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Uranium Hydrogeochemical and Stream Sediment Reconnaissance of the Ekalaka NTMS Quadrangle, Montana

Dan S. Chaney

Stephen L. Bolivar

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URANIUM HYDROGEOCHEMICAL AND STREAM SEDIMENT
RECONNAISSANCE OF THE EKALAKA NTMS QUADRANGLE, MONTANA

by

Dan S. Chaney and Stephen L. Bolivar

ABSTRACT

The Los Alamos Scientific Laboratory (LASL) conducted a Hydrogeochemical and Stream Sediment Reconnaissance in the Ekalaka National Topographic Map Series quadrangle, Montana. A total of 710 water and 851 sediment samples were collected from 1347 locations at a nominal density of 1 location per 10 km². All water samples were analyzed by fluorometry and those with >10 ppb uranium were reanalyzed by delayed-neutron counting. Sediment samples were analyzed by delayed-neutron counting. Standard field and analytical procedures developed by the LASL were followed.

A value nominally twice the standard deviation above the mean was selected as the "anomaly threshold." By this criterion, 27 waters (19 wells, 5 springs, and 3 surface waters) and 33 sediments (26 dry streams, 4 wet streams, 2 wet springs, and 1 dry artificial pond) contained anomalously high uranium concentrations.

The study delineated most known uranium occurrences. In addition, several areas were identified that appear of interest for further investigation. These are: (a) in the Belle Fourche shale formation and alluvium along Thompson Creek near the Black Hills uplift; (b) in the vicinity of Bay Horse/Moorhead in the Powder River basin; and (c) in the Long Pine Hills area in the Williston basin, although this area has been prospected before. The principal hosts for the known deposits are arkosic sandstones (Fort Union or associated formations) and lignite beds.

I. INTRODUCTION

This report describes work done in the Ekalaka, Montana, National Topographic Map Series (NTMS) quadrangle (1:250 000 scale) by the Los Alamos Scientific Laboratory (LASL) as part of the nationwide Hydrogeochemical and Stream Sediment Reconnaissance (HSSR). The HSSR, a part of the National Uranium Resource Evaluation (NURE) program sponsored by the US Department of Energy (DOE), is designed to identify areas having higher than normal concentrations of uranium in ground waters, surface waters, and water-transported sediments. The HSSR data will ultimately be combined with data from other NURE programs (e.g., from airborne radiometric surveys and geological investigations) to prepare an improved assessment of the potential uranium resources in the US and to indicate areas favorable for uranium exploration by the private sector. The LASL is responsible for conducting the HSSR in the Rocky Mountain states of New Mexico, Colorado, Wyoming, and Montana, and in Alaska.

II. DESCRIPTION OF STUDY AREA

The majority of the study area is located in southeastern Montana (Fig. 1). It includes about 17 000 km², all within the Ekalaka NTMS quadrangle, Montana.

Geographic Setting

The study area lies in the Great Plains physiographic province, about 80 km northwest of the Black Hills. The terrain is plains-like, consisting of grass covered rolling hills and terraced stream valleys. A large number of gravel roads provide good access to most parts of the area; maximum elevation is 1358 m (in the southeast corner), and the total relief is 568 m.

The three largest towns in the study area are Broadus, Ekalaka, and Alzada, with populations of 800, 650, and 500, respectively. The majority of the sparse population live on cattle and sheep ranches.

Climate

The climate of southeast Montana is semi-arid, for the area receives an average of only 350 mm of moisture annually. Most of the moisture comes from thundershowers during the summer months. The temperature extremes range from -40°C in the winter to 37°C in the summer.

The average monthly precipitation and temperatures are shown for weather stations at Ekalaka and Broadus in Figs. 2 and 3. Ekalaka, which is on an upland surface, receives about 50 mm more moisture annually than Broadus, which is in a river valley. There is little difference in annual temperature between the two stations, although they are separated by 72 km.

During the sampling done in the summer and fall of 1976, heavy thunder-shower activity in June delivered unusually high amounts of rain to the area, whereas precipitation in July was well below average.

Hydrology

Two major drainage systems are found in the study area. All streams in the eastern third of it are in the Little Missouri drainage system, while all others are in the Powder River drainage.

Of the six major perennial streams draining the area, only the Pumpkin, Mizpah, and Boxelder Creeks have headwaters in the study area. The Powder,

Fig. 1. Index map of the Ekalaka NTMS quadrangle, Montana.

Fig. 2. Average precipitation for Broadus and Ekalaka, Montana (from National Oceanic and Atmospheric Administration, 1951-1960; 1961-1975; 1976).

Fig. 3. Average temperatures for Broadus and Ekalaka, Montana (from National Oceanic and Atmospheric Administration, 1951-1960; 1961-1975; 1976).

Little Powder, and Little Missouri Rivers all originate in Wyoming and flow in a northeasterly direction across southeast Montana. The Little Missouri River and Boxelder Creek join in North Dakota and flow directly to the Missouri River. The remaining streams are tributaries of the Yellowstone River.

The drainage pattern, in general, is dendritic. Local structural control of the drainage is seen only in the southeastern corner of the study area where Willow and Thompson Creeks parallel the outcrop patterns of the Greenhorn and Belle Fourche shale formations.

Artesian wells in the area issue from aquifers in the Fox Hills sandstone and the Hell Creek and Fort Union formations (Taylor, 1968). These units are recharged in the southeast corner of the state where erosion of the Black Hills uplift has exposed the upturned ends of the strata. Other aquifers are either buried at great depths, or their water is of poor chemical quality and thus unusable (Taylor, 1965). Springs in the area are fed principally by ground waters in terrace gravels along the streams in the Fort Union formation, the White River group, and the ?Arikaree formation (the query indicates uncertain correlation in the study area, as explained later). The ground waters may be classified into two groups--hard waters from springs and soft waters from artesian wells (Taylor, 1968).

III. GEOLOGY

The stratigraphy and structure in the Ekalaka NTMS quadrangle are summarized in the following sections. Detailed descriptions can be found in the references cited.

Stratigraphy

The rocks in the study area generally reflect layer-cake stratigraphy and range from early Cretaceous to Pleistocene in age. A stratigraphic column is shown in Fig. 4 and a generalized geologic map (1:250 000 scale) is included as Plate I. The various units are described from oldest to youngest.

Colorado Group. The Colorado group is a series of marine shales and sandstones deposited during Lower and Upper Cretaceous time (Fig. 4). Individual formations are briefly described below; detailed descriptions are provided by Robinson et al (1964).

Mowry Shale (Lower Cretaceous). This is the oldest unit exposed in the Ekalaka NTMS quadrangle, and crops out in the extreme southeastern portion of the study area. This 60-m thick marine unit is composed of dark-gray siliceous shale with interbedded thin bentonite zones. The high silica content of the shale indicates that most of the Mowry shale was derived primarily from altered volcanic ash.

Belle Fourche Shale (Upper Cretaceous). The Belle Fourche shale, a marine deposit about 200-m thick, can be divided informally into a lower and an upper unit. The lower 15 m is characterized by soft grayish-black shale and numerous ovoid siderite concretions. The upper 185 m is composed of grayish-black shale with a few interspersed ironstone concretions, laminae of fine-grained sandstone, and a few beds of bentonite.

The conformable contact between the Belle Fourche and the underlying Mowry shale has been placed at the top of a marker bentonite bed (Clay Spur). The upper contact of the Belle Fourche with the Greenhorn formation is conformable with the two formations interfingering.

Greenhorn Formation (Upper Cretaceous). The Greenhorn formation is composed of shale, limestone, and marl. A limestone marl facies, about 100 m in thickness, crops out on the east flank of the Wolf Creek anticline. A concretionary facies, about 30-m thick, crops out on the west flank of the Wolf Creek anticline and is characterized by numerous septarian limestone concretions about 0.5 cm in diameter, veined with yellow-brown, coarse-grained calcite crystals. The base of the Greenhorn is placed at the lowest persistent calcareous limestone bed.

Carlile Shale (Upper Cretaceous). The Carlile shale is a dark marine shale that conformably overlies the Greenhorn formation and is in turn overlain conformably by the Niobrara formation. The formation reaches a thickness of 180 m in Carter County, Montana, and has been subdivided into three members. The lowest member, unnamed, is a dark shale with concretions. The middle member, Turner Sandy, consists of dark-gray sandy shale and sandstone with silty limestone concretions. The upper member, Sage Breaks, is composed of grayish-black noncalcareous shale.

Niobrara Formation (Upper Cretaceous). This dark- to light-gray calcareous marine shale, about 60-m thick, contains septarian concretions, with veins of brown calcite, in the lower portion of the formation. Small white calcareous spots, thought to be algal remains, are found throughout most of the formation.

Montana Group. The Montana group is a series of Cretaceous marine and nonmarine deposits. The Hell Creek formation is included in the Montana group following the usage of Gill and Cobban (1973). Individual formations are briefly described; for detailed descriptions see Robinson et al (1964).

Pierre Shale (Upper Cretaceous). The Pierre shale conformably overlies the Niobrara formation in southeast Montana. This formation is a 520-m thick sequence of dark-gray shale, sandy shale, sandstone, and concretions. The Gammon Ferruginous member, Groat sandstone bed, Mitten Black Shale member, and Monument Hill bentonite member crop out in the study area.

Fox Hills Sandstone (Upper Cretaceous). This is the youngest marine unit exposed in the study area. The formation, about 50-m thick, is composed of sandstone and shale.

Hell Creek Formation (Upper Cretaceous). This nonmarine sequence of medium- to dark-gray sandstones, shales, and claystones has a thickness of about 150 m in Powder River County, Montana. Spherical, cylindrical, and tabular calcareous concretions are found in the thicker sandstone beds, whereas carbonaceous shale beds are confined to the basal part. The lower contact is a conformable gradational one with the underlying Fox Hills sandstone.

Tertiary. Major Tertiary units recognized in the study area include the Fort Union formation, the White River group, and the ?Arikaree formation. These and other units are masked over broad areas by Quarternary alluvium.

Fort Union Formation (Paleocene). This nonmarine formation consists of sandstone, shale, and coal seams. Thickness ranges from 450 to 650 m in southeast Montana. The Tullock member, Lebo shale member, and Tongue River member, all with conformable contacts, crop out in the study area. Economic deposits of coal occur in the upper Tongue River member.

White River Group (Oligocene). The White River group rests unconformably on the Fort Union formation. The erosional remnants of this group, about 30-m thick, are composed of light-colored, coarse-grained sandstone that is locally conglomeratic near the base. This is overlain by a sequence of bentonitic clays and siltstones with lenses of limestone and calcareous sand. Ash beds occur throughout the sequence, but are most abundant in the upper portion of the group (Curry, 1959).

?Arikaree Formation (Oligocene-Miocene). The correlation of these rocks is problematical; based on lithology, they could be correlated with either the Arikaree or the Ogallala formation. The unit, about 60 m in thickness, is composed of light- to greenish-gray, tuffaceous, sandy, and quartzitic beds. Resting unconformably on the Pierre shale, Fox Hills sandstone, Hell Creek and Fort Union formations, and the White River group, the ?Arikaree appears to have had a much greater extent in the past than is presently observed.

Structure

The Ekalaka NTMS quadrangle is dominated by three main structural features: the Black Hills uplift in the southeast portion of the study area, the northern Powder River basin in the north and northeast portion of the study area, and the Williston basin in the northeast corner (Fig. 5). These features all formed in the Rocky Mountain foreland during the Laramide orogeny in the late Cretaceous to early Tertiary time (King, 1969).

Black Hills Uplift. This feature is a broad, north-plunging, asymmetrical anticline with minor folds superimposed (Fig. 5). It is steeper on the west flank, where about 300 m of uplift is recorded along the Camp Creek monocline (Robinson et al, 1964). The east flank of the Black Hills uplift is a gently sloping feature that has been slightly folded by a series of anticlines and synclines south and west of Albion. These gentle folds, the Bull Creek and Albion anticlines, and their associated synclines, are all asymmetrical. The beds dip as much as 10° on the steeper west slopes of the anticlines.

Powder River Basin. The Powder River basin is a northwest-trending structural and topographic basin that extends south to Casper, Wyoming (Fig. 5). The north end of this asymmetrical basin occupies the western two-thirds of the study area. The western limb is steeply dipping (>30°), whereas the eastern limb dips gently (3-5°).

Williston Basin. The Williston basin crosses the northeast corner of the study area (Fig. 5). The Ekalaka syncline (Plate I) is associated with the Cedar Creek anticline that lies to the northeast just outside the study area.

Fig. 5. Generalized map of structural provinces in the Ekalaka NTMS quadrangle, Montana.

These two features are asymmetrical in the same manner as those mentioned above in the Black Hills uplift.

Geologic History

An epicontinental sea covered southeast Montana during the time in which the presently exposed formations of the Colorado and Montana groups (with the exception of the Hell Creek formation) were deposited. In equivalent rock units to the west, a series of marine transgressions and regressions are recorded, but the regressions were never great enough to subaerially expose the study area until latest Fox Hills or earliest Hell Creek time. Volcanic activity to the west, evidence of the tectonic activity responsible for the transgressions and regressions, is recorded in the bentonite beds found throughout the Cretaceous sequence (see detailed discussion of the geologic history of the Montana group in Gill and Cobban, 1973). After the final regression of the sea, the Hell Creek and Fort Union formations were deposited in a coastal-plain or near coastal-plain environment where coal swamps were common, as evidenced by the numerous coal seams in them.

The actual time of uplift of the Black Hills is not known, but it may have occurred in latest Cretaceous time. This is suggested inasmuch as Paleocene and Eocene formations exist to the north and northeast but are lacking east of the Black Hills (Eardly, 1962). Ensuing erosion leveled the mountains to a gently sloping plain upon which the White River group was deposited. The region then underwent renewed uplift and was partially eroded. Upon this dissected surface the ?Arikaree formation was deposited. A possible source for the ash beds in the White River group and ?Arikaree formation may be the Absaroka volcanic field to the west (Denson and Gill, 1965). There is no evidence of Pleistocene continental or alpine glaciation.

Economic Minerals

Commercial deposits of metals are unknown in the area. The natural resources being produced include coal, gas, oil, and bentonite.

A major portion of the study area is underlain by coal deposits of Paleocene age in the Tongue River member of the Fort Union formation. This unit has been removed by erosion in central and southern Carter and western Powder River Counties, along the northern extension of the Black Hills uplift (Plate I). Most of the coal produced comes from strip mining operations in Powder River County. The coal ranges in grade from lignite to subbituminous (Koch, 1963). These lignite deposits are of particular interest because of their association with uranium deposits (Breger et al, 1955; Denson and Gill, 1956).

The oil and gas industry has remained small because more productive fields are found to the north and west of the study area. In eastern Montana, gas is produced from various formations of Cretaceous age, whereas oil is produced from formations ranging in age from Ordovician to Mississippian (Perry, 1962).

Near Alzada, bentonite is commercially mined from the Clay Spur bed at the top of the Mowry shale. The bentonite is of good quality and can be used in applications ranging from drilling muds to the preparation of metallurgical molding sands (Koch, 1963).

Reported Uranium Occurrences in the Study Area

Concentrations of uranium were first discovered in southeast Montana in 1948 (Denson and Gill, 1965). Reported uranium occurrences in the Ekalaka

TABLE I

REPORTED OCCURRENCES OF URANIUM IN THE EKALAKA NTMS QUADRANGLE, MONTANA

Designation on Plate II	Name of Area	Latitude	Longitude	Formation	Rock Type
1	Bay Horse Creek	45°08'51"	105°37'51"	Fort Union	Lignite
2	Portwine Prospect	45°04'21"	105°37'20"	Fort Union	?
3	Richardson Ranch	45°08'14"	104°56'14"	Hell Creek	Fine-grained sand- stone
4	Chalk Buttes	45°45'49"	104°42'36"	Fort Union	?
5	Ekalaka Hills	45°49'44"	104°29'50"	Fort Union	Lignite
6	Ekalaka Hills	45°51'32"	104°28'43"	?Arikaree	?
7	Lewis Nos. 1-5 Sand Creek Claims Maverick Claims Little Joe Claims	45°38'36"	104°22'01"	Hell Creek Fox Hills	Brown carbonaceous mudstone with plant remains
8	Long Pine Hills	45°37'16"	104°18'01"	Hell Creek	Carbonaceous bed over shale
9	Long Pine Hills	45°37'48"	104°15'41"	Hell Creek	Carbonaceous beds
10	Long Pine Hills	45°38'40"	104°15'23"	Hell Creek	Carbonaceous bed over shale
11	Vada Dee No. 2 Rock No. 1	45°40'26"	104°14'13"	Hell Creek	Sandstone
12	Long Pine Hills	45°42'25"	104°17'07"	Hell Creek	Carbonaceous bed over shale
13	NE Long Pine Hills	45°44'33"	104°13'35"	Fort Union	Lignite
14	Long Pine Hills	45°41'60"	104°13'14"	?Arikaree	?
15	Long Pine Hills	45°37'39"	104°11'28"	?Arikaree	?
16	School Section, E Long Pine Hills	45°39'37"	104°06'14"	Fort Union	Carbonized plant remains
17	Long Pine Hills	45°35'04"	104°08'40"	Fort Union	?
18	Long Pine Hills	45°36'20"	104°07'17"	?Arikaree	?
19	Long Pine Hills	45°37'04"	104°04'08"	Hell Creek	Carbonaceous beds
20	Long Pine Hills	45°34'25"	104°05'42"	Hell Creek	Lignite
A1	Moorhead	45°04'43"	105°50'12"	Fort Union	?
A2	Bay Horse	45°04'48"	105°35'39"	Fort Union	?

From Butler et al, 1962; Denson and Gill, 1965; and Elevatorski, 1977.

study area are shown on Plate II and are listed in Table I, where the location designators correspond to those on Plate II. Several large uranium deposits are found in the Powder River basin in Wyoming (Elevatorski, 1976). Some of these deposits occur in the Fort Union formation, which is also present in the Ekalaka study area. However, no uranium has been mined from the portion of the Powder River basin in Montana. Similarly, uranium has been mined from various parts of the Williston basin, but no mines exist in the study area (Elevatorski, 1977). Three isolated uranium prospects are reported in lignite

or fine-grained sandstone, but most of the known uranium occurrences in the study area are clustered around the Long Pine and Ekalaka Hills (Fig. 1). These hills are capped with sediments of the White River group and the ?Arikaree formation.

The ash beds in the ?Arikaree formation and White River group show an anomalously high content of uranium (Curry, 1959). This relationship between the tuffs and ashes of the White River group, the ?Arikaree formation, and the uraniferous lignites of the Fort Union and Hell Creek formations has led early as well as more recent workers to suggest an epigenetic origin of the uranium concentrations (Denson and Gill, 1956; Gill, 1959; Curry, 1959; Marks, 1959; Denson and Gill, 1965; Jacob, 1976; and Elevatorski, 1977). According to Denson and Gill (1956):

"...the uranium is epigenetic in origin, having been extracted by the lignite, subsequent to coalification, from ground water bringing uranium from overlying tuffaceous source rocks by percolating downward or by moving laterally along aquifers near the lignite beds." They further state, "...carbonaceous materials are believed to have acted as filters to concentrate and fix the uranium."

A graphic representation of this method of concentration is shown in Fig. 6. The amount of uranium concentrated in the lignite decreases rapidly with increasing distance from the unconformity at the base of the White River/?Arikaree source rocks. This indicates that the carbonaceous material is quite effective at removing the uranium from solution. This has been found to be the case in other areas in the Williston basin (Denson and Gill, 1965).

The areas designated A1 and A2 on Plate II are low-level radiometric anomalies located in the Powder River basin by Texas Instruments Incorporated (1974) using airborne geophysical techniques. At the time of their survey, they questioned the significance of these lesser anomalies. However, two reported occurrences of uranium, one within the boundaries of area A2 and another in the vicinity, could account for that anomaly.

The Bendix Field Engineering Corporation (1976) conducted a geochemical survey of the northern Powder River basin and found that favorable host rocks for uranium exist there, but because of many other variables, the region was given a rating of "poor favorability" for the occurrence of uranium deposits.

IV. EVALUATION OF ANALYTICAL AND STATISTICAL DATA

The following section describes the field and analytical procedures used in this study and presents basic statistical data for the uranium analyses of water and sediment samples from the Ekalaka NTMS quadrangle. All of the sample locations (with only the last four digits shown) are designated on Plate II. Uranium concentrations in waters are shown on Plate III; uranium concentrations in sediments are shown on Plate IV. The overlays can be used in combination with the geologic map (Plate I) and the Ekalaka NTMS sheet, available through the United States Geological Survey, Denver, Colorado.

Field and Analytical Procedures

A total of 1561 water and sediment samples were collected from the Ekalaka area by a commercial contractor between April 28 and July 16, 1976, and between October 8-11, 1976. The latter sampling period was used to fill gaps in areal coverage. Most of the samples taken during this later period

Fig. 6. Graphic representation of the formation of uranium concentrations in the Long Pine and Ekalaka Hills (not to scale; adapted from Denson and Gill, 1965; Curry, 1959).

consisted of dry sediment and well samples which are not appreciably affected by seasonal variations in climate (see discussion by Aamodt, 1977). A few parts of the area lack data because access permission was not obtainable (Plate II).

Standardized field and analytical procedures, as developed by the LASL (Sharp and Aamodt, 1976; Aamodt, 1977; Hues et al, 1977; and Sharp, 1977), were used throughout the work so that the data could be compared with those of forthcoming LASL HSSR reports on surrounding areas. In addition to the description which follows, these procedures are further detailed in Appendix A.

All water and sediment samples were analyzed for total uranium at the LASL. Initially, all water samples were analyzed by fluorometry (Hues et al, 1977). Two aliquots of each water sample are analyzed, then the values are averaged to obtain the uranium concentrations listed in Appendix B. The lower detection limit for the fluorometric analysis is 0.2 parts per billion (ppb). Aliquots with less than 0.2 ppb are arbitrarily assigned the value of 0.1 ppb. Some samples have values that fall between 0.1 and 0.2 ppb. These results are obtained when one of the two analyses is less than 0.2 ppb (and therefore is taken as 0.1 ppb) and the other analysis is 0.2 ppb or greater. Those samples with uranium in excess of 10 ppb, the maximum concentration measurable by the LASL fluorometric method without recalibration, were re-analyzed by delayed-neutron counting (DNC). These analyses are designated by an asterisk in Appendix B. Statistical analyses of samples treated in the same way from New Mexico (Whiteman, personal communication, LASL, 1977) and from Colorado (Sharp and Aamodt, 1976) have shown that there is no statistical difference between the uranium concentrations in water determined at the LASL by fluorometry and those determined there by DNC. Both methods are precise within about $\pm 10\%$ at concentrations an order of magnitude or more above the lower detection limits, but drop to about $\pm 30\%$ as the lower detection limits are approached.

In Appendix B there are also some water analyses with values greater than 10 ppb that were not analyzed by DNC. When these samples were analyzed, the DNC analytical facility was not in operation. Therefore, these samples were diluted to produce results less than 10 ppb (by fluorometry) that were then multiplied by the dilution factor to obtain the actual uranium concentration. Further, there are water analyses in Appendix B that were analyzed by DNC but have values less than 10 ppb. These were water samples that gave spurious results during the fluorometric analysis. Such results may be caused in part by diverse ions in solution that either quench or enhance the fluorescence of the sample (Hues et al, 1977).

All of the sediment samples were analyzed for total uranium using the DNC method and the results, in parts per million (ppm), are listed in Appendix C. The precision here is $\pm 4\%$ or better. Appendix D explains the codes used in Appendixes B and C.

Uranium Concentrations in Water

A summary of the uranium data for all waters, including a breakdown of the five specific source types, is presented in Table II. The uranium concentration in each of the water samples is graphically plotted on Plate III. A frequency histogram for all waters, showing the distribution of uranium concentrations, is plotted in Fig. 7A. The intervals for the uranium values in Plate III and Fig. 7A were arbitrarily chosen. All individual samples with concentrations ≥ 35 ppb are considered to be anomalous according to the criterion of Aamodt (1977), i.e., they are about two standard deviations or more above the mean. By this criterion, about 4% of the total water samples

SAMPLE SIZE = 710 MEAN = 7.31
 MAXIMUM = 227.90 STANDARD DEVIATION = 14.04
 MINIMUM = 0.10

A. FREQUENCY HISTOGRAM FOR WATERS

SAMPLE SIZE = 851 MEAN = 3.36
 MAXIMUM = 16.60 STANDARD DEVIATION = 1.24
 MINIMUM = 1.70

B. FREQUENCY HISTOGRAM FOR SEDIMENTS

Fig. 7 Distribution of uranium concentrations in water and sediment samples from the Ekalaka NTMS quadrangle, Montana.

TABLE II
SUMMARY OF URANIUM DATA FOR WATER SAMPLES

<u>Sample Type</u>	<u>Number of Samples</u>	<u>Range (ppb)</u>	<u>Mean (ppb)</u>	<u>Standard Deviation (ppb)</u>
All Waters	710	.10 - 227.90	7.31	14.04
Artificial Ponds	80	.10 - 22.00	3.67	4.89
Natural Ponds	7	.94 - 16.20	4.51	5.47
Streams	59	.10 - 227.90	10.95	30.32
Streams ^a	58	.10 - 53.50	7.21	-
Springs	76	.10 - 81.70	11.35	13.36
Wells	488	.10 - 91.50	6.87	11.79

^aSample with concentration of 227.90 ppb excluded from average in this case.

are anomalous. Evaluation of uranium background levels and comparison of uranium water analyses from different source types are very difficult because uranium concentrations in water depend on several factors, including hydrology, geochemistry, and geology of the study area (Germanov et al, 1958; Dyck, 1975; Aamodt, 1977). Consequently, the results of the water analyses are discussed in general terms and it is recognized that waters from different source types are not directly comparable. By the stated criterion, there are 26 individual anomalous water samples. Of these, 23 are ground waters (18 wells and 5 springs) and 3 are surface waters (Table III).

Accurate interpretation of the anomalous ground waters is difficult without precise information on well depth. Wells in the different structural regions can be classified in a very general way. Those in the Black Hills uplift are usually shallow and tap aquifers in the Pleistocene alluvium along the stream channels. Those in the Powder River basin are either shallow, in the Pleistocene alluvium, or deeper in aquifers in the Fox Hills sandstone and the Hell Creek and Fort Union formations. These aquifers become increasingly deeper toward the center of the basin, with some wells near there being over 300-m deep. It is probably true, however, that in any small part of the study area most of the wells will produce from roughly the same depth. The wells in the Williston basin are of intermediate depth because of the gentle dip of the formations on the east flank of the Black Hills uplift. Shallow wells also tap the Pleistocene alluvium in this area.

The anomalous ground waters found in the Black Hills uplift occur in one cluster, centered roughly around 45° 10' N, 104° 45' W, and are represented by two wells and a surface stream. In addition, one individual well sample with a uranium concentration of 228 ppb was found just east of the Black Hills uplift.

The anomalous waters from the portion of the study area in the Powder River basin form three clusters. Those in the vicinity of Bay Horse and Moorhead form an oval cluster of four wells. Two other clusters are composed

TABLE III
ANOMALOUS URANIUM CONCENTRATIONS IN WATER SAMPLES

<u>LASL Location No.^a</u>	<u>Water Type</u>	<u>Total Uranium (nearest ppb)</u>	<u>Surface Geology^b</u>	<u>Drainage System^c</u>
42008	Well	46	Ft. Union Fm.	Tributary of Powder River
42012	a.a.	53	a.a.	Tributary of Mizpah Creek
42235	a.a.	40	a.a.	Tributary of Pumpkin Creek
42236	a.a.	47	a.a.	a.a.
42239	a.a.	46	a.a.	a.a.
42286	a.a.	42	a.a.	Tributary of Powder River
42292	a.a.	44	a.a.	a.a.
42304	a.a.	74	a.a.	Tributary of Powder River
42305	a.a.	69	a.a.	a.a.
42401	a.a.	52	a.a.	a.a.
42535	Spring	42	Ft. Union Fm.	Tributary of Pumpkin Creek
42537	a.a.	40	a.a.	a.a.
42705	Well	42	Fox Hills Sandstone	Tributary of Powder River
42739	Spring	82	White River Group	Tributary of Little Missouri River
42752	Stream	35	Fox Hills Sandstone	Tributary of Powder River
42773	Spring	46	Hell Creek Ft. Union Fm.	Tributary of Boxelder Creek
42774	Well	37	Hell Creek Fm.	a.a.
42799	a.a.	46	Ft. Union Fm.	Tributary of Little Missouri River
42817	Spring	36	a.a. (White R. Group)	a.a.
42822	Well	92	Ft. Union Fm.	a.a.
42873	Stream	228	Pierre Shale	Tributary of Little Missouri River
42916	Well	38	Alluvium	Tributary of Boxelder Creek
43026	a.a.	40	Niobrara Fm.	Tributary of Willow Creek
43077	a.a.	80	Pierre Shale	Boxelder Creek
43174	Stream	54	Niobrara Fm.	Tributary of Thompson Creek
43183	Well	52	Pierre Shale	Tributary of Willow Creek

a.a. = as above.

