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HYDROGEOCHEMICAL AND STREAM SEDIMENT RECONNAISSANCE BASIC DATA REPORT FOR KINGMAN NTMS QUADRANGLE, ARIZONA, CALIFORNIA, AND NEVADA

MASTER

B. J. Qualheim

July 1978

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LAWRENCE LIVERMORE LABORATORY

December 21, 1978

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FROM: Technical Information Department, L-255

ERPATA

Please make the following corrections to the Conductivity Maps in the back of the reports, UCRL-52549, "Hydrogeochemical and Stream Sediment Reconnaissance Basic Data Report for Kingman NTMS Quadrangle, Arizona, California, and Nevada" and UCRL-52550, "Hydrogeochemical and Stream Sediment Reconnaissance Basic Data Report for Las Vegas NTMS Quadrangle, Arizona, California, and Nevada".

In the center and to the right of the Conductivity Maps of these two reports, (Overlay 1C) it reads as follows:

CONDUCTIVITY ($\mu\text{MHO}/\text{SQ. CM}$)

Delete the SQ. in some manner so it will read:

CONDUCTIVITY ($\mu\text{MHO}/\text{CM}$)

Jeanne D. Attebery
Technical Information Department

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UCRL-52549

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SEDIMENT RECONNAISSANCE BASIC
DATA REPORT FOR KINGMAN NTMS
QUADRANGLE, ARIZONA, CALIFORNIA,
AND NEVADA**

B. J. Qualheim

MS. date: July 1978

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Overlay 2B.	Total Uranium Concentrations, Sediment Samples
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HYDROGEOCHEMICAL AND STREAM SEDIMENT RECONNAISSANCE BASIC DATA REPORT FOR KINGMAN NTMS QUADRANGLE, ARIZONA, CALIFORNIA, AND NEVADA

ABSTRACT

This report presents the results of the geochemical reconnaissance sampling in the Kingman 1 x 2 quadrangle of the National Topographical Map Series (NTMS). Wet and dry sediment samples were collected throughout the 18,770-km arid to semiarid area and water samples at available streams, springs, and wells. Neutron activation analysis of uranium and trace elements and other measurements made in the field and laboratory are presented in tabular hardcopy and microfiche format. The report includes five full-size overlays for use with the Kingman NTMS 1:250,000 quadrangle. Water sampling sites, water sample uranium concentrations, water-sample conductivity, sediment sampling sites, and sediment-sample total uranium and thorium concentrations are shown on the separate overlays. General geological and structural descriptions of the area are included and known uranium occurrences on this quadrangle are delineated.

Results of the reconnaissance are briefly discussed and related to rock types in the final section of the report. The results are suggestive of uranium mineralization in only two areas: the Cerbat Mountains and near some of the western intrusives.

INTRODUCTION

The National Uranium Resource Evaluation (NURE) Program was established to evaluate domestic uranium resources in the continental U.S. and identify areas favorable for uranium exploration. The Grand Junction Office (GJO) of the Department of Energy (DOE) is responsible for administering and coordinating NURE program efforts. Lawrence Livermore Laboratory (LLL) is conducting a hydrogeochemical and stream-sediment reconnaissance (HSSR) of 1.8 million km² in 10 western states. Other DOE laboratories are responsible for similar reconnaissance in the rest of the continental U.S. including Alaska (Fig. 1).

Before starting a major field reconnaissance coverage, LLL conducts one or more orientation studies in the geological province, providing a rational

Fig. 1 Areas of responsibility for the NURE Hydrogeochemical Reconnaissance Program.

sediment and water sampling program sensitive to variable geological and climatic conditions that exist in the area.^{1,2} In this way the sediment and water samples reflect, as nearly as possible, the metallogenic nature of the region with particular emphasis on uranium mineralization. A description of sample collection and processing methods is available.

The samples were analyzed for uranium by delayed neutron counting, and in some cases, by instrumental neutron activation analysis (INAA). Instrumental neutron activation analysis was used to measure trace and major element content of sediment samples. The neutron activation analysis and delayed neutron counting are performed using an automated transport and detection system described by Smith.³ Data reduction for neutron activation analytical results utilizes the GAMANAL code described by Gunnink and Niday⁴ to interpret the gamma spectra. The NURAB code described by Heft and Martin⁵ and McMillan and Carver⁶ produces the elemental concentration values.

An automated optical emission spectrometer equipped with an argon plasma source provided trace and major element analyses of water samples. A modified spectrophotometric analyzer was used to obtain measurement of chloride and sulphate concentrations of water samples.

LOCATION AND GENERAL TOPOGRAPHY

The Kingman National Topographic Map Series (NTMS 1:250,000) Quadrangle, located at the southern tip of Nevada (Fig. 2), covers an area of approximately $18,770 \text{ km}^2$ ($7,250 \text{ mi}^2$).

The topographic features of the northwestern quarter of the area are characteristic of the Basin and Range Physiographic Province, with north-south trending mountain ranges separated by enclosed intermontane basins. The southwestern quarter, however, has several isolated irregular mountains and

Fig. 2 Location map of Kingman NTMS quadrangle (1:250,000)

ridges more characteristic of the Mojave Desert Province. In the eastern half of the study area, the topographic features differ from the northwestern parts of the Basin and Range Province in that the mountain ranges have external drainage to the sea via the Colorado River and its tributaries. Ground-surface elevations range from approximately 2400 m (8000 ft) in the Spring Mountains to less than 200 m (700 ft) along the Colorado River.

CLIMATE

The climate of the area is semiarid with an average rainfall of less than 25 cm (10 in.). The area west of the Colorado River was sampled during the months of February, March, and April, 1977 and the area east of the Colorado River was sampled in June and July 1977. During these months there was near-drought weather conditions. The average rainfall was 50-80% of normal, and consequently, many springs and streams that normally flow during this period were dry.

Temperatures in the summer range from 40-43°C during the day and frequently as low as -4°C at night. In the winter, freezing temperatures are uncommon below 600 m (2000 ft), with below freezing temperatures occurring in the higher elevations. Strong winds are common, especially in the lower elevations with periods of extensive wind sediment transport. These wind conditions, along with the near-drought conditions could significantly increase the chances of windblown contamination in the lowlands.

HYDROLOGY

The major source of water in the study area is the Colorado River and its tributaries. Most of the water from the Colorado River is not available to Nevada for domestic purposes, although it is used for agriculture. Davis Dam has formed Lake Mohave, which is used for recreation and irrigation. Wells supply the majority of domestic water.

The springs in the study area are most common in the higher mountains, which are underlain by coarse granular and faulted, stratified rocks. These springs are found mainly in the western half of the quadrangle, such as the Kingston Range, Spring Mountains, Ivanpah Mountains, and the New York Mountains. Areas of metamorphic rocks, such as crystalline gneisses, act as poor aquifers and contain fewer springs. These areas that contain sparse

springs include McCullough Range and several other smaller ranges. The springs at the base of the mountain ranges are commonly small seeps flowing only during the wet season; some at higher elevations flow all year. Most of the water is used for agriculture and livestock.

Wells in the area are found in the alluvial valleys and are usually shallow, indicating shallow ground water tables. In places where there are deeper wells, however, aquifers contain water under sufficient pressure to cause it to rise near the surface. The aquifers are recharged by precipitation in the higher elevations. Additional information on ground water in the area can be found in the following publications: Hewett,⁷ Hewett,⁸ Winograd and Thordarson,⁹ and Naff, et al.¹⁰

GEOLOGY OF THE KINGMAN QUADRANGLE

Structural History

The geologic features of the area indicate periods of extensive deformation during at least four periods of geologic history. Disturbances occurred after deposition of the lower Precambrian rocks, in the later Precambrian, during the Cretaceous Laramide Orogeny, and in the Late Tertiary. The disturbances were followed by intrusion of igneous rocks, extrusion of volcanics, and extensive erosion of pre-existing rocks. The major orogenic activity occurred during the Laramide Orogeny, which began in the Cretaceous and continued into the Tertiary. The sequence of structural activity during this period is summarized by Longwell, et al.¹¹:

- (1) Initiation of folds and large-scale thrust faults, accompanied by normal, steep reverse, and strike-slip faulting. Local accumulation of coarse clastic sediments derived from thrust plates and folds.
- (2) Intrusion of plutonic rocks; initiation of volcanic activity.
- (3) Dolomitization and other alterations of limestones.
- (4) Large-scale normal faulting and volcanic activity.
- (5) Repeated sedimentation within structural basins.

Stratigraphy

The Precambrian rocks of the Kingman quadrangle consist of three age groups; the oldest group is made up of sedimentary and metasedimentary rocks

and consists of a wide range of alterations, mainly to schists and marbles; the next younger group consists of intrusive coarse-grained granites and syenites; and the youngest group consists of intrusive rocks varying in texture from aplite to pegmatites. These rocks crop out in scattered localities throughout the study area; the largest areas are in the McCullough Range, Opal Mountains, Clark Mountains, Newberry Range, and the Cerbat Mountains east of the Colorado River. The Clark Mountains contain the rare-earth-rich Mountain Pass carbonatite sequence that is thought to be Precambrian in age. Anomalous thorium mineralization is reported in the Mountain Pass region.¹² Uranium mineralization is found associated with Precambrian quartz monzonites and along contact zones with older sedimentary rocks.

In the Cerbat Mountains of Arizona, the Precambrian complex consists of gneisses and schists intruded by younger granite porphyries and lamprophyric dikes. Uranium mineralization has been reported along veins associated with intrusion of these dikes.

The Paleozoic rocks crop out mainly in the western half of the study area. These rocks consist of 70 to 80% limestone and dolomite with minor amounts of sandstone and shale. The formations that are represented, listed from oldest to youngest, include: the Cambrian to Devonian Goodspring Dolomite, the Silurian Sultan Limestone, the Mississippian Monte Cristo Limestone, and the Mississippian to Permian Bird Spring Formation. These formations crop out in the Goodsprings mining district (Fig. 3) and reportedly contain secondary uranium deposits associated with base metal mineralization.

The Mesozoic rocks in the study area are largely marine sandstones and shales similar to some of the Colorado Plateau rocks that crop out to the northeast. These rocks are exposed in the western half of the study area along the southern extent of the Spring Mountains. In the late Cretaceous to Tertiary, the Laramide orogeny produced widespread folding and faulting of the pre-existing rocks followed by intrusions of large bodies of granitic rocks. These granitic intrusions and the widespread faulting may be responsible for many of the uraniferous and metalliferous deposits in the Goodsprings district.

Tertiary and Quaternary sedimentary rocks make up approximately 40% of the study area and consist of fluvial and lacustrine sediments. Secondary uranium mineralization has been reported in caliche and calcrete cemented Quaternary gravels (Table 1).

LEGEND

	Pre-Tertiary Rocks		Tertiary Quaternary Rocks
	sedimentary volcanic & metamorphic (low-rank) rocks	plutonic metamorphic (high-rank) rocks	sedimentary rocks
Uranium with base, precious & ferrous metals	●	●	
Uranium, Th & R.E.E. in pegmatites & small plutons		■	
Uranium with other mineralization minor or absent	◆		◆
Anomalous radioactivity	▲	▲	

Scale in miles
10 0 10 20 30 40

Scale in Kilometers
10 0 10 30 50

○ □ △ Minor prospect or occurrences

● Other uranium and/or radioactive occurrences or prospects reported

Fig. 3 Location of uranium occurrences - Kingman NTMS sheet

Table 1. Reported uranium occurrences in the Kingman Quadrangle.^{17,18}

District or claim	Location	Type of deposit
Superfluous No. 1	s.3 T.32S., R.64E.	Anomalous radioactivity near contact between Precambrian metasedimentary rocks and a granitic intrusive.
Unnamed	s.24 T.13N., R.10E.	Precambrian metamorphic
Paymaster	s.8 T.13N., R.10W.	Precambrian metamorphic
Jim Kane	s.8 T.24N., R.17W.	Anomalous radioactivity associated with dike-cutting granitic rocks.
Rainbow Group	s.32 T.14N., R.10E.	Precambrian granites
Lucky Group	s.17 T.15N., R.10E.	Precambrian metamorphics
Unnamed	s.21 T.24N., R.17W.	Precambrian metamorphics
Unnamed	s.17 T.24N., R.17W.	Precambrian metamorphics
Prospector 1-20	s.3 T.29S., R.61E.	Radioactivity associated with dike-cutting granitic rocks; 0.0874% U ₃ O ₈ .
Location 6, 7 Nippeno	s.21, 22, 27 T.28S., R.61E.	Anomalous radioactivity associated with Precambrian quartz monzonite.
Location 16	s.17 T.28S., R.61E.	Anomalous uranium and thorium in Precambrian mylonitic augen gneiss.
Surprise, Thor	s.29 T.28S., R.61E.	Anomalous radioactivity where a Tertiary or Cretaceous quartz monzonite intrudes Precambrian rocks.
Lucy Gray	s.32 T.27S., R.60E.	Anomalous radioactivity associated with an elliptical breccia pipe in Precambrian granite gneiss. 0.03-0.25% U ₃ O ₈
H&E	s.4 T.27S., R.64E.	Anomalous radioactivity in Precambrian rocks.

Table 1. (continued)

District or claim	Location	Type of deposit
Mary Helen and Rose Alice	s.14 T.26S., R.63T.	Anomalous radioactivity in band of greenstone gneiss in Precambrian rocks.
Yellow Jacket 1-15	s.7 T.26S., R.60E.	Sparsely-disseminated autunite in a shear-zone cutting Precambrian rocks; 0.07-0.125% U_3O_8 .
Tam O'Shanter	s.9 T.26S., R.58E.	Anomalous radioactivity in brecciated zone associated with copper oxide and limonite near base of Mississippian Bird Spring Formation.
Ingomarod-Milford No. 2	s.9 T.26S., R.58E.	Anomalous radioactivity associated with hydrozincite and limonite found along fractures in dolomitized portions of the Mississippian Yellow-pine Limestone.
Big Horn claim	s.36 T.25S., R.64E.	Anomalous radioactivity associated with fractures in Precambrian metasedimentary rocks; 0.07-0.024% U_3O_8 reported.
M&E No. 1 and 12	s.35 T.25S., R.63E.	Anomalous radioactivity in Precambrian gneiss and schist.
Lincoln, Little Betty	s.13, 24 T.25S., R.58E.	Slightly anomalous radioactivity associated with limonite and copper oxide below top of Goodsprings Dolomite.
Over Prospect	s.1 T.25S., R.58E.	Anomalous radioactivity associated with copper minerals.
Bullion mine	s.23 T.25S., R.58E.	Anomalous radioactivity associated with hydrozincite in a tabular breccia zone of the Anchor Limestone.
Eureka mine	s.27 T.25S., R.58E.	Slightly anomalous radioactivity associated with limonite and copper oxides in a dolomitized breccia of the Yellowpine Limestone.
Volcano	s.4 T.25S., R.58E.,	Anomalous radioactivity associated with hydrozincite.

Table 1. (continued)

District or claim	Location	Type of deposit
Hoosier	s.20 T.25S., R.58E.	Slightly anomalous radioactivity associated with hydorzincite and cerussite, in a crushed zone of dolomite near base of Bird Spring Formation.
Billy Wilson No. 1, Sultan	s.20 T.25S., R.58E.	Slightly anomalous radioactivity associated with limonite and hydrozincite in a brecciated dolomite along the Sultan thrust fault.
Singer, Tiffin	s.18 T.25S., R.58E.	Radioactivity in drifts and shafts associated with base metals.
Spelter	S.11 T.25S., R.57E.	Radioactivity associated with hydrozincite.
Jean Sloan	s.6 T.25S., R.60E.	Carnotite occurs with caliche as coatings along joints in the Erie Tuff.
Jean Sloan	s.36 T.25S., R.60E.	Small amounts of carnotite in Bird Spring Formation.
Jean Sloan No. 14	s.11 T.24S., R.60E.	Small amount of tyuyamunite occurs as patches in caliche cemented Quaternary gravel. Uranium content reaches 0.03% U ₃ O ₈ .
Little Snake Purple Valentine Jean Sloan No. 15	s.16 T.24S., R.60E.	Very small amounts of carnotite in gravels.
Jean Sloan No. 20	s.8 T.24S., R.60E.	Traces of carnotite occurring along joints and slickensided minor faults in the Supai Formation.
Willabelle Nunn, Jean Sloan No. 15	s.29 T.24S., R.60E.	Carnotite and MnO ₂ occur along bedding planes in the Permian Supai Formation.
Sieber	s.24 T.4S., R.59E.	Small amount of carnotite occurs with MnO ₂ , gypsum, and calcite as specks and thin films along fractures in the Permian Supai Formation.

Table 1. (continued)

District or claim	Location	Type of deposit
Humdinger Jean Sloan 22-26	s.25 T.24S., R.59E.	Small amount of carnotite occurs in sandstone and limestone of the Permian Toroweap Formation
Jean Sloan No. 27	s.14 T.24S., R.58E.	Small amount carnotite in fractures in sandstone of Toroweap Formation.
Hermosa, Surprise	s.32 T.24S., R.58E.	Slightly anomalous radioactivity occurs associated with limonite, cerussite, wulfenite, and galena in a breccia zone along bedding planes of the Bird Spring Formation.
Iron Gold Mine	s.21 T.24S., R.58E.	Water from 100-ft mine shaft shows anomalous uranium occurring in shales, limestones, and tuffs of the Triassic Moenkopi Formation that is cut by a granite porphyry dike.
Copper Glance mine	s.20 T.24S., R.58E.	Anomalous radioactivity along vertical shear zone in dolomite associated with copper oxides.
Alice, Yellow Pine Alice Fraction	s.20 T.24S., R.58E.	Slightly anomalous radioactivity associated with limonite in the Bird Spring Formation.
Royal Blue	s.32 T.24S., R.58E.	Anomalous radioactivity associated with limonite and copper oxides.
Fitzhugh Lee	s.36 T.24S., R.58E.	Slightly anomalous radioactivity associated with limonite, malachite, chrysocolla in shear zone of the Monte Cristo Limestone.
Keystone mine	s.30 T.24S., R.58E.	Slightly radioactive limonite
Unnamed	s.1, 12 T.24S., R.57E.	Slight radioactivity associated with limonite lenses along a minor fault zone in the Monte Cristo Limestone.
Highline, Oru Amigo	s.23, 26 T.24S., R.57E.	Anomalous radioactivity associated with limonite and copper minerals in shear zone in Sultan Limestone.

Table 1. (continued)

District or claim	Location	Type of deposit
Rosetta 1 and 2, Shenandoah, Ironside, Smithsonite, Copperside	s.25, 26 T.24S., R.57E.	Anomalous radioactivity associated with limonite and copper oxide minerals in the Sultan Limestone.
Boss	s.34 T.24S., R.57E.	Anomalous radioactivity in limonite lenses along a minor fault zone in the Monte Cristo Limestone.
Mohawk No. 7	s.4 T.24S., R.57E.	Anomalous radioactivity associated with shear zone in Bullion Limestone.
Platina	s.34 T.24S., R.57E.	Radioactivity associated with limestone and chrysocolla in the Monte Cristo Limestone.
Jean Sloan 9 to 13	s.2 T.24S., R.60E.	Carnotite occurs as specks and coatings on joints in the Erie Tuff; 0.008% U_3O_8 reported.
Jean Sloan 6,7	s.25 T.23S., R.60E.	Carnotite found along joints and fractures in the Bird Spring Formation and Erie Tuff Formation, selected samples as high as 0.04-0.70% U_3O_8 .
Jean Sloan No. 4	s.13 T.23S., R.60E.	Carnotite sparsely disseminated in caliche-cemented Quaternary gravel.
Jean Sloan 2,3	s.1, 12 T.23S., R.60E.	Small amount of carnotite found along joints in the Bird Spring Formation.
Jean Sloan No. 1	s.2 T.23S., R.60E.	Same as above.
Sloan Carnotite	s.27 T.24S., R.60E.	No information available.
Paradise	s.35 T.23S., R.57E.	Anomalous radioactivity associated with hydrozincite in the Monte Cristo Limestone.
Goodsprings Carnotite	s.14 T.23S., R.58E.	No information available.

Table 1. (continued)

District or claim	Location	Type of deposit
Daniel Boone Green Monster	s.1 T.24S., R.56E.	The Green Monster Mine is the best uranium occurrence in the quadrangle. Uranium is associated with limonite, chrysocolla, and hydrozincite. Ore is localized along brecciated fault intersections. Primary uranium could be present at depth. Selective uranium samples contain up to 10.5% U_3O_8 .
Desert Valley mine	s.2 T.24S., R.56E.	Slightly anomalous radioactivity associated with limonite, galena, and oxides of copper, zinc, and lead minerals. Minerals occur along a shear zone in the dolomitized Bullion Limestone.
Potosi	s.12 T.23S., R.57E.	Anomalous radioactivity associated with dark brown sphalerite and white calcite in a breccia of gray dolomite and carbonaceous shale. Reported uranium contents reach 0.013% U_3O_8 .

The Cretaceous to later Tertiary plutonic rocks crop out along the Colorado River and in areas in the southern half of the study area. The composition of these intrusive bodies ranges from medium-grained to coarse-grained granite and quartz monzonite to diorite.

The volcanic rocks have a wide distribution in the area. In the Eldorado Mountains, several thousand meters of volcanic rocks overlie the Precambrian basement. These rocks consist of flow breccia of mafic to intermediate composition, minor ash flow tuff, bedded tuff, and rhyolite.¹³ In the western half of the area, the volcanic rocks consist of andesite, rhyolite, minor pyroclastics, and Quaternary basalt. Anomalous uranium occurrences have been reported in the Jean-Sloan area associated with the Erie Tuff.¹⁴

Detailed geologic map coverage of the Kingman NTMS Quadrangle is found in Refs. 11, 15 and 16.

REPORTED URANIUM OCCURRENCES

The area contains numerous mineral deposits. These deposits fall into two groups: metallic deposits, which are numerous and widely distributed, and non-metallic, which are found only in selected areas. The first metallic deposits were discovered in the 1850's and have produced significant quantities of gold, silver, copper, lead, zinc, iron, tungsten, and molybdenum. The nonmetallic deposits consist of limestone, dolomite, gravels, and gypsum.

Presently, there is no active uranium production in the quadrangle. There are, however, sixty-three reported uranium occurrences.^{17,18} These occurrences are shown in Fig. 3 and summarized in Table 1. The major uranium occurrences are found in the Goodsprings, Jean-Sloan, Crescent Peak, and Wallapi districts (Fig. 3). Other minor anomalous areas are found in the Eldorado Mountains and north of Old Dad Mountain.

In the Goodsprings District, ore deposits have been developed primarily for gold, copper, cobalt, nickel, silver, lead, and zinc. The district contains the only property that has produced uranium. The Green Monster mine shipped five tons of $1.09\% \text{U}_3\text{O}_8$ in 1951. The uranium is found associated with limonite, hydrozincite, ferruginous chert, carbonaceous shale, and secondary copper minerals. Barton and Behre¹⁴ found that 45 out of 85 of the mines examined in the Goodsprings area contained anomalous uranium mineralization. The following is a summary of their conclusions on the uranium in the Goodsprings District:

- All occurrences are very low grade, and, with the possible exception of the Green Monster mine, there is little possibility of production.
- Megascopic uranium minerals are rare; kasolite, dumontite and an unidentified green uranium mineral have been reported.
- Radioactivity is concentrated in the shallow oxidized zones of deposits associated with limonite, hydrozincite, chrysocolla, ferruginous chert and was concentrated by adsorption on colloids. The adsorption is reversible, and uranium can be released to solution.
- The best uranium occurrences are in lead-zinc mines near copper mineralization. There is no correlation of uranium occurrences with cobalt, vanadium, gold, silver, or molybdenum.
- The westernmost mines of the Goodsprings district tend to be more radioactive.

- The source of the uranium was probably primary pitchblende, which is more closely associated with copper and iron minerals.

- Mineralization occurs along brecciated or fracture zones in Paleozoic carbonates.

The uranium mineralization in the Jean-Sloan area (Fig. 3) is found as carnotite-coated pebbles or disseminations and joint fillings in caliche or calcrete and in Quaternary gravel located down-dip from the late Tertiary Erie Tuff. Barton and Behre summarizes the uranium occurrences in the Jean-Sloan area:

- The uranium mineral is universally carnotite.

- All deposits are precipitated from ground water above the water table in recent geologic time; the mode of deposition is similar to caliche.

- Structural control is effective in the localization of the mineral deposits; joints and minor faults provide channels for circulating ground water.

- The known deposits are very low grade, and there is little possibility that they are related to large undiscovered deposits of the same type.

- The source rock of the uranium and vanadium is the Erie Tuff, which is anomalously high in uranium.

- The occurrence of manganese dioxide and uranium are independent in their occurrence.

- The Erie Tuff is an extruded part of a uranium-rich residual magmatic fluid.

- It is possible that the same magmatic process that produced the tuff could have formed large deposits at depth. The depth of these potential deposits could be excessive.

- The vent from which the tuff was erupted is probably located east or southeast of Erie and is probably covered by recent sediments or volcanics.

In the Crescent Peak area, uranium and thorium occur associated with uranium-bearing minerals in Precambrian pegmatites and other small intrusive bodies. Rare earths are also present at some localities. The uranium and thorium occur as impurities and chemical substitutions in xenotime, zircon, monazite, and allanite. These rocks are unlikely to contain economic deposits but could be a source rock for younger undiscovered ore bodies.

The uranium mineralization in the Eldorado Mountains is reported^{17,18} to be anomalous radioactivity along fracture systems in Precambrian metasedimentary rocks.

The uranium mineralization in the Cerbat Mountains (Wallapai district) of Arizona occurs associated with lead-zinc vein deposits.¹⁹ The uranium in the lead-zinc veins occurs as fine disseminations in incipient fractures associated with sphalerite. Samples from this district average 0.05% U_3O_8 .

Other smaller occurrences are reported by Larson et al.¹⁸ in the southwestern corner of the quadrangle near Old Dad Mountain. The four occurrences near Old Dad Mountain are minor occurrences associated with metamorphic and granitic rocks.

SAMPLE SITE SELECTION AND COLLECTION

The selection of representative sample sites is the most important aspect of sample acquisition. The following criterion were considered in the site selection process:

- Sites were chosen to measure the mobility of uranium in various geological environments.
- Sites were selected to minimize environmental contamination from agriculture, mining, etc.
- Sites were selected along range fronts to insure minimum windblown contamination.
- Samples along the fan aprons and in lowlands were biased toward ground water with minimal surface sampling because of windblown contamination.
- In smaller drainages, samples were taken along the range fronts at the apex of alluvial fans.
- In larger drainages, sites were placed up the canyons along tributaries to obtain representative coverage.
- To compensate for windblown contamination, sediments were sieved to eliminate fines. Sediments sampled and reported are the fraction between 500 and 1000 μm .

The average sediment-site density attempted for the quadrangle was one site per 13 km^2 ; however, the actual site density averages one site per 15 km^2 because of areas omitted for various reasons. Areas excluded from sampling or areas where the sampling density is lower include the playa lakes and large alluvial valleys.

To minimize the temporal factor, available water was sampled over a short period during the spring and summer of 1977. Because the region was at near-drought conditions, the uranium concentrations are probably at the

maximum values. For this reason, sampling during a wetter year might result in uranium values lower than those collected in 1977.

Site selection was performed by LLL geologists and sampling was done by contract geologists in areas west of the Colorado River. Site selection and sampling in areas east of the Colorado River were performed by Bendix Field Engineering Corporation geologists. Groundwater site selection and sampling was conducted by the University of Nevada - Desert Research Institute.

QUALITY ASSURANCE

Field Sampling

Lawrence Livermore Laboratory observers occasionally accompanied the contract sampling crews; LLL geologists resampled approximately 5% of the project sites. More than 95% of the resampled sites were accurately located on available maps or photos. The remaining sites were plotted within 200 m of the correct location.

Samples from the site revisits are reported in the tables by quality control x-reference numbers and the alternate site numbers are tabulated. Analytical replicates were also run on about 10% of all samples. Comparison of the sediment replicate results with the original samples shows a 10% standard deviation in measurement values. This 10% is the natural variability of the sampling and analysis.

Laboratory Analysis

Neutron activation analysis (INAA) and delayed neutron counting (DNC) are performed using their automated transport and detection system installed at the Livermore Pool Type Reactor. Water samples are analyzed by optical emission spectrometry using an inductively coupled argon plasma (ICP) source.

The data reduction for neutron activation analytical results utilizes the GAMANAL code⁴ to interpret the gamma spectra and the NURDAC^{5,6} code to produce elemental concentration values. Not all elements can be identified in every sample. Our experience suggests that, in general, the detection limits for elements reported here are those given in column 2 of Table 2.

The error associated with a DNC uranium measurement is typically 1% of the reported value for sediments and 2% for water analyses.

Table 2. Instrumental Neutron Activation Analysis
Sediment Quality Assurance Data Summary

Element	Detection limit, (a) ppm	Precision, (b) %	Accuracy (c) % bias
Ag	500.	ND	ND
Al	50.	10	-7
As	3.	6	-1
Ba	100.	13	ND
Br	5.	ND	NR
Ca	20,000.	7	ND
Ce	15.	ND	NR
Cl	50.	ND	NR
Co	3.	5	+6
Cr	30.	8	+13
Cs	30.	5	NR
Dy	0.2	10	NR
Eu	0.1	16	NR
Fe	2,000.	5	5
Hf	1.	14	NR
Hg	500.	ND	NR
K	2,000	7	ND
La	0.3	4	NR
Lu	2	22	NR
Mg	50.	10	+4
Mn	0.2	4	+11
Na	20.	4	0
Rb	150.	4	ND
Sb	0.5	4	-5
Sc	0.1	5	-1
Sm	0.3	4	NR
Sr	40.	ND	ND
Ta	3.	20	NR
Tb	20.	ND	NR
Th	2.	4	-6
Ti	200.	8	+2
U	2.	12	-4
V	1.	5	+4
W	30.	ND	NR
Yb	3.	13	-6
Zn	200.	16	ND

ND = not detected

NR = not reported for standards.

- (a) Approximate lower limits for detection in "typical" sediment samples.
 (b) Precision is an estimate of the reproducibility of analyses. Values entered are percent standard deviation of a measurement for 30 analyses of control samples over a five month period. (See footnote c, Table 4.)
 (c) Accuracy is a measure of analytical agreement with "known" values. Entries are the percent deviation from unity of the ratio of measured to known values, averaged for 15 measurements obtained over a five-month period. (See footnote d, Table 4.) Known values were obtained from the Canadian Association for Applied Spectroscopy.

The emission spectrometer data is automatically referenced to a known laboratory standard analyzed between each group of six samples. System calibration against a second, known standard solution precedes each batch of 72 samples. Water data from the Las Vegas quadrangle region were taken from "lab acidified" samples. Unacidified, filtered (0.45 μ m) water samples were collected and returned to LLL, placed in storage for several months, acidified to approximately pH 1, and allowed to stand for two weeks prior to analysis. This procedure was applied after it was noted that in several of the plastic bag-lined-bottles, the plastic bags had broken. It is uncertain if lab acidification completely reversed precipitation of certain components or exchange reactions with the polyethylene container. Therefore, the user should be aware that some analyses may not be representative of the actual water composition.

Six types of samples are routinely run for calibration of the various analytical systems and as a quality assurance measure.

- Elemental standards are used to establish emission spectrometry and spectrophotometry calibration and to determine physical parameters used in the activation analysis system.

- Blanks are processed along with samples and analyzed to detect any source of contamination. No significant amount of an element reported here has been detected.

- Splits of samples are analyzed to determine whether the results of all analytical systems are reproducible. These data are included in the microfiche data tables. Reproducibility is generally found to be within the estimated standard deviations of the measurements.

- Quality control samples are run by all systems at an approximate ratio of 1:30 to check precision of the measurements and to detect long term drift. Results are summarized in Table 2, column 3. The accuracy of the measurements is generally comparable to the errors estimated from the analytical uncertainties.

- Standard reference materials are analyzed to determine the accuracy of the measurements in actual samples. Results are tabulated in Table 3. In general, the bias is comparable to the precision of the measurement.

- Interlaboratory comparison samples for uranium are distributed under the auspices of DOE to the various laboratories participating in the NURE program. Analyses of these samples are collected and reported monthly by the Ames Laboratory.²⁰ This data is summarized in Table 4.

Table 3. Optical Emission Spectrometry (ICP)
Water Quality Assurance Data Summary

Element	Detection limit, (a) <u>ppb</u>	Precision, (b) <u>% bias</u>
Al	12	+16
As	20	+34
Ca	30	+10
Cd	4	+2
Co	4	-1
Cu	4	+6
Fe	4	+5
K	70	+7
Mg	5	+5
Na	5	+1
Ni	50	-13
Pb	40	-2
V	4	+2
Zn	3	+20

- a) Approximate lower limits of detection in water samples. Values given are four times the standard deviation of the background in each elemental channel.
- b) Precision is a measure of analytical agreement with known values. *Entries are the percent deviation from unity of the ratio of measured to known values averaged for 15 measurements.* (See footnote d, Table 4.) Known values were obtained from the Environmental Protection Agency.

While care has been taken to provide reliable sampling and analyses, verification of individual analyses is beyond the scope of this report. The data should be viewed statistically because "one-point anomalies" may be misleading. Regional trends, however, should be reliable.

Table 4. Delayed Neutron Assay For Uranium
Analyses of DOE Interlaboratory Comparison Samples

	Water		Sediment		
	A2, ppb	B2, ppb	R1, ppm	S1, ppm	T1, ppm
Number of analyses	12	11	16	16	14
Recommended value (a)	0.98	9.98	5.23	10.8	93.7
Mean value (b)	1.06	9.70	5.24	10.4	89.6
Standard deviation of a measurement, % (c)	6	3	5	2	2
Bias, + % (d)	+8	-3	0	-3	-5

(a) Recommended values are averages of analyses by three independent laboratories.

(b) Mean of LLL measurements.

$$(c) \frac{100}{\bar{x}} [\sum (x - \bar{x})^2 / (n-1)]^{1/2}$$

$$(d) \left[\frac{\text{mean value (b)}}{\text{recommended value (a)}} - 1 \right] 100$$

RELATION OF ANALYSES TO GEOLOGY

Uranium and Thorium

In order to provide the data as soon as possible, no detailed interpretation of geochemical relationships are provided in this report.

A logarithmic histogram and a cumulative-probability curve for uranium concentrations are provided for water and sediment samples. An additional logarithmic histogram and cumulative probability curve is provided for thorium concentration in sediment samples. (They are included in Appendix A.)

Interpreting large data sets where individual samples must be compared with different threshold values is a problem in a large-scale drainage survey over a range of rock types. Gouett et al²¹ have shown that logarithmic transformations of large geochemical survey data, such as the Kingman quadrangle, cause enhancement of the background populations and suppression of the anomalous population in the overall statistical distribution. Therefore, population recognition and sorting is vital to the statistical interpretation.

However if a region is subdivided into populations of similar rock types, statistical studies may be meaningful. In the Kingman quadrangle the major rock types separated are: carbonates of the Goodsprings district; Precambrian granites and granite gneiss of the Cerbat Mountains; ther Cretaceous to Tertiary volcanics of the Black Mountains and generally north along the Colorado river; the metasedimentary rocks of the McCullough and Newberry Mountains, and the intrusive formations generally in the western and southwestern area of the quadrangle. These are separated from each other by alluvial valleys. Each of these is briefly discussed below.

Cerbat Mountains

The highest uranium occurrence was found in the Cerbat Mountains. Uranium in the sediment samples varies from 0.5 to 47.5 ppm and has an average value of 4.2 ppm. The uranium correlates positively with thorium and the rare earths and negatively with sodium. However, in the richest uranium samples the Th to U ratio is less than three. These values are associated with Precambrian granite and granite gneiss. The uranium in ground water samples varies from 2 to 216 ppb and has an average value of about 30 ppb. The highest values are associated with the same type rocks as the highest sediment values but are more widely distributed.

Cretaceous to Tertiary Volcanics of the Black Mountains and Areas Along the Colorado River

There were no high values of uranium found in the sediments associated with the volcanics in the area. The highest value observed was 5 ppm and the lowest 0.9 ppm. Concentration of uranium in ground water ranged from less than 2 ppb to 14 ppb.

Quaternary Alluvium

Nothing of significance was observed associated with these sediments.

Goodsprings District

This is an area of known uranium occurrence; however, the results of the survey do not suggest extensive uranium mineralization. In the sediment samples the maximum concentration of uranium was 23 ppm, the lowest 0.8 ppm, and the average 1.8 ppm. The thorium-to-uranium ratio for the higher values of uranium was often less than two. The highest value of uranium in water was 32 ppb.

Crescent Peak District

This is also an area of known uranium occurrence. In sediments the concentrations of uranium vary from 0.5 to 13 ppm with most values less than 5 ppm. The uranium was strongly correlated with thorium and the rare earths. The two highest values were associated with Precambrian rocks in the southern portion of the McCullough Range. Uranium in the three samples of ground water ranged from 3 to 12 ppb.

Western Intrusives

Only minor uranium occurrence has previously been identified with these rocks. The sediment samples had uranium concentrations ranging from 0.8 to 40 ppm with an average value of 1.9 ppm. The high values were associated with contacts in the Kingston Range on both sides of a lower Precambrian outcrop. The analysis shows high iron, rare earths, scandium, and manganese and has low sodium. The water samples from these sites were also among the highest associated with the intrusives. Values of uranium concentrations in water from two sites in the Kingston Range were 12 and 27 ppb. Relatively high uranium in water sites were also found north of Old Dad Mountain. These sites ranged from 12-59 ppb.

Mountain Pass Region

The Mountain Pass sediments show very few high uranium values. The maximum concentration of uranium is 4.5 ppm, the lowest 0.6 ppm, and the average 2.0 ppm. Uranium in water averaged 5 to 6 ppb with the lowest 1.5 ppb and the highest 30 ppb. Even though there are high levels of thorium and the rare earths in the area, the uranium does not correlate with them. Thorium to uranium ratios are generally greater than five.

Other Elements

In the alluvial areas on both sides of the Cerbat Mountains, measurements of mercury greater than 1500 ppm were observed in several places. High values of silver were observed in the Precambrian granite in the Cerbat Mountains where there is a silver mine.

High levels of arsenic were observed in the Goodsprings District and high levels of zinc were seen in both the Goodsprings District and in the Cerbat Mountains.

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APPENDIX A

DATA ORGANIZATION AND DEFINITIONS

DATA PRESENTATION

Organization

The numerical results of this reconnaissance survey are presented in three hardcopy tables (Appendix B), in microfiche tables (back cover pocket), and on six vellum overlays (back cover pocket). In addition, frequency histograms and cumulative frequency plots of the logarithm of the uranium and thorium concentrations and water conductivities plotted on the overlays are included in the back of Appendix A.

Hardcopy Tables

Selected results of this investigation are presented in the three tables in Appendix B. Additional data on the trace elements content for each of the samples is reported in the microfiche tables. The titles and data reported in each of the three tables is given below.

