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Uranium Hydrogeochemical and Stream Sediment Reconnaissance Data  
 From the Area of the  
 Shishmaref, Kotzebue, Selawik and Shungnak Quadrangles  
 Northern Seward Peninsula and Vicinity, Alaska

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# CONTENTS

LIST OF ILLUSTRATIONS	v
LIST OF TABLES	vi
ABSTRACT	1
I. INTRODUCTION	2
II. DESCRIPTION OF STUDY AREA	2
Location and Geographic Setting	2
Climate	4
III. HYDROLOGY	4
IV. GEOLOGY	5
Stratigraphy	5
Structure	7
V. MINERAL OCCURRENCES	9
VI. EVALUATION OF THE DATA	9
Uranium in Waters	9
Uranium in Sediments	13
Results of Double-Density Sampling	17
VII. SUMMARY AND CONCLUSIONS	21
ACKNOWLEDGMENTS	22

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APPENDIX A	Summary of Standard LASL HSSR Field and Analytical Procedures	23
APPENDIX B	Listings of Field and Uranium Data for Water Samples	27
	B-I Data for Water Samples Analyzed by Fluorometry	28
	B-II Data for Water Samples Analyzed by Delayed-Neutron Counting	54
APPENDIX C	Listings of Field and Uranium Data for Sediment Samples	55
APPENDIX D	Codes to Data Listings	81
	D-I Explanation of Codes Used	82
	D-II Key to Sample Types	86
APPENDIX E	Listing of Dissolved Oxygen in Waters of the Northern Seward Peninsula and Vicinity, Alaska	87
REFERENCES CITED		92

## LIST OF ILLUSTRATIONS

### Fig. No.

- |    |   |    |
|----|---|----|
| 1. | Index of NTMS 1:250 000-scale map sheets covered by uranium HSSR sample data reported.  | 3  |
| 2. | Geologic map and stratigraphic units of the northern Seward Peninsula, Selawik and vicinity, Alaska.  | 6  |
| 3. | Locations of plutons of the Hogatza series within and south of the area.  | 7  |
| 4. | Major structural features of west-central Alaska.   | 8  |
| 5. | Histograms and statistical data for uranium concentrations in water samples, northern Seward Peninsula and vicinity, Alaska.  | 10 |
| 6. | Histograms and statistical data for uranium concentrations in sediment samples, northern Seward Peninsula and vicinity, Alaska.   | 14 |
| 7. | Contoured uranium concentrations for sediments from the western Selawik Hills, Alaska.  | 16 |
| 8. | Contoured uranium concentrations for waters from the western third of the Shungnak quadrangle, Alaska, for comparison of single- and double-density sampling results.                         | 18 |
| 9. | Contoured uranium concentrations for sediments from the western third of the Shungnak quadrangle, Alaska, for comparison of single- and double-density sampling results with bedrock geology. | 19 |

### Plate No.

- |      |   |        |
|------|---|--------|
| I.   | NURE hydrogeochemical and stream/lake sediment sample locations in the area of the Shishmaref quadrangle, Seward Peninsula, Alaska. | pocket |
| I-A. | Uranium concentrations in waters in the area of the Shishmaref quadrangle, Seward Peninsula, Alaska.                                | pocket |
| I-B. | Uranium concentrations in sediments in the area of the Shishmaref quadrangle, Seward Peninsula, Alaska.                             | pocket |
| II.  | NURE hydrogeochemical and stream/lake sediment sample locations in the area of the Kotzebue quadrangle, Seward Peninsula, Alaska.   | pocket |

II-A.	Uranium concentrations in waters in the area of the Kotzebue quadrangle, Seward Peninsula, Alaska.	pocket
II-B.	Uranium concentrations in sediments in the area of the Kotzebue quadrangle, Seward Peninsula, Alaska.	pocket
III.	NURE hydrogeochemical and stream/lake sediment sample locations in the area of the Selawik quadrangle, Seward Peninsula, Alaska.	pocket
III-A.	Uranium concentrations in waters in the area of the Selawik quadrangle, Seward Peninsula, Alaska.	pocket
III-B.	Uranium concentrations in sediments in the area of the Selawik quadrangle, Seward Peninsula, Alaska.	pocket
IV.	NURE hydrogeochemical and stream/lake sediment sample locations in the area of the Shungnak sheet (west third) quadrangle, Seward Peninsula, Alaska..	pocket
IV-A.	Uranium concentrations in waters in the area of the Shungnak quadrangle (west third), Seward Peninsula, Alaska.	pocket
IV-B.	Uranium concentrations in sediments in the area of the Shungnak quadrangle (west third), Seward Peninsula, Alaska.	pocket

#### LIST OF TABLES

##### Table No.

I.	List of Water Samples Containing Anomalous Uranium Concentrations (>2.00 ppb)	12
II.	List of Sediment Samples Containing Anomalous Uranium Concentrations (>8.0 ppm)	15

URANIUM HYDROGEOCHEMICAL AND STREAM SEDIMENT RECONNAISSANCE DATA  
FROM THE AREA OF THE  
SHISHMAREF, KOTZEBUE, SELAWIK AND SHUNGNAC QUADRANGLES,  
NORTHERN SEWARD PENINSULA AND VICINITY, ALASKA

by

Richard G. Warren, Dwight E. Hill, and Robert R. Sharp, Jr.

ABSTRACT

During the summer of 1976, 1336 water and 1251 sediment samples were collected for the Los Alamos Scientific Laboratory (LASL) from 1356 streams and small lakes or ponds within the Shishmaref, Kotzebue, Selawik, and western portion of the Shungnak NTMS quadrangles in western Alaska. Both a water and sediment sample were generally obtained from each location at a nominal location density of one per 23 km<sup>2</sup>. Total uranium was measured in waters by fluorometry and in sediments and some few waters by delayed neutron counting. All analytical work was done by the LASL. Uranium concentrations in waters have a mean of 0.31 ppb and a maximum of 9.23 ppb, and sediments exhibit a mean of 3.44 ppm and a maximum of 37.7 ppm.

A large number of high-uranium concentrations occur in both water and sediment samples collected in the Selawik Hills, an area underlain by a large silicic pluton of the Hogatza alkaline series. At least two locations within the Selawik Hills appear favorable for further investigation of possible uranium mineralization. Also, a cluster of high-uranium sediments is seen in the Waring Mountains. These sediments are probably derived from a lower Cretaceous conglomerate unit which is associated with known airborne radiometric anomalies. Apparently less favorable areas for further investigation of possible uranium mineralization are also located in the Waring Mountains and Kiana Hills.

Additional samples were collected within the Shungnak quadrangle to increase the sampling density used elsewhere in the area to approximately one location per 11 km<sup>2</sup> (double-density). Here, contoured plots of uranium concentrations for both waters and sediments were prepared for all double-density sample locations, and then for the even-numbered and odd-numbered locations separately. These plots indicate that the HSSR sampling density of one per 23 km<sup>2</sup> used by the LASL in lowland areas of Alaska provide essentially the same definition of relative areal uranium distributions in waters and sediments as seen when the density is doubled. Furthermore, these plots indicate that regional distribution patterns for uranium are well defined without selective sampling of geologic units.

## I. INTRODUCTION

This report describes hydrogeochemical and waterlain sediment sampling at a nominal density of one location per 23 km<sup>2</sup> in the area covered by the Shishmaref, Kotzebue, Selawik, and western part of the Shungnak National Topographic Map Series (NTMS) quadrangles in Alaska. The sampling and subsequent uranium analysis by the Los Alamos Scientific Laboratory (LASL) are part of the nationwide Hydrogeochemical and Stream Sediment Reconnaissance (HSSR). The HSSR, a portion 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 waters and water-transported sediments. Other phases of the NURE program, such as airborne radiometric surveys and geologic investigations will be combined with the HSSR studies to prepare an improved assessment of uranium resources within the US and to indicate areas favorable for uranium exploration. The LASL is responsible for conducting the HSSR in the Rocky Mountain states of New Mexico, Colorado, Wyoming, Montana, and in Alaska.

Water and sediment samples were collected from streams and ponds between July 26 and August 28, 1976, at locations throughout the study area (Fig. 1). A total of 1336 water samples and 1251 sediment samples were collected from the 1356 locations shown on Plates I-IV. Water samples consisted of 819 natural pond and 517 stream waters, and sediment samples consisted of 734 wet natural pond, 502 wet stream, and 15 dry stream sediments. Sampling density within the Shungnak quadrangle was doubled to approximately one location per 11 km<sup>2</sup> to evaluate the effectiveness of reconnaissance sampling at the lower sampling density of one location per 23 km<sup>2</sup> chosen for use in Alaskan areas of generally low relief in this program.

Samples were collected according to the standard field procedures described in Appendix A. Field data and analytical results are listed in Appendix B for waters and Appendix C for sediments. Note that the leading two digits for the sample numbers in these Appendixes do not appear on Plates I-IV. Codes for the data listings of Appendixes B and C appear in Appendix D. Dissolved oxygen contents of ponds and lakes sampled are listed in Appendix E.

All waters were analyzed in duplicate by a fluorometric method described in Appendix A. Results for these are contained in Appendix B-I. Fifty samples, suspected to contain ions that interfere with the fluorometric determination of uranium (Garrett and Lynch, 1976), were reanalyzed by delayed neutron counting (DNC), as described by Sharp and Aamodt (1976). Results for these are listed in Appendix B-II. All sediment samples were analyzed by DNC.

Uranium concentrations in water (Plates I-A through IV-A) and sediment (Plates I-B through IV-B) are plotted at a scale of 1:250 000 to overlay the sample location maps (Plates I through IV), the proper 1:250 000 scale NTMS sheets, and 1:250 000 scale geologic maps for the Selawik (Patton and Miller, 1968) and Shungnak (Patton et al, 1968) quadrangles.

## II. DESCRIPTION OF STUDY AREA

### Location and Geographic Setting

All samples were collected from an area covered by the Shishmaref, Kotzebue, Selawik, and western Shungnak NTMS quadrangles in western Alaska, between 66° and 67°N latitude and 158° and 167°W longitude (Fig. 1). The western part of the area (Shishmaref and Kotzebue quadrangles), located on the

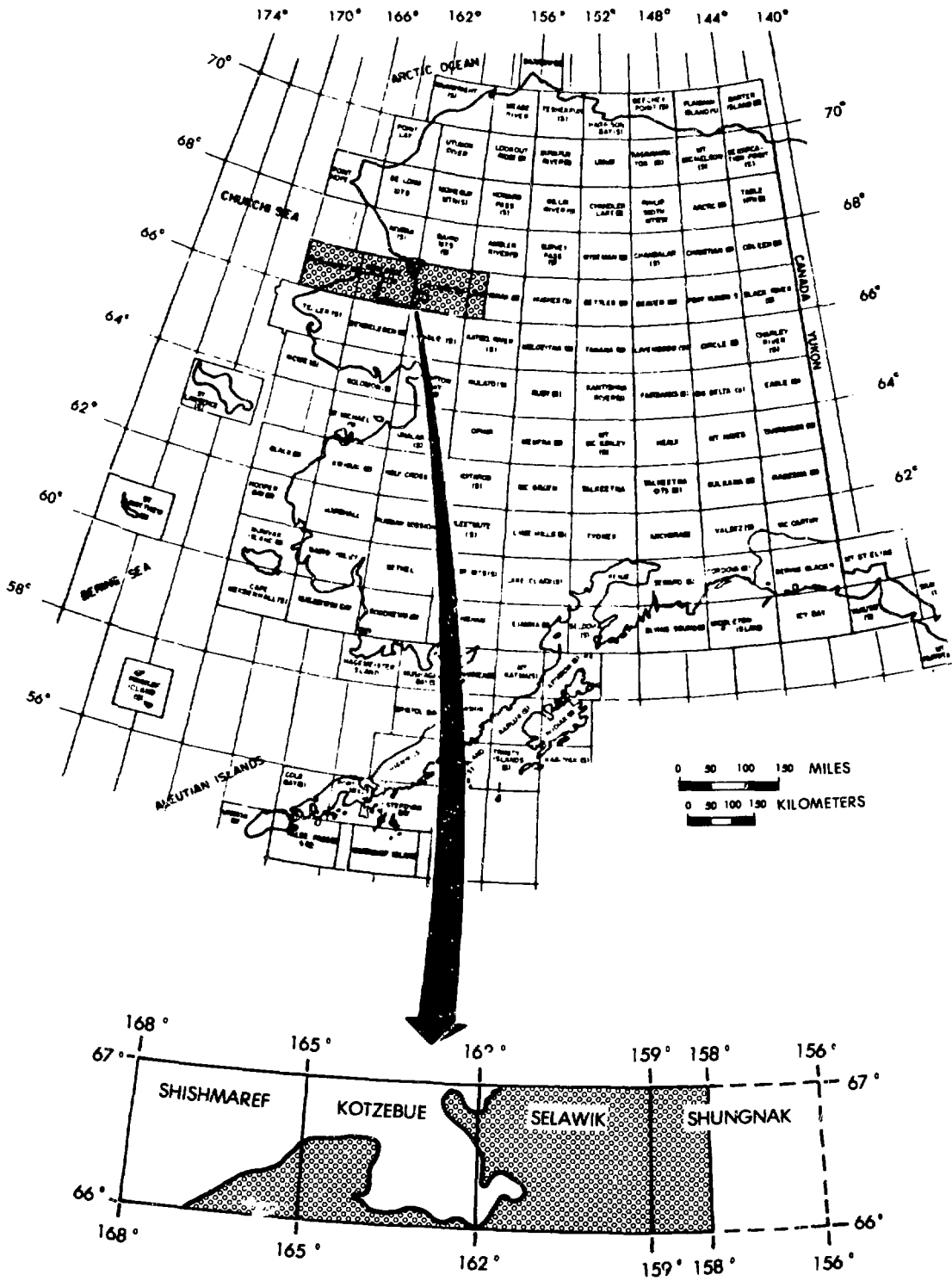


Fig. 1. Index of NTMS 1:250 000-scale map sheets covered by uranium HSSR sample data reported.



northern side of the Seward Peninsula physiographic province (Wahrhaftig, 1965), consists of lake-dotted coastal plains with elevations seldom exceeding 30 m above the Chukchi Sea. The eastern part of the area (Selawik and Shungnak quadrangles) exhibits a similar physiography along the courses of the Kobuk and Selawik Rivers. Both flow westward into the Kotzebue Sound where the Kobuk forms a large delta. This area is termed the Kobuk-Selawik lowland (Wahrhaftig, 1965). Within the eastern part of the area are four highlands with elevation generally above 300 m, the Waring Mountains and Kiana Hills to the north, the Buckland River uplands to the southeast, and the Selawik Hills to the southwest. The maximum elevation within the area, slightly in excess of 1000 m, is attained in the Selawik Hills.

Lowland areas are generally covered by moist or wet tundra and highlands by upland spruce-hardwood forest (Selkregg, 1976, p. 130). About 70% of the approximately 3500 population within the area (1970 census) reside in Kotzebue on the Kotzebue Sound, where salmon fisheries provide the major industry for the region.

### Climate

Climate within the study area varies from transitional maritime along the Chukchi Sea to continental subarctic inland. Annual precipitation varies from slightly below 25 cm in the transitional maritime zone to slightly more than 25 cm in the continental subarctic zone (Selkregg, 1976, p. 8). About 60% of the annual precipitation recorded at the coastal station of Kotzebue occurs during the period July through September. Within the sampling period (July 26 through August 28, 1976) two storms were recorded at Kotzebue during the periods July 28-29 and August 10-15. The resulting 1.6 cm precipitation is far below the normal amount for this coastal area (NOAA, 1976). These storms resulted in 5.9 cm precipitation at the inland station of Kobuk (just east of the study area) during the periods July 29-30 and August 10-11 and 14-16, an amount close to normal (NOAA, 1976). Mean maximum and minimum temperatures during July are 14.5° and 8.5°C at Kotzebue and 20.5° and 8.0°C at Kobuk, respectively, whereas the corresponding temperatures during January are -16° and -23°C at Kotzebue and -19.5° and -31°C at Kobuk (Selkregg, 1976, p. 19). During the sampling period, temperatures ranged from 3° to 19°C at Kotzebue and -0.5° to 27°C at Kobuk (NOAA, 1976). Weather data recorded at each sample location are found in Appendixes B and C.

### III. HYDROLOGY

Most of the western part of the area is dotted with numerous thaw lakes and is drained by small streams flowing northward into the Chukchi Sea. Major streams are the Serpentine River in the Shishmaref quadrangle; the Goodhope, Immachuk, and Kugruk Rivers in the Kotzebue quadrangle; and the Buckland River in the western Selawik quadrangle. In the Selawik and western Shungnak quadrangles, the Kobuk River forms a large delta and the Selawik and Kugaruk Rivers form extensive lowlands dotted with innumerable thaw lakes. Except for the Selawik Hills, much of which is drained by the Mangoak River, upland areas are drained by short streams feeding these river systems.

Nearly all of the study area is underlain by moderately thick to thin continuous permafrost, with areas along the courses of the Kobuk and Selawik Rivers underlain by discontinuous permafrost (Ferrians, 1965). Depth to the base of the permafrost is 73 m at Kotzebue. A summary review of the nature of

permafrost and mechanisms of ionic diffusion through the "permafrost barrier" is found in Levinson (1974, Chapter 11). In an HSSR report for an adjacent area, Aamodt et al (1978) discuss the effect of permafrost on the areal distribution of metallic ion concentrations. They conclude that ions are mobilized and concentrated from a mineralized source within permafrost and form dispersion halos similar to those observed in temperate zones. Contoured uranium concentrations reported herein for both waters and sediments exhibit well-defined dispersion halos, further indicating that permafrost does not significantly impede ionic migration from a mineralized source to the surface.

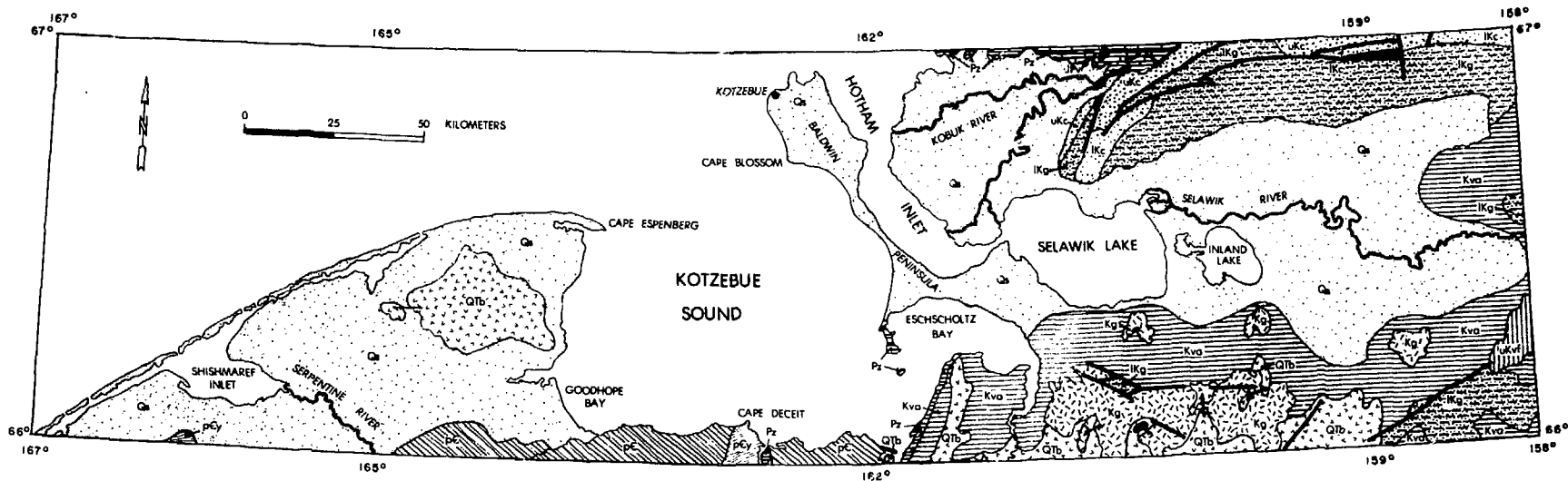
#### IV. GEOLOGY

##### Stratigraphy

A geologic map and description of stratigraphic units within the area is provided in Fig. 2. Rocks of late Precambrian, middle Paleozoic, Jurassic, and Cretaceous ages are known within the study area. These are mantled by surficial deposits (primarily glacial till) and, in the southern part of the Selawik and western part of the Kotzebue quadrangles, by extensive basalt flows. Paleozoic and older rocks crop out along the northern edge of the Seward Peninsula, within the southern part of the Shishmaref and Kotzebue quadrangles, and within the southwesternmost part of the Selawik quadrangle. Similar rocks are also found on the southern slopes of the Brooks Range along the northwestern edge of the Selawik quadrangle. Mesozoic rocks are found in the Kobuk-Selawik lowlands within the Selawik and Shungnak quadrangles.

Rocks in the Seward Peninsula area include a conformable Precambrian sequence of quartz siltite, calcareous graywacke, and thin dark limestone overlain by thin-bedded argillaceous and dolomitic limestone (Sainsbury, 1974). These are termed the York slate and Kanauguk formation, respectively. Most commonly, these units are metamorphosed to phyllite, schist and occasionally, gneiss. Basaltic volcanic units, often metamorphosed to blueschist facies (Sainsbury et al, 1970), are abundant within the York slate. Where these basaltic units are particularly thick, the volcanogenic sequence is termed the "Nome group" (Sainsbury, 1974). These rocks, which have minimum age-dates of 750 m.y., represent a eugeosynclinal sequence deposited in late Precambrian time. The character of the overlying Ordovician, Devonian, and Mississippian rocks is profoundly different and indicates deposition in a miogeosynclinal environment. These consist predominantly of thick carbonate and less common dark shale that have been variously metamorphosed to marble and schist. Since the Paleozoic units are always found in thrust sheets and slices, often forming a melange with the underlying Precambrian units, the stratigraphy of these units is not well known. Paleozoic rocks in the southern Brooks Range are thought to be closely related to rocks of similar age and lithology in the Seward Peninsula (Patton and Tailleur, 1977). Small outcrops of ophiolite-like, metamorphosed mafic and ultramafic rocks are also found in the southern Brooks Range (Patton, 1973).

The stratigraphic units of the Kobuk-Selawik lowland, described by Patton (1973), were deposited in a eugeosynclinal terrain. The basal unit consists of widespread andesitic volcanoclastic rocks of earliest Cretaceous age deposited within the Yukon-Koyukuk basin. These volcanoclastic rocks were unconformably succeeded by middle Cretaceous graywacke and mudstone deposited in basins of limited areal extent. At the margins of the Yukon-Koyukuk basin, a continental conglomeratic facies was deposited from sources within the Brooks Range and



Age	Map Symbol	Seward Peninsula*	Kobuk-Selawik Lowlands +	Lithologies	Age	Map Symbol	Seward Peninsula*	Kobuk-Selawik Lowlands +	Lithologies
Holocene through Pleistocene	Qs	Surficial deposits	Surficial deposits	Cover, alluvium, silt, sand, glacial drift, beach deposits, tidal-flat deposits, flood-plain deposits, and terrace deposits.	Early Cretaceous and Jurassic	Kva		Andesitic volcanic rocks	Chiefly andesitic tuff, volcanic breccia, and volcanic conglomerate with intercalated andesitic flows.
Holocene through Pliocene	QTb	Basalt	Basalt	Nearly horizontal flows of olivine basalt.	Jurassic through Permian	Jpv		Altered mafic volcanic rocks	Altered basalt and diabase.
Upper Cretaceous	uKvf		Felsic volcanic rocks	Porphyritic latite, quartz latite, trachyte flows and tuffs, ash-fall tuffs, tuffaceous graywacke, and volcanic conglomerate.	Paleozoic	Pz	Limestone and shale	Limestone, schist, and phyllite	Chiefly quartz-mica schist and schistose quartzite, phyllite, and recrystallized limestone and dolomite.
	uKc		Nonmarine conglomerate	Quartz-pebble conglomerate, sandstone, mudstone, and coal.		pCk	Kanauguk formation		Thin-bedded schistose argillaceous and dolomitic limestone, rhythmically interbedded.
Middle Cretaceous (Albian and Cenomanian)	Kg		Granitic and alkaline silicic plutons	Quartz monzonite, syenite, monzonite, nepheline syenite, and alkalic mafic rocks such as ijolite and pyroxenite.	Precambrian	pCyn	York slate and Nome group		York slate: Carbonaceous quartz siltite with interbeds of graywacke and thick dark limestone. Generally metamorphosed to graphitic phyllite cut by numerous vitreous white quartz veinlets. Nome group: Chloritic schist, locally blueschist, derived from volcanic material intercalated with York slate. Includes higher rank metamorphics earlier mapped as Kigluak group.
	lKg		Volcanic graywacke and mudstone	Marine deposits of poorly-sorted graywacke and mudstone interbedded with highly calcareous graywacke and mudstone. Contact metamorphosed in Selawik Hills.					
	lKc		Marine conglomerate	Marine conglomerate containing cobbles of igneous rocks in graywacke and mudstone matrix.					

\* Shishmaref, Kotzebue, SW Selawik quadrangles from Sainsbury, 1974.

+ Selawik and Shungnak quadrangles from Patton, 1973; Patton and Miller, 1968; Patton and others, 1968.

Geology from Beikman and Lathram, 1976.

Fig. 2. Geologic map and stratigraphic units of the northern Seward Peninsula, Selawik and vicinity, Alaska.

Seward Peninsula. During middle and late Cretaceous orogenic periods, plutonic rocks of the Hogatza alkaline series were emplaced in a belt extending for 300 km from the Seward Peninsula to west-central Alaska. Plutons of this series that occur within the study area are shown in Fig. 3 and consist of quartz monzonites, monzonites, alaskites, syenites, and nepheline syenites, all of middle Cretaceous age (Miller, 1972; Patton and Miller, 1968; Patton et al, 1968). Following the middle Cretaceous orogeny, a narrow band of nonmarine quartz conglomerate was deposited along the northern and southeastern margins of the Yukon-Koyukuk basin, probably along narrow fault-bounded trenches. Interfingering with the nonmarine conglomerate are felsic extrusive and hypabyssal rocks, chiefly latites and rhyolites, contemporaneous with the late Cretaceous plutons of the Hogatza series.

Most of the Kobuk-Selawik lowland underwent Pleistocene glaciation (Pewe, 1975). The Baldwin Peninsula is a terminal moraine deposited during the Illinoian stage (McCulloch et al, 1965).

### Structure

The major structural features of the region, shown in Fig. 4, consist of the Brooks Range geanticline, Seward Peninsula positive areas and the Yukon-Koyukuk basin. The Kobuk fault zone separates the Brooks Range and Yukon-Koyukuk basin.

Intense compressional deformation, including tight folding, closely-spaced high angle faulting and low-angle thrust faulting, dominates the

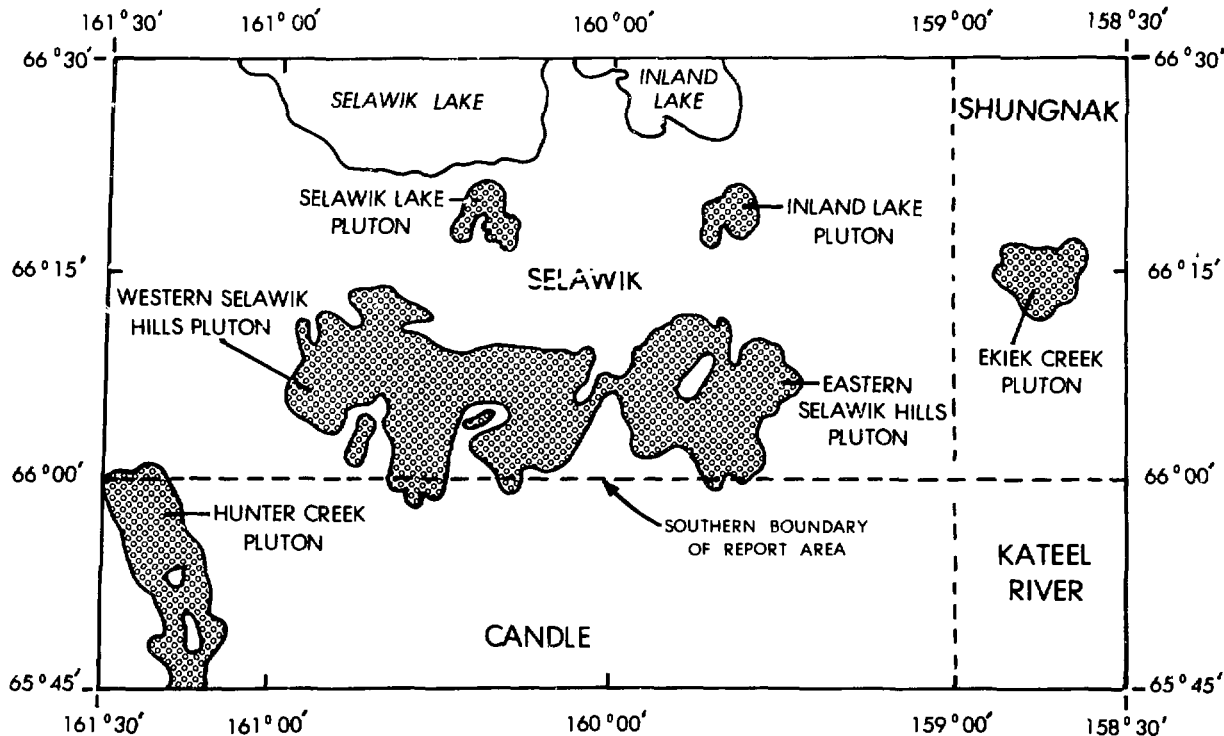


Fig. 3. Location of plutons of the Hogatza series within and south of the area.

structure of the Brooks Range and Seward Peninsula. In the eastern Seward Peninsula, folds trend north-south and thrusts are eastward-yielding, but in the Brooks Range, folds generally trend east-west and thrusts are northward-yielding (Lathram, 1973). Patton and Tailleur (1977) have proposed that the eugeosynclinal Precambrian and miogeosynclinal Paleozoic rocks of the Brooks Range and Seward Peninsula have been bent into a southward-looping oroclinal flexure during a late Cretaceous to middle Tertiary compressional episode. Both the Brooks Range and Seward Peninsula have been positive elements since early Jurassic (Detterman, 1973).

Cretaceous rocks of the Yukon-Koyukuk basin have been deformed in a manner similar to the older units of the Brooks Range and Seward Peninsula. In the northern part of the basin, folds trend east-west, parallel to those of the Brooks Range, whereas in the southern part of the basin, folds trend approximately north-south, parallel to those of the Seward Peninsula (Fig. 4). Within the Yukon-Koyukuk basin are two elongate mid-Cretaceous synclinal basins, the Kobuk-Koyukuk basin to the north, separated from the lower Yukon basin to the south by a structural high along which plutons of the Hogatza series were emplaced (Fig. 4). The Kobuk-Koyukuk basin in the Kobuk-Selawik lowlands area is filled with about 3000 m of middle Cretaceous graywackes.

The Kobuk fault zone extends east-west along the northern border of the Yukon-Koyukuk basin for about 450 km. Structural discontinuity across this fault indicates major strike-slip movement during latest Cretaceous or Tertiary time (Patton, 1973).

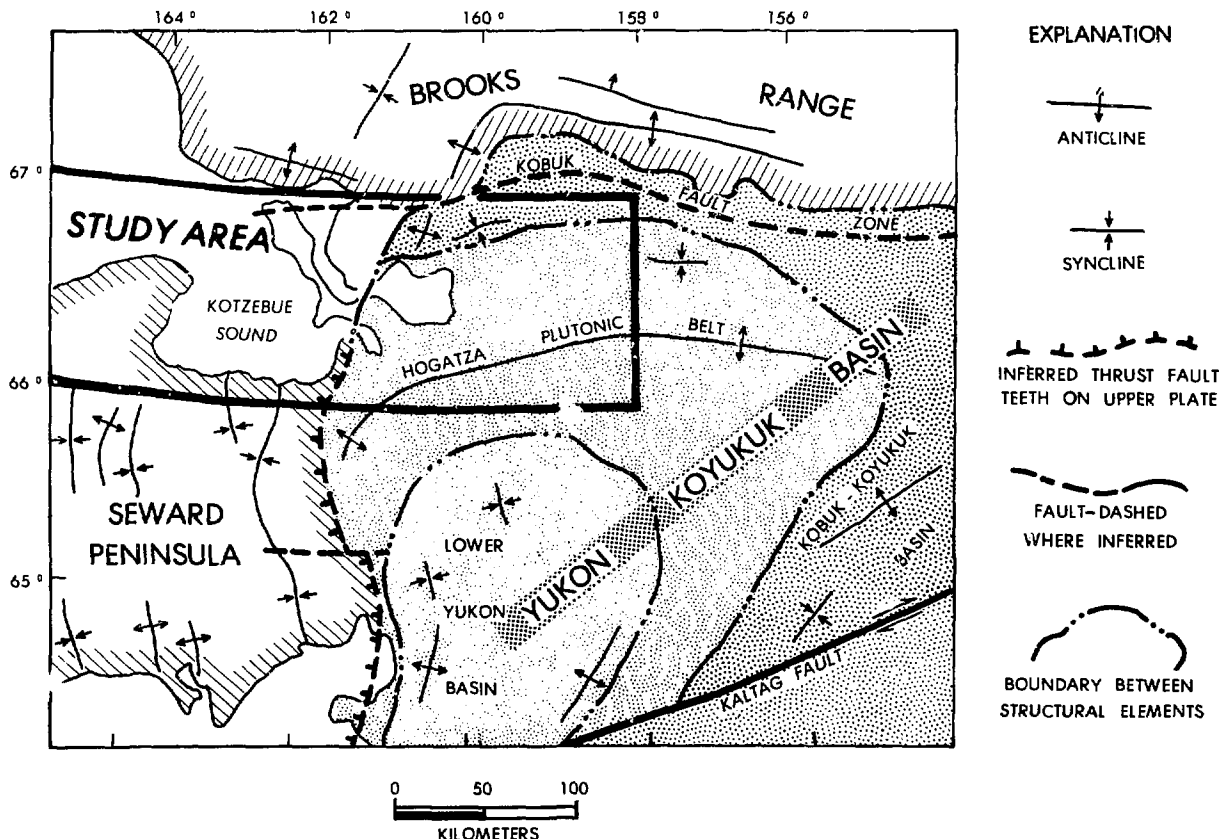


Fig. 4. Major structural features of west - central Alaska (Patton and Tailleur, 1977).

## V. MINERAL OCCURRENCES

No economic mineral production has been reported from the area. Only two noteworthy non-radioactive mineral occurrences are known within the area; a gold occurrence at Alder Creek within the Kotzebue quadrangle (Smith, 1930) and a lead-zinc occurrence in the eastern Selawik Hills within the Selawik quadrangle (Elliott and Miller, 1969). These are shown on maps compiled by Cobb (1972a, 1972b).

Three ground radiometric anomalies and high uranium concentrations for sediments have been reported for the western Selawik Hills pluton, where Wyoming Minerals Company has conducted a drilling program (Eakins, 1977). A ground radiometric anomaly is present in the Selawik Lake pluton (Eakins, 1977), but no marked uranium concentrations were found in reconnaissance samples of sediments associated with this pluton (Sharp and Hill, 1978). Weak radioactivity was found associated with Cretaceous carbonaceous shale and sandstone east of Kiana, along the Kobuk River (Matzko and Freeman, 1963, p. 38), and a ground radiometric anomaly associated with a fluorite-bearing nepheline syenite is reported in the same area north of the Kobuk River (Eakins, 1975, p. 141). Five "preferred" radiometric anomalies, or those showing enrichment of eU over eTh, have resulted from an airborne survey (Texas Instruments, Inc., 1975) of the entire area. Two of these are associated with the Selawik Hills pluton, another with the eastern Kiana Hills, and the remaining two with the eastern Waring Mountains.

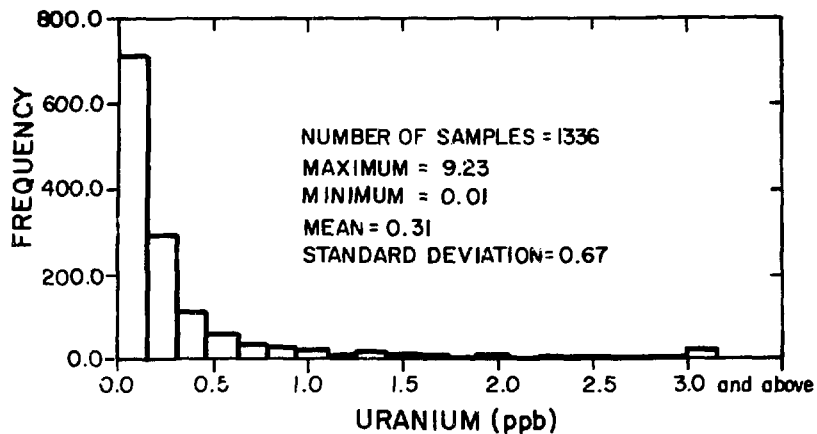
## VI. EVALUATION OF DATA

### Uranium in Waters

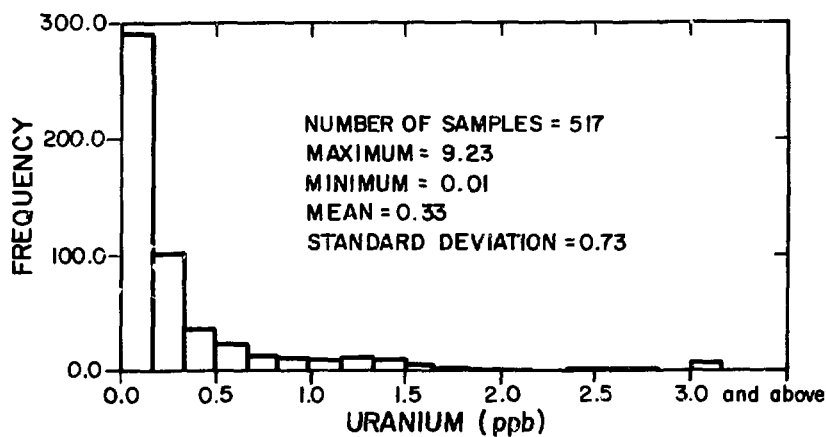
A total of 1336 water samples, from 819 small lakes or ponds and 517 streams, were collected and analyzed as described earlier. The analytical data for these are presented in Appendix B. Their locations are shown on Plates I through IV, and their uranium values are graphically plotted in the appropriate concentration ranges on Plates I-A through IV-A.

It should be noted that due to rounding to two decimal places, uranium concentrations listed in Appendix B for waters containing 0.04, 0.16, 0.50, and 1.00 ppb uranium, the interval cutoffs in Plates I-A through IV-A may in some few cases be plotted within the next lower interval shown on the legend for these Plates. For example, on Plate IV-B, the symbol for the water from location 405461, which was rounded and reported as 0.50 ppb uranium in Appendix B, is plotted (after truncation rather than rounding) as being in the concentration range between 0.16 - 0.49 ppb. Likewise, values of 0.01 ppb may in some cases be plotted within the next largest interval on the uranium concentration plates for waters.

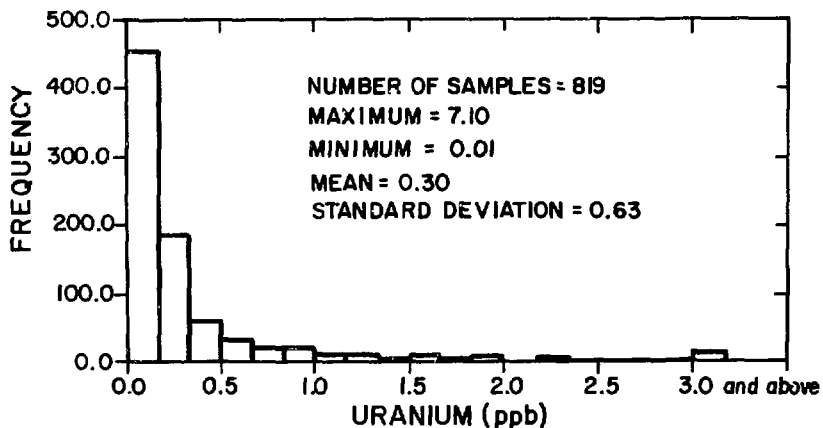
Histograms are shown in Fig. 5 for each water type (stream and lake or pond), as well as for the combined population. Statistical parameters such as the mean, maximum, minimum, and standard deviation are also included in Fig. 5. The maximum uranium concentration measured was 9.23 ppb. The distribution of uranium concentrations is very similar for water from both stream and lake source types (Fig. 5). A value of 2.00 ppb, selected to contain approximately 2% of the total population, was arbitrarily chosen as the anomaly threshold. Thus defined, 26 waters (1.95% of the population), corresponding to the two largest intervals on the concentration overlays of Plates I-A through IV-A, contain anomalous uranium concentrations. The next largest concentration



a. All waters.



b. Stream water.



c. Natural lake or pond water.

Fig. 5. Histograms and statistical data for uranium concentrations in water samples, northern Seward Peninsula and vicinity, Alaska.

interval, which includes uranium concentrations between 1.00 - 1.99 ppb, consists of 66 waters (4.94% of the population). These are termed "subanomalous." The 26 water samples containing anomalous uranium concentrations are listed in Table I.

Fifteen of the twenty-six anomalous and seventeen subanomalous samples were collected from coastal areas. Many of these exhibit high specific conductance values (Table I) and are almost certainly contaminated by seawater, which may have resulted from salt-water encroachment through the ground or may have been added during storms or periods of high winds. The average uranium concentration of seawater is about 3 ppb (Fairbridge, 1972, p. 1066). Since several anomalous samples collected in these areas exhibit low specific conductance values, it is possible that uranium may be preferentially concentrated in these near-shore lakes or ponds and their outlet streams by an unknown mechanism.

Although only 4 anomalous water samples are located within the Selawik Hills pluton (Table I), they are associated with 16 subanomalous water samples and an impressive cluster of anomalous sediment samples (see following section). For purposes of discussion, the Selawik Hills pluton, located on the southern part of the Selawik quadrangle (Fig. 3), is divided at 160°W longitude into eastern and western portions. This corresponds to a physiographic division of the Selawik Hills by the north-south flowing Mangoak River.

Only one anomalous water occurs within the western Selawik Hills pluton, but 15 subanomalous water samples were collected from the same area. All these waters cluster in an area sampled during a previous hydrogeochemical and bedrock sampling investigation (Eakins, 1977; Sharp and Hill, 1978). Of the 37 water samples from this area reported by Sharp and Hill (1978), 5 were found to contain between 1.00 - 1.99 ppb, and none above this amount. These were collected from locations not sampled in this study. The single anomalous value reported herein (4.92 ppb) from the western Selawik Hills pluton was collected from a stream midway between two ground radiometric anomalies about 15 km apart, centered at 66°09'N, 160°40'W and 66°08'N, 160°22'W (Eakins, 1977). The easternmost of these ground anomalies corresponds to a preferred airborne radiometric anomaly (Texas Instruments, Inc, 1975).

Three anomalous and one subanomalous waters were collected from sources within or marginal to the eastern Selawik Hills pluton. Two of these anomalous waters (6290, 91), including the one with the highest uranium concentration measured (9.23 ppb), were collected from the Fish River, which drains the southern part of the eastern Selawik Hills pluton. The occurrence of several anomalous sediments in streams draining this area (see following section) indicate a possibility for uranium mineralization in the southern part of the eastern Selawik Hills pluton. The second preferred airborne radiometric anomaly in the Selawik Hills pluton is located here. The eastern Selawik Hills pluton was not investigated by Eakins (1977).

A pair of anomalous waters (6310, 11) were obtained from lowland areas about 15 km NE of the Selawik Hills. These could result from covered extensions of dikes from the Selawik Hills or Inland Lake plutons. One anomalous pond water sample (6301) containing 6.38 ppb uranium, and another subanomalous one are associated with the Inland Lake pluton. No anomalous water or sediment samples are associated with the Selawik Lake pluton and only one water containing greater than 1.00 ppb (1.20 ppb) of 15 samples analyzed was reported by Sharp and Hill (1978) for this area. The ground radiometric high reported within the Selawik Lake pluton by Eakins (1977), was not reflected in these geochemical results.

The remaining four anomalous water samples occur as isolated high values and their significance is not known.



TABLE I

LIST OF WATER SAMPLES CONTAINING  
ANOMALOUS URANIUM CONCENTRATIONS (>2.00 ppb).

Location Number	Sample Source <sup>b</sup>	Uranium (ppb)	Plate No. <sup>c</sup>	NTMS Quad <sup>d</sup>	Specific Conductance <sup>e</sup>	Comments on Sampling or Source Location
2589	L	3.85	I	Sf	5500	Possible seawater contamination
2590	L	2.42	I	Sf		
2596	L	3.38	I	Sf		
3060	L	4.11	II	K		
3986	L	3.30	III	Sw	6500	
4434	L	2.33	III	Sw	137	Kobuk delta
4478		2.83	III	Sw	212	Coastal samples
5073	L	6.12	III	Sw	90	
5075	L	4.74	III	Sw	61	
5083	L	3.79	III	Sw	40	
5095	L	7.10	III	Sw	4652	Possible seawater contamination
5101	S	4.42	III	Sw		
5102	S	3.59	III	Sw		
5103	S	7.74	III	Sw		
5135	L	2.66	III	Sw	50	Coastal samples
5146	L	2.86	II	K		
6039	L	2.22	III	Sw	124	
6238	S	2.44	IV	Sg	40	
6290	S	2.55	III	Sw	90	Eastern Selawik Hills pluton
6291	S	9.23	III	Sw	114	
6301	L	6.38	III	Sw	136	Inland Lake pluton (?)
6310	S	3.30	III	Sw	109	Anomaly pair
6311	S	2.05	III	Sw	90	
6336	L	2.70	III	Sw	44	Eastern Selawik Hills pluton
6353	S	4.92	III	Sw	52	Western Selawik Hills pluton associated with 15 subanomalous samples
6368	L	3.61	II	K	1214	Possible seawater contamination

<sup>a</sup> The leading two digits as given in the data listings of Appendix B have been dropped.

<sup>b</sup> S = Stream and L = Lake or pond.

<sup>c</sup> The plate number of the appropriate sample location overlay is given, and the corresponding uranium concentration overlay for water is the same but in the "A" plate series.

<sup>d</sup> Sf = Shishmaref; K = Kotzebue; Sw = Selawik; and Sg = Shungnak.

<sup>e</sup> In units of  $\mu\text{mho/cm}$ .

Although no anomalous water samples are included, a cluster of eight subanomalous waters were collected within the Selawik quadrangle from streams and ponds draining the Kiana Hills. A preferred airborne radiometric anomaly is located at the eastern end of this area (Texas Instruments, Inc., 1975).

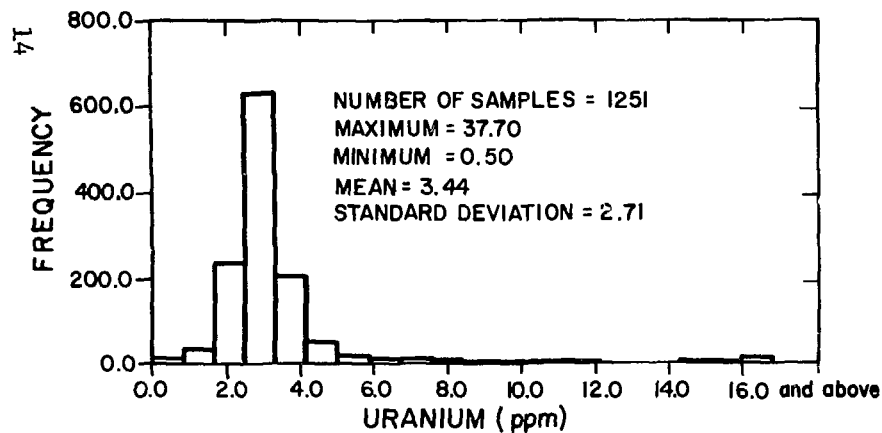
### Uranium in Sediments

A total of 1251 sediment samples from 734 wet natural lakes or ponds, 502 wet streams, and 15 dry streams were collected and analyzed as described earlier. The locations and analytical data are provided in Appendix C, and use of the uranium in sediment overlays produced from these data (Plates I-B through IV-B) has likewise been described.

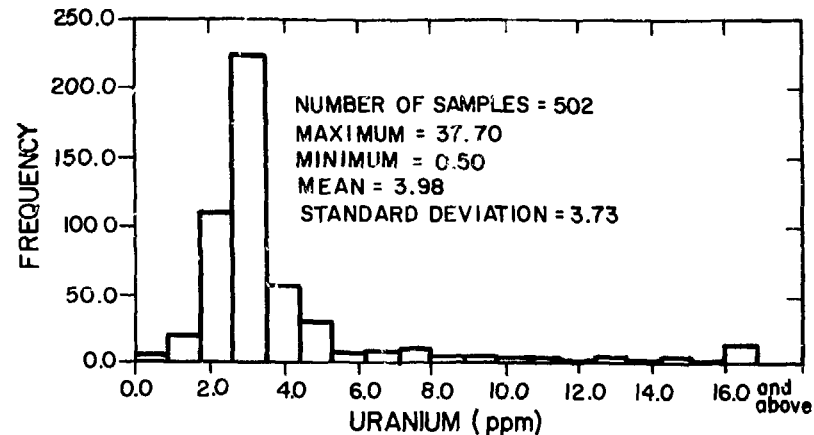
Histograms are shown in Fig. 6 for each sediment type (lake or pond, wet stream, and dry stream), as well as for the combined population. Statistical parameters such as the mean, maximum, minimum, and standard deviation are included in Fig. 6. The maximum measured uranium concentration was 37.7 ppm. The mean concentration for stream sediments (3.98 ppm) is higher than that of lake or pond sediments (3.10 ppm). This is due in large part to the large number of stream samples, relative to pond samples, collected from the Selawik Hills, an area of relatively high uranium concentrations in sediments. At concentrations below about 5 ppm, the sediment concentrations follow a normal distribution; however, a high concentration "tail" is present which markedly increases the value of the calculated standard deviation which might be estimated from the distribution of concentrations below 5 ppm. Therefore, the standard deviation was not used to determine the anomaly threshold. Instead, the threshold for anomalous and subanomalous uranium concentrations is chosen at the point where the normal frequency distribution represented by values below about 5 ppm extrapolates to a negligible value. This occurs at about 5.5 ppm. Values from 5.51 - 8.00 ppm (represented by the third largest symbol on Plates I-B through IV-B) are termed subanomalous, while those above 8.00 ppm (corresponding to the two largest symbols on Plates I-B through IV-B) are considered anomalous. Thus defined, 26 sediments (2.1%) contain subanomalous uranium concentrations and 37 sediments (3.0%) contain anomalous uranium concentrations. The 37 locations providing anomalous sediments (those with >8.00 ppm uranium) are listed in Table II.

Nearly 80% of the anomalous sediments (29 samples) are associated with the Selawik Hills pluton. The most impressive cluster of anomalous sediments (19) occurs in association with two of the three ground radiometric anomalies reported by Eakins (1977), at 66°09'N, 160°40'W and 66°12'N, 160°43'W in the western Selawik Hills pluton. Six of the nine sediments included here have uranium concentrations above 20 ppm (5090-2, 5125-7), including the highest value of 37.7 ppm (5092). Ten of 12 sediment samples reported by Sharp and Hill (1978) near these two radiometric anomalies are above 8 ppm uranium and include one with a concentration of 100 ppm. Uranium concentrations in sediments from this area are contoured in Fig. 7. Unfortunately, only one sediment was collected from streams draining the third ground radiometric anomaly reported by Eakins (1977) at 66°08'W, 160°22'W, but this was also anomalous (15.1 ppm). Sixteen of 21 sediment samples reported by Sharp and Hill (1978) in the vicinity of the third radiometric anomaly showed >8 ppm uranium, including 7 with concentrations >20 ppm, and a high value of 53 ppm.

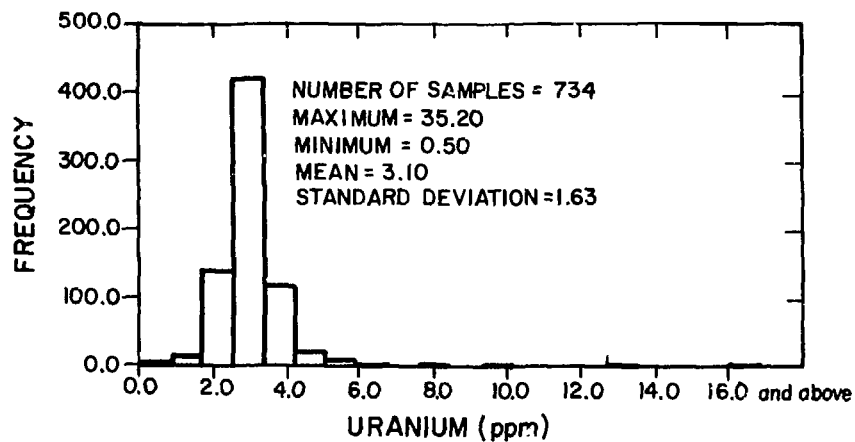
Ten anomalous sediments are dispersed throughout a number of streams draining the eastern Selawik Hills pluton. Three of these (6288-9, 6291) are downstream from a common drainage divide in the southern part of the pluton and are associated with two anomalous water samples, including the highest



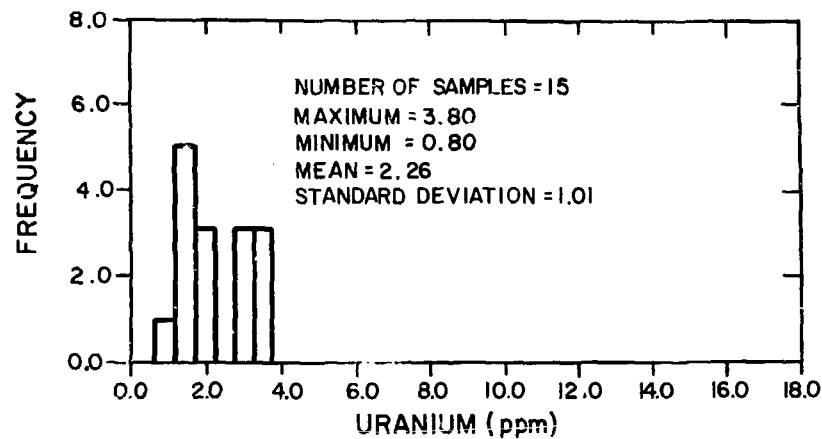
a. All sediments.



b. Wet stream sediment.



c. Wet natural lake or pond sediment.



d. Dry stream sediment.

