30		0.50
4618	AS1.1 E5.1	0.51	0.86		0.90	2.00	4.00
4619	AS1.1 E5.2	0.70			0.40		0.40
4620	AS1.1 E6	0.49			0.70		0.90

D-11

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4621	AS1.1 E6.1	0.70			0.60		0.80
4622	AS1.1 E6.2	1.34			1.20		1.50
4623	AS1.1 E7	1.26			1.20		1.30
4624	AS1.1 E7.1	1.14			1.10		11.90
4625	AS1.1 E7.2	1.96			1.70		14.60
4626	AS1.1 E8	2.02			1.70		5.70
4627	AS1.1 E8.1	1.57			1.20		1.50
4628	AS1.1 E8.2	1.20	0.81		0.80	2.40	4.20
4629	AS1.1 E9	0.68			0.50		2.00
4630	AS1.1 E9.1	1.74			2.30		4.90
4631	AS1.1 E9.2	2.05			2.90		10.30
4632	AS1.1 E10	6.34			9.00		13.50
4633	AS1.1 E10.1	0.91			1.30		1.80
4634	AS1.1 E10.2	27.65			39.10		13.20
4635	AS1.1 E11	1.09			0.90		12.90
4636	AS1.1+50 E11.2	0.42			0.60		0.70
4637	AS1+50 E11.2	1.22			0.90		11.00
4638	AS1+50 E12	1.91	1.60		2.10	7.20	22.30
4639	AS1.1+50 E12.1	0.82			0.60		10.70

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4640	AS1.1+50 E12.2	0.83			1.30		22.60
4641	AS1.1+50 E13	1.00			0.70		11.80
4642	AS1.1+50 E13.1	2.76			3.60		24.60
4643	AS1.1+50 E13.2	7.14			7.60		69.60
4644	AS1.1+50 E14	1.21			1.30		60.00
4645	AS1.1+50 E14.1	0.44			0.60		40.30
4646	AS1.1+50 E14.2	11.50			14.80		35.50

15058370378 P.03

TO

FROM HOMESTAKE GRANTS

08-09-1995 03:31PM

A

1949500.00
468500.00

1 300.00'

11
N90°00'00"E
LINE A-E

11
N90°00'00"E
LINE A-E (SOUTH)

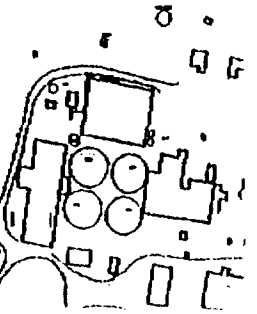
North Toe

5met

Sample 4603 - 4614
 4617 - 4624
 4625 - 4628
 4629 - 4638
 4639 - 4640
 464 - 4646

4
N90°00'00"W
LINE B-W (NORTH)

2
N90°00'00"E
LINE B-E (NORTH)



Homestake Mining Company - Grants Operation

Table D-2 Soil Sample Results For The West Toe of The Large Tailings Pile And West Barrow Area

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
316	AS-1+50'S (0'-2')	-1.22					
317	AS-1+50'S (2'-4')	-1.11					
318	AS-1+50'S (4'-6')	-1.66					
319	AS-6 (0'-2')	-1.32					
320	AS-6 (2'-4')	-1.48					
321	AS-6 (4'-6')	-1.06					
322	AS-11 (0'-2')	-1.45					
323	AS-11 (2'-4')	-1.05					
324	AS-11 (4'-6')	-1.26	0.53			< 0.95	
325	AW-4,AS1,100'S0'-2'	-1.31					
326	AW-4,AS1,100'S 2'-4'	-0.78					
327	AW-4,AS1,100'S 4'-6'	-0.80					
328	AW-4,AS-6 0'-2'	-1.20					
329	AW4-,AS-6 2'-4'	-1.50					

D- 2.1

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
330	AW-4,AS-6 4'-6'	-1.09					
331	AW4,AS11 0'-2'	-1.57					
332	AW-4,AS-11 2'-4'	-1.63	0.47		3.20	< 1.0	0.30
333	AW-4,AS-11 4'-6'	-0.77					
534	NW - 1 N	-0.79					
535	NW - 1 S	-0.47					
536	NW - 2 N	-0.76					
537	NW - 2 S	1.84					
538	NW - 3 N	-0.65					
539	NW - 3 S	-0.88					
540	AE-1,AS-1, 6"	4.67					
541	AE-1,AS-1, 12"	0.75					
542	AE-1.1, AS-1.1, 6"	-1.15					
543	AE-1.1, AS-1.1,12"	-0.62	0.33			<0.67	
544	AE-1.2, AS-1.2, 6"	-0.59					
545	AE-1.2, AS-1.2,12"	-1.10					
546	AE-1, AS-2, 6"	-0.82					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
547	AE-1, AS-2, 12"	-1.18					
548	AE-1.1, AS-2.1, 6"	-1.35					
549	AE-1.1, AS-2.1, 12"	0.06					
550	AE-1.2, AS-2.2, 6"	-1.02					
551	AE-1.2, AS-2.2, 12"	-5.33					
552	AE-1, AS-3, 6"	4.04					
553	AE-1, AS-3, 12"	2.92	0.65		0.60	<1.3	1.10
554	AE-1.1, AS-3.1, 6"	4.38					
555	AE-1.1, AS-3.1, 12"	2.19					
556	AE-1.2, AS-3.2, 6"	6.28					
557	AE-1.2, AS-3.2, 12"	3.33					
558	AE-1, AS-4, 6"	1.99					
559	AE-1, AS-4, 12"	4.14					
560	AE-1.1, AS-4.1, 6"	0.76					
561	AE-1.1, AS-4.1, 12"	-1.76					
562	AE-1.2, AS-4.2, 6"	1.82					
563	AE-1.2, AS-4.2, 12"	-0.44	2.04			1.40	

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
564	AE-1,AS-5, 6"	1.18					
565	AE-1,AS-5, 12"	-0.11					
566	AE-1.1,AS-5.1, 6"	3.63					
567	AE-1.1,AS-5.1, 12"	0.11					
568	AE-1.2,AS-5.2, 6"	3.19					
569	AE-1.2,AS-5.2, 12"	1.98					
570	AE-1,AS-6, 6"	1.74					
571	AE-1,AS-6, 12"	0.32					
572	AE-1.1,AS-6.1, 6"	0.76					
573	AE-1.1,AS-6.1, 12"	1.02	2.67		2.90	<1.6	2.10
574	AE-1.2,AS-6.2, 6"	-0.59					
575	AE-1.2,AS-6.2, 12"	-0.68					
576	AE-1,AS-7, 6"	0.40					
577	AE-1,AS-7, 12"	0.37					
578	AE-1.1,AS-7.1, 6"	0.21					
579	AE-1.1,AS-7.1, 12"	-0.33					
580	AE-1.2,AS-7.2, 6"	0.40					

D- 2.5

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
581	AE-1.2,AS-7.2, 12"	0.25					
582	AE-1,AS-8, 6"	1.33					
583	AE-1,AS-8, 12"	0.52	1.85			<2.4	
584	AE-1.1,AS-8.1, 6"	0.70					
585	AE-1.1,AS-8.1, 12"	0.57					
586	AE-1.2,AS-8.2, 6"	0.67					
587	AE-1.2,AS-8.2, 12"	-0.13					
588	AE-1,AS-9, 6"	0.64					
589	AE-1,AS-9, 12"	0.57					
590	N.W-H.L.POLE,1-6"	-0.72					
591	N.W-H.L.POLE,1-12"	-0.85					
592	N.W-H.L.POLE,2-6"	-0.84					
593	N.W-H.L.POLE,2-12"	-0.82	0.56		0.60	1.30	3.80
594	N.W-H.L.POLE,3-6"	0.18					
595	N.W-H.L.POLE,3-12"	0.39					
596	N.W-H.L.POLE,4-6"	-0.39					
597	N.W-H.L.POLE,4-12"	-0.65					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
598	N.W-H.L.POLE,6-6"	-0.65					
599	N.W-H.L.POLE,6-12"	-0.81					
600	AW7,AS-1+100 0'-2'	-0.52					
601	AW-7,AS-1+100 0'-4'	-0.49					
602	AW-7,AS-1+100 4'-6'	-0.84					
603	AW-7,AS-6 (0'-2')	-0.47	0.84			<1.4	
604	AW-7,AS-6 (2'-4')	-0.78					
605	AW-7,AS-6 (4'-6')	-0.84					
606	AW-7,AS-10(4'-6')	-0.67					
607	AW-7,AS-10(2'-4')	-0.52					
608	AW-7,AS-10(0'-2')	-0.95					
625	Point A - 0'- 2'	-0.84					
626	Point A - 2'- 4'	-0.58					
627	Point A - 4'- 6'	-0.80					
628	NWPP 5 - 6"	-0.02					
629	NWPP 5 - 12"	-0.88					
630	NWPPI 3 - 6"	-0.83					

D- 2.7

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
631	NWPPI 3 - 12"	-0.85					
632	NE I- 4 - 6"	-1.04					
633	NE I- 4 - 12"	-0.93	0.53	2.70	0.50	<1.5	0.60
634	NE I- 5 - 6"	-0.94					
635	NE I- 5 - 12"	-1.07					
636	S W S P - 6"	-0.56					
637	S W S P - 12"	-1.11					
638	NE 7 - 6"	-0.83					
639	NE 7 - 12"	-0.86					
640	NE 8 - 6"	-0.62					
641	NE 8 - 12"	-0.69					

2-8-94

N 90° 00' 00" E

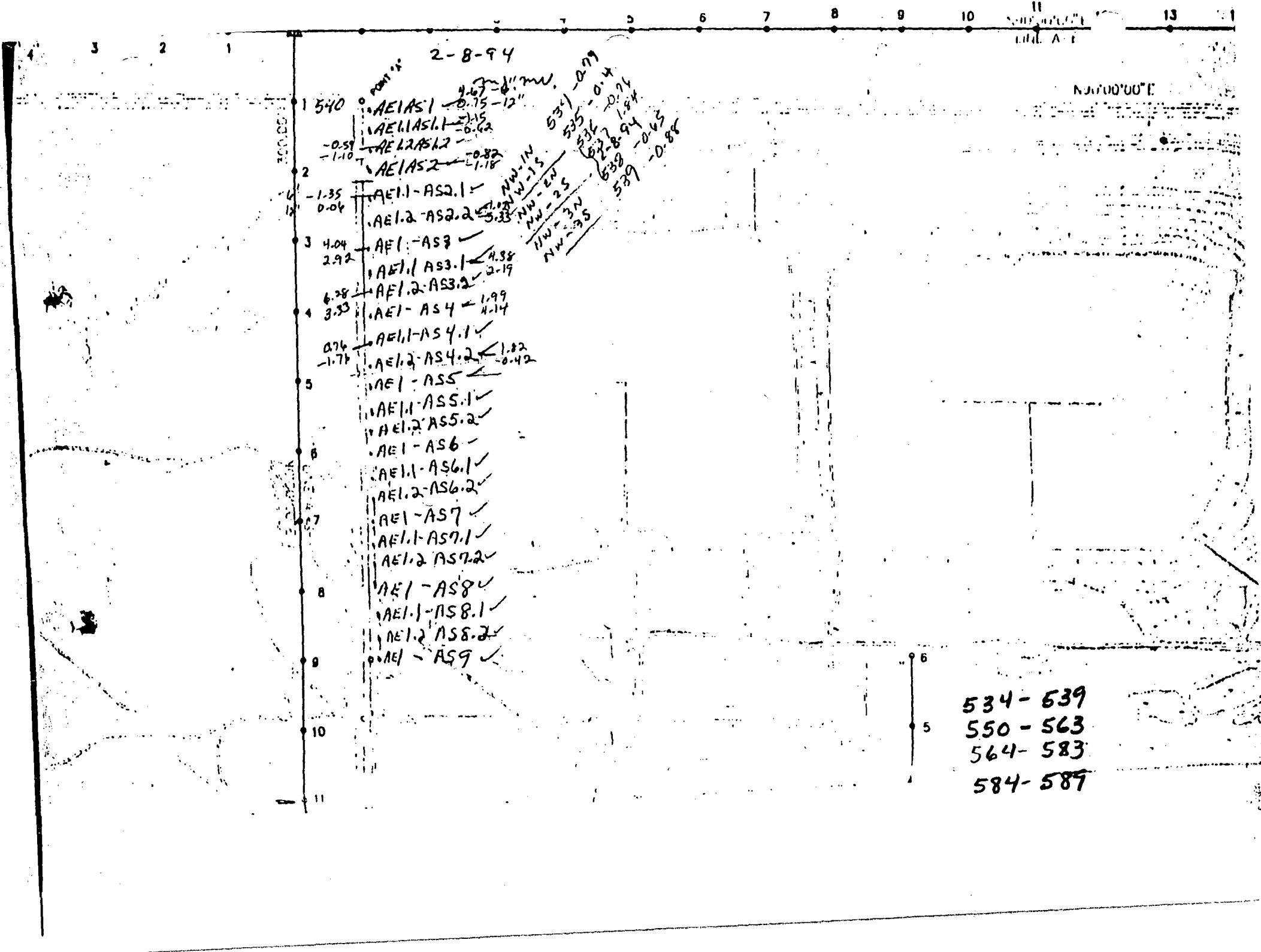
100000'

- 540 AE1AS1 4.67 0.15-12"
- AE1AS1.1 2.15
- 0.59 AE1AS1.2 -0.62
- 1.10 AE1AS2 -0.82
- AE1AS2 -1.18
- 1.35 AE1.1-AS2.1
- 0.04 AE1.2-AS2.2 5.33
- 4.04 AE1-AS3 ✓
- 2.92 AE1.1-AS3.1 4.38
- 6.28 AE1.2-AS3.2 2.19
- 3.33 AE1-AS4 1.99
- AE1-AS4 4.14
- 0.74 AE1.1-AS4.1 ✓
- 1.71 AE1.2-AS4.2 1.82
- AE1.2-AS4.2 -0.42
- AE1-AS5 ✓
- AE1.1-AS5.1 ✓
- AE1.2-AS5.2 ✓
- AE1-AS6 ✓
- AE1.1-AS6.1 ✓
- AE1.2-AS6.2 ✓
- AE1-AS7 ✓
- AE1.1-AS7.1 ✓
- AE1.2-AS7.2 ✓
- AE1-AS8 ✓
- AE1.1-AS8.1 ✓
- AE1.2-AS8.2 ✓
- AE1-AS9 ✓

534 -0.77
 535 -0.14
 536 -0.24
 537 1.84
 538 -0.45
 539 -0.84

NW-1N
 NW-1S
 NW-2S
 NW-3N
 NW-3S

534-539
 550-563
 564-583
 584-589



Appendix E

Verification Data-Area Near North Ore Pad

Homestake Mining Company - Grants Operation

Table E-1 Soil Sample Results For Area Near North Ore Pad

Homestake Mining Company - Grants Operation

Table E-1 Soil Sample Results For Area Near North Ore Pad

LAB ID	Wind Blown Sample ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3878	CN5 2/ W 4 6 "	-0.69					
3879	CN5 2/ W 4 1/ 6 "	-0.92					
3880	CN5 2/ W 3 1/ 6 "	-2.59					
3881	CN5 2/ W 3 2/ 6 "	-2.40					
3882	CN5 1/ W 2 1/ 6 "	-1.59	0.45		0.30	3.25	4.00
3883	CN5 1/ W 2 2/ 6 "	-1.57					
3884	CN5 1/ W 3 6 "	-0.38					
3885	CN5 1/ W 3 1/ 6 "	-3.55					
3886	CN5 1/ W 3 2/ 6 "	-3.74					
3887	CN5 1/ W 4 6 "	2.30					
3888	CN5 1/ W 4 1/ 6 "	3.63					
3889	CN5 W 4 6 "	-3.15					
3890	CN5 W 2 1/ 6 "	-3.45					
3891	CN5 W 2 2/ 6 "	-4.55					

E- 1.1

LAB ID	Wind Blown Sample ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3892	CN5 W 3 6 "	-4.43	0.77			3.25	
3893	CN5 W 3 1/ 6 "	-4.48					
3894	CN5 W 3 2/ 6 "	-4.06					
3895	CN4 2/ W 2 1/ 6 "	-3.72					
3896	CN4 2/ W 2 2/ 6 "	-5.44					
3897	CN4 2/ W 3 6 "	-4.75					
3898	CN4 2/ W 3 1/ 6 "	-4.72					
3899	CN4 2/ W 3 2/ 6 "	-5.01					
3900	CN4 2/ W 4 6 "	9.05					
3901	CN4 1/ W 2 2/ 6 "	13.52					
3902	CN4 1/ W 3 6 "	-3.27	1.12		1.00	30.00	69.10
3903	CN4 1/ W 3 1/ 6 "	-3.96					
3904	CN4 - W3 6 "	1.78					
3905	CN4 - W3 1/ 6 "	2.65					
3906	CN4 - W3 2/ 6 "	5.44					
3907	CN3 - W3 1/ 6 "	2.21					
3908	CN3 - W3 2/ 6 "	2.64					

LAB ID	Wind Blown Sample ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3909	CN3 1/ W 3 1/ 6 "	5.61					
3910	CN3 2/ W 3 6 "	1.70					
3911	CN3 2/ W 3 1/ 6 "	8.35					
4234	CN3-W 3.1	0.41					
4235	CN 3.1- W3.1	0.63					
4236	CN 3.2- W3	0.63					
4237	CN 3.2- W3.1	0.76					
4238	CN-4 W3.1	0.59	0.35		0.40	5.30	15.40
4239	CN-4 W 3.1	0.96					
4240	CN-4.1 W2.2	3.33					
4241	CN-4.1 W-3	0.89					
4242	CN-4.1-W3.1	1.20					
4243	CN-4.2-W2.1	1.64					
4244	CN-4.2-W2.2	2.69					
4245	CN-4.2-W3	1.82					
4246	CN-4.2-W3.1	1.38					

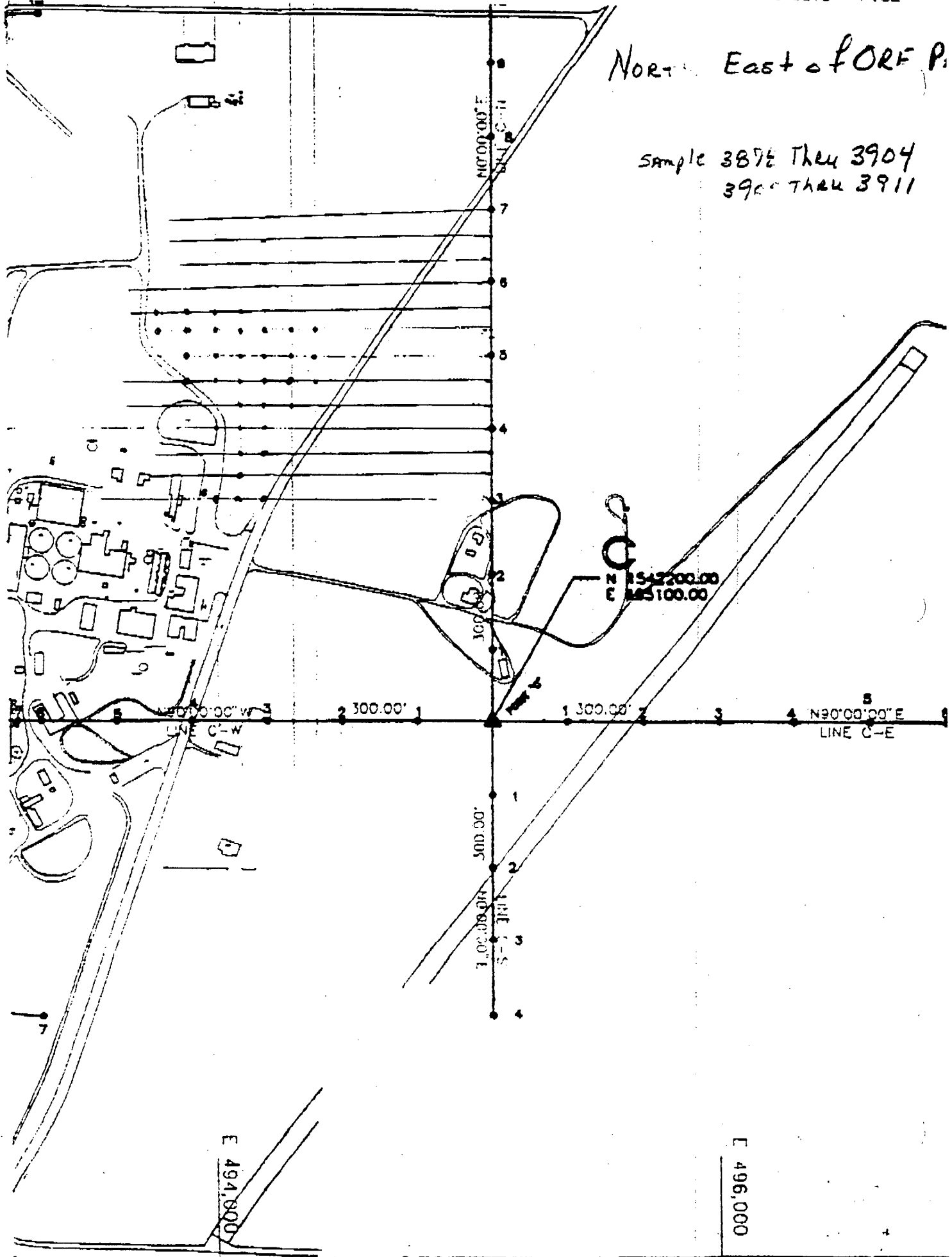
LAB ID	Wind Blown Sample ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
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HMC Average= 1.30

Stand. Deviation= 0.88

North East of FORF P.

Sample 387E Then 3904
3900 Then 3911



Appendix F

Characterization and Verification Data State High Way 605 Right of Way and County Road 63 Road Bed

Homestake Mining Company - Grants Operation

- Table F-1 Gamma Readings For State Hwy. 605 Right-of-Way Along Mill Site**
- Table F-2 Soil Sample Results For State Hwy. 605 Right-of-Way Along Mill Site**
- Table F-3 Soil Sample Results For State Hwy 605 South of Hamilton Construction Company Entrance**
- Table F-4 Soil Sample Results For County Road 63 Right-of-Way**
- Table F-5 Soil Sample Characterization Data For State Road 605 Right-of-Way North of County Road 63**

Homestake Mining Company - Grants Operation
Table F-1 Gamma Readings For State Hwy. 605 Right-of-Way Along Mill Site

Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr
100	5236		122	3507		144	3525	
101	3600		123	3269		145	3236	
102	3367		124	3114		146	3070	
103	3398		125	3206		147	2987	
104	3334		126	3079		148	2918	
105	3486		127	3133		149	3065	
106	3486		128	3146		150	3108	
107	3154		129	3102		151	3203	
108	3167		130	3049		152	2892	
109	3255		131	3238		153	2899	
110	3623		132	3238		154	2781	
111	3622		133	2992		155	3043	
112	3836		134	3318		156	2939	
113	3549		135	3523		157	2987	
114	3540		136	3416		158	2833	
115	3366		137	3443		159	3078	
116	3514		138	3145		160	3541	
117	2532		139	2965		161	3570	

F- 1.1

Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr
118	2753		140	3514		162	3453	
119	2960		141	3561		163	3626	
120	3971		142	3422		164	3214	
121	2805		143	3544		165	2972	
166	3444		188	3031		210	3891	
167	2784		189	3457		211	4198	
168	3845		190	3717		212	3669	
169	3497		191	4087		213	3324	
170	3562		192	3806		214	3108	
171	3406		193	3287		215	3179	
172	3696		194	2968		216	3029	
173	3738		195	3012		217	3162	
174	3403		196	3283		218	3234	
175	4096		197	3111		219	3272	
176	3071		198	3290		220	4462	
177	2983		199	3548		221	4875	
178	2791		200	4997		222	5242	
179	3023		201	3631		223	4527	
180	2873		202	3285		224	4678	
181	2926		203	3382		225	4243	

Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr
182	2797		204	3593		226	4276	
183	2747		205	4063		227	4006	
184	2659		206	4508		228	4496	
185	2677		207	4677		229	4968	
186	2557		208	4247		230	4832	
187	2971		209	4111		231	3995	
232	3627		254	3547		276	3076	
233	3869		255	3105		277	4192	
234	3932		256	4067		278	3128	
235	3986		257	2288		279	3566	
236	4542		258	3422		280	3469	
237	3967		259	3297		281	4010	
238	3947		260	4509		282	3206	
239	3937		261	3421		283	4070	
240	3840		262	3525		284	3700	
241	3523		263	4025		285	3827	
242	3560		264	3426		286		10-11
243	4596		265	3250		287		10-11
244	4200		266	3540		288		9-11
245	3493		267	4314		289		10-11

Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr
246	3181		268	3606		290		9-11
247	3303		269	4384		291		9-11
248	4362		270	4496		292		9-10
249	3396		271	4528		293		9-10
250	3215		272	5046		294		8-9
251	2617		273	4792		295		9-10
252	2807		274	4154		296		9-10
253	3231		275	2980		297		8-9
298		8-9	320		9-10	342	3724	
299		8-9	321		10-11	343	2896	
300		7-8	322		10-11	344	2636	
301		7-8	323		10-11	345	2544	
302		7-8	324		9-10	346	2631	
303		8-10	325		9-10	347	2564	
304		8-10	326		7-8	348	3110	
305		7-11	327		9-10	349	3155	
306		7-11	328		9-10	350		9-10
309	4301	* n/a	331		9-10	353		9-10
310	4301	* n/a	332		8-9	354		9-10

* Averaged over more than one 25 ft interval.

Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr
311	3803	* n/a	333		9-10	355		9-10
312	3803	* n/a	334		9-10	356		9-10
313	3803	* n/a	335		9-10	357		10-13
314	4038	* n/a	336		9-10	358		11-13
315	4038	* n/a	337		9-10	359		12-14
316	3577	* n/a	338		6-7	360		12-14
317	3577	* n/a	339		9-10	361		12-14
318	3577	* n/a	340	3640		362		15-16
319	4324	* n/a	341	3126		363		15-16
364		15-16	386	3691		408	2895	
365		15-16	387	3691		409	3133	
366		15-16	388	3365		410	3001	
367		15-16	389	3054		411	3808	
368		13-14	390	3011		412	4489	
369		13-15	391	3913		413	4308	
370		12-14	392	4013		414	3749	
371		13-15	393	4551		415	3564	
372		14-16	394	3837		416	3382	
373		14-16	395	3315		417	4704	

* Averaged over more than one 25 ft interval.

Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr
374		14-16	396	3573		418	3892	
375	3256		397	2930		419	4485	
376	3426		398	3109		420	4811	
377	3735		399	3471		421	4665	
378	3128		400	3107		422	2687	
379	3215		401	3118		423	2765	
380	2744		402	3354		424	3311	
381	2797		403	2851		425	2954	
382	3124		404	2812		426	3203	
383	3346		405	2691		427	3051	
384	3340		406	2721		428	2874	
385	3560		407	3114		429	2939	
430	3707		452	3724		474	3653	
431	2634		453	3040		475	2816	
432	3031		454	3615		476	2400	
433	4204		455	4413		477	2462	
434	3812		456	4611		478	2974	
435	4363		457	4017		479	2437	
436	4610		458	3659		480	2719	
437	3966		459	4088		481	2668	

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Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr
438	3263		460	2531		482	3170	
439	3991		461	3637		483	2920	
440	3782		462	3786		484	2827	
441	3677		463	3694		485	3326	
442	3436		464	3489		486	5845	
443	2860		465	4032		487	2953	
444	2936		466	3291		488	2936	
445	3876		467	3437		489	3033	
446	3960		468	3774		490	2642	
447	3448		469	4523		491	2616	
448	3427		470	3542		492	2805	
449	3811		471	3926		493	2641	
450	4103		472	3876		494	3682	
451	4337		473	3462		495	3082	
496	2905		518	3484		540	7590	
497	3688		519	3341		541	8004	
498	3392		520	4935		542	7484	
499	3258		521	4615		543	7062	
500	3138		522	7475		544	7144	
501	3151		523	7876		545	6409	

Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr	Station Number	Gamma Reading in cphm	Gamma Reading in μ R/hr
502	3381		524	7484		546	6609	
503	3172		525	6372		547	7145	
504	3943		526	6470				
505	3633		527	6484				
506	3188		528	9962				
507	2901		529	8062				
508	3094		530	5888				
509	2842		531	6558				
510	3394		532	6796				
511	3531		533	8598				
512	2865		534	6894				
513	2812		535	7164				
514	2839		536	7876				
515	2910		537	7608				
516	3012		538	6680				
517	2880		539	7180				

Homestake Mining Company - Grants Operation

Table F-2 Soil Sample Results For State Hwy. 605 Right-of-Way Along Mill Site

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3457	STA. #326 0 "-6 "	0.30					
3458	STA. #332 0 "-6 "	0.74					
3459	STA. #338 0 "-6 "	0.38					
3460	STA. #350 0 "-6 "	0.30					
3461	STA. #356 0 "-6 "	0.24	0.83		0.8	<3.5	
3462	STA. #362 0 "-6 "	0.49					
3463	STA. #368 0 "-6 "	0.20					
3464	STA. #374 0 "-6 "	0.48					
3465	STA. #286 0 "-6 "	4.24					
3466	STA. #292 0 "-6 "	5.67					
3718	STA. #523 0 "-6 "	0.25					
3719	STA. #529 0 "-6 "	-0.92					
3720	STA. #535 0 "-6 "	3.08					
3721	STA. #541 0 "-6 "	-0.13					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3722	STA. #547 0 "-6 "	13.48					
3723	STA. #201 0 "-6 "	-2.19	0.42		0.40	<3.6	6.20
3724	STA. #206 0 "-6 "	-0.88					
3725	STA. #212 0 "-6 "	-1.41					
3726	STA. #218 0 "-6 "	-1.33					
3727	STA. #224 0 "-6 "	6.20					
3728	STA. #298 0 "-6 "	7.09					
3729	STA. #304 0 "-6 "	6.59					
3730	STA. #230 0 "-6 "	7.66					
3731	STA. #234 0 "-6 "	-0.84					
3732	STA. #240 0 "-6 "	4.12	3.70		4.60	<4.44	7.00
3733	STA. #246 0 "-6 "	7.80					
3734	STA. #252 0 "-6 "	6.38					
3735	STA. #258 0 "-6 "	2.54					
3736	STA. # 264 0 "-6 "	1.82					
3737	STA. # 270 0 "-6 "	16.33					
3738	STA. # 276 0 "-6 "	4.34					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3739	STA. # 282 0 "-6 "	0.27					
3740	STA. # 288 0 "-6 "	4.83					
3741	STA. # 434 0 "-6 "	7.20					
3742	STA. # 440 0 "-6 "	2.91	3.93		3.90	<2.27	2.80
3743	STA. # 446 0 "-6 "	29.27					
3744	STA. # 452 0 "-6 "	0.16					
3745	STA. # 469 0 "-6 "	1.26					
3746	STA. # 464 0 "-6 "	6.76					
3747	STA. # 475 0 "-6 "	-0.98					
3748	STA. # 481 0 "-6 "	7.18					
3749	STA. # 487 0 "-6 "	-2.71					
3750	STA. # 493 0 "-6 "	-1.35					
3751	STA. # 499 0 "-6 "	-1.53					
3752	STA. # 505 0 "-6 "	-0.85	0.98		1.20	<3.6	5.20
3753	STA. # 511 0 "-6 "	-2.26					
3754	STA. # 517 0 "-6 "	8.76					
3755	STA. # 458 0 "-6 "	-2.51					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3756	STA. # 106 0 "-6 "	2.14					
3757	STA. # 112 0 "-6 "	1.07					
3819	STA. # 122 0 "-6 "	1.01					
3820	STA. # 128 0 "-6 "	0.71					
3821	STA. # 134 0 "-6 "	0.72					
3822	STA. # 140 0 "-6 "	0.30	0.65		0.50	2.92	6.50
3823	STA. # 144 0 "-6 "	0.69					
3824	STA. # 148 0 "-6 "	0.88					
3825	STA. # 150 0 "-6 "	5.18					
3826	STA. # 156 0 "-6 "	0.98					
3827	STA. # 162 0 "-6 "	2.54					
3828	STA. # 168 0 "-6 "	0.47					
3829	STA. # 174 0 "-6 "	0.36					
3830	STA. # 180 0 "-6 "	0.10					
3831	STA. # 186 0 "-6 "	0.14					
3832	STA. # 192 0 "-6 "	4.81	4.28		4.20	15.60	31.60
3833	STA. # 198 0 "-6 "	0.18					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3834	STA. # 344 0 "-6 "	0.83					
3918	STA. # 392	4.91	3.54		3.80	7.51	13.90
3919	STA. # 410	1.80					
3920	STA. # 416	5.99					
3921	STA. # 428	1.90					
3922	STA. # 386	1.34					
3923	STA. # 422	2.37					
3924	STA. # 380	2.11					
3925	STA. # 398	1.37					
3926	STA. # 404	1.62					
3927	STA. # 100	1.40					
3928	STA. # 320	3.79	2.94			<2.34	
3929	STA. # 118	2.05					

Homestake Mining Company - Grants Operation

Table F-3 Soil Sample Results For State Hwy 605 South of Hamilton Construction Company Entrance

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4271	#1 SR-605 S. EXT.	6.17					
4272	#2 SR-605 S. EXT.	5.40					
4273	#3 SR-605 S. EXT.	8.89					
4274	#4 SR-605 S. EXT.	5.50					
4275	#5 SR-605 S. EXT.	4.82					
4276	#6 SR-605 S. EXT.	9.14					
4277	#7 SR-605 S. EXT.	4.05					
4278	#8 SR-605 S. EXT.	7.56	7.20		7.60	2.60	3.70
4279	#9 SR-605 S. EXT.	7.48					
4280	#10 SR-605 S. EXT.	7.46					
4281	#11 SR-605 S. EXT.	9.41					
4282	#12 SR-605 S. EXT.	6.93					
4283	#13 SR-605 S. EXT.	8.40					
4284	#14 SR-605 S. EXT.	3.47					
4285	#15 SR-605 S. EXT.	3.88					
4286	#16 SR-605 S. EXT.	3.73					

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LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4287	#17 SR-605 S. EXT.	8.09					
4288	#18 SR-605 S. EXT.	8.05	7.70			<3.0	
4289	#19 SR-605 S. EXT.	1.99					
4290	#20 SR-605 S. EXT.	2.63					
4291	#21 SR-605 S. EXT.	5.14					
4292	#22 SR-605 S. EXT.	3.74					
4293	#23 SR-605 S. EXT.	1.58					
4294	#24 SR-605 S. EXT.	3.16					
4295	#25 SR-605 S. EXT.	5.00					
4296	#26 SR-605 S. EXT.	3.79					
4297	#27 SR-605 S. EXT.	2.28					
4298	#28 SR-605 S. EXT.	1.28	1.50		1.60	<2.3	1.40
4299	#29 SR-605 S. EXT.	1.46					
4300	#30 SR-605 S. EXT.	9.57					
4301	#31 SR-605 S. EXT.	7.31					
4302	#32 SR-605 S. EXT.	6.11					
4303	#33 SR-605 S. EXT.	10.07					
4304	#34 SR-605 S. EXT.	5.86					
4305	#35 SR-605 S. EXT.	9.64					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4306	#36 SR-605 S. EXT.	3.12					
4307	#37 SR-605 S. EXT.	1.61					
4308	#38 SR-605 S. EXT.	1.34	1.50			<1.8	
4309	#39 SR-605 S. EXT.	2.44					
4310	#40 SR-605 S. EXT.	3.15					
4319	#41 SR-605 S. EXT.	3.45					
4320	#42 SR-605 S. EXT.	2.07					
4321	#43 SR-605 S. EXT.	3.44					
4322	#44 SR-605 S. EXT.	2.09					
4323	#45 SR-605 S. EXT.	3.55					
4324	#46 SR-605 S. EXT.	3.69					
4325	#47 SR-605 S. EXT.	1.58					
4326	#48 SR-605 S. EXT.	4.38					
4327	#49 SR-605 S. EXT.	0.94					
4328	#50 SR-605 S. EXT.	3.28	3.50			<2.2	
4329	#51 SR-605 S. EXT.	1.48					
4330	#52 SR-605 S. EXT.	1.25					
4331	#53 SR-605 S. EXT.	4.19					
4332	#54 SR-605 S. EXT.	2.00					