Sediment analysis, dry and stream sites given in Table B-1

LLL sample number
DOE sample number
Sample data
Sample source and condition
Sieve fraction size, upper limit
Sieve fraction size, lower limit
Possible contamination
Quality control cross reference number
Uranium concentration, ppm
Thorium concentration, ppm

Water analyses; riv., stream and lake sites given in Table B-2.

LLL sample number
DOE sample number
Sample date
Sample source and condition
Water Temperature, °C
pH meter

Specific conductance, $\mu\text{mho}/\text{cm}$
Total alkalinity
Phenolphthalein alkalinity
Possible contamination
Uranium concentration, ppb
Quality control cross reference site number

Water analyses; springs and wells given in Table B-3.

LLL sample number
DOE sample number
Sample date
Sample source and condition
Water temperature, $^{\circ}\text{C}$
Well depth-type-casing
pH meter
Specific conductance, $\mu\text{mho}/\text{cm}$
Total alkalinity
Phenolphthalein alkalinity
Possible contamination
Uranium concentration, ppb
Quality control cross-reference number

Microfiche Tables

The additional element data gathered for each sample are presented in tables on microfiche film. These tables contain data from neutron activation analyses, special chemistry, and emission spectra analyses. The table titles are exactly as in the hardcopy tables, and the columnar entries of the hardcopy tables are repeated as the first part of each microfiche table. This is followed by the element values arranged in alphabetical order according to the element's proper name. Because of the amount of data, the tables are subdivided into several parts presented on separate pages.

Overlays

Full-size vellum overlays for use with National Topographic Map Series (NTMS) 1:250,000 scale $1^{\circ} \times 2^{\circ}$ quadrangle are located in the rear pocket of this report. These may be used with the commercially available NTMS map

for visual display of the sampling site locations and uranium concentration relative to local geographic features. The NTMS map name and number is given on the overlay. To limit the number of overlays that must be generated for each map, the information presented has been divided into two major classes - waters and sediments. The site number uranium concentration and thorium concentration of each sample are plotted on separate sheets for each class. Different sample site types (stream vs spring or well water, or wet vs dry sediment) are distinguished by using different symbols in association with the site number. The site type symbol is plotted over the geographic location with the site number plotted beside it. The corresponding concentration range value is indicated in a separate overlay by a symbol whose shape and size varies with the range value. The symbol set employed here is a slightly modified version of that employed by the Geological Survey of Canada in their hydrogeochemical surveys. Two sets of ranges are employed because the average uranium trace element concentration is nearly a factor of 10^3 larger in sediments than in natural waters. The range assignments are shown below.

Water Samples

Fig. A-1 Uranium concentrations in water samples.

Sediment Samples

Fig. A-2 Uranium concentration in sediment samples.

- Overlay 1A. Site Locations, Water Samples
- Overlay 1B. Total Uranium Concentrations, Water Samples
- Overlay 1C. Field Conductivity, Water Samples
- Overlay 2A. Site Locations, Sediment Samples
- Overlay 2B. Total Uranium Concentrations, Sediment Samples
- Overlay 2C. Total Thorium Concentrations, Sediment Samples

Histograms and Cumulative Frequency Plots

Histograms and cumulative frequency plots of the uranium values shown in overlays 1B and 2B are given in Fig. A-3 (water samples) and Fig. A-4 (sediment samples). The histogram and cumulative frequency plot of the thorium values shown in overlay 2C are given in Figure A-5. The histogram and cumulative frequency plot of the water sample conductivity values shown in overlay 1C are presented in Figure A-6. These are presented as the logarithm of the element concentrations.

DATA DEFINITIONS

This section presents a brief explanation of the columnar entries for the hardcopy and microfiche data tables.

Blanks in the data tables indicate no measurement available. Detection limits for INAA determinations are given in the text. Emission spectrometry detection limits are indicated in the data tables by the "less than" sign (<).

KINGMAN QUADRANGLE--WATERS ONLY

a

KINGMAN QUADRANGLE--WATERS ONLY

b

Fig. A-3 Histogram (a) and cumulative frequency distribution (b) of uranium concentrations for water samples plotted on overlay 1B.

Fig. A-4 Histogram (a) and cumulative frequency distribution (b) of field conductivities for water samples plotted on overlay 1C.

Fig. A-5 Histogram (a) and cumulative frequency distribution (b) of uranium concentrations for sediment samples plotted on overlay 2B.

Figure A-6. Histogram (a) and cumulative frequency distribution (b) of thorium concentrations for sediment samples plotted on overlay 2C.

DOE SAMPLE NUMBER

Each analyzed field sample is assigned a DOE sample number consisting of 28 characters. Five characters (dashes) are used to delineate the number subdivision. The subdivision assignments are as follows:

<u>Position</u>		<u>Description</u>
1-2	ST,	State, the two-digit Federal Information Processing Standard (FIPS) designated for the state corresponding to the sample site location (AZ=04, CA=06, ID=16, NV=32, OR=41, UT=49, WA=53).
4-10	LAT,	Latitude of site in decimal degrees.
12-19	LONG,	Longitude of site in decimal degrees.
21	L,	Originating laboratory (1=LLL)
23-24	TY,	DOE Sample Type. A two-digit code describing the sample source, medium, and overall geochemical treatment (field and laboratory) prior to analysis. See DOE Sample Type Numbers below for specific assignments.
26-28	RPL,	Replication Code. Three-digits used to distinguish between samples from the same site. The first indicates sample type (1=sediment, 2=water), the second identifies the field duplicate, and the third identifies analytical splits.

TY, DOE SAMPLE TYPE NUMBERS

<u>Number</u>	<u>Description</u>
01	<u>Spring water</u> sample <u>untreated</u> .
02	<u>River</u> or <u>stream water</u> sample <u>untreated</u> .
03	<u>Well water</u> sample <u>untreated</u> .
04	<u>Lake</u> or <u>reservoir water</u> sample <u>untreated</u> .
06	<u>Spring water</u> sample <u>filtered</u> through a 0.45 μ m membrane filter <u>and acidified</u> to a pH of ≤ 1 with high purity nitric acid (HNO_3).
07	<u>River</u> or <u>stream water</u> sample <u>filtered</u> through a 0.45 μ m membrane filter <u>and acidified</u> to a pH of ≤ 1 with high purity nitric acid (HNO_3).

- 08 Well water sample filtered through a 0.45 μm membrane filter
and acidified to a pH of ≤ 1 with high purity nitric acid
(HNO_3).
- 09 Lake or reservoir water sample filtered through a 0.45 μm
membrane filter and acidified to a pH of ≤ 1 with high purity
nitric acid (HNO_3).
- 21 Spring water sample filtered through a 0.45 μm membrane
filter.
- 22 River or stream water sample filtered through a 0.45 μm
membrane filter.
- 23 Well water sample filtered through a 0.45 μm membrane filter.
- 24 Lake or reservoir water sample filtered through 0.45 μm
membrane filter.
- 70 Wet sediment sample dried at 110°C and sieved to the reported
particle size range.
- 71 Lake or reservoir sediment sample dried at 110°C and sieved
to the reported particle size range.
- 72 Dry sediment sample dried at 110°C and sieved to the reported
particle size range.
- 73 Playa sediment sample taken by hand auger over the reported
depth, dried at 100°C , and crushed to a fine powder.
- 74 Rock sample crushed and sieved to less than 250 μm .

TEMPERATURE

Temperature. Measurement of water temperature in situ by mercury thermometer to nearest 0.1°C .

PH

Activity in pH units, reported to nearest 0.1 pH unit at ambient water temperature.

SP COND

Specific conductance. Measurement in situ with a commercial conductivity meter. Reported as conductance in micromhos per cm ($\mu\text{mho/cm}$) normalized to 25°C .

PHENO-ALK

Phenolphthalein alkalinity. Measurement by titration with standard sulphuric acid to a phenolphthalein indicator endpoint ($\text{pH} = 8.3$). Reported as an equivalent amount of CaCO_3 in mg/l , minimum detection 20 mg/l .

TOT-ALK

Total alkalinity. Measurement by titration with standard sulphuric acid to a bromcresol green-methyl red indicator endpoint ($\text{pH} = 4.8$). Reported as an equivalent amount of CaCO_3 in mg/l , minimum detection 20 mg/l .

POSSIBLE CONTAMINATION

The major possible contaminant types are indicated according to the following code: 1. none, 2. mining, 3. agricultural, 4. industrial, 5. sewage, 6. power generation, 7. urban, 8. recreation, 9. other.

URANIUM

The trace element concentration of uranium in the sample as determined by DNC is given in parts-per-billion (PPB) by weight for waters and in parts-per-million (PPM) by weight for sediments. Where DNC values are not available, INAA determinations have been substituted and flagged with an asterisk(*). The error column contains a statistical estimate of measurement uncertainty expressed as a percentage of the concentration.

OTHER ELEMENTS

The trace element concentration of each element in the sample is given in parts-per-billion (PPB) by weight for waters and in parts-per-million (PPM) by weight for sediments. The error column (ERR) gives a numerical estimate (expressed in trace element concentration units) of the uncertainties associated with quantization of the elemental concentration.

APPENDIX B
NUMERICAL RESULTS OF RECONNAISSANCE SURVEY

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

PAGE B-2

SITE NUMBER	ST	-----DGE LAT.	SAMPLE LONG.	NUMBER----- L TY RPL	DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE UPPER	SIZE LOWER	POS. CONT	O. C. X-REF	URANIUM(IOC) PPM	THORIUM(NAI) PPM	ERR
028	32-35	0223-115.4159	-172-101	76/05/03	STREAM	DRY	0150	0000		*	0.00	23.49	0.31
029	32-35	0226-115.4369	-172-100	76/05/03	STREAM	DRY	1000	0500	1	*	2.40	3.90	1.72
029	32-35	0226-115.4369	-172-101	76/05/03	STREAM	DRY	0150	0000		*	2.24	4.50	7.82
030	32-35	0469-115.4320	-172-100	76/05/03	STREAM	DRY	1000	0500	1	*	2.05	5.20	1.82
030	32-35	0469-115.4320	-172-101	76/05/03	STREAM	DRY	0150	0000		*	2.34	12.50	10.52
031	32-35	0703-115.5047	-172-100	76/05/06	STREAM	DRY	1000	0500	1	*	1.57	13.10	2.58
031	32-35	0703-115.5047	-172-101	76/05/06	STREAM	DRY	0150	0000		*	2.78	7.50	8.78
032	32-35	0211-115.4569	-172-100	76/05/03	STREAM	DRY	1000	0500	1	*	1.43	5.70	0.73
032	32-35	0211-115.4569	-172-101	76/05/03	STREAM	DRY	0150	0000		*	2.46	6.00	5.61
033	32-35	0597-115.4439	-172-100	76/05/03	STREAM	DRY	1000	0500	1	*	2.27	2.90	1.74
033	32-35	0597-115.4439	-172-101	76/05/03	STREAM	DRY	0150	0000		*	2.27	6.80	7.61
034	32-35	0331-115.4843	-172-100	76/05/06	STREAM	DRY	1000	0500	1	*	2.91	3.40	3.65
034	32-35	0331-115.4843	-172-101	76/05/06	STREAM	DRY	0150	0000		*	2.66	7.10	10.36
035	32-35	0056-115.4461	-172-100	76/05/03	STREAM	DRY	1000	0500	1	*	1.98	4.70	5.70
035	32-35	0056-115.4461	-172-101	76/05/03	STREAM	DRY	0150	0000		*	2.79	5.30	11.11
036	32-35	0024-115.4697	-172-100	76/05/03	STREAM	DRY	1000	0500	1	*	2.12	2.80	1.66
036	32-35	0024-115.4697	-172-101	76/05/03	STREAM	DRY	0150	0000		*	2.50	8.70	8.04
037	32-35	0493-115.4763	-172-100	76/05/06	STREAM	DRY	1000	0500	1	*	1.44	5.00	1.92
037	32-35	0493-115.4763	-172-101	76/05/06	STREAM	DRY	0150	0000		*	2.72	10.10	12.67
039	32-35	0267-115.4681	-174-400	76/05/03	ROCK	DRY	0250	0000	1	*	0.85	11.50	3.04
040	32-35	0103-115.4725	-174-410	76/05/06	ROCK	DRY	0250	0000	1	*	15.18	4.40	1.29
040	32-35	0103-115.4725	-174-410	76/05/06	ROCK	DRY	0250	0000		*	1.89	5.80	1.33
042	32-35	0322-115.4736	-174-400	76/05/03	ROCK	DRY	0250	0000	1	*	0.00	4.70	2.42
043	32-35	0410-115.4676	-172-100	76/05/06	STREAM	DRY	1000	0500	1	*	2.25	9.70	9.13
043	32-35	0410-115.4676	-172-101	76/05/06	STREAM	DRY	0150	0000		*	2.34	3.50	2.09
044	32-35	0705-115.3248	-172-100	76/05/04	STREAM	DRY	1000	0500	1	*	1.41	3.50	2.09
044	32-35	0705-115.3248	-172-101	76/05/04	STREAM	DRY	0150	0000		*	1.35	20.90	10.55
045	32-35	0802-115.4367	-172-100	76/05/03	STREAM	DRY	1000	0500	1	*	2.52	3.80	1.72
045	32-35	0802-115.4367	-172-101	76/05/03	STREAM	DRY	0150	0000		*	1.42	20.50	9.29
046	32-35	0806-115.4693	-174-400	76/05/06	ROCK	DRY	0250	0000	1	*	4.11	21.20	18.94
047	32-35	0527-115.4049	-172-100	76/05/04	STREAM	DRY	1000	0500	1	*	1.14	2.80	1.47
047	32-35	0527-115.4049	-172-101	76/05/04	STREAM	DRY	0150	0000		*	2.24	5.60	11.06
048	32-35	0007-115.4099	-172-101	76/05/03	STREAM	DRY	1000	0500	1	*	1.98	3.70	1.21
048	32-35	0007-115.4099	-172-101	76/05/03	STREAM	DRY	0150	0000		*	2.39	7.50	7.09
049	32-35	0239-115.4668	-174-400	76/05/06	ROCK	DRY	0250	0000	1	*	2.67	7.50	0.62
050	32-35	0325-115.4398	-172-100	76/05/03	STREAM	DRY	1000	0500	1	*	1.30	2.50	0.79
050	32-35	0325-115.4398	-172-101	76/05/03	STREAM	DRY	0150	0000		*	2.59	5.10	17.44
051	32-35	0879-115.4033	-174-400	76/05/03	ROCK	DRY	0250	0000	1	*	0.71	7.60	0.65
052	32-35	0682-115.4307	-172-100	76/05/06	STREAM	DRY	1000	0500	1	*	1.87	2.50	1.80
052	32-35	0682-115.4307	-172-101	76/05/06	STREAM	DRY	0150	0000		*	0.00	13.22	0.15
052	32-35	0682-115.4307	-174-400	76/05/06	ROCK	DRY	0250	0000	1	*	1.99	2.10	0.25
053	32-35	0627-115.4209	-172-100	76/05/04	STREAM	DRY	1000	0500	1	*	2.58	4.20	6.88
053	32-35	0627-115.4209	-172-101	76/05/04	STREAM	DRY	0150	0000		*	2.09	15.00	14.10
054	32-35	0181-115.4317	-172-100	76/05/03	STREAM	DRY	1000	0500	1	*	1.55	4.90	1.23
054	32-35	0181-115.4317	-172-101	76/05/03	STREAM	DRY	0150	0000		*	1.81	7.40	6.80
056	32-35	0791-115.2961	-174-400	76/05/06	ROCK	DRY	0250	0000	1	*	1.86	16.10	10.09
057	32-35	0175-115.4560	-172-100	76/05/03	STREAM	DRY	1000	0500	1	*	0.90	2.90	8.68
057	32-35	0175-115.4560	-172-101	76/05/03	STREAM	DRY	0150	0000		*	0.97	12.92	4.29
060	32-35	0235-115.4347	-172-100	76/05/03	STREAM	DRY	1000	0500	1	*	1.35	4.60	1.51

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TABLE 8-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

SITE NUMBER	ST	DDE LAT.	SAMPLE LONG.	NUMBER L T Y RPL	DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE UPPER	SIZE LOWER	POS. CONT	O. C. X-REF	URANIUM (GNC) PPM	THORIUM (NAI) PPM	ERR	
060	32-35	0235	-115.347	-1-72-101		STREAM	DRY	0150	0000	*	2.41	4.60	7.25	0.17
063	32-35	0251	-115.3139	-1-72-100	76/05/04	STREAM	DRY	1000	0500	1	1.53	4.70	1.10	0.03
063	32-35	0251	-115.3139	-1-72-101		STREAM	DRY	0150	0000	*	2.13	11.90	8.83	0.17
065	32-35	0156	-115.2047	-1-72-100	76/05/06	STREAM	DRY	1000	0500	1	1.32	14.40	16.57	0.20
065	32-35	0156	-115.2047	-1-72-101		STREAM	DRY	0150	0000	*	13.90	5.30	156.20	1.87
066	32-35	0216	-115.3628	-1-72-100	76/05/04	STREAM	DRY	1000	0500	1	1.27	3.70	0.02	0.03
066	32-35	0216	-115.3628	-1-72-101		STREAM	DRY	0150	0000	*	1.39	12.20	6.07	0.13
068	32-35	0479	-115.2570	-1-72-100	76/05/06	STREAM	DRY	1000	0500	1	2.55	7.80	21.73	0.37
068	32-35	0479	-115.2570	-1-72-101		STREAM	DRY	0150	0000	*	0.00	103.40	1.34	
069	32-35	0304	-115.4102	-1-72-100	76/05/04	STREAM	DRY	1000	0500	1	2.09	5.73	2.51	0.06
069	32-35	0304	-115.4102	-1-72-101		STREAM	DRY	0150	0000	*	2.63	9.60	10.56	0.20
071	32-35	7097	-115.2910	-1-72-100	76/05/06	STREAM	DRY	1000	0500	1	1.08	10.60	10.70	0.20
071	32-35	7097	-115.2910	-1-72-101		STREAM	DRY	0150	0000	*	0.00	42.10	0.55	
072	32-35	6204	-115.3424	-1-72-100	76/05/03	STREAM	DRY	1000	0500	1	2.05	6.30	25.70	0.36
072	32-35	6204	-115.3424	-1-72-101		STREAM	DRY	0150	0000	*	4.55	6.00	46.32	0.48
074	32-35	7149	-115.2754	-1-74-400	76/05/06	ROCK	DRY	0250	0000	1	1.90	11.30	4.12	0.14
075	32-35	6513	-115.3066	-1-72-100	76/05/04	STREAM	DRY	1000	0500	1	0.48	18.10	0.73	0.03
075	32-35	6513	-115.3066	-1-72-101		STREAM	DRY	0150	0000	*	5.95	6.20	21.84	0.35
076	32-35	6244	-115.3149	-1-72-100	76/05/04	STREAM	DRY	1000	0500	1	4.49	4.70	10.16	0.21
078	32-35	6244	-115.3149	-1-72-101		STREAM	DRY	0150	0000	*	8.95	9.00	47.36	0.66
081	32-35	6374	-115.3389	-1-72-100	76/05/05	STREAM	DRY	1000	0500	1	1.23	5.70	4.15	0.10
081	32-35	6374	-115.3389	-1-72-101		STREAM	DRY	0150	0000	*	2.31	11.80	18.73	0.21
084	32-35	9206	-115.4803	-1-72-100	76/05/05	STREAM	DRY	1000	0500	1	2.53	2.60	0.87	0.04
084	32-35	9206	-115.4803	-1-72-101		STREAM	DRY	0150	0000	*	1.96	11.49	6.92	0.16
097	32-35	0856	-115.4977	-1-74-400	76/05/05	ROCK	DRY	0250	0000	1	3.08	2.00	0.64	0.02
090	32-35	0603	-115.4899	-1-72-100	76/05/05	STREAM	DRY	1000	0500	1	2.25	4.10	1.58	
090	32-35	0603	-115.4899	-1-72-101		STREAM	DRY	0150	0000	*	1.56	4.70	11.00	0.15
093	32-35	0591	-115.4716	-1-72-100	76/05/05	STREAM	DRY	1000	0500	1	2.33	4.60	1.95	0.05
093	32-35	0591	-115.4716	-1-72-101		STREAM	DRY	0150	0000	*	2.86	6.25	10.72	0.14
096	32-35	7871	-115.4144	-1-72-100	76/05/05	STREAM	DRY	1000	0500	1	0.97	12.50	1.69	0.08
096	32-35	7871	-115.4144	-1-72-101		STREAM	DRY	0150	0000	*	2.35	8.20	10.24	0.33
099	32-35	7575	-115.4216	-1-72-100	76/05/05	STREAM	DRY	1000	0500	1	2.12	8.00	4.52	0.12
099	32-35	7575	-115.4216	-1-72-101		STREAM	DRY	0150	0000	*	23.36	4.10	47.79	0.67
910	32-35	6485	-115.3619	-1-73-100	75/08/21	PLAYA	DRY			*	3.82	6.60	15.69	0.20
910	32-35	6485	-115.3619	-1-73-110	75/08/21	PLAYA	DRY			*	5.09	3.00	9.16	0.17
925	32-35	6492	-115.3431	-1-73-100	75/08/22	PLAYA	DRY			*	3.23	12.03	15.19	0.33
925	32-35	6492	-115.3431	-1-73-110	75/08/22	PLAYA	DRY			*	4.09	7.50	18.29	0.37
926	32-35	6718	-115.3504	-1-73-100	75/08/22	PLAYA	DRY			*	1.46	16.81	10.16	0.17
926	32-35	6718	-115.3504	-1-73-110	75/08/22	PLAYA	DRY			*	6.07	4.60	16.67	0.27
932	32-35	6715	-115.3316	-1-73-100	75/08/22	PLAYA	DRY			*	6.14	5.10	15.36	0.29
932	32-35	6715	-115.3316	-1-73-110	75/08/22	PLAYA	DRY			*	3.34	11.20	14.70	0.29
934	32-35	6423	-115.3699	-1-73-100	75/08/21	PLAYA	DRY			*	3.67	5.90	14.75	0.35
934	32-35	6423	-115.3699	-1-73-110	75/08/21	PLAYA	DRY			*	5.76	5.10	11.33	0.18
937	32-35	6638	-115.3616	-1-73-100	75/08/22	PLAYA	DRY			*	0.85	37.90	12.53	0.20
937	32-35	6638	-115.3616	-1-73-110	75/08/22	PLAYA	DRY			*	2.76	5.40	6.00	0.16
938	32-35	6764	-115.3602	-1-73-100	75/08/22	PLAYA	DRY			*	2.91	5.90	11.58	0.20
938	32-35	6764	-115.3602	-1-73-110	75/08/22	PLAYA	DRY			*	4.47	3.80	9.02	0.17
940	32-35	6637	-115.3539	-1-73-100	75/08/22	PLAYA	DRY			*	8.51	2.60	14.33	0.19
940	32-35	6637	-115.3539	-1-73-110	75/08/22	PLAYA	DRY			*	7.57	3.50	16.07	0.21

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TABLE 8-1. SEDIMENT ANALYSIS; DRY AND STREAM SITES

PAGE 8-4

SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	DATE L TY RPL	MO-DA-YR SOURCE/COND.	PARTICLE UPPER	SIZE LOWER	POS. CONT	O. C. X-REF	URANIUM(DNC) PPM	ZERR	THORIUM(NAA) PPM	ERR
941	32-35	6563	-115, 3419	-173-100	75/08/22	PLAYA	DRY			3.07	18.20	17.18	0.26
941	32-35	6563	-115, 3419	-173-110	75/08/22	PLAYA	DRY			6.51	16.60	16.02	0.20
942	32-35	6862	-115, 3490	-173-100	75/08/22	PLAYA	DRY			2.30	9.20	14.39	0.19
7371	4-35	1726	-114, 4339	-170-100	03/09/77	STREAM	MET	1000 0500		4.01	1.37	24.06	2.10
7372	4-35	0769	-114, 4281	-170-100	03/09/77	STREAM	MET	1000 0500		2.78	1.46	17.75	1.69
7375	32-35	7047	-114, 8115	-170-100	03/11/77	STREAM	MET	1000 0500		3.37	1.22		
7378	6-35	1120	-114, 9964	-170-100	03/14/77	STREAM	MET	1000 0500		1.33	1.79	7.36	1.04
7384	6-35	1968	-115, 4281	-170-100	03/16/77	STREAM	MET	1000 0500		2.68	1.51	10.40	1.60
7386	6-35	3539	-115, 1302	-172-100	03/23/77	STREAM	DRY	1000 0500	9	4.71	1.42	23.01	3.52
7389	6-35	3173	-115, 2729	-170-100	03/23/77	STREAM	MET	1000 0500		1.03	2.73	10.69	2.11
7390	6-35	1686	-115, 6472	-170-100	03/24/77	STREAM	MET	1000 0500		3.32	1.51	6.42	1.40
7396	6-35	3153	-115, 0625	-170-100	03/27/77	STREAM	MET	1000 0500		0.99	2.19	7.22	1.28
7397	6-35	3841	-115, 8924	-170-100	03/07/77	STREAM	MET	1000 0500		2.26	1.63	20.74	1.59
7399	6-35	4288	-115, 9569	-170-100	03/27/77	STREAM	MET	1000 0500		1.20	2.26	10.62	1.83
7400	6-35	4818	-115, 8371	-172-100	03/27/77	STREAM	DRY	1000 0500		1.78	1.94	5.76	0.92
8993	32-35	6947	-115, 1886	-170-100	03/28/77	STREAM	MET	1000 0500		10.55	1.24	4.16	1.32
9205	6-35	4118	-115, 4614	-170-100	03/24/77	STREAM	MET	1000 0500		4.54	1.27	19.21	1.50
9207	6-35	4791	-115, 1813	-170-100	03/24/77	STREAM	MET	1000 0500		5.64	1.28	17.29	1.78
9208	32-35	6245	-115, 0775	-170-100	03/24/77	STREAM	MET	1000 0500		4.90	1.32	30.27	2.31
9213	6-35	6209	-115, 9631	-170-100	03/25/77	STREAM	MET	1000 0500		7.29	1.21	5.09	1.16
9214	6-35	6356	-115, 6322	-170-100	03/27/77	STREAM	MET	1000 0500		2.20	1.56	8.12	1.20
9215	6-35	4559	-115, 5267	-170-100	03/27/77	STREAM	MET	1000 0500		2.24	1.72	15.09	1.82
9401	32-35	7717	-114, 9528	-172-100	03/09/77	STREAM	DRY	1000 0500		2.36	1.43	21.56	2.09
9402	32-35	8221	-114, 8849	-172-100	03/09/77	STREAM	DRY	1000 0500		3.59	1.33	21.89	1.45
9403	32-35	8445	-114, 8187	-172-100	03/09/77	STREAM	DRY	1000 0500		2.73	1.45	18.34	1.50
9404	32-35	8640	-114, 8492	-172-100	03/09/77	STREAM	DRY	1000 0500		3.46	1.39	21.39	1.90
9405	32-35	8124	-114, 7897	-172-100	03/09/77	STREAM	DRY	1000 0500		2.60	1.28		
9406	32-35	7992	-114, 8056	-172-100	03/10/77	STREAM	DRY	1000 0500		1.99	1.63	12.53	1.58
9407	32-35	8096	-114, 8838	-172-100	03/10/77	STREAM	DRY	1000 0500		3.41	1.39	19.41	1.65
9408	32-35	7715	-114, 8196	-172-100	03/10/77	STREAM	DRY	1000 0500		3.23	1.53	24.52	2.55
9409	32-35	7717	-114, 8318	-172-100	03/09/77	STREAM	DRY	1000 0500		3.71	1.35	23.28	1.57
9410	32-35	7978	-114, 8787	-172-100	03/10/77	STREAM	DRY	1000 0500		2.94	1.44	15.46	1.61
9411	32-35	7889	-114, 8855	-172-100	03/10/77	STREAM	DRY	1000 0500		2.28	1.62	15.35	1.69
9412	32-35	7712	-114, 9083	-172-100	03/10/77	STREAM	DRY	1000 0500		2.55	1.52	15.05	1.68
9413	32-35	7614	-114, 9083	-172-100	03/10/77	STREAM	DRY	1000 0500	9	2.01	1.63	18.45	1.54
9414	32-35	7541	-114, 9030	-172-100	03/10/77	STREAM	DRY	1000 0500		1.75	1.25	17.25	1.19
9415	32-35	7733	-114, 9202	-172-100	03/10/77	STREAM	DRY	1000 0500		2.20	1.70	21.14	2.07
9416	32-35	7832	-114, 9199	-172-100	03/10/77	STREAM	DRY	1000 0500		2.21	1.62	15.31	1.51
9417	32-35	7905	-114, 9242	-172-100	03/10/77	STREAM	DRY	1000 0500		1.88	2.54	43.14	3.69
9418	32-35	7998	-114, 9296	-172-100	03/10/77	STREAM	DRY	1000 0500		3.23	1.23		
9419	32-35	7549	-114, 8488	-172-100	03/11/77	STREAM	DRY	1000 0500		3.63	1.41	20.49	2.06
9419	32-35	7549	-114, 8488	-172-101		STREAM	DRY	1000 0500		3.96	1.46	20.90	2.77
9420	32-35	7965	-114, 9052	-172-100	03/11/77	STREAM	DRY	1000 0500	1	3.42	1.23		
9421	32-35	8538	-114, 9890	-172-100	03/11/77	STREAM	DRY	1000 0500	1	3.58	1.19		
9422	32-35	7869	-115, 1338	-172-100	03/12/77	STREAM	DRY	1000 0500		2.73	1.56	15.78	2.21
9423	32-35	7752	-115, 0883	-172-100	03/12/77	STREAM	DRY	1000 0500	1	3.20	1.45	18.72	1.95
9424	32-35	8061	-115, 1019	-172-100	03/12/77	STREAM	DRY	1000 0500	1	2.50	1.40	8.77	1.02
9425	32-35	8113	-115, 0907	-172-100	03/12/77	STREAM	DRY	1000 0500	1	2.27	1.67	15.00	2.00
9426	32-35	8129	-115, 0763	-172-100	03/12/77	STREAM	DRY	1000 0500	1	2.33	1.46	13.16	1.22

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	-----DOE LAT.	SAMPLE LONG.	NUMBER----- L Y RPL	DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE SIZE UPPER LOWER CONT.	POS. CONT.	Q. C. X-REF	URANIUM(DNC) PPH	THORIUM(NAA) PPH	ERR
9427	32-35	8207-115.0617	-1-72-100	03/12/77	STREAM	DRY	1000 0500	1	2.69	1.45	9.96	1.44
9428	32-35	8277-115.0461	-1-72-100	03/12/77	STREAM	DRY	1000 0500	1	2.93	1.49	17.97	1.98
9429	32-35	8650-115.0142	-1-72-100	03/12/77	STREAM	DRY	1000 0500	1	3.56	1.36	20.07	1.53
9430	32-35	9739-115.1146	-1-72-100	03/13/77	STREAM	DRY	1000 0500	9	1.85	1.66	4.99	1.68
9431	32-35	9410-115.0821	-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	3.48	1.43	20.41	1.90
9432	32-35	9604-115.0599	-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.87	2.51	9.19	3.87
9433	32-35	9742-115.0787	-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	3.07	1.58	16.51	2.75
9434	32-35	9850-115.0755	-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	2.81	1.49	14.72	1.65
9435	32-35	9463-115.1318	-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	3.56	1.35	20.68	1.82
9436	32-35	9155-115.1281	-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	3.20	1.40	18.83	1.81
9437	32-35	5001-115.1789	-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.30	1.68	4.71	0.72
9438	32-35	9334-115.1166	-1-72-100	03/14/77	STREAM	DRY	1000 0500	1	2.32	1.50	14.77	1.40
9439	32-35	9229-115.0792	-1-72-100	03/14/77	STREAM	DRY	1000 0500	1	3.10	1.43	20.47	1.59
9440	32-35	9114-115.0950	-1-72-100	03/14/77	STREAM	DRY	1000 0500	1	2.55	1.45	17.86	1.38
9441	32-35	8952-115.0943	-1-72-100	03/14/77	STREAM	DRY	1000 0500	1	3.29	1.50	22.42	2.33
9442	32-35	8927-115.1065	-1-72-100	03/15/77	STREAM	DRY	1000 0500	1	3.24	1.44	16.53	2.15
9443	32-35	8773-115.1036	-1-72-100	03/15/77	STREAM	DRY	1000 0500	1	2.98	1.42	17.57	1.45
9444	32-35	8752-115.0859	-1-72-100	03/15/77	STREAM	DRY	1000 0500	1	3.46	1.43	13.03	2.37
9445	32-35	8962-115.1563	-1-72-100	03/15/77	STREAM	DRY	1000 0500	1	3.14	1.73	16.25	3.58
9446	32-35	9156-115.1913	-1-72-100	03/15/77	STREAM	DRY	1000 0500	1	2.85	1.60	12.76	2.63
9447	32-35	9040-115.1982	-1-72-100	03/15/77	STREAM	DRY	1000 0500	9	3.42	1.63	16.92	3.36
9448	32-35	8708-115.1513	-1-72-100	03/15/77	STREAM	DRY	1000 0500	1	2.62	1.48	17.35	1.73
9449	32-35	8175-115.1426	-1-72-100	03/15/77	STREAM	DRY	1000 0500	1	2.34	1.49	13.51	1.36
9450	32-35	8211-115.1426	-1-72-100	03/15/77	STREAM	DRY	1000 0500	1	3.18	1.31	9.26	0.93
9451	32-35	8502-115.0466	-1-72-100	03/16/77	STREAM	DRY	1000 0500	1	1.76	1.60	7.11	1.08
9452	32-35	8583-115.0420	-1-72-100	03/16/77	STREAM	DRY	1000 0500	1	3.24	1.40	17.55	1.76
9453	32-35	8888-115.0324	-1-72-100	03/16/77	STREAM	DRY	1000 0500	1	3.36	1.39	21.30	1.66
9454	32-35	9139-115.0273	-1-72-100	03/16/77	STREAM	DRY	1000 0500	1	2.61	1.54	18.54	1.94
9455	32-35	8481-115.1307	-1-72-100	03/16/77	STREAM	DRY	1000 0500	1	2.18	1.57	12.53	1.60
9456	32-35	8007-115.1629	-1-72-100	03/16/77	STREAM	DRY	1000 0500	1	2.47	1.64	14.46	2.15
9457	32-35	7804-115.1944	-1-72-100	03/17/77	STREAM	DRY	1000 0500	1	3.65	1.43	19.65	2.27
9458	32-35	8386-115.2274	-1-72-100	03/17/77	STREAM	DRY	1000 0500	1	3.85	1.33	19.93	1.67
9459	32-35	8501-115.2147	-1-72-100	03/17/77	STREAM	DRY	1000 0500	1	3.16	1.44	10.76	1.94
9460	32-35	6789-115.0420	-1-72-100	03/18/77	STREAM	DRY	1000 0500	1	3.27	1.49	19.92	2.32
9461	32-35	6624-115.0291	-1-72-100	03/18/77	STREAM	DRY	1000 0500	1	5.21	1.15		
9462	32-35	6336-115.0287	-1-72-100	03/18/77	STREAM	DRY	1000 0500	1	4.04	1.37	23.62	1.89
9463	32-35	6021-115.0295	-1-72-100	03/18/77	STREAM	DRY	1000 0500	1	2.63	1.55	16.20	2.63
9464	32-35	5923-115.0379	-1-72-100	03/18/77	STREAM	DRY	1000 0500	1	2.78	1.60	16.00	1.80
9465	32-35	4443-114.8185	-1-72-100	03/18/77	STREAM	DRY	1000 0500	1	2.05	1.58	14.43	1.35
9466	32-35	4416-114.8185	-1-72-100	03/18/77	STREAM	DRY	1000 0500	1	2.30	1.73	16.48	2.34
9467	32-35	4255-114.8301	-1-72-100	03/18/77	STREAM	DRY	1000 0500	1	1.91	1.56	7.25	1.13
9468	32-35	3551-114.6719	-1-72-100	03/19/77	STREAM	DRY	1000 0500	1	1.33	1.89	12.47	1.54
9469	32-35	3557-114.6625	-1-72-100	03/19/77	STREAM	DRY	1000 0500	1	1.40	2.01	14.76	1.72
9469	32-35	3557-114.6625	-1-72-101		STREAM	DRY	1000 0500	1	1.23	2.10	10.05	1.61
9470	32-35	3381-114.6377	-1-72-100	03/19/77	STREAM	DRY	1000 0500	1	2.02	1.38		
9471	32-35	3258-114.6403	-1-72-100	03/19/77	STREAM	DRY	1000 0500	1	1.70			
9472	32-35	3173-114.7296	-1-72-100	03/19/77	STREAM	DRY	1000 0500	1	1.11	1.32		
9473	32-35	2985-114.7334	-1-72-100	03/19/77	STREAM	DRY	1000 0500	1	1.19	3.70	7.28	3.95
9474	32-35	3455-114.7398	-1-72-100	03/20/77	STREAM	DRY	1000 0500	1	1.38	2.39	10.65	2.49

