K/UR-101

NATIONAL URANIUM RESOURCE EVALUATION PROGRAM

HYDROGEOCHEMICAL AND STREAM SEDIMENT RECONNAISSANCE BASIC DATA FOR PLAINVIEW NTMS QUADRANGLE, TEXAS

Uranium Resource Evaluation Project

June 8, 1978

UNION CARBIDE

OAK RIDGE GASEOUS DIFFUSION PLANT
OAK RIDGE, TENNESSEE

prepared for the U.S. DEPARTMENT OF ENERGY *under*
U.S. GOVERNMENT *Contract W-7405 eng 26*

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Union Carbide Corporation, Nuclear Division
Oak Ridge Gaseous Diffusion Plant
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ABSTRACT

Results of a reconnaissance geochemical survey of the Plainview Quadrangle, Texas are reported. Field and laboratory data are presented for 969 groundwater samples and 571 stream sediment samples. Statistical and areal distributions of uranium and other possible uranium-related variables are displayed. A generalized geologic map of the survey area is provided, and pertinent geologic factors which may be of significance in evaluating the potential for uranium mineralization are briefly discussed.

Results from groundwater samples indicate that at least two distinctly different types of groundwater occur in the Plainview Quadrangle. One is associated with the Permian units and is characterized by high conductivity values with high concentrations of uranium, molybdenum, and sulfate. The other is associated with the Ogallala Aquifer System and is characterized by high alkalinity values and high concentrations of arsenic, lithium, molybdenum, selenium, and vanadium.

Results from stream sediment samples indicate that two distinct associations between uranium and other elements occur in the Plainview Quadrangle. An association consists of high soluble uranium values accompanied by relatively low total-to-soluble uranium ratios with high values for vanadium, lithium, and to a lesser extent, arsenic and selenium. This association is indicative of the type of secondary mineralization expected in sedimentary units which is related to commercial potential. The other association consists of high values of total uranium and high total-to-soluble uranium ratios with high values for barium, manganese titanium, thorium, and zirconium. This association is indicative of heavy and resistate mineral suites which are less favorable for commercial potential.

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HYDROGEOCHEMICAL AND STREAM SEDIMENT RECONNAISSANCE BASIC DATA FOR PLAINVIEW NTMS QUADRANGLE, TEXAS

INTRODUCTION

The National Uranium Resource Evaluation (NURE) Program was established by the United States Atomic Energy Commission, now the United States Department of Energy (DOE), in the spring of 1973 to assess uranium resources and to identify areas favorable for the occurrence of uranium resources throughout the United States. The NURE Program, which is being administered by DOE, is expected to increase the activity of commercial exploration for uranium in the United States. The principal objectives of the NURE Program are: (1) to provide a comprehensive in-depth assessment of the nation's uranium resources for national energy planning, and (2) to identify areas favorable for uranium resources. A NURE report covering uranium resources in all areas presently considered favorable is targeted for 1982; the first comprehensive assessment of the entire United States is scheduled for completion in 1984.

The NURE Program consists of five parts:

1. Hydrogeochemical and Stream Sediment Reconnaissance Survey,
2. Aerial Radiometric and Magnetic Survey,
3. Surface Geologic Investigations,
4. Drilling for Geologic Information, and
5. Geophysical Technology Development.

The objective of the Hydrogeochemical and Stream Sediment Reconnaissance Survey in the NURE Program is to provide information to be used in accomplishing the overall NURE objectives. This is accomplished by a reconnaissance of surface water, groundwater, stream sediment, and lake sediment. This survey is being conducted by four Government-owned laboratories, each responsible for approximately one-quarter of the United States. Union Carbide Corporation, Nuclear Division (UCC-ND), under contract with DOE, will survey approximately 2,500,000 km^2 (1,000,000 mi^2) of the Central United States which includes most of the states of Texas, Oklahoma, Kansas, Nebraska, South Dakota, North Dakota, Minnesota, Wisconsin, Michigan, Indiana, Illinois, and Iowa, as well as parts of Arkansas, Missouri, New Mexico, and Ohio as shown in Figure 1. This report describes a portion of this work done by UCC-ND in the Plainview Quadrangle, Texas.

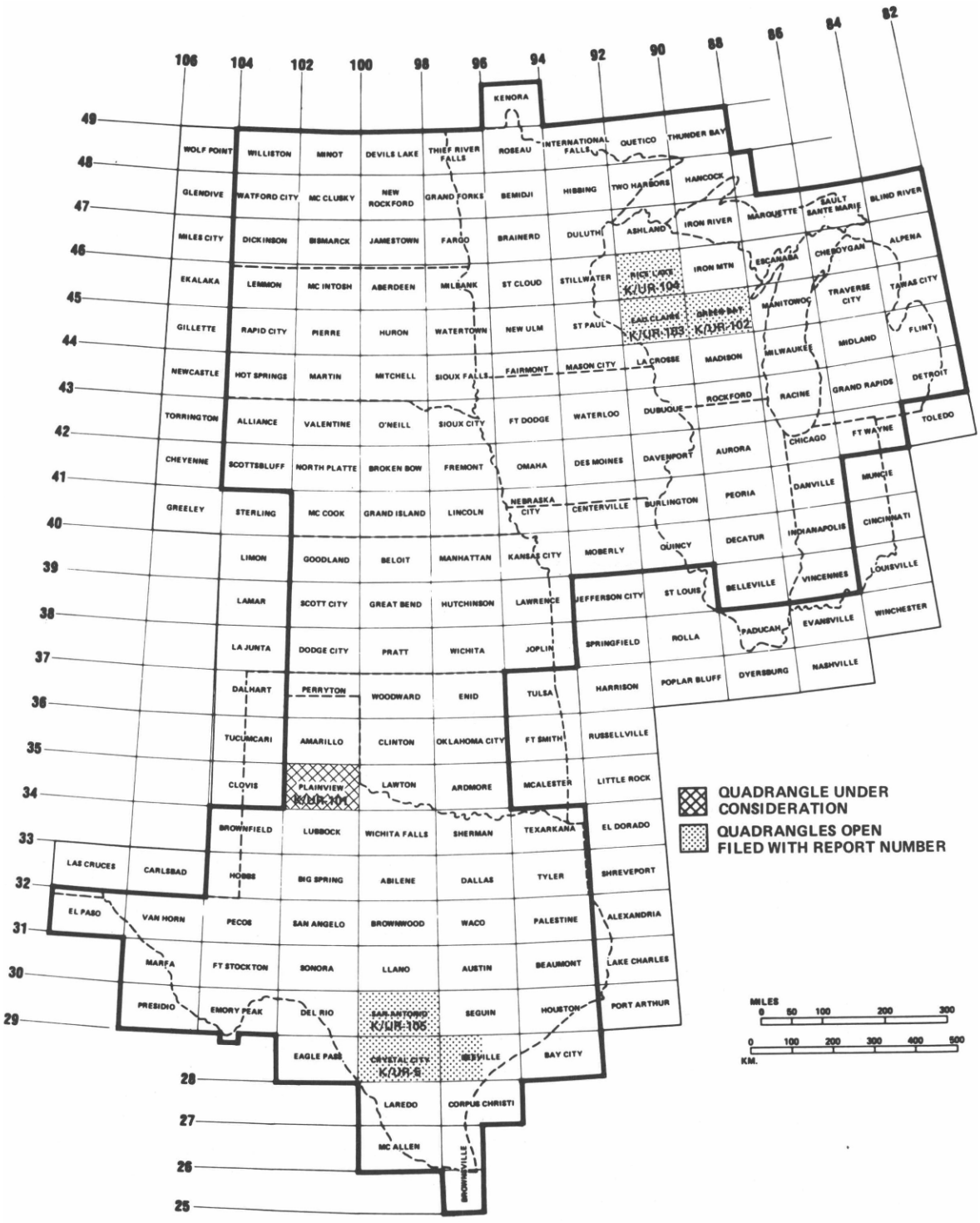

Figure 1

INDEX MAP SHOWING THE ORGDP AREA OF RESPONSIBILITY FOR THE HSSR PROGRAM, THE PLAINVIEW QUADRANGLE, AND QUADRANGLES FOR WHICH BASIC DATA REPORTS HAVE BEEN OPEN FILED

GEOLOGY

LOCATION AND GEOLOGIC SETTING

The Plainview Quadrangle covers a surface area of approximately 20,350 km^2 (~7,860 mi^2) in the Great Plains Province between 34° and 35° north latitude and 100° and 102° west longitude. The survey area is outlined on the generalized geologic map of Texas shown in Figure 2 and includes all or parts of Armstrong, Briscoe, Childress, Collingsworth, Cottle, Donley, Floyd, Foard, Hale, Hall, Motley, Randall, and Swisher Counties. A geologic map of the Plainview Quadrangle is shown in Figure 3 and Plate 7. The Ogallala Formation (Tertiary) and the Dockum Group (Triassic), is bounded on the east by the Cap Rock Escarpment which divides that portion of the High Plains known as the Llano Estacado from the Gypsum Plains portion of the Central Lowlands. The stratigraphic column and geologic codes used in this report are presented in Table 1.

Rocks deposited during the Paleozoic Era are restricted to post-Wolfcampian Permian units which crop out in the eastern half of the survey area and dip gently to the west. The Permian is represented by the Blaine Formation, the Whitehorse and Cloud Chief Groups, and the Quartermaster Formation (Table 1).

Units belonging to the Mesozoic Era consist primarily of Triassic sediments of the Dockum Group which lie unconformably on the Permian in the western part of the quadrangle and dip gently to the west. The Dockum, which is truncated north of the community of Palo Duro in Armstrong County, is exposed in a narrow north-trending belt. Cretaceous rocks of the Edwards Group form three inliers in the Llano Estacado in Floyd County. Evidence indicates the Cretaceous may have a wider subsurface extent (Cronin, 1964).

The oldest Cenozoic sediments are represented by the Pliocene Ogallala Formation which dips to the East and unconformably overlies Cretaceous, Triassic, and Permian rocks. Quaternary sediments in the survey area consist of four types. Lacustrine sediments of the Tule Formation are exposed in Tule Canyon, near the Cap Rock Escarpment (Reeves, 1963). Extensive terrace deposits are exposed in Collingsworth County in the northeast corner of the survey area (Smith, 1970). A windblown cover sand exists over most of the Llano Estacado covering the Ogallala Formation. Windblown sand deposits border the major streams in the Gypsum Plains portion of the survey area (Barnes and Eifler, 1968).

LITHOLOGY AND ENVIRONMENTS OF DEPOSITION

The Permian rocks in the survey area are evaporites and terrigenous clastics, many of which were deposited in a restricted marine environment (Nicholson, 1960). The oldest unit is the Blaine Formation,

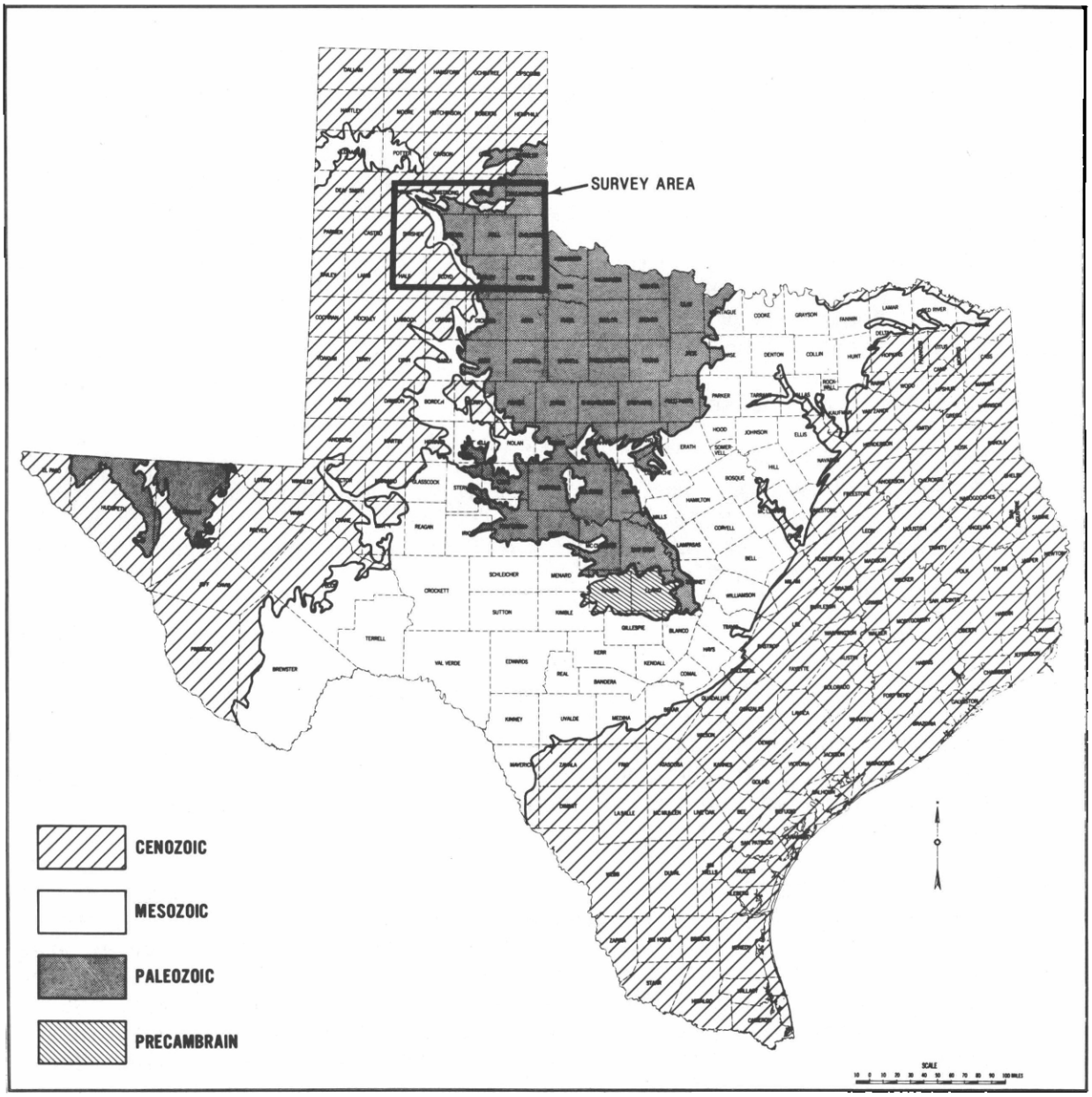

Figure 2
GENERALIZED GEOLOGIC MAP OF TEXAS (AFTER RENFRO, ET AL, 1973)

Table 1

STRATIGRAPHIC COLUMN AND GEOLOGIC CODES FOR THE PLAINVIEW QUADRANGLE

System	Series/Stage	Geologic Code		Unit Name	Maximum Thickness	
		Group	Formation		Meters	Feet
	Holocene		QAL	Alluvium		
			QWS	Windblown Sand		
Quaternary			QPFT	Fluviatile Terrace Deposits	104	340
	Pleistocene		QPCS	Windblown Cover Sand	7.6	25
			QPTU	Tule	44	145
Tertiary	Pliocene		TPO	Ogallala	107	350
Cretaceous		LKE		Edwards	*	*
Triassic		TRD		Dockum	91	300
Permian	Ochoan	POQ		Quartermaster	91	300
		PGWC		Whitehorse and Cloud Chief	213	700
	Guadalupian		PGEB	Blaine	121	400

*Limited Areal Exposure

Source of Geology

1. Barnes, V. E.; and Eifler, G. K. Jr.; Geologic Atlas of Texas, Plainview Sheet (1968).
2. Smith, J. T.; Groundwater Resources of Collingsworth County, Texas (1970).

System	Series/Stage	Geologic Code Group	Geologic Code Formation	Unit Name
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	Guadalupian	PGWC		Whitehorse and Cloud Chief
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Source of Geology for Geologic Map.

1. Barnes, V. E.; and Eifler, G. K., Jr.; Geologic Atlas of Texas, Plainview Sheet (1968).

2. Smith, J. T.; Ground-water Resources of Collingsworth County, Texas (1970).

LEGEND FOR FIGURE 3

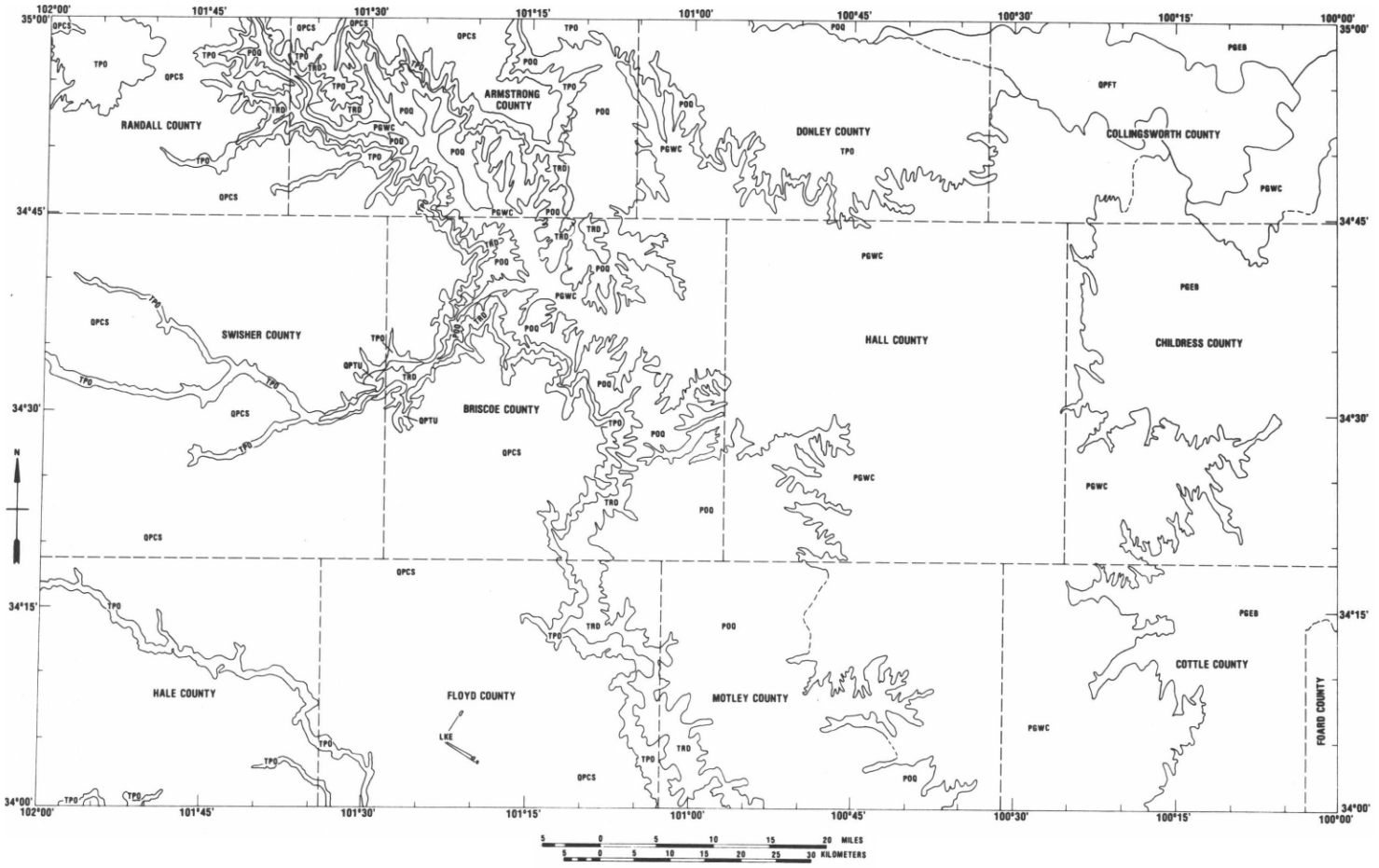

Figure 3

GENERALIZED GEOLOGIC MAP OF THE PLAINVIEW QUADRANGLE

which is composed of evaporites, red and greenish grey shales, and dolomites (Roth, 1949). The Whitehorse and Cloud Chief Group overlies the Blaine and consists of interbedded sandstone, shale, gypsum, and dolomite (Barnes and Eifler, 1968). The Quartermaster, which is the youngest Permian Formation in the survey area, consists of interbedded shale, siltstone, sandstone, gypsum, and dolomite (Barnes and Eiffler, 1968).

The Dockum Group (Triassic) is a thick flood plain alluvial-fan deposit of terrestial origin which dips to the west in the study area. Due to the unconformity between the Dockum and the overlying formations, some or all of the Dockum may be missing. The Dockum is divided by Sidwell (1945) into three formations. The lowest formation is the Tecovas, which consists of multicolored calcareous shales and lenses of grey sandstone. The overlying unit is the Santa Rosa Formation which is a compact cross-laminanted sandstone with some conglomerete beds. The uppermost formation is the Chinle, which is predominantly red shale with some interbedded sandstone lenses.

Cretaceous marine rocks of the Edwards Group occur as remnants in the subsurface in Randal, Hale, and Floyd Counties with three inliers of Edwards Limestone exposed in Floyd County (Cronin, 1964).

The Ogallala Formation (Tertiary) overlies the Mesozoic and Paleozoic sediments in the western half of the survey area. It was deposited on an older erosional surface of these sediments (Cronin, 1964). It is an extensive fluviatile deposit which was laid down east of the Rocky Mountains of Colorado and the limestone ranges of central New Mexico during Pliocene time. This formation is composed mainly of silt and fine sand although coarse sand and gravel are present throughout. The coarser facies occur primarily in broad valleys at the base of the Ogallala. A caliche caprock covers a large portion of the Ogallala with a thickness ranging up to several tens of feet (Barker and Scott, 1958).

The Tule Formation (Quarternary) consists of sand, silt, and clay with a discontinuous gravel at the base. This formation was deposited in an isolated lacustrine environment (Reeves, 1963). Quarternary Fluviatile Terrace deposits consisting of clay, silt, sand, gravel, and volcanic ash occur in the northeast portion of the survey area and range in thickness up to 100 m (350 ft) (Smith, 1970). A windblown cover sand deposit occurs over most of the Llano Estacado and consists primarily of fine to medium grained quartz sand. Holocene Surficial Windblown Sand deposits are found bordering the major rivers in the Gypsum Plains portion of the survey area. These appear to be formed primarily from materials blown out of the river beds and are composed of reworked Tertiary material (Gould, 1906). Sediments collected from streams adjacent to these areas may be more related to the Tertiary than the underlying Permian.

STRUCTURE

The dominant structural feature in the survey area is the Palo Duro basin, which was not significant in the depositional patterns of rocks younger than the Permian Wolfcampian series. Permian rocks in the survey area were deposited after the Palo Duro Basin was filled (Nicholson, 1960) and have a regional dip to the west. Structural features, such as the Amarillo Uplift and the Matador Arch, are reflected only in deeper sediments.

HYDROLOGY

Groundwater from the Permian formations of the survey area is characterized by a conductivity which is usually greater than 2,000 µmhos/cm. This high conductivity is related to gypsum and other evaporites found in the Permian section.

Water from the Dockum Group is of two types: true Dockum waters which are generally highly mineralized, and water which has seeped into the Dockum from the overlying Ogallala Aquifer. This occurs primarily along the edge of the Cap Rock Escarpment and is evidenced by springs near the top of the Dockum.

The Ogallala Aquifer is the principal water-bearing unit on the Llano Estacado. In some instances, water from this aquifer may be produced from other units which are in hydrologic continuity with the Ogallala Formation. In a few areas, Cretaceous rocks supply some of the water pumped from the aquifer (Cronin, 1964). Also, in isolated areas where the Santa Rosa Sand is the top unit of the Dockum Group, some water of Ogallala character may be produced from the Dockum.

Quaternary terrace deposits supply most of the groundwater for portions of the northeast corner of the survey area in Collingsworth County. This water has a lower conductivity than water from the surrounding Permian units. Recharge of the terrace deposits is from both rainwater infiltration and contribution from Permian units. Chemical composition is a function of the degree of mixing of waters from these two sources (Smith, 1970).

URANIUM OCCURRENCES

Eargle and McKay (1955) briefly summarize uranium occurrences in northern Texas and southern Oklahoma. They report one significant uranium locality in the Plainview Quadrangle where radioactive zones occur near the base of the Dockum Group in the Quitaque Area, Briscoe County, Texas.

The aerial radiometric survey of the Lubbock and Plainview Quadrangles identifies 18 anomalies from the bismuth and thallium data (Geo-Data International, 1975, Figure 13). The only anomalies in the Plainview Quadrangle are over the Dockum Formation in Tule Canyon about 15 km (10 miles) northwest of Silverton.

SAMPLE COLLECTION

CHRONOLOGY OF THE SURVEY

Sampling for the Plainview Quadrangle Basic Data Report began on July 20, 1977 and was completed in November 1977. Compilation and verification of all field and laboratory data used to illustrate the statistical and areal distribution of uranium and other possible uranium related parameters for this report was completed in April 1978.

FIELD PROCEDURES

Field sampling was performed by personnel from the Austin, Texas field office of Bendix Field Engineering Corporation (BFEC). A field orientation program was given to BFEC personnel on July 20, 1977. Technical supervision and training was provided by the URE staff throughout the entire sampling period.

A total of 969 groundwater and 571 stream sediment samples was collected within the boundaries of the Plainview Quadrangle. Spring water and well water samples are combined and reported as groundwater. Plates 1 and 4 are overlays at a scale of 1:250,000 showing sample locations for groundwater sites and stream sediment sites respectively. Drainage basins are drawn in on Plate 4 to indicate the area represented by the stream sediment sample. Stream sediment samples were not collected west of the Cap Rock Escarpment because of the poorly developed drainage system.

Detailed information regarding techniques in sample collection, recording site data, field equipment, and field measurements may be found in the following reports: Hydrogeochemical and Stream Sediment Reconnaissance Procedures of the Uranium Resource Evaluation Project (Arendt, et al, In Press); Procedures Manual for Groundwater Reconnaissance Sampling (Uranium Resource Evaluation Project, March 1978); Procedures Manual for Stream Sediment Reconnaissance Sampling (Uranium Resource Evaluation Project, May 1978). Field observations were recorded on the field form shown in Table D-2 and are included in the microfiche in Appendix D.

CONTAMINATION

Several steps were taken to avoid the possibility of collecting contaminated samples. Wells which were affected by any chlorination, water softening, or filtering devices were not sampled if a sample could not be taken before the water passed through such devices. Any well that had not been pumped recently was allowed to run long enough to flush the system. The fact that it had no recent use was noted on the field form. Since the possibility for contamination is high in dug wells these are noted on the field form. Any wells that the samplers felt were possibly contaminated were checked as such on the field forms.

Sediment samples were collected upstream from road crossings except where this was infeasible. Visable signs of contamination or the presence of cultivated areas upstream from a sample site were noted on the field form. Cotton is the major crop grown in the survey area and is sometimes lightly fertilized. The possibility of phosphate fertilizer contamination is minimal since only 25% of the area under cultivation is fertilized . This is done in March and April with 20-30 lbs/acre of 0-46-0 phosphate fertilizer. Paraquat was applied as a desiccant to 10% of the cotton in the area in the fall of 1977. No desiccant was applied in 1976. No arsenic acid has been used in the area for the past two years.

All samples were carefully scrutinized and any that were considered contaminated were deleted from the areal and statistical plots in Appendices A and B but are included in the data listings in Appendix D.

CHEMICAL ANALYSIS

All samples collected in the field geology program were returned to the URE Project laboratory in Oak Ridge, Tennessee for preparation and analysis. The elements determined and the analytical techniques used along with the appropriate detection limits are given in Table 2. These detection limits are considered the best average during normal operation; however some variables have values reported below these limits. Observed data from all samples are included in Appendix D. All water samples were received in 250 ml polyethylene bottles and were filtered through 0.45-μm cellulose acetate paper. Stream sediment samples were dried overnight at 85° C and sieved to collect the <150-μm fraction. Part of the sediment sample was dissolved in 10 ml of 1:1 nitric-hydrofluoric acid. The analytical procedures which were used have been described by Cagle (1977) and Arendt, et al (In Press).

QUALITY CONTROL

MEASUREMENTS CONTROL

The procedures used to analyze URE Project reconnaissance samples require that calibration standards, check samples, and blanks be run along with normal samples to ensure the validity of the reported results. A measurements control program provides information concerning precision and reliability of these measurements. Control samples of two water batches and two sediment batches are submitted anonymously along with routine samples on a daily basis. A statistical summary of results reported on control samples which were analyzed along with the samples included in this survey is given in Table 3. Results of uranium analysis of water and sediment samples obtained from the Ames Laboratory as part of the Multilaboratory Analytical Quality Control for the HSSR Program are reported by D'Silva, et al (1978).

Table 2

DETECTION LIMITS OF VARIABLES DETERMINED IN WATER AND SEDIMENT SAMPLES

Variable	Method	Detection Limits Sediment ppm	Water ppb
U-FL	Fluorometry (FL)	0.25	0.2
U-MS	Mass Spectrometry-Isotope Dilution (MS)		0.02
U-NT	Neutron Activation-Delayed Neutron Count (NT)	0.02	
As	Atomic Absorption (AA)	0.1	0.5
Se	Atomic Absorption (AA)	0.1	0.2
Ag	Plasma Source Emission Spectrometry (PS)	2	2
Al	Plasma Source Emission Spectrometry (PS)	0.05[a]	10
B	Plasma Source Emission Spectrometry (PS)	10	8
Ba	Plasma Source Emission Spectrometry (PS)	2	2
Be	Plasma Source Emission Spectrometry (PS)	1	1
Ca	Plasma Source Emission Spectrometry (PS)	0.05[a]	0.1[b]
Co	Plasma Source Emission Spectrometry (PS)	4	2
Cr	Plasma Source Emission Spectrometry (PS)	1	4
Cu	Plasma Source Emission Spectrometry (PS)	2	2
Fe	Plasma Source Emission Spectrometry (PS)	0.05[a]	10
Li	Plasma Source Emission Spectrometry (PS)	1	4
Mg	Plasma Source Emission Spectrometry (PS)	0.05[a]	0.1[b]
Mn	Plasma Source Emission Spectrometry (PS)	4	2
Mo	Plasma Source Emission Spectrometry (PS)	4	4
Na	Plasma Source Emission Spectrometry (PS)	0.05[a]	0[b]
Nb	Plasma Source Emission Spectrometry (PS)	4	--
Ni	Plasma Source Emission Spectrometry (PS)	2	--
P	Plasma Source Emission Spectrometry (PS)	5	40
Sc	Plasma Source Emission Spectrometry (PS)	1	1
Th	Plasma Source Emission Spectrometry (PS)	2	--
Ti	Plasma Source Emission Spectrometry (PS)	10	2
V	Plasma Source Emission Spectrometry (PS)	2	4
Y	Plasma Source Emission Spectrometry (PS)	1	1
Zn	Plasma Source Emission Spectrometry (PS)	2	4
Zr	Plasma Source Emission Spectrometry (PS)	2	2
SO_4	Spectrophotometry		5[b]

[a] Detection Limits in percent.
[b] Detection limits in ppm.

Table 3

SUMMARY OF MEASUREMENTS CONTROL RESULTS OBTAINED WITH SAMPLES FROM THE PLAINVIEW QUADRANGLE

Measurements Control Results For Water

Element	Method	Batch L-3				Batch H-3			
		No. of Samples	Mean (ppb)	Standard Deviation (ppb)	Coefficient of Variation	No. of Samples	Mean (ppb)	Standard Deviation (ppb)	Coefficient of Variation
U	FL	9	0.45	0.12	0.27	6	10.4	0.86	0.08
U	MS	10	0.54	0.12	0.22	10	9.78	0.69	0.07
As	AA	27	3.9	1.1	0.28	26	0.8	0.20	0.25
Se	AA	27	1.6	0.18	0.11	26	0.9	0.21	0.23
Al	PS	24	72	12	0.17	27	348	16	0.05
B	PS	24	2,237	87	0.04	27	58	4	0.07
Ba	PS	24	132	9	0.07	27	30	2	0.07
Ca	PS	23	9,910	480	0.05	27	95,420	4,520	0.05
Co	PS	24	15	2	0.13	27	92	5	0.05
Cr	PS	24	90	7	0.08	27	11	4	0.36
Cu	PS	24	50	6	0.12	27	194	6	0.03
Fe	PS	24	105	12	0.11	27	947	29	0.03
Li	PS	24	18	2	0.11	27	105	8	0.08
Mg	PS	24	9,700	460	0.05	26	72,300	3,100	0.04
Mn	PS	24	21	1	0.05	27	100	4	0.04
Mo	PS	24	51	7	0.14	27	17	5	0.29
Na	PS	24	2,040	120	0.06	27	51,250	3,060	0.06
Ni	PS	24	172	14	0.08	27	17	11	0.65
P	PS	24	120	14	0.12	27	523	35	0.07
Sc	PS	24	62	3	0.05	27	12	1	0.08
Ti	PS	24	100	5	0.05	27	39	2	0.05
V	PS					27	37	4	0.11
Y	PS	24	8	1	0.12	27	45	2	0.04
Zn	PS	24	486	24	0.05	27	68	10	0.15

Measurements Control Results For Stream Sediments

Element	Method	Batch R-2				Batch S-2			
		No. of Samples	Mean (ppm)	Standard Deviation (ppm)	Coefficient of Variation	No. of Samples	Mean (ppm)	Standard Deviation (ppm)	Coefficient of Variation
U	FL	37	3.48	0.40	0.11	31	8.83	0.98	0.11
U	NT	35	5.12	0.13	0.03	31	10.55	0.23	0.02
As	AA	35	6.22	1.08	0.17	34	10.07	2.06	0.20
Se	AA	36	0.62	0.28	0.46	33	0.70	0.19	0.28
Al	PS	21	4.74[a]	1.09[a]	0.23	27	6.51[a]	1.45[a]	0.22
B	PS	20	25.3	5.4	0.21	27	56.0	7.8	0.14
Ba	PS	21	378.6	68.4	0.18	27	450.7	86.0	0.19
Be	PS	21	1.7	0.5	0.29	27	2.4	0.5	0.21
Ca	PS	21	0.32[a]	0.06[a]	0.19	27	0.50[a]	0.11[a]	0.22
Co	PS	21	20.0	1.9	0.10	27	27.0	2.5	0.09
Cr	PS	21	44.0	3.5	0.08	27	60.4	4.1	0.07
Cu	PS	18	16.2	2.3	0.14	25	42.7	2.7	0.06
Fe	PS	21	2.34[a]	0.14[a]	0.06	27	3.17[a]	0.24[a]	0.08
Li	PS	21	28.8	3.4	0.12	27	31.4	4.8	0.15
Mg	PS	21	0.44[a]	0.06[a]	0.14	27	0.67[a]	0.11[a]	0.17
Mn	PS	21	996.5	134.2	0.13	27	829.1	118.9	0.14
Mo	PS	21	2.0	1.2	0.59	27	24.3	2.3	0.10
Na	PS	21	0.28[a]	0.03[a]	0.12	27	0.24[a]	0.03[a]	0.15
Ni	PS	20	31.2	1.9	0.06	25	58.5	2.1	0.04
P	PS	21	588.0	69.7	0.12	27	924.8	104.4	0.11
Sc	PS	21	8.1	2.0	0.24	27	13.4	3.0	0.23
Th	PS	21	11.6	3.5	0.30	27	14.9	3.6	0.24
Ti	PS	21	2882.5	235.6	0.08	27	3052.0	197.7	0.06
V	PS	21	86.4	3.1	0.04	26	164.9	4.1	0.03
Y	PS	21	23.0	5.7	0.25	27	38.0	8.4	0.22
Zn	PS	21	81.0	8.2	0.10	27	99.3	10.8	0.11
Zr	PS	21	125.5	5.6	0.04	27	120.2	4.6	0.04

(a) Values in percent

PRINCIPAL COMPONENT ERROR ANALYSIS

A principal component analysis of data from well water and stream sediment samples was used to produce an ordered list of samples using the eigenvalue statistics as described by Kane, et al (1977), where the most extreme samples were listed first. Additional unusual samples were identified if single-element measurements were outside a three standard deviation confidence interval around the mean. The laboratory and field data from the unusual samples identified by this procedure were reviewed. Seven well water samples (005825, 009463, 010949, 011269, 011843, 012214, and 012229) and five stream sediment samples (009467, 011412, 011450, 011765, and 012106) which appeared to be the most unusual were submitted for reanalysis. The original results and the reanalysis were compared. For the well water samples, two values, one sulfate result and one uranium result out of over 100 individual measurements, examined were found to be significantly different from the original analysis and were corrected. For the sediments, one uranium result and two spectrographic results required correction. This low error rate for the unusual samples indicates a high level of reliability for the laboratory measurements.

GEOCHEMICAL RESULTS

A statistical summary of all geochemical variables determined and a correlation matrix of selected variables is presented in Appendices A and B for well water and stream sediment samples collected in the Plainview Quadrangle. Areal distribution maps; frequency, percentile, and probability plots; and tabular data listings for selected variables are also included. All field and laboratory data for all groundwater and stream sediment samples may be found on microfiche in Appendix D. A generalized geologic map of the survey area is shown at the 1:250,000 scale (Plate 7) and at the 1:1,000,000 scale (Figure 3). Details of all sampling, analytical, and statistical procedures are discussed elsewhere (Arendt, et al, In Press).

GEOCHEMICAL DISTRIBUTIONS IN GROUNDWATER

The sample site locations for well and spring water samples collected in the Plainview Quadrangle are shown on Plate 1 at the 1:250,000 scale. Symbol Plots for uranium and conductivity are presented at this scale on Plates 2 and 3, respectively. The number of groundwater samples collected from each of the major stratigraphic units in the study area are presented in Table 4. Boundaries of the major producing horizons sampled and samples noted as having a hydrogen sulfide odor at the time the sample was collected are presented in Figure 4.

Values for uranium, conductivity, arsenic, lithium, molybdenum, selenium, vanadium, sulfate, and total alkalinity are listed in Table

Table 4

DISTRIBUTION OF SAMPLES FROM THE PLAINVIEW QUADRANGLE BY GEOLOGIC UNIT

Surface Geologic Unit	Geologic Unit Code	Stream Sediment Surface Code Code	Wells and Springs Producing Horizon Code
Alluvium	QAL	0	3
Windblown Sand	QWS	40	5
Fluviatile Terrace Deposits	QPFT	1	36
Windblown Cover Sand	QPCS	0	0
Tule Fm	PQTV	0	0
Ogallala Fm	TPO	17	395
Edwards GP	LKE	0	0
Dockum Gp	TRD	16	19
Quartermaster Gp	POQ	100	84
Whitehorse and Cloud Chief Gp	PGWC	218	292
Blaine Fm	PGEB	98	135
TOTALS		490	969

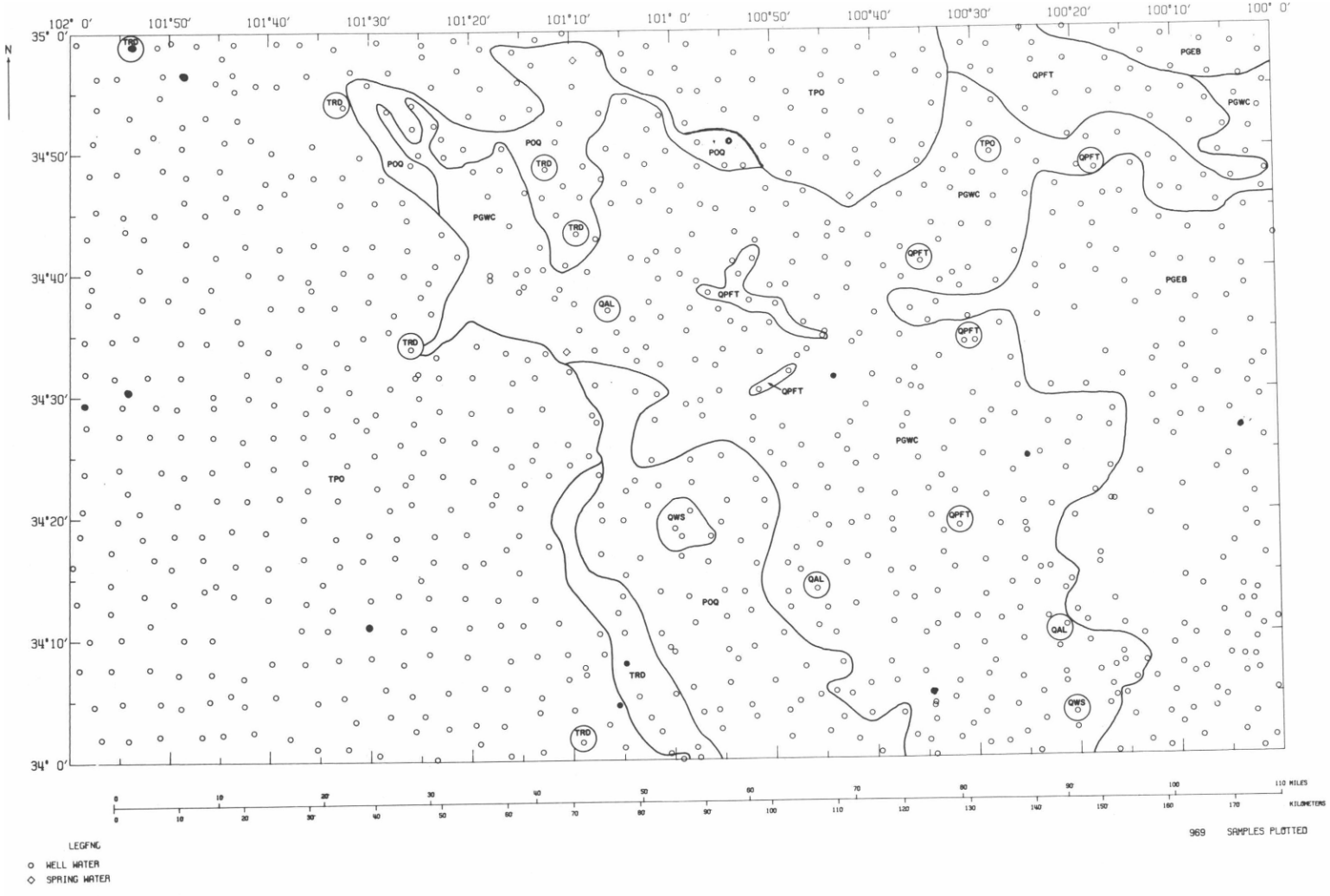

Figure 4

PRODUCING HORIZON MAP FOR WELL
AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

A-3. The figures in Appendix A present frequency, lognormal probability, percentile, and areal symbol plots for these same variables plus the ratios uranium/conductivity and uranium/sulfate. The groundwater data subset used to produce Tables A-1 and A-2 and the figures in Appendix A includes all well and spring water samples collected from the Plainview Quadrangle except for samples 005674 and 005853 which are duplicates of samples 011215 and 011865, respectively.

Uranium

The map showing the areal distribution of uranium in groundwater in the Plainview Quadrangle (Plate 2 and Figure A-1b) indicates that most of the uranium concentrations above 20 ppb (85th percentile) occur in the Permian units, particularly the Quartermaster. Conversely, almost all the wells producing from the Ogallala Aquifer System have uranium concentrations slightly lower than the median, predominantly in the 2 to 9 ppb range (See the percentile plot in Figure A-1a). The correlation matrix (Table A-2) indicates a significant positive correlation between uranium and boron, calcium, lithium, magnesium, sodium, vanadium, yttrium, conductivity, sulfate, pH, uranium/conductivity, and uranium/sulfate. A significant negative correlation is indicated between uranium and barium and pH.

Conductivity

The map showing the areal distribution of conductivity in groundwater in the Plainview Quadrangle (Plate 3 and Figure A-2b) indicates the presence of at least two distinct types of groundwater (Figure A-2a). Waters from Permian units exhibit high conductivity with median values ranging between 2900 and 4100 µmhos/cm. Conversely, water from the Ogallala Aquifer System has low conductivity with a median value around 700 µmhos/cm. The correlation matrix (Table A-2) indicates a significant positive correlation between conductivity and boron, calcium, copper, iron, lithium, magnesium, manganese, molybdenum, sodium, uranium, yittrium, and sulfate. Some of these correlations may be caused by the high total dissolved solids content of water from the Permian units. A significant negative correlation is indicated between conductivity and arsenic, barium, pH, uranium/conductivity, and uranium/sulfate.

Related Variables

In addition to uranium and conductivity, other elements determined in groundwater samples which are considered useful for identifying areas of potential uranium mineralization in sandstone include arsenic, molybdenum, selenium, and vanadium (Nichols, et al, 1977). Maps showing areal distribution of each of these are presented in Appendix A. The percentile plots show the distribution of observed concentrations within the different geologic units and are particularly helpful in evaluating the data.

The uranium, conductivity, and sulfate concentration maps (Figures A-1b, A-2b, and A-11b, respectively) reflect the variability of the major producing horizons. The waters can be divided into two distinct groups; that from the Permian units versus waters from the Ogallala Aquifer System. The ratio of uranium/conductivity (Figure A-3b) is perhaps a more meaningful variable for evaluation of the uranium potential of this area than uranium alone. Dividing uranium by conductivity tends to normalize the regionally high uranium values associated with high total dissolved solids typically found in the Permian units, thus highlighting potentially significant uranium concentrations that are unrelated to dissolved solids content. The uranium/sulfate map (Figure A-4b) gives similar results. Relatively high values for other important elements in waters from the Permian units may mask lower but significant concentrations of these elements in waters from other units within the survey area.

Figure A-5b shows a region of the Ogallala Aquifer System that is characterized by arsenic values which are greater than the 85th percentile (5.3 ppb). Figure A-8b shows a somewhat smaller region where selenium values greater than the 85th percentile (0.4 ppb) are associated with the area of high arsenic concentrations. Another area of selenium values above the 85th percentile occurs in waters from the Blaine Formation along the southeastern edge of the survey area.

The areal distribution for molybdenum concentrations in groundwater is shown in Figure A-7b. Three small areas with values above the 85th percentile (15 ppb) occur in the Ogallala Aquifer near the Cap Rock Escarpment. A larger area of high molybdenum values above the 85th percentile occurs in the Blaine Formation along the eastern border of the survey area. Figure A-9b shows an area in which vanadium values greater than the 85th percentile (29 ppb) occur in waters from the Ogallala Aquifer. These high values occur within the area of high arsenic values discussed earlier. Samples in this area also contain lithium concentrations above the 85th percentile (154 ppb) shown in Figure A-6b. An area in the Blaine Formation with high lithium values corresponds to the area of high molybdenum values. Figure A-10b shows two areas with alkalinity concentrations greater than the 85th percentile (282 ppm) in waters from the Ogallala Aquifer System. A small area occurs in the northwest corner of the quadrangle and a larger area covers much of the southwest quarter of the quadrangle.

Summary of Groundwater Data

Results indicate that two distinctly different types of groundwater occur in the Plainview Quadrangle. One type is associated with the Permian units and is characterized by high concentrations of uranium, conductivity, molybdenum, and sulfate. The other groundwater type is associated with the Ogallala Aquifer System and is characterized by high concentrations of arsenic, lithium, molybdenum, selenium, vanadium, and alkalinity. The contrast in the two groundwater types is best illustrated in the uranium/conductivity and uranium/sulfate ratio maps.

The percentile plots in Appendix A show the medians of some elements to be much higher for waters from some units than the medians for all samples. Considering the 85th percentile contours in Figures A-1b through A-11b, most of the Ogallala Aquifer west of the Cap Rock Escarpment appears anomalous. In addition, an area in the southeast corner of the quadrangle in the Blaine Formation shows values above the 85th percentile for lithium, molybdenum, and selenium. The geochemical model presented by Nichols, et al (1977) may be helpful in interpreting these results.

GEOCHEMICAL DISTRIBUTIONS IN STREAM SEDIMENTS

Sample site locations and the outline of draingage basins from which stream sediment samples were obtained in the Plainview Quadrangle are shown on Plate 4 at the 1:250,000 scale. Symbol plots for hot acid soluble uranium as determined by fluorometric analysis (U-FL) and thorium are given at this scale on Plates 5 and 6 and at the 1:1,000,000 scale in Figures B-1b and B-4b, respectively.

Values for U-FL, thorium, arsenic, barium, calcium, manganese, selenium, titanium, and zirconium are listed in Table B-3. The figures in Appendix B present frequency, lognormal probability, percentile, and symbol plots for these same variables (excluding calcium) plus total uranium as determined by neutron activation analysis (U-NT), the ratio of U-NT/U-FL, lithium, and vanadium. The stream sediment data subset used to produce Tables B-1 and B-2 and the figures in Appendix B includes samples from drainage basins that average approximately 25 km^2 (~10 mi^2). The number of stream sediment samples in this subset which were collected from each of the major stratigraphic units in the study area are presented in Table 4. Results from additional samples collected from larger basins have been presented by Nichols, et al (1978) and are not included in Appendix B but are included in Plates 4 and 5 and in the microfiche in Appendix D.

Uranium

When describing the uranium content in stream sediments, it is important to distinguish total uranium (U-NT) from soluble uranium (U-FL) and to evaluate the corresponding ratio of total uranium/soluble uranium (U-NT/U-FL).

Low U-NT/U-FL ratios and accompanying high U-FL values are thought to be more reliable indicators of the type of secondary uranium mineralization expected in sedimentary units which is of commercial potential; conversely, high U-NT/U-FL ratios and high U-NT values are thought to be more indicative of heavy mineral assemblages (Nichols, et al, 1978).

The map showing the areal distribution of U-FL in stream sediments of the Plainview Quadrangle (Plate 5 and Figure B-1b) indicates that concentrations above the 85th percentile (1.95 ppm) generally occur in

sediments from basins which are dominated by one or more of the following geologic units: the Dockum Group, Ogallala Formation, Fluviatile Terrace Deposits, and the Wind Blown Sand Deposits. The percentile plot in Figure B-1a gives the median and range for values in each unit. On the southeastern border of the survey area, a small area of elevated uranium concentrations is also discernable where drainage basins are contained within the Blaine Formation.

Concentrations above the 85th percentile (2.9 ppm) for U-NT (Figure B-2b) define essentially the same major areas as those areas indicated by U-FL with the exception of the area within the Blaine Formation in the southeast corner of the quadrangle.

High U-NT/U-FL ratios (Figure B-3b) occur in many of the same samples with high U-NT values. Essentially all samples with U-NT/U-FL values above the 85th percentile (2.1) are from basins dominated by the Dockum Group, Ogallala Formation, or Quaternary Deposits.

Two areas are defined by both values below the 15th percentile for (1.2) U-NT/U-FL (Figure B-3b) and values above the 85th percentile for U-FL (Figure B-1b). One area is located in the southeastern corner of the survey area where basins drain the Blaine Formation and the other area is located in the vicinity of Tule Canyon.

The correlation matrix in Table B-2 indicates a significant positive correlation between U-FL and arsenic, barium, calcium, chromium, cobalt, copper, iron, lithium, magnesium, niobium, phosphorus, scandiun, thorium, titanium, U-NT, vanadium, yittrium, zironium, and zinc. A significant negative correlation is shown between U-FL and U-NT/U-FL.

Thorium

The map showing the areal distribution of thorium in stream sediments of the Plainview Quadrangle (Plate 6 and Figure B-4b) indicates an area on the eastern border of the survey area where concentrations exceed the 85th percentile (12 ppm). A majority of the basins in this area drain the Blaine Formation. Other small or isolated areas where concentrations exceed 12 ppm are scattered throughout the other geologic units sampled. The correlation matrix (Table B-2) indicates a significant correlation between thorium and aluminum, arsenic, chromium, cobalt, copper, iron, lithium, phosphorus, scandium, selenium, sodium, U-FL, U-NT, vanadium, yittrium, and zinc.

Related Variables

Values exceeding the 85th percentile (800, 92, 570, 2400, and 12 ppm, respectively) for the elements barium, zirconium, manganese, and to a lesser extent titanium and thorium (Figures B-6b, B-12b, B-8b, B-10b, B-4b, respectively) define essentially the same areas that are defined by values above the 85th percentile (2.9 ppm, 2.1, respectively) for

U-NT and U-NT/U-FL. These elements are also common constituents of heavy minerals and their similar distributions support the hypothesis that high U-NT and U-NT/U-FL values are derived from heavy mineral assemblages. Heavy mineral suites of the Dockum Group that contain the above listed elements have been described by Sidwell (1945). Heavy and resistate mineral suites contained in stream sediment from many of the same units of the Plainview Quadrangle have been summarized by Nichols, et al (1978).

The area, defined by both values below the 15th percentile (1.2) for U-NT/U-FL and values above the 85th percentile (1.95 ppm) for U-FL, located in the southeastern corner of the quadrangle is associated with concentrations exceeding the 85th percentile (55, 47, 3.9, and 0.6 ppm, respectively) for vanadium, lithium, and to a lesser degree arsenic and selenium (Figures B-11b, B-7b, B-5b, and B-9b, respectively). These elements are commonly associated with tabular and roll front type uranium occurrences.

Summary of Stream Sediment Data

High U-FL concentrations and accompanying low U-NT/U-FL ratios are associated with high concentrations of vanadium, lithium, and to a lesser degree, arsenic and selenium in basins draining the Blaine Formation in the southeast part of the survey area. An additional area of high U-FL values and low U-NT/U-FL ratios is found in the vicinity of Tule Canyon. These associations are indicative of the type of secondary uranium mineralization expected in sedimentary units that is related to commercial potential. High concentrations of U-NT and high U-NT/U-FL ratios are accompanied by high concentrations of barium, manganese, titanium, thorium, and zirconium and are associated with a much broader area with basins draining the Dockum Group, Ogallala Formation, or Quaternary Fluviatile Terrace Deposits and Wind Blown Deposits. The elements associated with high U-NT and high U-NT/U-FL ratios are also common constituents of heavy and resistate mineral suites and are less favorable for commercial potential than the associations described above.