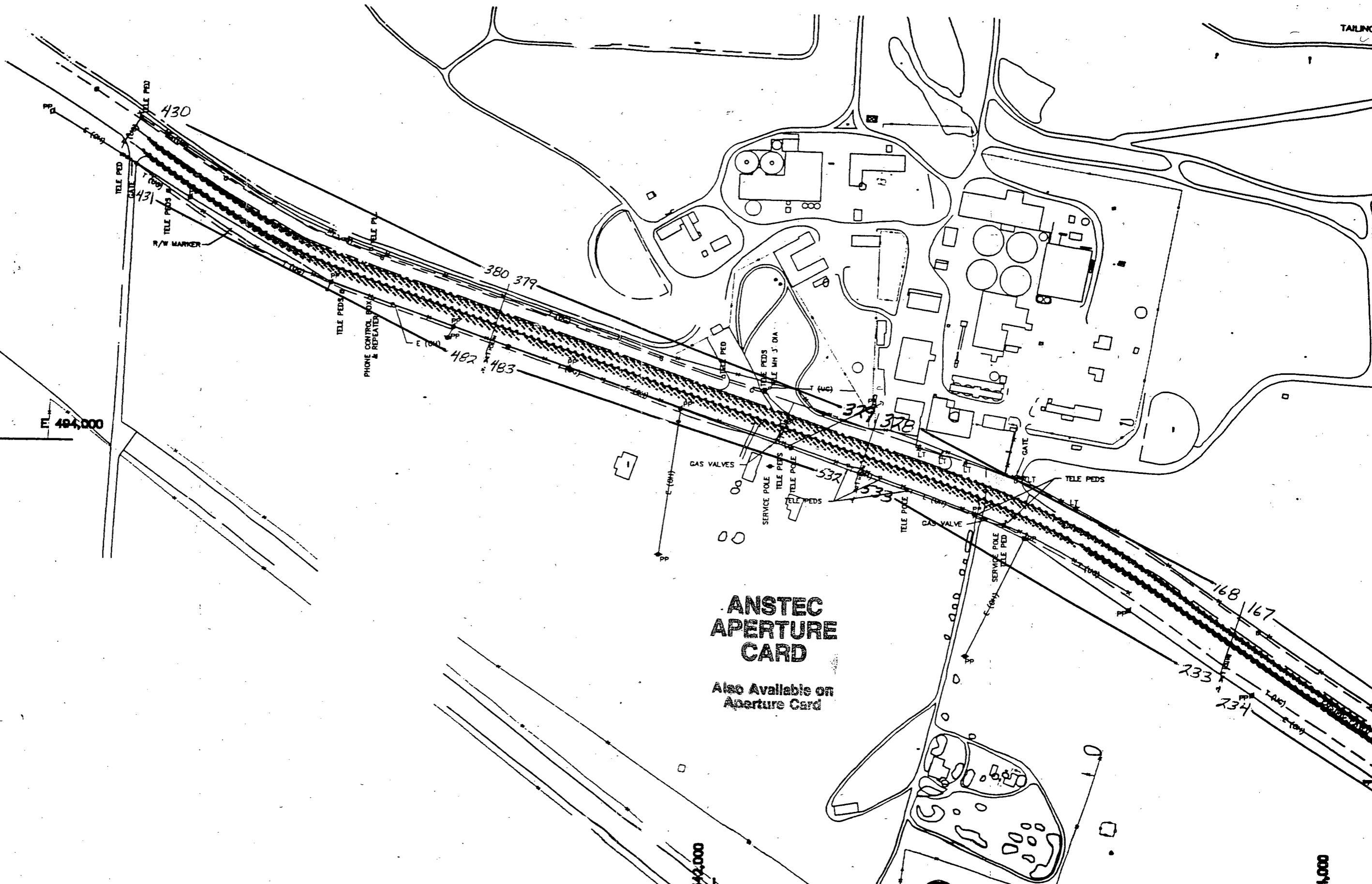
LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4333	#55 SR-605 S. EXT.	1.45					
4334	#56 SR-605 S. EXT.	0.18					
4335	#57 SR-605 S. EXT.	1.47					
4336	#58 SR-605 S. EXT.	2.58					
4337	#59 SR-605 S. EXT.	1.78					
4338	#60 SR-605 S. EXT.	3.96	3.70		4.50	<2.6	3.30
4339	#61 SR-605 S. EXT.	9.40					
4340	#62 SR-605 S. EXT.	4.26					
4341	#63 SR-605 S. EXT.	1.98					
4342	#64 SR-605 S. EXT.	2.02					
4343	#65 SR-605 S. EXT.	1.53					
4344	#66 SR-605 S. EXT.	3.33					
4345	#67 SR-605 S. EXT.	1.79					
4346	#68 SR-605 S. EXT.	2.65					
4347	#69 SR-605 S. EXT.	1.59					
4348	#70 SR-605 S. EXT.	1.84	2.00			<2.1	
4349	#71 SR-605 S. EXT.	2.04					
4350	#72 SR-605 S. EXT.	2.06					
4351	#73 SR-605 S. EXT.	1.23					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4352	#74 SR-605 S. EXT.	1.22					
4353	#75 SR-605 S. EXT.	2.22					
4354	#76 SR-605 S. EXT.	2.41					
4355	#77 SR-605 S. EXT.	2.30					
4356	#78 SR-605 S. EXT.	3.84					
4357	#79 SR-605 S. EXT.	2.14					
4358	#80 SR-605 S. EXT.	2.59	2.60		2.80	<1.9	3.60
4359	#81 SR-605 S. EXT.	2.88					
4360	#82 SR-605 S. EXT.	3.88					
4361	#83 SR-605 S. EXT.	1.80					
4362	# 84 SR-605 S. EXT.	3.36					
4363	#85 SR-605 S. EXT.	4.48					
4364	#86 SR-605 S. EXT.	1.76					
4365	#87 SR-605 S. EXT.	6.06					
4366	# 88 SR-605 S. EXT.	2.77					
4367	#89 SR-605 S. EXT.	3.92					
4368	#90 SR-605 S. EXT.	6.45	5.70			3.80	
4369	#91 SR-605 S. EXT.	5.61					
4370	#92 SR-605 S. EXT.	2.69					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4371	#93 SR-605 S. EXT.	2.46					
4372	#94 SR-605 S. EXT.	3.96					
4373	#95 SR-605 S. EXT.	2.25					
4374	#96 SR-605 S. EXT.	4.60					
4375	#97 SR-605 S. EXT.	1.81					
4376	#98 SR-605 S. EXT.	6.31					
4377	#99 SR-605 S. EXT.	4.61					
4378	#100 SR-605 S. EXT.	2.65	2.90		2.60	<2.4	2.80
4379	#101 SR-605 S. EXT.	4.98					
4380	#102 SR-605 S. EXT.	1.88					
4381	#103 SR-605 S. EXT.	2.40					
4382	#104 SR-605 S. EXT.	2.53					
4383	#105 SR-605 S. EXT.	2.75					
4384	#106 SR-605 S. EXT.	1.98					
4385	#107 SR-605 S. EXT.	3.68					
4386	#108 SR-605 S. EXT.	2.30					
4387	#109 SR-605 S. EXT.	1.80					
4388	#110 SR-605 S. EXT.	2.53	2.70			<2.0	
4389	#111 SR-605 S. EXT.	9.25					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4390	#112 SR-605 S. EXT.	7.75					
4391	#113 SR-605 S. EXT.	9.55					
4392	#114 SR-605 S. EXT.	2.86					
4393	#115 SR-605 S. EXT.	4.49					
4394	#116 SR-605 S. EXT.	5.39					
4395	# 117 SR-605 S. EXT.	5.98					
4396	#118 SR-605 S. EXT.	3.78					
4397	#119 SR-605 S. EXT.	4.71					
4398	#120 SR-605 S. EXT.	4.22	4.00		4.60	<2.3	3.10
4563	S.R 605 SOUTH EXT. 121	1.85			2.40		2.30
4564	S.R 605 SOUTH EXT. 122	1.41			1.70		1.40
4565	S.R 605 SOUTH EXT. 123	1.17			1.80		1.80
4566	S.R 605 SOUTH EXT. 124	3.33			3.30		2.50
4567	S.R 605 SOUTH EXT. 125	2.41			3.10		3.50
4568	S.R 605 SOUTH EXT. 126	2.14	2.20		2.60	<3.0	2.70
4569	S.R 605 SOUTH EXT. 127	2.66			2.90		2.90
4570	S.R 605 SOUTH EXT. 128	2.87			3.80		3.80
4571	S.R 605 SOUTH EXT. 129	2.59			3.20		3.10
4572	S.R 605 SOUTH EXT. 130	2.67			2.80		4.30

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4573	S.R 605 SOUTH EXT. 131	1.60			1.80		2.20



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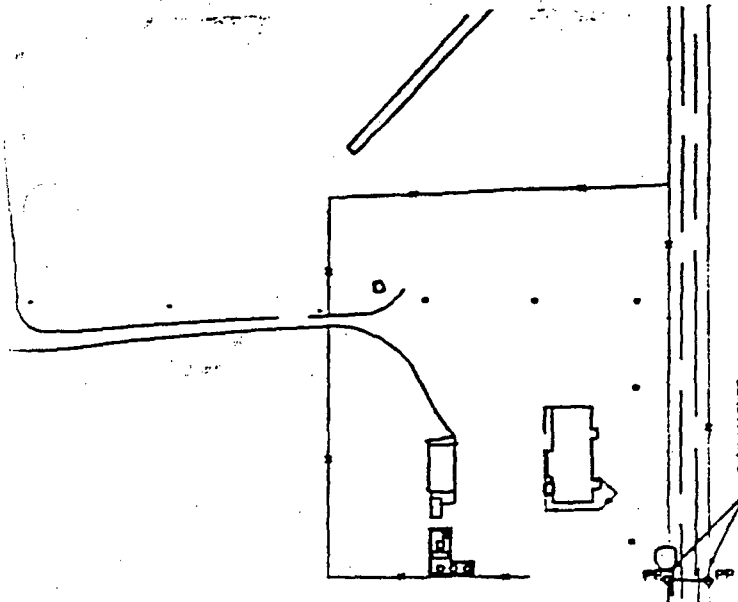
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CARD**

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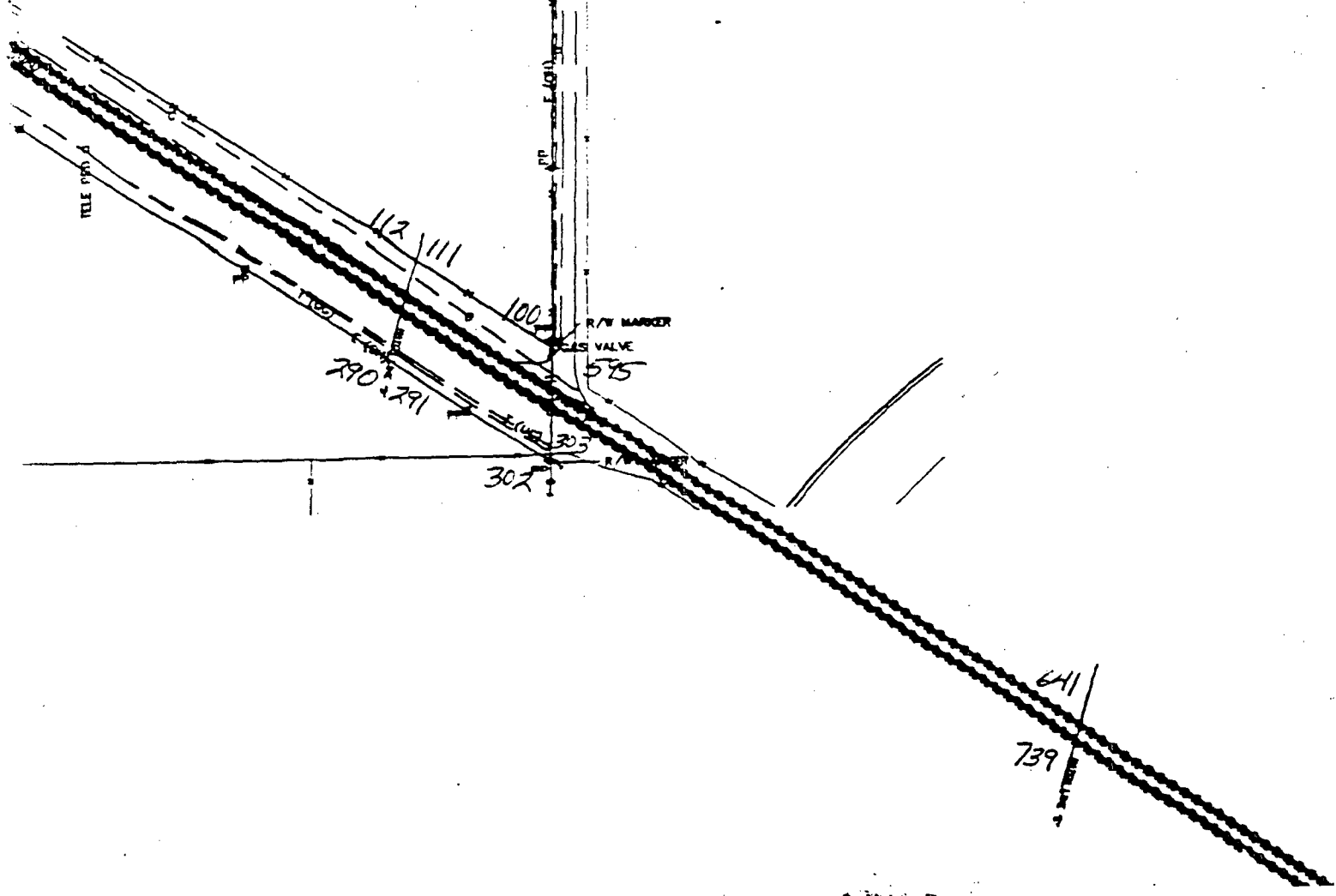
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R/W MARKER

PP
E 400
PP
E 400
PP
E 400
PP
E 400

EXISTING DRY ROAD



R/W MARKER
GAS VALVE

641
739

Homestake Mining Company - Grants Operation

Table F-4 Soil Sample Results For County Road 63 Right-of-Way

LAB ID	Wind Blown ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2760	CR - 1 6"	1.77					
2761	CR - 1 12"	-0.43					
2762	CR - 2 6"	0.33	0.87	1.00	1.00	2.80	1.20
2763	CR - 2 12"	0.21					
2764	CR - 3 6"	0.66					
2765	CR - 3 12"	-0.52					
2766	CR - 4 6"	0.29					
2767	CR - 4 12"	-0.42					
2768	CR - 5 6"	-0.24					
2769	CR - 5 12"	-0.29					
2770	CR - 6 6"	-0.85					
2771	CR - 6 12"	-0.71					
2772	CR - 7 6"	1.02	1.51	1.60		<2.8	
2773	CR - 7 6"	-0.63					

F-4.1

LAB ID	Wind Blown ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2774	CR - 8 6"	2.77					
2775	CR - 8 12"	-0.07					
2776	CR - 9 6"	3.88					
2777	CR - 9 12"	-0.60					
2778	CR - 10 6"	2.51					
2779	CR - 10 12"	0.18					
2780	CR - 11 6"	5.76					
2781	CR - 11 12"	-0.30					
2782	CR - 12 6"	-0.51	0.51	<1.0	0.50	<1.1	1.50
2783	CR - 12 12"	-0.23					
2784	CR - 13 6"	-0.32					
2785	CR - 13 12"	-0.52					
2786	CR - 14 6"	0.19					
2787	CR - 14 12"	-0.67					
2788	CR - 15 6"	-0.50					
2789	CR - 15 12"	-1.35					
2790	CR - 16 6"	-0.29					

LAB ID	Wind Blown ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2791	CR - 16 12"	-0.59					
2792	CR - 17 6"	-0.11	0.88	1.90		<2.1	
2793	CR - 17 12"	-0.79					
2794	CR - 18 6"	0.41					
2795	CR - 18 12"	-0.26					
2796	CR - 19 6"	12.76			9.20		9.20
2797	CR - 19 12"	1.25					
2798	CR - 20 6"	6.07					
2799	CR - 20 12"	-0.35					
2800	CR - 21 6"	8.29					
2801	CR - 21 12"	13.61			16.90		7.40
2802	CR - 22 6"	9.78	8.11	10.30	10.80	3.70	10.50
2803	CR - 22 12"	2.18					
2804	CR - 23 6"	1.18					
2805	CR - 23 12"	-0.12					
2806	CR - 24 6"	10.19			9.70		7.40
2807	CR - 24 12"	0.70					

LAB ID	Wind Blown ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2808	CR - 25 6"	0.59					
2809	CR - 25 12"	0.23					
2810	CR - 26 6"	5.29					
2811	CR - 26 12"	0.67					
2812	CR - 27 6"	2.36	2.94	3.60		3.40	
2813	CR - 27 12"	-0.02					
2814	CR - 28 6"	9.56					
2815	CR - 28 12"	0.75					
2816	CR - 29 6"	0.33					
2817	CR - 29 12"	0.02					
2818	CR - 30 6"	1.16					
2819	CR - 30 12"	-0.52					
2820	CR - 31 6"	0.68					
2821	CR - 31 12"	-0.14					
2822	CR - 32 6"	0.45	1.46	1.40	1.40	<2.2	2.30
2823	CR - 32 12"	-0.37					
2824	CR - 33 6"	2.52					

F- 4.5

LAB ID	Wind Blown ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2825	CR - 33 12"	0.67					
2826	CR - 34 6"	0.93					
2827	CR - 34 12"	0.03					
2828	CR - 35 6"	8.38					
2829	CR - 35 12"	-0.05					
2830	CR - 36 6"	0.10					
2831	CR - 36 12"	0.17					
2832	CR - 37 6"	-0.12	1.64	2.50		<3.6	
2833	CR - 37 12"	0.05					
2834	CR - 38 6"	2.69					
2835	CR - 38 12"	-0.53					
2836	CR - 39 6"	0.08					
2837	CR - 39 12"	-0.57					
2838	CR - 40 6"	-0.31					
2839	CR - 40 12"	-0.09					
2926	CR 41, 6 "	-0.26					
2927	CR 41, 12 "	0.15					

LAB ID	Wind Blown ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2928	CR 42, 6 "	-0.29					
2929	CR 42, 12 "	-0.04					
2930	CR 43, 6 "	-0.02					
2931	CR 43, 12 "	0.20					
2932	CR 44, 6 "	4.65	5.19	6.80	5.40	<2.6	3.40
2933	CR 44, 12 "	0.08					
2934	CR 45, 6 "	0.65					
2935	CR 45, 12 "	-0.19					
2936	CR 46, 6 "	5.43					
2937	CR 46, 12 "	1.04					
2938	CR 47, 6 "	4.57					
2939	CR 47, 12 "	0.03					
2940	CR 48, 6 "	3.44					
2941	CR 48, 12 "	-0.69					
2942	CR 49, 6 "	5.43	5.31	7.80		5.70	
2943	CR 49, 12 "	9.17					
2944	CR 50, 6 "	-0.15					

LAB ID	Wind Blown ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2945	CR 50, 12 "	-0.61					
2946	CR 51, 6 "	0.07					
2947	CR 51, 12 "	1.52					
2948	CR 52, 6 "	4.72					
2949	CR 52, 12 "	-0.16					
2950	CR 53, 6 "	-0.89					
2951	CR 53, 12 "	-0.30					
2952	CR 54, 6 "	0.95		3.30	1.70		1.20
2953	CR 54, 12 "	0.27					
2954	CR 55, 6 "	7.11					
2955	CR 55, 12 "	0.62					
2956	CR 56, 6 "	2.02					
2957	CR 56, 12 "	0.10					
2958	CR 57, 6 "	6.15					
2959	CR 57, 12 "	-0.28					
2960	CR 58, 6 "	14.78			11.40		8.70
2961	CR 58, 12 "	0.12					

LAB ID	Wind Blown ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2962	CR 59, 6 "	5.64	6.54	8.10		<4.4	
2963	CR 59, 12 "	0.04					
2964	CR 60, 6 "	15.14			14.30		11.90
2965	CR 60, 12 "	0.95					
2966	CR 61, 6 "	1.33					
2967	CR 61, 12 "	-0.32					
2968	CR 62, 6 "	3.31					
2969	CR 62, 12 "	-0.22					
2970	CR 63, 6 "	4.13					
2971	CR 63, 12 "	0.46					
2972	CR 64, 6 "	3.99	4.96	7.90	4.00	<1.8	3.60
2973	CR 64, 12 "	0.40					
2974	CR 65, 6 "	0.10					
2975	CR 65, 12 "	23.83			19.40		14.30
2976	CR 66, 6 "	1.99					
2977	CR 66, 12 "	0.73					
2978	CR 67, 6 "	5.49					

LAB ID	Wind Blown ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2979	CR 67, 12 "	-1.03					
2980	CR 68, 6 "	11.91			17.60		30.60
2981	CR 68, 12 "	-0.03					
2982	CR 69, 6 "	13.80	11.72	13.50	0.60	5.70	0.70
2983	CR 69, 12 "	-0.57					
2984	CR 70, 6 "	7.45					
2985	CR 70, 12 "	1.02					
2986	CR 71, 6 "	9.18					
2987	CR 71, 12 "	0.54					
2988	CR 72, 6 "	1.44					
2989	CR 72, 12 "	0.25					
2990	CR 73, 6 "	1.51					
2991	CR 73, 12 "	0.19					
2992	CR 74, 6 "	0.34	1.51	3.20	1.20	<1.5	1.80
2993	CR 74, 12 "	0.03					
2994	CR 75, 6 "	1.98					
2995	CR 75, 12 "	-0.33					

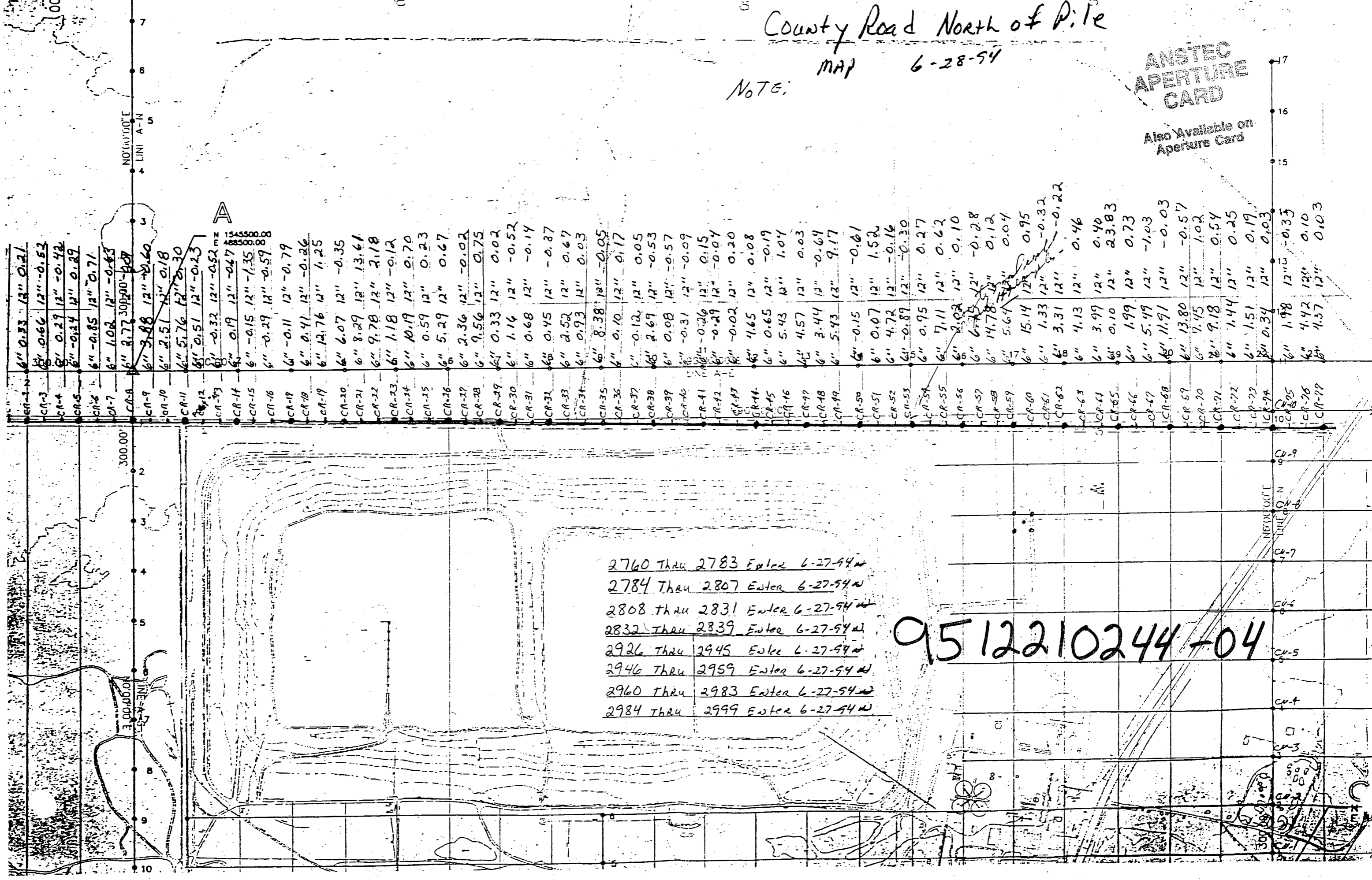
LAB ID	Wind Blown ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2996	CR 76, 6 "	4.42					
2997	CR 76, 12 "	0.10					
2998	CR 77, 6 "	4.37					
2999	CR 77, 12 "	0.03					

County Road North of Pike

NOTE: MAP 6-28-54

ANSTEC APERTURE CARD

Also Available on Aperture Card



2760 Thru 2783 Enter 6-27-54
 2784 Thru 2807 Enter 6-27-54
 2808 Thru 2831 Enter 6-27-54
 2832 Thru 2839 Enter 6-27-54
 2926 Thru 2945 Enter 6-27-54
 2946 Thru 2959 Enter 6-27-54
 2960 Thru 2983 Enter 6-27-54
 2984 Thru 2999 Enter 6-27-54

9512210244-04

CR-1	6" 0.33	12" 0.21
CR-2	6" 0.66	12" -0.52
CR-3	6" 0.29	12" -0.42
CR-4	6" -0.14	12" 0.29
CR-5	6" -0.85	12" 0.71
CR-6	6" 1.02	12" -0.63
CR-7	6" 3.77	300' 0.00
CR-8	6" 3.88	12" -0.60
CR-9	6" 2.51	12" 0.18
CR-10	6" 5.76	12" 0.30
CR-11	6" 0.51	12" -0.23
CR-12	6" -0.32	12" -0.52
CR-13	6" 0.19	12" -0.47
CR-14	6" -0.15	12" -1.35
CR-15	6" -0.29	12" -0.59
CR-16	6" -0.11	12" -0.79
CR-17	6" 0.41	12" -0.26
CR-18	6" 12.76	12" 1.25
CR-19	6" 6.07	12" -0.35
CR-20	6" 8.29	12" 13.61
CR-21	6" 9.78	12" 2.18
CR-22	6" 1.18	12" -0.12
CR-23	6" 10.19	12" 0.70
CR-24	6" 0.59	12" 0.23
CR-25	6" 5.29	12" 0.67
CR-26	6" 2.36	12" -0.02
CR-27	6" 9.56	12" 0.75
CR-28	6" 0.33	12" 0.02
CR-29	6" 1.14	12" -0.52
CR-30	6" 0.68	12" -0.14
CR-31	6" 0.45	12" -0.87
CR-32	6" 2.52	12" 0.67
CR-33	6" 0.93	12" 0.03
CR-34	6" 8.38	12" -0.05
CR-35	6" 0.10	12" 0.17
CR-36	6" -0.12	12" 0.05
CR-37	6" 2.69	12" -0.53
CR-38	6" 0.08	12" -0.57
CR-39	6" -0.31	12" -0.09
CR-40	6" -0.26	12" 0.15
CR-41	6" -0.29	12" -0.04
CR-42	6" -0.02	12" 0.20
CR-43	6" 1.65	12" 0.08
CR-44	6" 0.65	12" -0.19
CR-45	6" 5.43	12" 1.04
CR-46	6" 4.57	12" 0.03
CR-47	6" 3.44	12" -0.64
CR-48	6" 5.43	12" 9.17
CR-49	6" -0.15	12" -0.61
CR-50	6" 0.07	12" 1.52
CR-51	6" 4.72	12" -0.16
CR-52	6" -0.89	12" -0.30
CR-53	6" 0.95	12" 0.27
CR-54	6" 7.11	12" 0.62
CR-55	6" 2.02	12" 0.10
CR-56	6" 6.73	12" -0.28
CR-57	6" 14.78	12" 0.12
CR-58	6" 5.64	12" 0.04
CR-59	6" 15.14	12" 0.95
CR-60	6" 1.33	12" -0.32
CR-61	6" 3.31	12" -0.22
CR-62	6" 4.13	12" 0.46
CR-63	6" 3.99	12" 0.40
CR-64	6" 0.10	12" 23.83
CR-65	6" 1.99	12" 0.73
CR-66	6" 5.49	12" -1.03
CR-67	6" 11.91	12" -0.03
CR-68	6" 13.80	12" -0.57
CR-69	6" 7.45	12" 1.02
CR-70	6" 9.18	12" 0.54
CR-71	6" 1.44	12" 0.25
CR-72	6" 1.51	12" 0.19
CR-73	6" 0.34	12" 0.03
CR-74	6" 1.98	12" -0.35
CR-75	6" 4.42	12" 0.10
CR-76	6" 1.57	12" 0.03
CR-77		

CR-9	
CR-8	
CR-7	
CR-6	
CR-5	
CR-4	
CR-3	
CR-2	
CR-1	

Homestake Mining Company - Grants Operation

Table F-5 Soil Sample Characterization Data For State Road 605 Right-of-Way North of County Road 63

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2170	SR-2 A-N 6"	10.70					
2171	SR-2 A-N 12"	17.73					
2172	SR-2 B-N 6"	25.63	30.20	34.60	17.10	7.90	17.10
2173	SR-2 B-N 12"	18.27					
2174	SR-3 A-N 6"	15.52					
2175	SR-3 A-N 12"	19.23					
2176	SR-3 B-N 6"	35.65					
2177	SR-3 B-N 12"	8.67					
2178	SR-4 A-N 6"	20.45					
2179	SR-4 A-N 12"	2.15					
2180	SR-4 B-N 6"	13.16					
2181	SR-4 B-N 12"	2.10					
2182	SR-5 A-N 6"	18.07	19.68	23.60	17.70	6.00	11.30
2183	SR-5 A-N 12"	6.61					

F-5.1

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2184	SR - 5 N. B - 6 "	24.34					
2185	SR - 5 N. B - 12 "	14.06					
2186	SR - 1 N. C - 6 "	34.58					
2187	SR - 1 N. C - 12 "	4.22					
2188	SR - 1 N. D - 6 "	11.60					
2189	SR - 1 N. D - 12 "	0.43					
2190	SR - 2 N. C - 6 "	6.10					
2191	SR - 2 N. C - 12 "	1.34					
2192	SR - 2 N. D - 6 "	24.68	28.26	33.50		<5.1	
2193	SR - 2 N. D - 12 "	0.91					
2194	SR - 3 N. C - 6 "	45.70					
2195	SR - 3 N. C - 12 "	6.81					
2196	SR - 3 N. D - 6 "	13.76					
2197	SR - 3 N. D - 12 "	0.50					
2198	SR - 4 N. C - 6 "	32.55					
2199	SR - 4 N. C - 12 "	6.85					
2200	SR - 4 N. D - 6 "	10.27					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
2201	S R - 4 N. D - 12 "	20.84					
2202	S R - 5 N. C - 6 "	31.62	33.79	37.90	30.60	8.40	25.00
2203	S R - 5 N. C - 12 "	30.07					
2204	S R - 5 N. D - 6 "	16.77					
2205	S R - 5 N. D - 12 "	40.94					
3102	S-R-N-P-, 1 B 6 "	12.41	12.33	15.10		14.40	
3103	S-R-N-P-, 1 B 12 "	46.86					
3104	S-R-N-P-, 1B -1'.5 "	4.03					
3105	S-R-N-P-, 1 B - 2 '	-6.49					
3106	S-R-N-P-, 2 B -6 "	34.11					
3107	S-R-N-P-, 2 B - 12"	12.94					
3108	S-R-N-P-, 2B -1'.5"	12.92					
3109	S-R-N-P-, 2 B - 2 '	64.91					
3110	S-R-N-P-, 3 B -6 "	18.48			18.10		14.50
3111	S-R-N-P-, 3 B - 12"	3.42					
3112	S-R-N-P-, 3 B -1'.5"	7.84	6.91	9.00	11.10	3.50	10.20
3113	S-R-N-P-, 3 B - 2 '	46.64					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3114	S-R-N-P-, 4 B -6 "	64.07					
3115	S-R-N-P-, 4 B - 12"	6.87					
3116	S-R-N-P-, 4 B -1'.5"	10.11					
3117	S-R-N-P-, 4 B - 2 '	36.49					
3118	S-R-N-P-, 5 B -6 "	49.70					
3119	S-R-N-P-, 5 B - 12"	12.03					
3120	S-R-N-P-, 5 B -1'.5"	5.33					
3121	S-R-N-P-, 5 B - 2 '	25.30					
3122	S-R-N-P-, 6 B -6 "	71.19	63.13	80.10		19.40	
3123	S-R-N-P-, 6 B - 12"	1.20					
3124	S-R-N-P-, 6 B -1'.5"	20.34					
3125	S-R-N-P-, 6 B - 2 '	62.49					
3126	S-R-N-P-, 7 B -6 "	30.14					
3127	S-R-N-P-, 7 B - 12"	4.39					
3128	S-R-N-P-, 7 B -1'.5"	22.84					
3129	S-R-N-P-, 7 B - 2 '	44.20					
3130	S-R-N-P-, 8 B -6 "	35.34					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3131	S-R-N-P-, 8 B - 12"	14.51					
3132	S-R-N-P-, 8 B - 1'.5"	0.49	1.77	2.50	2.30	7.60	1.70
3133	S-R-N-P-, 8 B - 2'	40.13					
3134	S-R-N-P-, 9 B - 6"	34.41			34.60		23.40
3135	S-R-N-P-, 9 B - 12"	4.33					
3136	S-R-N-P-, 9 B - 1'.5"	9.29					
3137	S-R-N-P-, 9 B - 2'	6.99					
3138	S-R-N-P-, 10 B - 6"	4.91					
3139	S-R-N-P-, 10 B 12"	1.58					
3140	S-R-N-P-, 10 B 1'.5"	8.72					
3141	S-R-N-P-, 10 B 2'	1.29					
3142	S-R-N-P-, 11 B - 6"	13.94	14.01	5.50		5.90	
3143	S-R-N-P-, 11 B 12"	1.07					
3144	S-R-N-P-, 11 B 1'.5"	0.59					
3145	S-R-N-P-, 11 B 2'	15.16					
3146	S-R-N-P-, 12 B - 6"	33.66					
3147	S-R-N-P-, 12 B 12"	2.77					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3148	S-R-N-P-, 12 B 1'.5"	2.50					
3149	S-R-N-P-, 12 B 2'	1.79					
3150	S-R-N-P-, 13 B -6 "	24.67			25.40		33.50
3151	S-R-N-P-, 13 B 12"	4.54					
3152	S-R-N-P-, 13 B 1'.5"	1.01	2.29	3.25	3.20	4.10	9.00
3153	S-R-N-P-, 13 B 2'	1.22					
3154	S-R-N-P, 2 A 6 "	41.65					
3155	S-R-N-P, 2 A 12 "	21.34					
3156	S-R-N-P, 2 A 1'.5 "	19.12					
3157	S-R-N-P, 2 A 2'	10.07					
3158	S-R-N-P, 3 A 6 "	36.41			32.20		28.70
3159	S-R-N-P, 3 A 12 "	2.20					
3160	S-R-N-P, 3 A 1'.5 "	1.49					
3161	S-R-N-P, 3 A 2'	11.70					
3162	S-R-N-P, 4 A 6 "	33.07	28.33	28.40		12.30	
3163	S-R-N-P, 4 A 12 "	3.96					
3164	S-R-N-P, 4 A 1'.5 "	4.35					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3165	S-R-N-P, 4 A 2'	3.11					
3166	S-R-N-P, 5 A 6"	45.89					
3167	S-R-N-P, 5 A 12"	1.18					
3168	S-R-N-P, 5 A 1'.5"	3.42					
3169	S-R-N-P, 5 A 2'	1.55					
3170	S-R-N-P, 6 A 6"	868.98					
3171	S-R-N-P, 6 A 12"	2.12					
3172	S-R-N-P, 6 A 1'.5"	2.15	2.68	4.10	2.90	4.90	8.70
3173	S-R-N-P, 6 A 2'	1.33					
3174	S-R-N-P, 7 A 6"	8.06					
3175	S-R-N-P, 7 A 12"	-0.31					
3176	S-R-N-P, 7 A 1'.5"	0.14					
3177	S-R-N-P, 7 A 2'	2.03					
3178	S-R-N-P, 8 A 6"	8.76					
3179	S-R-N-P, 8 A 12"	-0.27					
3180	S-R-N-P, 8 A 1'.5"	-0.32					
3181	S-R-N-P, 8 A 2'	2.49					