^aThe coordinates and field data for each sample location are listed in Appendix B.

^bDescribed from Plate I.

^cGeographic names are taken from the Ekalaka NTMS quadrangle, Montana.

of three wells each, one located just northeast of Broadus and the other just northwest of Broadus near Camps Pass. Individual samples consisting of two springs with anomalous uranium concentrations were found in southern Custer County.

In general, ground waters normally are more uraniferous than surface waters (Sharp and Aamodt, 1976). However, water samples from wells in this study area have much lower uranium concentrations than water samples from springs or surface streams (Table II). The reason for this is unknown, but possibly the spring and surface waters are being influenced by uranium-rich lignite deposits (Denson & Gill, 1956; 1965).

Samples collected from the Williston basin generally have low uranium levels compared to those of the other areas. Even so, several obvious anomalies occur, particularly in the Long Pine Hills area (Fig. 1) and up to about 10 km due west of there, where high uranium concentrations occur in both wells and springs. These anomalous values evidence the presence of several known uranium occurrences. One individual well sample with an anomalous uranium concentration was found along the course of Boxelder Creek where it crosses a region in which the Pierre shale crops out. West of Boxelder Creek, one well and one stream sample with anomalous uranium concentrations were found.

The sample locations providing anomalous waters that appear to reflect the known uranium occurrences listed in Table I are: No. 42292, near occurrence 2, and Nos. 42739, 42773, 42774, 42799, 42817, 42822, and 42916, which are clustered around the Long Pine Hills area (occurrences 7 through 20). The occurrences in the Ekalaka Hills do not show up dramatically in the waters sampled, but this may be due to the low sampling density in that area and because most samples from there were collected up gradient from the known deposits.

Uranium Concentrations in Sediment

A summary of the uranium data for sediments, all of which were analyzed by DNC (Appendix C), is presented in Table IV. The uranium concentrations of

TABLE IV
SUMMARY OF URANIUM DATA FOR SEDIMENT SAMPLES

<u>Sample Type</u>	<u>Number of Samples</u>	<u>Range (ppm)</u>	<u>Mean (ppm)</u>	<u>Standard Deviation (ppm)</u>
All Sediments	851	1.70 - 16.60	3.36	1.24
Dry Artificial Ponds	62	1.90 - 11.20	3.11	1.17
Wet Artificial Ponds	74	2.30 - 5.10	3.11	0.57
Dry Natural Ponds	4	2.30 - 3.40	2.98	0.50
Wet Natural Ponds	15	2.20 - 4.00	3.17	0.56
Dry Streams	553	1.70 - 15.10	3.44	1.26
Wet Streams	58	2.40 - 8.40	3.60	1.13
Dry Springs	9	2.00 - 4.20	2.80	0.60
Wet Springs	76	1.90 - 16.60	3.20	1.71

the individual samples are graphically plotted on Plate IV. A frequency histogram for the sediments, showing the distribution of their uranium concentrations, is plotted in Fig. 7B. The samples listed in Appendix C as "other" types (i.e., sample type 99) are all dry spring sediments treated like all the other sediments as set forth in Appendix A. Individual samples with uranium concentrations two standard deviations or more above the mean are considered anomalous. Consequently, about 4% of the total sediment samples have uranium concentrations above the anomaly threshold of 6 ppm. The following discussion is based on this arbitrary criterion. Of the 33 so defined anomalous sediments, 26 are from dry streams, 4 are from wet streams, 2 are from wet springs, and 1 is from a dry artificial pond (Table V).

Although background levels in the Black Hills uplift appear high relative to those in other areas, several anomalous groupings are found there. The most striking is along the course of Thompson Creek, where the anomalies parallel the Belle Fourche shale. The area west and northwest of Willow Creek and its tributaries is delineated by high values, with at least one occurring in every major rock unit that these streams cross. Going downstream, these units are: the Pierre shale, the Niobrara formation, the Carlile shale, and the Pleistocene alluvium. Farther north, several smaller anomalies occur in the Pierre Shale or adjacent alluvium.

Samples in the Powder River basin are almost lacking in anomalous values, with the exception of the small cluster which occurs along Bay Horse Creek, in the southwest corner of the study area. Bay Horse Creek drains an area where only the Fort Union formation crops out. The remaining, scattered, anomalous values consist of individual stream sediment samples in the Fort Union formation (42399), in stream gravels (42850), in the Hell Creek formation (43225), and in the Pierre shale (42720).

The largest cluster of anomalous sediment values occurs in the Long Pine Hills in the Williston basin. These hills contain the Hell Creek, Fort Union, and ?Arikaree formations and members of the White River group. Most known uranium occurrences in the Long Pine Hills were easily identifiable by the proximity of sediment samples with anomalous uranium concentrations. Several scattered stream sediment samples with anomalous uranium concentrations form a broad halo centered around the Long Pine Hills district.

V. SUMMARY AND CONCLUSIONS

A total of 710 water and 851 sediment samples were collected from 1347 locations over a 17 000 km² area during this HSSR. The study area covers the Ekalaka NTMS quadrangle, Montana (1:250 000 scale). All water samples were analyzed by fluorometry and those with >10 ppb uranium were reanalyzed by DNC. All sediment samples were analyzed by DNC.

The study was able to delineate drainages in which either the water and/or sediment samples contain uranium concentrations notably higher than the surrounding background concentrations. There were 26 waters (18 wells, 5 springs, and 3 surface waters) and 33 sediments (26 dry streams, 4 wet streams, 2 wet springs, and 1 dry artificial pond) with anomalous uranium concentrations (i.e., nominally twice the standard deviation above the respective mean). By this criterion, about 4% of the combined water and sediment samples were anomalous.

Areas with anomalous uranium concentrations generally appear best delineated by a combination of water and sediment samples. Samples from the

TABLE V
ANOMALOUS URANIUM CONCENTRATIONS IN SEDIMENT SAMPLES

<u>LASL Location No.^a</u>	<u>Sediment Type</u>	<u>Total Uranium (ppm)</u>	<u>Geology^b</u>	<u>Drainage System^c</u>
42291	Wet Stream	7.1	Ft. Union Fm.	Tributary of Powder River
42298	Dry Stream	7.2	a.a.	Tributary of Little Powder River
42399	Wet Spring	6.4	a.a.	Powder River drainage
42653	Dry Stream	6.4	a.a.	Tributary of Boxelder Creek
42654	a.a.	9.3	Hell Creek Fm.	Tributary of Powder River
42720	a.a.	7.3	Pierre Shale	a.a.
42733	Wet Stream	8.4	Ft. Union Fm.	Boxelder Creek
42735	Dry Stream	7.6	a.a.	a.a.
42739	Wet Spring	16.6	White River Group ?Arikaree Fm.	Tributary of Little Missouri River
42755	Dry Stream	6.9	Hell Creek Fm.	a.a.
42777	a.a.	6.5	a.a.	Boxelder Creek
42828	a.a.	6.1	Ft. Union Fm.	Tributary of Little Missouri River
42829	a.a.	9.2	a.a.	a.a.
42830	a.a.	11.0	a.a.	a.a.
42850	a.a.	6.1	a.a.	Mizpah Creek
42882	a.a.	6.7	Niobrara Fm.	Little Missouri drainage basin
43011	a.a.	15.1	Hell Creek Fm.	Tributary of Boxelder Creek
43027	a.a.	7.4	Niobrara Fm.	Tributary of Willow Creek
43067	a.a.	6.9	Pierre Shale	Tributary of Little Missouri River
43073	a.a.	7.3	Alluvium	Little Missouri River
43163	a.a.	7.9	Pierre Shale	Tributary of Boxelder Creek
43197	a.a.	9.3	Fox Hills Sandstone	Tributary of Willow Creek
43207	Wet Stream	6.1	Niobrara Fm.	a.a.
43210	Wet Stream	6.7	Carlile Shale	a.a.
43225	Dry Stream	7.5	Hell Creek Fm.	Tributary of Powder River
43232	a.a.	6.6	Alluvium	Little Missouri River
43260	a.a.	8.9	a.a.	Tributary of Willow Creek
43261	a.a.	7.4	a.a. (Belle Fourche Shale)	a.a.
43262	a.a.	7.1	a.a.	a.a.
43263	a.a.	7.0	a.a.	Tributary of Thompson Creek
43264	a.a.	6.4	a.a.	a.a.
43265	a.a.	7.2	a.a.	a.a.
43282	Dry Pond	11.2	Ft. Union Fm.	Tributary of Powder River

a.a. = as above.

^aThe coordinates and field data for each sample location are listed in Appendix C.

^bDescribed from Plate I.

^cGeographic names are taken from the Ekalaka NTMS quadrangle, Montana.

study clearly indicate most known uranium occurrences (Table I). Further, several areas are identified as appearing of interest for further exploration. They are: (a) in the Belle Fourche shale formation and alluvium along Thompson Creek near the Black Hills uplift; (b) near Bay Horse/Moorhead in the Powder River basin; and (c) the Long Pine Hills area in the Williston basin, an area that has been prospected before. A broad oval of anomalous sediment and water samples (up to 40 km in radius) is found around the Ekalaka Hills and Long Pine Hills, areas of known uranium occurrences.

The known radioactive mineralization in the study area is quite localized and low grade. The anomalous water samples indicate the presence of soluble uranium-bearing minerals. The principal host rocks for known uranium deposits in the area occur in permeable arkosic sandstones (Fort Union or associated formations) or are associated with lignite deposits.

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APPENDIX A

SUMMARY OF STANDARD

LASL HSSR

FIELD AND ANALYTICAL PROCEDURES

APPENDIX A

SUMMARY OF STANDARD LASL HSSR FIELD AND ANALYTICAL PROCEDURES

I. FIELD PROCEDURES

Water Sampling

Water samples are taken directly from the source wherever possible, filtered through a 0.45- μ membrane filter into one each, prewashed and sealed, 41-ml reactor "rabbit" and 25-ml vial (both polyethylene), and both are then acidified to a pH of ≤ 1 with 8N, reagent-grade, HNO_3 . All sample containers are doubly labeled with preprinted, adhesive labels³ carrying the same sample location number preprinted on the field data form. Springs are sampled as near to their point of emergence as possible; stream waters are taken from fast-flowing current away from the bank; ponds (including small lakes and reservoirs) are sampled from just below the surface, away from the bank; and well waters are taken near the wellhead if the well is pumping or from a holding tank if not.

Sediment Sampling (Wet or Dry)

Enough fine-grained, organic-rich, water-transported sediment to yield a composite sample of 25 g after processing (as indicated below) is taken from beneath the water level (where water exists) at three closely adjacent spots at each location. This is done with a polyethylene scoop, after the water sample (if any) is taken. The sediment is put into a new, clean, and originally sealed, rip-top polyethylene bag and properly double-labeled for delivery (with the field data form) to the contractor's drying facility. After drying at $\leq 100^\circ\text{C}$, each sample is sieved through stainless steel sieves to -100 mesh. The -100 mesh fraction is put into a prewashed, 25-ml polyethylene vial, appropriately double-labeled (using labels from the data form), and sealed for shipment to the LASL.

Field Measurements

The air temperature, taken in the shade at the time of sampling, is recorded to the nearest whole degree Celsius. The water temperature is measured in the source water and recorded to the nearest one-tenth degree Celsius. All temperature measurements are made with quality, precalibrated thermometers. The pH of the source water is measured with a calibrated, portable pH meter or multi-range pH paper, and recorded to the nearest one-tenth of a pH unit. The specific conductance ($\mu\text{mho/cm}$) of the source water is measured with a calibrated, temperature compensated (25°C) portable meter after the attached sample cup has first been rinsed three times in the source water. The scintillometer readings, taken on a flat, dry spot within a few meters of the sample location, are measured with a portable scintillometer. Two readings are recorded, the first with a radiation shield in place (blocking out ground radiation), and the second with the shield removed. The readings (in counts/s) are converted by computer to give the equivalent uranium (eU) value set forth in the data listing.

Field Observations

These represent the best subjective judgment of the field sampler on location, and include very general descriptions of the local bedrock, sediment, water, vegetation, terrain, weather, possible contaminants, and water well configuration, if applicable.

Sample Location Verification

Each contractor is supplied field maps with the desired sample types and locations symbolically premarked at the LASL. The maps are normally USGS Quadrangles (either 7.5' or 15'), but where not available, Forest Service, State Highway, or other reasonably detailed maps are provided. As each location is sampled, a unique sample location number, preprinted on transparent adhesive labels provided with the identically numbered field data forms, is pasted over the precisely marked site on the field map. The latitude and longitude of each location is computed by the sampling contractor. Every location is later checked (and corrected if necessary) at the LASL by overlaying computer-produced location plots on the field maps used. The latitudes and/or longitudes are corrected if the overlay locations are displaced by more than 300 m from the locations marked on the field maps. When a desired location cannot be sampled as specified, an alternate sample type or location as near as possible to the original one is picked, and the new sample type and/or location is/are marked on the field map and properly labeled as above.

II. ANALYTICAL PROCEDURES

Water Samples Analyzed for Uranium by Fluorometry

In a controlled laboratory environment, a NaF (98%)-LiF (2%) flux pellet is prepared and placed on a platinum dish. The 25-ml water vial is vigorously shaken and a 0.20-ml aliquot of water is withdrawn and dropped onto a flux pellet, then evaporated under a heat lamp. The sample flux is then heated until fused. After it cools, it is excited with ultra-violet radiation in the fluorometer, and the measured fluorescence is read, recorded, and put through a computer routine using standards and blanks run at the same time to obtain the uranium concentration.

Water Samples Analyzed for Uranium by Delayed-Neutron Counting

Only waters with >10 ppb uranium are assayed using DNC. Samples taken in the 41-ml rabbits are thoroughly cleaned (exterior) before analysis. Samples received in 25-ml vials (used exclusively in some of the early work) are transferred to clean, labeled, 41-ml rabbits before being analyzed. Each water sample is weighed, and its weight (less that of the rabbit) and location number are recorded. The rabbits are then loaded into a 25-sample transfer clip. The reactor pneumatic transfer system and background radiation levels are checked, and the system is calibrated using four standards. The transfer clip is installed on the pneumatic feed line, and the count control is set (typically, a 60-s irradiation, a 30-s delay, and a 60-s count are used, but this can be changed to accommodate abnormally high or low uranium concentrations). The samples are cycled through the system and the uranium concentration is automatically measured, computed in ppb, and entered into the

data base. Statistical treatments of uranium concentrations obtained on the same suites of samples both by fluorometry and DNC have shown that there is no significant difference between results of the two analytical methods as used at the LASL. This analytical comparability is rechecked periodically.

Uranium Analysis of Sediment Samples

All sediment samples are analyzed for total uranium by DNC. A split of each sample (dried and sieved as described) is transferred to a clean 4-ml rabbit, weighed (less the tare), and recorded along with the appropriate location number. The readied rabbits are loaded into a 50-sample transfer clip. The reactor pneumatic transfer system and background radiation levels are checked, and the system is calibrated as above. The transfer clip is installed and the count control is set (typically, a 20-s irradiation, a 10-s delay, and a 20-s count are used). The samples are cycled through the system and the uranium concentration is automatically measured, computed in ppm, and entered into the data base.

APPENDIX B

LISTINGS OF FIELD AND URANIUM DATA
FOR
WATER SAMPLES
FROM THE
EKALAKA NTMS QUADRANGLE, MONTANA

APPENDIX B. Field Data and Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																			U CONCENTRATION									
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (40 ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (H)	UNITS IN ppb
							DATE	HOUR																										
30-45	0033-105	3748-2-08	0-M42001-04/28/76	8-13	1000	6-1-6	3-3-1	4-3-2-4	1-9	0.47																								
30-45	0356-105	3839-2-08	0-M42002-04/28/76-10	8-11	1000	10-1-6	3-3-1	4-3-2-4	1-9	0.48																								
30-45	1328-105	3351-2-08	0-M42006-04/28/76-11	10-12	900	3-1-6	2-3-1	4-3-3-4	1-1	0.10																								
30-45	1550-105	3461-2-08	0-M42007-04/28/76-11	15-13	900	13-1-6	2-3-1	4-3-3-4	1-1	0.19																								
30-45	4958-105	3942-2-08	0-M42008-05/05/76-9	8-10	3000	9-1-7	3-3-1	4-2-2-3	1-1	46.20*																								
30-45	5094-105	4019-2-08	0-M42009-05/05/76-10	10-10	2900	9-1-7	3-3-1	4-2-2-3	1-1	2.33																								
30-45	5239-105	4331-2-08	0-M42010-05/05/76-10	10-11	600	9-1-7	2-3-1	4-2-2-3	1-1	0.10																								
30-45	5467-105	4167-2-08	0-M42012-05/05/76-10	11-11	700	15-1-7	2-2-1	4-2-2-3	1-1	53.00*																								
30-45	5628-105	4314-2-08	0-M42013-05/05/76-11	11-11	2100	9-1-7	1-2-1	4-2-2-3	1-1	1.93																								
30-45	5844-105	4433-2-06	0-M42014-05/05/76-11	13-10	850	9-1-7-5	2-2-1	4-2-2-3	1-1	4.79																								
30-45	5583-105	4633-2-08	0-M42016-05/05/76-12	13-12	1450	9-1-7	2-2-1	4-2-2-3	1-1	0.72																								
30-45	5547-105	3839-2-10	0-M42017-05/05/76-12	11-11	1200	6-1-7-5	2-2-2	4-2-3-3	1-1	5.92																								
30-45	5825-105	3922-2-08	0-M42018-05/05/76-12	14-10	1100	9-1-7	2-3-1	4-2-2-3	1-1	5.13																								
30-45	6206-105	4025-2-08	0-M42019-05/05/76-12	11-10	400	7-1-7	2-2-1	4-2-1-3	1-1	4.51																								
30-45	5956-105	4928-2-08	0-M42022-05/05/76-13	11-10	1500	6-1-7	2-3-1	4-2-1-3	1-1	0.91																								
30-45	5742-105	4839-2-08	0-M42023-05/05/76-14	11-12	1200	10-1-7	2-2-1	4-2-2-3	1-1	0.51																								
30-45	5639-105	5283-2-08	0-M42024-05/05/76-14	11-14	1800	10-1-7	2-2-1	4-2-2-3	1-1	1.20																								
30-45	5086-105	5311-2-08	0-M42025-05/05/76-14	13-11	1100	12-1-7	2-2-1	4-2-3-2	1-1	0.52																								
30-45	5178-105	5117-2-08	0-M42026-05/05/76-13	17-13	500	12-1-7	2-2-1	4-2-1-2	1-1	6.45																								
30-45	5244-105	5500-2-08	0-M42027-05/05/76-16	16	1400	9-1-7	2-2-1	4-2-3-2	1-1	2.38																								
30-45	5106-105	5706-2-08	0-M42028-05/05/76-16	13-10	3500	9-1-7	2-2-1	4-2-2-2	1-1	3.52																								
30-45	5150-105	6047-2-08	0-M42029-05/05/76-16	13-11	1350	9-1-7	2-2-1	4-2-1-2	1-1	0.38																								
30-45	5322-105	4712-2-08	0-M42030-05/06/76-16	13-16	750	3-1-7	2-3-1	4-2-3-2	1-1	6.58																								
30-45	5103-105	4889-2-08	0-M42031-05/06/76-9	18-15	2300	6-1-6	3-3-1	4-3-3-2	1-1	1.28																								
30-45	5478-105	5742-2-08	0-M42032-05/06/76-10	12-13	2550	6-1-6	2-3-1	4-3-2-2	1-1	1.26																								
30-45	5511-105	6059-2-08	0-M42033-05/06/76-10	14-12	1400	12-1-6	2-3-1	4-3-2-1	1-1	2.26																								
30-45	5800-105	5311-2-08	0-M42034-05/06/76-11	14-13	1300	6-1-6	3-3-1	4-3-3-2	1-1	0.39																								
30-45	6100-105	5683-2-08	0-M42036-05/06/76-12	18-12	2100	12-1-6	3-3-1	4-3-2-2	1-1	2.54																								
30-45	6378-105	5609-2-10	0-M42037-05/06/76-12	18-15	2650	6-1-6-5	0-1-3-1	4-3-3-2	1-1	11.50*																								
30-45	6303-105	5917-2-08	0-M42038-05/06/76-13	18-14	1900	9-1-6	3-3-1	4-3-2-2	1-1	1.12																								
30-45	6319-105	5178-2-08	0-M42039-05/06/76-13	20-14	1000	9-1-6	3-3-1	4-3-2-2	1-1	0.28																								
30-45	6083-105	5411-2-08	0-M42041-05/06/76-13	19-16	1000	9-1-6	2-3-1	4-3-2-2	1-1	13.50*																								
30-45	6636-105	4918-2-08	0-M42042-05/06/76-14	16-16	800	12-1-6	3-3-1	4-3-2-2	1-1	5.47																								
30-45	6864-105	5950-2-08	0-M42044-05/06/76-15	20-16	1600	6-1-6	3-3-1	4-3-3-2	1-1	20.00*																								
30-45	6939-105	6247-2-08	0-M42045-05/06/76-15	20-11	1800	9-1-6	3-3-1	4-3-2-2	1-1	2.04																								
30-45	6911-105	6106-2-10	0-M42046-05/06/76-15	18-16	1000	9-1-7-5	6-1-3-4	1-4-4-2	1-1	20.90*																								
30-45	7011-105	5301-2-08	0-M42047-05/06/76-15	19-15	850	9-1-7	3-3-1	4-3-2-2	1-1	17.20*																								
30-45	7328-105	4786-2-08	0-M42048-06/03/76-12	30-21	2000	18-1-7	2-2-2	4-3-2-2	1-1	3.88																								
30-45	7139-105	4301-2-10	0-M42050-06/03/76-13	30-25	3500	10-1-7-5	7-2-3-2	4-3-2-2	1-1	14.90*																								
30-45	7061-105	4308-2-08	0-M42051-06/03/76-13	30-20	3400	10-1-7	3-3-1	4-3-2-3	1-1	7.70*																								
30-45	6767-105	4667-2-08	0-M42054-06/03/76-14	31-21	1900	4-1-7	2-3-2	4-3-2-2	1-1	6.99																								
30-45	6861-105	4883-2-08	0-M42055-06/03/76-14	31-23	1650	9-1-7	3-3-2	4-3-2-2	1-1	0.39																								
30-45	7000-105	4789-2-08	0-M42056-06/03/76-15	31-13	1500	9-1-7	3-3-1	4-3-2-2	1-1	0.39																								
30-45	6339-105	4767-2-08	0-M42057-06/03/76-15	31-13	1300	9-1-7	3-3-1	4-3-2-2	1-1	0.65																								
30-45	6489-105	4483-2-08	0-M42058-06/03/76-15	30-19	3500	9-1-7	2-2-1	4-2-2-1	1-1	9.53																								
30-45	5444-105	2833-2-08	0-M42060-06/03/76-17	27-19	1350	12-4-6	2-2-1	4-2-2-1	1-1	0.10																								
30-45	5714-105	2524-2-08	0-M42061-06/03/76-17	27-18	900	12-4-6	2-2-1	4-3-2-2	1-1	0.10																								
30-45	5294-105	2507-2-08	0-M42062-06/03/76-17	29-18	1400	8-4-6	2-2-1	4-3-3-2	1-1	0.41																								
30-45	5058-105	3342-2-08	0-M42064-06/04/76-10	25-18	700	9-1-7	2-2-1	4-3-2-2	1-1	0.10																								
30-45	5100-105	3612-2-08	0-M42065-06/04/76-10	25-22	1300	12-1-7	2-2-1	4-3-2-2	1-1	1.35																								
30-45	5283-105	3507-2-08	0-M42067-06/04/76-10	25-15	900	9-1-7	2-3-1	4-3-2-2	1-1	0.56																								