Fig. 6. Histograms and statistical data for uranium concentrations in sediment samples, northern Seward Peninsula and vicinity, Alaska.

TABLE II

LIST OF SEDIMENT SAMPLES CONTAINING ANOMALOUS URANIUM CONCENTRATIONS (&gt;8.0 ppm)

Location Number <sup>a</sup>	Sample Source <sup>b</sup>	Uranium (ppm)	Plate No. <sup>c</sup>	NTMS Quad <sup>d</sup>	Comments on Sampling or Source Location
5090	S	21.0	III	Sw	WESTERN SELAWIK HILLS PLUTON  Area underlain by granitic rocks
5091	S	22.1	III	Sw	
5092	S	37.7	III	Sw	
5116	S	17.3	III	Sw	
5117	S	10.4	III	Sw	
5118	S	11.1	III	Sw	
5122	S	13.3	III	Sw	
5123	S	13.5	III	Sw	
5124	S	12.5	III	Sw	
5125	S	32.4	III	Sw	
5126	S	29.7	III	Sw	
6350	S	14.4	III	Sw	
6351	S	16.5	III	Sw	
6353	S	10.5	III	Sw	
6357	S	15.1	III	Sw	
6359	S	9.4	III	Sw	
5127	S	20.6	III	Sw	Locations marginal to outcropping granitic rocks
6355	S	15.8	III	Sw	
6356	S	29.5	III	Sw	
<hr/>					
6288	S	12.7	III	Sw	EASTERN SELAWIK HILLS PLUTON  Area underlain by granitic rocks
5289	S	16.5	III	Sw	
6292	S	8.6	III	Sw	
6294	S	8.1	III	Sw	
5295	S	9.5	III	Sw	
6332	S	8.1	III	Sw	
6283	S	9.8	III	Sw	Locations marginal to outcropping granitic rocks
6291	S	11.1	III	Sw	
6335	L	13.4	III	Sw	
6337	L	35.2	III	Sw	
<hr/>					
5335	L	9.8	IV	Sg	EASTERN WARING MOUNTAINS Associated with 6 subanomalous within single stream drainage
<hr/>					
3996	L	23.1	II	K	Sediments from coastal areas
5106	L	8.2	III	Sw	
6360	S	9.2	III	Sw	
<hr/>					
3999	S	8.5	IV	Sg	Isolated anomalous sediments
5264	S	19.2	III	Sw	
5295	S	9.2	III	Sw	
6198	S	11.9	III	Sw	

<sup>a</sup> The leading two digits as given in the data listings of Appendix C have been dropped.<sup>b</sup> S = Stream and L = Lake or pond.<sup>c</sup> The plate number of the appropriate sample location overlay is given, and the corresponding uranium concentration overlay for sediment is the same but in the "B" plate series.<sup>d</sup> K = Kotzebue; Sw = Selawik; and Sg = Shungnak.

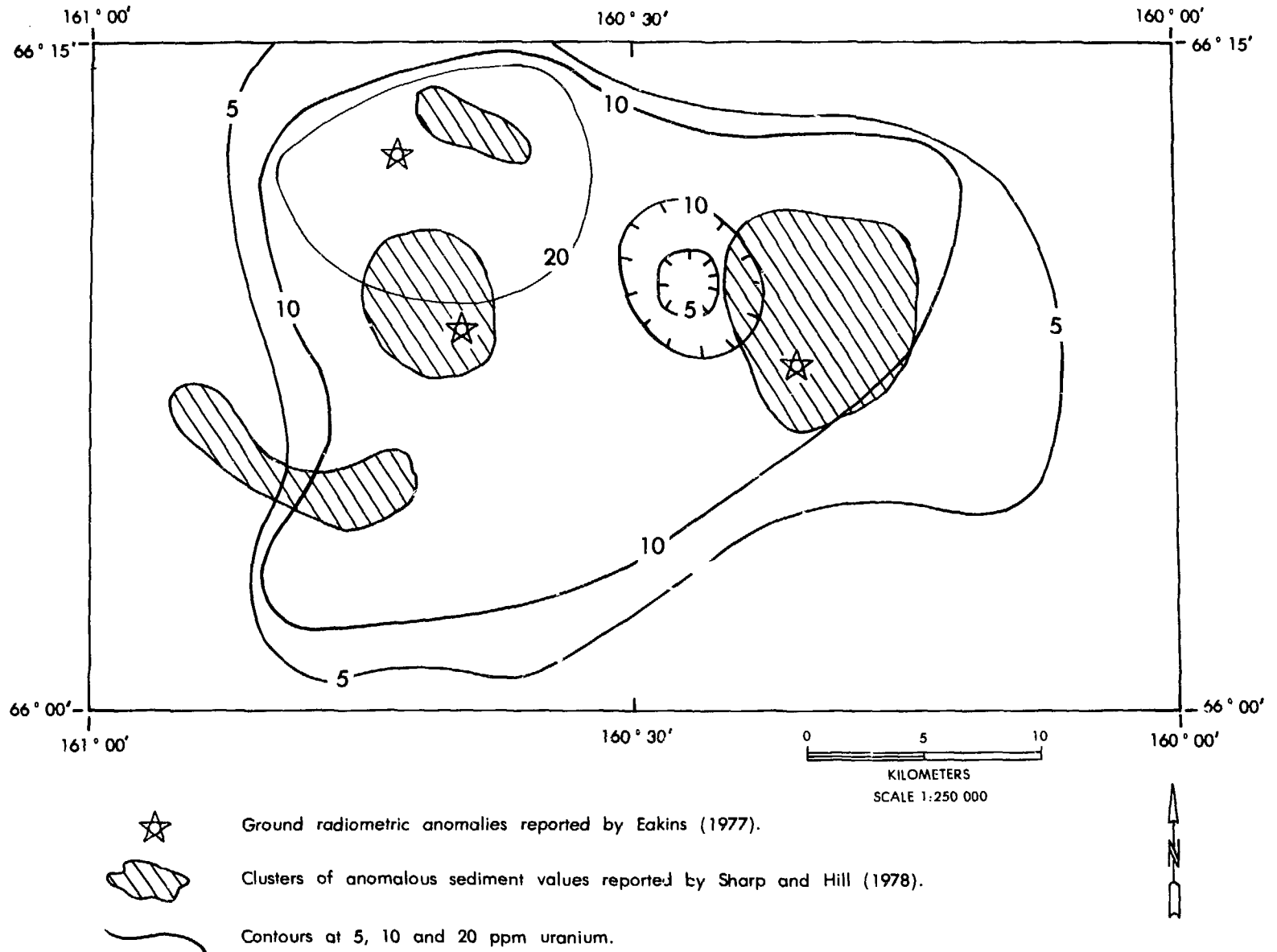


Fig. 7. Contoured uranium concentrations for sediments from the western Selawik Hills, Alaska.

uranium concentration in waters reported herein (9.23 ppb). A preferred radiometric anomaly is reported in this area (Texas Instruments, Inc., 1975).

A single anomalous sediment (5335) containing 9.8 ppm uranium, but associated with six subanomalous ones, is found in a single stream drainage within the northeast part of the Shungnak quadrangle. This stream system, consisting of two parallel forks, drains southward from the eastern end of the Waring Mountains where a Cretaceous conglomerate (1Kc on Fig. 2) crops out. One preferred anomaly and one suspect anomaly are reported for this conglomerate unit in the eastern Waring Mountains (Texas Instruments, Inc., 1975).

The remaining anomalous sediments occur either along the coast or singly at isolated, inland locations. No anomalous sediments reported herein are associated with the Selawik Lake, Inland Lake, or Ekiek Creek plutons. Only one subanomalous sediment resulting from this work is associated with the Selawik Lake pluton. Hill and Sharp (1978) reported only one sediment (of 15 analyzed) with uranium >8 ppm from streams draining the Selawik Lake pluton, and none >8 ppm in the pair analyzed from streams draining the Inland Lake pluton. Thus, notably high uranium contents are not observed for sediments and waters associated with the Selawik Lake, Inland Lake, and Ekiek Creek plutons. The only pluton of the Hogatza series within the report area showing geochemical evidence of markedly high uranium content is that of the Selawik Hills (Fig. 3).

#### Results of Double-Density Sampling

Water and sediment samples throughout the Shishmaref, Kotzebue, and Selawik NTMS sheets were obtained only at the nominal density of one location per 23 km<sup>2</sup>. This density was increased to approximately one per 11 km<sup>2</sup> for the Shungnak NTMS sheet to evaluate the effect of double-density sampling in defining areas of high or low uranium concentrations. Hand-contoured maps were prepared for the western third of the Shungnak quadrangle using data from both water (Fig. 8) and sediment (Fig. 9) samples. Closed contours include at least two appropriate values within the specific interval considered. Within larger clusters, values below a given contour interval are occasionally included. Individual sample source types (i.e., stream versus pond) were not considered. Three maps each were contoured in an identical manner for all waters and for all sediments: one for the full set of samples (i.e., at the double-density), one for all even-numbered, and another for all odd-numbered sample locations (at the single-density). Contour intervals for waters, at 0.2 and 0.5 ppb, are identical to those used by Boyle et al (1971) for an area in the Canadian Shield; intervals for sediments were chosen at 2, 3, 4, and 5 ppm with a supplementary interval at 3.5 ppm.

Several well-defined clusters of high uranium concentrations are evident in the contoured map resulting from double-density sampling of waters (Fig. 8a). The contours in Fig. 8a indicate that a halo of intermediate uranium concentrations (0.2 - 0.5 ppb) surrounds all clusters of high (>0.5 ppb) values, suggesting derivations of uranium from a central source. The northernmost of the five >0.5 ppb clusters indicates a source of relatively high uranium in waters within the Waring Mountains. In this area are two preferred and one suspected airborne radiometric anomalies (Texas Instruments, Inc., 1975) in the lower Cretaceous section. Four of the remaining clusters are located in major drainage basins covered by surficial deposits. Although other possibilities should be recognized, these might represent buried sources of uranium. The cluster at 66°25', just west of the Purcell Mountain pluton, could be reflecting a buried extension of that pluton. By comparing contoured data from

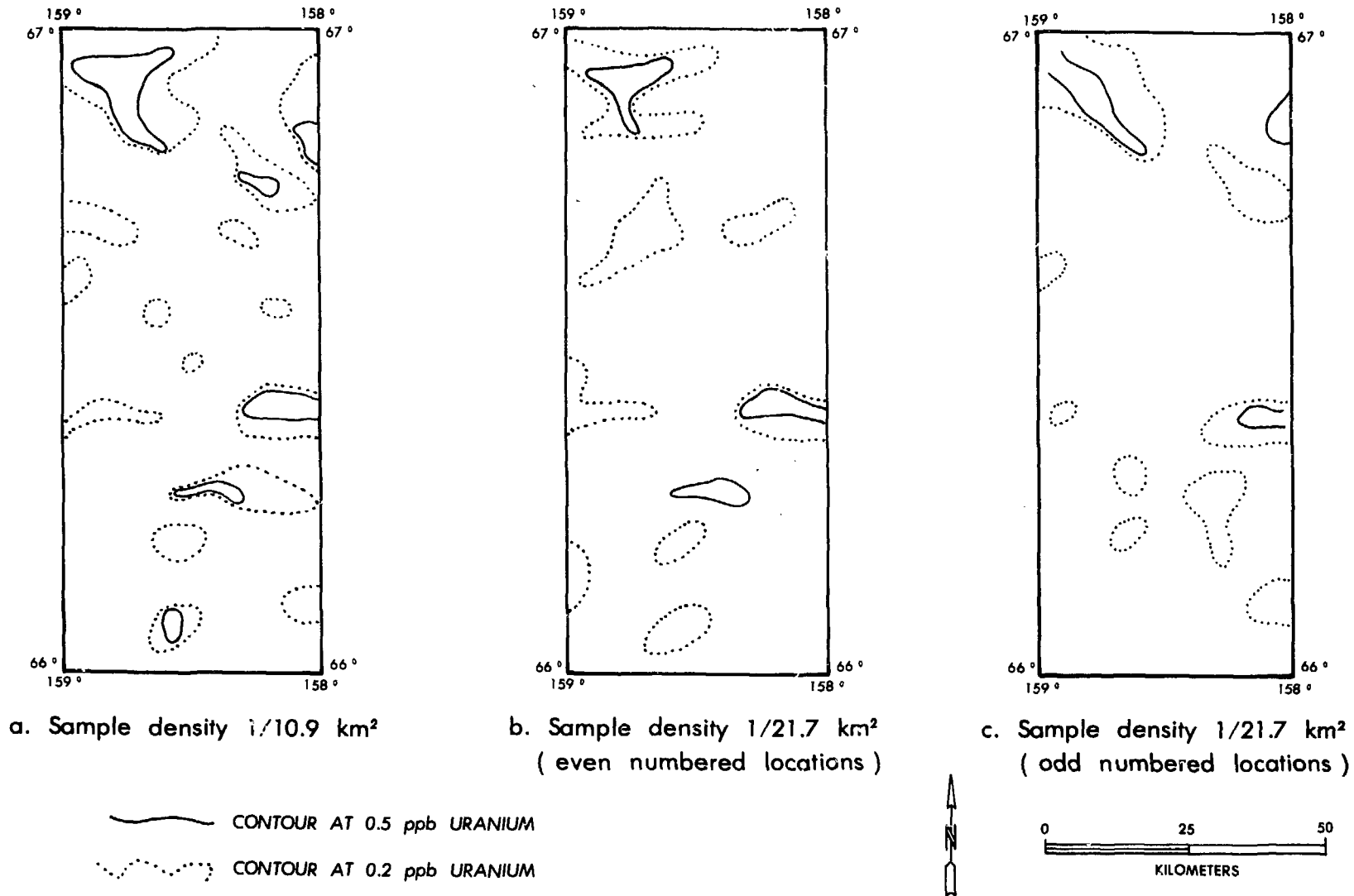
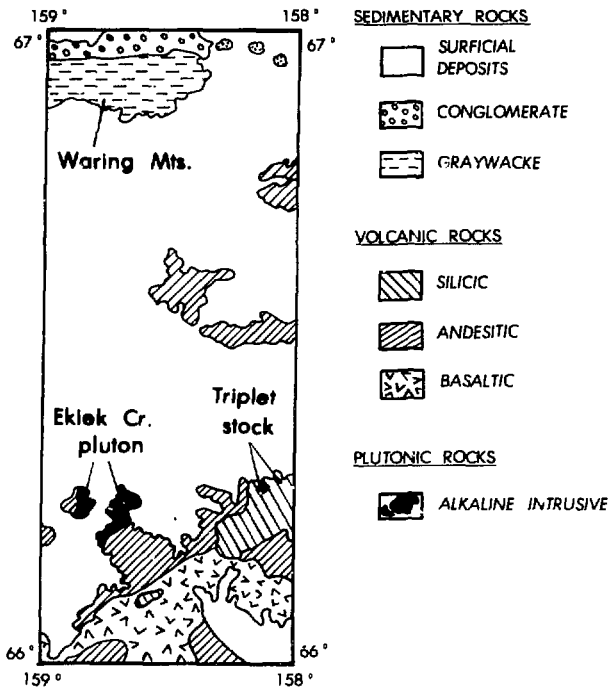
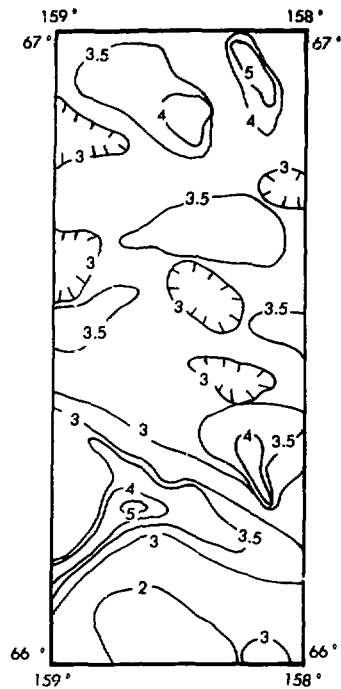


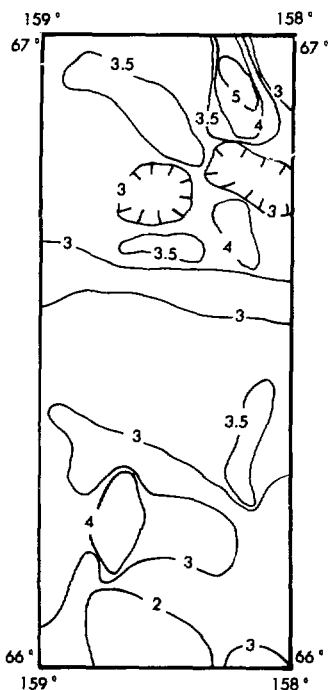
Fig. 8. Contoured uranium concentrations for waters from the western third of the Shungnak quadrangle, Alaska, for comparison of single- and double - density sampling results.



a. Generalized geology

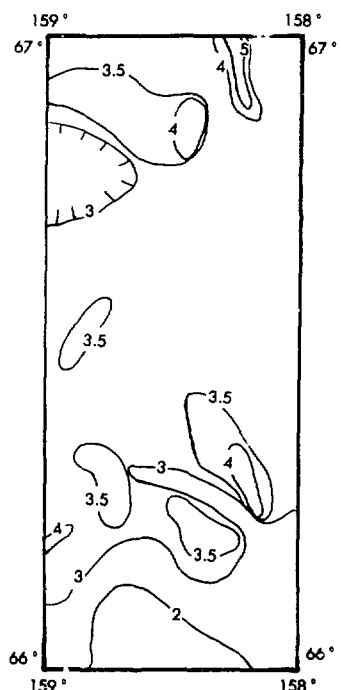
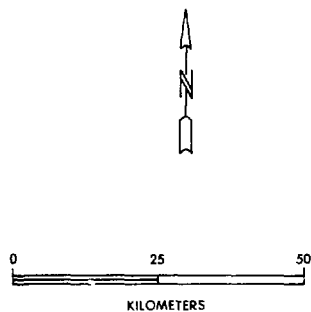


b. Sample density 1/10.3 km<sup>2</sup>



c. Sample density 1/20.5 km<sup>2</sup>  
(even numbered locations)

— CONTOURS AT 2, 3, 3.5,  
AND 5 ppm URANIUM



d. Sample density 1/20.5 km<sup>2</sup>  
(odd numbered locations)

Fig. 9. Contoured uranium concentrations for sediments from the western third of the Shungnak quadrangle, Alaska, for comparison of single - and double - density sampling results with bedrock geology.



double-density (Fig. 8a) and single-density sampling (Figs. 8b and 8c), it can be seen that single-density sampling adequately defines the largest two clusters, those in the Waring Mountains and west of the Purcell Mountain pluton. The remaining three smaller clusters are less well-defined by single-density sampling and generally are defined on only one or the other of the two single-density contour maps. Thus, water sampling at a nominal density of one location per 23 km<sup>2</sup> adequately defines the larger, more interesting areas of high uranium concentrations, but may not suffice to define the smaller areas. Dyck (1975) reached a similar conclusion from a study of a known uranium district in Canada at 59°N latitude comparing sampling densities of one location per 3 km<sup>2</sup>, one per 12.5 km<sup>2</sup>, and one per 30 km<sup>2</sup>.

Four well-defined clusters of high uranium concentrations appear in the contour map resulting from double-density sampling of sediments, and these all correlate with sources from bedrock exposures (Figs. 9a and 9b). These exposures are located in the Waring Mountains, Triplet stock, and eastern Ekiek Creek pluton. Miller and Anderson (1969) found an airborne radiometric anomaly associated with the pluton last named. A cluster of sediments containing uniformly low uranium concentrations (> 2 ppm) is found in the southern part of the area where basaltic rocks form extensive outcrops. Areas covered by glacial drift generally exhibit uniformly average uranium concentrations, apparently due to mechanical mixing of bedrock detritus during glacial transport. However, the nearby presence of a high-uranium source may lead to locally increased uranium concentrations in areas covered by surficial deposits. Thus, sediments within surficial deposits downstream (north) from the Triplet stock contain above-average uranium concentrations (Figs. 9a and 9b). A linear zone of sediments which contains below 3 ppm uranium trends northwest in glacial till across the southern part of all of the contoured maps in Fig. 9. This area may well be underlain at shallow depth by bedrock containing below-average uranium concentrations, such as lower Cretaceous andesite flows. All four clusters of high uranium concentrations delineated by the double-density sediment sampling are also defined by single-density sampling (Figs. 9c and 9d). The one contoured area in the northeast part of Fig. 9b contains the most concentrated array of anomalous and subanomalous sediment samples within the western Shungnak area and is equally well-defined by single-density sampling (Figs. 9c and 9d). Therefore, sampling at the nominal density of one location per 23 km<sup>2</sup> adequately defines the areal distribution of uranium concentrations in sediments.

Very small areas (about 5 km<sup>2</sup>) of relatively increased uranium concentration are defined by double-density sampling for both waters (Fig. 8a) and sediments (Fig. 9b). But definition of such small areas, which possibly represent very localized sources of uranium, is unnecessary in a regional reconnaissance such as the HSSR, which is simply attempting to delineate uranium districts. Consequently, sampling at a nominal density of one location per 23 km<sup>2</sup> appears quite adequate in areas of Alaska having similar low to moderate relief.

Maps contoured from a nominal sample density of one location per 23 km<sup>2</sup> are very similar for both water (Figs. 8b and 8c) and sediment (Figs. 9c and 9d). These maps define quite adequately the corresponding distribution pattern of uranium seen at a sample density of one location per 11 km<sup>2</sup> (Figs. 8a and 9b). Consequently, a roughly even spacing of sample sites appears to best suit the needs of the HSSR, making unnecessary the much more expensive procedure of site selection based on geologic control.

## VI. SUMMARY AND CONCLUSIONS

No notable difference was found between the mean uranium content of 819 natural lake or pond and 517 stream waters collected, analyzed and reported in this study. The mean uranium concentration for the combined population is 0.31 ppb. On the basis of the uranium data reported for these waters, clusters of samples that contain uranium concentrations in excess of 1.00 ppb indicate the areas of greatest interest for further, more detailed investigation to be in the Selawik Hills and Kiana Hills.

Sediment samples collected from 734 wet natural lakes or ponds and 502 wet streams showed notable differences in mean uranium concentrations, 3.10 ppm and 3.98 ppm, respectively. This difference is due to the collection of a large number of high-uranium stream sediments from locations in the Selawik Hills. The mean for the combined population, which follows a normal distribution with a "tail" at high uranium concentrations, is 3.44 ppm. Clusters of sediment samples containing uranium concentrations exceeding 5.5 ppm indicate that the areas of greatest interest for further, more detailed investigation are in the Selawik Hills (as indicated also by the waters) and in the Waring Mountains.

The areas of greatest interest within the Shungnak quadrangle are well defined at a nominal sampling density of one location per 23 km<sup>2</sup> by contoured uranium values for both waters and sediments. The major benefit of increasing the sampling density from approximately one location per 23 km<sup>2</sup> to one per 11 km<sup>2</sup> is to somewhat improve the definition of areas of high uranium concentrations in both waters and sediments. Increased sampling density does result in the additional definition of really smaller clusters of water samples containing intermediate (0.2 to 0.5 ppb) uranium concentrations; however, these clusters probably represent a localized source of uranium and are not of great value in defining a regional uranium distribution. Maps contoured from a nominal sample density of one location per 23 km<sup>2</sup> are very similar for both waters (Figs. 8b and 8c) and for sediments (Figs. 9c and 9d). This indicates that regional distribution patterns for uranium are adequately defined without highly selective sampling. The amenability of the data to contouring suggests that contoured maps prepared from the HSSR data or overlays may be quite helpful in pursuing more detailed resource evaluation or exploration work.

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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 AS USED IN ALASKA

#### I. FIELD PROCEDURES

##### Water Sampling

Water samples are taken first, directly from the source wherever possible, in one each, prewashed and sealed, 41-ml reactor "rabbit" and 25-ml vial (both polyethylene). The contents of both the rabbit and vial are then acidified to a pH  $\leq 1$  with 8N, reagent-grade  $\text{HNO}_3$ . All sample containers are doubly labeled with preprinted, adhesive labels carrying the same sample location number preprinted on the field data form. Stream waters are taken from fast-flowing current away from the bank; ponds (including small lakes) are sampled from just below the surface, near their center.

##### 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 stream 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. In the case of ponds or lakes sampled in Alaska, the sediment is taken by dropping a tethered, stainless steel bottom sampler overboard from a pontoon-equipped helicopter near the center of each lake. Here, only a bottom sample from a single location is taken (i.e., it is not a composite), but sampling is limited to lakes less than 10 m deep and about 0.3 to 2.0 km in least horizontal dimension. The sampler is rinsed before each use, and the raw sample is put into a polyethylene bag, labeled, and treated as above.

##### 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 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 ( $25^\circ\text{C}$ ) portable meter. 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 (using a calibration factor obtained from testing of the specific scintillometer on a calibration block) to give the equivalent uranium (eU) value set forth in the data listing. Special measurements such as dissolved oxygen are made with a

calibrated, portable meter and probe especially designed and commercially available for the purpose. In general, in the case of lakes, the water temperature, pH, specific conductance and (special) dissolved oxygen are all measured with a single, digital readout unit, utilizing a parameter selector switch and a composite probe lowered to just below the water surface from the sampling helicopter. Care is taken to see that this is done before the bottom sediment is disturbed.

### 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, and possible contaminants. Since these observations are subjective and made quickly in the field, they should be held subordinate to any formally documented information such as that provided by published topographic or geologic maps, etc.

### Sample Location Verification

Each contractor is supplied 1:250 000-scale field maps with the desired sample types and general locations symbolically premarked at the LASL. The maps are normally original NTMS quadrangles, available through the USGS. As each location is sampled, a unique sample location number, preprinted on transparent adhesive labels (used for labeling the samples) provided with identically numbered field data forms, is inked alongside the precisely marked point representing the sample site on the field map. The latitude and longitude of each location is then computed within 48 h 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 computer program for the Universal Transverse Mercator map projection utilized is described by Cheadle, (1977). 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 sample as specified cannot be obtained, an alternate sample type is taken, and the new sample type is 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, two NaF (98%)-LiF (2%) flux pellets are prepared and placed on platinum dishes. The 25-ml water vial is vigorously shaken and two 0.20-ml aliquots of water are withdrawn and dropped onto the flux pellets, then evaporated under a heat lamp. The sample fluxes are then heated until fused. After they cool, they are excited with ultraviolet radiation in the fluorometer, and the measured fluorescence of each is read, recorded, and put through a computer routine using standards and blanks run at the same time to obtain the two uranium concentrations. The single uranium concentration of the water samples given in the data listing is the average obtained from the duplicate aliquots. The lower limit of detection for each aliquot by the normal procedure is 0.2 ppb, but in high latitude areas, natural waters often have uranium concentrations below this. Consequently, when a sample run by the normal procedure is found to have < 0.2 ppb uranium, it is routinely put through another evaporative concentration step that provides a 10X concentration factor, again using duplicate aliquots. By this additional procedure, but using the same basic fluorometric method (as

described by Hues and others, 1977), the lower limit of detection of uranium in natural waters is reduced to 0.02 ppb, and when a lower concentration is found in an aliquot, it is arbitrarily averaged into the data listings as 0.01 ppb. Therefore, whenever the uranium concentration in a water sample run by fluorometry is given as some value less than 0.02 ppb, one of the two aliquots had a uranium concentration that was too low to detect. If the listed uranium value is 0.01 ppb, both aliquots were below the detectable limit. Analytical precision at the lower limit of detection is ~30%; however, it improves to ~10% one order of magnitude above the lower limit. Water samples with uranium concentrations in excess of 10 ppb (the upper limit of detection without recalibration), or which gave problems when run by fluorometry, were analyzed using the DNC technique described below.

#### Water Samples Analyzed for Uranium by Delayed-Neutron Counting

Only waters with >10 ppb uranium, or those with impurities that cause quenching of uranium induced fluorescence, are normally assayed using DNC. The exteriors of the 41-ml rabbits are thoroughly cleaned before analysis of the samples. 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 sequence is 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. Analytical precision for those few waters analyzed by the DNC method is as good or better than that by fluorometry.

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 using four standards. 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 sequence is used). The samples are cycled through the system and the uranium concentration is automatically measured, computed in ppm, and entered into the data base. The lower limit of detection of this method is 0.5 ppb (not ppm) uranium and is so low that it has never been reached with a natural sediment sample. The precision is 4% or better for all DNC sediment analyses. The delayed-neutron detectors especially designed and built by the LASL and used for these analyses are described by Balestrini and others (1976).

APPENDIX B

LISTINGS OF FIELD DATA AND URANIUM CONCENTRATIONS FOR WATER SAMPLES

APPENDIX B-I

Data for Water Samples Analyzed by Fluorometry

APPENDIX B-II

Data for Water Samples Analyzed by Delayed-Neutron Counting

(See Appendix D for Code to Listings)





APPENDIX B-1 (continued). Field Data and Uranium Concentrations for Water Samples Analyzed by Fluorometry

DOE SAMPLE NUMBER					LASL SAMPLE LOCATION NUMBER AND FIELD DATA														U CONCENTRATION																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION 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	OWNER/SHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY	UNITS IN ppb
							DATE	HOUR																											
02-66.0333-165.0277-2-24	0-402658-07/27/76-16	22-17.4	-S	8.0	85	-2-7-4-6	-	-	-4-3-2-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06			
02-66.0291-165.1722-2-24	0-402659-07/27/76-16	21-17.2	-S	7.9	69	-2-7-4-6	-	-	-4-3-2-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.0261-165.0560-2-24	0-402660-07/27/76-16	23-17.1	-S	7.9	79	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05			
02-66.0283-165.0510-2-24	0-402661-07/27/76-16	22-18.0	-S	7.9	64	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.1850-165.0500-2-24	0-402662-07/27/76-16	23-16.9	-S	7.6	227	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.29			
02-66.2000-165.0250-2-24	0-402663-07/27/76-17	21-17.0	-S	7.9	94	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.2194-165.1666-2-24	0-402664-07/27/76-17	22-17.4	-S	7.9	62	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.2183-165.0233-2-24	0-402665-07/27/76-17	22-17.2	-S	7.8	86	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05			
02-66.2336-165.0550-2-24	0-402666-07/27/76-17	23-16.1	-S	7.9	71	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02			
02-66.2625-165.0300-2-24	0-402667-07/27/76-17	22-16.5	-S	7.6	58	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09			
02-66.2505-165.1771-2-24	0-402668-07/27/76-17	21-16.2	-S	8.1	315	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11			
02-66.2472-165.0708-2-24	0-402669-07/27/76-17	23-16.8	-S	9.1	30	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.2388-165.0416-2-24	0-402670-07/27/76-17	23-16.8	-S	8.7	23	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02			
02-66.2766-165.0361-2-24	0-402671-07/27/76-17	21-16.6	-S	8.2	26	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03			
02-66.2866-165.0333-2-24	0-402672-07/27/76-17	22-16.4	-S	7.6	72	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.2972-165.1400-2-24	0-402673-07/27/76-17	21-16.1	-S	7.6	85	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.3138-165.1402-2-24	0-402674-07/27/76-17	22-16.3	-S	7.6	68	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.3277-165.0666-2-24	0-402675-07/27/76-17	21-16.1	-S	7.3	57	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28			
02-66.3541-165.0236-2-24	0-402676-07/27/76-18	20-16.1	-S	7.5	49	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21			
02-66.3666-165.0360-2-24	0-402677-07/27/76-18	20-16.2	-S	7.5	27	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.3208-165.0533-2-24	0-402678-07/27/76-18	21-16.6	-S	7.4	45	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06			
02-66.3666-165.0566-2-24	0-402679-07/27/76-18	19-16.6	-S	7.2	61	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.3375-165.0461-2-24	0-402680-07/27/76-18	21-16.6	-S	7.6	52	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.2750-165.0460-2-24	0-402681-07/27/76-18	18-16.2	-S	7.7	46	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17			
02-66.2500-165.0244-2-24	0-402682-07/27/76-18	18-16.9	-S	7.5	84	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07			
02-66.2111-165.0444-2-24	0-402683-07/27/76-18	19-16.6	-S	7.7	73	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19			
02-66.2116-165.0991-2-24	0-402684-07/27/76-18	19-18.1	-S	7.7	45	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.1650-165.0405-2-24	0-402685-07/27/76-18	20-17.5	-S	7.4	145	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.1133-165.1372-2-24	0-402686-07/27/76-18	20-17.5	-S	8.1	58	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17			
02-66.0483-165.0463-2-24	0-402687-07/27/76-18	20-17.9	-S	7.8	54	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.34			
02-66.0125-164.9370-2-24	0-402688-07/27/76-18	19-17.8	-S	7.7	108	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21			
02-66.0027-164.8083-2-24	0-402689-07/27/76-18	21-17.8	-S	8.2	33	-2-7-4-6	-	-	-4-3-1-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.14			
02-66.0138-164.1361-2-24	0-402785-07/29/76-13	8-14.1	-S	8.1	3	-2-7-6-6	-3-1	-	-3-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39			
02-66.0555-164.1370-2-24	0-402786-07/29/76-13	8-11.0	-S	7.4	45	6-2-7-4-6-2-3-1	-2-4-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.74			
02-66.0472-164.1771-2-24	0-402787-07/29/76-13	10-11.2	-S	8.0	50	6-2-7-4-6-3-2-1	-2-3-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05			
02-66.0972-164.8875-2-24	0-402788-07/29/76-14	8-14.9	-S	7.3	54	-2-7-6-6	-3-1	-	-3-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.51			
02-66.1243-165.0083-2-24	0-402789-07/29/76-14	9-14.7	-S	7.1	152	-2-7-6-6	-3-1	-	-3-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.1444-165.0736-2-24	0-402790-07/29/76-14	9-10.8	-S	7.0	65	13-2-7-4-6-3-3-1	-2-3-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26			
02-66.1458-165.0463-2-24	0-402791-07/29/76-14	10-10.9	-S	8.2	45	-2-7-6-6	-3-1	-	-4-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.1944-165.1555-2-24	0-402792-07/29/76-14	9-14.8	-S	7.8	3	-2-7-6-6	-3-1	-	-4-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02			
02-66.2055-165.0541-2-24	0-402793-07/29/76-14	10-14.5	-S	8.2	22	-2-7-6-6	-3-1	-	-4-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.2414-165.0311-2-24	0-402794-07/29/76-14	10-14.4	-S	7.4	35	-7-2-6-6	-3-1	-	-3-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.54			
02-66.2875-165.0271-2-24	0-402795-07/29/76-14	10-14.2	-S	7.4	55	-7-2-6-6	-3-1	-	-4-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66.3166-165.0694-2-24	0-402796-07/29/76-14	9-11.0	-S	7.6	60	13-7-2-4-6-2-3-1	-2-4-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01				
02-66.3486-165.0610-2-24	0-402797-07/29/76-14	10-10.8	-S	7.2	60	6-7-2-4-6-2-3-1	-2-4-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.35			
02-66.4027-165.0833-2-24	0-402798-07/29/76-14	10-14.3	-S	7.6	80	-7-2-6-6	-3-1	-	-2-4-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.24			
02-66.3888-165.1805-2-24	0-402799-07/29/76-14	10-14.5	-S	7.6	47	-7-2-6-6	-3-1	-	-4-3-3-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.88			
02-66.3763-165.0972-2-24	0-402800-07/29/76-14	10-14.6	-S	7.5	32	-7-2-6-6	-3-1	-	-4-3-3-4	-	-	-	-	-																					



# APPENDIX B-1 (continued). Field Data and Uranium Concentrations for Water Samples Analyzed by Fluorometry

DOE SAMPLE NUMBER							LASL SAMPLE LOCATION NUMBER AND FIELD DATA																U CONCENTRATION											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTEL-CETER (e.u. pt. ft.)	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
							DATE	HOUR																										UNITS IN ppb
02-66.5305-163.1974-2-24	0-402859-07/30/76-15	18-13.8-	S-	8.1-	67-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07		
02-66.4977-163.8194-2-24	0-402860-07/30/76-15	15-13.8-	S-	7.6-	132-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11		
02-66.4958-163.8403-2-24	0-402861-07/30/76-15	15-14.4-	S-	7.9-	81-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.43		
02-66.4944-164.0208-2-24	0-402862-07/30/76-15	17-14.1-	S-	7.9-	51-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.4972-164.1271-2-24	0-402863-07/30/76-16	16-14.1-	S-	8.0-	169-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26		
02-66.5027-164.2375-2-24	0-402864-07/30/76-15	15-14.5-	S-	6.5-	61-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.4986-164.3053-2-24	0-402865-07/30/76-	14-12.1-	S-	8.2-	79-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.4916-164.4791-2-24	0-402866-07/30/76-15	16-14.2-	S-	7.9-	45-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26		
02-66.4861-164.5458-2-24	0-402867-07/30/76-15	15-14.5-	S-	8.0-	28-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.4713-164.6347-2-24	0-402868-07/30/76-15	15-14.7-	S-	7.9-	42-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.4611-164.6583-2-24	0-402869-07/30/76-15	16-15.2-	S-	7.6-	143-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07		
02-66.4236-164.6918-2-24	0-402870-07/30/76-15	15-14.8-	S-	8.2-	48-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66.3569-164.6944-2-24	0-402871-07/30/76-16	16-14.7-	S-	8.0-	56-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.3375-164.6919-2-24	0-402872-07/30/76-16	16-14.1-	S-	7.9-	37-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.45		
02-66.2819-164.7091-2-24	0-402873-07/30/76-16	16-15.2-	S-	7.9-	37-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.2527-164.7167-2-24	0-402874-07/30/76-16	15-15.3-	S-	7.5-	220-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.1986-164.7004-2-24	0-402875-07/30/76-16	15-14.9-	S-	8.5-	33-	-2-7-4-6-	-	-	-4-3-1-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.1141-164.2004-2-24	0-402957-07/31/76-19	16-15.1-	S-	7.8-	64-	-2-7-4-6-	-3-1-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.1260-164.2633-2-24	0-402958-07/31/76-19	16-15.9-	S-	7.8-	73-	-2-7-4-6-	-3-1-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.1294-164.2102-2-24	0-402959-07/31/76-19	16-16.4-	S-	7.8-	32-	-2-7-4-6-	-3-1-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66.1355-164.2318-2-24	0-402960-07/31/76-19	16-15.8-	S-	7.5-	47-	-2-7-4-6-	-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17		
02-66.2083-164.2902-2-24	0-402961-07/31/76-19	16-10.8-C-	-	-	700-	6-2-7-4-6-3-3-1-2-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.14		
02-66.1805-164.3053-2-24	0-402962-07/31/76-19	16-11.2-C-	-	-	1500-	16-2-7-4-6-3-3-1-2-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.65		
02-66.1733-164.3683-2-24	0-402963-07/31/76-19	16-16.3-	S-	7.6-	258-	-2-7-4-6-	-3-1-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66.1600-164.3700-2-24	0-402964-07/31/76-19	16-11.6-C-	-	-	180-	4-2-7-4-6-2-3-1-2-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.55		
02-66.1583-164.4466-2-24	0-402965-07/31/76-19	16-11.6-C-	-	-	220-	4-2-7-4-6-3-3-1-2-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
02-66.1255-164.4102-2-24	0-402966-07/31/76-20	16-10.6-C-	-	-	55-	4-2-7-4-6-3-3-1-2-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66.1600-164.5333-2-24	0-402967-07/31/76-20	16-16.5-	S-	8.4-	155-	-2-7-4-6-	-3-1-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21		
02-66.2063-164.5154-2-24	0-402968-07/31/76-20	16-11.8-C-	-	-	70-	0-2-7-4-6-	-3-1-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.14		
02-66.2197-164.4960-2-24	0-402969-07/31/76-20	16-11.6-C-	-	-	70-	14-2-7-4-6-2-3-1-2-3-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.2080-164.5368-2-24	0-402970-07/31/76-20	16-11.8-C-	-	-	60-	84-2-7-4-6-2-3-1-2-3-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.2733-164.5769-2-24	0-402972-07/31/76-20	17-16.4-	S-	8.2-	2-	-2-7-4-6-	-3-1-	-	-3-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66.3533-164.5600-2-24	0-402974-07/31/76-20	16-15.0-	S-	8.3-	37-	-2-7-4-6-	-3-1-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04		
02-66.4133-164.5400-2-24	0-402975-07/31/76-20	16-15.6-C-	S-	7.6-	42-	-2-7-4-6-	-3-1-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.40		
02-66.4355-164.4950-2-24	0-402976-07/31/76-20	16-15.5-	S-	7.6-	2-	-2-7-4-6-	-3-1-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.45		
02-66.4200-164.4550-2-24	0-402977-07/31/76-20	16-16.1-C-S-	7.5-	2-	-2-7-4-6-	-3-1-	-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.33		
02-66.4472-164.4080-2-24	0-402978-07/31/76-20	16-17.45-C-S-	7.6-	52-	-2-7-4-6-	-3-1-	-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.4166-164.3569-2-24	0-402979-07/31/76-20	15-10.8-C-	-	-	110-	13-2-7-4-6-2-3-1-2-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.3613-164.3102-2-24	0-402981-07/31/76-20	15-11.8-C-	-	-	45-	0-2-7-4-6-2-3-1-3-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.3761-164.3508-2-24	0-402982-07/31/76-20	15-11.4-C-	-	-	95-	4-2-7-4-6-2-3-1-2-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.3600-164.4450-2-24	0-402983-07/31/76-21	15-14.7-C-S-	7.9-	23-	-2-7-4-6-	-3-1-	-	-	-3-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66.3364-164.4450-2-24	0-402984-07/31/76-21	15-16.5-C-S-	7.5-	50-	-2-7-4-6-	-3-1-	-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66.3166-164.4100-2-24	0-402985-07/31/76-21	15-16.2-C-S-	7.6-	56-	-2-7-4-6-	-3-1-	-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66.2633-164.4413-2-24	0-402986-07/31/76-21	16-16.1-C-S-	7.5-	52-	-2-7-4-6-	-3-1-	-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.2633-164.4111-2-24	0-402987-07/31/76-21	16-16.7-	-	7.7-	38-	-2-7-4-6-	-3-1-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66.2266-164.3700-2-24	0-402988-07/31/76-21	15-16.1-	S-	7.4-	35-	-2-7-4-6-	-3-2-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66.2294-164.3000-2-24	0-402989-07/31/76-21	14-15.7-	S-	7.5-	118-	-2-7-4-6-	-3-1-	-	-4-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66.1766-164.2000-2-24	0-402990-07/31/76-21	14-16.2-	S-	7.9-	61-	-2-7-4																												

## APPENDIX B-I (continued). Field Data and Uranium Concentrations for Water Samples Analyzed by Fluorometry

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA														U CONCENTRATION															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLONER (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	UNITS IN PPB
							DATE	HOUR																											
02-66	0100-164.4833-2-27-	0-402995-07/31/76-21-	14-11.4-C-	-	-	60-	9-2-	7-4-6-3-	3-1-2-	4-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27		
02-66	0166-164.1333-2-29-	0-403011-08/01/76-7-	10-14.1-	-S-	7.8-	72-	-	3-6-6-6-	3-2-	3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66	0650-164.0866-2-29-	0-403012-08/01/76-7-	10-14.3-	-S-	7.9-	98-	-	3-6-6-6-	3-1-	3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20		
02-66	1375-163.9933-2-29-	0-403013-08/01/76-8-	9-13.8-	-S-	7.8-	359-	-	2-6-7-	3-2-	3-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66	1761-164.1050-2-29-	0-403014-08/01/76-8-	10-12.9-C-	-S-	6.0-	45-	-	3-6-6-6-	3-1-	4-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	2250-163.9866-2-29-	0-403015-08/01/76-8-	10-14.2-	-S-	6.4-	43-	-	2-7-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	2333-164.0233-2-29-	0-403016-08/01/76-8-	10-14.4-	-S-	6.8-	64-	-	2-7-4-6-	3-3-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	2505-164.1371-2-29-	0-403017-08/01/76-8-	9-14.7-	-S-	7.3-	142-	-	2-7-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66	2666-164.1433-2-29-	0-403018-08/01/76-8-	10-14.6-	-S-	7.7-	79-	-	3-6-6-6-	3-1-	3-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07		
02-66	2780-164.2500-2-29-	0-403019-08/01/76-8-	10-14.8-C-	-S-	7.8-	58-	-	3-6-6-6-	3-1-	3-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	3133-164.2366-2-29-	0-403020-08/01/76-8-	10-15.1-	-S-	7.5-	65-	-	3-6-6-6-	3-1-	4-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.10		
02-66	3266-164.1966-2-29-	0-403021-08/01/76-8-	9-15.2-	-S-	7.8-	40-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.63		
02-66	3600-164.1666-2-29-	0-403022-08/01/76-8-	9-14.3-	-S-	7.8-	28-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	4155-164.1600-2-29-	0-403023-08/01/76-8-	8-14.8-	-S-	7.3-	128-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	4566-164.2266-2-29-	0-403024-08/01/76-8-	9-13.2-	-S-	7.8-	102-	-	3-6-6-6-	3-4-	4-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05		
02-66	4533-164.1566-2-29-	0-403025-08/01/76-8-	7-14.6-	-S-	7.8-	75-	-	3-6-6-6-	3-1-	4-3-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	4666-164.0472-2-29-	0-403026-08/01/76-8-	9-14.3-	-S-	7.7-	95-	-	7-6-6-6-	3-2-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.42		
02-66	4600-163.9783-2-29-	0-403027-08/01/76-8-	10-14.4-	-S-	7.8-	43-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20		
02-66	4663-163.7633-2-29-	0-403029-08/01/76-9-	10-13.4-	-S-	7.0-	196-	-	3-6-6-6-	3-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66	4058-163.8700-2-29-	0-403030-08/01/76-9-	10-14.0-C-	-S-	6.8-	322-	-	3-6-6-6-	3-2-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07		
02-66	4055-163.9266-2-29-	0-403031-08/01/76-9-	10-13.7-	-S-	7.9-	49-	-	3-6-6-6-	3-2-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	4055-164.0333-2-29-	0-403032-08/01/76-8-	10-13.9-	-S-	7.4-	50-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09		
02-66	3766-164.0300-2-29-	0-403033-08/01/76-9-	8-12.1-C-	-S-	7.3-	1512-	-	3-6-6-6-	3-1-	4-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	3805-163.9472-2-29-	0-403034-07/01/76-9-	9-14.3-	-S-	8.4-	57-	-	3-6-6-6-	3-2-	3-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.32		
02-66	3708-163.8708-2-29-	0-403035-07/01/76-9-	9-10.3-	-S-	8.0-	70-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.46		
02-66	3208-163.8866-2-29-	0-403036-08/01/76-9-	10-13.5-	-S-	8.0-	147-	-	3-6-4-6-	3-2-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.79		
02-66	3255-163.9316-2-29-	0-403037-08/01/76-9-	10-13.9-	-S-	7.8-	78-	-	3-6-5-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	3166-164.0166-2-29-	0-403038-08/01/76-9-	10-13.9-C-	-S-	7.9-	46-	-	3-6-5-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
02-66	2994-164.0333-2-29-	0-403039-08/01/76-9-	10-14.1-C-	-S-	8.1-	46-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	2938-163.9433-2-29-	0-403040-08/01/76-9-	10-14.5-	-S-	7.7-	132-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	2758-163.8633-2-29-	0-403041-08/01/76-9-	10-13.6-	-S-	8.1-	54-	-	3-6-5-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	2500-163.8923-2-29-	0-403042-08/01/76-9-	10-13.7-C-	-S-	8.1-	78-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
02-66	1763-163.9233-2-29-	0-403043-08/01/76-9-	10-13.4-C-	-S-	7.8-	136-	-	3-6-4-6-	3-	4-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.68		
02-66	1483-163.8900-2-29-	0-403044-08/01/76-9-	10-13.2-	-S-	7.4-	95-	-	3-6-4-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	1202-163.9733-2-29-	0-403045-08/01/76-9-	10-13.7-	-S-	7.1-	20-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22		
02-66	0616-163.9500-2-29-	0-403046-08/01/76-11-	12-14.6-	-S-	7.7-	34-	-	3-6-4-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.23		
02-66	0666-163.9183-2-29-	0-403047-08/01/76-11-	12-14.5-	-S-	7.3-	57-	-	3-6-5-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.23		
02-66	1030-163.9077-2-29-	0-403048-08/01/76-11-	12-14.6-	-S-	7.3-	25-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	0900-163.9666-2-29-	0-403049-08/01/76-11-	12-14.5-	-S-	7.2-	62-	-	3-6-5-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	0808-163.8800-2-29-	0-403050-08/01/76-11-	14-13.9-C-	-S-	7.3-	52-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.34		
02-66	0594-163.8966-2-29-	0-403051-08/01/76-11-	14-14.1-	-S-	6.8-	1782-	-	3-6-6-6-	3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17		
02-66	0250-163.8100-2-29-	0-403052-08/01/76-11-	13-14.7-	-S-	7.6-	76-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66	0247-163.5883-2-27-	0-403053-08/01/76-11-	14-12.6-	-	8.0-	26-	-	6-3-6-4-6-2-	3-1-2-	3-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.12		
02-66	0566-163.5666-2-29-	0-403054-08/01/76-11-	13-14.1-C-	-S-	7.4-	48-	-	3-6-6-6-	3-1-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
02-66	0527-163.4900-2-27-	0-403055-08/01/76-11-	14-12.6-	-	7.4-	28-	-	0-3-7-5-6-2-	2-2-2-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21		
02-66	0400-163.4733-2-27-	0-403056-08/01/76-11-	14-13.2-	-	7.6-	27-	-	0-3-6-6-6-2-	2-2-2-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	0666-163.3550-2-29-	0-403057-08/01/76-11-	13-14.2-	-S-	6.7-	49-	-</																												