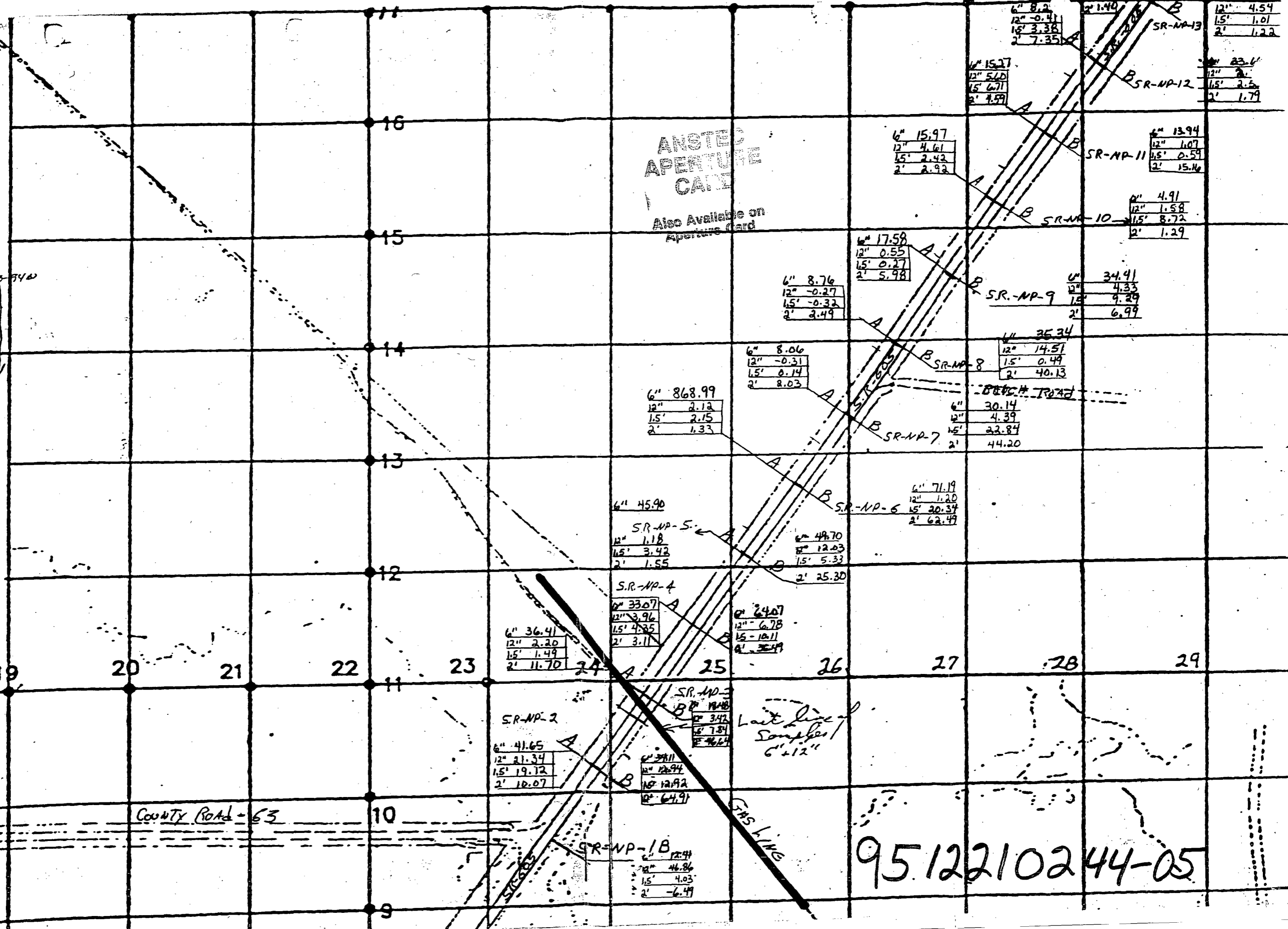
LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3182	S-R-N-P, 9 A 6 "	17.58	13.00	16.60	13.90	7.80	13.80
3183	S-R-N-P, 9 A 12 "	0.55					
3184	S-R-N-P, 9 A 1'.5 "	0.27					
3185	S-R-N-P, 9 A 2'	5.98					
3186	S-R-N-P, 10 A 6 "	15.97					
3187	S-R-N-P, 10 A 12 "	4.61					
3188	S-R-N-P, 10 A 1'.5 "	2.42					
3189	S-R-N-P, 10 A 2'	2.92					
3190	S-R-N-P, 11 A 6 "	15.27					
3191	S-R-N-P, 11 A 12 "	5.60					
3192	S-R-N-P, 11 A 1'.5 "	6.71	7.29	7.50	7.90	5.30	10.70
3193	S-R-N-P, 11 A 2'	4.59					
3194	S-R-N-P, 12 A 6 "	8.23					
3195	S-R-N-P, 12 A 12 "	-0.41					
3196	S-R-N-P, 12 A 1'.5 "	3.38					
3197	S-R-N-P, 12 A 2'	7.35					
3222	SR - NP 13 A 6 "	13.25	12.34	15.10	13.20	8.80	11.60

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
3223	SR-NP 13 A 12 "	5.15					
3224	SR-NP 13 A 1.5 '	1.97					
3225	SR-NP 13 A 2 '	1.40					

action
 0605 Barnett
 by hand sampled
 on 10/11/11
 in cu 300
 12", 18", 24"

- Thru 3125 E.L.G-Z-740
- Thru 3149
- Thru 3173
- Thru 3197
- Thru 3225

SCALE
 300'



ANSTER APERTURE CABLE
 Also Available on Aperture Card

6"	8.2
12"	-0.41
15'	3.38
2'	7.35

6"	1.40
12"	4.54
15'	1.01
2'	1.22

6"	23.4
12"	2
15'	2.5
2'	1.79

6"	15.97
12"	4.61
15'	2.42
2'	2.92

6"	13.94
12"	1.07
15'	0.59
2'	15.16

6"	4.91
12"	1.58
15'	8.72
2'	1.29

6"	17.58
12"	0.55
15'	0.27
2'	5.98

6"	8.76
12"	-0.27
15'	-0.32
2'	2.49

6"	34.41
12"	4.33
15'	9.29
2'	6.99

6"	8.06
12"	-0.31
15'	0.14
2'	8.03

6"	868.99
12"	2.12
15'	2.15
2'	1.33

6"	35.34
12"	14.51
15'	0.49
2'	40.13

6"	30.14
12"	4.39
15'	23.87
2'	44.20

6"	45.90
12"	1.18
15'	3.42
2'	1.55

6"	48.70
12"	12.03
15'	5.33
2'	25.30

6"	71.19
12"	1.20
15'	20.37
2'	62.47

6"	33.07
12"	3.96
15'	4.35
2'	3.11

6"	24.07
12"	6.78
15'	10.11
2'	30.49

95.12210244-05

Date Collected: 19,23,24,1995

Date Sealed: May 25,1995

Date Read : JUNE 12,1995

SAMPLED BY LJ. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	IHC Ra 226 pCi/g	EKG
		RA(ROI) 609KEV CH1549-CH1658	TH(ROI) 911KEV CH1861-CH1961	K(ROI) 1406KEV CH1338-CH1458	COUNT TIME SECONDS	RA 609 KEV CH549-CH658	TH 911 KEV CH861-CH961	K 1460 KEV CH1338-CH1458				
4933	PT-20	4008	1296	1299	1053	3.81	1.23	1.23	1681.50	2.20	4.28	3.58
4934	PT-26	2715	1307	1347	1145	2.37	1.14	1.18	1337.00	0.61	1.49	1.43
4935	PT-27	2598	1280	1214	1018	2.55	1.26	1.19	1321.90	0.58	1.44	1.87
4938	JO44238	3868	1550	1377	1001	3.86	1.55	1.38	1381.20	1.60	3.79	4.14
4937	JO34101	2878	1457	1305	1142	2.52	1.28	1.14	1480.40	0.49	1.09	1.49
4938	JO42092	3173	1493	1244	1027	3.09	1.45	1.21	1576.40	0.82	1.70	2.40
4939	HO43239	3130	1264	1216	1002	3.12	1.26	1.21	1501.70	1.29	2.79	2.28
4940	JO52237	1975	1014	926	1057	1.87	0.96	0.88	1491.00	0.33	0.73	1.24

Appendix G

Data Sort Sheets for Statistical Study in Outer Zone

Date Collected: May 23, 24, 1995

Date Sealed: May 25, 1995

Date Read: JUNE 12, 1995

SAMPLED BY L.J. PREP SAMPLES RO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT.	HMC Ra 226 pCi/g	EKG
		RA(ROI) 609KEV CH1549-CH1658	TH(ROI) 911KEV CH1861-CH1961	K(ROI) 1406KEV CH11338-CH1458		RA 609 KEV CH1549-CH1658	TH 911 KEV CH1861-CH1961	K 1460 KEV CH11338-CH1458				
4933	PT-20	4008	1296	1299	1053	3.81	1.23	1.23	1681.50	2.20	4.28	3.58
4934	PT-26	2715	1307	1347	1145	2.37	1.14	1.18	1337.00	0.61	1.49	1.43
4935	PT-27	2598	1280	1214	1018	2.55	1.26	1.19	1321.90	0.58	1.44	1.87
4936	JO44238	3868	1550	1377	1001	3.86	1.55	1.38	1381.20	1.60	3.79	4.14
4937	JO34101	2878	1457	1305	1142	2.52	1.28	1.14	1480.40	0.49	1.09	1.49
4938	JO42092	3173	1493	1244	1027	3.09	1.45	1.21	1576.40	0.82	1.70	2.40
4939	HO43239	3130	1264	1216	1002	3.12	1.26	1.21	1501.70	1.29	2.79	2.28
4940	JO52237	1975	1014	926	1057	1.87	0.96	0.88	1491.00	0.33	0.73	1.24

Homestake Mining Company - Grants, New Mexico Project 9:36:12 AM, 5/2/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E031

Zone: Outer

The Grid with the Max. Gamma Grid : E031222
 Ave. Gamma : 15,818.27
 No. of Points : 15
 North Limits : >1545566.67,<1545600
 East Limits : >488133.33,<488166.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: 1995

Date Sealed: MAY 6, 1995

Date Read : MAY 22, 1995

SAMPLED BY MJ and LJ. PHEP SAMPLES HQ.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAD ID	Wind Blown Samples ID.	TOTAL COUNTS				CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	IIMC No 226 pCi/g	ERG Ra226 pCi/g
		PA(POA) 609KEV CII549- CII658	TH(POA) 911KEV CII861- CII961	K(POA) 1406KEV CII1338- CII1458	COUNT TIME SECONDS	PA 609 KEV CII549- CII658	TH 911 KEV CII861- CII961	K 1460 KEV CII1338- CII1458				
4870	E031222	3493	1223	1350	1106	3.16	1.11	1.22	1549.80	1.67	3.54	2.86
4871	C064193	3148	1324	1346	1053	2.99	1.26	1.28	1470.40	1.14	2.54	2.18
4872	D074013	6926	2015	1852	1282	5.40	1.57	1.44	1510.80	3.47	7.55	5.83
4873	E141169	3732	1683	1705	1305	2.86	1.29	1.31	1395.10	0.91	2.15	2.47
4874	I1061259	2556	1358	1477	1730	1.48	0.78	0.85	1622.70	0.23	0.46	0.81
4875	I1052157	3639	1461	1373	1045	3.48	1.40	1.31	1702.70	1.45	2.79	2.81
4876	E074147	2863	1155	1153	1010	2.83	1.14	1.14	1569.00	1.17	2.45	2.15
4877	E083127	3665	1418	1339	1044	3.51	1.36	1.28	1570.80	1.58	3.27	3.00

Homestake Mining Company - Grants, New Mexico Project 7:30:43 AM, 4/4/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E032

Zone: Outer

The Grid with the Max. Gamma Grid : E032142
 Ave. Gamma : 14,898.91
 No. of Points : 23.00
 North Limits : >1545766.67, <1545800
 East Limits : >488833.33, <488866.67

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0.00

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: MARCH 24, 1995

Date Sealed: Mar. , 1995

Date Read: April 12, 1995

SAMPLED BY IV AND MJ. PREP SAMPLES NO.

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Pa 226 pCi/g	ERG
		PA(POL) 609KEV	III(POL) 911KEV	K(POL) 1400KEV	IIA 609 KEV		TII 911 KEV	K 1460 KEV					
		CH1549- CH1650	CH1861- CH1961	CH11330- CH11450									
4738	E022157	3665	1394	1366	1006	3.64	1.39	1.36	1565.50	1.50	3.30	3.05	
4739	E031117	2933	1219	1320	1133	2.59	1.08	1.17	1519.80	0.90	1.96	2.05	
4740	D024014	3821	1328	1379	1016	3.76	1.31	1.36	1426.10	1.88	4.37	3.87	
4741	D023053	4642	1765	1007	1391	3.34	1.27	1.30	1432.50	1.43	3.30	3.13	
4742	D021259	4631	1617	1509	1147	4.04	1.41	1.39	1425.50	2.00	4.65	3.84	
4743	D033032	16471	5040	4853	3365	4.89	1.50	1.44	1507.80	2.88	6.33	5.63	
4744	D022109	8609	2463	2125	1200	7.17	2.05	1.77	1354.90	4.54	11.12	6.64	
4745	D031078	6716	2028	1895	1247	5.39	1.63	1.52	1395.90	3.22	7.64	6.37	
4746	D032024	2838	1495	1588	1398	2.03	1.07	1.14	1392.40	0.21	0.51	1.29	
4747	E032142	2902	1372	1300	1174	2.47	1.17	1.11	1476.40	0.54	1.21	1.71	
4748	D034028	8003	3333	3397	2726	3.33	1.22	1.25	1506.90	1.51	3.32	3.00	
4749	D043064	5361	1959	1961	1510	3.55	1.30	1.30	1436.40	1.63	3.75	3.75	

Homestake Mining Company - Grants, New Mexico Project 4:15:58 PM, 4/20/95
 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E033

Zone: Outer

The Grid with the Max. Gamma Grid : E033049
 Ave. Gamma : 12,839.25
 No. of Points : 20
 North Limits : >1545400, <1545433.33
 East Limits : >488366.67, <488400

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: Jun 1995

Date Sealed: June 7, 1995

Date Read: JUNE 22, 1995

SAMPLED BY LJ. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB	Wind Blown Sample ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	IMC Ra 226 pCi/g	ERG
		RA(ROI) 609KEV CH549-CH658	TH(ROI) 911KEV CH861-CH981	K(ROI) 1406KEV CH1338-CH1458		RA 609 KEV CH549-CH658	TH 911 KEV CH861-CH981	K 1460 KEV CH1338-CH1458				
4970	E033049	2344	1040	1071	1023	2.29	1.02	1.05	1495.60	0.75	1.85	1.56
4971	E034114	2605	1056	1085	1015	2.57	1.04	1.07	1528.60	1.05	2.24	1.69
4972	E044145	2236	1015	999	1001	2.23	1.01	1.00	1517.60	0.68	1.46	1.52
4973	E053151	2665	1201	1099	1002	2.66	1.20	1.10	1527.20	0.82	1.75	2.09
4974	E041056	2449	1035	981	1007	2.43	1.03	0.95	1638.70	0.89	1.77	1.68
4975	D104176	3987	1526	1374	1001	3.98	1.52	1.37	1457.80	1.79	4.02	4.28
4976	D103249	3334	1461	1319	1049	3.18	1.39	1.26	1460.60	1.06	2.38	2.50
4977	D093206	2674	1128	1035	1002	2.67	1.13	1.03	1581.40	0.98	2.02	1.79

30-04724 03-10 ANDERSON ENVI KERING 101731430

Homestake Mining Company - Grants, New Mexico Project 5:52:32 PM, 4/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E034

Zone: Outer

The Grid with the Max. Gamma Grid : E034114
 Ave. Gamma : 12,936.13
 No. of Points : 16
 North Limits : >1545233.33, <1545266.67
 East Limits : >488500, <488533.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: June 1995

Date Sealed: June 1995

Date Read: JUNE 22, 1995

SAMPLED BY L.J. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	
		RA(ROI) 809KEV CH1549-CH1658	TH(ROI)911KEV CH861-CH961	K(ROI)1406KEV CH1338-CH1458		RA 809 KEV CH549-CH658	TH 911 KEV CH861-CH961	K 1480 KEV CH1338-CH1458				
4970	E033049	2344	1040	1071	1023	2.29	1.02	1.05	1495.60	0.75	1.85	1.56
4971	E034114	2605	1056	1085	1015	2.57	1.04	1.07	1528.60	1.05	2.24	1.69
4972	E044145	2236	1015	999	1001	2.23	1.01	1.00	1517.60	0.68	1.46	1.52
4973	E053151	2665	1201	1099	1002	2.66	1.20	1.10	1527.20	0.82	1.75	2.09
4974	E041056	2449	1035	961	1007	2.43	1.03	0.95	1638.70	0.89	1.77	1.68
4975	D104176	3987	1526	1374	1001	3.98	1.52	1.37	1457.80	1.79	4.02	4.28
4976	D103249	3334	1461	1319	1049	3.18	1.39	1.26	1460.60	1.06	2.38	2.50
4977	D093206	2674	1128	1035	1002	2.67	1.13	1.03	1581.40	0.98	2.02	1.79

ERG

Homestake Mining Company - Grants, New Mexico Project 3:29:14 PM, 4/4/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E041

Zone: Outer

The Grid with the Max. Gamma Grid : E041056
Ave. Gamma : 13,051.29
No. of Points : 14.00
North Limits : >1545933.33, <1545966.67
East Limits : >489466.67, <489500

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0.00

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: Jun 7, 1995

Date Sealed: June 7, 1995

Date Read: JUNE 22, 1995

SAMPLED BY L.J. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	
		RA(ROI) 609KEV CH1549-CH1658	TH(ROI) 911KEV CH1661-CH1961	K(ROI) 1406KEV CH1338-CH1458		RA 609 KEV CH1549-CH1658	TH 911 KEV CH1661-CH1961	K 1460 KEV CH1338-CH1458				
4970	E033049	2344	1040	1071	1023	2.29	1.02	1.05	1495.60	0.75	1.65	1.56
4971	E034114	2605	1056	1085	1015	2.57	1.04	1.07	1526.60	1.05	2.24	1.69
4972	E044145	2236	1015	999	1001	2.23	1.01	1.00	1517.60	0.68	1.46	1.52
4973	E053151	2665	1201	1099	1002	2.66	1.20	1.10	1527.20	0.82	1.75	2.09
4974	E041056	2449	1035	961	1007	2.43	1.03	0.95	1638.70	0.89	1.77	1.68
4975	D104176	3987	1526	1374	1001	3.98	1.52	1.37	1457.80	1.79	4.02	4.28
4976	D103249	3334	1461	1319	1049	3.18	1.39	1.26	1460.60	1.06	2.38	2.50
4977	D093206	2674	1128	1035	1002	2.67	1.13	1.03	1581.40	0.98	2.02	1.79

ERG

Homestake Mining Company - Grants, New Mexico Project
GPS Radiological Surveys

11:19:12 AM, 3/31/95

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

Zone: Outer

GRID E042

The Grid with the Max. Gamma Grid : E042169
 Ave. Gamma : 16,630.14
 No. of Points : 14.00
 North Limits : >1545700, <1545733.33
 East Limits : >489566.67, <489600

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	East Limits	North Limits
------	------------	---------------	-------------	--------------

Number of grids with Gamma greater than 21,500: Count(Grid) : 0.00

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
------	------------	---------------	--------------	-------------

Date Collected: March 28, 1995

Date Sealed: Mar. .995

Date Read: April 17, 1995

SAMPLED BY L.J. PREP SAMPLES NO.

1995

SOIL SAMPLES

LAB	Wind Blown Samples ID	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. PAT	IMC Pa 226 pCi/g	ERG Ra-226 Rci/g
		IA(POI) 609KEV CII549 - CII658	II(POI) 911KEV CII861 - CII961	K(POI) 1406KEV CII1338 - CII1458		IA 609 KEV CII549 - CII658	II 911 KEV CII861 - CII961	K 1480 KEV CII1338 - CII1458				
4760	E042169	2349	1287	1327	1559	1.51	0.83	0.85	1661.30	0.05	0.10	0.61
4761	E041058	3031	1147	1034	1009	3.00	1.14	1.02	1612.98	1.25	2.58	2.46
4762	D042218	7930	2231	1871	1334	5.95	1.67	1.40	1599.20	3.79	7.87	6.41
4763	D044254	4910	1620	1583	1566	3.14	1.03	1.01	1640.00	1.64	3.31	2.63
4764	E051195	3508	1411	1178	1035	3.39	1.36	1.14	1529.60	1.25	2.72	3.80
4765	D053193	2848	1259	1157	1065	2.67	1.18	1.09	1394.40	0.76	1.80	2.40
4766	E052153	3050	1588	1461	1187	3.25	1.34	1.25	1447.50	1.15	2.64	3.43
4767	E081087	3109	1376	1298	1036	3.00	1.33	1.25	1441.60	0.97	2.22	2.43
4768	D054255	7204	2231	1840	1280	5.63	1.74	1.44	1387.90	3.25	7.76	7.38
4769	D083095	3846	1489	1269	1030	3.73	1.45	1.25	1388.60	1.52	3.63	3.91
4770	D083095	1526	785	840	1019	1.50	0.77	0.82	1724.10	0.16	0.30	0.64

Homestake Mining Company - Grants, New Mexico Project 8:02:53 AM, 4/21/98
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E043

Zone: Outer

The Grid with the Max. Gamma Grid : E043111
 Ave. Gamma : 13,085.40
 No. of Points : 25
 North Limits : >1545266.67, <1545300
 East Limits : >489000, <489033.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: JUNE 13, 1995

Date Sealed: JUN 35

Date Read: JUNE 30, 1995

SAMPLED BY MJ AND LJ. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Pa 226 pCi/g	TMA	Energy	Energy	TMA	Energy
		RA(PO) 809 KEV CH1549 - CH1558	TH(PO) 911 KEV CH1861 - CH1881	K(PO) 1406 KEV CH1338 - CH1459		RA 809 KEV CH1549 - CH1558	TH 911 KEV CH1861 - CH1881	K 1406 KEV CH1338 - CH1459				Eberline Pa 226 pCi/g	Gamma Pa 226 pCi/g	Wet Chem Pa 226 pCi/g	Eberline U 238 pCi/g	Wet Chem U 238 pCi/g
		5021	H043239	3848		1528	1570	1230				3.13	1.24	1.28	1575.70	1.34
5022	G103133	2790	1438	1568	1799	1.55	0.80	0.87	1610.90	0.28	0.58					
5023	E043111	2308	1064	1042	1235	1.87	0.88	0.84	1618.00	0.50	1.00					
5024	L081015	4639	1826	1944	1888	2.46	0.97	1.03	1612.90	1.06	2.18					
5025	J053041	2643	1387	1299	1627	1.62	0.85	0.80	1484.40	0.24	0.54					

Homestake Mining Company - Grants, New Mexico Project 8:36:21 AM, 4/21/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E044

Zone: Outer

The Grid with the Max. Gamma Grid : E044145
 Ave. Gamma : 13,569.93
 No. of Points : 27
 North Limits : >1545233.33, <1545266.67
 East Limits : >489833.33, <489866.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: Jun 95

Date Sealed: June 7, 1995

Date Read: JUNE 22, 1995

SAMPLED BY L.J. PREP SAMPLES RO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	
		RA(ROI) 609KEV CH1549- CH1858	TH(ROI) 911KEV CH861- CH961	K(ROI) 1408KEV CH1338- CH1458		RA 609 KEV CH549- CH858	TH 911 KEV CH861- CH961	K 1460 KEV CH1338- CH1458				
4970	E033049	2344	1040	1071	1023	2.29	1.02	1.05	1495.80	0.75	1.85	1.56
4971	E034114	2605	1056	1085	1015	2.57	1.04	1.07	1528.60	1.05	2.24	1.89
4972	E044145	2236	1015	999	1001	2.23	1.01	1.00	1517.60	0.68	1.46	1.52
4973	E053151	2665	1201	1099	1002	2.66	1.20	1.10	1527.20	0.82	1.75	2.09
4974	E041056	2449	1035	961	1007	2.43	1.03	0.95	1638.70	0.89	1.77	1.68
4975	D104176	3987	1526	1374	1001	3.98	1.52	1.37	1457.80	1.79	4.02	4.28
4976	D103249	3334	1461	1319	1049	3.18	1.39	1.26	1460.60	1.06	2.38	2.50
4977	D093206	2674	1128	1035	1002	2.67	1.13	1.03	1581.40	0.98	2.02	1.79

ERG

Homestake Mining Company - Grants, New Mexico Project

GPS Radiological Surveys

11:23:45 AM, 3/31/95

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

Zone: Outer

GRID E051

The Grid with the Max. Gamma

Grid : E051195
 Ave. Gamma : 13,934.80
 No. of Points : 5.00
 North Limits : >1545633.33, <1545666.67
 East Limits : >490333.33, <490366.67

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	East Limits	North Limits
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Number of grids with Gamma greater than 21,500: Count(Grid) : 0.00

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
------	------------	---------------	--------------	-------------

Date Collected: March 28, 1995

Date Sealed: March 31, 1995

Date Read: April 17, 1995

SAMPLED BY L.J. PREP SAMPLE NO.

1995

SOIL SAMPLES

LAD ID	Wind Blown Sample ID	TOTAL COUNTS				CPS			SAMPLE WT.	TIME CT. IAI	IIMC Ila 228 pCi/g	ERG RA-226 Rc-137
		IA(110X) 609KEV CH1549 - CH1658	II(110X) 911KEV CH1061 - CH1961	K(110X) 1400KEV CH1338 - CH1458	COUNT TIME SECONDS	IA 609 KEV CH1549 - CH1658	II 911 KEV CH1061 - CH1961	K 1400 KEV CH1338 - CH1458				
4760	E042169	2349	1287	1327	1559	1.51	0.83	0.85	1661.30	0.05	0.10	0.61
4761	E041058	3031	1147	1034	1009	3.00	1.14	1.02	1612.98	1.25	2.58	2.46
4762	D042218	7936	2231	1871	1334	5.95	1.67	1.40	1599.20	3.79	7.87	6.41
4763	D044254	4910	1620	1583	1566	3.14	1.03	1.01	1640.00	1.64	3.31	2.63
4764	E051195	3508	1411	1178	1035	3.39	1.36	1.14	1529.60	1.25	2.72	3.80
4765	D053193	2848	1259	1157	1065	2.67	1.18	1.09	1394.40	0.76	1.80	2.40
4766	E052153	3850	1588	1481	1187	3.25	1.34	1.25	1447.50	1.15	2.64	3.43
4767	E081007	3109	1370	1290	1036	3.00	1.33	1.25	1441.60	0.97	2.22	2.43
4768	D054255	7204	2231	1840	1280	5.63	1.74	1.44	1387.90	3.25	7.76	7.38
4769	D063095	3840	1489	1289	1030	3.73	1.45	1.25	1388.60	1.52	3.63	3.91
4770	D063095	1526	785	840	1019	1.50	0.77	0.82	1724.10	0.16	0.30	0.64

Homestake Mining Company - Grants, New Mexico Project 1:10:36 NW, 4/24/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E052

Zone: Outer

The Grid with the Max. Gamma Grid : E052153
Ave. Gamma : 16,153.66
No. of Points : 34
North Limits : >1545766.67,<1545800
East Limits : >490966.67,<491000

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: March 19, 1995

Date Sealed: March 21, 1995

Date Read: April 17, 1995

SAMPLED BY L.J. PREP SAMPLES NO.

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RA1	IMC Ra 226 pCi/g	ERG Ra-226 Rci/g
		RA(ROI) 609KEV CII549 - CII658	TH(ROI) 911KEV CII861 - CII961	K(ROI) 1460KEV CII1338 - CII1458		RA 609 KEV CII549 - CII658	TH 911 KEV CII861 - CII961	K 1460 KEV CII1338 - CII1458				
4760	E042169	2349	1207	1327	1559	1.51	0.83	0.85	1661.30	0.05	0.10	0.61
4761	E041058	3031	1147	1034	1009	3.00	1.14	1.02	1612.98	1.25	2.58	2.46
4762	D042218	7936	2231	1871	1334	5.95	1.67	1.40	1599.20	3.79	7.87	6.41
4763	D044254	4910	1620	1583	1566	3.14	1.03	1.01	1640.00	1.64	3.31	2.63
4764	E051195	3508	1411	1178	1035	3.39	1.36	1.14	1529.60	1.25	2.72	3.80
4765	D053193	2846	1259	1157	1065	2.67	1.18	1.09	1394.40	0.76	1.80	2.40
4766	E052153	3850	1588	1481	1187	3.25	1.34	1.25	1447.50	1.15	2.64	3.43
4767	E061067	3109	1376	1296	1036	3.08	1.33	1.25	1441.60	0.97	2.22	2.43
4768	D054255	7204	2231	1840	1280	5.63	1.74	1.44	1387.90	3.25	7.76	7.38
4769	D063095	3846	1489	1289	1030	3.73	1.45	1.25	1388.60	1.52	3.63	3.91
4770	D063095	1526	785	840	1019	1.50	0.77	0.82	1724.10	0.16	0.30	0.64

Homestake Mining Company - Grants, New Mexico Project 11:39:54 AM, 4/21/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E053

Zone: Outer

The Grid with the Max. Gamma Grid : E053151
 Ave. Gamma : 15,472.44
 No. of Points : 9
 North Limits : >1545266.67, <1545300
 East Limits : >490400, <490433.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: June 7, 1995

Date Sealed: June 7, 1995

Date Read: JUNE 22, 1995

SAMPLED BY L.J. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	
		RA(ROI) 609KEV CH1549-CH1658	TH(ROI) 911KEV CH1861-CH1981	K(ROI) 1406KEV CH1338-CH1458	RA 609 KEV CH1549-CH1658		TH 911 KEV CH1861-CH1981	K 1460 KEV CH1338-CH1458					
4970	E033049	2344	1040	1071	1023	2.29	1.02	1.05	1495.60	0.75	1.65	1.56	
4971	E034114	2605	1056	1085	1015	2.57	1.04	1.07	1528.60	1.05	2.24	1.69	
4972	E044145	2236	1015	999	1001	2.23	1.01	1.00	1517.60	0.66	1.46	1.52	
4973	E053151	2665	1201	1099	1002	2.66	1.20	1.10	1527.20	0.82	1.75	2.09	
4974	E041056	2449	1035	961	1007	2.43	1.03	0.95	1638.70	0.89	1.77	1.68	
4975	D104176	3987	1526	1374	1001	3.98	1.52	1.37	1457.80	1.79	4.02	4.28	
4976	D103249	3334	1461	1319	1049	3.18	1.39	1.26	1460.60	1.06	2.36	2.50	
4977	D093206	2674	1128	1035	1002	2.67	1.13	1.03	1581.40	0.96	2.02	1.79	

ERG

Homestake Mining Company - Grants, New Mexico Project 12:08:07 PM, 6/21/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E054

Zone: Outer

The Grid with the Max. Gamma Grid : E054059
 Ave. Gamma : 15,365.73
 No. of Points : 11
 North Limits : >1545400, <1545433.33
 East Limits : >490966.67, <491000

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: June 7, 1995

Date Sealed: June 8, 1995

Date Read: JUNE 27, 1995

SAMPLED BY L.J. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT.	IMC Ra 226 pCi/g	ERG Ra 226 pCi/g
		PA(POI) 809KEV CH1549-CH1658	TH(POI) 911KEV CH1861-CH1961	K(POI) 1406KEV CH1338-CH1458	PA 809 KEV CH1549-CH1658		TH 911 KEV CH1861-CH1961	K 1406 KEV CH1338-CH1458					
4978	D113195	5487	1890	1505	1127	4.87	1.68	1.34	1514.30	2.55	5.51	6.20	
4979	E073127	2381	1145	1017	1016	2.32	1.13	1.00	1550.20	0.54	1.15	1.58	
4980	E054059	3918	1868	1715	1704	2.30	1.10	1.01	1490.50	0.58	1.28	1.90	
4981	E083203	2284	1117	988	1004	2.27	1.11	0.98	1477.30	0.51	1.12	1.21	
4982	E093135	4879	1887	1414	1088	4.57	1.58	1.32	1428.10	2.39	5.47	4.99	
4983	E082251	5173	1837	1588	1358	3.81	1.35	1.18	1502.40	1.92	4.18	3.70	
4984	E091155	5018	1872	1394	1055	4.76	1.58	1.32	1456.90	2.81	5.88	5.49	
4985	E101114	24170	8121	6583	5010	4.82	1.82	1.31	1372.60	2.81	6.23	5.75	

Homestake Mining Company - Grants, New Mexico Project 3:12:37 PM, 4/24/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E061

Zone: Outer

The Grid with the Max. Gamma Grid : E061067
 Ave. Gamma : 15,732.32
 No. of Points : 25
 North Limits : >1545800, <1545833.33
 East Limits : >491000, <491033.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: March 1995

Date Sealed: March 31, 1995

Date Read: April 17, 1995

SAMPLED BY L.J. PREP SAMPLES NO.