APPENDIX B (continued). Field Data and Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																						U CONCENTRATION							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (N)	UNITS IN ppb
							DATE	HOUR																											
30-45	5228-105	3106-2-08	0-M42068-06/04/76-11	26-20.0	-	7.2	2000	12-1-7	-	-2-2-2	-4-3-2-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.81		
30-45	5047-105	2847-2-08	0-M42070-06/04/76-12	27-14.0	-	6.9	700	7-1-7	-	-2-2-1	-4-3-2-2	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21		
30-45	6317-105	3203-2-08	0-M42071-06/04/76-12	27-18.0	-	8.2	3900	6-1-7	-	-2-2-2	-4-2-2-2	-9-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.32		
30-45	6111-105	2642-2-08	0-M42073-06/04/76-13	28-20.0	-	7.2	700	7-1-7	-	-3-3-1	-4-3-2-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	6211-105	2964-2-08	0-M42074-06/04/76-14	28-15.0	-	6.9	1500	18-1-7	-	-3-3-1	-4-3-3-1	-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.78		
30-45	6256-105	2790-2-08	0-M42076-06/04/76-14	28-21.0	-	6.9	750	7-1-7	-	-2-2-1	-4-3-2-2	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.56		
30-45	7194-105	2644-2-10	0-M42078-06/04/76-15	28-21.0	-	6.8	1200	9-1-7-5	-	-2-2-3	-4-2-2-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.55		
30-45	7283-105	2630-2-10	0-M42079-06/04/76-15	28-21.0	-	6.8	1000	7-1-7-5	-	-2-2-3	-4-2-2-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.80*		
30-45	6492-105	3039-2-10	0-M42080-06/04/76-16	26-24.0	-	6.8	190	9-1-7-5	-	-2-3-2	-4-3-2-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20		
30-45	6322-105	3848-2-08	0-M42081-06/04/76-16	26-18.0	-	6.6	1000	6-1-7	-	-3-3-1	-4-3-2-1	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.08		
30-45	6528-105	3567-2-08	0-M42082-06/04/76-16	26-17.0	-	6.6	700	12-1-7	-	-3-3-1	-4-3-2-1	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.20*		
30-45	6628-105	3806-2-08	0-M42083-06/04/76-15	26-13.0	-	6.6	2150	11-1-7	-	-2-2-1	-4-2-2-2	-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.00*		
30-45	6708-105	3244-2-08	0-M42084-06/04/76-17	26-12.0	-	6.6	1600	10-1-7	-	-2-3-1	-4-3-2-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.17		
30-45	7350-105	3319-2-08	0-M42086-06/04/76-17	26-21.0	-	8.0	1700	9-1-7	-	-2-3-1	-4-2-2-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27		
30-45	7222-105	3503-2-06	0-M42087-06/04/76-17	26-14.0	-	6.6	1500	7-1-7	-	-2-3-1	-4-3-2-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24		
30-45	6550-105	6400-2-08	0-M42088-06/05/76-11	24-17.0	-	6.6	550	7-1-7	-	-3-3-1	-4-3-2-1	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.83		
30-45	6692-105	6233-2-08	0-M42089-05/06/76-11	25-20.0	-	6.8	2000	7-1-7	-	-	-4-3-2-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.73		
30-45	6594-105	6811-2-08	0-M42090-06/05/76-12	27-12.0	-	6.6	1300	6-1-7	-	-2-2-1	-4-3-3-1	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.31		
30-45	6744-105	7011-2-08	0-M42091-06/05/76-12	25-24.0	-	8.6	850	4-1-7	-	-1-2-1	-4-2-3-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52		
30-45	6911-105	6922-2-08	0-M42092-06/05/76-13	28-18.0	-	6.9	1100	13-1-7	-	-2-2-2	-4-3-3-1	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	6886-105	6658-2-10	0-M42093-06/05/76-13	28-23.0	-	6.6	700	10-1-7-5	-	-2-2-2	-4-3-3-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.67		
30-45	7099-105	7306-2-08	0-M42094-06/05/76-14	29-19.0	-	7.2	3500	7-1-7	-	-2-2-1	-4-3-2-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.80*		
30-45	6844-105	6212-2-08	0-M42095-06/05/76-14	30-21.0	-	7.8	1000	9-1-7	-	-2-2-2	-4-3-3-1	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.84		
30-45	6967-105	6417-2-08	0-M42096-06/05/76-13	28-21.0	-	6.9	2100	13-1-7	-	-2-2-1	-4-3-3-1	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.90*		
30-45	7128-105	6739-2-08	0-M42097-06/05/76-14	30-21.0	-	6.9	3300	12-1-7	-	-2-3-1	-4-3-3-1	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.88		
30-45	7344-105	7111-2-08	0-M42098-06/05/76-14	30-14.0	-	6.9	1400	12-1-7	-	-3-3-1	-4-2-2-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.34		
30-45	7456-105	7436-2-08	0-M42099-06/05/76-15	27-21.0	-	8.1	1600	10-1-7	-	-2-2-1	-4-2-3-1	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.69		
30-45	4733-105	4206-2-08	0-M42100-06/03/76-11	23-20.0	-	6.8	2400	9-7-6	-	-1-3-1	-4-3-2-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.90*		
30-45	4631-105	4739-2-08	0-M42101-06/03/76-12	23-16.0	-	6.8	2300	6-7-6	-	-1-3-1	-4-3-2-2	-1-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.38		
30-45	4528-105	4656-2-08	0-M42102-06/03/76-13	24-18.0	-	7.0	2600	6-1-7	-	-1-3-1	-4-3-2-2	-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.24		
30-45	4011-105	4628-2-08	0-M42103-06/03/76-14	24-21.0	-	7.0	1000	9-1-7	-	-1-3-1	-4-3-2-1	-1-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	4117-105	4506-2-08	0-M42104-06/03/76-14	25-16.0	-	7.0	1000	6-1-7	-	-3-3-1	-4-3-2-2	-1-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	4083-105	4750-2-08	0-M42105-06/03/76-15	25-26.0	-	-	3400	9-1-7	-	-1-3-1	-4-3-3-1	-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.40*		
30-45	3928-105	4744-2-08	0-M42106-06/03/76-15	25-16.0	-	7.0	1000	12-1-7	-	-3-3-1	-4-3-2-1	-1-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	4328-105	3894-2-08	0-M42107-06/04/76-10	17-14.0	-	6.8	950	6-1-7	-	-3-3-1	-4-3-2-1	-1-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21		
30-45	4200-105	4083-2-08	0-M42108-06/04/76-11	17-17.0	-	6.8	1100	6-1-7	-	-3-3-1	-4-3-2-1	-1-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	3894-105	4374-2-08	0-M42109-06/04/76-11	17-15.0	-	6.5	2800	12-1-7	-	-2-2-1	-4-3-2-1	-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.32		
30-45	3739-105	4461-2-08	0-M42110-06/04/76-11	17-15.0	-	6.8	1100	6-1-7	-	-2-2-1	-4-3-2-1	-1-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	3500-105	4728-2-08	0-M42111-06/04/76-12	17-15.0	-	6.5	1050	12-1-7	-	-3-3-1	-4-3-2-1	-1-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	3483-105	4344-2-08	0-M42112-06/04/76-11	19-16.0	-	6.5	2000	12-1-7	-	-3-3-1	-4-3-2-1	-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.86		
30-45	3122-105	3797-2-08	0-M42114-06/04/76-11	18-21.0	-	6.8	1300	9-1-7	-	-3-3-1	-4-3-2-2	-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	2925-105	3818-2-08	0-M42115-06/04/76-12	18-15.0	-	6.8	1000	9-1-7	-	-3-3-1	-4-3-2-2	-1-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21		
30-45	2733-105	4019-2-08	0-M42116-06/04/76-12	19-13.0	-	6.5	1400	9-1-7	-	-3-3-1	-4-3-2-2	-1-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.71		
30-45	3100-105	4411-2-08	0-M42118-06/04/76-14	22-25.0	-	6.5	2700	6-1-7	-	-2-3-1	-4-3-2-2	-1-1	-	-																					

APPENDIX B (continued). Field Data and Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																			U CONCENTRATION									
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE ($\mu\text{mho/cm}$)	SCINTILLOMETER ($\mu\text{Ci ppm}$)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (N) UNITS IN ppb
							DATE	HOUR																										
30-45	1572-105	5789-2-08-	0-M42129-06/05/76-10-	20-18.5	-C-	8.1	2500-	12-1-7-	-	1-2-1-	-4-3-2-1-	-1-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.93	
30-45	1356-105	5231-2-08-	0-M42131-06/05/76-11-	23-19.5	-C-	6.9	8000-	8-1-7-	-	3-3-1-	-4-3-2-2-	-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	2839-105	5406-2-08-	0-M42132-06/05/76-12-	22-19.5	-C-	6.8	2300-	6-1-7-	-	2-2-3-	-4-3-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.78	
30-45	2433-105	5328-2-08-	0-M42133-06/05/76-12-	22-14.5	-C-	6.6	2100-	9-1-7-	-	2-2-2-	-4-2-2-2-	-9-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.48	
30-45	2564-105	5430-2-08-	0-M42134-06/05/76-12-	20-22.5	-C-	7.2	3300-	16-1-7-	-	2-2-1-	-4-3-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.84	
30-45	2678-105	5178-2-08-	0-M42135-06/05/76-12-	20-16.5	-C-	6.8	2400-	9-1-7-	-	3-2-1-	-4-3-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.24	
30-45	2417-105	5139-2-08-	0-M42136-06/05/76-13-	22-18.5	-C-	6.9	4300-	12-1-7-	-	2-2-2-	-4-3-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15*	
30-45	2289-105	4961-2-08-	0-M42137-06/05/76-13-	22-30.5	-C-	7.8	1300-	8-1-7-	-	1-2-3-	-4-2-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.46	
30-45	2200-105	4628-2-08-	0-M42138-06/05/76-14-	28-20.5	-C-	7.2	1900-	11-1-7-	-	3-3-1-	-4-2-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.35	
30-45	1983-105	4636-2-08-	0-M42139-06/05/76-14-	27-25.5	-C-	6.9	500-	9-1-7-	-	3-2-2-	-4-3-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.14	
30-45	1828-105	4408-2-08-	0-M42140-06/05/76-14-	27-22.5	-C-	7.2	2200-	9-1-7-	-	4-4-1-	-4-3-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.57	
30-45	3261-105	4828-2-08-	0-M42142-06/05/76-15-	21-15.5	-C-	6.8	1000-	6-1-7-	-	3-3-1-	-4-3-2-2-	-1-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	2911-105	4626-2-08-	0-M42143-06/05/76-15-	24-20.5	-C-	6.8	1800-	12-1-7-	-	1-3-2-	-4-3-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.70*	
30-45	2908-105	4961-2-08-	0-M42144-06/05/76-16-	24-16.5	-C-	6.7	1600-	8-1-7-	-	3-3-1-	-4-3-2-2-	-1-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	3611-105	5378-2-08-	0-M42145-06/04/76-10-	26-14.5	-C-	6.9	850-	14-1-7-	-	2-2-2-	-4-3-2-1-	-9-1-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.54	
30-45	3456-105	5383-2-08-	0-M42146-06/04/76-10-	28-14.5	-C-	7.4	2900-	12-1-7-	-	2-3-1-	-4-3-2-1-	-1-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.50*	
30-45	3392-105	5349-2-08-	0-M42147-06/04/76-11-	29-16.5	-C-	7.2	850-	4-1-7-	-	2-3-1-	-4-3-2-1-	-1-1-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.80*	
30-45	4519-105	5328-2-08-	0-M42149-06/03/76-12-	27-14.5	-C-	6.8	900-	12-1-7-	-	-	-1-	-4-3-2-2-	-1-5-	2-380-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	4714-105	5183-2-08-	0-M42151-06/03/76-13-	28-16.5	-C-	7.0	750-	9-1-7-	-	2-2-1-	-4-3-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	4872-105	5206-2-08-	0-M42152-06/03/76-13-	28-18.5	-C-	7.2	850-	6-1-7-	-	2-2-1-	-4-3-2-2-	-1-1-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20	
30-45	4678-105	5267-2-08-	0-M42153-06/03/76-14-	28-15.5	-C-	7.5	3300-	16-1-7-	-	2-2-1-	-4-3-2-1-	-1-1-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.34	
30-45	4839-105	5256-2-10-	0-M42154-06/03/76-14-	28-20.5	-C-	7.4	3750-	8-1-7-	-	4-6-1-3-5-	-4-3-2-2-	-1-1-	4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.58	
30-45	4019-105	5327-2-08-	0-M42155-06/03/76-14-	28-18.5	-C-	7.5	800-	12-1-7-	-	2-2-1-	-4-3-2-1-	-1-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37	
30-45	4033-105	5328-2-10-	0-M42156-06/03/76-15-	28-22.5	-C-	6.6	335-	9-1-7-	-	6-6-1-3-5-	-4-3-2-1-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	3833-105	5122-2-08-	0-M42157-06/03/76-16-	28-16.5	-C-	7.8	650-	7-1-7-	-	2-2-1-	-4-3-2-1-	-1-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	3900-105	5309-2-08-	0-M42158-06/03/76-16-	27-12.5	-C-	7.8	700-	9-1-7-	-	4-3-1-	-4-3-2-1-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	3833-105	5342-2-08-	0-M42161-06/03/76-17-	26-18.5	-C-	7.9	1400-	12-1-7-	-	2-2-1-	-4-3-3-1-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.65	
30-45	3242-105	5348-2-08-	0-M42162-06/04/76-11-	29-19.5	-C-	7.8	2750-	4-1-7-	-	2-3-1-	-4-3-2-1-	-1-1-	4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.38	
30-45	3167-105	5326-2-08-	0-M42163-06/04/76-12-	29-16.5	-C-	7.0	800-	7-1-7-	-	2-3-1-	-4-3-2-3-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	2972-105	5348-2-08-	0-M42164-06/04/76-12-	27-16.5	-C-	6.9	750-	14-1-7-	-	2-3-1-	-4-3-2-2-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	2897-105	5305-2-08-	0-M42165-06/04/76-12-	27-16.5	-C-	7.4	750-	12-1-7-	-	2-3-1-	-4-3-2-2-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	2825-105	5350-2-06-	0-M42167-06/04/76-14-	27-23.5	-C-	7.3	2350-	6-1-7-	-	4-7-1-2-5-	-4-3-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.16	
30-45	2625-105	5327-2-08-	0-M42168-06/04/76-15-	27-16.5	-C-	7.9	700-	14-1-7-	-	2-3-1-	-2-2-2-2-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	
30-45	2353-105	5306-2-08-	0-M42169-06/04/76-15-	27-16.5	-C-	7.8	650-	7-1-7-	-	2-3-1-	-4-3-3-1-	-1-8-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24	
30-45	2422-105	5288-2-08-	0-M42170-06/04/76-15-	28-	-	7.1	600-	11-1-7-	-	2-3-1-	-4-3-2-2-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.30	
30-45	2344-105	5361-2-08-	0-M42172-06/04/76-16-	28-14.5	-C-	7.0	700-	13-1-7-	-	2-3-1-	-4-3-2-2-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27	
30-45	2056-105	5303-2-08-	0-M42174-06/04/76-17-	27-15.5	-C-	7.3	850-	4-1-7-	-	2-3-1-	-4-3-2-3-	-1-8-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	1906-105	5307-2-08-	0-M42175-06/04/76-17-	26-15.5	-C-	7.2	950-	14-1-7-	-	2-3-1-	-4-3-2-3-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.56	
30-45	1781-105	5254-2-08-	0-M42176-06/04/76-17-	26-15.5	-C-	7.5	850-	4-1-7-	-	2-3-1-	-3-3-2-3-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	0853-105	5320-2-08-	0-M42178-06/06/76-12-	27-17.5	-C-	7.2	900-	9-1-7-	-	2-3-1-	-3-3-2-2-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.67	
30-45	0917-105	5153-2-08-	0-M42179-06/06/76-13-	27-15.5	-C-	7.3	850-	4-1-7-	-	2-3-1-	-3-3-2-2-	-1-8-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	0764-105	5342-2-08-	0-M42180-06/06/76-13-	27-15.5	-C-	6.9	900-	9-1-7-	-	2-3-1-	-2-3-2-2-	-1-8-	2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	0419-105	5371-2-07-	0-M42181-06/06/76-13-	27-19.5	-C-	6.7	-	12-1-7-	-	4-7-3-4-1-2-3-3-2-2-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45	0575-105	5381-2-07-	0-M																															

APPENDIX B (continued). Field Data and Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																				U CONCENTRATION								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DMC (N) UNITS IN ppb
							DATE	HOUR																										
30-45	1989-105	0600-2-08-	0-M42195-06/07/76-11-	25-15.5	-	7.6	850	12-1-7-	-	-3-3-1-	-2-2-3-1-	-1-3-	1-	-	-	0.10																		
30-45	2119-105	0836-2-08-	0-M42196-06/07/76-11-	26-15.5	-	7.8	1400	6-1-7-	-	-2-3-1-	-2-2-3-1-	-1-3-	2-	-	-	1.00																		
30-45	2139-105	0403-2-08-	0-M42197-06/07/76-11-	26-16.5	-C-	7.3	900	10-1-7-	-	-2-3-1-	-2-2-3-1-	-1-3-	4-580	-	-	0.24																		
30-45	2283-105	0303-2-07-	0-M42199-06/07/76-12-	27-20.5	-	7.1	2350	9-1-7-4-6-	-	-2-4-4-2-	-3-3-2-1-	-1-	-	-	-	0.16																		
30-45	3667-105	5103-2-06-	0-M42200-06/04/76-9-	29-13.5	-C-	6.8	1100	3-4-6-4-6-	-	-2-2-1-3-	-2-3-2-1-	-1-	-	-	-	0.10																		
30-45	3544-105	6058-2-08-	0-M42202-06/04/76-10-	30-19.5	-	6.5	2100	8-4-6-	-	-2-2-1-3-	-2-2-2-1-	-1-1-	-	-	-	5.90																		
30-45	3606-105	6328-2-08-	0-M42203-06/04/76-10-	30-19.5	-	6.9	2150	6-4-6-	-	-2-2-1-3-	-4-2-3-2-	-1-1-	-	-	-	9.04																		
30-45	3472-105	6650-2-08-	0-M42204-06/04/76-11-	29-18.5	-C-	7.8	2900	5-4-6-	-	-2-3-1-	-4-3-2-2-	-1-1-	-	-	-	22.30*																		
30-45	3289-105	6769-2-10-	0-M42205-06/04/76-11-	29-21.5	-	6.0	625	3-4-6-5-8-	-	-3-2-	-3-2-3-2-	-1-	-	-	-	2.10																		
30-45	3394-105	6897-2-08-	0-M42206-06/04/76-12-	28-13.5	-	6.9	2600	3-4-6-	-	-2-3-1-3-	-4-3-2-1-	-1-1-	-	-	-	15.60*																		
30-45	3264-105	5619-2-08-	0-M42207-06/04/76-12-	30-16.5	-C-	7.0	1300	3-4-6-	-	-	-4-3-2-2-	-1-9-	-	-	-	0.10																		
30-45	3178-105	5956-2-08-	0-M42208-06/04/76-12-	31-12.5	-	6.7	3650	5-4-6-	-	-	-4-2-2-2-	-1-3-	-	-	-	19.20*																		
30-45	2544-105	6650-2-08-	0-M42211-06/05/76-11-	30-17.5	-C-	7.5	1300	12-4-6-	-	-	-4-3-2-1-	-1-9-	-	-	-	0.10																		
30-45	2700-105	6672-2-10-	0-M42212-06/05/76-12-	28-19.5	-	6.5	1900	7-4-6-5-6-	-	-4-3-	-4-3-3-1-	-1-	-	-	-	4.92																		
30-45	2722-105	6303-2-08-	0-M42213-06/05/76-12-	28-14.5	-C-	6.9	750	7-4-6-	-	-	-6-2-2-2-	-1-9-	-	-	-	0.10																		
30-45	6411-105	1797-2-08-	0-M42214-06/06/76-11-	27-15.5	-	6.9	1600	3-1-6-	-	-	-3-3-3-1-	-1-1-	-	-	-	0.10																		
30-45	6344-105	2306-2-08-	0-M42215-06/06/76-11-	28-16.5	-	7.0	1400	2-1-6-	-	-	-4-3-2-1-	-1-1-	-	-	-	0.10																		
30-45	6347-105	2219-2-08-	0-M42216-06/06/76-12-	29-17.5	-	6.8	2000	5-4-6-	-	-	-4-2-3-1-	-1-1-	-	-	-	14.90*																		
30-45	6800-105	2107-2-08-	0-M42217-06/06/76-12-	29-18.5	-C-	7.0	1400	6-4-6-	-	-	-4-3-2-1-	-1-9-	-	-	-	0.16																		
30-45	6733-105	2050-2-08-	0-M42218-06/06/76-12-	30-17.5	-	6.5	1000	1-4-6-	-	-	-2-2-2-1-	-1-3-	-	-	-	0.10																		
30-45	6544-105	1347-2-08-	0-M42219-06/06/76-13-	28-16.5	-C-	7.3	3000	2-4-6-	-	-	-4-3-3-1-	-1-1-	-	-	-	2.33																		
30-45	6806-105	1233-2-08-	0-M42220-06/06/76-13-	27-16.5	-	7.0	2700	6-4-6-	-	-	-4-3-2-1-	-1-1-	-	-	-	11.20*																		
30-45	7022-105	0939-2-08-	0-M42221-06/06/76-14-	30-17.5	-	7.0	3100	3-4-6-	-	-	-6-2-2-1-	-1-3-	-	-	-	1.79																		
30-45	6583-105	0817-2-08-	0-M42222-06/06/76-14-	30-17.5	-	6.9	3700	2-4-6-	-	-	-4-3-2-1-	-1-3-	-	-	-	4.04																		
30-45	6611-105	0517-2-08-	0-M42223-06/06/76-14-	31-17.5	-	6.7	2350	1-4-6-	-	-	-4-2-2-1-	-1-1-	-	-	-	1.96																		
30-45	7533-105	7433-2-08-	0-M42225-06/05/76-15-	30-19.5	-	7.2	2200	13-1-7-	-	-2-2-1-	-4-3-3-2-	-1-	-	-	-	16.50*																		
30-45	7633-105	6894-2-08-	0-M42226-06/05/76-15-	29-15.5	-C-	6.9	1300	13-1-7-	-	-2-2-1-	-4-3-2-1-	-1-	-	-	-	1.04																		
30-45	7458-105	6718-2-08-	0-M42227-06/05/76-15-	27-23.0	-	6.9	2200	7-1-7-	-	-2-3-1-	-4-3-2-2-	-1-	-	-	-	7.35																		
30-45	7542-105	6658-2-08-	0-M42228-06/05/76-15-	29-15.5	-	6.9	1800	12-1-7-	-	-2-3-1-	-4-3-2-1-	-1-	-	-	-	0.15																		
30-45	7756-105	7372-2-08-	0-M42229-06/05/76-16-	27-13.5	-	6.9	2200	10-1-7-	-	-2-2-1-	-4-3-2-1-	-1-	-	-	-	0.96																		
30-45	7958-105	7236-2-08-	0-M42230-06/05/76-16-	27-20.0	-	6.9	3600	12-1-7-	-	-2-2-1-	-4-3-1-1-	-1-	-	-	-	11.50*																		
30-45	7917-105	6748-2-08-	0-M42231-06/05/76-16-	27-24.5	-	7.2	2850	10-1-7-	-	-3-3-1-	-4-2-2-2-	-1-	-	-	-	8.29																		
30-45	5333-105	7622-2-10-	0-M42232-06/07/76-11-	25-24.0	-	8.6	175	9-4-7-5-6-	-	-1-3-3-	-4-3-2-1-	-1-	-	-	-	1.80																		
30-45	5367-105	8272-2-08-	0-M42233-06/07/76-11-	28-	-	8.1	3900	9-1-7-	-	-2-3-1-	-4-3-2-1-	-1-3-	-	-	-	16.10*																		
30-45	5081-105	8514-2-08-	0-M42234-06/07/76-11-	28-	-C-	7.8	1600	9-1-7-	-	-3-2-1-	-4-3-2-1-	-9-3-	-	-	-	7.85																		
30-45	5153-105	8115-2-08-	0-M42235-06/07/76-12-	28-15.5	-	8.4	3600	6-1-7-	-	-2-3-1-	-4-3-3-1-	-1-2-	-	-	-	39.90*																		
30-45	5442-105	8015-2-08-	0-M42236-06/07/76-12-	28-12.5	-	6.8	3150	6-1-7-	-	-3-3-1-	-4-3-2-2-	-1-3-	-	-	-	47.20*																		
30-45	5650-105	7518-2-08-	0-M42237-06/07/76-12-	30-15.5	-	6.4	2950	9-1-7-	-	-3-3-1-	-4-3-2-2-	-1-	-	-	-	0.15*																		
30-45	5675-105	8172-2-08-	0-M42239-06/07/76-13-	30-12.5	-	6.2	3600	12-1-7-	-	-3-3-1-	-4-3-2-2-	-1-2-	-	-	-	45.90*																		
30-45	5961-105	8181-2-08-	0-M42240-06/07/76-13-	26-13.5	-C-	6.9	2500	12-1-7-	-	-3-3-1-	-4-3-3-2-	-1-2-	-	-	-	0.10																		
30-45	5878-105	8383-2-06-	0-M42241-06/07/76-14-	31-19.5	-C-	6.6	3400	6-1-7-5-6-	-	-2-3-1-	-4-3-4-2-	-1-9-	-	-	-	8.46																		
30-45	5772-105	7953-2-08-	0-M42242-06/07/76-14-	30-15.5	-C-	6.3	2050	6-1-7-	-	-2-3-6-	-4-3-2-2-	-1-2-	-	-	-	2.40																		
30-45	6028-105	7614-2-08-	0-M42243-06/07/76-14-	30-16.5	-	6.1	5000	9-1-7-	-	-3-3-1-	-4-3-2-2-	-1-2-	-	-	-	13.80*																		
30-45	6208-105	7631-2-08-	0-M42244-06/07/76-15-	30-20.5	-	6.0	2400	9-1-7-	-	-1-3-1-	-4-3-2-2-	-1-2-	-	-	-	12.80*																		
30-45	6469-105	7628-2-08-	0-M42247-06/07/76-15-	30-14.5	-	5.6	2450	9-1-7-	-	-3-3-2-	-4-3-2-2-	-1-3-	-	-	-	0.37																		
30-45	8083-105	6803-2-08-	0-M42248-06/07/76-17-	30-	-	7.2	2850	12-1-7-	-	-3-3-2-	-4-3-2-2-	-1-2-	-	-	-	6.72																		
30-45	8617-105	6692-2-08-	0-M42249-06/07/76-16-	27-17.5	-	6.8	7000	6-1-7-	-	-3-3-1-	-4-3-2-2-	-1-3-	-	-	-	20.70*																		
30-45	5531-105	8597-2-08-	0-M42253-06/07/76-9-	24-14.5	-	7.7	3500	16-4-6-	-	-	-2-2-2-1-	-1-4-	-	-	-	2.11																		
30-45	4572-105	7922-2-08-	0-M42255-06/07/76-10-	30-12.5	-C-	7.0	2400	11-1-6-5-6-	-	-2-2-1-	-1-2-4-1-	-1-9-	-	-	-	2.82																		
30-45	4764-105	7783-2-06-	0-M42256-06/07/76-11-	29-15.5	-	6.5	3100	15-4-6-4-6-	-	-2-2-1-2-	-2-3-4-1-	-1-	-	-	-	22.30*																		
30-45	4378-105	7783-2-08-	0-M42257-06/07/76-11-	30-15.5	-C-	6.8	1300	1-4-6-	-	-	-4-3-3-1-	-1-1-	-	-	-	12.20*																		

APPENDIX B (continued). Field Data and Uranium Concentrations for Water Samples

[illegible]