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APPENDIX A

GROUND WATER

APPENDIX A

WELL AND SPRING WATER

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Table A-1

STATISTICAL SUMMARY FOR WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

ELEMENTS	MEASURABLE VALUES	MINIMUM VALUE	MAXIMUM VALUE	MEAN	MEDIAN	MODE	STANDARD DEVIATION	COEFFICIENT OF VARIATION	SKEWNESS	KURTOSIS	SAMPLES BELOW DETECTION LEVEL	SAMPLES BELOW DETECTION LEVEL NUMBER
U	964	< 0.20	106.90	9.19	6.75	2.74	10.07	1.10	4.88	33.34	< 0.20	5
AS	847	< 0.5	34.0	3.31	2.3	1.3	2.66	0.80	3.22	24.40	< 0.5	119
SE	491	< 0.2	29.0	0.61	0.2	< 0.2	1.46	2.40	15.46	289.39	< 0.2	475
AG	214	< 2	36	7.1	< 2	< 2.0	5.7	0.81	1.95	4.79	< 2	747
AL	496	< 10	254	31.0	10	< 10.0	24.2	0.78	3.03	16.74	< 10	465
B	961	7	10670	558.3	259	163.8	895.4	1.60	5.10	38.52		
BA	956	< 2	774	53.9	24	9.0	72.5	1.35	3.76	23.80	< 2	5
BE	82	< 1	4	1.1	< 1	< 1.0	0.4	0.36	5.76	36.97	< 1	879
CA	961	0.7	1049.0	277.79	116.1	51.9	253.21	0.91	0.40	-1.44		
CO	432	< 2	78	5.6	< 2	< 2.0	5.1	1.07	5.41	49.66	< 2	529
CR	425	< 4	174	19.8	< 4	< 4.0	17.1	0.86	3.01	17.30	< 4	536
CU	587	< 2	347	9.0	3	3.0	20.8	2.32	10.99	149.11	< 2	374
FE	375	< 10	160	18.3	< 10	< 10.0	10.8	0.59	7.05	81.08	< 10	586
LI	960	< 2	692	96.3	83	33.0	65.9	0.69	2.21	10.63	< 2	1
MG	961	0.5	618.1	85.09	49.3	31.7	81.69	0.96	2.25	7.30		
MN	685	< 2	692	23.4	4	3.0	52.6	2.67	5.93	42.76	< 2	276
MO	721	< 4	238	11.6	7	6.0	11.8	1.02	10.74	187.47	< 4	240
NA	961	3.3	2882.0	125.09	51.9	36.4	234.66	1.88	6.02	50.35		
NI	388	< 4	223	34.3	< 4	< 4.0	33.7	0.98	2.51	8.25	< 4	573
P	70	< 40	2263	108.8	< 40	< 40.0	273.3	2.51	7.24	53.90	< 40	891
PT	1	3	3	3.0	3	3.0	0.0	0.0	0.0	0.0		
SC	392	< 1	12	1.6	< 1	< 1.0	1.0	0.65	3.94	28.80	< 1	569
TI	452	< 2	50	9.4	< 2	< 2.0	4.9	0.53	1.98	10.74	< 2	509
V	791	< 4	274	19.3	13	10.0	16.5	0.86	6.07	76.72	< 4	170
Y	665	< 1	31	5.2	2	1.5	3.6	0.68	0.86	3.38	< 1	296
ZN	916	< 4	3444	172.9	48	18.0	368.3	2.13	4.97	30.52	< 4	45
ZR	392	< 2	72	7.3	< 2	< 2.0	6.3	0.86	4.12	31.17	< 2	569
SO4	961	< 5	4322	805.8	278	27.5	872.5	1.08	0.67	-0.65	< 5	8
CT L	101	350	7800	1762.2	850	575.0	1501.0	0.85	1.19	1.42		
CT	954	240	15460	2357.1	1645	772.8	1982.5	0.84	1.40	3.27		
DO	951	0.3	18.0	7.86	8.5	6.2	2.52	0.32	-0.42	0.49		
TP	969	2.0	33.0	19.50	19.2	18.1	2.66	0.14	0.34	7.37		
PH	956	3.5	8.7	7.16	7.2	7.2	0.42	0.06	-1.03	6.94		
PH P	956	3.5	8.7	7.16	7.2	7.2	0.42	0.06	-1.03	6.94		
T AK	969	25	498	201.8	220	126.8	84.1	0.42	-0.12	-0.44		
M AK	969	26	482	201.9	220	126.1	83.9	0.42	-0.14	-0.45		
P AK	50	5	54	15.6	12	8.8	9.4	0.61	1.89	4.60		
CB	4	0.0	6.1	4.57	0.0	0.0	1.68	0.37	-0.02	-1.98		
EC	928	0.2	274.0	103.84	100.9	55.3	48.99	0.47	-0.01	-0.62		
U/CT	946	0.04	80.68	6.38	3.98	1.77	6.42	1.01	3.55	26.76		
U/B	952	0.06	1137.14	33.08	26.93	12.09	48.40	1.46	14.28	295.48		
U/SO	952	0.14	4896.66	169.54	18.11	6.29	302.25	1.78	5.59	66.38		

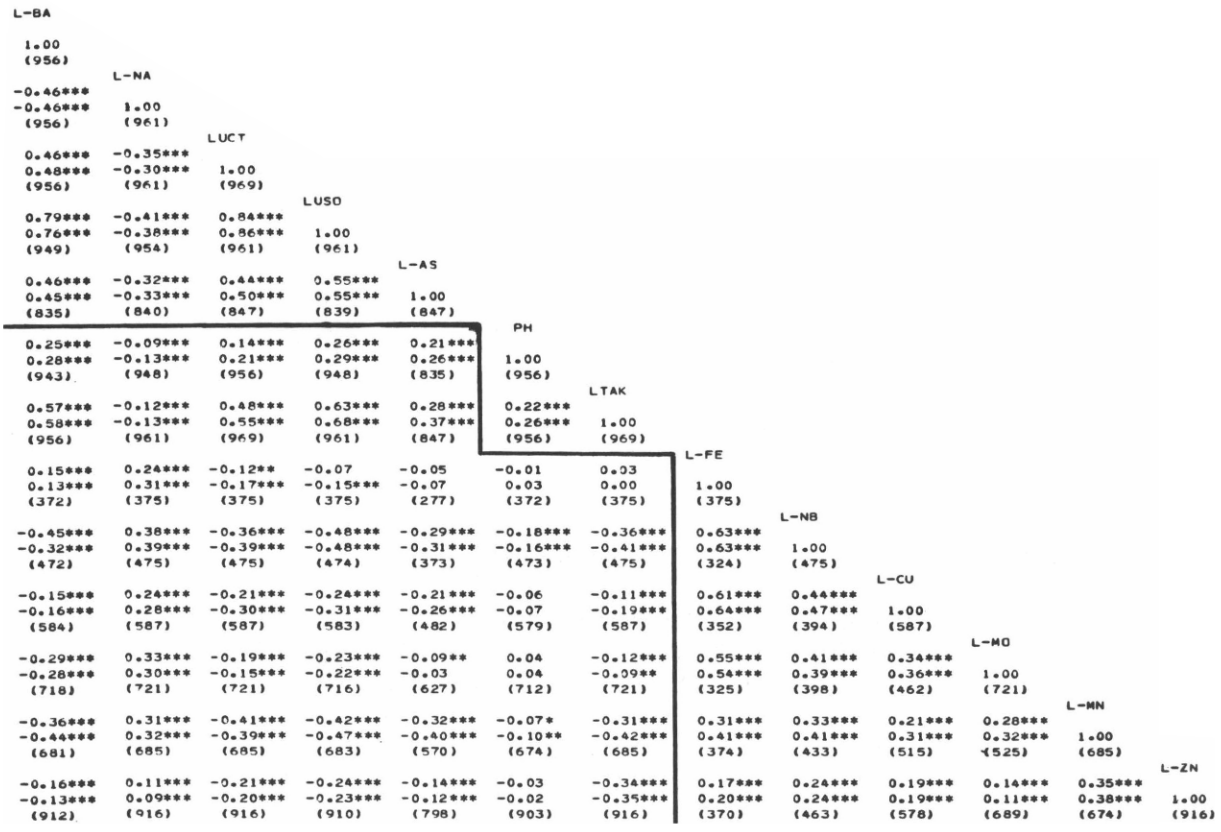
Table A - 2

CORRELATION MATRIX FOR WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

	L- U	L-LI	L- V	L-SE	DO	L- B	L-MG	L-SO	L-CT	L-CA	L- Y
L- U	1.00 (966)										
L-LI	0.39*** 0.33*** (957)	1.00 (960)									
L- V	0.18*** 0.17*** (788)	0.26*** 0.27*** (791)	1.00 (791)								
L-SE	0.07* 0.01 (491)	0.19*** 0.15*** (486)	0.08 -0.02 (404)	1.00 (491)							
DO	-0.03 -0.05* (951)	-0.16*** -0.15*** (945)	0.05 0.01 (779)	-0.13*** -0.15*** (484)	1.00 (954)						
L- B	0.32*** 0.41*** (958)	0.60*** 0.48*** (960)	0.09** 0.10*** (791)	0.07 0.00 (486)	-0.11*** -0.10*** (946)	1.00 (961)					
L-MG	0.42*** 0.40*** (958)	0.44*** 0.34*** (960)	0.05 0.07** (791)	-0.00 -0.05 (486)	-0.06** -0.09*** (946)	0.76*** 0.80*** (961)	1.00 (961)				
L-SO	0.23*** 0.26*** (958)	0.09*** 0.07** (953)	-0.08** -0.02 (788)	-0.10** -0.12*** (487)	0.05 0.05 (946)	0.66*** 0.74*** (954)	0.79*** 0.83*** (954)	1.00 (961)			
L-CT	0.26*** 0.27*** (966)	0.19*** 0.15*** (960)	-0.07* -0.06 (791)	-0.08* -0.10** (491)	-0.06* -0.10*** (954)	0.71*** 0.74*** (961)	0.81*** 0.84*** (961)	0.92*** 0.87*** (961)	1.00 (969)		
L-CA	0.20*** 0.16*** (958)	0.04 -0.07** (960)	-0.11*** -0.12*** (791)	-0.09* -0.14*** (486)	0.02 0.01 (946)	0.59*** 0.57*** (961)	0.84*** 0.78*** (961)	0.91*** 0.83*** (954)	0.88*** 0.81*** (961)	1.00 (961)	
L- Y	0.24*** 0.24*** (662)	0.21*** 0.17*** (664)	0.05 0.19*** (547)	-0.07 -0.09 (300)	-0.07* -0.06 (655)	0.65*** 0.69*** (665)	0.77*** 0.75*** (665)	0.89*** 0.78*** (663)	0.87*** 0.78*** (665)	0.92*** 0.88*** (665)	1.00 (665)
L-BA	-0.30*** -0.30*** (953)	-0.18*** -0.07** (955)	0.09** 0.09** (788)	0.06 0.08* (484)	0.01 0.02 (941)	-0.70*** -0.73*** (956)	-0.75*** -0.77*** (956)	-0.91*** -0.85*** (949)	-0.84*** -0.80*** (956)	-0.81*** -0.72*** (956)	-0.82*** -0.62*** (662)
L-NA	0.20*** 0.24*** (958)	0.33*** 0.28*** (960)	-0.01 -0.03 (791)	0.02 -0.02 (486)	-0.07** -0.05 (946)	0.61*** 0.60*** (961)	0.44*** 0.45*** (961)	0.48*** 0.53*** (954)	0.60*** 0.62*** (961)	0.36*** 0.32*** (961)	0.38*** 0.39*** (665)
LUCT	0.60*** 0.49*** (966)	0.14*** 0.23*** (960)	0.18*** 0.21*** (791)	0.12*** 0.13*** (491)	0.04 0.01 (954)	-0.34*** -0.31*** (961)	-0.33*** -0.41*** (961)	-0.58*** -0.59*** (961)	-0.61*** -0.63*** (969)	-0.56*** -0.63*** (961)	-0.46*** -0.47*** (665)
LUSO	0.18*** 0.17*** (958)	0.06* 0.12*** (953)	0.14*** 0.13*** (788)	0.13*** 0.15*** (487)	-0.05 -0.05 (946)	-0.55*** -0.56*** (954)	-0.63*** -0.67*** (954)	-0.91*** -0.87*** (961)	-0.82*** -0.78*** (961)	-0.83*** -0.80*** (954)	-0.77*** -0.68*** (663)
L-AS	0.00 -0.00 (847)	0.20*** 0.27*** (839)	0.36*** 0.41*** (706)	0.07 0.10** (441)	-0.02 -0.03 (835)	-0.26*** -0.27*** (840)	-0.31*** -0.34*** (840)	-0.54*** -0.52*** (839)	-0.51*** -0.50*** (847)	-0.53*** -0.58*** (840)	-0.45*** -0.44*** (549)
PH	-0.12*** -0.15*** (953)	0.03 0.05 (947)	0.18*** 0.21*** (778)	0.06 0.07 (490)	-0.06** -0.10*** (944)	-0.09*** -0.16*** (948)	-0.32*** -0.34*** (948)	-0.30*** -0.32*** (948)	-0.28*** -0.35*** (956)	-0.35*** -0.37*** (948)	-0.26*** -0.20*** (658)
LTAK	0.03 0.04 (966)	0.07** 0.19*** (960)	0.02 0.06 (791)	0.16*** 0.17*** (491)	-0.12*** -0.20*** (954)	-0.42*** -0.39*** (961)	-0.50*** -0.53*** (961)	-0.61*** -0.63*** (961)	-0.55*** -0.54*** (969)	-0.65*** -0.67*** (961)	-0.56*** -0.56*** (665)
L-FE	-0.01 -0.01 (372)	0.18*** 0.21*** (374)	0.48*** 0.50*** (324)	0.07 0.08 (144)	-0.03 -0.01 (368)	0.26*** 0.36*** (375)	0.18*** 0.44*** (375)	0.11** 0.39*** (375)	0.32*** 0.43*** (375)	-0.02 0.31*** (375)	0.56*** 0.69*** (373)
L-NB	0.10** 0.11** (472)	0.13*** 0.09* (475)	0.15*** 0.12** (421)	-0.06 -0.11* (220)	-0.04 -0.01 (469)	0.50*** 0.54*** (475)	0.55*** 0.56*** (475)	0.55*** 0.53*** (474)	0.62*** 0.61*** (475)	0.61*** 0.60*** (475)	0.69*** 0.75*** (442)
L-CU	-0.01 0.02 (584)	0.01 0.02 (586)	0.28*** 0.27*** (504)	-0.03 -0.01 (275)	0.04 0.06 (576)	0.14*** 0.26*** (587)	0.14*** 0.28*** (587)	0.23*** 0.34*** (583)	0.26*** 0.36*** (587)	0.20*** 0.35*** (587)	0.26*** 0.49*** (507)
L-MO	0.07* 0.11*** (718)	0.29*** 0.25*** (721)	0.34*** 0.32*** (646)	0.10** 0.04 (382)	-0.02 -0.04 (708)	0.47*** 0.45*** (721)	0.27*** 0.29*** (721)	0.26*** 0.28*** (716)	0.29*** 0.30*** (721)	0.20*** 0.17*** (721)	0.38*** 0.48*** (486)
L-MN	-0.05 0.08** (682)	0.19*** 0.14*** (684)	-0.02 -0.03 (566)	-0.03 -0.05 (324)	-0.13*** -0.08** (673)	0.46*** 0.52*** (685)	0.46*** 0.61*** (685)	0.39*** 0.56*** (683)	0.46*** 0.57*** (685)	0.43*** 0.53*** (685)	0.51*** 0.60*** (581)
L-ZN	-0.03 0.00 (913)	0.01 0.00 (915)	0.07* 0.09** (756)	0.03 0.03 (461)	0.05 0.05 (902)	0.21*** 0.18*** (916)	0.23*** 0.24*** (916)	0.23*** 0.25*** (910)	0.23*** 0.22*** (916)	0.26*** 0.26*** (916)	0.21*** 0.22*** (644)

Note: (1) Pearson correlation/Spearman correlation/(sample size). If either element has a concentration below the laboratory detection limit, it is omitted from the pairwise computations.

(2) Significance levels: * - 10%, ** - 5%, *** - 1%.



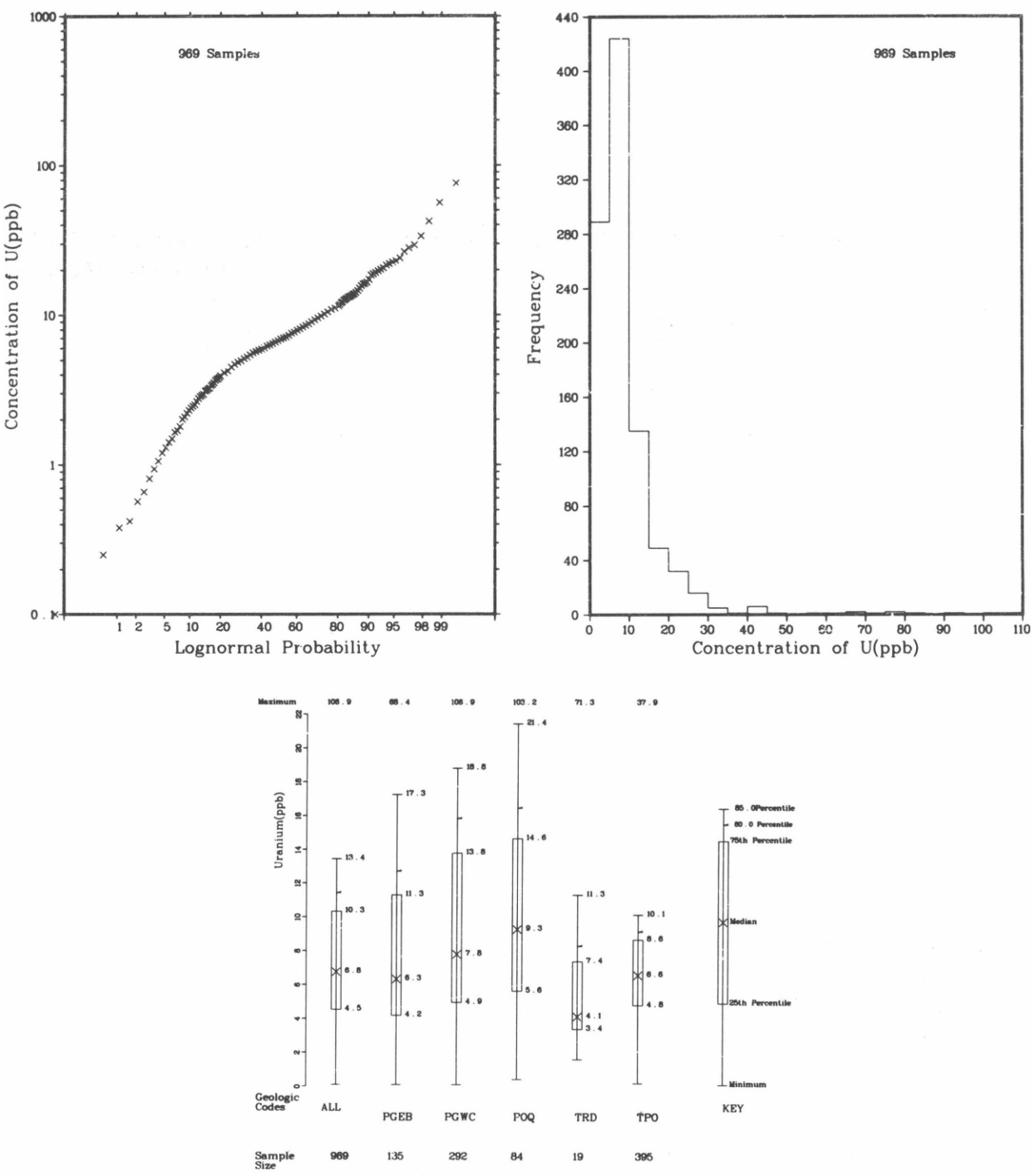


Figure A - 1a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR URANIUM IN WELL AND SPRING WATER OF
THE PLAINVIEW QUADRANGLE

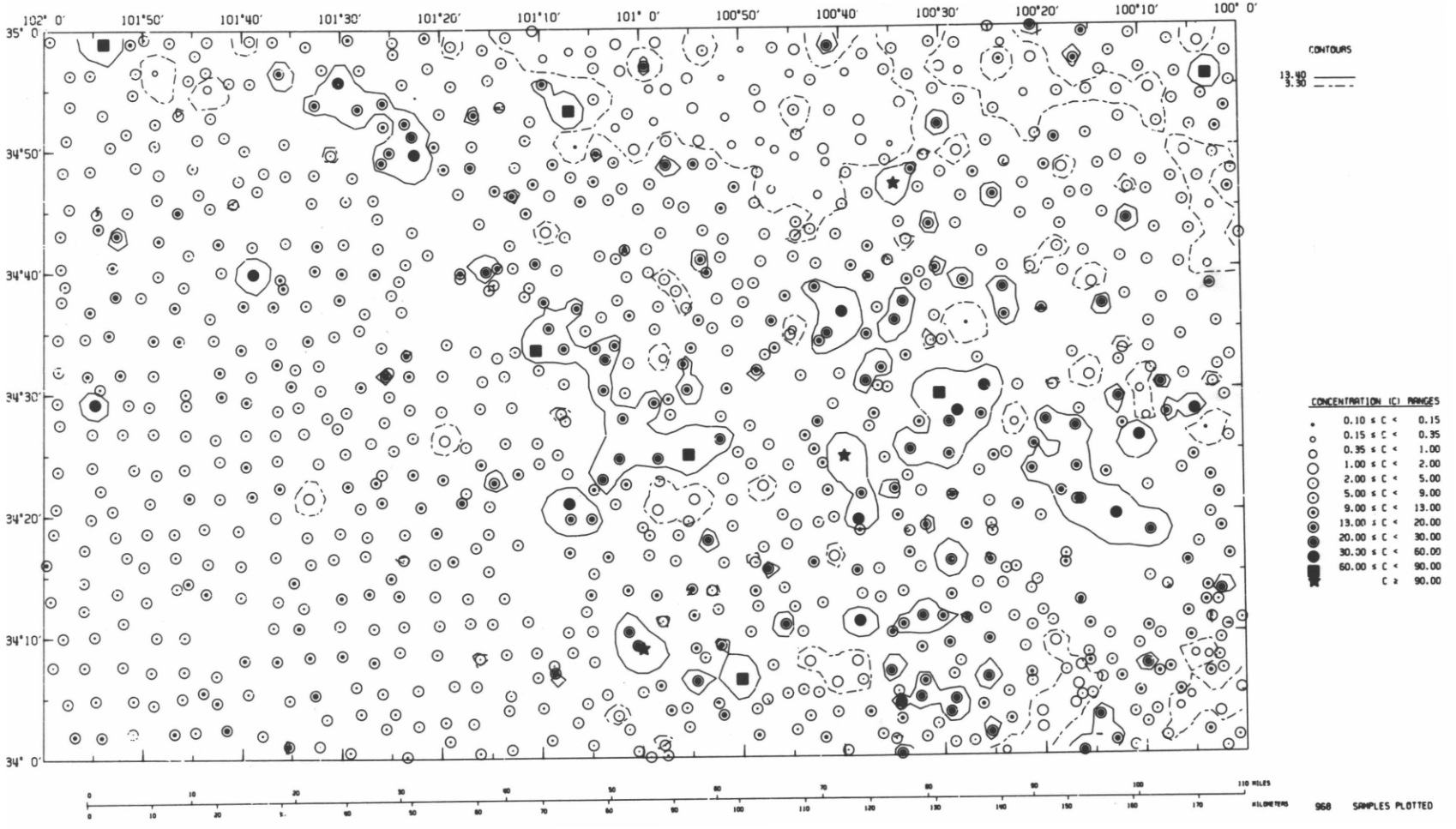


Figure A -1b

GEOCHEMICAL DISTRIBUTION OF URANIUM IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

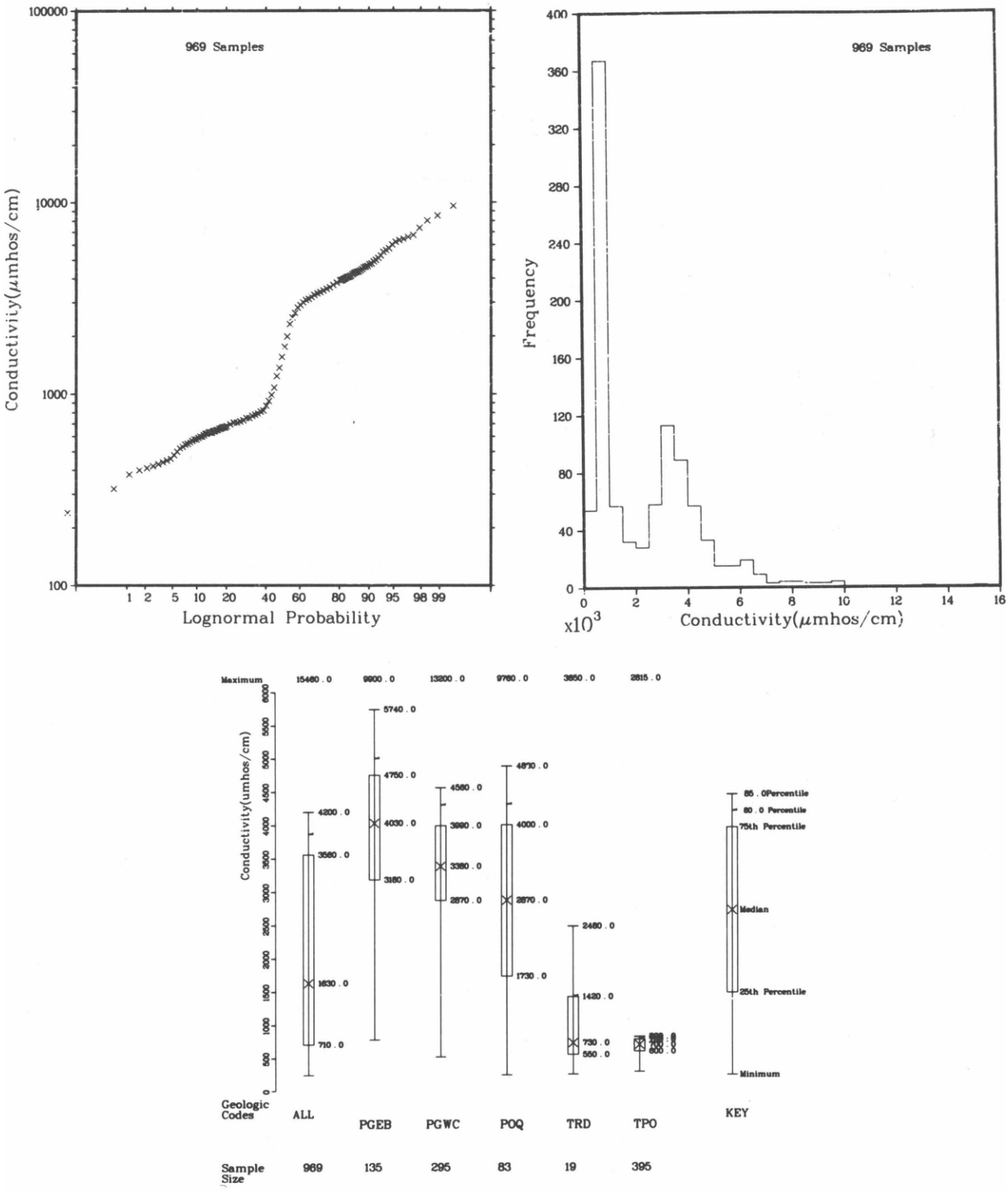


Figure A - 2a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS FOR CONDUCTIVITY IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

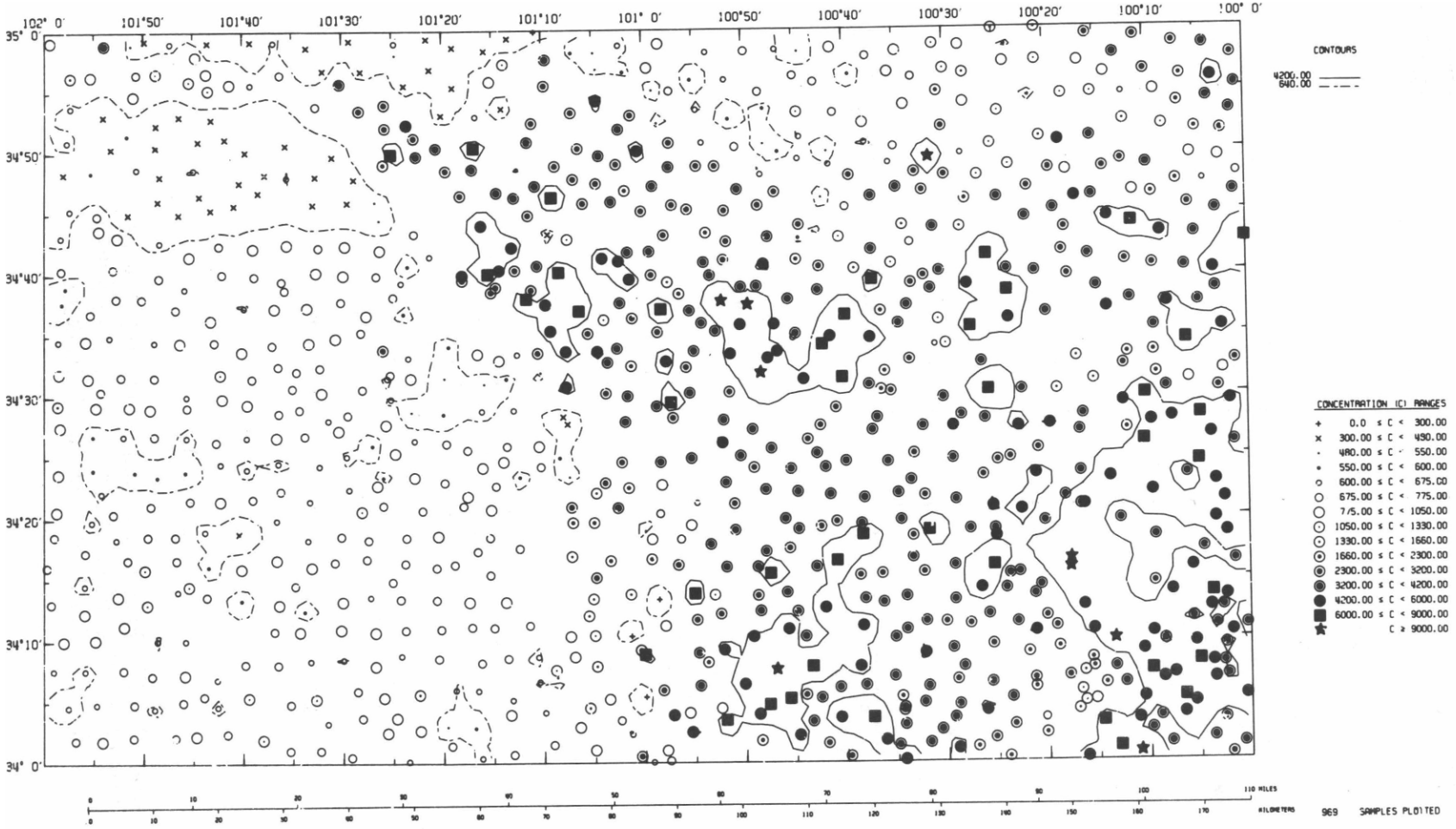


Figure A - 2b

GEOCHEMICAL DISTRIBUTION OF CONDUCTIVITY IN
WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

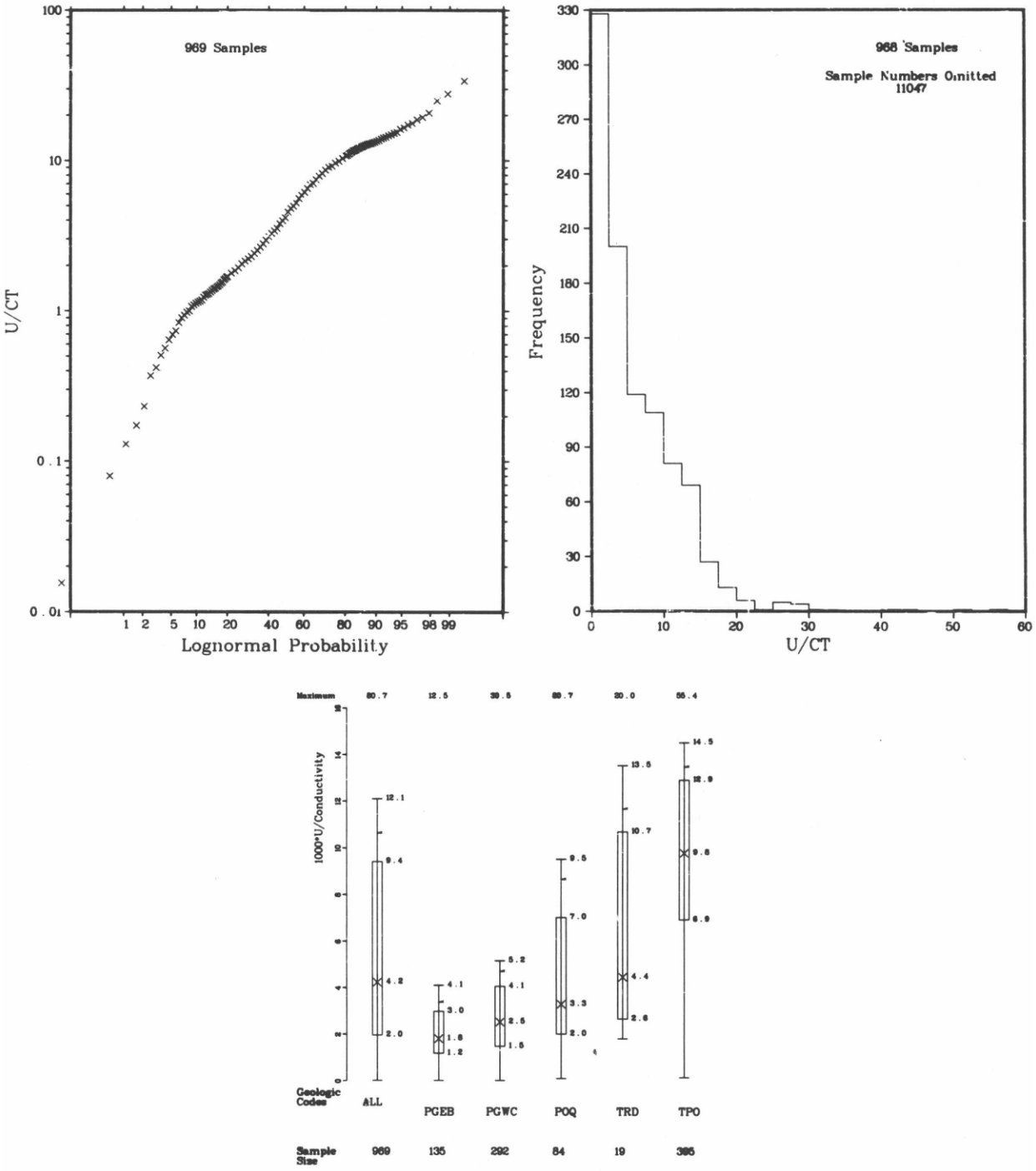


Figure A - 3a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS FOR URANIUM/CONDUCTIVITY IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

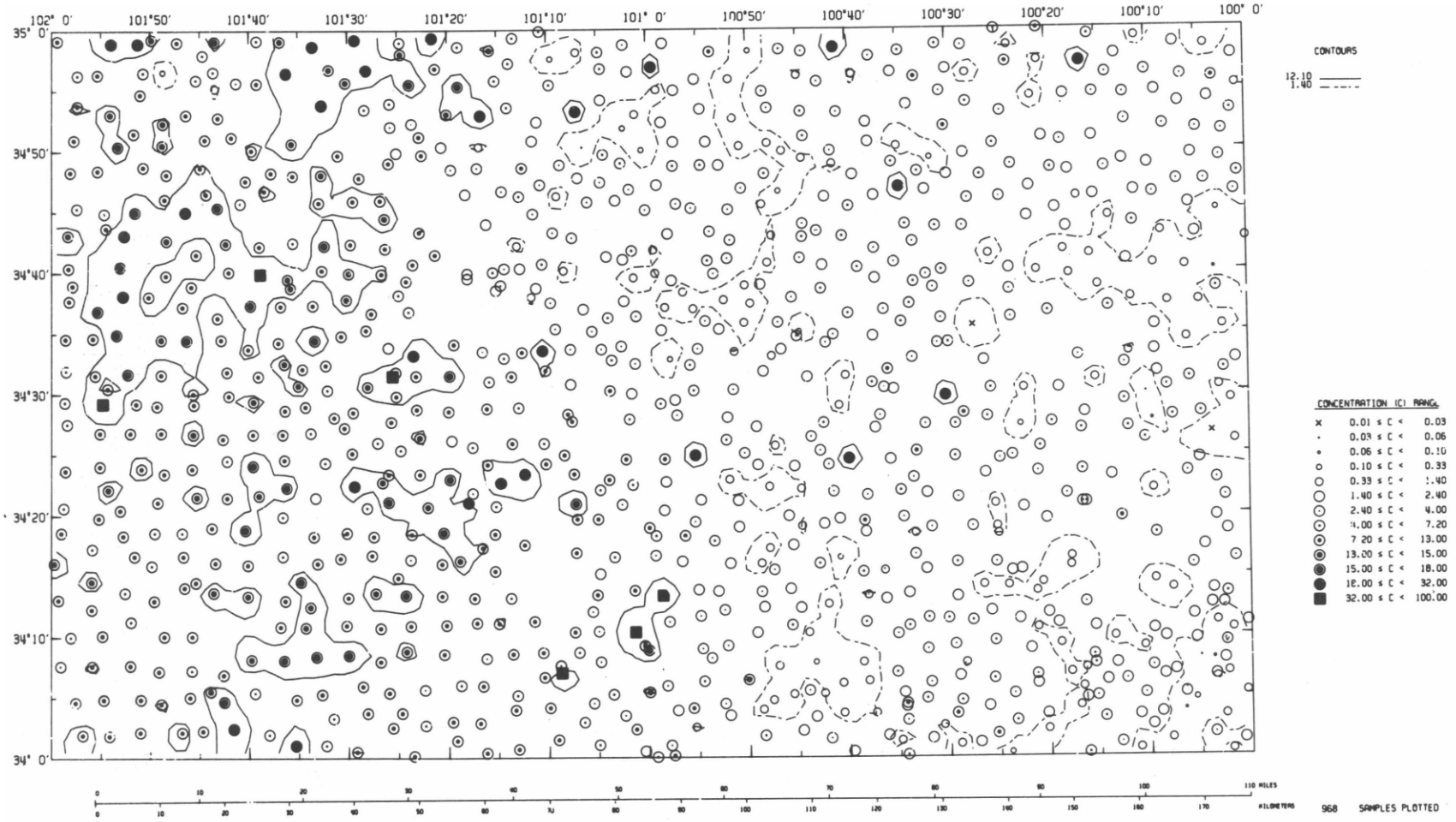


Figure A -3b

GEOCHEMICAL DISTRIBUTION OF URANIUM/CONDUCTIVITY
IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

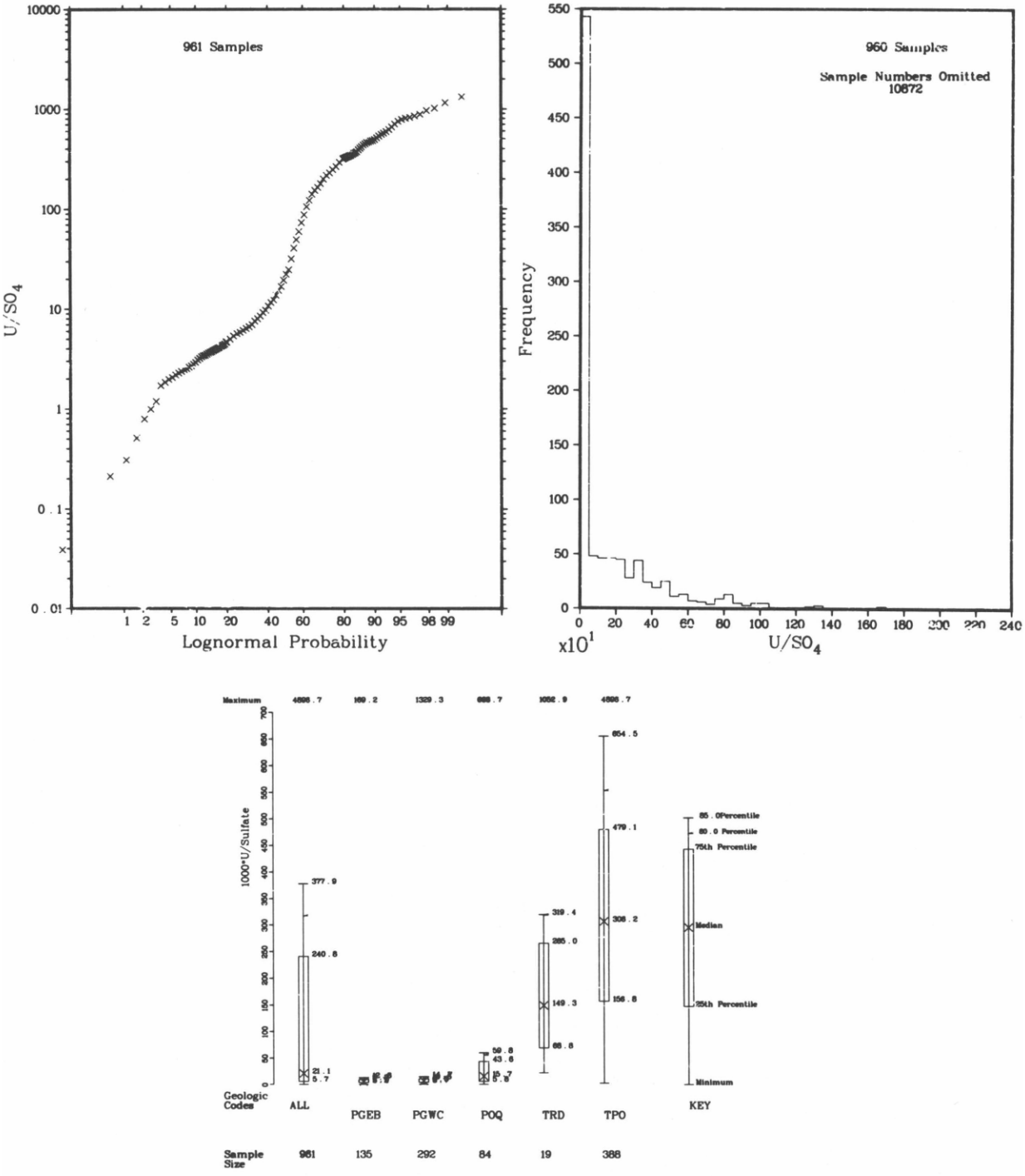


Figure A - 4a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR URANIUM/SULFATE IN WELL AND SPRING
WATER OF THE PLAINVIEW QUADRANGLE

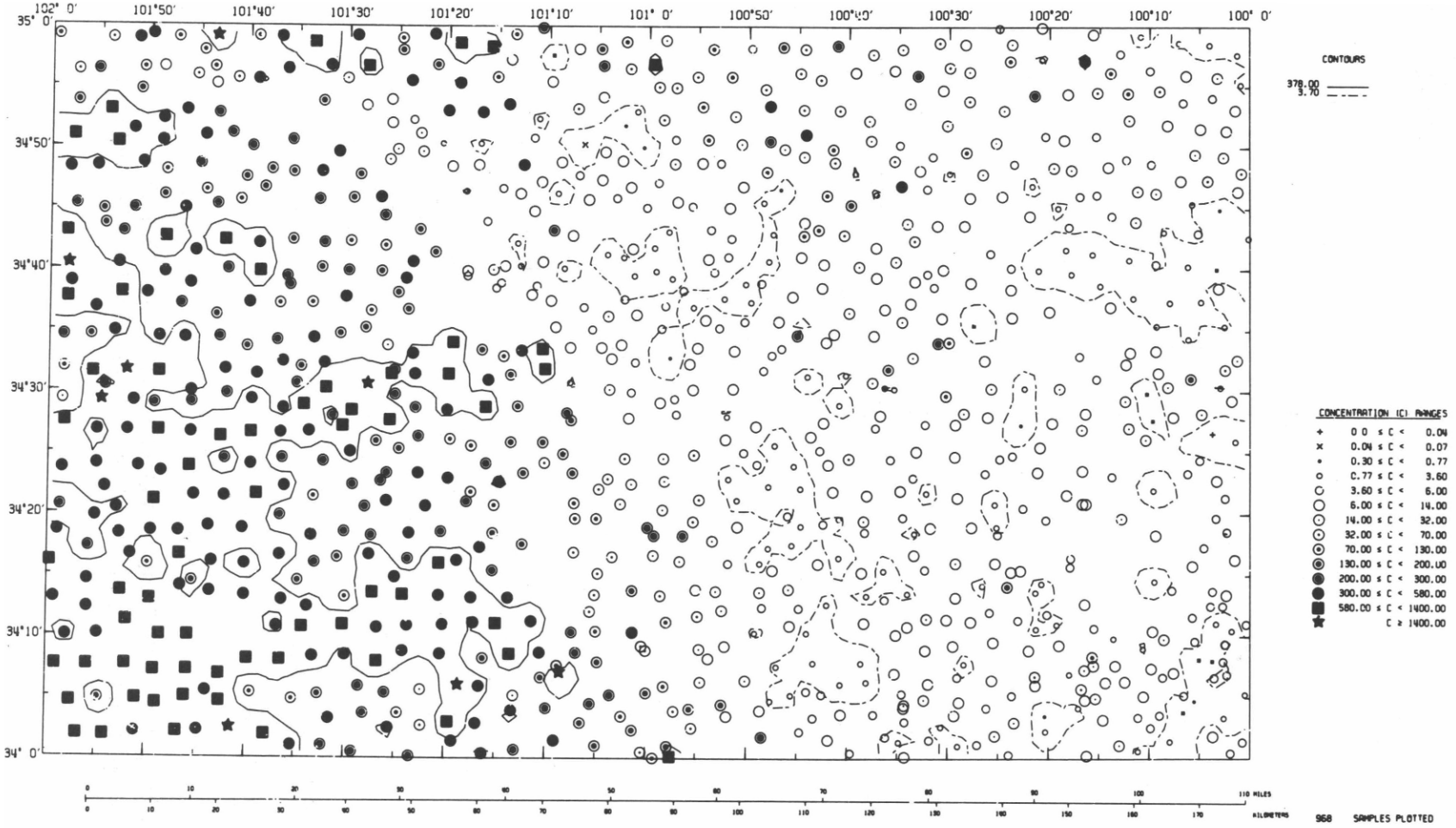


Figure A - 4b

GEOCHEMICAL DISTRIBUTION OF URANIUM/SULFATE IN
WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

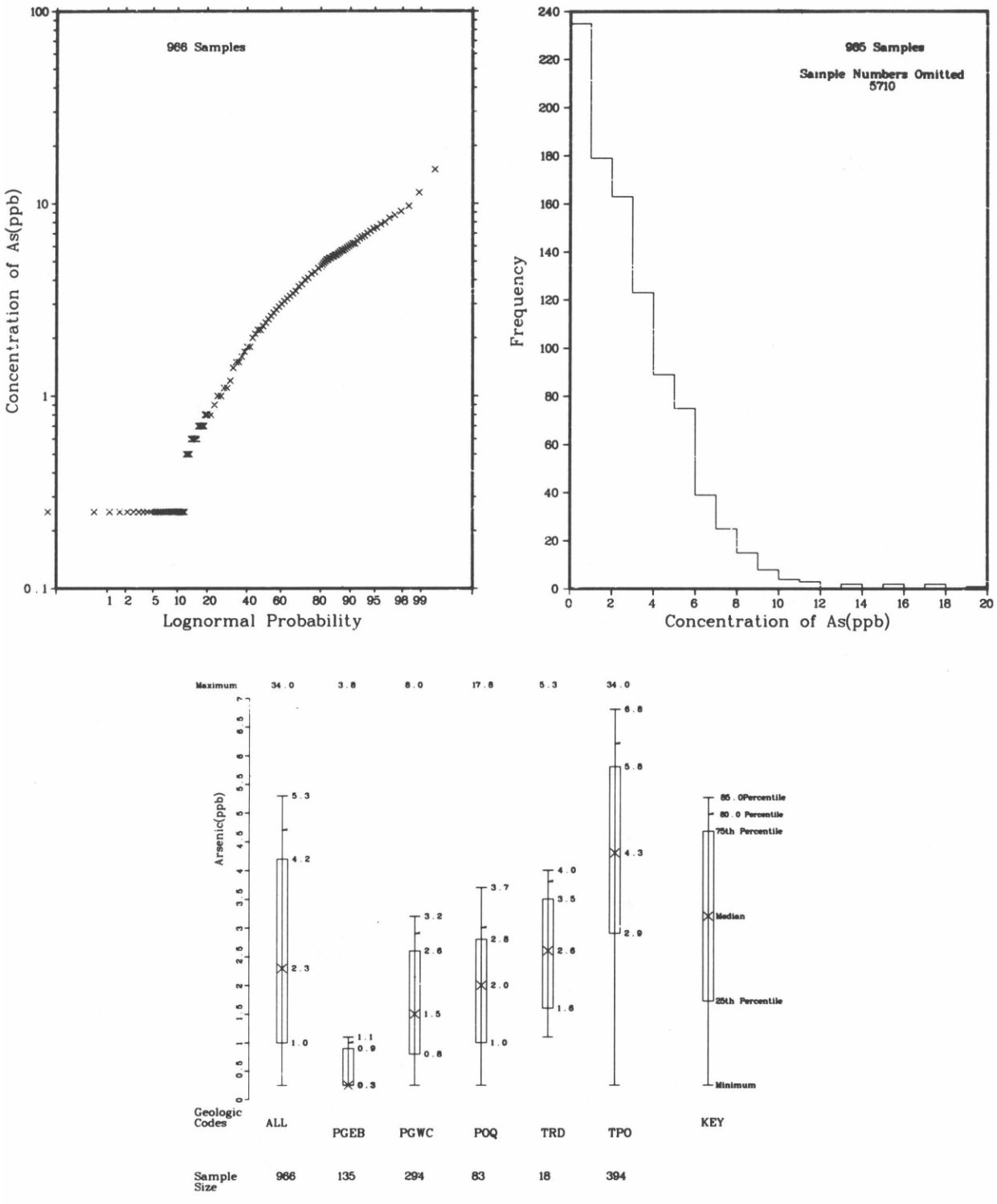


Figure A - 5a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS FOR
ARSENIC IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

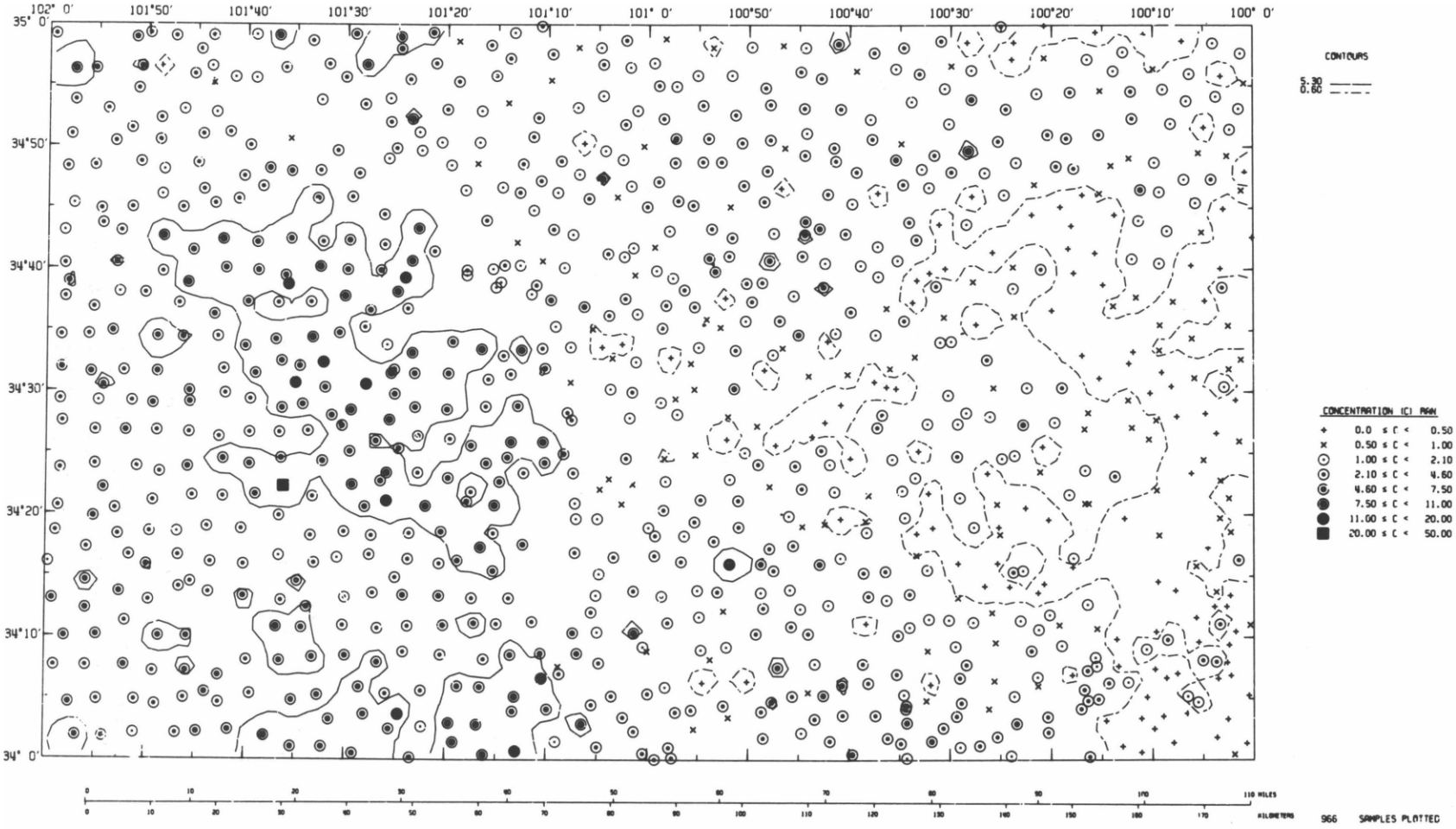


Figure A - 5b

GEOCHEMICAL DISTRIBUTION OF ARSENIC IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

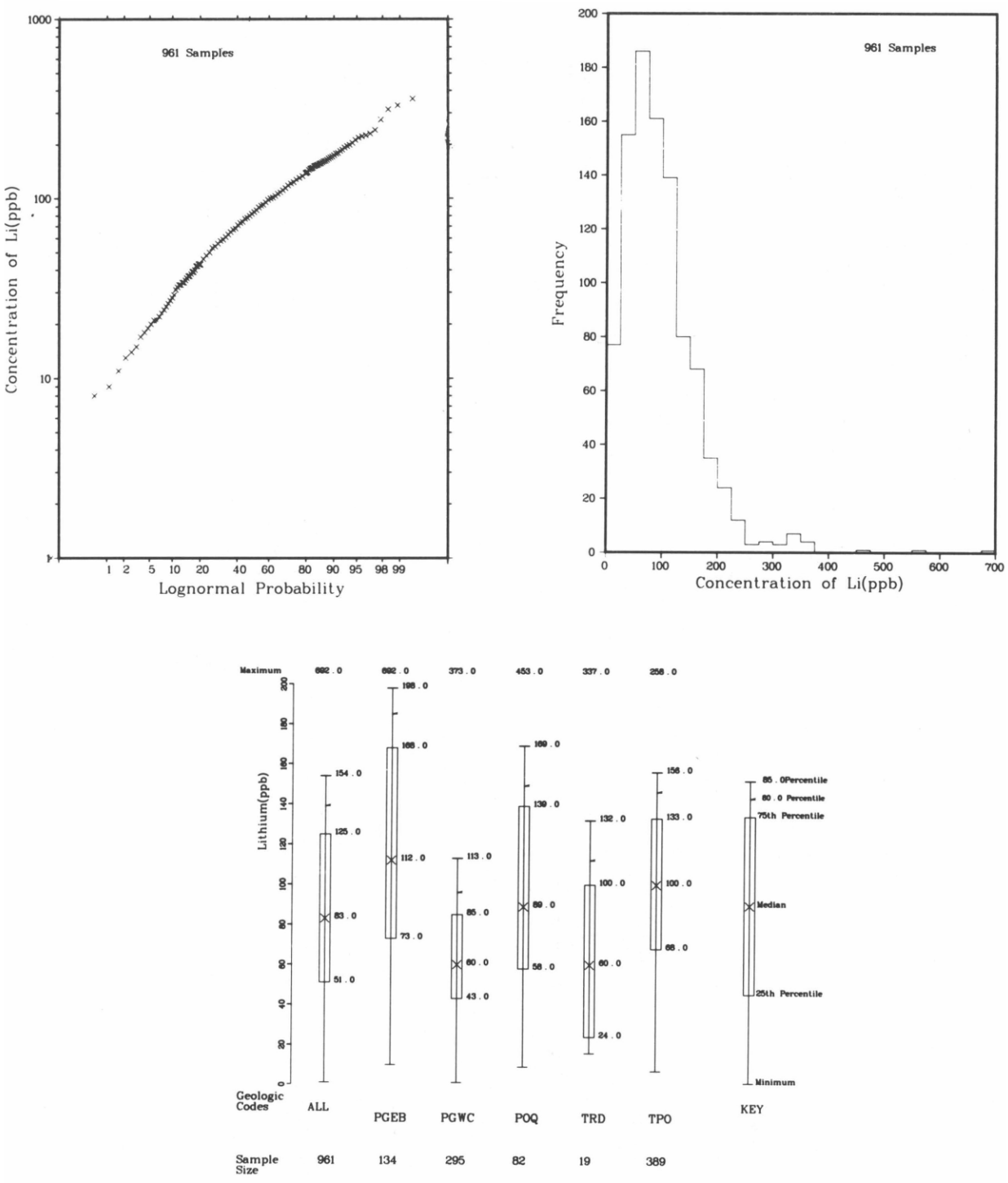


Figure A - 6a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS FOR LITHIUM IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