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	ERG Ra-226 Re:19
		IA(ROI) 609KEV CII549 - CII658	II(ROI) 911KEV CII861 - CII961	K(ROI) 1406KEV CII1338 - CII1458	IA 609 KEV CII549 - CII658		II 911 KEV CII861 - CII961	K 1460 KEV CII1338 - CII1458					
4760	E042169	2349	1207	1327	1559	1.51	0.83	0.85	1661.30	0.05	0.10	0.61	
4761	E041058	3031	1147	1034	1009	3.00	1.14	1.02	1612.98	1.25	2.58	2.46	
4762	D042218	7936	2231	1871	1334	5.95	1.67	1.40	1599.20	3.79	7.87	6.41	
4763	D044254	4910	1620	1583	1566	3.14	1.03	1.01	1640.00	1.84	3.31	2.83	
4764	E051195	3508	1411	1178	1035	3.39	1.36	1.14	1529.60	1.25	2.72	3.80	
4765	D053193	2848	1259	1157	1065	2.67	1.18	1.09	1394.40	0.78	1.80	2.40	
4766	E052153	3858	1588	1401	1187	3.25	1.34	1.25	1447.50	1.15	2.64	3.43	
4767	E081067	3189	1376	1296	1036	3.08	1.33	1.25	1441.60	0.97	2.22	2.43	
4768	D054255	7204	2231	1840	1280	5.63	1.74	1.44	1387.90	3.25	7.76	7.38	
4769	D083095	3840	1489	1289	1030	3.73	1.45	1.25	1388.60	1.52	3.63	3.91	
4770	D083095	1526	785	840	1019	1.50	0.77	0.82	1724.10	0.16	0.30	0.64	

Homestake Mining Company - Grants, New Mexico Project 5:44:17 PM, 4/24/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E063

Zone: Outer

The Grid with the Max. Gamma

Grid : E063127
 Ave. Gamma : 15,801.64
 No. of Points : 14
 North Limits : >1545200, <1545233.33
 East Limits : >491100, <491133.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: MAY 3, 1995

Date Sealed: M. 995

Date Read: MAY 22, 1995

SAMPLED BY MJ and LJ. PREP SAMPLES HQ.

15 DAY HEADING SEALED

1995

SOIL SAMPLES

LAD ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	IIMC Ra 226 pCi/g	ERG Ra 226 pCi/g
		PA(POI) 609KEV CII549-CII658	TH(POI) 911KEV CII861-CII961	K(POI) 1406KEV CII1338-CII1458		PA 609 KEV CII549-CII658	TH 911 KEV CII861-CII961	K 1460 KEV CII1338-CII1458				
4870	E031222	3493	1223	1350	1106	3.16	1.11	1.22	1549.80	1.67	3.54	2.66
4871	C064193	3148	1324	1346	1053	2.99	1.26	1.28	1470.40	1.14	2.54	2.18
4872	D074013	6926	2015	1852	1282	5.40	1.57	1.44	1510.80	3.47	7.55	5.83
4873	E141169	3732	1683	1705	1305	2.86	1.20	1.31	1385.10	0.91	2.15	2.47
4874	H1061259	2556	1358	1477	1730	1.48	0.78	0.85	1622.70	0.23	0.48	0.61
4875	H1052157	3639	1461	1373	1045	3.48	1.40	1.31	1702.70	1.45	2.78	2.61
4876	E074147	2863	1155	1153	1010	2.83	1.14	1.14	1569.00	1.17	2.45	2.15
4877	E063127	3665	1418	1339	1044	3.51	1.36	1.28	1570.90	1.56	3.27	3.00

**Homestake Mining Company - Grants, New Mexico Project 5:35:41 PM, 4/24/95
GPS Radiological Surveys**

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E064

Zone: Outer

The Grid with the Max. Gamma Grid : E064147
 Ave. Gamma : 15,539.26
 No. of Points : 19
 North Limits : >1545200, <1545233.33
 East Limits : >491800, <491833.33

Min(No. of Points) : 19

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: JUNE 28, 1995

Date Sealed: JULY 1, 1995

Date Read: JUNE 28, 1995

SAMPLED BY MJ AND L.J. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMO Pa 226 pCi/g	TMA	Energy	Energy	TMA	Energy
		RA(ROI) 809 KEV CH1349 - CH1358	TH(ROI) 911 KEV CH1361 - CH1361	K(ROI) 1408 KEV CH1338 - CH1458		RA 809 KEV CH1349 - CH1358	TH 911 KEV CH1361 - CH1361	K 1408 KEV CH1338 - CH1458				Eberline Pa 226 pCi/g	Gamma Pa 226 pCi/g	Wet Chem Pa 226 pCi/g	Eberline U 238 pCi/g	Wet Chem U 238 pCi/g
5002	ED64 147	4142	1599	1332	1231	3.36	1.30	1.08	1463.50	1.47	3.29					
5003	KD64 177	2347	1157	1120	1033	2.27	1.12	1.08	1359.30	0.51	1.22					
5004	KD63 196	3623	1496	1349	1095	3.31	1.37	1.23	1361.20	1.28	3.07					
5005	KD73084	4152	1512	1295	1220	3.40	1.24	1.08	1555.50	1.65	3.46					

Homestake Mining Company - Grants, New Mexico Project 5:03:17 PM, 4/27/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E073

Zone: Outer

The Grid with the Max. Gamma Grid : E073127
 Ave. Gamma : 15,075.47
 No. of Points : 19
 North Limits : >1545200,<1545233.33
 East Limits : >492100,<492133.33

Min(No. of Points) : 15

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: Ju 1995

Date Sealed: June 9, 1995

Date Read: JUNE 27, 1995

SAMPLED BY L.J. PREP SAMPLE NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	ERG Ra 226 pCi/g
		PA(POI) 609KEV CH1549-CH1658	TH(POI) 911KEV CH1861-CH1961	K(POI) 1408KEV CH11338-CH11458	COUNT TIME SECONDS	PA 609 KEV CH1549-CH1658	TH 911 KEV CH1861-CH1961	K 1408 KEV CH11338-CH11458				
4978	D113195	5487	1890	1505	1127	4.87	1.88	1.34	1514.30	2.55	5.51	5.20
4979	E073127	2361	1145	1017	1018	2.32	1.13	1.00	1550.20	0.54	1.15	1.56
4980	E054059	3918	1868	1715	1704	2.30	1.10	1.01	1490.50	0.58	1.28	1.90
4981	E083203	2284	1117	988	1004	2.27	1.11	0.98	1477.30	0.51	1.12	1.21
4982	E093135	4879	1887	1414	1088	4.57	1.58	1.32	1428.10	2.39	5.47	4.99
4983	E082251	5173	1837	1588	1356	3.81	1.35	1.18	1502.40	1.92	4.18	3.70
4984	E091155	5018	1872	1394	1055	4.76	1.58	1.32	1458.80	2.61	5.88	5.49
4985	E101114	24170	8121	6583	5010	4.82	1.62	1.31	1372.60	2.61	6.23	5.75

Homestake Mining Company - Grants, New Mexico Project 5:23:02 PM, 4/27/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E074

Zone: Outer

The Grid with the Max. Gamma Grid : E074147
 Ave. Gamma : 15,433.00
 No. of Points : 15
 North Limits : >1545200, <1545233.33
 East Limits : >492800, <492833.33

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: MAY 3, 1995

Date Sealed: MA .995

Date Read : MAY 22, 1995

SAMPLED BY MJ and LJ. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	IMC Pa 228 pCi/g	ERG R _{u226} pCi/g
		PA(ROI) 609KEV CII549-CII658	TH(ROI)911KEV CII861-CII961	K(ROI)1406KEV CII1330-CII1458	COUNT TIME SECONDS	PA 609 KEV CII549-CII658	TH 911 KEV CII861-CII961	K 1460 KEV CII1338-CII1458				
4870	E031222	3493	1223	1350	1106	3.16	1.11	1.22	1549.80	1.67	3.54	2.66
4871	C064193	3148	1324	1346	1053	2.99	1.26	1.28	1470.40	1.14	2.54	2.18
4872	D074013	6926	2015	1052	1282	5.40	1.57	1.44	1510.80	3.47	7.55	5.83
4873	E141169	3732	1683	1705	1305	2.86	1.29	1.31	1395.10	0.91	2.15	2.47
4874	I1061259	2556	1358	1477	1730	1.48	0.78	0.85	1622.70	0.23	0.46	0.61
4875	I1052157	3639	1461	1373	1045	3.48	1.40	1.31	1702.70	1.45	2.78	2.61
4876	E074147	2803	1155	1153	1010	2.83	1.14	1.14	1588.00	1.17	2.45	2.15
4877	E063127	3665	1418	1339	1044	3.51	1.36	1.28	1570.80	1.56	3.27	3.00

Homestake Mining Company - Grants, New Mexico Project 11:16:44 AM, 4/26/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E082

Zone: Outer

The Grid with the Max. Gamma Grid : E082251
 Ave. Gamma : 17,779.50
 No. of Points : 10
 North Limits : >1545566.67,<1545600
 East Limits : >493900,<493933.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: June 7, 1995

Date Sealed: June 7, 1995

Date Read: JUNE 27, 1995

SAMPLED BY L.J. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Sample ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT.	HMC Ra 226 pCi/g	ERG Ra 226 pCi/g
		PA(POI) 609KEV CH1549-CH1658	TI(POI) 911KEV CH1861-CH1981	K(POI) 1406KEV CH11338-CH11458		PA 609 KEV CH1549-CH1658	TI 911 KEV CH1861-CH1981	K 1406 KEV CH11338-CH11458				
4978	D1113195	5487	1890	1505	1127	4.87	1.68	1.34	1514.30	2.55	5.51	6.20
4979	E073127	2381	1145	1017	1018	2.32	1.13	1.00	1550.20	0.54	1.15	1.58
4980	E054059	3918	1866	1715	1704	2.30	1.10	1.01	1490.50	0.58	1.28	1.90
4981	E083203	2284	1117	968	1004	2.27	1.11	0.98	1477.30	0.51	1.12	1.21
4982	E093135	4879	1887	1414	1088	4.57	1.58	1.32	1428.10	2.39	5.47	4.99
4983	E082251	5173	1837	1568	1358	3.81	1.35	1.18	1502.40	1.92	4.18	3.70
4984	E091155	5018	1872	1394	1055	4.78	1.58	1.32	1456.80	2.61	5.88	5.49
4985	E101114	24170	8121	6583	5010	4.82	1.62	1.31	1372.80	2.61	6.23	5.75

Homestake Mining Company - Grants, New Mexico Project 5:42:00 PM, 4/27/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E083

Zone: Outer

The Grid with the Max. Gamma Grid : E083203
 Ave. Gamma : 16,087.95
 No. of Points : 39
 North Limits : >1545166.67, <1545200
 East Limits : >493466.67, <493500

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: Jun 27, 1995

Date Sealed: June 6, 1995

Date Read: JUNE 27, 1995

SAMPLED BY LJ. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Pa 226 pCi/g	ERG Ra 226 pCi/g
		PA(POI) 809KEV CH1549 - CH1658	TH(POI) 911KEV CH1861 - CH1961	K(POI) 1406KEV CH1338 - CH1458	COUNT TIME SECONDS	PA 809 KEV CH1549 - CH1658	TH 911 KEV CH1861 - CH1961	K 1406 KEV CH1338 - CH1458				
4978	D113195	5487	1890	1505	1127	4.87	1.68	1.34	1514.30	2.55	5.51	5.20
4979	E073127	2361	1145	1017	1016	2.32	1.13	1.00	1550.20	0.54	1.15	1.56
4980	E054059	3918	1868	1715	1704	2.30	1.10	1.01	1490.50	0.56	1.28	1.90
4981	E083203	2284	1117	968	1004	2.27	1.11	0.96	1477.30	0.51	1.12	1.21
4982	E093135	4879	1687	1414	1068	4.57	1.58	1.32	1428.10	2.39	5.47	4.99
4983	E082251	5173	1837	1588	1358	3.81	1.35	1.16	1502.40	1.92	4.18	3.70
4984	E091155	5018	1872	1394	1055	4.76	1.58	1.32	1458.90	2.61	5.86	5.49
4985	E101114	24170	8121	6563	5010	4.82	1.62	1.31	1372.60	2.61	6.23	5.75

Homestake Mining Company - Grants, New Mexico Project 6:20:12 PM, 4/27/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E084

Zone: Outer

The Grid with the Max. Gamma

Grid : E084171
Ave. Gamma : 18,796.20
No. of Points : 10
North Limits : >1545166.67, <1545200
East Limits : >493600, <493633.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: MAY 1995

Date Sealed: MAY 8, 1995

Date Read: MAY 23, 1995

SAMPLED BY MJ and LJ. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. IAT	HMC Na 226 pCi/g	ERG RA226 pCi/g
		IA(II0) 609KEV CII549 - CII650	III(II0) 911KEV CII861 - CII961	K(II0) 1406KEV CII1338 - CII1458		IA 609 KEV CII549 - CII650	III 911 KEV CII861 - CII961	K 1460 KEV CII1338 - CII1458				
4878	D113195	34231	10028	8560	4817	7.11	2.08	1.78	1475.70	4.52	10.07	8.49
4879	C114239	2947	1461	1402	1153	2.56	1.27	1.22	1390.10	0.57	1.34	2.28
4880	E084171	2633	1282	1272	1098	2.40	1.17	1.16	1531.30	0.58	1.25	1.91
4881	C122142	3720	1542	1459	1342	2.77	1.15	1.09	1493.60	1.07	2.36	3.01

Homestake Mining Company - Grants, New Mexico Project 11:44:11 AM, 5/5/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID X091

Zone: Outer

The Grid with the Max. Gamma Grid : E091155
 Ave. Gamma : 19,093.67
 No. of Points : 12
 North Limits : >1545733.33, <1545766.67
 East Limits : >494433.33, <494466.67

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: Jun 9, 1995

Date Sealed: June 9, 1995

Date Read: JUNE 27, 1995

SAMPLED BY LJ. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	ERG Ra 226 pCi/g
		PA(POI) 609KEV CH1549 - CH1658	TH(POI) 911KEV CH1661 - CH1961	K(POI) 1406KEV CH1338 - CH1458	COUNT TIME SECONDS	PA 609 KEV CH1549 - CH1658	TH 911 KEV CH1661 - CH1961	K 1406 KEV CH1338 - CH1458				
4978	D113195	5467	1890	1505	1127	4.87	1.66	1.34	1514.30	2.55	5.51	5.20
4979	E073127	2361	1145	1017	1016	2.32	1.13	1.00	1550.20	0.54	1.15	1.58
4980	E054059	3918	1868	1715	1704	2.30	1.10	1.01	1490.50	0.58	1.28	1.90
4981	E083203	2284	1117	988	1004	2.27	1.11	0.98	1477.30	0.51	1.12	1.21
4982	E093135	4878	1687	1414	1068	4.57	1.58	1.32	1428.10	2.38	5.47	4.99
4983	E082251	5173	1837	1588	1358	3.81	1.35	1.18	1502.40	1.92	4.18	3.70
4984	E091155	5018	1872	1394	1055	4.76	1.58	1.32	1456.90	2.61	5.88	5.49
4985	E101114	24170	8121	6583	5010	4.82	1.62	1.31	1372.60	2.61	6.23	5.75

Homestake Mining Company - Grants, New Mexico Project 11:47:01 AM, 5/5/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E092

Zone: Outer

The Grid with the Max. Gamma Grid : E092248
Ave. Gamma : 20,767.55
No. of Points : 11
North Limits : >1545500, <1545533.33
East Limits : >494833.33, <494866.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: June 1, 1995

Date Sealed: June 15

Date Read: JUNE 20, 1995

SAMPLED BY L.J. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Sample ID	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	
		RA(RO) 809KEV CII549 - CII858	TH(RO) 911KEV CII861 - CII961	K(RO) 1460KEV CII1338 - CII1458	RA 809 KEV CII549 - CII658		TH 911 KEV CII861 - CII961	K 1460 KEV CII1338 - CII1458					
4954	11084259	2444	1194	1163	1075	2.27	1.11	1.08	1645.20	0.54	1.07	1.36	
4955	E082248	5322	2009	1790	1324	4.02	1.52	1.35	1429.20	1.86	4.24	4.00	
4956	E101114	13609	4762	4068	2893	4.70	1.65	1.41	1437.50	2.42	5.49	5.25	
4957	F091028	10344	4434	4288	4082	2.53	1.09	1.05	1607.60	0.91	1.85	1.82	
4958	C073222	2367	1282	1348	1400	1.69	0.92	0.86	1561.40	0.22	0.47	0.70	
4959	K073028	3485	1395	1284	1257	2.77	1.11	1.02	1597.10	1.15	2.35	2.32	
4960	J082059	2547	1091	1075	1002	2.54	1.09	1.07	1556.60	0.92	1.93	2.38	
4961	K083219	3381	1351	1330	1275	2.65	1.06	1.04	1599.70	1.11	2.27	2.15	ERG

Homestake Mining Company - Grants, New Mexico Project 4:14:55 PM, 5/30/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E093

Zone: Outer

The Grid with the Max. Gamma Grid : E093135
 Ave. Gamma : 19,030.12
 No. of Points : 17
 North Limits : >1545233.33, <1545266.67
 East Limits : >494233.33, <494266.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: Jun 9, 1995

Date Sealed: June 9, 1995

Date Read: JUNE 27, 1995

SAMPLED BY LJ. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC RA 226 pCi/g	ERG RA 226 pCi/g
		PA(POI) 609KEV CII549-CII858	TI(POI) 911KEV CII861-CII961	K(POI) 1406KEV CII1338-CII1458		PA 609 KEV CII549-CII858	TI 911 KEV CII861-CII961	K 1406 KEV CII1338-CII1458				
4978	D113195	5467	1890	1505	1127	4.87	1.68	1.34	1514.30	2.55	5.51	5.20
4979	E073127	2361	1145	1017	1016	2.32	1.13	1.00	1550.20	0.54	1.15	1.56
4980	E054059	3918	1868	1715	1704	2.30	1.10	1.01	1490.50	0.58	1.28	1.90
4981	E083203	2284	1117	968	1004	2.27	1.11	0.96	1477.30	0.51	1.12	1.21
4982	E083135	4879	1687	1414	1068	4.57	1.58	1.32	1428.10	2.39	5.47	4.99
4983	E082251	5173	1837	1588	1356	3.81	1.35	1.18	1502.40	1.92	4.18	3.70
4984	E081155	5018	1872	1394	1055	4.76	1.58	1.32	1456.90	2.61	5.86	5.40
4985	E101114	24170	8121	6563	5010	4.82	1.62	1.31	1372.60	2.61	6.23	5.75

Homestake Mining Company - Grants, New Mexico Project 4:16:39 PM. 5/30/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E094

Zone: Outer

The Grid with the Max. Gamma : Grid : E094059
Ave. Gamma : 19,882.62
No. of Points : 13
North Limits : >1545400, <1545433.33
East Limits : >494966.67, <495000

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: Jun 1995

Date Sealed: June 9, 1995

Date Read: JUNE 27, 1995

SAMPLED BY LJ. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMO Ra 226 pCi/g	ERG Ra 226 pCi/g
		PA(POA) 609KEV CII549-CII658	TH(POA) 911KEV CII861-CII961	K(POA) 1408KEV CII1338-CII1458	PA 609 KEV CII549-CII658		TH 911 KEV CII861-CII961	K 1408 KEV CII1338-CII1458					
4986	E102084	6075	2465	2103	1739	3.49	1.42	1.21	1436.80	1.39	3.17	3.29	
4987	H092225	2897	1258	1154	1309	2.21	0.98	0.88	1785.00	0.75	1.37	1.59	
4988	H093095	2888	1331	1223	1339	2.01	0.99	0.91	1780.20	0.43	0.79	0.88	
4989	E103101	12883	4533	3788	2956	4.29	1.53	1.28	1434.10	2.14	4.88	4.75	
4990	E094059	4848	1748	1410	1122	4.32	1.56	1.26	1419.90	2.12	4.89	4.78	
4991	E092248	4424	1483	1254	1003	4.41	1.48	1.25	1458.70	2.40	5.39	4.63	
4992	E113168	3554	1119	1009	1008	3.53	1.11	1.00	1853.90	2.07	4.10	3.64	
4993	F102237	3085	1280	1137	1351	2.28	0.95	0.84	1817.30	0.86	1.74	1.50	

Homestake Mining Company - Grants, New Mexico Project 12:47:04 PM, 5/5/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E101

Zone: Outer

The Grid with the Max. Gamma Grid : E101114
Ave. Gamma : 21,765.74
No. of Points : 19
North Limits : >1545733.33, <1545766.67
East Limits : >495000, <495033.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 2

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
E101114	21,765.74	19	>1545733.33, <1545766.67	>495000, <495033.33
E101118	21,704.08	12	>1545700, <1545733.33	>495033.33, <495066.67

Date Collected: June 1, 1995

Date Sealed: Jun . . . 1995

Date Read : JUNE 20, 1995

10-11-1995

SAMPLED BY L.J. PREP SAMPLE NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	IMC Pa 226 pCi/g	ERG
		PA(PO) 609KEV	TII(PO) 911KEV	K(PO) 1406KEV	COUNT TIME		PA 609 KEV	TII 911 KEV	K 1460 KEV				
		CH1549 CH1658	CH1861-CH1961	CH1338-CH1458			CH1549-CH1658	CH1861-CH1961	CH1338-CH1458				
4954	H084259	2444	1194	1163	1075	2.27	1.11	1.08	1645.20	0.54	1.07	1.36	
4955	E092248	5322	2009	1790	1324	4.02	1.52	1.35	1429.20	1.86	4.24	4.00	
4956	E101114	13809	4782	4068	2893	4.70	1.65	1.41	1437.50	2.42	5.49	5.25	
4957	F091028	10344	4434	4288	4082	2.53	1.09	1.05	1607.80	0.91	1.85	1.82	
4958	C073222	2387	1282	1348	1400	1.69	0.92	0.96	1581.40	0.22	0.47	0.70	
4959	K073028	3485	1395	1284	1257	2.77	1.11	1.02	1597.10	1.15	2.35	2.32	
4960	J082059	2547	1091	1075	1002	2.54	1.09	1.07	1558.80	0.92	1.93	2.38	
4961	K083219	3381	1351	1330	1275	2.65	1.06	1.04	1599.70	1.11	2.27	2.15	

Homestake Mining Company - Grants, New Mexico Project 2:19:38 PM, 5/8/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E102

Zone: Outer

The Grid with the Max. Gamma Grid : E102084
Ave. Gamma : 20,674.50
No. of Points : 16
North Limits : >1545833.33, <1545866.67
East Limits : >495700, <495733.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: Jun 75

Date Sealed: June 9, 1995

Date Read: JUNE 27, 1995

SAMPLED BY LJ. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	
		RA(RO) 609KEV CII549-CII658	TH(RO) 911KEV CII861-CII961	K(RO) 1460KEV CII1338-CII1458	RA 609 KEV CII549-CII658		TH 911 KEV CII861-CII961	K 1460 KEV CII1338-CII1458					
4986	E102084	6075	2485	2103	1739	3.49	1.42	1.21	1436.80	1.39	3.17	3.29	
4987	H092225	2897	1258	1154	1309	2.21	0.96	0.88	1785.00	0.75	1.37	1.59	
4988	H093095	2888	1331	1223	1339	2.01	0.99	0.91	1760.20	0.43	0.79	0.88	
4989	E103101	12883	4533	3788	2956	4.29	1.53	1.28	1434.10	2.14	4.88	4.75	
4990	E094059	4848	1746	1410	1122	4.32	1.56	1.26	1419.90	2.12	4.89	4.76	
4991	E092248	4424	1483	1254	1003	4.41	1.48	1.25	1458.70	2.40	5.39	4.83	
4992	E113188	3554	1119	1009	1006	3.53	1.11	1.00	1653.80	2.07	4.10	3.84	
4993	F102237	3085	1280	1137	1351	2.28	0.95	0.84	1617.30	0.86	1.74	1.50	

ERG
Ra 226
pCi/g

Homestake Mining Company - Grants, New Mexico Project 2:07:50 PM, 5/30/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E103

Zone: Outer

The Grid with the Max. Gamma Grid : E103101
 Ave. Gamma : 20,059.41
 No. of Points : 37
 North Limits : >1545366.67, <1545400
 East Limits : >495400, <495433.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Location: 8CIL VERIFICATION SURVEY 33'x33' PLOT.

Date Collected: Jul 1995

Date Sealed: June 9, 1995

Date Read: JUNE 27, 1995

SAMPLED BY L.J. PREP SAMPLES RO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMO Ha 226 pCi/g
		RA(POI) 809KEV CII549 - CII658	TH(POI) 911KEV CII861 - CII961	K(POI) 1406KEV CII1338 - CII1458	RA 809 KEV CII549 - CII658		TH 911 KEV CII861 - CII961	K 1406 KEV CII1338 - CII1458				
4986	E102084	6075	2465	2103	1739	3.49	1.42	1.21	1438.80	1.39	3.17	3.29
4987	H092225	2897	1258	1154	1309	2.21	0.98	0.88	1785.00	0.75	1.37	1.59
4988	H093095	2688	1331	1223	1339	2.01	0.99	0.91	1760.20	0.43	0.79	0.88
4989	E103101	12883	4533	3788	2958	4.29	1.53	1.28	1434.10	2.14	4.88	4.75
4990	E094059	4848	1746	1410	1122	4.32	1.58	1.28	1419.90	2.12	4.89	4.78
4991	E092248	4424	1483	1254	1003	4.41	1.48	1.25	1458.70	2.40	5.39	4.63
4992	E113168	3554	1119	1009	1008	3.53	1.11	1.00	1653.90	2.07	4.10	3.84
4993	F102237	3085	1280	1137	1351	2.28	0.95	0.84	1617.30	0.86	1.74	1.50

ERG
Ra 226
pCi/g

Homestake Mining Company - Grants, New Mexico Project 3:12:00 PM, 5/5/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E113

Zone: Outer

The Grid with the Max. Gamma Grid : E113166
 Ave. Gamma : 17,927.31
 No. of Points : 13
 North Limits : >1545133.33, <1545166.67
 East Limits : >496066.67, <496100

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: 7, 1995

Date Sealed: June 9, 1995

Date Read: JUNE 27, 1995

SAMPLED BY L.J. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	IMO Ra 226 pCi/g	ERG
		RA(POI) 609KEV CII549-CII658	TH(POI) 911KEV CII661-CII961	K(POI) 1408KEV CII1338-CII1458	RA 609 KEV CII549-CII658		TH 911 KEV CII661-CII961	K 1408 KEV CII1338-CII1458					
4986	E102084	6075	2465	2103	1739	3.49	1.42	1.21	1436.80	1.39	3.17	3.29	
4987	H092225	2897	1258	1154	1309	2.21	0.98	0.88	1765.00	0.75	1.37	1.59	
4988	H093095	2688	1331	1223	1339	2.01	0.99	0.91	1760.20	0.43	0.79	0.66	
4989	E103101	12883	4533	3788	2956	4.29	1.53	1.28	1434.10	2.14	4.88	4.75	
4990	E094059	4648	1746	1410	1122	4.32	1.56	1.26	1419.90	2.12	4.89	4.78	
4991	E092248	4424	1483	1254	1003	4.41	1.48	1.25	1458.70	2.40	5.39	4.63	
4992	E113166	3554	1118	1009	1006	3.53	1.11	1.00	1653.90	2.07	4.10	3.64	
4993	F102237	3085	1280	1137	1351	2.28	0.95	0.84	1617.30	0.88	1.74	1.50	

Homestake Mining Company - Grants, New Mexico Project 9:31:13 AM, 5/5/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D093

Zone: Outer

The Grid with the Max. Gamma Grid : D093206
 Ave. Gamma : 15,253.13
 No. of Points : 8
 North Limits : >1546133.33, <1546166.67
 East Limits : >494466.67, <494500

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Location: USE VERIFICATION DRIVE 100 X 300 PLOT,
Date Collected: 6, 1995

Date Sealed: June 7, 1995

Date Read: JUNE 22, 1995

SAMPLED BY LJ. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	
		RA(ROI) 809KEV CH549-CH658	TH(ROI) 911KEV CH861-CH961	K(ROI) 1406KEV CH1338-CH1458	RA 809 KEV CH549-CH658		TH 911 KEV CH861-CH961	K 1480 KEV CH1338-CH1458					
4970	E033049	2344	1040	1071	1023	2.29	1.02	1.05	1495.60	0.75	1.65	1.56	
4971	E034114	2605	1056	1085	1015	2.57	1.04	1.07	1528.60	1.05	2.24	1.69	
4972	E044145	2238	1015	999	1001	2.23	1.01	1.00	1517.60	0.68	1.46	1.52	
4973	E053151	2665	1201	1099	1002	2.66	1.20	1.10	1527.20	0.82	1.75	2.09	
4974	E041056	2449	1035	961	1007	2.43	1.03	0.95	1638.70	0.89	1.77	1.68	
4975	D104176	3987	1526	1374	1001	3.98	1.52	1.37	1457.80	1.79	4.02	4.28	
4976	D103249	3334	1461	1319	1049	3.16	1.39	1.26	1460.60	1.06	2.36	2.50	
4977	D093206	2674	1128	1035	1002	2.67	1.13	1.03	1581.40	0.98	2.02	1.79	

ERG

Homestake Mining Company - Grants, New Mexico Project 9:33:50 AM, 5/5/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D094

Zone: Outer

The Grid with the Max. Gamma Grid : DC94229
 Ave. Gamma : 17,648.42
 No. of Points : 19
 North Limits : >1546000, <1546033.33
 East Limits : >494666.67, <494700

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: MAY 9, 1995

Date Sealed: MAY 10, 1995

Date Read: MAY 25, 1995

SAMPLED BY MJ and LJ. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	IMC Ra 226 pCi/g
		RA(ROA) 809KEV CII549 - CII858	TH(ROA) 911KEV CII861 - CII961	K(ROA) 1460KEV CII1338 - CII1458	RA 809 KEV CII549 - CII858		TH 911 KEV CII861 - CII961	K 1460 KEV CII1338 - CII1458				
4882	E111012	8026	3971	3462	3059	2.62	1.30	1.13	1393.70	0.57	1.34	1.92
4883	E123124	2503	1279	1386	1612	1.55	0.79	0.86	1717.70	0.30	0.58	0.59
4884	E132185	8992	2850	2606	1931	3.62	1.48	1.35	1433.10	1.45	3.33	3.54
4885	D094229	3187	1200	1249	1137	2.80	1.08	1.10	1555.70	1.32	2.79	2.08

ERG
Ra 226
pCi/g

Homestake Mining Company - Grants, New Mexico Project 8:36:50 AM, 4/25/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D103

Zone: Outer

The Grid with the Max. Gamma Grid : D103249
 Ave. Gamma : 20,918.38
 No. of Points : 13
 North Limits : >1546000,<1546033.33
 East Limits : >495366.67,<495400

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: June 6, 1995

Date Sealed: June 7, 1995

Date Read: JUNE 22, 1995

SAMPLED BY LJ. PREP SAMPLES RO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	
		RA(ROI) 609KEV CH1549-CH1658	TH(ROI) 911KEV CH861-CH961	K(ROI) 1406KEV CH1338-CH1458		RA 609 KEV CH549-CH658	TH 911 KEV CH861-CH961	K 1460 KEV CH1338-CH1458				
4970	E033049	2344	1040	1071	1023	2.29	1.02	1.05	1495.60	0.75	1.65	1.56
4971	E034114	2605	1056	1085	1015	2.57	1.04	1.07	1528.60	1.05	2.24	1.69
4972	E044145	2236	1015	999	1001	2.23	1.01	1.00	1517.60	0.68	1.46	1.52
4973	E053151	2665	1201	1099	1002	2.66	1.20	1.10	1527.20	0.82	1.75	2.09
4974	E041056	2449	1035	961	1007	2.43	1.03	0.95	1638.70	0.89	1.77	1.68
4975	D104176	3987	1526	1374	1001	3.98	1.52	1.37	1457.80	1.79	4.02	4.28
4976	D103249	3334	1461	1318	1049	3.18	1.39	1.26	1460.60	1.06	2.38	2.50
4977	D093206	2674	1128	1035	1002	2.67	1.13	1.03	1581.40	0.98	2.02	1.79

ERG

Homestake Mining Company - Grants, New Mexico Project 9:15:27 AM, 4/25/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D104

Zone: Outer

The Grid with the Max. Gamma Grid : D104176
 Ave. Gamma : 21,963.93
 No. of Points : 14
 North Limits : >1546133.33,<1546166.67
 East Limits : >495666.67,<495700

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 6

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
D104172	21,535.50	14	>1546166.67,<1546200	>495633.33,<495666.67
D104173	21,827.60	15	>1546166.67,<1546200	>495666.67,<495700
D104175	21,661.31	16	>1546133.33,<1546166.67	>495633.33,<495666.67
D104176	21,963.93	14	>1546133.33,<1546166.67	>495666.67,<495700
D104181	21,650.55	11	>1546166.67,<1546200	>495700,<495733.33
D104236	21,642.27	15	>1546033.33,<1546066.67	>495766.67,<495800

Date Collected: 6, 1995

Date Sealed: June 7, 1995

Date Read: JUNE 22, 1995

SAMPLED BY L.J. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	
		RA(ROI) 609KEV CH1549-CH1858	TH(ROI) 911KEV CH861-CH961	K(ROI) 1406KEV CH1338-CH1458		RA 609 KEV CH549-CH658	TH 911 KEV CH861-CH961	K 1460 KEV CH1338-CH1458				
4970	E033049	2344	1040	1071	1023	2.29	1.02	1.05	1495.60	0.75	1.65	1.56
4971	E034114	2605	1056	1085	1015	2.57	1.04	1.07	1528.60	1.05	2.24	1.69
4972	E044145	2236	1015	999	1001	2.23	1.01	1.00	1517.60	0.68	1.46	1.52
4973	E053151	2665	1201	1099	1002	2.66	1.20	1.10	1527.20	0.82	1.75	2.09
4974	E041056	2449	1035	961	1007	2.43	1.03	0.95	1638.70	0.69	1.77	1.68
4975	D104176	3987	1526	1374	1001	3.98	1.52	1.37	1457.80	1.79	4.02	4.28
4976	D103249	3334	1461	1319	1049	3.18	1.39	1.26	1460.60	1.06	2.38	2.50
4977	D093206	2674	1128	1035	1002	2.67	1.13	1.03	1581.40	0.98	2.02	1.79

ERG

Homestake Mining Company - Grants, New Mexico Project 9:29:29 AM, 5/11/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D113

Zone: Outer

The Grid with the Max. Gamma Grid : D113084
 Ave. Gamma : 20,785.50
 No. of Points : 25
 North Limits : >1546333.33,<1546366.67
 East Limits : >496200,<496233.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: MAY 16, 1995

Date Sealed: MA 1995

Date Read: JUNE 2, 1995

SAMPLED BY LJ. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	ERG Ra 226 pCi/g
		PA(POI) 609KEV CII549 - CII658	TH(POI) 911KEV CII861 - CII961	K(POI) 1408KEV CII1338 - CII1458	COUNT TIME SECONDS	PA 609 KEV CII549 - CII658	TH 911 KEV CII861 - CII961	K 1480 KEV CII1338 - CII1458				
4900	K042055	4204	1688	1450	1077	3.90	1.57	1.35	1469.80	1.61	3.59	4.07
4901	K051179	13887	4888	3982	2643	5.25	1.77	1.50	1523.10	2.85	6.15	5.25
4902	LO41117	3408	1810	1334	1077	3.16	1.49	1.24	1409.80	0.82	1.92	2.41
4903	L061048	3110	1590	1410	1225	2.54	1.30	1.15	1410.00	0.47	1.09	2.30
4904	D113084	2889	1308	1151	1022	2.83	1.28	1.13	1382.00	0.86	2.04	1.93

Homestake Mining Company - Grants, New Mexico Project 1:32:30 PM, 5/30/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID F102

Zone: Outer

The grid with the Max. Gamma Grid : F102237
Ave. Gamma : 18,905.90
No. of Points : 10
North Limits : >1544500, <1544533.33
East Limits : >495700, <495733.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Location: SOIL VERIFICATION SURVEY 33'x33' PLOT.