APPENDIX B (continued). Field Data and Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA														U CONCENTRATION															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (umho/cm)	SCINTILLOMETER (cpm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (N)	UNITS IN ppb
							DATE	HOUR																											
30-45	0486-105	0322-2-08-	0-M42338-06/07/76-16-	29-17.5-	-	7.7-	700-	8-1-7-	-	-2-3-1-	-4-3-2-2-	-1-1-	4-	-	-	8.09																			
30-45	0072-105	0119-2-08-	0-M42339-06/07/76-15-	30-17.5-	-	7.3-	600-	9-1-7-	-	-2-3-1-	-4-3-2-2-	-1-1-	4-	-	-	19.00																			
30-45	0517-105	0504-2-10-	0-M42340-06/07/76-16-	29-22.5-	-	7.3-	750-	15-1-7-	-	-1-3-3-	-4-3-2-2-	-1-	-	-	-	1.03																			
30-45	0847-105	1139-2-10-	0-M42341-06/07/76-16-	29-21.5-	-	6.8-	200-	4-1-7-	-	-1-3-3-	-4-3-2-2-	-1-	-	-	-	0.63																			
30-45	0889-105	0708-2-10-	0-M42342-06/07/76-16-	29-18.5-	-	7.3-	600-	13-1-7-4-6-1-3-2-	-1-3-3-2-	-1-	-	-	-	-	-	2.69																			
30-45	1186-105	0981-2-08-	0-M42343-06/07/76-17-	29-15.5-	-	6.7-	900-	5-1-7-	-	-1-	-2-2-2-2-	-1-8-	1-	-	-	0.10																			
30-45	0650-105	1042-2-08-	0-M42344-06/07/76-17-	29-16.0-	-	7.1-	650-	6-1-7-	-	-1-	-1-3-3-2-	-1-8-	4-	-	-	0.10																			
30-45	0306-105	1348-2-08-	0-M42345-06/08/76-8-	24-16.0-	-	7.6-	900-	8-1-7-	-	-1-	-2-3-2-1-	-1-8-	-	-	-	0.81																			
30-45	0564-105	1330-2-08-	0-M42346-06/08/76-8-	24-15.5-	-	7.3-	850-	6-1-7-	-	-1-	-4-3-2-1-	-1-8-	-	-	-	0.17																			
30-45	1058-105	2904-2-10-	0-M42348-06/08/76-9-	28-21.5-	-	7.4-	1500-	3-1-7-5-7-1-2-3-	-3-3-3-1-	-1-	-	-	-	-	-	2.46																			
30-45	0458-105	2319-2-10-	0-M42349-06/08/76-10-	28-	-	8.2-	6000-	4-1-7-5-6-1-3-2-	-4-3-2-1-	-1-	-	-	-	-	-	0.31																			
30-45	0136-105	1648-2-08-	0-M42350-06/08/76-10-	28-15.0-	-	7.4-	650-	5-1-7-	-	-3-3-1-	-4-3-2-1-	-1-8-	4-	-	-	1.29																			
30-45	1464-105	1339-2-07-	0-M42353-06/08/76-12-	30-20.0-	-	8.0-	2300-	11-1-7-5-6-2-3-1-1-	-2-2-2-1-	-1-	-	-	-	-	-	3.79																			
30-45	1506-105	1381-2-07-	0-M42354-06/08/76-12-	30-20.5-	-	8.0-	2500-	12-1-7-5-6-2-3-1-1-	-2-2-2-1-	-1-	-	-	-	-	-	2.63																			
30-45	1539-105	1661-2-10-	0-M42355-06/08/76-12-	30-22.0-	-	7.2-	240-	9-1-7-5-6-1-2-2-	-4-3-2-1-	-1-	-	-	-	-	-	1.42																			
30-45	1672-105	1846-2-08-	0-M42356-06/08/76-12-	30-16.5-C-	-	7.6-	900-	6-1-7-	-	-1-	-2-2-2-1-	-1-9-	700-	-	-	0.17																			
30-45	1711-105	2318-2-10-	0-M42357-06/08/76-13-	30-21.5-	-	7.4-	2400-	5-1-7-5-6-2-2-2-	-4-3-2-1-	-1-	-	-	-	-	-	6.35																			
30-45	2100-105	2217-2-10-	0-M42358-06/08/76-13-	30-22.5-	-	7.2-	110-	7-1-7-5-6-1-2-2-	-4-3-2-1-	-1-	-	-	-	-	-	0.10																			
30-45	2342-105	2428-2-08-	0-M42362-06/08/76-14-	32-15.0-C-	-	7.2-	1200-	4-1-7-	-	-2-	-1-	-2-2-3-1-	-1-9-	2-	-	0.10																			
30-45	1433-105	1334-2-08-	0-M42363-06/08/76-15-	32-18.5-	-	7.2-	900-	11-1-7-	-	-1-	-2-3-1-1-	-1-4-	2-	-	-	0.10																			
30-45	1650-105	1324-2-08-	0-M42364-06/08/76-13-	32-16.5-	-	7.3-	950-	9-1-7-	-	-1-	-4-3-2-1-	-1-8-	-	-	-	0.10																			
30-45	1475-105	1425-2-08-	0-M42367-06/09/76-16-	32-18.0-	-	7.6-	800-	10-1-7-	-	-1-	-4-2-2-1-	-1-2-	-	-	-	4.49																			
30-45	1964-105	1431-2-08-	0-M42369-06/09/76-17-	31-16.0-	-	7.4-	700-	8-1-7-	-	-2-	-4-3-2-1-	-1-	-	-	-	0.28																			
30-45	2089-105	1403-2-08-	0-M42370-06/09/76-16-	30-18.0-	-	7.2-	2300-	12-1-7-	-	-1-	-4-3-	-1-2-	-	-	-	2.22																			
30-45	2325-105	1397-2-10-	0-M42372-06/09/76-17-	31-29.0-	-	5.8-	170-	8-1-7-	-	-1-	-4-3-2-1-	-1-	-	-	-	0.32																			
30-45	2483-105	1391-2-08-	0-M42373-06/09/76-17-	31-15.0-	-	6.8-	900-	7-1-7-	-	-1-	-4-3-2-1-	-1-1-	-	-	-	0.10																			
30-45	8353-105	1671-2-08-	0-M42374-06/07/76-17-	29-11.0-	-	6.8-	1600-	9-1-7-	-	-3-3-1-	-4-3-3-2-	-1-2-	-	-	-	0.10																			
30-45	8467-105	1720-2-08-	0-M42375-06/08/76-10-	27-16.0-C-	-	7.2-	1800-	12-1-7-	-	-2-2-1-	-4-3-3-1-	-9-	-	-	-	12.00*																			
30-45	8639-105	1716-2-08-	0-M42376-06/08/76-10-	28-21.0-C-	-	7.1-	1500-	10-1-7-	-	-2-2-2-	-4-3-3-1-	-9-	-	-	-	0.10																			
30-45	7336-105	1717-2-08-	0-M42377-06/08/76-11-	30-19.0-C-	-	7.0-	400-	12-1-7-	-	-2-2-1-	-4-3-2-1-	-9-	-	-	-	0.19																			
30-45	7011-105	1804-2-06-	0-M42379-06/08/76-11-	31-16.0-C-	-	7.4-	20000-	12-1-7-5-7-2-2-1-	-4-3-3-1-	-1-	-	-	-	-	-	25.30*																			
30-45	7244-105	1790-2-08-	0-M42380-06/08/76-11-	28-	-	6.6-	4400-	10-1-7-	-	-2-2-1-	-4-3-2-1-	-9-	-	-	-	5.40*																			
30-45	7247-105	1826-2-08-	0-M42381-06/08/76-12-	31-21.0-C-	-	6.5-	2800-	4-1-7-	-	-2-2-1-	-4-3-2-1-	-1-	-	-	-	5.76																			
30-45	7439-105	1853-2-06-	0-M42382-06/08/76-12-	31-15.0-	-	7.2-	1350-	9-1-7-5-7-2-2-1-	-4-3-3-1-	-1-	-	-	-	-	-	7.32																			
30-45	7367-105	1930-2-08-	0-M42383-06/08/76-13-	30-17.0-	-	8.0-	2500-	9-1-7-	-	-3-3-1-	-4-3-3-1-	-1-	-	-	-	4.39																			
30-45	7217-105	1876-2-08-	0-M42385-06/08/76-14-	30-16.0-	-	8.0-	2200-	7-1-7-	-	-2-2-1-	-4-2-2-1-	-1-	-	-	-	7.40																			
30-45	7156-105	1927-2-08-	0-M42386-06/08/76-14-	31-24.0-C-	-	7.7-	2100-	10-1-7-	-	-1-	-4-3-2-1-	-9-	-	-	-	0.60																			
30-45	7006-105	1961-2-06-	0-M42387-06/08/76-14-	29-13.0-	-	6.6-	2100-	10-1-6-5-8-2-2-1-	-1-3-3-1-	-1-	-	-	-	-	-	21.90*																			
30-45	6936-105	1910-2-08-	0-M42388-06/08/76-15-	34-19.0-	-	7.2-	1400-	12-1-7-	-	-2-2-1-	-4-2-2-1-	-1-	-	-	-	8.27																			
30-45	6603-105	1857-2-08-	0-M42389-06/08/76-15-	32-20.0-C-	-	8.4-	1300-	15-1-7-	-	-3-3-1-	-4-2-2-1-	-1-	-	-	-	7.17																			
30-45	6483-105	1857-2-08-	0-M42390-06/08/76-16-	31-21.0-	-	8.2-	1700-	6-1-7-	-	-2-2-1-	-4-3-2-1-	-1-	-	-	-	0.10																			
30-45	6306-105	1874-2-08-	0-M42391-06/08/76-14-	33-21.0-	-	7.8-	900-	12-1-7-	-	-2-2-1-	-4-3-2-1-	-1-	-	-	-	4.92																			
30-45	6256-105	1909-2-06-	0-M42392-06/08/76-16-	30-12.0-	-	7.6-	1850-	6-1-7-5-7-2-2-1-	-1-2-3-1-	-1-	-	-	-	-	-	2.15																			
30-45	6672-105	1880-2-08-	0-M42393-06/08/76-16-	31-21.0-C-	-	6.4-	1500-	12-1-7-	-	-2-3-1-	-4-2-2-2-	-1-	-	-	-	2.11																			
30-45	6472-105	1881-2-08-	0-M42394-06/08/76-16-	31-21.0-	-	7.5-	1300-	9-1-7-	-	-2-3-1-	-4-2-2-1-	-1-	-	-	-	9.80																			
30-45	6733-105	1903-2-08-	0-M42395-06/08/76-16-	31-22.0-C-	-	7.3-	4900-	15-1-7-	-	-2-3-1-	-4-2-2-2-	-9-	-	-	-	6.11																			
30-45	6647-105	1948-2-06-	0-M42397-06/08/76-17-	30-16.0-C-	-	7.4-	1100-	9-1-6-5-7-2-2-1-	-1-3-3-2-	-1-	-	-	-	-	-	18.30*																			
30-45	6514-105	1941-2-06-	0-M42398-06/08/76-17-	30-13.0-	-	7.7-	1000-	12-1-7-5-7-2-2-1-	-1-3-3-2-	-1-	-	-	-	-	-	3.74																			
30-45	6333-105	1914-2-06-	0-M42399-06/08/76-18-	31-13.0-	-	7.8-	1250-	12-1-7-5-7-2-2-1-	-1-3-3-2-	-1-	-	-	-	-	-	7.95																			
30-45	4922-105	1339-2-06-	0-M42400-06/09/76-10-	26-16.0-	-	7.3-	800-	9-1-7-5-7-2-3-1-	-4-2-2-1-	-1-	-	-	-	-	-	0.10																			
30-45	4850-105	1374-2-08-	0-M42401-06/09/76-11-	28-17.0-C-	-	7.2-	3600-	13-1-7-	-	-2-2-1-	-4-2-3-1-	-1-	-	-	-	52.40*																			

APPENDIX B (continued). Field Data and Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																		U CONCENTRATION										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (µS ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DMC (H) UNITS IN ppb
							DATE	HOUR																										
30-45	3919-105	4639-2-08	0-M42402-06/09/76-11	30-19.5	-	7.3	1900	9-1-7	-	2-2-1	-	4-3-2-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	4289-105	4928-2-08	0-M42403-08/09/76-12	31-22.5	-	7.2	950	18-1-7	-	2-2-1	-	4-3-2-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.96	
30-45	4483-105	4183-2-08	0-M42404-06/09/76-12	30-17.5	-	7.0	2000	15-1-7	-	2-3-1	-	4-3-2-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.58	
30-45	6975-105	9972-2-08	0-M42405-06/11/76-14	24-22.5	-	6.5	2400	7-1-6	-	2-2-1	-	1-2-3-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.38	
30-45	1125-104	6383-2-08	0-M42407-06/13/76-15	21-10.5	-	7.1	5300	15-1-6	-	2-3-1	-	4-3-2-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.40	
30-45	2028-104	6472-2-08	0-M42408-06/13/76-16	20-12.5	-	-	-	12-1-6	-	-	-	4-3-1-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.20	
30-45	5583-105	9819-2-06	0-M42409-06/18/76-11	23-14.5	-	7.1	1900	3-1-7-5-6-2-3-1	-	4-3-2-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.22	
30-45	5453-105	9256-2-06	0-M42411-06/18/76-11	20-15.5	-	-	1850	3-1-7-5-6-3-3-2	-	4-3-2-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.47	
30-45	5033-105	9206-2-06	0-M42412-06/18/76-12	20-15.5	-	6.4	1000	3-1-7-5-6-2-2-1	-	4-3-2-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.00*	
30-45	5039-105	9672-2-10	0-M42414-06/18/76-13	20-20.5	-	8.2	2200	9-1-7-5-6-1-3-3	-	4-3-3-3	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.22	
30-45	5075-105	9931-2-08	0-M42415-06/18/76-13	20-19.5	-	7.1	6000	12-1-7	-	2-3-1	-	4-3-3-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15*	
30-45	5878-105	9674-2-10	0-M42416-06/18/76-14	21-18.5	-	6.8	1000	9-1-7-5-6-1-3-2	-	4-3-3-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.48	
30-45	6139-105	9433-2-06	0-M42417-06/18/76-15	19-11.0	-	6.5	1200	6-1-7-5-6-2-3-1	-	4-3-2-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.90*	
30-45	4333-105	9674-2-08	0-M42418-06/18/76-15	24-18.5	-	8.1	1800	10-1-3	-	2-3-1	-	4-3-2-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.36	
30-45	4614-105	9950-2-06	0-M42419-06/18/76-15	23-16.5	-	6.9	1700	6-1-4-5-6-2-3-1	-	1-3-3-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.68	
30-45	4358-105	9461-2-06	0-M42420-06/18/76-15	23-18.5	-	8.1	2300	5-1-7-5-6-2-3-1	-	4-3-3-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.27	
30-45	4169-105	9239-2-06	0-M42421-06/18/76-16	23-18.5	-	6.9	2200	9-1-7-5-6-2-3-1	-	4-3-2-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.30*	
30-45	4214-105	8903-2-06	0-M42422-06/18/76-16	23-19.5	-	7.8	1700	4-1-7-5-6-1-2-1	-	2-3-3-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.74	
30-45	4436-105	9167-2-06	0-M42423-06/18/76-17	23-18.5	-	7.4	1100	7-1-4-5-6-2-3-1	-	1-2-3-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.44	
30-45	3822-105	9106-2-06	0-M42424-06/18/76-17	24-21.5	-	7.8	1200	4-1-7-5-6-1-2-1	-	4-3-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.44	
30-45	3917-105	9374-2-06	0-M42425-06/18/76-18	24-15.5	-	7.7	1700	8-1-7-6-3-3-1	-	4-3-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.85	
30-45	3889-105	9989-2-08	0-M42426-06/18/76-18	24-17.5	-	7.5	2200	16-1-3	-	2-3-1	-	2-3-2-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.97	
30-45	2628-105	9544-2-06	0-M42427-06/19/76-13	25-18.5	-	8.7	700	9-1-3-4-8-2-3-1	-	4-3-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.04	
30-45	2611-105	9206-2-06	0-M42428-06/19/76-14	25-17.0	-	8.1	950	11-1-7-4-8-2-3-1	-	4-3-3-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.22	
30-45	2711-105	8991-2-06	0-M42429-06/19/76-14	25-19.5	-	7.6	1100	8-1-7-6-8-2-3-1	-	4-3-3-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.58	
30-45	2886-105	9611-2-06	0-M42430-06/19/76-14	26-18.5	-	7.4	1100	5-1-7-6-8-2-3-1	-	2-3-3-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.58	
30-45	2925-105	9054-2-06	0-M42431-06/19/76-15	26-16.5	-	8.0	1100	12-1-7-6-6-2-3-1	-	1-2-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.31	
30-45	3092-105	8967-2-06	0-M42432-06/19/76-16	24-17.5	-	7.8	750	13-1-7-4-6-2-3-1	-	1-2-3-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.70*	
30-45	3464-105	8986-2-08	0-M42433-06/22/76-11	23-18.0	-	8.1	1250	9-1-7	-	2-3-1-3-1-2-3-3	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.60*	
30-45	3625-105	8819-2-08	0-M42434-06/22/76-11	23-19.5	-	7.6	2300	8-1-7	-	2-2-1-3-1-2-2-3	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.70*	
30-45	3158-105	9370-2-06	0-M42435-06/22/76-12	23-20.0	-	7.4	1100	10-1-7	-	2-3-1-3-1-2-3-3	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.40*	
30-45	3369-105	9300-2-06	0-M42436-06/22/76-12	23-17.5	-	8.0	1900	10-1-7	-	2-3-1-3-1-3-3-3	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

APPENDIX B (continued). Field Data and Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																	U CONCENTRATION													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIFIC MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (αU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#)	UNITS IN ppb
30-45	1306-105	9336-2-10-	0-M42471-06/24/76-16-	17-20.5	-	7.8	2150	9-1-7-	-	1-3-1	-	4-3-2-2	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.73		
30-45	1417-105	9753-2-08-	0-M42472-06/24/76-16-	18-18.5	-	7.2	2100	-1-7-	-	2-3-1	-	2-3-2-2	-	1-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27		
30-45	3481-105	9744-2-06-	0-M42474-06/21/76-15-	25-20.5	-	7.6	1900	4-1-4-	-	3-3-1	-	2-3-3-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.40*		
30-45	7906-105	8817-2-06-	0-M42475-06/27/76-14-	23-13.5	-	7.2	1600	11-1-7-4-6-3-3-1	-	4-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.75		
30-45	7756-105	8774-2-08-	0-M42476-06/27/76-14-	23-20.5	-	6.6	1700	9-1-7-	-	3-3-1	-	4-3-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.31		
30-45	7711-105	9300-2-08-	0-M42478-06/27/76-15-	24-18.5	-	6.8	750	4-1-7-	-	3-3-1	-	4-3-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	7772-105	9711-2-06-	0-M42479-06/27/76-16-	24-14.5	-	7.0	1600	6-1-7-5-8-3-3-1	-	4-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.62		
30-45	7994-105	9406-2-06-	0-M42480-06/27/76-16-	24-15.5	-	7.2	1500	9-1-7-5-8-3-3-1	-	4-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.06		
30-45	8278-105	9967-2-08-	0-M42481-06/27/76-17-	23-17.5	-	7.5	2800	9-1-7-	-	3-3-1	-	4-3-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.89		
30-45	8375-105	9639-2-08-	0-M42482-06/27/76-17-	23-18.5	-	7.3	2500	9-1-7-	-	3-3-1	-	4-3-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.32		
30-45	8656-105	9872-2-08-	0-M42484-06/27/76-17-	23-15.5	-	7.6	2800	11-1-7-	-	3-3-1	-	4-3-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.81		
30-45	8811-105	9881-2-08-	0-M42485-06/27/76-17-	23-18.5	-	7.4	2800	11-1-7-	-	3-3-1	-	4-3-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.94		
30-45	5889-105	7417-2-08-	0-M42486-06/28/76-12-	30-17.5	-	7.3	2700	4-1-7-	-	2-3-1	-	4-3-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.13		
30-45	5675-105	6306-2-08-	0-M42488-06/28/76-14-	32-12.5	-	7.4	3400	8-1-7-	-	2-3-1	-	4-3-1-2	-	1-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.07		
30-45	4131-105	6236-2-08-	0-M42489-06/28/76-14-	32-15.5	-	7.5	3000	6-1-7-	-	2-3-1	-	4-3-1-2	-	1-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	4164-105	6008-2-10-	0-M42490-06/28/76-14-	32-22.5	-	7.2	500	12-1-7-5-6-2-2-4	-	4-3-1-2	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.62		
30-45	4242-105	6042-2-10-	0-M42491-06/28/76-14-	30-15.5	-	7.2	300	15-1-7-5-6-2-2-2	-	4-3-1-2	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.67		
30-45	5894-105	6267-2-08-	0-M42492-06/28/76-16-	30-15.5	-	7.2	1900	11-1-7-	-	2-3-1	-	4-3-2-1	-	1-8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.46		
30-45	4711-105	6081-2-08-	0-M42493-06/28/76-16-	30-20.5	-	7.4	2200	11-1-7-	-	2-3-1	-	4-3-2-1	-	1-8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.44		
30-45	4544-105	5808-2-08-	0-M42494-06/29/76-16-	29-13.5	-	6.8	2500	17-1-7-	-	2-3-1	-	4-3-2-1	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.56		
30-45	8389-104	1664-2-08-	0-M42495-06/29/76-11-	20-17.5	-	7.6	3200	11-1-7-	-	2-3-1	-	2-2-2-2	-	1-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.38		
30-45	8492-104	1825-2-07-	0-M42497-06/29/76-12-	22-19.5	-	7.5	2000	11-1-7-4-6-2-3-2-3	-	3-2-2-2	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.20*		
30-45	7322-105	1836-2-10-	0-M42499-07/09/76-14-	25-20.5	-	7.1	500	7-1-6-4-6-	-	-	-	4-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.81		
30-45	7194-105	2272-2-10-	0-M42500-07/09/76-13-	30-27.5	-	6.6	380	12-1-7-5-6-	-	-	-	4-3-1-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.97		
30-45	7047-105	2153-2-10-	0-M42501-07/09/76-12-	29-26.0	-	6.5	100	7-1-7-5-6-	-	-	-	3-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	7089-104	5153-2-10-	0-M42502-07/08/76-14-	28-27.0	-	6.3	500	6-1-7-5-6-	-	-	-	4-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	7294-104	5074-2-09-	0-M42503-07/08/76-14-	33-25.5	-	6.4	270	9-1-7-4-6-	-	-	-	3-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.10		
30-45	7431-104	5378-2-10-	0-M42504-07/09/76-11-	28-18.0	-	6.3	120	10-4-6-5-6-	-	-	-	4-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27		
30-45	6528-104	6078-2-10-	0-M42506-07/08/76-16-	28-16.0	-	6.8	1400	9-4-6-5-6-	-	-	-	4-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.76		
30-45	6739-104	6044-2-10-	0-M42507-07/08/76-16-	29-17.5	-	6.4	800	9-4-6-5-6-	-	-	-	6-4-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.06		
30-45	6867-104	5556-2-10-	0-M42508-07/08/76-15-	32-18.5	-	6.4	460	6-4-6-	-	-	-	6-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45	6889-104	5772-2-08-	0-M42509-07/08/76-15-	31-17.5	C	8.0	1300	9-4-6-	-	-	-	4-2-2-1	-	9-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20		
30-45	7208-104	5539-2-09-	0-M42510-07/08/76-14-	32-15.5	-	6.7	430	6-4-6-4-6-	-	-	-	4-4-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.95		
30-45	7161-104	5667-2-10-	0-M42511-07/08/76-14-	32-19.5	-	6.9	1300	6-4-6-4-6-	-	-	-	4-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36		
30-45	6956-104	6156-2-07-	0-M42512-07/08/76-13-	30-17.0	-	7.0	1100	8-4-6-4-8-1-2-2-3	-	4-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.47		
30-45	7328-104	6050-2-10-	0-M42513-07/08/76-11-	31-18.5	-	6.6	800	9-4-6-5-8-	-	-	-	4-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.79		
30-45	7528-104	6028-2-08-	0-M42515-07/08/76-10-	30-13.5	C	6.5	700	7-4-6-	-	-	-	4-4-2-1	-	9-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.70*		
30-45	9806-104	5674-2-07-	0-M42516-07/07/76-16-	32-22.0	-	7.0	1200	8-4-6-6-8-2-2-2-2	-	4-3-2-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.93		
30-46	0000-104	3500-2-09-	0-M42517-07/07/76-15-	29-20.0	-	6.6	600	9-1-6-5-6-1-3-2-3	-	6-3-3-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.46		
30-46	0000-104	3000-2-07-	0-M42518-07/07/76-15-	31-22.0	-	6.4	380	7-1-1-5-6-1-1-2-3	-	4-3-3-1	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.81		
30-45	9778-104	4986-2-07-	0-M42520-07/06/76-13-	31-21.0	-	6.8	1300	6-4-6-6-6-2-2-2-2	-	4-3-2-2	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.50		
30-45	8114-105	7236-2-08-	0-M42521-06/26/76-12-	15-12.5	-	7.2	1100	11-1-7-	-	3-3-1	-	4-3-2-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.40*		
30-45	8339-105	7567-2-08-	0-M42522-06/26/76-12-	15-12.0	-	7.0	1000	8-1-7-	-	3-3-1	-	4-3-2-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.80*		
30-45	8039-105	7630-2-08-	0-M42523-06/26/76-12-	15-14.5	-	6.6	800	9-1-7-	-	3-3-1	-	4-3-2-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.79		
30-45	7736-105	7667-2-08-	0-M42524-06/26/76-12-	15-13.5	-	6.8	7000	6-1-7-	-	3-3-1	-	4-3-2-2	-	1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.92		
30-45	8183-105	8667-2-08-	0-M42525-06/26/76-13-	16-16.5																																

[illegible]

APPENDIX B (continued). Field Data and Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																U CONCENTRATION													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (αU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (H)	UNITS IN ppb
							DATE	HOUR																											
30-45.9333-105.5747-2-08-						0-M42589-06/27/76-17	26-19.3		26-19.3				6.6	4100	9-1-7-	-2-2-1-	-4-3-3-1-	-1-1-																0.10	
30-45.9056-105.6411-2-08-						0-M42591-06/27/76-17	27-19.3		27-19.3				7.0	4800	9-1-7-	-2-2-1-	-4-3-2-1-	-9-1-																3.83	
30-45.6028-105.6611-2-08-						0-M42592-06/28/76-12	30-18.3		30-18.3				7.4	1200	9-1-7-	-2-3-1-	-4-3-1-1-	-1-1-																0.10	
30-45.6136-105.7130-2-08-						0-M42593-06/28/76-12	30-16.3		30-16.3				7.2	3100	4-1-7-	-2-3-1-	-4-3-1-3-	-1-1-																1.49	
30-45.9794-105.9006-2-06-						0-M42594-06/26/76-17	18-15.3		18-15.3				6.6	500	9-1-7-5-6	-3-3-1-	-4-3-2-2-	-1-1-																6.38	
30-45.9733-105.9306-2-08-						0-M42595-06/26/76-17	18-12.3		18-12.3				7.0	7000	9-1-7-	-3-3-1-	-4-3-2-2-	-1-1-																19.30*	
30-45.9978-105.9514-2-08-						0-M42596-06/26/76-17	18-13.3		18-13.3				6.9	8000	9-1-7-	-3-3-1-	-4-3-2-2-	-1-1-																20.10*	
30-45.9593-105.9983-2-08-						0-M42597-06/26/76-18	17-14.3		17-14.3				7.2	9000	9-1-7-	-3-3-1-	-4-3-2-1-	-1-1-																11.70*	
30-45.9333-105.9883-2-08-						0-M42598-06/26/76-18	17-13.3		17-13.3				6.8	6000	11-1-7-	-3-3-1-	-4-3-2-1-	-1-1-																14.50*	
30-45.9439-105.9530-2-08-						0-M42599-06/26/76-18	17-13.3		17-13.3				7.0	8000	9-1-7-	-3-3-1-	-4-3-2-1-	-1-1-																4.57	
30-45.9306-105.9322-2-08-						0-M42600-06/26/76-18	17-14.3		17-14.3				6.9	1600	11-1-7-	-3-3-1-	-4-3-2-1-	-1-1-																12.30*	
30-45.8933-105.8794-2-08-						0-M42601-06/26/76-18	17-15.3		17-15.3				6.9	7000	11-1-7-	-3-3-1-	-4-3-2-1-	-1-1-																5.50	
30-45.8894-105.9183-2-08-						0-M42602-06/26/76-18	17-15.3		17-15.3				6.8	3800	9-1-7-	-3-3-1-	-4-3-2-1-	-1-1-																12.70*	
30-45.8639-105.8930-2-08-						0-M42603-06/26/76-18	17-13.3		17-13.3				6.9	4000	9-1-7-	-3-3-1-	-4-3-2-1-	-1-1-																12.40*	
30-45.8722-105.9378-2-08-						0-M42605-06/27/76-12	23-17.3		23-17.3				6.8	3200	8-1-7-	-3-3-1-	-4-3-2-1-	-1-1-																1.70	
30-45.8611-105.9400-2-08-						0-M42606-06/27/76-13	23-15.3		23-15.3				6.6	3300	9-1-7-	-3-3-1-	-4-3-2-1-	-1-1-																2.45	
30-45.8293-105.9322-2-08-						0-M42607-06/27/76-13	23-16.3		23-16.3				6.7	4600	14-1-7-	-3-3-1-	-4-3-2-1-	-1-1-																2.58	
30-45.8339-105.8989-2-08-						0-M42608-06/27/76-13	23-18.3		23-18.3				7.0	3200	8-1-7-	-3-3-1-	-4-3-2-1-	-1-1-																18.80*	
30-45.7956-105.9056-2-08-						0-M42610-06/27/76-14	23-20.3		23-20.3				6.8	2500	3-1-7-	-3-3-1-	-4-3-3-1-	-1-1-																3.35	
30-45.4744-105.5519-2-08-						0-M42612-06/26/76-13	15-10.3		15-10.3				7.3	3300	10-1-7-	-4-4-1-2-	-9-1-	4-																0.92	
30-45.4494-105.5447-2-08-						0-M42613-06/26/76-14	15-13.3		15-13.3				7.7	2750	6-1-7-	-4-4-1-2-	-9-4-	6-																0.10	
30-45.4686-105.5069-2-08-						0-M42614-06/26/76-15	17-15.3		17-15.3				7.2	1800	7-1-7-	-4-4-1-2-	-9-4-	5-																1.16	
30-45.3933-105.5022-2-08-						0-M42615-06/26/76-15	19-12.3		19-12.3				8.0	2300	10-1-6-	-4-4-1-2-	-9-4-	5-																1.10	
30-45.4856-105.5081-2-08-						0-M42616-06/26/76-18	16-9.3		16-9.3				7.6	600	13-1-7-	-4-4-1-2-	-9-1-	4-																0.10	
30-45.4889-105.5822-2-08-						0-M42617-06/27/76-11	21-13.3		21-13.3				7.2	5000	13-1-7-	-4-4-1-2-	-9-1-	4-																2.99	
30-45.6231-105.6770-2-08-						0-M42618-06/27/76-12	20-11.3		20-11.3				6.6	3500	17-1-7-	-4-4-1-2-	-9-1-	4-																1.11	
30-45.5933-105.6947-2-08-						0-M42619-06/27/76-13	23-11.3		23-11.3				6.5	750	17-1-7-	-4-4-1-2-	-9-1-	4-																9.60*	
30-45.5728-105.6886-2-08-						0-M42621-06/27/76-14	24-10.3		24-10.3				6.6	2100	8-1-7-	-4-4-1-2-	-9-1-	4-																0.21	
30-45.5586-105.7017-2-08-						0-M42623-06/27/76-15	25-14.3		25-14.3				6.9	1500	10-1-7-	-4-4-1-2-	-9-1-	4-																22.60*	
30-45.5700-105.6630-2-08-						0-M42625-06/27/76-16	24-11.3		24-11.3				6.6	3800	11-1-7-	-4-4-1-2-	-9-1-	4-																4.17	
30-45.8611-104.1106-2-08-						0-M42629-06/29/76-13	23-15.3		23-15.3				7.3	1000	9-1-7-	-2-3-1-	-2-3-2-2-	-1-5-																19.20*	
30-45.8606-104.1653-2-08-						0-M42630-06/29/76-14	23-12.3		23-12.3				7.7	2400	7-1-4-	-2-3-1-	-4-3-2-2-	-1-4-																4.76	
30-45.8953-104.1194-2-08-						0-M42631-06/29/76-12																													1.20
30-45.8986-104.1208-2-07-						0-M42632-06/29/76-14	23-16.3		23-16.3				6.8	1100	12-1-7-6-8	-4-4-4-2-4-4-2-2-	-1-																	16.90*	
30-45.9492-104.0917-2-08-						0-M42633-06/29/76-14																													10.00
30-45.9375-104.0917-2-07-						0-M42634-06/29/76-15	23-20.3		23-20.3				7.8	1500	12-1-7-4-8	-4-4-4-2-4-3-2-2-	-1-																	9.60*	
30-45.9200-104.0667-2-07-						0-M42635-06/29/76-16																													4.35
30-45.9533-104.1500-2-07-						0-M42636-06/29/76-17																													5.40
30-45.7931-104.2917-2-08-						0-M42637-06/29/76-17																													11.30
30-45.8381-104.2319-2-08-						0-M42643-06/30/76-16	25-15.3		25-15.3				7.8	1500	12-1-7-	-2-3-1-	-2-2-2-1-	-1-5-																1.00	
30-45.8931-104.3083-2-07-						0-M42652-06/30/76-19	22-21.3		22-21.3				8.5	5500	13-1-7-6-6	-2-3-2-3-4-3-2-1-	-1-																	13.60*	
30-45.4944-104.4417-2-08-						0-M42657-07/01/76-11	26-14.3		26-14.3				6.8	1700	11-1-7-	-2-3-1-	-2-2-2-1-	-1-4-																21.30*	
30-45.9514-104.9278-2-08-						0-M42666-06/28/76-11	25-17.3		25-17.3				7.2	650	6-1-7-	-3-3-1-	-4-3-2-2-	-9-2-																3.33	
30-45.8875-104.7730-2-08-						0-M42671-06/28/76-13	22-18.3		22-18.3				6.3	550	6-1-7-	-2-3-1-	-4-3-2-2-	-1-2-																0.94	
30-45.8389-104.7431-2-08-						0-M42673-06/28/76-14	25-16.3		25-16.3				6.9	1500	9-1-7-	-3-3-1-	-4-3-2-2-	-1-2-																0.10	
30-45.7792-104.5722-2-08-						0-M42678-06/29/76-10	24-19.3		24-19.3				6.6	800	9-1-6-	-2-2-1-	-4-2-1-1-	-1-1-																0.97	
30-45.7672-104.8125-2-08-						0-M42689-06/29/76-13	27-19.3																												