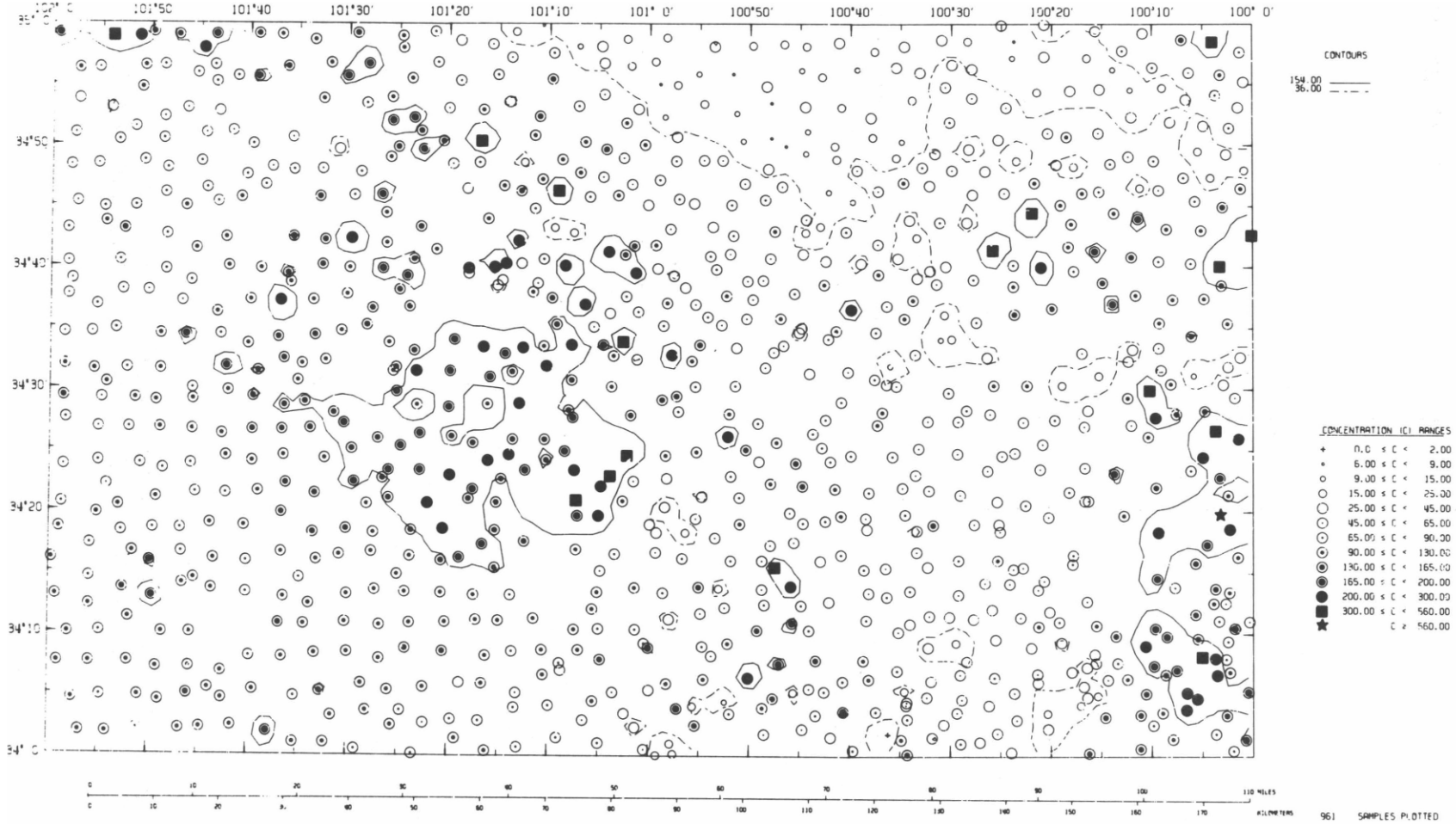


Figure A - 6b

GEOCHEMICAL DISTRIBUTION OF LITHIUM IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

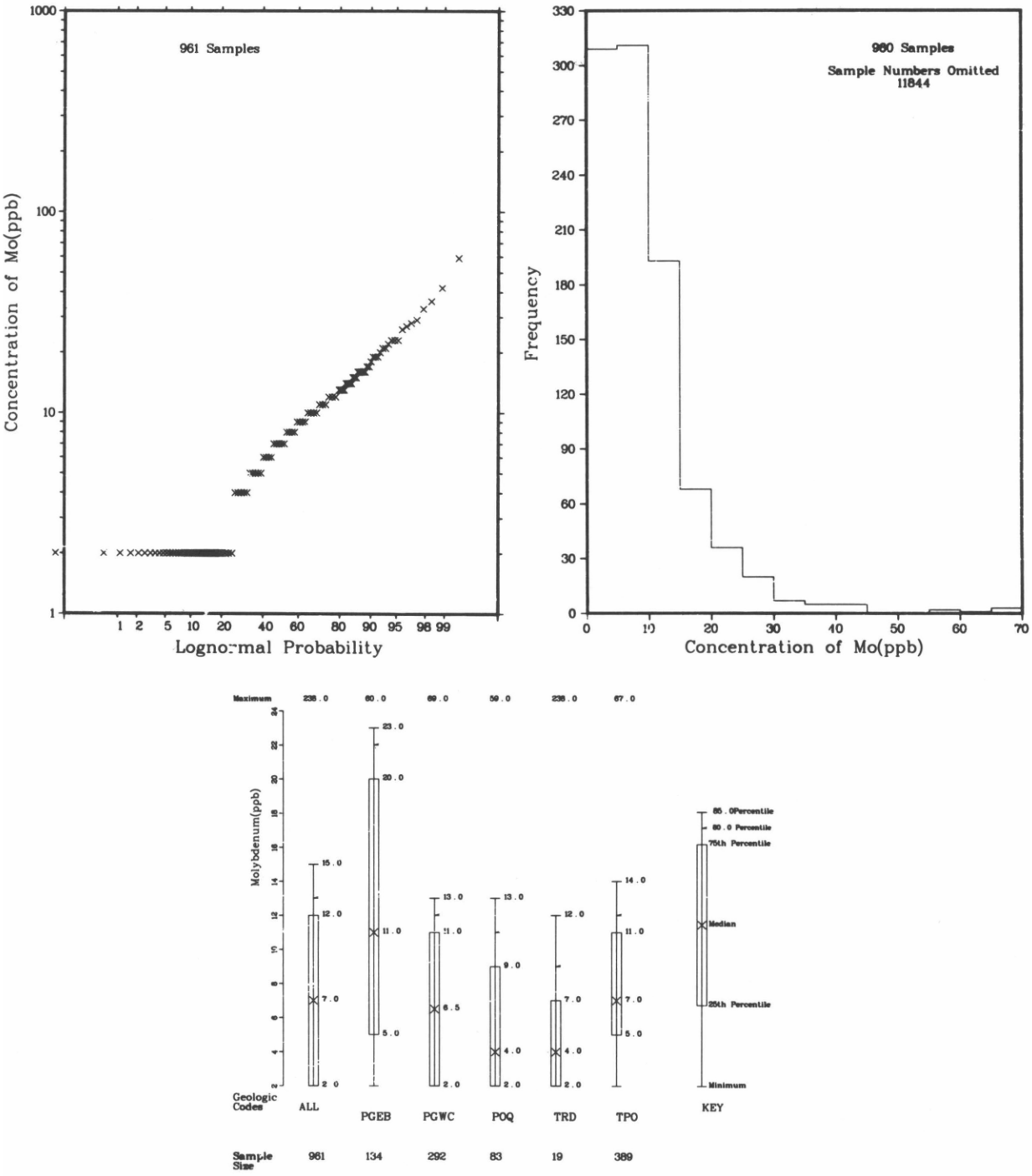


Figure A - 7a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS FOR
MOLYBDENUM IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

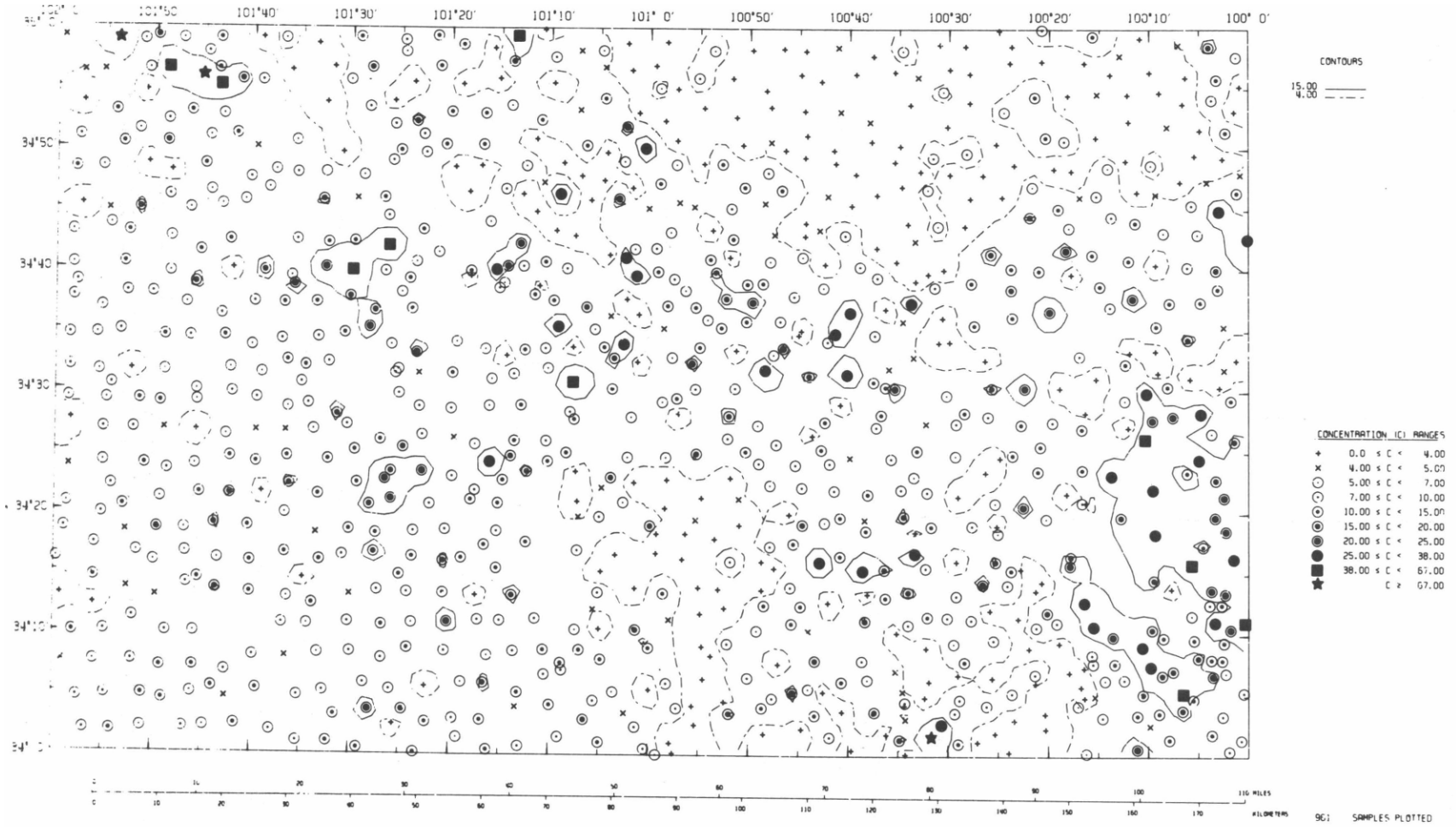
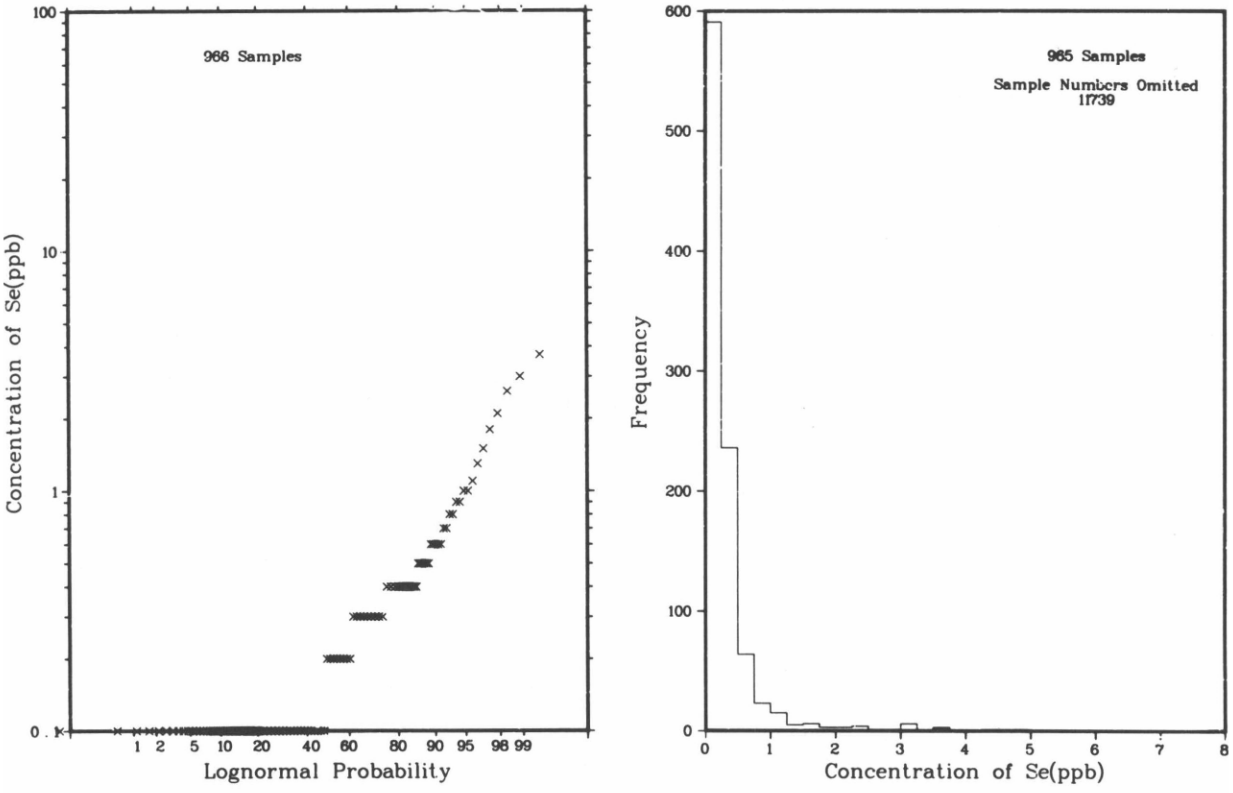


Figure A - 7b

GEOCHEMICAL DISTRIBUTION OF MOLYBDENUM IN
WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE



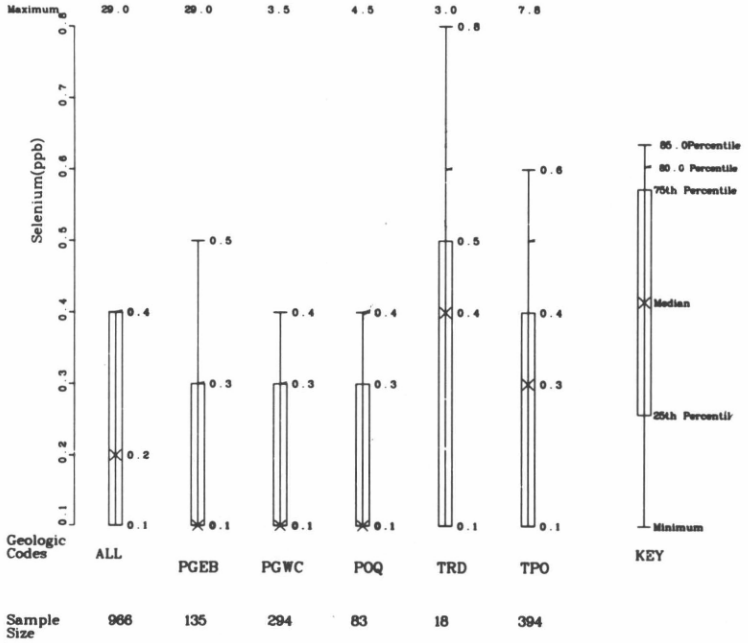


Figure A - 8a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS FOR
SELENIUM IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

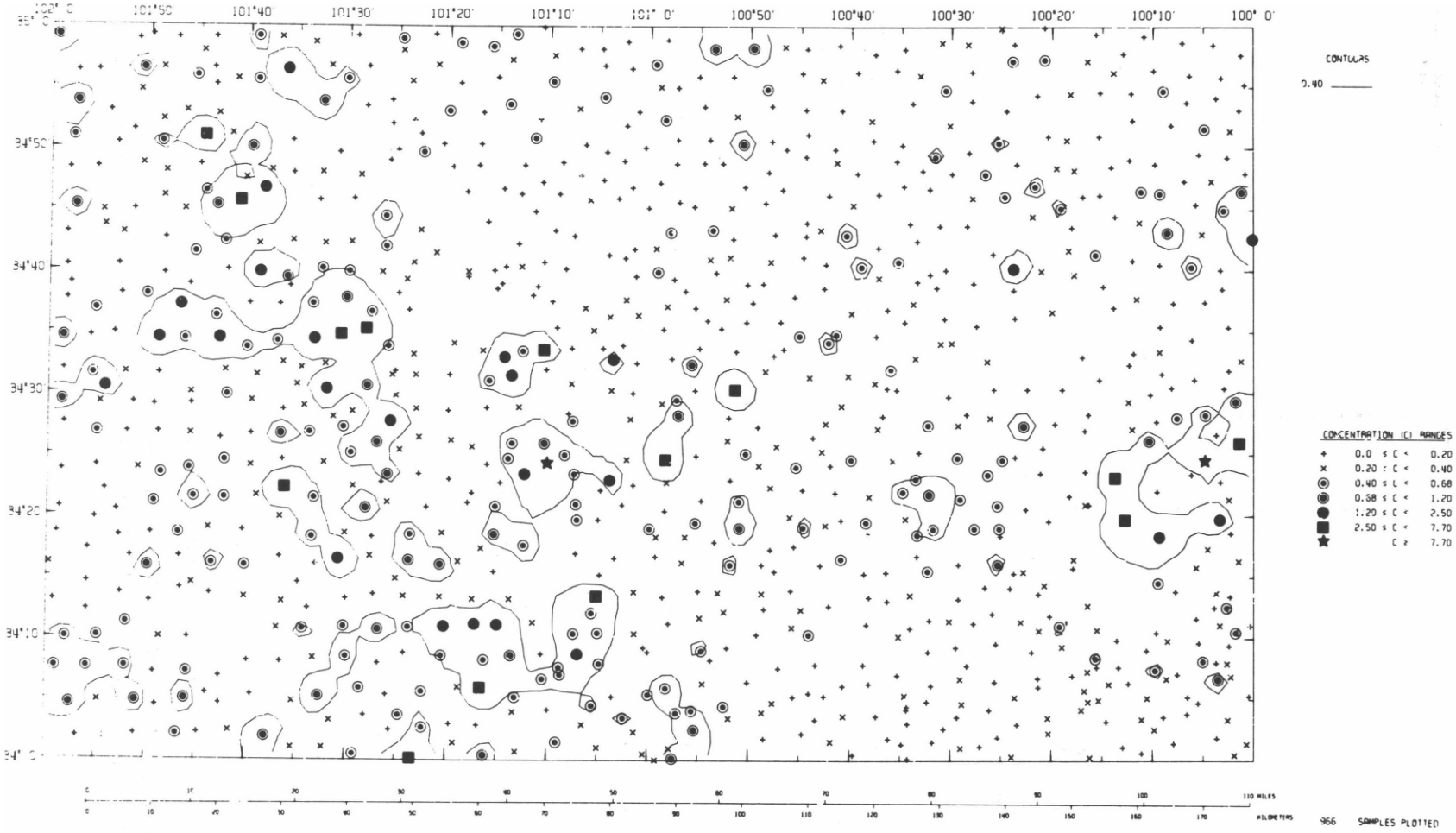


Figure A - 8b

GEOCHEMICAL DISTRIBUTION OF SELENIUM IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

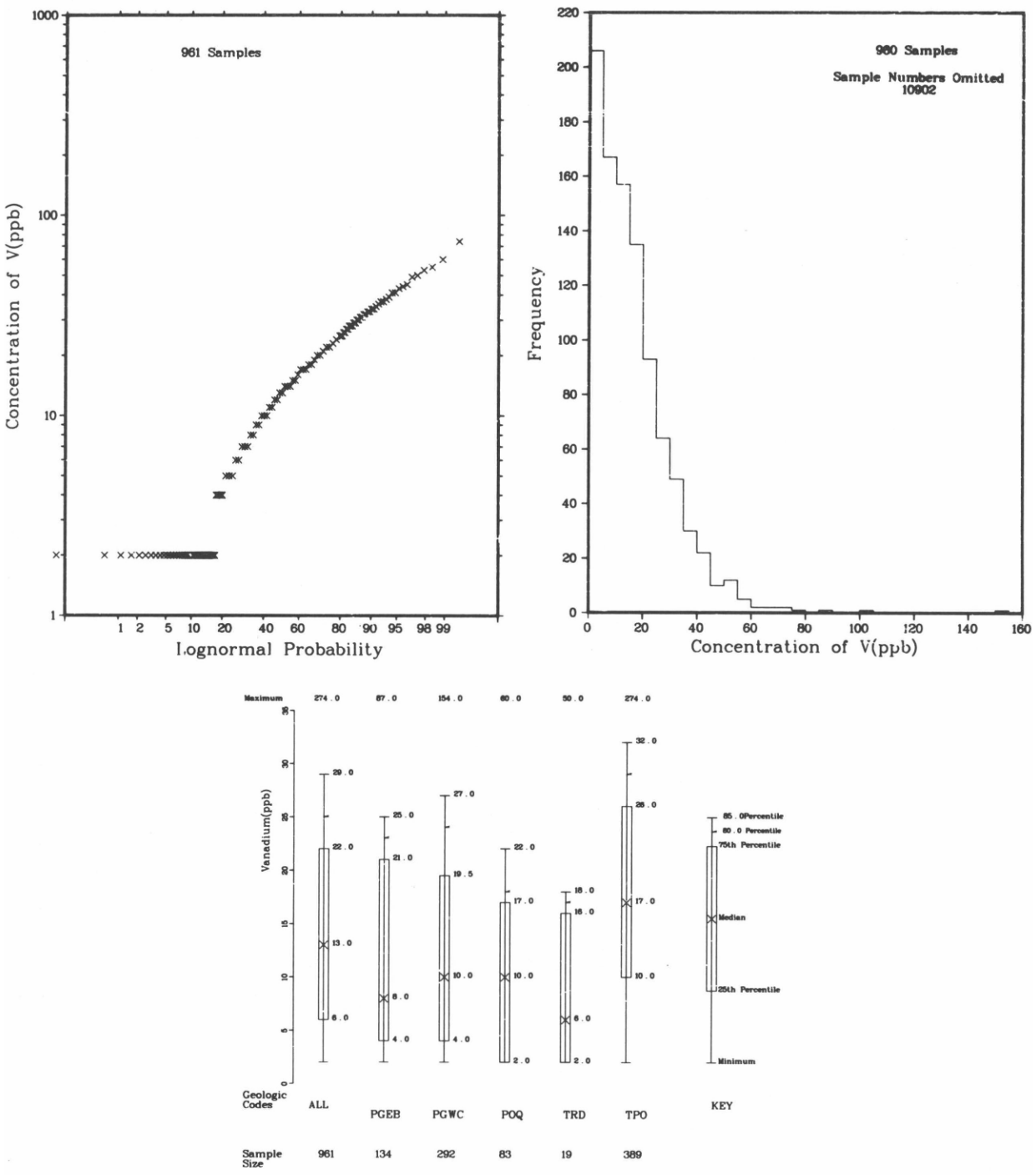


Figure A - 9a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS FOR
VANADIUM IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

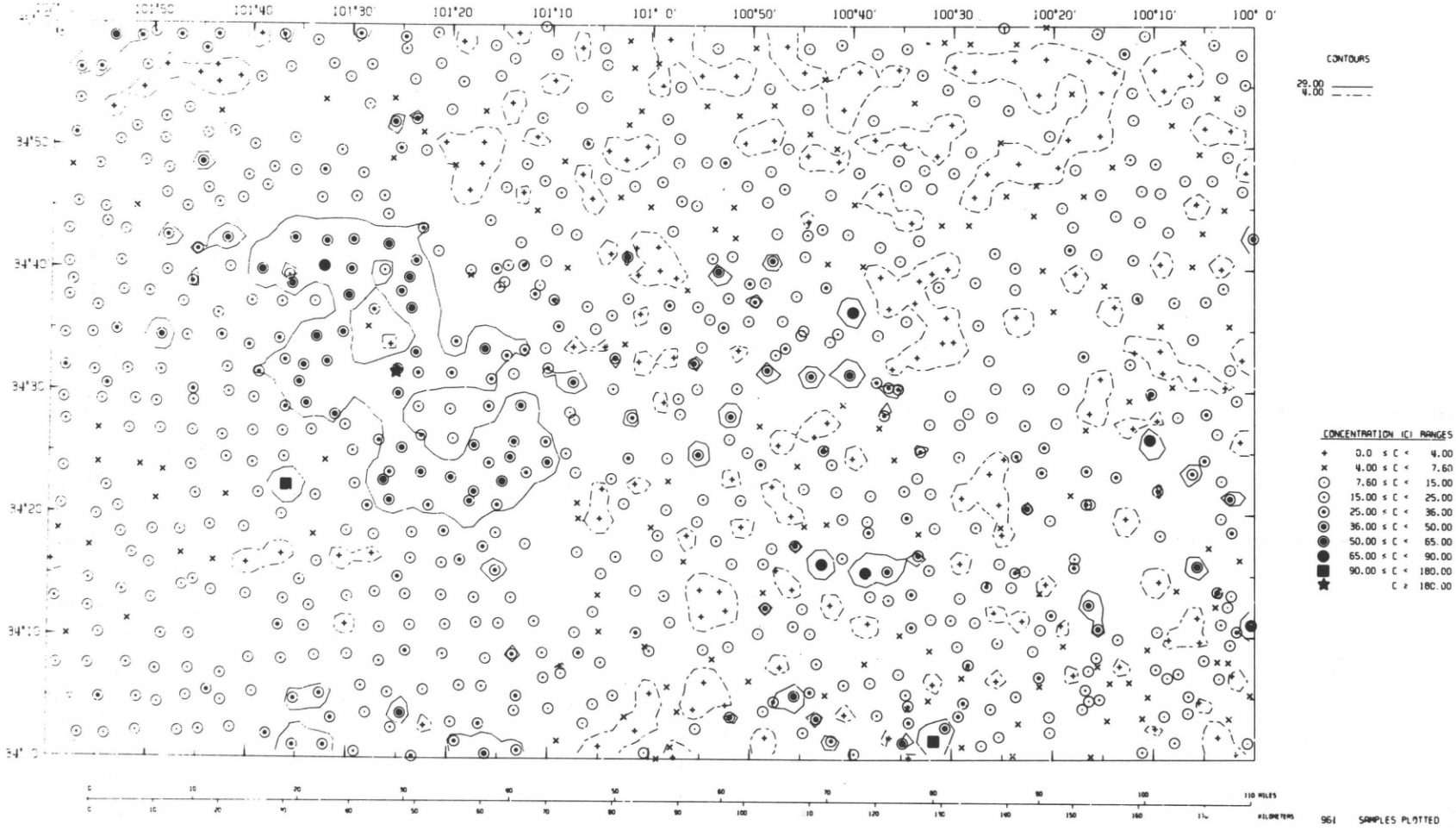


Figure A - 9b

GEOCHEMICAL DISTRIBUTION OF VANADIUM IN
WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

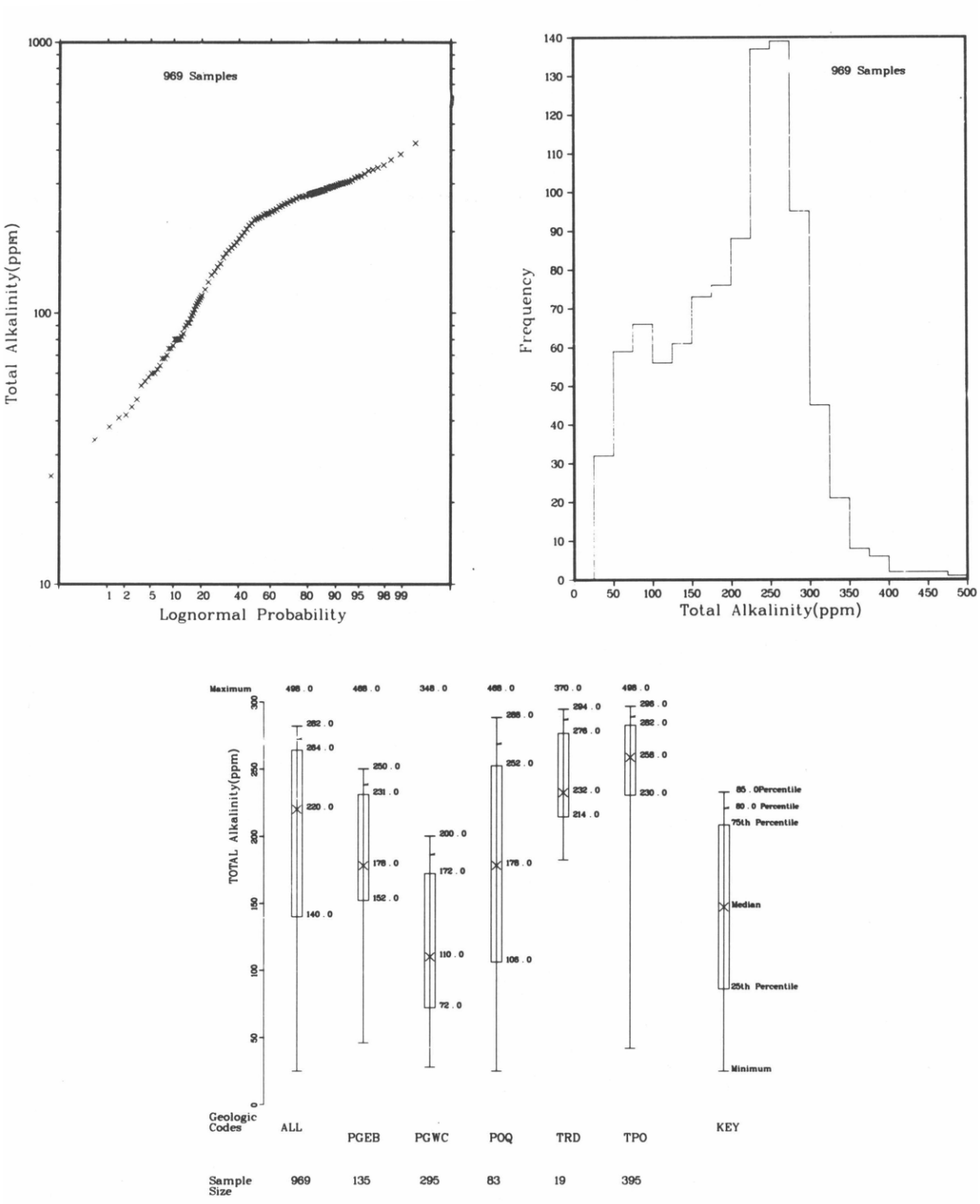


Figure A - 10a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR TOTAL ALKALINITY IN WELL AND SPRING
WATER OF THE PLAINVIEW QUADRANGLE

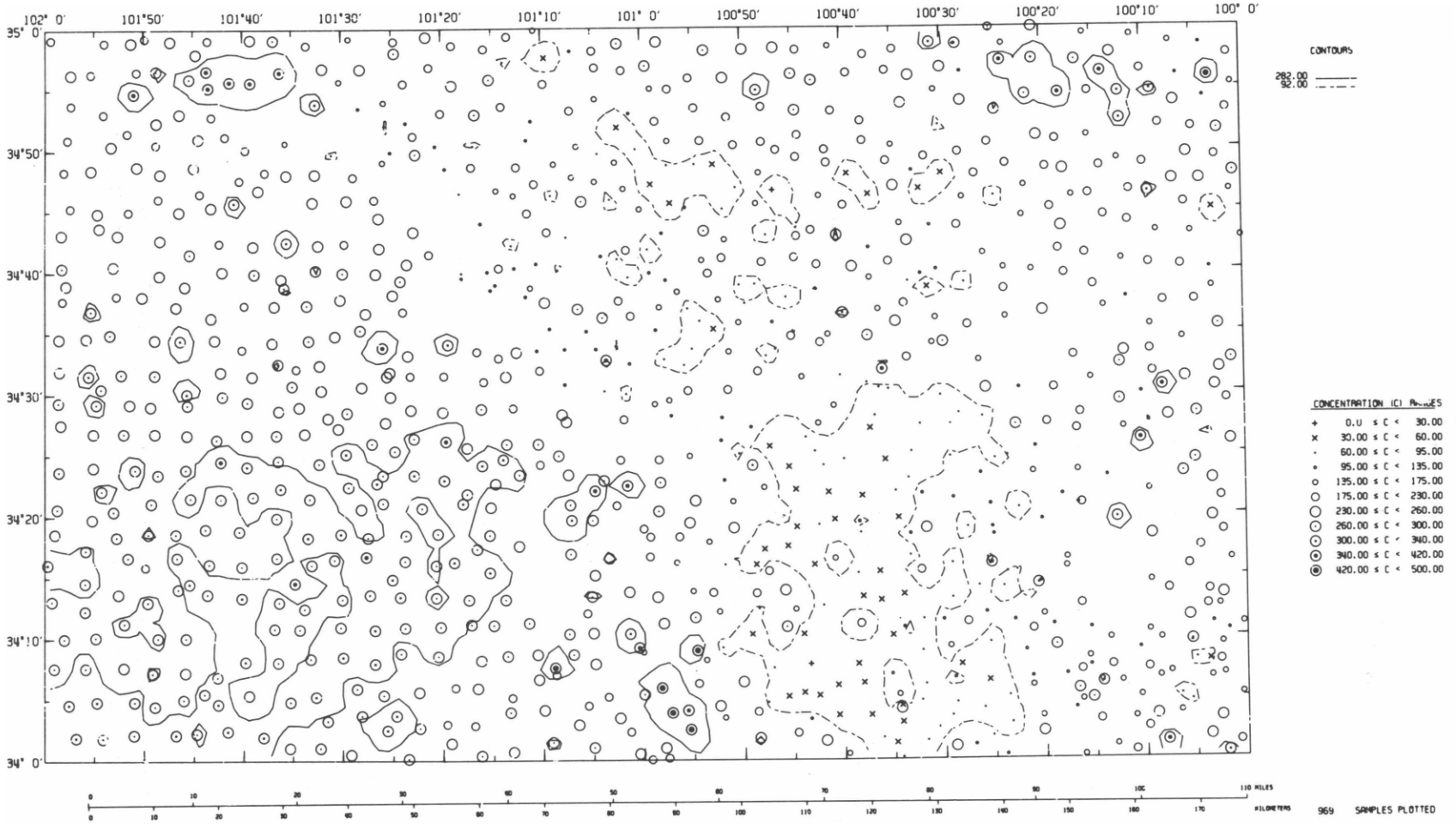


Figure A - 10b

GEOCHEMICAL DISTRIBUTION OF TOTAL ALKALINITY
IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

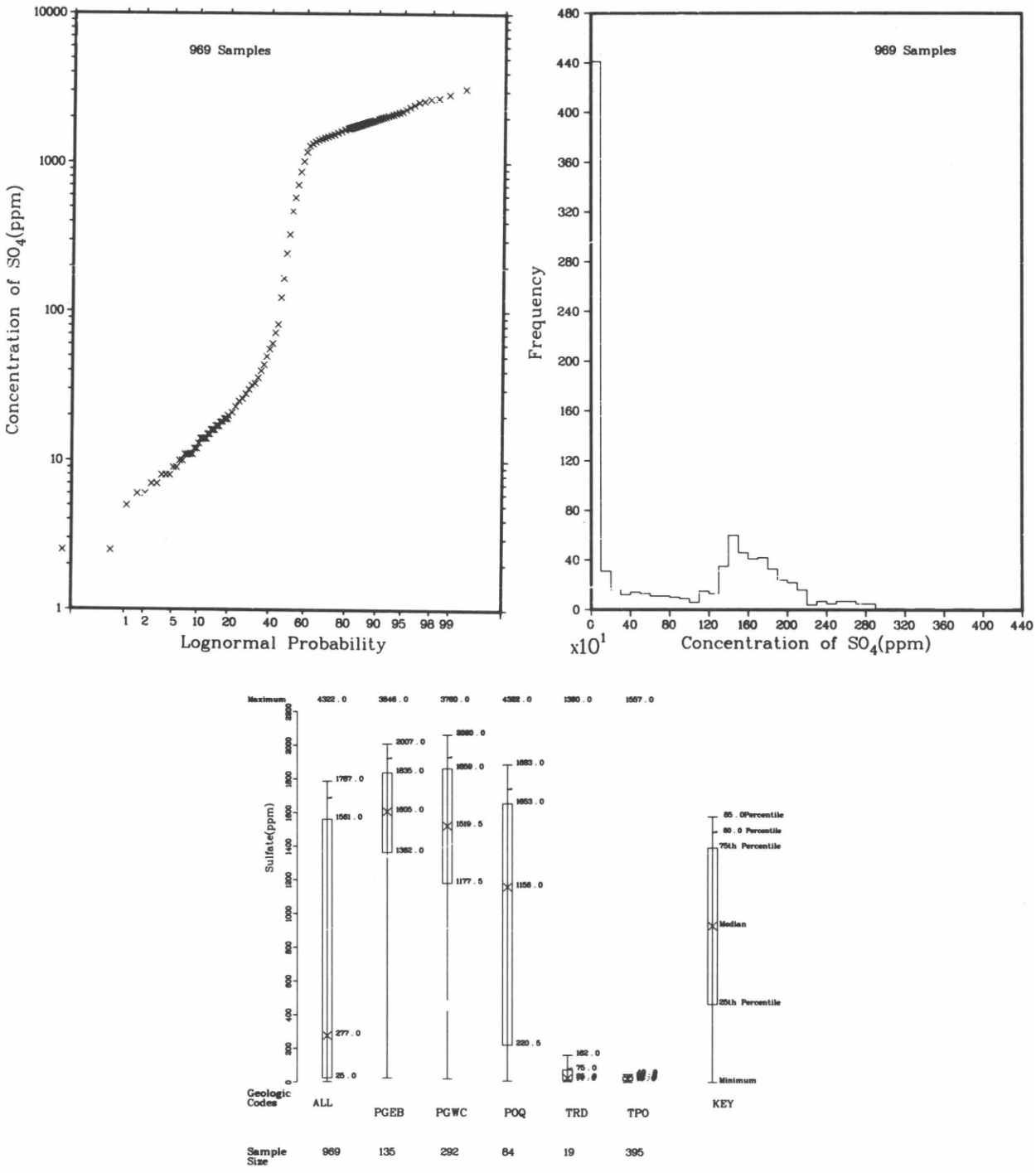


Figure A - 11a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS FOR
SULFATE IN WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

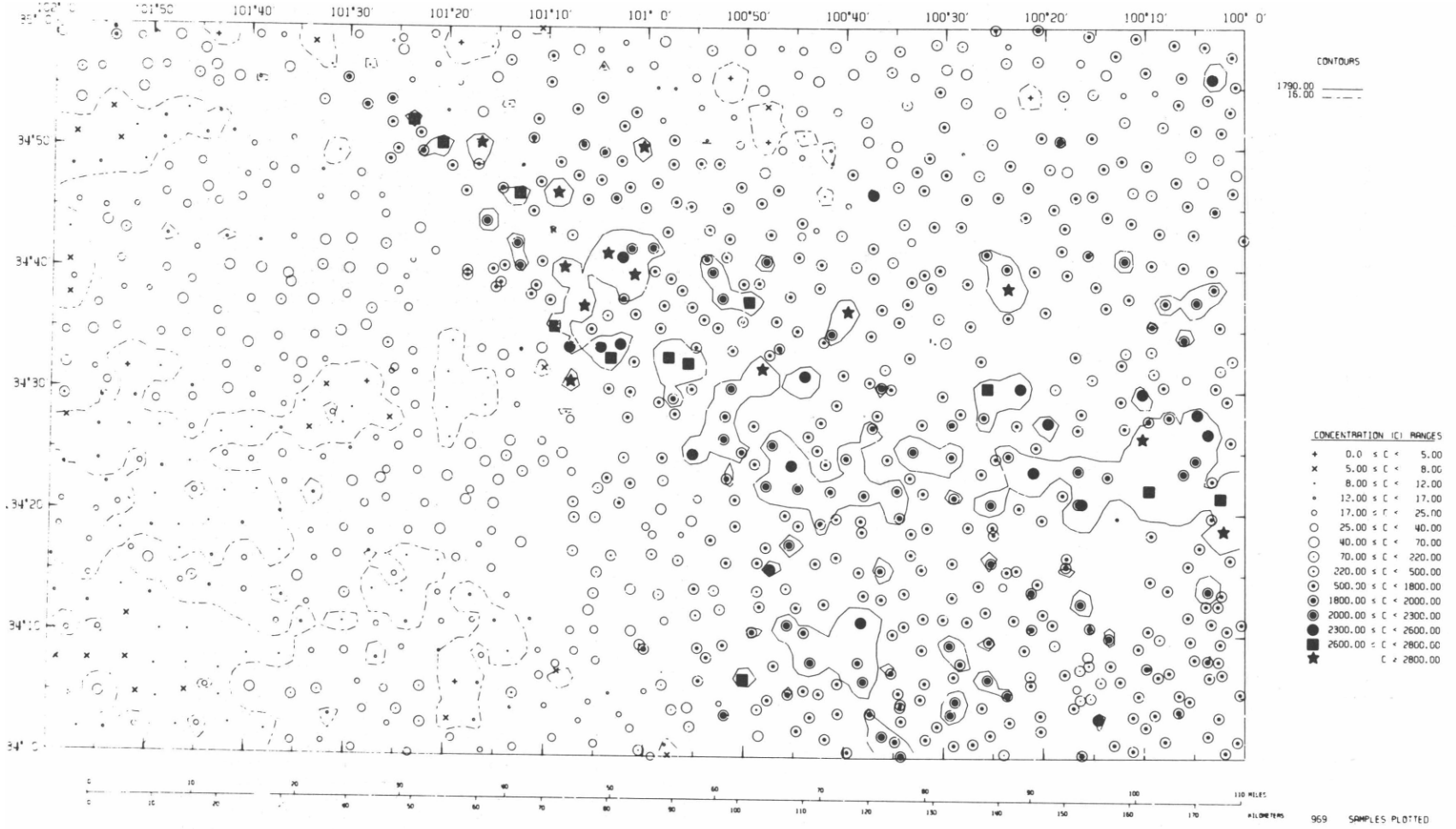


Figure A - 11b

GEOCHEMICAL DISTRIBUTION OF SULFATE IN WELL
AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

Table A - 3

PARTIAL DATA LISTING FOR WELL AND SPRING WATER OF THE PLAINVIEW QUADRANGLE

PARTIAL DATA LISTING PAGE 01

ST LAT LONG L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.033 -100.423 -3-03-A -005674	19.	2800	4.9	45	7	0.2	41	85	1600
48-34.083 -100.256 -3-03-A -005675	2.7	780	3.8	17	4	0.2	23	260	100
48-34.079 -100.092 -3-03-A -005676	0.92	5800	1.0	230	11	<0.2	<4	82	1800
48-34.229 -100.062 -3-03-A -005682	9.0	6400	0.9	150	24	0.2	41	180	2300
48-34.113 -100.356 -3-03-A -005683	9.6	2500	1.2	47	9	<0.2	26	120	280
48-34.256 -100.396 -3-03-A -005690	7.8	3500	2.7	46	11	<0.2	35	90	1100
48-34.212 -100.274 -3-03-A -005692	14.	5300	1.0	61	25	0.2	44	200	2100
48-34.349 -100.278 -3-03-A -005693	19.	3900	0.8	44	9	0.3	33	130	2000
48-34.058 -100.866 -3-03-A -005696	13.	6700	0.7	82	18	0.2	42	140	2200
48-34.086 -101.219 -3-03-A -005697	4.5	670	11.	60	11	0.4	28	220	280
48-34.062 -101.411 -3-03-A -005698	8.4	790	12.	76	15	0.4	58	330	80
48-34.081 -101.587 -3-03-A -005699	7.8	740	4.9	85	9	0.3	31	300	78
48-34.092 -101.732 -3-03-A -005700	9.3	710	5.2	93	11	<0.2	27	290	19
48-34.081 -101.912 -3-03-A -005701	7.2	670	4.5	81	7	0.3	25	310	52
48-34.243 -101.932 -3-03-A -005702	8.4	600	6.2	79	10	<0.2	18	290	17
48-34.369 -101.904 -3-03-A -005703	8.7	630	4.6	64	7	<0.2	16	290	16
48-34.508 -101.905 -3-03-A -005705	7.1	720	6.6	95	7	1.3	29	260	33
48-34.501 -101.761 -3-03-A -005706	8.5	660	4.6	88	6	0.2	27	300	16
48-34.359 -101.755 -3-03-A -005707	9.9	680	3.6	76	11	0.5	17	290	18
48-34.242 -101.757 -3-03-A -005708	12.	1100	3.0	100	11	0.3	22	320	71
48-34.243 -101.579 -3-03-A -005709	11.	750	6.1	75	<4	<0.2	23	340	62
48-34.372 -101.603 -3-03-A -005710	13.	750	34.	150	17	4.8	100	340	23
48-34.512 -101.583 -3-03-A -005711	10.	710	13.	120	9	0.3	44	270	38
48-34.648 -101.764 -3-03-A -005712	8.2	650	8.0	72	18	<0.2	31	250	25
48-34.649 -101.964 -3-03-A -005713	6.5	550	6.2	60	9	<0.2	22	240	17
48-34.807 -101.922 -3-03-A -005714	5.1	560	4.2	62	6	<0.2	18	230	15
48-34.811 -101.749 -3-03-A -005715	8.2	660	4.4	78	12	<0.2	40	250	33
48-34.939 -101.922 -3-03-A -005716	6.5	790	4.9	55	4	<0.2	35	220	30
48-34.932 -101.756 -3-03-A -005717	6.4	1200	3.4	80	67	0.4	<4	290	120
48-34.800 -101.592 -3-03-A -005718	6.3	660	5.4	68	9	<0.2	24	250	38
48-34.655 -101.402 -3-03-A -005719	8.2	670	18.	200	10	0.2	55	260	23
48-34.871 -101.392 -3-03-A -005722	16.	4600	7.8	200	19	<0.2	38	120	2800
48-34.930 -101.253 -3-03-A -005723	3.9	950	3.5	66	<4	<0.2	14	260	56
48-34.983 -101.412 -3-03-A -005724	3.3	650	7.5	100	7	0.4	30	230	37
48-34.985 -101.614 -3-03-A -005726	8.7	660	8.9	120	5	0.2	35	270	20
48-34.646 -101.596 -3-03-A -005727	10.	710	19.	130	22	<0.2	55	290	42
48-34.530 -101.420 -3-03-A -005730	7.6	730	5.7	140	7	<0.2	52	250	26
48-34.549 -101.239 -3-03-A -005731	3.8	920	3.9	170	<4	1.4	33	200	44
48-34.411 -101.232 -3-03-A -005732	11.	890	5.7	220	15	0.5	46	310	72
48-34.379 -101.442 -3-03-A -005733	12.	780	7.1	150	23	<0.2	52	300	50
48-34.248 -101.417 -3-03-A -005735	9.1	760	4.0	110	12	0.2	27	300	23
48-34.257 -101.255 -3-03-A -005736	6.3	740	5.5	160	14	<0.2	34	310	26
48-34.253 -101.080 -3-03-A -005737	5.7	2500	1.3	58	<4	<0.2	13	250	170
48-34.087 -101.059 -3-03-A -005738	3.7	830	3.0	60	7	<0.2	17	220	16
48-34.231 -100.917 -3-03-A -005743	15.	7100	1.2	150	<4	<0.2	<4	140	1700
48-34.092 -100.734 -3-03-A -005748	8.9	3200	0.7	59	5	<0.2	27	45	1700
48-34.089 -100.576 -3-03-A -005749	4.1	1800	1.2	22	4	0.2	15	170	870
48-34.257 -100.607 -3-03-A -005754	4.3	3100	2.2	47	16	<0.2	44	34	2000
48-34.292 -100.759 -3-03-A -005756	4.9	3200	2.7	47	13	<0.2	40	41	2100
48-34.415 -100.921 -3-03-A -005759	83.	4000	0.7	130	16	<0.2	47	140	2500
48-34.382 -101.064 -3-03-A -005760	27.	2600	0.7	370	15	1.9	18	270	600
48-34.539 -100.929 -3-03-A -005763	16.	3000	0.9	110	20	0.9	43	74	2700
48-34.546 -101.059 -3-03-A -005768	24.	4100	0.9	100	19	1.5	44	340	2700
48-34.872 -100.975 -3-03-A -005770	0.81	480	3.9	11	<4	0.4	17	190	18
48-34.838 -101.107 -3-03-A -005775	<0.2	2900	<0.5	100	10	<0.2	30	140	1800
48-34.810 -101.208 -3-03-A -005776	4.0	550	2.1	23	6	<0.2	16	220	12

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 02

ST LAT	LONG	L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.969	-101.080	-3-03-A -005779	3.0	520	1.9	25	5	<0.2	14	220	20
48-34.664	-100.889	-3-03-A -005780	13.	3600	5.3	77	18	<0.2	53	220	2200
48-34.684	-101.040	-3-03-A -005786	7.3	4300	1.4	160	31	<0.2	58	68	2600
48-34.672	-101.212	-3-03-A -005788	6.0	2800	2.0	42	9	0.2	31	110	2100
48-34.969	-100.893	-3-03-A -005789	8.1	660	0.5	37	5	0.8	10	270	72
48-34.969	-100.740	-3-03-A -005790	1.4	500	1.4	20	<4	<0.2	10	210	30
48-34.832	-100.774	-3-03-A -005793	0.53	570	0.7	8	<4	<0.2	9	210	30
48-34.531	-100.041	-3-03-A -005799	4.2	800	0.5	30	4	<0.2	10	250	100
48-34.414	-100.394	-3-03-A -005800	7.7	2900	1.3	45	10	<0.2	33	92	1900
48-34.539	-100.206	-3-03-A -005805	7.9	2400	<0.5	35	12	<0.2	22	260	620
48-34.507	-100.606	-3-03-A -005813	7.6	2300	<0.5	35	12	<0.2	33	76	2200
48-34.420	-100.553	-3-03-A -005814	30.	3000	<0.5	53	13	<0.2	35	80	2200
48-34.421	-100.713	-3-03-A -005821	9.6	3200	3.8	71	13	0.2	38	60	1800
48-34.522	-100.734	-3-03-A -005823	6.6	4400	0.9	42	16	0.2	38	150	2500
48-34.356	-100.041	-3-03-A -005824	13.	4300	0.9	100	21	0.2	42	190	2700
48-34.436	-100.173	-3-03-A -005825	56.	8200	0.9	120	40	0.7	87	390	3800
48-34.506	-100.374	-3-03-A -005826	4.8	4100	1.1	130	22	<0.2	18	130	2600
48-34.642	-100.052	-3-03-A -005836	15.	3200	2.1	150	13	<0.2	24	170	1900
48-34.681	-100.201	-3-03-A -005837	4.5	3200	1.0	140	12	<0.2	23	150	2100
48-34.714	-100.741	-3-03-A -005838	2.4	550	6.7	17	<4	<0.2	17	210	29
48-34.670	-100.397	-3-03-A -005845	8.3	3800	0.7	86	11	1.4	24	160	2000
48-34.961	-100.021	-3-03-A -005851	5.7	2900	1.2	79	6	<0.2	20	190	1800
48-34.816	-100.591	-3-03-A -005852	2.9	600	5.1	19	<4	<0.2	17	230	47
48-34.895	-100.565	-3-03-A -005853	1.5	920	3.3	21	<4	<0.2	13	220	97
48-34.969	-100.578	-3-03-A -005854	3.7	920	3.1	34	6	<0.2	20	180	250
48-34.885	-100.409	-3-03-A -005855	2.9	1100	3.1	47	5	<0.2	22	290	190
48-34.976	-100.396	-3-03-A -005856	0.42	570	<0.5	6	<4	<0.2	6	160	23
48-34.963	-100.216	-3-03-A -005857	6.4	3400	1.0	77	4	<0.2	25	230	1500
48-34.818	-100.206	-3-03-A -005858	4.7	3000	0.9	48	<4	<0.2	23	140	1300
48-34.821	-100.044	-3-03-A -005859	2.4	870	0.9	28	<4	<0.2	9	210	110
48-34.707	-100.557	-3-03-A -005860	2.0	750	2.6	24	4	<0.2	13	240	39
48-34.278	-100.988	-3-03-B -007879	4.1	2000	2.5	74	8	0.3	<4	210	380
48-34.074	-100.874	-3-03-B -007881	3.4	800	2.4	13	<4	0.3	<4	300	28
48-34.306	-101.879	-3-03-B -007882	5.1	730	1.5	80	5	<0.2	<4	300	17
48-34.489	-101.977	-3-03-B -007883	7.8	860	2.7	150	<4	1.2	13	330	36
48-34.840	-101.888	-3-03-B -007885	6.0	640	5.0	69	17	<0.2	12	280	15
48-34.984	-101.788	-3-03-B -007886	7.0	800	3.3	210	5	<0.2	23	250	55
48-34.324	-100.922	-3-03-A -007900	2.7	1000	2.2	48	4	0.4	9	250	60
48-34.353	-100.850	-3-03-A -007901	3.6	2500	3.9	73	4	0.5	16	170	1500
48-34.317	-100.849	-3-03-A -007902	6.6	3700	2.1	97	<4	1.0	<4	240	1000
48-34.410	-100.665	-3-03-A -007903	92.	3400	<0.5	67	4	0.4	<4	68	1900
48-34.360	-100.635	-3-03-A -007904	14.	3500	0.8	76	10	0.3	12	58	1800
48-34.366	-100.579	-3-03-A -007905	16.	3300	1.8	61	8	0.5	18	71	1900
48-34.330	-100.575	-3-03-A -007907	11.	3400	1.6	67	19	0.3	26	41	1900
48-34.316	-100.529	-3-03-A -007908	16.	6000	<0.5	140	10	0.5	9	260	1600
48-34.317	-100.461	-3-03-A -007909	11.	3600	1.4	61	8	0.4	18	80	1800
48-34.357	-100.484	-3-03-A -007910	14.	3600	1.4	46	<4	0.4	<4	96	1800
48-34.363	-100.536	-3-03-A -007912	4.4	3100	<0.5	54	8	0.9	13	110	1800
48-34.410	-100.415	-3-03-A -007914	10.	3000	1.5	45	<4	0.4	<4	80	1800
48-34.413	-100.489	-3-03-A -007915	17.	3300	3.1	57	6	0.4	21	94	1900
48-34.467	-100.435	-3-03-A -007916	18.	3700	1.5	60	7	0.3	17	64	1900
48-34.390	-100.439	-3-03-A -007921	6.1	2700	<0.5	49	<4	0.4	<4	120	1500
48-34.317	-100.420	-3-03-A -007922	4.3	3500	<0.5	43	<4	0.4	4	120	1600
48-34.348	-100.423	-3-03-A -007923	5.0	4300	0.5	36	5	0.4	<4	110	2000
48-34.201	-101.093	-3-03-A -007926	3.4	1400	3.2	95	4	0.4	8	210	50
48-34.174	-101.083	-3-03-A -007927	3.4	1300	1.1	82	<4	0.6	4	240	34
48-34.132	-101.080	-3-03-A -007928	4.8	1400	3.8	130	14	0.4	18	260	25