KINGHAM QUAD REPORT, LAHRENE LIVERMORE LABORATORY
TABLE B.1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	-----DOE ST	SAMPLE LAT.	NUMBER----- LONG.	DATE L TY RPL	SAMPLE MO-DA-YR	SOURCE/COND.	PARTICLE UPPER	SIZE LOWER	POS. CONT	G. C. X-REF	URANIUM(DNC) PPM	THORIUM(NAA) PPM	ERR	ERR
9475	32-35	2572-114	7422-1-72-100	03/20/77	STREAM	DRY	1000	0500	1	2.05	1.56	15.19	1.32	
9476	32-35	1678-114	6909-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	1.41	1.83	9.30	1.35	
9477	32-35	1708-114	7051-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	1.55	1.71	13.11	1.09	
9478	32-35	1431-114	7169-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	0.91	1.72			
9479	32-35	1322-114	7126-1-72-100	02/21/77	STREAM	DRY	1000	0500	1	0.81	2.22	6.41	0.96	
9480	32-35	1160-114	7132-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	0.87	2.35	12.59	1.27	
9481	32-35	1307-114	6708-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	1.09	1.65			
9482	32-35	1350-114	6710-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	0.95	2.41	6.30	1.56	
9483	32-35	1615-114	6947-1-72-100	03/21/77	STREAM	DRY	1000	0500	9	1.04	1.61			
9484	32-35	1459-114	6486-1-72-100	03/24/77	STREAM	DRY	1000	0500	1	1.18	2.07	7.41	1.39	
9485	32-35	1826-114	6598-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	1.33	2.20	15.33	1.09	
9486	32-35	1903-114	6848-1-72-100	03/21/77	STREAM	DRY	1000	0500	9	1.80	2.04	31.62	2.32	
9487	32-35	2019-114	6883-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	1.71	1.88	19.05	1.82	
9488	32-35	1800-114	6517-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	1.44	2.91	29.48	3.32	
9489	32-35	1955-114	6497-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	0.91	2.61	14.39	1.66	
9490	32-35	1955-114	6497-1-72-101		STREAM	DRY	1000	0500	1	1.02	3.66	17.09	3.24	
9491	32-35	2076-114	6751-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	1.52	1.48			
9492	32-35	1944-114	6457-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	1.14	2.10	15.43	1.37	
9493	32-35	1743-114	6495-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	1.13	2.81	14.08	1.47	
9494	32-35	1908-114	7157-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	1.02	2.26	10.76	1.47	
9495	32-35	1909-114	7112-1-72-100	03/21/77	STREAM	DRY	1000	0500	1	0.78	2.44	6.48	1.22	
9496	32-35	1909-114	6846-1-72-100	03/23/77	STREAM	DRY	1000	0500	1	0.92	1.42	8.60	1.49	
9497	32-35	1913-114	7804-1-72-100	03/23/77	STREAM	DRY	1000	0500	1	2.26	1.73	14.49	2.27	
9498	32-35	1908-114	7545-1-72-100	03/23/77	STREAM	DRY	1000	0500	1	2.42	1.55	13.22	1.75	
9499	32-35	1908-114	7559-1-72-100	03/23/77	STREAM	DRY	1000	0500	1	2.57	1.54	16.81	1.66	
9500	32-35	1907-114	7563-1-72-100	03/23/77	STREAM	DRY	1000	0500	1	1.80	2.00	23.95	2.20	
9501	32-35	1624-114	8340-1-72-100	02/09/77	STREAM	DRY	1000	0500	5	1.42	1.54			
9502	32-35	7138-114	8229-1-72-100	03/09/77	STREAM	DRY	1000	0500	9	2.37	1.53	16.39	1.44	
9503	32-35	6921-114	8259-1-72-100	03/09/77	STREAM	DRY	1000	0500	9	2.11	1.74	16.20	1.99	
9504	32-35	6921-114	8259-1-72-100	03/09/77	STREAM	DRY	1000	0500	9	2.72	1.50	17.71	1.78	
9505	32-35	6910-114	8136-1-72-100	03/09/77	STREAM	DRY	1000	0500	1	1.88	1.44			
9506	32-35	5660-114	8726-1-72-100	03/09/77	STREAM	DRY	1000	0500	1	2.20	1.51	14.35	1.39	
9507	32-35	7018-114	8005-1-72-100	03/10/77	STREAM	DRY	1000	0500	9	3.07	1.38	19.45	1.42	
9508	32-35	7354-114	7741-1-72-100	03/10/77	STREAM	DRY	1000	0500	9	3.42	1.39	25.46	1.75	
9509	32-35	7023-114	8281-1-72-100	03/10/77	STREAM	DRY	1000	0500	9	3.05	1.47	17.33	1.92	
9510	32-35	7023-114	8281-1-72-101		STREAM	DRY	1000	0500	9	3.08	1.39	14.60	1.69	
9511	32-35	7420-114	8359-1-72-100	03/10/77	STREAM	DRY	1000	0500	9	4.08	1.40	25.78	2.11	
9512	32-35	7285-114	8827-1-72-100	03/10/77	STREAM	DRY	1000	0500	9	2.10	1.62	12.86	1.54	
9513	32-35	6921-114	8018-1-72-100	03/10/77	STREAM	DRY	1000	0500	9	2.82	1.50	17.76	1.92	
9514	32-35	5100-114	7638-1-72-100	03/10/77	STREAM	DRY	1000	0500	9	1.93	1.89	15.64	2.00	
9515	32-35	5598-114	8253-1-72-100	03/11/77	STREAM	DRY	1000	0500	1	1.34	1.50			
9516	32-35	5598-114	8253-1-72-100	03/11/77	STREAM	DRY	1000	0500	1	1.98	1.55	11.90	1.23	
9517	32-35	5676-114	8086-1-72-100	03/11/77	STREAM	DRY	1000	0500	1	2.79	1.33			
9518	32-35	5330-114	8452-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	0.82	1.87			
9519	32-35	5406-114	8648-1-72-100	03/12/77	STREAM	DRY	1000	0500	5	2.46	1.54	14.20	1.59	
9520	32-35	5586-114	8666-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	2.97	1.43	17.58	1.56	
9521	32-35	5586-114	8666-1-72-101		STREAM	DRY	1000	0500	1	3.10	1.25			
9522	32-35	5809-114	8956-1-72-100	03/12/77	STREAM	DRY	1000	0500	5	3.18	1.46	18.44	1.74	
9523	32-35	5874-114	9201-1-72-100	03/12/77	STREAM	DRY	1000	0500	5	1.39	1.98	11.29	1.48	

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

SITE NUMBER	ST	LAT.	LONG.	L	T	RPL	DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE SIZE	POS. UPPER LOWER	CONT.	G. C. X-REF	URANIUM(DNC) PPM	±ERR	THORIUM(NAA) PPM	ERP
9522	32-35	5175	-114	7328	-1	72-100	03/12/77	STREAM	DRY	1000	0500	1	1.72	1.72	16.65	1.35
9523	32-35	5334	-114	7349	-1	72-100	03/12/77	STREAM	DRY	1000	0500	1	1.82	1.82		
9524	32-35	5617	-114	7337	-1	72-100	03/12/77	STREAM	DRY	1000	0500	1	1.52	1.77	9.43	1.20
9526	32-35	5808	-114	7895	-1	72-100	03/12/77	STREAM	DRY	1000	0500	1	0.66	2.57	5.79	0.99
9527	32-35	5962	-114	7968	-1	72-100	03/13/77	STREAM	DRY	1000	0500	9	0.48	2.99	4.73	0.85
9528	32-35	5084	-114	8181	-1	72-100	03/13/77	STREAM	DRY	1000	0500	5	3.05	1.52	21.25	1.74
9529	32-35	6988	-114	8408	-1	72-100	03/13/77	STREAM	DRY	1000	0500	5	1.69	1.83	12.83	1.75
9529	32-35	5988	-114	8408	-1	72-101		STREAM	DRY	1000	0500		2.06	1.70	20.25	1.86
9530	32-35	6061	-114	8440	-1	72-100	03/13/77	STREAM	DRY	1000	0500	5	2.22	1.36		
9531	32-35	6241	-114	8424	-1	72-100	03/13/77	STREAM	DRY	1000	0500	5	1.66	1.59	13.37	1.33
9532	32-35	7532	-114	7537	-1	72-100	03/14/77	STREAM	DRY	1000	0500	5	2.01	1.37		
9533	32-35	7651	-114	7645	-1	72-100	03/14/77	STREAM	DRY	1000	0500	9	3.42	1.74		
9534	32-35	7434	-114	8093	-1	72-100	03/14/77	STREAM	DRY	1000	0500	1	3.58	1.42	21.75	2.02
9535	32-35	7218	-114	8121	-1	72-100	03/14/77	STREAM	DRY	1000	0500	1	3.88	1.38	23.05	1.80
9536	32-35	6610	-114	7895	-1	72-100	03/14/77	STREAM	DRY	1000	0500	1	3.07	1.25		
9537	32-35	6959	-114	7752	-1	72-100	03/14/77	STREAM	DRY	1000	0500	1	3.82	1.23		
9538	32-35	3634	-114	8350	-1	72-100	03/14/77	STREAM	DRY	1000	0500	5	1.55	1.63	10.68	1.06
9539	32-35	3949	-114	8256	-1	72-100	03/14/77	STREAM	DRY	1000	0500	5	1.79	1.82	12.81	1.72
9540	32-35	3947	-114	8135	-1	72-100	03/14/77	STREAM	DRY	1000	0500	5	2.12	1.55	8.40	1.28
9541	32-35	3441	-114	7652	-1	72-100	03/14/77	STREAM	DRY	1000	0500	5	1.93	1.79	14.97	1.86
9542	32-35	5133	-114	7520	-1	72-100	03/14/77	STREAM	DRY	1000	0500	1	1.67	1.52		
9543	32-35	5378	-114	8182	-1	72-100	03/15/77	STREAM	DRY	1000	0500	5	2.12	1.49	14.37	1.19
9544	32-35	3430	-114	8027	-1	72-100	03/15/77	STREAM	DRY	1000	0500	5	2.38	1.47	13.58	1.15
9545	32-35	2884	-114	8744	-1	72-100	03/15/77	STREAM	DRY	1000	0500	9	1.59	1.75	10.94	1.33
9546	32-35	2771	-114	8978	-1	72-100	03/15/77	STREAM	DRY	1000	0500	5	1.74	1.66	12.08	1.25
9547	32-35	2956	-114	9226	-1	72-100	03/15/77	STREAM	DRY	1000	0500	5	2.11	1.87	16.03	2.55
9548	32-35	3110	-114	8905	-1	72-100	03/15/77	STREAM	DRY	1000	0500	5	2.12	1.79	14.41	2.25
9549	32-35	2920	-114	8766	-1	72-100	03/15/77	STREAM	DRY	1000	0500	9	2.66	1.40	15.38	1.14
9550	32-35	2738	-114	9682	-1	72-100	03/15/77	STREAM	DRY	1000	0500	5	4.22	1.33	18.31	2.00
9551	32-35	2532	-114	9797	-1	72-100	03/15/77	STREAM	DRY	1000	0500	5	2.12	1.63	12.48	1.70
9552	32-35	2595	-114	7130	-1	72-100	03/15/77	STREAM	DRY	1000	0500	5	1.48	1.96	16.00	1.68
9553	32-35	6684	-114	7552	-1	72-100	03/15/77	STREAM	DRY	1000	0500	9	2.66	1.61	22.26	1.75
9554	6-35	2467	-114	7612	-1	72-100	03/15/77	STREAM	DRY	1000	0500	9	4.03	1.22		
9555	6-35	2396	-114	7691	-1	72-100	03/15/77	STREAM	DRY	1000	0500	5	1.85	1.42		
9556	6-35	2271	-114	7716	-1	72-100	03/15/77	STREAM	DRY	1000	0500	1	1.60	1.28		
9557	6-35	2061	-114	7879	-1	72-100	03/15/77	STREAM	DRY	1000	0500	1	3.41	1.42	26.89	1.90
9558	6-35	1708	-114	7512	-1	72-100	03/15/77	STREAM	DRY	1000	0500	5	2.74	1.29		
9559	6-35	1959	-114	8397	-1	72-101		STREAM	DRY	1000	0500		2.03	1.59	9.28	1.39
9560	32-35	6203	-115	1594	-1	72-100	03/16/77	STREAM	DRY	1000	0500	9	2.37	1.88	41.18	2.73
9561	32-35	6347	-115	1602	-1	72-100	03/16/77	STREAM	DRY	1000	0500	5	2.42	2.05	25.84	1.85
9562	32-35	6688	-115	1574	-1	72-100	03/16/77	STREAM	DRY	1000	0500	5	2.47	1.56	20.99	1.85
9563	32-35	5536	-115	1598	-1	72-100	03/16/77	STREAM	DRY	1000	0500	5	3.09	1.43	18.27	1.73
9564	32-35	5761	-115	1526	-1	72-100	03/16/77	STREAM	DRY	1000	0500	5	2.29	1.85	23.65	1.82
9565	32-35	5698	-115	1559	-1	72-100	03/16/77	STREAM	DRY	1000	0500	5	4.03	1.98	69.49	5.73
9566	6-35	6959	-115	1767	-1	72-100	03/16/77	STREAM	DRY	1000	0500	9	2.58	1.33		
9567	32-35	5939	-115	1412	-1	72-100	03/17/77	STREAM	DRY	1000	0500	5	5.06	1.25		
9568	32-35	6082	-115	1342	-1	72-100	03/17/77	STREAM	DRY	1000	0500	5	4.31	1.18		
9569	32-35	6157	-115	1484	-1	72-100	03/17/77	STREAM	DRY	1000	0500	5	2.85	1.29		
9569	32-35	6157	-115	1484	-1	72-101		STREAM	DRY	1000	0500		5.30	1.81	78.41	6.77

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE #1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	DATE L TY RPL	MO-DA-YR	SOURCE/COND.	PARTICLE UPPER	SIZE LOWER	POS. CONT	Q. C. X-REF	URANIUM(DNC) PPM	THORIUM(NAA) PPM
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
9570	32-35	6373	-115.1468	-1-72-100	03/17/77	STREAM	DRY	1000	0500	5	1.36	1.54
9571	6-35	6812	-115.2000	-1-72-100	03/17/77	STREAM	DRY	1000	0500	5	2.41	1.30
9572	6-35	6802	-115.1403	-1-72-100	03/17/77	STREAM	DRY	1000	0500	9	1.87	1.38
9573	32-35	5079	-115.1762	-1-72-100	03/18/77	STREAM	DRY	1000	0500	9	13.55	1.06
9574	32-35	5083	-115.2016	-1-72-100	03/18/77	STREAM	DRY	1000	0500	5	2.50	1.31
9575	32-35	5147	-115.2114	-1-72-100	03/18/77	STREAM	DRY	1000	0500	9	2.87	1.63
9576	32-35	5274	-115.2133	-1-72-100	03/18/77	STREAM	DRY	1000	0500	1	2.01	1.39
9577	32-35	5534	-115.2628	-1-72-100	03/18/77	STREAM	DRY	1000	0500	1	2.07	1.71
9578	32-35	5623	-115.2717	-1-72-100	03/18/77	STREAM	DRY	1000	0500	9	2.25	2.02
9579	32-35	5610	-115.3055	-1-72-100	03/18/77	STREAM	DRY	1000	0500	5	1.61	2.26
9580	32-35	6340	-115.1662	-1-72-100	03/19/77	STREAM	DRY	1000	0500	5	5.03	1.37
9581	32-35	6462	-115.1433	-1-72-100	03/19/77	STREAM	DRY	1000	0500	5	3.54	1.23
9582	32-35	6703	-115.1847	-1-72-100	03/20/77	STREAM	DRY	1000	0500	5	2.72	1.29
9583	32-35	6571	-115.2082	-1-72-100	03/20/77	STREAM	DRY	1000	0500	9	9.26	1.10
9584	32-35	6517	-115.2094	-1-72-100	03/20/77	STREAM	DRY	1000	0500	9	2.07	1.41
9585	32-35	6462	-115.2007	-1-72-100	03/20/77	STREAM	DRY	1000	0500	5	2.21	1.35
9586	32-35	6364	-115.2053	-1-72-100	03/20/77	STREAM	DRY	1000	0500	5	2.17	1.32
9587	32-35	6684	-115.1649	-1-72-100	03/21/77	STREAM	DRY	1000	0500	5	1.36	1.58
9588	32-35	6554	-115.1563	-1-72-100	03/21/77	STREAM	DRY	1000	0500	5	1.65	1.48
9589	32-35	5575	-115.2369	-1-72-100	03/21/77	STREAM	DRY	1000	0500	5	1.61	1.78
9590	32-35	5825	-115.2242	-1-72-100	03/21/77	STREAM	DRY	1000	0500	5	1.55	1.86
9591	32-35	5918	-115.2394	-1-72-100	03/21/77	STREAM	DRY	1000	0500	5	2.28	1.60
9592	32-35	6174	-115.2068	-1-72-100	03/21/77	STREAM	DRY	1000	0500	5	3.48	1.23
9593	32-35	6150	-115.4825	-1-72-100	03/21/77	STREAM	DRY	1000	0500	5	2.45	3.88
9594	32-35	5571	-115.4730	-1-72-100	03/21/77	STREAM	DRY	1000	0500	5	1.19	2.17
9600	4-35	1983	-114.4573	-1-72-100	03/24/77	STREAM	DRY	1000	0500	5	1.95	2.09
9601	32-35	9193	-114.9197	-1-72-100	03/10/77	STREAM	DRY	1000	0500	9	3.44	1.25
9607	32-35	9930	-114.9024	-1-72-100	03/10/77	STREAM	DRY	1000	0500	1	2.03	1.38
9608	32-35	9884	-114.9001	-1-72-100	03/10/77	STREAM	DRY	1000	0500	1	2.26	1.38
9609	32-35	9850	-114.8636	-1-72-100	03/10/77	STREAM	DRY	1000	0500	9	2.70	1.25
9609	32-35	9850	-114.8636	-1-72-101		STREAM	DRY	1000	0500	1	2.51	1.63
9612	32-35	9898	-114.8534	-1-72-100	03/11/77	STREAM	DRY	1000	0500	1	2.00	1.27
9615	32-35	9801	-114.7895	-1-72-100	03/11/77	STREAM	DRY	1000	0500	1	2.89	1.31
9616	32-35	9869	-114.7781	-1-72-100	03/11/77	STREAM	DRY	1000	0500	1	3.40	1.23
9617	32-35	8979	-114.8316	-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	2.89	1.40
9618	32-35	8766	-114.7968	-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	2.34	1.36
9619	32-35	8708	-114.7748	-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	1.15	2.04
9619	32-35	8708	-114.7748	-1-72-101		STREAM	DRY	1000	0500	1	1.39	1.92
9620	32-35	9125	-114.7880	-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	2.51	1.31
9621	32-35	9012	-114.7629	-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	2.08	1.40
9622	32-35	9095	-114.8679	-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	2.75	1.27
9623	32-35	9686	-114.9018	-1-72-100	03/12/77	STREAM	DRY	1000	0500	9	2.94	1.51
9624	32-35	9386	-114.9392	-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	2.96	1.27
9625	32-35	9155	-114.9579	-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	2.41	1.32
9626	32-35	9575	-114.9886	-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	3.23	1.26
9627	32-35	9570	-114.9586	-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	3.82	1.21
9628	32-35	9840	-114.9602	-1-72-100	03/12/77	STREAM	DRY	1000	0500	1	3.22	1.29
9629	32-35	9754	-114.9293	-1-72-100	03/12/77	STREAM	DRY	1000	0500	9	3.79	1.29
9629	32-35	9754	-114.9293	-1-72-101		STREAM	DRY	1000	0500	1	2.02	1.26

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	NUMBER- L TY RPL	DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE UPPER	SIZE LOWER	POS. CONT	G. C. X-REF	URANIUM(DNC) PPH	THORIUM(NAA) PPH	ERR
9630	32-35	9618	-114.9264	-172-100	03/12/77	STREAM	DRY	1000	0500	1	3.05	1.28	
9631	32-35	9538	-114.9321	-172-100	03/12/77	STREAM	DRY	1000	0500	1	3.47	1.24	
9632	32-35	8852	-114.9782	-172-100	03/12/77	STREAM	DRY	1000	0500	1	2.60	1.49	17.45 1.52
9633	32-35	4662	-114.9132	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.22	1.58	14.85 1.94
9634	32-35	4730	-114.9565	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.45	1.57	14.44 1.62
9635	32-35	4212	-114.9425	-172-100	03/13/77	STREAM	DRY	1000	0500	9	3.01	1.47	17.52 1.87
9636	32-35	4014	-114.9430	-172-100	03/13/77	STREAM	DRY	1000	0500	1	1.44	1.77	12.70 1.11
9637	32-35	3498	-114.9873	-172-100	13/03/77	STREAM	DRY	1000	0500	1	2.36	1.60	16.18 1.68
9638	32-35	4477	-114.9110	-172-100	03/13/77	STREAM	DRY	1000	0500	9	2.64	1.48	17.53 1.30
9639	32-35	4851	-114.8847	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.51	1.56	16.67 1.75
9640	32-35	4676	-114.8653	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.20	1.56	13.60 1.33
9641	32-35	4893	-114.8658	-172-100	13/03/77	STREAM	DRY	1000	0500	1	2.25	1.69	17.99 1.82
9642	32-35	4753	-114.8368	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.36	1.65	18.79 1.52
9643	32-35	4923	-114.8316	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.07	1.85	12.28 2.37
9644	32-35	4847	-114.8119	-172-100	03/13/77	STREAM	DRY	1000	0500	1	1.95	1.69	14.70 1.48
9645	32-35	4921	-114.7745	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.11	1.65	19.04 1.66
9646	32-35	4839	-114.7690	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.21	1.59	16.07 1.47
9647	32-35	4432	-114.7613	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.05	1.89	12.67 2.42
9648	32-35	4499	-114.6812	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.11	1.66	10.29 1.66
9649	32-35	4337	-114.6816	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.73	1.60	18.57 1.98
9650	32-35	4075	-114.6801	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.80	1.52	18.49 2.02
9651	32-35	4082	-114.6713	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.99	1.53	17.25 2.34
9652	32-35	3754	-114.6974	-172-100	03/13/77	STREAM	DRY	1000	0500	1	2.58	1.58	19.73 2.13
9653	32-35	2898	-114.6733	-172-100	03/13/77	STREAM	DRY	1000	0500	1	1.66	1.87	9.69 1.84
9654	6-35	4475	-115.2771	-172-100	03/15/77	STREAM	DRY	1000	0500	1	1.76	1.71	20.91 1.48
9655	6-35	4858	-115.3939	-172-100	15/03/77	STREAM	DRY	1000	0500	1	1.31	1.73	8.91 0.97
9656	6-35	4685	-115.4548	-172-100	03/15/77	STREAM	DRY	1000	0500	1	1.14	2.10	16.21 1.39
9657	6-35	4633	-115.4737	-172-100	03/15/77	STREAM	DRY	1000	0500	9	2.03	1.88	17.24 2.48
9658	6-35	4679	-115.4791	-172-100	03/15/77	STREAM	DRY	1000	0500	1	2.15	1.54	15.17 1.35
9659	6-35	4581	-115.4879	-172-100	03/15/77	STREAM	DRY	1000	0500	1	1.60	1.68	9.84 1.18
9659	6-35	4680	-115.4879	-172-101		STREAM	DRY	1000	0500		1.81	1.40	
9660	6-35	4663	-115.4912	-172-100	03/15/77	STREAM	DRY	1000	0500	9	2.51	1.27	
9661	6-35	4794	-115.4612	-172-100	03/15/77	STREAM	DRY	1000	0500	2	2.17	2.46	
9662	6-35	4469	-115.3691	-172-100	03/15/77	STREAM	DRY	1000	0500	1	0.84	2.17	7.76 1.04
9663	6-35	3865	-115.3891	-172-100	03/15/77	STREAM	DRY	1000	0500	9	1.05	1.96	9.94 0.98
9664	6-35	3795	-115.3365	-172-100	03/15/77	STREAM	DRY	1000	0500	1	1.16	1.84	9.52 1.06
9665	6-35	3844	-115.3694	-172-100	03/15/77	STREAM	DRY	1000	0500	1	0.69	2.23	5.08 0.69
9666	6-35	2971	-115.4477	-172-100	03/15/77	STREAM	DRY	1000	0500	1	0.77	2.29	5.63 0.97
9667	6-35	2909	-115.4549	-172-100	03/15/77	STREAM	DRY	1000	0500	1	0.85	1.68	
9668	6-35	2675	-115.4543	-172-100	03/15/77	STREAM	DRY	1000	0500	1	0.68	2.33	5.84 0.85
9669	6-35	2822	-115.4133	-172-100	03/15/77	STREAM	DRY	1000	0500	1	0.95	2.21	8.39 1.29
9669	6-35	2822	-115.4131	-172-101		STREAM	DRY	1000	0500	1	0.95	2.21	
9670	6-35	3272	-115.2705	-172-100	03/15/77	STREAM	DRY	1000	0500	9	1.68	2.14	33.40 2.34
9671	6-35	3406	-115.2625	-172-100	03/15/77	STREAM	DRY	1000	0500	2	1.12	3.71	51.97 3.35
9672	32-35	4796	-114.7294	-172-100	03/16/77	STREAM	DRY	1000	0500	1	2.77	1.50	23.39 1.86
9673	32-35	4248	-114.7398	-172-100	03/16/77	STREAM	DRY	1000	0500	1	2.41	1.54	19.68 1.52
9674	32-35	3819	-114.6926	-172-100	03/16/77	STREAM	DRY	1000	0500	1	1.80	2.75	6.79 3.72
9675	32-35	4571	-114.8314	-172-100	03/16/77	STREAM	DRY	1000	0500	1	2.29	2.19	12.75 3.92
9676	32-35	4596	-114.8203	-172-100	03/16/77	STREAM	DRY	1000	0500	9	2.32	1.62	18.10 1.93

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE 8-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

PAGE 8-10

SITE NUMBER	-----DOE SAMPLE NUMBER----- SI LAT. LONG. L TY RPL	DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE SIZE UPPER LOWER	POG. CONT	Q. C. X-REF	URANIUM(DDCI) PPM	THORIUM(DDCI) PPM	THORIUM(DDCI) PPM	THORIUM(DDCI) ERR
9677	4-35,2284-114,6057-1-72-100	03/23/77	STREAM	DRY	1000 0500	1	0.84	3.78	5.57	2.78
9678	4-35,2143-114,6248-1-72-100	03/23/77	STREAM	DRY	1000 0500	1	0.86	2.23	8.97	1.10
9679	4-35,2124-114,6178-1-72-100	03/23/77	STREAM	DRY	1000 0500	1	2.62	1.56	26.48	1.87
9681	4-35,1120-114,6197-1-72-100	03/23/77	STREAM	DRY	1000 0500	9	2.69	1.49	19.61	1.81
9684	32-35,2347-114,5363-1-72-100	03/25/77	STREAM	DRY	1000 0500	9	2.58	1.60	15.55	2.31
10501	32-35,9799-115,1532-1-72-100	03/11/77	STREAM	DRY	1000 0500	9	2.22	1.63	11.33	1.83
10502	32-35,9844-115,2097-1-72-100	03/11/77	STREAM	DRY	1000 0500	9	1.44	1.56	2.62	0.72
10503	32-35,9775-115,2331-1-72-100	03/11/77	STREAM	DRY	1000 0500	1	1.78	1.50	4.40	0.76
10504	32-35,9713-115,3009-1-72-100	03/11/77	STREAM	DRY	1000 0500	1	1.86	1.41	2.13	0.42
10505	32-35,9822-115,3073-1-72-100	03/11/77	STREAM	DRY	1000 0500	1	1.97	1.44	2.45	0.53
10506	32-35,9534-115,3068-1-72-100	03/11/77	STREAM	DRY	1000 0500	1	1.81	1.41	1.92	0.43
10507	32-35,9501-115,2703-1-72-100	03/11/77	STREAM	DRY	1000 0500	1	1.42	1.67	3.55	0.66
10508	32-35,9342-115,2884-1-72-100	03/12/77	STREAM	DRY	1000 0500	1	1.39	1.76	3.12	0.99
10509	32-35,9243-115,2897-1-72-100	03/12/77	STREAM	DRY	1000 0500	1	1.67	1.49	4.53	0.60
10510	32-35,9025-115,2813-1-72-100	03/12/77	STREAM	DRY	1000 0500	1	2.50	1.34	2.03	0.55
10511	32-35,8744-115,2720-1-72-100	03/12/77	STREAM	DRY	1000 0500	9	1.70	1.49		
10512	32-35,9021-115,3190-1-72-100	03/12/77	STREAM	DRY	1000 0500	9	1.60	1.51		
10513	32-35,8525-115,3134-1-72-100	03/12/77	STREAM	DRY	1000 0500	1	1.84	1.43		
10514	32-35,8670-115,3187-1-72-100	03/12/77	STREAM	DRY	1000 0500	9	1.37	1.56		
10515	32-35,9680-115,3132-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.13	1.70		
10516	32-35,9545-115,3246-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.81	1.48		
10517	32-35,9557-115,3489-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.73	1.54	3.53	0.80
10518	32-35,8875-115,3681-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	2.41	1.63	7.85	1.27
10519	32-35,9131-115,3933-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	2.16	1.39	2.14	0.50
10519	32-35,9131-115,3930-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	2.38	1.46	2.13	0.47
10520	32-35,9276-115,4005-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	2.28	1.32		
10521	32-35,9446-115,3935-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.36	1.72	4.31	0.82
10522	32-35,9520-115,4022-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.44	1.58	5.64	0.69
10523	32-35,9636-115,3964-1-72-100	03/13/77	STREAM	DRY	1000 0500	9	1.43	1.73	5.50	0.90
10524	32-35,9717-115,3952-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.20	1.91	4.25	0.79
10525	32-35,9899-115,4747-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.16	1.92	2.91	0.98
10526	32-35,9515-115,2382-1-72-100	03/13/77	STREAM	DRY	1000 0500	9	1.43	1.61	2.49	0.56
10527	32-35,9351-115,2562-1-72-100	03/13/77	STREAM	DRY	1000 0500	9	1.52	1.69	4.97	0.89
10528	32-35,9218-115,2444-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.86	1.44	1.90	0.53
10529	32-35,9164-115,2411-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.92	1.47	3.03	0.62
10530	32-35,9045-115,2337-1-72-100	03/13/77	STREAM	DRY	1000 0500	1	1.81	1.47	2.45	0.51
10531	6-35,2369-114,9219-1-72-100	03/14/77	STREAM	DRY	1000 0500	9	2.06	1.57	13.95	1.45
10532	6-35,2062-114,9172-1-72-100	03/14/77	STREAM	DRY	1000 0500	5	1.43	1.57	1.59	1.78
10533	6-35,2318-114,8891-1-72-100	03/14/77	STREAM	DRY	1000 0500	1	2.95	1.42	16.49	1.52
10534	6-35,2190-114,9795-1-72-100	03/14/77	STREAM	DRY	1000 0500	1	2.67	1.49	20.00	1.57
10535	6-35,2020-114,9876-1-72-100	03/14/77	STREAM	DRY	1000 0500	1	2.18	1.64	22.57	1.69
10536	6-35,0919-114,9815-1-72-100	03/14/77	STREAM	DRY	1000 0500	5	2.25	1.53	14.82	1.16
10537	6-35,0802-114,9807-1-72-100	03/14/77	STREAM	DRY	1000 0500	1	1.21	1.58		
10538	6-35,0399-114,9905-1-72-100	03/14/77	STREAM	DRY	1000 0500	5	0.96	2.12	4.92	1.15
10539	6-35,0291-114,9469-1-72-100	03/14/77	STREAM	DRY	1000 0500	1	1.53	1.91	7.34	1.71
10540	6-35,0291-114,9469-1-72-100	03/14/77	STREAM	DRY	1000 0500	1	1.75	1.45		
10540	6-35,0453-114,9531-1-72-100	03/14/77	STREAM	DRY	1000 0500	5	0.99	1.59		
10541	6-35,0515-114,9409-1-72-100	03/14/77	STREAM	DRY	1000 0500	5	0.78	2.59	7.05	1.37
10542	6-35,1056-114,8868-1-72-100	03/14/77	STREAM	DRY	1000 0500	5	1.86	1.51	4.48	1.07

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE 8.1. SEDIMENT ANALYSIS; DRY AND STREAM SITES

PAGE B-11

SITE NUMBER	DOE LAT.	DOE LONG.	L TY	RPL MO	DOE DA-YR	SOURCE SAMPLE/COND.	PARTICLE UPPER	SIZE L<	POS. CONT	O. C. X-REF	URANIUM(DNC) PPM	THORIUM(NAA) PPM	ERR	
10543	6-35	0997-115	0856-1	72-100	03/14/77	STREAM	DRY	1000	0500	5	0.86	2.01	7.18	0.73
10544	32-35	7240-115	1569-1	72-100	03/15/77	STREAM	DRY	1000	0500	1	2.48	2.25	41.71	4.23
10545	32-35	7402-115	1593-1	72-100	03/17/77	STREAM	DRY	1000	0500	9	2.71	1.48	17.82	1.67
10546	32-35	7411-115	2174-1	72-100	03/17/77	STREAM	DRY	1000	0500	9	1.24	2.02	16.46	1.38
10547	32-35	7289-115	2420-1	72-100	03/17/77	STREAM	DRY	1000	0500	1	1.71	1.37		
10548	32-35	7111-115	1815-1	72-100	03/17/77	STREAM	DRY	1000	0500	1	2.05	1.65	19.03	1.58
10549	32-35	6975-115	0813-1	72-100	03/17/77	STREAM	DRY	1000	0500	1	2.35	1.59	19.81	1.66
10549	32-35	6975-115	0813-1	72-101		STREAM	DRY	1000	0500	1	1.99	1.65	17.21	1.54
10550	32-35	6598-115	0811-1	72-100	03/17/77	STREAM	DRY	1000	0500	1	2.18	1.57	17.09	1.49
10551	32-35	7134-115	1130-1	72-100	03/17/77	STREAM	DRY	1000	0500	1	2.14	1.61	19.71	1.67
10552	32-35	6085-115	0967-1	72-100	03/17/77	STREAM	DRY	1000	0500	1	2.14	1.35		
10553	32-35	5913-115	0872-1	72-100	03/17/77	STREAM	DRY	1000	0500	9	2.21	1.57	18.78	1.65
10554	32-35	5551-115	0625-1	72-100	03/17/77	STREAM	DRY	1000	0500	5	1.59	1.87	19.32	1.43
10555	32-35	5234-115	0689-1	72-100	03/17/77	STREAM	DRY	1000	0500	5	1.78	1.69	21.67	1.43
10556	32-35	5164-115	0316-1	72-100	03/17/77	STREAM	DRY	1000	0500	5	1.93	1.78	21.94	1.73
10557	32-35	5279-115	0170-1	72-100	03/17/77	STREAM	DRY	1000	0500	5	1.47	1.75	13.97	1.23
10558	32-35	5186-115	1098-1	72-100	03/17/77	STREAM	DRY	1000	0500	9	1.89	1.73	19.13	1.64
10559	6-35	4686-115	2025-1	72-100	03/18/77	STREAM	DRY	1000	0500	1	2.97	1.27		
10559	6-35	4686-115	2025-1	72-101		STREAM	DRY	1000	0500		2.82	1.52	26.26	1.71
10560	6-35	4477-115	1897-1	72-100	03/18/77	STREAM	DRY	1000	0500	1	3.67	1.37	24.32	1.81
10561	6-35	3731-115	2046-1	72-100	03/18/77	STREAM	DRY	1000	0500	1	3.58	1.36	21.53	1.65
10562	6-35	3944-115	1821-1	72-100	03/18/77	STREAM	DRY	1000	0500	1	3.14	1.59	22.60	2.67
10563	6-35	4701-115	1782-1	72-100	03/18/77	STREAM	DRY	1000	0500	1	3.99	1.49	42.39	2.81
10564	6-35	4609-115	1693-1	72-100	03/18/77	STREAM	DRY	1000	0500	1	6.10	1.26	36.38	2.39
10565	6-35	4768-115	1439-1	72-100	03/18/77	STREAM	DRY	1000	0500	1	2.35	1.68	36.91	2.61
10566	6-35	4603-115	1699-1	72-100	03/18/77	STREAM	DRY	1000	0500	1	2.18	1.36		
10567	6-35	4396-115	1337-1	72-100	03/18/77	STREAM	DRY	1000	0500	1	4.91	1.55	25.13	4.73
10568	6-35	4391-115	1602-1	72-100	03/18/77	STREAM	DRY	1000	0500	1	2.27	1.62	22.88	1.68
10569	6-35	4128-115	1453-1	72-100	03/18/77	STREAM	DRY	1000	0500	1	1.84	1.75	17.26	1.41
10570	6-35	4067-115	0986-1	72-100	03/19/77	STREAM	DRY	1000	0500	1	2.98	1.49	19.70	2.22
10571	6-35	4552-115	0993-1	72-100	03/19/77	STREAM	DRY	1000	0500	1	2.73	1.26		
10572	6-35	4417-115	0896-1	72-100	03/19/77	STREAM	DRY	1000	0500	1	2.56	1.47	17.28	1.37
10573	6-35	4246-115	0933-1	72-100	03/19/77	STREAM	DRY	1000	0500	1	2.73	1.30		
10574	6-35	4048-115	0982-1	72-100	03/19/77	STREAM	DRY	1000	0500	1	2.14	1.55	15.81	1.38
10575	6-35	3870-115	1129-1	72-100	03/19/77	STREAM	DRY	1000	0500	1	2.94	1.38	15.47	1.26
10576	6-35	3817-115	0624-1	72-100	03/19/77	STREAM	DRY	1000	0500	9	2.68	1.53	21.91	1.81
10577	6-35	3481-115	1008-1	72-100	03/19/77	STREAM	DRY	1000	0500	1	2.34	1.62	25.22	1.78
10578	6-35	3449-115	1315-1	72-100	03/19/77	STREAM	DRY	1000	0500	1	1.75	1.63	12.51	1.24
10579	6-35	3344-115	1471-1	72-100	03/19/77	STREAM	DRY	1000	0500	1	1.09	1.82	5.28	0.82
10579	6-35	3344-115	1471-1	72-101		STREAM	DRY	1000	0500		1.06	2.10	7.19	1.28
10580	6-35	3196-115	1860-1	72-100	03/19/77	STREAM	DRY	1000	0500	5	2.66	1.88		
10581	6-35	3375-115	1790-1	72-100	03/19/77	STREAM	DRY	1000	0500	5	2.45	1.70	23.14	2.40
10582	6-35	3010-115	2062-1	72-100	03/19/77	STREAM	DRY	1000	0500	5	2.23	1.91	15.55	1.32
10583	6-35	3013-115	2271-1	72-100	03/19/77	STREAM	DRY	1000	0500	5	1.65	1.42		
10584	6-35	2698-115	2311-1	72-100	03/19/77	STREAM	DRY	1000	0500	5	1.05	1.79	5.29	0.63
10585	6-35	4565-115	0944-1	72-100	03/20/77	STREAM	DRY	1000	0500	5	1.59	1.79	13.63	1.54
10586	6-35	4179-115	2121-1	72-100	03/20/77	STREAM	DRY	1000	0500	5	1.59	1.28		
10587	6-35	3704-115	0340-1	72-100	03/20/77	STREAM	DRY	1000	0500	1	1.98	1.61	14.58	1.55
10588	6-35	2919-115	0885-1	72-100	03/20/77	STREAM	DRY	1000	0500	1	3.50	1.45	24.51	2.02