Date Collected: J. 1995

Date Sealed: June 9, 1995

Date Read: JUNE 27, 1995

SAMPLED BY L.J. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMO Ra 226 pCi/g	ERG: Ra 226 pCi/g
		PA(POI) 809KEV CII1549 - CII1658	TH(POI) 911KEV CII861 - CII961	K(POI) 1406KEV CII1338 - CII1458	PA 809 KEV CII1549 - CII1658		TH 911 KEV CII861 - CII961	K 1406 KEV CII1338 - CII1458					
4986	E102084	6075	2465	2103	1739	3.49	1.42	1.21	1438.80	1.39	3.17	3.29	
4987	H092225	2897	1258	1154	1309	2.21	0.96	0.88	1785.00	0.75	1.37	1.59	
4988	H093095	2688	1331	1223	1339	2.01	0.99	0.91	1760.20	0.43	0.79	0.88	
4989	E103101	12683	4533	3788	2956	4.29	1.53	1.28	1434.10	2.14	4.88	4.75	
4990	E094059	4848	1746	1410	1122	4.32	1.56	1.28	1419.90	2.12	4.89	4.78	
4991	E092248	4424	1483	1254	1003	4.41	1.48	1.25	1458.70	2.40	5.39	4.83	
4992	E113166	3554	1119	1009	1006	3.53	1.11	1.00	1653.90	2.07	4.10	3.64	
4993	F102237	3065	1280	1137	1351	2.28	0.95	0.84	1617.30	0.86	1.74	1.50	

Homestake Mining Company - Grants, New Mexico Project 11:43:34 AM, 5/17/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F103

Zone: Outer

The Grid with the Max. Gamma Grid : F103039
 Ave. Gamma : 15,298.69
 No. of Points : 26
 North Limits : >1544400, <1544433.33
 East Limits : >495266.67, <495300

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: 7, 1995

Date Sealed: June 12, 1995

Date Read: JUNE 29, 1995

SAMPLED BY LJ. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Sample ID	TOTAL COUNTS			COUNT TIME SECONDS	CP8			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMO Ra 226 pCi/g	ERG Ra 226 pCi/g
		PA(PO) 809KEV CH1549 - CH1658	TH(PO) 911KEV CH1661 - CH1961	K(PO) 1406KEV CH1338 - CH1488		PA 809 KEV CH1549 - CH1658	TH 911 KEV CH1661 - CH1961	K 1406 KEV CH1338 - CH1488				
4994	G092096	3155	1178	1072	1189	2.65	0.99	0.90	1691.90	1.23	2.38	2.29
4995	F103039	5120	2026	1589	1418	3.61	1.43	1.12	1536.00	1.50	3.19	3.31
4996	J091041	2947	1250	1090	1060	2.78	1.18	1.03	1555.70	1.00	2.10	2.13
4997	G094087	3807	1478	1419	1553	2.32	0.95	0.91	1591.40	0.91	1.87	1.89
4998	J084225	2909	1189	1033	1020	2.85	1.17	1.01	1560.80	1.11	2.34	2.44
4999	K082078	13660	4990	4440	3930	3.48	1.27	1.13	1626.30	1.68	3.38	3.24
5000	K072035	3370	1683	1674	1795	1.88	0.94	0.93	1555.80	0.39	0.83	1.44
5001	K074174	1732	926	923	1058	1.64	0.88	0.87	1547.00	0.22	0.47	0.59

Homestake Mining Company - Grants, New Mexico Project 8:44:19 AM, 5/17/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID G092

Zone: Outer

The Grid with the Max. Gamma Grid : G092096
 Ave. Gamma : 13,361.20
 No. of Points : 15
 North Limits : >1543833.33, <1543866.67
 East Limits : >494866.67, <494900

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: J 7, 1995

Date Sealed: June 12, 1995

Date Read: JUNE 28, 1995

SAMPLED BY L.J. PREP SAMPLE NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				CP6			SAMPLE WT.	TRUE SAMPLE CT. RAT	IMO Ra 226 pCi/g	ERG Ra 226 pCi/g
		PA(POA) 609KEV CH1549 - CH1658	TI(POA) 911KEV CH1661 - CH1961	K(POA) 1406KEV CH1338 - CH1458	COUNT TIME SECONDS	RA 809 KEV CH1549 - CH1658	TH 911 KEV CH1661 - CH1961	K 1406 KEV CH1338 - CH1458				
4994	G092096	3155	1178	1072	1189	2.65	0.99	0.90	1691.90	1.23	2.38	2.29
4995	F103039	5120	2028	1589	1418	3.61	1.43	1.12	1536.00	1.50	3.19	3.31
4996	J081041	2947	1250	1090	1060	2.78	1.18	1.03	1555.70	1.00	2.10	2.13
4997	G094067	3807	1478	1419	1553	2.32	0.95	0.91	1591.40	0.91	1.87	1.89
4998	J084225	2909	1189	1033	1020	2.65	1.17	1.01	1560.80	1.11	2.34	2.44
4999	K062076	13660	4890	4440	3930	3.48	1.27	1.13	1626.30	1.66	3.38	3.24
5000	K072035	3370	1683	1674	1795	1.86	0.94	0.93	1555.60	0.39	0.83	1.44
5001	K074174	1732	828	923	1058	1.64	0.68	0.87	1547.00	0.22	0.47	0.59

Homestake Mining Company - Grants, New Mexico Project 11:13:07 AM, 5/30/95
GPS Radiological Surveys

By ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID G094

Zone: Outer

The Grid with the Max. Gamma Grid : G094067
 Ave. Gamma : 12,833.20
 No. of Points : 35
 North Limits : >1543300, <1543333.33
 East Limits : >494500, <494533.33

Min(No. of Points) : 12

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: 7, 1995

Date Sealed: June 12, 1995

Date Read: JUNE 28, 1995

SAMPLED BY L.J. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				CPB			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	ERG Ra 226 pCi/g
		RA(POI) 609KEV CH1549-CH1658	TH(POI) 911KEV CH1861-CH1961	K(POI) 1460KEV CH1338-CH1458	COUNT TIME SECONDS	RA 609 KEV CH1549-CH1658	TH 911 KEV CH1861-CH1961	K 1460 KEV CH1338-CH1458				
4994	G092098	3155	1178	1072	1189	2.65	0.99	0.90	1691.90	1.23	2.38	2.29
4995	F103039	5120	2028	1589	1418	3.61	1.43	1.12	1538.00	1.50	3.19	3.31
4996	J091041	2947	1250	1090	1060	2.78	1.18	1.03	1555.70	1.00	2.10	2.13
4997	G094087	3607	1478	1419	1553	2.32	0.95	0.91	1591.40	0.91	1.87	1.89
4998	J084225	2909	1189	1033	1020	2.65	1.17	1.01	1560.80	1.11	2.34	2.44
4999	K082078	13660	4990	4440	3930	3.48	1.27	1.13	1826.30	1.68	3.38	3.24
5000	K072035	3370	1683	1674	1795	1.88	0.94	0.93	1555.80	0.39	0.83	1.44
5001	K074174	1732	928	923	1058	1.64	0.88	0.87	1547.00	0.22	0.47	0.59

Homestake Mining Company - Grants, New Mexico Project 10:16:27 AM, 5/30/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H092

Zone: Outer

The Grid with the Max. Gamma Grid : H092225
 Ave. Gamma : 17,007.17
 No. of Points : 23
 North Limits : >1542533.33, <1542566.67
 East Limits : >494633.33, <494666.67

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: Jr 1995

Date Sealed: June 9, 1995

Date Read: JUNE 27, 1995

SAMPLED BY L.J. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPB			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMO Ra 226 pCi/g	
		RA(ROI) 609KEV CII549 - CII658	TH(ROI) 911KEV CII861 - CII961	K(ROI) 1406KEV CII1338 - CII1458	RA 609 KEV CII549 - CII658		TH 911 KEV CII861 - CII961	K 1400 KEV CII1338 - CII1458					
4986	E102084	6075	2465	2103	1739	3.49	1.42	1.21	1436.80	1.39	3.17	3.29	
4987	H092225	2897	1258	1154	1309	2.21	0.98	0.88	1785.00	0.75	1.37	1.59	
4988	H093095	2686	1331	1223	1339	2.01	0.99	0.91	1760.20	0.43	0.79	0.88	
4989	E103101	12683	4533	3788	2958	4.29	1.53	1.28	1434.10	2.14	4.88	4.75	
4990	E094059	4848	1746	1410	1122	4.32	1.56	1.26	1419.90	2.12	4.89	4.78	
4991	E092248	4424	1483	1254	1003	4.41	1.48	1.25	1458.70	2.40	5.39	4.83	
4992	E113166	3554	1119	1009	1006	3.53	1.11	1.00	1653.90	2.07	4.10	3.64	
4993	F102237	3085	1280	1137	1351	2.28	0.95	0.84	1617.30	0.86	1.74	1.50	

ERG
Ra 226
pCi/g

Homestake Mining Company - Grants, New Mexico Project 10:18:21 AM, 5/30/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H093

Zone: Outer

The Grid with the Max. Gamma

Grid : H093095
 Ave. Gamma : 18,226.17
 No. of Points : 18
 North Limits : >1542333.33, <1542366.67
 East Limits : >494333.33, <494366.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Location: 8CIL VERIFICATION SURVEY 33'x33' PLOT,

Date Collected: J , 1995

Date Sealed: June 9, 1995

Date Read: JUNE 27, 1995

SAMPLED BY LJ. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	
		PA(POA) 809KEV CII1549 - CII1658	TH(POA) 911KEV CII1861 - CII1961	K(POA) 1406KEV CII1338 - CII1458	PA 809 KEV CII1549 - CII1658		TH 911 KEV CII1861 - CII1961	K 1406 KEV CII1338 - CII1458					
4986	E102084	6075	2485	2103	1739	3.49	1.42	1.21	1438.80	1.39	3.17	3.29	
4987	H092225	2897	1258	1154	1309	2.21	0.98	0.88	1785.00	0.75	1.37	1.59	
4988	H093095	2888	1331	1223	1339	2.01	0.99	0.91	1760.20	0.43	0.79	0.88	
4989	E103101	12883	4533	3788	2956	4.29	1.53	1.28	1434.10	2.14	4.88	4.75	
4990	E094059	4848	1748	1410	1122	4.32	1.56	1.28	1419.90	2.12	4.89	4.78	
4991	E092240	4424	1483	1254	1003	4.41	1.48	1.25	1458.70	2.40	5.39	4.83	
4992	E113188	3554	1119	1009	1008	3.53	1.11	1.00	1653.90	2.07	4.10	3.84	
4993	F102237	3085	1280	1137	1351	2.28	0.95	0.84	1617.30	0.88	1.74	1.50	

ERG
Ra 226
pCi/g

Homestake Mining Company - Grants, New Mexico Project 4:27:04 PM, 5/8/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J091

Zone: Outer

The Grid with the Max. Gamma Grid : J091041
 Ave. Gamma : 17,219.20
 No. of Points : 10
 North Limits : >1541966.67, <1542000
 East Limits : >494300, <494333.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: June 7, 1995

Date Sealed: June 22, 1995

Date Read: JUNE 28, 1995

SAMPLED BY L.J. PREP SAMPLE NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CP8			SAMPLE WT.	TRUE SAMPLE CT. RAT.	HMO Ra 226 pCi/g	ERG Ra 226 pCi/g
		PA(POI) 609KEV CH1549-CH1658	TH(POI) 911KEV CH1861-CH1961	K(POI) 1406KEV CH1338-CH1458		PA 609 KEV CH1549-CH1658	TH 911 KEV CH1861-CH1961	K 1406 KEV CH1338-CH1458				
4994	G092096	3155	1178	1072	1189	2.65	0.99	0.90	1691.90	1.23	2.38	2.29
4995	F103039	5120	2028	1589	1418	3.61	1.43	1.12	1536.00	1.50	3.19	3.31
4998	J091041	2947	1250	1090	1060	2.78	1.16	1.03	1555.70	1.00	2.10	2.13
4997	G094087	3807	1478	1418	1553	2.32	0.95	0.91	1591.40	0.91	1.87	1.89
4998	J094225	2909	1189	1033	1020	2.85	1.17	1.01	1560.80	1.11	2.34	2.44
4999	K082078	13880	4990	4440	3930	3.48	1.27	1.13	1626.30	1.68	3.38	3.24
5000	K072035	3370	1683	1674	1795	1.88	0.94	0.93	1555.80	0.39	0.83	1.44
5001	K074174	1732	928	923	1058	1.64	0.88	0.87	1547.00	0.22	0.47	0.59

Homestake Mining Company - Grants, New Mexico Project 4:01:34 PM, 5/26/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID J084

Zone: Outer

The Grid with the Max. Gamma Grid : J084225
Ave. Gamma : 15,199.92
No. of Points : 13
North Limits : >1541033.33, <1541066.67
East Limits : >493633.33, <493666.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: , 1995

Date Sealed: June 12, 1995

Date Read: JUNE 28, 1995

SAMPLED BY LJ. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPB			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	
		RA(POI) 609KEV CH1549-CH1658	TH(POI) 911KEV CH1861-CH1961	K(POI) 1406KEV CH1338-CH1458	RA 609 KEV CH1549-CH1658		TH 911 KEV CH1861-CH1961	K 1406 KEV CH1338-CH1458					
4994	G092096	3155	1178	1072	1189	2.65	0.99	0.90	1691.80	1.23	2.38	2.28	
4995	F103039	5120	2026	1589	1418	3.61	1.43	1.12	1536.00	1.50	3.19	3.31	
4996	J081041	2947	1250	1090	1060	2.78	1.18	1.03	1555.70	1.00	2.10	2.13	
4997	G094067	3807	1478	1419	1553	2.32	0.95	0.91	1591.40	0.91	1.87	1.69	
4998	J084225	2909	1189	1033	1020	2.85	1.17	1.01	1580.80	1.11	2.34	2.44	
4999	K082076	13680	4890	4440	3930	3.48	1.27	1.13	1626.30	1.66	3.38	3.24	
5000	K072035	3370	1683	1674	1795	1.88	0.94	0.93	1555.80	0.39	0.63	1.44	
5001	K074174	1732	926	923	1058	1.64	0.88	0.87	1547.00	0.22	0.47	0.59	

ERG
Ra 226
pCi/g

Homestake Mining Company - Grants, New Mexico Project 2:42:32 PM, 5/26/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K082

Zone: Outer

The Grid with the Max. Gamma Grid : K082076
 Ave. Gamma : 16,690.50
 No. of Points : 24
 North Limits : >1540833.33, <1540866.67
 East Limits : >493666.67, <493700

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: 7, 1995

Date Sealed: June 12, 1995

Date Read: JUNE 28, 1995

SAMPLED BY LJ. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMC Ra 226 pCi/g	ERG Ra 226 pCi/g
		RA(ROI) 809KEV CII549 - CII658	TH(ROI) 911KEV CII861 - CII961	K(ROI) 1460KEV CII1338 - CII1458	RA 809 KEV CII549 - CII658		TH 911 KEV CII861 - CII961	K 1460 KEV CII1338 - CII1458					
4994	G092096	3155	1178	1072	1189	2.85	0.99	0.90	1691.90	1.23	2.38	2.29	
4995	F103039	5120	2026	1589	1418	3.81	1.43	1.12	1838.00	1.50	3.19	3.31	
4996	J091041	2947	1250	1090	1060	2.78	1.18	1.03	1555.70	1.00	2.10	2.13	
4997	G094087	3607	1478	1419	1553	2.32	0.95	0.91	1591.40	0.91	1.67	1.69	
4998	J084225	2909	1189	1033	1020	2.85	1.17	1.01	1560.80	1.11	2.34	2.44	
4999	K082076	13660	4990	4440	3930	3.48	1.27	1.13	1826.30	1.68	3.38	3.24	
5000	K072035	3370	1883	1674	1795	1.88	0.94	0.93	1555.80	0.99	0.83	1.44	
5001	K074174	1732	826	823	1058	1.64	0.88	0.87	1547.00	0.22	0.47	0.59	

Homestake Mining Company - Grants, New Mexico Project 10:39:08 AM, 5/31/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K073

Zone: Outer

The Grid with the Max. Gamma Grid : K073084
 Ave. Gamma : 13,934.36
 No. of Points : 11
 North Limits : >1540333.33, <1540366.67
 East Limits : >492200, <492233.33

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: JUNE 8, 1995

Date Sealed: JUNE 13, 1995

Date Read: JUNE 28, 1995

SAMPLED BY MJ AND L.J. PREP SAMPLES PG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB	Wind Blown Sample ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPM			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMO Pa 226 pCUg	TMA Eberline Pa 226 pCUg	Energy Gamma Pa 226 pCUg	Energy Wet Chem Pa 226 pCUg	TMA Eberline U 238 pCUg	Energy Wet Chem U 238 pCUg
		PA (ROI) 808 KEV CI1548 - CI1558	TH (ROI) 911 KEV CI1881 - CI1891	K (ROI) 1408 KEV CI1338 - CI1458		PA 808 KEV CI1548 - CI1558	TH 911 KEV CI1881 - CI1891	K 1408 KEV CI1338 - CI1458								
5002	ED64 147	4142	1598	1332	1231	3.38	1.30	1.08	1483.50	1.47	3.28					
5003	KD64 177	2347	1157	1120	1033	2.27	1.12	1.08	1358.30	0.51	1.22					
5004	KD63 196	3823	1496	1349	1095	3.31	1.37	1.23	1381.20	1.28	3.07					
5005	KD73064	4152	1512	1295	1220	3.40	1.24	1.08	1555.50	1.85	3.46					

Homestake Mining Company - Grants, New Mexico Project 10:41:46 AM, 5/31/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID K074

Zone: Outer

The Grid with the Max. Gamma Grid : K074174
Ave. Gamma : 15,601.27
No. of Points : 15
North Limits : >1540133.33, <1540166.67
East Limits : >492600, <492633.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: 7, 1995

Date Sealed: June 12, 1995

Date Read: JUNE 28, 1995

SAMPLED BY L.J. PREP SAMPLE NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				CPM			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMO Ra 226 pCi/g	ERG Ra 226 pCi/g
		RA(ROI) 609KEV CH1549-CH1658	TH(ROI) 911KEV CH1661-CH1961	K(ROI) 1406KEV CH1338-CH1458	COUNT TIME SECONDS	RA 809 KEV CH1549-CH1658	TH 911 KEV CH1661-CH1961	K 1460 KEV CH1338-CH1458				
4994	G092096	3155	1178	1072	1189	2.65	0.99	0.90	1691.90	1.23	2.38	2.29
4995	F103039	5120	2028	1589	1418	3.61	1.43	1.12	1536.00	1.50	3.19	3.31
4996	J091041	2947	1250	1090	1060	2.78	1.18	1.03	1555.70	1.00	2.10	2.13
4997	G094067	3807	1478	1419	1553	2.32	0.95	0.91	1591.40	0.91	1.87	1.89
4998	J084225	2909	1189	1033	1020	2.85	1.17	1.01	1560.80	1.11	2.34	2.44
4999	K082078	13660	4990	4440	3930	3.48	1.27	1.13	1626.30	1.68	3.38	3.24
5000	K072035	3370	1683	1674	1795	1.88	0.94	0.93	1555.80	0.39	0.83	1.44
5001	K074174	1732	926	923	1058	1.64	0.86	0.87	1547.00	0.22	0.47	0.59

Homestake Mining Company - Grants, New Mexico Project 4:17:25 PM, 5/12/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID K061

Zone: Outer

The Grid with the Max. Gamma Grid : K061142
 Ave. Gamma : 18,007.95
 No. of Points : 19
 North Limits : >1540766.67, <1540800
 East Limits : >491333.33, <491366.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: May 23, 1995

Date Sealed: Ma, 1995

Date Read: JUNE 13, 1995

SAMPLED BY L.J. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	IMC Pa 226 pCi/g
		PA(POI) 609KEV	TH(POI) 911KE	K(POI) 1406KEV	COUNT TIME		PA 609 KEV	TH 911 KEV	K 1400 KEV			
		CH1549 - CH1650	CH1801 - CH1981	CH1338 - CH1450			CH1549 - CH1650	CH1801 - CH1981	CH1338 - CH1450			
4941	J051233	2643	1321	1179	1195	2.21	1.11	0.99	1487.60	0.46	1.00	1.35
4912	J054255	2560	1251	1216	1088	2.35	1.15	1.12	1589.70	0.56	1.15	1.32
4943	J054099	2330	1040	1073	1088	2.15	0.96	0.99	1616.10	0.70	1.42	1.70
4944	J063212	2501	1220	1132	1001	2.50	1.22	1.13	1596.00	0.59	1.21	1.63
4945	J063218	2820	1419	1408	1295	2.18	1.10	1.09	1621.80	0.46	0.92	1.40
4946	K061142	3347	1613	1369	1164	2.86	1.39	1.16	1445.70	0.70	1.58	2.72
4947	K061095	2614	1245	1183	1005	2.60	1.24	1.18	1561.00	0.68	1.42	1.76
4948	K062258	1882	952	983	1038	1.81	0.92	0.95	1543.80	0.37	0.78	1.04
4949	K064052	2051	1044	988	1115	1.84	0.94	0.88	1585.00	0.35	0.72	0.87

Homestake Mining Company - Grants, New Mexico Project 9:03:58 AM, 5/15/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K063

Zone: Outer

The Grid with the Max. Gamma Grid : K063196
 Ave. Gamma : 17,374.38
 No. of Points : 15
 North Limits : >1540133.33, <1540166.67
 East Limits : >491366.67, <491400

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: JUNE 8, 1995

Date Sealed: JUNE 13, 1995

Date Read: JUNE 28, 1995

SAMPLED BY MJ AND LJ. PREP SAMPLES PG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMO Pa 226 pCi/g	TMA	Energy	Energy	TMA	Energy
		PA(PO) 808 KEV	TI(PO) 911 KEV	K(PO) 1408 KEV	BECONDOS		PA 808 KEV	TI 911 KEV	K 1408 KEV				Eberline	Gamma	Wet Chem	Eberline	Wet Chem
		CH1549 - CH1858	CH1861 - CH1881	CH11338 - CH11458			CH1849 - CH1805	CH1861 - CH1881	CH11338 - CH11458				Pa 226	Pa 226	Pa 226	Pa 226	U 238
WT.	CT. RAT	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g									
5002	ED84 147	4142	1589	1332	1231	3.38	1.30	1.08	1483.50	1.47	3.29						
5003	KD84 177	2347	1157	1120	1033	2.27	1.12	1.08	1359.30	0.51	1.22						
5004	KD83 198	3823	1488	1349	1085	3.31	1.37	1.23	1381.20	1.28	3.07						
5005	KD73084	4152	1512	1295	1220	3.40	1.24	1.06	1555.50	1.85	3.48						

Homestake Mining Company - Grants, New Mexico Project 9:06:26 AM, 5/15/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K064

Zone: Outer

The Grid with the Max. Gamma Grid.: K064177
 Ave. Gamma : 16,043.72
 No. of Points : 18
 North Limits : >1540100,<1540133.33
 East Limits : >491600,<491633.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: JUNE 8, 1995

Date Sealed: JUNE 13, 1995

Date Read: JUNE 28, 1995

SAMPLED BY MJ AND L.J. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Sample ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT pCi/g	HMO Pb 226 pCi/g	TMA	Energy	Energy	TMA	Energy
		PA(POL) 808 KEV	SI(POL) 911 KEV	K(POL) 1406 KEV		EA 809 KEV	TH 811 KEV	K 1400 KEV				Eberline	Gamma	Wet Chem	Eberline	Wet Chem
		CH1549 - CH1658	CH1661 - CH1761	CH1338 - CH1458		CH1549 - CH1658	CH1661 - CH1761	CH1338 - CH1458				Pb 226	Pb 226	Pb 226	Pb 226	U 238
5002	ED64147	4142	1589	1332	1231	3.38	1.30	1.08	1483.50	1.47	3.29					
5003	KD64177	2347	1157	1120	1033	2.27	1.12	1.08	1359.30	0.81	1.22					
5004	KD83186	3823	1498	1349	1095	3.31	1.37	1.23	1361.20	1.28	3.07					
5005	KD73064	4152	1512	1295	1220	3.40	1.24	1.08	1555.50	1.65	3.48					

Homestake Mining Company - Grants, New Mexico Project 10:10:37 AM, 5/16/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J051

Zone: Outer

The Grid with the Max. Gamma Grid : J051164
 Ave. Gamma : 14,390.43
 No. of Points : 21
 North Limits : >1541633.33, <1541666.67
 East Limits : >490000, <490033.33

Min(No. of Points) : 13

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: MAY 13, 1995

Date Sealed: JUL 1995

Date Read: JUNE 29, 1995

SAMPLED BY MJ AND L.J. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	HMO Pa 226 pCi/g	TMA	Energy	Energy	TMA	Energy
		RA(ROI) 809 KEV	TH(ROI) 911 KE	K(ROI) 1406 KEV	COUNT TIME SECONDS		RA 809 KEV	TH 911 KEV	K 1406 KEV				Eberline	Gamma	Wet Chem	Eberline	Wet Chem
		CH548 - CH856	CH861 - CH961	CH1338 - CH1456			CH548 - CH85	CH861 - CH961	CH1338 - CH1456				Pa 226	Pa 226	Pa 226	U 238	Unat
5013	K071253	1669	904	1047	1005	1.68	0.90	1.04	1566.50	0.23	0.48						
5014	K072187	1707	901	940	1008	1.69	0.89	0.93	1597.00	0.26	0.54						
5015	K071256	7301	4122	3998	4480	1.63	0.92	0.89	1580.00	0.12	0.24						
5016	K073055	1847	1013	1049	1198	1.54	0.85	0.88	1480.10	0.17	0.38						
5017	K061028	1589	888	896	1029	1.54	0.86	0.87	1634.20	0.13	0.27						
5018	J051184	2982	1280	1205	1008	2.98	1.27	1.20	1508.40	1.05	2.28						
5019	J042218	2724	1254	1233	1002	2.72	1.25	1.23	1527.30	0.80	1.71						
5020	J041053	3784	1888	1500	1205	3.15	1.40	1.24	1451.40	1.01	2.27						

Homestake Mining Company - Grants, New Mexico Project 10:51:03 AM, 5/16/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J054

Zone: Outer

The Grid with the Max. Gamma Grid : J054255
 Ave. Gamma : 18,230.27
 No. of Points : 11
 North Limits : >1541033.33, <1541066.67
 East Limits : >490933.33, <490966.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: May 20, 1995

Date Sealed: May 20, 1995

Date Read: JUNE 13, 1995

SAMPLED BY LJ. PREP SAMPLES NO.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Samples ID.	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT	IMO Ra 226 pCi/g	
		PA(POI) 609KEV	TH(POI) 911KE	K(POI) 1406KEV		PA 609 KEV	TH 911 KEV	K 1480 KEV				
		CH1549 - CH1658	CH1861 - CH1961	CH1338 - CH1458		CH1549 - CH1658	CH1861 - CH1961	CH1338 - CH1458				
4941	J051233	2643	1321	1179	1195	2.21	1.11	0.99	1487.60	0.46	1.00	1.35
4942	J054255	2560	1251	1216	1088	2.35	1.15	1.12	1589.70	0.56	1.15	1.32
4943	J054099	2330	1040	1073	1088	2.15	0.98	0.99	1618.10	0.70	1.42	1.70
4944	J063212	2501	1220	1132	1001	2.50	1.22	1.13	1598.00	0.59	1.21	1.63
4945	J063218	2820	1419	1408	1295	2.18	1.10	1.09	1621.90	0.46	0.92	1.40
4946	K061142	3347	1613	1369	1164	2.88	1.39	1.18	1445.70	0.70	1.58	2.72
4947	K061095	2614	1245	1183	1005	2.60	1.24	1.18	1581.00	0.68	1.42	1.78
4948	K062258	1882	952	983	1038	1.81	0.92	0.95	1543.80	0.37	0.78	1.04
4949	K064052	2051	1044	986	1115	1.84	0.94	0.88	1585.00	0.35	0.72	0.87

Homestake Mining Company - Grants, New Mexico Project 4:44:52 PM, 5/15/98
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID J041

Zone: Outer

The Grid with the Max. Gamma Grid : J041053
Ave. Gamma : 15,650.17
No. of Points : 18
North Limits : >1541966.67, <1542000
East Limits : >489466.67, <489500

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collected: MAY 13, 1995

Date Sealed: 14, 1995

Date Read: JUNE 28, 1995

SAMPLED BY MJ AND LJ. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Sample ID	TOTAL COUNTS			COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE CT. RAT	HMO pCi/g	TMA	Energy	Energy	TMA	Energy
		RA(RO) 808 KEV	TH(RO) 911 KEV	K(RO) 1406 KEV		EA 808 KEV	TH 911 KEV	K 1406 KEV				Eberline	Gamma	Wet Chem	Eberline	Wet Chem
		CH1548 - CH1858	CH1881 - CH1981	CH1338 - CH1458		CH1548 - CH1858	CH1881 - CH1981	CH1338 - CH1458				Flu 228 pCi/g	Flu 228 pCi/g	Flu 228 pCi/g	Flu 228 pCi/g	U 238 pCi/g
5013	KD71253	1808	904	1047	1005	1.88	0.90	1.04	1588.50	0.23	0.48					
5014	KD72187	1707	901	940	1008	1.69	0.89	0.93	1597.00	0.26	0.54					
5015	KD71259	7301	4122	3998	4480	1.63	0.92	0.89	1580.00	0.12	0.24					
5018	KD73055	1847	1013	1049	1198	1.54	0.85	0.86	1480.10	0.17	0.38					
5017	KD81029	1589	888	896	1029	1.54	0.88	0.87	1634.20	0.13	0.27					
5018	JD51184	2982	1280	1205	1008	2.98	1.27	1.20	1508.40	1.05	2.28					
5018	JD42218	2724	1254	1233	1002	2.72	1.25	1.23	1527.30	0.80	1.71					
5020	JD41053	3794	1888	1500	1205	3.15	1.40	1.24	1451.40	1.01	2.27					

Homestake Mining Company - Grants, New Mexico Project 4:50:56 PM, 5/15/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J042 Zone: Outer

The Grid with the Max. Gamma Grid : J042218
 Ave. Gamma : 15,408.93
 No. of Points : 15
 North Limits : >1541500, <1541533.33
 East Limits : >489533.33, <489566.67

Min(No. of Points) : 12

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Date Collect Y 13, 1995

Date Sealed: J. 14, 1995

Date Read: JUNE 29, 1995

SAMPLED BY MJ AND L.J. PREP SAMPLES RG.