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 03

ST	LAT	LONG	L	TY	REP	OR	NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48	34.075	-101.092	-3	-03	-A		-007929	3.6	1400	2.3	110	8	0.5	11	230	17
48	34.462	-101.427	-3	-03	-A		-009362	7.5	830	8.0	220	<4	1.8	26	230	6
48	34.475	-101.491	-3	-03	-A		-009363	6.6	700	9.0	220	5	0.2	37	270	8
48	34.510	-101.467	-3	-03	-A		-009364	10.	770	15.	240	<4	0.7	24	250	<5
48	34.506	-101.534	-3	-03	-A		-009365	6.1	870	5.5	150	<4	1.4	21	240	6
48	34.672	-101.238	-3	-03	-A		-009402	18.	5300	2.1	220	23	<0.2	15	220	1600
48	34.328	-101.083	-3	-03	-A		-009406	16.	1700	1.1	230	7	<0.2	<4	280	210
48	34.410	-100.972	-3	-03	-A		-009409	29.	3600	0.5	100	6	4.5	11	220	1300
48	34.462	-101.126	-3	-03	-A		-009410	4.2	460	2.4	190	11	0.4	11	240	25
48	34.379	-100.970	-3	-03	-A		-009411	2.1	1000	1.7	37	<4	0.3	4	270	120
48	34.541	-101.020	-3	-03	-A		-009415	4.9	1900	1.7	33	<4	<0.2	<4	120	820
48	34.943	-101.727	-3	-03	-A		-009416	4.7	800	1.8	72	13	<0.2	<4	370	61
48	34.880	-101.719	-3	-03	-A		-009417	3.9	410	1.8	41	6	0.2	6	230	14
48	34.920	-101.724	-3	-03	-A		-009418	0.91	1200	0.5	88	42	<0.2	<4	340	100
48	34.927	-101.653	-3	-03	-A		-009419	5.9	640	1.6	170	8	0.4	17	360	14
48	34.928	-101.688	-3	-03	-A		-009420	3.3	880	1.7	80	19	0.2	<4	390	67
48	34.719	-100.965	-3	-03	-A		-009421	5.2	2500	1.4	56	6	0.4	8	120	1500
48	34.697	-100.989	-3	-03	-A		-009422	4.1	3300	0.6	120	8	0.2	<4	62	2000
48	34.655	-100.959	-3	-03	-A		-009423	2.3	1600	1.8	32	7	<0.2	<4	110	770
48	34.665	-100.986	-3	-03	-A		-009424	3.5	2500	1.5	34	11	0.4	<4	100	1500
48	34.491	-100.954	-3	-03	-A		-009426	9.8	6500	0.6	160	12	0.4	17	160	2000
48	34.486	-100.978	-3	-03	-A		-009427	20.	3200	1.7	140	6	0.3	<4	160	1700
48	34.470	-100.951	-3	-03	-A		-009428	7.3	3000	1.8	70	<4	0.7	9	120	1700
48	34.316	-100.998	-3	-03	-A		-009431	6.0	500	1.8	33	16	0.4	5	210	30
48	34.416	-101.139	-3	-03	-A		-009432	6.8	550	5.3	180	14	0.4	22	280	43
48	34.390	-101.123	-3	-03	-A		-009433	4.1	490	4.5	230	<4	0.4	10	230	26
48	34.349	-101.120	-3	-03	-A		-009434	43.	2400	1.8	450	<4	0.4	6	300	410
48	34.328	-101.118	-3	-03	-A		-009435	16.	1700	2.0	180	4	0.4	4	320	230
48	34.547	-100.962	-3	-03	-A		-009437	0.85	4900	<0.5	220	6	<0.2	<4	84	2700
48	34.375	-101.025	-3	-03	-A		-009438	10.0	1700	0.7	58	<4	<0.2	<4	370	580
48	34.368	-101.079	-3	-03	-A		-009439	11.	1600	0.7	250	4	<0.2	<4	380	200
48	34.348	-101.043	-3	-03	-A		-009441	8.4	3400	0.6	120	5	<0.2	9	200	540
48	34.340	-100.973	-3	-03	-A		-009442	1.3	680	2.6	28	<4	<0.2	13	280	49
48	34.747	-101.190	-3	-03	-A		-009443	9.6	2600	1.1	69	<4	<0.2	7	210	1300
48	34.589	-101.153	-3	-03	-A		-009446	19.	5600	1.0	160	29	<0.2	28	110	2700
48	34.561	-101.128	-3	-03	-A		-009447	17.	5200	1.6	220	<4	<0.2	<4	110	2400
48	34.586	-101.092	-3	-03	-A		-009448	8.8	2900	0.5	57	5	0.2	8	120	1600
48	34.561	-101.076	-3	-03	-A		-009450	15.	4400	<0.5	170	11	<0.2	<4	110	2400
48	34.513	-101.128	-3	-03	-A		-009451	8.5	5500	0.6	150	59	0.2	45	130	3400
48	34.505	-100.857	-3	-03	-A		-009453	12.	3100	5.3	87	8	3.5	20	200	2000
48	34.467	-100.867	-3	-03	-A		-009458	6.7	3600	0.6	120	18	<0.2	49	120	2000
48	34.418	-100.839	-3	-03	-A		-009459	7.9	3200	1.2	130	10	0.4	18	90	1900
48	34.372	-100.798	-3	-03	-A		-009460	1.7	3300	0.7	110	5	0.2	<4	150	2100
48	34.530	-100.807	-3	-03	-A		-009463	16.	9600	<0.5	54	37	0.2	41	200	2900
48	34.402	-100.817	-3	-03	-A		-009466	6.9	3000	2.2	33	9	0.2	28	340	1400
48	34.382	-100.864	-3	-03	-A		-009468	3.5	4000	1.7	74	<4	<0.2	<4	95	2000
48	34.332	-100.766	-3	-03	-A		-009469	7.2	4000	1.3	59	<4	0.2	<4	120	1800
48	34.369	-100.745	-3	-03	-A		-009472	4.6	3500	3.0	130	7	<0.2	11	46	2000
48	34.505	-100.590	-3	-03	-A		-009475	5.9	3000	<0.5	51	21	<0.2	34	80	1700
48	34.328	-100.681	-3	-03	-A		-009478	5.8	3100	<0.5	100	14	<0.2	19	48	1800
48	34.365	-100.691	-3	-03	-A		-009479	12.	3600	1.5	120	7	<0.2	9	56	1900
48	34.325	-100.640	-3	-03	-A		-009481	40.	3500	0.5	55	4	0.4	11	100	1800
48	34.321	-100.707	-3	-03	-A		-009483	6.7	3000	0.6	83	5	0.3	5	64	1900
48	34.428	-100.788	-3	-03	-A		-009487	4.0	3400	<0.5	130	9	0.3	<4	42	2000
48	34.436	-100.869	-3	-03	-A		-009488	28.	4300	<0.5	200	8	0.3	10	100	2300
48	34.459	-100.707	-3	-03	-A		-009489	14.	2900	<0.5	75	11	0.2	<4	160	1700
48	34.400	-100.756	-3	-03	-A		-009490	5.3	3600	3.0	150	7	0.4	7	48	2400

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 04

ST LAT LONG L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.483 -100.681 -3-03-A -009491	3.0	3100	<0.5	68	<4	0.2	7	140	1400
48-34.452 -100.621 -3-03-A -009492	7.0	3600	2.2	110	9	0.3	7	38	1900
48-34.409 -100.596 -3-03-A -009493	7.3	3600	1.8	77	8	0.2	6	42	1700
48-34.440 -100.728 -3-03-A -009494	9.8	3200	<0.5	67	<4	<0.2	<4	62	1600
48-34.718 -101.972 -3-03-A -010751	8.9	630	1.5	65	5	<0.2	10	230	11
48-34.728 -101.908 -3-03-A -010752	9.7	840	2.2	92	5	0.2	15	240	59
48-34.344 -101.979 -3-03-A -010753	5.4	1000	2.4	65	6	<0.2	10	260	22
48-34.395 -101.976 -3-03-A -010754	7.6	850	2.1	59	4	<0.2	14	270	16
48-34.401 -101.918 -3-03-A -010755	5.3	590	2.4	66	5	<0.2	5	260	14
48-34.447 -101.918 -3-03-A -010756	4.1	560	4.0	56	8	0.4	7	260	13
48-34.447 -101.867 -3-03-A -010757	6.8	600	4.7	84	9	<0.2	11	280	14
48-34.447 -101.815 -3-03-A -010758	6.8	700	2.8	90	4	<0.2	13	230	9
48-34.445 -101.761 -3-03-A -010759	8.3	620	4.0	120	<4	0.3	13	250	20
48-34.398 -101.763 -3-03-A -010760	5.3	580	5.1	75	5	0.4	16	280	9
48-34.317 -101.730 -3-03-A -010761	5.6	620	3.1	92	16	0.3	17	270	11
48-34.269 -101.724 -3-03-A -010762	5.4	580	3.7	92	5	0.5	7	280	14
48-34.358 -101.704 -3-03-A -010763	6.2	790	2.7	79	16	0.4	5	260	11
48-34.361 -101.650 -3-03-A -010764	11.	760	6.1	110	<4	0.3	18	290	8
48-34.358 -101.554 -3-03-A -010765	1.2	640	4.3	150	10	0.4	21	290	14
48-34.374 -101.489 -3-03-A -010766	12.	650	7.7	170	12	0.3	24	280	46
48-34.419 -101.493 -3-03-A -010767	7.0	630	6.8	160	11	0.5	17	310	16
48-34.406 -101.538 -3-03-A -010768	4.3	660	5.4	130	10	0.2	4	270	19
48-34.410 -101.607 -3-03-A -010770	6.1	610	5.3	130	12	<0.2	17	280	27
48-34.402 -101.660 -3-03-A -010771	11.	620	6.7	120	14	0.3	18	310	21
48-34.409 -101.704 -3-03-A -010772	4.8	670	7.3	110	14	0.4	16	340	23
48-34.391 -101.810 -3-03-A -010774	6.9	590	3.4	71	9	0.4	6	260	13
48-34.398 -101.848 -3-03-A -010775	7.7	590	3.2	68	10	0.2	5	300	17
48-34.266 -101.669 -3-03-A -010776	6.1	790	3.0	77	12	0.4	<4	270	20
48-34.223 -101.669 -3-03-A -010777	8.1	580	5.8	86	11	0.3	8	300	19
48-34.045 -101.372 -3-03-A -010778	4.8	990	1.0	61	14	0.5	<4	280	140
48-34.142 -101.499 -3-03-A -010779	10.	630	4.8	110	8	0.6	10	300	29
48-34.140 -101.553 -3-03-A -010780	11.	650	5.8	120	6	0.3	11	280	22
48-34.181 -101.614 -3-03-A -010781	7.2	730	7.5	150	7	0.3	28	270	23
48-34.167 -101.967 -3-03-A -010782	6.3	990	4.6	96	11	0.5	6	280	19
48-34.169 -101.914 -3-03-A -010783	6.9	810	4.9	82	8	0.4	9	280	17
48-34.188 -101.866 -3-03-A -010784	5.8	820	3.8	110	9	0.4	6	290	7
48-34.168 -101.810 -3-03-A -010785	7.1	630	6.6	130	7	0.3	20	280	9
48-34.168 -101.763 -3-03-A -010786	7.9	670	5.4	110	6	<0.2	16	270	8
48-34.032 -101.947 -3-03-A -010787	9.3	720	5.9	99	8	<0.2	23	300	9
48-34.031 -101.902 -3-03-A -010788	9.8	850	5.0	120	12	<0.2	13	320	12
48-34.036 -101.850 -3-03-A -010789	8.5	750	1.8	77	5	<0.2	10	290	23
48-34.036 -101.780 -3-03-A -010790	9.3	720	4.1	100	7	0.4	10	330	10
48-34.038 -101.745 -3-03-A -010791	8.5	820	4.9	130	6	<0.2	17	280	19
48-34.084 -101.767 -3-03-A -010792	6.0	690	3.7	130	7	0.8	10	270	7
48-34.121 -101.764 -3-03-A -010794	6.4	990	5.6	120	12	0.4	14	260	8
48-34.120 -101.819 -3-03-A -010795	6.3	770	4.4	110	11	<0.2	15	280	8
48-34.128 -101.867 -3-03-A -010796	5.8	730	5.0	110	7	0.5	16	230	7
48-34.127 -101.931 -3-03-A -010797	7.7	610	4.2	110	5	0.6	12	290	6
48-34.127 -101.984 -3-03-A -010798	4.5	640	3.3	90	4	0.4	13	270	6
48-34.077 -101.959 -3-03-A -010799	5.7	600	5.1	110	7	0.8	19	300	6
48-34.081 -101.849 -3-03-A -010800	5.6	710	4.5	120	11	0.8	17	290	7
48-34.235 -101.776 -3-03-A -010801	7.9	670	2.2	90	7	<0.2	10	270	19
48-34.228 -101.727 -3-03-A -010802	9.1	690	3.5	110	16	<0.2	9	280	16
48-34.075 -101.815 -3-03-A -010803	7.8	620	2.9	91	12	<0.2	14	260	10
48-34.078 -101.709 -3-03-A -010804	9.1	600	2.9	100	4	<0.2	14	310	9
48-34.115 -101.710 -3-03-A -010805	6.6	670	5.2	120	8	<0.2	20	280	11
48-34.136 -101.663 -3-03-A -010806	11.	720	3.5	84	8	<0.2	14	320	11

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 05

ST LAT	LONG	L TY REP QR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.135	-101.608	-3-03-A -010808	12.	770	5.8	130	4	<0.2	19	270	9
48-34.033	-101.633	-3-03-A -010809	7.6	1100	7.7	180	9	1.1	25	310	10
48-34.217	-101.606	-3-03-A -010810	6.5	830	3.7	110	6	0.3	21	270	14
48-34.180	-101.571	-3-03-A -010811	11.	790	5.8	130	5	0.5	24	280	13
48-34.183	-101.503	-3-03-A -010812	7.1	910	2.3	110	9	0.4	<4	290	11
48-34.133	-101.446	-3-03-A -010813	11.	950	6.1	110	8	<0.2	18	330	13
48-34.227	-101.454	-3-03-A -010814	9.2	650	4.4	120	7	<0.2	22	340	8
48-34.221	-101.500	-3-03-A -010815	9.4	930	3.3	120	4	<0.2	10	270	73
48-34.208	-101.563	-3-03-A -010816	7.9	550	5.4	96	11	<0.2	17	270	17
48-34.439	-101.711	-3-03-A -010817	6.4	700	4.3	110	6	<0.2	24	270	8
48-34.445	-101.660	-3-03-A -010819	5.9	660	4.0	130	4	<0.2	22	230	8
48-34.478	-101.606	-3-03-A -010820	6.5	770	7.0	160	6	<0.2	28	260	20
48-34.042	-101.426	-3-03-A -010821	8.7	810	5.8	110	<4	<0.2	18	300	18
48-34.050	-101.327	-3-03-A -010823	6.0	500	9.7	70	9	<0.2	24	210	7
48-34.048	-101.281	-3-03-A -010824	4.8	570	8.5	67	10	<0.2	27	230	15
48-34.218	-101.988	-3-03-A -010825	6.9	690	5.0	110	<4	<0.2	16	270	15
48-34.268	-101.995	-3-03-A -010826	10.	770	1.4	110	5	0.3	<4	330	16
48-34.310	-101.983	-3-03-A -010827	8.1	710	3.1	94	9	<0.2	5	250	20
48-34.288	-101.931	-3-03-A -010828	5.1	720	2.2	72	7	<0.2	4	280	19
48-34.330	-101.920	-3-03-A -010829	6.8	610	4.7	100	9	<0.2	10	260	20
48-34.341	-101.884	-3-03-A -010830	7.6	750	2.4	92	10	<0.2	8	280	23
48-34.306	-101.879	-3-03-A -010832	6.3	650	2.1	74	4	<0.2	11	280	11
48-34.217	-101.827	-3-03-A -010833	8.4	1100	3.5	180	4	<0.2	12	290	12
48-34.228	-101.876	-3-03-A -010834	6.1	870	4.8	150	4	<0.2	20	260	10
48-34.205	-101.932	-3-03-A -010835	6.7	780	4.7	110	<4	<0.2	15	270	14
48-34.278	-101.860	-3-03-A -010836	6.6	770	3.1	90	6	<0.2	10	280	17
48-34.310	-101.826	-3-03-A -010837	5.3	750	2.3	88	16	<0.2	9	280	13
48-34.352	-101.821	-3-03-A -010838	6.8	750	2.3	90	6	0.4	4	280	10
48-34.310	-101.780	-3-03-A -010839	5.1	730	1.8	83	6	0.4	10	280	11
48-34.278	-101.778	-3-03-A -010840	6.1	770	2.4	83	5	<0.2	4	290	8
48-34.265	-101.831	-3-03-A -010841	5.2	1100	5.7	170	6	1.1	14	210	44
48-34.314	-101.673	-3-03-A -010842	7.6	460	3.2	120	10	<0.2	10	280	14
48-34.278	-101.610	-3-03-A -010843	5.8	820	1.6	100	10	<0.2	<4	270	10
48-34.332	-101.610	-3-03-A -010844	4.5	670	4.1	150	5	0.3	14	260	16
48-34.486	-101.760	-3-03-A -010845	7.9	710	5.0	110	5	<0.2	16	270	38
48-34.484	-101.822	-3-03-A -010847	8.0	820	5.3	110	14	<0.2	16	250	34
48-34.487	-101.857	-3-03-A -010848	6.9	800	3.9	96	10	<0.2	16	240	12
48-34.487	-101.913	-3-03-A -010849	34.	790	1.7	58	5	0.2	9	300	15
48-34.459	-101.973	-3-03-A -010850	4.8	790	3.3	84	<4	<0.2	16	240	6
48-34.489	-101.977	-3-03-A -010851	8.1	1400	3.2	150	5	1.1	16	280	360
48-34.532	-101.975	-3-03-A -010852	5.5	870	5.1	100	7	<0.2	25	230	50
48-34.527	-101.815	-3-03-A -010853	6.6	680	5.2	130	6	<0.2	22	270	8
48-34.528	-101.871	-3-03-A -010854	12.	690	4.2	77	<4	0.3	15	270	<5
48-34.526	-101.926	-3-03-A -010855	11.	820	4.9	90	5	0.6	20	300	17
48-34.490	-101.659	-3-03-A -010856	11.	820	3.5	160	9	0.3	19	270	23
48-34.088	-101.544	-3-03-A -010857	13.	1300	4.7	160	7	1.0	34	340	78
48-34.003	-101.391	-3-03-A -010858	6.6	660	5.3	86	10	2.8	25	260	25
48-34.147	-101.403	-3-03-A -010859	8.8	670	4.0	130	10	<0.2	28	270	19
48-34.143	-101.341	-3-03-A -010860	7.6	710	2.5	130	8	0.4	17	290	16
48-34.183	-101.337	-3-03-A -010862	7.9	750	5.2	110	20	2.3	23	300	17
48-34.179	-101.446	-3-03-A -010863	8.9	820	3.9	100	10	0.8	15	320	17
48-34.182	-101.396	-3-03-A -010864	7.1	730	4.1	110	6	0.4	20	300	15
48-34.224	-101.404	-3-03-A -010865	11.	710	4.6	110	9	0.2	21	300	11
48-34.273	-101.396	-3-03-A -010866	2.6	700	3.9	120	11	0.8	19	300	9
48-34.267	-101.344	-3-03-A -010867	5.9	700	4.5	150	16	1.0	21	280	10
48-34.223	-101.344	-3-03-A -010868	7.9	720	4.6	100	13	0.2	24	280	17
48-34.137	-101.270	-3-03-A -010869	2.8	710	3.0	120	6	0.4	14	240	17

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 06

ST LAT LONG L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.143 -101.226 -3-03-A -010870	6.5	700	6.2	84	8	0.7	33	280	8
48-34.127 -101.147 -3-03-A -010871	3.8	1100	0.7	76	12	0.4	<4	500	29
48-34.117 -101.145 -3-03-A -010872	29.	530	4.2	44	7	0.6	14	210	6
48-34.145 -101.176 -3-03-A -010873	5.4	600	5.3	91	12	<0.2	23	230	17
48-34.220 -101.290 -3-03-A -010874	7.3	780	3.6	100	<4	0.2	20	300	13
48-34.099 -101.276 -3-03-A -010875	7.2	640	6.0	93	18	3.0	22	260	15
48-34.186 -101.286 -3-03-A -010876	6.1	760	6.7	100	8	2.3	21	280	17
48-34.185 -101.249 -3-03-A -010877	9.0	700	4.4	110	9	1.5	22	280	12
48-34.188 -101.190 -3-03-A -010878	8.1	700	4.0	100	8	0.3	21	270	16
48-34.007 -101.270 -3-03-A -010879	6.6	630	10.	110	10	0.7	41	270	17
48-34.025 -101.151 -3-03-A -010880	8.3	710	1.4	88	7	0.4	4	290	26
48-34.018 -101.588 -3-03-A -010881	14.	710	6.0	110	9	0.2	34	260	31
48-34.018 -101.537 -3-03-A -010882	3.8	760	6.8	120	10	0.3	32	270	17
48-34.055 -101.525 -3-03-A -010883	4.0	670	5.9	100	11	0.2	26	270	13
48-34.041 -101.693 -3-03-A -010884	14.	750	5.1	110	12	0.3	14	300	8
48-34.090 -101.657 -3-03-A -010885	6.2	1300	2.9	120	10	<0.2	13	230	62
48-34.390 -101.432 -3-03-A -010886	6.9	580	7.7	170	16	1.0	29	280	25
48-34.345 -101.367 -3-03-A -010887	10.	680	8.5	220	8	<0.2	31	270	32
48- 0.000 - 0.000 -3-03-A -010888	7.3	870	12.	230	8	0.4	34	260	39
48-34.479 -101.385 -3-03-A -010890	6.0	540	5.4	130	8	0.3	22	250	28
48-34.476 -101.332 -3-03-A -010891	4.2	580	7.1	170	9	<0.2	22	260	9
48-34.525 -101.330 -3-03-A -010892	8.6	500	5.8	170	10	<0.2	32	200	10
48-34.517 -101.264 -3-03-A -010894	3.2	490	4.4	180	5	0.5	33	220	10
48-34.524 -101.227 -3-03-A -010895	4.2	570	3.0	140	7	1.2	8	230	28
48-34.557 -101.209 -3-03-A -010896	5.0	640	8.5	240	10	0.4	35	230	14
48-34.558 -101.275 -3-03-A -010897	4.2	870	8.7	210	5	0.3	51	200	30
48-34.568 -101.323 -3-03-A -010898	5.9	570	5.6	180	5	0.3	25	320	9
48-34.525 -101.386 -3-03-A -010899	10.	790	6.2	220	4	0.2	32	220	23
48-34.553 -101.390 -3-03-A -010900	15.	670	9.1	130	21	0.2	46	250	32
48-34.497 -101.419 -3-03-A -010901	8.1	630	5.8	170	7	0.2	36	250	33
48-34.525 -101.425 -3-03-A -010902	20.	600	7.9	93	7	0.3	270	270	20
48-34.564 -101.432 -3-03-A -010903	5.9	2500	1.1	110	5	0.4	<4	370	260
48-34.741 -101.438 -3-03-A -010904	6.9	520	4.2	94	7	0.6	21	240	32
48-34.691 -101.354 -3-03-A -010905	5.2	640	3.6	94	5	0.2	14	200	34
48-34.722 -101.380 -3-03-A -010906	8.7	710	8.2	150	10	0.3	30	260	45
48-34.678 -101.391 -3-03-A -010907	6.5	560	10.	160	5	0.2	39	230	18
48-34.902 -100.062 -3-03-A -010908	7.8	3300	1.1	79	8	<0.2	5	130	1400
48-34.825 -100.091 -3-03-A -010915	1.8	780	0.9	20	<4	<0.2	5	260	75
48-34.789 -100.070 -3-03-A -010917	2.0	650	2.6	15	4	0.3	8	240	61
48-34.717 -100.086 -3-03-A -010918	5.6	3500	0.7	110	6	0.2	6	160	1400
48-34.812 -100.164 -3-03-A -010920	6.3	3600	1.1	67	5	<0.2	15	200	1100
48-34.772 -100.156 -3-03-A -010922	5.5	2100	1.5	59	4	0.4	11	310	190
48-34.757 -100.096 -3-03-A -010923	4.7	3100	1.0	77	8	<0.2	<4	190	1300
48-34.872 -100.201 -3-03-A -010927	4.2	1400	2.9	27	<4	<0.2	12	310	170
48-34.909 -100.203 -3-03-A -010928	2.3	650	2.1	13	<4	<0.2	10	300	23
48-34.987 -100.182 -3-03-A -010929	3.6	3100	<0.5	42	<4	<0.2	8	170	1300
48-34.990 -100.261 -3-03-A -010930	13.	3000	<0.5	37	13	<0.2	20	160	1400
48-34.999 -100.346 -3-03-A -010931	20.	1700	<0.5	63	8	<0.2	7	250	1800
48-34.770 -100.255 -3-03-A -010934	6.8	3800	0.7	71	9	<0.2	16	180	1600
48-34.885 -100.024 -3-03-A -010935	13.	3200	2.0	39	<4	<0.2	17	200	1300
48-34.920 -100.015 -3-03-A -010936	4.6	3400	0.6	40	<4	<0.2	20	150	1500
48-34.726 -100.301 -3-03-A -010940	6.3	3000	<0.5	92	6	<0.2	10	240	1400
48-34.857 -100.039 -3-03-A -010944	9.3	2700	1.2	79	12	0.3	<4	280	1100
48-34.675 -100.156 -3-03-A -010945	4.3	3200	1.0	75	<4	<0.2	<4	190	1100
48-34.672 -100.103 -3-03-A -010946	4.9	3700	<0.5	84	7	0.6	7	210	1400
48-34.668 -100.055 -3-03-A -010947	0.42	5000	<0.5	360	15	<0.2	<4	100	1700
48-34.710 -100.002 -3-03-A -010949	3.8	8000	<0.5	330	36	2.0	45	160	1400

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 07

ST LAT	LONG	L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.799	-100.014	-3-03-A -010950	3.2	700	<0.5	23	4	<0.2	<4	270	60
48-34.940	-100.166	-3-03-A -010951	7.1	2900	0.5	68	<4	<0.2	<4	190	1200
48-34.933	-100.106	-3-03-A -010952	5.5	1800	1.3	52	<4	<0.2	<4	120	670
48-34.896	-100.111	-3-03-A -010953	3.5	1800	1.5	34	<4	<0.2	11	230	590
48-34.978	-100.118	-3-03-A -010954	4.7	2900	<0.5	140	4	<0.2	4	140	1400
48-34.930	-100.054	-3-03-A -010964	68.	5500	<0.5	91	11	<0.2	8	470	2500
48-34.975	-100.067	-3-03-A -010967	1.3	3500	1.1	300	18	<0.2	18	130	1600
48-34.841	-100.422	-3-03-A -010968	8.1	1200	2.2	41	<4	0.5	4	180	330
48-34.768	-100.412	-3-03-A -010969	20.	3300	1.8	63	<4	0.4	7	72	1700
48-34.798	-100.444	-3-03-A -010970	9.2	1300	1.0	43	<4	0.4	<4	180	360
48-34.766	-100.465	-3-03-A -010971	8.4	2200	<0.5	36	<4	0.3	<4	140	1000
48-34.457	-100.538	-3-03-A -010973	9.8	3200	1.8	56	4	0.4	9	80	1700
48-34.384	-100.558	-3-03-A -010975	9.0	3400	2.0	47	5	0.4	8	74	1700
48-34.457	-100.488	-3-03-A -010977	22.	4200	1.5	67	8	0.3	10	62	1800
48-34.719	-100.143	-3-03-A -010978	6.0	4700	1.5	110	5	0.9	8	140	1700
48-34.860	-100.082	-3-03-A -010981	6.3	1700	<0.5	30	<4	0.4	<4	230	640
48-34.789	-100.115	-3-03-A -010982	5.1	2100	1.0	67	<4	<0.2	9	240	620
48-34.782	-100.362	-3-03-A -010983	4.5	3100	0.9	97	5	0.5	4	150	1700
48-34.752	-100.319	-3-03-A -010984	5.8	3400	<0.5	110	12	0.5	11	200	1700
48-34.913	-100.510	-3-03-A -010985	4.7	1900	1.5	53	5	0.4	15	170	710
48-34.822	-100.527	-3-03-A -010986	2.9	13000	3.8	35	9	0.6	<4	190	580
48-34.865	-100.503	-3-03-A -010987	26.	2800	1.8	83	<4	0.2	<4	84	1600
48-34.689	-100.262	-3-03-A -010988	4.5	3300	<0.5	180	10	0.4	11	210	1800
48-34.749	-100.050	-3-03-A -010989	0.57	3900	<0.5	150	27	0.5	6	46	1900
48-34.695	-100.306	-3-03-A -010990	2.2	2500	<0.5	110	23	0.3	27	190	1400
48-34.741	-100.366	-3-03-A -010991	5.6	3200	<0.5	340	16	0.2	7	150	840
48-34.774	-100.020	-3-03-A -010992	10.	3500	0.8	92	11	0.7	10	170	1500
48-34.775	-100.187	-3-03-A -010993	2.2	990	4.6	20	<4	0.4	12	220	89
48-34.733	-100.190	-3-03-A -010995	26.	6400	1.4	190	13	0.2	9	210	1700
48-34.469	-100.613	-3-03-A -010996	10.	3800	2.5	96	14	<0.2	35	60	1500
48-34.741	-100.230	-3-03-A -010997	4.8	4600	<0.5	99	8	<0.2	9	180	1300
48-34.514	-100.626	-3-03-A -010998	23.	3600	<0.5	80	14	0.3	29	90	1500
48-34.402	-100.699	-3-03-A -010999	11.	3300	1.2	81	7	<0.2	15	66	1500
48-34.847	-101.191	-3-03-A -011000	8.0	4000	2.5	98	<4	0.4	<4	110	1900
48-34.009	-101.007	-3-03-A -011002	5.0	2800	4.0	60	7	0.2	10	230	80
48-34.039	-101.022	-3-03-A -011006	4.6	620	2.4	31	9	0.2	<4	210	33
48-34.001	-100.987	-3-03-A -011007	3.2	620	4.4	20	5	0.2	6	180	30
48-34.068	-100.927	-3-03-A -011009	7.9	920	2.2	19	<4	0.4	<4	410	58
48-34.090	-100.999	-3-03-A -011010	3.4	250	2.6	36	<4	0.4	<4	280	20
48-34.074	-100.874	-3-03-A -011013	2.9	840	2.8	9	<4	0.4	<4	250	18
48-34.030	-100.808	-3-03-A -011019	12.	1800	2.3	45	<4	<0.2	<4	300	56
48-34.298	-100.890	-3-03-A -011020	21.	3700	2.2	64	<4	<0.2	15	150	1400
48-34.305	-100.939	-3-03-A -011022	5.1	700	1.7	20	<4	0.2	<4	180	18
48-34.305	-100.987	-3-03-A -011024	5.7	800	4.4	43	<4	0.2	16	230	25
48-34.278	-100.988	-3-03-A -011026	6.9	2100	3.5	57	<4	<0.2	11	190	280
48-34.229	-100.884	-3-03-A -011027	2.5	1300	2.7	24	<4	0.2	<4	180	93
48-34.270	-100.944	-3-03-A -011028	6.0	2800	2.3	74	<4	0.3	5	150	320
48-34.230	-101.023	-3-03-A -011030	13.	1400	3.7	93	<4	0.2	11	240	68
48-34.037	-100.745	-3-03-A -011033	7.5	4600	1.4	64	<4	<0.2	17	190	1300
48-34.008	-100.661	-3-03-A -011034	4.9	3100	5.2	74	<4	<0.2	22	140	1200
48-34.061	-100.623	-3-03-A -011035	11.	7800	3.2	73	16	<0.2	19	58	1900
48-34.137	-100.896	-3-03-A -011036	6.4	1700	0.6	51	<4	<0.2	4	170	550
48-34.187	-100.966	-3-03-A -011040	2.5	810	2.9	26	4	<0.2	12	230	29
48-34.223	-100.976	-3-03-A -011041	9.9	240	4.4	74	10	<0.2	18	250	170
48-34.087	-100.760	-3-03-A -011042	5.6	8700	4.2	22	21	<0.2	60	56	1900
48-34.131	-100.723	-3-03-A -011043	2.0	6300	1.9	160	15	<0.2	17	25	2200
48-34.154	-101.007	-3-03-A -011045	23.	2000	1.1	77	<4	<0.2	4	360	340

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 08

ST LAT	LONG	L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.173	-101.022	-3-03-A -011047	20.	250	9.1	89	16	0.3	28	320	58
48-34.148	-101.000	-3-03-A -011051	100.	6500	0.6	180	12	<0.2	21	170	1900
48-34.126	-100.784	-3-03-A -011053	5.6	9800	7.4	170	<4	<0.2	<4	82	1600
48-34.107	-100.835	-3-03-A -011055	79.	5900	<0.5	240	9	<0.2	5	240	2700
48-34.054	-100.243	-3-03-A -011058	26.	6300	<0.5	150	9	<0.2	6	220	2400
48-34.263	-100.298	-3-03-A -011066	11.	9900	<0.5	70	23	<0.2	30	170	2000
48-34.186	-100.639	-3-03-A -011069	33.	5100	<0.5	67	16	<0.2	<4	190	2600
48-34.195	-100.914	-3-03-A -011073	9.3	2400	1.0	53	<4	0.2	<4	270	290
48-34.149	-100.537	-3-03-A -011075	11.	4300	0.6	29	<4	<0.2	4	60	1300
48-34.103	-100.532	-3-03-A -011076	15.	3700	<0.5	40	<4	<0.2	<4	68	1400
48-34.081	-100.539	-3-03-A -011078	21.	3600	0.8	59	<4	<0.2	6	68	1500
48-34.074	-100.572	-3-03-A -011079	35.	3300	6.3	46	9	<0.2	17	56	1400
48-34.172	-100.820	-3-03-A -011083	6.2	4300	4.0	150	6	<0.2	10	56	1900
48-34.228	-100.812	-3-03-A -011085	9.2	2400	1.9	53	<4	0.2	6	220	470
48-34.070	-100.573	-3-03-A -011086	5.5	2600	2.9	58	<4	<0.2	5	230	510
48-34.203	-100.874	-3-03-A -011087	6.6	2700	0.8	58	<4	0.3	<4	170	210
48-34.154	-100.869	-3-03-A -011088	15.	4700	1.5	120	7	<0.2	14	70	1500
48-34.267	-100.864	-3-03-A -011089	6.7	4000	18.	80	7	0.5	13	90	1600
48-34.267	-100.812	-3-03-A -011090	2.2	3900	6.0	63	<4	<0.2	21	56	1400
48-34.258	-100.791	-3-03-A -011091	22.	6600	2.6	370	<4	<0.2	<4	190	2500
48-34.066	-100.811	-3-03-A -011093	5.8	5800	3.3	110	14	0.3	13	200	440
48-34.445	-101.610	-3-03-A -011095	7.1	800	3.1	150	4	0.9	19	260	15
48-34.447	-101.562	-3-03-A -011096	4.0	720	3.7	140	6	0.4	22	260	7
48-34.454	-101.506	-3-03-A -011097	7.4	780	5.1	190	8	0.4	16	250	11
48-34.483	-101.571	-3-03-A -011098	7.2	700	6.6	160	8	0.3	44	250	11
48-34.540	-101.537	-3-03-A -011099	6.1	700	11.	120	8	0.3	36	230	18
48-34.535	-101.576	-3-03-A -011100	6.4	750	5.1	120	10	0.3	36	220	43
48-34.542	-101.607	-3-03-A -011101	10.	740	5.4	140	14	0.2	32	290	34
48-34.498	-101.701	-3-03-A -011102	10.0	820	4.0	100	7	0.4	18	270	42
48-34.531	-101.704	-3-03-A -011103	12.	1100	2.9	200	6	0.3	19	250	34
48-34.525	-101.651	-3-03-A -011104	7.0	730	6.8	160	5	0.3	30	240	22
48-34.562	-101.668	-3-03-A -011105	10.	790	6.1	120	6	0.5	25	220	67
48-34.575	-101.714	-3-03-A -011106	6.4	740	4.0	83	11	2.0	28	230	25
48-34.574	-101.772	-3-03-A -011107	12.	780	5.4	180	7	0.4	24	320	25
48-34.580	-101.511	-3-03-A -011108	7.1	780	7.4	120	12	3.1	49	240	50
48-34.630	-101.502	-3-03-A -011109	11.	750	7.5	120	15	0.8	54	250	34
48-34.666	-101.498	-3-03-A -011111	11.	810	7.0	120	44	0.4	39	280	53
48-34.706	-101.495	-3-03-A -011112	7.7	790	6.5	200	14	0.3	44	230	66
48-34.704	-101.539	-3-03-A -011113	12.	720	4.4	150	14	0.3	36	250	43
48-34.670	-101.543	-3-03-A -011114	12.	940	11.	150	23	0.4	73	280	78
48-34.622	-101.558	-3-03-A -011116	5.8	800	3.2	120	10	0.6	8	280	48
48-34.574	-101.555	-3-03-A -011117	13.	780	8.7	140	8	1.9	54	270	35
48-34.692	-101.756	-3-03-A -011118	6.4	800	6.7	91	10	0.4	30	260	18
48-34.707	-101.706	-3-03-A -011119	11.	740	8.2	120	10	0.4	39	220	14
48-34.703	-101.649	-3-03-A -011120	8.0	810	5.4			0.3		240	16
48-34.708	-101.592	-3-03-A -011121	3.8	830	6.1	160	9	0.3	37	300	22
48-34.571	-101.617	-3-03-A -011122	7.3	690	7.0	150	8	0.5	26	260	34
48-34.621	-101.613	-3-03-A -011123	9.5	1000	3.1	220	11	<0.2	16	250	78
48-34.622	-101.664	-3-03-A -011124	9.7	630	5.4	94	8	<0.2	24	220	31
48-34.605	-101.720	-3-03-A -011125	7.5	780	5.3	100	8	0.6	21	240	39
48-34.668	-101.701	-3-03-A -011126	8.7	700	5.8	120	<4	<0.2	12	250	41
48-34.658	-101.601	-3-03-A -011127	9.9	740	5.2	160	6	0.7	24	250	45
48-34.665	-101.647	-3-03-A -011128	38.	730	6.0	130	19	2.4	50	270	43
48-34.468	-101.523	-3-03-A -011129	5.6	670	6.1	160	19	0.3	36	240	21
48-34.268	-101.551	-3-03-A -011130	6.4	780	3.6	97	14	<0.2	10	270	23
48-34.275	-101.513	-3-03-A -011131	5.8	750	1.0	110	9	2.1	<4	270	33
48-34.305	-101.457	-3-03-A -011132	6.5	710	3.0	130	13	<0.2	10	270	23

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 09

ST	LAT	LONG	L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48	34.308	-101.394	-3-03-A -011133	8.9	710	4.1	150	8	0.6	23	290	25
48	34.310	-101.341	-3-03-A -011134	13.	830	5.4	230	8	0.2	25	270	53
48	34.308	-101.255	-3-03-A -011135	6.9	700	4.4	150	8	0.7	17	270	35
48	34.289	-101.276	-3-03-A -011137	8.9	710	9.3	180	10	0.2	28	280	23
48	34.271	-101.314	-3-03-A -011138	11.	770	5.5	170	13	0.3	27	310	25
48	34.293	-101.206	-3-03-A -011139	6.6	720	4.6	140	12	0.5	13	240	42
48	34.282	-101.120	-3-03-A -011140	10.	1400	2.6	130	7	<0.2	9	270	190
48	34.276	-101.056	-3-03-A -011142	11.	1800	2.8	66	<4	<0.2	15	290	330
48	34.099	-101.476	-3-03-A -011144	6.1	770	5.7	120	8	0.4	19	270	21
48	34.062	-101.468	-3-03-A -011145	7.2	710	6.3	120	21	<0.2	12	280	33
48	34.009	-101.486	-3-03-A -011146	8.7	710	6.5	79	14	0.4	23	250	33
48	34.090	-101.432	-3-03-A -011147	7.6	780	4.3	94	8	<0.2	20	260	34
48	34.111	-101.174	-3-03-A -011148	5.2	630	12.	91	7	0.6	21	250	26
48	34.049	-101.108	-3-03-A -011149	4.2	790	7.6	62	15	0.2	10	250	22
48	34.588	-101.469	-3-03-A -011151	7.0	770	2.8	140	20	3.7	4	260	49
48	34.611	-101.460	-3-03-A -011152	7.2	820	6.2	140	16	0.6	25	260	72
48	34.636	-101.415	-3-03-A -011153	4.9	720	9.4	130	5	<0.2	41	250	29
48	34.665	-101.443	-3-03-A -011154	9.2	720	4.9	170	7	0.2	22	240	53
48	34.700	-101.437	-3-03-A -011156	8.6	820	3.2	120	59	0.4	64	240	92
48	34.613	-101.398	-3-03-A -011157	4.1	590	2.7	130	14	<0.2	50	200	29
48	34.364	-101.292	-3-03-A -011158	2.6	820	3.5	190	7	<0.2	47	290	29
48	34.378	-101.245	-3-03-A -011159	19.	730	5.6	150	11	<0.2	54	280	41
48	34.404	-101.170	-3-03-A -011160	5.9	770	6.3	150	11	7.8	45	210	100
48	34.172	-100.734	-3-03-A -011164	3.9	3500	3.2	82	4	0.4	8	44	1900
48	34.223	-100.635	-3-03-A -011167	4.2	3300	2.4	58	<4	<0.2	10	46	1600
48	34.117	-100.588	-3-03-A -011169	22.	3900	2.7	75	4	<0.2	12	120	1900
48	34.131	-100.644	-3-03-A -011171	1.9	4400	3.0	130	7	<0.2	5	41	2000
48	34.105	-100.635	-3-03-A -011172	2.1	3900	3.2	100	5	<0.2	8	40	2100
48	34.102	-100.678	-3-03-A -011174	1.5	3600	6.2	82	10	<0.2	20	34	1800
48	34.170	-100.586	-3-03-A -011176	13.	3300	2.2	49	<4	0.3	6	55	1700
48	34.181	-100.567	-3-03-A -011179	14.	3500	1.1	36	8	<0.2	25	110	1700
48	34.226	-100.567	-3-03-A -011182	5.3	3600	2.2	83	17	0.3	25	36	1700
48	34.218	-100.605	-3-03-A -011183	6.3	3400	2.0	73	11	<0.2	21	54	1600
48	34.061	-100.677	-3-03-A -011184	6.4	5600	3.0	170	<4	0.2	<4	43	970
48	34.056	-100.723	-3-03-A -011186	8.3	3600	4.5	65	11	<0.2	40	110	1500
48	34.182	-100.762	-3-03-A -011188	27.	5500	3.7	190	11	0.2	18	270	2300
48	34.207	-100.808	-3-03-A -011191	5.9	3400	3.9	69	10	<0.2	43	82	1500
48	34.206	-100.747	-3-03-A -011192	6.2	3600	2.0	77	12	0.2	11	170	1500
48	34.211	-100.701	-3-03-A -011193	5.4	4900	1.6	36	<4	<0.2	<4	68	1600
48	34.255	-100.643	-3-03-A -011195	13.	3100	2.3	65	35	<0.2	74	88	1400
48	34.310	-100.638	-3-03-A -011197	9.7	6800	1.0	44	13	<0.2	25	76	1700
48	34.267	-100.715	-3-03-A -011198	15.	3400	5.3	38	29	<0.2	76	42	1400
48	34.232	-100.764	-3-03-A -011200	7.6	3400	1.5	230	7	<0.2	<4	260	490
48	34.288	-100.798	-3-03-A -011201	4.4	3900	4.2	63	7	<0.2	14	34	1300
48	34.318	-100.744	-3-03-A -011202	4.3	3300	0.6	73	16	0.6	4	50	1600
48	34.030	-100.603	-3-03-A -011203	8.0	4700	3.1	<2	<4	<0.2	<4	74	2200
48	34.026	-100.698	-3-03-A -011206	9.5	2900	2.4	42	7	0.3	35	250	1100
48	34.003	-100.571	-3-03-A -011207	23.	5100	1.3	160	<4	<0.2	<4	90	2100
48	34.051	-100.571	-3-03-A -011209	9.1	3600	5.7	85	4	<0.2	28	36	1600
48	34.044	-100.511	-3-03-A -011210	3.8	3500	2.8	39	29	<0.2	41	62	1600
48	34.026	-100.530	-3-03-A -011211	6.6	3500	4.7	35	69	<0.2	150	68	1500
48	34.023	-100.581	-3-03-A -011214	2.1	3900	3.4	120	19	<0.2	50	38	1900
48	34.032	-100.422	-3-03-A -011215	22.	2700	2.5	52	<4	<0.2	10	92	1400
48	34.070	-100.436	-3-03-A -011218	9.9	4500	0.7	39	7	<0.2	17	78	1700
48	34.020	-100.451	-3-03-A -011220	4.7	2100	2.5	37	<4	<0.2	13	130	960
48	34.018	-100.483	-3-03-A -011222	2.9	4800	1.3	70	13	0.2	7	240	1400
48	34.060	-100.489	-3-03-A -011223	28.	3400	2.6	56	7	<0.2	26	80	2100

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 10

ST LAT LONG L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.078 -100.481 -3-03-A -011224	20.	3500	3.6	61	8	0.2	30	60	2100
48-34.087 -100.394 -3-03-A -011225	8.5	3400	2.0	48	8	0.2	20	80	2100
48-34.059 -100.339 -3-03-A -011227	1.1	720	4.4	21	<4	0.2	13	170	1500
48-34.050 -100.390 -3-03-A -011228	13.	3100	5.6	61	<4	<0.2	5	64	570
48-34.140 -100.261 -3-03-A -011229	7.4	1800	1.7	43	8	0.5	15	160	65
48-34.231 -100.129 -3-03-A -011233	3.1	5100	<0.5	83	<4	<0.2	6	180	810
48-34.175 -100.161 -3-03-A -011236	11.	4700	<0.5	200	18	<0.2	14	160	1800
48-34.179 -100.258 -3-03-A -011240	9.0	4800	0.8	100	26	0.3	37	130	1900
48-34.156 -100.316 -3-03-A -011241	1.7	1800	1.7	32	<4	0.2	6	280	200
48-34.149 -100.366 -3-03-A -011242	3.8	1700	3.5	44	<4	<0.2	8	130	580
48-34.184 -100.320 -3-03-A -011244	4.6	3100	0.5	70	8	0.6	<4	110	1400
48-34.228 -100.355 -3-03-A -011245	3.4	3600	<0.5	55	<4	<0.2	4	70	2000
48-34.178 -100.354 -3-03-A -011247	5.1	4600	1.1	90	8	0.2	14	180	1900
48-34.198 -100.336 -3-03-A -011248	6.7	2900	1.0	33	15	<0.2	25	150	1700
48-34.188 -100.462 -3-03-A -011250	14.	3000	1.0	44	8	<0.2	12	180	1600
48-34.985 -101.725 -3-03-A -011251	4.8	310	3.8	180	10	<0.2	27	210	<5
48-34.893 -101.233 -3-03-A -011252	3.1	440	0.8	31	6	0.4	<4	220	10
48-34.766 -101.445 -3-03-A -011254	6.1	480		190	12		18	220	18
48-34.817 -101.431 -3-03-A -011255	14.	2000	1.8	120	8	<0.2	6	170	750
48-34.982 -101.854 -3-03-A -011266	10.	530	5.3	200	5	<0.2	31	250	30
48-34.988 -101.831 -3-03-A -011267	5.8	430	3.7	130	15	<0.2	14	210	14
48-34.942 -101.845 -3-03-A -011268	4.9	750	6.6	100	5	0.9	21	220	45
48-34.912 -101.850 -3-03-A -011269	6.8	900	2.2	100	<4	0.2	<4	360	49
48-34.804 -101.629 -3-03-A -011270	4.9	450	4.6	56	6	0.3	17	230	27
48-34.984 -101.788 -3-03-A -011274	7.1	610	4.5	160	6	<0.2	30	240	55
48-34.884 -101.901 -3-03-A -011278	4.9	350	2.7	34	10	<0.2	<4	200	6
48-34.840 -101.888 -3-03-A -011279	6.4	420	3.7	66	12	<0.2	9	250	7
48-34.853 -101.380 -3-03-A -011281	28.	3000	2.0	140	8	<0.2	7	180	1400
48-34.828 -101.376 -3-03-A -011284	42.	3900	1.4	190	8	0.4	10	290	2000
48-34.989 -101.358 -3-03-A -011286	9.1	470	7.2	71	10	<0.2	19	240	28
48-34.977 -101.315 -3-03-A -011288	2.5	450	0.8	40	12	0.4	<4	220	<5
48-34.763 -101.099 -3-03-A -011290	11.	3100	3.4	86	<4	0.3	<4	270	1400
48-34.796 -101.115 -3-03-A -011292	5.9	2900	1.0	96	<4	<0.2	<4	140	1400
48-34.828 -101.072 -3-03-A -011294	17.	3500	1.2	160	<4	<0.2	<4	94	1800
48-34.790 -101.077 -3-03-A -011295	11.	2900	8.0	53	<4	<0.2	10	140	1400
48-34.765 -101.052 -3-03-A -011296	7.5	3500	0.8	91	21	<0.2	5	76	1800
48-34.882 -101.277 -3-03-A -011300	16.	630	1.1	120	10	<0.2	7	260	45
48-34.922 -101.315 -3-03-A -011301	7.7	450	3.4	81	<4	<0.2	19	230	19
48-34.771 -101.151 -3-03-A -011305	4.6	7200	1.0	330	33	<0.2	23	76	4300
48-34.787 -101.178 -3-03-A -011306	12.	3300	2.1	120	4	<0.2	17	220	1500
48-34.765 -101.491 -3-03-A -011307	5.4	420	3.4	88	4	<0.2	17	260	28
48-34.763 -101.548 -3-03-A -011308	5.6	450	7.0	140	16	<0.2	23	230	21
48-34.814 -101.145 -3-03-A -011310	12.	3000	4.0	91	<4	<0.2	7	140	1700
48-34.887 -101.118 -3-03-A -011314	70.	2800	2.0	82	4	0.2	10	200	1500
48-34.808 -101.327 -3-03-A -011322	10.	2700	1.5	50	<4	<0.2	4	110	1400
48-34.750 -101.859 -3-03-A -011323	6.8	410	4.0	66	17	<0.2	6	220	23
48-34.805 -101.968 -3-03-A -011324	4.4	440	4.3	61	12	<0.2	7	200	14
48-34.896 -101.956 -3-03-A -011325	7.7	610	4.3	38	<4	0.9	18	210	49
48-34.938 -101.956 -3-03-A -011326	6.5	1400	9.0	120	4	<0.2	31	230	140
48-34.659 -101.022 -3-03-A -011333	3.6	5100	0.8	280	28	<0.2	<4	61	3000
48-34.696 -101.025 -3-03-A -011337	16.	3500	1.4	150	5	<0.2	<4	190	2100
48-34.688 -101.067 -3-03-A -011339	7.8	4800	2.4	280	<4	<0.2	<4	100	3100
48-34.774 -101.303 -3-03-A -011345	5.6	2900	1.5	40	<4	<0.2	<4	92	1600
48-34.810 -101.283 -3-03-A -011347	13.	3300	0.9	85	<4	<0.2	<4	190	1800
48-34.839 -101.280 -3-03-A -011349	6.0	6100	1.1	330	13	<0.2	<4	80	3800
48-34.771 -101.213 -3-03-A -011350	16.	3800	2.3	160	<4	<0.2	<4	140	2600
48-34.733 -101.268 -3-03-A -011355	8.8	5700	2.2	100	6	<0.2	16	130	2100

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 11

ST LAT	LONG	L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.778	-101.242	-3-03-A -011358	11.	3500	1.0	91	7	<0.2	10	170	1900
48-34.627	-101.038	-3-03-A -011365	6.9	3900	4.2	79	<4	0.3	17	230	1900
48-34.884	-101.773	-3-03-A -011372	3.2	390	1.0	49	10	0.3	10	240	9
48-34.850	-101.741	-3-03-A -011373	4.8	430	3.6	58	5	3.0	13	240	14
48-34.802	-101.806	-3-03-A -011374	4.6	450	1.7	67	<4	0.3	10	260	38
48-34.750	-101.774	-3-03-A -011375	13.	450	3.4	90	6	0.2	18	250	34
48-34.756	-101.720	-3-03-A -011376	7.4	420	3.2	80	6	1.0	18	230	30
48-34.762	-101.681	-3-03-A -011377	3.0	420	3.2	110	5	3.0	8	320	34
48-34.752	-101.002	-3-03-A -011378	8.1	2600	2.2	37	4	<0.2	5	140	1400
48-34.967	-101.411	-3-03-A -011382	7.5	520	5.3	99	5	0.2	19	260	43
48-34.987	-101.487	-3-03-A -011384	10.	450	5.3	140	12	<0.2	31	140	33
48-34.945	-101.468	-3-03-A -011385	8.4	450	8.2	190	15	<0.2	22	250	11
48-34.891	-101.471	-3-03-A -011390	19.	3200	2.3	77	8	<0.2	19	130	1800
48-34.899	-101.429	-3-03-A -011391	16.	2800	1.5	97	<4	<0.2	4	140	1800
48-34.978	-101.558	-3-03-A -011392	7.0	370	2.8	100	<4	0.2	23	230	7
48-34.946	-101.531	-3-03-A -011393	5.8	410	3.0	100	<4	0.3	15	230	11
48-34.941	-101.603	-3-03-A -011395	20.	710	3.0	160	<4	1.2	9	340	59
48-34.986	-101.653	-3-03-A -011396	2.3	470	1.7	130	<4	0.5	<4	240	29
48-34.925	-101.396	-3-03-A -011397	7.3	420	3.2	100	<4	0.2	13	220	20
48-34.797	-101.480	-3-03-A -011399	5.6	470	2.5	86	6	0.3	15	230	31
48-34.947	-101.353	-3-03-A -011400	3.8	430	2.9	80	13	0.3	13	200	23
48-34.884	-101.334	-3-03-A -011401	5.3	400	3.5	47	13	0.4	14	220	15
48-34.839	-101.343	-3-03-A -011402	9.6	4100	1.1	160	11	<0.2	<4	120	2700
48-34.928	-101.503	-3-03-A -011408	43.	3200	2.8	180	6	0.6	12	160	1800
48-34.897	-101.543	-3-03-A -011411	15.	730	1.6	92	<4	0.8	6	320	75
48-34.998	-101.178	-3-03-A -011416	1.9	290	3.0	7	<4	<0.2	10	160	7
48-34.924	-101.162	-3-03-A -011419	19.	3100	0.6	130	<4	0.4	<4	180	1600
48-34.721	-101.157	-3-03-A -011428	1.6	400	2.5	16	<4	<0.2	9	220	6
48-34.669	-101.139	-3-03-A -011429	5.7	6300	1.5	280	9	<0.2	4	88	2900
48-34.645	-101.185	-3-03-A -011430	6.6	3000	2.1	48	<4	<0.2	9	150	1600
48-34.714	-101.125	-3-03-A -011432	4.2	1200	1.8	23	<4	<0.2	14	92	450
48-34.853	-101.696	-3-03-A -011433	4.2	380	3.7	53	12	0.2	22	200	16
48-34.703	-101.217	-3-03-A -011435	5.4	5200	0.7	210	22	<0.2	12	80	2100
48-34.678	-101.175	-3-03-A -011438	14.	3300	0.8	86	10	<0.2	8	130	1600
48-34.625	-101.161	-3-03-A -011441	13.	4500	4.8	150	11	<0.2	31	230	1800
48-34.616	-101.106	-3-03-A -011442	16.	6800	4.7	230	15	0.2	18	290	2900
48-34.779	-101.640	-3-03-A -011458	5.4	420	4.2	76	5	1.7	18	230	29
48-34.801	-101.544	-3-03-A -011459	5.3	400	3.6	47	5	0.2	25	230	16
48-34.828	-101.516	-3-03-A -011460	2.8	340	3.2	27	<4	<0.2	18	85	8
48-34.844	-101.594	-3-03-A -011461	5.6	380	0.8	52	5	<0.2	16	140	23
48-34.835	-101.662	-3-03-A -011462	5.0	400	4.1	76	4	0.9	17	230	20
48-34.618	-100.970	-3-03-A -011463	7.4	6300	2.8	95	11	0.2	34	140	1600
48-34.587	-100.976	-3-03-A -011464	5.6	3100	2.7	85	4	<0.2	26	120	1500
48-34.500	-101.026	-3-03-A -011467	7.6	3500	2.2	120	7	<0.2	<4	82	1700
48-34.504	-101.062	-3-03-A -011468	19.	2500	1.1	110	13	0.2	20	94	1100
48-34.465	-101.030	-3-03-A -011469	19.	3500	1.1	130	5	0.3	34	190	1500
48-34.410	-101.036	-3-03-A -011470	21.	2300	2.5	360	6	0.2	25	230	490
48-34.768	-101.809	-3-03-A -011471	5.2	460	1.7	70	7	0.3	13	220	36
48-34.842	-101.813	-3-03-A -011473	5.4	410	3.7	68	15	0.5	9	230	12
48-34.872	-101.812	-3-03-A -011474	5.2	380	2.1	59	9	0.2	15	230	12
48-34.775	-101.739	-3-03-A -011475	5.2	430	2.4	72	6	0.4	16	220	40
48-34.793	-101.672	-3-03-A -011476	3.7	410	3.2	65	8	0.3	18	230	20
48-34.954	-101.230	-3-03-A -011477	5.5	1100	2.5	64	16	0.3	14	78	440
48-34.831	-101.418	-3-03-A -011478	16.	6600	3.1	140	13	<0.2	30	98	1100
48-34.667	-101.257	-3-03-A -011485	28.	6900	1.5	280	33	<0.2	28	98	900
48-34.665	-101.300	-3-03-A -011489	17.	5000	2.5	230	10	0.2	14	80	1200
48-34.658	-101.300	-3-03-A -011492	5.0	2500	1.9	42	<4	<0.2	7	130	1400