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																	U CONCENTRATION											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (αU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
							DATE	HOUR																										
30-45	5917-104	.9403-2-10-				0-M42709-07/01/76-12			29-20.5	-	-	7.2	3800		6-1-7-5-6-1-3-1-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80*	
30-45	7889-104	.1181-2-07-				0-M42730-07/03/76-13			26-21.5	-	-	7.5	2450		9-1-6-5-6-2-2-1-	-2-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.60*	
30-45	7542-104	.1000-2-07-				0-M42733-07/03/76-14			26-22.5	-	-	7.7	2300		16-1-7-6-6-2-3-2-3-	-4-3-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.90*	
30-45	7100-104	.1850-2-10-				0-M42738-07/03/76-16			24-21.5	C	-	7.5	900		16-1-7-6-8-1-3-2-	-4-3-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.50*	
30-45	6708-104	.192-2-06-				0-M42739-07/03/76-17			25-15.5	-	-	6.3	400		16-1-7-6-8-2-3-1-3-	-1-3-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81.70*	
30-45	2583-104	.7875-2-07-				0-M42740-07/07/76-11			26-20.5	-	-	9.9	1000		6-1-8-4-6-2-2-1-	-4-2-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.38	
30-45	2569-104	.7897-2-07-				0-M42741-07/07/76-11			26-21.5	-	-	6.3	300		6-1-6-4-6-2-2-1-	-4-2-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.86	
30-45	4417-104	.9697-2-07-				0-M42752-07/07/76-14			29-21.5	-	-	6.5	2000		9-1-6-5-																			

APPENDIX B (continued). Field Data and Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																							U CONCENTRATION						
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (eJ ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUORIMETRY OR DNC (#)	UNITS IN ppb
							DATE	HOUR																											
30-45.9681-105.2933-2-10-	0-M42859-07/10/76-19-	29-22.5-	-	-	7.2-	3400-	9-1-7-5-6-1-3-3-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.29		
30-45.9853-105.3876-2-07-	0-M42860-07/10/76-19-	29-21.5-	-	-	7.9-	2800-	12-1-7-	-3-3-2-1-	-3-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.80*	
30-45.8375-104.4167-2-10-	0-M42862-07/11/76-9-	29-23.0-	-	-	7.6-	800-	7-1-7-	-1-3-2-	-4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.46	
30-45.8375-104.4748-2-08-	0-M42863-07/11/76-10-	30-14.5-	-	-	7.6-	850-	8-1-7-	-2-3-1-	-3-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.8242-104.4194-2-08-	0-M42864-07/11/76-10-	30-15.5-	-	-	7.4-	1000-	9-1-7-	-2-3-1-	-1-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26	
30-45.0994-104.3633-2-08-	0-M42872-07/12/76-12-	32-14.5-	-	-	7.2-	800-	6-1-7-	-2-3-1-	-4-3-1-2-	-1-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.80*	
30-45.1556-104.1794-2-07-	0-M42873-07/12/76-13-	32-21.5-	-	-	7.7-	5300-	9-1-7-6-6-	-2-3-1-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	227.90*	
30-45.0361-104.0844-2-08-	0-M42884-07/12/76-16-	36-14.5-	-	-	7.2-	260-	8-1-7-	-2-3-1-	-2-2-2-2-	-1-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.93	
30-45.4403-104.5511-2-07-	0-M42899-07/13/76-12-	23-22.5-	-	-	7.2-	260-	12-1-7-6-7-	-2-3-2-1-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.43	
30-45.6250-104.3875-2-08-	0-M42916-07/01/76-15-	26-16.5-	-	-	7.1-	1900-	11-1-7-	-2-3-1-	-3-3-1-1-	-1-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38.20*	
30-45.7125-104.4000-2-07-	0-M42921-07/01/76-16-	26-21.5-	-	-	6.6-	320-	12-1-7-5-6-	-2-3-2-3-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24	
30-45.7208-104.4000-2-08-	0-M42922-07/01/76-16-	26-14.5-	-	-	7.2-	1800-	8-1-7-	-2-3-1-	-4-3-2-1-	-1-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.80*	
30-45.7283-104.6503-2-08-	0-M42925-07/07/76-10-	27-17.5-	-	-	7.2-	800-	12-1-7-	-2-3-1-	-4-3-2-1-	-1-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.52	
30-45.7258-104.6328-2-08-	0-M42926-07/07/76-10-	28-15.5-	-	-	7.0-	850-	12-1-7-	-2-3-1-	-4-3-2-1-	-1-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.12	
30-45.7056-104.6683-2-08-	0-M42927-07/07/76-10-	28-20.5-	-	-	7.4-	600-	12-1-7-	-1-3-1-	-4-3-2-1-	-1-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.26	
30-45.6878-104.6403-2-10-	0-M42928-07/07/76-11-	28-22.5-	-	-	7.2-	750-	9-1-7-4-6-	-1-2-2-3-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.08	
30-45.6917-104.6819-2-08-	0-M42929-07/07/76-11-	28-15.5-	-	-	7.8-	2000-	10-1-7-	-2-3-1-	-4-3-2-1-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.62	
30-45.7072-104.7036-2-08-	0-M42930-07/07/76-11-	28-15.5-	-	-	7.3-	750-	11-1-7-	-2-3-1-	-2-3-2-1-	-1-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.30*	
30-45.6689-104.7039-2-08-	0-M42932-07/07/76-12-	29-14.5-	-	-	7.5-	1300-	10-1-7-	-2-3-1-	-2-2-2-1-	-1-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31.20*	
30-45.6633-104.7178-2-10-	0-M42933-07/07/76-13-	29-22.5-	-	-	7.5-	220-	9-1-7-6-6-	-1-3-2-3-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.53	
30-45.6678-104.6792-2-10-	0-M42934-07/07/76-13-	30-21.5-	-	-	6.8-	2100-	6-1-7-6-7-	-1-3-2-3-	-4-4-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20	
30-45.6539-104.6711-2-10-	0-M42935-07/07/76-13-	30-23.5-	-	-	7.4-	4100-	6-1-7-6-6-	-1-3-2-3-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.65	
30-45.6225-104.6731-2-10-	0-M42937-07/07/76-14-	30-22.5-	-	-	6.9-	1500-	11-1-7-6-6-	-1-3-2-3-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.85	
30-45.7486-104.6500-2-08-	0-M42938-07/07/76-16-	28-15.5-	-	-	7.2-	800-	10-1-7-	-2-3-1-	-4-3-2-1-	-1-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.60*	
30-45.7325-105.0453-2-08-	0-M42940-07/09/76-12-	34-15.5-	-	-	7.8-	2100-	9-1-7-	-2-3-1-	-4-3-2-1-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.65	
30-45.7072-105.0456-2-08-	0-M42941-07/09/76-12-	34-16.5-	-	-	7.6-	1800-	9-1-7-	-2-3-1-	-2-2-2-1-	-1-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.57	
30-45.7328-105.0019-2-08-	0-M42942-07/09/76-12-	34-16.5-	-	-	7.1-	2250-	6-1-7-	-2-3-1-	-4-3-2-1-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.49	
30-45.7467-104.9606-2-08-	0-M42944-07/09/76-14-	36-17.5-	-	-	7.9-	3300-	6-1-7-	-2-3-1-	-4-2-3-1-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.53	
30-45.7328-104.9728-2-08-	0-M42945-07/09/76-14-	36-16.0-	-	-	7.5-	2500-	10-1-7-	-2-3-1-	-4-3-3-1-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.68	
30-45.7272-104.9486-2-08-	0-M42946-07/09/76-15-	36-16.5-	-	-	7.6-	1900-	7-1-7-	-2-3-1-	-4-3-3-1-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19	
30-45.7486-104.9247-2-08-	0-M42947-07/09/76-15-	36-17.5-	-	-	7.8-	2100-	6-1-7-	-2-3-1-	-4-2-2-1-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10	
30-45.7364-104.9153-2-08-	0-M42948-07/09/76-16-	35-15.5-	-	-	7.3-	1700-	10-1-7-	-2-3-1-	-3-3-2-1-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.93	
30-45.7217-104.8931-2-08-	0-M42949-07/09/76-16-	35-16.5-	-	-	7.6-	3100-	11-1-7-	-2-3-1-	-4-2-2-1-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.82	
30-45.7158-104.9131-2-08-	0-M42950-07/09/76-16-	35-16.0-	-	-	7.6-	1200-	11-1-7-	-2-3-1-	-3-3-2-1-	-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.76	
30-45.8089-105.2919-2-08-	0-M42951-07/10/76-12-	31-17.5-	-	-	7.8-	2400-	12-1-7-	-2-3-1-	-2-2-2-1-	-1-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.04	
30-45.9528-104.5014-2-07-	0-M42953-06/30/76-16-	26-23.5-	-	-	7.2-	900-	6-1-7-5-7-	-2-3-3-	-4-4-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.26	
30-45.9625-104.4815-2-07-	0-M42954-06/30/76-16-	26-25.5-	-	-	7.7-	1000-	9-1-7-5-8-	-2-2-2-2-	-4-4-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.89	
30-45.9583-104.5242-2-08-	0-M42955-06/30/76-17-	25-11.0-C-	-	-	6.6-	1000-	6-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.71	
30-45.9875-104.4750-2-08-	0-M42960-07/08/76-15-	34-23.5-C-	-	-	7.3-	1100-	12-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.82	
30-45.9161-104.5350-2-08-	0-M42961-07/08/76-15-	34-13.5-C-	-	-	6.7-	2300-	14-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.74	

APPENDIX B (continued). Field Data and Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																		U CONCENTRATION										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DMC (M) UNITS IN ppb
							DATE	HOUR																										
30-45	5458-105	0701-2-08-	0-M42988	07/10/76-11-	31-16.0	-C-	6.5	2400-	9-1-7-	-2-3-1-	-4-3-4-1-	-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.76		
30-45	5678-105	0701-2-10-	0-M42989	07/10/76-11-	31-21.0	-C-	7.2	1600-	15-1-7-5-6	-1-2-3-	-4-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.85	
30-45	5644-105	0703-2-08-	0-M42990	07/10/76-12-	31-16.0	-C-	6.6	1200-	12-1-7-	-3-3-1-	-4-3-3-1-	-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.58	
30-45	5406-105	0303-2-08-	0-M42991	07/10/76-13-	34-16.0	-C-	8.1	700-	9-1-7-	-1-2-1-	-4-3-3-1-	-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.44	
30-45	6244-105	0047-2-08-	0-M42993	07/10/76-14-	34-20.0	-C-	7.2	2450-	9-1-7-	-1-3-1-	-4-3-3-1-	-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.57	
30-45	6111-105	0917-2-08-	0-M42995	07/10/76-15-	34-	-C-	6.6	2000-	15-1-7-	-2-3-1-	-4-3-4-1-	-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.13	
30-45	6167-105	0678-2-08-	0-M42997	07/10/76-15-	36-20.0	-C-	7.5	2500-	9-1-7-	-1-3-1-	-4-3-3-1-	-9-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.99	
30-45	6017-105	1709-2-08-	0-M42998	07/10/76-15-	33-17.0	-C-	6.9	1950-	6-1-7-	-2-3-1-	-4-3-4-1-	-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.21	
30-45	5922-105	1658-2-08-	0-M42999	07/10/76-16-	32-16.0	-C-	6.6	2800-	9-1-7-	-3-3-1-	-4-3-3-1-	-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.54	
30-45	6125-105	1542-2-08-	0-M43000	07/10/76-16-	32-24.0	-C-	6.6	4400-	12-7-1-	-1-3-1-	-4-3-3-1-	-9-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.54	
30-45	6050-105	2078-2-08-	0-M43001	07/10/76-17-	32-14.0	-C-	6.3	3000-	9-1-7-	-3-3-1-	-4-3-3-1-	-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.45	
30-45	5789-105	2248-2-08-	0-M43002	07/10/76-17-	33-20.0	-C-	6.3	3600-	6-1-7-	-1-3-1-	-4-3-3-1-	-9-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.35	
30-45	5683-105	1822-2-08-	0-M43003	07/10/76-17-	33-16.0	-C-	6.6	3100-	9-1-7-	-3-3-1-	-4-3-4-1-	-9-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.89	
30-45	8222-104	5278-2-06-	0-M43004	07/11/76-9-	32-18.0	-C-	6.6	490-	12-1-7-5-6	-2-3-1-	-4-1-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.02	
30-45	8250-104	5556-2-10-	0-M43005	07/11/76-10-	32-19.0	-C-	6.6	460-	12-1-7-5-6	-2-3-1-	-4-1-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.78	
30-45	7958-104	5111-2-06-	0-M43008	07/11/76-12-	33-22.0	-C-	6.9	440-	12-1-7-5-6	-3-3-1-	-1-3-3-1-	-1-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.87	
30-45	2367-104	9617-2-08-	0-M43012	07/13/76-9-	23-19.0	-C-	6.6	500-	4-1-6-	-2-2-1-	-4-3-3-1-	-1-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.61	
30-45	2411-104	9801-2-10-	0-M43013	07/13/76-10-	23-22.0	-C-	6.3	200-	12-1-6-5-6	-2-3-1-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	2161-104	9844-2-08-	0-M43014	07/13/76-10-	23-22.0	-C-	6.9	550-	6-1-6-	-3-3-1-	-1-2-3-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.64	
30-45	2117-104	9407-2-10-	0-M43015	07/13/76-10-	24-21.0	-C-	6.1	100-	10-1-6-5-6	-2-2-2-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.41	
30-45	1819-104	9011-2-10-	0-M43019	07/13/76-13-	27-21.0	-C-	6.3	300-	9-1-6-5-6	-2-2-2-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.38	
30-45	1433-104	8839-2-10-	0-M43020	07/13/76-13-	27-21.0	-C-	5.9	250-	7-1-6-5-6	-2-2-1-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.94	
30-45	1953-104	8572-2-10-	0-M43021	07/13/76-14-	27-26.0	-C-	6.3	200-	18-1-6-5-6	-2-2-1-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36	
30-45	1786-104	7689-2-08-	0-M43026	07/13/76-15-	28-19.0	-C-	6.3	2650-	3-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39.80*	
30-45	4303-104	0509-2-07-	0-M43028	07/14/76-10-	27-19.0	-C-	6.3	470-	10-1-6-5-6	-2-2-2-	-4-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.63	
30-45	7642-105	1570-2-08-	0-M43029	07/09/76-15-	26-12.0	-C-	6.7	3100-	12-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.07	
30-45	7872-105	1567-2-08-	0-M43030	07/09/76-15-	30-14.0	-C-	6.8	3600-	12-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.55	
30-45	8042-105	1761-2-08-	0-M43031	07/09/76-16-	27-13.0	-C-	6.9	4200-	9-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.54	
30-45	7944-105	1333-2-08-	0-M43032	07/09/76-15-	31-14.0	-C-	6.8	2400-	12-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.19	
30-45	8083-105	2044-2-08-	0-M43034	07/09/76-16-	28-18.0	-C-	6.7	1100-	6-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	7767-105	2350-2-08-	0-M43035	07/09/76-16-	26-14.0	-C-	6.9	1100-	6-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.65	
30-45	8314-105	2278-2-08-	0-M43036	07/09/76-16-	28-13.0	-C-	6.9	1800-	6-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.30	
30-45	8350-105	1978-2-08-	0-M43037	07/09/76-17-	31-13.0	-C-	6.6	800-	10-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.87	
30-45	8467-105	1656-2-08-	0-M43038	07/09/76-18-	31-15.0	-C-	6.7	1200-	19-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.10	
30-45	9833-104	2375-2-08-	0-M43045	07/10/76-14-	30-13.0	-C-	6.5	1500-	9-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.21	
30-45	4339-104	0839-2-08-	0-M43060	07/16/76-10-	29-16.0	-C-	6.3	800-	10-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.22	
30-45	3756-104	1858-2-08-	0-M43066	07/16/76-12-	31-	-C-	6.5	650-	13-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.63	
30-45	3372-104	0801-2-08-	0-M43072	07/16/76-14-	30-19.0	-C-	6.9	500-	7-1-6-	-2-2-1-	-4-2-2-1-	-9-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.49	
30-45	4156-104	5777-2-08-	0-M43077	07/13/76-14-	25-15.5	-C-	7.7	3800-	17-1-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80.00*	
30-45	4031-104	6272-2-07-	0-M43088	07/13/76-18-	23-	-C-	7.2	550-	10-1-7-6-6	-1-3-2-1-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.42	
30-45	3742-104	6719-2-08-	0-M43089	07/16/76-10-	25-18.0	-C-	7.6	3900-	8-1-7-	-2-3-1-	-2-3-2-1-	-1-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.40*	
30-45	2808-104	9044-2-08-	0-M43110	07/16/76-17-	25-14.0	-C-	6.8	2600-	4-1-7-	-2-3-1-	-4-3-2-1-	-1-8-	-	-	-	-	-	-	-	-	-	-												

APPENDIX B (continued). Field Data and Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																					U CONCENTRATION							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (dU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (N) UNITS IN ppb
							DATE	HOURL																										
30-45	0517-104	8650-2-07-	0-M43175	07/16/76-15-	30-24.5	-	6.4	998-	3-1-6-5-6-1-3-2-	3-4-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.72	
30-45	0500-104	8653-2-07-	0-M43176	07/16/76-15-	30-24.5	-	6.4	998-	6-1-6-5-6-1-3-2-	3-4-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20
30-45	0750-104	8417-2-10-	0-M43177	07/16/76-16-	30-25.5	-	6.7	500-	6-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.91
30-45	0801-104	8231-2-08-	0-M43178	07/16/76-16-	25-25.5	-	6.1	100-	9-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.38
30-45	0801-104	8339-2-08-	0-M43179	07/16/76-18-	25-15.5	-	6.7	2000-	14-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.40*
30-45	0807-104	8309-2-08-	0-M43180	07/16/76-18-	25-15.5	-	6.3	700-	14-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31
30-45	1075-104	8136-2-06-	0-M43181	07/16/76-18-	25-25.5	-	6.4	400-	4-1-6-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.74
30-45	1428-104	8243-2-08-	0-M43183	07/17/76-12-	30-22.5	-	6.5	800-	9-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51.50*
30-45	1211-104	8450-2-07-	0-M43184	07/17/76-13-	34-26.5	-	5.7	100-	3-1-6-5-6-2-2-4-	4-3-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	1511-104	7933-2-07-	0-M43185	07/17/76-13-	32-25.5	-	6.6	650-	6-1-6-5-6-1-2-3-	4-3-2-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.22	
30-45	1492-104	7922-2-07-	0-M43186	07/17/76-14-	36-26.5	-	7.8	450-	7-1-6-5-6-2-3-1-	4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.66	
30-45	0897-104	7938-2-07-	0-M43187	07/17/76-16-	28-25.5	-	5.7	1500-	5-1-6-5-6-2-3-1-	4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.02	
30-45	1072-104	7694-2-10-	0-M43188	07/17/76-17-	29-25.5	-	5.9	1600-	1-1-6-5-6-1-2-2-	4-3-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.74	
30-45	0014-104	7714-2-07-	0-M43190	07/17/76-19-	27-25.5	-	6.5	1400-	2-1-6-5-6-1-2-1-	4-3-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.85	
30-45	0367-104	7896-2-08-	0-M43191	07/17/76-19-	24-25.5	-	6.5	2000-	1-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.30*
30-45	0658-104	8928-2-06-	0-M43192	07/18/76-11-	28-11.5	-	6.7	1900-	10-1-6-4-7-2-2-1-	4-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.30*	
30-45	0789-104	9220-2-07-	0-M43194	07/18/76-12-	28-22.5	-	6.3	650-	6-1-6-5-7-2-2-2-2-	4-4-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.36	
30-45	0842-104	9444-2-07-	0-M43195	07/18/76-13-	30-22.5	-	6.5	400-	3-1-6-5-6-1-3-1-	4-5-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.18	
30-45	0801-104	9444-2-07-	0-M43196	07/18/76-13-	30-21.5	-	6.5	450-	6-1-6-6-8-1-2-1-1-	4-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.74	
30-45	0489-104	9794-2-06-	0-M43198	07/18/76-15-	33-23.5	-	6.5	250-	4-1-6-4-7-1-2-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28	
30-45	0489-104	9989-2-08-	0-M43199	07/18/76-15-	32-23.5	-	6.8	600-	3-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.40*
30-45	0300-104	9718-2-10-	0-M43200	07/18/76-16-	32-29.5	-	7.8	1000-	6-1-6-5-7-1-3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.41	
30-45	0317-104	9700-2-07-	0-M43201	07/18/76-16-	33-26.5	-	6.4	1100-	3-1-6-6-7-1-3-1-	4-4-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.32	
30-45	1206-104	5503-2-07-	0-M43205	07/19/76-13-	32-26.5	-	6.0	750-	15-1-1-5-6-2-2-1-	4-3-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.49	
30-45	1519-104	5607-2-07-	0-M43206	07/19/76-14-	24-28.5	-	6.1	800-	1-1-6-5-6-1-2-1-	4-3-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15*	
30-45	1697-104	7653-2-07-	0-M43207	07/20/76-10-	22-20.5	-	7.1	1800-	4-1-6-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.86
30-45	1678-104	6501-2-07-	0-M43209	07/20/76-10-	24-22.5	-	6.1	120-	3-1-6-5-6-1-2-1-	4-3-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	1417-104	6592-2-07-	0-M43210	07/20/76-11-	25-21.5	-	5.9	310-	1-1-6-5-6-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39	
30-45	0992-104	5719-2-07-	0-M43211	07/20/76-12-	26-25.5	-	6.0	1100-	1-1-6-5-7-2-3-1-	4-4-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.91	
30-45	1933-105	7628-2-07-	0-M43273	10/08/76-12-	22-13.5	-	7.2	1000-	10-1-6-5-6-2-2-1-	4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31.30*	
30-45	1489-105	6876-2-10-	0-M43277	10/08/76-14-	28-19.5	-	7.5	1100-	18-1-6-5-7-2-2-1-	4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.43	
30-45	2128-105	7006-2-08-	0-M43278	10/08/76-14-	25-14.5	-	6.8	1350-	18-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45	2328-105	6639-2-06-	0-M43279	10/08/76-14-	24-13.5	-	6.6	1150-	5-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45	2083-105	6589-2-08-	0-M43281	10/08/76-14-	26-12.5	-	6.3	2000-	6-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.15
30-45	2039-105	6400-2-08-	0-M43283	10/08/76-15-	26-13.5	-	7.0	2100-	9-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.83
30-45	2228-105	6339-2-08-	0-M43286	10/08/76-16-	23-13.5	-	6.3	4000-	10-1-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.30*
30-45	9528-105	3153-2-08-	0-M43290	10/09/76-11-	24-13.5	-	7.2	1200-	10-1-6-	-																								

APPENDIX C

LISTINGS OF FIELD AND URANIUM DATA
FOR
SEDIMENT SAMPLES
FROM THE
EKALAKA NTMS QUADRANGLE, MONTANA

[illegible]

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																	U CONCENTRATION											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (dU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES
							DATE	HOUR																										ANALYZED BY DELAYED NEUTRON COUNTING (DNC)
30-45	0494-1	05.2017-2-12	0-M42183	06/06/76-15	28	-	-	C	7.4	2700	12-1-7-5-6-1-2-1-4-3-2-2-1-9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
30-45	0022-1	05.2072-2-14	0-M42184	06/06/76-15	27	28	0	-	6.6	1125	3-1-7-5-6-1-2-1-4-3-2-2-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
30-45	0025-1	05.2275-2-97	0-M42185	06/06/76-15	27	-	-	-	-	-	10-1-7-5-6-1-2-1-4-3-2-2-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
30-45	0475-1	05.1739-2-97	0-M42186	06/06/76-15	27	-	-	-	-	-	10-1-7-4-6-1-2-1-4-3-2-2-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
30-45	0353-1	05.1472-2-12	0-M42187	06/06/76-16	27	19	0	-	7.5	850	12-1-7-4-6-1-3-2-2-4-3-2-2-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40		
30-45	0961-1	05.2292-2-15	0-M42189	06/06/76-17	27	-	-	-	-	-	10-1-7-4-6-1-2-1-4-3-3-2-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
30-45	1533-1	05.1183-2-15	0-M42190	06/07/76-9	26	-	-	-	-	-	9-1-7-5-6-1-2-1-4-3-3-1-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
30-45	1950-1	05.0600-2-12	0-M42193	06/07/76-10	25	-	-	-	-	-	9-1-7-6-6-1-2-1-4-3-3-1-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
30-45	2286-1	05.0325-2-15	0-M42198	06/07/76-12	27	-	-	-	-	-	7-1-7-4-6-1-2-1-4-3-2-1-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
30-45	2283-1	05.0303-2-12	0-M42199	06/07/76-12	27	20	5	-	7.1	2350	9-1-7-4-6-1-2-4-4-2-3-3-2-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
30-45	3667-1	05.5103-2-12	0-M42200	06/04/76-9	29	13	0	-	6.8	1100	3-4-6-4-6-2-2-1-3-2-3-2-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
30-45	3389-1	05.5597-2-15	0-M42201	06/04/76-10	31	-	-	-	-	-	3-4-6-4-6-1-2-1-4-3-2-1-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
30-45	3289-1	05.6769-2-14	0-M42205	06/04/76-11	29	21	0	-	6.0	625	3-4-6-5-8-1-3-2-3-2-3-2-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70		
30-45	2986-1	05.6114-2-15	0-M42209	06/04/76-13	33	-	-	-	-	-	2-1-6-4-6-1-2-1-4-3-3-1-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
30-45	3461-1	05.5364-2-15	0-M42210																															