## APPENDIX B-1 (continued). Field Data and Uranium Concentrations for Water Samples Analyzed by Fluorometry

DOE SAMPLE NUMBER							LASL SAMPLE LOCATION NUMBER AND FIELD DATA																U CONCENTRATION											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	PH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILOMETER (c.u., 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
							DATE	HOUR																										UNITS IN ppb
02-66,8902=160.3791-2-24	0-404509-08/15/76-10	13-15.5	-5	8.2	47-	-2-6	-	-3-1	-1-3-3-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66,9000=160.4633-2-24	0-404510-08/15/76-10	13-15.6	-5	8.5	58-	-2-6	-	-3-1	-3-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66,8838=160.5900-2-24	0-404511-08/15/76-10	13-15.5	-5	8.4	38-	-2-6	-4-6	-3-1	-1-3-3-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66,8888=160.6833-2-24	0-404512-08/15/76-10	13-15.5	-5	7.8	68-	-2-6	-4-6	-3-1	-1-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.47		
02-66,9927=160.7800-2-24	0-404513-08/15/76-11	13-15.3	-5	8.3	14-	-2-6	-4-6	-3-1	-1-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18		
02-66,8861=160.8750-2-24	0-404514-08/15/76-11	13-15.4	-5	7.7	56-	-2-6	-4-6	-3-1	-1-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06		
02-66,8983=161.0133-2-24	0-404515-08/15/76-11	13-15.4	-5	8.7	68-	-2-6	-5-6	-3-1	-1-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.66		
02-66,8933=161.1260-2-24	0-404516-08/15/76-11	13-15.3	-5	8.9	57-	-2-6	-4-6	-3-1	-1-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28		
02-66,8750=161.2527-2-24	0-404517-08/15/76-11	13-15.2	-5	8.4	109-	-2-6	-4-6	-3-1	-1-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.53		
02-66,8933=161.3233-2-24	0-404518-08/15/76-11	13-14.6	-5	8.7	36-	-2-6	-4-6	-3-1	-1-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.85		
02-66,8866=161.4660-2-24	0-404519-08/15/76-11	13-14.6	-5	8.4	15-	-2-6	-4-6	-3-1	-1-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.34		
02-66,8894=161.5800-2-24	0-404520-08/15/76-11	13-14.6	-5	7.7	93-	-2-6	-6-6	-3-1	-1-2-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.85		
02-66,8800=161.7660-2-24	0-404521-08/15/76-13	10-14.1	-5	8.4	33-	-2-7	-4-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66,8566=161.7600-2-24	0-404522-08/15/76-13	10-14.0	-5	7.0	968-	-2-7	-4-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66,8316=161.8800-2-24	0-404523-08/15/76-14	10-14.1	-5	8.1	269-	-2-7	-4-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15		
02-66,8377=161.9500-2-24	0-404524-08/15/76-15	10-14.8	-5	8.3	118-	-2-7	-4-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.42		
02-66,8550=161.4372-2-24	0-404525-08/15/76-15	11-15.0	-5	8.4	78-	-2-7	-4-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.69		
02-66,8538=161.5533-2-24	0-404526-08/15/76-13	10-14.0	-5	8.1	69-	-2-7	-4-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20		
02-66,8333=161.6160-2-24	0-404527-08/15/76-15	16-15.1	-5	8.5	95-	-2-7	-4-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28		
02-66,8405=161.1400-2-24	0-404528-08/15/76-15	13-16.2	-5	8.9	59-	-2-7	-4-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
02-66,8461=161.9500-2-24	0-404529-08/15/76-14	16-14.6	-5	8.4	59-	-2-7	-4-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.65		
02-66,9202=161.6833-2-24	0-404531-08/16/76-10	13-14.9	-5	9.3	114-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66,8900=161.0560-2-24	0-404532-08/16/76-10	13-11.5	-5	7.5	143-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04		
02-66,9200=161.5660-2-24	0-404533-08/16/76-10	13-13.7	-5	9.7	198-	-2-7	-6-3	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20		
02-66,9116=161.4760-2-24	0-404534-08/16/76-11	13-13.1	-5	10.8	240-	-2-7	-6-3	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
02-66,9300=161.3800-2-24	0-404535-08/16/76-11	13-13.4	-5	9.8	42-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66,9216=161.2483-2-24	0-404536-08/16/76-10	13-14.4	-5	9.2	40-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00		
02-66,9250=161.1333-2-24	0-404537-08/16/76-16	13-14.9	-5	8.9	81-	-2-7	-6	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.93		
02-66,9200=160.4200-2-24	0-404538-08/16/76-11	13-14.2	-5	8.4	102-	-2-7	-6-8	-2-1	-4-1-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.60		
02-66,9266=160.8883-2-24	0-404539-08/16/76-11	14-12.3	-5	8.4	2-	-2-7	-6-8	-2-1	-4-1-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.58		
02-66,9300=160.7200-2-24	0-404541-08/16/76-11	13-14.5	-5	8.7	89-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.53		
02-66,9627=160.6444-2-24	0-404542-08/16/76-11	14-9.5	-3	8.5	394-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03		
02-66,9272=160.5900-2-24	0-404543-08/16/76-11	14-13.9	-5	9.6	59-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06		
02-66,9638=160.5108-2-24	0-404544-08/16/76-11	14-13.8	-5	8.9	8-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66,9750=160.4650-2-24	0-404545-08/16/76-11	14-11.2	-5	7.4	137-	-2-7	-6-3	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66,9261=160.4733-2-24	0-404546-08/16/76-11	14-10.4	-5	7.4	182-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25		
02-66,9033=160.2360-2-21	0-404547-08/16/76-11	14-10.2	-5	7.4	182-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.53		
02-66,9661=160.1033-2-24	0-404548-08/16/76-11	14-13.8	-5	7.4	182-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25		
02-66,9314=160.1000-2-21	0-404549-08/16/76-11	14-12.4	-5	7.4	182-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17		
02-66,9400=160.4500-2-21	0-404550-08/16/76-11	13-16.2	-5	7.4	182-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08		
02-66,9636=160.4533-2-21	0-404551-08/16/76-11	14-12.8	-5	7.4	182-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08		
02-66,9494=159.4222-2-21	0-404552-08/16/76-11	13-11.7	-5	7.4	182-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.84		
02-66,9766=159.4160-2-21	0-404553-08/16/76-12	13-13.9	-5	7.4	182-	-2-7	-6-8	-2-1	-4-1-1-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.32		
02-66,9850=159.6333-2-24	0-404554-08/16/76-12	13-14.5	-5	8.7	119-	-2-7	-4-8	-2-1	-5-1-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21		
02-66,9861=159.6583-2-24	0-404555-08/16/76-12	13-14.3	-5	8.9	112-	-2-7	-4-3	-2-1	-5-1-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05		
02-66,9633=159.6300-2-21	0-404556-08/16/76-12	13-12.9	-5	7.4	182-	-2-7	-4-6	-1-2-1	-5-1-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
02-66,9816=159.4560-2-21	0-404557-08/16/76-12	13-12.7	-5	7.4	182-	-2-7	-4-8	-1-2-1	-5-1-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06		
02-66,9833=159.3860-2-21	0-404558-08/16/76-12	13-11.8</																																











## APPENDIX B-1 (continued). Field Data and Uranium Concentrations for Water Samples Analyzed by Fluorometry

DOE SAMPLE NUMBER							LASL SAMPLE LOCATION NUMBER AND FIELD DATA														U CONCENTRATION													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (umho/cm)	SCINTILLOMETER (cpv, 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
							DATE	HOUR																										UNITS IN ppb
02-66	3527-160.4600	-2-24	U-405243	08/22/76	15	12-14.0	-5	7.5	30	-2-7-5-7	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18		
02-66	3561-160.5166	-2-24	U-405244	08/22/76	15	12-20.5	-5	6.4	24	-2-7-5-7	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	3500-160.5300	-2-24	U-405245	08/22/76	15	12-14.2	-5	6.9	37	-2-7-5-7	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66	3583-160.5633	-2-24	U-405246	08/22/76	15	12-13.7	-5	7.0	40	-2-7-6-8	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66	3569-160.7100	-2-24	U-405247	08/22/76	15	12-14.2	-5	6.5	40	-2-7-6-7	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19		
02-66	3266-160.5620	-2-24	U-405248	08/22/76	15	12-14.2	-5	4.9	15	-2-7-5-7	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.33		
02-66	3266-160.4660	-2-24	U-405249	08/22/76	15	12-14.2	-5	6.2	32	-2-7-5-8	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26		
02-66	2941-160.5572	-2-24	U-405250	08/22/76	15	12-13.7	-5	7.2	40	-2-7-6-8	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19		
02-66	2466-160.5375	-2-24	U-405251	08/22/76	15	12-14.7	-5	8.2	15	-2-7-5-7	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
02-66	2550-160.4900	-2-24	U-405252	08/22/76	15	12-14.7	-5	7.9	22	-2-7-6-8	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66	2516-160.4583	-2-24	U-405253	08/22/76	15	14-14.3	-5	8.2	47	-2-7-5-6	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.49		
02-66	2908-160.4194	-2-24	U-405254	08/22/76	15	12-13.9	-5	7.4	54	-2-7-5-7	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36		
02-66	3227-160.5061	-2-24	U-405255	08/22/76	15	13-14.2	-5	7.9	47	-2-7-6-7	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.43		
02-66	2650-160.4833	-2-24	U-405256	08/22/76	15	13-13.7	-5	8.1	47	-2-7-6-7	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28		
02-66	2333-160.4860	-2-24	U-405257	08/22/76	15	14-14.2	-5	7.8	21	-2-7-6-8	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20		
02-66	2294-160.4400	-2-24	U-405258	08/22/76	15	12-14.4	-5	7.2	13	-2-7-6-8	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	2666-160.4300	-2-24	U-405259	08/22/76	15	12-14.7	-5	8.1	14	-2-7-5-7	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18		
02-66	2483-160.4083	-2-24	U-405260	08/22/76	15	12-14.6	-5	7.8	12	-2-7-6-8	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26		
02-66	2500-159.4433	-2-24	U-405261	08/22/76	16	13-14.4	-5	7.4	33	-2-7-5-8	-3-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18		
02-66	3000-159.4850	-2-27	U-405263	08/22/76	16	14-13.7	-5	7.2	34	-2-7-5-7-3	-2-1-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.43		
02-66	3250-160.4070	-2-21	U-405265	08/22/76	16	14-13.6	-5	7.2	36	-2-7-3-6-3	-2-1-1	-4-4-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
02-66	3138-160.4080	-2-21	U-405266	08/22/76	16	14-12.7	-5	7.2	40	-2-7-3-6-3	-2-1-1	-3-4-3-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09		
02-66	3066-160.4160	-2-21	U-405268	08/22/76	16	13-14.1	-5	8.1	24	-2-7-6-8	-3-1	-4-4-3-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20		
02-66	3225-159.4466	-2-24	U-405269	08/22/76	16	13-13.7	-5	8.1	32	-2-7-5-7	-3-1	-4-4-3-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66	3100-159.4160	-2-24	U-405270	08/22/76	16	14-14.2	-5	8.1	24	-2-7-6-8	-3-1	-4-4-3-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66	3366-159.4080	-2-24	U-405271	08/22/76	16	14-14.4	-5	8.2	21	-2-7-6-8	-3-1	-4-4-3-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	3466-159.1960	-2-24	U-405272	08/22/76	16	14-14.6	-5	8.1	32	-2-7-5-6	-3-1	-4-4-3-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	8858-162.5433	-2-24	U-405274	08/23/76	8	13-13.8	-5	10.3	59	-2-7-6-8	-3-1	-4-3-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	8958-162.5611	-2-21	U-405275	08/23/76	8	14-12.3	-5	6.8	120	-2-7-6-8	-2-3-2	-2-4-3-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05		
02-66	8311-160.4744	-2-24	U-405276	08/23/76	9	11-13.9	-5	9.3	44	-2-7-4-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	8133-160.1960	-2-24	U-405277	08/23/76	9	12-13.8	-5	8.7	102	-2-7-4-6	-3-1	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17		
02-66	8500-160.1800	-2-24	U-405278	08/23/76	9	12-13.7	-5	8.7	40	-2-7-4-6	-3-1	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17		
02-66	8400-160.0760	-2-21	U-405279	08/23/76	9	12-13.1	-5	8.5	72	-2-7-4-6-2-3	-1-2	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.29		
02-66	8033-160.6233	-2-21	U-405280	08/23/76	9	12-12.8	-5	8.2	57	-2-7-4-6-2-3	-1-2	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17		
02-66	8162-160.5360	-2-21	U-405281	08/23/76	9	12-13.3	-5	7.8	62	-2-7-4-6-2-3	-1-2	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36		
02-66	8355-160.5700	-2-21	U-405282	08/23/76	9	11-13.0	-5	8.0	25	-2-7-4-6-2-3	-1-2	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.81		
02-66	8533-160.4466	-2-21	U-405283	08/23/76	9	12-13.2	-5	8.0	32	-2-7-6-8	-2-3-1	-2-1-2-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.88		
02-66	8169-160.4733	-2-21	U-405284	08/23/76	10	12-13.5	-5	7.8	30	-2-7-4-6-2-3	-1-2	-1-2-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09		
02-66	8372-160.3833	-2-21	U-405285	08/23/76	10	12-12.9	-5	8.4	53	-2-7-4-6-2-3	-1-2	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.45		
02-66	8558-160.4933	-2-21	U-405286	08/23/76	10	12-12.6	-5	7.3	86	-2-7-4-6-2-3	-1-2	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	8527-160.1500	-2-21	U-405287	08/23/76	10	12-12.8	-5	8.2	85	-2-7-4-6-2-3	-1-2	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09		
02-66	8900-160.1360	-2-21	U-405288	08/23/76	10	12-13.1	-5	8.5	115	-2-7-4-6-2-3	-1-2	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	8794-160.0333	-2-21	U-405289	08/23/76	10	13-12.8	-5	8.8	42	-2-7-4-6-2-3	-1-2	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66	8800-159.4260	-2-21	U-405290	08/23/76	10	13-12.8	-5	7.8	56	-2-7-4-6-2-3	-1-2	-1-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.72		
02-66	8466-159.9200	-2-21	U-405291	08/23/76	10	13-12.7	-5	7.8	63	-2-7-4-6-2-3	-1-2	-1-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
02-66	8333-100.4300	-2-21	U-405292	08/23/76	10	12-13.0	-5	8.1	47	-2-7-4-6-2-3	-1-2	-1-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26		
02-66	8569-159.1933	-2-21	U-405293	08/23/76	10	13-12.8	-5	8.3	69	-2-7-4-6-2-3	-1-2	-1-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.44		
02-66	8811-159.4300	-2-21	U-405294	08/23/76	10	13-13.2	-5	7.9	85	-2-7-4-6-2-3	-1-2	-4-3-2-2																						





APPENDIX B-1 (continued). Field Data and Uranium Concentrations for Water Samples Analyzed by Fluorometry

DOE SAMPLE NUMBER							LASL SAMPLE LOCATION NUMBER AND FIELD DATA															U CONCENTRATION													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION 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	UNITS IN ppb
							DATE	HOUR																											
02-66	6750-159	0000-2-24	0-405406	08/23/76	18-15	1-5	8.1	21	-2-7-6-6	-3-1	-1-2-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09			
02-66	6736-159	0360-2-24	0-405407	08/23/76	18-15	2-5	7.4	18	-2-7-6-6	-3-1	-1-2-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03			
02-66	6694-159	4560-2-24	0-405408	08/23/76	18-16	0-5	7.5	16	-2-7-6-6	-3-1	-1-2-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06			
02-66	6303-159	4300-2-24	0-405409	08/23/76	18-17	5-5	7.8	63	-2-7-6-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.70			
02-66	7066-159	4533-2-24	0-405410	08/23/76	18-14	9-5	9.9	61	-2-7-6-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27			
02-66	7266-159	4850-2-24	0-405411	08/23/76	18-14	4-5	8.3	15	-2-7-4-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.35			
02-66	7194-159	5940-2-24	0-405412	08/23/76	17-15	6-5	7.5	12	-2-7-4-6	-3-1	-1-2-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.08			
02-66	7216-159	0860-2-24	0-405413	08/23/76	18-14	9-5	7.5	30	-2-7-6-6	-3-1	-1-2-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20			
02-66	7150-159	7650-2-24	0-405414	08/23/76	18-16	0-5	8.0	22	-2-7-6-6	-3-1	-4-2-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03			
02-66	7133-159	0830-2-24	0-405415	08/23/76	17-15	2-5	7.5	13	-2-7-6-6	-3-1	-1-2-1-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.65			
02-66	3733-158	9900-2-24	0-405416	08/24/76	14-15	5-5	9.4	71	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.79			
02-66	3741-158	9550-2-24	0-405417	08/24/76	15-16	0-5	9.2	69	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18			
02-66	3700-158	0650-2-24	0-405418	08/24/76	15-16	0-5	8.7	39	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	3833-158	1875-2-24	0-405419	08/24/76	15-16	0-5	8.4	44	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	3825-158	7100-2-24	0-405420	08/24/76	15-14	0-5	8.5	55	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	3733-158	0600-2-24	0-405421	08/24/76	15-13	7-5	8.3	63	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	3933-158	0791-2-24	0-405422	08/24/76	16-14	1-5	7.4	28	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28			
02-66	4102-158	7194-2-24	0-405423	08/24/76	16-13	4-5	7.2	35	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10			
02-66	4233-158	0360-2-24	0-405424	08/24/76	15-14	6-5	7.9	90	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18			
02-66	4250-158	7160-2-24	0-405425	08/24/76	15-14	0-5	7.4	86	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02			
02-66	4658-158	0500-2-24	0-405426	08/24/76	15-14	2-5	8.7	127	-2-7-4-6	-3-3-1-2	-2-2-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.14			
02-66	4533-158	7472-2-24	0-405427	08/24/76	15-13	9-5	8.2	105	-2-7-4-6	-3-3-1-2	-3-2-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09			
02-66	4666-158	7631-2-24	0-405428	08/24/76	15-14	3-5	9.9	32	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05			
02-66	4038-158	0050-2-24	0-405430	08/24/76	15-16	4-5	9.1	69	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31			
02-66	4041-158	0861-2-24	0-405431	08/24/76	15-15	0-5	8.4	75	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.23			
02-66	3972-158	4910-2-24	0-405433	08/24/76	15-14	2-5	7.8	26	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	4258-158	4891-2-24	0-405434	08/24/76	15-14	4-5	8.1	57	-2-7-5-6	-3-2	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20			
02-66	4233-158	4391-2-24	0-405435	08/24/76	15-14	2-5	7.8	65	-2-7-5-6	-3-3	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17			
02-66	4272-158	08891-2-24	0-405436	08/24/76	15-14	4-5	7.9	24	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.14			
02-66	4600-158	0710-2-24	0-405437	08/24/76	15-14	3-5	7.4	30	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	4700-158	4500-2-24	0-405438	08/24/76	15-14	4-5	8.7	51	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.29			
02-66	4605-158	0883-2-24	0-405439	08/24/76	15-14	4-5	9.2	42	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	4975-158	4903-2-24	0-405440	08/24/76	15-14	7-5	8.4	35	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	4975-158	4460-2-24	0-405441	08/24/76	15-14	2-5	8.0	46	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	5191-158	0550-2-24	0-405442	08/24/76	15-14	5-C-5	8.2	31	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	5116-158	4794-2-24	0-405443	08/24/76	15-14	4-C-5	8.0	56	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04			
02-66	5100-158	4900-2-24	0-405444	08/24/76	16-14	1-5	8.2	54	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15			
02-66	4916-158	0041-2-24	0-405446	08/24/76	16-14	8-5	7.9	14	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10			
02-66	5133-158	7900-2-24	0-405447	08/24/76	16-14	8-5	8.2	26	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	5230-158	7191-2-24	0-405448	08/24/76	16-14	1-5	7.6	41	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
02-66	4922-158	06410-2-24	0-405450	08/24/76	16-14	6-5	7.9	28	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06			
02-66	5241-158	0333-2-24	0-405451	08/24/76	16-14	0-5	8.0	35	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07			
02-66	5463-158	0419-2-24	0-405452	08/24/76	16-15	5-C-5	7.7	43	-2-7-5-6	-3-3	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31			
02-66	5530-158	7241-2-24	0-405453	08/24/76	16-14	9-5	7.2	50	-2-7-5-6	-3-3	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18			
02-66	5461-158	0894-2-24	0-405457	08/24/76	16-14	0-5	8.2	95	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02			
02-66	5755-158	0833-2-24	0-405458	08/24/76	16-14	8-5	8.3	15	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20			
02-66	5766-158	4900-2-24	0-405459	08/24/76	16-14	2-5	7.9	21	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09			
02-66	5761-158	0800-2-24	0-405460	08/24/76	16-13	8-5	8.2	12	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09			
02-66	5722-158	7100-2-24	0-405462	08/																															



APPENDIX B-1 (continued). Field Data and Uranium Concentrations for Water Samples Analyzed by Fluorimetry

DOE SAMPLE NUMBER		LASI SAMPLE LOCATION NUMBER AND FIELD DATA													U CONCENTRATION																				
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASI SAMPLE LOCATION 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 FLUORIMETRY	UNITS IN PPT
							DATE	HOUR																											
02-66	6166-158	1160-2-2V	U-405465	04/24/76-12	16-14.5	-5	7.4	20	-2-7-5-6	-3-1	-4-3-2-2	-1	0.06																						
02-66	6011-158	1930-2-2V	U-405466	09/24/76-12	16-14.7	-5	7.3	34	-2-7-5-6	-3-1	-4-3-2-2	-1	0.01																						
02-66	6001-158	4733-2-2V	U-405467	08/24/76-12	16-14.0	-5	7.2	55	-2-7-5-6	-3-1	-4-3-2-2	-1	0.08																						
02-66	6041-158	3300-2-2V	U-405468	08/24/76-12	16-14.0	-5	7.5	27	-2-7-5-6	-3-1	-4-3-2-2	-1	0.32																						
02-66	6072-158	9833-2-2V	U-405469	08/24/76-12	16-14.7	-5	7.9	29	-2-7-5-6	-3-1	-4-3-2-2	-1	0.32																						
02-66	6416-158	9891-2-2V	U-405470	08/24/76-12	16-14.0	-5	8.0	33	-2-7-5-6	-3-1	-4-3-2-2	-1	0.01																						
02-66	6416-158	9891-2-2V	U-405471	08/24/76-13	16-15.2	-5	7.7	154	-2-7-5-6	-3-1	-2-4-3-2-2	-1	0.44																						
02-66	6333-158	8000-2-2V	U-405472	08/24/76-13	16-14.7	-5	7.4	120	-2-7-5-6	-3-1	-2-4-3-2-2	-1	0.14																						
02-66	6333-158	8000-2-2V	U-405473	08/24/76-13	16-14.7	-5	8.1	22	-2-7-5-6	-3-1	-4-3-2-2	-1	0.38																						
02-66	6333-158	8000-2-2V	U-405474	08/24/76-13	16-14.2	-5	8.5	20	-2-7-5-6	-3-1	-4-3-2-2	-1	0.02																						
02-66	6438-158	6563-2-2V	U-405475	08/24/76-13	16-14.8	-5	9.0	25	-2-7-5-6	-3-1	-4-3-2-2	-1	0.18																						
02-66	6552-158	6583-2-2V	U-405476	08/24/76-13	16-14.3	-5	8.2	55	-2-7-5-6	-3-1	-4-3-2-2	-1	0.02																						
02-66	6594-158	1250-2-2V	U-405477	08/24/76-13	16-14.0	-5	7.9	46	-2-7-5-6	-3-1	-4-3-2-2	-1	0.04																						
02-66	6700-158	1850-2-2V	U-405478	08/24/76-13	16-13.9	-5	8.4	60	-2-7-5-6	-3-1	-4-3-2-2	-1	0.53																						
02-66	6638-158	8708-2-2V	U-405479	08/24/76-13	16-15.3	-5	8.1	33	-2-7-5-6	-3-1	-4-3-2-2	-1	0.01																						
02-66	6555-158	9266-2-2V	U-405480	08/24/76-13	18-15.4	-5	9.3	112	-2-7-5-6	-3-1	-4-3-2-2	-1	0.06																						
02-66	6516-158	9855-2-2V	U-405481	08/24/76-13	18-14.3	-5	8.9	98	-2-7-5-6	-3-1	-4-3-2-2	-1	0.04																						
02-66	6968-158	1210-2-2V	U-405486	08/24/76-13	18-14.4	-5	9.0	38	-2-7-5-6	-3-1	-4-3-2-2	-1	0.21																						
02-66	6950-158	6460-2-2V	U-405487	08/24/76-13	18-14.4	-5	8.7	42	-2-7-5-6	-3-1	-4-3-2-2	-1	0.04																						
02-66	7233-158	1888-2-2V	U-405490	08/24/76-13	18-15.0	-5	8.0	65	-2-7-5-6	-3-1	-4-3-2-2	-1	0.05																						
02-66	7752-158	1133-2-2V	U-405491	08/24/76-13	22-13.8	-	8.0	62	-2-7-5-6	-3-1	-4-3-2-2	-1	0.01																						
02-66	7680-158	1333-2-2V	U-405493	08/24/76-16	22-13.7	-	6.8	66	-2-7-4-6-2	-3-1	-2-4-3-3-2	-1	0.43																						
02-66	7800-158	4191-2-2V	U-405494	08/24/76-16	22-13.9	-	8.9	58	-2-7-5-6	-3-1	-4-3-3-2	-1	0.06																						
02-66	7519-158	4100-2-2V	U-405495	08/24/76-16	22-15.7	-	9.1	55	-2-7-5-6	-3-1	-4-3-3-2	-1	0.73																						
02-66	7452-158	1533-2-2V	U-405496	08/24/76-16	21-15.2	-	9.0	76	-2-7-5-6	-3-1	-4-3-3-2	-1	0.03																						
02-66	7419-158	1087-2-2V	U-405497	08/24/76-16	21-14.2	-	7.5	21	-2-7-5-6	-3-1	-4-3-3-2	-1	0.39																						
02-66	7261-158	1073-2-2V	U-405498	08/24/76-16	21-14.0	-	7.2	34	-2-7-5-6	-3-1	-4-3-3-2	-1	0.01																						
02-66	7166-158	1078-2-2V	U-405500	08/24/76-16	21-13.6	-	6.8	75	-2-7-5-6	-3-1	-2-4-3-3-2	-1	0.09																						
02-66	7266-158	1400-2-2V	U-405501	08/24/76-16	21-12.8	-	7.2	68	-2-7-5-6	-3-1	-2-4-3-3-2	-1	0.38																						
02-66	7227-158	1988-2-2V	U-405502	08/24/76-17	21-16.7	-	7.7	38	-2-7-5-6	-3-1	-4-3-3-2	-1	0.42																						
02-66	7000-158	4232-2-2V	U-405503	08/24/76-17	21-16.4	-	7.5	44	-2-7-5-6	-3-1	-4-3-3-2	-1	0.12																						
02-66	6933-158	1183-2-2V	U-405504	08/24/76-17	21-16.8	-	7.4	52	-2-7-5-6	-3-1	-4-3-3-2	-1	0.19																						
02-66	6825-158	1095-2-2V	U-405505	08/24/76-17	21-15.6	-	7.6	23	-2-7-5-6	-3-1	-4-3-3-2	-1	0.03																						
02-66	6691-158	1086-2-2V	U-405506	08/24/76-17	21-15.0	-	7.8	40	-2-7-5-6	-3-1	-4-3-3-2	-1	0.09																						
02-66	6641-158	1020-2-2V	U-405507	08/24/76-17	21-14.8	-	7.4	104	-2-7-4-6-2	-3-1	-2-4-3-3-2	-1	0.08																						
02-66	6688-158	1063-2-2V	U-405508	08/24/76-17	21-14.4	-	7.2	110	-2-7-4-6-2	-3-1	-2-4-3-3-2	-1	0.04																						
02-66	6638-158	1475-2-2V	U-405509	08/24/76-17	21-14.6	-	7.8	126	-2-7-4-6-2	-3-1	-2-4-3-3-2	-1	0.04																						
02-66	6727-158	1950-2-2V	U-405510	08/24/76-17	21-15.3	-	8.3	35	-2-7-5-6	-3-1	-4-3-3-2	-1	0.04																						
02-66	6388-158	4366-2-2V	U-405511	08/24/76-17	21-15.6	-	8.3	26	-2-7-5-6	-3-1	-4-3-3-2	-1	0.02																						
02-66	6291-158	1391-2-2V	U-405512	08/24/76-17	21-15.2	-	8.1	42	-2-7-9-6	-3-1	-4-3-3-2	-1	0.03																						
02-66	6375-158	1400-2-2V	U-405513	08/24/76-17	21-15.8	-	7.3	18	-2-7-5-6	-3-1	-4-3-3-2	-1	0.04																						
02-66	6227-158	1000-2-2V	U-405514	08/24/76-17	21-15.2	-	7.2	26	-2-7-5-6	-3-1	-4-3-3-2	-1	0.23																						
02-66	6116-158	1065-2-2V	U-405515	08/24/76-17	21-15.6	-	7.4	28	-2-7-5-6	-3-1	-4-3-3-2	-1	0.07																						
02-66	5916-158	1093-2-2V	U-405516	08/24/76-17	21-15.2	-	5.10	61	-2-7-5-6	-3-1	-4-3-3-2	-1	0.03																						
02-66	6133-158	1200-2-2V	U-405517	08/24/76-17	21-15.8	-	5.10	82	-2-7-5-6	-3-1	-4-3-3-2	-1	0.01																						
02-66	6022-158	1924-2-2V	U-405518	08/24/76-17	21-14.8	-	5.8	76	-2-7-5-6	-3-1	-4-3-3-2	-1	0.05																						
02-66	5822-158	1916-2-2V	U-405519	08/24/76-17	21-15.7	-	5.8	76	-2-7-5-6	-3-1	-4-3-3-2	-1	0.18																						
02-66	5833-158	1333-2-2V	U-405520	08/24/76-17	21-15.0	-	8.9	47	-2-7-5-6	-3-1	-4-3-3-2	-1	0.18																						
02-66	5666-158	1100-2-2V	U-405521	08/24/76-17	21-15.6	-	8.2	56	-2-7-5-6	-3-1	-4-3-3-2	-1	0.01																						
02-66	5508-158	1020-2-2V	U-405523	08/24/76-17	21-13.6	-	6.0	40	-2-7-5-6	-2-3-1	-2-4-3-3-2	-1	0.16																						







## APPENDIX B-1 (continued). Field Data and Uranium Concentrations for Water Samples Analyzed by Fluorometry

DOE SAMPLE NUMBER							LASS SAMPLE LOCATION NUMBER AND FIELD DATA															U CONCENTRATION												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASS SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/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
							DATE	HOUR																										UNITS IN ppb
02-66	3422-158	1791-2-29				0-406084-08/26/76-10	14-14.2	-5	7.4	77	-2-7-5-8	-3-1	-4-4-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06		
02-66	3086-158	8603-2-29				0-406086-08/26/76-11	14-14.2	-5	7.3	107	-2-7-5-7	-3-1	-2-2-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09		
02-66	2958-158	8500-2-29				0-406087-08/26/76-11	13-14.8	-5	7.9	106	-2-7-5-6	-3-3	-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66	2833-158	8141-2-29				0-406088-08/26/76-11	13-14.6	-5	8.1	87	-2-7-6-6	-3-3	-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05		
02-66	2722-158	8191-2-29				0-406089-08/26/76-11	14-12.0	-	6.3	61	4-2-7-3-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02			
02-66	2377-158	7736-2-27				0-406090-08/26/76-11	14-12.4	-	6.8	114	15-2-7-3-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03			
02-66	2238-158	8800-2-29				0-406092-08/26/76-11	13-14.5	-5	9.8	294	-2-7-5-8	-3-1	-2-2-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04		
02-66	1936-158	8800-2-29				0-406093-08/26/76-11	13-14.0	-5	8.9	197	-2-7-6-8	-3-1	-4-4-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05		
02-66	1922-158	8066-2-29				0-406094-08/26/76-11	13-10.4	-	6.9	114	4-2-7-5-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04			
02-66	1800-158	8666-2-29				0-406095-08/26/76-11	14-10.3	-	6.4	76	2-2-7-3-6-3-2-1	-1-1-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15		
02-66	1711-158	8058-2-29				0-406096-08/26/76-11	13-9.9	-	6.7	24	4-2-7-3-6-2-2-1	-1-4-4-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66	1722-158	8444-2-29				0-406097-08/26/76-11	14-12.2	-	7.4	102	10-2-7-3-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04		
02-66	1400-158	8416-2-29				0-406098-08/26/76-11	13-12.2	-	7.7	90	15-2-7-5-6-3-2-1	-1-2-2-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66	1427-158	8991-2-27				0-406099-08/26/76-11	14-11.7	-	8.1	97	4-2-7-5-6-2-3-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08		
02-66	1458-158	8675-2-27				0-406100-08/26/76-11	14-14.2	-	6.9	24	4-2-7-5-8-1-3-3-1	-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04		
02-66	1283-158	8660-2-29				0-406101-08/26/76-11	14-14.4	-	6.5	47	4-2-7-6-6-1-3-3-1	-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	1116-158	8910-2-29				0-406102-08/26/76-11	14-12.9	-	7.4	27	15-2-7-3-6-3-2-1	-1-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	0838-158	8191-2-27				0-406103-08/26/76-11	14-13.1	-	7.7	112	4-2-7-3-6-3-2-1	-1-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66	0733-158	8675-2-27				0-406104-08/26/76-11	14-11.9	-	7.4	97	4-2-7-3-6-3-2-1	-1-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	0597-158	8347-2-29				0-406105-08/26/76-11	14-12.2	-	7.4	111	2-2-7-3-6-3-2-1	-1-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	0583-158	8666-2-27				0-406106-08/26/76-11	14-12.2	-	7.2	74	8-2-7-3-6-3-2-1	-1-4-4-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	0665-158	8750-2-29				0-406107-08/26/76-11	13-9.5	-	7.4	24	4-2-7-3-6-3-2-1	-1-4-4-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66	1133-158	8191-2-29				0-406109-08/26/76-11	12-9.7	-	8.2	42	4-2-7-3-6-3-2-1	-1-4-4-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08		
02-66	0933-158	8750-2-29				0-406110-08/26/76-11	13-9.4	-	8.2	88	10-2-7-4-6-3-2-1	-1-4-4-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	1066-158	8333-2-29				0-406111-08/26/76-11	14-9.7	-	7.9	42	2-2-7-4-7-3-2-1	-1-4-4-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66	1208-158	8861-2-29				0-406112-08/26/76-12	16-10.2	-	7.5	43	4-2-7-3-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	0961-158	8133-2-29				0-406113-08/26/76-12	15-9.7	-	7.9	37	4-2-7-3-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.50		
02-66	0466-158	8933-2-27				0-406114-08/26/76-12	15-10.7	-	6.9	32	3-2-7-3-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.40		
02-66	0480-158	8600-2-29				0-406115-08/26/76-12	16-11.7	-	6.3	21	4-2-7-3-6-2-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66	0833-158	8058-2-29				0-406116-08/26/76-12	14-9.4	-	6.9	63	4-2-7-3-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25		
02-66	1061-158	8900-2-29				0-406117-08/26/76-12	15-11.7	-	6.9	121	4-2-7-3-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	1125-158	8708-2-29				0-406118-08/26/76-12	14-10.4	-	7.2	27	4-2-7-5-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05		
02-66	0933-158	8433-2-29				0-406119-08/26/76-12	13-9.5	-	6.4	44	10-2-7-3-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05		
02-66	0638-158	8458-2-29				0-406120-08/26/76-12	14-10.3	-	7.2	22	8-2-7-5-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	0766-158	8858-2-29				0-406121-08/26/76-12	13-10.4	-	7.1	34	2-2-7-3-6-3-2-1	-1-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	1225-158	8300-2-29				0-406122-08/26/76-12	15-9.4	-	8.8	87	15-2-7-5-6-3-2-1	-1-4-4-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66	1069-158	8275-2-29				0-406123-08/26/76-12	15-9.5	-	8.4	110	8-2-7-3-6-3-2-1	-1-2-4-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02		
02-66	0900-158	8861-2-29				0-406124-08/26/76-12	16-10.1	-	8.4	96	2-2-7-3-6-3-2-1	-1-2-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20		
02-66	1166-158	8458-2-27				0-406125-08/26/76-12	15-9.4	-	7.9	47	8-2-7-5-6-3-2-1	-1-2-4-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	0891-158	8466-2-29				0-406126-08/26/76-12	16-9.4	-	8.3	142	17-2-7-3-6-3-2-1	-1-2-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	0488-158	8883-2-29				0-406127-08/26/76-12	18-14.3	-5	7.2	24	-2-7-5-7	-3-1	-4-4-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	6466-158	8060-2-29				0-406128-08/26/76-16	17-13.7	-	6.3	24	4-2-7-6-8-2-3-3-2	-4-4-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01		
02-66	6105-158	8833-2-29				0-406129-08/26/76-16	17-12.4	-	6.7	19	15-2-7-5-8-2-3-3-1	-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66	5866-158	8608-2-29				0-406130-08/26/76-16	17-16.8	-5	7.0	14	-2-7	-	-3-1	-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
02-66	6402-158	8000-2-27				0-406131-08/26/76-16	16-12.6	-	6.7	21	10-2-7-5-6-2-2-1	-1-4-4-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22		
02-66	6077-158	8050-2-29				0-406132-08/26/76-16	16-13.6	-	7.1	42	4-2-7-5-6-2-2-1	-1-4-4-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
02-66	5825-158	8058-2-29				0-406133-08/26/76-16	16-12.7	-	6.7	12	2-2-7-5-8-2-2-1	-1-4-4-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
02-66	6141-158	843																																











## APPENDIX B-1 (continued). Field Data and Uranium Concentrations for Water Samples Analyzed by Fluorometry

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA															U CONCENTRATION													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	PH	SPECIFIC CONDUCTANCE (umho/cm)	SCINTILLOMETER (c.u. 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
							DATE	HOUR																										UNITS IN ppb
02-66	1538-160.2900	2-27-	0-406357	08/27/76-18	14-10.1	-	-	7.4	72	7-2-7-5-6-3-2-1-1-3-4-2-2-1-1-	-	-	7.4	40	47-2-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.39	
02-66	1916-160.1900	2-27-	0-406358	08/27/76-18	15-10.4	-	-	7.4	40	47-2-7-	-	-	7.4	40	47-2-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.63	
02-66	1566-160.1933	2-27-	0-406359	08/27/76-18	15-11.4	-	-	7.7	37	30-2-7-4-6-3-2-1-1-3-3-2-2-	-	-	7.7	37	30-2-7-4-6-3-2-1-1-3-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.33	
02-66	0325-162.0900	2-27-	0-406360	08/28/76-15	12-12.2	-	-	7.2	110	4-2-7-5-6-2-3-1-1-4-4-2-2-	-	-	7.2	110	4-2-7-5-6-2-3-1-1-4-4-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.55	
02-66	0475-162.0908	2-27-	0-406361	08/28/76-15	12-12.2	-	-	7.3	124	4-2-7-	-	-	7.3	124	4-2-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.41	
02-66	0494-162.1983	2-27-	0-406362	08/28/76-15	12-11.2	-	-	8.2	130	10-2-7-5-6-3-2-1-1-3-4-2-2-	-	-	8.2	130	10-2-7-5-6-3-2-1-1-3-4-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.63	
02-66	0233-162.2200	2-27-	0-406363	08/28/76-15	12-11.4	-	-	7.4	114	2-3-7-5-6-2-2-1-1-4-4-2-2-	-	-	7.4	114	2-3-7-5-6-2-2-1-1-4-4-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.67	
02-66	0222-162.3358	2-27-	0-406364	08/28/76-15	12-10.9	-	-	7.7	114	4-2-7-5-6-2-2-2-1-3-3-2-2-	-	-	7.7	114	4-2-7-5-6-2-2-2-1-3-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	
02-66	0133-162.3777	2-27-	0-406365	08/28/76-15	12-11.2	-	-	7.4	141	17-2-7-	-	-	7.4	141	17-2-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.97	
02-66	0483-162.4822	2-24-	0-406366	08/28/76-15	12-16.8	C-S	-	8.0	-	-	-	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.16	
02-66	0416-162.5372	2-24-	0-406367	08/28/76-15	12-16.2	-	-	7.8	947	-	-	-	7.8	947	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.89	
02-66	0358-162.5711	2-24-	0-406368	08/28/76-15	12-16.0	-	-	8.2	1214	-	-	-	8.2	1214	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.61	



APPENDIX C

LISTINGS OF FIELD DATA AND URANIUM CONCENTRATIONS FOR SEDIMENT SAMPLES

(See Appendix D for Code to Listings)





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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																U CONCENTRATION													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION 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	BELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (L)	UNITS IN PPM
							DATE	HOUR																											
02-66.1800-164.8777-2-13	0-402412-07/29/76-15	11-11.2	-	-	-	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66.1375-164.7722-2-13	0-402413-07/29/76-15	10-14.5	-	-	-	7.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20		
02-66.1375-164.6430-2-12	0-402414-07/29/76-15	9-11.0	-	-	-	8.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66.1222-164.6730-2-12	0-402415-07/29/76-15	10-12.6	-	-	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40		
02-66.0958-164.6958-2-12	0-402416-07/29/76-15	10-11.0	-	-	-	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.20		
02-66.0750-164.6444-2-12	0-402417-07/29/76-16	10-12.0	-	-	-	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60		
02-66.1053-164.6444-2-13	0-402418-07/29/76-16	10-14.3	-	-	-	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40		
02-66.0586-164.6444-2-12	0-402419-07/29/76-16	10-10.6	-	-	-	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66.0722-164.4303-2-12	0-402420-07/29/76-16	10-11.0	-	-	-	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.0328-164.4750-2-12	0-402422-07/29/76-16	10-12.0	-	-	-	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40		
02-66.0652-164.8961-2-13	0-402427-07/30/76-13	13-14.3	-	-	-	8.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.2277-164.8194-2-13	0-402430-07/30/76-13	16-14.4	-	-	-	7.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.2944-164.8410-2-12	0-402431-07/30/76-13	15-11.7	-	-	-	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66.2861-164.8750-2-12	0-402432-07/30/76-13	15-12.3	-	-	-	7.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.3111-164.8750-2-12	0-402433-07/30/76-13	16-13.2	-	-	-	7.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.3166-164.8438-2-12	0-402434-07/30/76-13	16-14.0	-	-	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40		
02-66.3652-164.8761-2-13	0-402435-07/30/76-13	15-13.7	-	-	-	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.3686-164.8660-2-13	0-402436-07/30/76-14	15-13.7	-	-	-	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40		
02-66.4000-164.8333-2-13	0-402437-07/30/76-14	15-14.2	-	-	-	7.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.4111-164.8660-2-13	0-402438-07/30/76-14	16-13.8	-	-	-	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30		
02-66.4444-164.8660-2-13	0-402441-07/30/76-14	16-13.2	-	-	-	8.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.20		
02-66.4416-164.8833-2-13	0-402442-07/30/76-14	16-13.6	-	-	-	8.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30		
02-66.5277-164.8527-2-13	0-402443-07/30/76-14	15-13.7	-	-	-	7.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.5347-164.8488-2-13	0-402444-07/30/76-14	16-14.1	-	-	-	7.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.36		
02-66.5611-164.8788-2-13	0-402446-07/30/76-14	15-14.6	-	-	-	7.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66.5505-164.8722-2-13	0-402447-07/30/76-14	15-13.9	-	-	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.5708-164.8550-2-13	0-402448-07/30/76-14	16-14.2	-	-	-	8.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10		
02-66.5680-164.8550-2-13	0-402449-07/30/76-14	17-14.1	-	-	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66.5375-164.8222-2-13	0-402450-07/30/76-14	17-14.1	-	-	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66.5444-164.8747-2-13	0-402451-07/30/76-14	17-14.3	-	-	-	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40		
02-66.5875-164.8067-2-13	0-402453-07/30/76-14	15-13.5	-	-	-	7.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.30		
02-66.5616-163.9861-2-13	0-402454-07/30/76-15	15-14.2	-	-	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40		
02-66.5513-163.9410-2-13	0-402455-07/30/76-15	15-14.1	-	-	-	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.5805-163.9027-2-13	0-402456-07/30/76-15	16-12.4	-	-	-	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.70		
02-66.5833-163.9160-2-13	0-402457-07/30/76-15	16-12.9	-	-	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.30		
02-66.5727-163.9833-2-13	0-402458-07/30/76-15	16-13.4	-	-	-	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50		
02-66.5305-163.9722-2-13	0-402459-07/30/76-15	14-13.8	-	-	-	8.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.4977-163.9194-2-13	0-402460-07/30/76-15	15-13.8	-	-	-	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66.4958-163.8800-2-13	0-402461-07/30/76-15	15-14.6	-	-	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.4944-164.9200-2-13	0-402462-07/30/76-15	17-14.1	-	-	-	7.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00		
02-66.4713-164.8747-2-13	0-402464-07/30/76-15	15-14.7	-	-	-	7.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.4236-164.8910-2-13	0-402470-07/30/76-15	15-14.9	-	-	-	8.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40		
02-66.3375-164.8910-2-13	0-402473-07/30/76-16	16-15.1	-	-	-	7.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00		
02-66.2819-164.8910-2-13	0-402473-07/30/76-16	16-15.2	-	-	-	7.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.2527-164.8067-2-13	0-402474-07/30/76-16	15-15.3	-	-	-	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66.1986-164.8000-2-13	0-402475-07/30/76-16	15-14.9	-	-	-	8.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30		
02-66.1200-164.8433-2-13	0-402454-07/31/76-19	16-15.9	-	-	-	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40		
02-66.1294-164.8100-2-13	0-402459-07/31/76-19	16-16.4	-	-	-	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.1355-164.8100-2-13	0-402460-07/31/76-19	16-15.8	-	-	-	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66.2083-164.8900-2-12	0-402461-07/31/76-19	16-10.2	-	-	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
02-66.1800-164.8900-2-13	0-402462-07/31/76-19	16-11.2																																	

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

DOE SAMPLE NUMBER							LAST SAMPLE LOCATION NUMBER AND FIELD DATA																U CONCENTRATION											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAST SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	PH	SPECIFIC CONDUCTANCE (umho/cm)	SCINTILOMETER (c.u. ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	STREAM FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RIEF	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																										
02-66	1600	-164.5700	-2-12	U-402464	-07/31/76	-19	16-11.4	-5	14.0	1-2-7-4-6	-3-3-1	-2-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40			
02-66	1583	-164.4466	-2-12	U-402465	-07/31/76	-19	16-11.4	-5	22.0	1-2-7-4-6	-3-3-1	-2-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20			
02-66	1255	-164.4100	-2-12	U-402466	-07/31/76	-20	16-10.6	-5	55	1-2-7-4-6	-3-3-1	-2-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00				
02-66	1600	-164.5733	-2-13	U-402467	-07/31/76	-20	16-16.5	-5	8.4	155	-2-7-4-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40				
02-66	2063	-164.5152	-2-13	U-402468	-07/31/76	-20	16-11.8	-5	70	0-2-7-4-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30				
02-66	2191	-164.4966	-2-12	U-402469	-07/31/76	-20	16-11.6	-5	70	14-2-7-4-6	-2-3-1	-2-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20				
02-66	2080	-164.5366	-2-12	U-402470	-07/31/76	-20	16-11.8	-5	60	84-2-7-4-6	-2-3-1	-2-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.80				
02-66	2236	-164.5500	-2-12	U-402471	-07/31/76	-20	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90			
02-66	2733	-164.5766	-2-13	U-402472	-07/31/76	-20	17-16.4	-5	8.2	2	-2-7-4-6	-3-1	-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40				
02-66	4355	-164.4950	-2-13	U-402476	-07/31/76	-20	15-15.5	-5	7.4	2	-2-7-4-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30				
02-66	4166	-164.5966	-2-12	U-402479	-07/31/76	-20	15-10.8	-5	11.0	13-2-7-4-6	-2-3-1	-2-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.90				
02-66	4186	-164.5775	-2-13	U-402480	-07/31/76	-20	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.40			
02-66	3613	-164.5100	-2-12	U-402481	-07/31/76	-20	15-11.8	-5	45	0-2-7-4-6	-2-3-1	-3-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90				
02-66	3761	-164.5080	-2-12	U-402482	-07/31/76	-20	15-11.4	-5	95	4-2-7-4-6	-2-3-1	-2-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.80				
02-66	3166	-164.4100	-2-13	U-402485	-07/31/76	-21	15-16.2	-5	7.6	56	-2-7-4-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10				
02-66	2633	-164.4111	-2-13	U-402487	-07/31/76	-21	16-16.7	-5	7.7	38	-2-7-4-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80				
02-66	2266	-164.3700	-2-13	U-402488	-07/31/76	-21	15-16.1	-5	7.3	35	-2-7-4-6	-3-2	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50				
02-66	2294	-164.3000	-2-13	U-402489	-07/31/76	-21	14-15.7	-5	7.5	118	-2-7-4-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70				
02-66	1766	-164.2000	-2-13	U-402490	-07/31/76	-21	14-16.2	-5	7.9	61	-2-7-4-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60				
02-66	1666	-164.5541	-2-13	U-402491	-07/31/76	-21	15-15.4	-5	7.5	72	-2-7-4-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00				
02-66	1211	-164.1210	-2-13	U-402492	-07/31/76	-21	16-15.7	-5	7.6	2	-2-7-4-6	-3-2	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60				
02-66	0766	-164.2060	-2-13	U-402493	-07/31/76	-21	13-16.1	-5	7.5	14	-2-7-4-6	-3-2	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70				
02-66	0100	-164.2933	-2-12	U-402495	-07/31/76	-21	14-11.6	-5	60	1-2-7-4-6	-2-3-1	-2-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90				
02-66	0166	-164.1033	-2-13	U-403011	-08/01/76	-7	10-14.1	-5	7.8	72	-3-6-6-6	-3-2	-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50				
02-66	0650	-164.0860	-2-13	U-403012	-08/01/76	-8	16-14.3	-5	7.8	98	-3-6-6-6	-3-1	-3-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70				
02-66	1375	-163.9933	-2-13	U-403013	-08/01/76	-8	9-13.8	-5	7.8	359	-2-6-7	-3-2	-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70				
02-66	2250	-163.9800	-2-13	U-403015	-08/01/76	-8	10-14.2	-5	8.4	43	-2-7-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20				
02-66	2333	-164.0733	-2-13	U-403016	-08/01/76	-8	10-14.4	-5	6.8	64	-2-7-4-6	-3-3	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20				
02-66	2505	-164.1460	-2-13	U-403017	-08/01/76	-8	9-14.7	-5	7.3	142	-2-7-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70				
02-66	2666	-164.1433	-2-13	U-403018	-08/01/76	-8	16-14.6	-5	7.7	79	-3-6-6-6	-3-1	-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60				
02-66	3266	-164.1966	-2-13	U-403021	-08/01/76	-8	9-15.2	-5	7.8	40	-3-6-6-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00				
02-66	3600	-164.1666	-2-13	U-403022	-08/01/76	-8	9-14.3	-5	7.8	28	-3-6-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40				
02-66	4155	-164.1600	-2-13	U-403023	-08/01/76	-8	8-14.8	-5	7.3	128	-3-6-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00				
02-66	4566	-164.2266	-2-13	U-403024	-08/01/76	-8	9-13.2	-5	7.2	102	-3-6-6-6	-3-4	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50				
02-66	4533	-164.1566	-2-13	U-403025	-08/01/76	-8	7-14.6	-5	7.8	75	-3-6-6-6	-3-1	-4-3-2-3	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50				
02-66	4666	-164.0472	-2-13	U-403026	-08/01/76	-8	9-14.3	-5	7.7	95	-3-6-6-6	-3-2	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40				
02-66	4600	-163.9783	-2-13	U-403027	-08/01/76	-8	10-14.4	-5	7.8	43	-3-6-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30				
02-66	4651	-163.8421	-2-13	U-403028	-08/01/76	-9	10-14.2	-5	7.8	33	-3-6-5-6	-3-2	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40				
02-66	4663	-163.7633	-2-13	U-403029	-08/01/76	-9	10-13.6	-5	7.0	146	-3-6-6-6	-3	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40				
02-66	4055	-163.9766	-2-13	U-403031	-08/01/76	-9	10-13.7	-5	7.8	49	-3-6-6-6	-3-2	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20				
02-66	4055	-164.0733	-2-13	U-403032	-08/01/76	-9	10-13.9	-5	7.4	50	-3-6-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50				
02-66	3805	-163.9472	-2-13	U-403034	-07/01/76	-9	9-14.3	-5	8.6	57	-3-6-6-6	-3-2	-3-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40				
02-66	3708	-163.0700	-2-13	U-403035	-07/01/76	-9	9-10.3	-5	8.0	70	-3-6-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50				
02-66	3208	-163.0866	-2-13	U-403036	-08/01/76	-9	10-13.5	-5	8.0	147	-3-6-6-6	-3-2	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50				
02-66	3250	-163.9310	-2-13	U-403037	-08/01/76	-9	10-13.9	-5	7.8	78	-3-6-5-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10				
02-66	2438	-163.9433	-2-13	U-403040	-08/01/76	-9	10-14.5	-5	7.7	132	-3-6-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90				
02-66	1483	-163.0900	-2-13	U-403044	-08/01/76	-9	10-13.2	-5	7.4	95	-3-6-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.20				
02-66	1202	-164.0733	-2-13	U-403045	-08/01/76	-9	10-13.7	-5	7.1	20	-3-6-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60				
02-66	0616	-163.9500	-2-13	U-403046	-08/01/76	-11	12-14.6	-5	7.7	34	-3-6-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60				
02-66	0666	-163.9183	-2-13	U-403047	-08/01/76	-11	12-14.5	-5	7.3	57	-3-6-6-6	-3-1	-4-3-2-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60				
02-66	1030	-163.9071	-2-12	U-403048	-08/01/76	-11	12-14.6	-5																										