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

PAGE 6-12

SITE NUMBER	ST	DOE SAMPLE NUMBER LAT.	DOE LONG.	DOE L TY	DOE RPL	DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE UPPER	SIZE LOWER	POS. CONT	O. C. X-REF	URANIUM(DNC) PPM	THORIUM(NAA) PPM	ERR	
10589	6-35	3018	-115.0797	-172	-100	03/20/77	STREAM	DRY	1000	0500	5	3.62	1.43	29.79	2.19
10590	6-35	3044	-115.0741	-172	-100	03/20/77	STREAM	DRY	1000	0500	5	4.19	1.19		
10591	6-35	2734	-115.0518	-172	-100	03/20/77	STREAM	DRY	1000	0500	1	1.49	1.46		
10592	6-35	2744	-115.1188	-172	-100	03/20/77	STREAM	DRY	1000	0500	9	1.35	2.06	25.34	1.65
10593	6-35	2693	-115.1343	-172	-100	03/22/77	STREAM	DRY	1000	0500	5	1.21	1.78	9.91	0.75
10594	6-35	2596	-115.1488	-172	-100	03/22/77	STREAM	DRY	1000	0500	5	1.08	1.80	7.75	0.83
10595	6-35	3298	-115.0328	-172	-100	03/20/77	STREAM	DRY	1000	0500	1	0.91	3.27	18.45	2.46
10596	6-35	3516	-115.0422	-172	-100	03/20/77	STREAM	DRY	1000	0500	5	0.75	1.84		
10597	6-35	4505	-115.4585	-172	-100	03/21/77	STREAM	DRY	1000	0500	1	2.03	1.56	12.59	1.28
10598	6-35	4495	-115.4453	-172	-100	03/21/77	STREAM	DRY	1000	0500	1	1.60	1.83	9.29	1.61
10599	6-35	4950	-115.4808	-172	-100	03/21/77	STREAM	DRY	1000	0500	1	3.94	1.50	38.59	3.01
10599	6-35	4950	-115.4808	-172	-101		STREAM	DRY	1000	0500		1.53	1.92	9.19	1.75
10600	6-35	4466	-115.4299	-172	-100	03/21/77	STREAM	DRY	1000	0500	5	1.08	2.33	8.43	1.76
10601	6-35	4285	-115.4314	-172	-100	03/21/77	STREAM	DRY	1000	0500	1	1.07	1.54		
10602	6-35	4233	-115.4425	-172	-100	03/21/77	STREAM	DRY	1000	0500	1	0.65	3.86	11.27	2.10
10603	6-35	4243	-115.4524	-172	-100	03/21/77	STREAM	DRY	1000	0500	5	0.83	3.01	20.17	1.81
10604	6-35	4100	-115.4626	-172	-100	03/21/77	STREAM	DRY	1000	0500	1	0.83	2.47	10.34	1.38
10605	6-35	3885	-115.4762	-172	-100	03/21/77	STREAM	DRY	1000	0500	5	0.78	2.25	4.74	0.98
10606	6-35	3804	-115.4708	-172	-100	03/21/77	STREAM	DRY	1000	0500	5	0.69	2.65	4.49	1.25
10607	6-35	2907	-115.3724	-172	-100	03/21/77	STREAM	DRY	1000	0500	9	0.92	1.92	4.19	0.76
10608	6-35	3022	-115.3535	-172	-100	03/21/77	STREAM	DRY	1000	0500	9	1.22	1.94	9.90	1.27
10609	6-35	3306	-115.3232	-172	-100	03/21/77	STREAM	DRY	1000	0500	9	0.95	2.17	6.89	1.04
10609	6-35	3306	-115.3232	-172	-100		STREAM	DRY	1000	0500		0.90	1.94	7.13	0.77
10610	6-35	3384	-115.2978	-172	-100	03/21/77	STREAM	DRY	1000	0500	9	0.91	1.99	4.35	0.75
10611	6-35	2732	-115.2794	-172	-100	03/21/77	STREAM	DRY	1000	0500	5	1.11	1.98	4.05	1.12
10612	6-35	3430	-115.2405	-172	-100	03/21/77	STREAM	DRY	1000	0500	5	1.66	1.40		
10613	6-35	3875	-115.2637	-172	-100	03/21/77	STREAM	DRY	1000	0500	1	1.09	2.19	15.80	1.46
10614	6-35	4316	-115.2617	-172	-100	03/23/77	STREAM	DRY	1000	0500	9	1.44	1.47		
10615	6-35	2445	-115.2261	-172	-100	03/23/77	STREAM	DRY	1000	0500	9	0.84	2.02	4.04	0.81
10616	6-35	2151	-115.1905	-172	-100	03/23/77	STREAM	DRY	1000	0500	1	0.75	2.00	1.91	0.61
10617	6-35	2176	-115.1796	-172	-100	03/23/77	STREAM	DRY	1000	0500	1	0.93	1.68	2.38	0.40
10618	6-35	2245	-115.1540	-172	-100	03/23/77	STREAM	DRY	1000	0500	9	0.67	2.35	3.53	0.61
10619	6-35	2109	-115.0950	-172	-100	03/23/77	STREAM	DRY	1000	0500	9	1.10	2.00	11.20	1.23
10620	6-35	2267	-115.0639	-172	-100	03/23/77	STREAM	DRY	1000	0500	9	0.97	1.95	6.33	0.96
10621	6-35	1386	-115.0824	-172	-100	03/23/77	STREAM	DRY	1000	0500	9	1.55	1.61	7.06	1.13
10622	6-35	1288	-115.0693	-172	-100	03/23/77	STREAM	DRY	1000	0500	9	1.20	1.55		
10623	6-35	1267	-115.1837	-172	-100	03/23/77	STREAM	DRY	1000	0500	9	2.21	1.47	12.45	1.17
10624	6-35	1620	-115.1939	-172	-100	03/23/77	STREAM	DRY	1000	0500	1	1.41	1.61	8.18	0.67
10625	32-35	2023	-114.7482	-172	-100	03/25/77	STREAM	DRY	1000	0500	9	2.15	1.54	17.11	1.35
10626	4-35	2818	-114.6151	-172	-100	03/25/77	STREAM	DRY	1000	0500	1	1.55	1.67	10.32	1.64
10627	4-35	361	-114.6080	-172	-100	03/25/77	STREAM	DRY	1000	0500	1	0.88	1.75		
10628	4-35	3070	-114.6133	-172	-100	03/25/77	STREAM	DRY	1000	0500	1	1.51	1.85	12.16	1.44
10629	4-35	4713	-114.5831	-172	-100	03/25/77	STREAM	DRY	1000	0500	9	3.11	1.43	19.71	1.73
10630	4-35	4933	-114.5538	-172	-100	03/25/77	STREAM	DRY	1000	0500	9	5.53	1.30	33.11	2.95
10631	4-35	4951	-114.5559	-172	-100	03/25/77	STREAM	DRY	1000	0500	9	2.91	1.46	17.43	1.59
10632	4-35	4003	-114.4619	-172	-100	03/25/77	STREAM	DRY	1000	0500	9	1.69	1.73	9.16	1.33
10633	4-35	3997	-114.4730	-172	-100	03/25/77	STREAM	DRY	1000	0500	9	2.50	1.50	13.51	1.33
10635	4-35	3890	-114.4821	-172	-100	03/25/77	STREAM	DRY	1000	0500	9	2.33	1.56	15.20	1.37
10636	4-35	3965	-114.4929	-172	-100	03/25/77	STREAM	DRY	1000	0500	9	2.48	1.46	15.11	1.33

SITE	DOE	SAMPLE	DATE	SAMPLE	SIZE	POS.	Q. C.	URANIUM(DNC)	THORIUM(NAA)						
NUMBER	ST	LAT.	LONG.	L T Y RPL	MO-DA-YR	SOURCE/COND.	PARTICLE	UPPER	LOWER	COUNT	X-REF	PPM	%ERR	PPM	%ERR
10637	4-35	3907-114	5195-1	-72-100	03/25/77	STREAM	DRY	1000	0500	9		2.59	1.53	16.17	1.75
10638	4-35	3967-114	4967-1	-72-100	03/25/77	STREAM	DRY	1000	0500	9		2.52	1.54	17.34	1.51
10639	4-35	3844-114	5093-1	-72-100	03/25/77	STREAM	DRY	1000	0500	9		2.27	1.57	12.35	1.40
10640	4-35	3039-114	5507-1	-72-100	03/25/77	STREAM	DRY	1000	0500	9		2.35	1.65	16.56	2.02
10641	4-35	2545-114	4731-1	-72-100	03/27/77	STREAM	DRY	1000	0500	9		1.81	2.68	34.05	3.90
10642	4-35	2611-114	4850-1	-72-100	03/27/77	STREAM	DRY	1000	0500	9		1.37	2.14	22.28	1.67
10643	4-35	2674-114	4637-1	-72-100	03/27/77	STREAM	DRY	1000	0500	9		2.12	1.64	18.60	1.55
10644	4-35	1561-114	4212-1	-72-100	03/27/77	STREAM	DRY	1000	0500	9		4.38	1.40	23.82	2.83
10645	4-35	1479-114	3743-1	-72-100	03/27/77	STREAM	DRY	1000	0500	9		2.83	1.54	17.50	2.00
10646	4-35	1453-114	4227-1	-72-100	03/27/77	STREAM	DRY	1000	0500	9		2.75	1.53	21.14	1.79
10658	6-35	1388-115	1538-1	-72-100	03/29/77	STREAM	DRY	1000	0500	9		1.16	1.57		
10659	6-35	1461-115	2184-1	-72-100	03/29/77	STREAM	DRY	1000	0500	9		0.87	2.25	3.93	1.16
10659	6-35	1461-115	2184-1	-72-101		STREAM	DRY	1000	0500			0.86	1.75		
10660	6-35	1220-115	2332-1	-72-100	03/29/77	STREAM	DRY	1000	0500	9		2.08	1.60	14.18	1.52
10661	6-35	0807-115	1825-1	-72-100	03/29/77	STREAM	DRY	1000	0500	9		1.15	1.95	8.40	1.24
10662	6-35	0809-115	1999-1	-72-100	03/29/77	STREAM	DRY	1000	0500	9		0.88	2.24	5.18	1.10
10663	6-35	0634-115	2355-1	-72-100	03/29/77	STREAM	DRY	1000	0500	9		2.52	1.87	15.99	3.17
10664	6-35	0560-115	1622-1	-72-100	03/29/77	STREAM	DRY	1000	0500	9		0.91	2.58	15.31	1.55
10665	6-35	0919-115	1897-1	-72-100	03/29/77	STREAM	DRY	1000	0500	9		1.65	1.68	7.63	1.41
10666	6-35	0313-115	1957-1	-72-100	03/29/77	STREAM	DRY	1000	0500	9		1.99	1.40		
10667	6-35	0145-115	1621-1	-72-100	03/30/77	STREAM	DRY	1000	0500	9		2.59	1.66	14.44	2.36
10668	6-35	1252-115	0356-1	-72-100	03/30/77	STREAM	DRY	1000	0500	9		0.86	2.03	3.78	0.78
10669	6-35	1269-115	0246-1	-72-100	03/30/77	STREAM	DRY	1000	0500	9		1.26	1.54		
10669	6-35	1269-115	0246-1	-72-101		STREAM	DRY	1000	0500			1.14	1.58		
10670	6-35	1763-115	0179-1	-72-100	03/30/77	STREAM	DRY	1000	0500	9		2.39	1.57	21.11	1.61
10671	6-35	0384-114	9094-1	-72-100	03/31/77	STREAM	DRY	1000	0500	9		1.72	1.83	8.04	1.92
10672	6-35	0059-114	9320-1	-72-100	03/03/77	STREAM	DRY	1000	0500	9		1.00	2.34	6.05	1.57
10680	6-35	0343-115	2208-1	-72-100	04/01/77	STREAM	DRY	1000	0500	9		1.87	1.67	12.29	1.44
10681	6-35	0435-115	2336-1	-72-100	04/01/77	STREAM	DRY	1000	0500	9		4.07	1.30	21.50	1.42
10701	6-35	4016-115	5069-1	-72-100	04/06/77	STREAM	DRY	1000	0500	9		2.10	1.68	25.80	1.72
10702	6-35	3757-115	5304-1	-72-100	04/06/77	STREAM	DRY	1000	0500	5		1.59	2.04	29.14	1.93
10703	6-35	3640-115	5350-1	-72-100	04/06/77	STREAM	DRY	1000	0500	9		0.95	2.11	12.69	1.10
10704	6-35	3373-115	5443-1	-72-100	04/06/77	STREAM	DRY	1000	0500	9		1.18	2.16	21.13	1.47
10705	6-35	3631-115	6131-1	-72-100	04/06/77	STREAM	DRY	1000	0500	5		0.66	2.52	8.47	1.09
10706	6-35	3691-115	6593-1	-72-100	04/06/77	STREAM	DRY	1000	0500	5		1.16	2.09	7.56	1.42
10707	6-35	2561-115	7139-1	-72-100	04/06/77	STREAM	DRY	1000	0500	5		1.14	1.58		
10708	6-35	2686-115	7093-1	-72-100	04/06/77	STREAM	DRY	1000	0500	5		1.60	1.60		
10709	6-35	2813-115	7168-1	-72-100	04/06/77	STREAM	DRY	1000	0500	1		0.81	1.65		
10709	6-35	2813-115	7168-1	-72-101		STREAM	DRY	1000	0500			0.81	3.09	7.80	2.00
10710	6-35	3438-115	7411-1	-72-100	04/06/77	STREAM	DRY	1000	0500	5		0.70	2.42	2.72	1.00
10711	6-35	4015-115	7369-1	-72-100	04/06/77	STREAM	DRY	1000	0500	5		0.87	2.13	7.74	0.94
10712	6-35	4351-115	8509-1	-72-100	04/07/77	STREAM	DRY	1000	0500	5		1.09	1.91	8.05	0.99
10713	6-35	4267-115	8180-1	-72-100	04/07/77	STREAM	DRY	1000	0500	1		3.02	1.42	18.08	1.62
10714	6-35	4289-115	8698-1	-72-100	04/07/77	STREAM	DRY	1000	0500	5		0.90	1.78		
10715	6-35	4819-115	8448-1	-72-100	04/07/77	STREAM	DRY	1000	0500	5		1.57	1.45		
10716	6-35	4319-115	8973-1	-72-100	04/07/77	STREAM	DRY	1000	0500	1		2.45	1.56		
10717	6-35	4203-115	9084-1	-72-100	04/07/77	STREAM	DRY	1000	0500	1		2.81	1.41	12.40	1.45
10718	6-35	3905-115	9088-1	-72-100	04/07/77	STREAM	DRY	1000	0500	9		1.81	1.67	13.92	1.42
10719	6-35	3951-115	9176-1	-72-100	04/07/77	STREAM	DRY	1000	0500	5		2.52	1.47	15.69	1.33

KINGHAM QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	DOE NO	SAMPLE NUMBER	DATE NO-DA-YR	SOURCE	SAMPLE TYPE	PARTICLE SIZE	POS. CONT	Q. C. X-REF	URANIUM(DNC) PPHM	ZERR	THORIUM(NA) ERR
			LONG. L T Y RPL				UPPER LOWER					
10719	6-35	3951	-115.9176	-172-101	STREAM	DRY	1000 0500			4.10	1.42	36.25 2.36
10720	6-35	4160	-115.9360	-172-100	04/07/77	STREAM	DRY	1000 0500	1	2.76	1.28	
10721	6-35	4426	-115.9571	-172-100	04/07/77	STREAM	DRY	1000 0500	1	2.23	1.33	
10722	6-35	4489	-115.9874	-172-100	04/07/77	STREAM	DRY	1000 0500	5	1.39	1.51	
10723	6-35	4853	-115.9197	-172-100	04/07/77	STREAM	DRY	1000 0500	5	0.91	1.96	4.51 0.87
10724	6-35	3676	-115.9653	-172-100	04/08/77	STREAM	DRY	1000 0500	5	2.51	1.31	
10725	6-35	3640	-115.9708	-172-100	04/08/77	STREAM	DRY	1000 0500	1	2.91	1.94	36.76 3.98
10726	6-35	3794	-115.9761	-172-100	04/08/77	STREAM	DRY	1000 0500	1	2.21	2.12	45.31 3.30
10727	6-35	4722	-115.7733	-172-100	04/08/77	STREAM	DRY	1000 0500	1	0.69	2.65	4.89 1.18
10743	4-35	7872	-114.6023	-172-100	04/19/77	STREAM	DRY	1000 0500	5	1.98	1.65	16.65 1.59
10745	4-35	8846	-114.5983	-172-100	04/19/77	STREAM	DRY	1000 0500	5	2.28	1.52	16.70 1.49
10746	4-35	9064	-114.6120	-172-100	04/19/77	STREAM	DRY	1000 0500	5	2.76	1.44	11.05 1.61
10747	4-35	9190	-114.6139	-172-100	04/19/77	STREAM	DRY	1000 0500	9	2.30	1.51	12.58 1.33
10748	4-35	7165	-114.6277	-172-100	04/19/77	STREAM	DRY	1000 0500	9	1.89	1.81	16.09 1.89
10750	4-35	6805	-114.5845	-172-100	04/19/77	STREAM	DRY	1000 0500	9	1.72	1.76	12.40 1.34
10751	4-35	6682	-114.6015	-172-100	04/19/77	STREAM	DRY	1000 0500	9	2.45	1.45	12.17 1.35
10752	4-35	6577	-114.5783	-172-100	04/19/77	STREAM	DRY	1000 0500	9	1.88	1.69	9.25 1.58
10753	4-35	6643	-114.5850	-172-100	04/19/77	STREAM	DRY	1000 0500	9	2.02	1.59	8.76 1.26
10754	4-35	6530	-114.5844	-172-100	04/19/77	STREAM	DRY	1000 0500	9	1.87	1.44	
10755	4-35	6280	-114.6844	-172-100	04/19/77	STREAM	DRY	1000 0500	9	1.78	1.74	12.57 1.55
10756	4-35	5284	-114.5946	-172-100	04/19/77	STREAM	DRY	1000 0500	9	1.69	1.73	11.50 1.43
10757	4-35	5445	-114.5467	-172-100	04/19/77	STREAM	DRY	1000 0500	9	2.33	1.52	12.38 1.54
10758	4-35	5326	-114.5350	-172-100	04/19/77	STREAM	DRY	1000 0500	9	2.29	1.53	11.48 1.29
10759	4-35	5163	-114.5344	-172-100	04/12/77	STREAM	DRY	1000 0500	9	2.38	1.50	12.59 1.31
10760	4-35	5097	-114.5213	-172-100	04/19/77	STREAM	DRY	1000 0500	9	2.19	1.59	12.30 1.60
10801	6-35	1512	-115.7704	-172-100	04/10/77	STREAM	DRY	1000 0500	1	0.92	2.61	6.01 1.74
10802	6-35	1569	-115.8033	-172-100	04/10/77	STREAM	DRY	1000 0500	1	1.03	2.72	19.71 2.01
10803	6-35	1990	-115.8741	-172-100	04/10/77	STREAM	DRY	1000 0500	1	1.16	2.12	7.19 1.59
10804	6-35	2045	-115.8729	-172-100	04/10/77	STREAM	DRY	1000 0500	1	0.83	2.28	4.42 1.07
10839	6-35	3755	-115.7571	-172-100	04/17/77	STREAM	DRY	1000 0500	1	0.65	2.46	4.05 0.83
10839	6-35	3755	-115.7571	-172-101	STREAM	DRY	1000 0500			0.69	2.33	4.14 0.88
10840	6-35	3561	-115.7992	-172-100	04/17/77	STREAM	DRY	1000 0500	1	1.08	1.98	5.56 1.10
10841	6-35	3337	-115.8073	-172-100	04/17/77	STREAM	DRY	1000 0500	1	1.53	1.38	
10842	6-35	3027	-115.8682	-172-100	04/17/77	STREAM	DRY	1000 0500	1	1.29	1.58	
10843	6-35	2900	-115.8574	-172-100	04/17/77	STREAM	DRY	1000 0500	1	1.45	1.50	
10844	6-35	2688	-115.8181	-172-100	04/17/77	STREAM	DRY	1000 0500	9	2.58	1.30	
10845	6-35	2735	-115.8290	-172-100	04/17/77	STREAM	DRY	1000 0500	1	0.87	2.12	4.52 1.02
10846	6-35	2671	-115.8248	-172-100	04/17/77	STREAM	DRY	1000 0500	1	0.82	2.00	
10847	6-35	3167	-115.9230	-172-100	04/17/77	STREAM	DRY	1000 0500	1	2.16	1.61	13.86 1.71
10848	6-35	4735	-115.8205	-172-100	04/17/77	STREAM	DRY	1000 0500	1	1.00	1.93	6.51 0.83
10849	6-35	4751	-115.7993	-172-100	04/17/77	STREAM	DRY	1000 0500	1	1.11	1.87	6.84 0.93
10850	6-35	4751	-115.7953	-172-101	STREAM	DRY	1000 0500			1.03	1.80	6.45 0.91
10850	6-35	4326	-115.7838	-172-100	04/17/77	STREAM	DRY	1000 0500	1	1.16	1.57	
10851	6-35	3602	-115.9478	-172-100	04/17/77	STREAM	DRY	1000 0500	1	2.27	1.45	19.75 3.16
10852	6-35	3515	-115.9929	-172-100	04/17/77	STREAM	DRY	1000 0500	1	4.18	1.49	14.83 1.14
10927	6-35	0286	-115.0214	-172-100	03/30/77	STREAM	DRY	1000 0500	1	1.21	1.89	5.45 1.13
10928	6-35	0824	-115.0607	-172-100	03/30/77	STREAM	DRY	1000 0500	9	2.16	1.69	15.16 1.84
10929	6-35	0429	-115.0737	-172-100	03/31/77	STREAM	DRY	1000 0500	9	1.31	1.69	4.39 0.89
10929	6-35	0429	-115.0737	-172-101	STREAM	DRY	1000 0500			1.23	1.79	7.09 0.78

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

PAGE B-15

SITE NUMBER	DOE SAMPLE NUMBER				DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE SIZE		POS. CDT	Q. C. X-REF	URANIUM(DNC)		THORIUM(MAA)	
	ST	LAT.	LONG.	L T Y RPL			UPPER	LOWER			PPM	%ERR	PPM	%ERR
10930	6-35	0395	-115.0880	-172-100	03/31/77	STREAM	DRY	1000	0500	9	1.05	2.04	8.83	1.22
10931	6-35	0335	-115.1112	-172-100	03/31/77	STREAM	DRY	1000	0500	1	0.95	2.44	18.46	1.54
10975	6-35	0000	-115.5663	-172-100	04/07/77	STREAM	DRY	1000	0500	1	1.51	1.42		
10976	6-35	0096	-115.5075	-172-100	04/07/77	STREAM	DRY	1000	0500	1	2.05	1.43	4.05	0.99
10977	6-35	0133	-115.5358	-172-100	04/07/77	STREAM	DRY	1000	0500	1	2.27	1.95	46.32	2.83
10978	6-35	0537	-115.5230	-172-100	04/07/77	STREAM	DRY	1000	0500	1	1.35	1.98	19.22	1.43
10979	6-35	0492	-115.5209	-172-100	04/07/77	STREAM	DRY	1000	0500	1	2.12	1.52	11.72	1.42
10979	6-35	0492	-115.5209	-172-101		STREAM	DRY	1000	0500		2.40	1.30		
10980	6-35	0697	-115.5808	-172-100	04/07/77	STREAM	DRY	1000	0500	1	2.07	1.79	14.00	2.27
10981	6-35	0683	-115.5348	-172-100	04/07/77	STREAM	DRY	1000	0500	1	1.33	1.50		
10982	6-35	0887	-115.5103	-172-100	04/07/77	STREAM	DRY	1000	0500	9	1.10	2.07	2.65	1.50
10983	6-35	0824	-115.5168	-172-100	04/07/77	STREAM	DRY	1000	0500	1	2.16	1.51	8.29	1.25
10984	6-35	1147	-115.4999	-172-100	04/07/77	STREAM	DRY	1000	0500	1	3.01	1.53	14.51	2.40
10985	6-35	1367	-115.5270	-172-100	04/07/77	STREAM	DRY	1000	0500	1	1.32	1.77	5.00	0.99
10986	6-35	2041	-115.5038	-172-100	04/07/77	STREAM	DRY	1000	0500	1	0.81	2.28	4.65	1.00
10987	6-35	0541	-115.6326	-172-100	04/09/77	STREAM	DRY	1000	0500	1	1.95	1.60	12.84	1.39
10988	6-35	0515	-115.6382	-172-100	04/09/77	STREAM	DRY	1000	0500	1	0.71	1.83		
10989	6-35	0856	-115.6277	-172-100	04/09/77	STREAM	DRY	1000	0500	1	1.04	1.64		
10989	6-35	0856	-115.6277	-172-101		STREAM	DRY	1000	0500		0.63	3.15	6.26	1.45
10990	6-35	1780	-115.5142	-172-100	04/09/77	STREAM	DRY	1000	0500	1	0.58	2.47	5.35	0.81
10991	6-35	1826	-115.5382	-172-100	04/09/77	STREAM	DRY	1000	0500	1	0.89	2.16	5.78	1.07
10992	6-35	1826	-115.5820	-172-100	04/09/77	STREAM	DRY	1000	0500	1	1.19	2.11	14.24	1.46
10993	6-35	1937	-115.6171	-172-100	04/09/77	STREAM	DRY	1000	0500	1	0.82	1.89	4.67	0.49
10994	6-35	2169	-115.5535	-172-100	04/09/77	STREAM	DRY	1000	0500	1	0.68	1.96	0.81	0.81
10995	6-35	1822	-115.6393	-172-100	04/09/77	STREAM	DRY	1000	0500	1	1.01	1.92	7.38	0.78
10996	6-35	1499	-115.6519	-172-100	04/09/77	STREAM	DRY	1000	0500	1	0.98	1.63		
10997	6-35	1482	-115.6840	-172-100	04/09/77	STREAM	DRY	1000	0500	1	1.06	2.37	24.31	1.61
10998	6-35	1456	-115.6717	-172-100	04/09/77	STREAM	DRY	1000	0500	1	0.85	2.16	6.91	0.97
10999	6-35	1668	-115.6964	-172-100	04/09/77	STREAM	DRY	1000	0500	1	1.77	2.18	10.33	0.81
10999	6-35	1666	-115.6966	-172-101		STREAM	DRY	1000	0500		1.17	2.19	10.31	1.62
11000	6-35	1353	-115.8089	-172-100	04/10/77	STREAM	DRY	1000	0500	1	1.37	1.70	6.00	0.74
11050	6-35	5031	-115.9908	-172-100	04/14/77	STREAM	DRY	1000	0500	1	0.90	2.00	7.65	0.91
11051	6-35	5028	-115.9908	-172-100	04/14/77	STREAM	DRY	1000	0500	1	1.95	1.92	5.56	1.03
11052	6-35	5555	-115.9044	-172-100	04/14/77	STREAM	DRY	1000	0500	1	1.76	1.63	6.08	1.23
11053	6-35	5511	-115.9133	-172-100	04/14/77	STREAM	DRY	1000	0500	1	1.82	1.34		
11054	6-35	5396	-115.9377	-172-100	04/14/77	STREAM	DRY	1000	0500	1	1.81	1.55	10.81	1.04
11055	6-35	5378	-115.9377	-172-100	04/14/77	STREAM	DRY	1000	0500	1	3.79	1.27	17.26	1.33
11056	6-35	5083	-115.9679	-172-100	04/14/77	STREAM	DRY	1000	0500	1	1.87	1.66		
11057	6-35	5831	-115.9691	-172-100	04/14/77	STREAM	DRY	1000	0500	1	0.98	1.82	5.98	0.69
11058	6-35	5414	-115.7568	-172-100	04/14/77	STREAM	DRY	1000	0500	1	2.54	1.36	8.28	0.62
11059	6-35	5565	-115.8161	-172-100	04/14/77	STREAM	DRY	1000	0500	1	0.68	2.01	7.11	0.68
11059	6-35	5568	-115.8161	-172-101		STREAM	DRY	1000	0500		2.03	1.29	13.79	1.19
11060	6-35	5690	-115.8082	-172-100	04/14/77	STREAM	DRY	1000	0500	1	2.06	1.50	12.18	1.13
11061	6-35	5870	-115.8079	-172-100	04/14/77	STREAM	DRY	1000	0500	1	2.30	1.63	16.10	1.86
11062	6-35	5487	-115.8526	-172-100	04/15/77	STREAM	DRY	1000	0500	1	1.75	1.61	10.20	1.33
11063	6-35	5856	-115.9049	-172-100	04/15/77	STREAM	DRY	1000	0500	1	1.51	1.67		
11064	6-35	5796	-115.8787	-172-100	04/15/77	STREAM	DRY	1000	0500	1	1.72	1.55	9.43	1.01
11065	6-35	6133	-115.9169	-172-100	04/15/77	STREAM	DRY	1000	0500	1	2.77	1.24		
11066	6-35	6035	-115.9258	-172-100	04/15/77	STREAM	DRY	1000	0500	1	3.54	1.32	14.02	1.42

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE 8-1. SEDIMENT ANALYSIS; DRY AND STREAM SITES

PAGE B-16

SITE NUMBER	ST	DOE SAMPLE NUMBER-----				DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE SIZE		POS. CONT	Q, C, X-REF	URANIUM(DNC)		THORIUM(NAA)			
		LAT.	LONG.	L	TY RPL			UPPER	LOWER			PPM	ZERR	PPM	ZERR		
11067	6-35	5946	-115.9316	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	3.14	1.33	12.47	1.13	
11068	6-35	6120	-115.9798	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	3.42	1.25	7.89	0.83	
11069	6-35	6425	-115.9529	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	2.11	1.47	10.87	1.16	
11069	6-35	6425	-115.9529	-1	-72	-101	04/15/77	STREAM	DRY	1000	0500	1	2.00	1.50	9.52	1.05	
11070	6-35	6432	-115.9363	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	3.22	1.37	15.05	1.68	
11071	6-35	6467	-115.9263	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	3.07	1.39	17.29	1.59	
11072	6-35	6404	-115.9209	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	2.47	1.39	11.87	0.96	
11073	6-35	6311	-115.8945	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	2.38	1.52	9.66	1.64	
11075	6-35	6186	-115.8130	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	2.05	1.46	9.28	0.92	
11076	6-35	6439	-115.8192	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	1.01	1.76	2.51	0.51	
11077	6-35	6845	-115.8198	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	2.13	1.45	10.47	0.96	
11078	6-35	6962	-115.8174	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	2.16	1.35			
11079	6-35	6914	-115.7865	-1	-72	-100	04/11/77	STREAM	DRY	1000	0500	1	2.02	1.64	22.56	1.51	
11079	6-35	6914	-115.7865	-1	-72	-101	04/11/77	STREAM	DRY	1000	0500	1	1.92	1.78	19.78	1.68	
11080	6-35	6913	-115.7777	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	1.66	1.88	21.38	1.71	
11081	6-35	6615	-115.7693	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	1.77	1.94	8.10	1.16	
11082	6-35	6397	-115.7519	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	1.89	1.38			
11083	6-35	6278	-115.7433	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	1.81	1.60	12.65	1.25	
11084	6-35	6160	-115.7269	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	1.23	1.52			
11085	6-35	6069	-115.7282	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	1.08	1.80	5.25	0.69	
11086	6-35	5319	-115.7062	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1	2.77	1.40	14.53	1.28	
11087	6-35	6986	-115.8781	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1	1.81	1.54	7.82	0.94	
11088	6-35	7198	-115.8358	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1	1.57	1.58	6.58	0.80	
11089	6-35	6896	-115.9755	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1	4.05	1.21			
11089	6-35	6896	-115.9755	-1	-72	-101	04/16/77	STREAM	DRY	1000	0500	1	3.77	1.24			
11090	6-35	7158	-115.9825	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1	4.39	1.19			
11091	6-35	7230	-115.9883	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1	3.98	1.33	26.32	1.65	
11092	6-35	6909	-115.7368	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1	2.88	1.45	18.43	1.55	
11093	6-35	6812	-115.6750	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1	2.90	1.38	11.76	1.00	
11094	6-35	6539	-115.6599	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1	1.59	1.46			
11095	6-35	6522	-115.6645	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1	1.78	1.51	7.39	0.77	
11096	6-35	6202	-115.7014	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1	2.19	1.39	7.37	0.85	
11097	6-35	5825	-115.6403	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1	1.67	1.88	23.69	1.74	
11098	6-35	6311	-115.6328	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1	1.50	1.56	5.18	0.63	
11099	6-35	6046	-115.5251	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1	1.19	1.56			
11099	6-35	6046	-115.5251	-1	-72	-101	04/17/77	STREAM	DRY	1000	0500	1	1.12	1.57	1.16	0.36	
11100	6-35	5951	-115.5464	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1	1.97	2.29	24.47	3.38	
11103	32-35	9155	-114.9575	-1	-72	-100	03/29/77	STREAM	DRY	1000	0500	1	9825	3.44	1.43	14.41	2.40
11104	32-35	7712	-114.9003	-1	-72	-100	03/30/77	STREAM	DRY	1000	0500	9	9412	2.75	1.29		
11105	32-35	7731	-114.9103	-1	-72	-100	03/30/77	STREAM	DRY	1000	0500	1	9415	2.13	1.54	16.00	1.46
11106	32-35	7139	-114.9240	-1	-72	-100	03/30/77	STREAM	DRY	1000	0500	1	9502	2.49	1.54	19.69	1.75
11107	32-35	6248	-114.9340	-1	-72	-100	03/30/77	STREAM	DRY	1000	0500	9	9501	2.42	1.46	15.02	1.23
11108	32-35	5605	-115.0780	-1	-72	-100	04/05/77	STREAM	DRY	1000	0500	9	10594	2.67	1.71	17.66	2.83
11109	32-35	5940	-115.0871	-1	-72	-100	04/05/77	STREAM	DRY	1000	0500	1	10553	2.13	1.51	20.41	1.47
11109	32-35	5940	-115.0871	-1	-72	-101	04/05/77	STREAM	DRY	1000	0500	1	2.69	1.56	17.94	1.97	
11110	32-35	5770	-115.1526	-1	-72	-100	04/05/77	STREAM	DRY	1000	0500	1	9584	2.19	1.48	16.12	1.16
11112	32-35	4851	-114.8847	-1	-72	-100	04/05/77	STREAM	DRY	1000	0500	1	9639	2.05	1.61	13.01	1.49
11113	32-35	4676	-114.8653	-1	-72	-100	04/05/77	STREAM	DRY	1000	0500	9	9647	2.42	1.48	14.63	1.68
11114	32-35	3947	-114.8124	-1	-72	-100	04/05/77	STREAM	DRY	1000	0500	9	9540	1.91	1.63	13.45	1.35

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	DATE L TY RPL	SAMPLE MO-DA-YR	PARTICLE SOURCE/COND.	SIZE UPPER	POS. LOWER	C. X-REF	URANIUM(DNC) PPM	THORIUM(MAA) PPM	ERR			
11115	6-35	1859	-114.8397	-172-100	04/06/77	STREAM	DRY	1000	0500	1	9559	2.08	1.88	25.27	2.20
11116	32-35	5010	-115.1761	-172-100	04/06/77	STREAM	DRY	1000	0500	1	9437	2.75	1.49	13.89	1.78
11117	32-35	2655	-114.7552	-172-100	04/07/77	STREAM	DRY	1000	0500	9	9553	1.88	2.01	20.74	2.45
11118	6-35	2476	-114.7601	-172-100	04/07/77	STREAM	DRY	1000	0500	9	9554	2.13	1.61	19.84	1.70
11119	6-35	0427	-114.9520	-172-100	04/07/77	STREAM	DRY	1000	0500	9	10540	0.97	2.13	5.30	1.19
11119	6-35	0427	-114.9520	-172-101		STREAM	DRY	1000	0500			1.12	1.96	4.85	1.34
11120	6-35	1136	-114.9894	-170-100	04/07/77	STREAM	WET	1000	0500	9	7378	1.09	1.85	4.94	0.95
11121	6-35	4902	-115.1414	-172-100	04/07/77	STREAM	DRY	1000	0500	9	9572	1.78	1.90	25.15	1.96
11122	6-35	4695	-115.2035	-172-100	04/07/77	STREAM	DRY	1000	0500	9	10559	3.27	1.25		
11123	6-35	4695	-115.4548	-172-100	04/07/77	STREAM	DRY	1000	0500	9	9556	1.58	3.45	59.83	4.57
11124	6-35	3306	-115.3232	-172-100	04/08/77	STREAM	DRY	1000	0500	9	10609	0.87	2.05	2.97	0.90
11125	6-35	3004	-115.2293	-172-100	04/08/77	STREAM	DRY	1000	0500	9	10583	2.15	1.67	21.57	1.83
11126	6-35	4604	-115.1354	-172-100	04/08/77	STREAM	DRY	1000	0500	9	10566	2.68	1.56	31.48	1.99
11127	32-35	6526	-115.4690	-172-100	04/18/77	STREAM	DRY	1000	0500	1	11260	2.52	1.31	1.77	0.53
11128	6-35	5594	-115.5866	-172-100	04/21/77	STREAM	DRY	1000	0500	9	11706	1.21	2.19	11.77	1.76
11129	6-35	5680	-115.8053	-172-100	04/21/77	STREAM	DRY	1000	0500	9	11061	2.08	1.50	14.27	1.27
11129	6-35	5690	-115.8093	-172-101		STREAM	DRY	1000	0500			2.09	1.55	11.88	1.23
11136	4-35	0559	-114.4134	-172-100	04/22/77	STREAM	DRY	1000	0500	5	11235	2.34	1.51	15.66	1.66
11137	4-35	0943	-114.4429	-172-100	04/22/77	STREAM	DRY	1000	0500	1	11238	2.74	1.46	17.92	1.37
11141	32-35	5776	-115.2342	-172-100	04/23/77	STREAM	DRY	1000	0500	1	10503	1.47	1.46		
11142	32-35	5788	-115.1532	-172-100	04/23/77	STREAM	DRY	1000	0500	9	10501	3.25	1.34	12.90	1.36
12001	4-35	1969	-114.4331	-172-100	03/24/77	STREAM	DRY	1000	0500	5		1.87	2.19	29.17	2.93
12002	4-35	1985	-114.4243	-172-100	03/24/77	STREAM	DRY	1000	0500	5		1.99	1.93	26.99	2.03
12003	4-35	1984	-114.4177	-172-100	03/24/77	STREAM	DRY	1000	0500	5		1.90	1.88	23.43	2.08
12004	4-35	1803	-114.4161	-172-100	03/24/77	STREAM	DRY	1000	0500	5		3.03	1.93	26.29	3.78
12005	4-35	1834	-114.4347	-172-100	03/24/77	STREAM	DRY	1000	0500	9		2.47	2.01	25.48	3.47
12024	4-35	0481	-114.4707	-172-100	03/27/77	STREAM	DRY	1000	0500	2		2.74	1.56	17.75	2.19
12025	4-35	0535	-114.4738	-172-100	03/27/77	STREAM	DRY	1000	0500	5		2.06	1.68	17.45	1.74
12026	4-35	0412	-114.4703	-172-100	03/27/77	STREAM	DRY	1000	0500	5		2.39	1.52	14.88	1.51
12027	4-35	0336	-114.4700	-172-100	03/27/77	STREAM	DRY	1000	0500	5		1.93	1.69	16.64	1.63
12028	4-35	0154	-114.4607	-172-100	03/27/77	STREAM	DRY	1000	0500	9		2.52	1.58	16.75	2.04
12029	4-35	0133	-114.4487	-172-100	03/27/77	STREAM	DRY	1000	0500	1		2.72	1.51	10.00	1.94
12130	4-35	0257	-114.4374	-172-100	03/27/77	STREAM	DRY	1000	0500	1		2.58	1.49	16.60	1.60
12131	4-35	0041	-114.4343	-172-100	03/27/77	STREAM	DRY	1000	0500	1		2.93	1.56	19.40	2.17
12132	4-35	0281	-114.4209	-172-100	03/27/77	STREAM	DRY	1000	0500	5		2.40	1.75	17.14	2.43
12133	4-35	0288	-114.4143	-172-100	03/27/77	STREAM	DRY	1000	0500	5		2.53	1.52	17.59	1.62
12134	4-35	0257	-114.4368	-172-100	03/28/77	STREAM	DRY	1000	0500	9		2.73	1.48	15.98	1.65
12135	4-35	0559	-114.4145	-172-100	03/28/77	STREAM	DRY	1000	0500	5		2.77	1.61	16.77	1.92
12136	4-35	0748	-114.4567	-172-100	03/28/77	STREAM	DRY	1000	0500	5		2.30	1.72	9.37	2.26
12137	4-35	0665	-114.4471	-172-100	03/28/77	STREAM	DRY	1000	0500	5		2.07	1.72	14.40	2.00
12138	4-35	0943	-114.4429	-172-100	03/28/77	STREAM	DRY	1000	0500	5		2.78	1.46	17.14	1.95
12139	4-35	1135	-114.4544	-172-100	03/28/77	STREAM	DRY	1000	0500	1		2.61	1.85	15.47	3.38
12140	4-35	1151	-114.4449	-172-100	03/28/77	STREAM	DRY	1000	0500	1		2.70	1.70	16.63	2.51
12141	4-35	0903	-114.4233	-172-100	03/28/77	STREAM	DRY	1000	0500	5		2.78	1.46	15.83	1.48
12142	4-35	0935	-114.4046	-172-100	03/28/77	STREAM	DRY	1000	0500	1		3.25	1.46	20.02	1.91
12143	4-35	1101	-114.3788	-172-100	03/28/77	STREAM	DRY	1000	0500	9		3.05	1.48	20.34	1.71
12144	4-35	1097	-114.4008	-172-100	03/28/77	STREAM	DRY	1000	0500	9		2.40	1.67	17.59	2.03
12145	4-35	1227	-114.4190	-172-100	03/28/77	STREAM	DRY	1000	0500	5		2.54	1.57	18.33	1.94
12146	4-35	0764	-114.4029	-172-100	03/28/77	STREAM	DRY	1000	0500	5		2.38	1.67	16.48	2.02