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 12

ST LAT	LONG	L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.649	-101.244	-3-03-A -011493	7.0	2600	2.0	34	6	<0.2	14	110	1200
48-34.642	-101.252	-3-03-A -011495	5.0	2500	2.0	25	7	<0.2	21	98	1300
48-34.633	-101.193	-3-03-A -011499	7.2	6000	1.2	93	12	<0.2	32	110	900
48-34.906	-100.358	-3-03-A -011501	0.58	580	1.0	16	10	<0.2	<4	290	<5
48-34.778	-100.536	-3-03-A -011502	5.1	2400	1.0	43	6	<0.2	8	50	1000
48-34.799	-100.499	-3-03-A -011503	4.2	3000	3.4	48	<4	<0.2	17	40	1500
48-34.828	-100.471	-3-03-A -011504	1.1	670	7.5	28	9	<0.2	13	190	16
48-34.850	-100.340	-3-03-A -011509	2.4	1400	3.2	48	11	<0.2	9	240	530
48-34.845	-100.309	-3-03-A -011511	14.	4300	2.4	94	7	0.2	<4	190	2200
48-34.804	-100.297	-3-03-A -011513	1.4	830	4.0	18	<4	0.3	8	250	64
48-34.812	-100.392	-3-03-A -011515	3.1	1300	1.1	21	<4	<0.2	<4	230	670
48-34.938	-100.466	-3-03-A -011517	0.99	1400	1.0	35	<4	<0.2	<4	130	40
48-34.944	-100.499	-3-03-A -011518	1.8	1100	0.9	42	<4	<0.2	<4	230	53
48-34.976	-100.473	-3-03-A -011519	2.4	990	<0.5	21	<4	0.3	5	280	210
48-34.953	-100.399	-3-03-A -011520	10.	1000	<0.5	13	<4	0.4	<4	350	82
48-34.998	-100.417	-3-03-A -011522	3.5	1400	3.7	28	<4	0.2	9	180	650
48-34.955	-100.346	-3-03-A -011524	1.3	1300	0.9	31	<4	0.4	<4	340	460
48-34.908	-100.303	-3-03-A -011525	2.4	1100	2.5	28	<4	0.3	7	350	380
48-34.953	-100.275	-3-03-A -011531	18.	790	1.6	21	<4	0.2	<4	260	32
48-34.937	-100.232	-3-03-A -011532	3.2	1000	1.7	11	<4	0.2	<4	390	44
48-34.910	-100.254	-3-03-A -011533	2.9	1200	0.7	32	4	<0.2	<4	220	84
48-34.850	-100.256	-3-03-A -011534	6.1	3300	3.3	62	<4	<0.2	<4	140	1200
48-34.912	-100.150	-3-03-A -011536	1.3	800	1.0	18	<4	0.4	<4	310	23
48-34.865	-100.137	-3-03-A -011537	2.9	1200	1.5	43	4	<0.2	7	210	220
48-34.808	-100.236	-3-03-A -011539	8.3	3100	0.9	73	6	<0.2	7	190	1300
48-34.898	-100.466	-3-03-A -011541	5.4	830	5.1	56	<4	<0.2	14	230	130
48-34.978	-100.516	-3-03-A -011542	7.3	1300	3.5	27	<4	0.2	7	310	170
48-34.667	-100.351	-3-03-A -011544	2.9	3400	2.1	210	11	0.3	5	140	1500
48-34.489	-100.207	-3-03-A -011547	27.	4200	0.9	98	5	0.3	6	280	1800
48-34.603	-100.395	-3-03-A -011553	16.	4500	0.6	140	10	<0.2	<4	150	1700
48-34.343	-100.376	-3-03-A -011558	9.5	4400	<0.5	65	23	<0.2	37	70	1700
48-34.327	-100.338	-3-03-A -011559	8.6	3900	<0.5	54	5	<0.2	8	130	1700
48-34.349	-100.272	-3-03-A -011561	26.	5700	0.9	62	<4	<0.2	8	180	2500
48-34.557	-100.156	-3-03-A -011563	4.3	2000	0.8	51	<4	0.3	<4	220	430
48-34.519	-100.098	-3-03-A -011566	4.2	800	0.6	10	<4	<0.2	<4	250	25
48-34.444	-100.062	-3-03-A -011569	<0.2	5700	<0.5	310	6	<0.2	12	76	2600
48-34.807	-100.326	-3-03-A -011574	11.	2500	2.4	33	<4	0.3	<4	200	480
48-34.768	-100.283	-3-03-A -011575	5.8	4300	<0.5	120	4	<0.2	4	170	1500
48-34.635	-101.879	-3-03-A -011577	14.	730	1.4	53	7	<0.2	14	220	22
48-34.577	-101.930	-3-03-A -011578	7.1	810	3.0	63	6	<0.2	23	240	41
48-34.620	-101.779	-3-03-A -011580	9.7	750	3.3	58	5	1.2	12	260	43
48-34.663	-101.807	-3-03-A -011581	8.0	730	4.3	80	6	<0.2	24	260	25
48-34.711	-101.806	-3-03-A -011583	9.2	630	8.4	77	5	<0.2	34	260	14
48-34.718	-101.877	-3-03-A -011585	17.	780	2.2	150	13	0.3	11	260	70
48-34.675	-101.884	-3-03-A -011586	10.	680	5.7	80	10	<0.2	19	260	28
48-34.628	-101.970	-3-03-A -011587	5.8	590	3.4	55	8	<0.2	16	210	6
48-34.576	-101.976	-3-03-A -011588	6.9	660	3.1	60	9	0.8	21	250	32
48-34.634	-101.836	-3-03-A -011589	7.1	720	2.3	57	7	0.4	19	230	23
48-34.673	-101.971	-3-03-A -011590	8.3	730	3.3	59	5	<0.2	12	270	5
48-34.614	-101.922	-3-03-A -011591	11.	720	2.5	72	6	0.4	15	300	25
48-34.582	-101.890	-3-03-A -011592	11.	640	4.8	71	9	<0.2	26	260	32
48-34.575	-101.815	-3-03-A -011593	9.6	650	7.2	120	14	1.7	39	240	30
48-34.279	-101.460	-3-03-A -011594	8.4	700	2.1	130	19	0.3	<4	340	15
48-34.310	-101.502	-3-03-A -011595	8.9	730	4.0	140	10	0.3	12	310	34
48-34.305	-101.557	-3-03-A -011596	7.0	660	2.6	140	4	0.6	7	320	19
48-34.066	-101.222	-3-03-A -011599	7.6	990	5.3	73	4	0.3	17	270	15
48-34.069	-101.165	-3-03-A -011600	5.2	670	6.8	68	12	<0.2	11	240	18

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 13

ST LAT LONG L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.100 -101.313 -3-03-A -011601	4.0	630	6.4	38	5	0.3	15	230	<5
48-34.012 -101.217 -3-03-A -011602	6.5	720	15.	82	8	0.2	32	250	28
48-34.094 -101.373 -3-03-A -011603	4.4	1600	3.0	99	<4	0.4	9	230	160
48-34.024 -101.320 -3-03-A -011604	8.5	740	8.7	100	6	0.2	33	250	26
48-34.018 -101.083 -3-03-A -011605	4.9	870	2.8	78	14	0.3	<4	270	32
48-34.173 -101.123 -3-03-A -011606	7.0	910	5.3	100	6	0.6	11	280	30
48-34.220 -101.229 -3-03-A -011607	6.4	940	4.5	88	17	0.3	16	280	19
48-34.344 -101.468 -3-03-A -011608	7.4	1100	6.5	110	17	1.0	27	250	33
48-34.224 -101.085 -3-03-A -011610	11.	1400	1.7	100	7	3.0	6	290	160
48-34.145 -101.116 -3-03-A -011611	6.1	890	4.6	100	14	2.4	25	270	26
48-34.346 -101.253 -3-03-A -011615	5.5	910	9.4	140	14	0.4	31	240	53
48-34.403 -101.267 -3-03-A -011616	13.	1000	5.9	220	28	<0.2	32	320	63
48-34.432 -101.173 -3-03-A -011617	5.6	940	7.8	160	9	0.9	33	270	36
48-34.423 -101.412 -3-03-A -011618	5.9	900	5.1	200	15	0.2	37	270	33
48-34.390 -101.380 -3-03-A -011619	9.3	900	4.1	190	22	<0.2	37	300	28
48-34.352 -101.432 -3-03-A -011620	11.	720	14.	160	20	0.3	40	290	36
48-34.351 -101.299 -3-03-A -011621	14.	770	5.7	160	12	<0.2	49	320	50
48-34.383 -101.330 -3-03-A -011623	13.	750	7.1	230	7	<0.2	39	330	40
48-34.480 -101.268 -3-03-A -011624	6.7	620	4.4	97	6	<0.2	25	280	11
48-34.481 -101.215 -3-03-A -011625	3.4	650	6.4	200	10	0.3	43	230	21
48-34.432 -101.226 -3-03-A -011626	5.5	710	8.0	150	12	0.5	42	260	42
48-34.427 -101.292 -3-23-A -011627	4.1	710	6.8	150	6	0.3	36	250	42
48-34.433 -101.450 -3-03-A -011628	3.9	550	5.0	160	12	1.1	29	280	22
48-34.440 -101.380 -3-03-A -011629	9.0	660	5.7	170	7	0.3	29	290	35
48-34.436 -101.327 -3-03-A -011630	1.0	680	2.3	150	4	0.3	11	380	10
48-34.532 -101.170 -3-03-A -011631	6.8	530	5.8	260	6	<0.2	32	230	7
48-34.472 -101.133 -3-03-A -011632	2.3	320	2.9	140	8	<0.2	14	230	11
48-34.390 -101.205 -3-03-A -011633	11.	570	3.8	180	16	1.6	30	290	76
48-34.386 -100.229 -3-03-A -011635	10.	5700	2.3	170	28	4.3	29	120	2000
48-34.329 -100.213 -3-03-A -011637	32.	3700	<0.5	100	18	3.5	<4	320	1400
48-34.611 -100.333 -3-03-A -011654	14.	3400	<0.5	150	23	0.2	6	230	1500
48-34.646 -100.249 -3-03-A -011665	1.4	3600	<0.5	140	10	<0.2	7	190	770
48-34.590 -100.042 -3-03-A -011671	5.8	4600	0.8	110	4	<0.2	4	270	1700
48-34.573 -100.102 -3-03-A -011672	7.1	7900	0.8	160	17	<0.2	22	160	2200
48-34.623 -100.133 -3-03-A -011673	5.0	4300	0.6	100	13	<0.2	22	180	2000
48-34.456 -100.380 -3-03-A -011676	0.8	4400	5.1	59	12	0.9	15	280	1600
48-34.380 -100.055 -3-03-A -011677	13.	4300	0.6	170	15	<0.2	12	250	1700
48-34.367 -100.160 -3-03-A -011679	4.9	5000	0.6	130	28	<0.2	30	170	2600
48-34.390 -100.103 -3-03-A -011680	8.6	3600	<0.5	75	12	<0.2	34	280	2000
48-34.394 -100.278 -3-03-A -011681	15.	3700	1.1	50	12	<0.2	25	150	2200
48-34.392 -100.352 -3-03-A -011682	16.	4600	0.7	52	11	<0.2	25	140	2400
48-34.459 -100.328 -3-03-A -011683	21.	4300	1.3	78	9	<0.2	13	220	2300
48-34.624 -100.081 -3-03-A -011687	4.8	4200	<0.5	120	11	<0.2	15	210	2100
48-34.506 -100.316 -3-03-A -011689	3.1	1600	3.8	19	<4	<0.2	8	210	120
48-34.550 -100.283 -3-03-A -011691	4.1	1600	<0.5	49	9	<0.2	25	200	780
48-34.472 -100.273 -3-03-A -011692	6.6	3900	0.8	37	<4	<0.2	<4	230	860
48-34.591 -100.155 -3-03-A -011693	6.8	4100	0.5	120	10	<0.2	6	170	1900
48-34.361 -100.304 -3-03-A -011696	14.	4200	1.7	70	<4	<0.2	5	130	1400
48-34.310 -100.038 -3-03-A -011697	12.	5300	0.7	260	23	<0.2	28	200	3300
48-34.433 -100.024 -3-03-A -011698	4.9	4000	0.5	220	16	3.1	<4	250	1500
48-34.544 -100.021 -3-03-A -011699	5.0	2600	0.6	30	<4	0.2	<4	260	320
48-34.507 -100.049 -3-03-A -011700	2.3	2900	1.2	42	<4	<0.2	<4	240	720
48-34.641 -100.397 -3-03-A -011701	22.	6500	1.4	120	15	<0.2	9	200	2800
48-34.617 -100.232 -3-03-A -011703	20.	4200	0.7	170	9	<0.2	<4	150	1700
48-34.462 -100.161 -3-03-A -011705	0.38	4800	0.7	210	22	<0.2	<4	84	1800
48-34.209 -100.065 -3-03-A -011707	9.1	4300	<0.5	110	8	<0.2	5	200	1600
48-34.224 -100.039 -3-03-A -011709	23.	4600	<0.5	110	20	<0.2	8	250	1800

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PARTIAL DATA LISTING PAGE 14

ST LAT	LONG	L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.194	-100.095	-3-03-A -011711	9.0	4100	<0.5	130	5	<0.2	<4	260	1600
48-34.134	-100.062	-3-03-A -011715	0.42	5000	2.5	250	11	<0.2	4	58	2000
48-34.161	-100.091	-3-03-A -011716	9.9	4700	<0.5	160	10	<0.2	<4	290	1700
48-34.008	-100.032	-3-03-A -011717	3.4	2600	0.5	73	9	0.2	<4	330	740
48-34.056	-100.043	-3-03-A -011723	1.7	4000	<0.5	150	7	0.2	5	240	1500
48-34.064	-100.110	-3-03-A -011724	0.45	4500	<0.5	210	16	<0.2	8	140	1800
48-34.024	-100.132	-3-03-A -011726	3.0	3900	<0.5	98	14	<0.2	15	360	1500
48-34.011	-100.185	-3-03-A -011729	4.2	9100	<0.5	140	23	<0.2	22	210	1500
48-34.031	-100.061	-3-03-A -011731	11.	4100	<0.5	82	10	<0.2	<4	240	1400
48-34.060	-100.149	-3-03-A -011732	8.5	4100	<0.5	100	12	<0.2	11	250	1500
48-34.555	-100.199	-3-03-A -011735	2.4	1900	<0.5	28	<4	<0.2	<4	250	210
48-34.662	-100.297	-3-03-A -011736	4.2	3100	<0.5	80	<4	0.3	<4	190	1400
48-34.499	-100.171	-3-03-A -011737	0.35	6700	<0.5	560	33	<0.2	37	130	2400
48-34.508	-100.136	-3-03-A -011738	22.	3300	<0.5	99	10	<0.2	6	400	1400
48-34.408	-100.083	-3-03-A -011739	9.6	6300	0.6	220	27	29.	28	270	2000
48-34.489	-100.030	-3-03-A -011740	6.0	4600	<0.5	45	11	0.8	18	180	890
48-34.471	-100.080	-3-03-A -011741	40.	6400	<0.5	150	27	0.6	26	280	2400
48-34.467	-100.127	-3-03-A -011743	19.	4700	<0.5	160	22	0.4	11	240	1900
48-34.519	-100.255	-3-03-A -011744	1.5	1400	<0.5	18	<4	<0.2	<4	170	260
48-34.527	-100.152	-3-03-A -011745	2.8	1800	<0.5	32	<4	<0.2	<4	230	410
48-34.450	-100.279	-3-03-A -011747	20.	4100	0.7	46	11	<0.2	5	180	1200
48-34.426	-100.348	-3-03-A -011748	13.	3100	<0.5	47	13	<0.2	25	110	1600
48-34.728	-100.519	-3-03-A -011751	20.	3300	<0.5	89	5	<0.2	7	120	1600
48-34.731	-100.569	-3-03-A -011754	7.4	1400	2.1	32	<4	<0.2	<4	160	450
48-34.668	-100.509	-3-03-A -011758	17.	3300	<0.5	38	<4	<0.2	<4	120	1400
48-34.672	-100.649	-3-03-A -011762	11.	1600	1.7	27	8	0.6	4	240	480
48-34.675	-100.707	-3-03-A -011764	5.7	2700	1.8	40	<4	<0.2	6	180	940
48-34.728	-100.474	-3-03-A -011767	4.7	1400	1.0	28	<4	<0.2	6	180	570
48-34.690	-100.431	-3-03-A -011768	7.0	7600	<0.5	340	19	<0.2	16	160	1900
48-34.602	-100.511	-3-03-A -011771	3.7	1100	0.9	24	<4	<0.2	<4	150	330
48-34.652	-100.556	-3-03-A -011772	12.	2700	<0.5	37	<4	<0.2	<4	90	1200
48-34.622	-100.563	-3-03-A -011773	23.	3800	<0.5	120	34	0.2	<4	220	1700
48-34.614	-100.606	-3-03-A -011774	5.3	2000	0.9	53	<4	<0.2	<4	170	800
48-34.679	-100.588	-3-03-A -011775	2.7	1100	1.6	26	<4	0.4	9	230	120
48-34.597	-100.577	-3-03-A -011776	28.	4100	2.6	100	4	<0.2	14	240	1600
48-34.698	-100.621	-3-03-A -011778	11.	3900	1.4	54	<4	<0.2	8	100	1400
48-34.578	-100.624	-3-03-A -011779	13.	6000	1.3	87	8	<0.2	14	260	1100
48-34.685	-100.745	-3-03-A -011788	5.2	1800	3.2	40	5	<0.2	13	220	610
48-34.679	-100.799	-3-03-A -011789	5.0	4400	7.4	47	6	0.3	38	210	2200
48-34.685	-100.866	-3-03-A -011791	8.1	2900	3.7	59	<4	0.3	10	190	1700
48-34.682	-100.899	-3-03-A -011792	19.	3400	5.9	88	12	0.3	23	140	1900
48-34.722	-100.895	-3-03-A -011793	6.9	2000	2.1	53	<4	0.4	7	270	1300
48-34.771	-100.621	-3-03-A -011794	5.9	3300	<0.5	54	<4	<0.2	<4	46	2300
48-34.838	-100.582	-3-03-A -011795	0.29	680	0.9	14	<4	<0.2	<4	170	68
48-34.871	-100.633	-3-03-A -011796	1.7	850	1.5	28	4	0.3	10	200	100
48-34.844	-100.630	-3-03-A -011797	1.1	600	2.2	15	<4	<0.2	<4	210	57
48-34.937	-100.656	-3-03-A -011798	0.67	570	0.6	12	<4	<0.2	<4	210	59
48-34.845	-100.955	-3-03-A -011800	4.9	2400	5.6	41	<4	<0.2	14	150	940
48-34.812	-100.956	-3-03-A -011802	24.	3400	3.3	72	6	<0.2	12	86	1500
48-34.962	-100.627	-3-03-A -011805	2.8	750	2.9	22	<4	<0.2	8	190	130
48-34.974	-100.686	-3-03-A -011806	22.	820	7.2	25	4	<0.2	20	170	98
48-34.936	-100.748	-3-03-A -011807	0.95	750	2.7	11	<4	<0.2	<4	260	25
48-34.886	-100.742	-3-03-A -011808	6.0	1100	2.9	25	<4	<0.2	8	280	130
48-34.454	-100.819	-3-03-A -011810	7.9	3600	0.7	82	5	<0.2	5	110	1100
48-34.782	-100.579	-3-03-A -011811	110.	3500	2.7	110	<4	<0.2	10	240	310
48-34.832	-100.693	-3-03-A -011813	1.5	540	3.4	18	<4	<0.2	5	180	12
48-34.852	-100.738	-3-03-A -011814	3.7	630	1.6	14	<4	<0.2	5	210	11

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PARTIAL DATA LISTING PAGE 15

ST LAT	LONG	L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.843	-100.798	-3-03-A -011817	0.6	530	3.2	8	4	<0.2	<4	190	<5
48-34.839	-100.845	-3-03-A -011818	0.61	690	2.2	9	<4	1.0	<4	210	25
48-34.760	-100.951	-3-03-A -011821	8.5	3100	3.7	66	4	<0.2	16	54	1300
48-34.813	-100.910	-3-03-A -011823	13.	2900	3.8	64	<4	<0.2	11	82	1300
48-34.877	-100.856	-3-03-A -011824	0.38	550	2.9	11	<4	0.3	6	190	19
48-34.754	-100.926	-3-03-A -011827	8.0	2700	4.5	39	4	<0.2	8	97	1400
48-34.931	-100.919	-3-03-A -011828	1.3	580	1.8	13	7	<0.2	<4	180	36
48-34.981	-100.972	-3-03-A -011831	1.8	820	0.9	16	<4	<0.2	<4	240	58
48-34.883	-101.019	-3-03-A -011836	3.4	3000	1.2	43	<4	<0.2	7	100	1200
48-34.986	-101.990	-3-03-A -011837	5.8	780	4.4	180	4	0.8	22	230	52
48-34.849	-101.962	-3-03-A -011838	6.0	670	3.3	53	8	0.4	29	220	5
48-34.755	-101.957	-3-03-A -011839	4.0	630	1.8	53	<4	0.8	15	220	19
48-34.748	-101.911	-3-03-A -011840	2.9	680	4.4	68	4	0.2	14	250	21
48-34.812	-101.845	-3-03-A -011841	4.6	610	2.2	65	<4	0.2	13	250	11
48-34.858	-101.861	-3-03-A -011842	5.2	580	2.9	50	5	<0.2	21	220	9
48-34.943	-101.812	-3-03-A -011843	0.19	1300	<0.5	84	65	0.3	<4	290	30
48-34.982	-101.899	-3-03-A -011844	71.	3700		340	240		50	210	1400
48-34.354	-100.912	-3-03-A -011850	1.5	660	2.9	33	<4	<0.2	15	240	26
48-34.650	-100.463	-3-03-A -011851	17.	4500	0.9	73	11	<0.2	23	79	1800
48-34.592	-100.458	-3-03-A -011852	<0.2	6500	<0.5	78	12	<0.2	21	190	820
48-34.472	-100.474	-3-03-A -011854	31.	3600	1.2	72	13	<0.2	11	60	1600
48-34.544	-100.440	-3-03-A -011855	7.4	3400	2.9	29	<4	0.3	8	160	700
48-34.506	-100.429	-3-03-A -011859	50.	8100	0.9	96	17	<0.2	13	240	2600
48-34.972	-100.777	-3-03-A -011863	3.2	650	0.9	22	<4	0.2	<4	250	18
48-34.885	-100.682	-3-03-A -011864	2.5	720	3.4	17	4	<0.2	<4	180	38
48-34.895	-100.565	-3-03-A -011865	1.4	850	1.6	22	<4	<0.2	7	230	81
48-34.940	-100.591	-3-03-A -011866	2.0	990	1.1	34	<4	<0.2	<4	220	280
48-34.914	-100.806	-3-03-A -011867	3.2	750	2.5	28	<4	0.4	8	340	52
48-34.970	-100.829	-3-03-A -011869	0.21	760	1.7	22	<4	0.9	5	240	57
48-34.891	-100.798	-3-03-A -011870	1.6	600	2.3	8	<4	<0.2	4	230	5
48-34.931	-100.862	-3-03-A -011871	0.25	650	1.9	8	<4	<0.2	<4	230	<5
48-34.946	-101.076	-3-03-A -011872	2.7	530	3.2	34	4	<0.2	12	180	12
48-34.979	-101.038	-3-03-A -011873	1.7	630	2.3	21	<4	<0.2	7	260	18
48-34.916	-100.954	-3-03-A -011877	1.0	720	1.7	17	<4	<0.2	13	220	16
48-34.948	-100.991	-3-03-A -011878	23.	810	1.5	19	<4	0.4	4	270	31
48-34.890	-100.910	-3-03-A -011879	1.2	630	2.4	16	<4	<0.2	6	180	17
48-34.942	-101.031	-3-03-A -011880	1.1	600	1.9	15	<4	<0.2	5	190	19
48- 0.000	- 0.000	-3-03-A -011882	1.5	640	2.2	16	<4	<0.2	8	230	13
48-34.801	-100.803	-3-03-A -011889	3.7	600	4.3	33	9	<0.2	11	170	46
48-34.759	-100.808	-3-03-A -011890	3.8	3000	3.0	69	4	<0.2	9	140	1400
48-34.803	-100.548	-3-03-A -011893	19.	3000	1.6	65	<4	<0.2	13	110	1500
48-34.756	-100.663	-3-03-A -011896	3.1	680	1.4	12	<4	0.3	4	230	20
48-34.752	-100.864	-3-03-A -011902	9.5	3200	0.8	72	9	0.2	7	80	1400
48-34.822	-100.741	-3-03-A -011906	0.66	670	2.1	9	<4	<0.2	<4	210	24
48-34.781	-100.842	-3-03-A -011909	11.	3200	2.5	60	10	<0.2	14	78	1500
48-34.813	-100.879	-3-03-A -011913	6.3	3200	2.6	55	14	<0.2	25	38	1500
48-34.643	-100.710	-3-03-A -011917	19.	3400	6.9	110	6	<0.2	28	90	1600
48-34.609	-100.665	-3-03-A -011918	42.	7300	3.8	220	28	0.2	68	300	2900
48-34.777	-100.780	-3-03-A -011919	0.78	3100	<0.5	54	11	<0.2	20	28	1400
48-34.716	-100.792	-3-03-A -011929	4.8	3700	1.2	99	4	<0.2	13	68	1700
48-34.710	-100.861	-3-03-A -011930	5.7	2400	4.4	69	11	<0.2	7	150	1000
48-34.557	-100.855	-3-03-A -011931	5.9	4200	2.4	42	<4	<0.2	<4	140	500
48-34.588	-100.880	-3-03-A -011933	7.1	3900	0.8	64	13	<0.2	27	54	1500
48-34.504	-100.923	-3-03-A -011935	19.	3300	0.9	70	7	<0.2	12	180	1500
48-34.917	-100.983	-3-03-A -011936	0.61	550	2.3	8	5	0.3	<4	170	15
48-34.864	-101.039	-3-03-A -011937	0.89	4000	2.7	110	20	<0.2	6	33	1800
48-34.597	-100.782	-3-03-A -011939	14.	4300	3.4	110	9	<0.2	8	110	1600

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 16

ST LAT LONG L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.623 -100.828 -3-03-A -011940	8.5	15000	2.7	58	23	<0.2	34	92	2700
48-34.648 -100.837 -3-03-A -011942	3.3	3500	2.2	59	14	<0.2	26	80	1500
48-34.628 -100.872 -3-03-A -011943	4.8	9300	<0.5	92	19	0.2	24	160	2100
48-34.639 -100.940 -3-03-A -011944	2.6	2000	2.1	43	5	<0.2	6	140	650
48-34.551 -100.793 -3-03-A -011947	5.7	4300	1.7	61	6	<0.2	16	74	1400
48-34.597 -100.838 -3-03-A -011948	5.3	4900	1.8	46	14	<0.2	23	150	1400
48-34.599 -100.903 -3-03-A -011950	11.	3600	0.5	79	6	<0.2	10	74	1500
48-34.616 -100.923 -3-03-A -011951	2.3	3300	2.9	49	11	<0.2	24	80	1300
48-34.927 -100.714 -3-03-A -011952	2.9	770	2.7	23	<4	0.3	4	270	51
48-34.814 -100.690 -3-03-A -011953	0.78	670	2.3	15	<4	0.3	<4	190	15
48-34.786 -100.983 -3-03-A -011954	5.6	3400	3.2	84	12	<0.2	15	50	1500
48-34.649 -100.811 -3-03-A -011956	6.3	3800	3.4	51	12	<0.2	21	80	1500
48-34.532 -100.600 -3-03-A -011964	19.	1900	0.9	13	4	0.4	<4	350	140
48-34.524 -100.670 -3-03-A -011965	4.5	6400	0.9	50	29	0.2	54	92	1400
48-34.569 -100.499 -3-03-A -011966	6.3	1200	1.1	19	<4	0.3	<4	280	76
48-34.568 -100.517 -3-03-A -011967	2.0	670	1.9	10	<4	0.3	<4	150	9
48-34.548 -100.559 -3-03-A -011968	10.	2900	0.8	48	4	0.2	<4	220	680
48-34.578 -100.751 -3-03-A -011970	2.6	600	5.0	27	<4	0.4	17	200	11
48-34.644 -100.524 -3-03-A -011971	8.6	3400	2.8	55	9	<0.2	17	58	1500
48-34.662 -100.535 -3-03-A -011972	6.8	2500	<0.5	32	<4	<0.2	<4	100	1100
48-34.903 -101.076 -3-03-A -011982	7.0	5000	1.6	60	10	0.4	9	150	1100
48-34.816 -101.043 -3-03-A -011983	11.	2300	1.9	64	5	<0.2	<4	160	1000
48-34.834 -101.008 -3-03-A -011984	1.2	5300	0.8	100	31	<0.2	<4	60	2800
48-34.780 -101.029 -3-03-A -011987	6.0	2000	2.0	61	<4	<0.2	8	150	790
48-34.966 -101.745 -3-03-A -011988	4.8	960	3.4	220	7	0.2	27	230	56
48-34.631 -100.759 -3-03-A -011989	9.4	3300	1.0	66	7	<0.2	11	68	1500
48-34.560 -100.777 -3-03-A -011991	11.	5900	0.7	54	23	<0.2	28	88	1900
48-34.933 -100.552 -3-03-A -011992	8.7	710	4.5	31	4	<0.2	17	230	30
48-34.845 -100.309 -3-03-B -011995	25.	5000	1.6	100	13	<0.2	10	240	2200
48-34.955 -100.346 -3-03-B -011996	1.0	1300	0.7	28	<4	<0.2	<4	340	190
48-34.602 -100.511 -3-03-B -011998	2.9	1200	1.0	23	<4	<0.2	<4	180	340
48-34.160 -100.425 -3-03-A -012002	13.	3200	0.8	43	7	<0.2	15	72	2000
48-34.130 -100.473 -3-03-A -012003	5.0	3900	2.8	35	12	<0.2	35	56	1900
48-34.155 -100.491 -3-03-A -012004	13.	3800	1.6	21	5	<0.2	18	140	2100
48-34.108 -100.427 -3-03-A -012005	22.	4000	0.7	74	<4	<0.2	<4	44	2100
48-34.268 -100.422 -3-03-A -012011	15.	6200	<0.5	120	17	0.7	8	340	2300
48-34.201 -100.431 -3-03-A -012013	6.4	3600	0.8	43	<4	<0.2	<4	100	1300
48-34.192 -100.535 -3-03-A -012014	23.	3800	1.0	56	10	<0.2	10	60	1500
48-34.237 -100.443 -3-03-A -012017	3.5	4900	<0.5	55	20	<0.2	31	94	1500
48-34.221 -100.487 -3-03-A -012018	9.7	4100	0.6	63	8	<0.2	11	62	1500
48-34.268 -100.487 -3-03-A -012019	28.	4200	<0.5	82	<4	<0.2	<4	80	1300
48-34.279 -100.556 -3-03-A -012020	12.	4000	0.6	59	25	<0.2	41	66	1500
48-34.240 -100.345 -3-03-A -012024	3.3	3300	<0.5	47	<4	0.3	<4	300	960
48-34.019 -100.216 -3-03-A -012032	17.	6100	<0.5	170	13	<0.2	<4	160	960
48-34.057 -100.185 -3-03-A -012033	7.9	4300	<0.5	150	14	0.2	7	160	1600
48-34.272 -100.025 -3-03-A -012039	13.	3900	2.4	110	36	0.3	4	160	1400
48-34.005 -100.270 -3-03-A -012041	24.	4600	2.1	130	5	0.2	7	150	1800
48-34.106 -100.207 -3-03-A -012042	11.	3800	1.1	91	9	<0.2	5	170	1600
48-34.165 -100.226 -3-03-A -012043	7.8	9200	<0.5	160	21	<0.2	21	140	2200
48-34.151 -100.177 -3-03-A -012044	5.2	4800	1.0	220	25	<0.2	7	120	1700
48-34.087 -100.109 -3-03-A -012045	9.5	6400	1.0	200	60	<0.2	21	62	1800
48-34.111 -100.059 -3-03-A -012046	10.	5600	<0.5	230	20	1.1	13	170	1800
48-34.038 -100.338 -3-03-A -012047	1.9	2000	2.4	25	<4	0.3	9	240	820
48-34.088 -100.008 -3-03-A -012049	1.7	4600	<0.5	180	9	<0.2	4	170	1700
48-34.112 -100.144 -3-03-A -012050	9.8	4600	<0.5	150	17	0.3	10	170	1700
48-34.164 -100.142 -3-03-A -012051	6.1	4000	2.2	190	12	0.2	<4	140	300
48-34.070 -100.284 -3-03-A -012053	1.2	1500	4.1	23	6	0.2	10	100	880

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 17

ST LAT	LONG	L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.275	-100.297	-3-03-A -012054	6.0	9800	1.0	74	15	0.2	19	170	1300
48-34.236	-100.402	-3-03-A -012055	4.3	4000	<0.5	56	7	<0.2	14	64	27
48-34.258	-100.380	-3-03-A -012056	8.1	3800	2.0	52	<4	0.2	14	90	1300
48-34.307	-100.418	-3-03-A -012058	5.8	4200	0.7	56	5	<0.2	<4	110	1400
48-34.190	-100.384	-3-03-A -012059	8.4	3900	1.3	52	<4	0.3	<4	100	1500
48-34.081	-100.273	-3-03-A -012060	2.1	1500	2.1	39	<4	0.3	10	160	200
48-34.105	-100.239	-3-03-A -012062	3.1	1800	2.8	54	5	0.3	6	310	250
48-34.122	-100.274	-3-03-A -012063	1.5	1300	3.1	26	<4	0.2	14	180	85
48-34.096	-100.279	-3-03-A -012064	1.7	1300	3.5	36	<4	0.3	15	270	37
48-34.128	-100.259	-3-03-A -012065	9.9	2000	1.8	33	8	<0.2	5	130	470
48-34.101	-100.355	-3-03-A -012066	4.6	2200	0.8	34	<4	<0.2	7	150	560
48-34.116	-100.299	-3-03-A -012067	3.4	2800	<0.5	39	<4	<0.2	<4	130	980
48-34.043	-100.164	-3-03-A -012068	8.7	3900	<0.5	84	4	0.2	<4	180	1500
48-34.086	-100.176	-3-03-A -012069	13.	4300	<0.5	140	15	0.3	7	170	1600
48-34.124	-100.163	-3-03-A -012070	22.	6700	<0.5	190	28	0.6	21	190	1800
48-34.128	-100.223	-3-03-A -012071	8.1	3700	<0.5	89	11	<0.2	<4	180	1200
48-34.118	-100.126	-3-03-A -012072	11.	5600	<0.5	190	17	<0.2	18	170	1700
48-34.136	-100.084	-3-03-A -012073	0.36	8100	2.2	320	18	0.5	19	74	1500
48-34.115	-100.038	-3-03-A -012074	5.1	4000	<0.5	120	5	0.3	<4	150	1300
48-34.133	-100.044	-3-03-A -012075	6.7	4100	<0.5	87	11	0.3	7	200	1400
48-34.157	-100.041	-3-03-A -012076	5.9	4000	<0.5	68	12	<0.2	16	170	1400
48-34.185	-100.056	-3-03-A -012077	2.8	4100	2.2	89	27	0.2	16	120	1500
48-34.209	-100.045	-3-03-A -012078	5.7	3900	<0.5	54	12	0.5	9	170	1300
48-34.175	-100.030	-3-03-A -012079	3.1	4800	<0.5	200	22	0.5	30	120	1700
48-34.184	-100.006	-3-03-A -012080	6.7	3700	0.6	50	44	<0.2	66	160	1300
48-34.023	-100.012	-3-03-A -012082	7.7	4200	<0.5	170	8	0.3	8	180	1500
48-34.006	-100.399	-3-03-A -012083	0.4	2200	1.9	37	<4	0.3	7	110	74
48-34.088	-100.709	-3-03-A -012084	4.9	3800	4.7	74	<4	<0.2	4	42	1300
48-34.079	-100.794	-3-03-A -012085	3.1	8500	6.2	130	8	0.2	34	70	1700
48-34.105	-100.909	-3-03-A -012087	22.	3800	<0.5	91	<4	0.3	<4	220	1200
48-34.629	-100.194	-3-03-A -012102	4.0	3300	0.7	100	21	0.3	30	130	1600
48-34.306	-100.156	-3-03-A -012103	23.	3900	0.6	210	28	1.3	15	230	1700
48-34.264	-100.095	-3-03-A -012104	13.	4400	0.7	130	38	0.3	56	230	1600
48-34.329	-100.056	-3-03-A -012108	6.7	4400	0.5	690	22	1.6	8	230	1500
48-34.289	-100.076	-3-03-A -012109	7.0	3800	<0.5	170	13	0.3	5	220	1500
48-34.243	-100.158	-3-03-A -012110	4.1	3200	<0.5	200	19	0.4	<4	160	1700
48-34.112	-100.484	-3-03-A -012113	5.9	2900	2.1	47	<4	0.3	4	110	1500
48-34.191	-100.502	-3-03-A -012114	14.	3100	1.1	39	9	0.3	18	120	1600
48-34.259	-100.538	-3-03-A -012115	7.6	3200	1.5	37	8	0.4	18	190	1600
48-34.308	-100.556	-3-03-A -012116	2.5	2500	<0.5	25	<4	0.4	4	130	1100
48-34.275	-100.681	-3-03-A -012117	1.4	8500	1.6	82	11	0.4	18	150	1600
48-34.058	-101.040	-3-03-A -012119	2.5	770	3.5	39	4	0.5	4	230	20
48-34.065	-100.953	-3-03-A -012121	9.6	4300	2.4	170	7	0.4	5	420	160
48-34.017	-100.964	-3-03-A -012122	2.1	780	3.4	24	<4	0.3	4	240	14
48-34.003	-100.959	-3-03-A -012123	7.4	690	2.6	17	<4	0.9	<4	180	7
48-34.042	-100.923	-3-03-A -012124	5.6	4900	0.8	140	<4	0.7	9	450	130
48-34.099	-100.970	-3-03-A -012125	9.4	2900	1.5	120	7	0.6	7	470	130
48-34.150	-100.911	-3-03-A -012126	10.	3400	1.2	74	<4	0.6	8	440	620
48-34.452	-100.201	-3-23-A -012127	12.	2200	0.8	47	<4	0.3	<4	170	630
48-34.560	-100.690	-3-03-A -012128	21.	5400	1.2	110	26	0.4	24	170	2100
48-34.569	-100.703	-3-03-A -012129	20.	7800	<0.5	84	8	0.5	12	190	1700
48-34.715	-100.674	-3-03-A -012130	6.3	1300	2.7	77	7	0.6	14	300	190
48-34.722	-100.717	-3-03-A -012131	2.5	520	4.9	19	4	0.3	17	190	21
48-34.732	-100.740	-3-03-A -012132	7.9	2700	4.7	57	<4	<0.2	<4	70	1200
48-34.657	-100.620	-3-03-A -012133	14.	6200	1.7	120	9	0.3	<4	150	1500
48-34.496	-100.504	-3-03-A -012135	64.	3400	1.7	74	5	<0.2	9	85	740
48-34.989	-101.223	-3-03-A -012210	2.2	400	1.2	24	43	0.4	<4	220	30

Table A - 3 Continued

PARTIAL DATA LISTING PAGE 18

ST LAT	LONG	L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.969	-101.117	-3-03-A -012214	0.57	580	0.7	14	4	<0.2	<4	120	60
48-34.972	-101.262	-3-03-A -012215	5.3	400	3.0	48	<4	0.4	11	220	8
48-34.867	-101.428	-3-03-A -012217	9.2	2600	2.8	200	9	<0.2	37	86	1400
48-34.873	-101.183	-3-03-A -012227	3.8	2600	2.6	130	12	<0.2	23	110	1500
48-34.565	-101.043	-3-03-A -012229	16.	4100	<0.5	330	34	<0.2	6	82	2300
48-34.606	-101.018	-3-03-A -012230	10.	3100	1.5	85	<4	0.2	<4	220	1600
48-34.604	-101.065	-3-03-A -012232	5.8	1200	2.6	34	4	0.2	18	290	370
48-34.561	-100.916	-3-03-A -012243	11.	3900	1.0	130	11	<0.2	12	84	1800
48-34.584	-100.747	-3-03-A -012245	0.42	3200		35	<4		11	98	1400

PARTIAL DATA LISTING PAGE 19

ST LAT	LONG	L TY REP OR NO.	U (PPB)	CT (UMHOS/CM)	AS (PPB)	LI (PPB)	MO (PPB)	SE (PPB)	V (PPB)	T-AK (PPM)	SO4 (PPM)
48-34.559	-101.174	-3-01-A -009436	76.	2700	3.7	110	8	2.6	13	110	57
48-34.799	-100.656	-3-01-A -011886	4.1	2800	2.9	54	<4	<0.2	20	42	1600
48-34.769	-100.703	-3-01-A -011900	0.94	530	3.2	12	4	<0.2	13	140	8
48-34.960	-101.160	-3-01-A -012211	0.42	4100	2.4	89	8	0.3	18	35	1700

APPENDIX B

STREAM SEDIMENT

APPENDIX B

STREAM SEDIMENT SAMPLES

LIST OF TABLES

LIST OF FIGURES

LIST OF FIGURES Continued

Table B - 1

STATISTICAL SUMMARY FOR STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

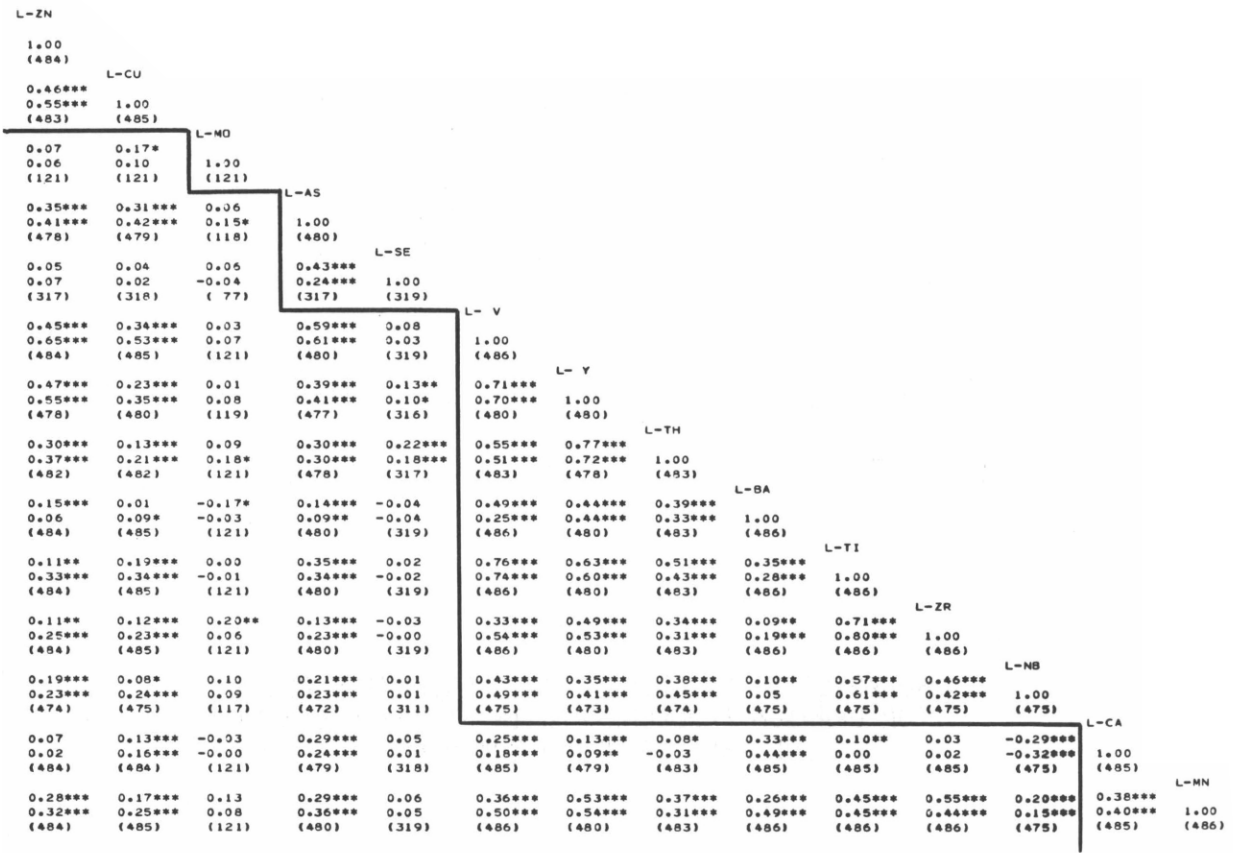
ELEMENTS	MEASURABLE VALUES	MINIMUM VALUE	MAXIMUM VALUE	MEAN	MEDIAN	MODE	STANDARD DEVIATION	COEFFICIENT OF VARIATION	SKEWNESS	KURTOSIS	SAMPLES BELOW DETECTION LEVEL	SAMPLES BELOW DETECTION LEVEL NUMBER
U FL	486	0.42	5.83	1.54	1.44	1.18	0.63	0.41	2.17	9.98		
U NT	449	1.00	14.40	2.41	2.19	1.84	1.12	0.47	4.70	35.35		
AS	480	< 0.1	10.4	2.92	2.7	1.9	1.14	0.39	1.60	6.27	< 0.1	5
SE	319	< 0.1	9.6	0.53	0.3	0.2	0.79	1.48	7.18	64.28	< 0.1	166
AG	28	< 1	4	2.1	< 2	< 2.0	0.4	0.20	3.90	14.24	< 2	457
AL	485	1	8	3.8	3	2.7	1.4	0.36	0.46	-0.09		
B	358	< 10	91	24.8	17	15.0	13.6	0.55	1.77	3.98	< 10	128
BA	486	1	5146	641.4	523	444.1	511.0	0.80	4.89	32.29		
BE	465	< 1	12	1.3	1	< 1.0	0.7	0.52	9.14	138.56	< 1	20
CA	485	0.1	12.7	2.64	2.3	1.4	1.76	0.67	1.52	4.26		
CO	484	< 1	27	9.3	9	6.0	3.8	0.41	0.79	1.28	< 1	1
CR	485	< 1	65	24.6	24	16.5	8.7	0.35	0.73	1.17	< 1	1
CU	485	< 1	194	14.7	11	8.5	19.3	1.31	6.01	40.72	< 1	1
FE	485	0	4	1.5	1	1.3	0.6	0.36	1.11	3.76		
LI	485	< 1	84	29.5	27	14.5	15.1	0.51	0.71	0.09	< 1	1
MG	485	0.1	5.6	1.73	1.6	0.8	1.05	0.61	0.62	-0.09		
MN	486	145	1682	451.0	421	345.0	176.8	0.39	2.57	11.05		
MO	121	< 1	19	2.1	< 1	< 2.0	2.0	0.95	5.68	44.78	< 1	364
NA	485	0.1	2.0	0.65	0.6	0.5	0.26	0.39	0.95	2.44		
NB	475	< 1	104	7.5	7	< 20.0	6.6	0.88	8.64	106.18	< 1	10
											< 20	1
NI	478	< 1	79	13.3	12	8.5	6.5	0.49	3.19	26.65	< 1	8
P	482	< 5	798	333.6	342	< 1000.0	114.6	0.34	-0.01	0.29	< 5	3
PB	1	10	10	10.0	10	10.0	0.0	0.0	0.0	0.0		
PT	0	< 10	< 10		< 10						< 10	1
SC	485	< 1	15	5.9	6	4.5	2.4	0.41	0.53	0.17	< 1	1
TH	483	< 1	38	8.4	8	< 400.0	3.8	0.44	2.39	14.18	< 1	2
TI	486	88	11022	2011.1	1900	1721.9	872.9	0.43	4.95	39.74		
V	486	1	178	41.7	40	33.2	15.7	0.38	2.14	14.09		
Y	480	< 1	47	13.3	13	10.5	4.6	0.34	1.65	8.13	< 1	6
ZN	484	< 1	122	35.3	33	< 200.0	14.6	0.41	1.45	4.52	< 1	1
ZR	486	21	413	81.3	77	70.0	36.1	0.44	5.07	36.35		
U/U	449	0.43	5.84	1.66	1.43	0.95	0.62	0.38	2.79	13.12		

Table B - 2

CORRELATION MATRIX FOR STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

	L- U	LUNT	LU/U	L-AL	L-LI	L-MG	L-CR	L-FE	L-SC	L- P	L-NA	L-CO
L- U	1.00 (486)											
LUNT	0.61*** 0.62*** (449)	1.00 (449)										
LU/U	-0.50*** -0.55*** (428)	0.33*** 0.16*** (428)	1.00 (428)									
L-AL	0.05 0.08* (485)	-0.23*** -0.11** (449)	-0.36*** -0.31*** (428)	1.00 (485)								
L-LI	0.21*** 0.23*** (485)	-0.15*** -0.03 (448)	-0.46*** -0.40*** (427)	0.85*** 0.85*** (484)	1.00 (485)							
L-MG	0.26*** 0.25*** (485)	-0.09* -0.02 (449)	-0.46*** -0.40*** (428)	0.64*** 0.61*** (485)	0.83*** 0.81*** (484)	1.00 (485)						
L-CR	0.35*** 0.32*** (485)	0.08 0.11** (448)	-0.37*** -0.32*** (427)	0.71*** 0.77*** (484)	0.79*** 0.81*** (485)	0.61*** 0.56*** (484)	1.00 (485)					
L-FE	0.44*** 0.44*** (485)	0.24*** 0.28*** (449)	-0.28*** -0.30*** (428)	0.61*** 0.72*** (485)	0.59*** 0.69*** (484)	0.54*** 0.55*** (485)	0.82*** 0.83*** (484)	1.00 (485)				
L-SC	0.29*** 0.28*** (485)	-0.03 0.04 (448)	-0.39*** -0.37*** (427)	0.88*** 0.90*** (484)	0.82*** 0.83*** (485)	0.74*** 0.70*** (484)	0.75*** 0.77*** (485)	0.87*** 0.87*** (484)	1.00 (485)			
L- P	0.33*** 0.34*** (482)	0.09* 0.13*** (446)	-0.36*** -0.36*** (425)	0.50*** 0.59*** (482)	0.60*** 0.68*** (481)	0.59*** 0.56*** (482)	0.74*** 0.78*** (481)	0.66*** 0.68*** (492)	0.58*** 0.66*** (481)	1.00 (482)		
L-NA	-0.18*** -0.22*** (485)	-0.31*** -0.31*** (449)	-0.15*** -0.07 (428)	0.63*** 0.67*** (485)	0.49*** 0.55*** (484)	0.38*** 0.39*** (485)	0.35*** 0.43*** (484)	0.21*** 0.27*** (485)	0.44*** 0.46*** (484)	0.18*** 0.26*** (482)	1.00 (485)	
L-CO	0.36*** 0.34*** (484)	0.13*** 0.14*** (448)	-0.31*** -0.33*** (427)	0.58*** 0.62*** (484)	0.56*** 0.58*** (483)	0.51*** 0.49*** (484)	0.68*** 0.68*** (483)	0.78*** 0.84*** (484)	0.74*** 0.77*** (483)	0.57*** 0.62*** (481)	0.11** 0.18*** (484)	1.00 (484)
L-ZN	0.25*** 0.24*** (484)	-0.01 0.03 (448)	-0.28*** -0.30*** (427)	0.50*** 0.60*** (484)	0.58*** 0.60*** (483)	0.40*** 0.39*** (484)	0.63*** 0.68*** (483)	0.47*** 0.68*** (484)	0.67*** 0.69*** (483)	0.50*** 0.69*** (481)	0.13*** 0.22*** (484)	0.56*** 0.65*** (483)
L-CU	0.26*** 0.32*** (485)	0.11** 0.23*** (448)	-0.27*** -0.29*** (427)	0.36*** 0.48*** (484)	0.40*** 0.53*** (485)	0.30*** 0.38*** (484)	0.43*** 0.58*** (485)	0.39*** 0.53*** (484)	0.35*** 0.49*** (485)	0.40*** 0.58*** (481)	0.06 0.15*** (484)	0.40*** 0.49*** (483)
L-MO	-0.03 -0.12 (121)	-0.03 -0.07 (110)	0.06 0.07 (102)	0.19** 0.20** (121)	0.11 0.14 (121)	0.08 0.13 (121)	0.09 0.12 (121)	0.13 0.16* (121)	0.21** 0.24*** (121)	0.05 0.06 (119)	-0.03 0.09 (121)	0.29*** 0.25*** (121)
L-AS	0.33*** 0.41*** (480)	0.07 0.22*** (443)	-0.35*** -0.32*** (422)	0.39*** 0.45*** (479)	0.43*** 0.48*** (479)	0.38*** 0.39*** (479)	0.53*** 0.54*** (479)	0.57*** 0.59*** (479)	0.44*** 0.53*** (479)	0.52*** 0.50*** (478)	0.11** 0.11** (479)	0.46*** 0.54*** (478)
L-SE	0.01 -0.02 (319)	-0.05 -0.06 (290)	-0.04 -0.01 (274)	0.19*** 0.19*** (318)	0.18*** 0.20*** (318)	0.12** 0.14** (318)	0.13** 0.13** (318)	0.15*** 0.13** (318)	0.17*** 0.16*** (318)	0.16*** 0.13** (317)	0.13** 0.17*** (318)	0.08 0.08 (317)
L- V	0.47*** 0.56*** (486)	0.33*** 0.45*** (449)	-0.24*** -0.26*** (428)	0.29*** 0.50*** (485)	0.37*** 0.52*** (485)	0.33*** 0.36*** (485)	0.72*** 0.77*** (495)	0.80*** 0.89*** (485)	0.47*** 0.66*** (485)	0.73*** 0.68*** (482)	0.02 0.06 (485)	0.55*** 0.75*** (484)
L- Y	0.37*** 0.38*** (480)	0.25*** 0.30*** (443)	-0.17*** -0.13*** (423)	0.56*** 0.66*** (479)	0.43*** 0.48*** (480)	0.35*** 0.31*** (479)	0.56*** 0.58*** (480)	0.75*** 0.77*** (479)	0.70*** 0.76*** (480)	0.49*** 0.46*** (478)	0.24*** 0.24*** (479)	0.52*** 0.52*** (478)
L-TH	0.22*** 0.16*** (483)	0.18*** 0.16*** (447)	-0.07 -0.02 (426)	0.39*** 0.47*** (483)	0.27*** 0.29*** (482)	0.19*** 0.12** (483)	0.43*** 0.41*** (482)	0.56*** 0.54*** (483)	0.50*** 0.53*** (482)	0.34*** 0.25*** (481)	0.21*** 0.20*** (483)	0.43*** 0.47*** (482)
L-BA	0.35*** 0.37*** (486)	0.39*** 0.37*** (449)	-0.02 -0.04 (428)	-0.06 0.13*** (485)	0.03 0.12*** (485)	0.12*** 0.21*** (485)	0.13*** 0.07 (485)	0.17*** 0.21*** (485)	0.10** 0.22*** (485)	0.23*** 0.02 (482)	-0.04 -0.03 (485)	-0.02 0.09* (484)
L-TI	0.46*** 0.48*** (486)	0.50*** 0.65*** (449)	-0.04 0.03 (428)	0.13*** 0.28*** (485)	0.12*** 0.24*** (485)	0.15*** 0.13*** (485)	0.49*** 0.51*** (485)	0.74*** 0.66*** (485)	0.27*** 0.39*** (485)	0.40*** 0.38*** (482)	0.06 0.01 (485)	0.39*** 0.46*** (484)
L-ZR	0.46*** 0.40*** (486)	0.61*** 0.54*** (449)	0.10** 0.08* (428)	0.13*** 0.25*** (485)	0.13*** 0.25*** (485)	0.22*** 0.26*** (485)	0.37*** 0.42*** (485)	0.53*** 0.53*** (485)	0.32*** 0.36*** (485)	0.24*** 0.39*** (482)	0.06 0.11** (485)	0.36*** 0.35*** (484)
L-NB	0.18*** 0.23*** (475)	0.29*** 0.35*** (441)	0.12** 0.11** (421)	0.08* 0.17*** (475)	0.04 0.10** (475)	-0.10** -0.14*** (475)	0.33*** 0.38*** (475)	0.39*** 0.38*** (475)	0.14*** 0.18*** (475)	0.12** 0.19*** (473)	0.01 0.02 (475)	0.21*** 0.24*** (474)
L-CA	0.41*** 0.43*** (485)	0.15*** 0.22*** (449)	-0.40*** -0.38*** (428)	0.17*** 0.14*** (485)	0.36*** 0.33*** (484)	0.58*** 0.54*** (485)	0.21*** 0.12*** (484)	0.28*** 0.21*** (485)	0.32*** 0.27*** (484)	0.32*** 0.18*** (482)	0.02 -0.06 (485)	0.23*** 0.19*** (484)
L-MN	0.47*** 0.48*** (486)	0.39*** 0.36*** (449)	-0.10** -0.17*** (428)	0.25*** 0.27*** (485)	0.25*** 0.30*** (485)	0.39*** 0.42*** (485)	0.34*** 0.33*** (485)	0.56*** 0.56*** (485)	0.49*** 0.48*** (485)	0.32*** 0.38*** (482)	-0.04 -0.06 (485)	0.49*** 0.49*** (484)

Note: (1) Pearson correlation/Spearman correlation/(sample size). If either element has a concentration below the laboratory detection limit, it is omitted from the pairwise computations.
(2) Significance levels: * - 10%, ** - 5%, *** - 1%.