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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																U CONCENTRATION												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION 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)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
							DATE	HOUR																										
02-66.9766-159.9166-2-12-	0-404573-08/16/76-12-	13-13.9-C-	-	-	-	-	-	-	-	-	-	-	-	-	6-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
02-66.9850-159.7633-2-13-	0-404574-08/16/76-12-	13-14.5-S-	8.7-	119-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
02-66.9861-159.6543-2-13-	0-404575-08/16/76-12-	13-14.3-S-	8.9-	112-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.9633-159.6300-2-12-	0-404576-08/16/76-12-	13-12.9-C-	-	-	-	-	-	-	-	-	-	-	-	-	0-2-7-4-A-6-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.9816-159.4566-2-12-	0-404577-08/16/76-12-	13-12.7-C-	-	-	-	-	-	-	-	-	-	-	-	-	6-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30		
02-66.9833-159.3866-2-12-	0-404578-08/16/76-12-	13-11.0-C-	-	-	-	-	-	-	-	-	-	-	-	-	6-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
02-66.9450-159.3833-2-12-	0-404579-08/16/76-12-	13-11.2-C-	-	-	-	-	-	-	-	-	-	-	-	-	4-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
02-66.9736-159.2200-2-12-	0-404580-08/16/76-12-	13-10.9-C-	-	-	-	-	-	-	-	-	-	-	-	-	33-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
02-66.9816-159.1533-2-12-	0-404581-08/16/76-13-	14-11.3-C-	-	-	-	-	-	-	-	-	-	-	-	-	6-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
02-66.9450-159.2094-2-12-	0-404582-08/16/76-13-	14-10.8-C-	-	-	-	-	-	-	-	-	-	-	-	-	13-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.9533-159.1166-2-12-	0-404583-08/16/76-13-	13-11.3-C-	-	-	-	-	-	-	-	-	-	-	-	-	6-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
02-66.9450-159.0400-2-12-	0-404584-08/16/76-13-	13-11.2-C-	-	-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
02-66.9833-159.0466-2-12-	0-404585-08/16/76-13-	13-11.6-C-	-	-	-	-	-	-	-	-	-	-	-	-	3-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.30	
02-66.9500-158.9466-2-12-	0-404586-08/16/76-13-	13-10.7-C-	-	-	-	-	-	-	-	-	-	-	-	-	9-2-7-4-A-1-2-1-2-4-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50	
02-66.9391-158.9021-2-12-	0-404587-08/16/76-13-	13-11.6-C-	-	-	-	-	-	-	-	-	-	-	-	-	13-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
02-66.9875-158.8250-2-12-	0-404588-08/16/76-13-	13-10.9-C-	-	-	-	-	-	-	-	-	-	-	-	-	16-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
02-66.9844-158.7233-2-12-	0-404589-08/16/76-13-	14-11.6-C-	-	-	-	-	-	-	-	-	-	-	-	-	26-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
02-66.9372-158.7933-2-12-	0-404590-08/16/76-13-	14-11.3-C-	-	-	-	-	-	-	-	-	-	-	-	-	56-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.9216-158.5521-2-12-	0-404591-08/16/76-13-	14-10.7-C-	-	-	-	-	-	-	-	-	-	-	-	-	19-2-4-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
02-66.9491-158.3750-2-12-	0-404592-08/16/76-13-	13-14.0-C-	-	-	-	-	-	-	-	-	-	-	-	-	13-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
02-66.9200-158.3400-2-12-	0-404593-08/16/76-13-	14-11.2-C-	-	-	-	-	-	-	-	-	-	-	-	-	19-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
02-66.9616-158.4733-2-12-	0-404594-08/16/76-13-	13-11.5-C-	-	-	-	-	-	-	-	-	-	-	-	-	6-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
02-66.9566-158.3950-2-12-	0-404595-08/16/76-14-	13-12.1-C-	-	-	-	-	-	-	-	-	-	-	-	-	4-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.9466-158.3458-2-12-	0-404596-08/16/76-14-	13-10.8-C-	-	-	-	-	-	-	-	-	-	-	-	-	19-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
02-66.9200-158.2875-2-12-	0-404597-08/16/76-14-	13-10.2-C-	-	-	-	-	-	-	-	-	-	-	-	-	13-2-7-4-A-1-2-1-1-5-1-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
02-66.9666-161.4600-2-13-	0-404622-08/17/76-11-	16-11.5-S-	8.5-	205-	-	-	-	-	-	-	-	-	-	-	-2-6-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
02-66.9650-161.1033-2-12-	0-404625-08/17/76-11-	16-14.0-S-	6.6-	175-	-	-	-	-	-	-	-	-	-	-	-2-6-5-6-2-3-1-2-1-2-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
02-66.9730-160.4725-2-12-	0-404626-08/17/76-11-	16-9.0-S-	6.4-	320-	-	-	-	-	-	-	-	-	-	-	-2-7-3-6-2-3-1-2-1-2-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.9658-160.8916-2-13-	0-404627-08/17/76-11-	16-8.0-S-	6.8-	325-	-	-	-	-	-	-	-	-	-	-	-2-7-5-6-2-3-1-2-1-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.9308-162.4872-2-13-	0-405055-08/21/76-9-	11-14.7-S-	9.4-	123-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.9238-162.3066-2-13-	0-405056-08/21/76-9-	12-14.8-S-	9.4-	46-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.8936-162.3350-2-13-	0-405057-08/21/76-9-	12-14.7-S-	8.8-	145-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
02-66.8500-162.3250-2-13-	0-405058-08/21/76-9-	12-14.6-S-	8.8-	124-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.8063-162.1933-2-13-	0-405060-08/21/76-10-	12-14.9-S-	8.8-	34-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
02-66.7950-162.2600-2-13-	0-405061-08/21/76-10-	12-14.8-S-	8.5-	48-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
02-66.7583-162.0733-2-13-	0-405062-08/21/76-10-	12-14.6-S-	8.6-	29-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
02-66.7536-162.1766-2-13-	0-405063-08/21/76-10-	13-14.4-S-	8.4-	82-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
02-66.7472-162.2725-2-13-	0-405064-08/21/76-10-	12-15.0-S-	8.7-	54-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
02-66.7230-162.3100-2-13-	0-405065-08/21/76-10-	12-13.9-S-	7.6-	6040-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
02-66.7197-162.1933-2-13-	0-405066-08/21/76-10-	12-13.6-S-	8.0-	41-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
02-66.6766-162.0466-2-13-	0-405068-08/21/76-10-	13-14.7-S-	8.2-	78-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
02-66.6166-162.0500-2-13-	0-405069-08/21/76-	12-14.7-S-	8.0-	26-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
02-66.5066-161.8516-2-13-	0-405070-08/21/76-10-	12-14.4-S-	7.8-	50-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
02-66.4677-161.8391-2-13-	0-405071-08/21/76-11-	12-14.0-S-	7.6-	44-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.30	
02-66.4083-161.8300-2-13-	0-405072-08/21/76-11-	12-13.8-S-	7.9-	24-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
02-66.3888-161.8083-2-13-	0-405073-08/21/76-11-	12-13.4-S-	7.5-	90-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
02-66.4038-161.0983-2-13-	0-405074-08/21/76-11-	12-13.9-S-	7.8-	42-	-	-	-	-	-	-	-	-	-	-	-2-7-4-A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
02-66.4394-161.6466-2-13-	0-4050																																	

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

DOE SAMPLE NUMBER				LASL SAMPLE LOCATION NUMBER AND FIELD DATA														U CONCENTRATION																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (µmho/cm)	SCINTILLOMETER (cpm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STRAW 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)
02-66.4933-161.4444-2-13-	0-405079-08/21/76-11-	11-14.0°	-5	7.2	27-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
02-66.4333-161.4400-2-13-	0-405080-08/21/76-11-	12-14.0°	-5	7.5	25-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.4155-161.4750-2-13-	0-405081-08/21/76-11-	11-14.1°	-5	7.4	32-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
02-66.3944-161.4533-2-13-	0-405082-08/21/76-11-	11-13.7°	-5	7.4	39-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.3650-161.4722-2-13-	0-405083-08/21/76-11-	11-13.1°	-5	7.4	43-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70		
02-66.3666-161.4650-2-13-	0-405084-08/21/76-11-	11-13.3°	-5	7.5	30-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00		
02-66.4073-161.4833-2-13-	0-405085-08/21/76-11-	11-13.7°	-5	7.4	23-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.4033-161.4616-2-13-	0-405086-08/21/76-12-	11-13.3°	-5	7.4	22-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
02-66.3716-161.4700-2-13-	0-405087-08/21/76-12-	11-13.4°	-5	7.4	19-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.3361-161.4741-2-13-	0-405088-08/21/76-12-	11-13.4°	-5	7.1	64-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
02-66.3347-160.4650-2-13-	0-405089-08/21/76-12-	11-13.8°	-5	7.7	22-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70		
02-66.2083-160.4825-2-12-	0-405090-08/21/76-12-	11-13.7°	-5	7.6	150-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.00		
02-66.1866-160.4500-2-12-	0-405091-08/21/76-12-	11-13.1°	-5	7.5	110-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.10		
02-66.1600-160.4412-2-12-	0-405092-08/21/76-12-	11-12.8°	-5	7.1	95-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37.70		
02-66.1675-160.4250-2-12-	0-405094-08/21/76-12-	11-13.3°	-5	5.6	5000-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30		
02-66.2333-161.4722-2-12-	0-405096-08/21/76-13-	11-12.8°	-5	6.5	135-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.2055-161.4416-2-12-	0-405097-08/21/76-13-	11-13.0°	-5	5.2	154-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66.1638-161.4833-2-12-	0-405098-08/21/76-13-	11-12.8°	-5	5.8	140-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.1805-161.4533-2-13-	0-405099-08/21/76-13-	11-13.3°	-5	9.5	16-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.1516-161.4550-2-13-	0-405100-08/21/76-13-	11-12.3°	-5	8.4	43-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.1000-161.4833-2-12-	0-405101-08/21/76-13-	11-12.8°	-5	7.1	-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90		
02-66.0680-161.4361-2-12-	0-405102-08/21/76-14-	11-13.4°	-5	7.8	4652-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40		
02-66.0069-161.4550-2-12-	0-405103-08/21/76-14-	11-14.2°	-5	7.5	4957-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60		
02-66.0133-161.4000-2-13-	0-405104-08/21/76-14-	11-13.9°	-5	9.1	408-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.0300-161.4600-2-13-	0-405105-08/21/76-14-	11-13.9°	-5	8.7	45-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.0261-161.4850-2-13-	0-405106-08/21/76-14-	11-14.1°	-5	7.7	233-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.20		
02-66.0080-161.4550-2-13-	0-405107-08/21/76-14-	11-13.7°	-5	7.7	980-	-2-7-4-6-	-3-1-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.0483-161.4616-2-12-	0-405108-08/21/76-15-	11-13.5°	-5	6.4	72-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.0722-161.4533-2-12-	0-405109-08/21/76-15-	11-14.2°	-5	6.7	58-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40		
02-66.1000-161.4583-2-12-	0-405110-08/21/76-15-	10-12.6°	-5	7.9	108-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.1061-161.4750-2-12-	0-405111-08/21/76-15-	11-11.9°	-5	6.6	66-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90		
02-66.0900-161.4310-2-12-	0-405112-08/21/76-15-	11-11.8°	-5	6.9	73-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66.1638-161.4960-2-12-	0-405113-08/21/76-15-	11-12.2°	-5	7.6	52-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
02-66.1011-160.4300-2-12-	0-405114-08/21/76-15-	11-13.1°	-5	7.3	38-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
02-66.1033-160.4260-2-12-	0-405115-08/21/76-15-	11-12.7°	-5	7.5	54-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
02-66.0516-160.4200-2-12-	0-405116-08/21/76-15-	11-12.6°	-5	6.6	40-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.30		
02-66.1250-160.4400-2-12-	0-405117-08/21/76-15-	11-13.1°	-5	7.1	38-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.40		
02-66.0500-160.4260-2-12-	0-405118-08/21/76-15-	11-12.9°	-5	6.9	51-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.10		
02-66.0138-160.4833-2-12-	0-405119-08/21/76-15-	11-12.7°	-5	7.2	82-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.50		
02-66.0152-160.4480-2-12-	0-405120-08/21/76-15-	11-13.6°	-5	4.7	32-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.0150-160.4361-2-12-	0-405121-08/21/76-15-	11-12.7°	-5	9.7	32-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.30		
02-66.0633-160.4800-2-12-	0-405122-08/21/76-15-	11-13.0°	-5	9.2	47-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.30		
02-66.0966-160.4616-2-12-	0-405123-08/21/76-16-	11-11.8°	-5	6.2	32-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.50		
02-66.0800-160.4500-2-12-	0-405124-08/21/76-16-	11-11.9°	-5	7.1	48-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.50		
02-66.1627-160.4613-2-12-	0-405125-08/21/76-16-	11-12.3°	-5	11.4	87-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32.60		
02-66.1988-160.4200-2-12-	0-405126-08/21/76-16-	11-12.6°	-5	8.1	65-	-2-7-4-6-2-	-3-1-2-	-4-3-1-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.70		
02-66.2366-160.4660-2-12-	0-405127-08/21/76-16-	11-12.7°	-5																															





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

DOE SAMPLE NUMBER					LASL SAMPLE LOCATION NUMBER AND FIELD DATA														U CONCENTRATION															
DATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMON S	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)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
							DATE	TIME																										
02-66,3861	-160.1316	-2-13				0-405236-08/22/76-14	14-13.0	-5	7.0	167					-2-7-5-7	-3-1	-4-4-2-3	-1															2.86	
02-66,3860	-160.0960	-2-13				0-405237-08/22/76-14	14-14.0	-5	7.2	180					-2-7-6-7	-3-1	-4-4-2-3	-1														2.58		
02-66,3850	-160.1660	-2-13				0-405238-08/22/76-14	13-14.5	-5	7.6	13					-2-7-5-8	-3-1	-4-4-2-3	-1														5.03		
02-66,3761	-160.0075	-2-13				0-405239-08/22/76-14	12-14.5	-5	7.5	24					-2-7-6-8	-3-1	-4-4-2-3	-1														3.73		
02-66,3694	-160.3191	-2-12				0-405240-08/22/76-15	13-14.5	-5	6.2	39					5-2-7-3-6-2	-3-1-1	-4-4-2-3	-1														3.16		
02-66,3561	-160.3519	-2-12				0-405241-08/22/76-15	12-14.0	-5	6.7	40					4-2-7-3-6-2	-3-1-1	-4-4-2-3	-1														3.25		
02-66,3666	-160.4433	-2-13				0-405242-08/22/76-15	12-14.3	-5	7.3	25					-2-7-3-7	-3-1	-4-4-2-3	-1															3.27	
02-66,3527	-160.4600	-2-13				0-405243-08/22/76-15	12-14.0	-5	7.5	30					-2-7-5-7	-3-1	-4-4-2-3	-1															3.31	
02-66,3561	-160.5160	-2-13				0-405244-08/22/76-15	12-20.5	-5	6.4	24					-2-7-5-7	-3-1	-4-4-2-3	-1															3.09	
02-66,3500	-160.5300	-2-13				0-405245-08/22/76-15	12-14.2	-5	6.9	67					-2-7-5-7	-3-1	-4-4-2-3	-1															3.01	
02-66,3583	-160.6633	-2-13				0-405246-08/22/76-15	12-13.7	-5	7.0	40					-2-7-6-8	-3-1	-4-4-2-3	-1															2.80	
02-66,3564	-160.6800	-2-13				0-405247-08/22/76-15	12-14.2	-5	6.5	40					-2-7-6-7	-3-1	-4-4-2-3	-1															3.00	
02-66,3266	-160.5625	-2-13				0-405248-08/22/76-15	12-14.2	-5	4.9	15					-2-7-5-7	-3-1	-4-4-2-3	-1															2.90	
02-66,3266	-160.4560	-2-13				0-405249-08/22/76-15	12-14.2	-5	6.2	32					-2-7-5-8	-3-1	-4-4-2-3	-1															3.20	
02-66,2941	-160.5572	-2-13				0-405250-08/22/76-15	12-13.7	-5	7.2	40					-2-7-6-8	-3-1	-4-4-2-3	-1															2.90	
02-66,2466	-160.5375	-2-13				0-405251-08/22/76-15	12-14.7	-5	8.2	15					-2-7-5-7	-3-1	-4-4-2-3	-1															3.30	
02-66,2550	-160.4900	-2-13				0-405252-08/22/76-15	12-14.7	-5	7.0	22					-2-7-6-8	-3-1	-4-4-2-3	-1															3.20	
02-66,2516	-160.4583	-2-13				0-405253-08/22/76-15	14-14.3	-5	8.2	47					-2-7-5-6	-3-1	-4-4-2-3	-1															3.80	
02-66,2908	-160.4194	-2-13				0-405254-08/22/76-15	12-13.2	-5	7.4	54					-2-7-5-7	-3-1	-4-4-2-3	-1															4.00	
02-66,3227	-160.3061	-2-13				0-405255-08/22/76-15	13-14.2	-5	7.9	47					-2-7-6-7	-3-1	-4-4-2-3	-1															3.80	
02-66,2650	-160.4833	-2-13				0-405256-08/22/76-15	13-13.7	-5	8.1	47					-2-7-6-7	-3-1	-4-4-2-3	-1															5.60	
02-66,2333	-160.4860	-2-13				0-405257-08/22/76-15	14-14.1	-5	7.8	21					-2-7-6-8	-3-1	-4-4-2-3	-1															3.60	
02-66,2294	-160.4400	-2-13				0-405258-08/22/76-15	12-14.4	-5	7.2	13					-2-7-6-8	-3-1	-4-4-2-3	-1															2.40	
02-66,2666	-160.4300	-2-13				0-405259-08/22/76-15	12-14.7	-5	8.1	14					-2-7-5-7	-3-1	-4-4-2-3	-1															2.40	
02-66,2483	-160.4833	-2-13				0-405260-08/22/76-15	12-14.6	-5	7.8	12					-2-7-6-8	-3-1	-4-4-2-3	-1															2.40	
02-66,2500	-159.9633	-2-13				0-405261-08/22/76-16	13-14.4	-5	7.4	33					-2-7-5-8	-3-1	-4-4-2-3	-1															3.00	
02-66,2433	-159.9125	-2-13				0-405262-08/22/76-16	12-14.2	-5	7.8	40					-2-7-5-8	-3-1	-4-4-2-3	-1															4.80	
02-66,3000	-159.8850	-2-12				0-405263-08/22/76-16	14-13.7	-5	7.2	34					-2-7-5-7-3	-2-1-1	-4-4-2-3	-1															3.00	
02-66,2894	-159.9633	-2-12				0-405264-08/22/76-16	14-13.9	-5	7.6	40					-2-7-6-8-3	-2-1-1	-4-4-2-3	-1															19.20	
02-66,3250	-160.4072	-2-12				0-405265-08/22/76-16	14-13.6	-5	7.2	36					-2-7-3-6-3	-2-1-1	-4-4-2-3	-1															3.20	
02-66,3138	-160.0800	-2-12				0-405266-08/22/76-16	14-12.7	-5	7.2	40					-2-7-3-6-3	-2-1-1	-3-4-3-3	-1															3.00	
02-66,2958	-160.0833	-2-12				0-405267-08/22/76-16	14-12.4	-5	6.2	26					-2-7-3-6-3	-2-1-1	-3-4-3-3	-1															3.70	
02-66,3066	-160.0160	-2-13				0-405268-08/22/76-16	13-14.1	-5	8.1	24					-2-7-6-8	-3-1	-4-4-3-3	-1															3.20	
02-66,3225	-159.9460	-2-13				0-405269-08/22/76-16	13-13.7	-5	8.3	32					-2-7-5-7	-3-1	-4-4-3-3	-1															3.50	
02-66,3466	-159.9660	-2-13				0-405272-08/22/76-16	14-14.6	-5	8.1	32					-2-7-5-6	-3-1	-4-4-3-3	-1															3.60	
02-66,8311	-160.9749	-2-13				0-405276-08/23/76-9	11-13.9	-5	9.3	44					-2-7-4-5	-3-1	-4-3-1-2	-1															3.20	
02-66,8133	-160.9375	-2-13				0-405277-08/23/76-9	12-13.8	-5	8.7	102					-2-7-4-6	-3-1	-4-3-2-3	-1															5.10	
02-66,8500	-160.8000	-2-13				0-405278-08/23/76-9	12-13.7	-5	8.7	40					-2-7-4-6	-3-1	-4-3-2-3	-1															4.50	
02-66,8400	-160.6766	-2-12				0-405279-08/23/76-9	12-13.1	-5	8.5	72					-2-7-4-6-2	-3-1-2	-4-3-2-3	-1															3.00	
02-66,8033	-160.6733	-2-12				0-405280-08/23/76-9	12-12.8	-5	8.2	57					-2-7-4-6-2	-3-1-2	-4-3-2-3	-1															3.10	
02-66,8102	-160.5360	-2-12				0-405281-08/23/76-9	12-13.3	-5	7.8	62					-2-7-4-6-2	-3-1-2	-4-3-2-3	-1															3.10	
02-66,8355	-160.5700	-2-12				0-405282-08/23/76-9	11-13.0	-5	8.0	25					-2-7-4-6-2	-3-1-2	-4-3-2-3	-1															2.20	
02-66,8169	-160.4733	-2-12				0-405284-08/23/76-10	12-13.5	-5	7.8	30					-2-7-4-6-2	-3-1-2	-4-3-2-3	-1															3.50	
02-66,8372	-160.3833	-2-12				0-405285-08/23/76-10	12-12.9	-5	8.4	53					-2-7-4-6-2	-3-1-2	-4-3-2-3	-1															3.80	
02-66,8558	-160.4933	-2-12				0-405286-08/23/76-10	12-12.6	-5	7.3	86					-2-7-4-6-2	-3-1-2	-4-3-2-3	-1															2.20	
02-66,8527	-160.1500	-2-12				0-405287-08/23/76-10	12-12.8	-5	8.2	85					-2-7-4-6-2	-3-1-2	-4-3-2-3	-1															2.50	
02-66,8400	-160.1760	-2-12				0-405288-08/23/76-10	12-13.1	-5	8.5	115					-2-7-4-6-2	-3-1-2	-4-3-2-3	-1															3.20	
02-66,8794	-160.0333	-2-12				0-405289-08/23/76-10	13-12.8	-5	8.8	42					-2-7-4-6-2	-3-1-2	-4-3-2-3	-1															3.00	
02-66,8800	-159.9260	-2-12				0-405290-08/23/76-10	13-12.8	-5	7.8	56					-2-7-4-6-2	-3-1-2	-1-3-3-2	-1															3.40	
02-66,8466	-159.9200	-2-12				0-405291-08/23/76-10	13-12.7	-5	7.8	63					-2-7-4-6-2	-3-1-2	-1-3-2-2	-1															2.10	
02-66,8333	-160.0300	-2-12				0-405292-08/23/76-10	12-13.7	-5	8.1	47					-2-7-4-6																			











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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																U CONCENTRATION												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION 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)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
							DATE	HOUR																										
02-66.6727-158.1950-2-13	0-405510-08/24/76-17	21-15.3	-5	8.3	35	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00		
02-66.6388-158.2360-2-13	0-405511-08/24/76-17	21-15.6	-5	8.0	26	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.6291-158.1391-2-13	0-405512-08/24/76-17	21-15.7	-5	8.1	42	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90		
02-66.6375-158.0600-2-13	0-405513-08/24/76-17	21-15.8	-5	7.3	18	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.6227-158.0000-2-13	0-405514-08/24/76-17	21-15.2	-5	7.2	26	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
02-66.6116-158.0666-2-13	0-405515-08/24/76-17	21-15.6	-5	7.6	28	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.5916-158.0933-2-13	0-405516-08/24/76-17	21-15.2	-5	10.7	61	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90		
02-66.6133-158.1200-2-13	0-405517-08/24/76-17	21-15.4	-5	10.1	82	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90		
02-66.6075-158.1822-2-13	0-405518-08/24/76-17	21-14.8	-5	8.8	76	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.80		
02-66.5822-158.1910-2-13	0-405519-08/24/76-17	21-15.7	-5	8.6	74	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40		
02-66.5833-158.1333-2-13	0-405520-08/24/76-17	21-15.0	-5	8.9	47	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66.5666-158.1000-2-13	0-405521-08/24/76-17	21-15.6	-5	8.2	56	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66.5752-158.1108-2-13	0-405522-08/24/76-17	21	-	-	-	-2-7-4-6	-	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
02-66.5508-158.0200-2-12	0-405523-08/24/76-17	21-13.6	-	6.0	40	-2-7-5-6-2	-3-1-2	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
02-66.5600-158.0561-2-12	0-405524-08/24/76-17	21-13.6	-	6.8	28	-2-7-5-6-2	-3-1-2	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
02-66.5563-158.1650-2-13	0-405525-08/24/76-17	21-14.6	-5	6.8	15	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
02-66.5616-158.1160-2-13	0-405526-08/24/76-17	21-14.8	-5	6.9	26	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
02-66.5291-158.2260-2-13	0-405527-08/24/76-17	21-15.0	-5	7.2	26	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
02-66.5308-158.1610-2-12	0-405528-08/24/76-18	21-13.8	-	4.2	28	-2-7-5-6-2	-3-1-2	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
02-66.5200-158.0600-2-12	0-405529-08/24/76-18	21-12.6	-	7.6	25	-2-7-4-6-2	-3-1-2	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
02-66.5111-158.0083-2-12	0-405530-08/24/76-18	21-13.6	-	5.0	20	-2-7-4-6-3	-3-1-2	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
02-66.4927-158.1830-2-13	0-405531-08/24/76-18	21-15.8	-5	7.5	26	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.00	
02-66.4814-158.0583-2-13	0-405532-08/24/76-18	21-15.6	-5	7.0	30	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
02-66.4808-158.1502-2-13	0-405533-08/24/76-18	21-15.6	-5	7.6	33	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
02-66.4800-158.2000-2-13	0-405534-08/24/76-18	21-15.9	-5	7.7	32	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.4666-158.1660-2-13	0-405535-08/24/76-18	21-15.8	-5	7.2	46	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.4608-158.1500-2-13	0-405536-08/24/76-18	21-15.6	-5	7.6	59	-2-7-4-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
02-66.4573-158.0760-2-13	0-405537-08/24/76-18	21-16.1	-5	7.7	68	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
02-66.4558-158.0260-2-13	0-405538-08/24/76-18	21-16.3	-5	7.0	52	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
02-66.4427-158.0230-2-13	0-405539-08/24/76-18	21-16.0	-5	7.5	60	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.4441-158.0880-2-13	0-405540-08/24/76-18	21-15.0	-5	7.7	30	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
02-66.4425-158.1400-2-13	0-405541-08/24/76-18	21-14.9	-5	7.2	44	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
02-66.4388-158.2180-2-13	0-405542-08/24/76-18	21-15.4	-5	7.4	38	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
02-66.4066-158.2416-2-13	0-405543-08/24/76-18	21-15.4	-5	7.4	30	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
02-66.4100-158.1460-2-13	0-405544-08/24/76-18	21-15.4	-5	7.0	28	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
02-66.3944-158.1833-2-13	0-405545-08/24/76-18	21-15.0	-5	7.2	38	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
02-66.4000-158.0300-2-13	0-405546-08/24/76-18	21-14.0	-5	7.0	20	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
02-66.3700-158.0260-2-13	0-405547-08/24/76-18	21	-	-	-	-2-7-5-6	-	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
02-66.3833-158.0760-2-13	0-405548-08/24/76-18	20-15.0	-5	7.3	59	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
02-66.3683-158.1660-2-13	0-405549-08/24/76-18	20-13.2	-5	7.0	48	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
02-66.3892-158.2000-2-13	0-405550-08/24/76-18	21-15.6	-5	7.4	52	-2-7-5-6	-3-1	-4-3-3-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.3722-158.3000-2-13	0-405551-08/24/76-18	20-15.2	-5	7.7	103	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
02-66.4058-158.3166-2-13	0-405552-08/24/76-18	20-15.9	-5	7.6	98	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10	
02-66.4058-158.3533-2-13	0-405553-08/24/76-18	20-15.6	-5	7.4	101	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
02-66.3727-158.3833-2-13	0-405554-08/24/76-19	20-14.9	-5	7.1	20	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
02-66.3733-158.4450-2-13	0-405555-08/24/76-19	20-15.0	-5	7.0	18	-2-7-5-6	-3-1	-4-3-1-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	
02-66.4000-158.4500-2-13	0-405556-08/24/76-19	20-15.6	-5	7.4	26	-2-7-5-6	-3-1	-4-																										



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

DOE SAMPLE NUMBER							LASK SAMPLE LOCATION NUMBER AND FIELD DATA															U CONCENTRATION												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASK SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTIVANCE (umho/cm)	SCINTILLOMETER (c.u. ppm)	ROCK TYPE	POCK 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																										
02-66.7966-158.4623-2-13-	0-406014-08/25/76-12-	18-15.4-	-5-	8.1-	90-	-2-7-6-6-	-3-1-	-1-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66.8108-158.2980-2-13-	0-406015-08/25/76-15-	18-17.8-	-5-	10.0-	93-	-2-7-4-6-	-3-1-	-1-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
02-66.8433-158.2866-2-13-	0-406016-08/25/76-15-	18-15.5-	-5-	9.3-	112-	-2-7-6-6-	-3-1-	-1-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66.6936-158.4833-2-13-	0-406017-08/25/76-15-	18-18.3-	-5-	9.2-	32-	-2-7-6-6-	-3-1-	-1-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30		
02-66.6666-158.4061-2-13-	0-406018-08/25/76-15-	16-16.7-	-5-	8.3-	38-	-2-7-6-6-	-3-1-	-1-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66.6705-158.4660-2-13-	0-406019-08/25/76-15-	18-17.1-	-5-	8.2-	37-	-2-7-6-6-	-3-1-	-1-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.6916-158.4641-2-13-	0-406020-08/25/76-15-	18-16.4-	-5-	7.8-	27-	-2-7-6-6-	-3-1-	-1-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40		
02-66.6966-158.4500-2-13-	0-406021-08/25/76-15-	18-16.1-	-5-	7.2-	32-	-2-7-6-6-	-3-1-	-1-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.6777-158.4441-2-13-	0-406022-08/25/76-15-	18-16.4-	-5-	7.3-	8-	-2-7-6-6-	-3-1-	-1-2-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00		
02-66.6752-158.4933-2-13-	0-406023-08/25/76-15-	18-16.0-	-5-	7.4-	82-	-2-7-6-6-	-3-1-	-1-2-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
02-66.6900-158.5191-2-13-	0-406024-08/25/76-15-	18-16.6-	-5-	8.0-	30-	-2-7-6-6-	-3-1-	-1-2-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40		
02-66.6933-158.5660-2-13-	0-406025-08/25/76-15-	17-16.1-	-5-	7.7-	47-	-2-7-6-6-	-3-1-	-1-2-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.6666-158.5772-2-13-	0-406026-08/25/76-15-	18-17.2-	-5-	7.4-	69-	-2-7-6-6-	-3-1-	-1-2-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66.3533-158.4783-2-13-	0-406028-08/26/76-6-	10-14.8-	-5-	8.2-	24-	-2-7-5-6-	-3-1-	-1-2-1-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.2861-159.0123-2-13-	0-406030-08/26/76-9-	10-14.5-	-5-	7.0-	26-	-2-7-5-7-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.2736-159.0111-2-13-	0-406031-08/26/76-6-	10-13.5-	-5-	10.7-	103-	-2-7-6-7-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66.2900-158.4433-2-13-	0-406032-08/26/76-6-	10-14.0-	-5-	9.6-	127-	-2-7-5-8-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.2677-159.4300-2-13-	0-406033-08/26/76-6-	10-13.9-	-5-	9.1-	44-	-2-7-6-8-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.2444-159.0638-2-13-	0-406034-08/26/76-9-	10-14.1-	-5-	8.6-	62-	-2-7-5-6-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
02-66.1875-159.0041-2-13-	0-406035-08/26/76-6-	10-13.8-	-5-	8.2-	55-	-2-7-5-7-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.2300-158.4603-2-13-	0-406036-08/26/76-7-	10-13.9-	-5-	7.8-	43-	-2-7-6-7-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.2088-158.4603-2-13-	0-406037-08/26/76-7-	10-14.1-	-5-	8.3-	48-	-2-7-6-8-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.2083-159.0541-2-13-	0-406038-08/26/76-7-	10-14.2-	-5-	8.2-	66-	-2-7-5-8-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.1652-159.0491-2-13-	0-406039-08/26/76-7-	10-12.3-	-5-	10.1-	124-	-2-7-5-6-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.1800-158.4391-2-13-	0-406040-08/22/76-7-	11-12.6-	-5-	9.8-	97-	-2-7-5-7-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.1461-158.9666-2-13-	0-406041-08/26/76-7-	8-14.2-	-5-	9.0-	49-	-2-7-5-8-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50		
02-66.1422-159.0021-2-13-	0-406042-08/22/76-7-	7-14.0-	-5-	8.7-	61-	-2-7-5-8-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.1166-159.0069-2-13-	0-406043-08/26/76-7-	9-10.8-	-5-	8.7-	72-	-2-7-5-6-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.1183-158.4533-2-13-	0-406044-08/22/76-7-	8-10.9-	-5-	8.4-	107-	-2-7-6-6-	-3-1-	-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66.0950-158.4661-2-12-	0-406045-08/26/76-7-	8-9.5-	-5-	8.3-	138-	-2-7-3-6-3-2-	-1-1-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.1366-159.0433-2-12-	0-406046-08/26/76-7-	8-9.0-	-5-	7.2-	114-	-2-7-5-6-3-2-	-1-1-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.0916-159.0133-2-12-	0-406047-08/26/76-7-	8-8.7-	-5-	8.3-	46-	-2-7-3-6-3-2-	-1-1-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66.0441-158.4250-2-12-	0-406048-08/26/76-7-	8-9.4-	-5-	8.1-	112-	-2-7-3-6-3-2-	-1-1-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66.0283-158.4608-2-12-	0-406049-08/26/76-7-	9-9.5-	-5-	7.4-	67-	-2-7-3-6-3-2-	-1-1-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.0416-159.0263-2-12-	0-406050-08/26/76-7-	8-8.9-	-5-	8.4-	44-	-2-7-3-6-3-2-	-1-1-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.0333-159.4500-2-12-	0-406051-08/26/76-7-	9-9.4-	-5-	8.4-	84-	-2-7-5-6-3-2-	-1-1-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66.0058-158.4594-2-12-	0-406052-08/26/76-7-	8-9.2-	-5-	7.7-	92-	-2-7-5-6-3-2-	-1-1-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.0316-158.8833-2-12-	0-406053-08/26/76-7-	8-9.4-	-5-	8.4-	104-	-2-7-3-6-3-2-	-1-1-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.0055-158.8521-2-13-	0-406054-08/26/76-7-	11-	-	-	-	-2-7-3-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
02-66.0091-158.7950-2-13-	0-406055-08/26/76-7-	11-	-	-	-	-2-7-3-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.60	
02-66.0252-158.1904-2-13-	0-406056-08/26/76-7-	11-	-	-	-	-2-7-3-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.70	
02-66.0250-158.1366-2-12-	0-406057-08/26/76-7-	9-9.4-	-5-	6.4-	44-	-2-7-6-6-2-	-1-1-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.0147-158.7291-2-12-	0-406058-08/26/76-7-	10-10.4-	-5-	6.4-	22-	-2-7-5-6-2-	-1-1-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.0033-158.6766-2-13-	0-406059-08/26/76-7-	10-	-	-	-	-2-7-3-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.80	
02-66.0300-158.0550-2-12-	0-406060-08/26/76-7-	8-6.2-	-5-	8.5-	83-	-2-7-3-6-3-2-	-1-1-2-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50		
02-66.0266-158.5791-2-12-	0-406061-08/26/76-7-	9-7.1-	-5-	8.3-	107-	-2-7-6-3-2-	-1-1-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50		
02-66.0052-158.5783-2-12-	0-406062-08/26/76-8-	9-7.1-	-5-	7.9-	88-	3-2-7-5-6-3-2-	-1-1-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.70		
02-66.0094-158.5261-2-12-	0-406063-08/26/76-8-	10-7.2-	-5-	7																														

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

DOE SAMPLE NUMBER							LAST SAMPLE LOCATION NUMBER AND FIELD DATA																U CONCENTRATION											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAST SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	SPECIFIC CONDUCTANCE (umho/cm)	SCINTILLOMETER (c.u. 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																										
02-66.0336-158.4400-2-12-	0-406067-08/26/76-	8-9-7.2-	-	-	-	8.2-	67-	4-2-7-3-6-3-2-1-1-3-4-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.0141-158.4583-2-12-	0-406068-08/26/76-	8-9-6.9-	-	-	-	7.9-	44-	2-7-3-6-3-2-1-1-3-4-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50		
02-66.0250-158.3832-2-12-	0-406069-08/26/76-	8-10-6.2-	-	-	-	8.2-	102-	8-2-7-5-6-3-2-1-1-1-4-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50		
02-66.0027-158.3521-2-12-	0-406070-08/26/76-	8-11-5.2-	-	-	-	8.2-	148-	4-2-7-3-6-3-2-1-1-3-3-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.20		
02-66.0141-158.3166-2-12-	0-406071-08/26/76-	8-11-	-	-	-	-	-	4-2-7-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.20		
02-66.0225-158.4000-2-12-	0-406072-08/26/76-	8-11-10.5-	-	-	-	7.8-	91-	4-2-7-3-6-3-2-1-1-2-3-6-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.0338-158.4533-2-12-	0-406073-08/26/76-	8-12-10.7-	-	-	-	7.6-	112-	8-2-7-3-6-3-2-1-1-4-4-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.0500-158.4200-2-12-	0-406074-08/26/76-	8-12-11.0-	-	-	-	7.4-	104-	2-2-7-5-6-3-2-1-1-4-4-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.60		
02-66.0522-158.1791-2-12-	0-406075-08/26/76-	8-12-10.5-	-	-	-	7.4-	99-	10-2-7-5-6-3-2-1-1-2-3-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40		
02-66.0400-158.1411-2-12-	0-406076-08/26/76-	8-12-10.7-	-	-	-	7.0-	42-	8-2-7-5-6-3-2-1-1-2-3-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.0252-158.1103-2-12-	0-406077-08/26/76-	8-12-13.2-	-	-	-	7.8-	87-	2-2-7-5-6-3-2-1-1-2-3-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30		
02-66.0150-158.1133-2-12-	0-406078-08/26/76-	8-12-11.1-	-	-	-	7.3-	111-	15-2-7-3-6-3-2-1-1-4-4-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66.0075-158.0333-2-13-	0-406079-08/26/76-	8-14-14.1-	-	-	-	6.9-	7-	2-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30		
02-66.0311-158.0322-2-13-	0-406080-08/26/76-	8-14-14.4-	-	-	-	6.7-	14-	2-7-6-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.0022-158.1700-2-13-	0-406081-08/26/76-	8-14-13.9-	-	-	-	7.0-	12-	2-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.0058-158.2233-2-13-	0-406082-08/26/76-	8-14-14.3-	-	-	-	6.6-	20-	2-7-5-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66.3366-158.8560-2-13-	0-406083-08/26/76-10-	14-14.2-	-	-	-	7.8-	63-	2-7-6-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90		
02-66.3422-158.1791-2-13-	0-406084-08/26/76-10-	14-14.2-	-	-	-	7.7-	77-	2-7-5-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66.3183-158.8858-2-13-	0-406085-08/26/76-10-	13-14.3-	-	-	-	7.7-	73-	2-7-5-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90		
02-66.3086-158.8503-2-13-	0-406086-08/26/76-11-	14-14.2-	-	-	-	7.3-	107-	2-7-5-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
02-66.2958-158.8500-2-13-	0-406087-08/26/76-11-	13-14.4-	-	-	-	7.9-	106-	2-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.2833-158.8141-2-13-	0-406088-08/26/76-11-	13-14.6-	-	-	-	8.1-	87-	2-7-6-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66.2722-158.8192-2-12-	0-406089-08/26/76-11-	14-12.0-	-	-	-	6.3-	61-	4-2-7-3-6-3-2-1-1-3-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66.2377-158.7736-2-12-	0-406090-08/26/76-11-	14-12.4-	-	-	-	6.8-	114-	15-2-7-3-6-3-2-1-1-3-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00		
02-66.2500-158.8700-2-12-	0-406091-08/26/76-11-	14-	-	-	-	-	-	4-2-7-5-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90	
02-66.2230-158.8800-2-13-	0-406092-08/26/76-11-	13-14.5-	-	-	-	9.8-	294-	2-7-5-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66.1936-158.8800-2-13-	0-406093-08/26/76-11-	13-14.0-	-	-	-	8.9-	197-	2-7-6-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66.1922-158.8866-2-12-	0-406094-08/26/76-11-	13-10.4-	-	-	-	6.9-	114-	4-2-7-5-6-3-2-1-1-1-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20		
02-66.1800-158.8666-2-12-	0-406095-08/26/76-11-	14-10.3-	-	-	-	6.4-	76-	2-2-7-3-6-3-2-1-1-1-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00		
02-66.1711-158.8858-2-12-	0-406096-08/26/76-11-	13-9.9-	-	-	-	6.7-	24-	4-2-7-3-6-2-2-1-1-4-4-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66.1722-158.7444-2-12-	0-406097-08/26/76-11-	14-12.2-	-	-	-	7.4-	102-	10-2-7-3-6-3-2-1-1-3-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66.1400-158.7416-2-12-	0-406098-08/26/76-11-	13-12.2-	-	-	-	7.7-	90-	15-2-7-5-6-3-2-1-1-2-2-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00		
02-66.1427-158.7991-2-12-	0-406099-08/26/76-11-	14-11.7-	-	-	-	8.1-	97-	4-2-7-5-6-2-3-1-1-3-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66.1458-158.8670-2-12-	0-406100-08/26/76-11-	14-14.2-	-	-	-	6.9-	24-	4-2-7-5-8-1-3-3-1-3-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66.1283-158.8660-2-12-	0-406101-08/26/76-11-	14-14.4-	-	-	-	6.5-	47-	4-2-7-6-6-1-3-3-1-3-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30		
02-66.1116-158.7919-2-12-	0-406102-08/26/76-11-	14-12.9-	-	-	-	7.4-	27-	15-2-7-3-6-3-2-1-1-3-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.80		
02-66.0838-158.8191-2-12-	0-406103-08/26/76-11-	14-13.1-	-	-	-	7.7-	112-	4-2-7-3-6-3-2-1-1-3-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90		
02-66.0733-158.8670-2-12-	0-406104-08/26/76-11-	14-11.9-	-	-	-	7.6-	97-	4-2-7-3-6-3-2-1-1-3-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30		
02-66.0597-158.8341-2-12-	0-406105-08/26/76-11-	14-12.2-	-	-	-	7.4-	111-	2-2-7-3-6-3-2-1-1-3-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90		
02-66.0583-158.7666-2-12-	0-406106-08/26/76-11-	14-12.2-	-	-	-	7.2-	74-	8-2-7-3-6-3-2-1-1-4-4-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90		
02-66.0685-158.7350-2-12-	0-406107-08/26/76-11-	13-9.5-	-	-	-	7.4-	24-	4-2-7-3-6-3-2-1-1-4-4-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90		
02-66.0988-158.7133-2-12-	0-406108-08/26/76-11-	13-	-	-	-	-	-	2-2-7-3-6-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50	
02-66.1133-158.7191-2-12-	0-406109-08/26/76-11-	12-9.7-	-	-	-	8.2-	42-	4-2-7-3-6-3-2-1-1-4-4-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30		
02-66.0933-158.6750-2-12-	0-406110-08/26/76-11-	13-9.4-	-	-	-	8.2-	88-	10-2-7-4-6-3-2-1-1-4-4-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.70		
02-66.1066-158.6333-2-12-	0-406111-08/26/76-11-	14-9.7-	-	-	-	7.9-	42-	2-2-7-4-7-3-2-1-1-4-4-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.80		
02-66.1208-158.5861-2-12-	0-406112-08/26/76-12-	15-10.7-	-	-	-	7.5-	43-	4-2-7-3-6-3-2-1-1-3-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20		
02-66.0961-158.6133-2-12-	0-406113-08/26/76-12-	15-9.7-	-	-	-	7.9-	37-	4-2-7-3-6-3-2-1-1-3-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00		
02-66.0466-158.5933-2-12-	0-406114-08/26/76-12-</																																	





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

DOE SAMPLE NUMBER					LASL SAMPLE LOCATION NUMBER AND FIELD DATA																	U CONCENTRATION												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	PH	SPECIFIC CONDUCTANCE (umho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	REFUG	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																																		
02-66	2938-153.1361-2-13-	0-406174-08/26/76-18-	20-15.4	S	7.6	14-	-2-7-5-6-	-3-1-	-4-4-2-	-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
02-66	2386-154.1516-2-12-	0-406175-08/26/76-18-	19-15.2	-	7.2	122-	4-2-7-5-6-	-3-2-1-	-1-1-3-	-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90		
02-66	2500-154.1583-2-12-	0-406176-08/26/76-18-	19-15.2	-	7.2	21-	15-2-7-4-	-6-3-2-	-1-1-4-	-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90		
02-66	2891-154.2169-2-12-	0-406177-08/26/76-18-	19-14.9	-	6.9	14-	2-2-7-5-6-	-2-2-1-	-2-2-3-	-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80		
02-66	3166-154.2338-2-12-	0-406178-08/26/76-18-	19-15.5	-	7.0	32-	4-2-7-5-6-	-3-2-1-	-2-3-3-	-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.60		
02-66	3400-154.2583-2-12-	0-406179-08/26/76-18-	19-15.0	-	7.0	41-	0-2-7-3-6-	-3-2-1-	-1-4-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60		
02-66	2550-154.0822-2-12-	0-406180-08/26/76-18-	19-14.9	-	6.9	27-	4-2-7-5-6-	-2-2-2-1-	-3-3-3-	-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20		
02-66	2233-154.0733-2-12-	0-406181-08/26/76-18-	17-14.7	-	6.9	22-	4-2-7-3-6-	-3-2-1-	-1-4-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66	2127-154.1069-2-12-	0-406182-08/26/76-18-	17-15.0	-	7.2	42-	10-2-7-5-6-	-2-2-2-1-	-1-4-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66	2016-154.1333-2-12-	0-406183-08/26/76-18-	17-13.9	-	7.0	19-	10-2-7-4-6-	-3-2-1-	-1-3-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
02-66	1991-154.2000-2-12-	0-406184-08/26/76-18-	16-11.3	-	8.1	16A-	2-2-7-3-6-	-3-2-1-	-1-3-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66	1666-154.2033-2-12-	0-406184-08/26/76-18-	16-11.9	-	7.9	142-	10-2-7-5-6-	-3-2-1-	-1-3-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
02-66	1400-154.2191-2-12-	0-406187-08/26/76-18-	15-9.6	-	7.9	121-	10-2-7-4-6-	-3-2-1-	-1-2-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66	1433-154.1723-2-12-	0-406188-08/26/76-18-	15-10.4	-	8.2	49-	10-2-7-3-6-	-3-2-1-	-1-2-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66	1733-154.0769-2-12-	0-406189-08/26/76-18-	15-10.7	-	7.9	27-	10-2-7-3-6-	-3-2-1-	-1-3-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66	1333-154.0900-2-12-	0-406190-08/26/76-18-	15-10.7	-	8.1	27-	4-2-7-3-6-	-3-2-1-	-1-4-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66	1200-154.1138-2-12-	0-406191-08/26/76-18-	15-11.4	-	6.9	24-	2-2-7-5-6-	-3-2-1-	-1-2-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66	1077-154.1416-2-12-	0-406192-08/26/76-18-	15-11.7	-	8.1	121-	4-2-7-3-6-	-3-2-1-	-1-1-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66	0929-154.1633-2-12-	0-406193-08/26/76-18-	15-11.2	-	8.2	24-	2-2-7-4-6-	-3-2-1-	-1-1-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
02-66	0883-154.0623-2-12-	0-406194-08/26/76-18-	15-9.9	-	7.9	49-	4-2-7-4-6-	-3-2-1-	-1-2-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.50		
02-66	1566-154.1333-2-12-	0-406195-08/26/76-18-	14-10.9	-	8.1	101-	2-2-7-4-6-	-3-2-1-	-1-2-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66	1400-154.2900-2-13-	0-406196-08/26/76-19-	16-16.3	S	6.4	8-	-2-7-5-6-	-3-1-	-1-3-2-	-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66	1455-154.3341-2-12-	0-406197-08/26/76-19-	14-9.2	-	8.1	22-	17-2-7-3-6-	-3-2-1-	-1-1-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66	1750-154.3002-2-12-	0-406198-08/26/76-19-	14-10.3	-	7.9	14-	0-2-7-4-6-	-3-2-1-	-1-2-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.90		
02-66	1944-154.2638-2-12-	0-406199-08/26/76-19-	15-9.9	-	8.2	47-	8-2-7-5-6-	-3-2-1-	-1-3-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60		
02-66	1633-154.3525-2-12-	0-406200-08/26/76-19-	14-10.2	-	7.7	27-	15-2-7-3-6-	-3-2-1-	-1-2-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66	1738-154.4183-2-12-	0-406201-08/26/76-19-	14-11.0	-	8.1	124-	2-2-7-3-6-	-3-2-1-	-1-2-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
02-66	1916-154.4405-2-12-	0-406202-08/26/76-19-	14-11.2	-	7.1	21-	10-2-7-3-6-	-3-2-1-	-1-2-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
02-66	1486-154.4641-2-12-	0-406203-08/26/76-19-	15-10.4	-	8.2	114-	10-2-7-5-6-	-3-2-1-	-1-3-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66	1386-154.5041-2-12-	0-406204-08/26/76-19-	13-10.2	-	8.1	34-	4-2-7-3-6-	-3-2-1-	-1-1-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66	1680-154.5238-2-12-	0-406205-08/26/76-19-	14-9.9	-	7.5	25-	15-2-7-5-6-	-3-2-1-	-1-4-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66	1588-154.5841-2-12-	0-406206-08/26/76-19-	12-9.7	-	7.7	127-	15-2-7-5-6-	-3-2-1-	-1-1-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66	1391-154.6133-2-12-	0-406207-08/26/76-19-	13-10.2	-	8.2	122-	4-2-7-5-6-	-3-2-1-	-1-4-4-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40		
02-66	1438-154.6583-2-12-	0-406208-08/26/76-19-	13-11.0	-	8.2	22-	8-2-7-5-6-	-3-2-1-	-1-2-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30		
02-66	1791-154.6341-2-12-	0-406209-08/26/76-19-	13-12.2	-	7.7	14-	10-2-7-5-6-	-3-2-1-	-1-1-3-	-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66	3566-154.1752-2-13-	0-406210-08/27/76-10-	13-15.0	S	7.9	64-	-2-7-6-8-	-3-1-	-4-4-2-	-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66	3491-154.6633-2-13-	0-406211-08/27/76-10-	14-14.5	S	9.1	62-	-2-7-5-7-	-3-2-	-4-4-2-	-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
02-66	3358-154.6433-2-12-	0-406212-08/27/76-10-	14-13.2	-	6.7	60-	10-2-7-5-6-	-3-2-1-	-1-3-4-	-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
02-66	3350-154.2291-2-12-	0-406213-08/27/76-10-	14-12.3	-	6.1	57-	4-2-7-5-6-	-3-2-1-	-1-3-4-	-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00		
02-66	3224-154.1224-2-12-	0-406214-08/27/76-10-	18-13.4	-	7.9	160-	10-2-7-3-6-	-3-2-1-	-1-1-4-	-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
02-66	3150-154.0523-2-12-	0-406215-08/27/76-10-	18-14.0	-	7.9	211-	0-2-7-4-6-	-3-2-1-	-1-4-4-	-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66	3116-154.0633-2-12-	0-406216-08/27/76-10-	18-13.2	-	8.2	147-	15-2-7-5-6-	-3-2-1-	-1-1-3-	-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
02-66	3044-154.0269-2-12-	0-406217-08/27/76-10-	18-13.2	-	7.7	94-	4-2-7-3-6-	-3-2-1-	-1-4-4-	-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66	2927-154.0010-2-12-	0-406218-08/27/76-10-	18-14.1	-	8.1	81-	8-2-7-5-6-	-3-2-1-	-1-2-3-	-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66	3066-154.4633-2-12-	0-406219-08/27/76-10-	18-13.7	-	7.7	142-	8-2-7-4-7-	-3-2-1-	-1-3-3-	-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
02-66	2916-154.4250-2-12-	0-406220-08/27/76-10-	18-13.4	-	7.4	194-	8-2-7-3-6-	-3-2-1-	-1-1-3-	-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
02-66	2800-154.3723-2-12-	0-406221-08/27/76-10-	18-13.4	-	7.9	99-	2-2-7-3-6-	-3-2-1-	-1-1-3-	-2-2-																								







APPENDIX D

CODE TO DATA LISTINGS

Appendix D-I

Explanation of Codes Used

Appendix D-II

Key to Sample Types

## APPENDIX D-I

### EXPLANATION OF CODES USED IN APPENDIXES B AND C

#### 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	New Mexico	= 35
Colorado	= 08	Wyoming	= 56
Montana	= 30		

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 "Key to Sample Types," Appendix 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 LOCATION NUMBER AND FIELD DATA

LASL SAMPLE LOCATION NUMBER: A unique six-digit number permanently assigned by the LASL to every location sampled in each state. 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 the various states as follows.

<u>Location Numbers</u>	<u>State</u>
from 000 001 through 099 999	= New Mexico
from 100 001 through 199 999	= Colorado
from 200 001 through 299 999	= Wyoming
from 300 001 through 399 999	= Montana
from 400 001 and above	= Alaska

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 report on the surrounding area. In the area of this report, dissolved oxygen was taken as a special measurement at most lakes and some few streams. These dissolved oxygen data are presented in Appendix E.

**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 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
----------------	-------------	-------------

**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 uranium concentration found in the water sample in ppb, or in the sediment sample in ppm. Sample Types No. 1 through 10 and 21 through 30 are water samples, with their uranium concentrations given in ppb, while Sample Types No. 11 through 20 and 31 through 40 are sediment samples, with their uranium concentration given in ppm.

## APPENDIX 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 / MEDIUM / TREATMENT</u>
12 -	<u>Wet stream sediment</u> sample <u>dried</u> at $\leq 100^{\circ}\text{C}$ <u>and sieved to -100 mesh</u> through stainless steel sieves.
13 -	<u>Wet natural lake sediment</u> sample <u>dried</u> at $\leq 100^{\circ}\text{C}$ <u>and sieved to -100 mesh</u> through stainless steel sieves.
15 -	<u>Dry stream sediment</u> sample <u>dried</u> at $\leq 100^{\circ}\text{C}$ (if necessary) <u>and sieved to -100 mesh</u> through stainless steel sieves.
27 -	<u>Stream water</u> sample <u>acidified</u> to a pH of $\leq 1$ with reagent-grade nitric acid ( $\text{HNO}_3$ ).
29 -	<u>Natural lake water</u> sample <u>acidified</u> to a pH of $\leq 1$ with reagent-grade nitric acid ( $\text{HNO}_3$ ).