15 DAY READING SEALED

1995

SOIL SAMPLES

LAB ID	Wind Blown Sample ID.	TOTAL COUNTS				COUNT TIME SECONDS	CPS			SAMPLE WT.	TRUE SAMPLE CT. RAT pCi/g	HMO pCi/g	TMA	Energy	Energy	TMA	Energy
		RA(PO) 809 KEV CI1548 - CI1858	TH(PO) 911 KEV CI1861 - CI1961	K(PO) 1406 KEV CI11338 - CI11458	SECONDS		RA 809 KEV CI1548 - CI1858	TH 911 KEV CI1861 - CI1961	K 1406 KEV CI11338 - CI11458				Gamma	Wet Chem	Eberline	Wet Chem	
														U 238 pCi/g			
5013	KD71253	1808	804	1047	1005	1.86	0.80	1.04	1588.50	0.23	0.48						
5014	KD72187	1707	801	840	1008	1.69	0.89	0.83	1587.00	0.28	0.54						
5015	KD71259	7301	4122	3998	4480	1.63	0.92	0.89	1580.00	0.12	0.24						
5018	KD73055	1847	1013	1049	1198	1.54	0.85	0.88	1480.10	0.17	0.38						
5017	KD81028	1589	888	896	1029	1.54	0.86	0.87	1634.20	0.13	0.27						
5018	JD51184	2982	1280	1205	1008	2.98	1.27	1.20	1508.40	1.05	2.28						
5018	JD42218	2724	1254	1233	1002	2.72	1.25	1.23	1527.30	0.80	1.71						
5020	JD41053	3784	1888	1500	1205	3.15	1.40	1.24	1451.40	1.01	2.27						

Homestake Mining Company - Grants, New Mexico Project 10:06:15 AM, 5/15/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H043

Zone: Outer

The Grid with the Max. Gamma Grid : H043239
 Ave. Gamma : 14,980.92
 No. of Points : 11
 North Limits : >1542000, <1542033.33
 East Limits : >489266.67, <489300

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,500: Count(Grid) : 0

List of grids with Gamma greater than 21,500:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

**Completion Report for Reclamation of Off-Pile Areas
at the Homestake Mining Company of California Uranium Mill**

Grants Operation

License No. SUA-1471

Appendices H-I

November 1995

Prepared for:

**Homestake Mining Company of California
Grants Operations
P. O. Box 98
Grants, NM 87020**

Prepared By:

**Environmental Restoration Group, Inc.
12809 Arroyo de Vista NE
Albuquerque, NM 87111**

**Completion Report for Reclamation of Off-Pile Areas
at the Homestake Mining Company of California Uranium Mill**

Grants Operation

License No. SUA-1471

Appendices H-I

November 1995

Prepared for:

**Homestake Mining Company of California
Grants Operations
P. O. Box 98
Grants, NM 87020**

Prepared By:

**Environmental Restoration Group, Inc.
12809 Arroyo de Vista NE
Albuquerque, NM 87111**

Appendix H

Verification Data-Soil Sample Ra-226 Results for Inner and Outer Zones

Homestake Mining Company - Grants Operation

Table H-1 Soil Sample Results of Inner Zone Surveyed by GPS

Table H-2 Soil Sample Results of Outer Zone Surveyed by GPS

Homestake Mining Company - Grants Operation

Table H-1 Soil Sample Results of Inner Zone Surveyed by GPS

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4801	H034057	2.86					
4803	H043039	2.56					
4804	H032106	4.56					
4805	H041065	2.62					
4806	H042246	1.09					
4807	H051252	2.80	2.70			4.20	
4808	H063056	0.48					
4809	H064026	3.02					
4810	H062258	0.41					
4811	H074034	0.67					
4812	H072237	1.15					
4813	H074011	0.90					
4814	H073053	3.43	3.10			<3.1	
4815	H071175	0.30					
4816	H061259	1.18					
4817	H054046	0.98					

H-11

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4818	H053033	0.73			1.40		2.40
4819	H074022	0.93					
4820	H074021	0.67					
4821	H074024	0.35	0.61		0.60	7.40	23.00
4822	H074016	0.45					
4823	H074013	0.64					
4824	H074012	0.30					
4825	H074015	0.74					
4826	H074014	0.31					
4827	H064028	3.68					
4828	H064027	4.14	3.70		4.70	6.20	12.60
4829	H064024	3.40					
4830	H064016	2.30					
4831	H073056	0.53					
4832	H073055	0.16					
4833	H073052	0.77					
4834	H073054	0.26					
4835	H073016	1.01	0.91			15.00	
4836	H073015	0.64					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4837	H073014	0.31					
4838	H064056	0.37			0.40		5.50
4839	H065055	0.35					
4840	H064054	0.16					
4841	H073013	0.39					
4842	H073012	0.59	0.74			7.60	
4843	H073011	1.52					
4844	H064053	0.62					
4845	H064052	0.19					
4846	H064042	0.23					
4847	H044028	1.01					
4874	H061259	0.46					
4875	H052157	2.79					
4938	JO42092	1.70			1.20		2.40
4940	JO52237	0.73					
4941	JO51233	1.00					
4943	JO54099	1.42					
4944	JO63212	1.21					
4947	K061095	1.42					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4948	K062258	0.78					
4949	K064052	0.72					
4959	K073026	2.35					
4963	J084017	0.40					
4964	J083114	0.13					
4965	J074236	0.94					
4966	K071155	0.55					
4967	K081061	0.13					
4968	K083013	0.40					
4969	K074042	0.77					
5000	K072035	0.83					
5013	K071253	0.48					
5014	K072167	0.54					
5015	k071259	0.24					
5016	K073055	0.38					
5017	K081028	0.27					
5025	J053041	0.54					
5026	H032099	1.69					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
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HMC Average= 1.11

Stand. Deviation= 1.05

Homestake Mining Company - Grants Operation

Table H-2 Soil Sample Results of Outer Zone Surveyed by GPS

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4738	E022157	3.30	3.80		4.70	2.50	9.40
4739	E031117	1.96					
4740	D024014	4.37					
4741	D023053	3.30					
4742	D021259	4.65					
4743	D033032	6.33					
4744	D022109	11.12	8.50		10.40	<3.1	6.20
4745	D031079	7.64					
4746	D032024	0.51					
4747	E032142	1.21					
4748	D034028	3.32					
4749	D043064	3.75					
4760	E042169	0.10					
4761	E041058	2.58					
4762	D042218	7.87					
4763	D044254	3.31					

H-2.1

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4764	E051195	2.72			3.90		5.00
4765	D053193	1.80	2.30			3.10	
4766	E052153	2.64					
4767	E061067	2.22					
4768	D054255	7.76					
4769	D063095	3.63					
4770	D063095	0.30					
4771	D022153	6.95					
4772	D041081	3.59	2.70			<1.4	
4773	D051244	1.87					
4774	D061218	3.16					
4775	D052059	2.86					
4776	D062253	6.18					
4777	D071189	1.81					
4778	D072043	2.99			3.90		2.80
4779	D081078	0.35	0.48			<1.8	
4780	D082234	7.93					
4781	D091189	6.04					
4782	D092233	0.31					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4783	C093077	1.73					
4784	C091022	4.83					
4785	C044251	4.57					
4786	C042185	3.74	2.90			<2.3	
4787	C044014	4.23					
4788	C034186	3.75					
4789	C033247	4.25					
4790	D024073	2.60					
4791	E022051	1.28					
4792	D031114	5.79			9.10		3.10
4802	H034099	3.54					
4848	B123228	0.60					
4849	B114209	0.39	0.53			<2.0	
4850	B103215	0.77					
4851	B094205	0.50					
4852	B084231	3.40					
4853	B074231	3.16					
4854	B053256	1.58					
4857	D102223	5.07					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4858	C092059	1.40			1.10		0.80
4859	C101015	0.71					
4860	D124068	3.29					
4861	D134217	1.39					
4862	C072084	3.60					
4863	C082161	5.28	4.70			<4.4	
4864	C051135	3.09					
4865	E022108	1.45					
4866	D024094	0.68					
4867	D031118	5.31					
4868	C033248	0.84					
4869	D044162	3.19					
4870	E031222	3.54	2.50			<2.8	
4871	C064193	2.54					
4872	D074013	7.55					
4873	E141169	2.15					
4876	E074147	2.45					
4877	E063127	3.27	2.70			<2.7	
4878	D113195	10.07			10.10		9.70

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4879	C114239	1.34					
4880	E084171	1.25					
4881	C122142	2.36					
4882	E111012	1.34					
4883	E123124	0.58					
4884	E132185	3.33	3.30			8.20	
4885	D094229	2.79					
4886	F121087	3.67					
4887	F131118	1.47					
4888	G124239	0.98					
4889	G111021	2.08					
4890	H113041	3.26					
4891	H101052	3.59	2.50			<2.7	
4892	J101221	1.37					
4893	K102014	1.00					
4894	J121036	1.72					
4895	H123099	0.88					
4896	J093178	2.12					
4897	K091089	2.11					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4898	L033043	2.48	2.30			8.30	
4899	K032193	2.90					
4900	K042055	3.59					
4901	K051179	6.15					
4902	LO41117	1.92					
4903	L061048	1.09					
4904	D113084	2.04					
4936	JO44238	3.79					
4937	JO34101	1.09					
4939	HO43239	2.79	2.10			<3.4	
4942	J054255	1.15					
4945	J063218	0.92					
4946	K061142	1.58	1.70			<2.0	
4950	F112085	3.04					
4951	F104031	2.22					
4952	G092096	2.65					
4953	H091138	0.49					
4954	H084259	1.07					
4955	E092248	4.24					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4956	E101114	5.49					
4957	F091028	1.85					
4958	C073222	0.47					
4960	J082059	1.93					
4961	K083219	2.27					
4962	F112085	1.45					
4970	E033049	1.65					
4971	E034114	2.24					
4972	E044145	1.46					
4973	E053151	1.75					
4974	E041056	1.77					
4975	D104176	4.02					
4976	D103249	2.38					
4977	D093206	2.02					
4978	D113195	5.51					
4979	E073127	1.15					
4980	E054059	1.28					
4981	E083203	1.12	1.30			<2.3	
4982	E093135	5.47					

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
4983	E082251	4.18					
4984	E091155	5.86					
4985	E101114	6.23					
4986	E102084	3.17					
4987	H092225	1.37					
4988	H093095	0.79	0.57			<1.1	
4989	E103101	4.88					
4990	E094059	4.89					
4991	E092248	5.39					
4992	E113166	4.10					
4993	F102237	1.74					
4994	G092096	2.38					
4995	F103039	3.19	2.80			<3.3	
4996	J091041	2.10					
4997	G094067	1.87					
4998	J084225	2.34					
4999	K082076	3.38					
5001	K074174	0.47					
5002	E064147	3.29	3.30			<3.7	

LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
5003	K064177	1.22					
5004	K063196	3.07					
5005	K073084	3.46					
5013	K071253	0.48					
5018	J051164	2.28					
5019	J042218	1.71					
5020	J041053	2.27					
5021	H043239	2.77					
5022	G103133	0.58					
5023	E043111	1.00					
5024	L081015	2.16					
5027	C044105	3.02					
5028	D101189	3.81					
5029	D102147	3.74					
5030	D102183	4.34					
5031	D102187	2.80					
5032	D102235	3.99					
5033	D102236	4.63					
5034	D104175	4.40					

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LAB ID	Wind Blown Samples ID.	HMC Ra 226 pCi/g	TMA Eberline Ra 226 pCi/g	Energy Gamma Ra 226 pCi/g	Energy Wet Chem. Ra 226 pCi/g	TMA Eberline U 238 pCi/g	Energy Wet Chem. Unat pCi/g
5035	D104172	4.05					
5036	D104173	2.95					
5037	D104181	3.22					
5038	D104184	2.85					
5039	D104185	3.43					
5040	D104222	2.80					
5041	D104223	2.98					
5042	D104226	3.02					
5043	D104231	3.02					
5044	D104234	2.44					
5045	D104237	2.13					
5046	D104236	6.72					
5047	E101115	2.89					
5048	E101118	5.46					
5049	C073166	2.13					

HMC Average= 2.95

Stand. Deviation= 1.89

Appendix I

**Data Sort Results Identifying the Grid Blocks with Highest Gamma Count Rate,
Grid Blocks Exceeding Action Levels, and Grid Blocks not Meeting Data Point
Requirements for Inner and Outer Zones**

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 24, 1995

Grid: **BO5**

Highest Average 33' Grid for each 500' Grid:

***BO53	13,940.62
BO54	13,482.25

***Highest average 33" grid within the 1000" grid

Coordinates for: B053256

North limits: >1548033.33,<1548066.67

East limits: >490466.67,<490500

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID B053

Zone: Outer

The Grid with the Max. Gamma Grid : B053256
 Ave. Gamma : 13,940.62
 No. of Points : 13
 North Limits : >1548033.33,<1548066.67
 East Limits : >490466.67,<490500

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID B054

Zone: Outer

The Grid with the Max. Gamma Grid: B054214
 Ave. Gamma : 13,482.25
 No. of Points : 16
 North Limits : >1548033.33,<1548066.67
 East Limits : >490500,<490533.33

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 28, 1995

Grid: **B08 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

B083	15,650.21
***B084	17,338.00

***Highest average 33" grid within the 1000" grid

Coordinates for: B084231

North limits: >1548066.67,<1548100.00

East limits: >493700.00,<493733.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID B083

Zone: Outer

The Grid with the Max. Gamma Grid : B083192
 Ave. Gamma : 15,650.21
 No. of Points : 29
 North Limits : >1548166.67, <1548200
 East Limits : >493333.33, <493366.67

Min(No. of Points) : 12

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID B084

Zone: Outer

The Grid with the Max. Gamma Grid : B084231
 Ave. Gamma : 17,338.00
 No. of Points : 17
 North Limits : >1548066.67,<1548100
 East Limits : >493700,<493733.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 24, 1995

Grid: **B09**

Highest Average 33' Grid for each 500' Grid:

B093	16,852.29
***B094	19,662.00

***Highest average 33" grid within the 1000" grid

Coordinates for: B094205

North limits: >1548133.33,<1548166.67

East limits: >494933.33,<494966.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID B093

Zone: Outer

The Grid with the Max. Gamma Grid : B093237
 Ave. Gamma : 16,852.29
 No. of Points : 17
 North Limits : >1548000,<1548033.33
 East Limits : >494200,<494233.33

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID B094

Zone: Outer

The Grid with the Max. Gamma Grid : B094205
 Ave. Gamma : 19,662.00
 No. of Points : 10
 North Limits : >1548133.33,<1548166.67
 East Limits : >494933.33,<494966.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 24, 1995

Grid: **B10**

Highest Average 33' Grid for each 500' Grid:

***B103 20,531.25

***Highest average 33" grid within the 1000" grid

Coordinates for: B103215

North limits: >1548033.33,<1548066.67

East limits: >495033.33,<495066.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID B103

Zone: Outer

The Grid with the Max. Gamma Grid : B103215
 Ave. Gamma : 20,531.25
 No. of Points : 8
 North Limits : >1548033.33,<1548066.67
 East Limits : >495033.33,<495066.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 24, 1995

Grid: B11

Highest Average 33' Grid for each 500' Grid:

*****B114 12,524.71**

*****Highest average 33" grid within the 1000" grid**

Coordinates for: B114209

North limits: >1548100.00,<1548133.33

East limits: >496966.67,<497000.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID B114

Zone: Outer

The Grid with the Max. Gamma Grid : B114209
 Ave. Gamma : 12,524.71
 No. of Points : 14
 North Limits : >1548100,<1548133.33
 East Limits : >496966.67,<497000

Min(No. of Points) : 14

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 24, 1995

Grid: **B12**

Highest Average 33' Grid for each 500' Grid:

***B123 14,406.57

***Highest average 33" grid within the 1000" grid

Coordinates for: B123228

North limits: >1548000.00,<1548033.33

East limits: >497133.33,<497166.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID B123

Zone: Outer

The Grid with the Max. Gamma Grid : B123228
 Ave. Gamma : 14,406.57
 No. of Points : 13
 North Limits : >1548000,<1548033.33
 East Limits : >497133.33,<497166.67

Min(No. of Points) : 13

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 2, 1995

Grid: **C03**

Highest Average 33' Grid for each 500' Grid:

***C033	14,613.30
C034	13,596.77

***Highest average 33" grid within the 1000" grid

Coordinates for: C033248

North limits: >1547000.00,<1547033.33

East limits: >488333.33,<488366.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C033

Zone: Outer

The Grid with the Max. Gamma Grid : C033248
 Ave. Gamma : 14,613.30
 No. of Points : 10
 North Limits : >1547000,<1547033.33
 East Limits : >488333.33,<488366.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C034

Zone: Outer

The Grid with the Max. Gamma Grid : C034187
 Ave. Gamma : 13,596.77
 No. of Points : 13
 North Limits : >1547100,<1547133.33
 East Limits : >488700,<488733.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 2, 1995

Grid: C04

Highest Average 33' Grid for each 500' Grid:

C042 9,933.50

C043 13,005.07

***C044 13,899.67

***Highest average 33" grid within the 1000" grid

Coordinates for: C044251

North limits: >1547066.67,<1547100.00

East limits: >489900.00,<489933.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C042

Zone: Outer

The Grid with the Max. Gamma Grid : C042203
 Ave. Gamma : 9,933.50
 No. of Points : 8
 North Limits : >1547666.67, <1547700
 East Limits : >489966.67, <490000

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0.

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C043

Zone: Outer

The Grid with the Max. Gamma Grid : C043187
Ave. Gamma : 13,005.07
No. of Points : 14
North Limits : >1547100,<1547133.33
East Limits : >489200,<489233.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C044

Zone: Outer

The Grid with the Max. Gamma Grid : C044251
 Ave. Gamma : 13,899.67
 No. of Points : 9
 North Limits : >1547066.67,<1547100
 East Limits : >489900,<489933.33

Min(No. of Points) : 3

Number of grids with fewer than 5 data points: Count(Grid) : 1

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
C044105	9,566.00	3	>1547333.33,<1547366.67	>489933.33,<489966.67

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
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Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 27 1995

Grid: **CO5**

Highest Average 33' Grid for each 500' Grid:

***CO51 15,412.61

CO52 13,793.82

CO53 12,800.00

CO54 12,945.06

***Highest average 33" grid within the 1000" grid

Coordinates for: CO51135

North limits: >1547733.33,<1547766.67

East limits: >490233.33,<490266.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C051

Zone: Outer

The Grid with the Max. Gamma Grid : C051135
 Ave. Gamma : 15,412.61
 No. of Points : 28
 North Limits : >1547733.33,<1547766.67
 East Limits : >490233.33,<490266.67

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C052

Zone: Outer

The Grid with the Max. Gamma Grid : C052029
 Ave. Gamma : 13,793.82
 No. of Points : 11
 North Limits : >1547900, <1547933.33
 East Limits : >490666.67, <490700

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C053

Zone: Outer

The Grid with the Max. Gamma

Grid : C053062
 Ave. Gamma : 12,800.00
 No. of Points : 12
 North Limits : >1547366.67,<1547400
 East Limits : >490033.33,<490066.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C054

Zone: Outer

The Grid with the Max. Gamma Grid : C054205
 Ave. Gamma : 12,945.06
 No. of Points : 16
 North Limits : >1547133.33,<1547166.67
 East Limits : >490933.33,<490966.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 28, 1995

Grid: **C06 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

C061	13,129.13
C062	15,464.42
C063	14,566.28
***C064	17,991.09

***Highest average 33" grid within the 1000" grid

Coordinates for: C064193

North limits: >1547166.67,<1547200.00

East limits: >491866.67,<491900.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C061

Zone: Outer

The Grid with the Max. Gamma Grid : C061246
 Ave. Gamma : 13,129.13
 No. of Points : 15
 North Limits : >1547533.33,<1547566.67
 East Limits : >491366.67,<491400

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C062

Zone: Outer

The Grid with the Max. Gamma Grid : C062189
 Ave. Gamma : 15,464.42
 No. of Points : 19
 North Limits : >1547600, <1547633.33
 East Limits : >491766.67, <491800

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C063

Zone: Outer

The Grid with the Max. Gamma Grid : C063052
 Ave. Gamma : 14,566.28
 No. of Points : 25
 North Limits : >1547466.67,<1547500
 East Limits : >491433.33,<491466.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C064

Zone: Outer

The Grid with the Max. Gamma Grid : C064193
 Ave. Gamma : 17,991.09
 No. of Points : 11
 North Limits : >1547166.67,<1547200
 East Limits : >491866.67,<491900

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 28, 1995

Grid: **C07 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

C072	14,964.40
***C073	18,861.81
C074	17,106.21

***Highest average 33" grid within the 1000" grid

Coordinates for: C073166

North limits: >1547133.33,<1547166.67

East limits: >492066.67,<492100.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C072

Zone: Outer

The Grid with the Max. Gamma Grid : C072259
 Ave. Gamma : 14,964.40
 No. of Points : 15
 North Limits : >1547500,<1547533.33
 East Limits : >492966.67,<493000

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C073

Zone: Outer

The Grid with the Max. Gamma Grid : C073166
 Ave. Gamma : 18,861.81
 No. of Points : 16
 North Limits : >1547133.33,<1547166.67
 East Limits : >492066.67,<492100

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C074

Zone: Outer

The Grid with the Max. Gamma Grid : C074059
 Ave. Gamma : 17,106.21
 No. of Points : 28
 North Limits : >1547400, <1547433.33
 East Limits : >492966.67, <493000

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 28, 1995

Grid: **C08 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

C081	16,291.13
***C082	17,369.70
C083	16,895.67
C084	15,469.92

***Highest average 33" grid within the 1000" grid

Coordinates for: C082161
North limits: >1547666.67,<1547700.00
East limits: >493500.00,<493533.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C081

Zone: Outer

The Grid with the Max. Gamma Grid : C081163
 Ave. Gamma : 16,291.13
 No. of Points : 15
 North Limits : >1547666.67,<1547700
 East Limits : >493066.67,<493100

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C082

Zone: Outer

The Grid with the Max. Gamma Grid : C082161
 Ave. Gamma : 17,369.70
 No. of Points : 10
 North Limits : >1547666.67,<1547700
 East Limits : >493500,<493533.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C083

Zone: Outer

The Grid with the Max. Gamma Grid : C083171
 Ave. Gamma : 16,895.67
 No. of Points : 12
 North Limits : >1547166.67, <1547200
 East Limits : >493100, <493133.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C084

Zone: Outer

The Grid with the Max. Gamma Grid : C084014
 Ave. Gamma : 15,469.92
 No. of Points : 12
 North Limits : >1547433.33,<1547466.67
 East Limits : >493500,<493533.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 29, 1995

Grid: **C09 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

C091	16,147.29
***C092	18,767.89
C093	15,195.75
C094	14,888.54

***Highest average 33" grid within the 1000" grid

Coordinates for: C092056

North limits: >1547933.33,<1547966.67

East limits: >494966.67,<495000.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C091

Zone: Outer

The Grid with the Max. Gamma Grid : C091031
 Ave. Gamma : 16,147.29
 No. of Points : 14
 North Limits : >1547966.67,<1548000
 East Limits : >494200,<494233.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C092

Zone: Outer

The Grid with the Max. Gamma Grid : C092056
 Ave. Gamma : 18,767.89
 No. of Points : 9
 North Limits : >1547933.33,<1547966.67
 East Limits : >494966.67,<495000

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C093

Zone: Outer

The Grid with the Max. Gamma Grid : C093077
 Ave. Gamma : 15,195.75
 No. of Points : 12
 North Limits : >1547300,<1547333.33
 East Limits : >494100,<494133.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C094

Zone: Outer

The Grid with the Max. Gamma Grid : C094098
 Ave. Gamma : 14,888.54
 No. of Points : 13
 North Limits : >1547300,<1547333.33
 East Limits : >494833.33,<494866.67

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 24, 1995

Grid: **C10**

Highest Average 33' Grid for each 500' Grid:

***C101 19,737.00

C102 17,551.62

C103 17,192.00

C104 16,524.85

***Highest average 33" grid within the 1000" grid

Coordinates for: C101015

North limits: >1547933.33,<1547966.67

East limits: >495033.33,<495066.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C101

Zone: Outer

The Grid with the Max. Gamma Grid : C101015
 Ave. Gamma : 19,737.00
 No. of Points : 10
 North Limits : >1547933.33,<1547966.67
 East Limits : >495033.33,<495066.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C102

Zone: Outer

The Grid with the Max. Gamma Grid : C102258
 Ave. Gamma : 17,551.62
 No. of Points : 13
 North Limits : >1547500,<1547533.33
 East Limits : >495933.33,<495966.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C103

Zone: Outer

The Grid with the Max. Gamma Grid : C103204
 Ave. Gamma : 17,192.00
 No. of Points : 14
 North Limits : >1547133.33, <1547166.67
 East Limits : >495400, <495433.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C104

Zone: Outer

The Grid with the Max. Gamma Grid : C104145
 Ave. Gamma : 16,524.85
 No. of Points : 13
 North Limits : >1547233.33,<1547266.67
 East Limits : >495833.33,<495866.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 4, 1995

Grid: C11

Highest Average 33' Grid for each 500' Grid:

C111 17,141.55
C112 17,043.83
C113 17,767.86
***C114 18,056.00

***Highest average 33" grid within the 1000" grid

Coordinates for: C114239

North limits: >1547000.00,<1547033.33

East limits: >496766.67,<496800.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C111

Zone: Outer

The Grid with the Max. Gamma Grid : C111252
 Ave. Gamma : 17,141.55
 No. of Points : 11
 North Limits : >1547566.67,<1547600
 East Limits : >496433.33,<496466.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C112

Zone: Outer

The Grid with the Max. Gamma Grid : C112221
 Ave. Gamma : 17,043.83
 No. of Points : 12
 North Limits : >1547566.67,<1547600
 East Limits : >496600,<496633.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C113

Zone: Outer

The Grid with the Max. Gamma Grid : C113153
 Ave. Gamma : 17,767.86
 No. of Points : 14
 North Limits : >1547266.67, <1547300
 East Limits : >496466.67, <496500

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C114

Zone: Outer

The Grid with the Max. Gamma Grid : C114239
 Ave. Gamma : 18,056.00
 No. of Points : 8
 North Limits : >1547000,<1547033.33
 East Limits : >496766.67,<496800

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 4, 1995

Grid: C12

Highest Average 33' Grid for each 500' Grid:

C121 16,356.65
***C122 16,478.80
C123 16,308.57

*****Highest average 33" grid within the 1000" grid**

Coordinates for: C122142
North limits: >1547766.67,<1547800.00
East limits: >497833.33,<497866.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C121

Zone: Outer

The Grid with the Max. Gamma Grid : C121075
 Ave. Gamma : 16,356.65
 No. of Points : 17
 North Limits : >1547833.33,<1547866.67
 East Limits : >497133.33,<497166.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID C122

Zone: Outer

The Grid with the Max. Gamma Grid : C122142
 Ave. Gamma : 16,478.80
 No. of Points : 15
 North Limits : >1547766.67, <1547800
 East Limits : >497833.33, <497866.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID C123

Zone: Outer

The Grid with the Max. Gamma Grid : C123218
 Ave. Gamma : 16,308.57
 No. of Points : 14
 North Limits : >1547000,<1547033.33
 East Limits : >497033.33,<497066.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 1, 1995

Grid: **D02**

Highest Average 33' Grid for each 500' Grid:

D022	15,720.18
***D024	15,846.31

***Highest average 33" grid within the 1000" grid

Coordinates for: D024094

North limits: >1546333.33,<1546366.67

East limits: >487800.00,<487833.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D022

Zone: Outer

The Grid with the Max. Gamma Grid : D022159
 Ave. Gamma : 15,720.18
 No. of Points : 17
 North Limits : >1546700, <1546733.33
 East Limits : >487966.67, <488000

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D024

Zone: Outer

The Grid with the Max. Gamma Grid : D024094
 Ave. Gamma : 15,846.31
 No. of Points : 13
 North Limits : >1546333.33,<1546366.67
 East Limits : >487800,<487833.33

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: July 11, 1995

Grid: **D03**

Highest Average 33' Grid for each 500' Grid:

D031	16,872.50
D032	12,737.88
***D033	17,117.77
D034	15,929.33

***Highest average 33" grid within the 1000" grid

Coordinates for: D033032
North limits: >1546466.67,<1546500.00
East limits: >488233.33,<488266.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D031

Zone: Outer

The Grid with the Max. Gamma Grid : D031142
 Ave. Gamma : 16,872.50
 No. of Points : 14
 North Limits : >1546766.67,<1546800
 East Limits : >488333.33,<488366.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D032

Zone: Outer

The Grid with the Max. Gamma Grid : D032024
 Ave. Gamma : 12,737.88
 No. of Points : 8
 North Limits : >1546933.33, <1546966.67
 East Limits : >488600, <488633.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D033

Zone: Outer

The Grid with the Max. Gamma Grid : D033032
 Ave. Gamma : 17,117.77
 No. of Points : 13
 North Limits : >1546466.67,<1546500
 East Limits : >488233.33,<488266.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D034

Zone: Outer

The Grid with the Max. Gamma Grid : D034208
 Ave. Gamma : 15,929.33
 No. of Points : 24
 North Limits : >1546100,<1546133.33
 East Limits : >488933.33,<488966.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 27 1995

Grid: **D04**

Highest Average 33' Grid for each 500' Grid:

D041	12,865.00
D042	15,015.92
D043	13,869.14
***D044	15,997.95

***Highest average 33" grid within the 1000" grid

Coordinates for: D044162

North limits: >1546166.67,<1546200.00

East limits: >489533.33,<489566.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D041

Zone: Outer

The Grid with the Max. Gamma Grid : D041081
 Ave. Gamma : 12,865.00
 No. of Points : 10
 North Limits : >1546866.67,<1546900
 East Limits : >489200,<489233.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D042

Zone: Outer

The Grid with the Max. Gamma Grid : D042218
 Ave. Gamma : 15,015.92
 No. of Points : 13
 North Limits : >1546500, <1546533.33
 East Limits : >489533.33, <489566.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D043

Zone: Outer

The Grid with the Max. Gamma Grid : D043064
 Ave. Gamma : 13,869.14
 No. of Points : 7
 North Limits : >1546333.33, <1546366.67
 East Limits : >489000, <489033.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D044

Zone: Outer

The Grid with the Max. Gamma Grid : D044162
 Ave. Gamma : 15,997.95
 No. of Points : 19
 North Limits : >1546166.67,<1546200
 East Limits : >489533.33,<489566.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 27 1995

Grid: **D05**

Highest Average 33' Grid for each 500' Grid:

D051	11,469.00
D052	15,850.82
D053	12,691.13
***D054	17,460.17

***Highest average 33" grid within the 1000" grid

Coordinates for: D054255

North limits: >1546033.33,<1546066.67

East limits: >490933.33,<490966.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D051

Zone: Outer

The Grid with the Max. Gamma Grid : D051244
 Ave. Gamma : 11,469.00
 No. of Points : 9
 North Limits : >1546533.33,<1546566.67
 East Limits : >490300,<490333.33

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D052 Zone: Outer

The Grid with the Max. Gamma Grid : D052059
 Ave. Gamma : 15,850.82
 No. of Points : 11
 North Limits : >1546900,<1546933.33
 East Limits : >490966.67,<491000

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D053

Zone: Outer

The Grid with the Max. Gamma Grid : D053193
 Ave. Gamma : 12,691.13
 No. of Points : 8
 North Limits : >1546166.67, <1546200
 East Limits : >490366.67, <490400

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D054

Zone: Outer

The Grid with the Max. Gamma Grid : D054255
 Ave. Gamma : 17,460.17
 No. of Points : 12
 North Limits : >1546033.33,<1546066.67
 East Limits : >490933.33,<490966.67

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 27 1995

Grid: **D06**

Highest Average 33' Grid for each 500' Grid:

D061	15,905.45
***D062	18,470.40
D063	17,784.92
D064	17,831.27

***Highest average 33" grid within the 1000" grid

Coordinates for: D062253

North limits: >1546566.67,<1546600.00

East limits: >491966.67,<492000.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D061

Zone: Outer

The Grid with the Max. Gamma Grid : D061218
 Ave. Gamma : 15,905.45
 No. of Points : 11
 North Limits : >1546500,<1546533.33
 East Limits : >491033.33,<491066.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D062

Zone: Outer

The Grid with the Max. Gamma Grid : D062253
 Ave. Gamma : 18,470.40
 No. of Points : 10
 North Limits : >1546566.67,<1546600
 East Limits : >491966.67,<492000

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D063

Zone: Outer

The Grid with the Max. Gamma Grid : D063095
 Ave. Gamma : 17,784.92
 No. of Points : 12
 North Limits : >1546333.33,<1546366.67
 East Limits : >491333.33,<491366.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D064

Zone: Outer

The Grid with the Max. Gamma Grid : D064039
 Ave. Gamma : 17,831.27
 No. of Points : 11
 North Limits : >1546400,<1546433.33
 East Limits : >491766.67,<491800

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 27 1995

Grid: **D07**

Highest Average 33' Grid for each 500' Grid:

D071	16,870.50
D072	17,548.45
D073	13,544.00
***D074	18,451.75

***Highest average 33" grid within the 1000" grid

Coordinates for: D074013

North limits: >1546466.67,<1546500.00

East limits: >492566.67,<492600.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D071

Zone: Outer

The Grid with the Max. Gamma Grid : D071189
 Ave. Gamma : 16,870.50
 No. of Points : 10
 North Limits : >1546600,<1546633.33
 East Limits : >492266.67,<492300

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D072

Zone: Outer

The Grid with the Max. Gamma Grid : D072043
 Ave. Gamma : 17,548.45
 No. of Points : 11
 North Limits : >1546966.67,<1547000
 East Limits : >492866.67,<492900

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D073

Zone: Outer

The Grid with the Max. Gamma Grid : D073038
 Ave. Gamma : 13,544.00
 No. of Points : 13
 North Limits : >1546400,<1546433.33
 East Limits : >492233.33,<492266.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D074

Zone: Outer

The Grid with the Max. Gamma Grid : D074013
 Ave. Gamma : 18,451.75
 No. of Points : 8
 North Limits : >1546466.67,<1546500
 East Limits : >492566.67,<492600

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 27 1995

Grid: **D08**

Highest Average 33' Grid for each 500' Grid:

D081	20,069.08
***D082	20,353.36
D083	13,483.44
D084	14,908.67

***Highest average 33" grid within the 1000" grid

Coordinates for: D082234

North limits: >1546533.33,<1546566.67

East limits: >493700.00,<493733.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D081

Zone: Outer

The Grid with the Max. Gamma Grid : D081078
 Ave. Gamma : 20,069.08
 No. of Points : 12
 North Limits : >1546800,<1546833.33
 East Limits : >493133.33,<493166.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D082

Zone: Outer

The Grid with the Max. Gamma Grid : D082234
 Ave. Gamma : 20,353.36
 No. of Points : 11
 North Limits : >1546533.33, <1546566.67
 East Limits : >493700, <493733.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D083

Zone: Outer

The Grid with the Max. Gamma Grid : D083052
 Ave. Gamma : 13,483.44
 No. of Points : 9
 North Limits : >1546466.67, <1546500
 East Limits : >493433.33, <493466.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D084

Zone: Outer

The Grid with the Max. Gamma Grid : D084163
 Ave. Gamma : 14,908.67
 No. of Points : 9
 North Limits : >1546166.67,<1546200
 East Limits : >493566.67,<493600

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 8, 1995

Grid: **D09**

Highest Average 33' Grid for each 500' Grid:

D091 16,127.90

D092 14,306.45

D093 15,253.19

***D094 17,648.42

***Highest average 33" grid within the 1000" grid

Coordinates for: D094229

North limits: >1546000.00,<1546033.33

East limits: >494666.67,<494700.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D091

Zone: Outer

The Grid with the Max. Gamma Grid : D091189
 Ave. Gamma : 16,127.90
 No. of Points : 10
 North Limits : >1546600,<1546633.33
 East Limits : >494266.67,<494300

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D092

Zone: Outer

The Grid with the Max. Gamma Grid : D092233
 Ave. Gamma : 14,306.45
 No. of Points : 11
 North Limits : >1546566.67,<1546600
 East Limits : >494766.67,<494800

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D093

Zone: Outer

The Grid with the Max. Gamma Grid : D093206
 Ave. Gamma : 15,253.13
 No. of Points : 8
 North Limits : >1546133.33,<1546166.67
 East Limits : >494466.67,<494500

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D094

Zone: Outer

The Grid with the Max. Gamma Grid : D094229
 Ave. Gamma : 17,648.42
 No. of Points : 19
 North Limits : >1546000,<1546033.33
 East Limits : >494666.67,<494700

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 24, 1995

Grid: **D10**

Highest Average 33' Grid for each 500' Grid:

D101	21,036.33
***D102	22,370.91
D103	20,918.38
D104	21,963.93

***Highest average 33" grid within the 1000" grid

Coordinates for: D102223

North limits: >1546566.67,<1546600.00

East limits: >495666.67,<495700.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D101

Zone: Outer

The Grid with the Max. Gamma Grid : D101189
 Ave. Gamma : 21,036.33
 No. of Points : 15
 North Limits : >1546600,<1546633.33
 East Limits : >495266.67,<495300

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 1

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
D101189	21,036.33	15	>1546600,<1546633.33	>495266.67,<495300

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D102

Zone: Outer

The Grid with the Max. Gamma Grid : D102223
 Ave. Gamma : 22,370.91
 No. of Points : 11
 North Limits : >1546566.67,<1546600
 East Limits : >495666.67,<495700

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 6

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
D102147	22,335.92	12	>1546700,<1546733.33	>495800,<495833.33
D102183	21,453.13	16	>1546666.67,<1546700	>495766.67,<495800
D102187	21,428.50	16	>1546600,<1546633.33	>495700,<495733.33
D102223	22,370.91	11	>1546566.67,<1546600	>495666.67,<495700
D102235	21,944.44	16	>1546533.33,<1546566.67	>495733.33,<495766.67
D102236	21,691.64	14	>1546533.33,<1546566.67	>495766.67,<495800

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D103

Zone: Outer

The Grid with the Max. Gamma Grid : D103249
 Ave. Gamma : 20,918.38
 No. of Points : 13
 North Limits : >1546000,<1546033.33
 East Limits : >495366.67,<495400

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D104

Zone: Outer

The Grid with the Max. Gamma Grid : D104176
 Ave. Gamma : 21,963.93
 No. of Points : 14
 North Limits : >1546133.33,<1546166.67
 East Limits : >495666.67,<495700

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 14

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
D104172	21,535.50	14	>1546166.67,<1546200	>495633.33,<495666.67
D104173	21,827.60	15	>1546166.67,<1546200	>495666.67,<495700
D104175	21,661.31	16	>1546133.33,<1546166.67	>495633.33,<495666.67
D104176	21,963.93	14	>1546133.33,<1546166.67	>495666.67,<495700
D104181	21,650.55	11	>1546166.67,<1546200	>495700,<495733.33
D104184	21,251.40	15	>1546133.33,<1546166.67	>495700,<495733.33
D104185	21,233.50	14	>1546133.33,<1546166.67	>495733.33,<495766.67
D104222	21,054.50	14	>1546066.67,<1546100	>495633.33,<495666.67
D104223	21,256.45	22	>1546066.67,<1546100	>495666.67,<495700
D104226	21,205.62	21	>1546033.33,<1546066.67	>495666.67,<495700
D104231	21,255.48	21	>1546066.67,<1546100	>495700,<495733.33
D104234	21,203.63	16	>1546033.33,<1546066.67	>495700,<495733.33
D104236	21,642.27	15	>1546033.33,<1546066.67	>495766.67,<495800
D104237	21,018.50	14	>1546000,<1546033.33	>495700,<495733.33

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 11, 1995

Grid: D11

Highest Average 33' Grid for each 500' Grid:

D111 20,508.13
D112 17,421.43
***D113 20,785.50
D114 17,917.50

***Highest average 33" grid within the 1000" grid

Coordinates for: D113084
North limits: >1546333.33,<1546366.67
East limits: >496200.00,<496233.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D111