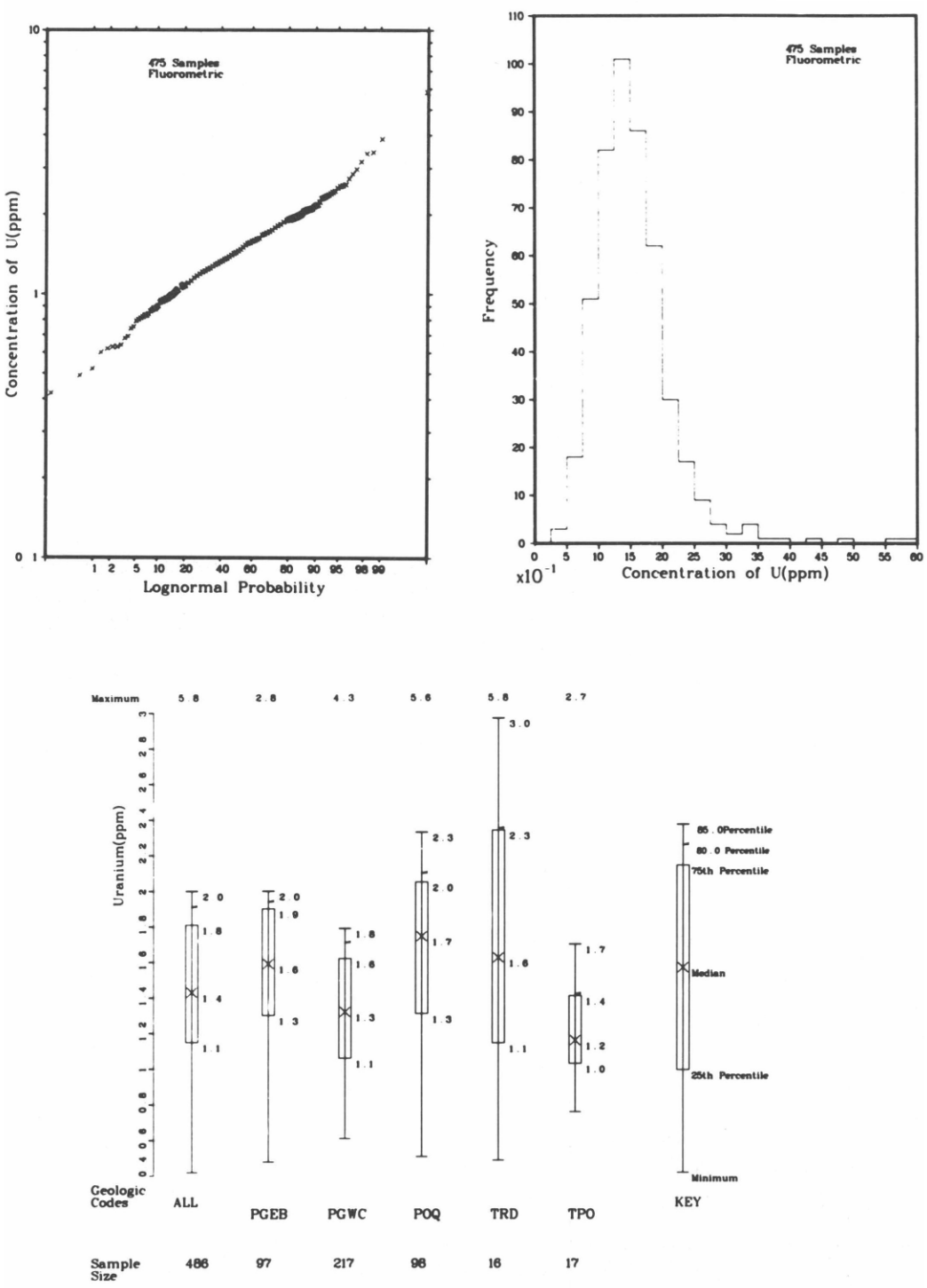


Figure B - 1a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS FOR URANIUM FLUOROMETRIC IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

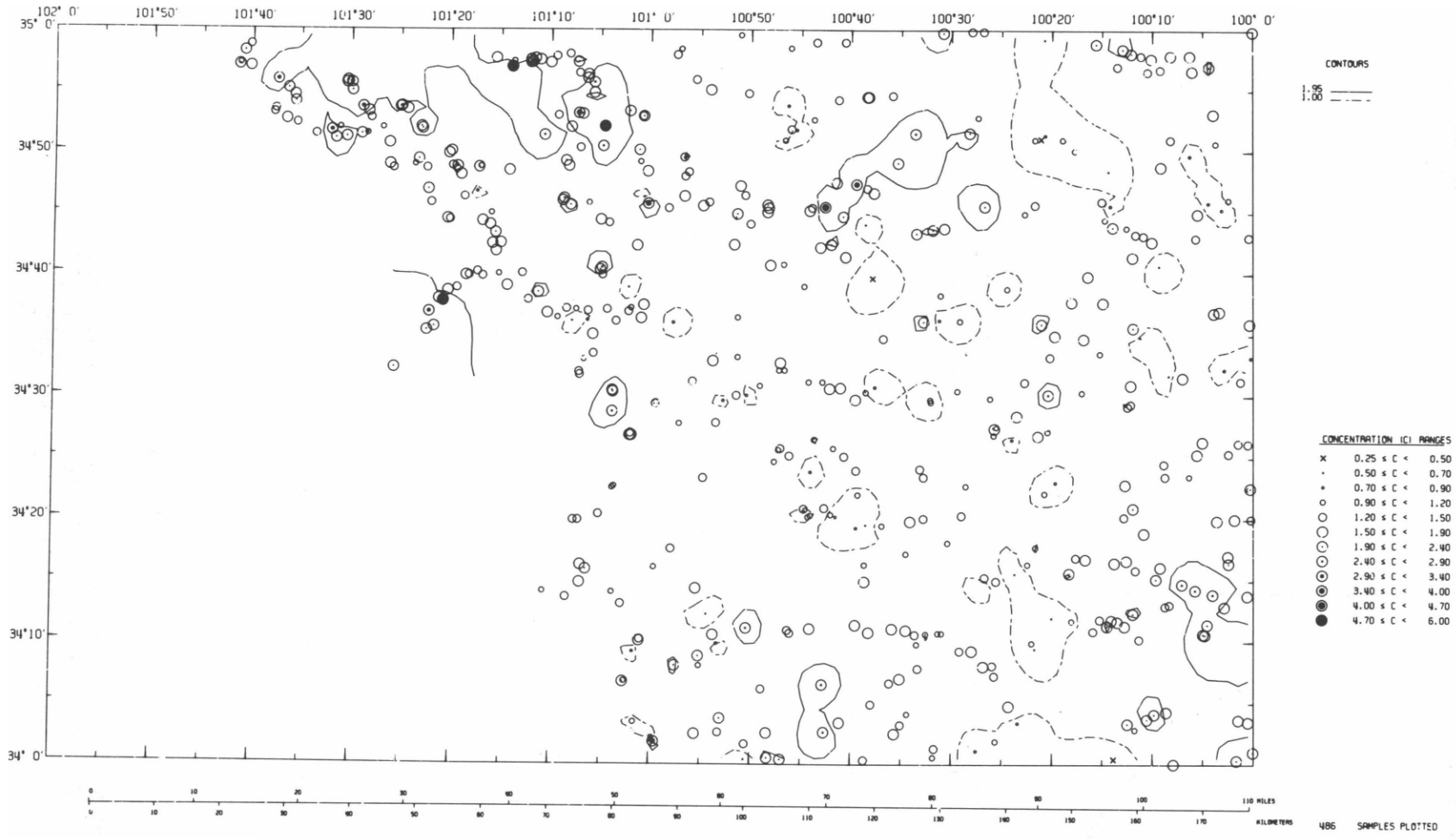


Figure B-1b

GEOCHEMICAL DISTRIBUTION OF URANIUM FLUOROMETRIC
IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

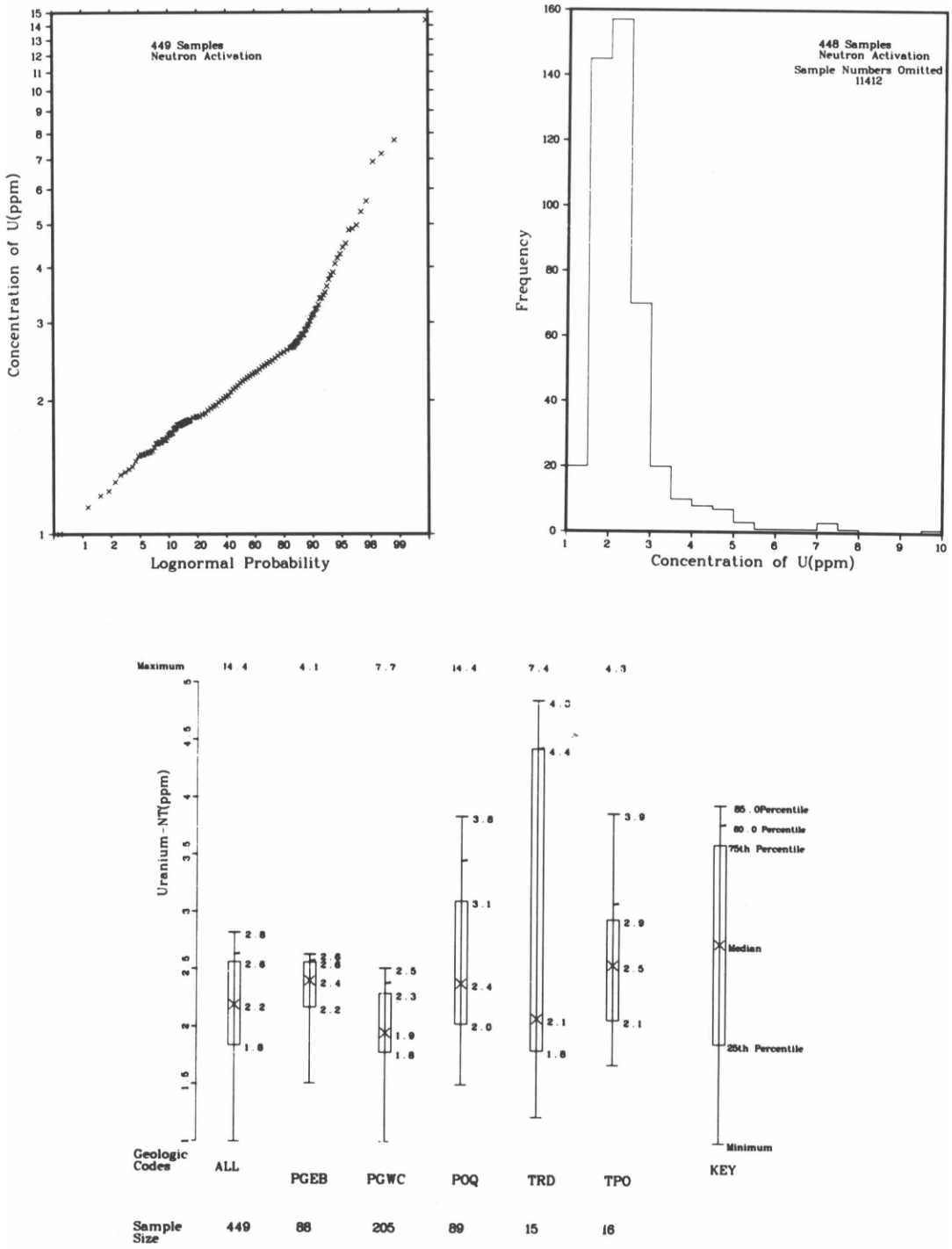


Figure B-2a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS FOR URANIUM NEUTRON ACTIVATION IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

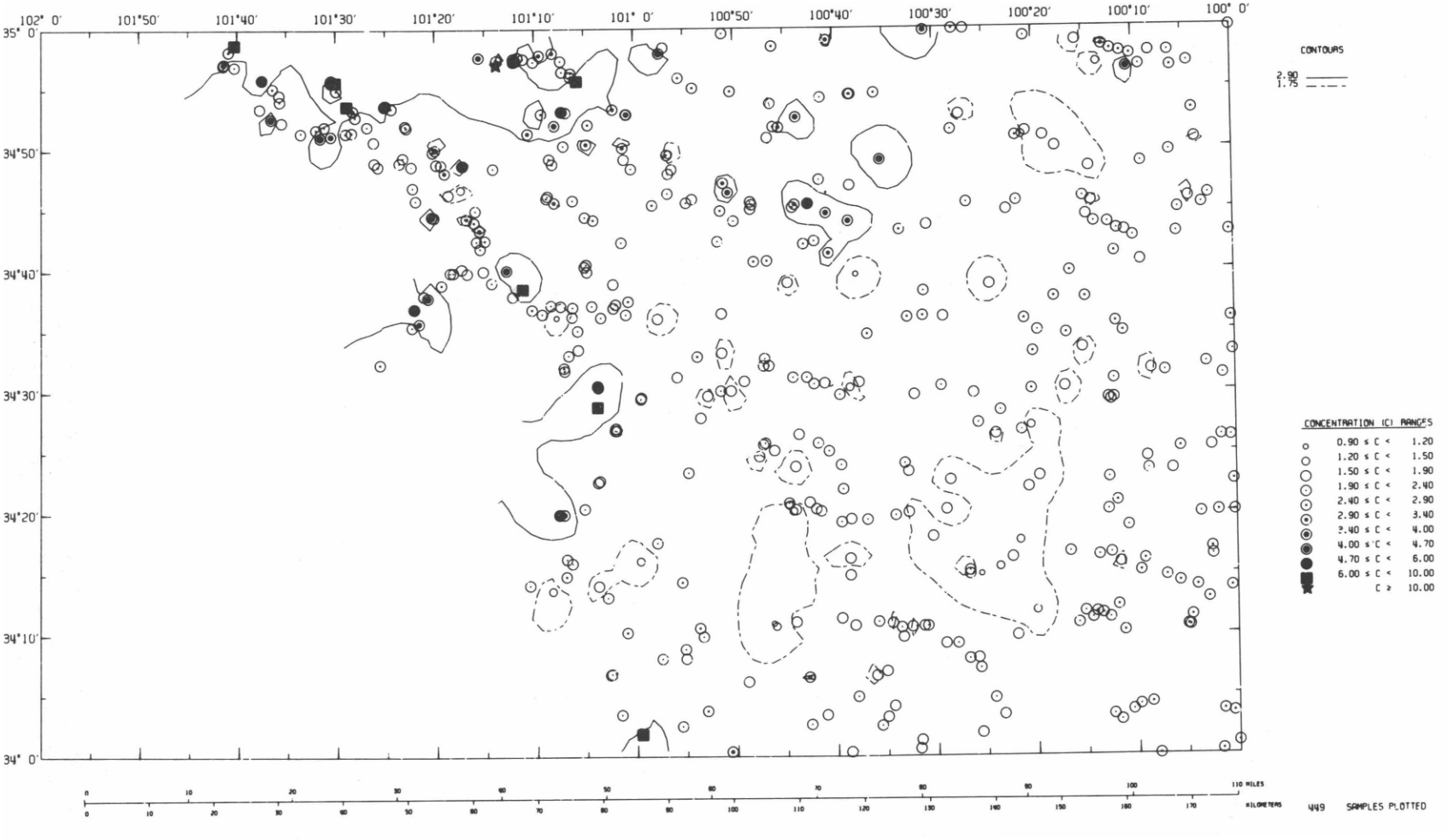


Figure B -2b

GEOCHEMICAL DISTRIBUTION OF URANIUM NEUTRON ACTIVATION IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

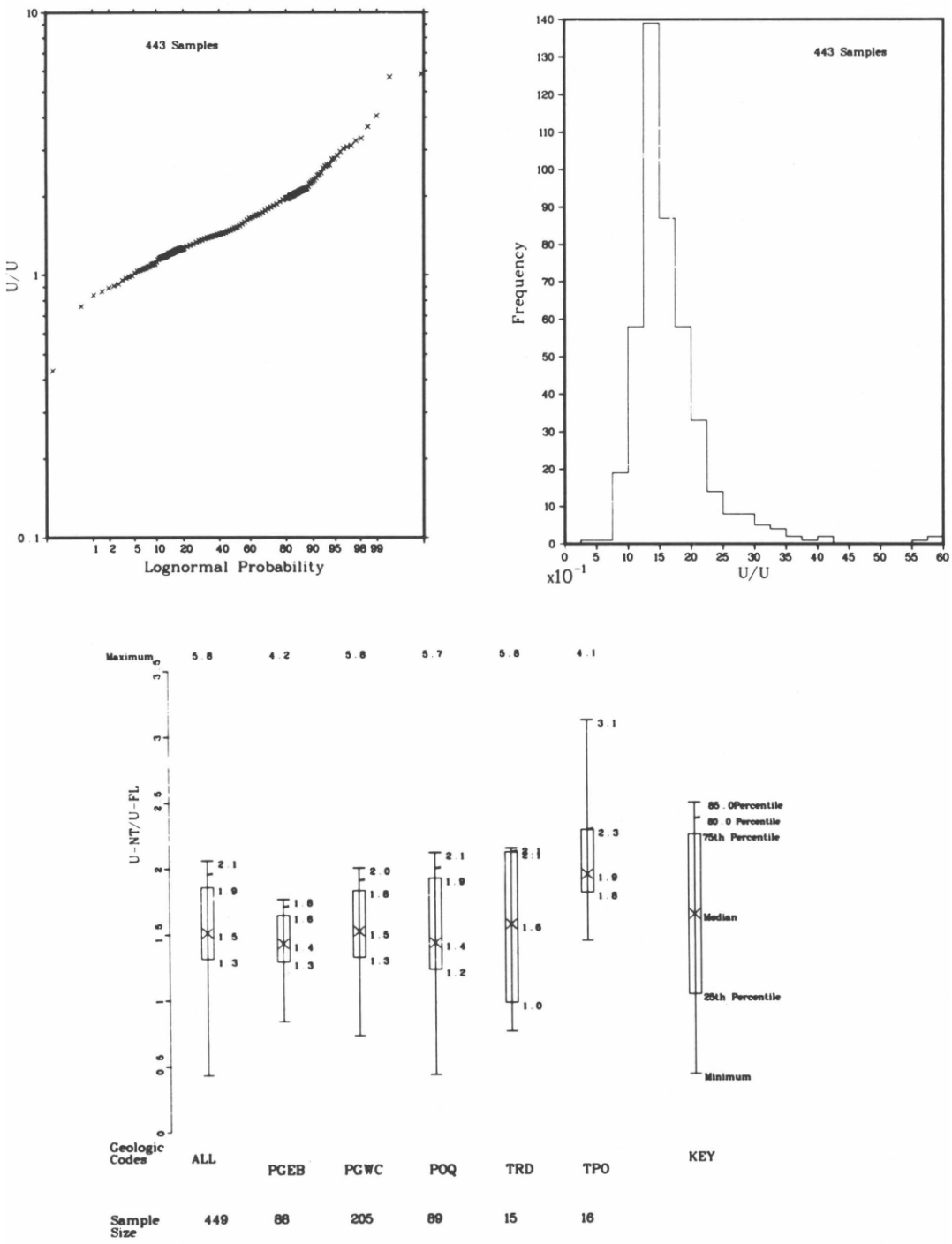


Figure B-3a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR URANIUM NEUTRON ACTIVATION/URANIUM
FLUOROMETRIC IN STREAM SEDIMENT OF
THE PLAINVIEW QUADRANGLE

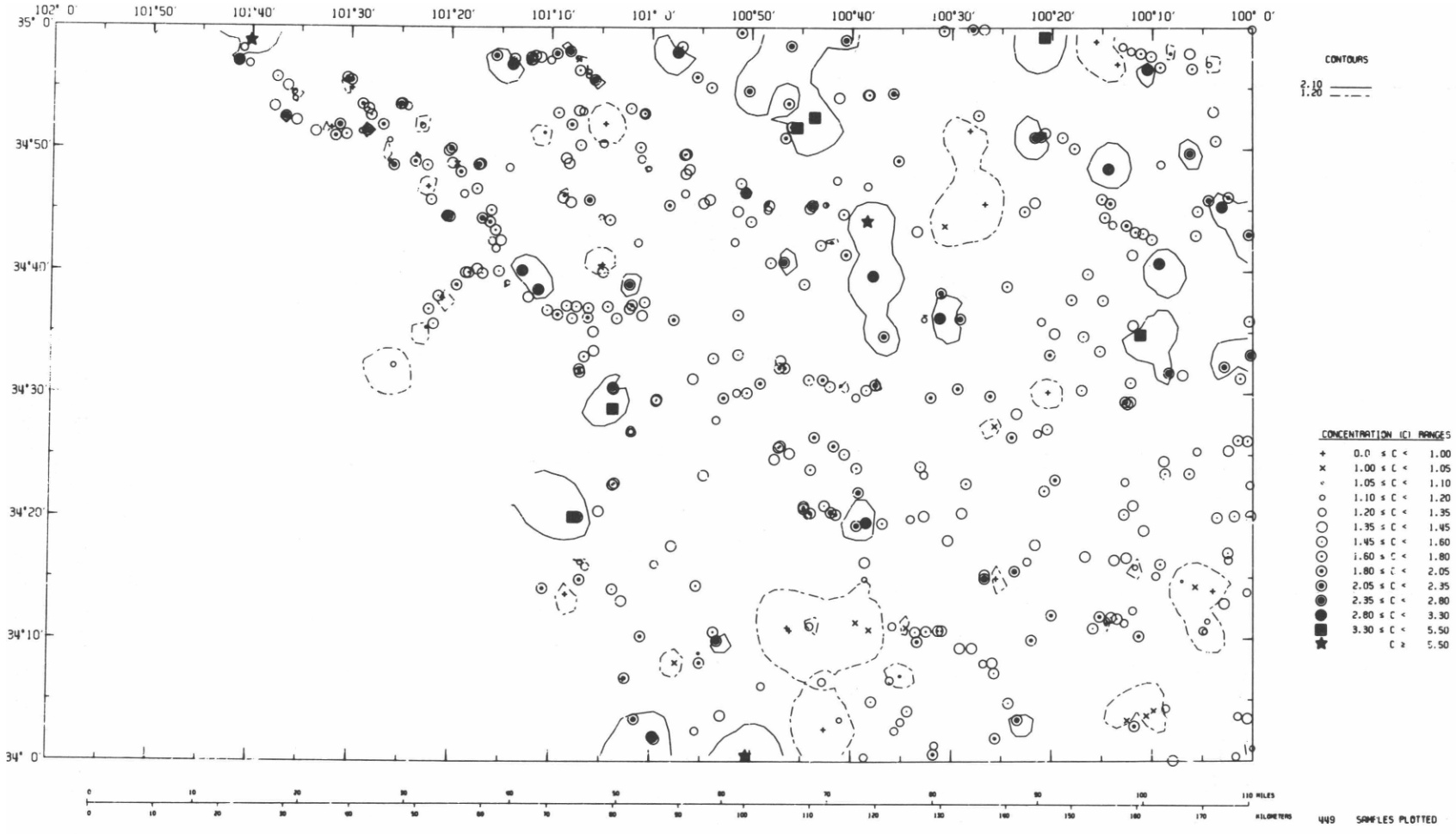


Figure B-3b

GEOCHEMICAL DISTRIBUTION OF URANIUM NEUTRON ACTIVATION/URANIUM FLUOROMETRIC IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

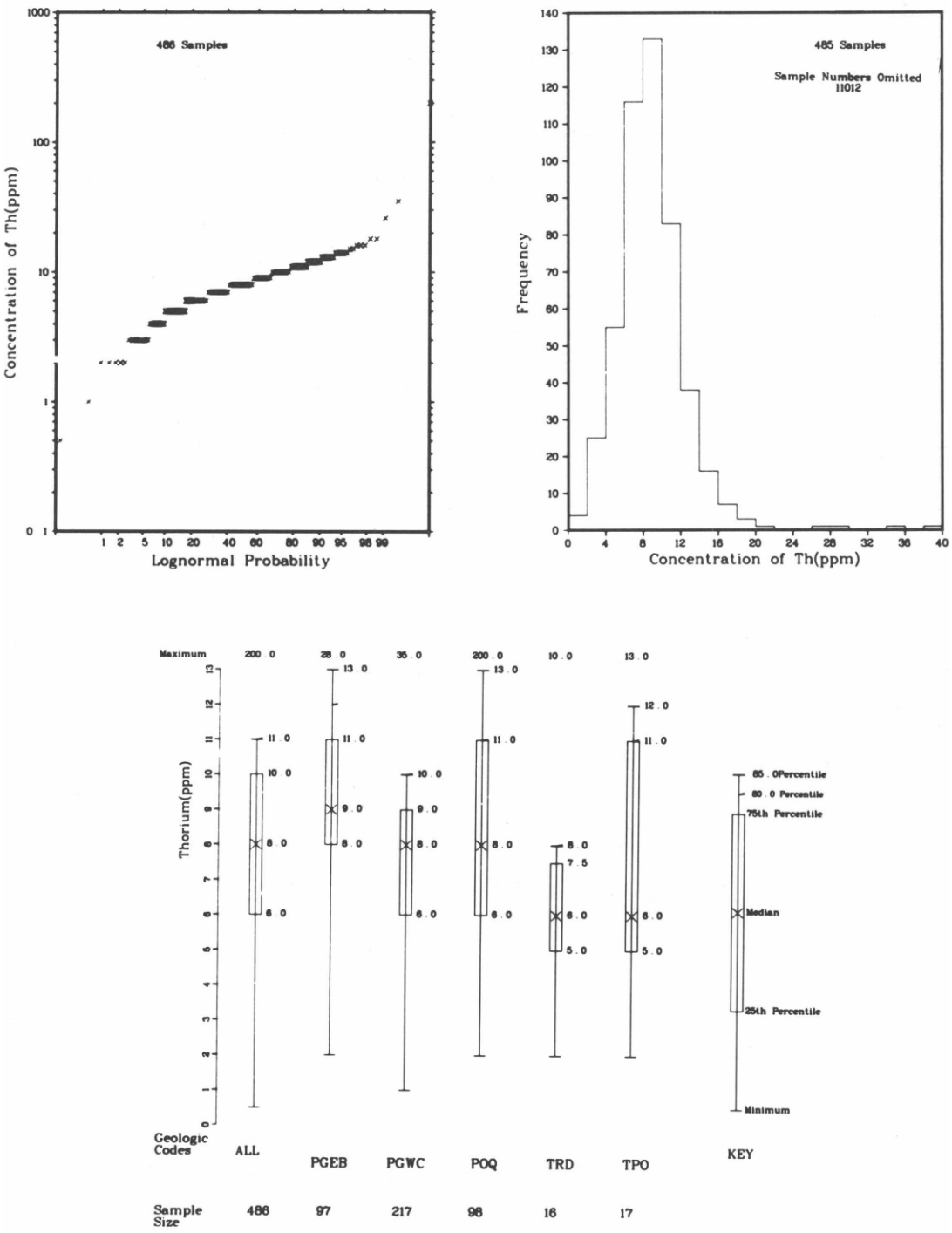


Figure B-4a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR THORIUM IN STREAM SEDIMENT
OF THE PLAINVIEW QUADRANGLE

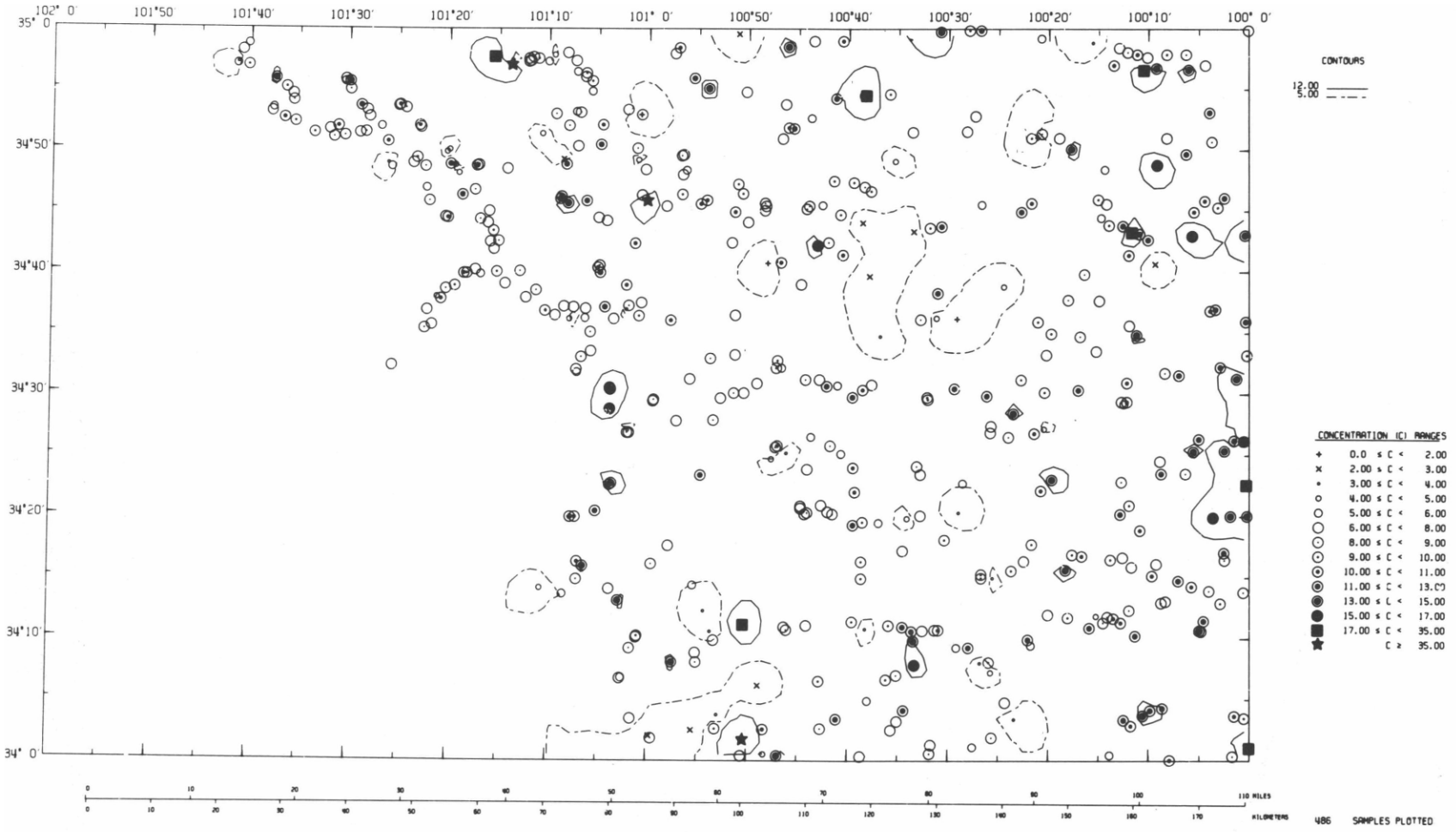


Figure B-4b

GEOCHEMICAL DISTRIBUTION OF THORIUM IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

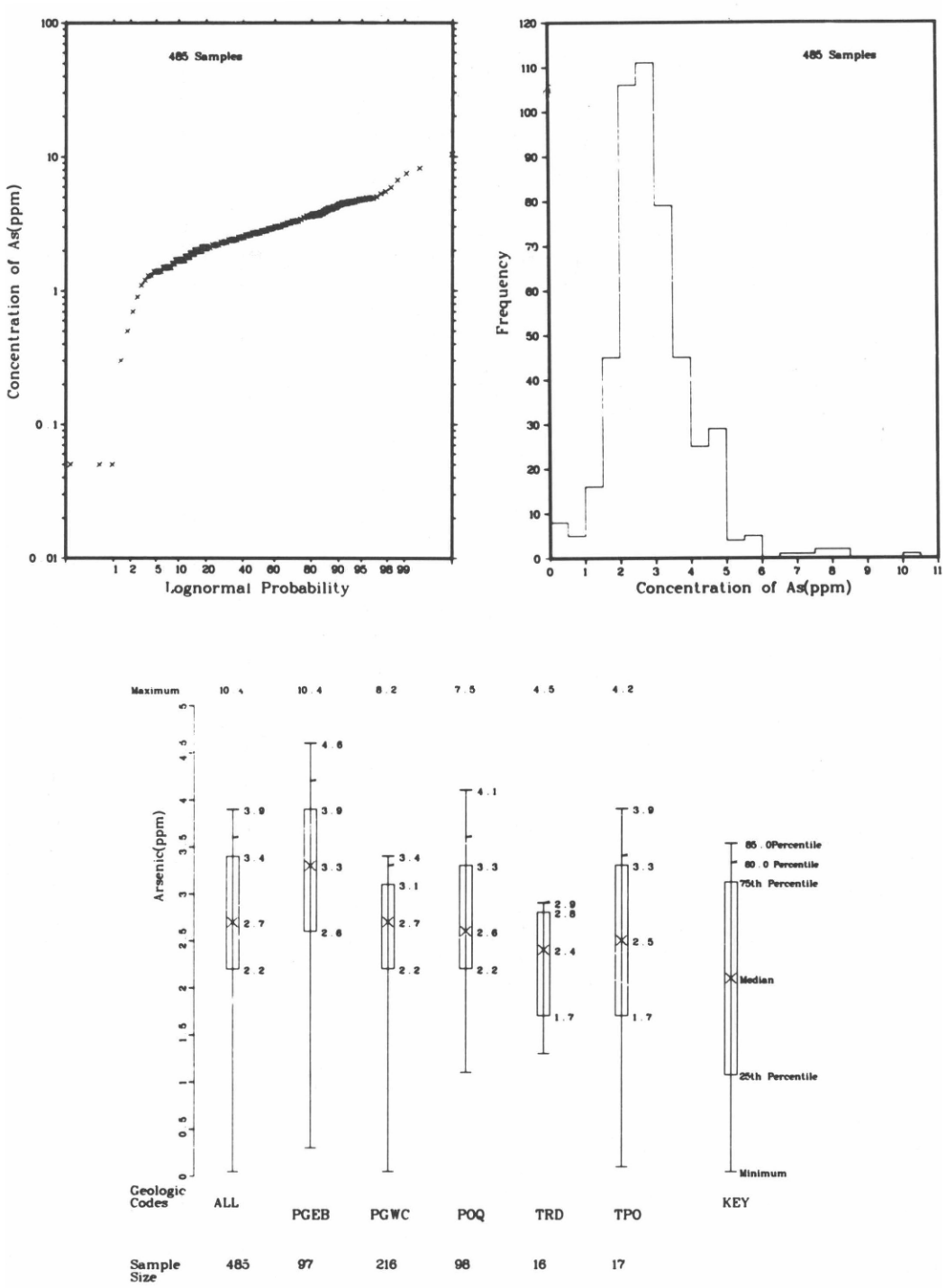


Figure B-5a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR ARSENIC IN STREAM SEDIMENT
OF THE PLAINVIEW QUADRANGLE

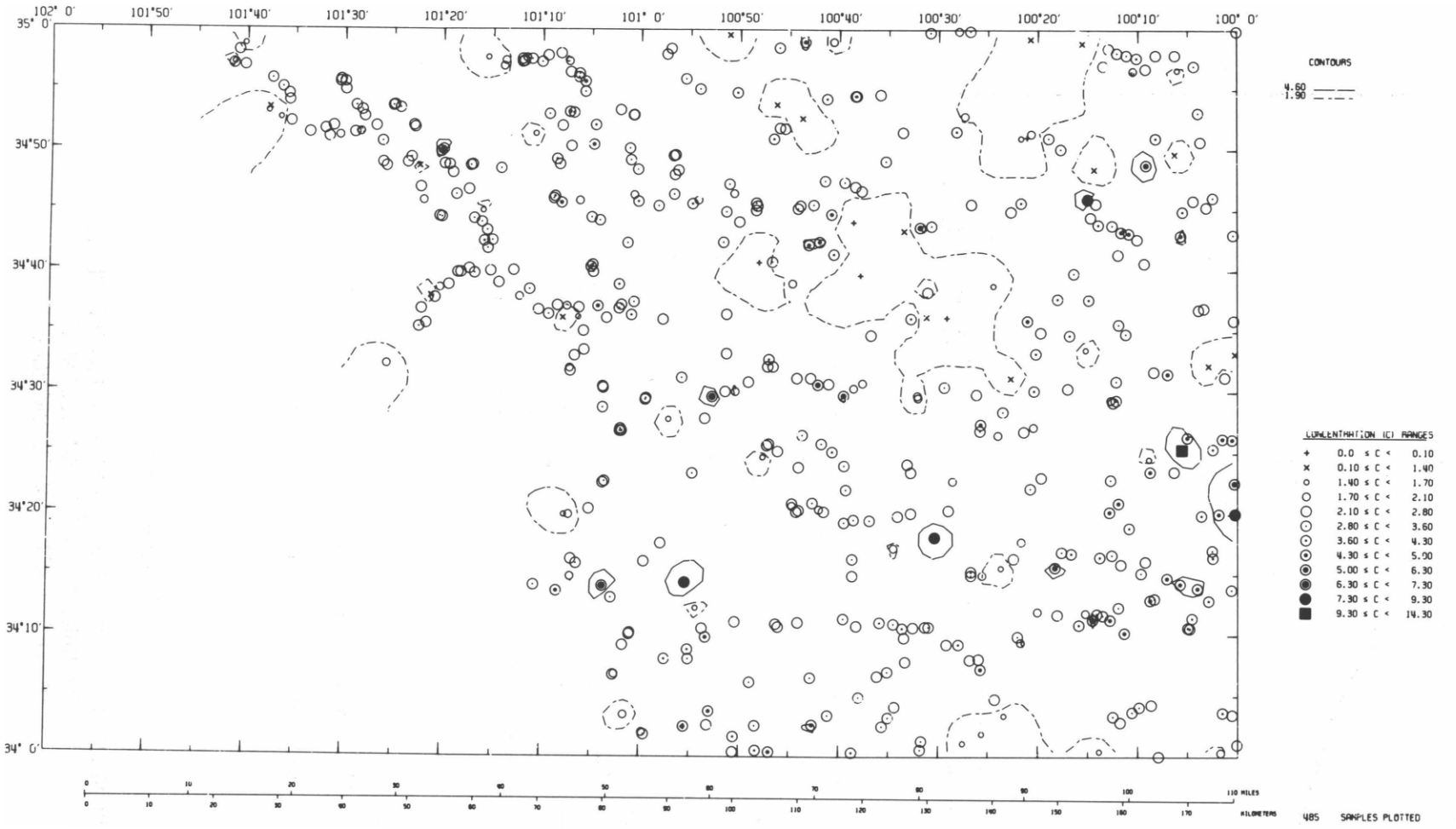
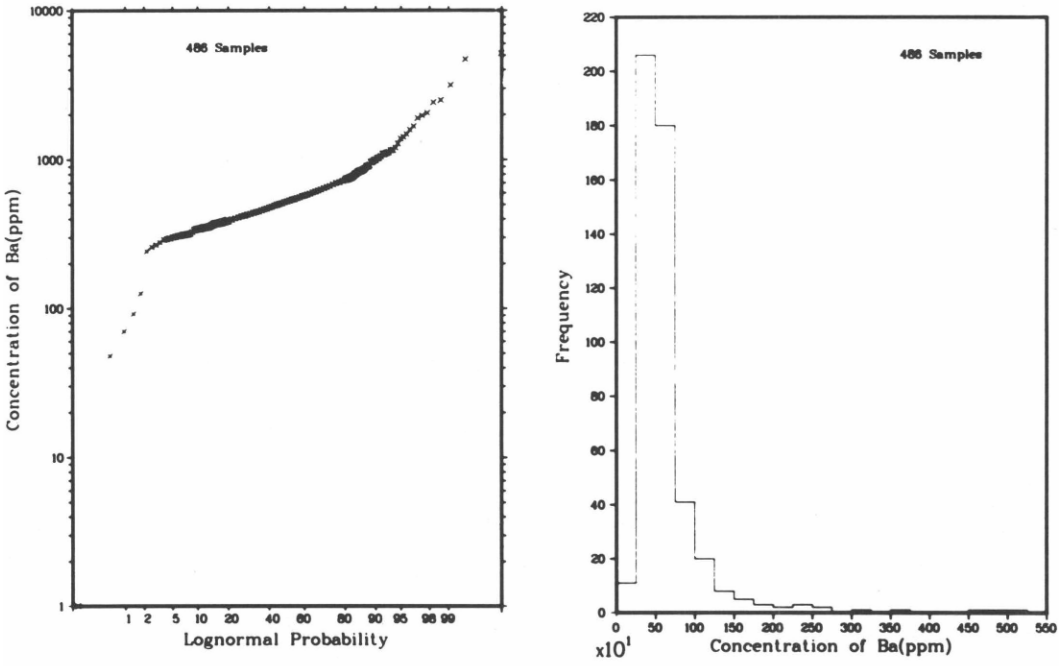


Figure B-5b

GEOCHEMICAL DISTRIBUTION OF ARSENIC IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE



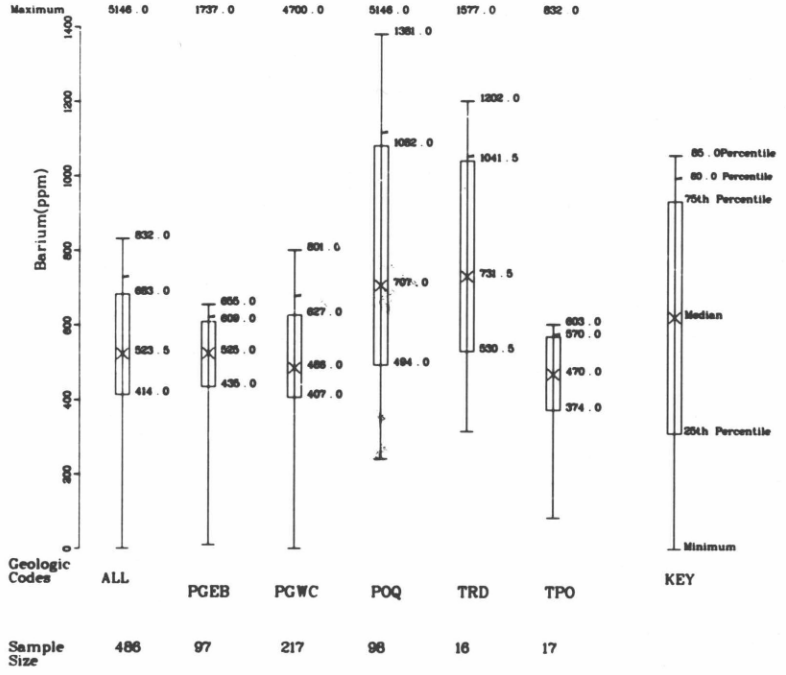


Figure B-6a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR BARIUM IN STREAM SEDIMENT
OF THE PLAINVIEW QUADRANGLE

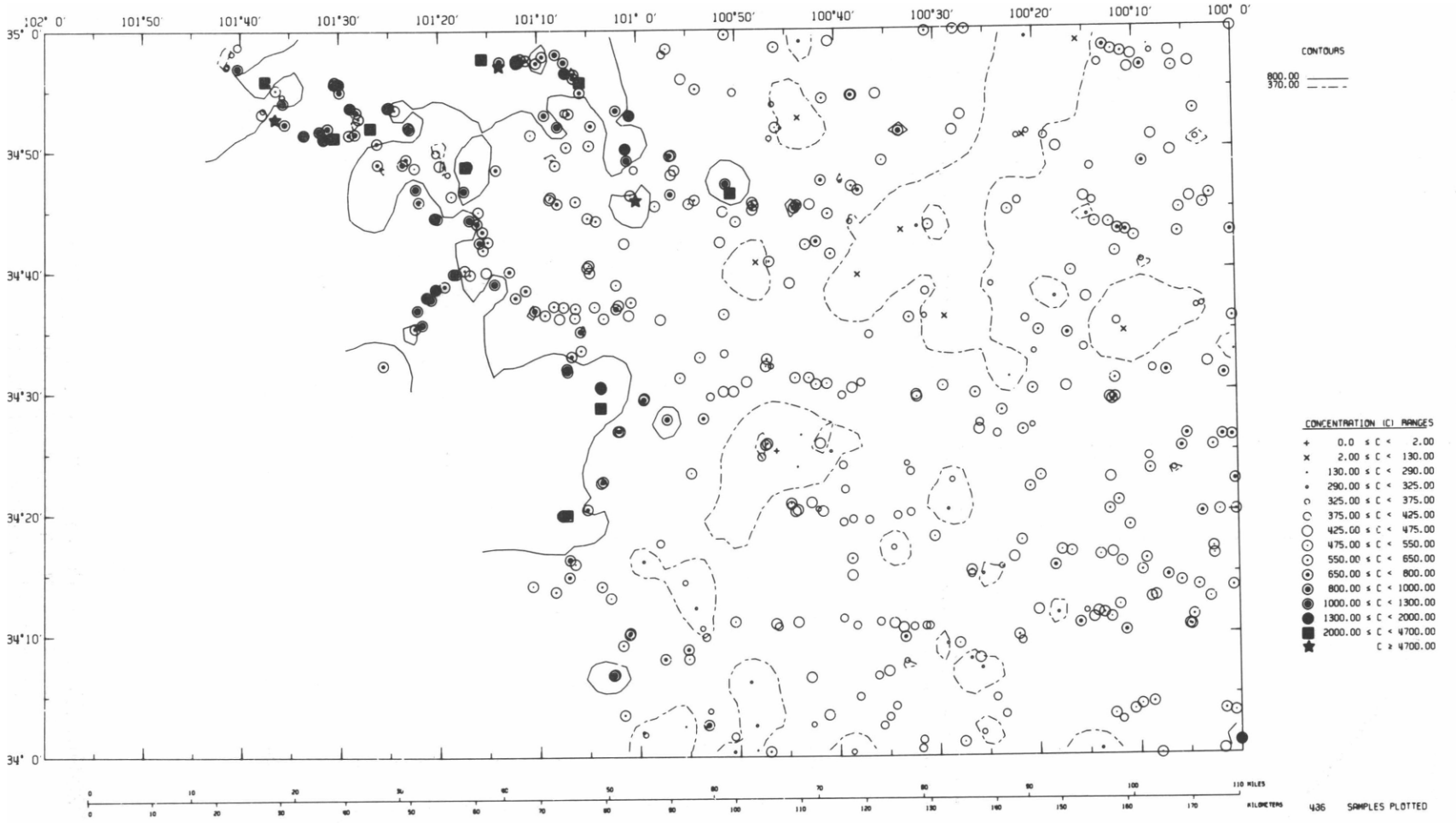
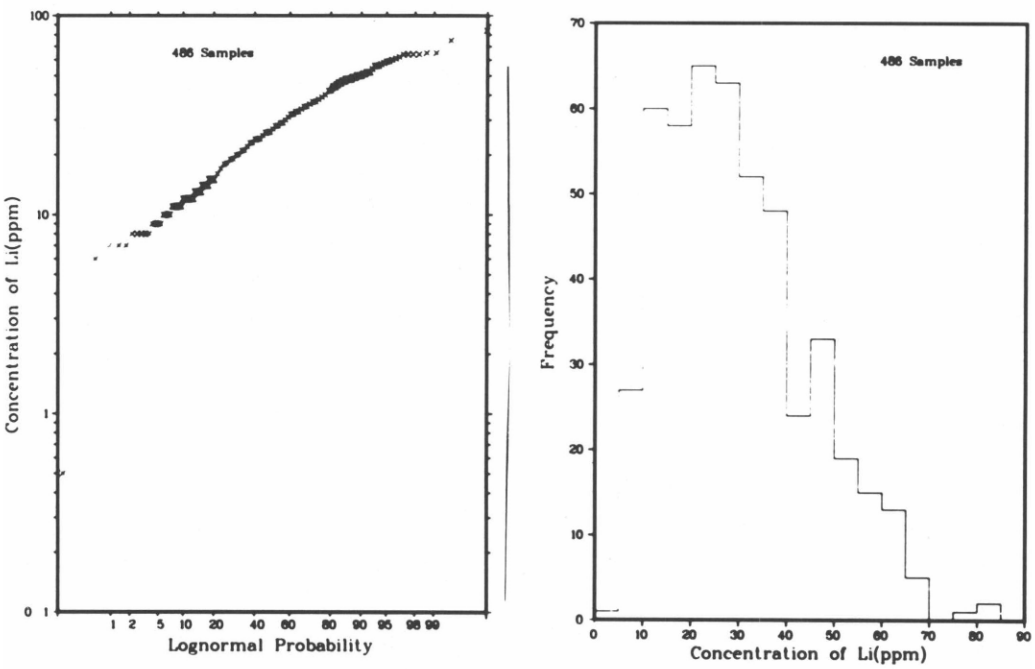


Figure B-6b

GEOCHEMICAL DISTRIBUTION OF BARIUM IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE



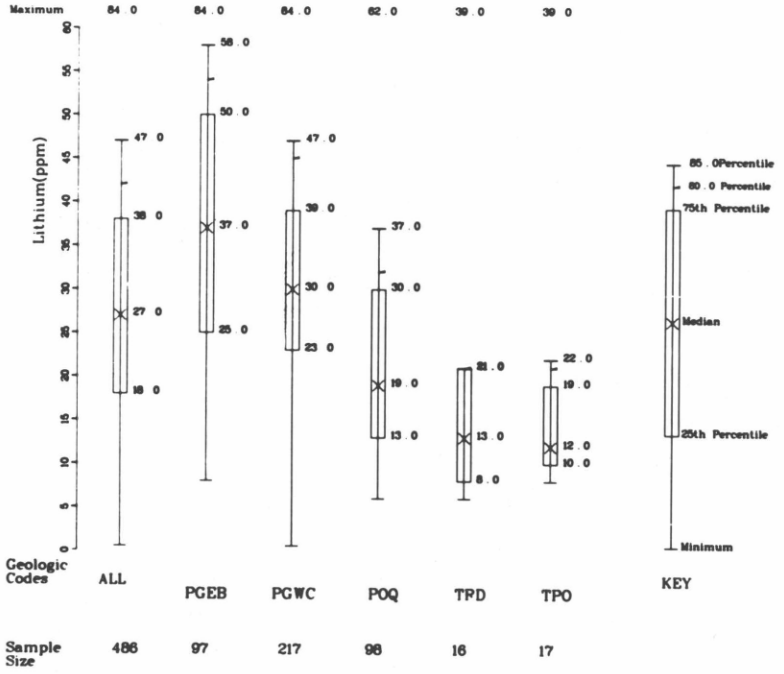


Figure B-7a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR LITHIUM IN STREAM SEDIMENT
OF THE PLAINVIEW QUADRANGLE

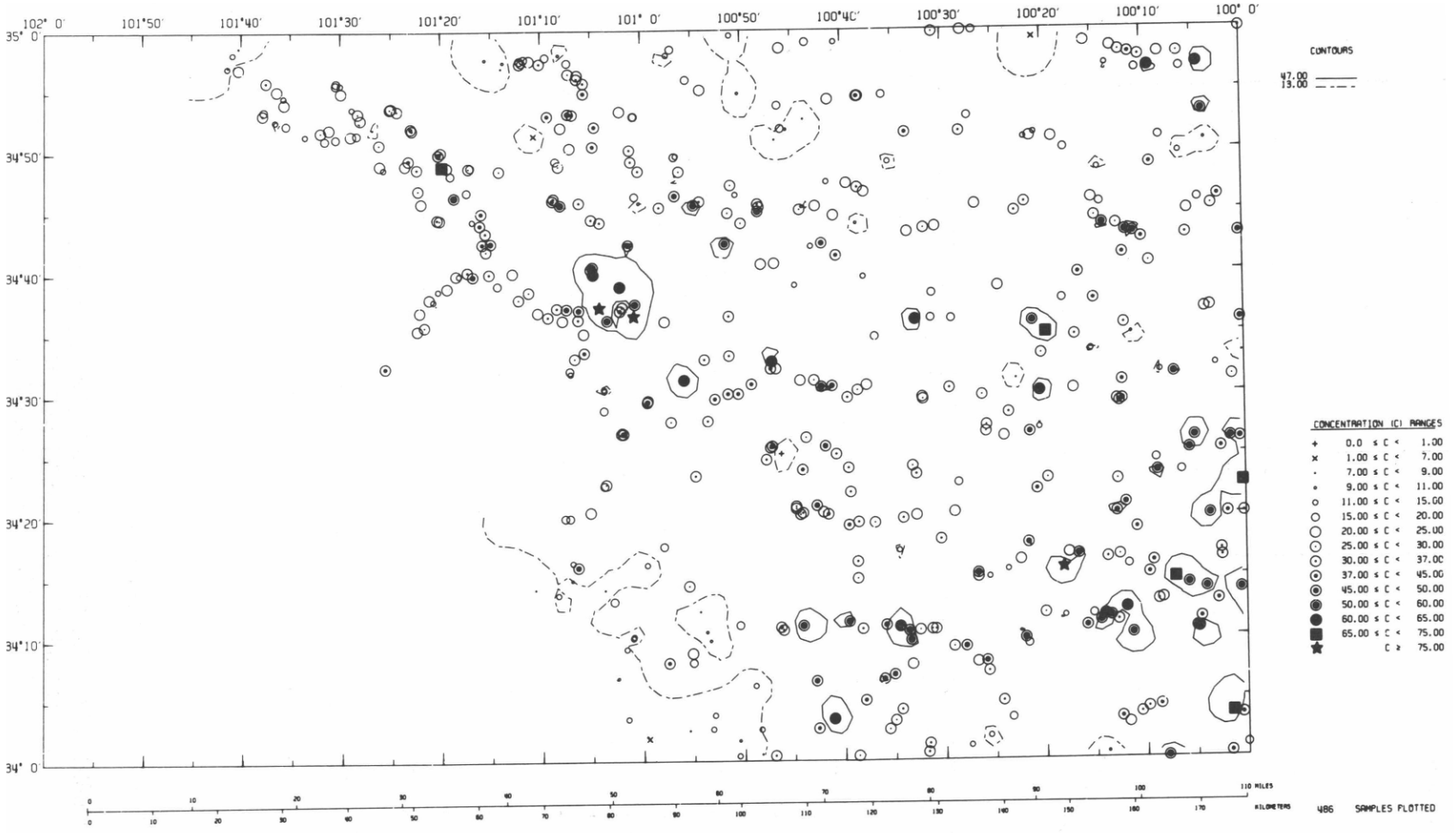


Figure B-7b

GEOCHEMICAL DISTRIBUTION OF LITHIUM IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