APPENDIX E

LISTING OF DISSOLVED OXYGEN IN WATERS OF THE  
NORTHERN SEWARD PENINSULA AND VICINITY, ALASKA

## APPENDIX E

## Listing of Dissolved Oxygen in Waters of the Northern Seward Peninsula and Vicinity, Alaska

LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)
2600	11.5	2685	11.1	2848	11.8	2978	12.4	3035	11.6	3992	11.4
2603	10.4	2686	10.7	2949	11.8	2983	12.6	3036	11.8	3993	11.7
2616	11.2	2687	11.3	2850	11.5	2984	12.9	3037	11.9	3994	8.7
2617	11.6	2688	11.1	2851	11.8	2985	11.6	3038	11.4	3996	10.0
2618	10.9	2689	10.6	2852	12.2	2986	12.3	3039	11.4	3997	10.3
2639	11.2	2785	11.6	2853	12.7	2988	12.4	3040	12.0	4430	11.9
2654	10.7	2788	11.4	2854	12.3	2989	12.2	3041	11.9	4431	11.4
2655	10.8	2789	11.6	2855	12.0	2990	12.2	3042	11.5	4432	11.1
2656	11.6	2792	11.6	2858	12.8	2991	11.6	3043	11.6	4433	11.2
2657	11.7	2793	11.5	2859	12.0	2992	12.3	3044	10.6	4434	12.5
2658	11.4	2794	11.3	2860	12.8	2993	11.5	3045	11.8	4435	12.3
2659	10.5	2795	11.4	2861	12.0	2994	11.6	3046	10.9	4436	11.5
2660	11.7	2798	11.6	2862	12.1	3011	11.4	3047	10.2	4437	11.0
2661	11.4	2799	11.3	2864	12.1	3012	11.6	3048	11.6	4438	9.7
2662	11.8	2800	11.7	2865	6.9	3013	11.6	3049	11.8	4439	11.2
2663	11.3	2811	11.2	2866	12.8	3014	10.6	3050	10.3	4441	9.8
2664	11.6	2813	12.4	2867	12.0	3015	11.4	3051	12.5	4442	9.5
2665	11.5	2818	11.8	2868	11.9	3016	11.6	3052	11.2	4443	10.1
2666	11.2	2823	11.1	2969	12.0	3017	12.1	3054	10.5	4445	10.5
2667	11.4	2827	10.8	2870	11.8	3018	11.4	3057	9.1	4446	10.0
2669	11.4	2828	11.5	2871	11.6	3019	11.1	3060	12.1	4447	9.6
2670	11.3	2829	11.4	2872	12.0	3020	11.3	3061	9.3	4448	8.8
2671	11.3	2830	11.2	2873	11.3	3021	11.4	3062	11.4	4449	3.5
2672	11.4	2835	12.0	2874	11.5	3022	11.8	3063	11.6	4450	3.7
2673	11.4	2836	11.8	2875	11.2	3033	11.6	3064	11.3	4457	8.5
2674	11.1	2837	11.1	2957	12.0	3034	11.6	3065	11.5	4458	9.8
2675	11.4	2838	11.7	2958	12.1	3035	11.7	3067	10.8	4459	9.8
2676	11.6	2839	11.6	2959	12.3	3036	11.4	3068	11.2	4460	9.5
2677	11.5	2840	11.1	2960	11.9	3037	11.8	3069	6.8	4465	10.8
2678	11.2	2841	12.6	2963	11.7	3038	11.7	3974	9.6	4466	10.0
2679	11.3	2842	12.2	2967	11.9	3039	10.7	3976	9.1	4467	10.9
2680	11.7	2843	12.0	2972	12.2	3030	11.9	3977	9.2	4468	11.0
2681	10.9	2844	11.2	2974	12.1	3031	11.7	3986	11.3	4469	10.9
2682	11.3	2845	11.6	2975	12.0	3032	11.5	3988	9.7	4470	11.1
2683	11.2	2846	11.8	2976	12.5	3033	12.5	3989	9.7	4472	9.8
2684	10.7	2847	12.1	2977	12.6	3034	11.4	3990	9.6	4473	8.0

\* Denotes stream locations; all others are lakes or ponds.

APPENDIX E (continued)

Listing of Dissolved Oxygen in Waters of the Northern Seward Peninsula and Vicinity, Alaska

LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)
4474	10.6	4552	11.5	5073	10.9	5145	11.0	5181	9.7	5217	10.7
4475	10.8	4554	11.4	5074	11.4	5146	12.4	5182	9.5	5218	11.5
4476	10.1	4555	10.6	5075	11.1	5147	11.3	5183	10.3	5219	11.5
4477	10.6	4556	9.8	5076	10.4	5148	11.4	5184	10.4	5220	11.8
4480	11.0	4557	10.0	5077	10.9	5149	10.9	5185	10.2	5221	11.6
4481	10.0	4558	9.9	5078	10.4	5150	10.8	5186	10.3	5222	10.5
4482	9.9	4559	10.1	5079	11.3	5151	11.0	5187	10.1	5223	10.4
4483	9.9	4560	12.1	5080	11.4	5152	10.7	5188	11.3	5224	11.0
4484	10.0	4561	12.1	5081	10.1	5153*	10.7	5189	11.4	5225	10.9
4485	10.0	4562	10.9	5082	12.0	5154*	10.5	5190	10.6	5226	10.7
4505	9.7	4563	10.1	5083	11.6	5155	10.7	5191	10.7	5227	10.5
4506	9.7	4564	11.3	5084	10.8	5156	9.6	5192	11.1	5228	10.2
4507	10.3	4565	11.7	5085	10.6	5157	9.6	5193	12.0	5229	10.2
4508	10.1	4566	12.7	5086	11.2	5158	10.1	5194	12.0	5230	10.6
4509	10.4	4568	11.2	5087	9.7	5159	9.9	5195	10.4	5231	10.6
4510	10.4	4574	9.6	5088	11.8	5160	9.7	5196	10.5	5232	10.7
4511	9.3	4575	10.5	5089	10.6	5161	10.0	5197	10.8	5233	10.6
4512	9.7	4622	10.8	5095	10.2	5162	10.7	5198	10.3	5234	10.7
4513	9.5	5055	10.5	5099	11.1	5163	10.5	5199	10.6	5235	10.8
4514	9.3	5056	10.4	5100	11.8	5164	10.4	5200	10.6	5236	8.3
4515	10.8	5057	10.1	5102*	11.5	5165	10.2	5201	10.4	5237	8.7
4516	9.8	5058	11.9	5104	8.9	5166	10.2	5202	10.5	5238	10.1
4517	11.0	5059	10.4	5105	9.8	5167	10.3	5203	11.5	5239	10.1
4518	9.6	5060	10.4	5106	11.1	5168	10.4	5204	11.5	5242	10.1
4519	9.4	5061	10.5	5107	9.3	5169	10.3	5205	10.5	5243	9.5
4520	8.8	5062	10.2	5128	10.3	5170	9.0	5206	10.2	5244	9.8
4521	10.4	5063	11.9	5129	10.7	5171	9.0	5207	10.2	5245	10.6
4522	3.6	5064	10.4	5133	11.4	5172	10.4	5208	10.1	5246	11.5
4523	9.9	5065	10.1	5134	10.9	5173	10.4	5209	10.2	5247	9.8
4524	11.5	5066	9.2	5135	12.0	5174	10.8	5210	11.0	5248	9.5
4525	9.9	5067	10.8	5138	11.0	5175	10.3	5211	10.9	5249	10.1
4526	6.7	5068	10.7	5139	11.6	5176	10.3	5212	9.9	5250	9.6
4527	11.3	5069	8.1	5140	11.1	5177	10.9	5213	9.8	5251	8.9
4528	7.9	5070	11.1	5141	12.7	5178	10.3	5214	9.9	5252	7.6
4529	7.8	5071	10.6	5142	11.6	5179	10.4	5215	9.7	5253	10.1
4551	11.4	5072	10.8	5144	11.6	5180	10.8	5216	10.7	5254	9.1

\* Denotes stream location; all others are lakes or ponds.

## APPENDIX E (continued)

## Listing of Dissolved Oxygen in Waters of the Northern Seward Peninsula and Vicinity, Alaska

LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)
5255	11.1	5329	10.5	5405	10.4	5443	8.2	5479	7.5	5527	8.1
5256	9.7	5330	9.7	5406	7.9	5444	9.4	5480	10.6	5531	9.3
5257	10.1	5331	6.9	5407	11.3	5445	9.6	5481	11.0	5532	10.1
5258	11.9	5332	5.3	5408	8.3	5446	7.9	5482	10.4	5533	9.2
5259	10.9	5333	5.4	5409	7.1	5447	8.3	5483	10.7	5534	8.4
5260	9.6	5334	7.6	5410	11.3	5448	8.1	5484	9.0	5535	9.7
5261	11.1	5335	8.7	5411	8.2	5449	8.0	5485	9.2	5536	8.2
5262	9.8	5336	10.3	5412	8.5	5450	8.4	5486	7.6	5537	7.8
5268	10.1	5337	10.2	5413	9.1	5451	8.3	5487	8.0	5538	8.3
5269	11.1	5338	10.5	5414	9.2	5452	4.9	5488	8.0	5539	7.6
5270	11.5	5345	10.5	5415	9.4	5453	5.6	5489	7.4	5540	8.0
5271	10.1	5346	10.2	5416	9.4	5454	9.8	5490	7.7	5541	8.2
5272	9.9	5347	9.1	5417	9.6	5455	10.2	5494	9.7	5542	7.9
5274	9.2	5348	8.6	5418	9.0	5456	9.9	5495	9.9	5543	7.1
5276	9.8	5349	5.8	5419	8.8	5457	10.0	5496	9.2	5544	6.9
5277	10.4	5350	10.8	5420	10.1	5458	8.3	5497	4.6	5545	7.3
5278	10.2	5351	8.2	5421	10.0	5459	9.0	5498	4.0	5546	6.9
5295*	10.8	5359	8.0	5422	7.2	5460	9.0	5502	5.5	5548	8.0
5296	11.2	5374	8.1	5423	7.0	5461	8.3	5503	5.3	5549	8.4
5297	11.4	5375	7.9	5424	9.0	5462	8.0	5504	5.6	5550	8.2
5298	10.8	5376	5.5	5425	9.2	5463	8.5	5505	9.6	5551	7.6
5299	10.1	5377	9.2	5428	10.2	5464	8.8	5506	10.0	5552	7.8
5315	5.5	5378	8.7	5429	11.1	5465	8.2	5510	7.9	5553	7.2
5316	5.0	5379	8.5	5430	6.2	5466	7.7	5511	8.0	5554	6.4
5317	7.6	5380	7.9	5431	7.4	5467	8.0	5512	7.7	5555	6.4
5318	11.5	5381	8.8	5432	8.8	5468	7.9	5513	8.3	5556	6.3
5319	11.2	5382	8.9	5433	9.0	5469	7.3	5514	8.0	5557	7.8
5320	11.4	5383	9.6	5434	10.2	5470	7.9	5515	8.2	5558	8.1
5321	8.0	5384	8.0	5435	9.9	5471*	7.2	5516	8.0	5559	7.7
5322	7.5	5385	7.9	5436	7.3	5472*	7.0	5517	8.2	5560	7.9
5323	8.9	5386	7.9	5437	7.9	5473	7.4	5518	7.8	5565	7.9
5324	8.9	5387	5.0	5438	9.1	5474	7.9	5519	11.4	5566	8.5
5325	11.5	5388	9.1	5439	8.8	5475	6.9	5520	11.3	5567	9.4
5326	10.0	5389	6.1	5440	8.2	5476	9.4	5521	11.0	5568	8.3
5327	6.5	5390	9.1	5441	8.0	5477	9.0	5525	7.6	5569	8.7
5328	9.2	5392	8.3	5442	7.9	5478	9.3	5526	8.1	5570	8.2

\* Denotes stream location; all others are lakes or ponds.

APPENDIX E (continued)

Listing of Dissolved Oxygen in Waters of the Northern Seward Peninsula and Vicinity, Alaska

LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)	LASL Location Number	Dissolved Oxygen (ppm)
5571	8.8	6004	9.4	6027	8.0	6051*	9.9	6169	9.5	6275	5.6
5572	6.3	6005	9.6	6028	9.9	6052*	8.6	6170	10.1	6276	8.2
5573	8.4	6006	10.4	6029	7.8	6053*	7.4	6174	9.7	6301	5.0
5574	6.9	6007	9.8	6030	8.2	6060*	5.1	6196	6.7	6302	7.5
5575	8.1	6008	8.1	6031	9.6	6070*	10.1	6210	8.5	6303	7.6
5576	8.8	6009	9.1	6032	8.7	6079	7.1	6211	9.9	6304	3.3
5577	7.8	6010	8.8	6033	8.4	6080	6.4	6236	9.4	6305	4.1
5578	8.9	6011	8.7	6034	8.7	6081	7.3	6237	7.7	6306	6.1
5581	8.4	6012	7.7	6035	7.3	6082	6.6	6250	9.5	6307	8.6
5582	8.9	6013	7.8	6036	7.1	6083	7.3	6251	8.3	6314	8.3
5589	8.3	6014	9.3	6037	8.6	6084	7.5	6252	10.7	6315	8.1
5590	7.4	6015	7.5	6038	8.3	6085	6.8	6253	7.8	6316	4.0
5591	6.7	6016	8.2	6039	7.8	6086	6.2	6254	10.9	6317	9.0
5592	8.8	6017	7.8	6040	7.9	6087	8.3	6265	11.5	6318	8.8
5593	9.3	6018	10.2	6041	9.0	6088	8.2	6266	9.1	6319	10.3
5594	8.2	6019	8.7	6049*	7.4	6092	11.1	6267	8.4	6320	9.1
5597	8.0	6020	8.3	6042	10.3	6093	10.9	6268	5.5	6321	10.2
5598	6.8	6021	7.2	6043	7.3	6127	9.9	6269	9.2	6335	6.3
5599	8.9	6022	8.7	6044	7.5	6130	8.6	6270	8.4	6336	8.3
5600	9.1	6023	9.4	6045*	7.5	6149	9.7	6271	4.3	6337	8.9
6001	7.3	6024	9.9	6046*	8.5	6151	9.1	6272	7.6	6366	4.5
6002	9.2	6025	8.7	6047*	9.5	6157	3.9	6273	8.5	6367	6.7
6003	10.4	6026	7.1	6050*	7.4	6168	10.1	6274	5.5	6368	8.5

\* Denotes stream location; all others are lakes or ponds.

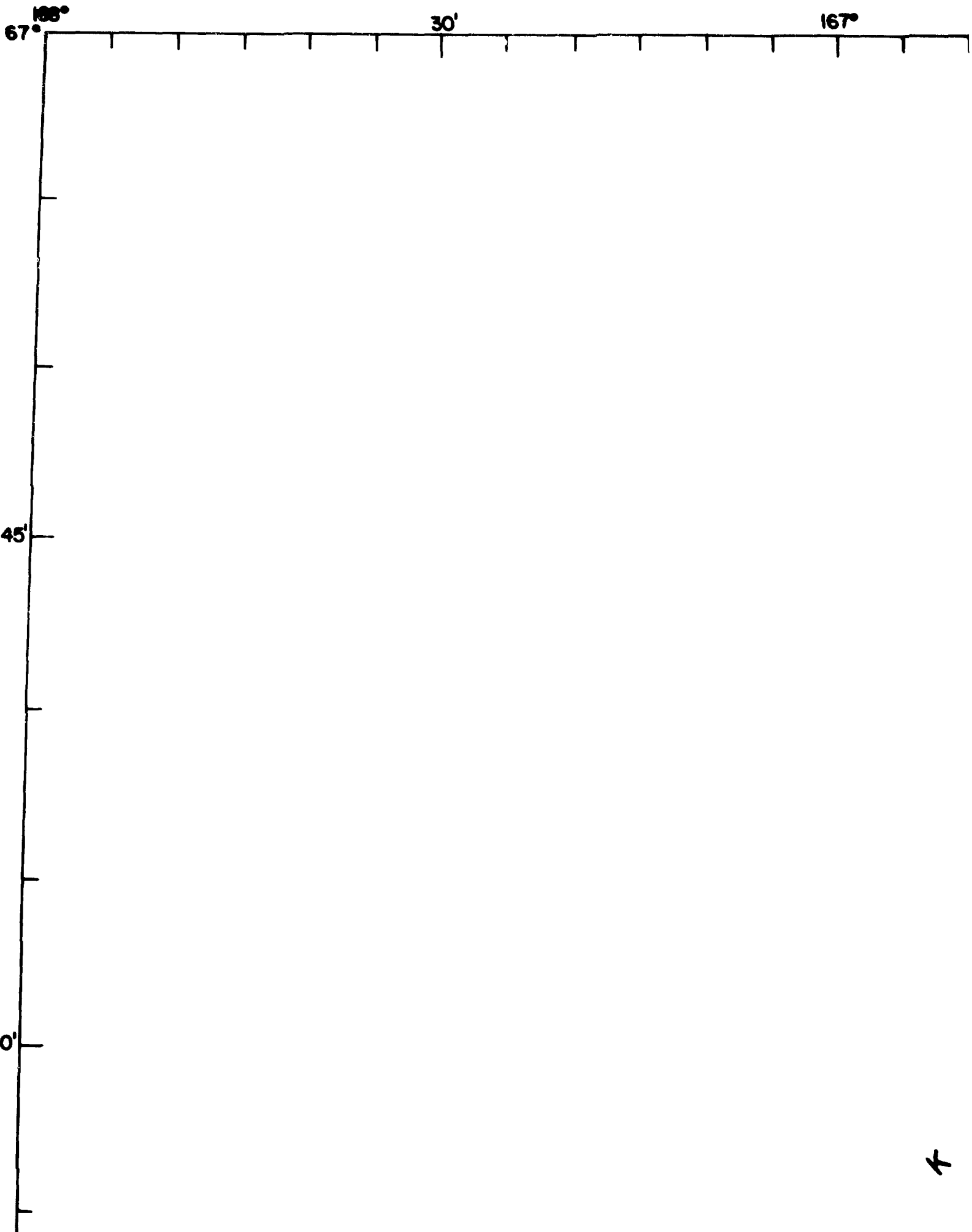


## REFERENCES CITED

- Aamodt, P. L., Hill, D. E., and Sharp, R. R., Jr., 1978, Uranium hydrogeochemical and stream sediment reconnaissance data release for the Noatak and portions of the Baird Mountains and Ambler River, NTMS quadrangles, Alaska (in progress).
- Balestrini, S. J., Balagna, J. P., and Menlove, H. O., 1975, Two specialized delayed-neutron detector designs for assays of fissionable elements in water and sediment samples, Nucl. Instrum. and Methods, v. 136, pp. 521-524.
- Beikman, H. M., and Lathram, E. H., 1976, Preliminary geologic map of northern Alaska, US Geol. Survey Misc. Field Studies map MF-789, scale 1:1 000 000.
- Boyle, R. W., Hornbrook, E. H. W., Allan, R. J., Dyck, W., and Smith, A. Y., 1971, Hydrogeochemical methods--application in the Canadian Shield, CIM Bull. 64 (Nov.), 60-71.
- Cheadle, J., III, 1977, Computer program for Universal Transverse Mercator map projection, GJBX-54(77), US ERDA, Grand Junction, CO, 11 p.
- Cobb, E. H., 1972a, Metallic mineral resources map of the Selawik quadrangle, Alaska, US Geol. Survey Misc. Field Studies map MF-406, scale 1:250 000.
- Cobb, E. H., 1972b, Metallic mineral resources map of the Kotzebue quadrangle, Alaska, US Geol. Survey Misc. Field Studies map MF-421, scale 1:250 000.
- Detterman, R. L., 1973, Mesozoic sequence in arctic Alaska: in Arctic Geology, Am. Assoc. Petrol. Geol. Memoir 19, pp. 376-387.
- Dyck, W., 1975, Geochemistry applied to uranium exploration: in Uranium Exploration '75, Geol. Survey Canada Paper 75-26, Info. Canada, Ottawa, pp. 33-47.
- Eakins, G. R., 1975, Investigation of Alaska's uranium potential, Part I, GJO-1627, US DOE Grand Junction, CO, 437 p.
- Eakins, G. R., 1977, Investigations of Alaska's uranium potential, Part I, reconnaissance program, west-central Alaska and Copper River basin, GJBX-28(77), US DOE Grand Junction, CO, 58 p.
- Elliott, R. L., and Miller, T. P., 1969, Results of stream sediment sampling in the western Candle and southern Selawik quadrangles, Alaska, US Geol. Survey Open File Report, 61 p.
- Fairbridge, R. W. (Ed.), 1972, The Encyclopedia of Geochemistry and Environmental Sciences, Van Nostrand Reinhold Co., 1321 p.
- Ferriars, O. J., Jr., 1965, Permafrost map of Alaska, US Geol. Survey Misc. Geol. Inv. map I-445, scale 1:2 500 000.

- Garrett, R. G., and Lynch, J. J., 1976, A comparison of neutron activation delayed neutron counting versus fluorometric analyses in large-scale geochemical exploration for uranium (with discussion): in Exploration for Uranium Ore Deposits, IAEA-SM-208/30, Vienna, pp. 321-334.
- Hues, A. D., Henicksman, A. L., Ashley, W. H., and Romero, D., 1977, The fluorometric determination of uranium in natural waters at the Los Alamos Scientific Laboratory, Los Alamos, NM, GJBX-24(77), US DOE Grand Junction, CO, 11 p.
- Lathram, E. H., 1973, Tectonic framework of northern and central Alaska: in Arctic Geology, Am. Assoc. Petrol. Geol. Memoir 19, pp. 351-360.
- Levinson, A. A., 1974, Introduction to Exploration Geochemistry, Applied Publishing Ltd., Maywood, IL, 614 p.
- Matzko, J. J., and Freeman, V. L., 1963, Summary of reconnaissance for uranium in Alaska, 1955: in Contributions to Economic Geology of Alaska, US Geol. Survey Bull. 1155, pp. 33-49.
- McCulloch, D. S., Taylor, D. W., and Rubin, M., 1965, Stratigraphy, nonmarine mollusks, and radiometric dates from Quaternary deposits in the Kotzebue Sound area, western Alaska, Jour. Geology, v. 73, pp. 442-453.
- Miller, T. P., 1972, Potassium-rich alkaline intrusive rocks of western Alaska, Geol. Soc. Am. Bull., v. 83, pp. 2111-2128.
- Miller, T. P., and Anderson, L. A., 1969, Airborne radioactivity and total intensity magnetic survey of the southern Kobuk-Selawik Lowland, western Alaska, US Geol. Survey Open File Report, 6 p.
- National Oceanic and Atmospheric Administration, 1976, Climatological data, Alaska, monthly summaries, July (no. 7) and August (no. 8), and annual summary (no. 13), US Dept. of Commerce, Env. Data Serv., v. 62.
- Patton, W. W., Jr., 1973, Reconnaissance geology of the northern Yukon-Koyukuk province, Alaska, US Geol. Survey Prof. Paper 774A, 17 p.
- Patton, W. W., Jr., and Miller, T. P., 1968, Regional geologic map of the Selawik and southeastern Baird Mountains quadrangles, Alaska, US Geol. Survey Misc. Geol. Inv. map I-530, scale 1:250 000.
- Patton, W. W., Jr., and Tailleur, I. L., 1977, Evidence in the Bering Strait region for differential movement between North America and Eurasia, Geol. Soc. Am. Bull., v. 88, pp. 1298-1304.
- Patton, W. W., Jr., Miller, T. P., and Tailleur, I. L., 1968, Regional geologic map of the Shungnak and southern part of the Ambler River quadrangles, Alaska, US Geol. Survey Misc. Geol. Inv. map I-554, scale 1:250 000.
- Pewe, T. L., 1975, Quaternary geology of Alaska, US Geol. Survey Prof. Paper 835.

- Sainsbury, C. L., 1974, Geologic map of the Bendeleben quadrangle, Seward Peninsula, Alaska, The Mapmakers, Anchorage, AK, 37 p plus map, scale 1:250 000.
- Sainsbury, C. L., Coleman, R. G., and Kachadoorian, R., 1970, Blueschist and related greenschist facies rocks of the Seward Peninsula, Alaska, US Geol. Survey Prof. Paper 700B, pp. B33-B42.
- Selkregg, L. L. (Ed.), 1976, Alaska regional profiles, northwest region, Univ. of Alaska, Arctic Environmental Information and Data Center, College, AK, 265 p.
- Sharp, R. R., Jr., and Aamodt, P. L., 1976, Uranium concentrations in natural waters, South Park, Colorado, GJBX-28(76), US DOE Grand Junction, CO, 34 p.
- Sharp, R. R., Jr., and Hill, D. E., 1978, Uranium concentrations in stream waters and sediments from selected sites in the eastern Seward Peninsula, Koyukuk, and Charley River areas, and across south-central Alaska, LA-6649-MS, Los Alamos Scientific Laboratory, Los Alamos, NM, 39 p.
- Smith, P. S., 1930, Mineral industry of Alaska in 1927, US Geol. Survey Bull. 810, pp. 1-64.
- Texas Instruments, Inc., 1975, Airborne geophysical survey, Copper River and Seward-Selawik areas, Alaska, GJO-165], US DOE Grand Junction, CO, 8 chapters plus appendixes, maps, and stacked radiometric and aeromagnetic profiles.
- Wahrhaftig, C., 1965, Physiographic divisions of Alaska, US Geol. Survey Prof. Paper 482, 51 p.



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SHISHMAREF

30'

100'

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# PLATE I

30'

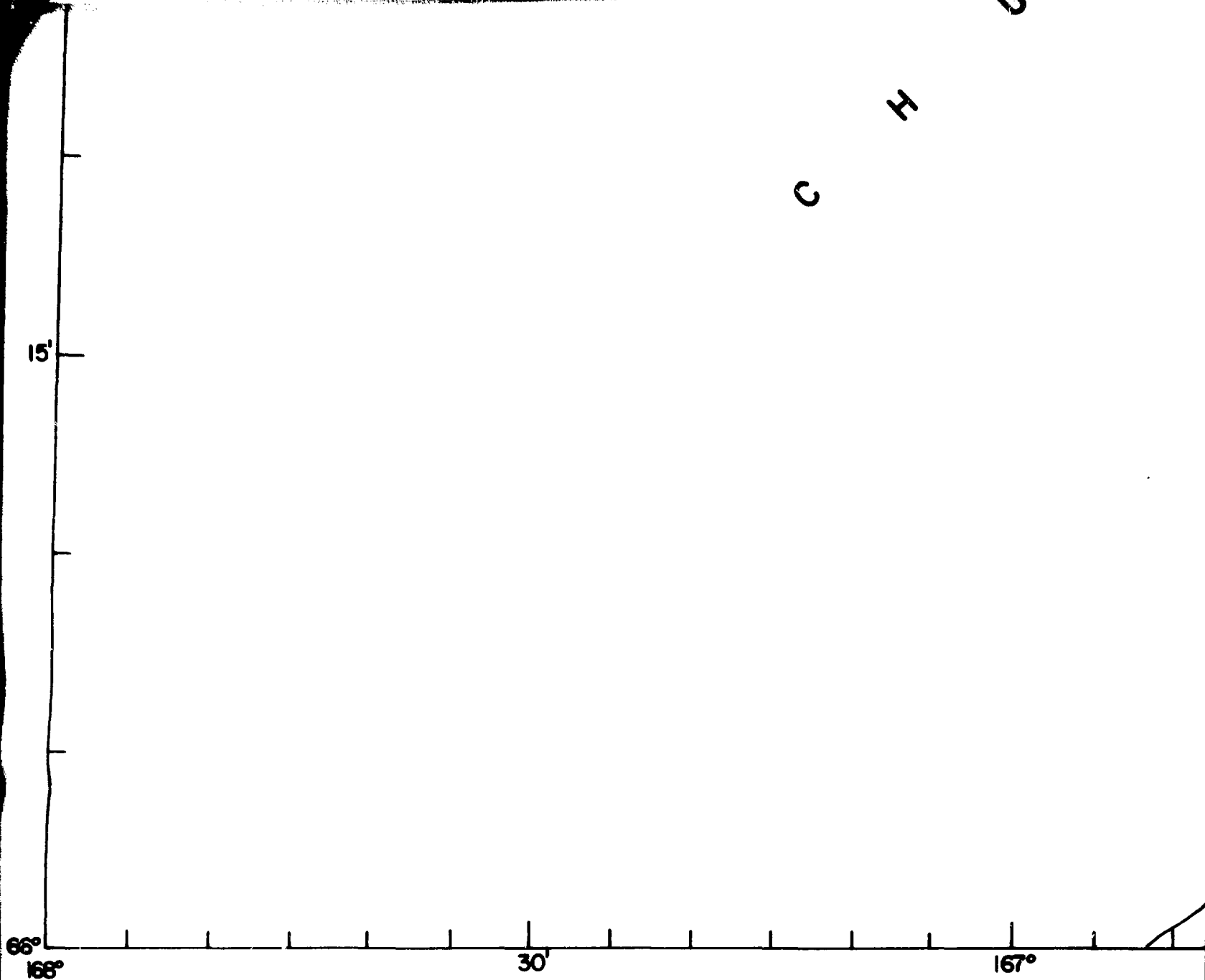
165°  
67°

45'

30'

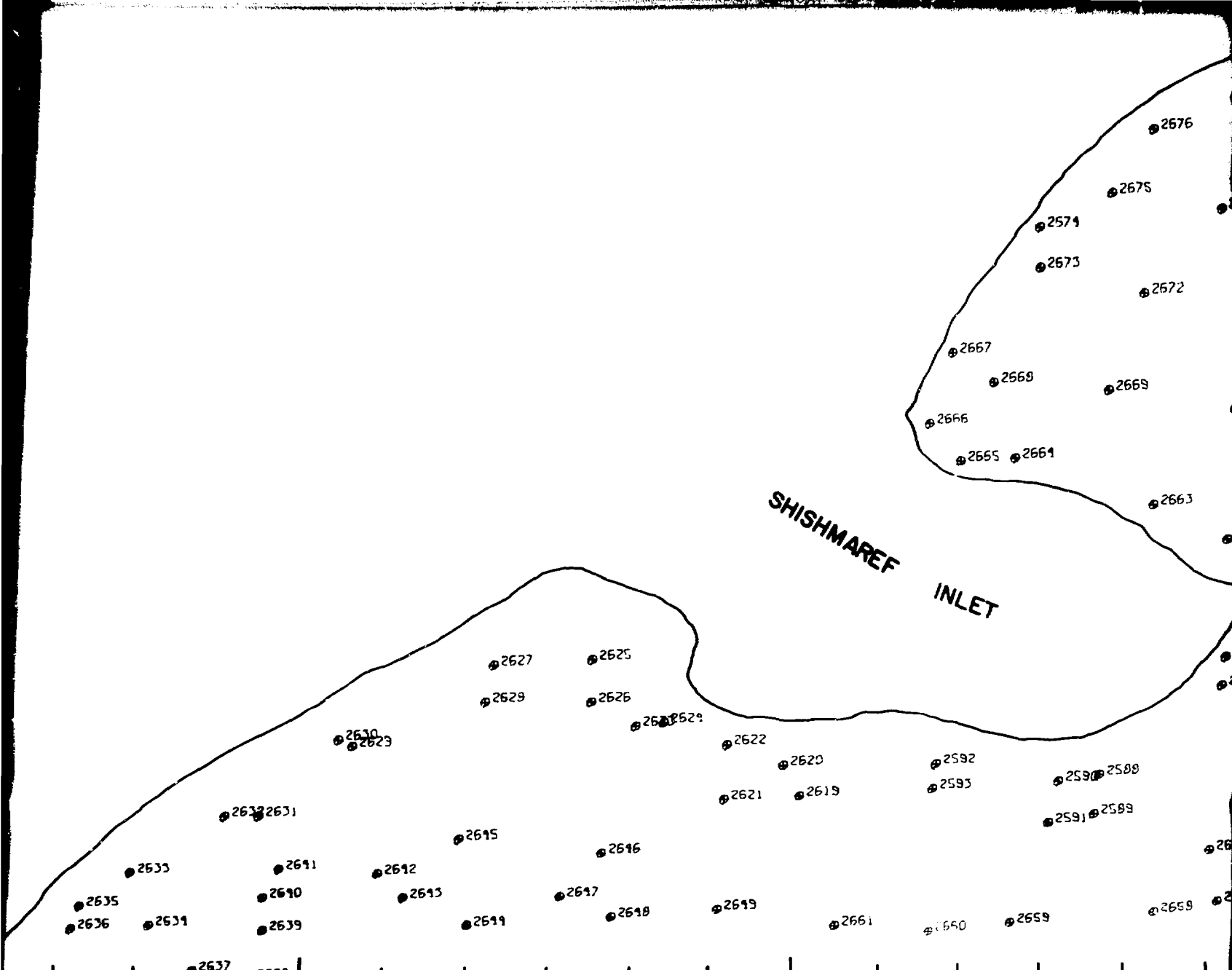
A





NURE HYDROGE

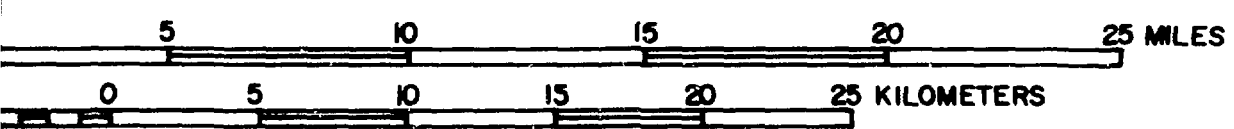
THE AREA C



30'

166°

SCALE 1:250 000

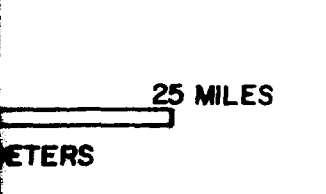
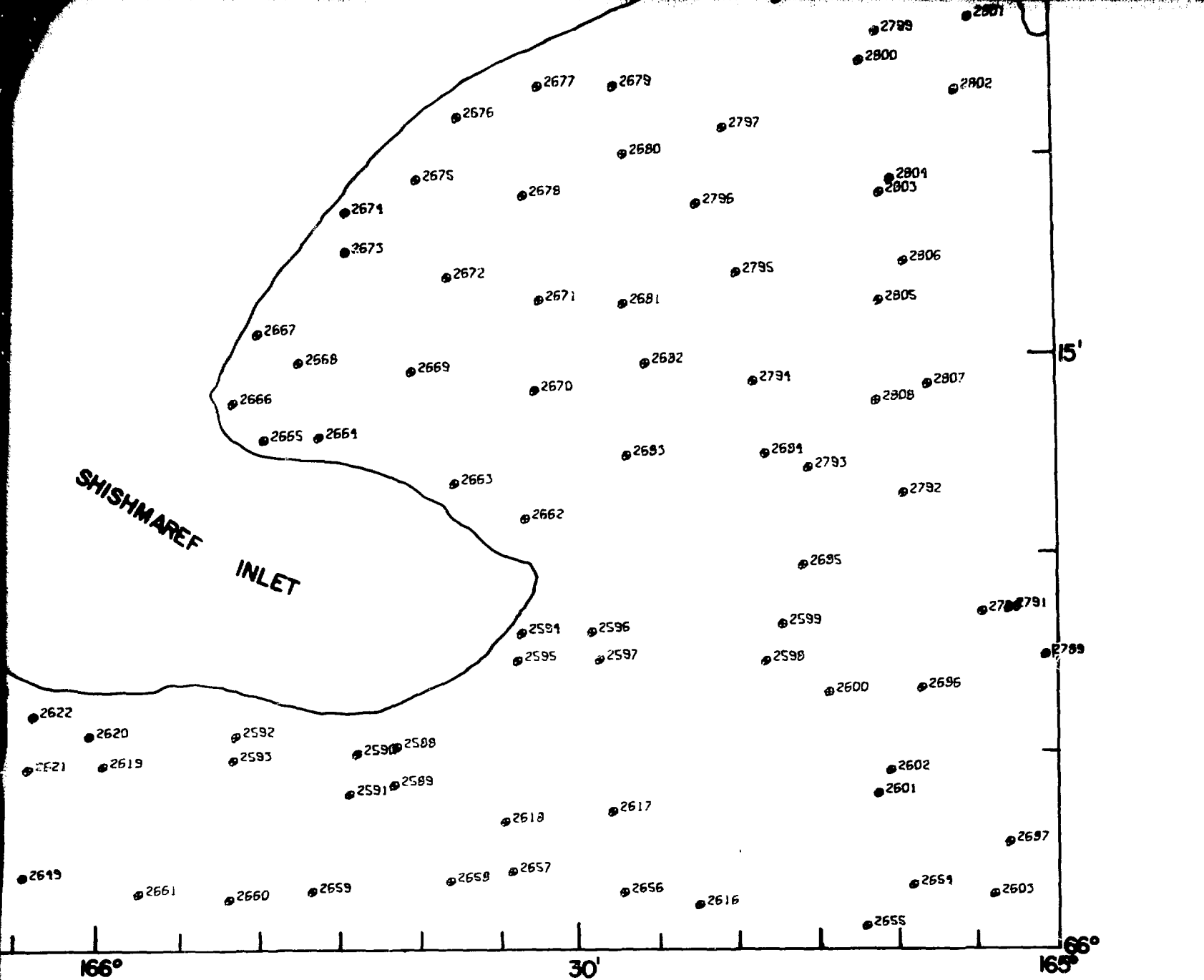


# PLATE I

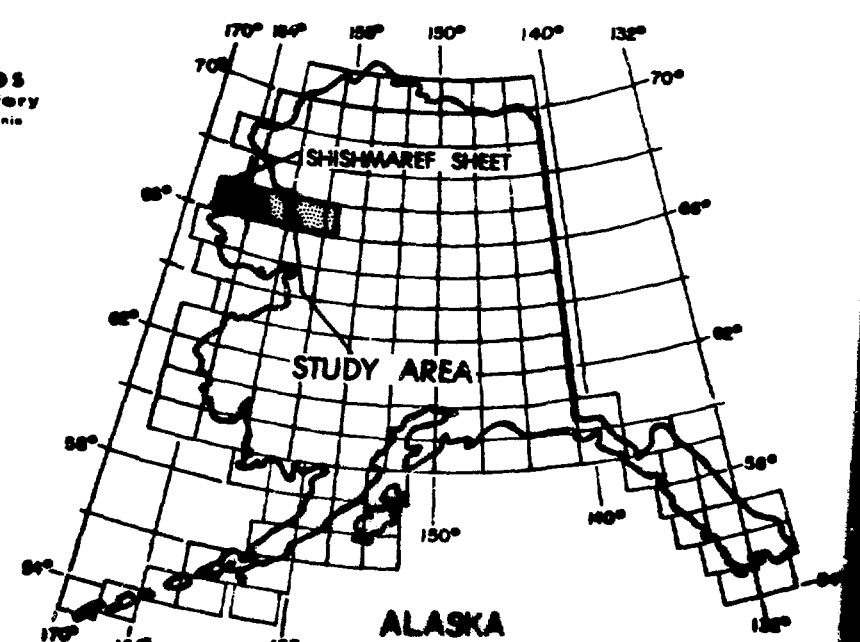
**ORGANIC AND STREAM/LAKE SEDIMENT  
SAMPLE LOCATIONS  
IN**

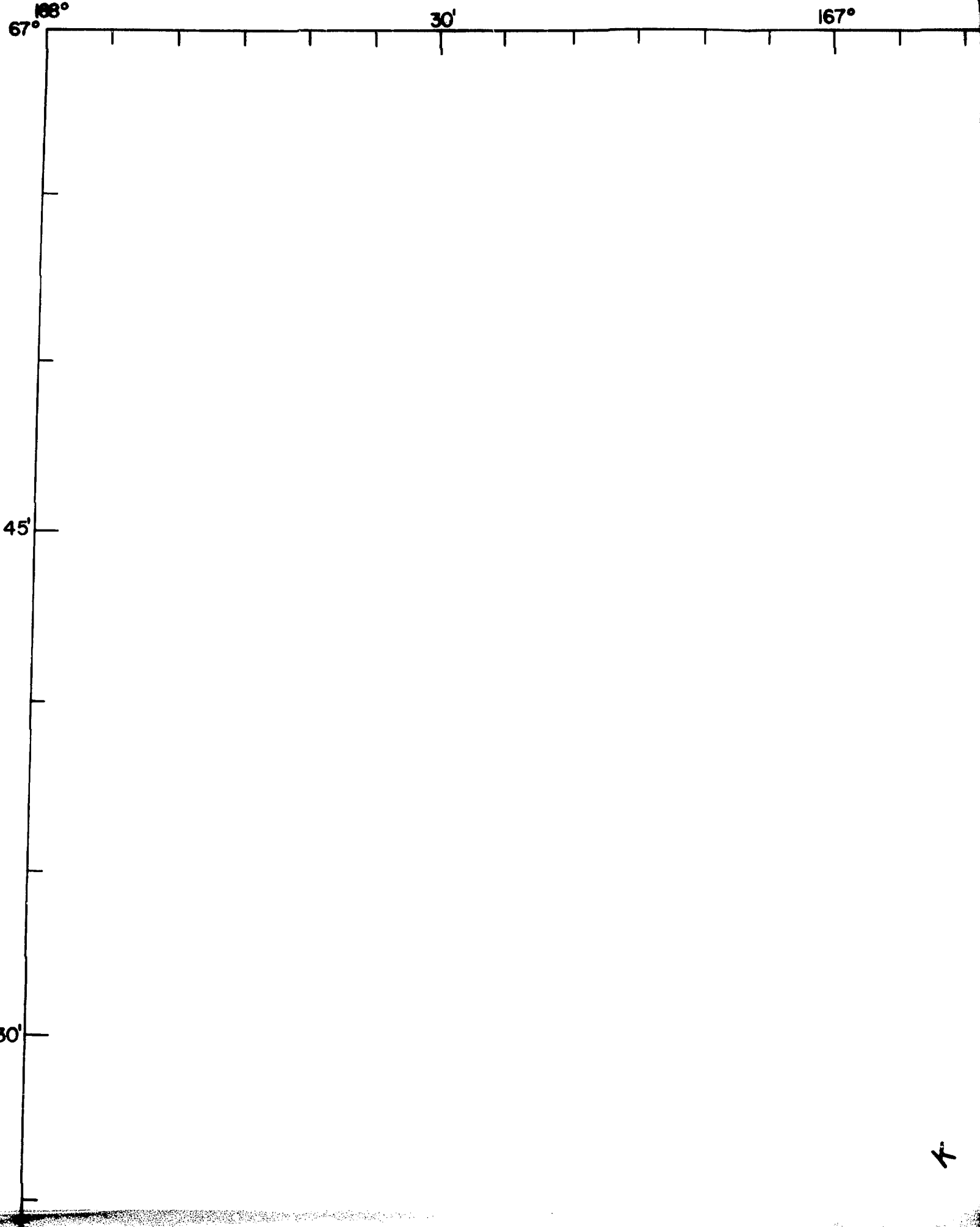
**THE SHISHMAREF QUADRANGLE  
WARD PENINSULA, ALASKA**





SEDIMENT  
RANGLE





4

# SHISHMAREF

67°

30'

156°

T

C

H

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E

A

# PLATE I-A

30'

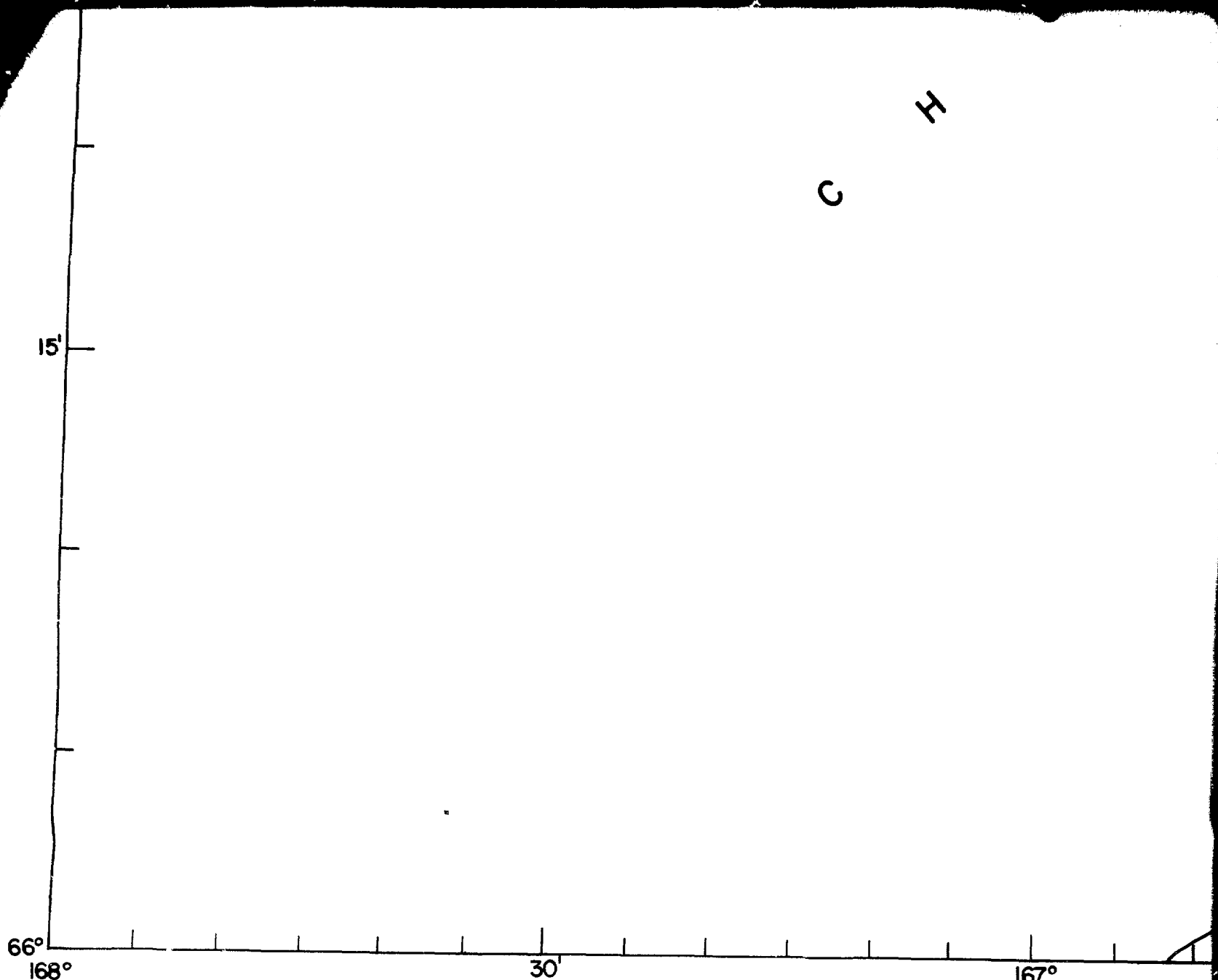
165°  
67°

A

45'

30'

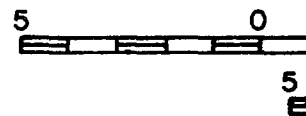




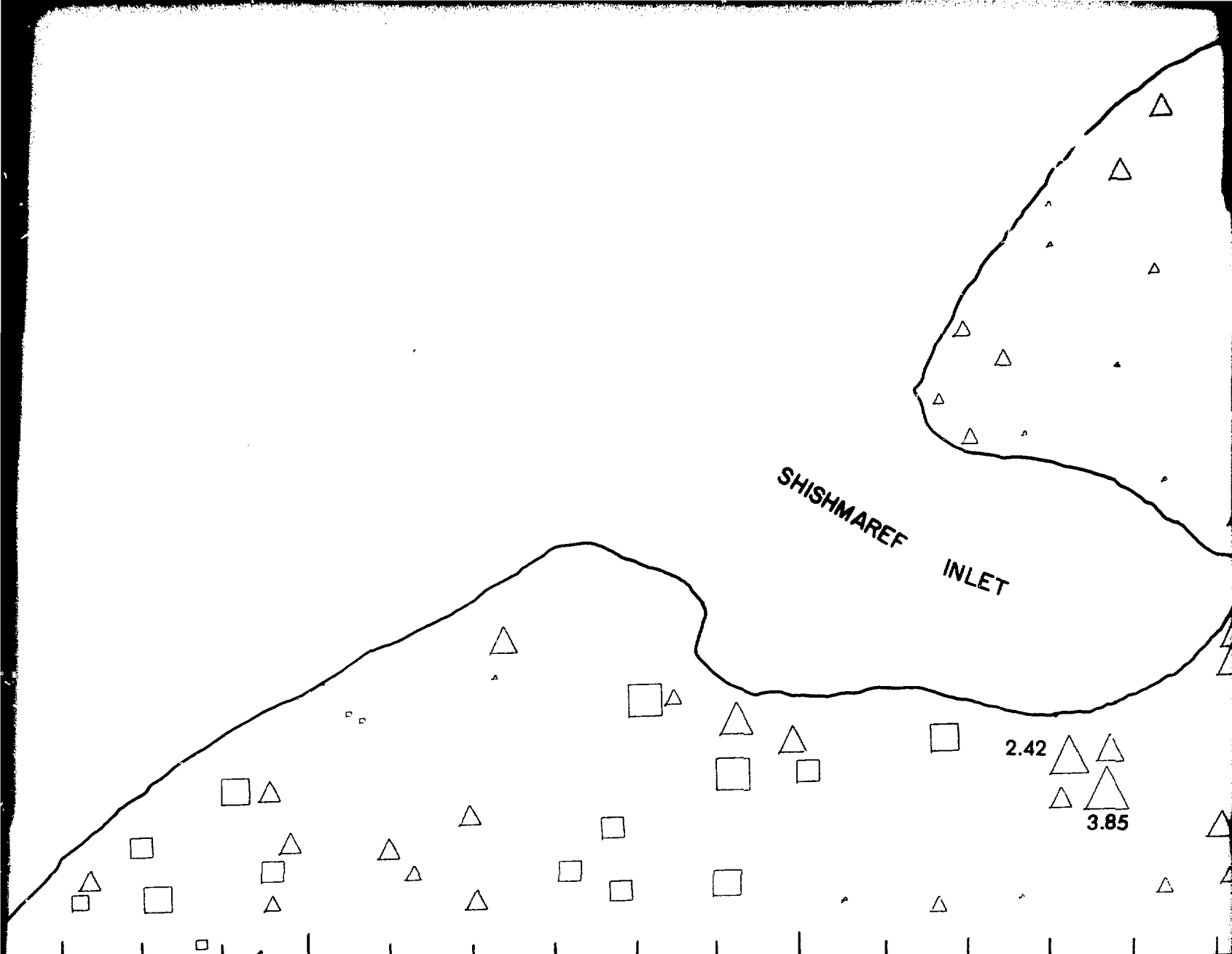
LEGEND

NATURAL LAKE WATER	SURFACE STREAM WATER	U (ppb)
▲	◻	≤ 0.01
△	◻	>0.01 - 0.03
△	◻	0.04 - 0.15
△	◻	0.16 - 0.49
△	◻	0.50 - 0.99
△	◻	1.0 - 1.99
△	◻	2.0 - 2.99
△	◻	≥ 3.0

3.85 The numbers printed next to the symbols for the two largest concentration intervals are the measured uranium concentrations, in ppb, for those samples.