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																				U CONCENTRATION								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
							DATE	HOUR																										
30-45	0339-105	6861-2-13-	0-M42307-06/08/76-11-	25-22.0-C-	6.9	1800-	11-1-7-5-8-3-3-1-	-4-3-2-1-	-1-9-	-	-	-	3.80																					
30-45	0644-105	7033-2-15-	0-M42309-06/08/76-11-	25-	-	-	9-1-7-5-6-	-4-3-2-1-	-1-	-	-	3.60																						
30-45	1019-105	7342-2-15-	0-M42311-06/08/76-11-	25-	-	-	8-1-7-4-4-	-4-3-2-1-	-1-	-	-	5.40																						
30-45	0317-105	6708-2-15-	0-M42313-06/08/76-12-	25-	-	-	9-1-7-5-6-	-4-3-2-1-	-1-	-	-	3.30																						
30-45	0325-105	6628-2-15-	0-M42314-06/08/76-12-	25-	-	-	11-1-7-4-7-	-4-3-2-1-	-1-	-	-	2.80																						
30-45	1022-105	6567-2-96-	0-M42318-06/08/76-13-	24-	-	-	9-1-7-5-6-	-4-3-2-1-	-1-	-	-	3.30																						
30-45	1111-105	6417-2-15-	0-M42320-06/08/76-14-	24-	-	-	8-1-7-5-6-	-4-3-2-1-	-1-	-	-	3.00																						
30-45	1067-105	6408-2-15-	0-M42321-06/08/76-14-	24-	-	-	8-1-7-4-7-	-4-3-2-1-	-1-	-	-	2.90																						
30-45	0906-105	4528-2-97-	0-M42323-06/08/76-15-	26-	-	-	8-1-7-5-6-	-4-3-2-2-	-1-	-	-	3.50																						
30-45	1039-105	4100-2-97-	0-M42327-06/08/76-16-	25-	-	-	8-1-7-4-6-	-4-3-2-2-	-1-	-	-	2.70																						
30-45	1161-105	3939-2-97-	0-M42328-06/08/76-16-	25-	-	-	9-1-7-5-7-	-4-3-2-2-	-1-	-	-	3.10																						
30-45	0867-105	3856-2-97-	0-M42329-06/08/76-17-	24-	-	-	9-1-7-4-6-	-4-3-2-2-	-3-	-	-	3.00																						
30-45	2375-105	0508-2-15-	0-M42330-06/07/76-12-	27-	-	-	9-1-7-5-6-	-2-3-3-1-	-1-	-	-	2.50																						
30-45	1467-105	0342-2-12-	0-M42331-06/07/76-12-	28-22.0-C-	7.5	650-	5-1-7-5-6-2-3-1-1-2-4-3-1-	-1-	-	-	-	2.80																						
30-45	1472-105	0239-2-14-	0-M42332-06/07/76-13-	29-22.0-C-	7.5	500-	9-1-7-6-6-1-2-4-	-1-3-3-1-	-1-	-	-	3.70																						
30-45	1097-105	0467-2-14-	0-M42333-06/07/76-14-	29-21.0-	7.4	700-	12-1-7-4-6-2-4-2-1-2-2-3-2-	-1-	-	-	-	3.00																						
30-45	1139-105	0256-2-14-	0-M42334-06/07/76-14-	30-21.5-C-	7.9	490-	13-1-7-4-6-1-3-1-	-4-3-2-2-	-1-1-	4-	-	2.80																						
30-45	0725-105	0150-2-14-	0-M42335-06/07/76-14-	30-22.5-	7.1	2050-	10-1-7-4-6-2-3-1-	-4-3-2-2-	-1-	-	-	2.40																						
30-45	0517-105	0564-2-14-	0-M42340-06/07/76-16-	29-22.0-	7.3	750-	15-1-7-	-1-3-3-	-4-3-2-2-	-1-	-	2.50																						
30-45	0847-105	1139-2-14-	0-M42341-06/07/76-16-	29-21.5-	6.8	200-	4-1-7-	-1-3-3-	-4-3-2-2-	-1-	-	2.60																						
30-45	0889-105	0708-2-14-	0-M42342-06/07/76-16-	29-18.5-	7.3	600-	13-1-7-4-6-1-3-2-	-1-3-3-2-	-1-	-	-	2.50																						
30-45	0289-105	3175-2-15-	0-M42347-06/08/76-9-	25-	-	-	8-1-7-4-6-	-2-2-2-1-	-1-	-	-	3.40																						
30-45	1058-105	2964-2-14-	0-M42348-06/08/76-9-	28-21.5-	7.4	1500-	3-1-7-5-7-1-2-3-	-3-3-3-1-	-1-	-	-	3.20																						
30-45	0458-105	2319-2-14-	0-M42349-06/08/76-10-	28-	-	8.2	4-1-7-5-6-1-3-2-	-4-3-2-1-	-1-	-	-	2.70																						
30-45	1000-105	1314-2-15-	0-M42351-06/08/76-11-	29-	-	-	8-1-7-4-6-	-4-3-3-1-	-9-	-	-	2.40																						
30-45	1144-105	1400-2-13-	0-M42352-06/08/76-11-	29-	-	-	9-1-7-4-6-	-4-3-2-1-	-1-	-	-	2.40																						
30-45	1464-105	1339-2-12-	0-M42353-06/08/76-12-	30-20.0-	8.0	2300-	11-1-7-5-6-2-3-1-1-2-2-2-1-	-1-	-	-	-	2.80																						
30-45	1506-105	1381-2-12-	0-M42354-06/08/76-12-	30-20.5-	8.0	2500-	12-1-7-5-6-2-3-1-1-2-2-2-1-	-1-	-	-	-	3.00																						
30-45	1539-105	1661-2-14-	0-M42355-06/08/76-12-	30-22.0-	7.2	240-	9-1-7-5-6-1-2-2-	-4-3-2-1-	-1-	-	-	2.90																						
30-45	1711-105	2378-2-14-	0-M42357-06/08/76-13-	30-21.5-	7.4	2400-	5-1-7-5-6-2-2-2-	-4-3-2-1-	-1-	-	-	3.20																						
30-45	2100-105	2217-2-14-	0-M42358-06/08/76-13-	30-22.5-	7.2	110-	7-1-7-5-6-1-2-2-	-4-3-2-1-	-1-	-	-	2.50																						
30-45	2228-105	2106-2-15-	0-M42359-06/08/76-13-	31-	-	-	5-1-7-4-6-	-4-3-3-1-	-1-	-	-	3.50																						
30-45	1833-105	0000-2-15-	0-M42360-06/08/76-13-	31-	-	-	8-1-7-4-6-	-4-3-3-1-	-1-	-	-	2.90																						
30-45	2189-105	1667-2-15-	0-M42361-06/08/76-14-	33-	-	-	5-1-7-4-6-	-4-3-3-1-	-1-	-	-	3.00																						
30-45	1392-105	3897-2-97-	0-M42365-06/09/76-15-	32-	-	-	4-1-7-4-6-	-4-3-2-1-	-1-	-	-	3.50																						
30-45	1344-105	4042-2-15-	0-M42366-06/09/76-13-	32-	-	-	12-1-7-4-6-	-4-3-2-1-	-1-	-	-	2.80																						
30-45	1611-105	4094-2-97-	0-M42368-06/09/76-16-	32-	-	-	9-1-7-5-6-	-4-2-2-1-	-1-	-	-	2.50																						
30-45	2183-105	3989-2-15-	0-M42371-06/09/76-16-	31-	-	-	24-1-7-	-4-3-2-1-	-1-	-	-	2.80																						
30-45	2325-105	3978-2-14-	0-M42372-06/09/76-17-	31-29.0-	5.8	170-	8-1-7-	-4-3-2-1-	-1-	-	-	2.70																						
30-45	6936-105	7642-2-97-	0-M42378-06/08/76-11-	31-	-	-	12-1-7-5-6-1-1-	-4-3-3-1-	-1-	-	-	3.50																						
30-45	7011-105	8094-2-11-	0-M42379-06/08/76-11-	31-16.0-C-	7.4	2000-	12-1-7-5-7-2-2-1-	-4-3-3-1-	-1-	-	-	2.80																						
30-45	7439-105	8583-2-11-	0-M42382-06/08/76-12-	31-15.0-	7.2	1350-	9-1-7-5-7-2-2-1-	-4-3-3-1-	-1-	-	-	2.80																						
30-45	7450-105	9675-2-99-	0-M42384-06/08/76-13-	31-	-	-	7-1-7-4-7-	-1-	-4-3-3-1-	-1-	-	2.70																						
30-45	7006-105	9614-2-11-	0-M42387-06/08/76-14-	29-13.0-	6.6	2100-	10-1-6-5-8-2-2-1-	-1-3-3-1-	-1-	-	-	3.60																						
30-45	6256-105	9069-2-11-	0-M42392-06/08/76-16-	30-12.0-	7.6	1850-	6-1-7-5-7-2-2-1-	-1-2-3-1-	-1-	-	-	2.30																						
30-45	6664-105	9183-2-97-	0-M42396-06/08/76-17-	32-	-	-	12-1-7-4-7-	-1-	-4-3-3-2-	-1-	-	2.60																						
30-45	6647-105	9489-2-11-	0-M42397-06/08/76-17-	30-16.0-	7.4	1100-	9-1-6-5-7-2-2-1-	-1-3-3-2-	-1-	-	-	3.20																						
30-45	6514-105	9481-2-11-	0-M42398-06/08/76-17-	30-13.0-	7.7	1000-	12-1-7-5-7-2-2-1-	-1-3-3-2-	-1-	-	-	2.30																						
30-45	6333-105	9914-2-11-	0-M42399-06/08/76-18-	31-13.0-	7.8	1250-	12-1-7-5-7-2-2-1-	-1-3-3-2-	-1-	-	-	6.40																						
30-45	4922-105	3389-2-11-	0-M42400-06/09/76-10-	26-16.0-	7.3	800-	9-1-7-5-7-2-3-1-	-4-2-2-1-	-1-	-	-	2.60																						
30-45	6131-105	9833-2-99-	0-M42406-06/11/76-15-	21-	-	-	9-1-6-4-6-	-1-	-1-3-3-4-	-1-	-	2.90																						

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER					LASL SAMPLE NUMBER AND FIELD DATA																				U CONCENTRATION										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmhos/cm)	SCINTILLOMETER (dU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC)	UNITS IN ppm
							DATE	HOUR																											
30-45	5583-105.9819	-2-11				0-M42419	-06/18/76	-11	23-14.5				7.1	1900		3-1-7-5-6-2-3-1		-4-3-2-2	-1															2.30	
30-45	5731-105.9556	-2-99				0-M42410	-06/18/76	-11	20							6-1-7-4-6-		-4-3-2-2	-1															2.40	
30-45	5453-105.9256	-2-11				0-M42411	-06/18/76	-11	20-15.5					1850		3-1-7-5-6-2-3-2		-4-3-2-2	-1															2.60	
30-45	5033-105.9206	-2-11				0-M42412	-06/18/76	-12	20-15.5				6.4	1000		3-1-7-5-6-2-2-1		-4-3-2-2	-1															3.50	
30-45	5122-105.9581	-2-99				0-M42413	-06/18/76	-13	20							3-1-7-4-6-		-4-3-3-	-1															2.00	
30-45	5039-105.9672	-2-13				0-M42414	-06/18/76	-13	20-20.5				8.2	2200		9-1-7-5-6-1-3-3		-4-3-3-3	-1															2.90	
30-45	5878-105.9694	-2-14				0-M42416	-06/18/76	-14	21-18.5				6.8	1000		9-1-7-5-6-1-3-3		-4-3-3-2	-1															2.90	
30-45	6139-105.9433	-2-11				0-M42417	-06/18/76	-15	19-11.5				6.5	1200		6-1-7-5-6-2-3-1		-4-3-2-2	-1															2.90	
30-45	6614-105.9950	-2-11				0-M42419	-06/18/76	-15	23-16.5				6.9	1700		6-1-4-5-6-2-3-1		-1-3-3-2	-1															2.60	
30-45	4358-105.9461	-2-11				0-M42420	-06/18/76	-15	23-18.5				8.1	2300		5-1-7-5-6-2-3-1		-4-3-3-2	-1															2.80	
30-45	4169-105.9239	-2-11				0-M42421	-06/18/76	-16	23-18.5				6.9	2200		9-1-7-5-6-2-3-1		-4-3-2-2	-1															3.00	
30-45	4214-105.8953	-2-11				0-M42422	-06/18/76	-16	23-19.5				7.8	1700		4-1-7-5-6-1-2-1		-2-3-3-2	-1															2.40	
30-45	4436-105.9167	-2-11				0-M42423	-06/18/76	-17	23-18.5				7.4	1100		7-1-4-5-6-2-3-1		-1-2-3-2	-1															2.80	
30-45	3822-105.9106	-2-11				0-M42424	-06/18/76	-17	24-21.5				7.8	1200		4-1-7-5-6-1-2-1		-4-3-2-1	-1															2.90	
30-45	3917-105.9394	-2-11				0-M42425	-06/18/76	-18	24-15.5				7.7	1700		8-1-7-6-8-3-3-1		-4-3-2-1	-1															2.50	
30-45	2628-105.9544	-2-11				0-M42427	-06/19/76	-13	25-18.5				8.7	700		9-1-3-4-8-2-3-1		-4-3-2-1	-1															2.80	
30-45	2611-105.9206	-2-11				0-M42428	-06/19/76	-14	25-17.5				8.1	950		11-1-7-4-8-2-3-1		-4-3-3-1	-1															3.90	
30-45	2711-105.8961	-2-11				0-M42429	-06/19/76	-14	25-19.5				7.6	1100		8-1-7-6-8-2-3-1		-4-3-3-1	-1															3.20	
30-45	2886-105.9611	-2-11				0-M42430	-06/19/76	-14	26-18.5				7.4	1100		5-1-7-6-8-2-3-1		-2-3-3-1	-1															3.20	
30-45	2925-105.9064	-2-11				0-M42431	-06/19/76	-15	26-16.5				8.0	1100		12-1-7-6-6-2-3-1		-1-2-2-1	-1															2.90	
30-45	3092-105.8967	-2-11				0-M42432	-06/19/76	-16	24-17.5				7.8	750		13-1-7-4-6-2-3-1		-1-2-3-1	-1															2.80	
30-45	3158-105.9350	-2-11				0-M42435	-06/22/76	-12	23-20.0				7.4	1100		10-1-7-	-2-3-1-3-1-2-3-3	-1																2.90	
30-45	3369-105.9300	-2-11				0-M42436	-06/22/76	-12	23-17.5				8.0	1900		10-1-7-	-2-3-1-3-1-3-3-3	-1																3.90	
30-45	3564-105.9431	-2-11				0-M42437	-06/22/76	-12	23-16.5				7.4	2300		13-1-7-	-2-3-1-3-1-3-3-3	-1																2.30	
30-45	2906-105.8747	-2-11				0-M42438	-06/22/76	-13	23-18.5				7.6	2300		5-1-7-4-6-2-3-1-3-1-2-2-3	-1																2.60		
30-45	2769-105.8475	-2-11				0-M42439	-06/22/76	-13	23-17.5				7.4	1950		8-1-7-6-8-2-3-1-3-1-3-3-3	-1																2.70		
30-45	2294-105.8369	-2-15				0-M42441	-06/22/76	-14	23							7-1-4-4-																			

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																				U CONCENTRATION										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC)	UNITS IN ppm	
							DATE	HOUR																												
30-45.7772-105.9711-2-11-						0-M42479-06/27/76-16-	24-14.0	-	7.0	1600-					6-1-7-5-8-3-3-1-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
30-45.7994-105.9456-2-11-						0-M42480-06/27/76-16-	24-15.0	-	7.2	1500-					9-1-7-5-8-3-3-1-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.8211-105.9728-2-15-						0-M42483-06/27/76-17-	23-	-	-	-					9-1-7-4-6-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.5928-105.6567-2-15-						0-M42487-06/28/76-13-	30-	-	-	-					9-1-7-5-6-	-4-3-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.4164-105.6008-2-14-						0-M42490-06/28/76-14-	32-22.0	-	7.2	500-					12-1-7-5-6-2-2-4-	-4-3-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45.4242-105.6042-2-14-						0-M42491-06/28/76-14-	30-15.0	-	7.2	300-					15-1-7-5-6-2-2-2-	-4-3-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.8436-104.1833-2-15-						0-M42496-06/29/76-11-	21-	-	-	-					9-1-7-4-6-	-3-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.8492-104.1825-2-12-						0-M42497-06/29/76-12-	22-19.5	-	7.5	2000-					11-1-7-4-6-2-3-2-3-	-3-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
30-45.7378-105.1519-2-97-						0-M42498-07/09/76-14-	25-	-	-	-					9-1-6-5-6-	-4-3-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.7322-105.1836-2-14-						0-M42499-07/09/76-14-	25-20.0	-	7.1	500-					7-1-6-4-6-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.7194-105.2272-2-14-						0-M42500-07/09/76-13-	30-27.0	-	6.6	380-					12-1-7-5-6-	-4-3-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45.7047-105.2153-2-14-						0-M42501-07/09/76-12-	29-26.0	-	6.5	100-					7-1-7-5-6-	-3-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.7089-104.5153-2-14-						0-M42502-07/08/76-14-	28-27.0	-	6.3	500-					6-1-7-5-6-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45.7264-104.5094-2-13-						0-M42503-07/08/76-14-	33-25.0	-	6.4	270-					9-1-7-4-6-	-3-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45.7431-104.5378-2-14-						0-M42504-07/09/76-11-	28-18.0	-	6.3	120-					10-4-6-5-6-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45.6261-104.5889-2-15-						0-M42505-07/08/76-16-	30-	-	-	-					9-4-6-5-6-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45.6528-104.6078-2-14-						0-M42506-07/08/76-16-	28-16.0	-	6.8	1400-					9-4-6-5-6-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
30-45.6739-104.6044-2-14-						0-M42507-07/08/76-16-	29-17.0	-	6.4	800-					9-4-6-5-6-	-6-4-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45.6867-104.5556-2-14-						0-M42508-07/08/76-15-	32-18.0	-	6.4	460-					6-4-6-	-6-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45.7208-104.5539-2-13-						0-M42510-07/08/76-14-	32-15.0	-	6.7	430-					6-4-6-4-6-	-4-4-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.7161-104.5667-2-14-						0-M42511-07/08/76-14-	32-19.0	-	6.9	1300-					6-4-6-4-6-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45.6956-104.6156-2-12-						0-M42512-07/08/76-13-	30-17.0	-	7.0	1100-					8-4-6-4-8-1-2-2-3-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.7328-104.6050-2-14-						0-M42513-07/08/76-11-	31-18.0	-	6.6	800-					9-4-6-5-8-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45.7583-104.6056-2-15-						0-M42514-07/08/76-10-	30-	-	-	-					6-4-6-5-8-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.9806-104.5694-2-12-						0-M42516-07/07/76-16-	32-22.0	-	7.0	1200-					8-4-6-6-8-2-2-2-2-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-46.0000-104.3500-2-13-						0-M42517-07/07/76-15-	29-20.0	-	6.6	600-					9-1-6-5-6-1-3-2-3-6-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-46.0000-104.3000-2-12-						0-M42518-07/07/76-15-	31-22.0	-	6.4	380-					7-1-1-5-6-1-1-2-3-4-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-46.0000-104.4847-2-15-						0-M42519-07/06/76-14-	30-	-	-	-					4-4-6-4-6-	-4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.9778-104.4986-2-12-						0-M42520-07/06/76-13-	31-21.0	-	6.8	1300-					6-4-6-6-6-2-2-2-2-4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.9122-105.7833-2-11-						0-M42534-06/26/76-15-	17-15.0	-	6.5	500-					9-1-7-5-8-3-3-1-	-4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.9367-105.7917-2-11-						0-M42535-06/26/76-16-	18-13.0	-	7.8	3800-					9-1-7-5-8-3-3-1-	-4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
30-45.8850-105.7839-2-11-						0-M42537-06/26/76-16-	18-15.0	-	8.0	4000-					11-1-7-5-8-3-3-1-	-4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45.9661-105.8433-2-11-						0-M42538-06/26/76-17-	18-14.0	-	6.6	600-					8-1-7-5-8-3-3-1-	-4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.5428-105.9644-2-15-						0-M42540-06/23/76-13-	22-	-	-	-					6-1-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00
30-45.5786-105.9200-2-11-						0-M42541-06/23/76-13-	21-12.0	-	6.6	1450-					12-1-6-5-7-2-2-1-	-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.5681-105.9000-2-11-						0-M42542-06/23/76-14-	22-13.0	-	6.5	1200-					9-1-6-5-8-2-2-1-	-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.4753-105.9094-2-11-						0-M42544-06/23/76-15-	26-	-	-	-					9-1-6-5-7-1-1-1-	-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.4986-105.9039-2-11-						0-M42545-06/23/76-15-	24-16.0	-	6.6	600-					9-1-6-5-8-2-2-1-	-1-6-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45.4922-105.9931-2-11-						0-M42546-06/23/76-16-	20-14.0	-	6.6	1800-					10-1-6-5-8-2-2-1-	-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.4775-105.9533-2-15-						0-M42547-06/23/76-17-	22-	-	-	-					12-1-6-4-6-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70
30-45.8211-105.6131-2-11-						0-M42548-06/26/76-12-	21-12.0	-	7.2	500-					6-1-7-5-6-3-3-1-	-4-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45.8667-105.54																																				

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																						U CONCENTRATION							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (αd ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES	
							DATE	HOURL																										ANALYZED BY DELAYED NEUTRON COUNTING (DNC)	UNITS IN ppm
30-45	9528	-105.6239	-2-15	0-M42584	-06/27/76	-16	26	-	-	-	-	-	-	-	9-1-7-4-6	-1	-	-3-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
30-45	9342	-105.5289	-2-14	0-M42586	-06/27/76	-16	28-21.5	-	-	-	-	6.3	350	-	10-1-7-5-6	-2-1	-	-4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45	9033	-105.5011	-2-14	0-M42587	-06/27/76	-16	28-21.5	-	-	-	-	6.9	3300	-	6-1-7-5-6	-2-3-1	-	-4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	9206	-105.5472	-2-14	0-M42588	-06/27/76	-17	27-20.5	-	-	-	-	6.5	2000	-	10-1-7-5-6	-2-2-1	-	-4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	9419	-105.5856	-2-15	0-M42590	-06/27/76	-17	25	-	-	-	-	-	-	-	7-1-7-4-6	-1	-	-3-2-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	9794	-105.9006	-2-11	0-M42594	-06/26/76	-17	19-15.5	-	-	-	-	6.6	500	-	9-1-7-5-6	-3-3-1	-	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	9167	-105.9094	-2-15	0-M42604	-06/27/76	-12	14	-	-	-	-	-	-	-	11-1-7-6-7	-	-	-4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	7906	-105.9100	-2-99	0-M42609	-06/27/76	-13	23	-	-	-	-	-	-	-	9-1-7-4-6	-	-	-4-3-4-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	8458	-104.1644	-2-15	0-M42611	-06/29/76	-12	22	-	-	-	-	-	-	-	8-1-7-4-6	-	-	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
30-45	5828	-105.6733	-2-15	0-M42620	-06/27/76	-14	22	-	-	-	-	-	-	-	8-1-7-5-7	-	-	-4-4-1-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	5606	-105.7253	-2-15	0-M42622	-06/27/76	-15	24	-	-	-	-	-	-	-	10-1-7-5-7	-	-	-4-3-2-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	5708	-105.6694	-2-15	0-M42624	-06/27/76	-16	23	-	-	-	-	-	-	-	15-1-7-5	-	-	-4-4-1-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	8292	-104.1456	-2-15	0-M42626	-06/29/76	-12	22	-	-	-	-	-	-	-	11-1-7-4-6	-	-	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	8250	-104.0681	-2-15	0-M42627	-06/29/76	-13	22	-	-	-	-	-	-	-	12-1-7-4-6	-	-	-2-2-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	8583	-104.1292	-2-15	0-M42628	-06/29/76	-13	22	-	-	-	-	-	-	-	16-1-7-4-6	-	-	-4-3-2-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45	8986	-104.1208	-2-12	0-M42632	-06/29/76	-14	23-16.0	-	-	-	-	6.8	1100	-	12-1-7-6-8	-4-4-2-4-2	-4-4-2-4-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
30-45	9375	-104.0917	-2-12	0-M42634	-06/29/76	-15	23-20.0	-	-	-	-	7.8	1500	-	12-1-7-4-8	-4-4-4-2-4-3	-2-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
30-45	7992	-104.2900	-2-15	0-M42638	-06/30/76	-12	26	-	-	-	-	-	-	-	12-1-7-4-6	-	-	-4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
30-45	8267	-104.2717	-2-15	0-M42639	-06/30/76	-15	26	-	-	-	-	-	-	-	14-1-7-5-6	-	-	-2-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	8306	-104.2833	-2-15	0-M42640	-06/30/76	-15	26	-	-	-	-	-	-	-	14-1-7-4-6	-	-	-4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45	8308	-104.2822	-2-15	0-M42641	-06/30/76	-15	26	-	-	-	-	-	-	-	8-1-7-6-8	-	-	-4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
30-45	8111	-104.2361	-2-15	0-M42642	-06/30/76	-16	25	-	-	-	-	-	-	-	12-1-7-4-6	-	-	-3-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	8083	-104.1417	-2-15	0-M42644	-06/30/76	-16	25	-	-	-	-	-	-	-	12-1-7-5-6	-	-	-4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45	9044	-104.1806	-2-15	0-M42645	-06/30/76	-17	23	-	-	-	-	-	-	-	9-1-7-6-6	-	-	-4-3-2-1	-1	-	-	-	-												