Zone: Outer

The Grid with the Max. Gamma Grid : D111162
 Ave. Gamma : 20,508.13
 No. of Points : 8
 North Limits : >1546666.67,<1546700
 East Limits : >496033.33,<496066.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D112

Zone: Outer

The Grid with the Max. Gamma Grid : D112064
 Ave. Gamma : 17,421.43
 No. of Points : 14
 North Limits : >1546833.33,<1546866.67
 East Limits : >496500,<496533.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D113

Zone: Outer

The Grid with the Max. Gamma Grid : D113084
 Ave. Gamma : 20,785.50
 No. of Points : 25
 North Limits : >1546333.33, <1546366.67
 East Limits : >496200, <496233.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D114

Zone: Outer

The Grid with the Max. Gamma Grid : D114104
 Ave. Gamma : 17,917.50
 No. of Points : 12
 North Limits : >1546333.33, <1546366.67
 East Limits : >496900, <496933.33

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 24, 1995

Grid: **D12**

Highest Average 33' Grid for each 500' Grid:

D121	16,639.78
D122	16,625.60
D123	16,788.77
***D124	17,006.17

***Highest average 33" grid within the 1000" grid

Coordinates for: D124068

North limits: >1546300.00,<1546333.33

East limits: >497533.33,<497566.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D121

Zone: Outer

The Grid with the Max. Gamma Grid : D121245
 Ave. Gamma : 16,639.78
 No. of Points : 9
 North Limits : >1546533.33,<1546566.67
 East Limits : >497333.33,<497366.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D122

Zone: Outer

The Grid with the Max. Gamma Grid : D122162
 Ave. Gamma : 16,625.60
 No. of Points : 10
 North Limits : >1546666.67,<1546700
 East Limits : >497533.33,<497566.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D123

Zone: Outer

The Grid with the Max. Gamma Grid : D123136
 Ave. Gamma : 16,788.77
 No. of Points : 13
 North Limits : >1546233.33, <1546266.67
 East Limits : >497266.67, <497300

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D124

Zone: Outer

The Grid with the Max. Gamma Grid : D124068
 Ave. Gamma : 17,006.17
 No. of Points : 12
 North Limits : >1546300, <1546333.33
 East Limits : >497533.33, <497566.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 24, 1995

Grid: **D13**

Highest Average 33' Grid for each 500' Grid:

D133	14,159.13
***D134	14,390.29

***Highest average 33" grid within the 1000" grid

Coordinates for: D134217
North limits: >1546000.00,<1546033.33
East limits: >498500.00,<498533.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID D133

Zone: Outer

The Grid with the Max. Gamma Grid : D133258
 Ave. Gamma : 14,159.13
 No. of Points : 15
 North Limits : >1546000, <1546033.33
 East Limits : >498433.33, <498466.67

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID D134

Zone: Outer

The Grid with the Max. Gamma Grid : D134217
 Ave. Gamma : 14,390.29
 No. of Points : 17
 North Limits : >1546000,<1546033.33
 East Limits : >498500,<498533.33

Min(No. of Points) : 17

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 24, 1995

Grid: EO2

Highest Average 33' Grid for each 500' Grid:

***EO22 14,683.92

***Highest average 33" grid within the 1000" grid

Coordinates for: E022108

North limits: >1545800.00,<1545833.33

East limits: >487933.33,<487966.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E022

Zone: Outer

The Grid with the Max. Gamma Grid : E022108
 Ave. Gamma : 14,683.92
 No. of Points : 13
 North Limits : >1545800,<1545833.33
 East Limits : >487933.33,<487966.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 2, 1995

Grid: **E03**

Highest Average 33' Grid for each 500' Grid:

***E031 15,818.27
E032 14,898.91
E033 12,839.25
E034 12,936.13

***Highest average 33" grid within the 1000" grid

Coordinates for: E031222
North limits: >1545566.67,<1545600.00
East limits: >488133.33,<488166.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E031

Zone: Outer

The Grid with the Max. Gamma Grid : E031222
 Ave. Gamma : 15,818.27
 No. of Points : 15
 North Limits : >1545566.67,<1545600
 East Limits : >488133.33,<488166.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E032

Zone: Outer

The Grid with the Max. Gamma Grid : E032142
 Ave. Gamma : 14,898.91
 No. of Points : 23
 North Limits : >1545766.67,<1545800
 East Limits : >488833.33,<488866.67

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E033

Zone: Outer

The Grid with the Max. Gamma Grid : E033049
 Ave. Gamma : 12,839.25
 No. of Points : 20
 North Limits : >1545400,<1545433.33
 East Limits : >488366.67,<488400

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E034

Zone: Outer

The Grid with the Max. Gamma Grid : E034114
 Ave. Gamma : 12,936.13
 No. of Points : 16
 North Limits : >1545233.33,<1545266.67
 East Limits : >488500,<488533.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 28, 1995

Grid: E04 - OUTER ZONE

Highest Average 33' Grid for each 500' Grid:

E041	13,356.46
***E042	16,630.14
E043	13,085.40
E044	13,569.93

*****Highest average 33" grid within the 1000" grid**

Coordinates for: E042169

North limits: >1545700.00,<1545733.33

East limits: >489566.67,<489600.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E041

Zone: Outer

The Grid with the Max. Gamma Grid : E041233
 Ave. Gamma : 13,356.46
 No. of Points : 13
 North Limits : >1545566.67, <1545600
 East Limits : >489266.67, <489300

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E042

Zone: Outer

The Grid with the Max. Gamma Grid : E042169
 Ave. Gamma : 16,630.14
 No. of Points : 14
 North Limits : >1545700, <1545733.33
 East Limits : >489566.67, <489600

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E043

Zone: Outer

The Grid with the Max. Gamma Grid : E043111
 Ave. Gamma : 13,085.40
 No. of Points : 25
 North Limits : >1545266.67,<1545300
 East Limits : >489000,<489033.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E044

Zone: Outer

The Grid with the Max. Gamma Grid : E044145
 Ave. Gamma : 13,569.93
 No. of Points : 27
 North Limits : >1545233.33,<1545266.67
 East Limits : >489833.33,<489866.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 27, 1995

Grid: **EO5**

Highest Average 33' Grid for each 500' Grid:

E051	13,934.80
***E052	16,153.66
E053	15,472.44
E054	15,365.73

***Highest average 33" grid within the 1000" grid

Coordinates for: E052153

North limits: >1545766.67,<1545800.00

East limits: >490966.67,<491000.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E051

Zone: Outer

The Grid with the Max. Gamma Grid : E051195
 Ave. Gamma : 13,934.80
 No. of Points : 5
 North Limits : >1545633.33,<1545666.67
 East Limits : >490333.33,<490366.67

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E052

Zone: Outer

The Grid with the Max. Gamma Grid : E052153
 Ave. Gamma : 16,153.66
 No. of Points : 34
 North Limits : >1545766.67, <1545800
 East Limits : >490966.67, <491000

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E053

Zone: Outer

The Grid with the Max. Gamma Grid : E053151
 Ave. Gamma : 15,472.44
 No. of Points : 9
 North Limits : >1545266.67,<1545300
 East Limits : >490400,<490433.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E054

Zone: Outer

The Grid with the Max. Gamma Grid : E054059
 Ave. Gamma : 15,365.73
 No. of Points : 11
 North Limits : >1545400,<1545433.33
 East Limits : >490966.67,<491000

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 27, 1995

Grid: **EO6**

Highest Average 33' Grid for each 500' Grid:

E061	15,732.32
***E063	15,801.64
E064	15,539.26

***Highest average 33" grid within the 1000" grid

Coordinates for: E063127

North limits: >1545200.00,<1545233.33

East limits: >491100.00,<491133.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E061

Zone: Outer

The Grid with the Max. Gamma Grid : E061067
 Ave. Gamma : 15,732.32
 No. of Points : 25
 North Limits : >1545800,<1545833.33
 East Limits : >491000,<491033.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E063

Zone: Outer

The Grid with the Max. Gamma Grid : E063127
 Ave. Gamma : 15,801.64
 No. of Points : 14
 North Limits : >1545200,<1545233.33
 East Limits : >491100,<491133.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E064

Zone: Outer

The Grid with the Max. Gamma Grid : E064147
 Ave. Gamma : 15,539.26
 No. of Points : 19
 North Limits : >1545200,<1545233.33
 East Limits : >491800,<491833.33

Min(No. of Points) : 19

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 28, 1995

Grid: E07

Highest Average 33' Grid for each 500' Grid:

E073	15,075.47
***E074	15,433.00

***Highest average 33" grid within the 1000" grid

Coordinates for: E074147

North limits: >1545200.00,<1545233.33

East limits: >492800.00,<492833.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E073

Zone: Outer

The Grid with the Max. Gamma Grid : E073127
 Ave. Gamma : 15,075.47
 No. of Points : 19
 North Limits : >1545200,<1545233.33
 East Limits : >492100,<492133.33

Min(No. of Points) : 15

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E074

Zone: Outer

The Grid with the Max. Gamma Grid : E074147
 Ave. Gamma : 15,433.00
 No. of Points : 15
 North Limits : >1545200,<1545233.33
 East Limits : >492800,<492833.33

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 27, 1995

Grid: **EO8**

Highest Average 33' Grid for each 500' Grid:

E082	17,779.50
E083	16,087.95
***E084	18,796.20

***Highest average 33" grid within the 1000" grid

Coordinates for: E084171

North limits: >1545166.67,<1545200.00

East limits: >493600.00,<493633.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E082

Zone: Outer

The Grid with the Max. Gamma Grid : E082251
 Ave. Gamma : 17,779.50
 No. of Points : 10
 North Limits : >1545566.67, <1545600
 East Limits : >493900, <493933.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E083

Zone: Outer

The Grid with the Max. Gamma Grid : E083203
 Ave. Gamma : 16,087.95
 No. of Points : 39
 North Limits : >1545166.67, <1545200
 East Limits : >493466.67, <493500

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E084

Zone: Outer

The Grid with the Max. Gamma Grid : E084171
 Ave. Gamma : 18,796.20
 No. of Points : 10
 North Limits : >1545166.67,<1545200
 East Limits : >493600,<493633.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 30, 1995

Grid: E09

Highest Average 33' Grid for each 500' Grid:

E091	19,093.67
***E092	20,767.55
E093	19,030.12
E094	19,882.62

***Highest average 33" grid within the 1000" grid

Coordinates for: E092248

North limits: >1545500.00,<1545533.33

East limits: >494833.33,<494866.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E091

Zone: Outer

The Grid with the Max. Gamma Grid : E091155
 Ave. Gamma : 19,093.67
 No. of Points : 12
 North Limits : >1545733.33, <1545766.67
 East Limits : >494433.33, <494466.67

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E092

Zone: Outer

The Grid with the Max. Gamma Grid : E092248
 Ave. Gamma : 20,767.55
 No. of Points : 11
 North Limits : >1545500, <1545533.33
 East Limits : >494833.33, <494866.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E093

Zone: Outer

The Grid with the Max. Gamma Grid : E093135
 Ave. Gamma : 19,030.12
 No. of Points : 17
 North Limits : >1545233.33,<1545266.67
 East Limits : >494233.33,<494266.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E094

Zone: Outer

The Grid with the Max. Gamma Grid : E094059
 Ave. Gamma : 19,882.62
 No. of Points : 13
 North Limits : >1545400,<1545433.33
 East Limits : >494966.67,<495000

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 30, 1995

Grid: **E10**

Highest Average 33' Grid for each 500' Grid:

***E101	21,765.74
E102	20,674.50
E103	20,059.41
E104	20,088.14

***Highest average 33" grid within the 1000" grid

Coordinates for: E101114

North limits: >1545733.33,<1545766.67

East limits: >495000.00,<495033.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E101

Zone: Outer

The Grid with the Max. Gamma Grid : E101114
 Ave. Gamma : 21,765.74
 No. of Points : 19
 North Limits : >1545733.33, <1545766.67
 East Limits : >495000, <495033.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 3

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
E101114	21,765.74	19	>1545733.33, <1545766.67	>495000, <495033.33
E101115	21,280.10	10	>1545733.33, <1545766.67	>495033.33, <495066.67
E101118	21,704.08	12	>1545700, <1545733.33	>495033.33, <495066.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E102

Zone: Outer

The Grid with the Max. Gamma Grid : E102084
 Ave. Gamma : 20,674.50
 No. of Points : 16
 North Limits : >1545833.33, <1545866.67
 East Limits : >495700, <495733.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E102

Zone: Outer

The Grid with the Max. Gamma Grid : E102084
 Ave. Gamma : 20,674.50
 No. of Points : 16
 North Limits : >1545833.33, <1545866.67
 East Limits : >495700, <495733.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E103

Zone: Outer

The Grid with the Max. Gamma Grid : E103101
 Ave. Gamma : 20,059.41
 No. of Points : 37
 North Limits : >1545366.67, <1545400
 East Limits : >495400, <495433.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E104

Zone: Outer

The Grid with the Max. Gamma Grid : E104156
 Ave. Gamma : 20,088.14
 No. of Points : 14
 North Limits : >1545233.33, <1545266.67
 East Limits : >495966.67, <496000

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 11, 1995

Grid: E11

Highest Average 33' Grid for each 500' Grid:

***E111 19,135.90
E112 18,111.08
E113 17,927.31
E114 18,951.40

***Highest average 33" grid within the 1000" grid

Coordinates for: E111012
North limits: >1545966.67,<1546000.00
East limits: >496033.33,<496066.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E111

Zone: Outer

The Grid with the Max. Gamma Grid : E111012
 Ave. Gamma : 19,135.90
 No. of Points : 10
 North Limits : >1545966.67,<1546000
 East Limits : >496033.33,<496066.67

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E112

Zone: Outer

The Grid with the Max. Gamma Grid : E112231
 Ave. Gamma : 18,111.08
 No. of Points : 13
 North Limits : >1545566.67,<1545600
 East Limits : >496700,<496733.33

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E113

Zone: Outer

The Grid with the Max. Gamma Grid : E113166
 Ave. Gamma : 17,927.31
 No. of Points : 13
 North Limits : >1545133.33,<1545166.67
 East Limits : >496066.67,<496100

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E114

Zone: Outer

The Grid with the Max. Gamma Grid : E114077
 Ave. Gamma : 18,951.40
 No. of Points : 10
 North Limits : >1545300,<1545333.33
 East Limits : >496600,<496633.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 8, 1995

Grid: **E12**

Highest Average 33' Grid for each 500' Grid:

E121	17,622.00
E122	16,608.36
***E123	20,258.00
E124	18,661.40

***Highest average 33" grid within the 1000" grid

Coordinates for: E123124

North limits: >1545233.33,<1545266.67

East limits: >497100.00,<497133.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E121

Zone: Outer

The Grid with the Max. Gamma Grid : E121138
 Ave. Gamma : 17,622.00
 No. of Points : 20
 North Limits : >1545700,<1545733.33
 East Limits : >497233.33,<497266.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E122

Zone: Outer

The Grid with the Max. Gamma Grid : E122214
 Ave. Gamma : 16,608.36
 No. of Points : 14
 North Limits : >1545533.33,<1545566.67
 East Limits : >497500,<497533.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E123

Zone: Outer

The Grid with the Max. Gamma Grid : E123124
 Ave. Gamma : 20,258.00
 No. of Points : 13
 North Limits : >1545233.33, <1545266.67
 East Limits : >497100, <497133.33

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E124

Zone: Outer

The Grid with the Max. Gamma Grid : E124018
 Ave. Gamma : 18,661.40
 No. of Points : 15
 North Limits : >1545400,<1545433.33
 East Limits : >497533.33,<497566.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 8, 1995

Grid: **E13**

Highest Average 33' Grid for each 500' Grid:

E131 16,192.60
***E132 17,191.00
E133 16,395.72

***Highest average 33" grid within the 1000" grid

Coordinates for: E132185
North limits: >1545633.33,<1545666.67
East limits: >498733.33,<498766.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E131

Zone: Outer

The Grid with the Max. Gamma Grid : E131098
 Ave. Gamma : 16,192.60
 No. of Points : 15
 North Limits : >1545800,<1545833.33
 East Limits : >498333.33,<498366.67

Min(No. of Points) : 12

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E132

Zone: Outer

The Grid with the Max. Gamma Grid : E132185
 Ave. Gamma : 17,191.00
 No. of Points : 23
 North Limits : >1545633.33,<1545666.67
 East Limits : >498733.33,<498766.67

Min(No. of Points) : 12

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E133

Zone: Outer

The Grid with the Max. Gamma Grid : E133066
 Ave. Gamma : 16,395.72
 No. of Points : 43
 North Limits : >1545333.33,<1545366.67
 East Limits : >498066.67,<498100

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: April 27, 1995

Grid: E14

Highest Average 33' Grid for each 500' Grid:

***E141	15,578.00
E143	15,429.50

***Highest average 33" grid within the 1000" grid

Coordinates for: E141169
North limits: >1545600.00,<1545633.33
East limits: >499066.67,<499100.00

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID E141

Zone: Outer

The Grid with the Max. Gamma Grid : E141169
 Ave. Gamma : 15,578.00
 No. of Points : 20
 North Limits : >1545600,<1545633.33
 East Limits : >499066.67,<499100

Min(No. of Points) : 17

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID E143

Zone: Outer

The Grid with the Max. Gamma Grid : E143041
 Ave. Gamma : 15,429.50
 No. of Points : 20
 North Limits : >1545466.67, <1545500
 East Limits : >499300, <499333.33

Min(No. of Points) : 16

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 31, 1995

Grid: **F09 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

***F091	19,167.09
F092	17,357.42
F094	15,412.59

***Highest average 33" grid within the 1000" grid

Coordinates for: F091028

North limits: >1544900.00,<1544933.33

East limits: >494133.33,<494166.67

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F091 Zone: Outer

The Grid with the Max. Gamma Grid : F091028
 Ave. Gamma : 19,167.09
 No. of Points : 22
 North Limits : >1544900, <1544933.33
 East Limits : >494133.33, <494166.67

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID F092

Zone: Outer

The Grid with the Max. Gamma Grid : F092132
 Ave. Gamma : 17,357.42
 No. of Points : 19
 North Limits : >1544766.67,<1544800
 East Limits : >494733.33,<494766.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID F094

Zone: Outer

The Grid with the Max. Gamma Grid : F094015
 Ave. Gamma : 15,412.59
 No. of Points : 17
 North Limits : >1544433.33,<1544466.67
 East Limits : >494533.33,<494566.67

Min(No. of Points) : 13

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 30, 1995

Grid: **F10**

Highest Average 33' Grid for each 500' Grid:

F101	16,326.73
F102	18,905.90
F103	15,298.69
***F104	20,056.00

***Highest average 33" grid within the 1000" grid

Coordinates for: F104031

North limits: >1544466.67,<1544500.00

East limits: >495700.00,<495733.33

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F101 Zone: Outer

The Grid with the Max. Gamma Grid : F101205
 Ave. Gamma : 16,326.73
 No. of Points : 26
 North Limits : >1544633.33,<1544666.67
 East Limits : >495433.33,<495466.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F102

Zone: Outer

The Grid with the Max. Gamma Grid : F102237
 Ave. Gamma : 18,905.90
 No. of Points : 10
 North Limits : >1544500, <1544533.33
 East Limits : >495700, <495733.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F103

Zone: Outer

The Grid with the Max. Gamma Grid : F103039
 Ave. Gamma : 15,298.69
 No. of Points : 26
 North Limits : >1544400, <1544433.33
 East Limits : >495266.67, <495300

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/19/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F104

Zone: Outer

The Grid with the Max. Gamma Grid : F104031
 Ave. Gamma : 20,056.00
 No. of Points : 11
 North Limits : >1544466.67,<1544500
 East Limits : >495700,<495733.33

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 26, 1995

Grid: F11

Highest Average 33' Grid for each 500' Grid:

F111	19,724.80
***F112	20,054.69
F113	19,163.73
F114	16,798.25

***Highest average 33" grid within the 1000" grid

Coordinates for: F112085

North limits: >1544833.33,<1544866.67

East limits: >496733.33,<496766.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F111

Zone: Outer

The Grid with the Max. Gamma Grid : F111181
 Ave. Gamma : 19,724.80
 No. of Points : 15
 North Limits : >1544666.67,<1544700
 East Limits : >496200,<496233.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F112

Zone: Outer

The Grid with the Max. Gamma Grid : F112085
 Ave. Gamma : 20,054.69
 No. of Points : 13
 North Limits : >1544833.33,<1544866.67
 East Limits : >496733.33,<496766.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

Zone: Outer

GRID F113

The Grid with the Max. Gamma Grid : F113012
 Ave. Gamma : 19,163.73
 No. of Points : 11
 North Limits : >1544466.67, <1544500
 East Limits : >496033.33, <496066.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F114

Zone: Outer

The Grid with the Max. Gamma Grid : F114036
 Ave. Gamma : 16,798.25
 No. of Points : 16
 North Limits : >1544433.33,<1544466.67
 East Limits : >496766.67,<496800

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 8, 1995

Grid: F12

Highest Average 33' Grid for each 500' Grid:

***F121 19,637.50
F122 16,000.88
F123 12,614.33
F124 13,431.88

***Highest average 33" grid within the 1000" grid

Coordinates for: F121087

North limits: >1544800.00,<1544833.33

East limits: >497200.00,<497233.33

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F121

Zone: Outer

The Grid with the Max. Gamma Grid : F121087
 Ave. Gamma : 19,637.50
 No. of Points : 12
 North Limits : >1544800,<1544833.33
 East Limits : >497200,<497233.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F122

Zone: Outer

The Grid with the Max. Gamma Grid : F122016
 Ave. Gamma : 16,000.88
 No. of Points : 16
 North Limits : >1544933.33,<1544966.67
 East Limits : >497566.67,<497600

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID F123

Zone: Outer

The Grid with the Max. Gamma Grid : F123053
 Ave. Gamma : 12,614.33
 No. of Points : 15
 North Limits : >1544466.67,<1544500
 East Limits : >497466.67,<497500

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID F124

Zone: Outer

The Grid with the Max. Gamma Grid : F124011
 Ave. Gamma : 13,431.88
 No. of Points : 16
 North Limits : >1544466.67,<1544500
 East Limits : >497500,<497533.33

Min(No. of Points) : 13

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 8, 1995

Grid: **F13**

Highest Average 33' Grid for each 500' Grid:

***F131 16,081.50

***Highest average 33" grid within the 1000" grid

Coordinates for: F131118

North limits: >1544700.00,<1544733.33

East limits: >498033.33,<498066.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID F131

Zone: Outer

The Grid with the Max. Gamma Grid : F131118
 Ave. Gamma : 16,081.50
 No. of Points : 16
 North Limits : >1544700, <1544733.33
 East Limits : >498033.33, <498066.67

Min(No. of Points) : 13

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 31, 1995

Grid: **G09 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

***G092	13,361.20
G093	13,257.63
G094	12,833.20

***Highest average 33" grid within the 1000" grid

Coordinates for: G092096

North limits: >1543833.33,<1543866.67

East limits: >494866.67,<494900.00

Homestake Mining Company - Grants, New Mexico Project. 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID G092

Zone: Outer

The Grid with the Max. Gamma Grid : G092096
 Ave. Gamma : 13,361.20
 No. of Points : 15
 North Limits : >1543833.33, <1543866.67
 East Limits : >494866.67, <494900

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID G093

Zone: Outer

The Grid with the Max. Gamma Grid : G093199
 Ave. Gamma : 13,257.63
 No. of Points : 16
 North Limits : >1543100,<1543133.33
 East Limits : >494366.67,<494400

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID G094

Zone: Outer

The Grid with the Max. Gamma Grid : G094067
 Ave. Gamma : 12,833.20
 No. of Points : 35
 North Limits : >1543300,<1543333.33
 East Limits : >494500,<494533.33

Min(No. of Points) : 12

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 16, 1995

Grid: **G10**

Highest Average 33' Grid for each 500' Grid:

G101	12,377.07
G102	17,937.64
***G103	18,062.86
G104	15,551.25

***Highest average 33" grid within the 1000" grid

Coordinates for: G103133

North limits: >1543266.67,<1543300.00

East limits: >495266.67,<495300.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID G101

Zone: Outer

The Grid with the Max. Gamma Grid : G101238
 Ave. Gamma : 12,377.07
 No. of Points : 14
 North Limits : >1543500,<1543533.33
 East Limits : >495233.33,<495266.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID G102 Zone: Outer

The Grid with the Max. Gamma Grid : G102055
 Ave. Gamma : 17,937.64
 No. of Points : 14
 North Limits : >1543933.33,<1543966.67
 East Limits : >495933.33,<495966.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID G103

Zone: Outer

The Grid with the Max. Gamma Grid : G103133
 Ave. Gamma : 18,062.86
 No. of Points : 14
 North Limits : >1543266.67,<1543300
 East Limits : >495266.67,<495300

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID G104

Zone: Outer

The Grid with the Max. Gamma Grid : G104156
 Ave. Gamma : 15,551.25
 No. of Points : 16
 North Limits : >1543233.33, <1543266.67
 East Limits : >495966.67, <496000

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 9, 1995

Grid: **G11**

Highest Average 33' Grid for each 500' Grid:

***G111 17,927.88

G112 12,154.68

G113 15,924.60

G114 13,571.44

***Highest average 33" grid within the 1000" grid

Coordinates for: G111021

North limits: >1543966.67,<1544000.00

East limits: >496100.00,<496133.33

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID G111

Zone: Outer

The Grid with the Max. Gamma Grid : G111021
 Ave. Gamma : 17,927.88
 No. of Points : 17
 North Limits : >1543966.67,<1544000
 East Limits : >496100,<496133.33

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID G112

Zone: Outer

The Grid with the Max. Gamma Grid : G112019
 Ave. Gamma : 12,154.68
 No. of Points : 19
 North Limits : >1543900, <1543933.33
 East Limits : >496566.67, <496600

Min(No. of Points) : 12

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID G113

Zone: Outer

The Grid with the Max. Gamma Grid : G113176
 Ave. Gamma : 15,924.60
 No. of Points : 19
 North Limits : >1543133.33,<1543166.67
 East Limits : >496166.67,<496200

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID G114

Zone: Outer

The Grid with the Max. Gamma Grid : G114222
 Ave. Gamma : 13,571.44
 No. of Points : 18
 North Limits : >1543066.67,<1543100
 East Limits : >496633.33,<496666.67

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 8, 1995

Grid: **G12**

Highest Average 33' Grid for each 500' Grid:

***G124 12,067.17

***Highest average 33" grid within the 1000" grid

Coordinates for: G124239

North limits: >1543000.00,<1543033.33

East limits: >497766.67,<497800.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID G124

Zone: Outer

The Grid with the Max. Gamma Grid : G124239
 Ave. Gamma : 12,067.17
 No. of Points : 18
 North Limits : >1543000, <1543033.33
 East Limits : >497766.67, <497800

Min(No. of Points) : 13

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 15, 1995

Grid: **H03 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

***H034 16,379.95

***Highest average 33" grid within the 1000" grid

Coordinates for: H034099

North limits: >1542300.00,<1542333.33

East limits: >488866.67,<488900.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H034

Zone: Outer

The Grid with the Max. Gamma Grid : H034099
 Ave. Gamma : 16,379.95
 No. of Points : 21
 North Limits : >1542300,<1542333.33
 East Limits : >488866.67,<488900

Min(No. of Points) : 20

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 15, 1995

Grid: **H03 - INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
H032			
H032106	17,977.82	>1542833.33,<1542866.67	>488966.67,<489000.00
H034			
H034057	16,592.45	>1542400.00,<1542433.33	>488900.00,<488933.33

Homestake Mining Company - Grants, New Mexico Project 7/20/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H032

Zone: Inner

The Grid with the Max. Gamma Grid : H032106
 Ave. Gamma : 17,977.82
 No. of Points : 66
 North Limits : >1542833.33,<1542866.67
 East Limits : >488966.67,<489000

Min(No. of Points) : 5

Number of grids with fewer than 7 data points: Count(No. of Points) : 1

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
H032099	12,689.60	5	>1542800,<1542833.33	>488866.67,<488900

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H034

Zone: Inner

The Grid with the Max. Gamma Grid : H034057
 Ave. Gamma : 16,592.45
 No. of Points : 20
 North Limits : >1542400,<1542433.33
 East Limits : >488900,<488933.33

Min(No. of Points) : 18

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 15, 1995

Grid: **H04-OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

***H043 14,980.82

***Highest average 33" grid within the 1000" grid

Coordinates for: H043239

North limits: >1542000.00,<1542033.33

East limits: >489266.67,<489300.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H043

Zone: Outer

The Grid with the Max. Gamma Grid : H043239
 Ave. Gamma : 14,980.82
 No. of Points : 11
 North Limits : >1542000, <1542033.33
 East Limits : >489266.67, <489300

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 22, 1995

Grid: **H04 - INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
H041			
H041065	18,512.11	>1542833.33,<1542866.67	>489033.33,<489066.67
H042			
H042246	14,685.00	>1542533.33,<1542566.67	>489866.67,<489900.00
H043			
H043039	17,579.42	>1542400.00,<1542433.33	>489266.67,<489300.00
H044			
H044028	15,489.44	>1542400.00,<1542433.33	>489633.33,<489666.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H041

Zone: Inner

The Grid with the Max. Gamma Grid : H041065
 Ave. Gamma : 18,512.11
 No. of Points : 45
 North Limits : >1542833.33,<1542866.67
 East Limits : >489033.33,<489066.67

Min(No. of Points) : 15

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H042

Zone: Inner

The Grid with the Max. Gamma Grid : H042246
 Ave. Gamma : 14,685.00
 No. of Points : 33
 North Limits : >1542533.33,<1542566.67
 East Limits : >489866.67,<489900

Min(No. of Points) : 16

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H043

Zone: Inner

The Grid with the Max. Gamma Grid : H043039
 Ave. Gamma : 17,579.42
 No. of Points : 19
 North Limits : >1542400,<1542433.33
 East Limits : >489266.67,<489300

Min(No. of Points) : 10

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H044

Zone: Inner

The Grid with the Max. Gamma Grid : H044028
 Ave. Gamma : 15,489.44
 No. of Points : 54
 North Limits : >1542400, <1542433.33
 East Limits : >489633.33, <489666.67

Min(No. of Points) : 9

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 22, 1995

Grid: **H05 - INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
H051			
H051252	18,933.68	>1542566.67,<1542600.00	>490433.33,<490466.67
H052			
H052157	18,473.50	>1542700.00,<1542733.33	>490900.00,<490933.33
H053			
H053033	15,048.13	>1542466.67,<1542500.00	>490266.67,<490300.00
H054			
H054046	16,322.25	>1542433.33,<1542466.67	>490866.67,<490900.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H051

Zone: Inner

The Grid with the Max. Gamma

Grid : H051252
 Ave. Gamma : 18,933.68
 No. of Points : 19
 North Limits : >1542566.67, <1542600
 East Limits : >490433.33, <490466.67

Min(No. of Points) : 11

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H052

Zone: Inner

The Grid with the Max. Gamma Grid : H052157
 Ave. Gamma : 18,473.50
 No. of Points : 26
 North Limits : >1542700,<1542733.33
 East Limits : >490900,<490933.33

Min(No. of Points) : 11

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H053

Zone: Inner

The Grid with the Max. Gamma Grid : H053033
 Ave. Gamma : 15,048.13
 No. of Points : 30
 North Limits : >1542466.67,<1542500
 East Limits : >490266.67,<490300

Min(No. of Points) : 18

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H054

Zone: Inner

The Grid with the Max. Gamma Grid : H054046
 Ave. Gamma : 16,322.25
 No. of Points : 97
 North Limits : >1542433.33,<1542466.67
 East Limits : >490866.67,<490900

Min(No. of Points) : 17

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 22, 1995

Grid: **H06 - INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
H061 H061259	20,461.04	>1542500.00,<1542533.33	>491466.67,<491500.00
H062 H062258	26,112.53	>1542500.00,<1542533.33	>491933.33,<491966.67
H063 H063056	21,616.23	>1542433.33,<1542466.67	>491466.67,<491500.00
H064 H064028	48,460.42	>1542400.00,<1542433.33	>491633.33,<491666.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H061

Zone: Inner

The Grid with the Max. Gamma Grid : H061259
 Ave. Gamma : 20,461.04
 No. of Points : 28
 North Limits : >1542500,<1542533.33
 East Limits : >491466.67,<491500

Min(No. of Points) : 14

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H062

Zone: Inner

The Grid with the Max. Gamma

Grid : H062258
 Ave. Gamma : 26,112.53
 No. of Points : 32
 North Limits : >1542500,<1542533.33
 East Limits : >491933.33,<491966.67

Min(No. of Points) : 16

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H063

Zone: Inner

The Grid with the Max. Gamma Grid : H063056
 Ave. Gamma : 21,616.23
 No. of Points : 52
 North Limits : >1542433.33,<1542466.67
 East Limits : >491466.67,<491500

Min(No. of Points) : 23

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H064

Zone: Inner

The Grid with the Max. Gamma

Grid : H064028
Ave. Gamma : 48,460.42
No. of Points : 36
North Limits : >1542400, <1542433.33
East Limits : >491633.33, <491666.67

The Grid with the Max. Gamma
less than 28000

Grid : H064025
Ave. Gamma : 27,855.16
No. of Points : 61
North Limits : >1542433.33, <1542466.67
East Limits : >491633.33, <491666.67

Min(No. of Points) : 16

Count(No. of Points) : 0

Number of grids with fewer than 7 data points:

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000:

Count(Grid) : 11

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
H064016	28,240.46	54	>1542433.33, <1542466.67	>491566.67, <491600
H064024	29,377.70	56	>1542433.33, <1542466.67	>491600, <491633.33
H064026	36,421.33	55	>1542433.33, <1542466.67	>491666.67, <491700
H064027	42,902.68	36	>1542400, <1542433.33	>491600, <491633.33
H064028	48,460.42	36	>1542400, <1542433.33	>491633.33, <491666.67
H064042	28,024.57	23	>1542466.67, <1542500	>491833.33, <491866.67
H064052	28,898.40	25	>1542466.67, <1542500	>491933.33, <491966.67
H064053	29,733.30	37	>1542466.67, <1542500	>491966.67, <492000
H064054	28,919.69	28	>1542433.33, <1542466.67	>491900, <491933.33
H064055	30,168.46	26	>1542433.33, <1542466.67	>491933.33, <491966.67
H064056	30,787.38	24	>1542433.33, <1542466.67	>491966.67, <492000

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: June 22, 1995

Grid: **H07 - INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
H071			
H071175	23,942.00	>1542633.33,<1542666.67	>492133.33,<492166.67
H072			
H072237	25,069.28	>1542500.00,<1542533.33	>492700.00,<492733.33
H073			
H073053	35,532.46	>1542466.67,<1542500.00	>492466.67,<492500.00
H074			
H074011	33,277.00	>1542466.67,<1542500.00	>492500.00,<492533.33

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H071

Zone: Inner

The Grid with the Max. Gamma Grid : H071175
 Ave. Gamma : 23,942.00
 No. of Points : 31
 North Limits : >1542633.33,<1542666.67
 East Limits : >492133.33,<492166.67

Min(No. of Points) : 17

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H072

Zone: Inner

The Grid with the Max. Gamma Grid : H072237
 Ave. Gamma : 25,069.28
 No. of Points : 29
 North Limits : >1542500,<1542533.33
 East Limits : >492700,<492733.33

Min(No. of Points) : 14

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H073

Zone: Inner

The Grid with the Max. Gamma Grid : H073053
Ave. Gamma : 35,532.46
No. of Points : 24
North Limits : >1542466.67, <1542500
East Limits : >492466.67, <492500