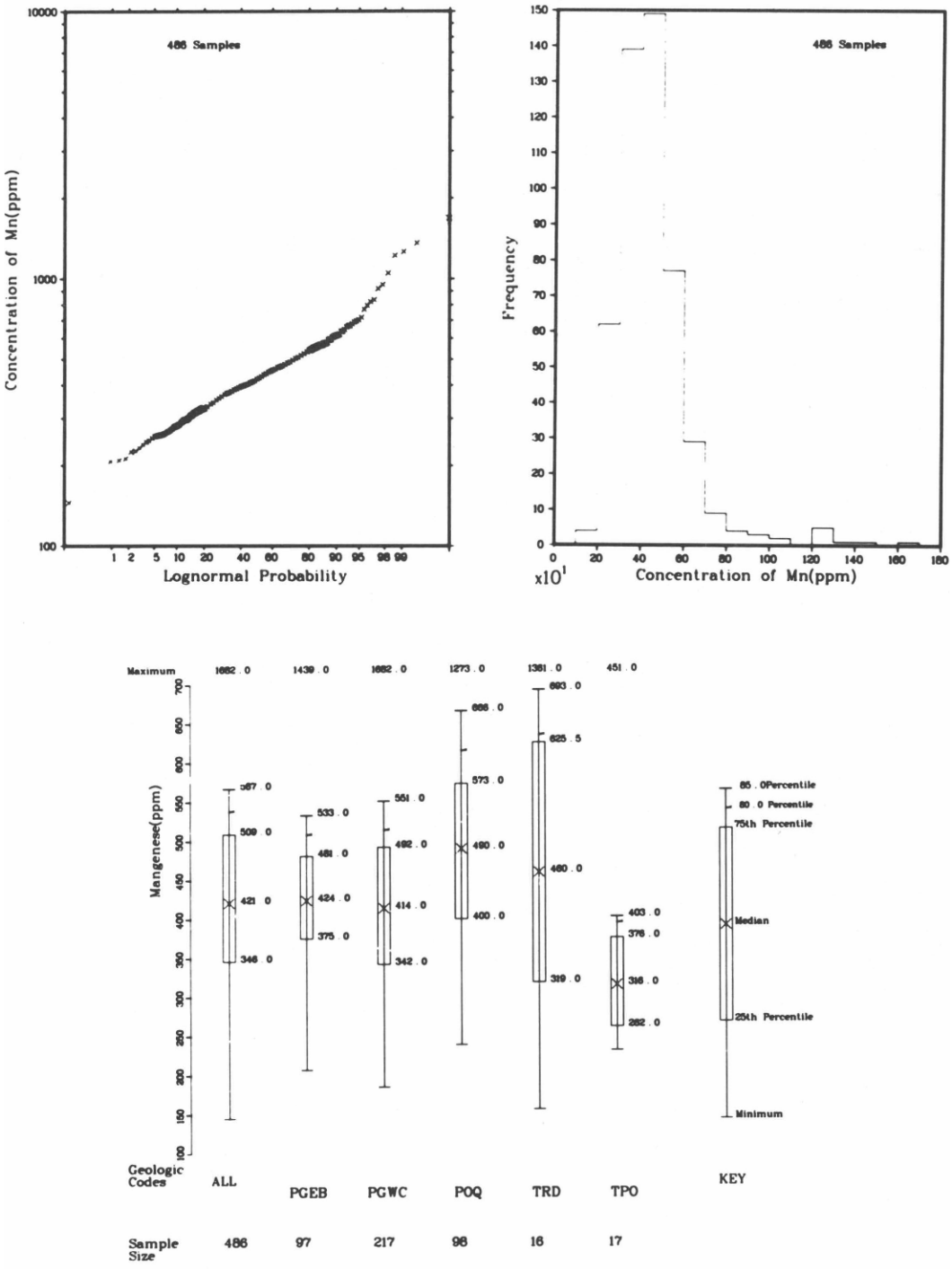


Figure B-8a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR MANGANESE IN STREAM SEDIMENT
OF THE PLAINVIEW QUADRANGLE

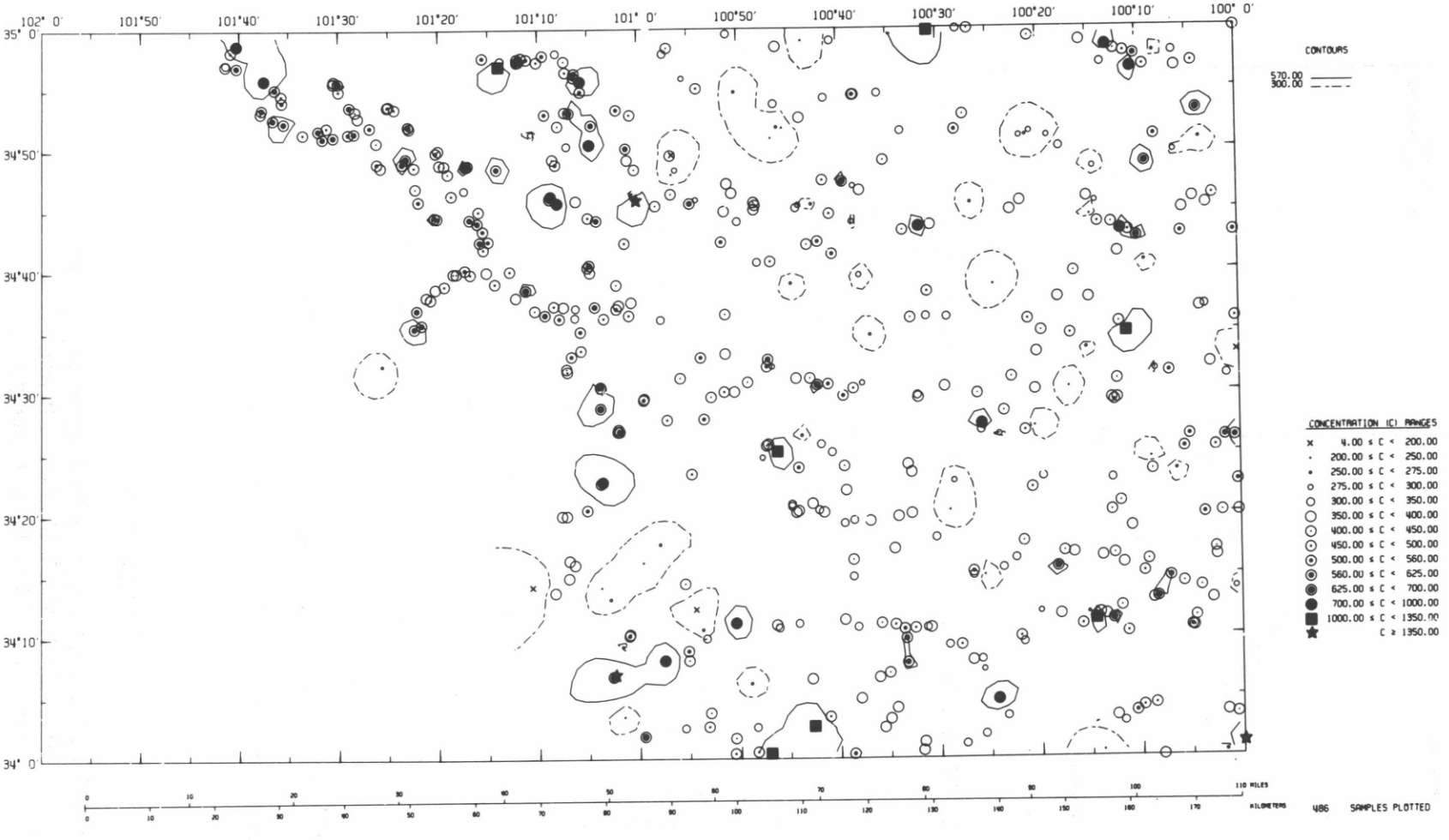
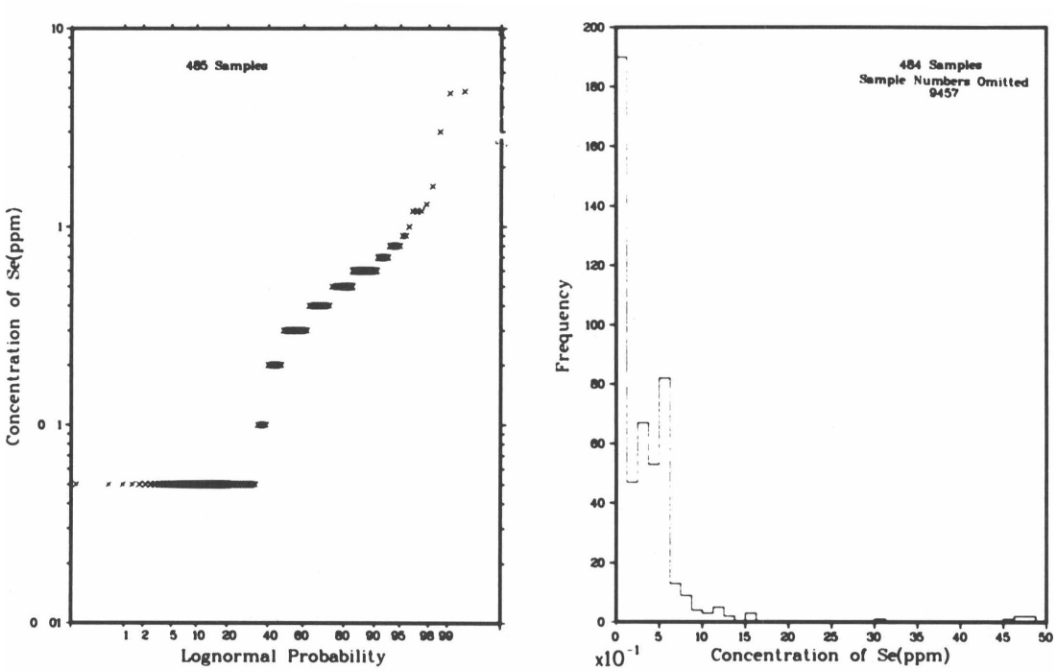


Figure B–8b

GEOCHEMICAL DISTRIBUTION OF MANGANESE IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE



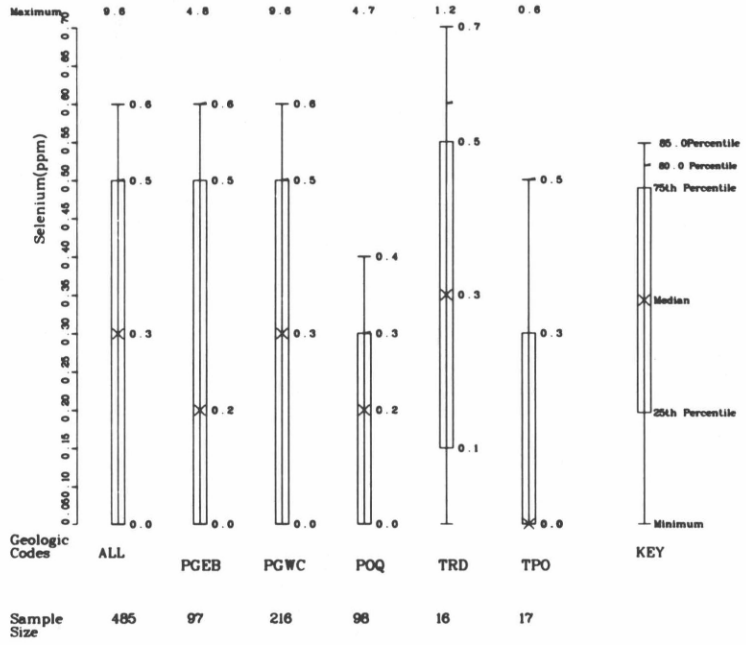


Figure B-9a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR SELENIUM IN STREAM SEDIMENT
OF THE PLAINVIEW QUADRANGLE

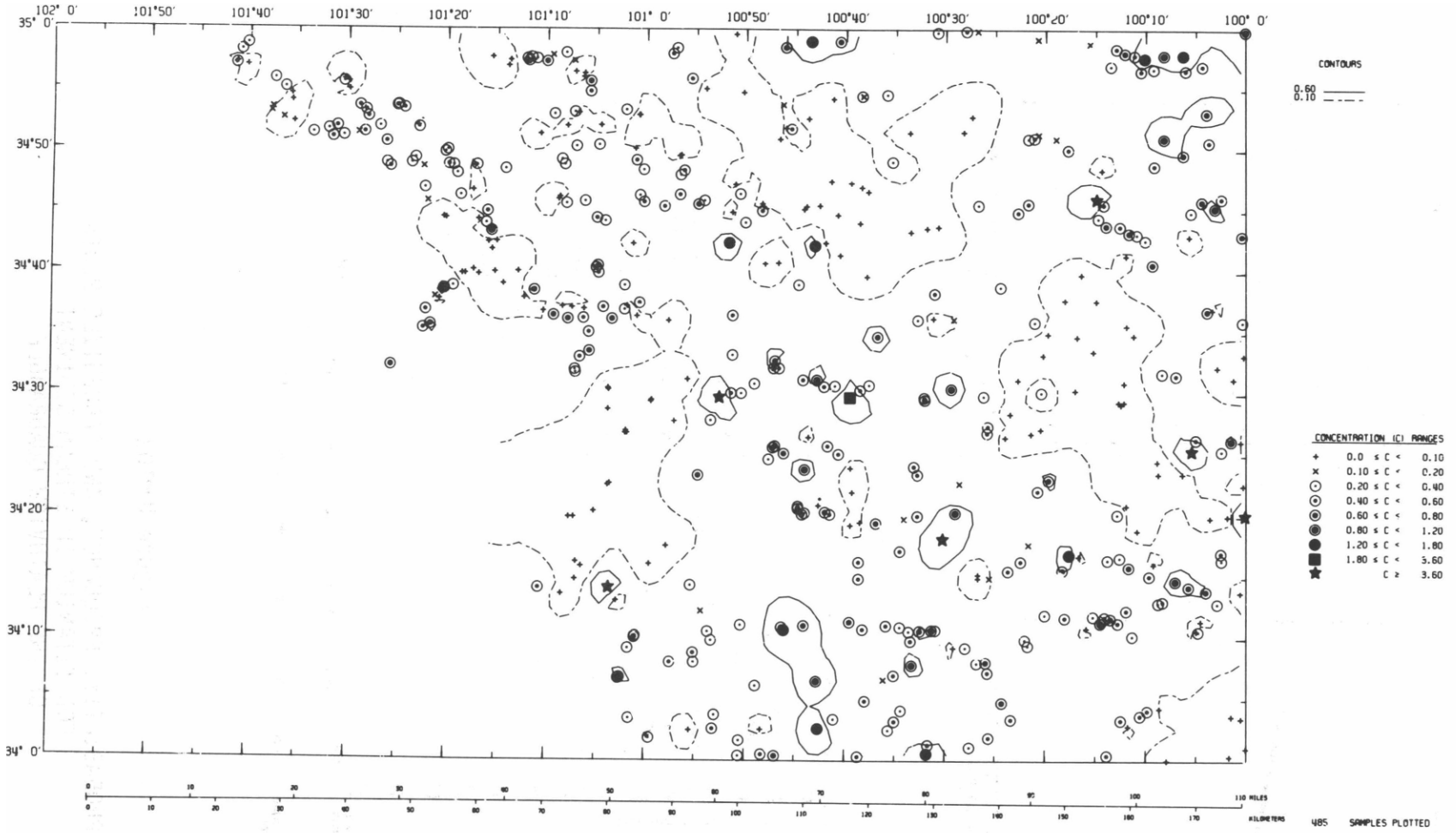


Figure B-9b

GEOCHEMICAL DISTRIBUTION OF SELENIUM IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

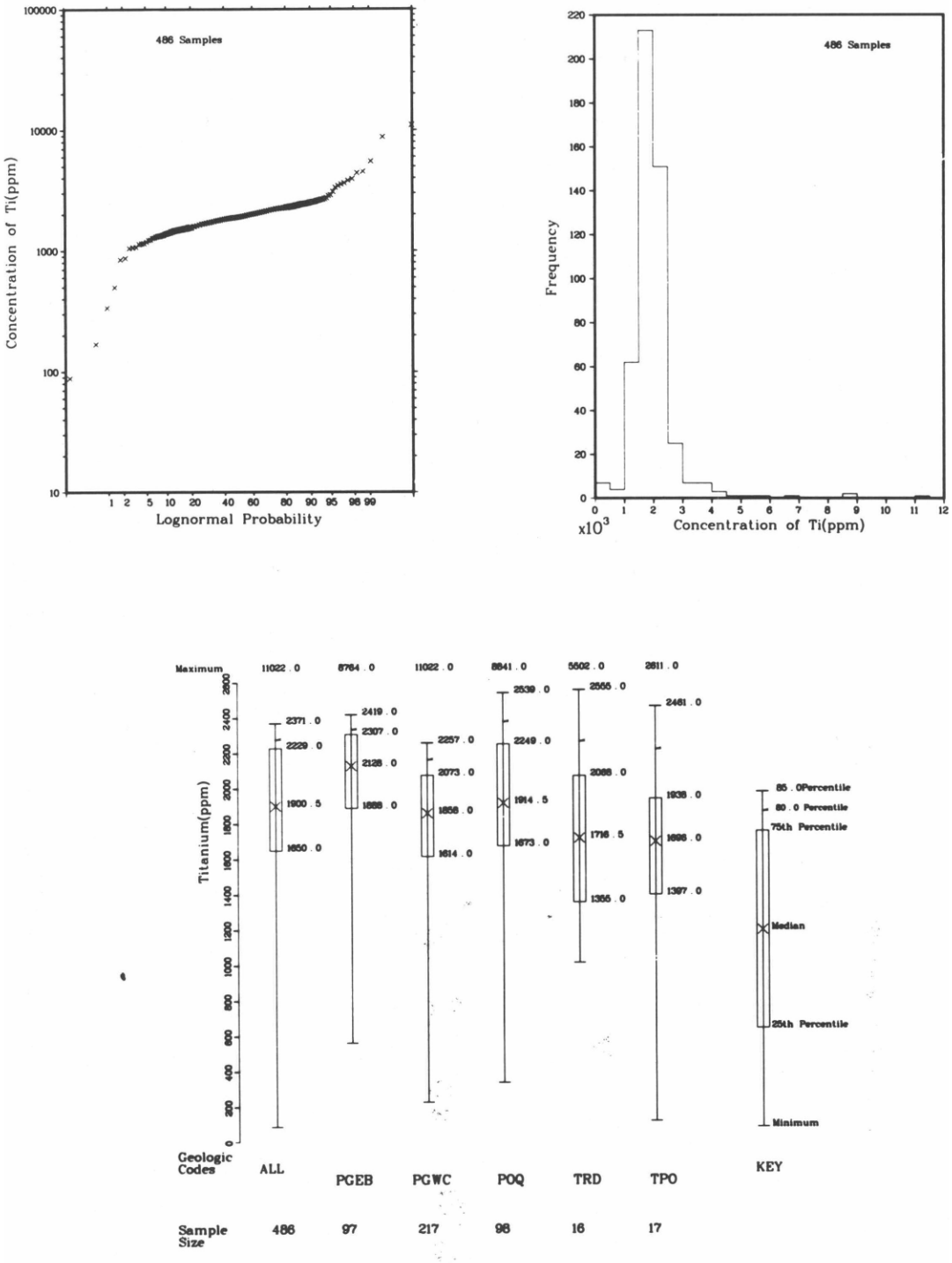


Figure B-10a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR TITANIUM IN STREAM SEDIMENT
OF THE PLAINVIEW QUADRANGLE

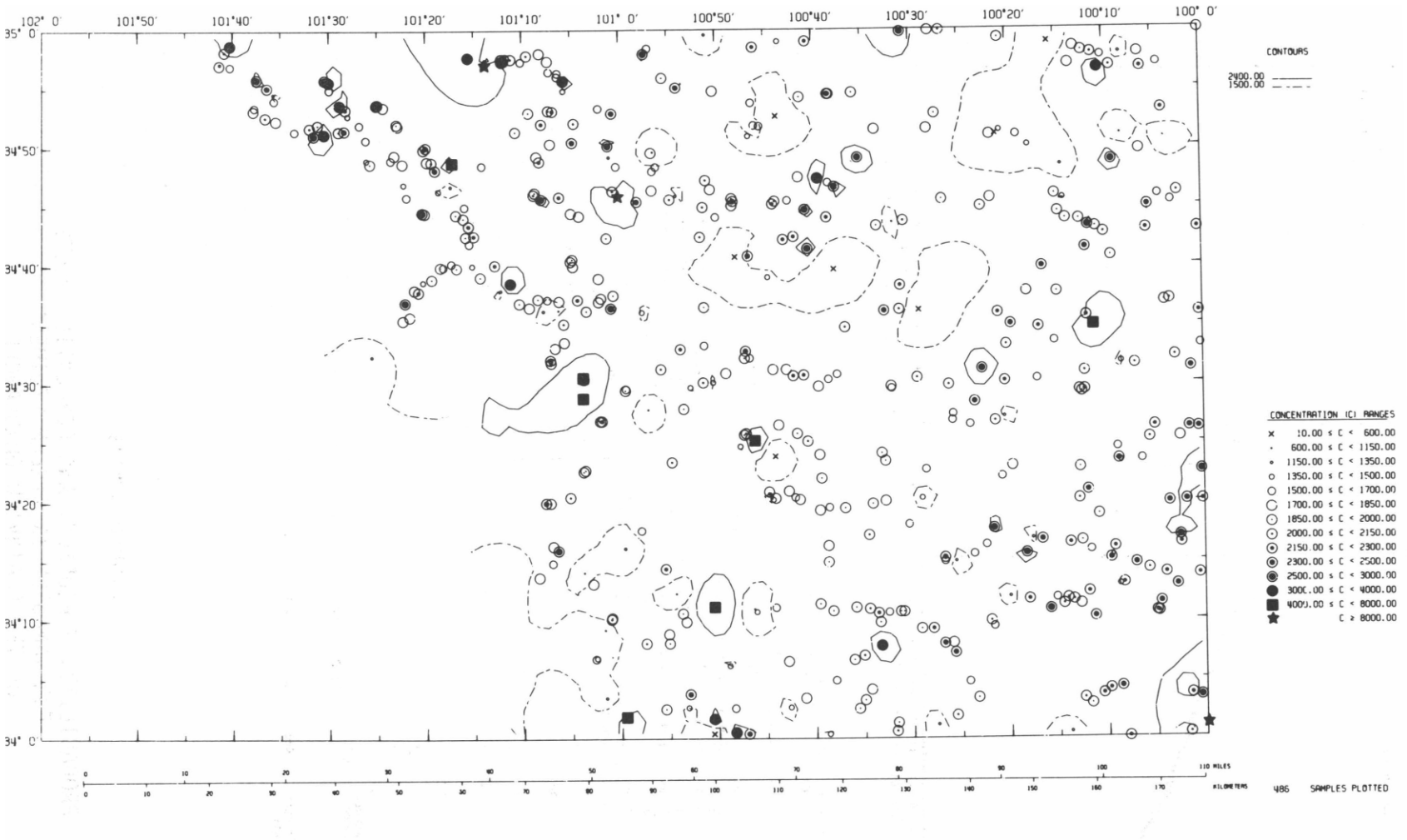


Figure B-10b

GEOCHEMICAL DISTRIBUTION OF TITANIUM IN STREAM
SEDIMENT OF THE PLAINVIEW QUADRANGLE

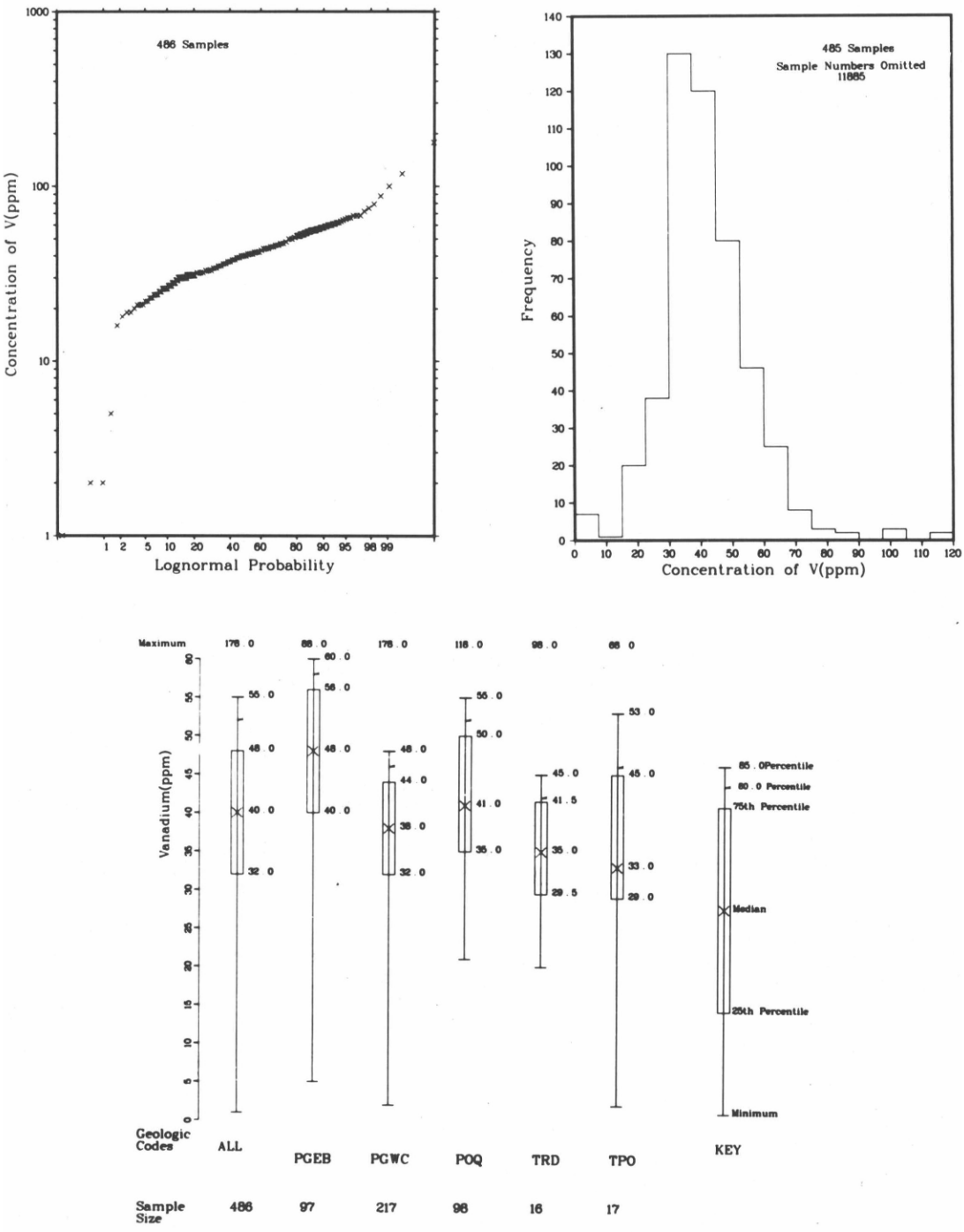


Figure B-11a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR VANADIUM IN STREAM SEDIMENT
OF THE PLAINVIEW QUADRANGLE

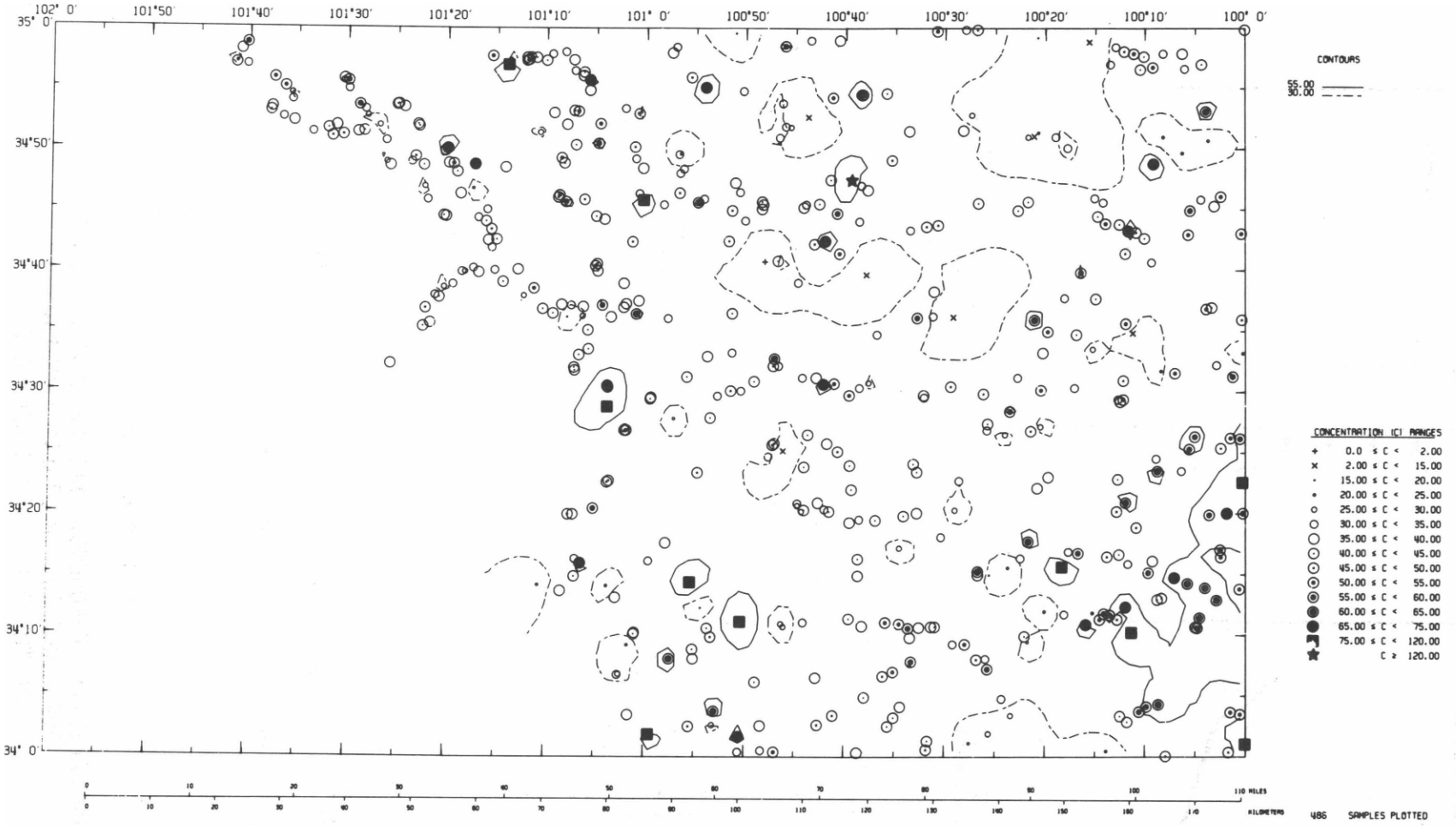


Figure B-11b

GEOCHEMICAL DISTRIBUTION OF VANADIUM IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

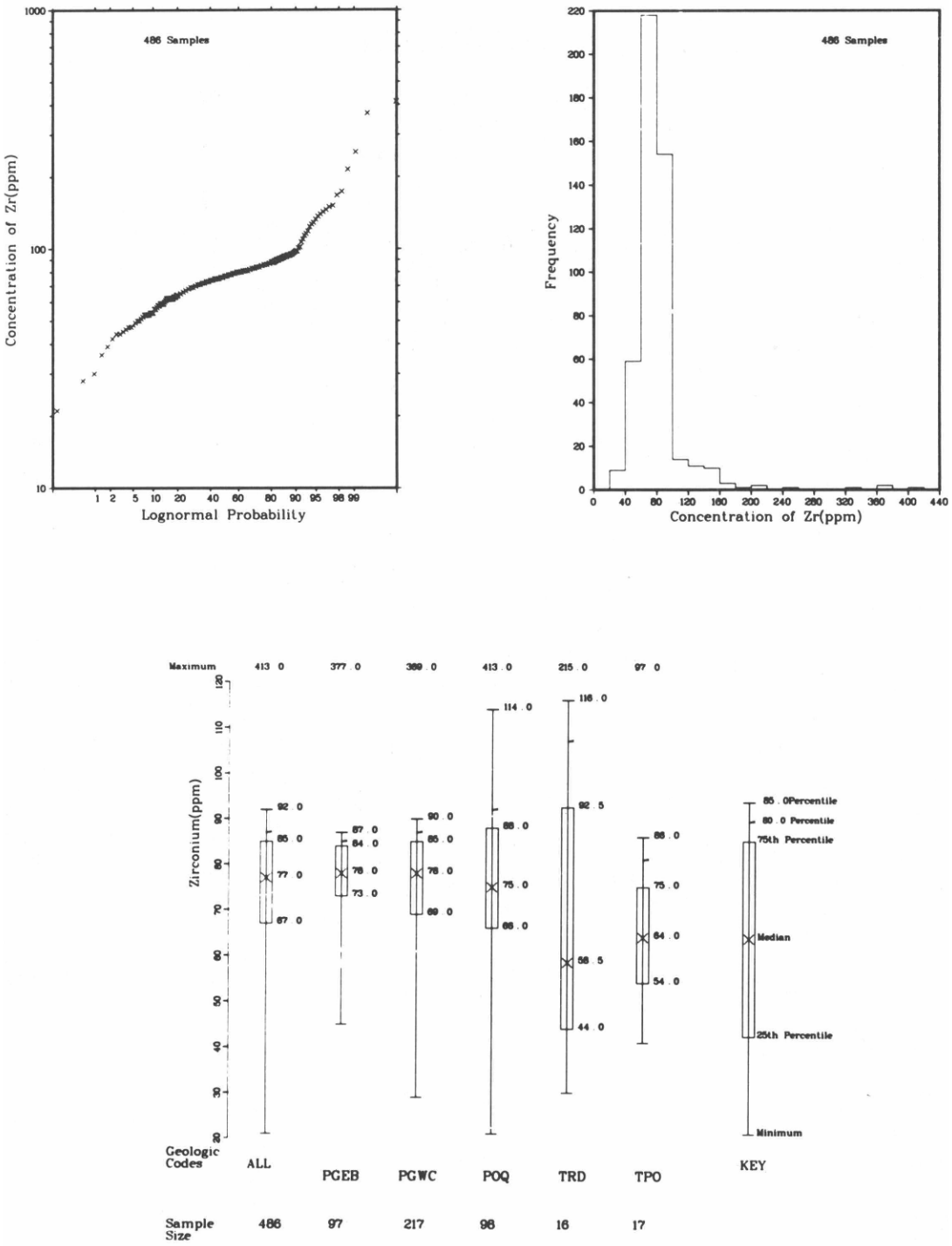


Figure B-12a

PROBABILITY, FREQUENCY, AND PERCENTILE PLOTS
FOR ZIRCONIUM IN STREAM SEDIMENT
OF THE PLAINVIEW QUADRANGLE

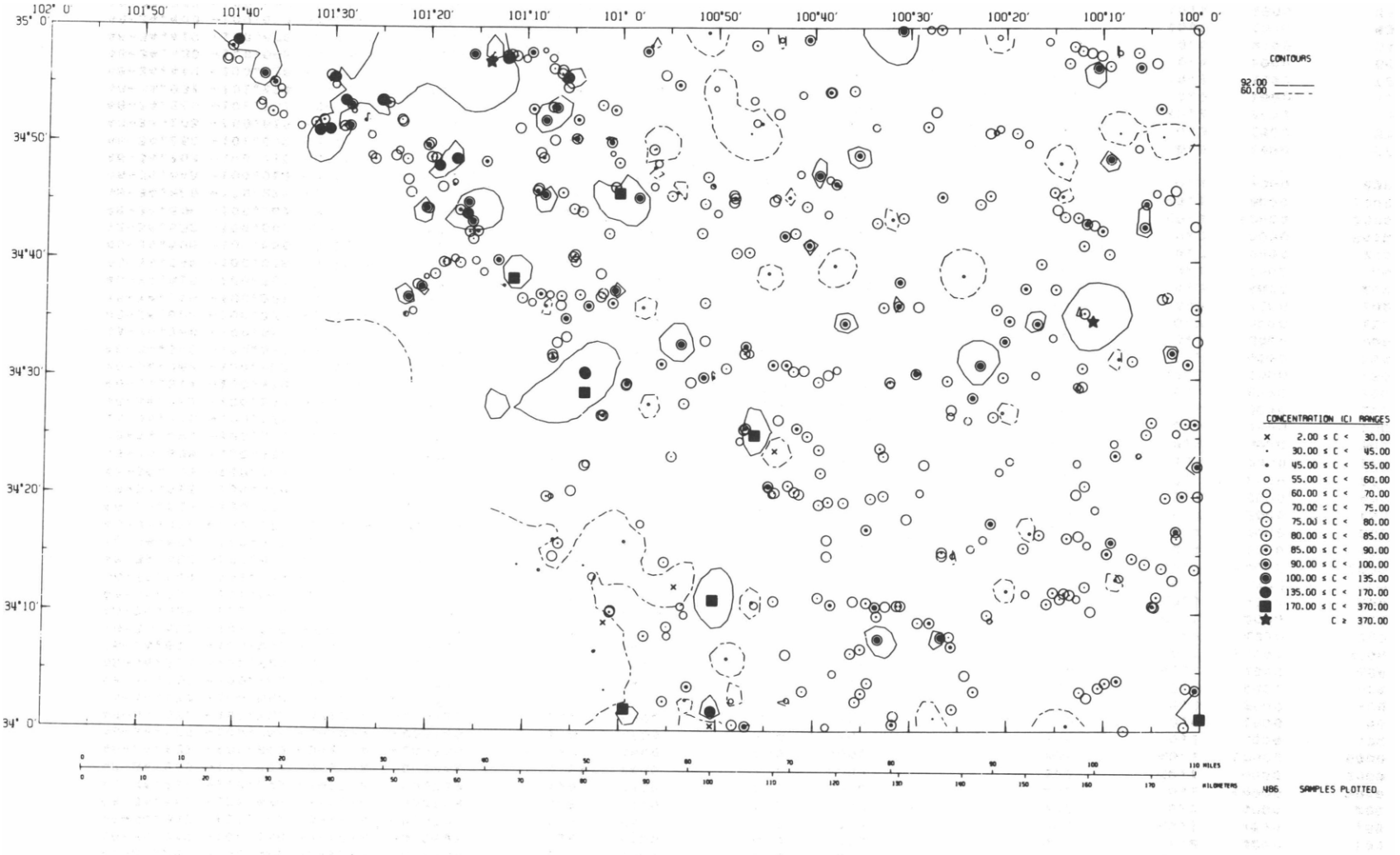


Figure B-12b

GEOCHEMICAL DISTRIBUTION OF ZIRCONIUM IN STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

Table B - 3

PARTIAL DATA LISTING FOR STREAM SEDIMENT OF THE PLAINVIEW QUADRANGLE

PARTIAL DATA LISTING PAGE 01 ST LAT	LONG	L TY REP OR NO.	U (PPM)	TH (PPM)	AS (PPM)	BA (PPM)	CA	MN (PPM)	SE (PPM)	TI (PPM)	ZR (PPM)
48-30.849	- 98.346	-3-12-A -000078	0.4	<400	1.3	50		50	1.0	<200	<40
48-34.006	-100.645	-3-12-A -003690	1.3	6	4.2	340	3.2	530	0.4	1500	62
48-34.009	-100.652	-3-15-A -003691	1.4	<400	4.7	200		200	0.2	4000	200
48-34.211	-100.072	-3-12-A -005681	2.3	<400	4.9	400		150	0.4	2000	100
48-34.121	-100.429	-3-15-A -005684	1.4	4	4.3	290	0.68	300	0.4	2300	88
48-34.134	-100.447	-3-15-A -005686	1.8	3	2.7	310	2.3	400	0.2	2300	100
48-34.267	-100.414	-3-15-A -005688	1.1	<400	2.0	500		300	<0.1	4000	200
48-34.319	-100.288	-3-12-A -005695	2.2	<400	4.9	300		150	1.2	3000	100
48-34.837	-101.413	-3-12-A -005721	1.2	<400	1.7	800		200	<0.1	1500	150
48-34.541	-101.430	-3-15-A -005728	3.2	<400	5.3	800		250	0.5	4000	200
48-34.214	-100.890	-3-15-A -005739	1.6	<400	2.3	1000		400	0.2	10000	2000
48-34.286	-100.991	-3-12-A -005742	0.94	<400	1.8	4000		600	<0.1	6000	2000
48-34.188	-100.840	-3-12-A -005745	3.3	<400	2.9	3000		800	<0.1	10000	6000
48-34.109	-100.761	-3-12-A -005746	1.0	<400	1.4	600		300	<0.1	4000	400
48-34.051	-100.722	-3-12-A -005751	2.1	<400	5.2	150		50	0.6	1000	50
48-34.177	-100.562	-3-12-A -005753	1.4	<400	3.7	200		150	0.2	2000	100
48-34.309	-100.782	-3-12-A -005758	1.0	<400	2.7	800		200	0.2	4000	400
48-34.513	-100.926	-3-12-A -005762	1.1	<400	1.9	4000		400	<0.1	5000	600
48-34.611	-100.996	-3-15-A -005764	2.4	<400	2.6	4000		600	0.2	10000	3000
48-34.593	-101.089	-3-15-A -005766	1.2	<400	2.6	2000		600	0.2	6000	300
48-34.828	-101.024	-3-15-A -005772	0.94	<400	2.0	600		150	<0.1	2000	150
48-34.839	-101.041	-3-15-A -005773	1.5	<400	2.7	600		200	<0.1	4000	200
48-34.949	-101.233	-3-12-A -005778	0.97	<400	1.6	800		200	0.3	3000	300
48-34.682	-100.880	-3-15-A -005781	1.8	<400	2.7	600		200	<0.1	10000	2000
48-34.651	-100.951	-3-15-A -005784	1.7	<400	2.1	800		100	0.2	6000	400
48-34.961	-100.678	-3-12-A -005792	1.6	<400	2.0	600		300	0.2	6000	800
48-34.515	-100.400	-3-15-A -005794	1.8	<400	4.7	200		150	0.7	2000	130
48-34.515	-100.400	-3-15-B -005795	1.0	<400	1.6	400		200	<0.1	6000	400
48-34.403	-100.005	-3-12-A -005797	1.9	<400	4.4	200		150	0.4	2000	130
48-34.528	-100.433	-3-12-A -005802	2.3	<400	4.7	400		100	1.4	3000	150
48-34.490	-100.350	-3-15-A -005803	1.4	<400	3.2	600		150	0.6	6000	300
48-34.276	-100.175	-3-12-A -005807	1.6	<400	3.2	400		130	0.4	2000	130
48-34.333	-100.543	-3-15-A -005808	1.2	<400	3.0	600		200	0.1	6000	200
48-34.314	-100.440	-3-12-A -005812	1.2	<400	2.0	600		200	0.2	6000	200
48-34.367	-100.683	-3-15-A -005815	1.8	<400	3.9	400		100	<0.1	4000	150
48-34.340	-100.688	-3-12-A -005818	1.3	<400	2.8	400		200	0.2	4000	150
48-34.380	-100.664	-3-15-A -005819	1.6	<400	2.9	400		200	0.3	5000	200
48-34.602	-100.377	-3-12-A -005827	1.5	<400	5.9	600		200	0.7	5000	150
48-34.615	-100.281	-3-12-A -005830	1.4	<400	2.9	150		130	0.2	1500	100
48-34.618	-100.251	-3-12-A -005831	1.7	<400	3.3	400		150	0.2	4000	200
48-34.694	-100.028	-3-12-A -005835	1.1	12	1.6	390	0.55	380	0.4	1600	64
48-34.608	-100.666	-3-15-A -005839	1.6	<400	3.2	800		200	0.7	4000	200
48-34.632	-100.600	-3-15-A -005841	1.6	<400	2.5	600		500	0.2	8000	3000
48-34.604	-100.507	-3-15-A -005843	1.3	<400	1.7	600		600	<0.1	10000	3000
48-34.820	-100.278	-3-12-A -005848	1.4	<400	1.7	400		600	<0.1	8000	1000
48-34.848	-100.063	-3-12-A -005850	1.6	<400	3.7	600		200	0.4	4000	200
48-34.703	-100.718	-3-15-B -007877									
48-34.282	-101.002	-3-12-B -007878	2.0	8	4.0	530	5.3	490	0.6	1600	57
48-34.103	-100.815	-3-15-B -007880	<0.25	5	3.5	400	0.9	240	0.3	1500	57
48-34.865	-101.381	-3-15-B -007884	1.7	4	2.0	350	3.0	380	<0.1	1400	55
48-34.931	-101.624	-3-15-B -007887	2.6	8	2.5	890	3.6	660	0.3	1600	80
48-34.442	-100.728	-3-15-A -007889	0.99	5	3.1	280	1.3	260	<0.1	1800	72
48-34.430	-100.696	-3-15-A -007890	1.0	8	3.0	440	1.6	350	0.4	1900	85
48-34.419	-100.678	-3-15-A -007891	1.4	5	3.6	300	1.3	340	0.5	2100	84
48-34.400	-100.658	-3-15-A -007892	1.3	10	3.4	410	1.6	410	<0.1	1800	83
48-34.367	-100.655	-3-15-A -007893	0.95	10	3.1	380	1.2	400	<0.1	1900	84
48-34.326	-100.642	-3-15-A -007894	0.62	9	3.3	400	1.0	340	<0.1	1700	83

Table B - 3 Continued

PARTIAL DATA LISTING PAGE 02

ST LAT	LONG	L TY REP OR NO.	U (PPM)	TH (PPM)	AS (PPM)	BA (PPM)	CA	MN (PPM)	SE (PPM)	TI (PPM)	ZR (PPM)
48-34.322	-100.658	-3-15-A -007895	0.83	11	3.4	400	1.2	330	<0.1	1800	79
48-34.349	-100.711	-3-15-A -007896	1.2	7	3.0	460	2.8	370	<0.1	1700	83
48-34.113	-101.044	-3-12-A -007897	1.9	6	2.7	1000	3.8	640	0.5	1600	47
48-34.114	-101.042	-3-12-A -007899	0.95	5	2.0	760	2.0	1400	0.8	1400	42
48-34.331	-100.568	-3-15-A -007906	1.5	4	2.4	390	3.0	390	0.1	2000	79
48-34.339	-100.483	-3-15-A -007911	1.3	3	2.7	310	1.8	250	0.9	1400	67
48-34.335	-100.546	-3-15-A -007913	1.2	7	2.2	390	1.4	370	0.4	1800	76
48-34.457	-100.429	-3-12-A -007917	2.2	6	4.6	390	6.3	920	0.4	1700	73
48-34.379	-100.476	-3-15-A -007924	1.0	5	2.0	360	0.84	280	0.1	1500	70
48-34.321	-100.443	-3-15-A -007925	1.3	7	3.0	490	2.0	460	0.9	1900	77
48-34.379	-101.060	-3-12-A -009403	1.1	14	2.9	860	4.8	950	<0.1	1900	67
48-34.377	-101.063	-3-15-A -009404	1.1	11	2.7	600	3.8	500	<0.1	2000	72
48-34.341	-101.086	-3-15-A -009405	1.4	11	2.4	740	7.4	510	<0.1	2000	72
48-34.333	-101.120	-3-12-A -009407	1.3	10	1.7	3200	2.9	390	<0.1	2100	58
48-34.333	-101.128	-3-12-A -009408	1.3	12	1.5	2000	2.1	420	<0.1	2400	84
48-34.367	-100.990	-3-15-A -009412	1.3	13	3.2	800	5.5	560	<0.1	2300	77
48-34.539	-101.427	-3-15-A -009414	2.3	7	1.7	700	3.5	270	0.6	1300	46
48-34.489	-100.958	-3-12-A -009425	3.3	20	2.0	1800	3.3	1400	<0.1	9900	360
48-34.464	-100.952	-3-12-A -009429	1.1	7	1.4	960	10.	490	<0.1	1100	53
48-34.608	-101.155	-3-15-A -009444	1.1	7	2.8	620	3.8	570	0.6	1800	69
48-34.603	-101.131	-3-15-A -009445	0.69	4	1.3	470	3.5	550	0.6	1200	48
48-34.502	-100.840	-3-15-A -009452	0.88	7	1.7	450	2.2	360	0.3	1400	53
48-34.502	-100.857	-3-15-A -009454	1.5	8	2.6	440	3.5	490	0.4	2100	95
48-34.465	-100.891	-3-15-A -009455	1.4	8	2.6	680	4.1	520	0.3	1900	79
48-34.493	-100.876	-3-15-A -009456	1.6	11	60.	830	7.8	610	<0.1	2000	69
48-34.495	-100.879	-3-15-A -009457	0.89	7	6.7	410	2.6	400	9.6	1500	70
48-34.536	-100.777	-3-12-A -009461	1.1	5	2.4	360	1.7	290	0.5	1600	67
48-34.536	-100.786	-3-12-A -009462	1.1	9	2.7	500	2.1	510	0.6	1900	82
48-34.515	-100.818	-3-15-A -009465	1.0	6	2.6	430	1.9	430	0.3	1800	78
48-34.412	-100.794	-3-15-A -009467	1.2	4	1.4	380	1.8	290	0.3	1500	65
48-34.345	-100.745	-3-15-A -009470	0.75	6	1.9	410	2.1	330	0.6	1300	62
48-34.348	-100.745	-3-12-A -009471	1.3	7	2.2	490	1.9	300	0.5	1800	94
48-34.337	-100.738	-3-15-A -009473	1.1	6	2.1	450	2.2	370	0.6	1400	66
48-34.339	-100.734	-3-12-A -009474	0.97	8	2.3	470	1.7	350	0.3	1800	75
48-34.513	-100.627	-3-15-A -009476	0.83	6	2.0	390	0.94	300	0.3	1600	62
48-34.506	-100.642	-3-15-A -009477	0.96	10	2.0	470	1.8	460	0.5	1700	74
48-34.398	-100.734	-3-15-A -009480	0.88	7	2.2	260	2.1	560	0.9	500	29
48-34.325	-100.615	-3-15-A -009482	1.2	5	2.9	420	2.5	380	0.6	1900	77
48-34.340	-100.700	-3-12-A -009484	0.93	6	1.9	340	1.0	320	0.6	1600	82
48-34.337	-100.692	-3-12-A -009486	0.87	8	2.3	440	1.2	360	0.4	1700	77
48-34.982	-100.185	-3-12-A -010409	2.3	14	2.6	560	0.35	790	0.8	2800	90
48-34.965	-100.186	-3-15-A -010909	1.5	10	3.2	630	3.4	490	0.5	2100	71
48-34.968	-100.202	-3-15-A -010910	1.9	8	2.9	540	5.5	440	0.6	2000	75
48-34.998	-100.466	-3-15-A -010911	1.2	9	1.7	530	1.1	320	0.4	1700	68
48-34.996	-100.514	-3-15-A -010912	2.2	14	3.2	580	5.0	1100	0.2	2900	130
48-34.946	-100.154	-3-15-A -010913	1.3	13	2.6	720	2.8	460	0.2	2100	77
48-34.943	-100.175	-3-15-A -010914	1.3	18	1.8	440	0.93	720	0.4	3800	130
48-34.764	-100.074	-3-15-A -010924	0.74	10	2.2	460	0.5	370	0.6	1600	66
48-34.755	-100.052	-3-15-A -010925	0.83	9	2.6	530	2.8	360	0.8	1700	74
48-34.768	-100.041	-3-15-A -010926	1.1	12	2.8	640	1.7	480	0.4	2000	74
48-34.749	-100.379	-3-15-A -010932	1.0	12	2.5	490	1.3	400	0.4	2000	75
48-34.760	-100.237	-3-15-A -010933	0.8	7	2.4	400	0.93	300	0.4	1400	50
48-34.721	-100.195	-3-15-A -010937	1.4	20	4.8	770	2.4	750	0.7	2700	98
48-34.730	-100.210	-3-15-A -010938	1.1	11	3.0	480	0.64	430	0.4	1900	83
48-34.741	-100.246	-3-15-A -010939	1.0	5	2.4	300	0.78	250	0.3	2000	71
48-34.965	-100.105	-3-12-A -010941	1.6	8	2.7	430	7.4	320	1.6	1800	78
48-34.885	-100.066	-3-15-A -010942	1.8	11	3.1	570	1.7	660	0.7	2300	87

Table B - 3 Continued

PARTIAL DATA LISTING PAGE 03

ST LAT LONG L TY REP OR NO.	U (PPM)	TH (PPM)	AS (PPM)	BA (PPM)	CA	MN (PPM)	SE (PPM)	TI (PPM)	ZR (PPM)
48-34.845 -100.062 -3-12-A -010943	1.1	8	2.1	350	1.4	260	0.4	1100	44
48-34.965 -100.137 -3-12-A -010955	1.7	9	2.2	340	12.	260	1.0	1200	56
48-34.828 -100.105 -3-12-A -010957	0.82	11	1.2	460	0.99	280	0.6	1700	69
48-34.711 -100.168 -3-15-A -010958	1.5	11	2.4	540	0.64	640	0.2	2100	86
48-34.678 -100.156 -3-15-A -010959	0.6	2	2.1	360	1.1	260	0.6	1900	76
48-34.701 -100.021 -3-15-A -010960	1.0	12	2.5	490	0.39	380	0.4	2000	84
48-34.717 -100.007 -3-15-A -010961	1.2	13	3.3	660	1.3	540	0.6	2200	74
48-34.731 -100.233 -3-15-A -010962	1.9	9	3.6	520	6.5	500	0.6	2000	75
48-34.944 -100.101 -3-15-A -010963	1.5	14	1.5	540	0.51	370	0.4	2200	93
48-34.931 -100.053 -3-15-A -010965									
48-34.950 -100.073 -3-12-A -010966	2.0	7	3.3	460	7.2	450	0.4	1700	71
48-34.998 -100.001 -3-12-A -010972	1.8	6	2.9	430	6.5	450	0.8	1900	75
48-34.402 -100.552 -3-15-A -010974	1.3	8	2.7	370	1.3	350	0.5	1900	80
48-34.391 -100.546 -3-15-A -010976	1.4	6	2.4	420	1.4	380	0.5	2000	78
48-34.749 -100.092 -3-15-A -010980	1.6	10	3.7	480	0.84	370	0.3	2400	96
48-34.821 -101.142 -3-15-A -011001	1.9	2	3.7	290	1.6	400	0.2	1800	74
48-34.034 -100.995 -3-15-A -011004	0.49	2	1.7	320	2.3	210	<0.1	1000	30
48-34.031 -100.992 -3-12-A -011005	3.4	6	2.9	350	1.4	690	0.3	5500	220
48-34.042 -100.925 -3-15-A -011008	1.8	2	4.7	240	1.2	320	<0.1	1900	80
48-34.063 -100.883 -3-15-A -011011	1.9	3	4.9	350	1.4	410	0.2	2300	88
48-34.028 -100.842 -3-15-A -011012	1.4	<400	3.6	400		400	0.2	3000	150
48-34.103 -100.815 -3-15-A -011014	1.4	2	3.0	310	0.7	260	0.2	1500	54
48-34.240 -100.924 -3-12-A -011015	1.6	5	7.5	340	2.6	450	0.3	2200	76
48-34.165 -100.889 -3-15-A -011016	0.75	6	4.8	390	2.7	320	0.3	1800	67
48-34.177 -100.895 -3-15-A -011017	1.5	3	2.3	330	1.5	260	0.2	1900	64
48-34.043 -100.806 -3-15-A -011018	1.7	10	3.5	300	0.49	330	<0.1	1600	55
48-34.294 -100.965 -3-15-A -011023	1.4	6	2.1	420	2.2	260	<0.1	1500	64
48-34.269 -100.993 -3-15-A -011025	1.2	8	2.1	320	1.6	230	<0.1	1200	46
48-34.282 -101.002 -3-12-A -011029	9.3	9	3.2	490	3.3	390	0.2	1500	57
48-34.009 -100.805 -3-15-A -011031	2.2	4	4.2	250	0.21	460	0.5	3100	78
48-34.007 -100.783 -3-12-A -011032	1.9	13	4.4	580	3.7	1300	0.6	2400	94
48-34.135 -100.918 -3-15-A -011037	0.94	8	3.1	500	2.4	410	0.3	1900	69
48-34.148 -100.919 -3-15-A -011038	1.9	7	3.7	710	2.9	530	0.4	1800	76
48-34.109 -100.714 -3-15-A -011044	2.4	9	2.9	440	2.8	350	0.9	1800	74
48- 0.000 - 0.000 -3-15-A -011046									
48-34.169 -101.017 -3-15-A -011048	1.9	7	2.7	740	2.7	520	0.6	2100	80
48- 0.000 - 0.000 -3-15-A -011049									
48- 0.000 - 0.000 -3-15-A -011050									
48-34.135 -100.958 -3-15-A -011052	2.1	13	4.2	790	4.8	890	0.4	2100	83
48-34.008 -100.231 -3-15-A -011057	0.48	5	1.6	300	0.4	210	0.5	1300	48
48- 0.000 - 0.000 -3-15-A -011059									
48-34.056 -100.208 -3-15-A -011061	1.1	11	2.8	540	0.61	390	0.4	2100	78
48-34.062 -100.176 -3-15-A -011062	1.3	13	3.3	540	0.74	540	0.5	2300	83
48-34.069 -100.164 -3-15-A -011063	1.2	12	3.1	520	0.94	470	0.4	2200	80
48-34.282 -100.294 -3-15-A -011064	1.3	9	2.9	480	4.5	410	1.3	1200	45
48-34.261 -100.305 -3-12-A -011065	2.0	14	5.5	670	2.6	660	0.6	2700	83
48-34.196 -100.301 -3-15-A -011067	0.91	9	2.5	310	0.6	380	0.5	2300	69
48-34.190 -100.659 -3-15-A -011068	1.4	9	3.1	410	2.1	390	0.6	1900	78
48-34.180 -100.637 -3-15-A -011070	0.91	3	2.3	420	0.72	340	0.4	2000	86
48-34.044 -100.886 -3-15-A -011071	1.2	9	2.3	840	2.4	490	0.4	1400	51
48-34.205 -100.906 -3-15-A -011074	0.58	3	1.5	310	0.68	150	0.1	850	25
48-34.131 -100.555 -3-15-A -011077	1.4	15	2.4	360	0.78	610	0.8	3300	120
48-34.069 -100.573 -3-15-A -011080	1.2	11	2.1	390	0.83	360	0.3	1800	79
48-34.094 -100.578 -3-15-A -011081	1.6	8	2.0	470	2.1	460	0.1	2300	100
48-34.111 -100.602 -3-15-A -011082	1.4	9	2.6	420	3.5	380	0.1	1900	79
48-34.186 -100.840 -3-12-A -011084	2.6	26	2.6	510	1.3	770	0.2	6900	250
48-34.302 -100.506 -3-15-A -011094	1.1	9	8.2	480	3.9	340	4.7	1600	71