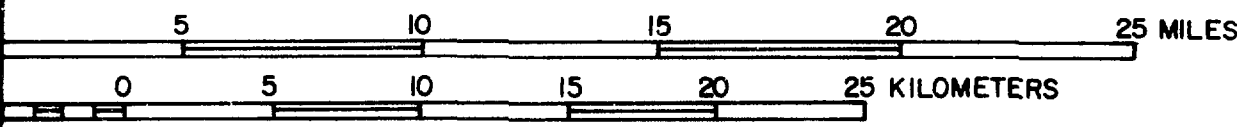
URANIUM  
THE AREA



30'

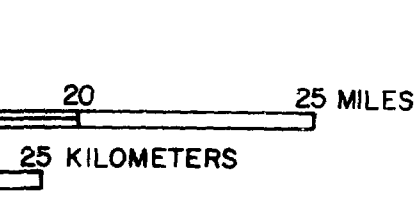
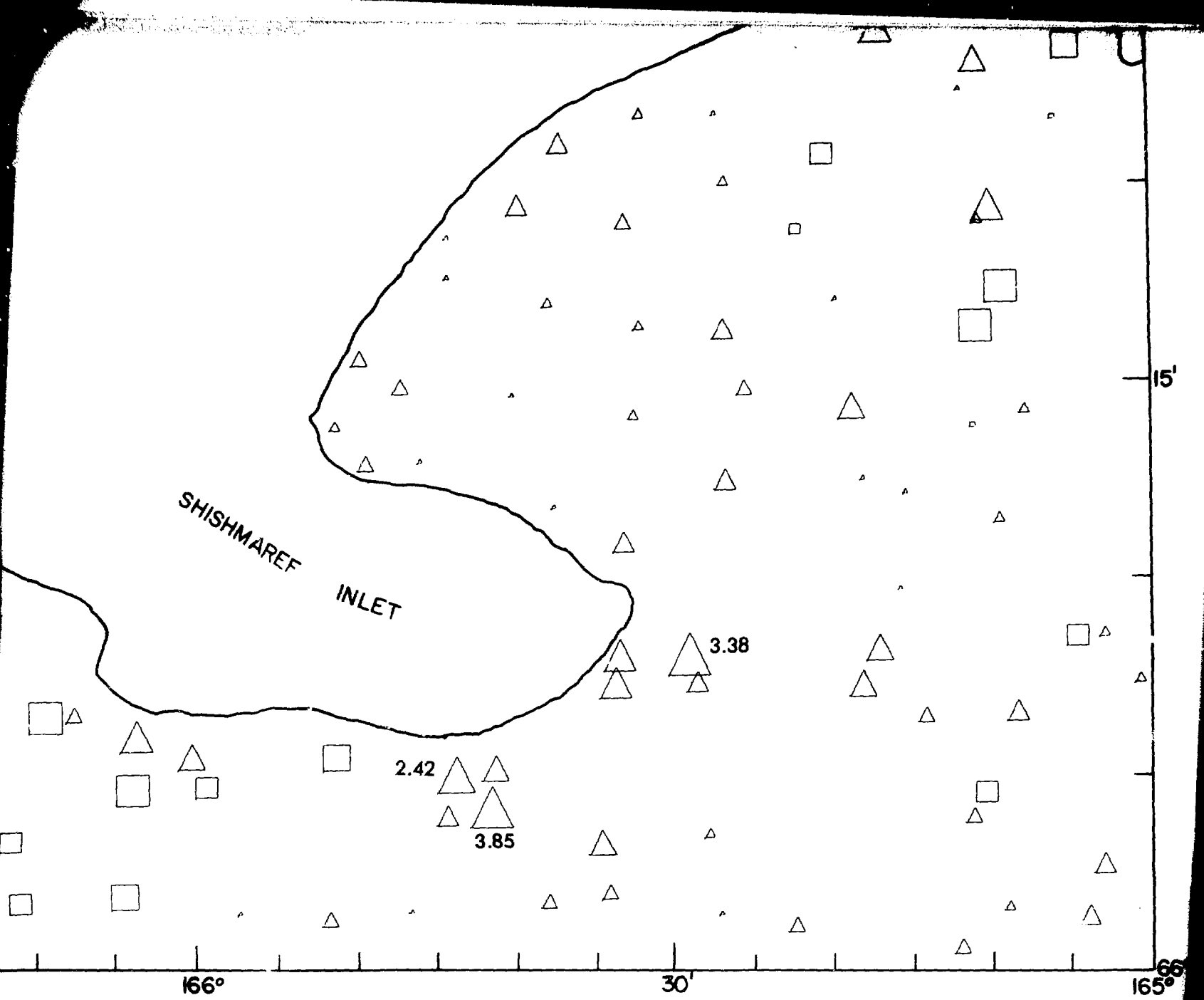
166°

SCALE 1:250 000



# PLATE I-A

CONCENTRATIONS (ppb) IN WATERS  
 IN  
 OF THE SHISHMAREF QUADRANGLE  
 SEWARD PENINSULA, ALASKA



N WATERS  
QUADRANGLE  
SKA

67° 168°

30'

167°

45'

30'

↑



# SHISHMAREF

167°

30'

169°

A

C

H

I

S

E

# PLATE I-B

30'

165°

67°

E

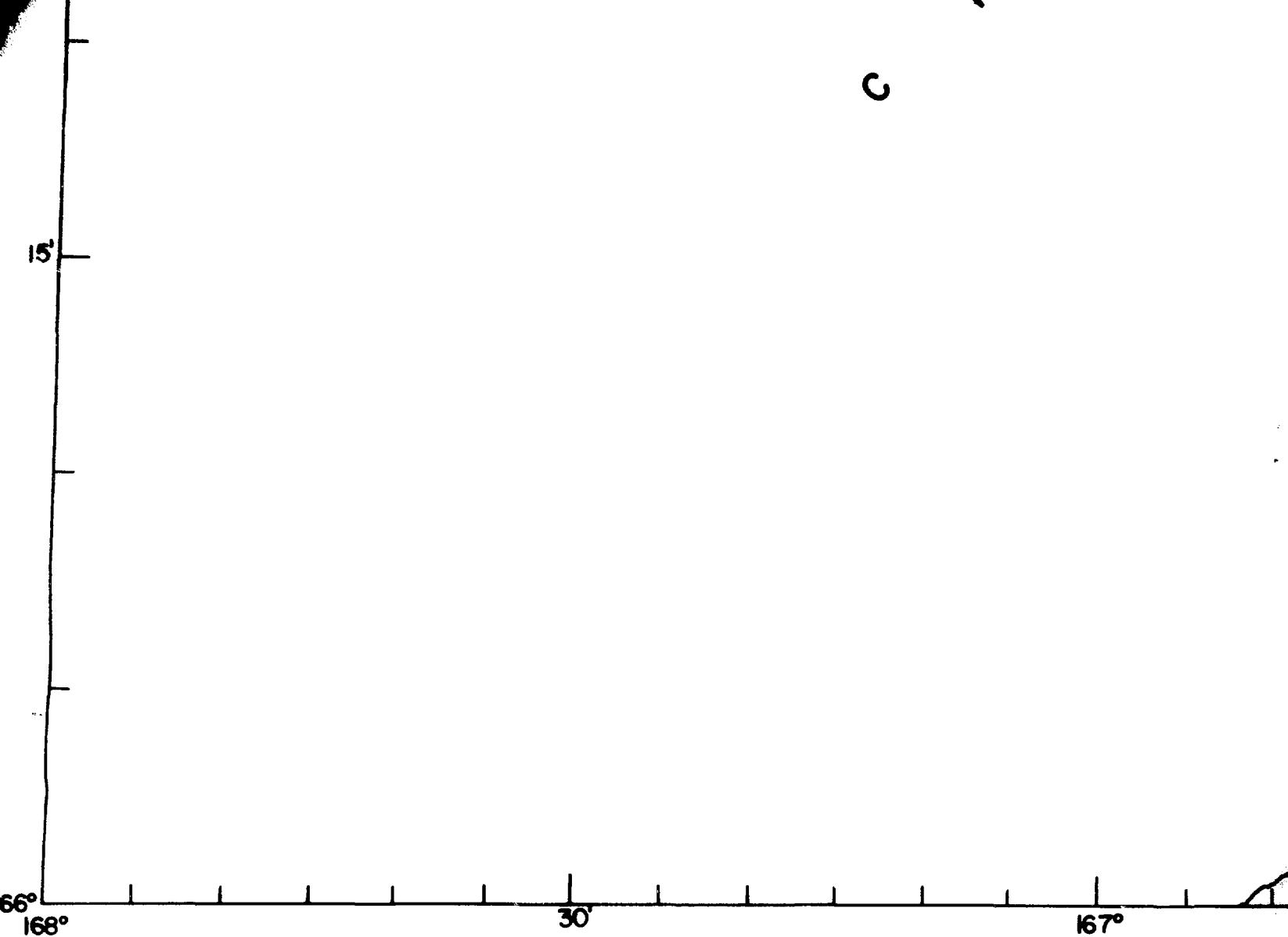
A

45'

30'



C

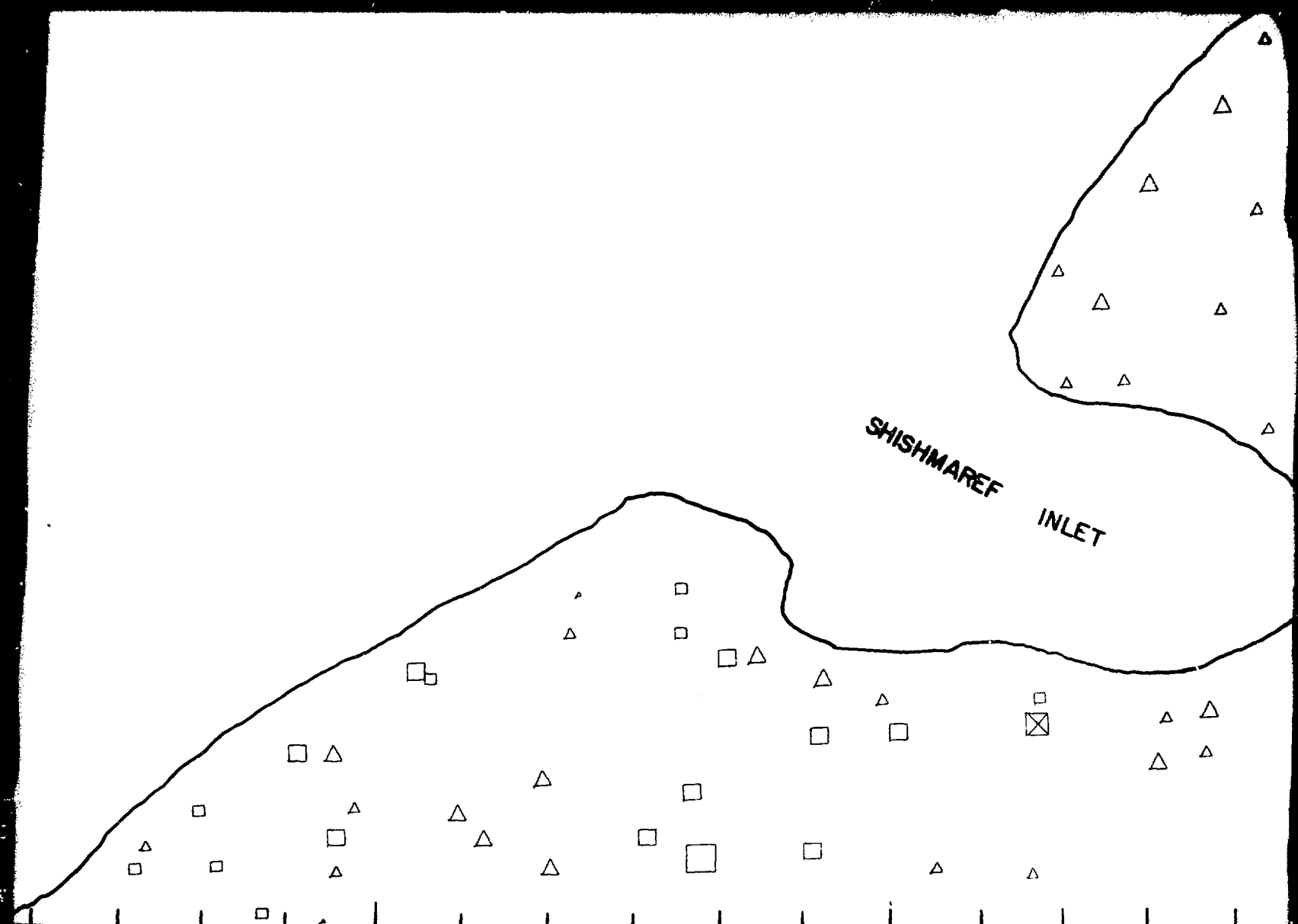


LEGEND

NATURAL LAKE SEDIMENT	WET STREAM SEDIMENT	DRY STREAM SEDIMENT	U (ppm)
△	□	■	≤ 1.25
△	□	▣	1.26 - 2.50
△	□	⊠	2.51 - 3.25
△	□	⊠	3.26 - 4.00
△	□	⊠	4.01 - 5.50
△	□	⊠	5.51 - 8.00
△	□	⊠	8.01 - 16.00
△	□	⊠	> 16.00

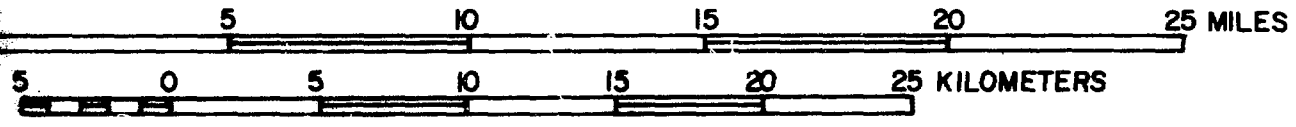


URANIUM OF  
THE AREA



30' 166°

SCALE 1:250 000



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of the United

PLATE I-B

CONCENTRATIONS (ppm) IN SEDIMENTS  
IN  
OF THE SHISHMAREF QUADRANGLE  
SEWARD PENINSULA, ALASKA

SHISHMAREF  
INLET

166°

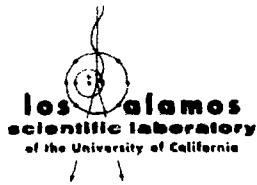
30'

165°

5'

20 25 MILES

25 KILOMETERS



SEDIMENTS

QUADRANGLE

KA

67° 165°

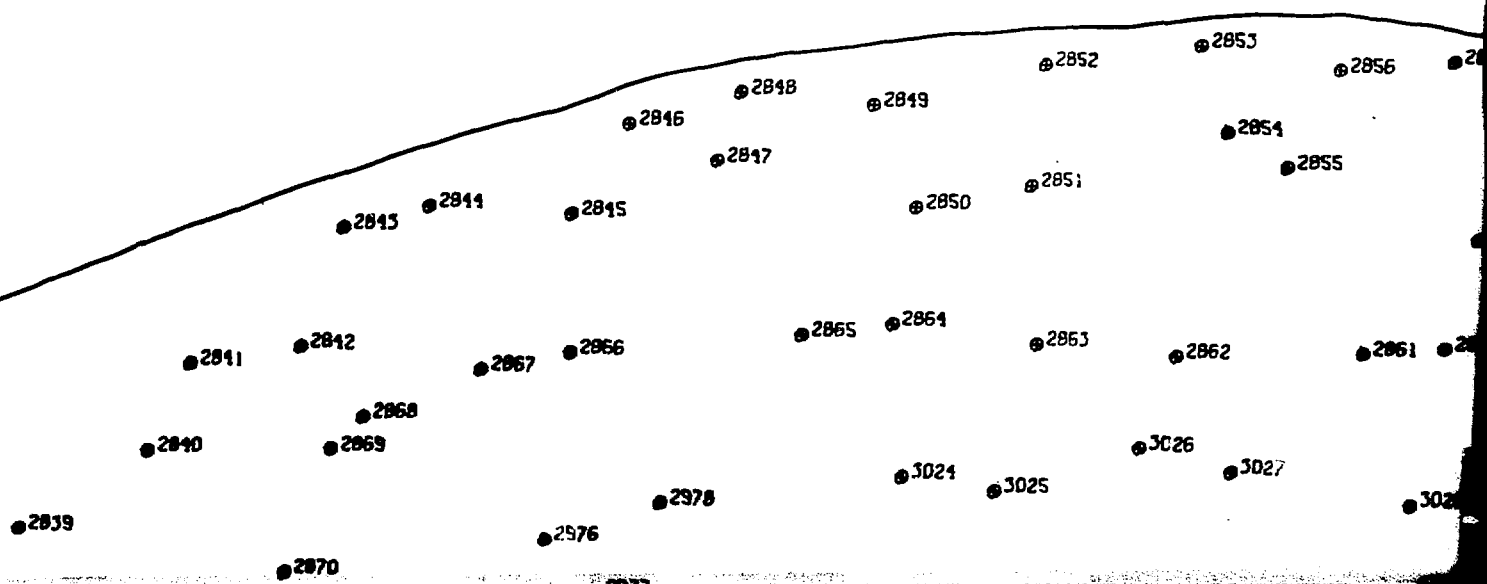
30'

164°

45'

C H U K C H I  
S E A

30'



# KOTZEBUE

30'

163°

K  
O  
T  
Z  
E  
B  
U  
E

● 2857

⊙ 2858

● 2859

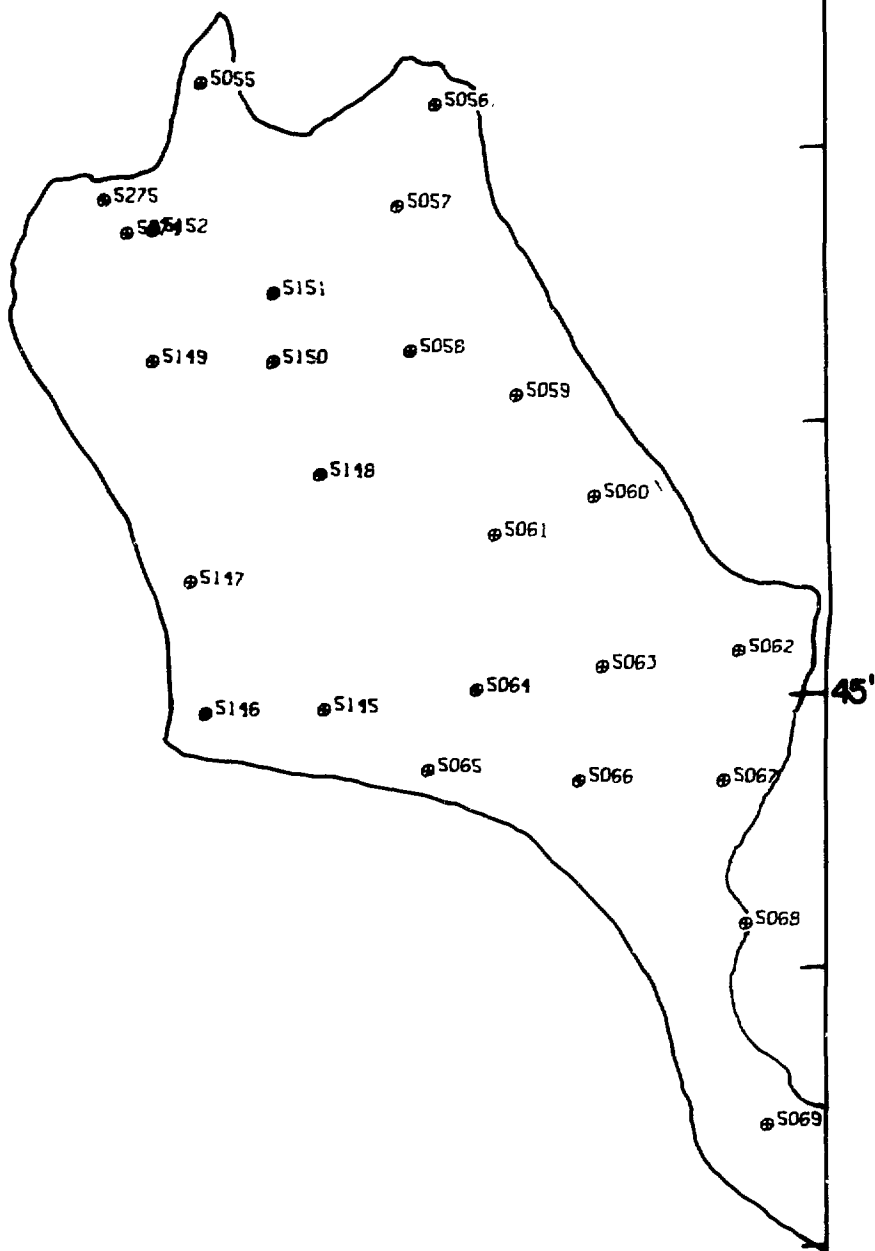
● 2860

● 3029

# PLATE II

30'

162° 67'

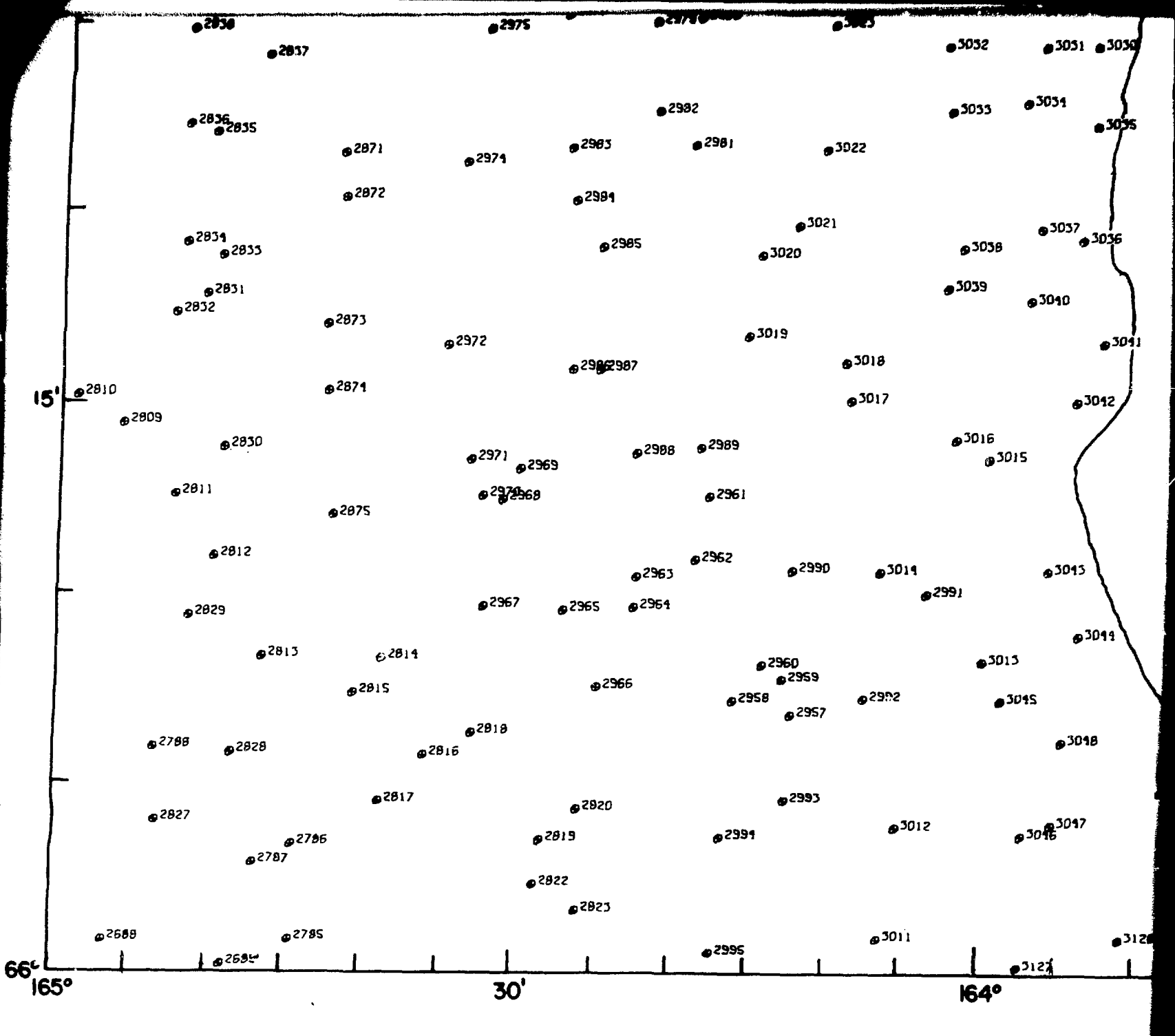


E

S

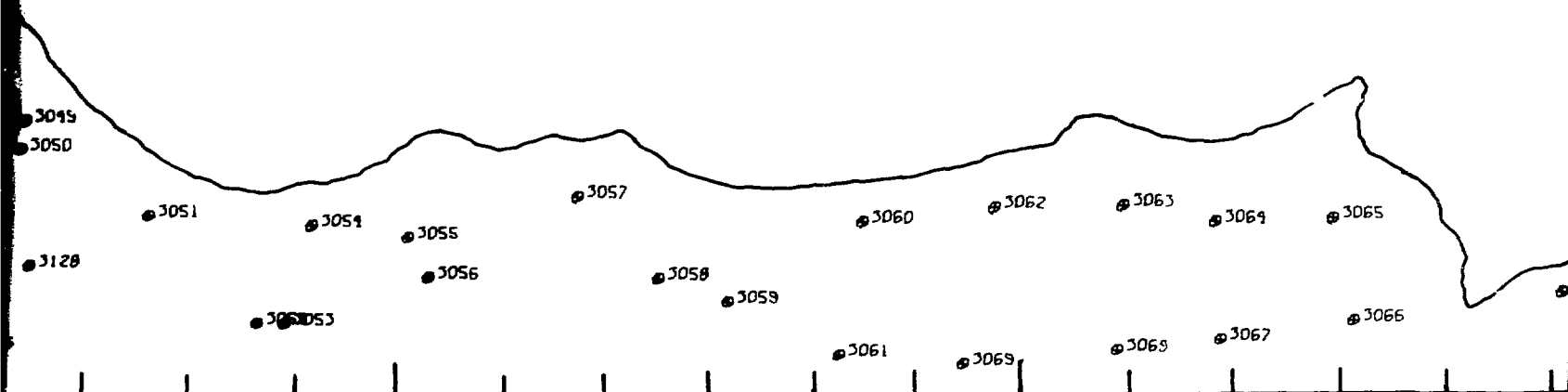
O





NURE HYDROGE

THE AREA



SCALE 1:250 000

0 5 10 15 20 25 MILES

0 5 10 15 20 25 KILOMETERS



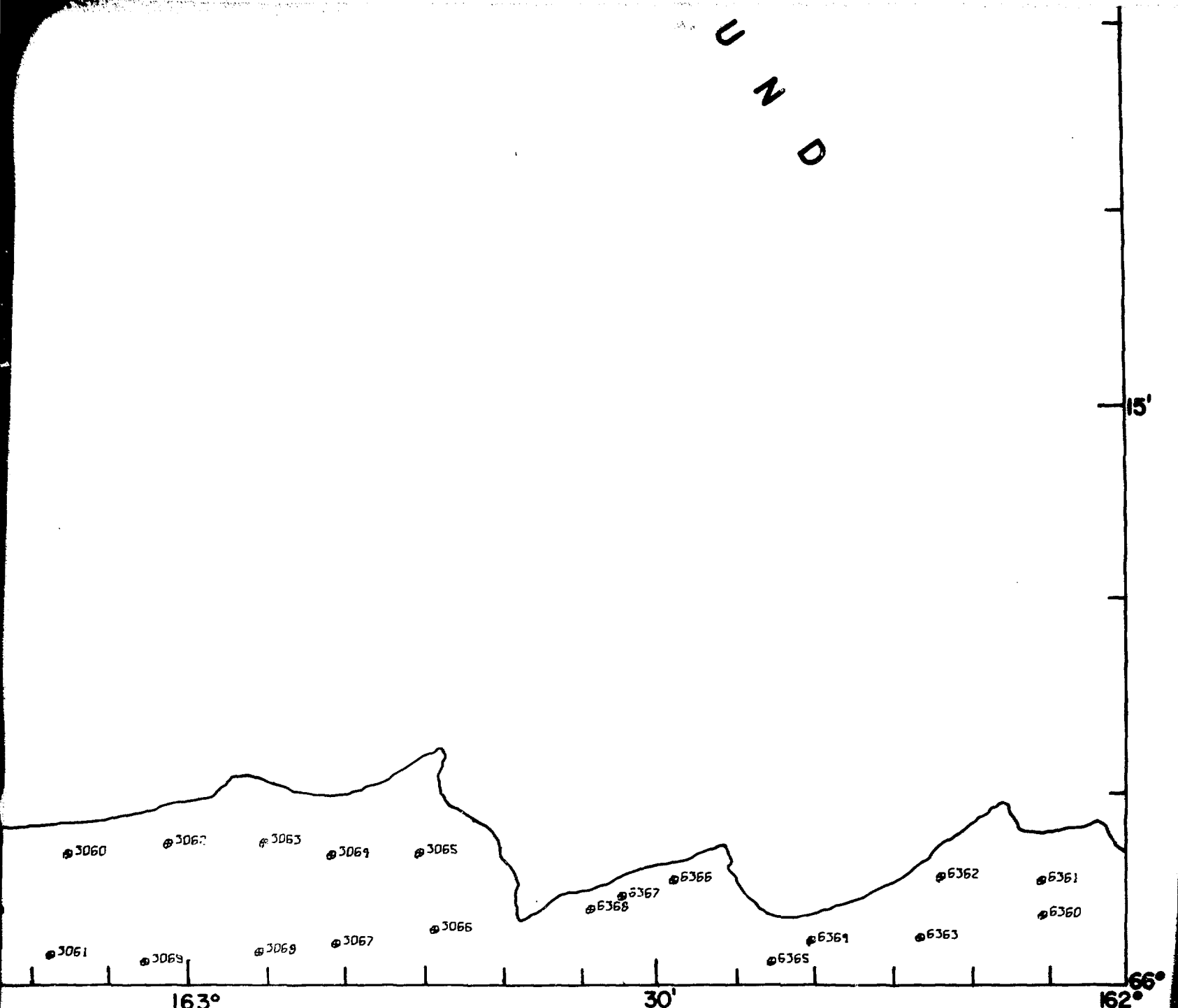
## PLATE II

INORGANIC AND STREAM/LAKE SEDIMENT  
SAMPLE LOCATIONS

IN

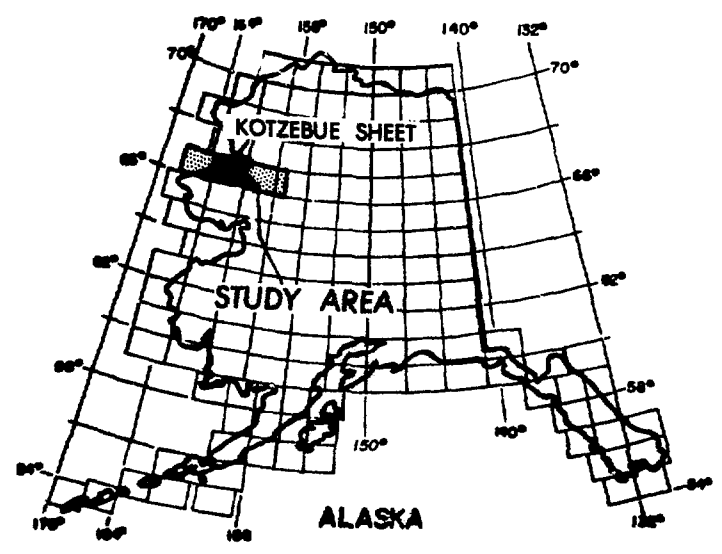
OF THE KOTZEBUE QUADRANGLE  
SEWARD PENINSULA, ALASKA

U  
N  
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Los Alamos  
scientific laboratory  
of the University of California

LAKE SEDIMENT  
DRANGLE



67° 165°

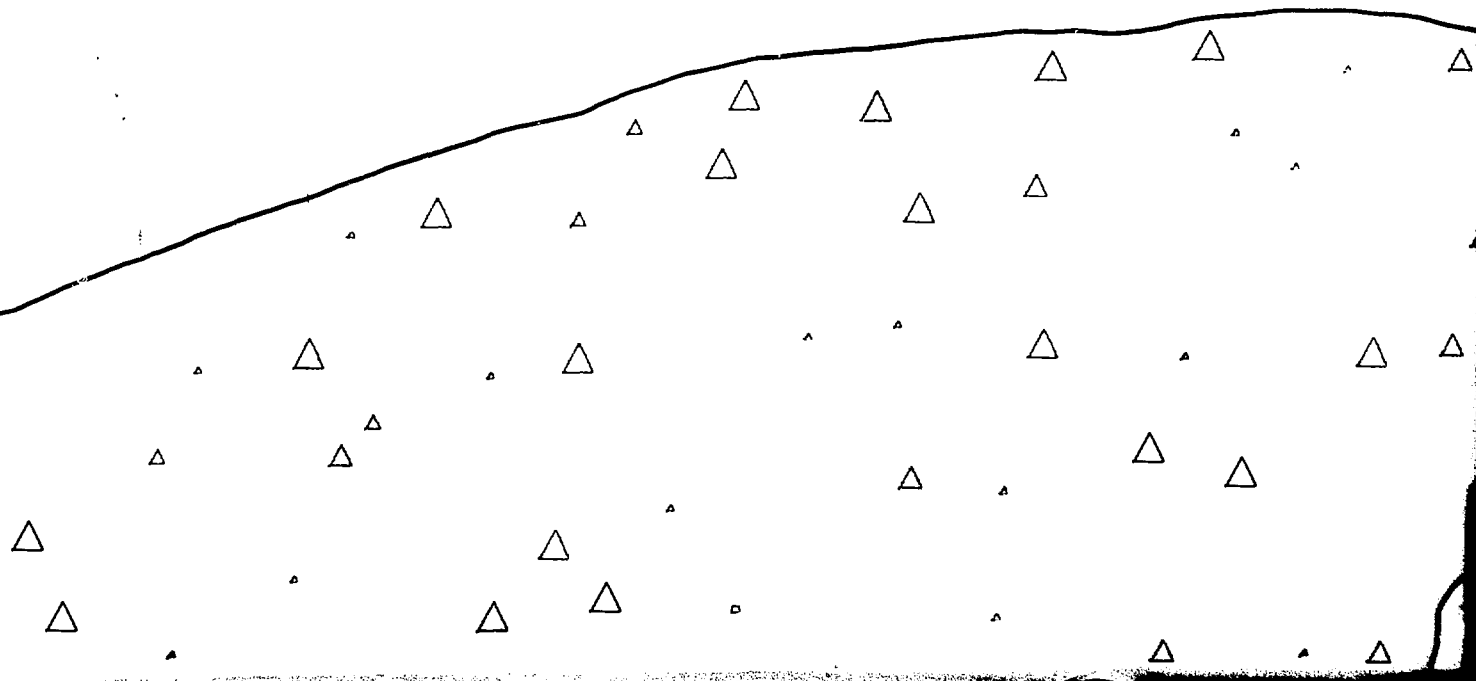
30'

164°

45'

C H U K C H I  
S E A

30'



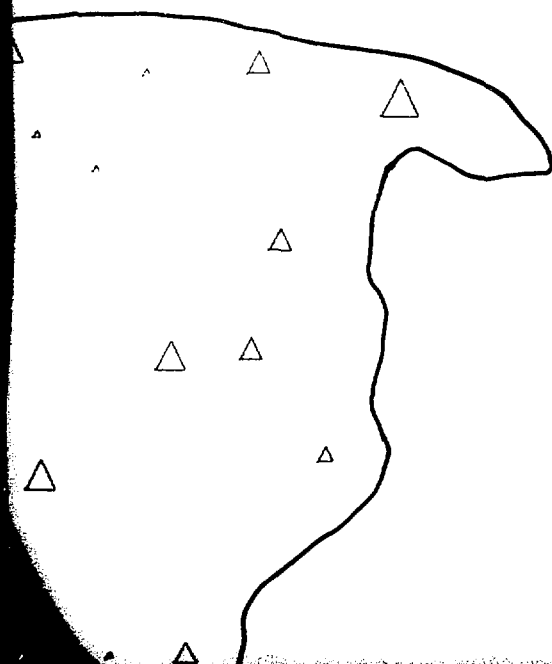
# KOTZEBUE

30'

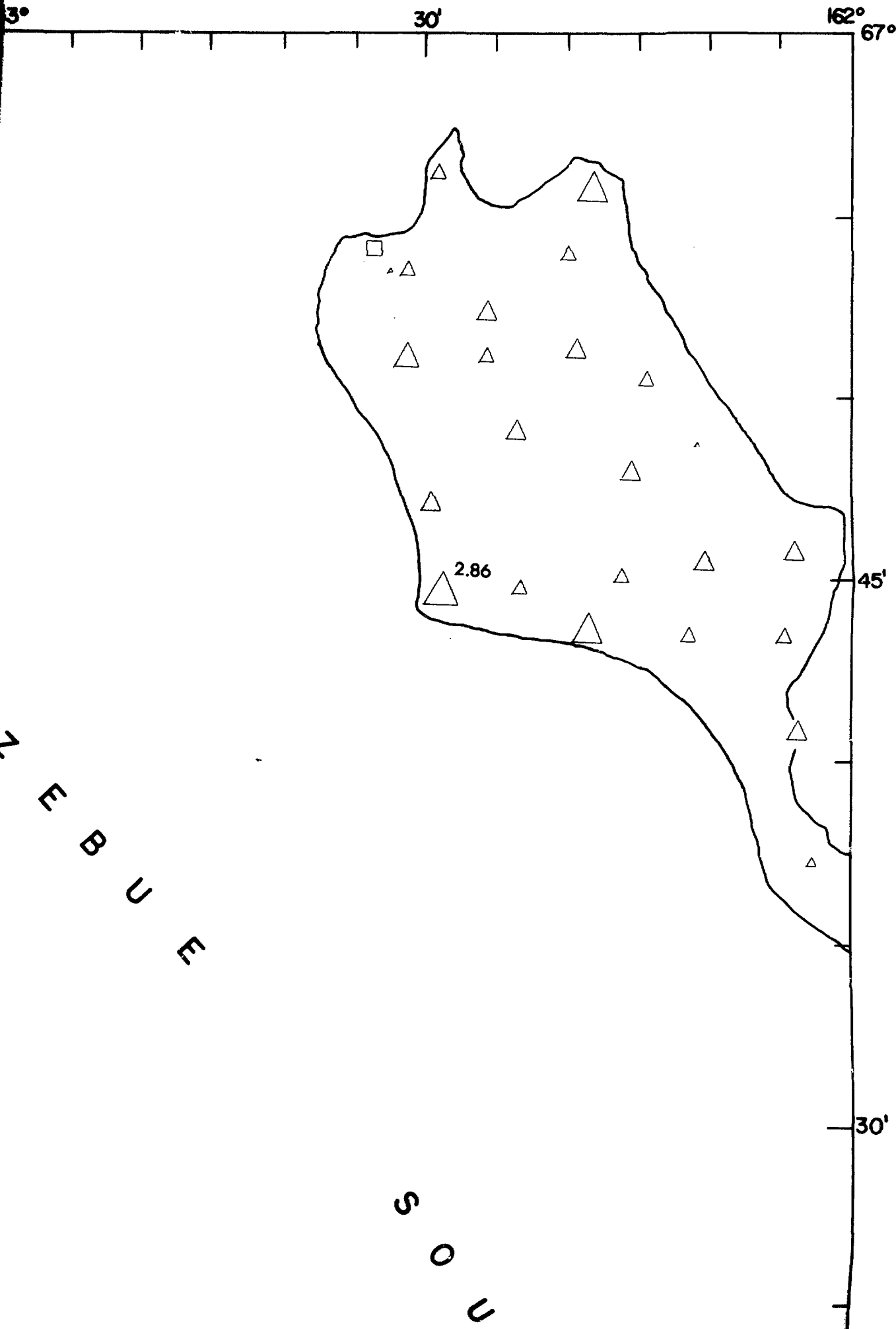
163°

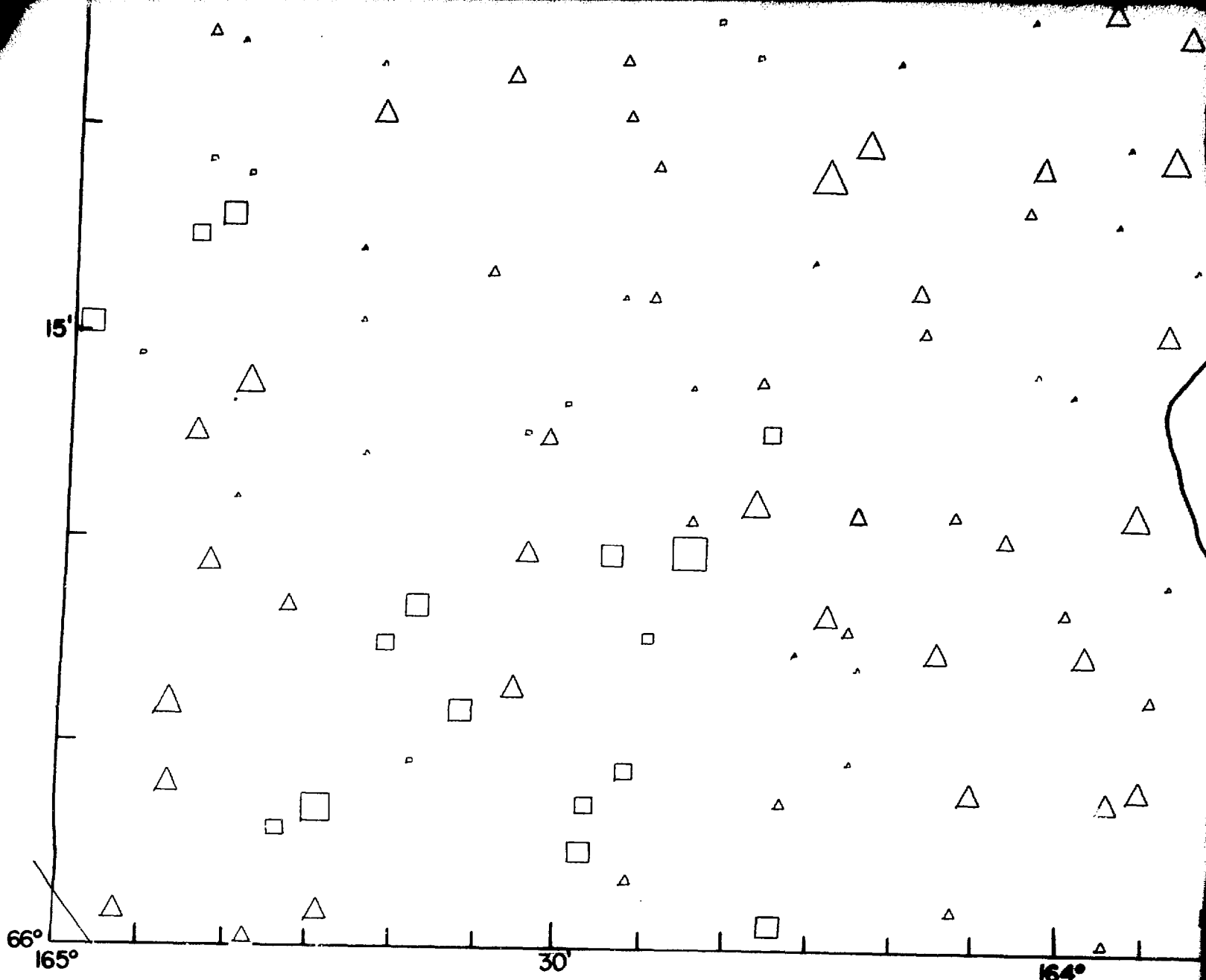
A

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U  
E



# PLATE II-A

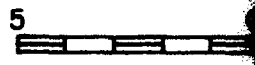




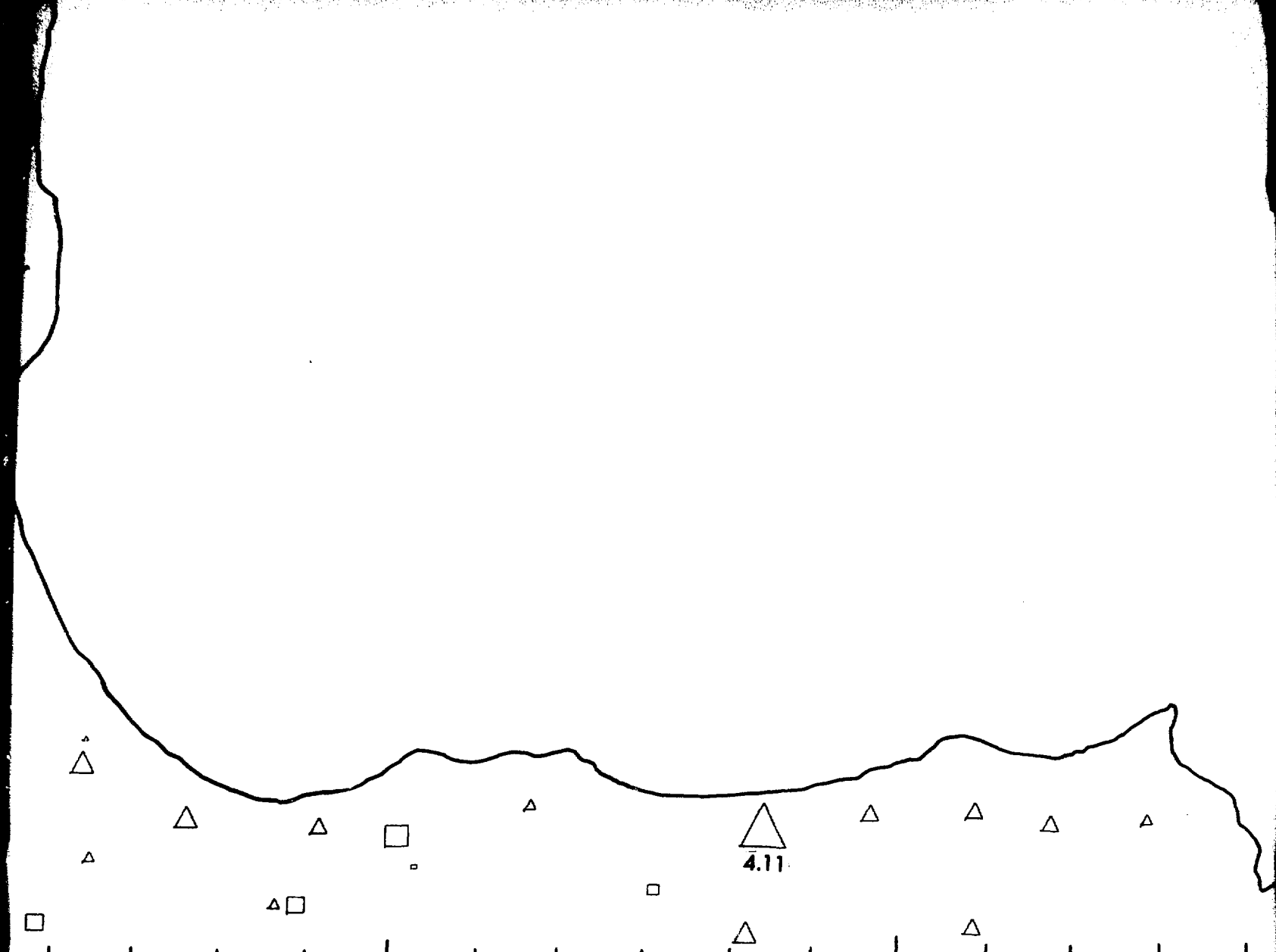
LEGEND

NATURAL LAKE WATERS	SURFACE STREAM WATERS	U (ppb)
•	◻	≤ 0.01
△	◻	> 0.01 - 0.03
△	◻	0.04 - 0.15
△	◻	0.16 - 0.49
△	◻	0.50 - 0.99
△	◻	1.0 - 1.99
△	◻	2.0 - 2.99
△	◻	≥ 3.0

3.85 The numbers printed next to the symbols for the two largest concentration intervals are the measured uranium concentrations, in ppb for those samples.



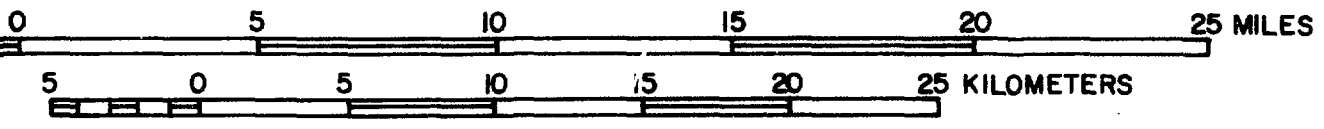
URANIUM  
THE AR...



30'

163°

SCALE 1:250 000



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 science  
 of the U.S.