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-7, SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	DOE ST	SAMPLE LAT.	NUMBER LONG.	DATE L TY RPL	SAMPLE MO-DA-YR	PARTICLE SOURCE/COND.	SIZE UPPER	POS. LOWER	CONT	Q. C. X-REF	URANIUM(DNC) PPM	%ERR	THORIUM(MAA) PPM	%ERR
1247	4-35	0765	-114.3699	-172-100	03/28/77	STREAM	DRY	1000	0500	1	2.33	1.74	15.83	2.20
1248	4-35	0805	-114.3741	-172-100	03/29/77	STREAM	DRY	1000	0500	9	1.71	1.97	17.71	1.97
1254	32-35	5080	-115.4956	-172-100	03/30/77	STREAM	DRY	1000	0500	5	2.70	1.52	19.56	1.82
1255	32-35	6160	-115.4940	-172-100	03/30/77	STREAM	DRY	1000	0500	9	1.51	1.70	7.71	1.07
1256	32-35	6113	-115.4797	-172-100	03/30/77	STREAM	DRY	1000	0500	1	1.64	1.41		
1257	32-35	6203	-115.4762	-172-100	03/30/77	STREAM	DRY	1000	0500	1	1.71	1.44	2.40	6.42
1258	32-35	6275	-115.4750	-172-100	03/30/77	STREAM	DRY	1000	0500	5	1.34	1.57	2.06	0.47
1259	32-35	6209	-115.4541	-172-100	03/30/77	STREAM	DRY	1000	0500	5	1.50	1.52	2.48	0.40
1260	32-35	6526	-115.4690	-172-100	03/30/77	STREAM	DRY	1000	0500	5	2.50	1.33	3.05	0.50
1261	32-35	6490	-115.2757	-172-100	03/30/77	STREAM	DRY	1000	0500	2	2.45	1.57	19.64	1.71
1262	32-35	6410	-115.2803	-172-100	03/30/77	STREAM	DRY	1000	0500	5	2.44	1.73	22.04	2.43
1263	32-35	6492	-115.2900	-172-100	03/30/77	STREAM	DRY	1000	0500	1	2.13	1.60	18.33	1.73
1264	32-35	5367	-115.2947	-170-100	03/30/77	STREAM	WET	1000	0500	5	2.22	1.86	33.45	2.53
1265	32-35	5308	-115.3224	-172-100	03/30/77	STREAM	DRY	1000	0500	5	1.66	1.97	25.62	2.34
1266	32-35	5238	-115.2795	-172-100	03/30/77	STREAM	DRY	1000	0500	5	1.79	2.04	20.76	2.38
1267	32-35	5200	-115.2620	-172-100	03/30/77	STREAM	DRY	1000	0500	5	1.53	1.83	16.22	1.44
1268	32-35	5216	-115.2520	-172-100	03/30/77	STREAM	DRY	1000	0500	5	1.87	1.62	19.66	1.29
1269	6-35	1352	-114.9311	-172-101	03/31/77	STREAM	DRY	1000	0500	5	1.21	1.87	5.91	1.08
1269	6-35	1352	-114.9311	-172-101	03/31/77	STREAM	DRY	1000	0500	5	1.21	1.78	9.93	0.63
1270	6-35	1579	-114.8888	-172-100	03/31/77	STREAM	DRY	1000	0500	5	1.48	1.76	14.75	1.17
1271	6-35	1660	-114.8337	-172-100	03/31/77	STREAM	DRY	1000	0500	5	1.82	1.72	17.56	1.57
1272	6-35	1418	-114.7915	-172-100	03/31/77	STREAM	DRY	1000	0500	5	2.48	1.68	32.49	2.04
1273	6-35	1514	-114.7347	-172-100	03/31/77	STREAM	DRY	1000	0500	5	2.97	1.51	25.98	1.79
1274	6-35	0350	-114.8240	-172-100	03/31/77	STREAM	DRY	1000	0500	5	1.47	1.60	7.44	0.80
1275	6-35	0725	-114.7517	-172-100	03/31/77	STREAM	DRY	1000	0500	9	1.24	1.87	6.22	1.20
1276	6-35	0322	-114.7671	-172-100	03/31/77	STREAM	DRY	1000	0500	5	3.28	1.43	26.34	1.92
1277	6-35	0177	-114.7631	-172-100	03/31/77	STREAM	DRY	1000	0500	5	0.97	1.66		
1278	6-35	1325	-114.9805	-172-100	04/01/77	STREAM	DRY	1000	0500	5	2.25	1.75		
1279	6-35	1467	-114.9714	-172-100	04/01/77	STREAM	DRY	1000	0500	5	2.09	1.66	19.74	1.61
1279	6-35	1467	-114.9714	-172-101	04/01/77	STREAM	DRY	1000	0500	5	2.37	1.31		
1280	6-35	1740	-114.9872	-172-100	04/01/77	STREAM	DRY	1000	0500	5	1.47	1.76	9.82	1.25
1281	6-35	1813	-114.9944	-172-100	04/01/77	STREAM	DRY	1000	0500	5	1.72	1.70	12.66	1.25
1282	6-35	2361	-115.0307	-172-100	04/01/77	STREAM	DRY	1000	0500	5	2.32	1.36		
1283	6-35	2098	-115.0258	-172-100	04/01/77	STREAM	DRY	1000	0500	5	2.21	1.64	12.62	1.46
1341	6-35	4593	-115.5894	-172-100	04/11/77	STREAM	DRY	1000	0500	9	1.10	1.67	1.80	0.51
1342	6-35	4467	-115.5889	-172-100	04/11/77	STREAM	DRY	1000	0500	1	1.10	1.59	3.02	0.44
1343	6-35	4331	-115.5789	-172-100	04/11/77	STREAM	DRY	1000	0500	9	1.10	1.71	3.47	0.55
1344	6-35	4202	-115.5582	-172-100	04/11/77	STREAM	DRY	1000	0500	5	2.58	1.52	14.59	1.48
1345	6-35	3965	-115.5377	-172-100	04/11/77	STREAM	DRY	1000	0500	5	1.99	1.34		
1346	6-35	3895	-115.5433	-172-100	04/11/77	STREAM	DRY	1000	0500	5	1.24	1.51		
1347	6-35	3207	-115.5324	-172-100	04/11/77	STREAM	DRY	1000	0500	5	2.05	1.64	22.40	1.43
1340	6-35	3108	-115.5304	-172-100	04/11/77	STREAM	DRY	1000	0500	5	1.81	1.70	21.28	1.38
1349	6-35	3077	-115.7406	-172-100	04/11/77	STREAM	DRY	1000	0500	5	1.04	1.65		
1349	6-35	3077	-115.7406	-172-101	04/11/77	STREAM	DRY	1000	0500	5	1.17	1.64		
1393	6-35	3982	-115.8658	-172-100	04/16/77	STREAM	DRY	1000	0500	5	1.59	1.56	7.23	0.77
1394	6-35	4424	-115.9678	-172-100	04/16/77	STREAM	DRY	1000	0500	9	1.77	1.56	9.71	0.93
1395	6-35	4503	-115.9433	-172-100	04/16/77	STREAM	DRY	1000	0500	1	1.03	2.40	6.04	1.80
1396	6-35	4931	-115.8843	-172-100	04/16/77	STREAM	DRY	1000	0500	9	1.26	1.60	5.92	0.85
1401	32-35	3091	-114.6781	-172-100	03/24/77	STREAM	DRY	1000	0500	1	1.09	1.77	6.41	0.86

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
 TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	DATE L TY RPL	SAMPLE MO-DA-YR	PARTICLE SOURCE/COND.	SIZE UPPER	POS. LOWER	CONT	Q. C. X-REF	URANIUM(DNC) PPHM	THORIUM(MAA) PPHM	ERR	
11402	32-35	3049-114	6914-1	-72-100	03/24/77	STREAM	DRY	1000	0500	1	1.02	2.32	16.78	1.37
11403	32-35	2415-114	6789-1	-72-100	03/20/77	STREAM	DRY	1000	0500	1	1.04	1.95	8.84	0.92
11408	4-35	2031-114	5570-1	-72-100	03/25/77	STREAM	DRY	1000	0500	1	3.38	1.35	11.42	1.85
11409	4-35	2783-114	5779-1	-72-100	03/25/77	STREAM	DRY	1000	0500	1	1.54	1.77	8.53	1.36
11437	32-35	0659-114	7344-1	-72-100	03/30/77	STREAM	DRY	1000	0500	1	0.97	1.94	4.05	0.92
11438	32-35	0457-114	7163-1	-72-100	03/30/77	STREAM	DRY	1000	0500	1	0.97	2.61	6.90	1.94
11439	32-35	0329-114	7035-1	-72-100	03/30/77	STREAM	DRY	1000	0500	1	2.97	1.63	40.45	2.47
11439	32-35	0329-114	7035-1	-72-100	03/30/77	STREAM	DRY	1000	0500	1	4.48	1.47	50.69	3.08
11440	32-35	0238-114	7016-1	-72-100	03/30/77	STREAM	DRY	1000	0500	1	2.64	1.29		
11441	32-35	0175-114	7028-1	-72-100	03/30/77	STREAM	DRY	1000	0500	1	8.37	1.09		
11442	32-35	0131-114	7095-1	-72-100	03/30/77	STREAM	DRY	1000	0500	1	1.06	2.19	16.10	1.37
11443	32-35	0077-114	7086-1	-72-100	03/30/77	STREAM	DRY	1000	0500	1	0.63	2.44	6.23	0.82
11444	6-35	1295-115	2571-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	2.59	1.54	19.72	2.00
11445	6-35	1648-115	2663-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.83	1.78	11.85	1.83
11446	6-35	1802-115	2725-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.51	2.01	8.33	1.92
11447	6-35	2410-115	2987-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.59	1.86	5.56	1.74
11448	6-35	2158-115	3080-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	0.84	2.02	2.57	0.85
11449	6-35	2143-115	3212-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	0.75	1.95		
11450	6-35	2377-115	3845-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.68	1.86	13.57	1.84
11451	6-35	2151-115	3794-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.61	1.77	15.37	1.45
11452	6-35	1682-115	3167-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.50	1.86	7.49	1.66
11453	6-35	1350-115	3338-1	-72-100	03/31/77	STREAM	DRY	1000	0500	9	2.97	2.24	10.13	5.08
11454	6-35	1517-115	3609-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.45	2.01	10.26	1.83
11455	6-35	1835-115	3867-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.82	1.93	16.80	2.14
11456	6-35	1758-115	4164-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.57	3.55	15.33	5.00
11457	6-35	1689-115	4309-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.32	2.27	18.53	2.04
11458	6-35	1879-115	4382-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	0.91	2.36	6.70	1.39
11459	6-35	1986-115	4314-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.73	2.11	32.02	2.34
11460	6-35	2135-115	4530-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.53	1.73	5.81	1.13
11461	6-35	2357-115	4373-1	-72-100	03/31/77	STREAM	DRY	1000	0500	1	1.20	1.58	10.57	1.16
11462	6-35	1504-115	4005-1	-72-100	04/01/77	STREAM	DRY	1000	0500	1	0.59	3.34	5.92	1.56
11463	6-35	1035-115	4047-1	-72-100	04/01/77	STREAM	DRY	1000	0500	1	0.58	4.02	10.31	1.98
11464	6-35	1020-115	4201-1	-72-100	04/01/77	STREAM	DRY	1000	0500	1	0.75	2.32	3.47	1.02
11465	6-35	0921-115	4301-1	-72-100	04/01/77	STREAM	DRY	1000	0500	1	1.18	2.09	8.35	1.45
11466	6-35	0683-115	3275-1	-72-100	04/01/77	STREAM	DRY	1000	0500	1	0.77	2.77	4.75	1.43
11467	6-35	0280-115	4160-1	-72-100	04/01/77	STREAM	DRY	1000	0500	1	2.44	1.59	12.84	1.89
11468	6-35	0433-115	4135-1	-72-100	04/01/77	STREAM	DRY	1000	0500	1	1.32	2.00	8.15	1.55
11469	6-35	0008-115	4010-1	-72-100	04/01/77	STREAM	DRY	1000	0500	1	2.38	1.59	16.36	1.51
11469	6-35	0008-115	4010-1	-72-100	04/01/77	STREAM	DRY	1000	0500	1	2.26	1.80	17.19	2.42
11470	6-35	0345-115	3633-1	-72-100	04/01/77	STREAM	DRY	1000	0500	1	0.81	3.24	22.29	1.96
11471	8-35	0586-115	2784-1	-72-100	04/03/77	STREAM	DRY	1000	0500	1	2.26	1.73	15.68	2.31
11472	6-35	0510-115	2522-1	-72-100	04/02/77	STREAM	DRY	1000	0500	1	2.49	1.70	13.66	2.40
11473	6-35	0162-115	4188-1	-72-100	04/02/77	STREAM	DRY	1000	0500	1	1.33	2.04	19.61	1.62
11474	6-35	0268-115	3251-1	-72-100	04/02/77	STREAM	DRY	1000	0500	1	1.46	2.09	13.68	1.95
11475	6-35	0279-115	3415-1	-72-100	04/02/77	STREAM	DRY	1000	0500	1	3.05	1.44	17.10	1.78
11476	6-35	0390-115	3588-1	-72-100	04/02/77	STREAM	DRY	1000	0500	1	2.32	1.67	14.90	2.04
11477	6-35	1731-115	3419-1	-72-100	04/03/77	STREAM	DRY	1000	0500	1	1.35	1.74	4.97	1.42
11478	6-35	1724-115	3583-1	-72-100	04/03/77	STREAM	DRY	1000	0500	1	2.24	2.02	5.27	1.53
11479	6-35	1242-115	4592-1	-72-100	04/03/77	STREAM	DRY	1000	0500	1	3	1.84	5.60	1.29

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE 8-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	DATE L T YR	COND. RPL	SOURCE	PARTICLE SIZE	POS.	Q. C.	URANIUM(10NC)	THORIUM(10NC)	ERR
							UPPER LOWER CONT		X-REF	PPM	PPM	ERR
11980	6-35	3226-115.9747	-172-100	04/04/77	STREAM	DRY	1000 0500	1		1.15	1.76	7.42 0.75
11981	6-35	3428-115.9139	-172-100	04/04/77	STREAM	DRY	1000 0500	1		1.06	1.85	6.89 0.72
11982	6-35	3245-115.9611	-172-100	04/04/77	STREAM	DRY	1000 0500	1		0.82	2.20	3.74 0.98
11983	6-35	3593-115.9500	-172-100	04/04/77	STREAM	DRY	1000 0500	1		2.70	59.53	3.58
11984	6-35	3986-115.8952	-172-100	04/04/77	STREAM	DRY	1000 0500	1		1.05	1.84	7.30 0.79
11985	6-35	4291-115.7100	-172-100	04/04/77	STREAM	DRY	1000 0500	1		1.75	1.43	
11986	6-35	4388-115.6825	-172-100	04/04/77	STREAM	DRY	1000 0500	5		0.82	1.83	
11987	6-35	4377-115.6880	-172-100	04/04/77	STREAM	DRY	1000 0500	5		0.86	2.51	1.45
11988	6-35	4710-115.5870	-172-100	04/04/77	STREAM	DRY	1000 0500	1		1.03	1.59	
11989	6-35	4751-115.5462	-172-100	04/04/77	STREAM	DRY	1000 0500	9		1.03	2.25	13.89 1.31
11989	6-35	4751-115.5462	-172-101		STREAM	DRY	1000 0500			1.43	1.59	
11990	6-35	4693-115.5143	-172-100	04/04/77	STREAM	DRY	1000 0500	9		3.56	1.69	51.49 3.51
11991	6-35	4735-115.7259	-172-100	04/05/77	STREAM	DRY	1000 0500	1		0.90	2.52	8.42 1.51
11992	6-35	4754-115.7346	-172-100	04/05/77	STREAM	DRY	1000 0500	1		0.80	2.33	6.49 1.10
11993	6-35	4640-115.6819	-172-100	04/05/77	STREAM	DRY	1000 0500	9		1.20	1.62	3.00 0.53
11994	6-35	4979-115.6472	-172-100	04/05/77	STREAM	DRY	1000 0500	1		1.25	1.71	4.58 0.90
11995	6-35	4856-115.5945	-172-100	04/05/77	STREAM	DRY	1000 0500	1		0.92	1.66	
11996	6-35	4972-115.5889	-172-100	04/05/77	STREAM	DRY	1000 0500	1		1.40	1.56	3.31 0.57
11997	6-35	4757-115.5991	-172-100	04/05/77	STREAM	DRY	1000 0500	9		1.01	1.66	
11998	6-35	4012-115.6290	-172-100	04/05/77	STREAM	DRY	1000 0500	1		0.92	2.04	8.30 0.87
11999	6-35	4162-115.5218	-172-100	04/05/77	STREAM	DRY	1000 0500	1		1.12	2.38	18.87 1.78
11999	6-35	4162-115.5218	-172-101		STREAM	DRY	1000 0500			1.10	2.22	14.62 1.53
12000	6-35	4298-115.5338	-172-100	04/06/77	STREAM	DRY	1000 0500	5		1.11	1.69	3.01 0.59
11642	6-35	0153-115.7135	-172-100	04/11/77	STREAM	DRY	1000 0500	1		2.90	1.35	12.32 1.25
11643	6-35	0353-115.7229	-172-100	04/11/77	STREAM	DRY	1000 0500	9		2.82	1.28	
11644	6-35	1296-115.6863	-172-100	04/11/77	STREAM	DRY	1000 0500	1		1.16	2.20	12.75 1.68
11645	6-35	1125-115.6920	-172-100	04/11/77	STREAM	DRY	1000 0500	1		1.37	1.84	12.59 1.29
11646	6-35	0875-115.7154	-172-100	04/11/77	STREAM	DRY	1000 0500	1		1.02	2.36	10.58 1.56
11647	6-35	0985-115.7120	-172-100	04/11/77	STREAM	DRY	1000 0500	1		0.92	2.44	18.47 1.41
11648	6-35	0789-115.7025	-172-100	04/11/77	STREAM	DRY	1000 0500	1		1.18	1.94	11.59 1.13
11649	6-35	0621-115.7038	-172-100	04/11/77	STREAM	DRY	1000 0500	1		2.84	1.30	
11649	6-35	0621-115.7038	-172-101		STREAM	DRY	1000 0500			1.45	1.91	11.40 1.54
11650	6-35	1756-115.6097	-172-100	04/14/77	STREAM	DRY	1000 0500	1		1.29	1.51	
11651	6-35	1563-115.6102	-172-100	04/14/77	STREAM	DRY	1000 0500	1		1.87	1.38	
11652	6-35	1659-115.6000	-172-100	04/14/77	STREAM	DRY	1000 0500	1		1.53	1.88	7.22 1.72
11653	6-35	1718-115.5933	-172-100	04/14/77	STREAM	DRY	1000 0500	1		2.06	2.31	43.45 3.45
11655	6-35	1841-115.7326	-172-100	04/14/77	STREAM	DRY	1000 0500	1		0.59	3.92	6.29 1.93
11656	6-35	1949-115.7302	-172-100	04/14/77	STREAM	DRY	1000 0500	9		0.72	2.60	6.52 1.25
11657	6-35	2039-115.7069	-172-100	04/14/77	STREAM	DRY	1000 0500	1		0.86	2.14	7.76 1.12
11658	6-35	2437-115.7393	-172-100	04/14/77	STREAM	DRY	1000 0500	1		0.80	2.63	11.57 1.49
11659	6-35	1050-115.8226	-172-100	04/14/77	STREAM	DRY	1000 0500	1		0.63	2.42	4.66 0.93
11660	6-35	2140-115.8310	-172-100	04/14/77	STREAM	DRY	1000 0500	1		0.68	3.08	10.10 1.60
11661	6-35	2128-115.8000	-172-100	04/14/77	STREAM	DRY	1000 0500	1		0.68	2.42	3.45 1.02
11664	6-35	2371-115.9999	-172-100	04/15/77	STREAM	DRY	1000 0500	1		0.63	2.00	
11665	6-35	2252-115.9715	-172-100	04/15/77	STREAM	DRY	1000 0500	9		0.75	2.70	5.36 1.44
11666	6-35	1893-115.9983	-172-100	04/15/77	STREAM	DRY	1000 0500	1		0.60	1.94	
11667	6-35	1871-115.9533	-172-100	04/15/77	STREAM	DRY	1000 0500	1		0.79	2.30	4.69 1.17
11668	6-35	1531-115.8866	-172-100	04/15/77	STREAM	DRY	1000 0500	1		0.70	2.35	3.18 0.95
11669	6-35	1224-115.9761	-172-100	04/15/77	STREAM	DRY	1000 0500	1		1.86	1.61	5.88 1.01

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
 TABLE B-1. SEDIMENT ANALYSIS; DRY AND STREAM SITES

SITE NUMBER	ST	DOE SAMPLE NUMBER				DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE SIZE		POS. CONT	Q. C. X-REF	URANIUM(DNC)		THORIUM(NAA)	
		LAT.	LONG.	L	TY RPL			UPPER	LOWER			PPH	±ERR	PPH	±ERR
11670	6-35	1957	-115.8994	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	0.76	1.79		
11671	6-35	1749	-115.8996	-1	-72	-100	04/15/77	STREAM	DRY	1000	0500	1.85	1.61	7.82	1.10
11672	6-35	1409	-115.9221	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1.84	1.84		
11673	6-35	1204	-115.9667	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	2.91	1.51	6.32	1.17
11674	6-35	1203	-115.9015	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1.85	1.54	6.23	1.06
11675	6-35	1045	-115.8896	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1.88	1.36	4.32	1.19
11676	6-35	0836	-115.8745	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	2.80	1.32	4.11	0.69
11677	6-35	0160	-115.9617	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	0.72	1.46	4.05	1.14
11678	6-35	0261	-115.9626	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	0.81	2.00	4.09	0.70
11679	6-35	0825	-115.8526	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	3.30	1.24		
11680	6-35	0941	-115.8415	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1.68	1.61	8.57	1.15
11681	6-35	0913	-115.8262	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	2.16	1.77	10.92	2.32
11682	6-35	1183	-115.8214	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1.16	2.22	12.07	1.77
11683	6-35	1693	-115.8723	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1.60	1.64	9.46	1.12
11684	6-35	1791	-115.8568	-1	-72	-100	04/16/77	STREAM	DRY	1000	0500	1.69	1.63	7.74	1.18
11685	6-35	1037	-115.8062	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	0.94	2.19	5.48	0.94
11686	6-35	0733	-115.8297	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	2.61	1.41	6.60	1.16
11687	6-35	0769	-115.8220	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1.64	1.61	9.98	0.96
11688	6-35	0909	-115.7900	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1.10	2.26	7.31	1.62
11689	6-35	0894	-115.7791	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1.15	2.07	11.57	1.38
11690	6-35	0993	-115.7850	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	2.44	2.37	8.74	4.78
11691	6-35	0421	-115.7775	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	0.94	2.01	6.15	1.00
11692	6-35	0663	-115.7596	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	0.85	1.82		
11693	6-35	0320	-115.7812	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1.72	1.70	13.22	1.37
11694	6-35	1050	-115.7578	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	1.29	3.02	15.44	3.22
11701	6-35	5615	-115.9402	-1	-72	-100	04/17/77	STREAM	DRY	1000	0500	2.40	1.69	25.53	2.21
11702	6-35	5142	-115.5763	-1	-72	-100	04/18/77	STREAM	DRY	1000	0500	1.05	1.66		
11703	6-35	5093	-115.5434	-1	-72	-100	04/18/77	STREAM	DRY	1000	0500	0.96	1.86	2.72	0.78
11704	6-35	5468	-115.5733	-1	-72	-100	04/18/77	STREAM	DRY	1000	0500	0.98	1.77	1.54	0.33
11705	6-35	9581	-115.6329	-1	-72	-100	04/18/77	STREAM	DRY	1000	0500	1.90	1.48	8.25	0.78
11706	6-35	5594	-115.5666	-1	-72	-100	04/18/77	STREAM	DRY	1000	0500	1.29	1.90	10.37	1.20
11707	6-35	5495	-115.5901	-1	-72	-100	04/18/77	STREAM	DRY	1000	0500	1.90	1.54	7.95	1.08
11842	32-35	9554	-115.5319	-1	-72	-100	05/31/77	STREAM	DRY	1000	0500	0.88	1.57		
11843	32-35	8955	-115.5684	-1	-72	-100	05/31/77	STREAM	DRY	1000	0500	1.29	1.40	1.50	0.40
11844	6-35	7877	-115.9586	-1	-72	-100	06/01/77	STREAM	DRY	1000	0500	3.31	1.33	18.04	1.35
11845	6-35	7094	-115.6934	-1	-72	-100	06/01/77	STREAM	DRY	1000	0500	2.41	1.47	17.90	1.39
11846	6-35	8026	-115.9088	-1	-72	-100	06/01/77	STREAM	DRY	1000	0500	2.16	1.38	8.63	0.78
12001	14-35	6266	-114.6765	-1	-72	-100	04/10/77	STREAM	DRY	1000	0500	0.80	2.60	7.90	1.44
12002	4-35	8841	-114.6725	-1	-72	-100	04/10/77	STREAM	DRY	1000	0500	2.16	1.50	15.50	1.27
12023	32-35	7495	-114.6997	-1	-72	-100	04/12/77	STREAM	DRY	1000	0500	2.79	1.47	15.90	1.67
12024	32-35	7412	-114.6911	-1	-72	-100	04/12/77	STREAM	DRY	1000	0500	2.09	1.52	14.19	1.61
12025	32-35	7214	-114.6911	-1	-72	-100	04/12/77	STREAM	DRY	1000	0500	1.52	1.72	6.66	1.29
12026	32-35	7181	-114.7083	-1	-72	-100	04/12/77	STREAM	DRY	1000	0500	3.14	1.46	21.28	1.98
12027	32-35	6978	-114.6846	-1	-72	-100	04/12/77	STREAM	DRY	1000	0500	1.91	1.61	10.91	1.19
12028	32-35	6930	-114.6704	-1	-72	-100	04/14/77	STREAM	DRY	1000	0500	1.59	1.79	9.39	1.46
12029	32-35	6795	-114.6741	-1	-72	-100	04/14/77	STREAM	DRY	1000	0500	1.69	1.46		
12030	32-35	6633	-114.6734	-1	-72	-100	04/14/77	STREAM	DRY	1000	0500	2.35	1.59	14.30	1.70
12031	32-35	6518	-114.6846	-1	-72	-100	04/14/77	STREAM	DRY	1000	0500	2.03	1.57	8.15	1.25
12032	32-35	6456	-114.6805	-1	-72	-100	04/14/77	STREAM	DRY	1000	0500	2.25	1.51	14.34	1.29

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TABLE 8-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	DATE L TY RPL	SOURCE/COND.	PARTICLE MO-DA-YR	SIZE UPPER	POS. LOWER	CONT	O. C. X-REF	URANIUM(DNC) PPM	ERR	THORIUM(NAA) PPM	ERR
12033	32-35	6471-114.6739	-172-100	04/14/77	STREAM	DRY	1000	0500	5		2.33	1.64	10.44	2.13
12034	32-35	6631-114.6691	-172-100	04/14/77	STREAM	DRY	1000	0500	9		2.59	1.48	15.72	1.59
12036	32-35	6155-114.6693	-172-100	04/14/77	STREAM	DRY	1000	0500	1		1.91	1.48	9.50	0.91
12037	32-35	6222-114.6470	-172-100	04/14/77	STREAM	DRY	1000	0500	5		3.43	1.24		
12038	32-35	6177-114.6449	-172-100	04/14/77	STREAM	DRY	1000	0500	5		2.97	1.50	19.30	1.90
12039	32-35	6078-114.6452	-172-100	04/14/77	STREAM	DRY	1000	0500	5		3.83	1.37	23.16	1.69
12040	32-35	5988-114.6491	-172-100	04/14/77	STREAM	DRY	1000	0500	9		2.88	1.41	16.50	1.19
12041	32-35	5947-114.6677	-172-100	04/12/77	STREAM	DRY	1000	0500	1		1.14	1.75	4.89	0.98
12042	32-35	5753-114.6881	-172-100	04/14/77	STREAM	DRY	1000	0500	1		1.41	1.63	6.22	0.75
12043	32-35	5380-114.6749	-172-100	04/14/77	STREAM	DRY	1000	0500	1		1.62	1.50	6.99	0.71
12044	32-35	5184-114.6831	-172-100	04/14/77	STREAM	DRY	1000	0500	1		1.43	1.88	7.56	1.84
12045	32-35	5103-114.6834	-172-100	04/14/77	STREAM	DRY	1000	0500	9		1.25	1.63	7.01	0.67
12046	32-35	5004-114.6847	-172-100	04/15/77	STREAM	DRY	1000	0500	1		1.17	1.74	8.25	0.79
12051	4-35	2462-114.5959	-172-100	04/16/77	STREAM	DRY	1000	0500	1		2.93	1.81	47.75	3.16
12052	4-35	2417-114.5954	-172-100	04/16/77	STREAM	DRY	1000	0500	1		1.43	2.41	15.23	2.59
12053	4-35	2354-114.5989	-172-100	04/16/77	STREAM	DRY	1000	0500	1		4.73	1.56	53.45	4.12
12054	4-35	2055-114.5866	-172-100	04/16/77	STREAM	DRY	1000	0500	1		3.37	1.51	37.66	2.34
12055	4-35	2118-114.5886	-172-100	04/16/77	STREAM	DRY	1000	0500	1		1.59	1.60	9.39	1.03
12059	32-35	5527-114.6415	-172-100	04/17/77	STREAM	DRY	1000	0500	9		2.23	1.66	14.98	2.02
12065	32-35	5592-114.6445	-172-100	04/17/77	STREAM	DRY	1000	0500	9		2.43	1.57	14.27	1.68
12066	32-35	5664-114.6520	-172-100	04/17/77	STREAM	DRY	1000	0500	1		3.07	1.42	20.59	1.50
12067	32-35	5737-114.6540	-172-100	04/17/77	STREAM	DRY	1000	0500	9		2.97	1.45	19.53	1.63
12068	32-35	5799-114.6805	-172-100	04/17/77	STREAM	DRY	1000	0500	9		2.36	1.48	11.78	1.94
12131	32-35	8858-115.5159	-170-100	05/20/77	STREAM	WET	1000	0500	9		11.51	1.12	6.10	1.29
12132	6-35	7735-115.8870	-170-100	05/20/77	STREAM	WET	1000	0500	1		5.94	1.17	16.85	1.20
12133	6-35	7940-115.9609	-170-100	05/20/77	STREAM	WET	1000	0500	1		2.08	1.84		
12135	6-35	7880-115.9584	-170-100	05/21/77	STREAM	WET	1000	0500	1		39.34	1.04		
12162	32-35	3709-115.5405	-170-100	05/27/77	STREAM	WET	1000	0500	1		2.04	1.87		
12230	6-35	9830-115.8253	-170-100	05/20/77	STREAM	WET	1000	0500	1		2.11	1.47	5.58	0.90
12915	32-35	8961-115.7158	-172-100	05/11/77	STREAM	DRY	1000	0500	1		1.46	1.49		
12917	32-35	9117-115.7335	-172-100	05/11/77	STREAM	DRY	1000	0500	1		1.80	1.60	5.16	1.20
12918	32-35	8880-115.6940	-172-100	05/11/77	STREAM	DRY	1000	0500	3		1.33	1.63	1.58	
12919	32-35	8056-115.5169	-172-100	05/11/77	STREAM	DRY	1000	0500	9		1.71	1.40	1.73	0.50
12919	32-35	8056-115.5169	-172-100	05/11/77	STREAM	DRY	1000	0500	1		1.66	1.37	1.29	0.34
12920	32-35	8245-115.5166	-172-100	05/11/77	STREAM	DRY	1000	0500	2		1.83	1.43	1.92	0.56
12921	32-35	8131-115.5398	-172-100	05/11/77	STREAM	DRY	1000	0500	1		1.25	1.50		
12922	32-35	8535-115.5332	-172-100	05/11/77	STREAM	DRY	1000	0500	1		2.70	1.30		
12923	32-35	8435-115.5229	-172-100	05/11/77	STREAM	DRY	1000	0500	2		2.40	1.28		
12924	32-35	8635-115.5325	-172-100	05/11/77	STREAM	DRY	1000	0500	1		2.64	1.30	2.28	0.44
12925	32-35	8804-115.5167	-172-100	05/12/77	STREAM	DRY	1000	0500	1		2.48	1.30		
12926	32-35	8824-115.5343	-172-100	05/12/77	STREAM	DRY	1000	0500	1		3.18	1.24		
12927	32-35	8808-115.5454	-172-100	05/12/77	STREAM	DRY	1000	0500	1		1.50	1.51	2.23	0.42
12928	32-35	8955-115.5684	-172-100	05/12/77	STREAM	DRY	1000	0500	1		2.09	1.42	2.41	0.51
12929	32-35	8963-115.5596	-172-100	05/12/77	STREAM	DRY	1000	0500	2		2.14	1.32		
12929	32-35	8963-115.5596	-172-100	05/12/77	STREAM	DRY	1000	0500	1		2.28	1.26		
12930	32-35	9096-115.5438	-172-100	05/12/77	STREAM	DRY	1000	0500	1		2.45	1.29		
12931	32-35	9284-115.5335	-172-100	05/12/77	STREAM	DRY	1000	0500	1		2.65	1.27	1.93	0.42
12932	32-35	9373-115.5222	-172-100	05/12/77	STREAM	DRY	1000	0500	1		1.50	1.54	2.07	0.52
12933	32-35	9429-115.5310	-172-100	05/12/77	STREAM	DRY	1000	0500	1		1.34	1.48		

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TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

SITE NUMBER	ST	DOE LAT.	DOE LONG.	SAMPLE L T Y RPL	DATE MO-DA-YR	SOURCE/COND.	PARTICLE SIZE	POS. UPPER LOWER	CONT.	Q. C. X-REF	URANIUM(DIC) PPM	%ERR	THORIUM(MAI) PPM	%ERR
12934	32-35	9554	-115.5319	-1-72-100	05/12/77	STREAM	DRY	1000	0500	2	0.95	1.58		
12935	32-35	9330	-115.5123	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	0.73	1.85	1.79	0.38
12936	32-35	9947	-115.5001	-1-72-100	05/12/77	STREAM	DRY	1000	0500	7	1.23	1.51		
12937	32-35	9726	-115.5382	-1-72-100	05/12/77	STREAM	DRY	1000	0500	7	0.87	1.63		
12938	32-35	9523	-115.5741	-1-72-100	05/02/77	STREAM	DRY	1000	0500	1	0.86	1.68		
12939	32-35	9576	-115.5791	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	1.63	1.37		
12939	32-35	9576	-115.5795	-1-72-101		STREAM	DRY	0500	0500	1	1.51	1.37		
12940	32-35	9858	-115.5801	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	1.16	1.84	5.18	0.72
12941	32-35	9947	-115.5722	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	1.69	1.47	1.67	0.42
12942	32-35	9163	-115.6556	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	2.32	1.39	1.91	0.47
12943	32-35	8567	-115.5725	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	2.66	1.28	1.53	0.45
12944	32-35	8506	-115.5848	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	2.84	1.24	1.50	0.35
12945	32-35	7952	-115.5845	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	2.14	1.36	2.71	0.55
12946	32-35	7543	-115.5223	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	1.94	1.32		
12947	6-35	7334	-115.5083	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	1.81	1.38	1.20	0.46
12948	6-35	7223	-115.4908	-1-72-100	05/12/77	STREAM	DRY	1000	0500	2	1.91	1.31		
12949	32-35	6572	-115.4744	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	2.57	1.28	1.89	0.45
12949	32-35	6572	-115.4744	-1-72-101		STREAM	DRY	0500	0500	1	2.51	1.32	1.67	0.48
12950	32-35	7124	-115.4910	-1-72-100	05/13/77	STREAM	DRY	1000	0500	1	1.66	1.39		
12951	32-35	6807	-115.4828	-1-72-100	05/13/77	STREAM	DRY	1000	0500	1	3.92	1.28	12.14	1.05
12952	32-35	6779	-115.4751	-1-72-100	05/13/77	STREAM	DRY	1000	0500	1	4.18	1.24	15.66	1.13
12953	6-35	6501	-115.4867	-1-72-100	05/14/77	STREAM	DRY	1000	0500	1	2.21	1.34	1.41	0.41
12954	6-35	6259	-115.4971	-1-72-100	05/14/77	STREAM	DRY	1000	0500	1	1.22	1.53	1.26	0.41
12955	6-35	6312	-115.4881	-1-72-100	05/14/77	STREAM	DRY	1000	0500	1	2.48	1.32	1.55	0.47
12956	6-35	6446	-115.5453	-1-72-100	05/14/77	STREAM	DRY	1000	0500	1	1.34	1.45		
12957	6-35	6375	-115.5554	-1-72-100	05/14/77	STREAM	DRY	1000	0500	1	0.86	1.80	1.27	0.36
12958	6-35	6327	-115.6036	-1-72-100	05/14/77	STREAM	DRY	1000	0500	1	2.30			
12958	6-35	6307	-115.5975	-1-72-100	05/14/77	STREAM	DRY	1000	0500	5	3.01	1.24		
12959	6-35	6307	-115.5975	-1-72-101		STREAM	DRY	0500	0500	1	2.82	1.34	13.17	1.18
12960	6-35	6332	-115.5731	-1-72-100	05/14/77	STREAM	DRY	1000	0500	5	1.81	1.66	10.79	1.30
12961	6-35	5987	-115.5794	-1-72-100	05/14/77	STREAM	DRY	1000	0500	5	1.24	1.55		
12962	6-35	6918	-115.6373	-1-72-100	05/14/77	STREAM	DRY	1000	0500	5	3.58	1.34	13.48	1.76
12963	6-35	6743	-115.6232	-1-72-100	05/15/77	STREAM	DRY	1000	0500	1	2.49	1.34	5.86	0.89
12964	6-35	7094	-115.6934	-1-72-100	05/15/77	STREAM	DRY	1000	0500	1	2.96	1.45	21.61	1.68
12965	6-35	7288	-115.7428	-1-72-100	05/15/77	STREAM	DRY	1000	0500	1	3.79	1.33	12.34	1.68
12966	32-35	7899	-115.4484	-1-72-100	05/16/77	STREAM	DRY	1000	0500	9	2.18	1.52	13.25	1.14
12967	32-35	7719	-115.4877	-1-72-100	05/16/77	STREAM	DRY	1000	0500	2	1.84	1.38		
12968	32-35	7611	-115.4956	-1-72-100	05/16/77	STREAM	DRY	1000	0500	1	1.66	1.49	3.26	0.50
12969	32-35	8195	-115.4779	-1-72-100	05/16/77	STREAM	DRY	1000	0500	2	2.32	1.41	6.76	0.84
12969	32-35	8195	-115.4779	-1-72-101		STREAM	DRY	0500	0500	1	2.29	1.33		
12970	32-35	7238	-115.4039	-1-72-100	05/15/77	STREAM	DRY	1000	0500	1	1.57	1.45		
13762	6-35	9395	-115.9978	-1-72-100	05/01/77	STREAM	DRY	1000	0500	9	2.18	1.66	6.27	2.11
13773	6-35	7772	-115.9998	-1-72-100	05/01/77	STREAM	DRY	1000	0500	1	3.46	1.37	12.28	2.06
13892	6-35	9633	-115.8444	-1-72-100	05/12/77	STREAM	DRY	1000	0500	9	1.78	1.62	4.64	1.44
13893	6-35	9542	-115.8335	-1-72-100	05/12/77	STREAM	DRY	1000	0500	9	1.88	1.44	3.59	0.66
13894	6-35	9072	-115.8165	-1-72-100	05/12/77	STREAM	DRY	1000	0500	9	1.35	1.68	6.58	0.96
13895	6-35	8921	-115.7513	-1-72-100	05/12/77	STREAM	DRY	1000	0500	9	1.67	1.43	3.74	0.56
13896	6-35	8361	-115.7467	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	1.14	1.59	2.44	0.55
13897	6-35	8554	-115.7729	-1-72-100	05/12/77	STREAM	DRY	1000	0500	1	3.11	1.37	16.10	1.59