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																				U CONCENTRATION								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (eJ ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
							DATE	HOUR																										
30-45	7639-104	5367-2-15	0-M42677	06/29/76-10	25	-	-	-	-	-	-	-	-	-	-	7-1-6-4-6	-1	-	-4-2-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	7856-104	7217-2-15	0-M42679	06/29/76-11	26	-	-	-	-	-	-	-	-	-	-	10-1-6-4-6	-1	-	2-4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	7833-104	7250-2-15	0-M42680	06/29/76-11	26	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6	-1	-	2-4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	8006-104	7389-2-15	0-M42681	06/29/76-11	26	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6	-1	-	2-3-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	8000-104	7389-2-15	0-M42682	06/29/76-11	26	-	-	-	-	-	-	-	-	-	-	10-1-6-4-6	-1	-	2-3-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	8006-104	7458-2-15	0-M42683	06/29/76-12	25	-	-	-	-	-	-	-	-	-	-	6-1-6-4-6	-1	-	2-3-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45	8083-104	7667-2-15	0-M42684	06/29/76-12	27	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6	-1	-	1-3-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	8111-104	7922-2-15	0-M42685	06/29/76-12	27	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6	-1	-	2-3-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45	8125-104	7944-2-15	0-M42686	06/29/76-12	27	-	-	-	-	-	-	-	-	-	-	7-1-6-4-6	-1	-	1-3-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	8625-104	8319-2-15	0-M42687	06/28/76-15	25	-	-	-	-	-	-	-	-	-	-	3-1-7-5-6	-	-	4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	7667-104	8058-2-15	0-M42688	06/29/76-13	27	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6	-1	-	2-3-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	7583-104	8264-2-15	0-M42690	06/29/76-13	27	-	-	-	-	-	-	-	-	-	-	6-1-6-4-6	-1	-	4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	7833-104	9017-2-15	0-M42691	06/29/76-13	28	-	-	-	-	-	-	-	-	-	-	10-1-6-4-6	-1	-	2-3-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	7833-104	9056-2-15	0-M42692	06/29/76-14	29	-	-	-	-	-	-	-	-	-	-	10-1-6-4-6	-1	-	4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45	7694-104	9611-2-15	0-M42694	06/29/76-14	29	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6	-1	-	4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
30-45	7917-104	8542-2-15	0-M42695	06/29/76-14	30	-	-	-	-	-	-	-	-	-	-	7-1-6-4-6	-1	-	2-4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	8375-104	8250-2-15	0-M42696	06/29/76-15	29	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6	-1	-	2-3-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	8375-104	9208-2-15	0-M42697	06/29/76-15	30	-	-	-	-	-	-	-	-	-	-	10-1-6-4-6	-1	-	4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	8375-104	8792-2-15	0-M42698	06/29/76-15	30	-	-	-	-	-	-	-	-	-	-	10-1-6-4-6	-1	-	1-4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	8333-104	8792-2-15	0-M42699	06/29/76-16	30	-	-	-	-	-	-	-	-	-	-	12-1-6-4-6	-1	-	2-4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45	8139-104	9042-2-15	0-M42700	06/29/76-16	29	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6	-1	-	1-4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	8083-104	9042-2-15	0-M42701	06/29/76-16	29	-	-	-	-	-	-	-	-	-	-	12-1-6-4-6	-1	-	2-4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45	6175-104	7617-2-15	0-M42704	07/01/76-11	26	-	-	-	-	-	-	-	-	-	-	6-1-7-5-6	-	-	4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	5861-104	9056-2-15	0-M42706	07/01/76-11	28	-	-	-	-	-	-	-	-	-	-	9-1-7-5-6	-	-	4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45	5847-104	9056-2-15	0-M42707	07/01/76-11	28	-	-	-	-	-	-	-	-	-	-	6-1-7-4-6	-	-	4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45	6042-104	9347-2-15	0-M42708	07/01/76-12	29	-	-	-	-	-	-	-	-	-	-	6-1-7-5-6	-	-	4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
30-45	5917-104	9403-2-14	0-M42709	07/01/76-12	29	20.0	-	-	7.2	3800	-	-	-	-	-	6-1-7-5-6-1-3-1	-	-	4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	5681-104	9319-2-15	0-M42710	07/01/76-12	29	-	-	-	-	-	-	-	-	-	-	3-1-7-4-6	-	-	4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	5472-104	9708-2-15	0-M42711	07/01/76-12	29	-	-	-	-	-	-	-	-	-	-	12-1-7-4-6	-	-	4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45	5722-104	8875-2-15	0-M42712	07/01/76-13	31	-	-	-	-	-	-	-	-	-	-	3-1-7-5-6	-	-	4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	5708-104	8889-2-15	0-M42713	07/01/76-13	31	-	-	-	-	-	-	-	-	-	-	6-1-7-5-6	-	-	4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	5875-104	8542-2-15	0-M42714	07/01/76-14	28	-	-	-	-	-	-	-	-	-	-	6-1-7-4-6	-	-	4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45	5861-104	8533-2-15	0-M42715	07/01/76-14	29	-	-	-	-	-	-	-	-	-	-	3-1-7-4-6	-	-	4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	5819-104	8583-2-15	0-M42716	07/01/76-15	28	-	-	-	-	-	-	-	-	-	-	4-1-7-4-6	-	-	4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	5722-104	8708-2-15	0-M42717	07/01/76-15	27	-	-	-	-	-	-	-	-	-	-	9-1-7-4-6	-	-	4-3-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45	5750-104	7792-2-15	0-M42718	07/01/76-14	29	-	-	-	-	-	-	-	-	-	-	6-1-7-4-6	-	-	4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	5583-104	7533-2-15	0-M42719	07/01/76-15	29	-	-	-	-	-	-	-	-	-	-	6-1-7-4-6	-	-	4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45	5486-104	7917-2-15	0-M42720	07/01/76-15	31	-	-	-	-	-	-	-	-	-	-	3-1-7-4-6	-	-	4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	7.30	
30-45	5611-104	8333-2-15	0-M42721	07/01/76-15	31	-	-	-	-	-	-	-	-	-	-	6-1-7-4-6	-	-	4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45	5556-104	8517-2-15	0-M42722	07/01/76-16	27	-	-	-	-	-	-	-	-	-	-	6-1-7-5-6	-	-	4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	5514-104	8722-2-15	0-M42723	07/01/76-16	27	-	-	-	-	-	-	-	-	-	-	6-1-7-5-6	-	-	4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	5458-104	8333-2-15	0-M42724	07/01/76-16	28	-	-	-	-	-	-	-	-	-	-	3-1-7-5-6	-	-	4-3-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	5236-104	8708-2-15	0-M42725	07/01/76-16	27	-	-	-	-	-	-	-	-	-	-	6-1-7-5-6	-	-	4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	5208-104	8708-2-15	0-M42726	07/01/76-16	27	-	-	-	-	-	-	-	-	-	-	6-1-7-5-6	-	-	4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45	5292-104	8339-2-15	0-M42727	07/01/76-17	28	-	-	-	-	-	-	-	-	-	-	3-1-7-5-6	-	-	4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45	5281-104	8328-2-15	0-M42728	07/01/76-17	28	-	-	-	-	-	-	-	-	-	-	3-1-7-4-6	-	-	4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	2.20	
30-45	5292-104	8319-2-15																																

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER					LASL SAMPLE NUMBER AND FIELD DATA																			U CONCENTRATION									
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (dJ ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES
							DATE	HOUR																									ANALYZED BY DELAYED NEUTRON COUNTING (DNC)
																														UNITS IN ppm			
10-45	7417-104.1000	2-15	0-M42734	07/03/76	14	25	-	-	-	-	-	-	-	-	10-1-6-4-6	-1	-	-4-2-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	2.40		
10-45	7306-104.1500	2-15	0-M42735	07/03/76	15	26	-	-	-	-	-	-	-	-	14-1-7-5-6	-1	-	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	7.60		
10-45	7056-104.1583	2-15	0-M42736	07/03/76	15	27	-	-	-	-	-	-	-	-	12-1-6-4-6	-1	-	-4-2-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	3.80		
10-45	7158-104.1883	2-99	0-M42737	07/03/76	15	24	-	-	-	-	-	-	-	-	12-1-6-4-6	-1	-	-4-2-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	4.20		
10-45	7100-104.1850	2-14	0-M42738	07/03/76	16	24-21.5	-	-	-	-	-	7.5	900	-	16-1-7-6-8-1	-3-2	-	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	5.10		
10-45	6708-104.1972	2-11	0-M42739	07/03/76	17	25-15.5	-	-	-	-	-	6.3	400	-	16-1-7-6-8-2	-3-1-3	-	-1-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	16.60		
10-45	2583-104.7875	2-12	0-M42740	07/07/76	11	26-20.5	-	-	-	-	-	5.9	1000	-	6-1-6-4-6-2	-2-1	-	-4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	3.70		
10-45	2569-104.7867	2-12	0-M42741	07/07/76	11	26-21.0	-	-	-	-	-	6.3	300	-	6-1-6-4-6-2	-2-1	-	-4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	3.90		
10-45	2014-104.7000	2-15	0-M42742	07/07/76	11	27	-	-	-	-	-	-	-	-	6-1-6-5-6	-1	-	-4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	2.30		
10-45	2000-104.7028	2-15	0-M42743	07/07/76	11	27	-	-	-	-	-	-	-	-	12-1-6-5-6	-1	-	-4-2-2-1	-1	-	-	-	-	-	-	-	-	-	-	-	2.50		
10-45	1889-104.7042	2-15	0-M42744	07/07/76	12	29	-	-	-	-	-	-	-	-	6-1-6-5-6	-1	-	-4-2-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	2.60		
10-45	1875-104.7042	2-15	0-M42745	07/07/76	12	29	-	-	-	-	-	-	-	-	6-1-6-5-6	-1	-	-4-2-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	2.60		
10-45	3667-104.9000	2-15	0-M42746	07/07/76	12	26	-	-	-	-	-	-	-	-	7-1-6-5-6-1	-	-	-4-2-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	2.80		
10-45	3681-104.9028	2-15	0-M42747	07/07/76	12	26	-	-	-	-	-	-	-	-	6-1-6-5-6	-1	-	-4-2-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	3.70		
10-45	3833-104.9167	2-15	0-M42748	07/07/76	12	26	-	-	-	-	-	-	-	-	9-1-6-5-6	-1	-	-4-2-3-1	-1	-	-	-	-	-	-	-	-	-	-	-	3.30		
10-45	4083-104.9625	2-15																															

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																					U CONCENTRATION						
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (dpm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
							DATE	HOUR																									
0-45-7097-104.3208-2-15-						0-M42795-06/30/76-15-			21-	-	-	-	-	-	11-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
0-45-7028-104.3333-2-15-						0-M42796-06/30/76-18-			21-	-	-	-	-	-	14-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
0-45-6278-104.1792-2-11-						0-M42797-06/30/76-18-			21-	10.3	-	7.2	400-	-	8-1-7-5-6-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
0-45-6194-104.1417-2-11-						0-M42798-07/01/76-8-			21-	18.5	-	8.2	600-	-	4-1-7-5-6-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
0-45-6194-104.0958-2-15-						0-M42800-07/01/76-9-			21-	-	-	-	-	-	8-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
0-45-6208-104.1167-2-15-						0-M42801-07/01/76-9-			21-	-	-	-	-	-	11-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
0-45-5833-104.1611-2-15-						0-M42802-07/01/76-9-			21-	-	-	-	-	-	14-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.90	
0-45-5597-104.1722-2-15-						0-M42803-07/01/76-10-			23-	-	-	-	-	-	11-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
0-45-5583-104.1583-2-15-						0-M42805-07/01/76-10-			23-	-	-	-	-	-	9-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
0-45-5278-104.1250-2-15-						0-M42807-07/01/76-10-			23-	-	-	-	-	-	9-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
0-45-5125-104.0875-2-12-						0-M42809-07/01/76-11-			23-	21.0	-	7.6	700-	-	9-1-7-4-8-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
0-45-5194-104.0861-2-15-						0-M42810-07/01/76-11-			23-	-	-	-	-	-	9-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
0-45-5667-104.1056-2-11-						0-M42811-07/01/76-11-			23-	19.0	-	8.0	600-	-	12-1-7-4-8-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
0-45-5389-104.0861-2-15-						0-M42812-07/01/76-11-			23-	-	-	-	-	-	9-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
0-45-5389-104.0528-2-15-						0-M42813-07/01/76-12-			26-	-	-	-	-	-	11-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
0-45-5458-104.0125-2-15-						0-M42814-07/01/76-12-			24-	-	-	-	-	-	11-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
0-45-5500-104.0208-2-15-						0-M42815-07/01/76-12-			24-	-	-	-	-	-	9-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
0-45-5778-104.0708-2-11-						0-M42816-07/01/76-13-			26-	20.0	-	7.8	850-	-	12-1-7-6-8-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
0-45-6028-104.1000-2-11-						0-M42817-07/01/76-13-			26-	18.0	-	7.9	750-	-	12-1-7-4-8-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
0-45-5764-104.0333-2-15-						0-M42818-07/01/76-14-			26-	-	-	-	-	-	9-1-7-6-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
0-45-6000-104.0167-2-15-						0-M42820-07/01/76-14-			26-	-	-	-	-	-	12-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
0-45-6375-104.0194-2-15-						0-M42821-07/01/76-15-			25-	-	-	-	-	-	12-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
0-45-6625-104.0389-2-15-						0-M42823-07/01/76-16-			28-	-	-	-	-	-	14-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
0-45-6625-104.0528-2-12-						0-M42824-07/01/76-16-			28-	18.0	-	7.0	1600-	-	11-1-7-4-8-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
0-45-6639-104.0556-2-12-						0-M42825-07/01/76-16-			28-	20.0	-	7.2	1800-	-	12-1-7-4-8-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
0-45-7097-104.0722-2-15-						0-M42826-07/01/76-16-			28-	-	-	-	-	-	12-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
0-45-7083-104.0889-2-15-						0-M42827-07/01/76-16-			28-	-	-	-	-	-	12-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
0-45-6944-104.1125-2-15-						0-M42828-07/01/76-16-			28-	-	-	-	-	-	14-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.10	
0-45-6889-104.1028-2-15-						0-M42829-07/01/76-16-			28-	-	-	-	-	-	12-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.20	
0-45-6778-104.0861-2-15-						0-M42830-07/01/76-16-			28-	-	-	-	-	-	16-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.00	
0-45-6556-104.0972-2-15-						0-M42831-07/01/76-17-			28-	-	-	-	-	-	16-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
0-45-6542-104.0972-2-13-						0-M42832-07/01/76-17-			28-	24.0	-	8.8	1000-	-	12-1-7-6-8-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
0-45-6667-104.1542-2-15-						0-M42833-07/01/76-17-			26-	-	-	-	-	-	12-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
0-45-6681-104.1750-2-12-						0-M42834-07/01/76-18-			26-	23.0	-	7.4	850-	-	11-1-7-6-8-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
0-45-6833-104.1389-2-15-						0-M42835-07/01/76-18-			26-	-	-	-	-	-	11-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
0-45-7994-105.2844-2-15-						0-M42837-07/10/76-12-			32-	-	-	-	-	-	11-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
0-45-8350-105.3036-2-15-						0-M42838-07/10/76-13-			32-	-	-	-	-	-	9-1-7-6-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
0-45-8489-105.3319-2-15-						0-M42840-07/10/76-13-			32-	-	-	-	-	-	9-1-7-6-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
0-45-8503-105.3450-2-15-						0-M42841-07/10/76-14-			32-	-	-	-	-	-	12-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
0-45-8653-105.3653-2-15-						0-M42843-07/10/76-14-			32-	-	-	-	-	-	8-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
0-45-8783-105.3008-2-14-						0-M42846-07/10/76-15-			32-	22.0	-	8.5	1500-	-	11-1-7-6-7-1-3-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
0-45-8853-105.3075-2-15-						0-M42848-07/10/76-16-			31-	-	-	-	-	-	12-1-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
0-45-8961-105.3492-2-15-						0-M42849-07/10/76-16-			30-	-	-	-	-	-	12-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
0-45-9019-105.3514-2-15-						0-M42850-07/10/76-16-			30-	-	-	-	-	-	9-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.10	
0-45-9333-105.3917-2-12-						0-M42851-07/10/76-17-			30-	20.5	-	7.6	2600-	-	14-1-7-6-8-2-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
0-45-9564-105.4203-2-97-						0-M42852-07/10/76-17-			30-	-	-	-	-	-	12-1-7-6-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
0-45-9819-105.3553-2-15-						0-M42857-07/10/76-18-			29-	-	-	-	-	-	13-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
0-45-9681-105.2933-2-14-						0-M42859-07/10/76-18-			29-	22.0	-	7.2	3400-	-	9-1-7-5-6-1-3-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
0-45-9853-105.3856-2-12-						0-M42860-07/10/76-19-			29-	21.0	-	7.9	2800-	-	12-1-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
0-45-8472-104.4917-2-15-						0-M42861-07/11/76-9-			29-	-	-	-	-	-	12-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
0-45-8375-104.4167-2-14-						0-M42862-07/11/76-9-			29-	23.0	-	7.6	800-	-	7-1-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

[illegible]

[illegible]

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER					LASL SAMPLE NUMBER AND FIELD DATA																										U CONCENTRATION				
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC)	UNITS IN ppm
							DATE	HOUR																											
0-45-1864-104.9828-2-15-	0-M43017-07/13/76-12-	26-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-5-6-	-1-	-	-1-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
0-45-2156-104.9067-2-13-	0-M43018-07/13/76-12-	23-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
0-45-1819-104.9011-2-14-	0-M43019-07/13/76-13-	27-21.0-	-	-	-	-	-	-	-	-	-	-	6.3-	300-	9-1-6-5-6-2-2-2-	-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
0-45-1433-104.8839-2-14-	0-M43020-07/13/76-13-	27-21.0-	-	-	-	-	-	-	-	-	-	-	5.9-	250-	7-1-6-5-6-2-2-1-	-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
0-45-1953-104.8572-2-14-	0-M43021-07/13/76-14-	27-26.0-	-	-	-	-	-	-	-	-	-	-	6.3-	200-	18-1-6-5-6-2-2-1-	-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
0-45-1603-104.8566-2-15-	0-M43022-07/13/76-14-	24-	-	-	-	-	-	-	-	-	-	-	-	-	15-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.90	
0-45-1714-104.7911-2-15-	0-M43023-07/13/76-15-	25-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
0-45-1811-104.7681-2-15-	0-M43024-07/13/76-15-	26-	-	-	-	-	-	-	-	-	-	-	-	-	12-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
0-45-1694-104.8211-2-15-	0-M43025-07/13/76-15-	25-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
0-45-1656-104.7550-2-15-	0-M43027-07/13/76-16-	27-	-	-	-	-	-	-	-	-	-	-	-	-	7-1-6-5-6-1-2-5-	-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.40	
0-45-4303-104.0589-2-12-	0-M43028-07/14/76-10-	27-19.0-	-	-	-	-	-	-	-	-	-	-	6.3-	470-	10-1-6-5-6-2-2-2-	-	-	-4-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
0-45-7833-105.1250-2-97-	0-M43033-07/09/76-16-	28-	-	-	-	-	-	-	-	-	-	-	-	-	12-1-6-5-6-	-	-	-4-3-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
0-45-9750-104.1056-2-15-	0-M43039-07/10/76-12-	31-	-	-	-	-	-	-	-	-	-	-	-	-	4-1-6-4-6-	-	-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
0-45-9917-104.1583-2-15-	0-M43040-07/10/76-12-	31-	-	-	-	-	-	-	-	-	-	-	-	-	13-1-6-5-6-	-	-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
0-45-9694-104.1194-2-15-	0-M43041-07/10/76-13-	32-	-	-	-	-	-	-	-	-	-	-	-	-	7-1-6-5-6-	-	-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
0-45-9681-104.1208-2-15-	0-M43042-07/10/76-13-	32-	-	-	-	-	-	-	-	-	-	-	-	-	4-1-6-5-6-	-	-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
0-45-9986-104.2250-2-15-	0-M43043-07/10/76-14-	32-	-	-	-	-	-	-	-	-	-	-	-	-	12-1-6-5-6-	-	-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
0-45-9986-104.2583-2-15-	0-M43044-07/10/76-14-	33-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-	-	-4-3-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
0-45-9375-104.5667-2-15-	0-M43046-07/11/76-	9-22-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
0-45-9083-104.5750-2-15-	0-M43047-07/11/76-	9-23-	-	-	-	-	-	-	-	-	-	-	-	-	10-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
0-45-9167-104.6083-2-15-	0-M43048-07/11/76-	9-24-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
0-45-9625-104.6542-2-15-	0-M43049-07/11/76-10-	24-	-	-	-	-	-	-	-	-	-	-	-	-	7-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
0-45-8903-104.6264-2-15-	0-M43050-07/11/76-10-	26-	-	-	-	-	-	-	-	-	-	-	-	-	12-1-6-4-7-	-1-	-	-4-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
0-45-9083-104.6250-2-15-	0-M43051-07/11/76-10-	26-	-	-	-	-	-	-	-	-	-	-	-	-	7-1-6-4-6-	-1-	-	-4-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
0-45-9000-104.6617-2-15-	0-M43052-07/11/76-11-	25-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
0-45-8750-104.6472-2-15-	0-M43053-07/11/76-11-	25-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	
0-45-8750-104.6333-2-15-	0-M43054-07/11/76-11-	25-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-5-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
0-45-8583-104.6500-2-15-	0-M43055-07/11/76-11-	25-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
0-45-8458-104.6517-2-15-	0-M43056-07/11/76-11-	24-	-	-	-	-	-	-	-	-	-	-	-	-	6-1-6-4-6-	-1-	-	-4-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
0-45-8667-104.5833-2-15-	0-M43057-07/11/76-12-	24-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
0-45-4350-104.1556-2-15-	0-M43058-07/16/76-10-	29-	-	-	-	-	-	-	-	-	-	-	-	-	12-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
0-45-4303-104.1472-2-15-	0-M43059-07/16/76-10-	29-	-	-	-	-	-	-	-	-	-	-	-	-	12-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
0-45-3908-104.0586-2-15-	0-M43061-07/16/76-11-	30-	-	-	-	-	-	-	-	-	-	-	-	-	10-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
0-45-3744-104.0600-2-15-	0-M43062-07/16/76-11-	30-	-	-	-	-	-	-	-	-	-	-	-	-	10-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
0-45-3897-104.1194-2-15-	0-M43063-07/16/76-11-	30-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
0-45-3675-104.1542-2-15-	0-M43064-07/16/76-11-	30-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
0-45-3811-104.1797-2-15-	0-M43065-07/16/76-12-	31-	-	-	-	-	-	-	-	-	-	-	-	-	13-1-6-4-6-	-1-	-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
0-45-4081-104.2211-2-15-	0-M43067-07/16/76-12-	31-	-	-	-	-	-	-	-	-	-	-	-	-	9-1-6-5-6-1-2-	-1-	-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90	
0-45-4208-104.2558-2-15-	0-M43068-07/16/76-12-	31-	-	-	-	-	-	-	-	-	-	-	-	-	10-1-6-4-6-	-1-	-	-1-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
0-45-4044-104.2725-2-15-	0-M43069-07/16/76-13-	31-	-	-	-	-	-	-	-	-	-	-	-	-	7-1-6-4-6-	-1-	-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
0-45-3681-104.2106-2-15-	0-M43070-07/16/76-13-	31-	-	-	-	-	-	-	-	-	-	-	-	-	10-1-6-4-6-	-1-	-	-4-3-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
0-45-3608-104.2106-2-15-	0-M43071-07/16/76-13-	32-	-	-	-	-	-	-	-	-	-	-	-	-	7-1-6-4-6-	-1-	-	-4-3-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
0-45-3483-104.0722-2-15-																																			

[illegible]

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																						U CONCENTRATION						
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (dU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
							DATE	HOUR																										
30-45	3550-104.5144-2-15-					0-M43138	07/17/76	12-	31-	-	-	-	-	-	-	6-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45	3567-104.5256-2-15-					0-M43139	07/17/76	12-	32-	-	-	-	-	-	-	3-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45	3481-104.5306-2-15-					0-M43140	07/17/76	13-	31-	-	-	-	-	-	-	15-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.40	
30-45	2867-104.3731-2-15-					0-M43141	07/17/76	14-	32-	-	-	-	-	-	-	9-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	2867-104.3725-2-15-					0-M43142	07/17/76	14-	32-	-	-	-	-	-	-	9-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	2761-104.3464-2-12-					0-M43143	07/17/76	14-	32-20.0	-	-	-	6.9	800	-	9-1-7-5-6-2-2-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45	2747-104.2247-2-15-					0-M43144	07/17/76	14-	35-	-	-	-	-	-	-	9-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45	3836-104.5272-2-15-					0-M43145	07/18/76	10-	27-	-	-	-	-	-	-	12-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	4053-104.5360-2-15-					0-M43146	07/18/76	10-	27-	-	-	-	-	-	-	10-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	3964-104.5460-2-15-					0-M43147	07/18/76	11-	31-	-	-	-	-	-	-	9-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45	3700-104.5553-2-15-					0-M43148	07/18/76	11-	31-	-	-	-	-	-	-	12-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	3906-104.6053-2-15-					0-M43149	07/18/76	11-	30-	-	-	-	-	-	-	10-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	3736-104.4797-2-15-					0-M43150	07/18/76	11-	31-	-	-	-	-	-	-	13-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	3967-104.4642-2-15-					0-M43152	07/18/76	11-	30-	-	-	-	-	-	-	12-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	3842-104.4381-2-15-					0-M43153	07/18/76	12-	29-	-	-	-	-	-	-	9-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	3864-104.3594-2-15-					0-M43154	07/18/76	12-	28-	-	-	-	-	-	-	10-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	3389-104.3558-2-15-					0-M43155	07/18/76	12-	27-	-	-	-	-	-	-	9-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	3422-104.3533-2-15-					0-M43156	07/18/76	12-	28-	-	-	-	-	-	-	10-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45	4019-104.4397-2-15-					0-M43157	07/18/76	13-	32-	-	-	-	-	-	-	9-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	4211-104.4575-2-15-					0-M43158	07/18/76	13-	31-	-	-	-	-	-	-	12-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45	4386-104.4536-2-15-					0-M43159	07/18/76	13-	34-	-	-	-	-	-	-	10-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90	
30-45	4164-104.4119-2-14-					0-M43160	07/18/76	14-	28-21.0	-	-	-	6.3	750	-	10-1-6-5-6-2-2-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	4183-104.3875-2-15-					0-M43161	07/18/76	14-	29-	-	-	-	-	-	-	9-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	4297-104.3381-2-15-					0-M43162	07/18/76	14-	30-	-	-	-	-	-	-	15-1-6-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.90	
30-45	4158-104.3400-2-15-					0-M43163	07/18/76	15-	29-	-	-	-	-	-	-	13-1-6-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.50	
30-45	4217-104.3136-2-15-					0-M43164	07/18/76	15-	30-	-	-	-	-	-	-	10-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45	4181-104.2983-2-15-					0-M43165	07/18/76	15-	29-	-	-	-	-	-	-	10-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45	3917-104.2930-2-15-					0-M43166	07/18/76	15-	29-	-	-	-	-	-	-	12-1-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	0414-104.4064-2-15-					0-M43167	07/19/76	10-	28-	-	-	-	-	-	-	9-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
30-45	0542-104.4014-2-15-					0-M43168	07/19/76	10-	28-	-	-	-	-	-	-	6-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	0275-104.4250-2-12-					0-M43169	07/19/76	11-	29-19.0	-	-	-	6.5	700	-	15-1-7-5-6-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
30-45	0239-104.4281-2-15-					0-M43170	07/19/76	11-	29-	-	-	-	-	-	-	13-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45	0431-104.4431-2-15-					0-M43171	07/19/76	11-	28-	-	-	-	-	-	-	12-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20	
30-45	0425-104.7908-2-15-					0-M43172	07/16/76	11-	25-	-	-	-	-	-	-	7-1-6-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45	0267-104.8333-2-12-					0-M43173	07/16/76	13-	27-21.0	-	-	-	6.6	1570	-	6-1-6-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45	0044-104.8106-2-12-					0-M43174	07/16/76	13-	20-30.0	-	-	-	6.9	4350	-	7-1-6-5-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
3																																		

DOE SAMPLE NUMBER					LASL SAMPLE NUMBER AND FIELD DATA																	U CONCENTRATION											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmhos/cm)	SCINTILLOMETER (αU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES
							DATE	HOUR																									ANALYZED BY DELAYED NEUTRON COUNTING (DNC)
																														UNITS IN ppm			
30-45.0842-104.9444-2-12-	0-M43195-07/18/76-13	30-22.0	-	6.5	400	3-1-6-5-6-1-3-1-	-4-5-3-3-	-1-	-	-	-	-	-	-	3.00																		
30-45.0861-104.9444-2-12-	0-M43196-07/18/76-13	30-21.0	-	6.5	450	6-1-6-6-8-1-2-1-1-	-4-4-3-2-	-1-	-	-	-	-	-	-	4.80																		
30-45.0572-104.9633-2-15-	0-M43197-07/18/76-14	34-	-	-	-	1-1-7-5-7-	-	-4-4-2-2-	-1-	-	-	-	-	-	9.30																		
30-45.0489-104.9764-2-11-	0-M43198-07/18/76-15	33-23.0	-	6.5	250	4-1-6-4-7-1-2-1-	-4-3-2-2-	-1-	-	-	-	-	-	-	1.90																		
30-45.0300-104.9778-2-14-	0-M43200-07/18/76-16	32-29.0	-	7.2	1000	6-1-6-5-7-1-3-1-	-4-3-2-2-	-1-	-	-	-	-	-	-	3.10																		
30-45.0317-104.9700-2-12-	0-M43201-07/18/76-16	33-26.0	-	6.4	1100	3-1-6-6-7-1-3-1-	-4-4-1-2-	-1-	-	-	-	-	-	-	3.20																		
30-45.0161-104.9386-2-15-	0-M43202-07/18/76-16	32-	-	-	-	3-1-6-5-6-	-	-4-3-2-2-	-1-	-	-	-	-	-	2.80																		
30-45.0133-104.9394-2-15-	0-M43203-07/18/76-16	32-	-	-	-	3-1-6-5-7-	-	-4-3-2-2-	-1-	-	-	-	-	-	3.50																		
30-45.0311-104.9017-2-15-	0-M43204-07/18/76-17	24-	-	-	-	3-1-6-5-6-	-	-4-3-2-2-	-1-	-	-	-	-	-	3.10																		
30-45.1206-104.5583-2-12-	0-M43205-07/19/76-13	32-26.0	-	6.2	750	15-1-1-5-6-2-2-1-	-4-3-1-2-	-1-	-	-	-	-	-	-	4.40																		
30-45.1519-104.5667-2-12-	0-M43206-07/19/76-14	24-28.0	-	6.1	800	1-1-6-5-6-1-2-1-	-4-3-1-2-	-1-	-	-	-	-	-	-	3.90																		
30-45.1697-104.7653-2-12-	0-M43207-07/20/76-10	22-20.0	-	7.1	1800	4-1-6-5-6-	-	-3-3-2-1-	-1-	-	-	-	-	-	6.10																		
30-45.1583-104.6814-2-15-	0-M43208-07/20/76-10	23-	-	-	-	4-1-6-5-6-	-	-4-3-1-2-	-1-	-	-	-	-	-	4.60																		
30-45.1678-104.6581-2-12-	0-M43209-07/20/76-10	24-22.0	-	6.1	120	3-1-6-5-6-1-2-1-	-4-3-1-2-	-1-	-	-	-	-	-	-	4.00																		
30-45.1417-104.6592-2-12-	0-M43210-07/20/76-11	25-21.0	-	5.9	310	1-1-6-5-6-1-	-1-	-4-3-1-1-	-1-	-	-	-	-	-	6.70																		
30-45.0992-104.5719-2-12-	0-M43211-07/20/76-12	26-25.0	-	6.2	1100	1-1-6-5-7-2-3-1-	-4-4-1-1-	-1-	-	-	-	-	-	-	4.10																		
30-45.3278-105.0861-2-15-	0-M43212-07/17/76-14	33-	-	-	-	6-1-7-4-6-	-	-4-3-1-1-	-1-	-	-	-	-	-	2.90																		
30-45.3472-105.0583-2-15-	0-M43213-07/17/76-14	34-	-	-	-	6-1-7-5-6-	-	-3-3-2-1-	-1-	-	-	-	-	-	2.70																		
30-45.3639-105.0944-2-15-	0-M43214-07/17/76-14	35-	-	-	-	9-1-7-4-6-	-	-3-3-2-1-	-1-	-	-	-	-	-	2.50																		
30-45.4319-105.1250-2-15-	0-M43215-07/17/76-15	35-	-	-	-	11-1-7-6-6-	-	-3-3-2-1-	-1-	-	-	-	-	-	2.90																		
30-45.4333-105.1167-2-15-	0-M43216-07/17/76-15	35-	-	-	-	4-1-7-5-6-	-	-4-3-2-1-	-1-	-	-	-	-	-	2.90																		
30-45.4333-105.1667-2-15-	0-M43217-07/17/76-16	35-	-	-	-	8-1-7-4-6-	-	-4-4-2-1-	-1-	-	-	-	-	-	2.70																		
30-45.4403-105.176																																	