PLATE II-A

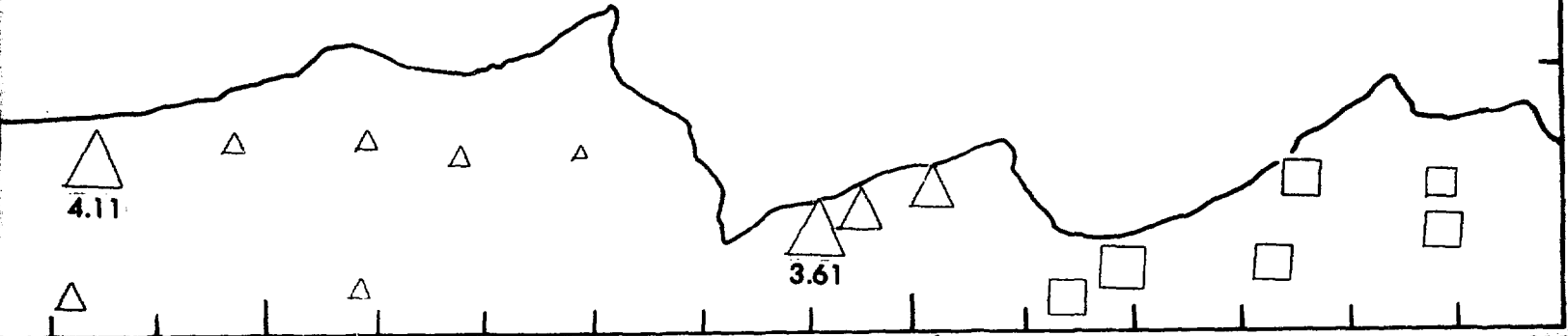
LEAD CONCENTRATIONS (ppb) IN WATERS  
 IN  
 AREA OF THE KOTZEBUE QUADRANGLE  
 SEWARD PENINSULA, ALASKA

KOTZEBUE



0

5'



163°

30'

162°



**WATERS**  
**QUADRANGLE**

183°

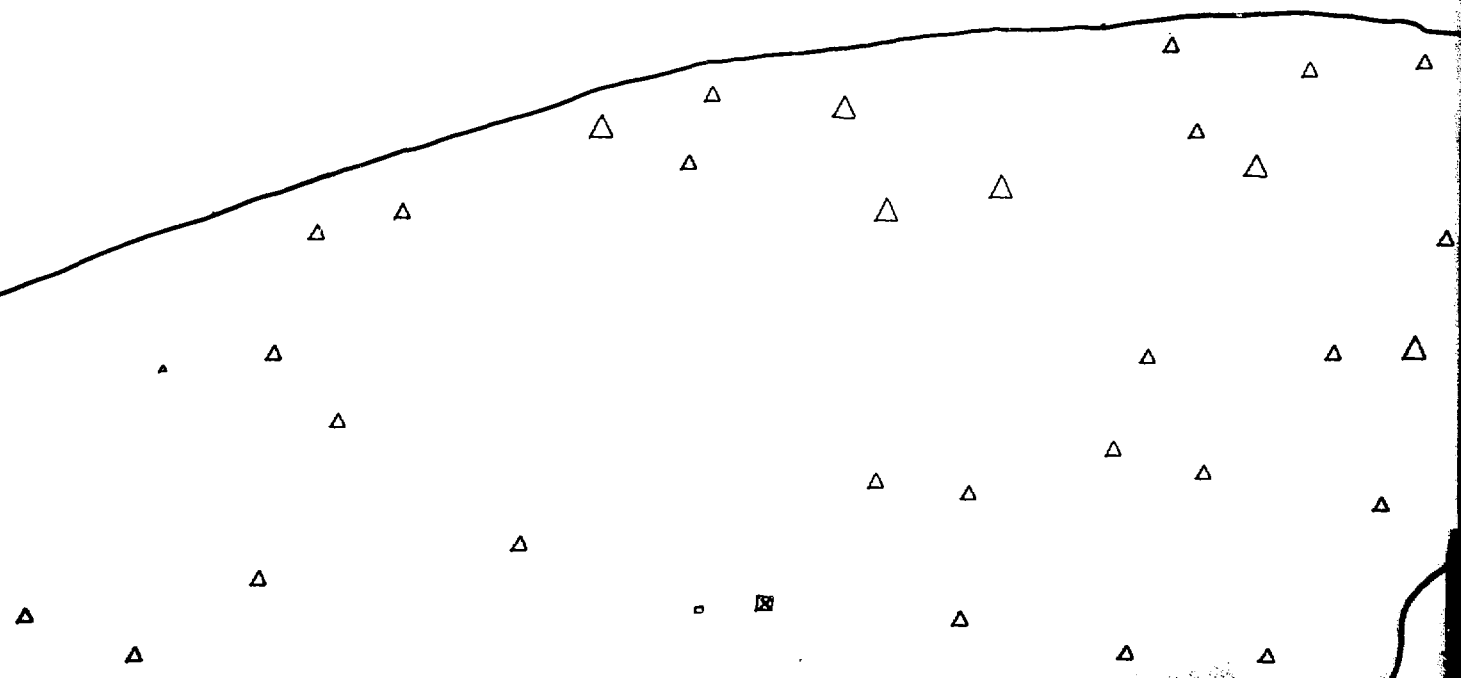
30'

184°

C H U K C H I  
S E A

45'

30'

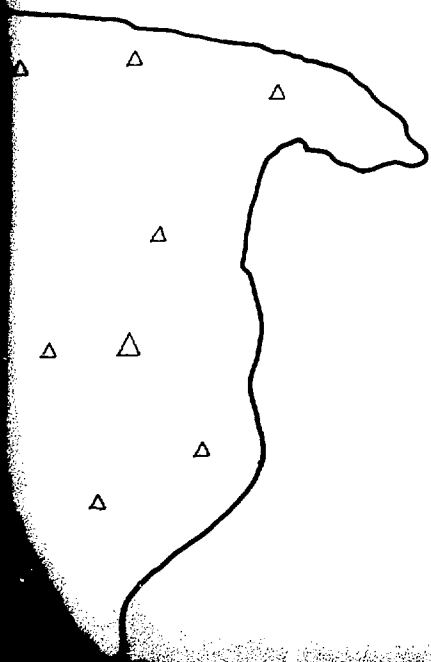


KOTZEBUE

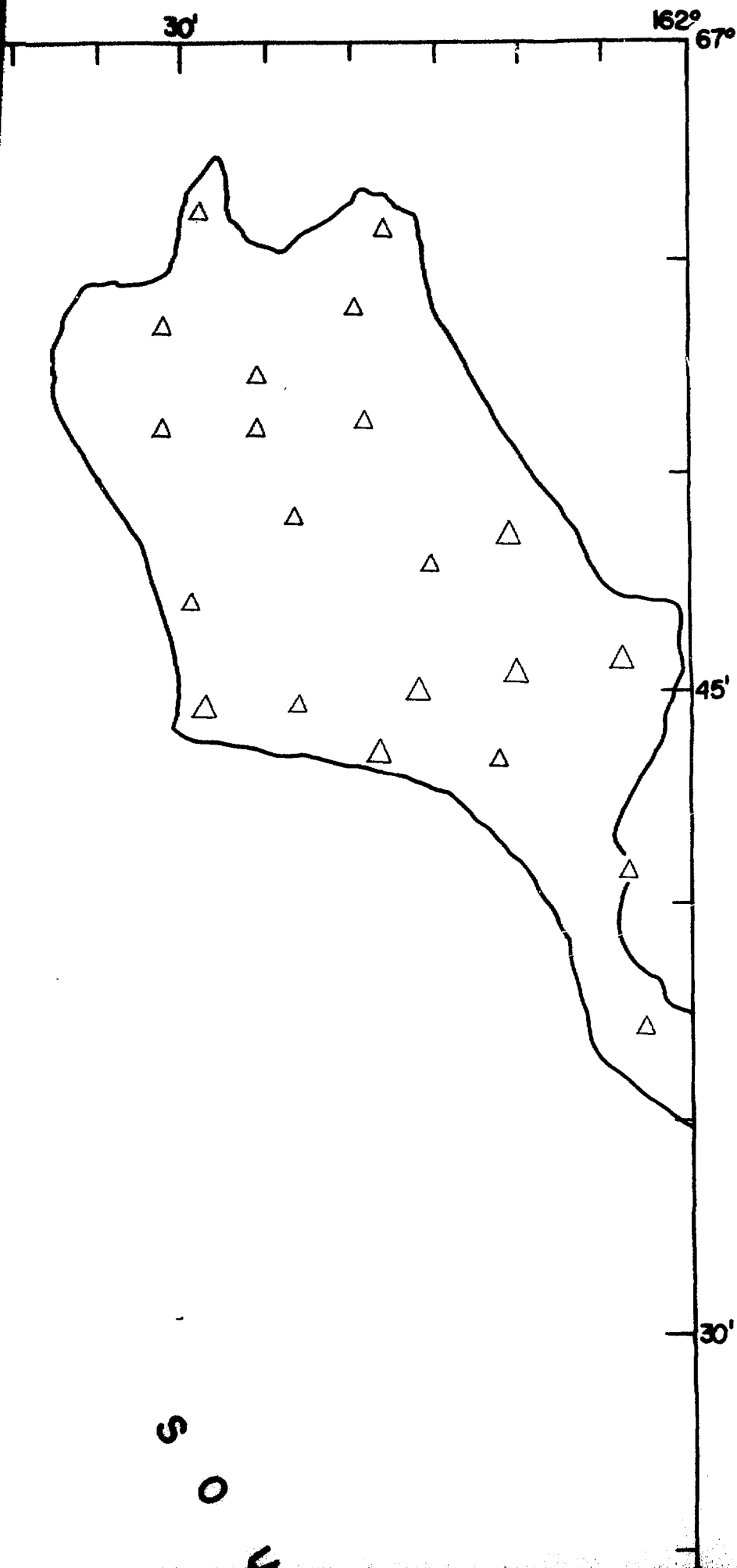
30'

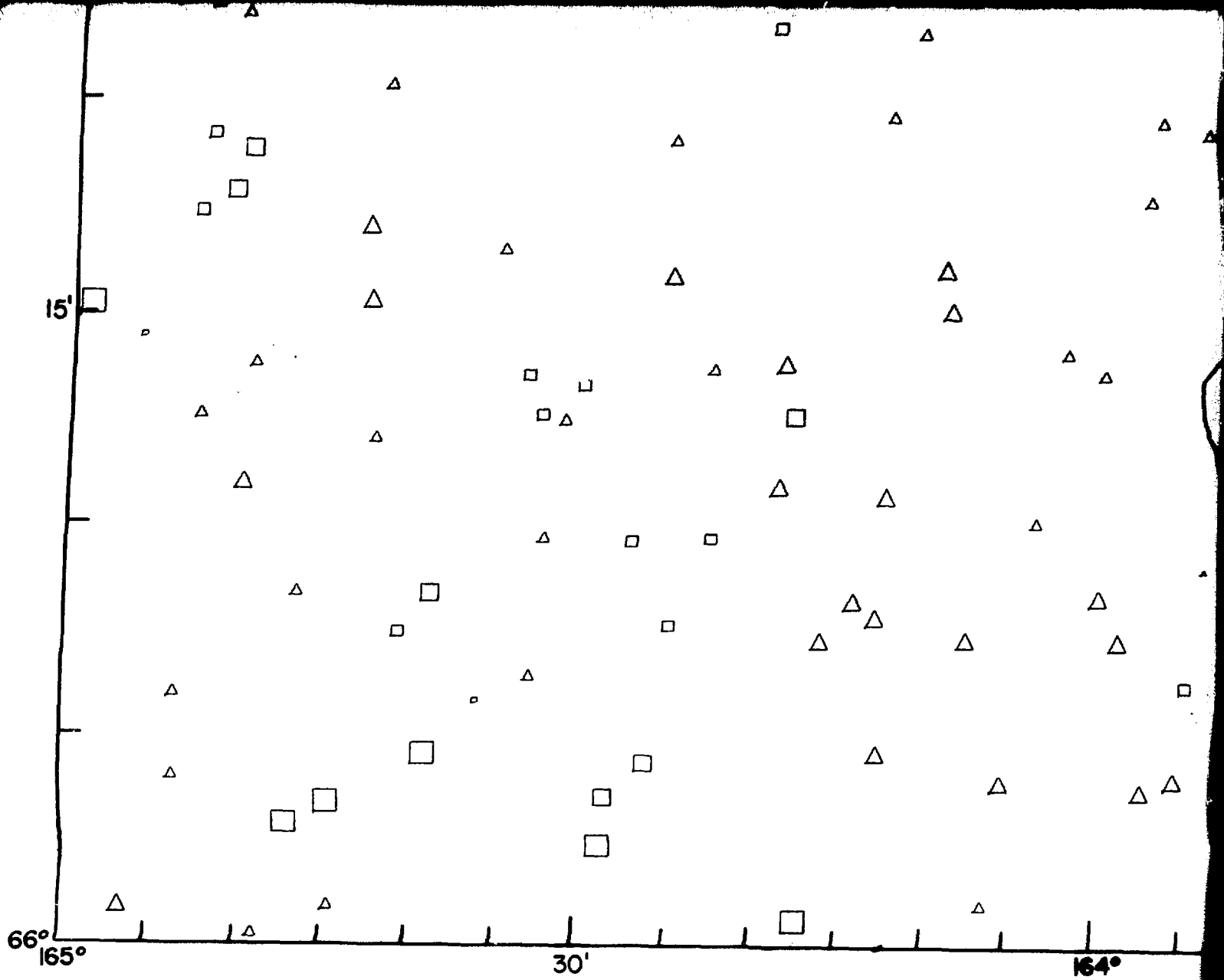
163°

K  
O  
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B  
U  
E



# PLATE II-B





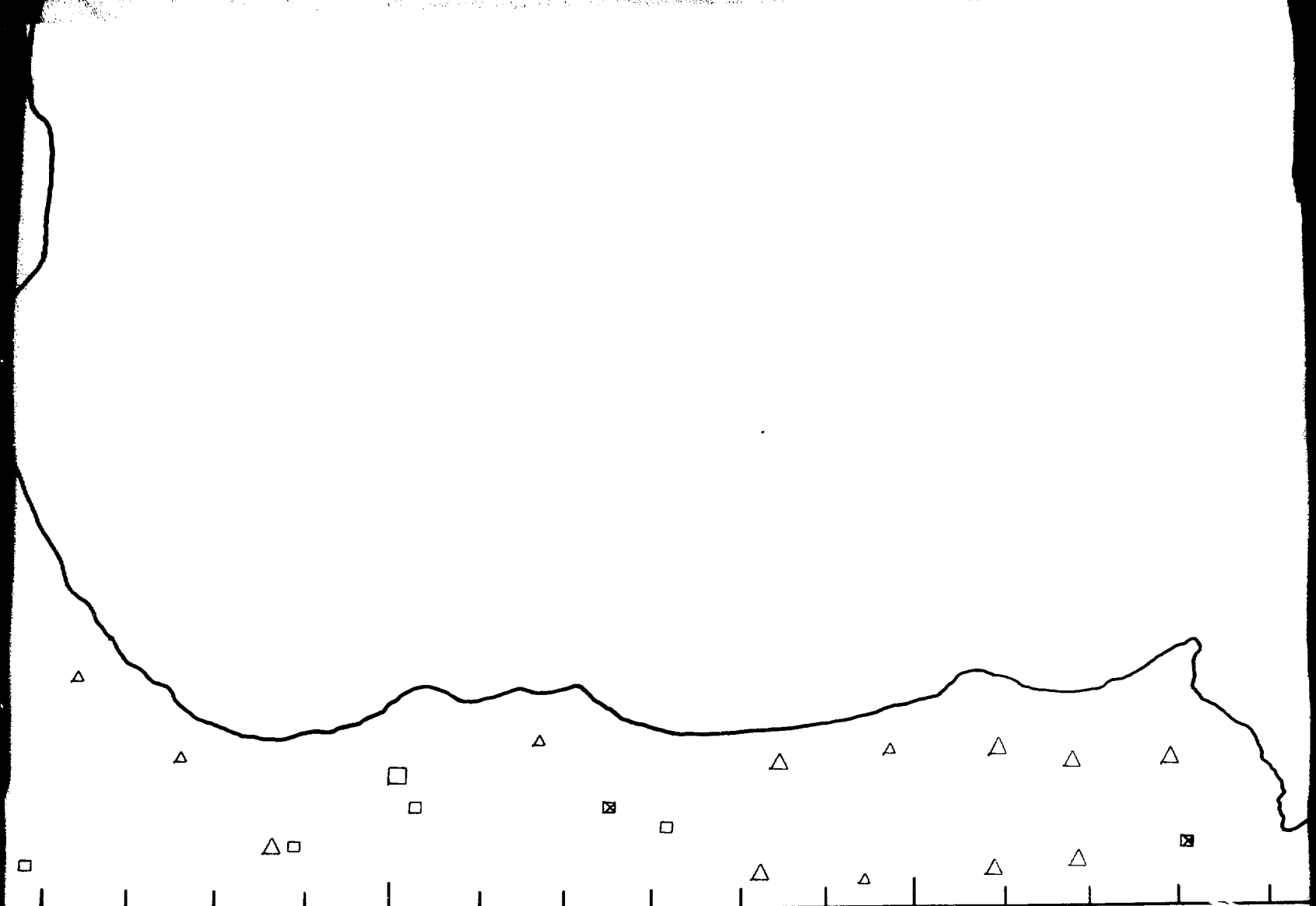
LEGEND

NATURAL LAKE SEDIMENT	WET STREAM SEDIMENT	DRY STREAM SEDIMENT	U (ppm)
△	□	■	≤ 1.25
△	□	▣	1.26 - 2.50
△	□	⊠	2.51 - 3.25
△	□	⊠	3.26 - 4.00
△	□	⊠	4.01 - 5.50
△	□	⊠	5.51 - 8.00
△	□	⊠	8.01 - 16.00
△	□	⊠	> 16.00

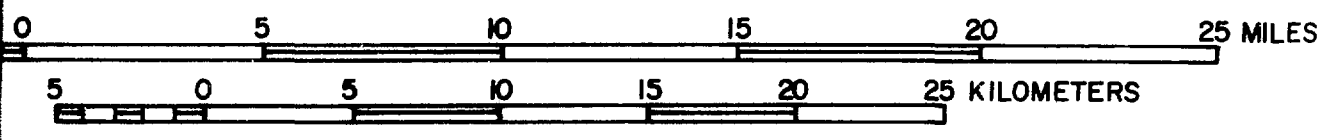
37.7 The numbers printed next to the symbols for the two largest concentrations intervals are the measured uranium concentrations, in ppm, for those samples.



URANIUM  
THE AR



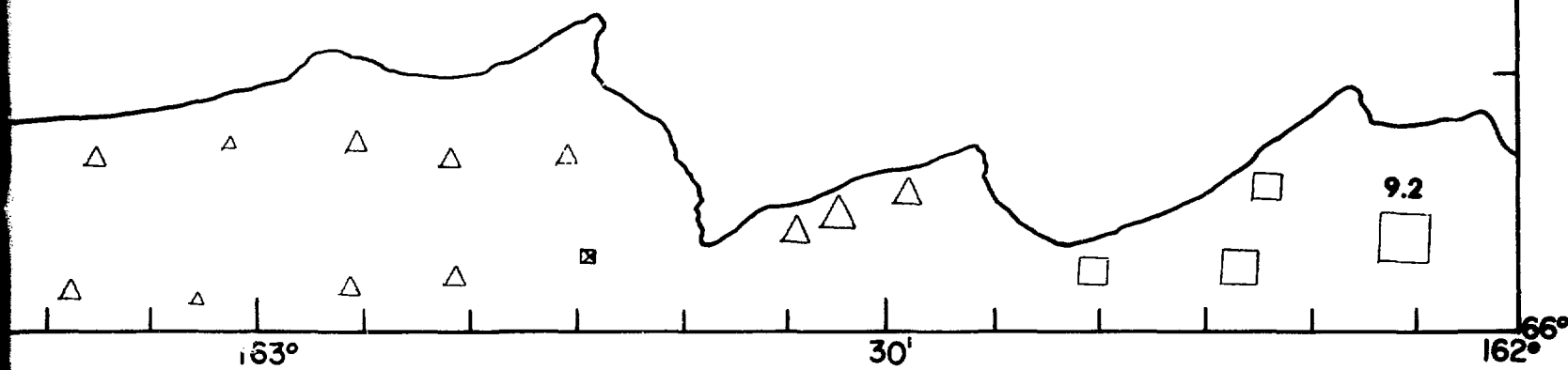
SCALE 1:250 000



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PLATE II-B

CONCENTRATIONS (ppm) IN SEDIMENTS  
 IN  
 AREA OF THE KOTZEBUE QUADRANGLE  
 SEWARD PENINSULA, ALASKA



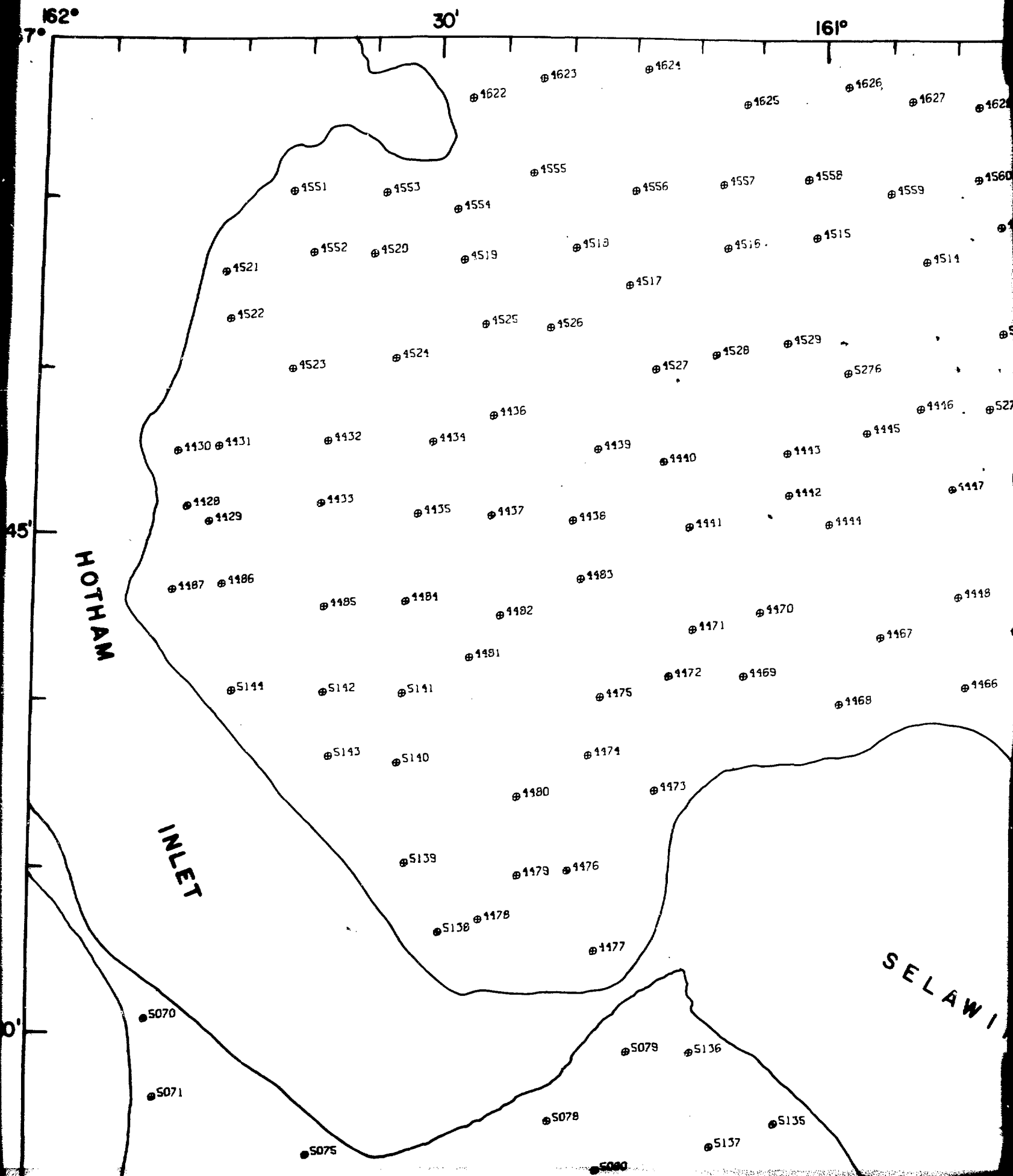
20 25 MILES  
25 KILOMETERS



SEDIMENTS

QUADRANGLE

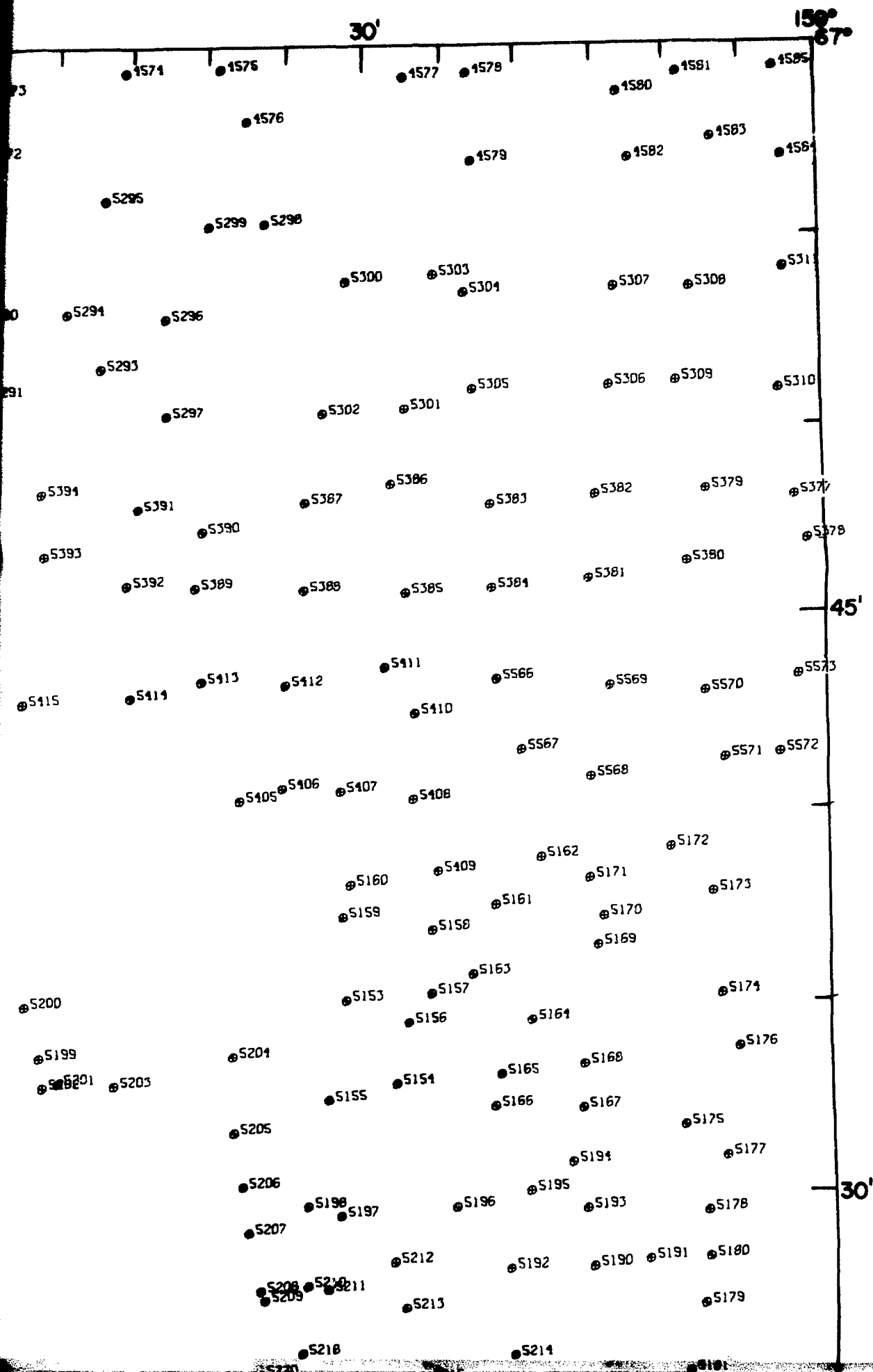
KA



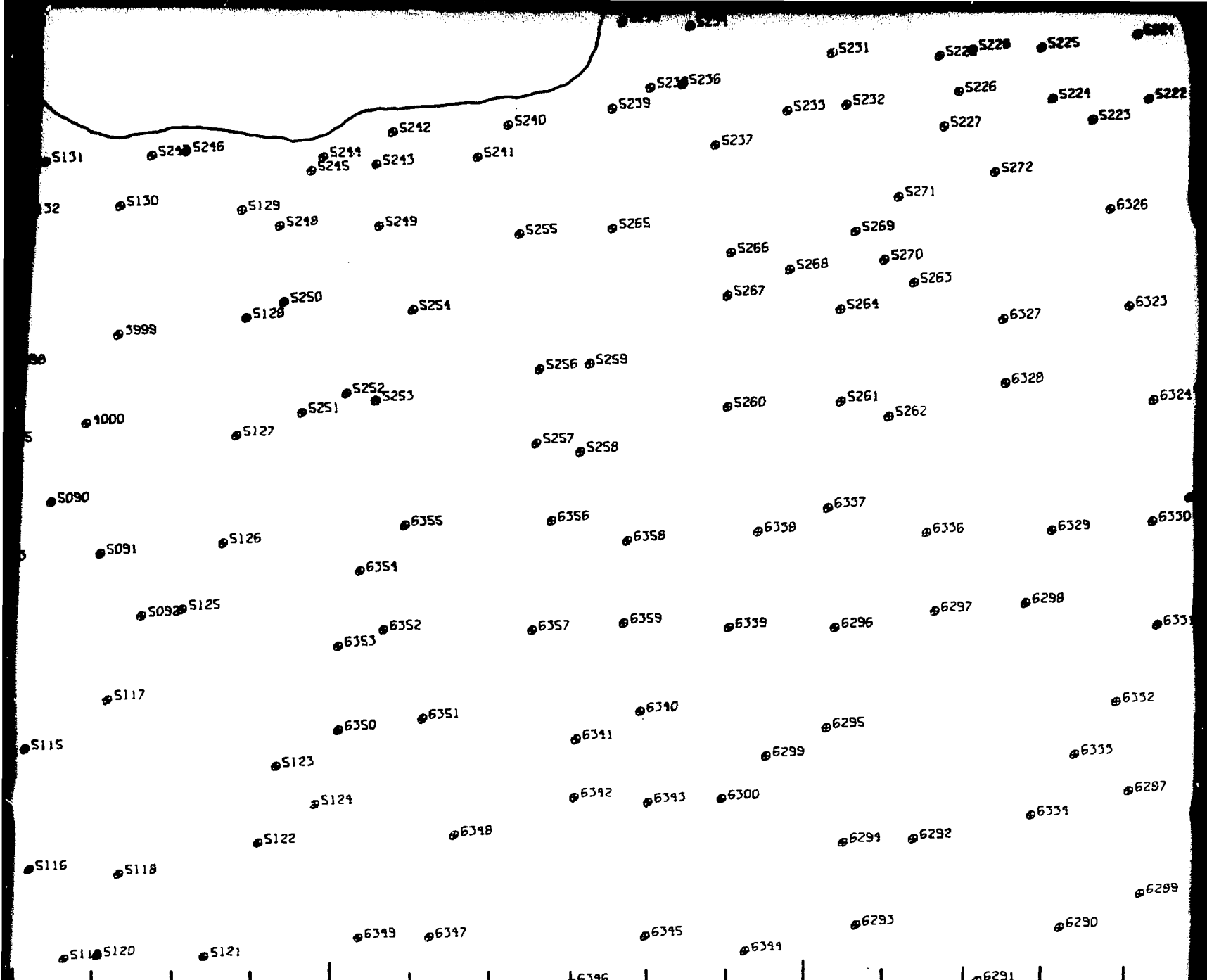




# PLATE III







SCALE 1:250 000

5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

### PLATE III

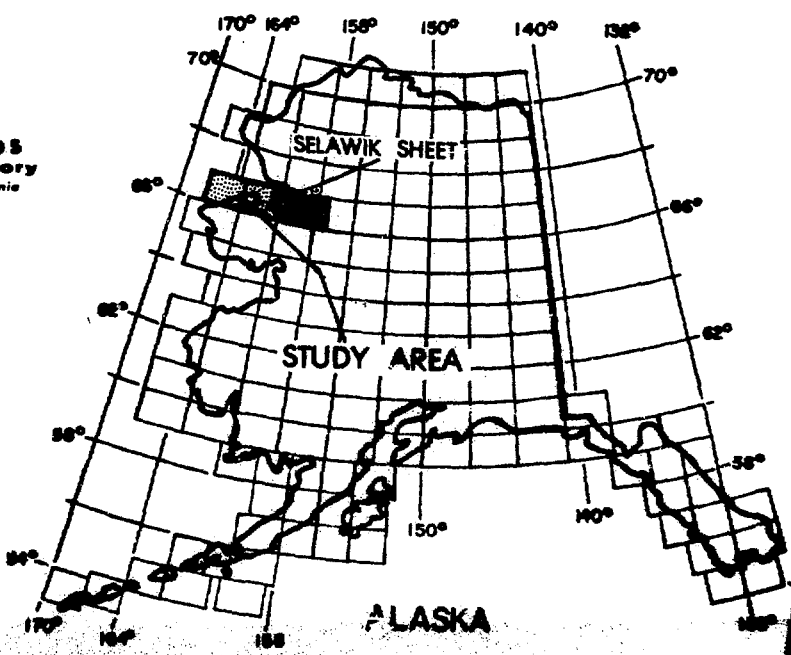
GEOCHEMICAL AND STREAM/LAKE SEDIMENT  
 SAMPLE LOCATIONS  
 IN  
 AREA OF THE SELAWIK QUADRANGLE  
 SEWARD PENINSULA, ALASKA



25 MILES  
 METERS



Los Alamos  
 scientific laboratory  
 of the University of California



E SEDIMENT  
 RANGLE

ALASKA

182°  
67°

30'

161°

45'

HOTHAM

INLET

SELAW

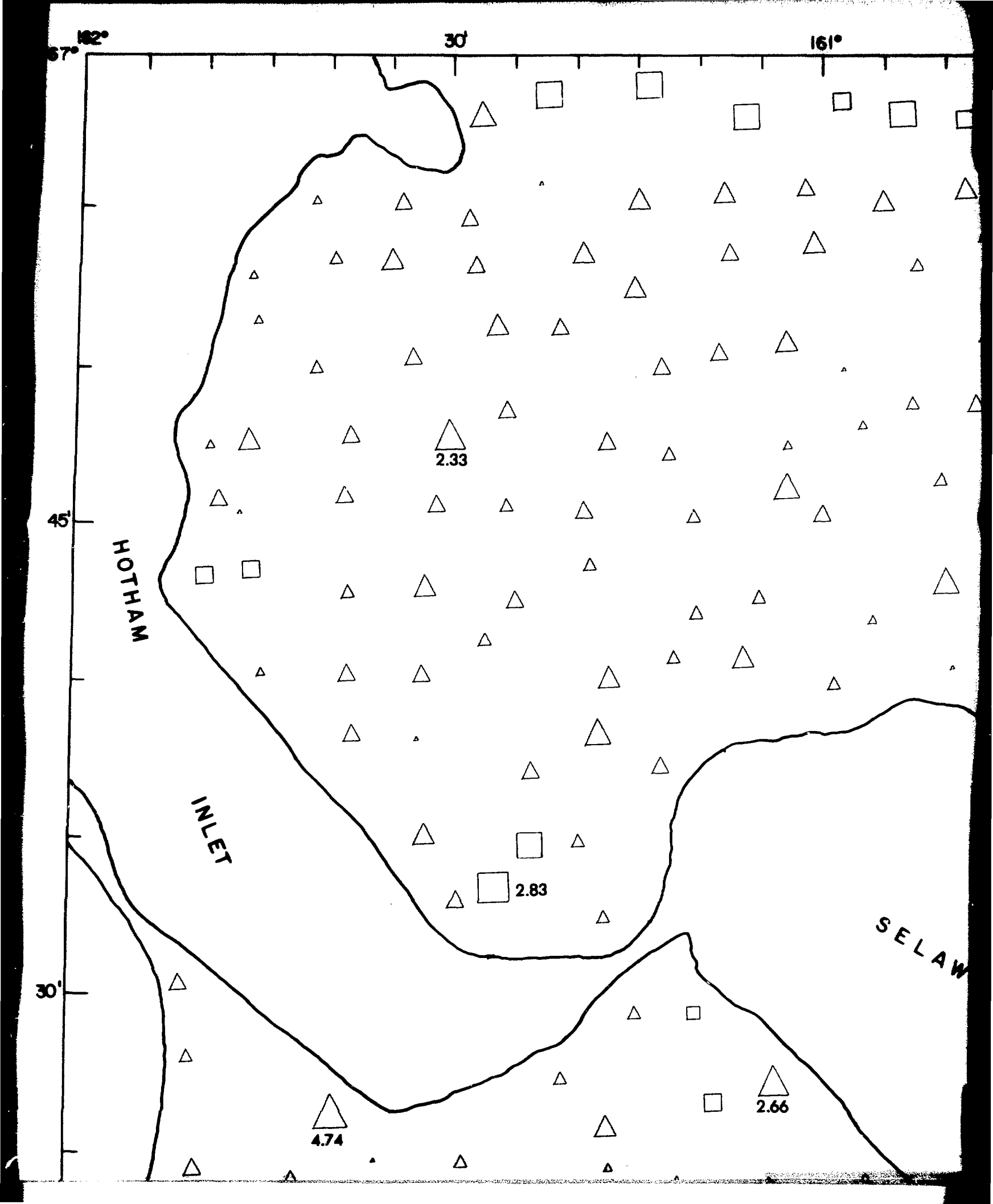
30'

2.33

2.83

2.66

4.74



# SELAWIK

161°

30'

160°



SELAWIK

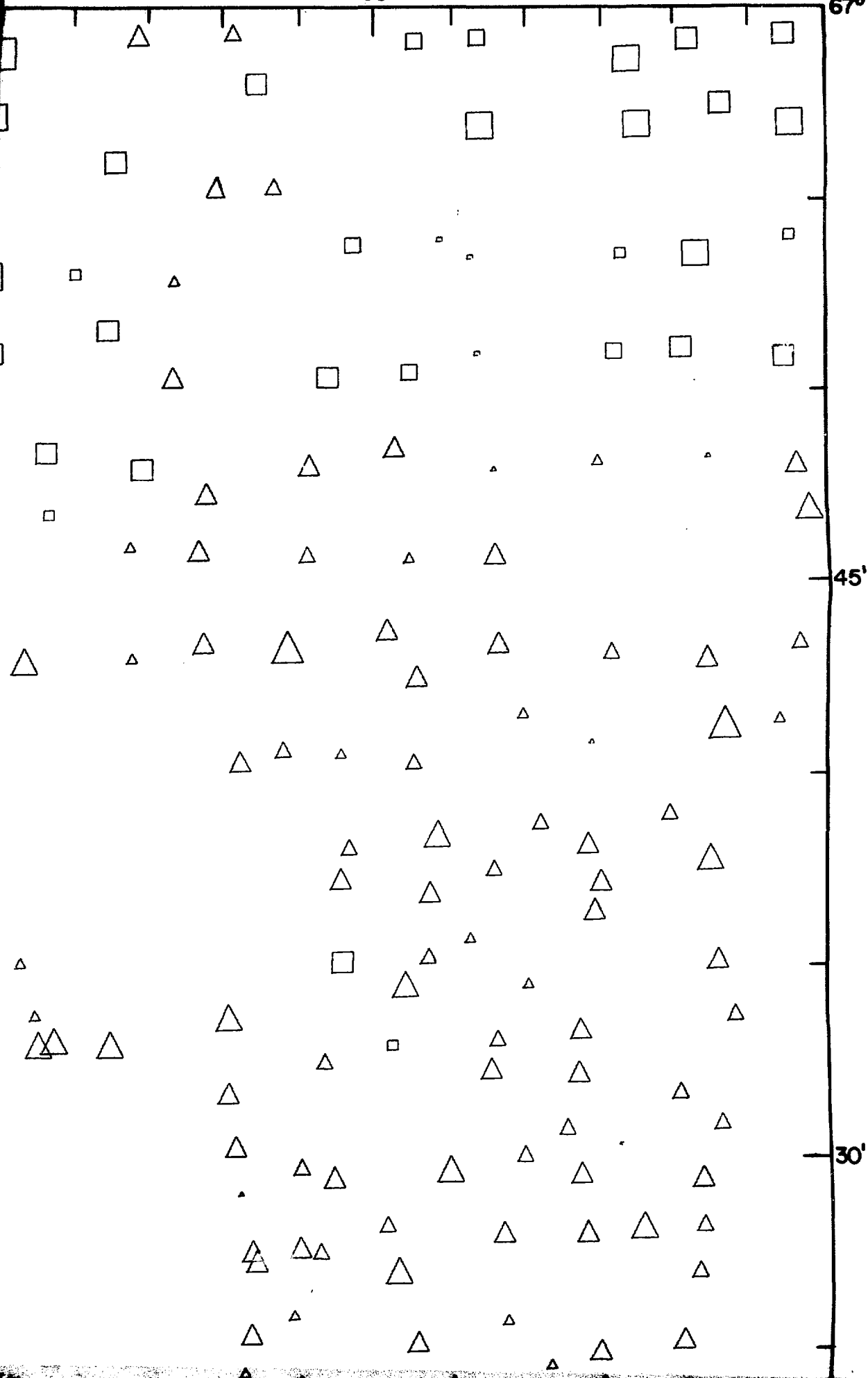
LAKE

2.66

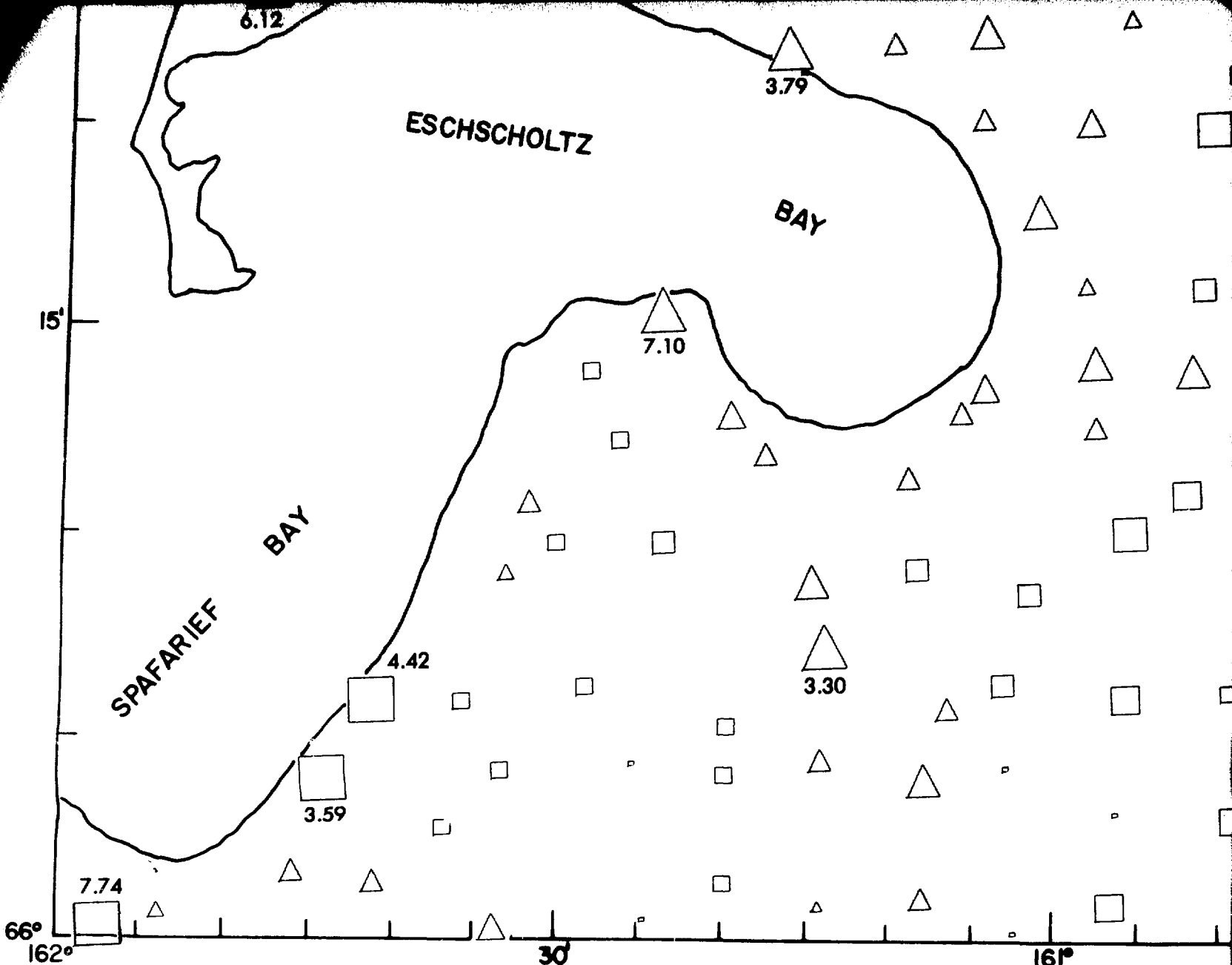
# PLATE III-A

30'

159°  
67°







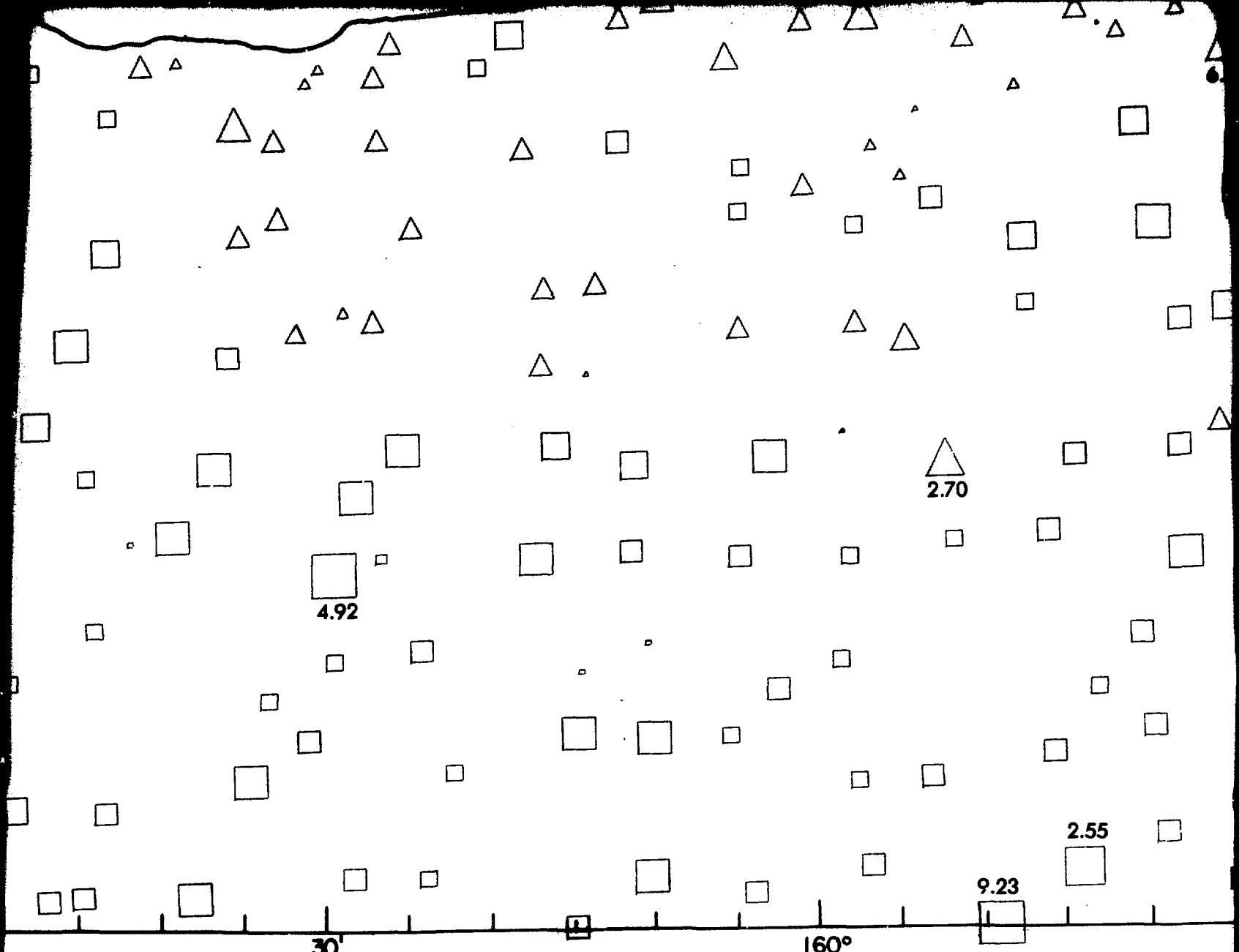
LEGEND

NATURAL LAKE WATERS	SURFACE STREAM WATERS	U (ppb)
•	◻	≤ 0.01
△	◻	> 0.01 - 0.03
△	◻	0.04 - 0.15
△	◻	0.16 - 0.49
△	◻	0.50 - 0.99
△	◻	1.0 - 1.99
△	◻	2.0 - 2.99
△	◻	≥ 3.0

3.85 The numbers printed next to the symbols for the two largest concentration intervals are the measured uranium concentrations, in ppb, for those samples.



URANIUM  
THE AREA



SCALE 1:250 000

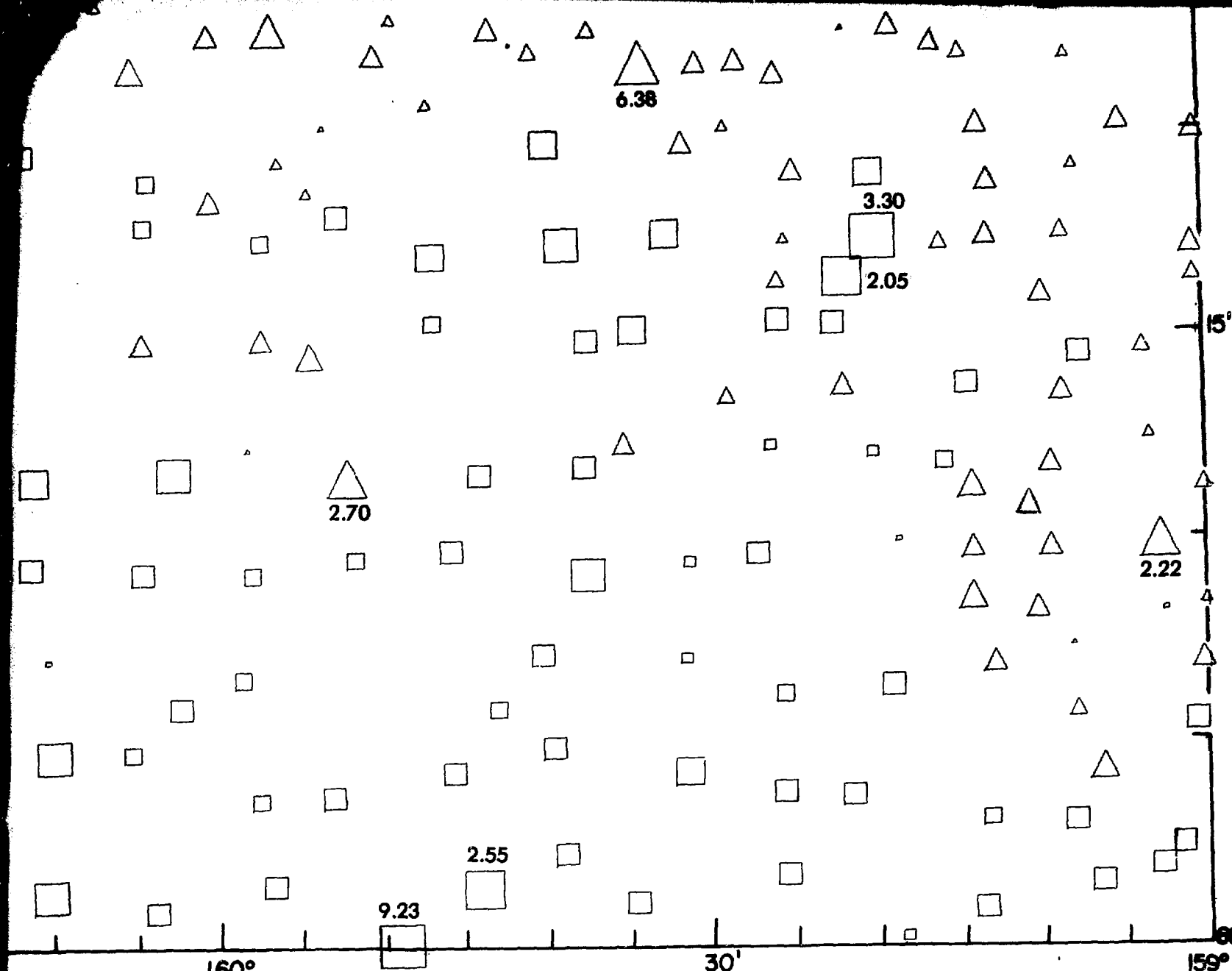
5 10 15 20 25 MILES

0 5 10 15 20 25 KILOMETERS



### PLATE III-A

LEAD CONCENTRATIONS (ppb) IN WATERS  
 IN  
 AREA OF THE SELAWIK QUADRANGLE  
 SEWARD PENINSULA, ALASKA



N WATERS  
QUADRANGLE  
SKA

67° 162°

30'

161°

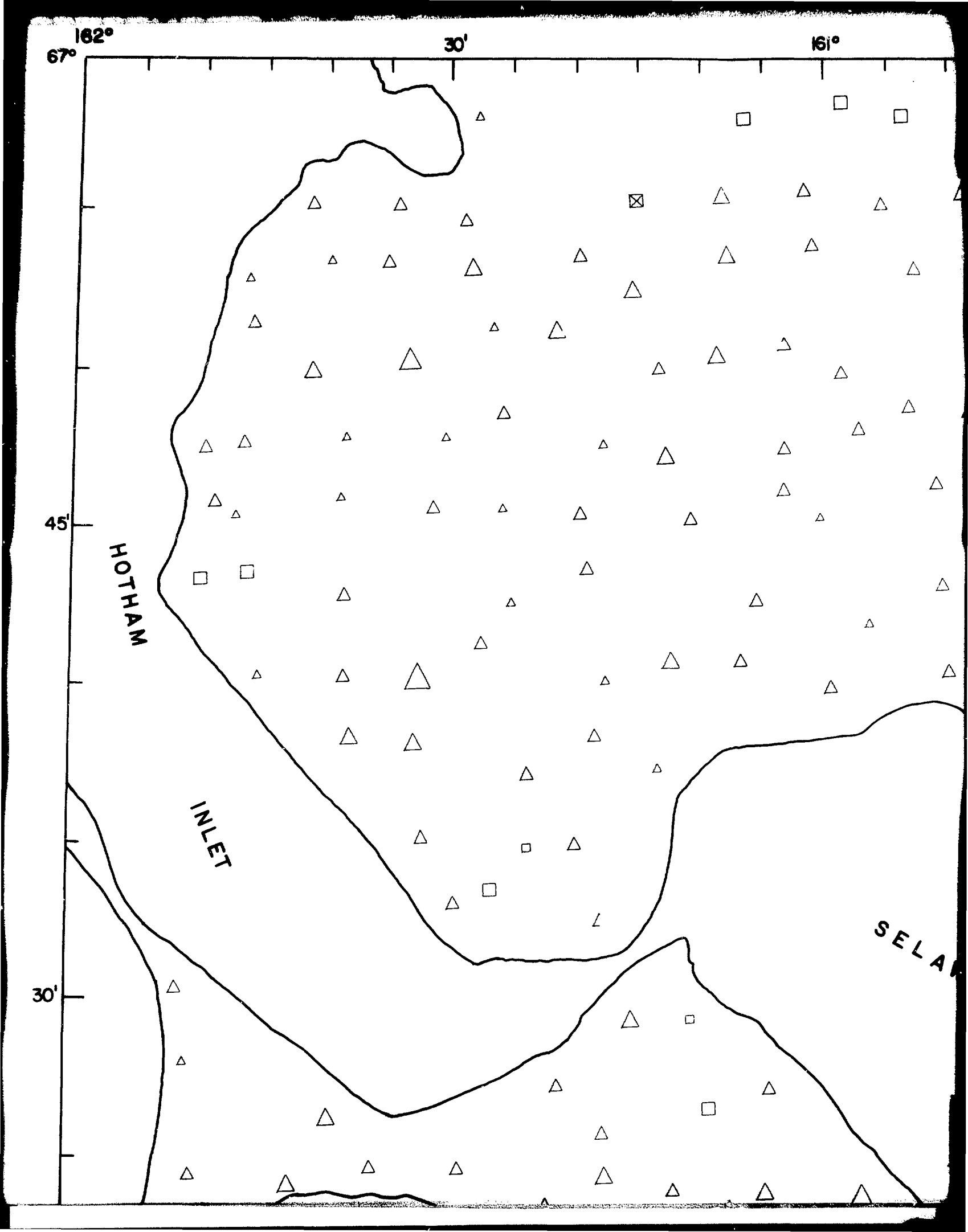
45'

HOTHAM

INLET

SELA

30'



# SELAWIK

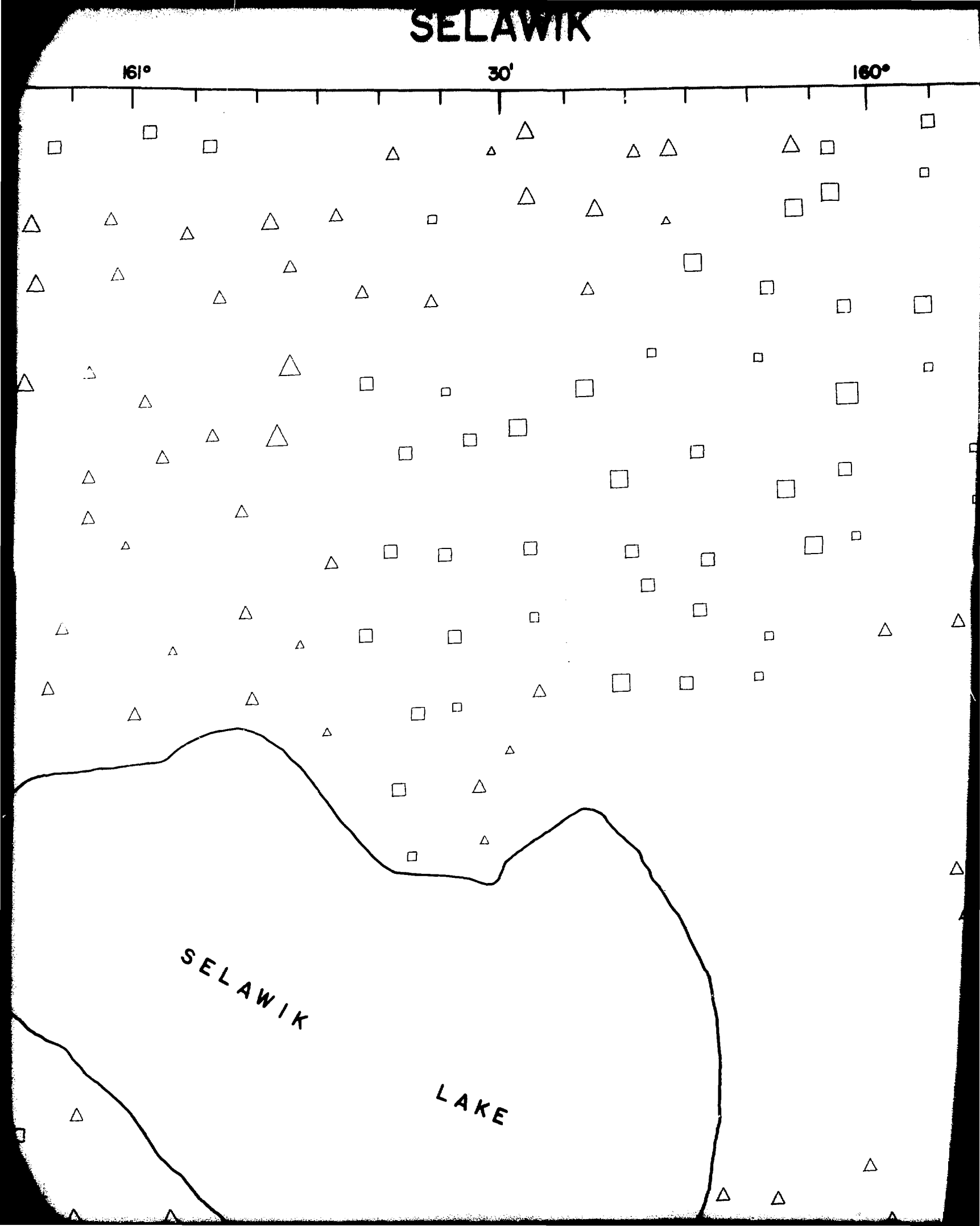
161°

30'