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TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	-----DOC SAMPLE NUMBER-----				DATE	SAMPLE MO-DA-YR	SOURCE/COND.	PARTICLE SIZE		POS. CONT.	Q, C, X-REF	URANIUM(DNC) PPM	ZERR	THORIUM(NAA) PPM		ERR
		LAT.	LONG.	L	TY RPL				UPPER	LOWER							
13898	6-35,9052	-115.8907	-1-72	-100	05/12/77	STREAM	DRY	1000	0500	9		2.08	1.49	7.64	1.32		
13899	6-35,9098	-115.9062	-1-72	-100	05/12/77	STREAM	DRY	1000	0500	1		5.26	1.17	9.84	0.65		
13899	6-35,9098	-115.9062	-1-72	-101		STREAM	DRY	1000	0500			3.74	1.20	1.91	0.48		
13900	6-35,9280	-115.9214	-1-72	-100	05/12/77	STREAM	DRY	1000	0500	1		1.42	1.61	5.46	0.82		
13901	6-35,9644	-115.9620	-1-72	-100	05/12/77	STREAM	DRY	1000	0500	9		1.16	1.32	8.63	1.03		
13902	6-35,9011	-115.9340	-1-72	-100	05/12/77	STREAM	DRY	1000	0500	1		6.88	1.34	12.76	1.02		
13903	6-35,9467	-115.9048	-1-72	-100	05/12/77	STREAM	DRY	1000	0500	1		1.31	1.43	7.95	0.77		
13904	6-35,9026	-115.9088	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	2		1.47	1.53	4.61	0.64		
13905	6-35,7877	-115.9908	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		3.33	1.34	15.91	1.43		
13906	6-35,7913	-115.9609	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	2		2.02	1.48	11.33	1.00		
13907	6-35,7811	-115.9323	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	2		2.44	1.44	12.31	1.34		
13908	6-35,7646	-115.9015	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		4.56	1.30	27.45	1.95		
13909	6-35,7644	-115.8761	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		3.78	1.28	9.37	1.54		
13909	6-35,7644	-115.8761	-1-72	-101		STREAM	DRY	1000	0500			3.51	1.22				
13910	6-35,7543	-115.8585	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		2.71	1.35	13.35	0.97		
13911	6-35,7722	-115.8450	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	2		1.98	1.42	10.00	0.83		
13912	6-35,7255	-115.7694	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		2.25	1.63	22.94	1.93		
13913	6-35,7336	-115.8269	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		2.59	1.27				
13914	6-35,8238	-115.9327	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		2.08	1.40	7.26	0.96		
13915	6-35,8148	-115.9695	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		1.69	1.46	6.58	0.66		
13916	6-35,8166	-115.9683	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	2		1.68	1.49	7.31	0.86		
13917	6-35,7877	-115.9970	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	2		1.54	1.61	7.62	1.15		
13918	6-35,8434	-115.8418	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		1.68	1.56	10.31	1.14		
13919	6-35,8342	-115.8264	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		1.61	1.37				
13919	6-35,8342	-115.8264	-1-72	-101		STREAM	DRY	1000	0500			1.38	1.74	10.76	1.08		
13920	6-35,8426	-115.8562	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		2.58	1.42	13.31	1.16		
13921	6-35,8110	-115.7815	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		3.23	1.37	22.24	1.46		
13926	6-35,8050	-115.7881	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	1		1.58	1.50	6.04	0.74		
13927	6-35,7900	-115.8204	-1-72	-100	05/14/77	STREAM	DRY	1000	0500	2		2.45	1.35	9.09	0.99		
14101	4-35,3990	-114.2363	-1-72	-100	07/20/77	STREAM	DRY	1000	0500	9		0.87	2.57	12.68	1.50		
14101	4-35,3990	-114.2363	-1-72	-110		STREAM	DRY	1000	0500			2.19	1.69	7.48	1.03		
14102	4-35,3896	-114.2190	-1-72	-100	07/20/77	STREAM	DRY	1000	0500	5		1.14	1.85	5.65	0.55		
14103	4-35,4162	-114.1994	-1-72	-100		STREAM	DRY	1000	0500	9		1.23	2.15	6.70	1.07		
14104	4-35,4366	-114.1877	-1-72	-100		STREAM	DRY	1000	0500	9		2.54	1.42	10.67	1.27		
14105	4-35,4293	-114.1813	-1-72	-100	07/20/77	STREAM	DRY	1000	0500	9		2.84	1.35	7.76	0.94		
14106	4-35,4218	-114.1806	-1-72	-100	07/20/77	STREAM	DRY	1000	0500	9		1.39	1.69	7.61	0.95		
14107	4-35,4104	-114.1831	-1-72	-100	30/00/77	STREAM	DRY	1000	0500	9		1.30	1.70	4.67	0.96		
14108	4-35,4054	-114.1823	-1-72	-100	07/20/77	STREAM	DRY	1000	0500	9		1.78	1.58	7.47	0.97		
14109	4-35,3990	-114.1592	-1-72	-100	07/20/77	STREAM	DRY	1000	0500	9		1.53	1.63	10.00	0.91		
14109	4-35,3990	-114.1592	-1-72	-101		STREAM	DRY	1000	0500			1.80	1.76	19.64	1.71		
14110	4-35,4257	-114.2629	-1-72	-100	07/21/77	STREAM	DRY	1000	0500	5		2.01	1.71	9.12	2.04		
14110	4-35,4257	-114.2629	-1-72	-110		STREAM	DRY	1000	0500			1.98	1.90	21.55	2.46		
14111	4-35,4353	-114.2461	-1-72	-100	07/21/77	STREAM	DRY	1000	0500	5		2.04	2.21	9.83	3.48		
14112	4-35,4246	-114.2245	-1-72	-100	07/21/77	STREAM	DRY	1000	0500			2.75	1.42	12.96	1.39		
14113	4-35,4615	-114.2135	-1-72	-100	07/21/77	STREAM	DRY	1000	0500			3.26	1.67	15.84	1.28		
14114	4-35,4639	-114.1999	-1-72	-100	07/21/77	STREAM	DRY	1000	0500	5		1.54	1.57	6.73	0.87		
14115	4-35,4612	-114.1967	-1-72	-100	07/21/77	STREAM	DRY	1000	0500	5		2.49	1.43	15.89	1.12		
14116	4-35,3934	-114.1881	-1-72	-100	07/21/77	STREAM	DRY	1000	0500	9		1.01	2.07	13.89	1.05		
14117	4-35,3822	-114.1730	-1-72	-100	07/21/77	STREAM	DRY	1000	0500	9		1.59	1.64	7.19	1.20		

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
 TABLE 8-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	NUMBER L	DATE TY RPL	SAMPLE MO-DA-YR	PARTICLE SOURCE/COND.	SIZE UPPER LOWER	POS. CONT	O. C. X-REF	URANIUM(DNC) PPM	THORIUM(DNC) PPM	THORIUM(DNC) PPM		
14118	-35,	3798	-114,	1768	-172	-100	07/21/77	STREAM	DRY	1000 0500	9	2.10	1.72	19.19	2.03
14119	-35,	4158	-114,	2622	-172	-100	07/22/77	STREAM	DRY	1000 0500	9	1.85	1.45	7.81	0.69
14119	-35,	4158	-114,	2622	-172	-101		STREAM	DRY	1000 0500		1.93	1.39		
14119	-35,	4158	-114,	2622	-172	-110		STREAM	DRY	1000 0500		1.59	1.65	8.48	1.24
14120	-35,	3503	-114,	2927	-172	-100	07/22/77	STREAM	DRY	1000 0500	5	1.14	2.15	11.76	1.52
14121	-35,	3579	-114,	3101	-172	-100	07/22/77	STREAM	DRY	1000 0500	5	3.07	1.47	22.80	2.03
14122	-35,	3574	-114,	3277	-172	-100	07/22/77	STREAM	DRY	1000 0500	9	2.37	1.48	20.42	1.16
14123	-35,	3914	-114,	3389	-172	-100	07/22/77	STREAM	DRY	1000 0500	9	2.35	1.59	16.09	1.68
14124	-35,	3881	-114,	3533	-172	-100	07/22/77	STREAM	DRY	1000 0500	9	2.11	1.54	16.05	1.24
14125	-35,	4008	-114,	3573	-172	-100	07/22/77	STREAM	DRY	1000 0500	9	2.63	1.46	15.86	1.25
14126	-35,	4316	-114,	2836	-172	-100	07/22/77	STREAM	DRY	1000 0500	5	1.68	1.68	9.37	1.30
14127	-35,	4875	-114,	2818	-172	-100	07/22/77	STREAM	DRY	1000 0500	5	1.42	1.65	7.97	0.93
14128	-35,	4801	-114,	2743	-172	-100	07/22/77	STREAM	DRY	1000 0500	5	1.92	1.48	5.11	0.97
14128	-35,	4686	-114,	2879	-172	-100	07/22/77	STREAM	DRY	1000 0500	5	1.32	2.08	11.89	1.82
14129	-35,	4696	-114,	2879	-172	-101		STREAM	DRY	1000 0500		1.31	1.66	5.80	0.85
14130	-35,	4589	-114,	2959	-172	-100	07/22/77	STREAM	DRY	1000 0500	5	1.34	1.68	7.22	0.76
14131	-35,	4901	-114,	3589	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	1.36	1.76	12.54	1.07
14131	-35,	4901	-114,	3589	-172	-110		STREAM	DRY	1000 0500		1.50	1.78	8.92	1.54
14132	-35,	4712	-114,	3188	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	1.09	1.75	5.55	0.76
14133	-35,	4604	-114,	3212	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	1.51	1.62	9.25	0.88
14134	-35,	4543	-114,	3324	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	1.56	1.64	10.79	1.09
14135	-35,	4503	-114,	3535	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	1.66	1.50	7.29	0.83
14136	-35,	4190	-114,	3229	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	1.32	1.58	7.68	1.10
14137	-35,	4926	-114,	3918	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	2.07	1.50	12.06	1.20
14138	-35,	4985	-114,	4148	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	1.94	1.87	16.41	2.28
14139	-35,	4931	-114,	4579	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	1.49	1.75	9.30	1.40
14139	-35,	4931	-114,	4579	-172	-101		STREAM	DRY	1000 0500		1.51	1.93	15.67	1.61
14140	-35,	4851	-114,	4648	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	1.82	1.73	13.28	1.77
14141	-35,	4769	-114,	4605	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	2.11	1.68	14.33	1.89
14142	-35,	4754	-114,	4320	-172	-100	07/23/77	STREAM	DRY	1000 0500	5	2.54	1.62	25.09	2.15
14143	-35,	4682	-114,	4555	-172	-100	07/23/77	STREAM	DRY	1000 0500	9	2.32	1.53	16.83	1.48
14144	-35,	4568	-114,	4073	-172	-100	07/23/77	STREAM	DRY	1000 0500	9	2.17	1.59	15.74	1.49
14145	-35,	4770	-114,	3813	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	2.49	1.48	16.32	1.38
14145	-35,	4770	-114,	3813	-172	-110		STREAM	DRY	1000 0500		2.39	1.49	18.72	1.31
14146	-35,	4670	-114,	3772	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	1.67	1.59	11.43	0.97
14147	-35,	4265	-114,	3785	-172	-100	07/26/77	STREAM	DRY	1000 0500	9	1.79	1.54	13.64	1.11
14148	-35,	4450	-114,	3988	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	2.40	1.50	17.28	1.31
14149	-35,	4052	-114,	3957	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	2.65	1.54	23.21	1.66
14149	-35,	4052	-114,	3957	-172	-101		STREAM	DRY	1000 0500		2.69	1.59	20.03	2.08
14150	-35,	4081	-114,	4033	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	2.17	1.65	16.75	2.30
14151	-35,	4149	-114,	4262	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	2.11	1.51	13.38	1.12
14152	-35,	4278	-114,	4357	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	2.53	1.59	18.74	1.88
14153	-35,	4489	-114,	4494	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	2.87	1.44	15.93	1.75
14154	-35,	5314	-114,	3508	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	1.46	1.84	9.78	0.83
14155	-35,	5671	-114,	3773	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	0.92	1.96	7.03	0.80
14156	-35,	5814	-114,	4121	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	1.14	2.09	9.88	1.47
14157	-35,	5607	-114,	4161	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	1.47	1.45		
14158	-35,	5323	-114,	4357	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	2.78	1.42	20.23	1.50
14159	-35,	5098	-114,	4827	-172	-100	07/26/77	STREAM	DRY	1000 0500	5	2.74	1.53	24.49	2.04

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	NUMBER L T Y RPL	DATE MO-DA-YR	SOURCE/COND.	PARTICLE UPPER	SIZE LOWER	POS. CONT	Q. C. X-REF	URANIUM(DNC) PPM	THORIUM(NAA) PPM	ERR	
14159		4-35.5098	-114.4627	-172-101		STREAM	DRY	1000	0500		2.64	1.62	24.80	2.27
14160		4-35.5645	-114.4678	-172-100	07/26/77	STREAM	DRY	1000	0500	5	1.96	1.56	13.65	1.30
14161		4-35.5718	-114.4698	-172-100	07/26/77	STREAM	DRY	1000	0500	5	2.92	1.54	31.22	2.25
14162		4-35.5347	-114.3783	-172-100	07/26/77	STREAM	DRY	1000	0500	5	1.58	1.59	13.09	0.92
14162		4-35.5347	-114.3783	-172-110		STREAM	DRY	1000	0500		1.28	1.58	3.50	0.64
14163		4-35.5375	-114.3837	-172-100	07/26/77	STREAM	DRY	1000	0500	5	1.36	1.74	8.09	1.17
14164		4-35.6095	-114.4233	-172-100	07/27/77	STREAM	DRY	1000	0500	5	1.32	1.72	10.80	1.04
14165		4-35.6220	-114.4594	-172-100	07/27/77	STREAM	DRY	1000	0500	5	2.93	1.49	20.80	1.88
14166		4-35.6364	-114.4589	-172-100	07/27/77	STREAM	DRY	1000	0500	5	3.16	1.49	14.60	2.29
14167		4-35.6648	-114.4779	-172-100	07/27/77	STREAM	DRY	1000	0500	5	2.39	1.49	15.29	1.59
14168		4-35.6724	-114.4975	-172-100	07/27/77	STREAM	DRY	1000	0500	5	1.43	1.70	7.18	1.13
14169		4-35.6724	-114.4953	-172-100	07/27/77	STREAM	DRY	1000	0500	5	1.75	1.66	9.98	1.42
14169		4-35.6724	-114.4953	-172-101		STREAM	DRY	1000	0500		1.77	1.80	9.76	1.90
14170		4-35.6834	-114.5082	-172-100	07/27/77	STREAM	DRY	1000	0500	9	2.27	1.50	14.07	1.43
14171		4-35.6970	-114.5100	-172-100	07/27/77	STREAM	DRY	1000	0500	9	1.81	1.72	19.48	1.55
14172		4-35.7193	-114.5003	-172-100	07/27/77	STREAM	DRY	1000	0500	9	2.94	1.52	20.63	2.29
14173		4-35.7448	-114.5539	-172-100	07/27/77	STREAM	DRY	1000	0500	9	2.21	1.52	16.62	1.45
14174		4-35.7495	-114.5205	-172-100	07/27/77	STREAM	DRY	1000	0500	9	2.19	1.49	12.75	1.15
14175		4-35.5155	-114.3260	-172-100	07/28/77	STREAM	DRY	1000	0500	5	1.24	1.67	7.76	0.78
14175		4-35.5155	-114.3260	-172-110		STREAM	DRY	1000	0500		1.21	1.70	5.51	0.78
14176		4-35.5273	-114.2803	-172-100	07/28/77	STREAM	DRY	1000	0500	5	1.35	1.73	11.47	1.02
14177		4-35.5045	-114.2801	-172-100	07/28/77	STREAM	DRY	1000	0500	5	1.61	1.69	10.43	1.24
14178		4-35.5468	-114.3139	-172-100	07/28/77	STREAM	DRY	1000	0500	5	1.10	2.09	11.01	1.37
14179		4-35.5728	-114.3087	-172-100	07/28/77	STREAM	DRY	1000	0500	5	0.79	2.63	10.46	1.64
14180		4-35.5773	-114.3095	-172-100	07/28/77	STREAM	DRY	1000	0500	5	0.86	2.28	4.42	1.28
14181		4-35.5890	-114.3092	-172-100	07/28/77	STREAM	DRY	1000	0500	5	1.15	1.83	4.07	1.04
14182		4-35.6026	-114.2712	-172-100	07/28/77	STREAM	DRY	1000	0500	5	1.08	2.26	8.09	1.65
14183		4-35.5857	-114.3267	-172-100	07/28/77	STREAM	DRY	1000	0500	9	3.00	1.43	23.17	1.70
14184		4-35.6067	-114.3351	-172-100	07/28/77	STREAM	DRY	1000	0500	5	4.14	1.39	32.57	2.30
14185		4-35.6132	-114.3415	-172-100	07/28/77	STREAM	DRY	1000	0500	5	3.13	1.42	22.73	1.74
14186		4-35.6127	-114.3514	-172-100	07/28/77	STREAM	DRY	1000	0500	5	3.34	1.44	21.61	2.01
14187		4-35.5905	-114.3794	-172-100	07/28/77	STREAM	DRY	1000	0500	5	1.83	1.68	13.41	1.58
14188		4-35.5748	-114.3501	-172-100	07/28/77	STREAM	DRY	1000	0500	5	0.84	1.98	5.48	0.72
14189		4-35.5597	-114.3268	-172-100	07/28/77	STREAM	DRY	1000	0500	5	0.94	2.28	16.44	1.20
14189		4-35.5597	-114.3268	-172-101		STREAM	DRY	1000	0500		1.01	2.30	10.65	1.60
14190		4-35.6361	-114.4015	-172-100	07/28/77	STREAM	DRY	1000	0500	5	2.50	1.50	17.54	1.50
14191		4-35.6277	-114.3874	-172-100	07/28/77	STREAM	DRY	1000	0500	5	2.08	1.98	17.80	2.79
14192		4-35.7166	-114.4281	-172-100	07/28/77	STREAM	DRY	1000	0500	5	1.11	2.29	17.86	2.30
14193		4-35.7159	-114.4254	-172-100	07/28/77	STREAM	DRY	1000	0500	5	1.30	1.92	13.00	1.35
14194		4-35.7328	-114.4569	-172-100	07/28/77	STREAM	DRY	1000	0500	5	1.61	1.98	17.72	1.95
14195		4-35.6776	-114.4465	-172-100	08/04/77	STREAM	DRY	1000	0500	9	1.31	1.91	11.05	1.36
14196		4-35.6805	-114.4111	-172-100	08/04/77	STREAM	DRY	1000	0500	9	1.39	1.78	10.20	1.19
14197		4-35.7099	-114.4820	-172-100	08/04/77	STREAM	DRY	1000	0500	5	1.84	1.52	10.54	0.93
14198		4-35.7301	-114.4117	-172-100	08/04/77	STREAM	DRY	1000	0500	9	1.87	1.59	14.66	1.27
14199		4-35.7286	-114.3852	-172-100	08/04/77	STREAM	DRY	1000	0500	9	1.66	1.76	15.41	1.48
14200		4-35.7298	-114.3587	-172-100	08/04/77	STREAM	DRY	1000	0500	9	1.38	1.86	15.98	1.32
14201		4-35.7335	-114.3519	-172-100	08/04/77	STREAM	DRY	1000	0500	9	1.88	1.77	22.81	1.73
14202		4-35.7325	-114.3177	-172-100	08/04/77	STREAM	DRY	1000	0500	9	2.05	2.89	54.70	4.86
14203		4-35.7389	-114.3186	-172-100	08/04/77	STREAM	DRY	1000	0500	9	1.71	1.66	16.25	1.21

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
 TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	-----DOE SAMPLE NUMBER----- ST LAT.	DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE SIZE UPPER LOWER	POS. CONT.	Q. C. X-REF	URANIUM(DNC) PPM ±ERR	THORIUM(NAA) PPM ERR		
14204	-35,7082-114,3185-1-72-100	08/04/77	STREAM	DRY 1000	0500	5	1.15	2.03	14.13	1.27
14205	-35,7010-114,3187-1-72-100	08/04/77	STREAM	DRY 1000	0500	5	1.82	1.76	12.72	1.65
14206	-35,6956-114,3189-1-72-100	08/04/77	STREAM	DRY 1000	0500	5	1.66	1.98	13.53	2.05
14207	-35,7053-114,3484-1-72-100	08/04/77	STREAM	DRY 1000	0500	5	2.09	1.75	18.95	2.17
14208	-35,6727-114,1474-1-72-100	08/05/77	STREAM	DRY 1000	0500	9	1.27	1.91	7.64	1.36
14209	-35,6621-114,1555-1-72-100	08/05/77	STREAM	DRY 1000	0500	9	0.71	2.18	4.60	0.76
14209	-35,6621-114,1555-1-72-101	08/05/77	STREAM	DRY 1000	0500	9	0.56	1.98		
14210	-35,6475-114,1847-1-72-100	08/05/77	STREAM	DRY 1000	0500	9	0.54	2.91	2.98	1.08
14211	-35,6479-114,2024-1-72-100	08/05/77	STREAM	DRY 1000	0500	9	0.60	2.28	3.21	0.64
14212	-35,6336-114,2106-1-72-100	08/05/77	STREAM	DRY 1000	0500	9	1.07	2.14	12.55	1.34
14213	-35,6544-114,2099-1-72-100	08/05/77	STREAM	DRY 1000	0500	9	0.68	3.12	6.41	1.65
14214	-35,6564-114,2197-1-72-100	08/05/77	STREAM	DRY 1000	0500	9	1.29	1.75	10.49	0.97
14215	-35,6645-114,2205-1-72-100	08/05/77	STREAM	DRY 1000	0500	9	1.21	1.92	8.24	0.36
14216	-35,6770-114,1748-1-72-100	08/05/77	STREAM	DRY 1000	0500	9	0.52	2.49	2.24	0.71
14217	-35,6804-114,2067-1-72-100	08/05/77	STREAM	DRY 1000	0500	5	0.77	2.00	3.82	0.75
14218	-35,7103-114,1736-1-72-100	08/05/77	STREAM	DRY 1000	0500	5	1.57	1.67	19.12	1.68
14219	-35,7085-114,1737-1-72-100	08/05/77	STREAM	DRY 1000	0500	5	1.44	1.43		
14220	-35,6875-114,2164-1-72-100	08/05/77	STREAM	DRY 1000	0500	5	1.06	2.07	3.45	1.31
14221	-35,6977-114,1730-1-72-100	08/06/77	STREAM	DRY 1000	0500	5	1.13	1.82	8.39	0.97
14222	-35,7290-114,1506-1-72-100	08/06/77	STREAM	DRY 1000	0500	5	1.68	1.36		
14223	-35,7445-114,2111-1-72-100	08/06/77	STREAM	DRY 1000	0500	5	3.44	1.47	29.69	2.40
14224	-35,7294-114,2194-1-72-100	08/06/77	STREAM	DRY 1000	0500	5	3.94	2.17	73.98	6.63
14225	-35,7379-114,2368-1-72-100	08/06/77	STREAM	DRY 1000	0500	5	1.98	1.54	14.67	1.22
14226	-35,7444-114,1549-1-72-100	08/06/77	STREAM	DRY 1000	0500	5	2.73	1.23		
14227	-35,7012-114,1342-1-72-100	08/06/77	STREAM	DRY 1000	0500	5	0.50	0.50	2.45	0.78
14228	-35,7279-114,1189-1-72-100	08/06/77	STREAM	DRY 1000	0500	5	1.35	1.71	9.52	1.01
14229	-35,7279-114,1189-1-72-101	08/06/77	STREAM	DRY 1000	0500	5	1.58	1.64	12.85	1.24
14230	-35,6837-114,1182-1-72-100	08/06/77	STREAM	DRY 1000	0500	9	0.65	2.61	3.71	1.19
14231	-35,6521-114,1139-1-72-100	08/06/77	STREAM	DRY 1000	0500	9	0.82	2.08	5.28	0.99
14232	-35,6440-114,1142-1-72-100	08/06/77	STREAM	DRY 1000	0500	9	0.53	3.14	3.22	1.22
14233	-35,6167-114,1052-1-72-100	08/06/77	STREAM	DRY 1000	0500	9	0.69	2.20	6.31	0.67
14234	-35,5960-114,1048-1-72-100	08/06/77	STREAM	DRY 1000	0500	9	1.16	2.33	9.89	1.89
14235	-35,6605-114,1257-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	2.19	1.96	18.87	1.65
14236	-35,6625-114,0969-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	0.40	1.30	19.76	2.44
14237	-35,6481-114,0599-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	6.82	1.22	22.52	2.02
14238	-35,6760-114,0600-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	9.51	1.09		
14239	-35,6918-114,0771-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	5.83	1.21	18.19	1.62
14239	-35,6918-114,0771-1-72-101	08/07/77	STREAM	DRY 1000	0500	9	5.80	1.23	21.44	1.58
14240	-35,6770-114,0257-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	11.70	1.12	15.74	1.49
14241	-35,7212-114,0639-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	1.09	2.07	6.36	1.39
14242	-35,7423-114,0766-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	1.12	1.99	10.54	1.22
14243	-35,7206-114,0535-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	1.16	1.82	5.88	0.77
14244	-35,7243-114,0438-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	1.42	1.81	13.76	1.24
14245	-35,7456-114,0287-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	1.13	2.29	7.76	1.88
14246	-35,7409-114,0233-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	1.14	2.51	12.93	2.08
14247	-35,7147-114,0221-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	2.47	1.45	13.31	1.14
14248	-35,5967-114,0506-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	4.26	1.31	13.95	1.39
14249	-35,5956-114,0467-1-72-100	08/07/77	STREAM	DRY 1000	0500	9	3.33	1.36	12.37	1.37
14249	-35,5956-114,0467-1-72-101	08/07/77	STREAM	DRY 1000	0500	9	3.33	1.33	12.79	1.05

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

PAGE B-28

SITE NUMBER	LAT. ST	LONG.	DATE TY RPL MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE SIZE		POS. CONT	Q. C. X-REF	URANIUM(DNC) PPM	THORIUM(MA) PPM	ERR
					UPPER	LOWER					
14250	4-35.5803	-114.0536	-172-100	08/07/77	STREAM	DRY	1000 0500	9	3.92	1.31	15.82 1.34
14251	4-35.5166	-114.0283	-172-100	08/08/77	STREAM	DRY	1000 0500	9	1.57	1.61	8.55 0.93
14252	4-35.5146	-114.1287	-172-100	08/08/77	STREAM	DRY	1000 0500	5	2.62	1.45	18.99 1.59
14253	4-35.5269	-114.1173	-172-100	08/08/77	STREAM	DRY	1000 0500	5	1.37	1.97	8.73 1.77
14254	4-35.5348	-114.1082	-172-100	08/08/77	STREAM	DRY	1000 0500	5	1.19	1.96	14.15 1.16
14255	4-35.5393	-114.1080	-172-100	08/08/77	STREAM	DRY	1000 0500	5	1.15	2.17	13.91 1.58
14256	4-35.5639	-114.1201	-172-100	08/08/77	STREAM	DRY	1000 0500	5	1.07	2.09	8.57 1.23
14257	4-35.5730	-114.1463	-172-100	08/08/77	STREAM	DRY	1000 0500	5	1.27	1.94	9.78 1.52
14258	4-35.5960	-114.1424	-172-100	08/08/77	STREAM	DRY	1000 0500	5	1.29	1.77	11.11 1.00
14259	4-35.5778	-114.0957	-172-100	08/08/77	STREAM	DRY	1000 0500	9	1.09	1.85	6.52 0.87
14259	4-35.5778	-114.0957	-172-101	08/08/77	STREAM	DRY	1000 0500	9	1.06	2.04	7.61 1.33
14260	4-35.5669	-114.0960	-172-100	08/08/77	STREAM	DRY	1000 0500	9	1.26	1.74	10.12 0.97
14261	4-35.5615	-114.0962	-172-100	08/08/77	STREAM	DRY	1000 0500	9	1.04	1.85	5.49 0.84
14262	4-35.5425	-114.0935	-172-100	08/08/77	STREAM	DRY	1000 0500	9	1.11	1.92	8.45 1.02
14263	4-35.5287	-114.0819	-172-100	08/08/77	STREAM	DRY	1000 0500	9	1.46	1.65	4.49 0.81
14264	4-35.5223	-114.0766	-172-100	08/08/77	STREAM	DRY	1000 0500	9	1.65	1.49	8.05 0.96
14265	4-35.5049	-114.0640	-172-100	08/08/77	STREAM	DRY	1000 0500	9	1.44	1.62	8.93 0.81
14266	4-35.5011	-114.0587	-172-100	08/08/77	STREAM	DRY	1000 0500	9	1.41	1.78	5.66 1.27
14267	4-35.6590	-114.2639	-172-100	08/09/77	STREAM	DRY	1000 0500	9	2.13	1.57	18.35 1.39
14268	4-35.6367	-114.2660	-172-100	08/09/77	STREAM	DRY	1000 0500	9	1.97	1.71	15.26 1.79
14269	4-35.6082	-114.2424	-172-100	08/09/77	STREAM	DRY	1000 0500	9	0.81	2.50	6.42 1.36
14269	4-35.6082	-114.2424	-172-101	08/09/77	STREAM	DRY	1000 0500	9	0.75	4.39	9.41 2.97
14270	4-35.6184	-114.2155	-172-100	08/09/77	STREAM	DRY	1000 0500	9	0.98	2.43	6.94 1.73
14271	4-35.5391	-114.2514	-172-100	08/09/77	STREAM	DRY	1000 0500	9	1.02	1.13	1.73 0.30
14272	4-35.5480	-114.2499	-172-100	08/09/77	STREAM	DRY	1000 0500	5	1.32	2.05	17.29 1.61
14273	4-35.5577	-114.2375	-172-100	08/09/77	STREAM	DRY	1000 0500	5	1.14	1.64	1.64 0.30
14274	4-35.5695	-114.2448	-172-100	08/09/77	STREAM	DRY	1000 0500	9	0.99	1.98	5.60 0.95
14275	4-35.5448	-114.2431	-172-100	08/09/77	STREAM	DRY	1000 0500	9	0.78	3.08	1.71 0.30
14276	4-35.5928	-114.2427	-172-100	08/09/77	STREAM	DRY	1000 0500	5	1.42	1.90	12.02 1.53
14277	4-35.3870	-114.0920	-172-100	08/10/77	STREAM	DRY	1000 0500	5	1.90	1.76	7.53 1.98
14278	4-35.3959	-114.0669	-172-100	08/10/77	STREAM	DRY	1000 0500	5	1.04	2.17	6.29 1.49
14279	4-35.3939	-114.0604	-172-100	08/10/77	STREAM	DRY	1000 0500	5	1.46	1.89	9.50 1.63
14279	4-35.3939	-114.0604	-172-101	08/10/77	STREAM	DRY	1000 0500	5	1.12	2.13	12.16 1.44
14280	4-35.4198	-114.1244	-172-100	08/10/77	STREAM	DRY	1000 0500	5	1.14	1.79	6.40 0.86
14281	4-35.4105	-114.1104	-172-100	08/10/77	STREAM	DRY	1000 0500	5	1.19	1.80	5.29 1.05
14282	4-35.4181	-114.0914	-172-100	08/10/77	STREAM	DRY	1000 0500	5	1.42	1.95	7.84 1.72
14283	4-35.4206	-114.0925	-172-100	08/10/77	STREAM	DRY	1000 0500	5	1.10	1.81	5.65 0.98
14284	4-35.4298	-114.0735	-172-100	08/10/77	STREAM	DRY	1000 0500	5	2.55	1.40	12.44 1.04
14285	4-35.4773	-114.1180	-172-100	08/10/77	STREAM	DRY	1000 0500	5	1.63	1.58	7.29 1.01
14286	4-35.4812	-114.0913	-172-100	08/10/77	STREAM	DRY	1000 0500	1	5.06	1.22	19.63 1.53
14287	4-35.4689	-114.0682	-172-100	08/10/77	STREAM	DRY	1000 0500	5	2.54	1.61	17.37 2.22
14288	4-35.4682	-114.0389	-172-100	08/10/77	STREAM	DRY	1000 0500	5	1.25	1.90	10.56 1.27
14289	4-35.3774	-114.0114	-172-100	08/11/77	STREAM	DRY	1000 0500	9	1.30	1.85	8.87 1.31
14289	4-35.3774	-114.0114	-172-101	08/11/77	STREAM	DRY	1000 0500	9	1.36	2.12	16.06 1.95
14290	4-35.4062	-114.0115	-172-100	08/11/77	STREAM	DRY	1000 0500	9	1.10	2.04	7.07 1.39
14291	4-35.4254	-114.0218	-172-100	08/11/77	STREAM	DRY	1000 0500	9	2.19	1.59	26.77 2.04
14292	4-35.4540	-114.0119	-172-100	08/11/77	STREAM	DRY	1000 0500	9	1.02	1.98	6.90 0.94
14293	4-35.4601	-114.0403	-172-100	08/11/77	STREAM	DRY	1000 0500	9	1.54	1.85	11.62 1.53
14294	4-35.4518	-114.0318	-172-100	08/11/77	STREAM	DRY	1000 0500	9	1.24	2.11	10.90 1.58