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER					LASL SAMPLE NUMBER AND FIELD DATA																				U CONCENTRATION										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (dU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC)	UNITS IN ppm
							DATE	HOUR																											
30-45	1450-104.3200-2-15	0-M43247-07/18/76-17	30-	-	-	-	-	-	-	-	-	-	-	-	8-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
30-45	1400-104.3300-2-15	0-M43248-07/18/76-17	30-	-	-	-	-	-	-	-	-	-	-	-	9-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	1600-104.4100-2-15	0-M43249-07/19/76-10	30-	-	-	-	-	-	-	-	-	-	-	-	9-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45	1631-104.4200-2-15	0-M43250-07/19/76-10	30-	-	-	-	-	-	-	-	-	-	-	-	9-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45	1589-104.4244-2-15	0-M43251-07/19/76-11	32-	-	-	-	-	-	-	-	-	-	-	-	6-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45	1556-104.4250-2-15	0-M43252-07/19/76-11	32-	-	-	-	-	-	-	-	-	-	-	-	8-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
30-45	1531-104.4739-2-15	0-M43253-07/19/76-12	32-	-	-	-	-	-	-	-	-	-	-	-	9-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
30-45	1511-104.4794-2-15	0-M43254-07/19/76-12	32-	-	-	-	-	-	-	-	-	-	-	-	9-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
30-45	1314-104.5128-2-15	0-M43255-07/19/76-12	32-	-	-	-	-	-	-	-	-	-	-	-	9-1-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45	1069-104.5017-2-15	0-M43256-07/19/76-13	32-	-	-	-	-	-	-	-	-	-	-	-	6-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45	1114-104.4939-2-15	0-M43257-07/19/76-13	32-	-	-	-	-	-	-	-	-	-	-	-	10-1-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-							

APPENDIX C (continued). Field Data and Uranium Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE NUMBER AND FIELD DATA																				U CONCENTRATION								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (αU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
							DATE	HOURL																										
30-45.8958	-105.1042	-2-15-	0-M43306	-10/09/76-	15-	25-	-	-	-	-	-	-	-	-	12-1-6-4-7-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.9167	-105.0917	-2-15-	0-M43307	-10/09/76-	15-	26-	-	-	-	-	-	-	-	-	9-1-6-4-7-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.9500	-105.1000	-2-15-	0-M43308	-10/09/76-	15-	26-	-	-	-	-	-	-	-	-	15-1-6-5-6-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45.9500	-105.0972	-2-15-	0-M43309	-10/09/76-	15-	26-	-	-	-	-	-	-	-	-	9-1-6-4-7-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.9389	-105.1667	-2-15-	0-M43310	-10/09/76-	15-	26-	-	-	-	-	-	-	-	-	10-1-6-6-7-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.9833	-105.1125	-2-15-	0-M43311	-10/09/76-	15-	25-	-	-	-	-	-	-	-	-	12-1-6-4-7-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.9708	-105.1486	-2-15-	0-M43312	-10/09/76-	15-	25-	-	-	-	-	-	-	-	-	9-1-6-4-7-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.9492	-105.0333	-2-15-	0-M43313	-10/09/76-	15-	25-	-	-	-	-	-	-	-	-	7-1-6-4-7-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.9833	-105.0500	-2-15-	0-M43314	-10/09/76-	16-	24-	-	-	-	-	-	-	-	-	6-1-6-4-7-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45.9292	-105.0306	-2-15-	0-M43315	-10/09/76-	16-	25-	-	-	-	-	-	-	-	-	7-1-6-4-7-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45.8875	-105.0278	-2-15-	0-M43316	-10/09/76-	16-	27-	-	-	-	-	-	-	-	-	9-1-6-4-7-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45.8083	-104.9667	-2-15-	0-M43317	-10/09/76-	16-	27-	-	-	-	-	-	-	-	-	-1-6-4-7-	-1-	-	-4-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.8292	-104.9750	-2-15-	0-M43318	-10/09/76-	17-	25-	-	-	-	-	-	-	-	-	12-1-6-4-7-	-1-	-	-4-2-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.8625	-104.9750	-2-15-	0-M43319	-10/09/76-	17-	24-	-	-	-	-	-	-	-	-	9-1-6-4-7-	-1-	-	-4-2-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.9153	-104.9833	-2-15-	0-M43320	-10/09/76-	17-	23-	-	-	-	-	-	-	-	-	9-1-6-4-7-	-1-	-	-4-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.9167	-104.9833	-2-15-	0-M43321	-10/09/76-	17-	23-	-	-	-	-	-	-	-	-	9-1-6-4-7-	-1-	-	-4-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45.9500	-104.9889	-2-15-	0-M43322	-10/09/76-	18-	22-	-	-	-	-	-	-	-	-	10-1-6-4-7-	-1-	-	-4-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.9667	-104.9931	-2-15-	0-M43323	-10/09/76-	18-	20-	-	-	-	-	-	-	-	-	10-1-6-4-7-	-1-	-	-4-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.9833	-105.0000	-2-15-	0-M43324	-10/09/76-	18-	22-	-	-	-	-	-	-	-	-	6-1-6-4-7-	-1-	-	-4-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.9917	-104.9486	-2-15-	0-M43325	-10/09/76-	18-	20-	-	-	-	-	-	-	-	-	10-1-6-4-7-	-1-	-	-4-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.9167	-104.9458	-2-15-	0-M43326	-10/09/76-	18-	20-	-	-	-	-	-	-	-	-	13-1-6-4-6-	-1-	-	-4-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.8875	-104.9042	-2-15-	0-M43327	-10/10/76-	16-	21-	-	-	-	-	-	-	-	-	7-1-6-4-6-	-1-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.7875	-104.7292	-2-15-	0-M43328	-10/10/76-	11-	24-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.2319	-105.7194	-2-97-	0-M43332	-10/11/76-	14-	22-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45.0678	-105.8917	-2-15-	0-M43334	-10/11/76-	14-	22-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.0572	-105.8539	-2-14-	0-M43335	-10/11/76-	14-	22-	-	-	-	-	-	-	-	-	10-1-6-4-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45.0300	-105.9228	-2-15-	0-M43336	-10/11/76-	15-	21-	-	-	-	-	-	-	-	-	13-1-6-4-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
30-45.0417	-105.9589	-2-15-	0-M43337	-10/11/76-	15-	22-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.0622	-105.8539	-2-14-	0-M43338	-10/11/76-	15-	21-	-	-	-	-	-	-	-	-	9-1-6-5-7-	-2-i	-	-4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45.1039	-105.8356	-2-97-	0-M43340	-10/11/76-	15-	21-	-	-	-	-	-	-	-	-	12-1-6-4-6-	-1-	-	-1-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45.1078	-105.8083	-2-15-	0-M43341	-10/11/76-	15-	20-	-	-	-	-	-	-	-	-	9-1-6-4-6-	-1-	-	-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.0861	-105.7933	-2-15-	0-M43342	-10/11/76-	15-	20-	-	-	-	-	-	-	-	-	12-1-6-4-6-	-1-	-	-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.0306	-105.8306	-2-97-	0-M43343	-10/11/76-	16-	21-	-	-	-	-	-	-	-	-	9-1-6-4-7-	-1-	-	-1-2-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45.0256	-105.8333	-2-15-	0-M43344	-10/11/76-	16-	21-	-	-	-	-	-	-	-	-	15-1-6-4-6-	-1-	-	-3-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.0300	-105.8806	-2-15-	0-M43346	-10/11/76-	16-	21-	-	-	-	-	-	-	-	-	12-1-6-4-6-	-1-	-	-3-2-2-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	

APPENDIX D

CODE TO DATA LISTINGS

APPENDIX ITEM D-I

EXPLANATION OF CODES USED

APPENDIX ITEM D-II

KEY TO SAMPLE TYPES

APPENDIX ITEM D-I

EXPLANATION OF CODES USED

DOE SAMPLE NUMBER

STATE: A two-digit Federal Information Processing Standards (FIPS) code, designating the state from which each sample came. For the states being covered by the LASL, the code numbers are:

Alaska	= 02	Montana	= 30	Texas	= 48
Arizona	= 04	New Mexico	= 35	Utah	= 49
Colorado	= 08	Oklahoma	= 40	Wyoming	= 56
Idaho	= 16				

LATITUDE AND LONGITUDE: Sample location, in degrees and decimal degrees to four places. Although generally much better, locational accuracy cannot be guaranteed closer than about 300 m (1000 ft).

DOE LAB: A Department of Energy (DOE) one-digit identifier designating the DOE laboratory responsible for taking the samples and data shown in the listings, as well as providing the analyses of the uranium and other elemental concentrations, if any. The LASL is designated by the numeral 2.

SAMPLE TYPE: A two-digit identifier which specifically designates the pertinent properties defining the sample type to which the listed data relate. For explanation of the code used, refer to the attached "Numerical Key and Specifications for Sample Types Taken by the LASL" Appendix Item D-II.

REPLICATE: A three-digit sequential number assigned to indicate a multiple sample of a single sample type from a single location. The largest number in use indicates the most recent sample taken, and there will always be smaller sequential numbers representing earlier samples back to 000, which is the initial sample from any given location. Except in the case of special studies, there will be no replicate samples and this entry will therefore be 000.

LASL SAMPLE NUMBER AND FIELD DATA

LASL SAMPLE NUMBER: A unique six-place alphanumeric designator permanently assigned by the LASL to every location sampled. For internal use, these numbers are assigned in blocks to the various areas individually treated and reported upon, and therefore serve to generally locate the samples within various areas for which the LASL is responsible as follows.

<u>Location Numbers</u>	<u>State</u>
N00 001 through N99 999	= Principally New Mexico
C00 001 through C99 999	= Principally Colorado
W00 001 through W99 999	= Principally Wyoming
M00 001 through M99 999	= Principally Montana
A00 001 and above	= Alaska only
L00 001 and above	= Areas beyond the western boundary of LASL's region as established by DOE in 1977.
Ø00 001 and above	= Areas beyond the eastern boundary of LASL's region as established by DOE in 1977.

TIME SAMPLED: The DATE that the sample was taken, in terms of the number of the MONTH, followed by the DAY and finally the YEAR, separated by slashes, and then the TIME it was taken on that date to the nearest whole HOUR on a 24-hour clock.

AIR TEMPERATURE: The temperature that was measured in the shade at the time of sampling, to the nearest whole degree Celsius (°C).

WATER TEMPERATURE: The temperature that was measured in the sample water (in situ whenever possible) at the time of sampling, to the nearest one-tenth of a degree Celsius (0.1°C).

COMMENTS: A "C" in this column indicates that some secondary comment not included in the listing was recorded at the sample location. This information will be used by the LASL in evaluating the data, and if appropriate, it will be mentioned in the final report.

SPECIAL MEASUREMENTS: An "S" in this column indicates that one or more field measurements in addition to those listed were made at the sample location. A description of any special parameters measured and the measured value at each sample location will be included in the final HSSR survey report on the area.

pH: The pH, to the nearest one-tenth (0.1) of a pH unit, that was measured in the water at the sample location at the time of sampling.

SPECIFIC CONDUCTANCE: The conductivity, in $\mu\text{mho/cm}$, that was measured in the water at the sample location at the time of sampling.

SCINTILLOMETER: The equivalent uranium (eU), in parts per million (ppm), as measured on a flat ground surface within 10 m of the sample location using a scintillometer fitted with a differential gamma sampler (DGS). The effect of the DGS is to introduce a fixed geometry into the measurement and remove the background.

ROCK TYPE: The single digit in this column provides a general description of the dominant lithologic regime at or near the sample location, as given below.

1 = Sedimentary	3 = Igneous
2 = Metamorphic	4 = Unknown

ROCK COLOR: The single digit in this column provides an indication of the observed dominant color of local bedrock exposures at or near the sample location, as given below.

1 = White/Buff	4 = Pink/Red	7 = Gray
2 = Yellow	5 = Green	8 = Black
3 = Orange	6 = Brown	9 = Other

SEDIMENT TYPE: The single digit in this column provides a subjective evaluation of the dominant sediment type at the sample location, as given below.

1 = Boulders	4 = Sand	7 = Other
2 = Cobbles	5 = Mud	
3 = Gravel	6 = Muck	

SEDIMENT COLOR: The single digit in this column indicates the observed dominant color of the bottom sediment (stream channel, lake bed, etc.) at the sample location at the time of sampling, as given below.

1 = White/Buff	4 = Pink/Red	7 = Gray
2 = Yellow	5 = Green	8 = Black
3 = Orange	6 = Brown	9 = Other

WATER FLOW: The single digit in this column provides a subjective evaluation of the water movement at the sample location at the time of sampling, as given below.

1 = Stagnant	3 = Moderate	5 = Torrent
2 = Slow	4 = Fast	

WATER LEVEL: The single digit in this column provides a subjective estimate of water quantity at the time of sampling, relative to its usual condition at the sample location, as given below.

1 = Dry	3 = Normal	5 = Flood
2 = Low	4 = High	

WATER COLOR: The single digit in this column provides a subjective evaluation of suspended load in the sample water, as given below.

1 = Clear	3 = Cloudy	5 = Algal
2 = Murky	4 = Muddy	6 = Other

STREAM CHANNEL: The single digit here gives a subjective evaluation of stream channel character at the sample location at the time of sampling, as given below.

1 = Depositing	2 = Eroding	3 = Unknown
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VEGETATION TYPE: The single digit in this column provides a subjective evaluation of the dominant plant type in the vicinity of the sample location, as given below.

1 = Conifers	4 = Grass	7 = Other
2 = Deciduous	5 = Moss	
3 = Brush	6 = Marsh	

VEGETATION DENSITY: The single digit in this column provides a subjective estimate of the amount of plant cover in the vicinity of the sample location, as given below.

1 = Barren	3 = Moderate	5 = Very Dense
2 = Sparse	4 = Dense	

RELIEF: The single digit in this column provides a subjective evaluation of the topography within a few hundred meters of the sample location, as given below.

1 = Flat	3 = Gentle (15-60 m)	5 = High (>300 m)
2 = Low (<15 m)	4 = Moderate (60-300 m)	6 = Other

WEATHER: The single digit in this column gives the observed climatic condition at the sample location at the time of sampling, as given below.

1 = Clear	3 = Overcast	5 = Snowy
2 = Partly cloudy	4 = Rainy	6 = Other

OWNERSHIP: When shown, the single digit here gives a broad classification of administrative responsibility or general ownership of the land at the sample location, as given below.

1 = Federal	3 = Private	5 = Other
2 = State	4 = Indian	

CONTAMINANTS: The single digit here indicates known or suspected local factors likely to influence analytical results, as given below.

1 = None	4 = Industry	7 = Urban
2 = Mining	5 = Sewage	8 = Recreation
3 = Agriculture	6 = Power generation	9 = Other

WELL TYPE: If a well water sample, the single digit in this column provides a general description of the type of well from which the sample was taken as given below.

1 = Windmill-stock	4 = Suction pump	7 = Hand bail
2 = Windmill-domestic	5 = Jet pump	8 = Unknown
3 = Submersible pump	6 = Large turbine	9 = Other

WELL DIAMETER: When shown, the one or two digits in this column give the measured or estimated inside diameter, in inches, of the well casing from which the water sample came.

WELL DEPTH: When shown, the one, two, or three digits in this column give the total drilled depth from the surface, in feet, of the well from which the sample came. Three 9s in this column indicates a well depth greater than 1000 ft.

WATER DEPTH: When shown, the one, two, or three digits in this column give the known depth, in feet, from the surface to the standing water in the well. A -1 in this column indicates a flowing artesian well.

URANIUM CONCENTRATION: The value given in this column is the analytically derived value of the total uranium concentration found in the water sample in parts per billion (ppb), or in the sediment sample in parts per million (ppm). Those uranium concentrations in water that are shown with an asterisk were measured using a delayed neutron counting method, while those without an asterisk were determined fluorometrically. The uranium analyses as determined by both of these methods at the LASL are directly comparable, as described in Appendix A.

APPENDIX ITEM D-II

KEY TO SAMPLE TYPES

This numerical key provides the necessary tie between the specific type or form of each sample taken and each individual suite of field and laboratory data to which the sample relates. It defines the various sample types collected by the LASL in the DOE HSSR for uranium.

The two-digit key number assigned to each sample type designates three distinct properties of the samples taken. These properties are: (a) The general sample source (spring or stream or dry stream, etc.); (b) The sample medium (water or sediment, etc.); and (c) The treatment given the sample in the field or laboratory prior to its analysis by the LASL.

The key numbers are inserted in the appropriate columns of the specially formatted DOE sample numbering system to positively identify the sample type for all LASL sample data submitted.

<u>KEY NO.</u>	<u>SOURCE</u> / <u>MEDIUM</u> / <u>TREATMENT</u>
01 -	<u>Spring water</u> sample <u>untreated</u> .
02 -	<u>Stream water</u> sample <u>untreated</u> .
03 -	<u>Well water</u> sample <u>untreated</u> .
04 -	<u>Natural pond water</u> sample <u>untreated</u> .
05 -	<u>Artificial pond water</u> sample <u>untreated</u> .
06 -	<u>Spring water</u> sample <u>filtered</u> through an 0.45- μ membrane filter <u>and acidified</u> to a pH of ≤ 1 with reagent-grade nitric acid (HNO_3).
07 -	<u>Stream water</u> sample <u>filtered</u> through an 0.45- μ membrane filter <u>and acidified</u> to a pH of ≤ 1 with reagent-grade nitric acid (HNO_3).
08 -	<u>Well water</u> sample <u>filtered</u> through an 0.45- μ membrane filter <u>and acidified</u> to a pH of ≤ 1 with reagent-grade nitric acid (HNO_3).
09 -	<u>Natural pond water</u> sample <u>filtered</u> through an 0.45- μ membrane filter <u>and acidified</u> to a pH of ≤ 1 with reagent-grade nitric acid (HNO_3).
10 -	<u>Artificial pond water</u> sample <u>filtered</u> through an 0.45- μ membrane filter <u>and acidified</u> to a pH of ≤ 1 with reagent-grade nitric acid (HNO_3).

- 11 - Wet spring sediment sample dried at $\leq 100^{\circ}\text{C}$ and sieved to -100 mesh through stainless steel sieves.
- 12 - Wet stream sediment sample dried at $\leq 100^{\circ}\text{C}$ and sieved to -100 mesh through stainless steel sieves.
- 13 - Wet natural pond sediment sample dried at $\leq 100^{\circ}\text{C}$ and sieved to -100 mesh through stainless steel sieves.
- 14 - Wet artificial pond sediment sample dried at $\leq 100^{\circ}\text{C}$ and sieved to -100 mesh through stainless steel sieves.
- 15 - Dry stream sediment sample dried at $\leq 100^{\circ}\text{C}$ (if necessary) and sieved to -100 mesh through stainless steel sieves.
- 96 - Dry natural pond sediment sample dried at $\leq 100^{\circ}\text{C}$ (if necessary) and sieved to -100 mesh through stainless steel sieves.
- 97 - Dry artificial pond sediment sample dried at $\leq 100^{\circ}\text{C}$ (if necessary) and sieved to -100 mesh through stainless steel sieves.
- 98 - Other water These key numbers are to be used only for water (98) or sediment (99) samples coming from a special source and/or given a special treatment not described for any of the types of samples above. When used in the listings published herein, the source and treatment given the samples so designated are described in the text.
- 99 - Other sediment

modified from the Geologic Map of Montana
by Ross et al. 1955.

GEOLOGIC MAP OF THE EKALAKA NTMS QUADRANGLE, MONTANA

SYMBOLS

Syncline
 Anticline
 Monocline
 arrow shows plunge of axis

geologic contact,
dashed where
inferred.

intermittent streams

CENOZOIC	QUATERNARY	Alluvium River terrace sand and gravel.
	Pleistocene & Recent	
TERTIARY	Paleocene	Fort Union Formation Includes the following members (not shown on map): Tongue River, massive sandstones with coal seams. Lebo, gray shales and sandstones. Tullock, light colored sandstones with coal seams.
	Oligocene	White River Group Light-gray tuffaceous sands and siltstones.
	Miocene	? Arikaree Formation May be Ogallala formation, Tuffaceous sands and gravels.
MESOZOIC	MONTANA GROUP	Hell Creek Formation Yellowish-gray sandstones and gray shales with a few thin beds of carbonaceous shale.
		Fox Hills Sandstone Brownish-gray shale, siltstone and sandstone.
		Pierre Shale Gray to black shales including the following members (not shown on map): Monument Hill Bentonite, light gray to gray bentonitic shales and bentonites. Mitten Black Shale, dark-gray to black shale with yellow brown weathering concretions. Gammon Ferruginous member, light-gray claystone and shale with abundant ferruginous concretions. Groat Sandstone, fine grained glauconitic ferruginous sandstone.
		Niobrara Formation Dark to light-gray calcareous shale with septarian concretions in the lower portion.
		Carlile Shale Gray shale with sand unit in middle part, divided into the following members (not shown on map): Sage Breaks, gray shale with numerous septarian concretions. Turner Sandy, gray sandy shale and siltstone. Lower unnamed member, gray shale.
	COLORADO GROUP	Greenhorn Formation Including the following facies (not shown on map): Limestone Marl facies, gray calcareous shale and marl with light-gray thin bedded limestone. Concretionary facies, gray shale with septarian concretions.
		Belle Fourche Shale Dark shale with numerous siderite concretions near base, and limestone concretions in the middle and upper portions.
		Mowry Shale Gray siliceous shale with Clay Spur bed at top.

① REPORTED URANIUM OCCURRENCES
(NUMBERS CORRESPOND TO THOSE IN
TABLE I; AREAS DESIGNATED A1 AND A2
ARE POSSIBLE URANIUM ANOMALY AREAS
LOCATED BY TEXAS INSTRUMENTS INCORPORATED
(1974) USING AIRBORNE GEOPHYSICAL TECHNIQUES.)

Note that the location numbers shown are
those listed in Appendix B and Appendix C
of text, but with the initial M and first
digit dropped.

SAMPLE LOCATION OVERLAY FOR THE EKALAKA NTMS QUADRANGLE, MONTANA

EKALAKA NTMS QUADRANGLE, MONTANA OVERLAY FOR THE SAMPLE LOCATION

① REPORTED URANIUM OCCURRENCES
(NUMBERS CORRESPOND TO THOSE IN
TABLE 1; AREAS DESIGNATED A1 AND A2
ARE CORRELATE URANIUM ANOMALY AREAS
LOCATED BY TEXAS INSTRUMENTS INCORPORATED
(1974) USING AIRBORNE GEOPHYSICAL TECHNIQUES)

Note that the location numbers shown are
those listed in Appendix B and Appendix C
of text, but with the initial M and first
digit dropped.

LEGEND

WELL WATER	SPRING WATER	ARTIFICIAL WATER	NATURAL LAKE OR POND WATER	SURFACE STREAM WATER	TOTAL URANIUM (ppb)	RESULTS PER INTERVAL
○	◇	▽	△	□	≤ 5.00	461
○	◇	▽	△	□	5.01 - 10.00	97
○	◇	▽	△	□	10.01 - 15.00	40
○	◇	▽	△	□	15.01 - 20.00	48
○	◇	▽	△	□	20.01 - 25.00	19
○	◇	▽	△	□	25.01 - 30.00	11
○	◇	▽	△	□	30.01 - 40.00	14
○	◇	▽	△	□	> 40.00	20

URANIUM CONCENTRATIONS (ppb) IN WATERS
OVERLAY TO THE
EKALAKA NTMS QUADRANGLE, MONTANA

SCALE 1:250 000

RESULTS PER INTERVAL	TOTAL URANIUM (ppb)	WATER SAMPLE INTERVAL	WATER SAMPLE INTERVAL	WATER SAMPLE INTERVAL	WATER SAMPLE INTERVAL	WATER SAMPLE INTERVAL	WATER SAMPLE INTERVAL
481	≥ 200	□	△	▽	◇	○	○
37	50.1 - 100.0	□	△	▽	◇	○	○
40	10.01 - 100.0	□	△	▽	◇	○	○
48	12.01 - 50.00	□	△	▽	◇	○	○
19	50.01 - 20.00	□	△	▽	◇	○	○
11	20.01 - 20.00	□	△	▽	◇	○	○
14	30.01 - 40.00	□	△	▽	◇	○	○
50	> 40.00	□	△	▽	◇	○	○

LEGEND

EKALAKA NTMS QUADRANGLE, MONTANA OVERLAY TO THE URANIUM CONCENTRATIONS (ppb) IN WATERS

SCALE 1:500,000
50 KILOMETERS
50 MILES

PLATE III

LEGEND

DRY ARTIFICIAL POND SEDIMENT	DRY POND SEDIMENT	DRY SPRING SEDIMENT	WET SPRING SEDIMENT	WET ARTIFICIAL POND SEDIMENT	WET POND SEDIMENT	WET STREAM SEDIMENT	WET STREAM SEDIMENT	TOTAL URANIUM (ppm)	RESULTS PER INTERVAL
⊙	○	+	◊	▽	△	⊗	⊠	0.0 - 2.14	13
⊕	⊙	+	◊	▽	△	⊗	⊠	2.15 - 2.72	217
⊕	⊙	+	◊	▽	△	⊗	⊠	2.73 - 3.30	335
⊕	⊙	+	◊	▽	△	⊗	⊠	3.31 - 3.88	129
⊕	⊙	+	◊	▽	△	⊗	⊠	3.89 - 4.46	82
⊕	⊙	+	◊	▽	△	⊗	⊠	4.47 - 5.62	37
⊕	⊙	+	◊	▽	△	⊗	⊠	5.63 - 6.78	15
⊕	⊙	+	◊	▽	△	⊗	⊠	> 6.78	23

URANIUM CONCENTRATIONS (ppm) IN SEDIMENTS
OVERLAY TO THE
EKALAKA NTMS QUADRANGLE, MONTANA

— — — — — DRAINAGE DIVIDE BETWEEN THE POWDER AND LITTLE MISSOURI RIVERS.
(hatchers are on Powder River side of divide)

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scientific laboratory
of the University of California
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