160°

SELAWIK

LAKE



# PLATE III-B

30°

30'

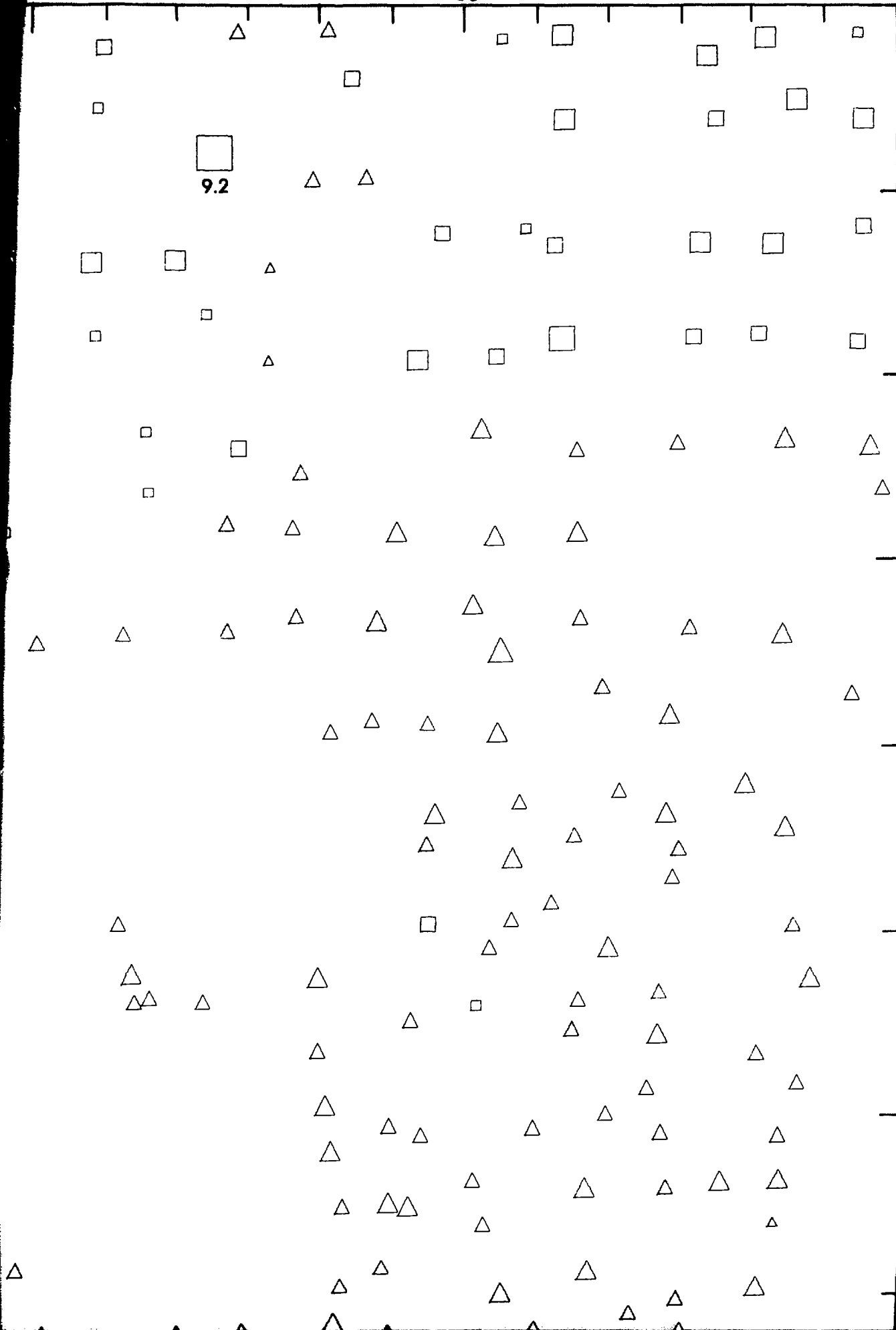
159°

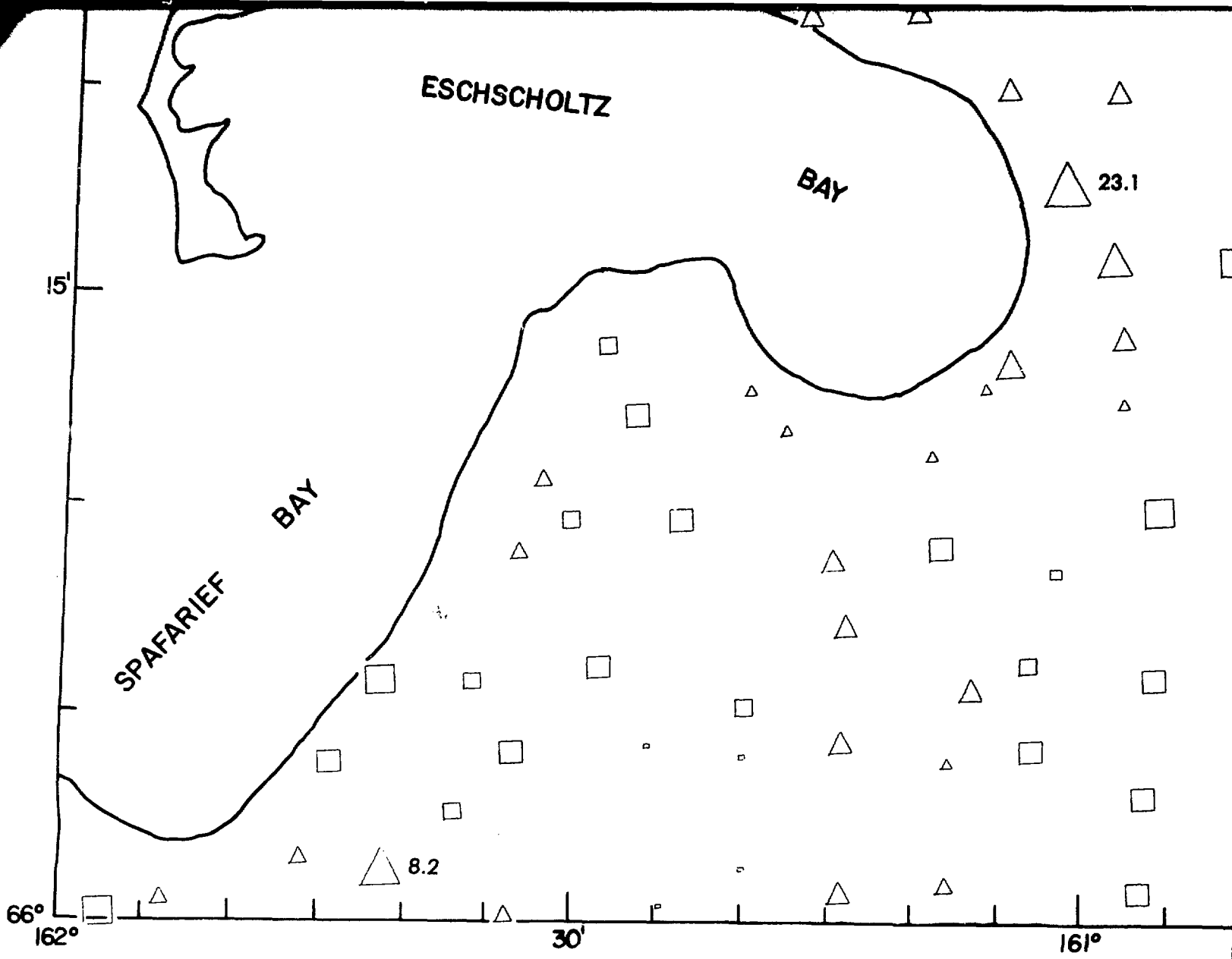
67°

9.2

45'

30'





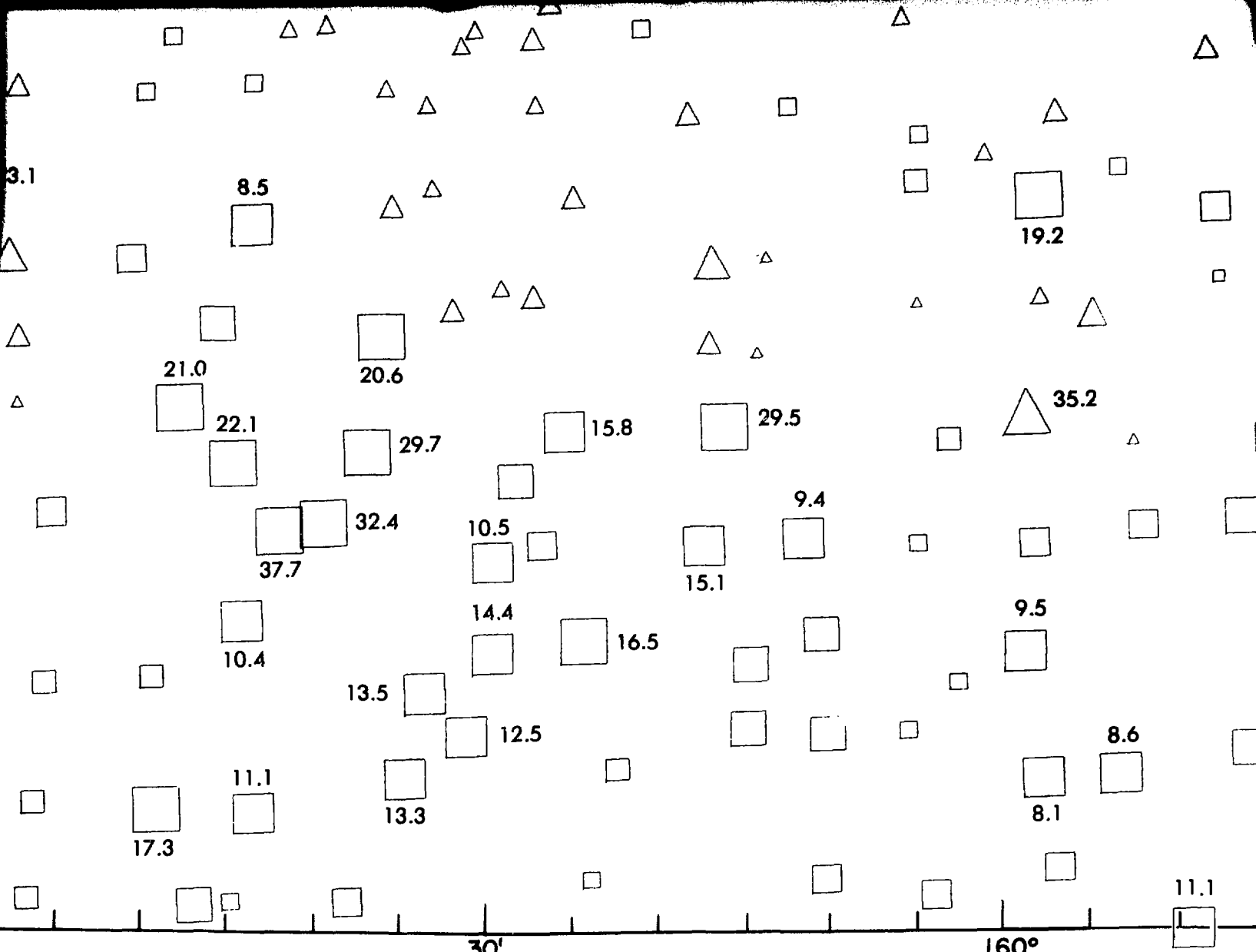
LEGEND

NATURAL LAKE SEDIMENT	WET STREAM SEDIMENT	DRY STREAM SEDIMENT	U (ppm)
△	□	■	≤ 1.25
△	□	▣	1.26 - 2.50
△	□	⊠	2.51 - 3.25
△	□	⊠	3.26 - 4.00
△	□	⊠	4.01 - 5.50
△	□	⊠	5.51 - 8.00
△	□	⊠	8.01 - 16.00
△	□	⊠	> 16.00

37.7 The numbers printed next to the symbols for the two largest concentration intervals are the measured uranium concentrations, in ppm, for those samples.



URANIUM  
THE ARE



SCALE 1:250 000

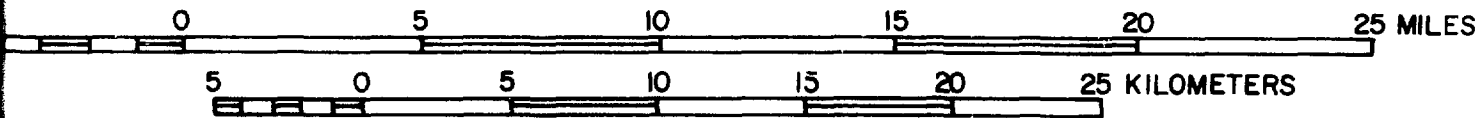
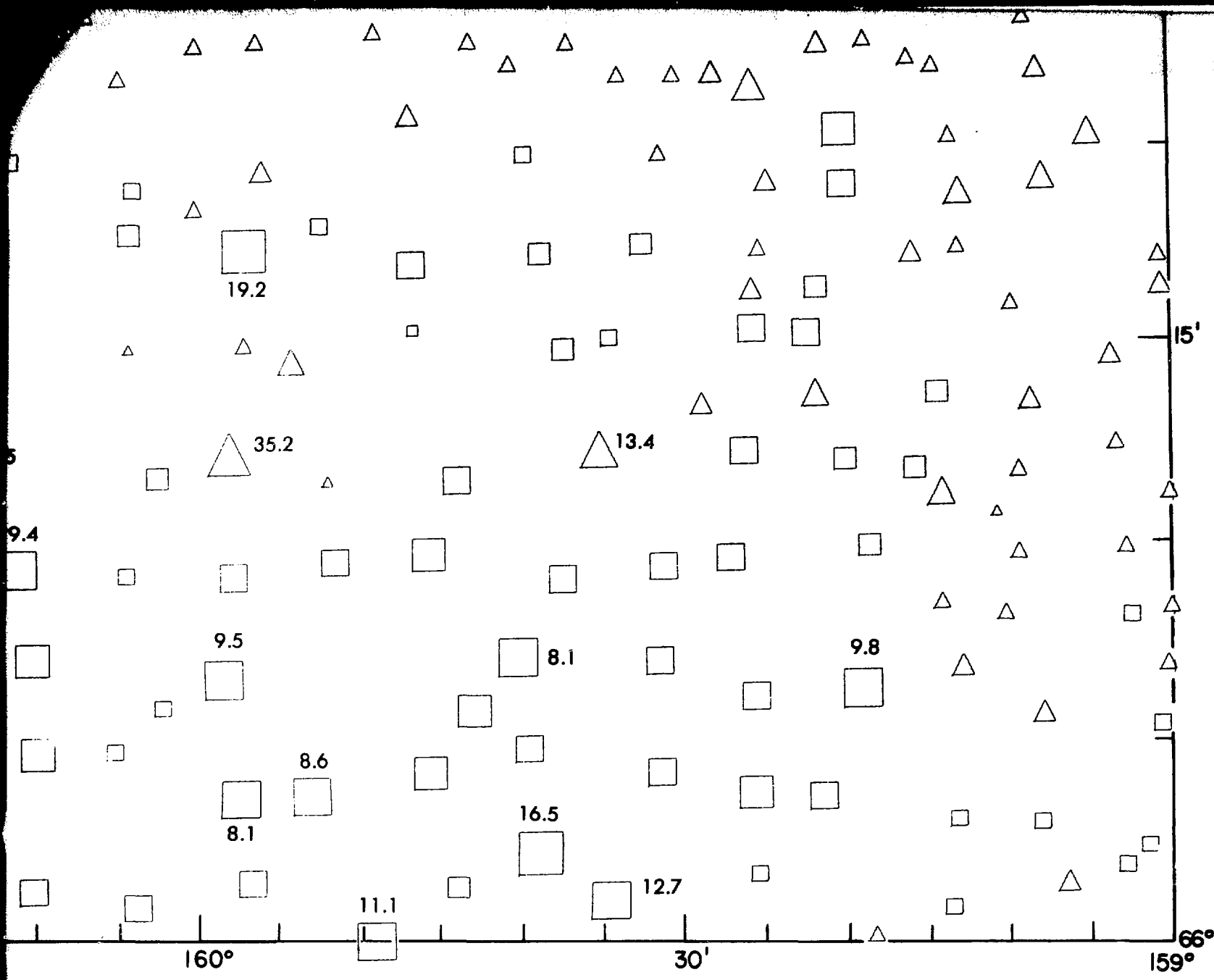


PLATE III-B

LEAD CONCENTRATIONS (ppm) IN SEDIMENTS  
 IN  
 AREA OF THE SELAWIK QUADRANGLE  
 SEWARD PENINSULA, ALASKA





20 25 MILES  
25 KILOMETERS



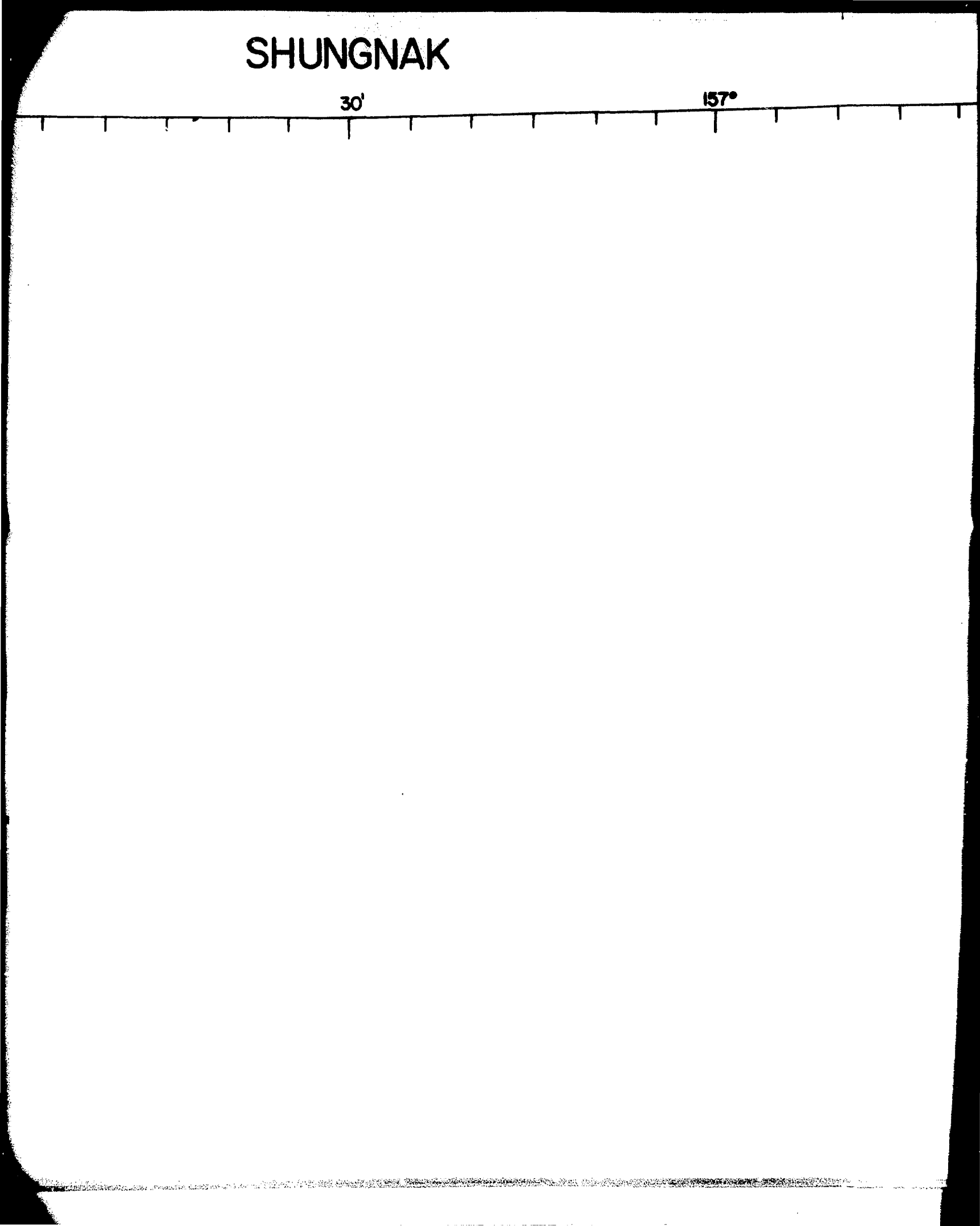
SEDIMENTS  
DRANGLE  
A



# SHUNGNAK

30'

157°



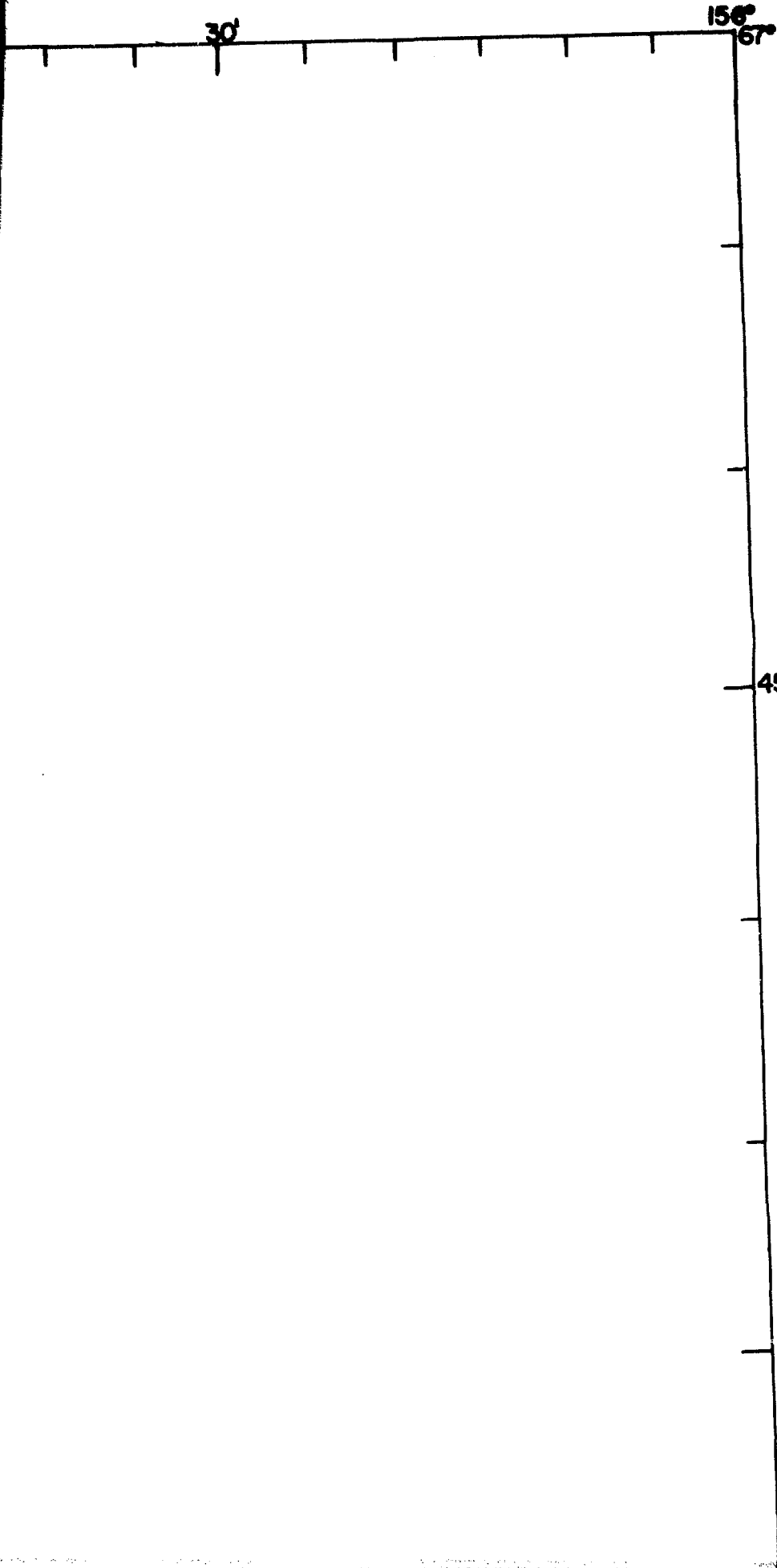
# PLATE IV

30'

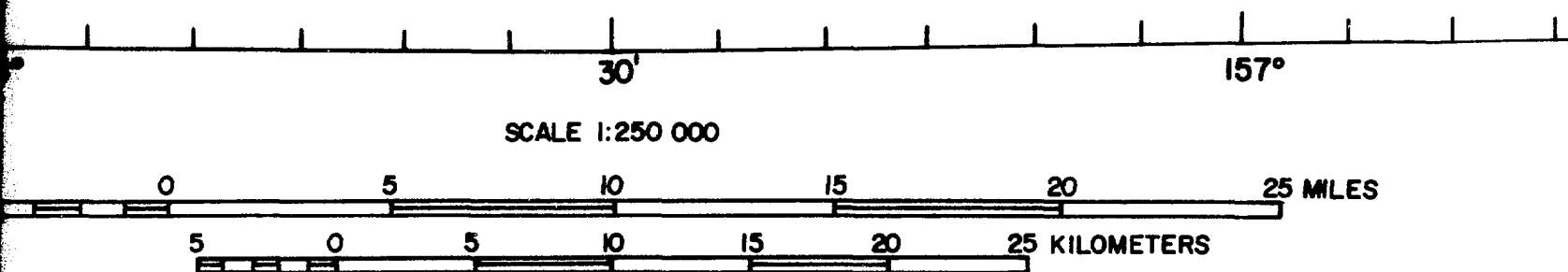
156°  
67'

45'

30'







**PLATE IV**

**HYDROGEOCHEMICAL AND STREAM/LAKE SEDIMENT  
SAMPLE LOCATIONS  
IN  
THE SHUNGNAK QUADRANGLE (WEST THIRD)**

15'

66°

157°

30'

156°

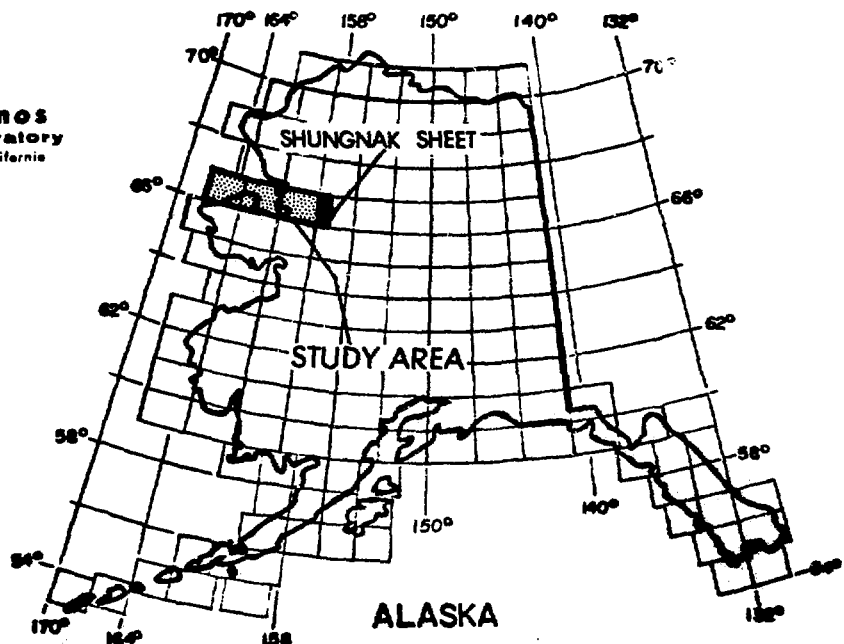
25 MILES

METERS



SEDIMENT

(WEST THIRD)



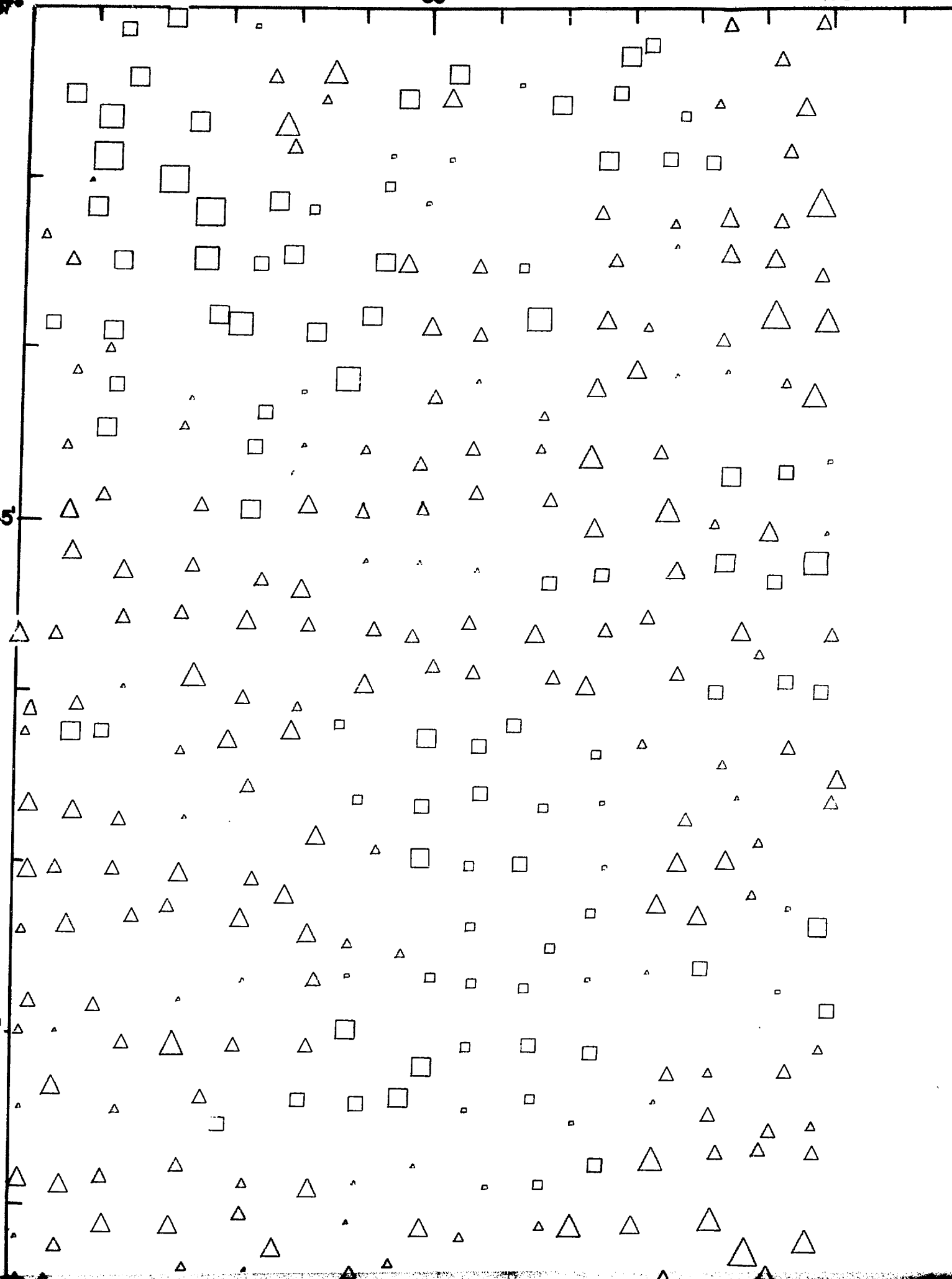
ALASKA

30'

156°

45'

30'



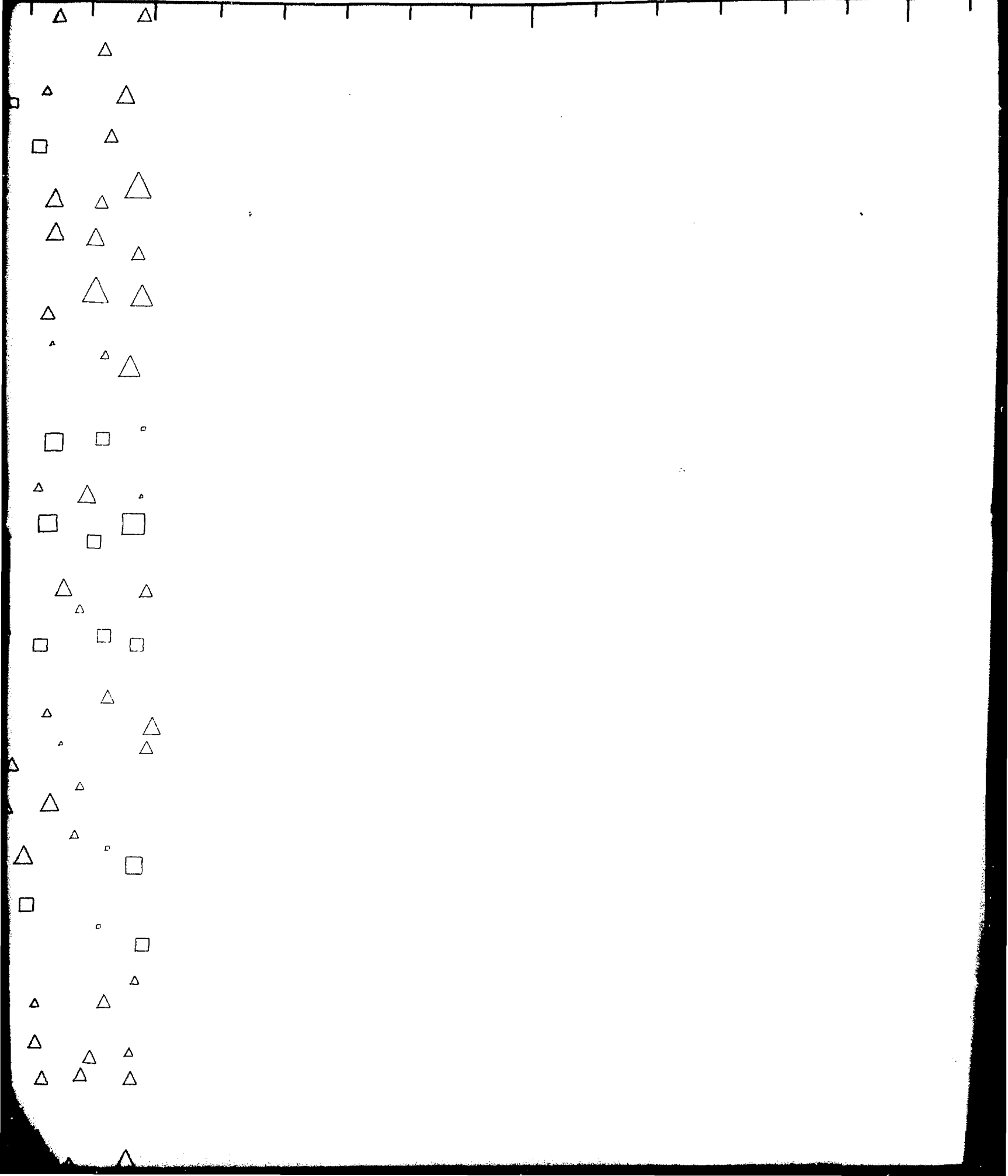


# SHUNGNAK

158°

30'

157°



# PLATE IV-A

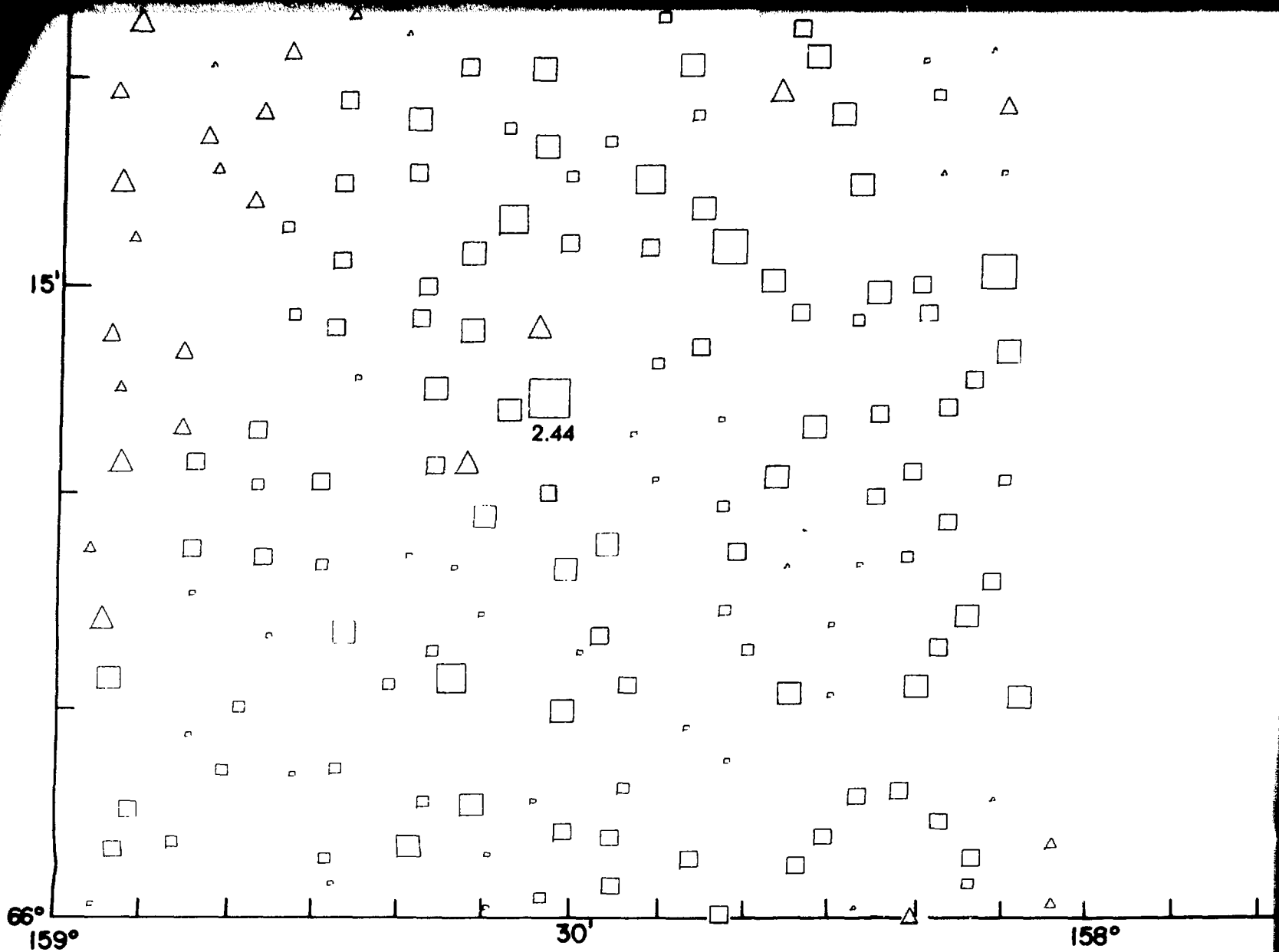
30'

156°  
67°

45'

30'





LEGEND

NATURAL LAKE WATERS	SURFACE STREAM WATERS	U (ppb)
•	◻	≤ 0.01
△	◻	> 0.01 - 0.03
△	◻	0.04 - 0.15
△	◻	0.16 - 0.49
△	◻	0.50 - 0.99
△	◻	1.0 - 1.99
△	◻	2.0 - 2.99
△	◻	3.0 - 3.99

3.85 The numbers printed next to the symbols for the two largest concentration intervals are the measured uranium concentrations, in ppb, for those samples.



URANIUM  
THE AREA OF

30'

157°

SCALE 1:250 000

5

10

15

20

25 MILES

0

5

10

15

20

25 KILOMETERS



# PLATE IV-A

UM CONCENTRATIONS (ppb) IN WATERS  
IN

THE SHUNGNAK QUADRANGLE (WEST THIRD)  
SEWARD PENINSULA, ALASKA

15'

157°

30'

156°



N WATERS

ANGLE (WEST THIRD)

ASKA

150° 30' 150°

67°

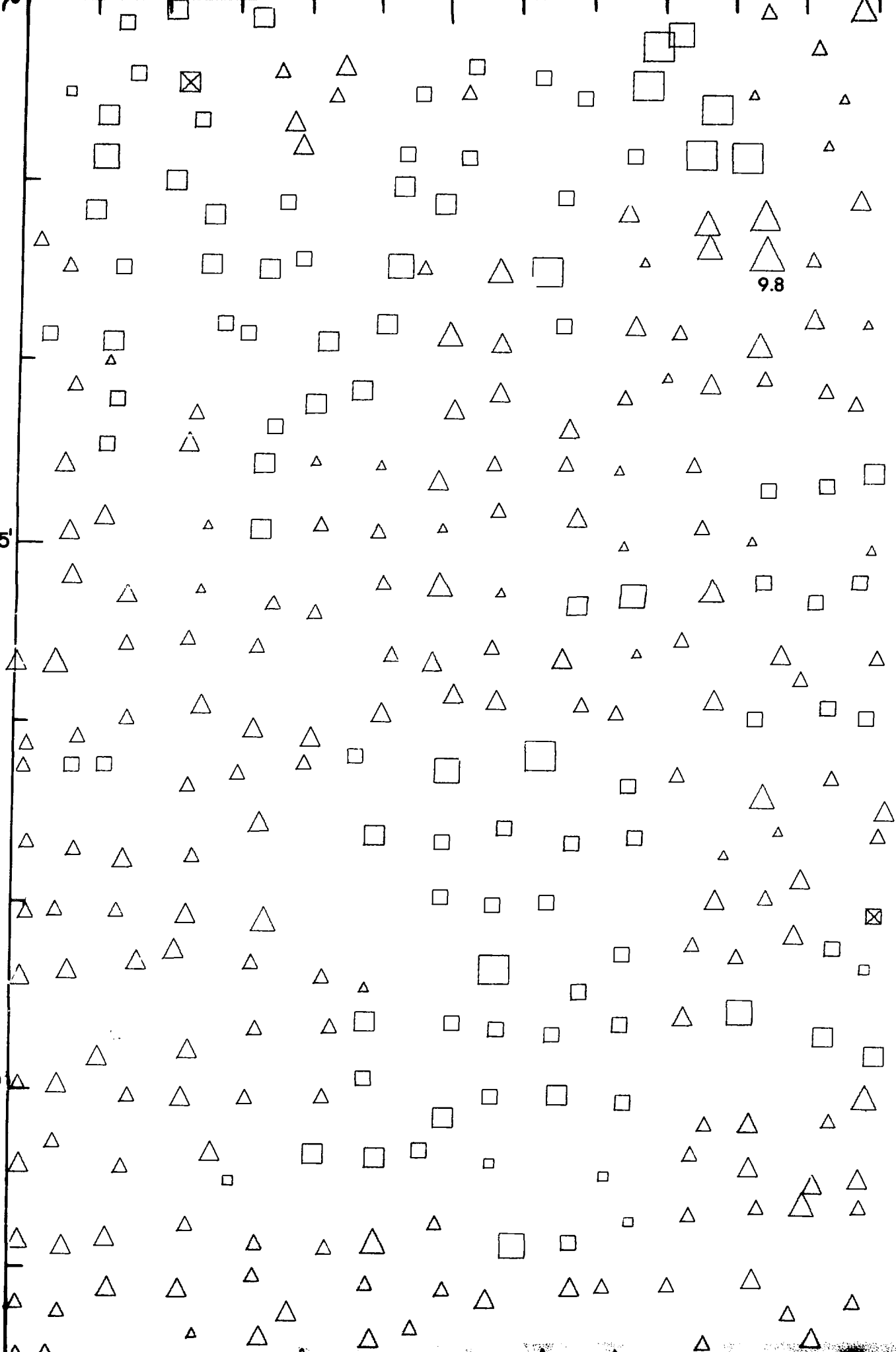
30'

150°

45'

30'

9.8

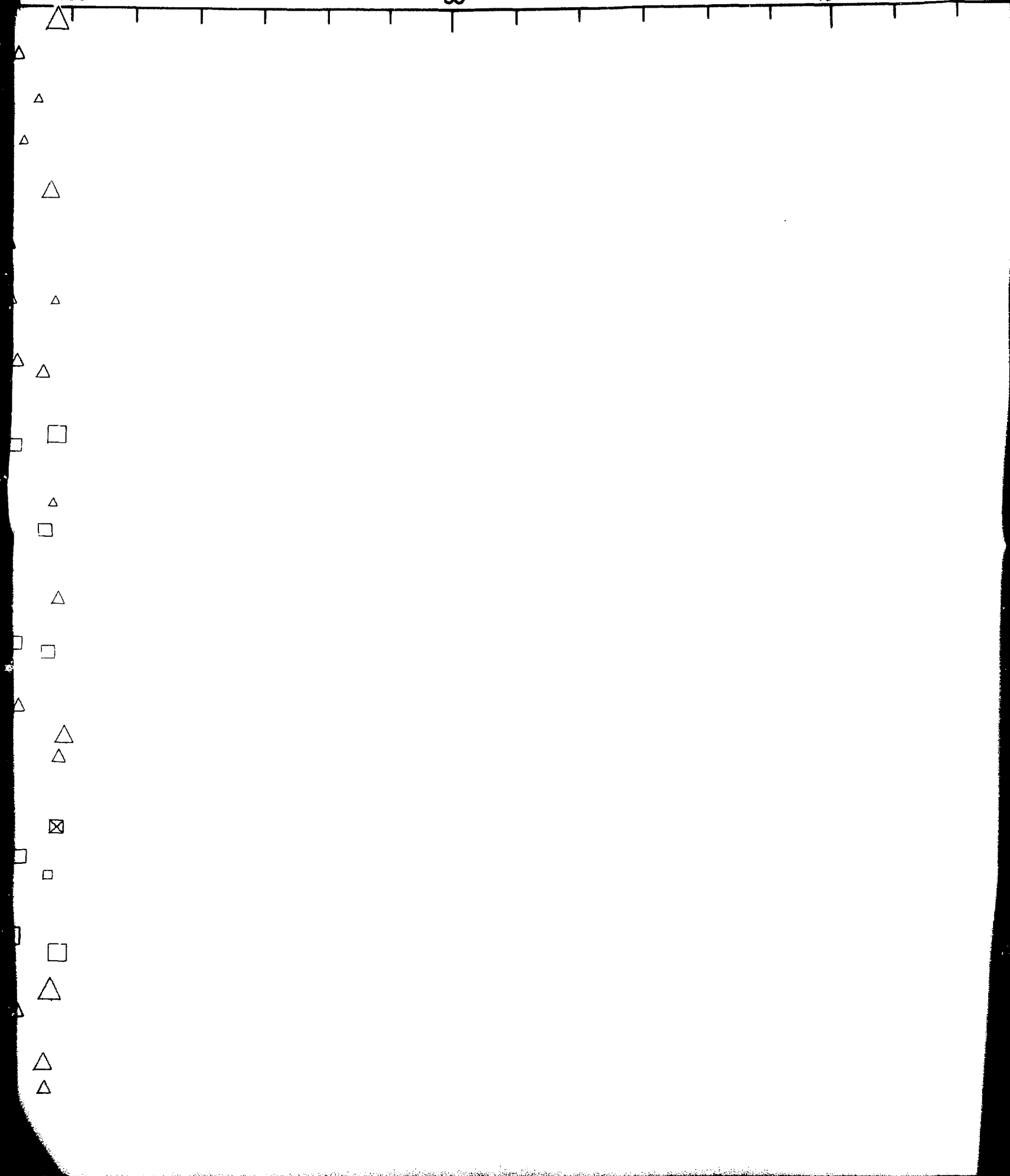


# SHUNGNAK

158°

30'

157°



# PLATE IV-B

30'

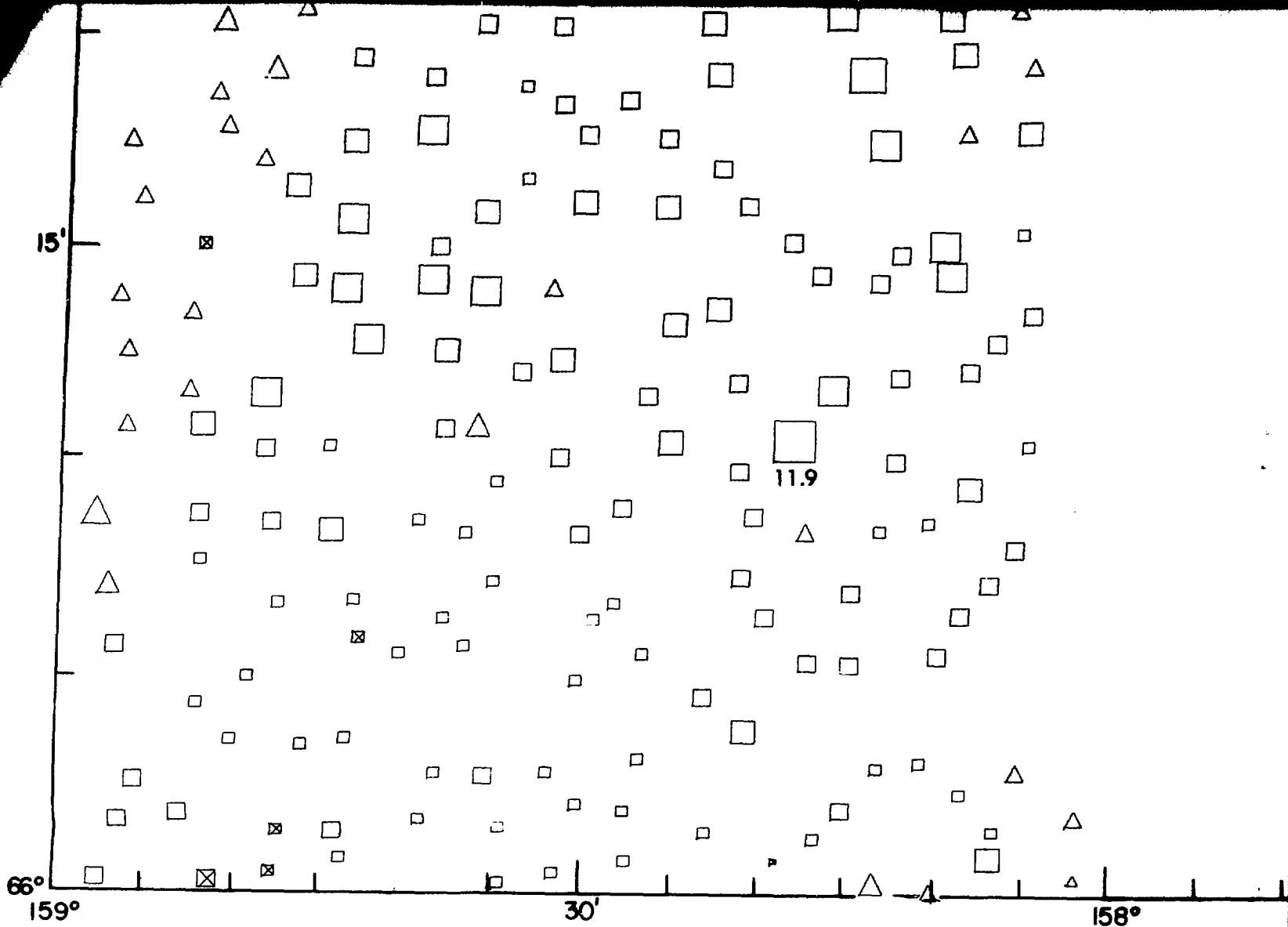
156°  
67°

45'

30'







37.7 The numbers printed next to the symbols for the two largest concentration intervals are the measured uranium concentrations, in ppm, for those samples.



LEGEND

NATURAL LAKE SEDIMENT	WET STREAM SEDIMENT	DRY STREAM SEDIMENT	U (ppm)
△	□	■	≤ 1.25
△	□	⊠	1.26 - 2.50
△	□	⊞	2.51 - 3.25
△	□	⊠	3.26 - 4.00
△	□	⊠	4.01 - 5.50
△	□	⊠	5.51 - 8.00
△	□	⊠	8.01 - 16.00
△	□	⊠	> 16.00

URANIUM  
THE AREA OF TH

30

157°

SCALE 1:250 000

0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS



## PLATE IV-B

UM CONCENTRATIONS (ppm) IN SEDIMENTS  
IN  
THE SHUNGNAK QUADRANGLE (WEST THIRD)  
SEWARD PENINSULA, ALASKA

15'

157°

30'

156°

20

25 MILES

25 KILOMETERS



Los Alamos  
scientific laboratory  
of the University of California

SEDIMENTS

GLE ( WEST THIRD)

ASKA