SITE NUMBER	ST	DOE SAMPLE NUMBER			DATE		SAMPLE		PARTICLE SIZE		POS. CONT	Q. C. X-REF	URANIUM(ONC)		THORIUM(NAI)	
		LAT.	LONG.	L T Y RPL	MO-DA-YR	SOURCE/COND.	UPPER	LOWER	PPM	(ERR)			PPM	(ERR)		
14295		4-35.4455	-114.0310	-172-100	08/11/77	STREAM	DRY	1000	0500	9			1.52	1.74	10.93	1.30
14296		4-35.4169	-114.0387	-172-100	08/11/77	STREAM	DRY	1000	0500	9			1.23	1.92	9.77	1.28
14297		4-35.3925	-114.0384	-172-100	08/11/77	STREAM	DRY	1000	0500	9			1.54	1.59	6.55	0.97
14701		4-35.0088	-114.1257	-172-100	07/20/77	STREAM	DRY	1000	0500	9			2.43	1.58	22.10	1.86
14702		4-35.0088	-114.1257	-172-110		STREAM	DRY	1000	0500	1			1.77	1.49	9.18	0.91
14703		4-35.0356	-114.0776	-172-100	07/20/77	STREAM	DRY	1000	0500	1			1.51	1.68	8.18	1.42
14704		4-35.0377	-114.0766	-172-100	07/20/77	STREAM	DRY	1000	0500	1			1.97	1.59	7.68	1.41
14705		4-35.0099	-114.0588	-172-100	07/20/77	STREAM	DRY	1000	0500	5			2.02	1.48	11.64	0.92
14706		4-35.0265	-114.0494	-172-100		STREAM	DRY	1000	0500	5			1.93	1.47	3.93	1.00
14707		4-35.0343	-114.1369	-172-100	07/20/77	STREAM	DRY	1000	1300	5			1.54	1.70	7.72	1.22
14708		4-35.0651	-114.0364	-172-100	07/20/77	STREAM	DRY	1000	0500	5			1.12	1.64	5.37	1.39
14709		4-35.0609	-114.0496	-172-100	07/20/77	STREAM	DRY	1000	0500	5			2.62	1.61	12.52	2.35
14709		4-35.0809	-114.0486	-172-101		STREAM	DRY	1000	0500	5			2.75	1.55	13.45	2.40
14710		4-35.0827	-114.0507	-172-100	07/20/77	STREAM	DRY	1000	0500	5			1.71	1.65	14.62	1.13
14711		4-35.1096	-114.1157	-172-100	07/21/77	STREAM	DRY	1000	0500	9			2.17	2.42	61.82	3.84
14712		4-35.1066	-114.1047	-172-100	02/21/77	STREAM	DRY	1000	0500	9			2.38	1.89	44.26	2.80
14713		4-35.0725	-114.1125	-172-100	09/21/77	STREAM	DRY	1000	0500	9			1.51	1.82	12.04	1.44
14713		4-35.0725	-114.1125	-172-110		STREAM	DRY	1000	0500	9			1.63	1.36		
14714		4-35.0786	-114.1035	-172-100	09/21/77	STREAM	DRY	1000	0500	9			2.01	1.75	16.76	1.99
14715		4-35.0870	-114.1909	-172-100	07/21/77	STREAM	DRY	1000	0500	5			1.80	1.95	22.84	2.26
14716		4-35.0724	-114.2232	-172-100	07/21/77	STREAM	DRY	1000	0500	5			1.18	1.86	6.70	1.08
14717		4-35.0753	-114.2330	-172-100	07/21/77	STREAM	DRY	1000	0500	5			2.33	1.61	19.39	1.92
14718		4-35.0974	-114.2147	-172-100	07/21/77	STREAM	DRY	1000	0500	1			1.27	1.68	8.03	0.67
14719		4-35.0294	-114.2773	-172-101		STREAM	DRY	1000	0500	1			1.61	2.83	7.85	0.82
14720		4-35.0404	-114.3252	-172-100	07/22/77	STREAM	DRY	1000	0500	5			0.93	2.91	10.64	2.15
14721		4-35.0322	-114.3199	-172-100	07/22/77	STREAM	DRY	1000	0500	9			1.75	1.59	11.54	1.22
14722		4-35.0569	-114.3150	-172-100	07/22/77	STREAM	DRY	1000	0500	9			1.59	1.88	13.21	1.90
14723		4-35.0660	-114.2748	-172-100	07/22/77	STREAM	DRY	1000	0500	5			0.93	1.92	6.15	1.63
14724		4-35.0469	-114.2526	-172-100	07/22/77	STREAM	DRY	1000	0500	9			1.80	1.79	14.34	1.76
14725		4-35.0712	-114.2913	-172-100	07/22/77	STREAM	DRY	1000	0500	1			2.13	1.67	10.36	1.80
14726		4-35.0962	-114.2806	-172-100	07/22/77	STREAM	DRY	1000	0500	5			2.72	1.45	20.80	1.44
14727		4-35.1212	-114.3104	-172-100	07/22/77	STREAM	DRY	1000	0500	1			2.04	1.56	21.51	2.31
14728		4-35.0841	-114.2645	-172-100	07/22/77	STREAM	DRY	1000	0500	1			2.60	1.58	19.34	1.89
14729		4-35.1062	-114.2418	-172-100		STREAM	DRY	1000	0500	5			2.54	1.53	18.71	1.71
14729		4-35.1062	-114.2418	-172-101		STREAM	DRY	1000	0500	5			2.73	1.50	21.08	1.82
14730		4-35.2251	-114.2618	-172-100	07/24/77	STREAM	DRY	1000	0500	1			1.29	1.94	8.09	1.49
14731		4-35.2145	-114.2909	-172-100	07/24/77	STREAM	DRY	1000	0500	1			3.34	1.38	19.51	1.64
14732		4-35.2141	-114.2733	-172-100	07/24/77	STREAM	DRY	1000	0500	1			1.11	1.72	5.30	0.76
14733		4-35.1961	-114.2706	-172-100	07/24/77	STREAM	DRY	1000	0500	1			3.03	1.24	27.04	1.88
14734		4-35.1950	-114.3058	-172-100	07/24/77	STREAM	DRY	1000	0500	1			3.56	1.39	27.04	1.88
14735		4-35.2013	-114.3045	-172-100	07/24/77	STREAM	DRY	1000	0500	1			2.94	1.50	22.00	2.03
14736		4-35.1741	-114.3383	-172-100	07/24/77	STREAM	DRY	1000	0500	1			2.03	1.57	20.47	1.32
14737		4-35.1709	-114.2737	-172-100	07/24/77	STREAM	DRY	1000	0500	5			2.12	1.78	23.17	2.06
14738		4-35.1713	-114.2506	-172-100	07/24/77	STREAM	DRY	1000	0500	5			1.07	1.19	6.59	1.55
14739		4-35.1568	-114.2500	-172-100	07/24/77	STREAM	DRY	1000	0500	5			2.21	1.90	27.88	2.75
14739		4-35.1568	-114.2500	-172-101		STREAM	DRY	1000	0500	5			2.08	2.15	15.46	3.41
14740		4-35.1472	-114.2624	-172-100	07/24/77	STREAM	DRY	1000	0500	5			2.21	1.67	22.35	1.95
14741		4-35.1463	-114.2624	-172-100	07/24/77	STREAM	DRY	1000	0500	1			2.43	1.50	21.65	1.36
14742		4-35.1336	-114.2607	-172-100	07/24/77	STREAM	DRY	1000	0500	1			3.22	1.43	22.54	1.72

KINGHAM QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1 SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	DOE SAMPLE NUMBER				DATE	SAMPLE		PARTICLE SIZE		POS.	Q. C.	UPANIUM(DVC)	THORIUM(PMNA)					
		LAT.	LONG.	L	T	Y	R	PL	MO-DA-YR	SOURCE/COND.	UPPER	LOWER	CONT	X-REF	PPM	PPM	ERR		
14743	4-35	1270-114.2466	-172-100						07/24/77	STREAM	DRY	1000	0500	5		2.71	1.56	21.40	2.11
14744	4-35	1277-114.3157	-172-100						07/24/77	STREAM	DRY	1000	0500	5		3.14	1.40	23.57	1.59
14745	4-35	0649-114.2487	-172-100						07/25/77	STREAM	DRY	1000	0500	5		2.31	1.53	19.05	1.57
14746	4-35	0110-114.1815	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.59	1.55	9.05	1.12
14747	4-35	0048-114.1828	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.40	1.72	11.47	1.14
14748	4-35	0095-114.1969	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.34	1.89	10.21	1.53
14749	4-35	0424-114.2111	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.45	1.94	15.24	1.73
14749	4-35	0424-114.2111	-172-101							STREAM	DRY	1000	0500			1.72	1.80	16.91	1.82
14750	4-35	0289-114.2116	-172-100						07/25/77	STREAM	DRY	1000	0500	5		2.23	1.88	35.19	2.64
14751	4-35	0621-114.1688	-172-100						07/25/77	STREAM	DRY	1000	0500	5		2.31	1.72	32.68	2.16
14752	4-35	0633-114.1797	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.54	2.11	26.32	1.96
14753	4-35	0299-114.2192	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.99	1.62	14.61	1.63
14754	4-35	2406-114.3274	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.10	3.10	10.69	2.67
14755	4-35	1991-114.2475	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.25	1.66	7.30	1.24
14756	4-35	1997-114.2332	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.26	1.67	5.47	0.82
14757	4-35	2048-114.1792	-172-100						07/25/77	STREAM	DRY	1000	0500	5		0.95	2.17	10.98	1.20
14758	4-35	1859-114.1810	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.02	1.93	6.25	0.93
14759	4-35	1921-114.2148	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.25	1.66	9.98	0.80
14759	4-35	1921-114.2148	-172-101							STREAM	DRY	1000	0500			1.27	1.80	5.59	1.26
14760	4-35	1649-114.2080	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.13	1.66	6.70	0.70
14761	4-35	1564-114.1919	-172-100						07/25/77	STREAM	DRY	1000	0500	5		1.31	1.97	11.60	1.61
14762	4-35	1728-114.1627	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.76	1.53	5.44	1.13
14763	4-35	1656-114.1597	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.04	2.07	9.22	1.37
14764	4-35	1460-114.2098	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.48	1.91	10.55	1.73
14765	4-35	1459-114.2076	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.11	1.98	11.69	1.23
14766	4-35	1155-114.2163	-172-100						07/26/77	STREAM	DRY	1000	0500	5		2.55	1.31	8.50	0.71
14767	4-35	1262-114.1742	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.53	1.90	13.03	1.82
14768	4-35	1358-114.1242	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.54	1.69	8.93	1.38
14768	4-35	1302-114.1116	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.73	1.72	16.23	1.56
14769	4-35	1302-114.1116	-172-101							STREAM	DRY	1000	0500			1.76	1.79	10.51	1.62
14770	4-35	1584-114.0875	-172-100						07/26/77	STREAM	DRY	1000	0500	5		2.34	1.40	13.90	0.92
14771	4-35	1707-114.0728	-172-100						07/26/77	STREAM	DRY	1000	0500	5		2.76	1.58	20.00	2.20
14772	4-35	1649-114.0555	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.50	1.67	6.98	1.17
14773	4-35	1622-114.0596	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.57	1.73	9.38	1.32
14774	4-35	1534-114.0636	-172-100						07/26/77	STREAM	DRY	1000	0500	1		1.90	1.56	13.98	1.23
14775	4-35	1814-114.0329	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.49	1.65	7.31	1.00
14777	4-35	2544-114.3244	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.31	1.80	5.97	1.26
14778	4-35	2731-114.2878	-172-100						07/26/77	STREAM	DRY	1000	0500	1		2.54	1.49	18.51	1.56
14779	4-35	3011-114.2935	-172-100						07/26/77	STREAM	DRY	1000	0500	1		2.32	1.65	16.05	2.17
14779	4-35	3011-114.2935	-172-101							STREAM	DRY	1000	0500			2.37	1.62	14.01	1.94
14780	4-35	3065-114.3340	-172-100						07/26/77	STREAM	DRY	1000	0500	1		2.33	1.52	19.32	1.34
14781	4-35	3057-114.3373	-172-100						07/26/77	STREAM	DRY	1000	0500	1		2.57	1.76	12.26	1.53
14782	4-35	2882-114.3599	-172-100						07/26/77	STREAM	DRY	1000	0500	5		1.06	2.10	6.80	1.47
14783	4-35	2515-114.2819	-172-100						07/26/77	STREAM	DRY	1000	0500	1		2.12	1.65	18.94	1.71
14784	4-35	2362-114.0243	-172-100						07/27/77	STREAM	DRY	1000	0500	9		2.24	1.51	16.99	1.48
14785	4-35	2066-114.0649	-172-100						07/27/77	STREAM	DRY	1000	0500	9		2.26	1.41	14.46	1.03
14786	4-35	1987-114.0762	-172-100						07/27/77	STREAM	DRY	1000	0500	6		1.98	1.82	12.86	1.32
14787	4-35	3392-114.2186	-172-100						07/27/77	STREAM	DRY	1000	0500	5		1.38	1.61	7.45	0.93
14788	4-35	3304-114.2342	-172-100						07/27/77	STREAM	DRY	1000	0500	5		1.12	2.08	5.66	1.53

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE 9.1 SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	DOE SI	SAMPLE LAT.	NUMBER LONG.	DATE LTY RPL	DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE SIZE UPPER LOWER	POS. CONT	Q. C. X-REF	URANIUM PPM	THORIUM PPM	THORIUM PPM	THORIUM PPM
14789	4-35	3546-114	2675-1-72	100	07/27/77	STREAM	DRY	1000 0500	5	1.41	1.83	19.33	1.37
14789	4-35	3546-114	2675-1-72	101	07/27/77	STREAM	DRY	1000 0500	5	2.03	1.35	16.53	2.89
14790	4-35	3212-114	2631-1-72	100	07/27/77	STREAM	DRY	1000 0500	5	1.29	1.43		
14791	4-35	3150-114	2666-1-72	100	07/27/77	STREAM	DRY	1000 0500	5	1.34	1.59	3.58	1.15
14792	4-35	3013-114	2605-1-72	100	07/27/77	STREAM	DRY	1000 0500	5	1.21	1.73	3.78	1.06
14793	4-35	3178-114	3149-1-70	100	07/27/77	STREAM	WET	1000 0500	5	2.34	1.49	20.43	1.29
14794	4-35	3225-114	3235-1-72	100	07/27/77	STREAM	DRY	1000 0500	5	2.41	1.52	21.15	1.51
14795	4-35	2559-114	2609-1-72	100	07/27/77	STREAM	DRY	1000 0500	5	1.28	1.74	7.78	1.08
14796	4-35	2582-114	2664-1-72	100	07/27/77	STREAM	DRY	1000 0500	5	1.01	1.76	9.62	0.69
14797	4-35	2723-114	2538-1-72	100	07/27/55	STREAM	DRY	1000 0500	5	1.21	2.02	8.27	1.56
14798	4-35	2216-114	2050-1-72	100	07/28/77	STREAM	DRY	1000 0500	5	1.53	1.50	20.51	1.58
14799	4-35	2234-114	2434-1-72	100	07/28/77	STREAM	DRY	1000 0500	5	1.30	1.79	7.28	0.99
14799	4-35	2234-114	2434-1-72	101	07/28/77	STREAM	DRY	1000 0500	5	1.55	1.44		
14800	4-35	2347-114	2243-1-72	100	07/28/77	STREAM	DRY	1000 0500	5	2.33	1.71	30.24	1.58
14801	4-35	2344-114	2133-1-72	100	07/09/77	STREAM	DRY	1000 0500	1	1.76	1.57	10.35	1.03
14802	4-35	3550-114	1663-1-72	100	07/28/77	STREAM	DRY	1000 0500	2	3.47	1.32	13.13	1.15
14803	4-35	3377-114	1570-1-72	100	07/28/77	STREAM	DRY	1000 0500	2	2.77	1.43	15.47	1.62
14805	4-35	2983-114	1683-1-72	100	07/28/77	STREAM	DRY	1000 0500	5	1.79	1.51	5.84	1.13
14806	4-35	2722-114	1736-1-72	100	07/28/77	STREAM	DRY	1000 0500	5	1.68	1.56	7.31	1.28
14807	4-35	2815-114	2216-1-72	100	07/28/77	STREAM	DRY	1000 0500	5	1.33	1.36		
14808	4-35	2924-114	2278-1-72	100	07/28/77	STREAM	DRY	1000 0500	5	1.09	1.81	4.97	0.97
14809	4-35	2526-114	1424-1-72	101	07/28/77	STREAM	DRY	1000 0500	1	1.30	2.08	12.30	1.80
14810	4-35	2523-114	1666-1-72	100	07/28/77	STREAM	DRY	1000 0500	1	1.22	2.20	17.64	1.74
14811	4-35	2580-114	0356-1-72	100	07/28/77	STREAM	DRY	1000 0500	1	1.00	1.85	6.65	0.84
14812	4-35	2530-114	0061-1-72	100	07/29/77	STREAM	DRY	1000 0500	6	1.80	1.63	11.16	1.53
14818	4-35	2921-114	0597-1-72	100	08/13/77	STREAM	DRY	1000 0500	9	1.12	2.16	13.19	1.55
14819	4-35	3086-114	0712-1-72	100	08/13/77	STREAM	DRY	1000 0500	9	1.17	1.51	7.72	1.32
14819	4-35	3086-114	0712-1-72	101	08/13/77	STREAM	DRY	1000 0500	9	1.80	8.23		
14920	4-35	3198-114	0510-1-72	100	08/13/77	STREAM	DRY	1000 0500	9	3.37	1.26	7.84	1.18
14921	4-35	3363-114	0614-1-72	100	08/13/77	STREAM	DRY	1000 0500	5	1.45	1.82	4.87	1.63
14922	4-35	3532-114	0530-1-72	100	08/13/77	STREAM	DRY	1000 0500	9	1.51	1.39		
14923	4-35	3697-114	0460-1-72	100	08/13/77	STREAM	DRY	1000 0500	9	1.34	2.09	14.88	1.94
14924	4-35	3710-114	0073-1-72	100	08/13/77	STREAM	DRY	1000 0500	9	3.37	1.99	13.92	1.77
14925	4-35	3370-114	0184-1-72	100	08/13/77	STREAM	DRY	1000 0500	5	1.73	1.73	10.08	1.75
14926	4-35	3395-114	0084-1-72	100	08/13/77	STREAM	DRY	1000 0500	5	1.94	1.58	13.09	1.52
14927	4-35	3242-114	0101-1-72	100	08/13/77	STREAM	DRY	1000 0500	5	1.54	1.65	6.37	1.27
14928	4-35	3042-114	0394-1-72	100	08/13/77	STREAM	DRY	1000 0500	5	1.00	1.82	7.84	0.74
14929	4-35	2955-114	0167-1-72	100	08/13/77	STREAM	DRY	1000 0500	5	1.16	2.27	6.46	1.87
14929	4-35	2955-114	0167-1-72	101	08/13/77	STREAM	DRY	1000 0500	5	1.10	2.64	6.90	2.29
14930	4-35	2584-114	0092-1-72	100	08/13/77	STREAM	DRY	1000 0500	6	1.34	1.81	8.24	1.29
14931	4-35	2682-114	0099-1-72	100	08/13/77	STREAM	DRY	1000 0500	6	1.90	2.25	5.81	1.50
14938	4-35	3501-114	3950-1-72	100	09/16/77	STREAM	DRY	1000 0500	9	2.32	3.15	11.58	6.56
14939	4-35	3145-114	4118-1-72	100	08/16/77	STREAM	DRY	1000 0500	5	1.62	1.71	10.82	1.34
14939	4-35	3145-114	4118-1-72	101	08/16/77	STREAM	DRY	1000 0500	5	1.63	1.68	10.17	1.41
14940	4-35	2764-114	4009-1-72	100	08/16/77	STREAM	DRY	1000 0500	5	2.31	1.75	15.64	2.58
14941	4-35	3679-114	4200-1-72	100	08/16/77	STREAM	DRY	1000 0500	5	1.77	1.56	11.83	0.94
15201	4-35	3915-114	5951-1-70	100	11/07/77	STREAM	WET	1000 0500	5	1.92	1.52	8.61	1.12
15202	4-35	3989-114	2569-1-70	100	11/08/77	STREAM	WET	1000 0500	5	2.69	1.94	15.06	3.01
15203	4-35	7623-114	2780-1-72	100	11/08/77	STREAM	DRY	1000 0500	1	2.07	1.59	12.34	1.43

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	DOE SAMPLE NUMBER-----			DATE MO-DA-YR	SOURCE/COND.	PARTICLE SIZE		POS. CONT.	Q. C. X-REF	URANIUM(DNC) PPM		THORIUM(NAA) PPM	
		LAT.	LONG.	L T Y RPL			UPPER	LOWER			ERR	ERR		
15204		-35.8543	-114.0512	-172-100	11/09/77	STREAM	DRY	1000 0500	1		4.22	1.31	20.33	2.08
15206		-35.7679	-114.0212	-172-100	11/15/77	STREAM	DRY	1000 0500	1		1.09	2.42	6.12	1.84
15207		-35.7788	-114.0230	-172-100	11/15/77	STREAM	DRY	1000 0500	1		1.91	1.39		
15208		-35.7692	-114.0072	-172-100	11/15/77	STREAM	DRY	1000 0500	1		6.90	1.16	12.85	1.18
15209		-35.8015	-114.0310	-172-100	11/16/77	STREAM	DRY	1000 0500	1		3.83	1.46	5.32	2.36
15210		-35.8217	-114.0081	-170-100	11/16/77	STREAM	WET	1000 0500	5		1.38	1.66	2.89	0.91
15211		-35.5911	-114.2561	-172-100	11/16/77	STREAM	DRY	1000 0500	5		0.94	2.40	8.68	1.20
15212		-35.6415	-114.3011	-172-100	11/16/77	STREAM	DRY	1000 0500	5		5.50	1.41	24.00	2.29
15213		-35.6159	-114.3006	-172-100	11/16/77	STREAM	DRY	1000 0500	5		5.17	1.35	30.74	2.33
15214		-35.6325	-114.3199	-170-100	11/17/77	STREAM	WET	1000 0500	5		3.67	1.45	12.31	1.30
15215		-35.6265	-114.3323	-170-100	11/17/77	STREAM	WET	1000 0500	5		4.37	1.31	19.20	1.47
15216		-35.6867	-114.2850	-172-100	11/17/77	STREAM	DRY	1000 0500	1		1.99	1.60		
15217		-35.7476	-114.2685	-172-100	11/17/77	STREAM	DRY	1000 0500	1		1.74	1.61	10.32	1.07
15218		-35.7434	-114.2786	-170-100	11/23/77	STREAM	WET	1000 0500	1		2.79	1.66	13.56	2.44
15219		-35.7514	-114.2772	-172-100	11/23/77	STREAM	DRY	1000 0500	1		2.03	1.86	22.14	1.86
15220		-35.6001	-114.2018	-170-100	11/23/77	STREAM	WET	1000 0500	1		2.89	1.55	8.97	1.43
15221		-35.5565	-114.1515	-172-100	11/24/77	STREAM	DRY	1000 0500	5		1.91	1.63	14.17	1.09
15222		-35.5203	-114.1451	-170-100	11/25/77	STREAM	WET	1000 0500	5		2.12	1.56	9.80	0.98
15223		-35.6028	-114.2028	-170-100	12/19/77	STREAM	WET	1000 0500	1		2.61	1.51	16.52	1.70
15224		-35.5999	-114.2493	-172-100	12/07/77	STREAM	DRY	1000 0500	9		0.59	2.30	4.52	0.69
15225		-35.5598	-114.2131	-170-100	12/07/77	STREAM	WET	1000 0500	1		3.13	1.45	20.53	1.74
15226		-35.5557	-114.2331	-170-100	12/07/77	STREAM	WET	1000 0500	1		10.93	1.15	11.74	1.55
15228		-35.3500	-114.1050	-170-100	12/08/77	STREAM	WET	1000 0500	1		2.25	2.11	6.02	1.56
15230		-35.3263	-114.1419	-170-100	12/08/77	STREAM	WET	1000 0500	1		47.53	1.05	34.52	5.84
15232		-35.2945	-114.1265	-172-100	12/09/77	STREAM	DRY	1000 0500	9		3.48	1.52	26.27	2.64
15233		-35.3578	-114.0947	-172-100	12/09/77	STREAM	DRY	1000 0500	9		2.02	1.68	14.97	1.61
15234		-35.3995	-114.0660	-170-100	12/09/77	STREAM	WET	1000 0500	1		4.40	1.38	7.44	1.83
15236		-35.3952	-114.1142	-170-100	10/19/77	STREAM	WET	1000 0500	1		3.02	1.37	10.89	1.31
15237		-35.4053	-114.1194	-170-100	12/09/77	STREAM	WET	1000 0500	1		1.23	1.99	5.82	1.32
15238		-35.4060	-114.1139	-170-100	12/10/77	STREAM	WET	1000 0500	1		4.96	1.33	15.09	1.78
15239		-35.4198	-114.1233	-172-100	12/10/77	STREAM	DRY	1000 0500	9		3.78	1.29	10.63	1.04
15240		-35.4204	-114.1133	-170-100	12/10/77	STREAM	WET	1000 0500	1		3.94	1.45	27.06	2.17
15241		-35.4644	-114.0656	-170-100	12/10/77	STREAM	WET	1000 0500	1		3.95	1.41	5.70	1.41
15242		-35.5327	-114.1336	-170-100	12/10/77	STREAM	WET	1000 0500	1		18.70	1.11	7.77	1.79
15243		-35.5338	-114.2207	-170-100	12/11/77	STREAM	WET	1000 0500	1		1.45	2.06	15.00	1.73
15244		-35.5318	-114.2494	-170-100	12/11/77	STREAM	WET	1000 0500	1		1.84	1.49	6.56	1.00
15248		-35.3501	-114.3827	-170-100	12/10/77	STREAM	WET	1000 0500	1		5.12	1.48	10.19	1.13
15250		-35.2515	-114.3732	-170-100	12/10/77	STREAM	WET	1000 0500	1		2.56	1.59	13.33	1.55
15252		-35.5907	-114.4692	-172-100	12/07/77	STREAM	DRY	1000 0500	1		2.93	1.56	14.73	1.66
15253		-35.5805	-114.4962	-172-100	12/07/77	STREAM	DRY	1000 0500	1		2.17	1.48	14.02	1.10
15255		-35.0456	-114.3535	-170-100	12/08/77	STREAM	WET	1000 0500	1		3.16	1.49	21.53	1.64
15256		-35.0391	-114.3482	-172-100	12/08/77	STREAM	DRY	1000 0500	1		2.35	1.45	10.36	1.17
15258		-35.0357	-114.3165	-170-100	12/08/77	STREAM	WET	1000 0500	1		4.88	1.28	19.02	1.44
15260		-35.0151	-114.3205	-170-100	12/08/77	STREAM	DRY	1000 0500	1		1.59	1.66	10.49	1.20
15261		-35.0190	-114.2930	-170-100	12/08/77	STREAM	WET	1000 0500	1		1.61	1.62	10.70	1.11
15262		-35.0135	-114.2878	-170-100	12/08/77	STREAM	WET	1000 0500	1		4.36	1.29	18.51	1.64
15264		-35.0725	-114.3077	-170-100	12/08/77	STREAM	WET	1000 0500	1		4.23	2.53	7.98	2.52
15266		-35.0970	-114.3134	-170-100	12/09/77	STREAM	DRY	1000 0500	1		2.36	1.65	14.84	1.87
15267		-35.1417	-114.3405	-172-100	12/09/77	STREAM	DRY	1000 0500	1		9.80	1.27	13.13	1.32

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE 8-1. SEDIMENT ANALYSIS: DRY AND STREAM SITES

PAGE 8-33

SITE	DOE	SAMPLE NUMBER	DATE	SAMPLE	PARTICLE SIZE	POS.	Q. C.	URANIUM(DNC)	THORIUM(NAA)					
NUMBER	ST	LAT.	LONG.	L TY RPL	MO-DA-YR	SOURCE/COND.	UPPER	LOWER	CONT					
							X-REF	PPH	ERR					
15270	4-35	1659-114	3792-1	-72-100	12/08/77	STREAM	DRY	1000	0500	1	3.41	1.50	21.91	2.47
15275	4-35	0045-114	0196-1	-72-100	12/08/77	STREAM	DRY	1000	0500	1	1.55	1.59	5.89	0.82
15276	4-35	1086-114	0750-1	-72-100	12/08/77	STREAM	DRY	1000	0500	1	4.72	1.81	88.60	5.66
15278	4-35	1405-114	0591-1	-72-100	12/08/77	STREAM	WET	1000	0500	1	2.39	1.48	19.27	1.91
15279	4-35	1487-114	0593-1	-70-100	12/08/77	STREAM	WET	1000	0500	1	5.95	1.35	23.65	1.95
15280	4-35	1743-114	0727-1	-70-100	12/08/77	STREAM	WET	1000	0500	1	2.80	1.40	18.53	1.42
15285	4-35	1382-114	1080-1	-70-100	12/09/77	STREAM	WET	1000	0500	1	2.35	1.26		
15287	4-35	2576-114	3553-1	-70-100	12/10/77	STREAM	WET	1000	0500	1	2.38	1.49	19.58	1.48
15288	4-35	2846-114	3530-1	-70-100	12/10/77	STREAM	WET	1000	0500	1	3.95	1.33	7.46	1.01
15291	4-35	2168-114	1151-1	-72-100	12/10/77	STREAM	DRY	1000	0500	1	1.81	1.74	9.11	1.64
15292	4-35	2275-114	1092-1	-70-100	12/10/77	STREAM	WET	1000	0500	1	2.01	1.75	10.27	1.50
15293	4-35	2249-114	1170-1	-72-100	12/10/77	STREAM	DRY	1000	0500	1	1.14	2.00	12.52	1.19
15297	4-35	4204-114	1486-1	-72-100	12/10/77	STREAM	DRY	1000	0500	1	1.33	1.93	5.35	1.23
20601	4-35	3862-114	2581-1	-72-100	07/20/77	STREAM	DRY	1000	0500	1	2.14	1.41	9.04	1.01
20601	4-35	3862-114	2581-1	-72-110		STREAM	DRY	1000	0500		2.35	1.46	16.50	1.39
20602	4-35	3692-114	2620-1	-72-100	07/20/77	STREAM	DRY	1000	0500	1	1.80	1.89	14.86	2.16
20603	4-35	3948-114	2636-1	-72-100	07/20/77	STREAM	DRY	1000	0500	1	2.07	1.65	19.46	1.61
20604	4-35	3259-114	2602-1	-72-100	07/20/77	STREAM	DRY	1000	0500	1	1.78	1.66	17.03	2.07
20605	4-35	3278-114	2623-1	-72-100	07/20/77	STREAM	DRY	1000	0500	1	2.32	1.48	9.35	1.55
20606	4-35	3377-114	2642-1	-72-100	07/20/77	STREAM	DRY	1000	0500	1	1.72	1.62	10.05	1.28
20607	4-35	3019-114	2754-1	-72-100	07/20/77	STREAM	DRY	1000	0500	9	1.75	1.98	15.49	2.27
20608	4-35	3960-114	2911-1	-72-100	07/20/77	STREAM	DRY	1000	0500	1	1.98	1.62	19.92	1.36
20609	4-35	3923-114	3289-1	-72-100	07/20/77	STREAM	DRY	1000	0500	1	1.81	1.56	10.11	1.16
20609	4-35	1487-114	0593-1	-72-101		STREAM	DRY	1000	0500		1.81	1.61	14.28	1.34
20610	4-35	3834-114	3755-1	-72-100	07/20/77	STREAM	DRY	1000	0500	1	1.58	1.57	8.05	0.87
20611	4-35	3786-114	4036-1	-72-100	07/20/77	STREAM	DRY	1000	0500	1	1.62	1.61	9.08	1.03
20612	4-35	3768-114	4502-1	-72-100	07/20/77	STREAM	DRY	1000	0500	1	1.58	1.57	8.18	0.87
20613	4-35	3236-114	3190-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	2.13	1.66	17.10	1.76
20613	4-35	3236-114	3190-1	-72-110		STREAM	DRY	1000	0500		2.08	1.48	11.45	1.06
20614	4-35	3862-114	3244-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	2.27	1.73	33.81	2.14
20615	4-35	3298-114	3155-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	1.57	1.84	20.45	1.62
20616	4-35	3451-114	2729-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	1.77	1.84	27.01	1.76
20617	4-35	3441-114	2707-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	1.45	1.43		
20618	4-35	3894-114	2614-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	1.45	1.74		
20619	4-35	3232-114	2615-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	1.96	1.56	9.89	1.40
20619	4-35	3232-114	2615-1	-72-101		STREAM	DRY	1000	0500		2.23	1.53	7.40	1.70
20620	4-35	3894-114	2691-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	0.77	1.94	2.10	0.64
20621	4-35	3123-114	2973-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	1.59	1.62	11.16	0.97
20622	4-35	7947-114	3189-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	2.55	1.62	29.84	1.75
20623	4-35	7717-114	3395-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	2.20	1.79	26.77	2.44
20624	4-35	3828-114	3753-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	1.57	1.83	15.50	1.60
20625	4-35	3834-114	3757-1	-72-100	07/21/77	STREAM	DRY	1000	0500	1	1.88	1.46	6.29	0.91
20626	4-35	3873-114	4894-1	-72-100	07/22/77	STREAM	DRY	1000	0500	1	1.75	1.72	29.42	1.51
20627	4-35	7745-114	3826-1	-72-100	07/22/77	STREAM	DRY	1000	0500	1	2.44	1.44	15.84	1.29
20628	4-35	7593-114	3875-1	-72-100	07/22/77	STREAM	DRY	1000	0500	1	1.81	1.82	27.73	1.68
20628	4-35	3808-114	3884-1	-72-100	07/22/77	STREAM	DRY	1000	0500	9	2.95	1.46	31.17	1.77
20629	4-35	3808-114	3884-1	-72-101		STREAM	DRY	1000	0500		1.85	1.58	16.14	1.28
20630	4-35	7941-114	4121-1	-72-100	07/22/77	STREAM	DRY	1000	0500	1	2.95	1.46	18.22	1.29
20631	4-35	7878-114	4121-1	-72-101		STREAM	DRY	1000	0500	1	3.21	1.26		

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TABLE B-1 SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	NUMBER L T Y RPL	DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE UPPER	SIZE LOHER	POS. CONT	G. C. X-REF	UPANIUM(DNC) PPH	THOR[UMINAA] PPH	ERR	
20632	4-35	7623-114	3200-1	-72-100	07/22/77	STREAM	DRY	1000	0500	9	2.02	1.53	15.45	1.16
20633	4-35	7653-114	2922-1	-72-100	07/22/77	STREAM	DRY	1000	0500	1	1.60	1.51	10.51	1.09
20634	4-35	8039-114	3684-1	-72-100	07/22/77	STREAM	DRY	1000	0500	1	2.37	1.54	24.76	1.59
20635	4-35	9117-114	3515-1	-72-100	07/23/77	STREAM	DRY	1000	0500	1	1.79	2.09	16.54	2.04
20636	4-35	9210-114	4055-1	-72-100	07/23/77	STREAM	DRY	1000	0500	1	2.10	1.58	20.95	1.39
20637	4-35	9366-114	3740-1	-72-100	07/23/77	STREAM	DRY	1000	0500	1	1.60	1.57	11.28	0.77
20637	4-35	9366-114	3740-1	-72-110	07/23/77	STREAM	DRY	1000	0500	1	1.62	1.50	7.45	0.76
20638	4-35	9755-114	3427-1	-72-100	07/23/77	STREAM	DRY	1000	0500	1	1.21	1.66	6.07	0.77
20639	4-35	9760-114	4059-1	-72-100	07/23/77	STREAM	DRY	1000	0500	1	2.46	1.44	11.58	1.27
20639	4-35	9760-114	4059-1	-72-101	07/23/77	STREAM	DRY	1000	0500	1	3.06	1.45	20.79	2.09
20640	4-35	9719-114	4249-1	-72-100	07/23/77	STREAM	DRY	1000	0500	9	39.76	1.02	4.61	0.72
20641	4-35	9748-114	3915-1	-72-100	07/23/77	STREAM	DRY	1000	0500	1	3.45	1.26	10.34	1.04
20642	4-35	9261-114	4763-1	-72-100	07/23/77	STREAM	DRY	1000	0500	1	1.40	1.49	4.22	0.45
20643	4-35	9206-114	4640-1	-72-100	07/23/77	STREAM	DRY	1000	0500	1	1.22	1.53	4.34	0.47
20644	4-35	9136-114	4789-1	-72-100	07/23/77	STREAM	DRY	1000	0500	1	4.04	1.22	10.43	0.99
20645	4-35	8981-114	4961-1	-72-100	07/24/77	STREAM	DRY	1000	0500	1	1.44	1.59	10.60	0.85
20646	4-35	8937-114	3756-1	-72-100	07/24/77	STREAM	DRY	1000	0500	1	1.50	1.67	12.61	1.07
20647	4-35	7849-114	2827-1	-72-100	07/24/77	STREAM	DRY	1000	0500	2	2.46	1.59	30.04	1.79
20648	4-35	7808-114	2231-1	-72-100	07/24/77	STREAM	DRY	1000	0500	2	4.71	1.25	24.31	1.72
20649	4-35	7736-114	2212-1	-72-100	07/24/77	STREAM	DRY	1000	0500	2	2.74	1.49	24.40	1.63
20649	4-35	7736-114	2212-1	-72-101	07/24/77	STREAM	DRY	1000	0500	2	3.60	1.77	11.21	0.63
20650	4-35	7745-114	1835-1	-72-100	07/24/77	STREAM	DRY	1000	0500	1	4.39	1.45	31.81	3.31
20651	4-35	7863-114	1864-1	-72-100	07/24/77	STREAM	DRY	1000	0500	1	3.91	1.59	54.11	3.48
20652	4-35	7939-114	2029-1	-72-100	07/24/77	STREAM	DRY	1000	0500	2	3.59	1.53	26.01	3.00
20653	4-35	7939-114	1982-1	-72-100	07/24/77	STREAM	DRY	1000	0500	9	1.99	1.52	12.36	1.21
20654	4-35	8278-114	5813-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	0.54	2.38	2.83	0.58
20654	4-35	8278-114	5813-1	-72-110	07/25/77	STREAM	DRY	1000	0500	1	0.66	2.48	4.33	0.97
20655	4-35	8113-114	5463-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	1.60	1.61	12.72	0.98
20656	4-35	7851-114	3497-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	2.02	1.54	13.51	1.09
20657	4-35	7945-114	5634-1	-72-100	07/25/77	STREAM	DRY	1000	0500	5	1.81	2.03	29.85	2.32
20659	4-35	7699-114	5476-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	1.83	1.59	12.72	1.03
20659	4-35	7930-114	5303-1	-72-100	07/25/77	STREAM	DRY	1000	0500	5	2.90	1.48	17.36	1.82
20659	4-35	7930-114	5303-1	-72-101	07/25/77	STREAM	DRY	1000	0500	5	2.97	1.48	19.66	1.99
20660	4-35	7728-114	5165-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	2.55	1.66	15.53	0.96
20661	4-35	7756-114	5169-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	3.16	1.47	21.30	2.14
20662	4-35	7523-114	4096-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	0.89	2.08	9.41	1.19
20663	4-35	7611-114	4381-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	1.07	1.59	14.24	1.13
20664	4-35	7656-114	4041-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	1.03	2.08	14.24	1.13
20665	4-35	7870-114	0847-1	-72-100	07/25/77	STREAM	DRY	1000	0500	2	2.29	1.53	10.57	1.63
20666	4-35	7940-114	0921-1	-72-100	07/25/77	STREAM	DRY	1000	0500	2	1.98	1.45	4.98	0.95
20667	4-35	8110-114	0893-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	1.42	1.75	16.11	1.16
20668	4-35	8146-114	0881-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	1.38	1.70	9.57	0.95
20669	4-35	8200-114	0690-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	1.14	1.95	7.81	0.99
20669	4-35	8200-114	0690-1	-72-101	07/25/77	STREAM	DRY	1000	0500	1	1.25	1.87	5.59	1.37
20670	4-35	8304-114	0720-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	2.04	1.66	11.77	1.89
20671	4-35	8310-114	0598-1	-72-100	07/25/77	STREAM	DRY	1000	0500	1	2.50	1.49	12.58	1.47
20672	4-35	8446-114	0615-1	-72-100	07/25/77	STREAM	DRY	1000	0500	5	3.29	1.34	16.88	1.62
20673	4-35	8129-114	1656-1	-72-100	07/26/77	STREAM	DRY	1000	0500	5	3.47	1.95	39.66	2.78
20673	4-35	8129-114	1656-1	-72-110	07/26/77	STREAM	DRY	1000	0500	5	2.05	1.50	12.63	1.22