The Grid with the Max. Gamma
less than 28000

Zero grids with an average less than 28000

Min(No. of Points) : 15

Count(No. of Points) : 0

Number of grids with fewer than 7 data points:

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000:

Count(Grid) : 11

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
H073011	29,276.65	26	>1542466.67, <1542500	>492000, <492033.33
H073012	28,100.59	46	>1542466.67, <1542500	>492033.33, <492066.67
H073013	31,047.45	33	>1542466.67, <1542500	>492066.67, <492100
H073014	31,606.76	29	>1542433.33, <1542466.67	>492000, <492033.33
H073015	31,647.82	33	>1542433.33, <1542466.67	>492033.33, <492066.67
H073016	32,842.44	27	>1542433.33, <1542466.67	>492066.67, <492100
H073052	32,035.10	30	>1542466.67, <1542500	>492433.33, <492466.67
H073053	35,532.46	24	>1542466.67, <1542500	>492466.67, <492500
H073054	32,797.07	15	>1542433.33, <1542466.67	>492400, <492433.33
H073055	31,558.69	26	>1542433.33, <1542466.67	>492433.33, <492466.67
H073056	31,516.55	22	>1542433.33, <1542466.67	>492466.67, <492500

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H074

Zone: Inner

The Grid with the Max. Gamma

Grid : H074011
Ave. Gamma : 33,277.00
No. of Points : 18
North Limits : >1542466.67, <1542500
East Limits : >492500, <492533.33

The Grid with the Max. Gamma
less than 28000

Grid : H074034
Ave. Gamma : 27,679.10
No. of Points : 29
North Limits : >1542433.33, <1542466.67
East Limits : >492700, <492733.33

Min(No. of Points) : 15

Count(No. of Points) : 0

Number of grids with fewer than 7 data points:

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 9

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
H074011	33,277.00	18	>1542466.67, <1542500	>492500, <492533.33
H074012	31,170.21	19	>1542466.67, <1542500	>492533.33, <492566.67
H074013	29,820.17	18	>1542466.67, <1542500	>492566.67, <492600
H074014	30,580.04	23	>1542433.33, <1542466.67	>492500, <492533.33
H074015	29,859.84	19	>1542433.33, <1542466.67	>492533.33, <492566.67
H074016	29,780.64	22	>1542433.33, <1542466.67	>492566.67, <492600
H074021	29,329.38	16	>1542466.67, <1542500	>492600, <492633.33
H074022	28,223.29	17	>1542466.67, <1542500	>492633.33, <492666.67
H074024	29,323.40	15	>1542433.33, <1542466.67	>492600, <492633.33

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 31, 1995

Grid: **H08 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

***H084 16,764.17

***Highest average 33" grid within the 1000" grid

Coordinates for: H084259

North limits: >1542000.00,<1542033.33

East limits: >493966.67,<494000.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H084

Zone: Outer

The Grid with the Max. Gamma Grid : H084259
 Ave. Gamma : 16,764.17
 No. of Points : 23
 North Limits : >1542000,<1542033.33
 East Limits : >493966.67,<494000

Min(No. of Points) : 18

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 30, 1995

Grid: **H09**

Highest Average 33' Grid for each 500' Grid:

***H091	20,764.00
H092	17,007.17
H093	18,226.17
H094	14,418.08

***Highest average 33" grid within the 1000" grid

Coordinates for: H091138

North limits: >1542700.00,<1542733.33

East limits: >494233.33,<494266.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H091

Zone: Outer

The Grid with the Max. Gamma Grid : H091138
 Ave. Gamma : 20,764.00
 No. of Points : 20
 North Limits : >1542700,<1542733.33
 East Limits : >494233.33,<494266.67

Min(No. of Points) : 13

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H092

Zone: Outer

The Grid with the Max. Gamma Grid : H092225
 Ave. Gamma : 17,007.17
 No. of Points : 23
 North Limits : >1542533.33,<1542566.67
 East Limits : >494633.33,<494666.67

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H093

Zone: Outer

The Grid with the Max. Gamma Grid : H093095
 Ave. Gamma : 18,226.17
 No. of Points : 18
 North Limits : >1542333.33, <1542366.67
 East Limits : >494333.33, <494366.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H094

Zone: Outer

The Grid with the Max. Gamma Grid : H094013
 Ave. Gamma : 14,418.08
 No. of Points : 12
 North Limits : >1542466.67,<1542500
 East Limits : >494566.67,<494600

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homs taks Mining Company - Grant , Nsw Msxico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 8, 1995

Grid: H10

Highest Average 33' Grid for each 500' Grid:

***H101	18,279.47
H102	17,289.80
H103	15,727.93
H104	16,235.36

*****Highest average 33" grid within the 1000" grid**

Coordinates for: H101052

North limits: >1542966.67,<1543000.00

East limits: >495433.33,<495466.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H101

Zone: Outer

The Grid with the Max. Gamma Grid : H101052
 Ave. Gamma : 18,279.47
 No. of Points : 15
 North Limits : >1542966.67,<1543000
 East Limits : >495433.33,<495466.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H102

Zone: Outer

The Grid with the Max. Gamma Grid : H102065
 Ave. Gamma : 17,289.80
 No. of Points : 10
 North Limits : >1542833.33,<1542866.67
 East Limits : >495533.33,<495566.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H103

Zone: Outer

The Grid with the Max. Gamma Grid : H103015
 Ave. Gamma : 15,727.93
 No. of Points : 40
 North Limits : >1542433.33,<1542466.67
 East Limits : >495033.33,<495066.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 8, 1995

Grid: **H11**

Highest Average 33' Grid for each 500' Grid:

H111	16,673.31
H112	15,055.57
***H113	16,783.04
H114	14,945.00

***Highest average 33" grid within the 1000" grid

Coordinates for: H113041

North limits: >1542466.67,<1542500.00

East limits: >496300.00,<496333.33

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H111

Zone: Outer

The Grid with the Max. Gamma Grid : H111017
 Ave. Gamma : 16,673.31
 No. of Points : 13
 North Limits : >1542900,<1542933.33
 East Limits : >496000,<496033.33

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H112

Zone: Outer

The Grid with the Max. Gamma Grid : H112131
 Ave. Gamma : 15,055.57
 No. of Points : 21
 North Limits : >1542766.67,<1542800
 East Limits : >496700,<496733.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H113

Zone: Outer

The Grid with the Max. Gamma Grid : H113041
Ave. Gamma : 16,783.04
No. of Points : 50
North Limits : >1542466.67,<1542500
East Limits : >496300,<496333.33

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H114

Zone: Outer

The Grid with the Max. Gamma Grid : H114061
 Ave. Gamma : 14,945.00
 No. of Points : 20
 North Limits : >1542366.67, <1542400
 East Limits : >496500, <496533.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 8, 1995

Grid: **H12**

Highest Average 33' Grid for each 500' Grid:

H121	14,089.96
H122	12,021.40
***H123	15,255.71

***Highest average 33" grid within the 1000" grid

Coordinates for: H123099
North limits: >1542300.00,<1542333.33
East limits: >497366.67,<497400.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H121

Zone: Outer

The Grid with the Max. Gamma Grid : H121218
 Ave. Gamma : 14,089.96
 No. of Points : 24
 North Limits : >1542500,<1542533.33
 East Limits : >497033.33,<497066.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID H122

Zone: Outer

The Grid with the Max. Gamma Grid : H122088
 Ave. Gamma : 12,021.40
 No. of Points : 10
 North Limits : >1542800, <1542833.33
 East Limits : >497733.33, <497766.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID H123

Zone: Outer

The Grid with the Max. Gamma Grid : H123099
 Ave. Gamma : 15,255.71
 No. of Points : 17
 North Limits : >1542300, <1542333.33
 East Limits : >497366.67, <497400

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 15, 1995

Grid: **J03**

Highest Average 33' Grid for each 500' Grid:

J032	14,799.21
***J034	16,463.15

***Highest average 33" grid within the 1000" grid

Coordinates for: J034101

North limits: >1541366.67,<1541400.00

East limits: >488900.00,<488933.33

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID J032

Zone: Outer

The Grid with the Max. Gamma Grid : J032253
 Ave. Gamma : 14,799.21
 No. of Points : 29
 North Limits : >1541566.67,<1541600
 East Limits : >488966.67,<489000

Min(No. of Points) : 15

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID J034

Zone: Outer

The Grid with the Max. Gamma Grid : J034101
 Ave. Gamma : 16,463.15
 No. of Points : 13
 North Limits : >1541366.67,<1541400
 East Limits : >488900,<488933.33

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 16, 1995

Grid: J04 - OUTER ZONE

Highest Average 33' Grid for each 500' Grid:

J041	15,650.17
J042	15,408.93
J043	17,786.06
***J044	18,150.58

***Highest average 33" grid within the 1000" grid

Coordinates for: J044238

North limits: >1541000.00,<1541033.33

East limits: >489733.33,<489766.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID J041

Zone: Outer

The Grid with the Max. Gamma Grid : J041053
 Ave. Gamma : 15,650.17
 No. of Points : 18
 North Limits : >1541966.67, <1542000
 East Limits : >489466.67, <489500

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J042

Zone: Outer

The Grid with the Max. Gamma Grid : J042218
 Ave. Gamma : 15,408.93
 No. of Points : 15
 North Limits : >1541500,<1541533.33
 East Limits : >489533.33,<489566.67

Min(No. of Points) : 12

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID J043

Zone: Outer

The Grid with the Max. Gamma Grid : J043192
 Ave. Gamma : 17,786.06
 No. of Points : 16
 North Limits : >1541166.67,<1541200
 East Limits : >489333.33,<489366.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J044

Zone: Outer

The Grid with the Max. Gamma Grid : J044238
 Ave. Gamma : 18,150.58
 No. of Points : 12
 North Limits : >1541000,<1541033.33
 East Limits : >489733.33,<489766.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 16, 1995

Grid: **J04 - INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
J042			
J042092	14,365.09	>1541866.67,<1541900.00	>489833.33,<489866.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J042

Zone: Inner

The Grid with the Max. Gamma

Grid : J042092
 Ave. Gamma : 14,365.09
 No. of Points : 23
 North Limits : >1541866.67, <1541900
 East Limits : >489833.33, <489866.67

Min(No. of Points) : 11

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 16, 1995

Grid: **J05 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

J051	14,390.43
J053	17,500.75
***J054	18,230.27

***Highest average 33" grid within the 1000" grid

Coordinates for: J054255

North limits: >1541033.33,<1541066.67

East limits: >490933.33,<490966.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J051

Zone: Outer

The Grid with the Max. Gamma Grid : J051164
 Ave. Gamma : 14,390.43
 No. of Points : 21
 North Limits : >1541633.33,<1541666.67
 East Limits : >490000,<490033.33

Min(No. of Points) : 13

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J053

Zone: Outer

The Grid with the Max. Gamma Grid : J053217
 Ave. Gamma : 17,500.75
 No. of Points : 12
 North Limits : >1541000, <1541033.33
 East Limits : >490000, <490033.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID J054

Zone: Outer

The Grid with the Max. Gamma Grid : J054255
 Ave. Gamma : 18,230.27
 No. of Points : 11
 North Limits : >1541033.33, <1541066.67
 East Limits : >490933.33, <490966.67

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 16, 1995

Grid: **J05 - INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
J051			
J051233	15,734.53	>1541566.67,<1541600.00	>490266.67,<490300.00
J052			
J052237	10,763.95	>1541500.00,<1541533.33	>490700.00,<490733.33
J053			
J053041	11,444.43	>1541466.67,<1541500.00	>490300.00,<490333.33
J054			
J054099	18,797.50	>1541300.00,<1541333.33	>490866.67,<490900.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J051

Zone: Inner

The Grid with the Max. Gamma Grid : J051233
 Ave. Gamma : 15,734.53
 No. of Points : 17
 North Limits : >1541566.67,<1541600
 East Limits : >490266.67,<490300

Min(No. of Points) : 11

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J052

Zone: Inner

The Grid with the Max. Gamma Grid : J052237
 Ave. Gamma : 10,763.95
 No. of Points : 21
 North Limits : >1541500,<1541533.33
 East Limits : >490700,<490733.33

Min(No. of Points) : 13

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J053

Zone: Inner

The Grid with the Max. Gamma Grid : J053041
 Ave. Gamma : 11,444.43
 No. of Points : 21
 North Limits : >1541466.67,<1541500
 East Limits : >490300,<490333.33

Min(No. of Points) : 10

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J054

Zone: Inner

The Grid with the Max. Gamma Grid : J054099
 Ave. Gamma : 18,797.50
 No. of Points : 8
 North Limits : >1541300,<1541333.33
 East Limits : >490866.67,<490900

Min(No. of Points) : 8

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 16, 1995

Grid: J06 - OUTER ZONE

Highest Average 33' Grid for each 500' Grid:

***J063 17,487.58

***Highest average 33" grid within the 1000" grid

Coordinates for: J063218

North limits: >1541000.00,<1541033.33

East limits: >491033.33,<491066.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J063

Zone: Outer

The Grid with the Max. Gamma Grid : J063218
 Ave. Gamma : 17,487.58
 No. of Points : 12
 North Limits : >1541000,<1541033.33
 East Limits : >491033.33,<491066.67

Min(No. of Points) : 12

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 16, 1995

Grid: **J06 - INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
J063			
J063212	19,582.18	>1541066.67,<1541100.00	>491033.33,<491066.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J063

Zone: Inner

The Grid with the Max. Gamma Grid : J063212
 Ave. Gamma : 19,582.18
 No. of Points : 11
 North Limits : >1541066.67,<1541100
 East Limits : >491033.33,<491066.67

Min(No. of Points) : 11

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 30, 1995

Grid: **J07 - INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
J074			
J074236	20,941.38	>1541033.33,<1541066.67	>492766.67,<492800.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID J074

Zone: Inner

The Grid with the Max. Gamma Grid : J074236
 Ave. Gamma : 20,941.38
 No. of Points : 13
 North Limits : >1541033.33, <1541066.67
 East Limits : >492766.67, <492800

Min(No. of Points) : 13

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 30, 1995

Grid: **J08 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

***J082	16,513.67
J084	15,199.92

***Highest average 33" grid within the 1000" grid

Coordinates for: J082059

North limits: >1541900.00,<1541933.33

East limits: >493966.67,<494000.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID J082

Zone: Outer

The Grid with the Max. Gamma Grid : J082059
 Ave. Gamma : 16,513.67
 No. of Points : 12
 North Limits : >1541900, <1541933.33
 East Limits : >493966.67, <494000

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J084

Zone: Outer

The Grid with the Max. Gamma Grid : J084225
 Ave. Gamma : 15,199.92
 No. of Points : 13
 North Limits : >1541033.33,<1541066.67
 East Limits : >493633.33,<493666.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 30, 1995

Grid: **J08- INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
J083			
J083114	19,288.81	>1541233.33,<1541266.67	>493000.00,<493033.33
J084			
J084017	12,836.92	>1541400.00,<1541433.33	>493500.00,<493533.33

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J083

Zone: Inner

The Grid with the Max. Gamma Grid : J083114
 Ave. Gamma : 19,288.81
 No. of Points : 36
 North Limits : >1541233.33,<1541266.67
 East Limits : >493000,<493033.33

Min(No. of Points) : 9

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J084

Zone: Inner

The Grid with the Max. Gamma Grid : J084017
 Ave. Gamma : 12,836.92
 No. of Points : 24
 North Limits : >1541400,<1541433.33
 East Limits : >493500,<493533.33

Min(No. of Points) : 24

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 9, 1995

Grid: **J09**

Highest Average 33' Grid for each 500' Grid:

J091	17,219.20
J092	15,019.56
***J093	17,645.60
J094	15,400.92

***Highest average 33" grid within the 1000" grid

Coordinates for: J093178

North limits: >1541100.00,<1541133.33

East limits: >494133.33,<494166.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J091

Zone: Outer

The Grid with the Max. Gamma Grid : J091041
 Ave. Gamma : 17,219.20
 No. of Points : 10
 North Limits : >1541966.67,<1542000
 East Limits : >494300,<494333.33

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J092

Zone: Outer

The Grid with the Max. Gamma Grid : J092033
 Ave. Gamma : 15,019.56
 No. of Points : 9
 North Limits : >1541966.67,<1542000
 East Limits : >494766.67,<494800

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J093

Zone: Outer

The Grid with the Max. Gamma Grid : J093178
 Ave. Gamma : 17,645.60
 No. of Points : 42
 North Limits : >1541100,<1541133.33
 East Limits : >494133.33,<494166.67

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J094

Zone: Outer

The Grid with the Max. Gamma Grid : J094181
 Ave. Gamma : 15,400.92
 No. of Points : 13
 North Limits : >1541166.67, <1541200
 East Limits : >494700, <494733.33

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 8, 1995

Grid: **J10**

Highest Average 33' Grid for each 500' Grid:

***J101	14,037.65
J102	13,524.36
J103	13,417.15
J104	13,071.94

***Highest average 33" grid within the 1000" grid

Coordinates for: J101221

North limits: >1541566.67,<1541600.00

East limits: >495100.00,<495133.33

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J101

Zone: Outer

The Grid with the Max. Gamma Grid : J101221
 Ave. Gamma : 14,037.65
 No. of Points : 17
 North Limits : >1541566.67,<1541600
 East Limits : >495100,<495133.33

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J102

Zone: Outer

The Grid with the Max. Gamma Grid : J102078
 Ave. Gamma : 13,524.36
 No. of Points : 11
 North Limits : >1541800,<1541833.33
 East Limits : >495633.33,<495666.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J103

Zone: Outer

The Grid with the Max. Gamma Grid : j103013
 Ave. Gamma : 13,417.15
 No. of Points : 20
 North Limits : >1541466.67,<1541500
 East Limits : >495066.67,<495100

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J104

Zone: Outer

The Grid with the Max. Gamma Grid : j104218
 Ave. Gamma : 13,071.94
 No. of Points : 16
 North Limits : >1541000,<1541033.33
 East Limits : >495533.33,<495566.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 8, 1995

Grid: J12

Highest Average 33' Grid for each 500' Grid:

*****J121 13,098.93**

*****Highest average 33" grid within the 1000" grid**

Coordinates for: J121036

North limits: >1541933.33,<1541966.67

East limits: >497266.67,<497300.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID J121

Zone: Outer

The Grid with the Max. Gamma Grid : J121036
 Ave. Gamma : 13,098.93
 No. of Points : 15
 North Limits : >1541933.33,<1541966.67
 East Limits : >497266.67,<497300

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 11, 1995

Grid: **K03**

Highest Average 33' Grid for each 500' Grid:

***K032	17,712.84
K034	16,832.31

***Highest average 33" grid within the 1000" grid

Coordinates for: K032193

North limits: >1540666.67,<1540700.00

East limits: >488866.67,<488900.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K032

Zone: Outer

The Grid with the Max. Gamma Grid : K032193
 Ave. Gamma : 17,712.84
 No. of Points : 31
 North Limits : >1540666.67, <1540700
 East Limits : >488866.67, <488900

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID K034

Zone: Outer

The Grid with the Max. Gamma Grid : K034145
 Ave. Gamma : 16,832.31
 No. of Points : 13
 North Limits : >1540233.33,<1540266.67
 East Limits : >488833.33,<488866.67

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 12, 1995

Grid: **K04**

Highest Average 33' Grid for each 500' Grid:

K041 15,581.27
***K042 19,789.67
K043 15,861.07
K044 10,814.35

***Highest average 33" grid within the 1000" grid

Coordinates for: K042055

North limits: >1540933.33,<1540966.67

East limits: >489933.33,<489966.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K041

Zone: Outer

The Grid with the Max. Gamma Grid : K041181
 Ave. Gamma : 15,581.27
 No. of Points : 15
 North Limits : >1540666.67,<1540700
 East Limits : >489200,<489233.33

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K042

Zone: Outer

The Grid with the Max. Gamma Grid : K042055
 Ave. Gamma : 19,789.67
 No. of Points : 12
 North Limits : >1540933.33, <1540966.67
 East Limits : >489933.33, <489966.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID K043

Zone: Outer

The Grid with the Max. Gamma Grid : K043064
 Ave. Gamma : 15,861.07
 No. of Points : 14
 North Limits : >1540333.33,<1540366.67
 East Limits : >489000,<489033.33

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K044

Zone: Outer

The Grid with the Max. Gamma Grid : K044022
 Ave. Gamma : 10,814.35
 No. of Points : 17
 North Limits : >1540466.67,<1540500
 East Limits : >489633.33,<489666.67

Min(No. of Points) : 14

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 12, 1995

Grid: **K05**

Highest Average 33' Grid for each 500' Grid:

***K051	20,387.00
K052	17,806.06

***Highest average 33" grid within the 1000" grid

Coordinates for: K051179

North limits: >1540600.00,<1540633.33

East limits: >490166.67,<490200.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K051

Zone: Outer

The Grid with the Max. Gamma Grid : K051179
 Ave. Gamma : 20,387.00
 No. of Points : 11
 North Limits : >1540600,<1540633.33
 East Limits : >490166.67,<490200

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K052

Zone: Outer

The Grid with the Max. Gamma Grid : K052063
 Ave. Gamma : 17,806.06
 No. of Points : 17
 North Limits : >1540866.67,<1540900
 East Limits : >490566.67,<490600

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 15, 1995

Grid: **K06 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

***K061 18,007.95

K062 16,969.69

K063 17,874.38

K064 16,043.72

***Highest average 33" grid within the 1000" grid

Coordinates for: K061142

North limits: >1540766.67,<1540800.00

East limits: >491333.33,<491366.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K061

Zone: Outer

The Grid with the Max. Gamma Grid : K061142
 Ave. Gamma : 18,007.95
 No. of Points : 19
 North Limits : >1540766.67,<1540800
 East Limits : >491333.33,<491366.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID K062

Zone: Outer

The Grid with the Max. Gamma Grid : K062225
 Ave. Gamma : 16,969.69
 No. of Points : 16
 North Limits : >1540533.33,<1540566.67
 East Limits : >491633.33,<491666.67

Min(No. of Points) : 13

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K063

Zone: Outer

The Grid with the Max. Gamma Grid : K063196
 Ave. Gamma : 17,874.38
 No. of Points : 15
 North Limits : >1540133.33,<1540166.67
 East Limits : >491366.67,<491400

Min(No. of Points) : 6

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K064

Zone: Outer

The Grid with the Max. Gamma Grid : K064177
 Ave. Gamma : 16,043.72
 No. of Points : 18
 North Limits : >1540100,<1540133.33
 East Limits : >491600,<491633.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 15, 1995

Grid: K06 - INNER ZONE

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
K061			
K061095	16,258.83	>1540833.33,<1540866.67	>491333.33,<491366.67
K062			
K062259	12,830.40	>1540500.00,<1540533.33	>491966.67,<492000.00
K064			
K064052	12,882.44	>1540466.67,<1540500.00	>491933.33,<491966.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K061

Zone: Inner

The Grid with the Max. Gamma Grid : K061095
 Ave. Gamma : 16,258.83
 No. of Points : 17
 North Limits : >1540833.33,<1540866.67
 East Limits : >491333.33,<491366.67

Min(No. of Points) : 13

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID K062

Zone: Inner

The Grid with the Max. Gamma Grid : K062259
 Ave. Gamma : 12,830.40
 No. of Points : 79
 North Limits : >1540500, <1540533.33
 East Limits : >491966.67, <492000

Min(No. of Points) : 79

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K064

Zone: Inner

The Grid with the Max. Gamma

Grid : K064052
 Ave. Gamma : 12,882.44
 No. of Points : 51
 North Limits : >1540466.67,<1540500
 East Limits : >491933.33,<491966.67

Min(No. of Points) : 32

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 30, 1995

Grid: **K07 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

K073	13,934.36
***K074	15,601.27

***Highest average 33" grid within the 1000" grid

Coordinates for: K074174
North limits: >1540133.33,<1540166.67
East limits: >492600.00,<492633.33

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID K073

Zone: Outer

The Grid with the Max. Gamma Grid : K073084
 Ave. Gamma : 13,934.36
 No. of Points : 11
 North Limits : >1540333.33, <1540366.67
 East Limits : >492200, <492233.33

Min(No. of Points) : 5

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K074

Zone: Outer

The Grid with the Max. Gamma Grid : K074174
 Ave. Gamma : 15,601.27
 No. of Points : 15
 North Limits : >1540133.33,<1540166.67
 East Limits : >492600,<492633.33

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 30, 1995

Grid: **K07 - INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
K071 K071155	14,997.26	>1540733.33,<1540766.67	>492433.33,<492466.67
K072 K072035	20,101.97	>1540933.33,<1540966.67	>492733.33,<492766.67
K073 K073026	15,171.27	>1540433.33,<1540466.67	>492166.67,<492200.00
K074 K074042	15,065.18	>1540466.67,<1540500.00	>492833.33,<492866.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K071

Zone: Inner

The Grid with the Max. Gamma Grid : K071155
 Ave. Gamma : 14,997.26
 No. of Points : 30
 North Limits : >1540733.33,<1540766.67
 East Limits : >492433.33,<492466.67

Min(No. of Points) : 4

Number of grids with fewer than 7 data points: Count(No. of Points) : 2

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
K071253	10,126.75	4	>1540566.67,<1540600	>492466.67,<492500
K071259	9,910.00	6	>1540500,<1540533.33	>492466.67,<492500

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K072

Zone: Inner

The Grid with the Max. Gamma Grid : K072035
 Ave. Gamma : 20,101.97
 No. of Points : 33
 North Limits : >1540933.33,<1540966.67
 East Limits : >492733.33,<492766.67

Min(No. of Points) : 6

Number of grids with fewer than 7 data points: Count(No. of Points) : 1

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
K072167	12,002.00	6	>1540600,<1540633.33	>492500,<492533.33

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K073

Zone: Inner

The Grid with the Max. Gamma Grid : K073026
 Ave. Gamma : 15,171.27
 No. of Points : 15
 North Limits : >1540433.33, <1540466.67
 East Limits : >492166.67, <492200

Min(No. of Points) : 6

Number of grids with fewer than 7 data points: Count(No. of Points) : 1

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
K073055	9,936.17	6	>1540433.33, <1540466.67	>492433.33, <492466.67

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K074

Zone: Inner

The Grid with the Max. Gamma

Grid : K074042
 Ave. Gamma : 15,065.18
 No. of Points : 17
 North Limits : >1540466.67, <1540500
 East Limits : >492833.33, <492866.67

Min(No. of Points) : 7

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 30, 1995

Grid: **K08 - OUTER ZONE**

Highest Average 33' Grid for each 500' Grid:

K081	16,305.43
K082	16,690.50
***K083	17,133.88
K084	14,305.54

***Highest average 33" grid within the 1000" grid

Coordinates for: K083219

North limits: >1540000.00,<1540033.33

East limits: >493066.67,<493100.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K081

Zone: Outer

The Grid with the Max. Gamma Grid : K081206
 Ave. Gamma : 16,305.43
 No. of Points : 13
 North Limits : >1540633.33,<1540666.67
 East Limits : >493466.67,<493500

Min(No. of Points) : 13

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID K082

Zone: Outer

The Grid with the Max. Gamma Grid : K082076
 Ave. Gamma : 16,690.50
 No. of Points : 24
 North Limits : >1540833.33, <1540866.67
 East Limits : >493666.67, <493700

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K083

Zone: Outer

The Grid with the Max. Gamma Grid : K083219
 Ave. Gamma : 17,133.88
 No. of Points : 17
 North Limits : >1540000,<1540033.33
 East Limits : >493066.67,<493100

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K084

Zone: Outer

The Grid with the Max. Gamma Grid : K084012
 Ave. Gamma : 14,305.54
 No. of Points : 13
 North Limits : >1540466.67,<1540500
 East Limits : >493533.33,<493566.67

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 30, 1995

Grid: **K08- INNER ZONE**

Highest Average 33' Grid for each 500' Grid:

<u>Grid</u>	<u>Gamma</u>	<u>North Limits</u>	<u>East Limits</u>
K081			
K081061	16,039.69	>1540866.67,<1540900.00	>493000.00,<493033.33
K083			
K083013	13,161.17	>1540466.67,<1540500.00	>493066.67,<493100.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K081

Zone: Inner

The Grid with the Max. Gamma Grid : K081061
 Ave. Gamma : 16,039.69
 No. of Points : 13
 North Limits : >1540866.67,<1540900
 East Limits : >493000,<493033.33

Min(No. of Points) : 6

Number of grids with fewer than 7 data points: Count(No. of Points) : 1

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits
K081028	14,185.00	6	>1540900,<1540933.33	>493133.33,<493166.67

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K083

Zone: Inner

The Grid with the Max. Gamma Grid : K083013
 Ave. Gamma : 13,161.17
 No. of Points : 12
 North Limits : >1540466.67,<1540500
 East Limits : >493066.67,<493100

Min(No. of Points) : 11

Number of grids with fewer than 7 data points: Count(No. of Points) : 0

List of grids with fewer than 7 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 28,000: Count(Grid) : 0

List of grids with Gamma greater than 28,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 9, 1995

Grid: **K09**

Highest Average 33' Grid for each 500' Grid:

***K091 14,953.15

K092 13,474.31

K093 14,429.82

***Highest average 33" grid within the 1000" grid

Coordinates for: K091089

North limits: >1540800.00,<1540833.33

East limits: >494266.67,<494300.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K091

Zone: Outer

The Grid with the Max. Gamma Grid : K091089
 Ave. Gamma : 14,953.15
 No. of Points : 13
 North Limits : >1540800,<1540833.33
 East Limits : >494266.67,<494300

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K092

Zone: Outer

The Grid with the Max. Gamma Grid : K092015
 Ave. Gamma : 13,474.31
 No. of Points : 16
 North Limits : >1540933.33,<1540966.67
 East Limits : >494533.33,<494566.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID K093

Zone: Outer

The Grid with the Max. Gamma Grid : K093092
 Ave. Gamma : 14,429.82
 No. of Points : 17
 North Limits : >1540366.67,<1540400
 East Limits : >494333.33,<494366.67

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 9, 1995

Grid: **K10**

Highest Average 33' Grid for each 500' Grid:

K101	13,232.20
***K102	13,832.89

***Highest average 33" grid within the 1000" grid

Coordinates for: K102014

North limits: >1540933.33,<1540966.67

East limits: >495500.00,<495533.33

Homestake Mining Company - Grants, New Mexico Project 7/20/95 GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID K101

Zone: Outer

The Grid with the Max. Gamma Grid : K101037
 Ave. Gamma : 13,232.20
 No. of Points : 15
 North Limits : >1540900, <1540933.33
 East Limits : >495200, <495233.33

Min(No. of Points) : 11

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID K102

Zone: Outer

The Grid with the Max. Gamma Grid : K102014
 Ave. Gamma : 13,832.89
 No. of Points : 18
 North Limits : >1540933.33, <1540966.67
 East Limits : >495500, <495533.33

Min(No. of Points) : 14

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 11, 1995

Grid: L03

Highest Average 33' Grid for each 500' Grid:

*****L032 15,671.11**

*****Highest average 33" grid within the 1000" grid**

Coordinates for: L032043

North limits: >1539966.67,<1540000.00

East limits: >488866.67,<488900.00

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID L032

Zone: Outer

The Grid with the Max. Gamma Grid : L032043
 Ave. Gamma : 15,671.11
 No. of Points : 18
 North Limits : >1539966.67,<1540000
 East Limits : >488866.67,<488900

Min(No. of Points) : 12

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 12, 1995

Grid: L04

Highest Average 33' Grid for each 500' Grid:

***L041 15,188.61

***Highest average 33" grid within the 1000" grid

Coordinates for: L041117

North limits: >1539700.00,<1539733.33

East limits: >489000.00,<489033.33

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID L041

Zone: Outer

The Grid with the Max. Gamma Grid : L041117
 Ave. Gamma : 15,188.61
 No. of Points : 17
 North Limits : >1539700,<1539733.33
 East Limits : >489000,<489033.33

Min(No. of Points) : 16

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 12, 1995

Grid: L06

Highest Average 33' Grid for each 500' Grid:

***L061	16,182.18
L062	14,230.73

***Highest average 33" grid within the 1000" grid

Coordinates for: L061048

North limits: >1539900.00,<1539933.33

East limits: >491333.33,<491366.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID L061

Zone: Outer

The Grid with the Max. Gamma Grid : L061048
 Ave. Gamma : 16,182.18
 No. of Points : 11
 North Limits : >1539900,<1539933.33
 East Limits : >491333.33,<491366.67

Min(No. of Points) : 10

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID L062

Zone: Outer

The Grid with the Max. Gamma Grid : L062064
 Ave. Gamma : 14,230.73
 No. of Points : 22
 North Limits : >1539833.33, <1539866.67
 East Limits : >491500, <491533.33

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 26, 1995

Grid: L07

Highest Average 33' Grid for each 500' Grid:

***L071	13,413.47
L072	13,074.79
L073	11,100.08
L074	10,197.15

***Highest average 33" grid within the 1000" grid

Coordinates for: L071222
North limits: >1539566.67,<1539600.00
East limits: >492133.33,<492166.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID L071

Zone: Outer

The Grid with the Max. Gamma

Grid : L071222
 Ave. Gamma : 13,413.47
 No. of Points : 17
 North Limits : >1539566.67,<1539600
 East Limits : >492133.33,<492166.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID L072

Zone: Outer

The Grid with the Max. Gamma Grid : L072165
 Ave. Gamma : 13,074.79
 No. of Points : 14
 North Limits : >1539633.33,<1539666.67
 East Limits : >492533.33,<492566.67

Min(No. of Points) : 7

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID L073

Zone: Outer

The Grid with the Max. Gamma Grid : L073056
 Ave. Gamma : 11,100.08
 No. of Points : 12
 North Limits : >1539433.33,<1539466.67
 East Limits : >492466.67,<492500

Min(No. of Points) : 12

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID L074

Zone: Outer

The Grid with the Max. Gamma Grid : L074011
 Ave. Gamma : 10,197.15
 No. of Points : 13
 North Limits : >1539466.67, <1539500
 East Limits : >492500, <492533.33

Min(No. of Points) : 13

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico

GPS Radiological Surveys

By: Environmental Restoration Group, Inc.

Anderson Engineering Company, Inc.

Date: May 26, 1995

Grid: L08

Highest Average 33' Grid for each 500' Grid:

***L081	18,054.07
L082	13,010.79

***Highest average 33" grid within the 1000" grid

Coordinates for: L081015

North limits: >1539933.33,<1539966.67

East limits: >493033.33,<493066.67

Homestake Mining Company - Grants, New Mexico Project 7/20/95

GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
ANDERSON ENGINEERING COMPANY, INC.

GRID L081

Zone: Outer

The Grid with the Max. Gamma Grid : L081015
 Ave. Gamma : 18,054.07
 No. of Points : 14
 North Limits : >1539933.33,<1539966.67
 East Limits : >493033.33,<493066.67

Min(No. of Points) : 8

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Homestake Mining Company - Grants, New Mexico Project 7/20/95
GPS Radiological Surveys

By: ENVIRONMENTAL RESTORATION GROUP, INC.
 ANDERSON ENGINEERING COMPANY, INC.

GRID L082

Zone: Outer

The Grid with the Max. Gamma

Grid : L082012
 Ave. Gamma : 13,010.79
 No. of Points : 14
 North Limits : >1539966.67, <1540000
 East Limits : >493533.33, <493566.67

Min(No. of Points) : 9

Number of grids with fewer than 5 data points: Count(Grid) : 0

List of grids with fewer than 5 data points:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits

Number of grids with Gamma greater than 21,000: Count(Grid) : 0

List of grids with Gamma greater than 21,000:

Grid	Ave. Gamma	No. of Points	North Limits	East Limits