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TABLE B-1 SEDIMENT ANALYSIS: DRY AND STREAM SITES

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SITE NUMBER	ST	DOE SAMPLE NUMBER LAT. LONG. L T Y RPL	DATE MO-DA-YR	SAMPLE SOURCE/COND.	PARTICLE UPPER	SIZE LOWER	POS. CONT	O. C. X-REF	URANIUM (PPM)	THORIUM (PPM)	ERR		
20674		4-35.7981-114.1905-1-72-100	07/26/77	STREAM	DRY	1000	0500	9		3.12	1.70	29.66	3.34
20675		4-35.8144-114.2330-1-72-100	07/26/77	STREAM	DRY	1000	0500	2		3.02	1.69	48.35	2.95
20676		4-35.8212-114.2129-1-72-100	07/26/77	STREAM	DRY	1000	0500	9		1.30	1.81	12.08	1.14
20677		4-35.8176-114.2141-1-72-100	07/26/77	STREAM	DRY	1000	0500	9		2.62	1.36	10.12	1.06
20678		4-35.8226-114.1951-1-72-100	07/26/77	STREAM	DRY	1000	0500	1		1.61	1.54	8.48	0.79
20679		4-35.8161-114.1876-1-72-100	07/26/77	STREAM	DRY	1000	0500	2		2.60	1.28		
20680		4-35.8161-114.1876-1-72-101	07/26/77	STREAM	DRY	1000	0500	1		2.52	1.45	12.41	1.54
20681		4-35.7605-114.1619-1-72-100	07/26/77	STREAM	DRY	1000	0500	1		3.48	1.49	39.31	2.40
20682		4-35.7510-114.2164-1-72-100	07/26/77	STREAM	DRY	1000	0500	1		6.49	1.13	25.90	1.61
20683		4-35.7543-114.2440-1-72-100	07/26/77	STREAM	DRY	1000	0500	1		2.09	1.49	14.25	1.01
20684		4-35.9862-114.5043-1-72-100	07/27/77	STREAM	DRY	1000	0500	1		1.70	1.64	12.93	1.29
20685		4-35.9862-114.5043-1-72-110	07/27/77	STREAM	DRY	1000	0500	1		1.63	1.67	10.14	1.27
20686		4-35.9983-114.5660-1-72-100	07/27/77	STREAM	DRY	1000	0500	1		2.20	1.56	11.86	1.61
20687		4-35.9915-114.5873-1-72-100	07/27/77	STREAM	DRY	1000	0500	1		1.91	1.35		
20688		4-35.9685-114.5193-1-72-100	07/27/77	STREAM	DRY	1000	0500	5		0.77	2.29	8.82	0.95
20689		4-35.9358-114.5081-1-72-100	07/27/77	STREAM	DRY	1000	0500	1		1.17	1.70	8.12	0.71
20690		4-35.9267-114.5039-1-72-100	07/27/77	STREAM	DRY	1000	0500	7		1.45	1.80	6.97	1.42
20691		4-35.9053-114.5135-1-72-100	07/27/77	STREAM	DRY	1000	0500	1		1.11	1.80	7.55	0.76
20692		4-35.9053-114.5135-1-72-101	07/27/77	STREAM	DRY	1000	0500	1		1.25	2.07	8.07	1.71
20693		4-35.8954-114.5160-1-72-100	07/27/77	STREAM	DRY	1000	0500	5		1.48	1.79	7.34	1.35
20694		4-35.8987-114.5802-1-72-100	07/27/77	STREAM	DRY	1000	0500	1		1.87	1.54	10.42	1.11
20695		4-35.8865-114.5639-1-72-100	07/27/77	STREAM	DRY	1000	0500	2		2.06	1.44	12.75	1.06
20696		4-35.8705-114.5280-1-72-100	07/27/77	STREAM	DRY	1000	0500	1		2.50	1.39	13.40	1.18
20697		4-35.8589-114.5371-1-72-100	07/27/77	STREAM	DRY	1000	0500	5		1.35	2.01	9.50	1.69
21218		4-35.9914-114.3555-1-72-100	08/05/77	STREAM	DRY	1000	0500	7		1.53	1.64	10.10	1.01
21219		4-35.9984-114.3575-1-72-100	08/05/77	STREAM	DRY	1000	0500	1		1.85	1.50	10.75	1.02
21220		4-35.9984-114.3575-1-72-101	08/05/77	STREAM	DRY	1000	0500	1		1.82	1.41	11.05	1.34
21221		4-35.9524-114.3557-1-72-100	08/06/77	STREAM	DRY	1000	0500	1		1.79	1.65	13.23	1.42
21222		4-35.9042-114.3784-1-72-100	08/06/77	STREAM	DRY	1000	0500	1		1.97	1.31		
21223		4-35.8928-114.3469-1-72-100	08/06/77	STREAM	DRY	1000	0500	1		1.75	1.48	9.96	0.80
21224		4-35.8330-114.3763-1-72-100	08/06/77	STREAM	DRY	1000	0500	1		2.66	1.42	14.68	1.32
21225		4-35.9362-114.0858-1-72-100	08/07/77	STREAM	DRY	1000	0500	3		0.78	1.39	12.79	1.06
21226		4-35.9200-114.0864-1-72-100	08/07/77	STREAM	DRY	1000	0500	5		0.74	1.95	2.41	0.59
21227		4-35.9200-114.0864-1-72-101	08/07/77	STREAM	DRY	1000	0500	1		0.61	1.81		
21230		4-35.9074-114.0880-1-70-100	08/07/77	STREAM	WET	1000	0500	9		0.58	3.44	19.04	1.47
21231		4-35.8903-114.0890-1-72-100	08/07/77	STREAM	DRY	1000	0500	9		0.47	2.32	2.54	0.52
21232		4-35.8905-114.0942-1-72-100	08/07/77	STREAM	DRY	1000	0500	5		0.53	2.49	4.32	0.69
21233		4-35.8777-114.0891-1-72-100	08/07/77	STREAM	DRY	1000	0500	5		0.62	2.99	4.96	1.32
21234		4-35.8574-114.0323-1-72-100	08/07/77	STREAM	DRY	1000	0500	1		3.15	1.47	31.19	1.92
21235		4-35.8921-114.0092-1-72-100	08/07/77	STREAM	DRY	1000	0500	5		1.75	1.70	17.17	1.44
21236		4-35.8884-114.0090-1-72-100	08/07/77	STREAM	DRY	1000	0500	1		2.12	1.49	12.14	1.29
21237		4-35.8879-114.0276-1-72-100	08/07/77	STREAM	DRY	1000	0500	1		2.57	1.62	33.56	2.10
21238		4-35.9553-114.0940-1-72-100	08/08/77	STREAM	DRY	1000	0500	2		3.35	1.32	13.44	1.24
21239		4-35.8796-114.0898-1-72-100	08/08/77	STREAM	DRY	1000	0500	2		3.80	1.31	20.06	1.53
21239		4-35.8796-114.0898-1-72-101	08/08/77	STREAM	DRY	1000	0500	1		3.51	1.68	19.73	3.68
21243		4-35.9980-114.2222-1-72-100	08/09/77	STREAM	DRY	1000	0500	1		2.99	1.53	63.37	3.65
21246		4-35.9954-114.2267-1-72-100	08/09/77	STREAM	DRY	1000	0500	9		4.87	1.25	25.69	1.62
21247		4-35.9908-114.2202-1-72-100	08/09/77	STREAM	DRY	1000	0500	9		3.08	1.34	17.68	1.20
21248		4-35.9972-114.1878-1-72-100	08/09/77	STREAM	DRY	1000	0500	7		2.41	1.52	20.95	1.54

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-1 SEDIMENT ANALYSIS: DRY AND STREAM SITES

PAGE B-36

SITE NUMBER	ST	LAT.	LONG.	L	TY	RPL	MO-DA-YR	DATE	SAMPLE SOURCE/COND.	PARTICLE UPPER	SIZE LOWER	PDS. CONT	Q. C. X-REF	URANIUM(DNC) PPM	ZERR	THORIUM(NAA) PPM	ERR
21249	4-35	9711-114	1868-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				3.65	1.29	16.63	1.20
21249	4-35	9711-114	1868-1-72	101		STREAM	DRY	1000	0500					3.15	1.42	17.27	1.99
21250	4-35	9458-114	1892-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				2.51	1.45	14.19	1.46
21251	4-35	9119-114	2395-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				2.54	2.30	71.84	4.24
21252	4-35	9136-114	2340-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				3.01	1.50	31.07	1.93
21253	4-35	9111-114	2031-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				1.72	1.63	13.12	1.17
21254	4-35	9118-114	1975-1-72	100	08/09/77	STREAM	DRY	1000	0500	2				1.59	1.72	13.91	1.58
21255	4-35	9257-114	1726-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				2.04	1.46	10.91	0.99
21257	4-35	9978-114	1357-1-72	100		STREAM	DRY	1000	0500	1				1.30	1.69	6.68	0.80
21258	4-35	9801-114	1363-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				2.14	1.54	9.77	1.65
21259	4-35	9718-114	1422-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				0.78	1.94	2.88	0.76
21259	4-35	9718-114	1422-1-72	101		STREAM	DRY	1000	0500					0.89	2.16	5.55	1.21
21260	4-35	9621-114	1503-1-72	100	08/09/77	STREAM	DRY	1000	0500	2				0.76	2.62	5.03	1.46
21261	4-35	9506-114	1574-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				1.97	1.51	9.27	1.15
21262	4-35	9468-114	1519-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				0.95	2.06	7.83	1.07
21263	4-35	9415-114	1544-1-72	100	08/09/77	STREAM	DRY	1000	0500	2				1.28	1.60	6.82	0.69
21264	4-35	9300-114	1658-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				1.54	1.60	9.16	0.98
21265	4-35	9138-114	1664-1-72	100	08/09/77	STREAM	DRY	1000	0500	2				0.67	2.09	2.61	0.58
21266	4-35	8978-114	1736-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				1.29	1.61	6.54	0.65
21267	4-35	8735-114	1767-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				1.21	1.79	7.08	1.07
21268	4-35	8662-114	1748-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				1.26	1.95	13.44	1.13
21268	4-35	8644-114	1737-1-72	100	08/09/77	STREAM	DRY	1000	0500	5				1.31	1.63	7.02	0.70
21269	4-35	8644-114	1737-1-72	101		STREAM	DRY	1000	0500					1.71	1.60	15.21	1.23
21270	4-35	8500-114	1742-1-72	100	08/09/77	STREAM	DRY	1000	0500	1				1.44	1.56	6.36	0.74
21277	4-35	9856-114	0430-1-72	100	08/10/77	STREAM	DRY	1000	0500	1				2.77	1.24		
21278	4-35	9540-114	0375-1-72	100	08/10/77	STREAM	DRY	1000	0500	1				1.85	1.45	8.78	0.89
21279	4-35	9349-114	0327-1-72	100	08/10/77	STREAM	DRY	1000	0500	5				2.39	1.42	10.24	1.08
21279	4-35	9349-114	0327-1-72	101		STREAM	DRY	1000	0500					1.25	1.39	10.39	1.08
21280	4-35	9233-114	1508-1-72	100	08/11/77	STREAM	DRY	1000	0500	5				3.63	1.28	15.55	1.37
21281	4-35	9424-114	1568-1-72	100	08/11/77	STREAM	DRY	1000	0500	1				1.62	1.57	7.42	1.10
21282	4-35	9524-114	1598-1-72	100	08/10/77	STREAM	DRY	1000	0500	1				1.46	1.58	10.72	0.89
21283	4-35	9805-114	1678-1-72	100	08/10/77	STREAM	DRY	1000	0500	1				0.72	1.70		
21284	4-35	8823-114	1675-1-72	100	08/10/77	STREAM	DRY	1000	0500	1				0.42	2.48	2.43	0.49

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KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-2, WATER ANALYSIS: RIVERS, STREAMS & LAKES

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SITE	-----DOE	SAMPLE	NUMBER-----	DATE	SAMPLE	TEMP	PH	SPEC	COND	AKTOTL	AKPHEN	PDS.	URANIUM(DNC)	Q. C.			
NUMBER	ST	LAT.	LONG.	L	TY	RPL	MO-DA-YR	SOURCE	C.	METR	UMHO/CM	MG/LITER	MG/LITER	CONT	PPB	SEERR	X-REF
7378		6-35,1120-114.9964	-1-22-200	03/14/77	STREAM		19.0	7.9		485.	220.		1	3.66	2.05		

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE 8-3. WATER ANALYSIS: SPRING AND WELL SITES

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SITE NUMBER	-----DOE ST	SAMPLE LAT.	NUMBER LONG.	----- L T Y RPL	DATE MO-DA-YR	SAMPLE SOURCE	TEMP WELL C. DEPTH	WELL TYPE	WELL CASING	PH METR	SPEC COND UMHO/CM	AKTOTL MG/L LITER
826	32-35.0334	-115.4367	-1-08-200	76/05/03	WELL	20.3				7.3	1346.	200.
826	32-35.0334	-115.4367	-1-08-201		WELL	20.3				7.3	1346.	200.
838	32-35.0316	-115.4356	-1-08-200	76/05/03	WELL	20.2				7.3	1061.	200.
838	32-35.0316	-115.4356	-1-08-201		WELL	20.2				7.3	1061.	200.
841	32-35.7787	-115.3227	-1-08-200	76/05/04	WELL	22.6				7.5	2744.	120.
841	32-35.7787	-115.3227	-1-08-201		WELL	22.6				7.5	2744.	120.
859	32-35.6421	-115.3502	-1-08-200	76/05/05	WELL	22.8				7.6	2842.	80.
859	32-35.6421	-115.3502	-1-08-201		WELL	22.8				7.6	2842.	80.
862	32-35.6107	-115.3969	-1-08-200	76/05/06	WELL	20.1				8.4	4203.	180.
862	32-35.6107	-115.3969	-1-08-201		WELL	20.1				8.4	4203.	180.
7371	4-35.1726	-114.4339	-1-21-200	03/09/77	SPRING	19.5				7.4	798.	240.
7375	32-35.7047	-114.8115	-1-21-200	03/11/77	SPRING	15.0				8.0	1544.	150.
7376	32-35.6818	-114.8916	-1-23-200	03/12/77	WELL	18.5	FARM/LIVESTOCK	IRON	8.4	819.	160.	
7377	32-35.4737	-114.9519	-1-21-200	03/12/77	SPRING	17.0				7.9	219.	140.
7385	6-35.3700	-115.1199	-1-23-200	03/23/77	WELL	19.0	FARM/LIVESTOCK	IRON	7.1	693.	200.	
7387	6-35.2896	-115.2306	-1-23-200	03/23/77	WELL	19.0	FARM/LIVESTOCK	IRON	7.6	1039.	180.	
7388	6-35.2671	-115.2905	-1-21-200	03/23/77	SPRING	12.0				7.6	577.	240.
7389	6-35.3173	-115.2729	-1-21-200	03/23/77	SPRING	15.5				7.7	330.	180.
7390	6-35.1688	-115.6472	-1-21-200	03/24/77	SPRING	20.5				6.8	522.	160.
7391	6-35.3867	-115.7008	-1-23-200	03/24/77	WELL	20.0	FARM/LIVESTOCK	IRON	8.2	675.	200.	
7392	6-35.2896	-115.6090	-1-21-200	03/24/77	SPRING	9.5				7.5	611.	160.
7396	6-35.3153	-115.0625	-1-21-200	03/27/77	SPRING	15.0				8.2	1030.	200.
7397	6-35.3941	-115.8924	-1-21-200	03/07/77	SPRING	14.0				7.9	1193.	200.
7398	6-35.3774	-115.9552	-1-21-200	03/27/77	SPRING	16.0				7.9	1376.	380.
7399	6-35.4288	-115.9568	-1-21-200	03/27/77	SPRING	15.0				7.4	772.	180.
8982	32-35.6205	-115.4398	-1-23-200	03/27/77	WELL	15.0	FARM/LIVESTOCK	IRON	8.3	347.	140.	
8993	32-35.6947	-115.1886	-1-21-200	03/28/77	SPRING	9.5				9.2	993.	100.
8993	32-35.6947	-115.1886	-1-21-201		SPRING							
8994	32-35.6947	-115.1886	-1-21-200	03/28/77	SPRING	12.5				7.5	1109.	200.
9202	6-35.1182	-115.1610	-1-23-200	03/23/77	WELL	24.5	FARM/LIVESTOCK	IRON	7.3	1011.	100.	
9205	6-35.4118	-115.4614	-1-21-200	03/24/77	SPRING	10.5				7.6	887.	340.
9206	6-35.4568	-115.3809	-1-23-200	03/24/77	WELL	25.0				7.7	900.	80.
9207	6-35.4791	-115.1813	-1-21-200	03/24/77	SPRING	12.5				7.4	971.	120.
9208	32-35.6245	-115.0775	-1-21-200	03/24/77	SPRING	9.0				7.5	637.	100.
9213	6-35.6209	-115.9631	-1-21-200	03/25/77	SPRING	26.0				7.4	1467.	120.
9213	6-35.6209	-115.9631	-1-21-201		SPRING							
9214	6-35.6356	-115.6322	-1-21-200	03/27/77	SPRING	18.0				7.0	533.	160.
9214	6-35.6356	-115.6322	-1-21-201		SPRING							
9215	6-35.4959	-115.5267	-1-21-200	03/27/77	SPRING	10.0				7.9	451.	160.
9216	6-35.5461	-115.5328	-1-21-200	03/27/77	SPRING	14.5				7.8	1175.	300.
12131	32-35.8858	-115.5154	-1-21-200	05/20/77	SPRING	12.0				7.9	2676.	240.
12132	6-35.7735	-115.8870	-1-21-200	05/20/77	SPRING	17.5				7.2	426.	140.
12135	6-35.7880	-115.9894	-1-21-200	05/21/77	SPRING	18.0				7.5	403.	100.
12162	32-35.9709	-115.5405	-1-21-200	05/27/77	SPRING	12.5				7.3	603.	220.
12163	6-35.9647	-115.8943	-1-23-200	05/27/77	WELL	20.0	300.0	MUNICIPAL	IRON	0.8	484.	120.
12228	32-35.8050	-115.6941	-1-23-200	05/20/77	WELL	16.0	600.0	IRRIGATION	IRON	0.7	1896.	160.
12229	32-35.6086	-115.6187	-1-23-200	05/20/77	WELL	22.0	600.0	IRRIGATION	IRON	7.5	643.	160.
15201	4-35.9915	-114.5851	-1-21-200	11/07/77	SPRING	17.0				7.3	609.	320.

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-3 WATER ANALYSIS: SPRING AND WELL SITES

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SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	NUMBER TY	DATE MO-DA-YR	SAMPLE SOURCE	TEMP C.	WELL DEPTH	WELL TYPE	WELL CASING	PH METR	SPEC COND UMHO/CM	AKTOTL MG/LITER
15202		4-35.9609	-114.2563	-1-21-200	11/08/77	SPRING	15.0				8.0	2696.	340.
15203		4-35.7623	-114.2780	-1-23-200	11/08/77	WELL	18.0		FARM/LIVESTOCK		7.6	652.	370.
15204		4-35.8943	-114.0512	-1-21-200	11/09/77	SPRING	15.0				7.9	64.	34.
15210		4-35.8217	-114.0081	-1-21-200	11/16/77	SPRING	14.0				8.1	795.	320.
15214		4-35.6325	-114.3199	-1-21-200	11/17/77	SPRING	16.0				7.6	525.	240.
15215		4-35.6265	-114.3323	-1-21-200	11/17/77	SPRING	14.0				7.6	543.	240.
15218		4-35.7434	-114.2786	-1-21-200	11/23/77	SPRING	11.5				7.7	858.	320.
15220		4-35.6001	-114.2818	-1-21-200	11/23/77	SPRING	15.5				7.1	330.	220.
15222		4-35.5203	-114.1451	-1-21-200	11/25/77	SPRING	5.5				7.3	1592.	520.
15223		4-35.6028	-114.2028	-1-21-200	12/19/77	SPRING	18.5				7.5	327.	120.
15223		4-35.6028	-114.2028	-1-21-201		SPRING							
15225		4-35.5598	-114.2131	-1-21-200	12/07/77	SPRING	12.3				8.2	1830.	340.
15226		4-35.5557	-114.2331	-1-21-200	12/07/77	SPRING	18.3				7.7	706.	180.
15227		4-35.3201	-114.1026	-1-21-200	12/08/77	SPRING	9.5				7.7	3393.	240.
15228		4-35.3500	-114.1060	-1-21-200	12/08/77	SPRING	25.5				8.1	791.	140.
15229		4-35.3608	-114.0704	-1-21-200	12/08/77	SPRING	17.0				7.4	560.	200.
15230		4-35.3283	-114.1419	-1-21-200	12/08/77	SPRING	17.5				8.0	1465.	140.
15231		4-35.3090	-114.1272	-1-21-200	12/09/77	SPRING	12.3				7.6	1425.	240.
15234		4-35.3995	-114.0668	-1-21-200	12/09/77	SPRING	13.0				8.8	1092.	180.
15235		4-35.4085	-114.1039	-1-21-200	12/09/77	SPRING	15.0				7.4	618.	200.
15236		4-35.3952	-114.1140	-1-21-200	12/15/77	SPRING	13.8				7.3	1068.	200.
15237		4-35.4053	-114.1194	-1-21-200	12/09/77	SPRING	11.0				7.2	673.	160.
15237		4-35.4053	-114.1194	-1-21-201		SPRING							
15238		4-35.4280	-114.1139	-1-21-200	12/10/77	SPRING	10.5				7.2	1611.	260.
15240		4-35.4204	-114.1133	-1-21-200	12/10/77	SPRING	7.5				7.5	832.	260.
15241		4-35.4644	-114.0695	-1-21-200	12/10/77	SPRING	11.3				8.2	617.	180.
15242		4-35.5327	-114.1336	-1-21-200	12/10/77	SPRING	15.8				7.9	510.	160.
15243		4-35.5338	-114.2207	-1-21-200	12/11/77	SPRING	12.5				7.9	871.	220.
15244		4-35.5318	-114.2491	-1-21-200	12/11/77	SPRING	12.5				8.0	1045.	160.
15245		4-35.3105	-114.3483	-1-21-200	12/11/77	SPRING	20.0				7.2	293.	100.
15246		4-35.2905	-114.3642	-1-21-200	12/11/77	SPRING	18.0				7.4	474.	160.
15247		4-35.1532	-114.3313	-1-21-200	12/10/77	SPRING	16.0				6.9	275.	80.
15247		4-35.1532	-114.3313	-1-21-201		SPRING							
15249		4-35.1916	-114.2346	-1-23-200	12/10/77	WELL	28.0		MUNICIPAL		8.1	431.	100.
15249		4-35.1916	-114.2346	-1-23-201		WELL							
15251		4-35.6908	-114.4726	-1-23-200	12/07/77	WELL	24.0	700.0	DOMESTIC	IRON	7.8	476.	120.
15254		4-35.5601	-114.3896	-1-23-200	12/07/77	WELL	23.0		FARM/LIVESTOCK				
15257		4-35.0394	-114.3959	-1-21-200	12/08/77	SPRING	17.0		FARM/LIVESTOCK	IRON	7.5	356.	100.
15258		4-35.0357	-114.3165	-1-21-200	12/08/77	SPRING	15.0				8.0	548.	180.
15259		4-35.0211	-114.3061	-1-23-200	12/08/77	WELL	21.0		FARM/LIVESTOCK	IRON	7.4	418.	120.
15263		4-35.0771	-114.3150	-1-21-200	12/08/77	SPRING	20.0				7.1	659.	180.
15264		4-35.0725	-114.3077	-1-21-200	12/08/77	SPRING	16.0				7.0	330.	100.
15265		4-35.0634	-114.3058	-1-21-200	12/09/77	SPRING	19.0				7.5	250.	120.
15266		4-35.1438	-114.3514	-1-23-200	12/09/77	WELL	18.0		FARM/LIVESTOCK	WOOD	8.0	379.	100.
15269		4-35.1731	-114.3757	-1-23-200	12/09/77	WELL	12.0			WOOD & CONCRETE	7.4	845.	260.
15269		4-35.1731	-114.3757	-1-23-201		WELL							
15271		4-35.4946	-114.2782	-1-21-200	12/07/77	SPRING	18.0				6.9	829.	140.

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-3. WATER ANALYSIS: SPRING AND WELL SITES

PAGE B-43

SITE NUMBER	ST	DOE LAT.	SAMPLE LONG.	NUMBER L TY RPL	DATE MO-DA-YR	SOURCE	TEMP C.	WELL DEPTH	WELL TYPE	WELL CASING	PH METP	SPEC COND UMHO/CM	AKTOTL MG/LITER
15272	4-35	4791-114	2325-1	21-200	12/07/77	SPRING	16.0				6.6	536.	140.
15273	4-35	4670-114	2549-1	21-200	12/07/77	SPRING	12.0				7.7	845.	140.
15274	4-35	0185-114	0048-1	21-200	12/08/77	SPRING	7.0				7.1	643.	140.
15274	4-35	0185-114	0048-1	21-201		SPRING							
15277	4-35	1170-114	0517-1	21-200	12/08/77	SPRING	16.5				7.0	580.	120.
15279	4-35	1487-114	0593-1	21-200	12/08/77	SPRING	15.0				7.4	644.	120.
15280	4-35	1743-114	0727-1	21-200	12/09/77	SPRING	20.0				7.7	416.	120.
15281	4-35	1671-114	0729-1	23-200	12/09/77	WELL	24.0		MUNICIPAL	PVC	7.8	419.	120.
15282	4-35	1703-114	0926-1	23-200	12/09/77	WELL	20.0		FARM/LIVESTOCK	IRON	7.7	529.	120.
15282	4-35	1703-114	0926-1	23-201		WELL							
15283	4-35	1655-114	0818-1	23-200	12/09/77	WELL	24.0		DOMESTIC	IRON	7.7	430.	120.
15283	4-35	1655-114	0818-1	23-201		WELL							
15286	4-35	2211-114	0738-1	21-200	12/09/77	SPRING	15.5				7.6	501.	160.
15286	4-35	2425-114	0988-1	21-200	12/09/77	SPRING	13.5				7.6	417.	120.
15287	4-35	2576-114	3653-1	21-200	12/10/77	SPRING	16.0				7.2	488.	120.
15289	4-35	2645-114	3508-1	23-200	12/10/77	WELL	20.0		FARM/LIVESTOCK	CONCRETE	7.1	732.	160.
15290	4-35	2866-114	3781-1	21-200	12/11/77	SPRING	12.0				7.7	352.	120.
15292	4-35	2275-114	1092-1	21-200	12/10/77	SPRING	18.0				7.8	427.	160.
15292	4-35	2275-114	1092-1	21-201		SPRING							
15294	4-35	4045-114	1624-1	21-200	12/10/77	SPRING	9.0				7.8	1089.	220.
15295	4-35	4318-114	2132-1	23-200	12/10/77	WELL	25.0				7.9	1150.	240.
15296	4-35	4335-114	2494-1	23-200	12/10/77	WELL	20.5		FARM/LIVESTOCK	IRON	7.2	1890.	160.
15299	4-35	4069-114	1513-1	21-200	12/10/77	SPRING	10.5				7.6	1182.	80.
15299	4-35	4496-114	4923-1	23-200	12/11/77	WELL	16.0		FARM/LIVESTOCK	IRON	7.9	588.	160.

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-3. WATER ANALYSIS: SPRING AND WELL SITES

SITE NUMBER	RPL TPTR	AKPHEN MG/LITER	POS. CONT	URANIUM (NCI) PPB	O. C. X-REF
026 200	MMFA		1*	3.51	1.27
026 201	MMFA		*	4.77	1.20
030 200	MMFA		1*	3.33	1.27
030 201	MMFA		*	4.64	1.94
041 200	MMFA		1*	3.00	2.03
041 201	MMFA		*	3.64	2.20
050 200	MMFA		1*	4.11	1.42
050 201	MMFA		*	5.41	2.60
062 200	MMFA	20.	1*	24.99	0.85
062 201	MMFA	20.	*	31.47	1.02
7371 200	WSFO		1	14.68	1.23
7375 200	WSFO		1	17.73	1.19
7376 200	MMFO	20.	1	2.93	1.92
7377 200	WSFO		1	5.51	1.52
7385 200	MMFO		1	9.10	1.46
7387 200	MMFO		1	3.23	1.66
7388 200	WSFO		1	1.55	2.47
7389 200	WSFO		1	7.67	1.42
7390 200	WSFO		1	8.27	1.42
7391 200	MMFO		1	5.72	1.54
7392 200	WSFO		1	8.17	1.38
7396 200	WSFO		1	58.48	1.06
7397 200	WSFO		1	35.98	1.10
7398 200	WSFO		1	51.68	1.07
7399 200	WSFO		1	3.46	1.79
8992 200	MMFO	20.	1	4.24	59.00
8993 200	WSFO	20.	1	5.26	78.00
8993 201	WSFO				
8994 200	WSFO		1	1.00	0.22
9202 200	MMFO		1	3.49	47.00
9205 200	WSFO		1	30.96	52.00
9206 200	MMFO		1	2.69	0.13
9207 200	WSFO		1	4.98	0.25
9208 200	WSFO		1	3.67	33.00
9213 200	WSFO		1	0.73	0.45
9213 201	WSFO				
9214 200	WSFO		1	1.07	23.06
9214 201	WSFO				
9215 200	WSFO		1	1.81	25.00
9216 200	WSFO		1	12.45	0.10
12131 200	WSFO		1	25.84	1.02
12132 200	WSFO		1	11.70	56.00
12135 200	WSFO		1	27.14	49.00
12162 200	WSFO		1	2.18	21.00
12163 200	MMFO		1	2.52	98.00
12228 200	MMFO		1	10.63	0.81
12229 200	MMFO		1	3.77	0.15
15201 200	WSFO		5	8.65	1.35
15202 200	WSFO		5	6.78	1.46

KINGMAN QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-3. WATER ANALYSIS: SPRING AND WELL SITES

SITE NUMBER	WELL	DEPTH	ANALYST	POS. CONT.	Q. C. X-REF	URANIUM (DNC) PPM	YEAR
15203	200	M5F0		1		11.67	40.00
15204	200	M5F0		1		22.67	47.00
15210	200	M5F0		5		36.89	73.00
15214	200	M5F0		5		0.99	30.00
15215	200	M5F0		5		3.00	30.00
15218	200	M5F0		0		8.63	46.00
15220	200	M5F0		1		1.99	10.00
15222	200	M5F0		5		12.05	1.83
15223	200	M5F0		1		1.95	9.00
15225	200	M5F0		1		63.11	0.14
15226	200	M5F0		1		11.26	40.00
15227	200	M5F0		1		7.57	0.22
15229	200	M5F0		1		7.20	39.00
15230	200	M5F0		1		67.53	0.67
15231	200	M5F0		1		216.20	0.34
15232	200	M5F0		1		13.07	0.73
15235	200	M5F0		1		6.23	59.00
15236	200	M5F0		1		38.89	0.25
15237	200	M5F0		1		8.90	77.00
15238	200	M5F0		1		95.63	0.39
15240	200	M5F0		1		41.32	34.00
15241	200	M5F0		1		8.32	37.00
15242	200	M5F0		1		8.89	66.00
15243	200	M5F0		1		25.00	66.00
15244	200	M5F0		1		7.29	76.00
15245	200	M5F0		1		0.56	13.00
15246	200	M5F0		1		1.15	21.00
15247	200	M5F0		1		0.42	10.00
15249	200	M4F0	20.	1		4.28	47.00
15249	201	M4F0		1		3.93	46.00
15251	200	M4F0		1		4.85	46.00
15251	200	M4F0		1		2.14	34.00
15257	200	M5F0		1		3.26	24.00
15258	200	M5F0	20.	1		2.47	34.00
15259	200	M4F0		1		2.74	34.00
15264	200	M5F0		1		1.06	12.00
15265	200	M5F0		1		1.74	14.00
15268	200	M4F0		1		1.58	22.00
15269	200	M4F0	20.	1		1.88	33.00
15271	200	M4F0		1		4.95	59.00
15272	200	M5F0		1		3.95	31.00
15273	200	M5F0		1		29.19	43.00
15274	200	M5F0		1			

KINGHAM QUAD REPORT, LAWRENCE LIVERMORE LABORATORY
TABLE B-3. WATER ANALYSIS: SPRING AND WELL SITES

SITE NUMBER	RPL	TPTR	ACOMEN MG/LITER	POS. CONT	URANIUM(DNC) PPM	Q. C. SEMR	O. C. X-REF
15274	201	WSFO					
15277	200	WSFO		1	2.49	36.00	
15279	200	WSFO		1	3.59	27.00	
15280	200	WSFO		1	2.57	20.00	
15281	200	WMFO		1			
15282	200	WMFO		1	1.04	31.00	
15282	201	WMFO					
15283	200	WMFO		1	2.64	19.00	
15283	201	WMFO					
15285	200	WSFO		1	0.55	17.00	
15286	200	WSFO		1	1.95	17.00	
15287	200	WSFO		1	0.35	21.00	
15289	200	WMFO		1			
15290	200	WSFO		1	0.67	14.00	
15292	200	WSFO		1	0.82	15.00	
15292	201	WSFO					
15294	200	WSFO		1	7.10	1.50	
15295	200	WMFO		1	101.60	1.02	
15296	200	WMFO		1	23.11	1.16	
15298	200	WSFO		1	13.61	1.24	
15299	200	WMFO		1	0.08	16.82

KINGM

115°00

30'

15'

Δ 12162

Δ 12131

626 ▽ 636

▽ 841

Δ 8993

▽ 859

▽ 862

Δ 9206

2

AN

NI 11-03

45'

30'

Δ 15201

Δ 7375

▽ 7376

3

▽ 15251

03

15'

114°00'

Δ 15202

36°00'

Δ 15204

Δ 15210

▽ 15203

Δ 15218

45'

Δ 15214
Δ 15215

15223 Δ 15220

4

30'

Δ 7319

Δ 7398

Δ 7387

▽ 7391

Δ 7396

Δ 7392

15'

5

Δ 7390

Δ 9214

△ 8294

△ 9216

▽ 8992

△ 9207

△ 9215

▽ 9206

△ 9205

▽ 7385

△ 7389

▽ 7387

△ 7388

6

▽ 9202

□ 7378

▽15254

△7377

▽15293

△15290
△1524

▽15207

7

△7371

▽15269

▽15269

▽ 15254

△ 15225
△ 15226

15244 △

△ 15243

△ 15242
△ 15222

△ 15271

△ 15272

△ 15273

△ 15241

▽ 15296

▽ 15295

△ 15240

15294 △

△ 15298

△ 15237

△

△ 15235

△ 15236

△ 15234

△ 15229

△ 15228

△ 15230

△ 15227

△ 15231

△ 15245

△ 15290
△ 15246

▽ 15289
△ 15287

15'

△ 15286
△ 15292

△ 15285

▽ 15249

71
▽ 15269

△ 15247
▽ 15266

15280
▽ 15267
15283 ▽

15281

△ 15279

△ 15277

30'

8

35°00'

116°00'

45'

SYMBOL EXPLANATION

SITE TYPES. WATER SAMPLES

□ RIVER/STREAM

△ SPRING

▽ WELL

◇ LAKE/RESERVOIR

LAWRENCE
LIVERMORE
LABORATORY

UNIVERSITY OF CALIFORNIA

SER NO. LLL:NURE:HSSR 12,45,02 U 07/28/78

9

V 9202

□ 7376

30'

15'

115°00'

SCALE 1:25000

5

0

5

5

0

5

10

15

SITE LOCATIONS. WAT

10

15263 Δ

Δ 15257

Δ 15

45'

30'

15

20 STATUTE MILES

20

25

30 KILOMETERS

SAMPLES

V 15260

OVERLAY 1A

SITE LOCATIONS. WATER SAMPLES

GEOCHEMICAL
RECONNAISSANCE STUDY
KINGMAN
(NTMS QUAD)

12

KINGMA

30'

15'

115°00'

2

AN

NI 11-03

45

30'

3

3

15'

114°00'

36°00'

45'

4

5

6

7

8

**LAWRENCE
LIVERMORE
LABORATORY**
UNIVERSITY OF CALIFORNIA

SYMBOL EXPLANATION

URANIUM(TOTAL)CONCENTRATIONS

PARTS PER BILLION (PPB) BY WEIGHT

+ LESS THAN 0.01 PPB
(OR NOT DETECTED)

★ GREATER THAN 200 PPB

SER NO. LLL.NURE.HSSR 12.46.15 U 07/28/78

9

URANIUM(TOTAL) CONCEN
WATER SAMP

0'

45'

30'

50000

10

15

20 STATUTE MILES

15 20 25 30 KILOMETERS

CONCENTRATIONS (PPB)
SAMPLES

OVERLAY 1B
URANIUM(TOTAL)
CONCENTRATIONS(PPB)
(WATER SAMPLES)
GEOCHEMICAL
RECONNAISSANCE STUDY
KINGMAN
(NTMS QUAD)

12

KINGMA

30'

15'

115° 00'

2

AN

NI 11-03

45'

30'

3

03

15'

114°00'

36°00'

x

45'

4

30'

15'

5

6

7

8

LAWRENCE
LIVERMORE
LABORATORY
UNIVERSITY OF CALIFORNIA

SYMBOL EXPLANATION

CONDUCTIVITY ($\mu\text{MHO/SQ.CM}$)

+ LESS THAN 50.0 $\mu\text{MHO/SQ.CM}$

● GREATER THAN 4000. $\mu\text{MHO/SQ.CM}$

SER NO. LLL,NURE,HSSR 21:25:35 R 08/10/78

9

30'

15'

115°00'

SCALE 1:2500

5

0

5

5

0

5

10

15

CONDUCTIVITY (μ M)
WATER SAM

10

45'

30'

0000

10

15

20 STATUTE MILES

15

20

25

30 KILOMETERS

MHO/SQ.CM]

MPLES

OVERLAY 1C

CONDUCTIVITY (μ MHO/SQ.CM)
(WATER SAMPLES)

GEOCHEMICAL
RECONNAISSANCE STUDY
KINGMAN
(NTMS QUAD)

12

45

45'

KINGMA

30'

15'

115°00'

AN

NI 11-03

45'

30'

3

15'

114°00'

36°00'

45'

4

8

SYMBOL EXPLANATION

SITE TYPES, SEDIMENT SAMPLES

- WET
- DRY
- ◇ SPRING

**LAWRENCE
LIVERMORE
LABORATORY**
UNIVERSITY OF CALIFORNIA

SER NO. LLL/NURE/HSSR 14.15.15 R 07/29/78

9

OVERLAY 2A SITE LOCATIONS. SEDIMENT SAMPLES

GEOCHEMICAL
RECONNAISSANCE STUDY
KINGMAN
(NTMS QUAD)

12

116°00'

45'

36°00'

45'

0

KINGMA

115°00'

30'

15'

2

MAN

NI 11-03

00'

45'

30'

3

03

15'

114°00'

36°00'

45'

4

5

6

8

**LAWRENCE
LIVERMORE
LABORATORY**
UNIVERSITY OF CALIFORNIA

SYMBOL EXPLANATION

URANIUM (TOTAL) CONCENTRATIONS

PARTS PER MILLION (PPM) BY WEIGHT
+ LESS THAN 0.02 PPM
(OR NOT DETECTED)

★ GREATER THAN 500 PPM

SER NO. LLL:NURE:HSSR 14,28,35 R 07/29/78

9

115°00'
SCALE 1:2500

URANIUM (TOTAL) CONCENTRATION
SEDIMENT SAMPLES

10

ENTRATIONS (PPM)
AMPLES

OVERLAY 2B
URANIUM(TOTAL)
CONCENTRATIONS(PPM)
(SEDIMENT SAMPLES)
GEOCHEMICAL
RECONNAISSANCE STUDY
KINGMAN
(NTMS QUAD)

12

116°00'

45'

36°00'

KINGMAN

115°00'

15'

30'

2

AN

NI 11-03

45'

30'

VE 11-03-11-03

03

4

5

8

SYMBOL EXPLANATION

THORIUM (TOTAL) CONCENTRATIONS

PARTS PER MILLION (PPM) BY WEIGHT

+ LESS THAN 0.02 PPM
(OR NOT DETECTED)

☆ GREATER THAN 500 PPM

**LAWRENCE
LIVERMORE
LABORATORY**

UNIVERSITY OF CALIFORNIA

SER NO. LLL.NURE.HSSR 17.27.35 R 07/29/78

9

115° 00'
SCALE 1:2500

THORIUM (TOTAL) CONCENTRATION IN
SEDIMENT SAMPLES

10

ENTRATIONS (PPM)
AMPLES

OVERLAY 2C
THORIUM(TOTAL)
CONCENTRATIONS(PPM)
(SEDIMENT SAMPLES)
GEOCHEMICAL
RECONNAISSANCE STUDY
KINGMAN
(NTMS QUAD)