Table B - 3 Continued

PARTIAL DATA LISTING PAGE 04

ST LAT LONG L TY REP OR NO.	U (PPM)	TH (PPM)	AS (PPM)	BA (PPM)	CA	MN (PPM)	SE (PPM)	TI (PPM)	ZR (PPM)
48-34.272 -101.116 -3-15-A -011141	1.7	10	2.2	810	4.3	350	<0.1	1700	50
48-34.235 -101.063 -3-15-A -011143	0.97	7	7.1	570	2.3	240	4.7	1100	33
48-34.236 -101.178 -3-15-A -011150	1.0	4	2.9	510	1.7	160	0.5	1100	37
48-34.148 -101.020 -3-15-A -011161	1.0	10	2.4	650	1.9	550	0.6	2300	91
48-34.154 -101.028 -3-15-A -011162	0.82	8	2.5	610	3.4	260	0.3	850	28
48-34.171 -101.016 -3-15-A -011163	1.3	9	2.4	700	3.1	480	0.2	1900	74
48-34.185 -100.735 -3-15-A -011165	1.5	7	2.6	460	3.1	340	0.6	1600	75
48-34.287 -100.575 -3-15-A -011168	1.1	6	1.8	330	1.2	380	0.4	2000	85
48-34.117 -100.585 -3-15-A -011170	1.8	8	3.1	440	1.6	430	0.4	2100	81
48-34.082 -100.633 -3-15-A -011173	1.2	5	2.9	420	3.0	390	0.5	1700	68
48-34.185 -100.598 -3-15-A -011175	1.6	9	3.7	410	2.0	420	0.5	1900	72
48-34.164 -100.557 -3-15-A -011177	0.98	13	2.6	660	1.2	600	0.5	1900	80
48-34.177 -100.560 -3-15-A -011178	1.5	12	3.7	460	1.8	560	0.3	2200	90
48-34.183 -100.575 -3-15-A -011180	1.6	11	2.8	450	2.5	470	0.3	2000	84
48-34.057 -100.685 -3-15-A -011185	1.5	11	2.8	440	3.7	490	0.3	1800	75
48-34.044 -100.711 -3-12-A -011187	2.6	8	4.8	370	8.8	1300	1.2	1400	59
48-34.179 -100.768 -3-15-A -011189	1.3	8	2.1	420	3.3	330	1.6	1400	60
48-34.183 -100.772 -3-15-A -011190	1.3	7	2.5	430	6.2	420	0.6	1100	52
48-34.272 -100.644 -3-15-A -011194	1.2	9	2.8	570	1.4	440	0.5	1800	72
48-34.249 -100.644 -3-15-A -011196	1.6	9	2.2	450	1.6	320	0.4	1900	71
48-34.054 -100.584 -3-15-A -011204	1.4	7	2.8	400	1.0	400	0.5	1900	82
48-34.042 -100.594 -3-15-A -011205	1.6	6	2.8	380	1.5	360	0.2	1900	77
48-34.022 -100.528 -3-15-A -011212	1.3	6	2.8	400	1.2	370	0.5	1900	74
48-34.010 -100.530 -3-15-A -011213	1.0	8	2.9	400	1.2	390	1.3	2000	86
48-34.032 -100.427 -3-15-A -011216	0.96	8	1.4	350	0.32	320	0.4	2000	83
48-34.080 -100.405 -3-12-A -011217	1.5	7	2.5	390	2.4	930	0.6	1600	73
48-34.019 -100.459 -3-15-A -011221	0.83	5	1.5	510	0.91	330	0.3	1300	44
48-34.057 -100.390 -3-15-A -011226	0.81	3	1.5	380	0.47	340	0.4	1900	84
48-34.182 -100.265 -3-15-A -011230	1.5	12	4.0	710	2.2	470	<0.1	2500	80
48-34.171 -100.189 -3-15-A -011231	1.4	11	4.6	770	2.4	480	0.3	2400	73
48-34.218 -100.139 -3-15-A -011232	1.2	6	3.1	540	3.1	680	0.4	2200	65
48-34.216 -100.146 -3-15-A -011235	1.4	8	4.6	540	5.0	450	0.3	1500	50
48-34.189 -100.242 -3-12-A -011238	2.2	8	5.9	440	7.3	1000	0.8	2000	77
48-34.189 -100.213 -3-12-A -011239	1.7	10	4.5	530	5.9	670	0.5	1800	69
48-34.158 -100.362 -3-15-A -011243	0.61	5	1.8	410	0.75	300	0.2	1500	59
48-34.166 -100.367 -3-15-A -011246	0.95	12	2.8	610	1.7	470	0.3	2000	78
48-34.200 -100.334 -3-15-A -011249	0.68	7	2.0	440	1.3	300	0.3	1300	54
48-34.856 -101.178 -3-15-A -011253	2.8	4	1.4	490	1.6	280	<0.1	2000	71
48-34.811 -101.429 -3-15-A -011256	1.2	5	2.1	290	1.9	420	0.5	1900	82
48-34.831 -101.337 -3-12-A -011257	1.9	4	5.7	420	7.0	560	0.3	2200	92
48-34.834 -101.333 -3-12-A -011258	1.6	4	5.2	260	2.3	440	0.3	2400	73
48-34.813 -101.323 -3-12-A -011259	2.6	4	3.0	310	2.2	440	0.3	2000	76
48-34.802 -101.317 -3-12-A -011260	1.6	4	2.2	330	2.2	440	0.2	2500	140
48-34.979 -101.671 -3-12-A -011261	1.3	5	1.5	390	1.4	840	0.2	3600	170
48-34.970 -101.681 -3-15-A -011262	2.1	7	2.5	340	2.1	480	0.2	2100	89
48-34.951 -101.690 -3-12-A -011263	1.9	5	2.2	350	2.5	370	0.2	1800	71
48-34.953 -101.689 -3-12-A -011265	1.2	3	1.5	340	1.7	320	<0.1	1300	62
48-34.949 -101.671 -3-15-A -011271	1.6	9	2.3	1000	3.2	610	<0.1	1600	62
48-34.942 -101.668 -3-15-A -011272									
48-34.931 -101.624 -3-15-A -011273	3.2	14	3.5	2400	4.0	820	0.3	2500	130
48-34.910 -101.595 -3-15-A -011275	1.5	6	2.1	340	2.1	490	<0.1	1300	62
48-34.901 -101.594 -3-15-A -011276	2.0	8	2.1	1100	4.1	510	<0.1	1700	63
48-34.837 -101.396 -3-15-A -011280									
48-34.867 -101.383 -3-15-A -011282	2.1	10	2.2	710	3.7	570	<0.1	1900	76
48-34.864 -101.381 -3-15-A -011283	2.1	7	2.5	1100	3.8	550	0.2	1700	71
48-34.823 -101.387 -3-15-A -011285	2.0	9	3.3	710	4.2	680	0.2	1700	67
48-34.865 -101.133 -3-15-A -011289	1.8	8	2.0	850	3.5	330	0.5	1700	64

Table B - 3 Continued

PARTIAL DATA LISTING PAGE 05

ST LAT	LONG	L TY REP OR NO.	U (PPM)	TH (PPM)	AS (PPM)	BA (PPM)	CA	MN (PPM)	SE (PPM)	TI (PPM)	ZR (PPM)
48-34.764	-101.103	-3-15-A -011291	1.0	11	2.0	650	0.58	350	0.3	2200	84
48-34.836	-101.019	-3-12-A -011293	2.0	8	3.4	1400	4.2	580	<0.1	2700	98
48-34.889	-101.035	-3-12-A -011297	2.0	7	2.1	970	4.9	530	0.3	1700	75
48-34.808	-101.236	-3-15-A -011299	1.8	7	3.3	710	4.2	620	0.2	1700	85
48-34.767	-101.147	-3-12-A -011302	1.8	12	3.5	540	3.1	550	<0.1	2100	86
48-34.770	-101.145	-3-12-A -011303	1.9	11	3.9	620	4.7	700	<0.1	1900	71
48-34.761	-101.134	-3-12-A -011304	2.2	14	4.3	700	3.5	790	0.2	2600	120
48-34.814	-101.137	-3-12-A -011309	1.6	11	2.9	640	4.3	520	0.3	2200	88
48-34.839	-101.118	-3-12-A -011311	1.5	7	2.1	600	4.1	310	0.2	1800	70
48-34.883	-101.155	-3-15-A -011312	1.5	8	3.2	910	4.0	530	0.3	1900	85
48-34.886	-101.121	-3-12-A -011315	3.4	5	4.4	390	1.8	490	0.3	2100	87
48-34.885	-101.114	-3-12-A -011316	2.6	8	4.1	680	4.9	670	<0.1	2200	130
48-34.914	-101.095	-3-12-A -011317	1.7	5	3.2	720	3.9	530	0.5	1500	71
48-34.928	-101.095	-3-15-A -011318	2.6	9	4.5	2500	4.3	830	0.6	3600	150
48-34.934	-101.106	-3-15-A -011319	2.0	6	3.4	780	4.3	590	<0.1	1500	75
48-34.939	-101.105	-3-15-A -011320	1.9	9	3.0	650	5.3	560	<0.1	1700	70
48-34.814	-101.331	-3-15-A -011321	1.4	11	2.9	450	4.4	460	0.4	1700	80
48-34.649	-101.036	-3-15-A -011327	0.69	10	3.7	530	3.0	420	0.3	1700	71
48-34.621	-101.032	-3-15-A -011328	1.0	8	2.9	510	2.2	400	<0.1	1800	76
48-34.616	-101.036	-3-15-A -011329	1.4	3	3.8	840	2.5	500	0.3	1700	79
48-34.619	-101.072	-3-15-A -011330	1.5	12	4.5	490	3.6	560	0.4	2200	80
48-34.625	-101.011	-3-15-A -011332	1.7	7	2.9	570	2.1	400	0.4	1900	100
48-34.676	-101.081	-3-15-A -011334	2.4	8	4.2	520	3.1	590	0.4	2000	80
48-34.673	-101.084	-3-15-A -011335	2.3	10	4.5	500	3.4	540	0.7	1900	80
48-34.666	-101.080	-3-15-A -011336	1.4	12	3.2	580	4.1	430	0.5	1700	82
48-34.706	-101.022	-3-15-A -011338	1.6	10	3.3	470	3.2	450	<0.1	2000	76
48-34.741	-101.083	-3-12-A -011340	1.7	7	3.0	620	4.2	480	0.4	1800	79
48-34.737	-101.069	-3-15-A -011341	1.5	6	3.3	630	3.6	570	0.2	1800	76
48-34.813	-101.284	-3-12-A -011342	1.1	9	2.5	970	4.3	410	0.2	1300	62
48-34.812	-101.287	-3-12-A -011343	2.3	12	3.3	3600	3.3	800	<0.1	4200	170
48-34.779	-101.290	-3-15-A -011344	0.79	8	2.1	1100	2.3	330	<0.1	1200	57
48-34.772	-101.311	-3-12-A -011346	1.2	11	3.0	480	7.5	500	0.2	1400	73
48-34.781	-101.243	-3-12-A -011351	2.5	6	2.5	420	2.5	430	0.3	3000	210
48-34.750	-101.266	-3-12-A -011352	1.2	7	1.5	490	5.3	460	0.4	1700	100
48-34.751	-101.263	-3-15-A -011353	1.6	9	2.6	1900	5.2	580	0.2	2400	160
48-34.734	-101.268	-3-12-A -011354	1.5	7	3.0	990	5.2	590	0.2	2000	140
48-34.723	-101.259	-3-15-A -011356	1.9	9	3.3	660	3.7	550	0.8	2200	130
48-34.854	-101.415	-3-12-A -011359	3.0	11	3.0	2000	3.6	660	<0.1	3600	220
48-34.839	-101.404	-3-12-A -011360	3.5	15	2.6	3900	2.4	810	0.3	5000	320
48-34.833	-101.415	-3-12-A -011361	3.1	8	3.0	480	2.0	870	<0.1	5500	270
48-34.816	-101.435	-3-12-A -011362	1.8	3	2.7	750	3.6	560	0.3	1400	62
48-34.772	-101.011	-3-12-A -011363	0.64	7	2.0	580	1.4	250	0.2	2000	75
48-34.646	-101.036	-3-15-A -011364	1.3	10	3.7	540	3.7	540	0.5	1900	81
48-34.763	-101.004	-3-12-A -011366	3.4	35	3.7	4700	1.1	1700	0.5	11000	330
48-34.622	-101.022	-3-12-A -011368	1.3	6	3.2	530	3.8	500	0.5	1900	85
48-34.891	-101.406	-3-15-A -011379	1.8	8	3.0	560	3.0	470	0.5	1800	87
48-34.895	-101.416	-3-15-A -011380	2.4	10	2.6	1200	3.1	470	0.3	2600	150
48-34.894	-101.418	-3-15-A -011381	2.0	6	2.9	990	3.1	460	0.5	2400	140
48-34.879	-101.467	-3-15-A -011386	1.3	7	2.5	610	2.2	360	0.5	1400	59
48-34.888	-101.471	-3-15-A -011387	1.8	7	3.0	970	2.5	430	0.5	2200	110
48-34.894	-101.481	-3-15-A -011388	3.4	12	3.2	1900	1.7	620	0.5	3500	140
48-34.897	-101.480	-3-15-A -011389	2.9	8	3.8	400	2.9	420	<0.1	2100	74
48-34.845	-101.436	-3-12-A -011398	1.6	10	3.3	690	2.8	410	0.5	1600	67
48-34.779	-101.295	-3-15-A -011404	0.58	4	1.8	460	3.1	320	0.2	120	14
48-34.775	-101.307	-3-12-A -011405	2.4	5	2.8	1700	3.7	630	0.2	3400	150
48-34.927	-101.508	-3-12-A -011406	2.2	5	2.3	730	2.5	390	0.2	1400	53
48-34.930	-101.507	-3-12-A -011407	2.5	8	2.8	730	2.5	410	<0.1	2600	78

Table B - 3 Continued

PARTIAL DATA LISTING PAGE 06 ST LAT LONG L TY REP OR NO.	U (PPM)	TH (PPM)	AS (PPM)	BA (PPM)	CA	MN (PPM)	SE (PPM)	TI (PPM)	ZR (PPM)
48-34.927 -101.500 -3-12-A -011409	3.1	13	2.3	1700	1.8	700	<0.1	3900	150
48-34.916 -101.499 -3-15-A -011410	2.0	8	2.5	1000	2.7	460	<0.1	1500	62
48-34.949 -101.232 -3-12-A -011412	4.8	38	1.8	4800	1.9	1200	<0.1	8800	410
48-34.957 -101.229 -3-12-A -011413	1.1	3	1.7	830	2.9	320	<0.1	1200	41
48-34.961 -101.259 -3-15-A -011414	1.9	18	1.5	2300	2.3	510	<0.1	3600	110
48-34.919 -101.606 -3-15-A -011415	1.9	9	3.4	590	3.6	570	0.3	2400	93
48-34.967 -101.136 -3-12-A -011417	1.3	7	2.4	910	3.2	320	0.2	1800	59
48-34.964 -101.158 -3-12-A -011418	1.4	4	2.4	710	5.1	550	0.1	2000	92
48-34.955 -101.168 -3-15-A -011420	1.7	5	3.1	680	3.4	480	0.6	1600	69
48-34.959 -101.185 -3-15-A -011422	1.7	9	3.1	740	5.1	550	0.3	2000	80
48-34.961 -101.194 -3-12-A -011423	1.5	6	2.0	850	5.1	370	0.3	1700	80
48-34.959 -101.201 -3-15-A -011424	1.7	6	2.4	1100	3.6	460	0.3	2400	94
48-34.956 -101.198 -3-15-A -011425	3.5	6	2.5	1400	4.2	640	0.3	3700	150
48-34.955 -101.201 -3-15-A -011426	1.8	6	2.7	860	3.7	400	0.1	2200	91
48-34.744 -101.084 -3-15-A -011427	1.8	6	2.5	630	4.1	490	0.4	1800	81
48-34.642 -101.187 -3-15-A -011431	2.4	8	2.9	670	2.7	650	0.7	3900	170
48-34.668 -101.214 -3-15-A -011434	1.3	8	2.1	710	2.3	460	<0.1	2300	90
48-34.709 -101.250 -3-15-A -011436	1.7	8	3.0	590	3.0	510	<0.1	2200	89
48-34.619 -101.124 -3-15-A -011439	1.2	6	2.0	540	3.8	370	<0.1	1500	67
48-34.620 -101.140 -3-15-A -011440	1.4	7	2.1	560	2.9	450	<0.1	1900	85
48-34.617 -101.104 -3-15-A -011443	1.4	6	2.4	600	2.9	330	<0.1	1800	81
48-34.867 -101.133 -3-15-A -011444	1.9	8	2.3	1100	3.3	410	<0.1	2200	110
48-34.653 -100.957 -3-15-A -011446	1.5	5	2.7	970	3.7	520	<0.1	2100	98
48-34.870 -101.091 -3-15-A -011447	1.9	7	2.7	1500	2.5	490	<0.1	2700	120
48-34.607 -101.015 -3-12-A -011448	1.7	9	4.0	470	2.9	470	<0.1	2500	86
48-34.608 -100.997 -3-12-A -011450	2.5	38	3.2	4900	0.92	920	<0.1	7200	260
48-34.601 -100.962 -3-12-A -011451	0.84	10	2.5	450	1.6	300	<0.1	1500	54
48-34.480 -101.063 -3-15-A -011452	2.7	16	3.0	2500	1.8	690	<0.1	5300	200
48-34.509 -101.063 -3-15-A -011453	2.1	16	2.4	2000	2.0	670	<0.1	4400	160
48-34.507 -101.062 -3-15-A -011454	2.1	16	2.2	1300	1.8	490	<0.1	3100	140
48-34.448 -101.031 -3-12-A -011455	1.8	6	3.8	700	3.3	600	<0.1	2200	87
48-34.448 -101.034 -3-12-A -011456	1.5	8	2.8	730	3.7	480	<0.1	2000	75
48-34.451 -101.033 -3-12-A -011457	1.4	3	2.8	360	2.2	400	<0.1	1500	57
48-34.493 -100.990 -3-12-A -011465	1.1	8	2.9	460	3.1	420	<0.1	1700	91
48-34.491 -100.991 -3-12-A -011466	1.2	7	2.9	820	3.0	520	<0.1	1900	82
48-34.742 -101.339 -3-15-A -011479	1.8	7	3.3	1600	3.9	610	<0.1	2600	120
48-34.741 -101.335 -3-15-A -011480	1.4	10	3.3	650	2.9	500	<0.1	1900	79
48-34.739 -101.281 -3-15-A -011481	1.6	8	2.8	1100	2.5	580	<0.1	1900	89
48-34.708 -101.264 -3-15-A -011483	1.7	6	3.8	820	2.9	590	<0.1	2000	84
48-34.698 -101.258 -3-15-A -011484	1.6	7	2.8	630	3.7	470	<0.1	1600	78
48-34.667 -101.253 -3-15-A -011486	1.2	9	2.1	470	3.7	370	<0.1	1500	67
48-34.664 -101.280 -3-15-A -011487	1.2	5	2.9	560	3.3	470	<0.1	1900	76
48-34.670 -101.289 -3-15-A -011488	1.3	6	2.7	610	3.7	510	<0.1	1700	68
48-34.665 -101.303 -3-15-A -011490	1.3	9	2.3	1000	2.6	410	<0.1	1600	68
48-34.665 -101.308 -3-15-A -011491	1.6	10	2.2	1100	2.6	410	<0.1	1900	82
48-34.651 -101.239 -3-15-A -011494	1.8	7	2.7	1200	3.7	470	<0.1	1900	64
48-34.632 -101.204 -3-15-A -011496	1.3	6	1.9	680	3.3	390	<0.1	1300	53
48-34.614 -101.172 -3-15-A -011497	1.6	10	2.4	880	2.9	440	<0.1	1900	75
48-34.759 -100.445 -3-15-A -011500	2.4	5	2.3	280	0.88	270	0.2	1900	85
48-34.850 -100.362 -3-15-A -011505	1.2	9	1.6	350	1.3	300	0.2	1800	74
48-34.851 -100.352 -3-15-A -011506	0.47	<1	<0.1	92	0.42	270	0.4	380	59
48-34.856 -100.345 -3-15-A -011507	0.89	8	2.0	350	0.91	300	0.1	1400	65
48-34.850 -100.316 -3-15-A -011510	1.1	7	2.9	400	0.74	290	0.1	1500	75
48-34.835 -100.296 -3-15-A -011512	0.9	14	3.4	430	0.53	320	0.4	1400	65
48-34.761 -100.362 -3-15-A -011514	1.4	10	3.7	410	1.9	400	0.5	1800	82
48-34.859 -100.470 -3-15-A -011516	2.1	7	4.8	430	5.0	520	<0.1	1700	81
48-34.998 -100.447 -3-15-A -011521	1.4	11	3.2	500	0.58	410	0.1	2000	80

Table B - 3 Continued

PARTIAL DATA LISTING PAGE 07

ST LAT	LONG	L TY REP OR NO.	U (PPM)	TH (PPM)	AS (PPM)	BA (PPM)	CA	MN (PPM)	SE (PPM)	TI (PPM)	ZR (PPM)
48-34.987	-100.346	-3-12-A -011523	0.65	5	0.7	320	0.48	410	0.1	1900	58
48-34.950	-100.225	-3-15-A -011526	1.4	10	2.5	380	1.9	320	0.3	1800	76
48-34.974	-100.216	-3-12-A -011527	2.3	7	3.7	760	6.4	800	0.5	1800	77
48-34.961	-100.169	-3-12-A -011528	1.6	6	3.7	440	7.9	560	1.2	1600	73
48-34.981	-100.260	-3-15-A -011530	1.9	3	0.3	48	0.33	370	0.1	560	69
48-34.850	-100.137	-3-12-A -011535	1.3	6	4.1	430	6.5	540	0.8	1100	44
48-34.807	-100.240	-3-15-A -011538	0.52	5	0.7	400	0.53	280	<0.1	1300	53
48-34.880	-100.456	-3-12-A -011540	1.0	7	1.7	460	1.4	420	<0.1	1900	72
48-34.599	-100.351	-3-15-A -011543	2.1	9	4.8	410	5.6	480	0.2	2200	80
48-34.673	-100.339	-3-15-A -011545	1.8	9	9.6	510	3.3	540	4.4	2300	89
48-34.671	-100.341	-3-15-A -011546	2.0	9	4.5	560	6.3	570	0.5	1900	74
48- 0.000	- 0.000	-3-15-A -011548	1.5	8	2.9	580	1.5	380	0.5	1800	66
48-34.719	-100.182	-3-15-A -011550	1.2	11	4.7	680	1.4	500	0.3	1900	72
48-34.716	-100.095	-3-15-A -011551	1.3	16	4.8	580	0.57	520	<0.1	2300	94
48-34.613	-100.153	-3-15-A -011552	1.9	16	5.9	670	1.5	640	0.4	2700	100
48-34.516	-100.399	-3-15-A -011554	1.4	9	8.6	550	1.9	430	4.4	2000	79
48-34.520	-100.379	-3-15-A -011555	1.2	9	0.9	220	0.46	410	<0.1	2900	120
48-34.384	-100.328	-3-12-A -011556	0.88	14	2.7	480	0.9	330	0.7	1800	69
48-34.369	-100.346	-3-15-A -011557	0.98	10	2.8	560	3.0	470	0.4	1600	65
48-34.337	-100.214	-3-15-A -011562	1.5	11	4.4	640	2.0	450	0.2	2000	73
48-34.529	-100.140	-3-15-A -011564	0.63	8	2.2	420	0.29	280	0.3	1400	53
48-34.526	-100.117	-3-15-A -011565	1.7	11	4.5	730	2.8	520	0.5	2000	75
48-34.422	-100.093	-3-15-A -011567	1.9	13	10.	750	1.8	510	4.5	2100	78
48-34.439	-100.084	-3-15-A -011568	1.6	11	4.5	700	1.1	530	0.4	2200	80
48-34.436	-100.009	-3-15-A -011570	1.3	15	4.5	690	1.1	620	<0.1	2300	87
48-34.437	-100.025	-3-15-A -011571	1.3	11	4.6	660	2.0	560	0.8	2300	80
48-34.423	-100.041	-3-15-A -011573	1.3	13	3.7	610	1.6	450	0.3	1700	62
48-34.766	-100.251	-3-15-A -011576	1.4	9	7.6	450	0.54	390	4.8	1900	81
48-34.219	-101.048	-3-15-A -011598	1.3	13	3.1	510	2.3	260	<0.1	1700	63
48-34.266	-101.107	-3-15-A -011609	1.9	14	3.0	540	3.4	380	<0.1	2500	84
48-34.248	-101.117	-3-15-A -011613	1.5	8	1.7	730	2.7	380	<0.1	1600	71
48-34.228	-101.140	-3-12-A -011614	1.3	5	4.5	550	1.8	390	<0.1	1800	47
48-34.381	-100.212	-3-15-A -011634	1.5	8	2.9	470	1.1	330	<0.1	1900	65
48-34.315	-100.181	-3-15-A -011639	1.6	10	4.0	570	5.2	380	<0.1	1900	69
48-34.349	-100.199	-3-15-A -011640	1.9	9	4.7	580	3.8	450	<0.1	2400	77
48-34.392	-100.146	-3-15-A -011641	1.3	11	4.3	570	1.1	420	<0.1	2500	86
48-34.392	-100.106	-3-15-A -011642	1.1	8	2.4	340	0.85	250	<0.1	1700	59
48-34.376	-100.005	-3-15-A -011643	2.0	18	5.3	710	2.4	520	<0.1	2900	96
48-34.334	-100.031	-3-15-A -011644	1.7	13	4.6	500	1.4	430	<0.1	2400	85
48-34.332	-100.060	-3-15-A -011645	1.6	15	4.2	760	1.7	520	<0.1	2400	81
48-34.409	-100.148	-3-12-A -011646	1.3	6	1.4	380	0.79	230	<0.1	1600	60
48-34.334	-100.004	-3-15-A -011648	1.5	14	8.3	560	1.4	390	4.8	2200	79
48-34.521	-100.021	-3-15-A -011649	1.3	13	2.4	650	0.55	310	<0.1	2400	88
48-34.553	-100.004	-3-15-A -011650	0.72	9	1.1	270	0.15	150	<0.1	1500	70
48-34.537	-100.048	-3-15-A -011651	0.87	12	1.2	450	0.41	360	<0.1	2000	95
48-34.581	-100.187	-3-15-A -011652	0.63	13	3.2	11	2.3	1200	<0.1	4500	380
48-34.594	-100.199	-3-15-A -011653	1.9	7	3.0	410	3.2	410	<0.1	2200	81
48-34.516	-100.203	-3-15-A -011655	1.6	10	3.0	620	2.6	430	<0.1	2100	80
48-34.490	-100.203	-3-15-A -011656	1.4	10	3.6	660	2.0	390	<0.1	2300	73
48-34.487	-100.208	-3-15-A -011658	1.3	5	2.5	590	1.5	460	<0.1	2000	68
48-34.490	-100.212	-3-15-A -011659	0.81	8	1.8	520	0.53	400	<0.1	1800	69
48-34.554	-100.337	-3-15-A -011660	1.5	6	3.8	370	4.7	360	<0.1	2100	91
48-34.583	-100.329	-3-15-A -011661	1.6	9	2.3	570	3.2	420	<0.1	2400	88
48-34.579	-100.281	-3-15-A -011662	1.8	8	3.9	690	2.5	490	<0.1	2200	98
48-34.629	-100.301	-3-12-A -011663	1.6	8	3.6	290	6.7	400	<0.1	1800	85
48-34.628	-100.249	-3-15-A -011664	1.6	7	3.8	450	8.3	380	<0.1	1900	81
48-34.664	-100.274	-3-15-A -011666	1.8	8	3.4	480	4.9	440	<0.1	2300	84

Table B - 3 Continued

PARTIAL DATA LISTING PAGE 08

ST LAT	LONG	L TY REP OR NO.	U (PPM)	TH (PPM)	AS (PPM)	BA (PPM)	CA	MN (PPM)	SE (PPM)	TI (PPM)	ZR (PPM)
48-34.690	-100.200	-3-15-A -011667	1.7	10	2.4	530	1.2	380	<0.1	2300	82
48-34.318	-100.288	-3-15-A -011668	1.8	8	3.1	540	2.2	370	<0.1	2000	67
48-34.506	-100.284	-3-15-A -011669	1.1	11	2.4	430	0.65	240	<0.1	1600	61
48-34.453	-100.341	-3-15-A -011674	0.94	4	1.9	370	0.44	210	<0.1	1300	51
48-34.447	-100.357	-3-15-A -011675	1.7	10	2.7	550	2.1	480	<0.1	2100	78
48-34.614	-100.065	-3-15-A -011684	2.0	10	2.7	350	1.6	370	0.6	2000	72
48-34.616	-100.056	-3-15-A -011685	1.8	12	2.6	370	2.0	310	<0.1	2100	81
48-34.503	-100.340	-3-15-A -011686	2.5	9	3.6	580	3.5	370	0.2	2200	84
48-34.599	-100.006	-3-15-A -011688	1.6	12	2.7	560	3.0	470	0.2	2300	84
48-34.474	-100.392	-3-15-A -011694	1.5	14	3.1	560	1.9	440	<0.1	2400	92
48-34.442	-100.400	-3-15-A -011695	0.86	8	2.0	380	0.96	290	<0.1	1500	61
48-34.647	-100.408	-3-15-A -011702	0.9	4	1.6	370	1.3	210	0.3	1100	46
48-34.559	-100.254	-3-15-A -011706	1.0	6	1.4	380	0.74	270	<0.1	1600	63
48-34.215	-100.048	-3-15-A -011708	1.8	9	4.1	530	4.3	390	0.2	2300	74
48-34.230	-100.010	-3-15-A -011710	1.8	8	3.3	610	3.5	280	<0.1	2200	75
48-34.178	-100.083	-3-15-A -011712	2.1	14	3.7	580	2.0	530	<0.1	2200	87
48-34.177	-100.080	-3-15-A -011713	2.1	9	3.6	580	5.0	460	0.3	2200	76
48-34.191	-100.076	-3-15-A -011714	2.1	11	3.6	570	3.6	420	<0.1	2300	81
48-34.006	-100.028	-3-15-A -011718	2.0	8	1.7	430	2.5	270	<0.1	2100	75
48-34.017	-100.001	-3-15-A -011719	2.3	28	2.7	1700	1.6	1400	<0.1	8800	220
48-34.058	-100.009	-3-15-A -011720	1.8	9	2.6	510	2.3	430	<0.1	2500	91
48-34.061	-100.025	-3-15-A -011722	1.9	10	3.7	630	3.0	380	<0.1	2300	79
48-34.072	-100.144	-3-15-A -011725	1.8	12	2.4	580	1.8	490	<0.1	2400	86
48-34.001	-100.132	-3-15-A -011727	1.7	10	2.3	480	3.5	370	<0.1	2200	77
48-34.280	-100.278	-3-15-A -011733	1.6	10	3.7	510	1.1	360	<0.1	2400	81
48-34.269	-100.154	-3-12-A -011734	1.5	7	2.7	610	3.3	400	<0.1	2200	93
48-34.603	-100.378	-3-12-A -011749	1.8	11	5.0	650	3.5	610	<0.1	2300	85
48-34.680	-100.779	-3-15-A -011750	1.1	10	3.5	630	3.2	490	<0.1	2500	82
48-34.729	-100.512	-3-15-A -011752	1.7	11	3.3	510	0.72	400	<0.1	2000	80
48-34.727	-100.531	-3-15-A -011753	2.0	9	5.5	290	13.	720	<0.1	1100	49
48-34.722	-100.558	-3-15-A -011755	1.9	2	0.3	57	0.64	420	<0.1	1900	76
48-34.691	-100.475	-3-15-A -011756	1.6	7	1.7	400	2.0	340	0.2	1500	72
48-34.664	-100.516	-3-15-A -011757	1.1	4	1.1	480	2.4	550	<0.1	2500	100
48-34.603	-100.486	-3-15-A -011759	0.9	1	<0.1	130	0.5	340	0.1	230	70
48-34.604	-100.520	-3-15-A -011760	0.8	4	0.5	350	0.91	320	<0.1	2100	95
48-34.632	-100.600	-3-12-A -011761	2.8	14	4.5	610	1.9	1000	<0.1	5400	180
48-34.707	-100.700	-3-15-A -011763	2.0	8	4.9	690	2.8	510	<0.1	2200	77
48-34.661	-100.631	-3-12-A -011765	0.42	2	<0.1	110	0.5	280	<0.1	170	47
48-34.734	-100.643	-3-15-A -011766	0.63	2	<0.1	350	0.24	290	<0.1	2300	66
48-34.604	-100.508	-3-15-A -011770	2.4	13	3.0	680	2.6	1000	<0.1	4600	150
48-34.650	-100.745	-3-15-A -011780	1.1	7	2.0	430	1.2	260	0.2	1500	54
48-34.605	-100.708	-3-12-A -011781	1.6	6	3.0	460	3.0	350	0.4	1900	73
48-34.765	-100.903	-3-15-A -011782	1.2	10	2.0	600	2.8	280	0.2	1300	52
48-34.918	-100.901	-3-15-A -011783	1.7	13	3.3	580	0.6	450	<0.1	2500	86
48-34.896	-100.772	-3-12-A -011784	0.88	6	1.1	370	1.1	330	0.1	1700	64
48-34.877	-100.729	-3-15-A -011785	1.0	5	0.1	85	0.54	380	<0.1	120	71
48-34.818	-100.589	-3-15-A -011786	2.4	4	3.3	480	3.5	410	0.2	2600	97
48-34.703	-100.718	-3-15-A -011787	1.7	16	4.9	550	0.81	450	1.5	2300	91
48-34.679	-100.801	-3-15-A -011790	1.8	1	<0.1	70	0.49	340	<0.1	88	78
48-34.800	-100.943	-3-15-A -011801	1.3	6	3.3	500	2.4	210	0.2	1500	53
48-34.826	-100.945	-3-15-A -011803	1.4	8	2.6	840	5.8	350	<0.1	1700	79
48-34.827	-100.942	-3-15-A -011804	0.81	6	2.3	430	5.7	190	<0.1	870	36
48-34.496	-100.659	-3-15-A -011809	1.6	11	5.0	420	2.2	550	3.0	1800	77
48-34.849	-100.777	-3-15-A -011815	0.93	7	4.2	360	0.56	230	<0.1	1400	43
48-34.863	-100.758	-3-15-A -011816	0.76	11	2.7	320	0.47	240	0.5	1700	45
48-34.757	-100.970	-3-15-A -011819	1.3	6	2.8	490	3.6	440	0.5	2300	110
48-34.756	-100.955	-3-12-A -011820	1.8	9	3.1	580	3.7	330	0.3	1600	70

Table B - 3 Continued

PARTIAL DATA LISTING PAGE 09

ST LAT LONG L TY REP OR NO.	U (PPM)	TH (PPM)	AS (PPM)	BA (PPM)	CA	MN (PPM)	SE (PPM)	TI (PPM)	ZR (PPM)
48-34.773 -100.944 -3-15-A -011822	1.9	9	3.5	800	4.5	440	0.4	1800	66
48-34.806 -100.937 -3-12-A -011825	1.3	5	3.5	550	3.6	300	0.5	1500	65
48-34.809 -100.939 -3-15-A -011826	1.3	3	3.0	440	1.9	230	0.5	870	30
48-34.932 -100.925 -3-12-A -011830	1.3	11	3.4	460	1.0	300	0.5	1900	70
48-34.974 -100.950 -3-15-A -011832	1.2	10	2.5	510	0.74	400	0.3	1500	54
48-34.966 -100.957 -3-15-A -011833	1.3	6	2.1	390	0.28	310	0.5	2500	93
48-34.882 -101.012 -3-15-A -011834	1.9	8	2.7	1400	2.2	390	<0.1	2400	74
48-34.882 -101.013 -3-15-A -011835	1.4	<1	2.1	390	1.5	230	<0.1	1200	48
48-34.428 -100.787 -3-15-A -011846	1.1	8	2.3	520	2.0	410	0.6	1900	77
48-34.430 -100.784 -3-15-A -011847	1.3	10	2.7	570	1.8	500	0.6	2000	89
48-34.420 -100.769 -3-15-A -011848	1.3	3	2.4	1	1.8	1200	0.6	4500	370
48-34.390 -100.912 -3-15-A -011849	1.5	12	3.3	530	1.5	470	0.6	2100	76
48-34.498 -100.436 -3-15-A -011853	0.99	11	2.5	580	1.8	430	0.3	2100	83
48-34.493 -100.534 -3-15-A -011856	0.94	9	1.8	540	2.1	360	0.6	1600	66
48-34.496 -100.535 -3-15-A -011858	0.95	9	1.8	460	1.1	350	0.5	1800	81
48-34.448 -100.430 -3-15-A -011860	1.1	7	3.1	450	1.4	330	0.4	1500	64
48-34.975 -100.768 -3-15-A -011861	1.1	13	3.3	540	0.64	400	0.6	2200	81
48-34.983 -100.677 -3-15-A -011862	1.4	10	1.7	470	0.49	310	0.7	2200	90
48-34.913 -100.838 -3-15-A -011868	1.2	6	4.1	390	0.61	260	<0.1	1700	56
48-34.993 -100.851 -3-15-A -011875	1.1	2	0.9	600	3.4	340	<0.1	1300	54
48-34.787 -100.851 -3-15-A -011881	1.9	9	2.9	1100	4.2	350	<0.1	2100	75
48-34.777 -100.629 -3-15-A -011883	1.6	9	2.4	660	2.1	380	<0.1	2700	94
48-34.783 -100.640 -3-15-A -011884	1.4	8	2.3	620	3.6	290	<0.1	1700	62
48-34.789 -100.658 -3-15-A -011885	3.9	9	3.1	320	0.35	680	<0.1	3400	130
48-34.761 -100.806 -3-15-A -011891	2.1	8	3.0	640	4.0	400	<0.1	2000	73
48-34.774 -100.843 -3-15-A -011892	1.4	9	1.9	2100	3.5	390	0.3	1800	59
48-34.858 -100.560 -3-12-A -011894	2.7	6	2.3	830	4.4	330	<0.1	1800	67
48-34.791 -100.691 -3-15-A -011895	1.8	9	2.9	680	9.9	470	<0.1	1800	63
48-34.758 -100.710 -3-15-A -011901	4.3	5	3.3	470	5.6	270	<0.1	1500	53
48-34.864 -100.767 -3-15-A -011903	1.4	10	2.6	520	0.8	260	<0.1	1700	62
48-34.841 -101.080 -3-12-A -011904	2.4	12	4.4	610	4.6	700	0.3	2300	94
48-34.868 -101.077 -3-15-A -011905	5.6	10	4.0	760	5.1	610	<0.1	2100	87
48-34.757 -100.732 -3-15-A -011907	1.2	8	2.3	840	2.6	280	<0.1	2100	62
48-34.753 -100.736 -3-15-A -011908	1.7	8	3.0	860	4.8	350	<0.1	2300	72
48-34.749 -100.856 -3-15-A -011910	2.0	10	3.1	440	4.3	380	<0.1	2100	77
48-34.908 -100.638 -3-15-A -011911	1.5	17	3.6	650	0.97	470	0.1	2300	80
48-34.908 -100.640 -3-15-A -011912	1.7	14	3.6	740	1.1	540	0.3	2400	86
48-34.904 -100.688 -3-15-A -011914	1.4	12	3.9	570	1.6	310	<0.1	1900	65
48-34.690 -100.676 -3-15-A -011916	1.6	10	4.1	570	1.1	500	<0.1	2700	98
48-34.751 -100.806 -3-15-A -011920	1.7	7	2.9	580	2.9	360	0.5	2000	72
48-34.757 -100.804 -3-15-A -011921	1.7	8	2.6	750	3.2	460	<0.1	2400	87
48-34.745 -100.680 -3-15-A -011923	2.1	9	4.6	650	0.83	470	<0.1	2500	79
48-34.983 -100.725 -3-12-A -011924	1.4	6	4.9	310	0.35	220	1.2	1500	58
48-34.707 -100.861 -3-15-A -011925	1.8	7	3.1	450	1.8	540	1.2	2100	78
48-34.617 -100.802 -3-15-A -011926	1.6	7	2.6	590	1.7	400	<0.1	1900	73
48-34.602 -100.546 -3-15-A -011927	2.2	8	4.1	590	3.3	430	0.2	2300	84
48-34.579 -100.613 -3-15-A -011928	1.2	3	2.4	380	1.1	270	0.7	2100	95
48-34.554 -100.855 -3-15-A -011932	1.1	6	2.6	420	2.0	360	0.3	1600	72
48-34.521 -100.930 -3-15-A -011934	1.3	6	3.0	520	2.5	420	<0.1	2100	87
48-34.608 -100.855 -3-15-A -011949	1.1	7	2.7	490	1.8	440	0.5	1900	77
48-34.760 -100.913 -3-15-A -011955	1.6	10	3.7	540	3.1	570	0.6	2100	77
48-34.638 -100.518 -3-15-A -011957	1.1	11	2.4	410	0.91	460	0.4	2200	92
48-34.508 -100.490 -3-15-A -011958	1.2	12	2.8	510	1.0	380	0.9	2100	93
48-34.512 -100.684 -3-15-A -011959	1.6	5	2.7	520	1.7	510	0.2	2200	73
48-34.511 -100.702 -3-15-A -011960	1.5	12	5.0	500	3.0	670	0.4	2200	79
48-34.520 -100.714 -3-15-A -011962	0.99	7	2.4	520	1.6	420	1.0	1800	88
48-34.520 -100.737 -3-15-A -011963	1.1	8	2.2	530	1.5	360	0.4	1800	88

Table B - 3 Continued

PARTIAL DATA LISTING PAGE 10

ST LAT	LONG	L TY REP OR NO.	U (PPM)	TH (PPM)	AS (PPM)	BA (PPM)	CA	MN (PPM)	SE (PPM)	TI (PPM)	ZR (PPM)
48-34.807	-101.005	-3-15-A -011985	1.7	6	3.2	420	4.6	410	0.3	1600	83
48-34.820	-101.017	-3-15-A -011986	1.2	4	3.3	1200	4.6	390	0.5	1300	59
48-34.546	-100.784	-3-15-A -011990	1.7	9	4.1	600	3.2	580	0.7	2500	94
48-34.910	-100.598	-3-15-A -011993	1.2	9	2.4	470	1.8	340	0.3	1900	75
48-34.856	-100.345	-3-15-B -011994	2.0	9	4.0	450	1.9	1300	0.7	1600	66
48-34.987	-100.346	-3-12-B -011997	1.2	<1	1.3	320	0.49	410	0.5	1700	55
48-34.155	-100.466	-3-15-A -012000	1.6	12	3.7	540	1.4	460	0.3	2200	87
48-34.135	-100.432	-3-15-A -012001	1.3	9	2.6	430	1.2	330	0.7	1700	79
48-34.155	-100.486	-3-15-A -012006	1.3	5	2.3	310	0.9	310	<0.1	1900	78
48-34.250	-100.445	-3-15-A -012007	0.62	9	2.9	380	1.3	340	<0.1	1600	70
48-34.250	-100.426	-3-15-A -012009	1.4	3	1.7	320	0.76	230	0.1	1200	56
48-34.255	-100.445	-3-15-A -012010	1.4	9	3.6	620	4.7	510	<0.1	2400	81
48-34.260	-100.395	-3-15-A -012012	0.64	9	1.4	370	1.0	310	0.5	1500	69
48-34.178	-100.542	-3-15-A -012015	0.96	7	2.2	380	1.3	460	0.7	1700	72
48-34.179	-100.522	-3-15-A -012016	1.1	7	2.4	390	0.75	330	0.8	1900	84
48-34.296	-100.361	-3-15-A -012021	0.99	9	1.9	520	3.6	430	0.1	2600	90
48-34.291	-100.421	-3-12-A -012022	1.8	7	4.9	490	5.5	910	0.8	2100	74
48-34.273	-100.374	-3-12-A -012023	1.2	6	2.2	450	1.4	330	0.4	1700	63
48-34.265	-100.195	-3-15-A -012026	1.4	7	2.6	490	2.7	400	0.6	1500	64
48-34.278	-100.210	-3-15-A -012027	1.6	6	3.2	470	3.9	430	0.3	1900	73
48-34.275	-100.230	-3-15-A -012028	1.6	9	3.9	500	2.9	400	0.3	2300	84
48-34.297	-100.232	-3-12-A -012029	1.9	9	4.6	430	5.6	410	0.9	2100	76
48-34.246	-100.118	-3-12-A -012035	2.5	11	4.6	660	5.1	610	1.1	2400	80
48-34.238	-100.096	-3-15-A -012036	2.4	10	4.8	610	4.5	420	0.7	2100	76
48-34.232	-100.067	-3-15-A -012037	2.8	8	4.9	620	5.0	440	0.7	2300	75
48-34.274	-100.041	-3-15-A -012038	1.9	8	3.6	480	2.9	390	0.3	2200	78
48-34.284	-100.042	-3-15-A -012040	1.6	12	3.5	500	2.0	400	0.5	2600	93
48-34.048	-100.196	-3-15-A -012048	1.1	10	2.6	420	0.8	340	<0.1	2000	74
48-34.179	-100.516	-3-15-A -012052	1.1	10	3.2	420	1.4	390	0.2	1900	84
48-34.110	-100.776	-3-15-A -012086	1.2	7	2.8	500	3.0	470	0.5	1900	90
48-34.064	-100.971	-3-12-A -012089	3.8	23	3.8	3200	2.5	1900	1.1	12000	290
48-34.007	-100.843	-3-15-A -012090	0.51	7	2.4	300	1.1	490	0.3	340	21
48-34.058	-101.026	-3-15-A -012091	0.97	6	1.7	630	1.7	250	0.2	1300	39
48-34.195	-100.225	-3-15-A -012105	1.5	10	2.8	550	2.3	400	0.6	2100	75
48-34.197	-100.235	-3-15-A -012106	1.7	8	3.6	460	3.1	400	0.5	2000	80
48-34.206	-100.199	-3-15-A -012107	2.1	8	3.1	520	4.4	410	0.4	2300	78
48-34.253	-100.161	-3-15-A -012111	2.0	10	3.3	630	5.2	460	0.4	2500	87
48-34.198	-100.254	-3-12-A -012112	1.3	4	1.9	370	5.3	260	0.3	1500	81
48-34.322	-100.523	-3-15-A -012134									
48-34.816	-101.393	-3-15-A -012198	1.1	7	2.7	800	3.0	610	0.3	1600	72
48-34.782	-101.371	-3-15-A -012199	2.1	5	2.6	1100	2.6	430	0.2	1500	70
48-34.648	-101.323	-3-15-A -012200	1.4	9	2.6	760	2.5	450	0.2	1900	78
48-34.644	-101.338	-3-15-A -012201	1.7	8	2.0	1500	2.6	370	1.2	1500	58
48-34.630	-101.346	-3-15-A -012202	5.8	10	2.2	1200	2.0	470	<0.1	2300	110
48-34.633	-101.353	-3-15-A -012203	1.6	4	1.3	1600	2.6	450	0.1	1700	73
48-34.877	-101.609	-3-15-A -012204	1.8	10	1.5	5100	2.2	620	0.1	2100	84
48-34.886	-101.630	-3-15-A -012205	1.3	6	1.4	470	2.2	410	0.1	1800	71
48-34.891	-101.628	-3-15-A -012206	1.3	5	1.1	350	1.9	570	0.1	1500	66
48-34.764	-101.366	-3-15-A -012208	1.2	8	1.8	920	4.3	550	0.1	1600	71
48-34.811	-101.373	-3-15-A -012209	1.2	8	1.3	500	3.8	480	0.1	1800	78
48-34.941	-101.120	-3-12-A -012212	1.2	5	2.6	1300	3.6	460	<0.1	1600	75
48-34.956	-101.122	-3-15-A -012213	1.3	7	1.7	930	4.8	400	0.1	1800	63
48-34.866	-101.447	-3-15-A -012218	1.1	5	2.1	2600	1.3	530	0.3	1600	49
48-34.857	-101.483	-3-15-A -012219	2.1	6	2.4	780	2.7	540	0.1	2000	81
48-34.853	-101.508	-3-15-A -012220	2.3	8	1.9	2000	1.9	580	0.3	3400	140
48-34.866	-101.519	-3-15-A -012221	1.1	10	2.2	900	3.8	490	0.4	1900	84
48-34.858	-101.473	-3-15-A -012222	0.94	8	1.7	840	2.3	570	0.5	2500	100

Table B - 3 Continued

PARTIAL DATA LISTING PAGE 11 ST LAT	LONG	L TY REP OR NO.	U (PPM)	TH (PPM)	AS (PPM)	BA (PPM)	CA	MN (PPM)	SE (PPM)	TI (PPM)	ZR (PPM)
48-34.862	-101.533	-3-15-A -012223	2.9	6	2.4	1200	2.9	580	0.3	2000	83
48-34.851	-101.526	-3-15-A -012224	2.3	8	2.2	1600	2.6	570	0.4	2700	140
48-34.857	-101.559	-3-15-A -012225	1.2	9	2.3	1400	3.1	490	0.2	1700	65
48-34.872	-101.591	-3-15-A -012226	1.3	9	2.4	880	3.1	620	<0.1	1800	62
48-34.603	-101.057	-3-15-A -012231	1.3	7	2.4	540	4.4	478	0.6	1900	90
48-34.604	-101.105	-3-15-A -012233	0.84	5	1.6	490	6.4	330	0.4	1100	71
48-34.585	-101.096	-3-15-A -012234	1.6	8	2.5	900	3.8	540	0.4	2100	91
48-34.559	-101.095	-3-15-A -012235	1.3	7	2.5	590	3.4	490	0.6	1800	71
48-34.551	-101.111	-3-15-A -012236	1.2	8	2.5	660	5.0	540	0.4	1800	74
48-34.534	-101.119	-3-15-A -012237	1.4	7	1.9	1300	2.3	400	0.3	2300	81
48-34.530	-101.118	-3-12-A -012238	1.4	5	2.2	1100	2.7	470	0.3	2300	89
48-34.615	-101.369	-3-12-A -012239	3.0	7	2.7	1100	4.7	570	0.4	2600	120
48-34.595	-101.361	-3-15-A -012240	2.3	7	2.6	1000	3.0	570	0.7	1700	68
48-34.590	-101.373	-3-15-A -012241	1.9	8	3.1	700	3.9	620	0.5	1800	59
48-34.735	-100.834	-3-15-A -012242	1.3	6	2.2	540	3.1	330	0.3	1600	62
48-34.549	-100.896	-3-15-A -012244	1.5	8		530	3.6	510		2300	120

APPENDIX C

STREAM WATER

No Stream Water Samples were collected from the
Plainview Quadrangle for this Basic Data Report.

APPENDIX D

MICROFICHE OF FIELD AND LABORATORY DATA

APPENDIX D

MICROFICHE OF FIELD AND LABORATORY DATA

LIST OF TABLES

Table D-1

COMPUTER CODE LIST OF GEOCHEMICAL VARIABLES

Variable[a]	Code	Variable[a]	Code
Uranium Measured by Fluorometry[b]	U-FL	Titanium	TI
Uranium Measured by Mass Spectrometry[b]	U-MS	Vanadium	V
Uranium Measured by Neutron Activation	U-NT	Yttrium	Y
Arsenic	AS	Zinc	ZN
Selenium	SE	Zirconium	ZR
Silver	AG	Sulfate (ppm)	SO,SO4
Aluminum	AL	Conductivity From Lab (μmhos/cm)	CT-L
Boron	B	Conductivity From Field (μmhos/cm)	CT-F
Barium	BA	Dissolved Oxygen (ppm)	DO
Beryllium	BE	Temperature (°C)	TP, TEMP
Calcium	CA	pH	PH
Cobalt	CO	pH Measured by Lo Ion Paper	PH-P
Chromium	CR	Total Alkalinity (ppm)	T-AK
Copper	CU	M Alkalinity (ppm)	M-AK
Iron	FE	P Alkalinity (ppm)	P-AK
Lithium	LI	Carbonate (ppm)	CB
Magnesium	MG	$CB = \begin{cases} 0 & \text{if } pH \leq 8.3 \\ \dfrac{3.42 * M\text{-}AK}{5.61 - 10^{11} - pH} & \text{if } pH > 8.3 \end{cases}$	
Manganese	MN	Bicarbonate (ppm)	BC
Molybdenum	MO	$BC = \begin{cases} \dfrac{2.62 * M\text{-}AK}{4.3 + 10^{7} - pH} & \text{if } pH \leq 8.3 \\ .61 * M\text{-}AK - CB & \text{if } pH > 8.3 \end{cases}$	
Sodium	NA		
Niobium	NB		
Nickel	NI		
Phosphorus	P	U-NT/U-FL	U/U
Lead	PB	1000·U/CT-L	U/CT,UCT
Platinum	PT	1000·U/B	U/B
Scandium	SC	1000·U/SO	U/SO,USO
Thorium	TH		

[a] If natural logarithm of variable is used, L or L- precedes the variable code.

[b] If method is not specified for waters, U-FL is used except where value is below laboratory detection limit in which case U-MS is substituted if it is available.

Table D-2

OAK RIDGE GEOCHEMICAL SAMPLING FORM SHOWING FIELD DATA RECORDED ON MICROFICHE

OAK RIDGE GEOCHEMICAL SAMPLING FORM

Card Number 1 = 1

GENERAL SITE DATA

Attach Identical Sample Number Here (2 3 4 5 6 7)

(8 9 10 11) Site Number

(12 13 14 15 – 16 17) Map Code

Sample Type (18)

M	Stream Sediment
H	Lake Sediment
S	Stream Water
W	Well Water
P	Spring Water
L	Lake Water
A	Bog Water
B	Plant
F	Soil (Use Remarks)
G	Rock
Ø	Other

(19) Replicate Letter (A–Z)

Hour	Day	Month	Year
20 21	22 23	24 25	26 27

(28 29 30) Collector's Initials

(31) Phase (P, 1, 2, or G)

Field Sheet Status (32)

Ø	Original
C	Correction
V	Voiding

Control Sample (33)

A	Sediment, High U
B	Sediment, Low U
C	Water, High U
D	Water, Low U
Ø	Other

(34 35 36 37) Air Temperature (°C)

Location

Latitude			Longitude		
Deg.	Min.	Sec.	Deg.	Min.	Sec.
38 39	40 41	42 43	44 45	46 47	48 49 50

(51 52 53 54) Surface Geologic Unit Code

UCN-11992 (1 5-77)

Type of Vegetation (55) (Within 1 Km Upstream)

C	Conifer
&	Conifer & Deciduous
D	Deciduous
B	Brush
G	Grass
M	Moss
L	Lichen
Ø	Other

Density of Vegetation (56) (Within 1 Km Upstream)

B	Barren
S	Sparse
M	Moderate
D	Dense
V	Very Dense

Local Relief (57) (Within 1 Km Upstream)

F	Flat (- 2m)
L	Low (2–15m)
G	Gentle (15–60m)
M	Moderate (60–300m)
H	High (>300m)
Ø	Other

Weather

(58)		(59)	
C	Calm	C	Clear
P	Lt Wind	L	Pt Cldy
V	Windy	W	Overcst
R	V. Windy	V	Rainy
S	Gale	G	Snowy

Classes of Contaminants (60) (Use Remarks)

N	None
M	Mining
A	Agriculture
F	Oil Field
I	Industry
S	Sewage
P	Power Plant
U	Urban
Ø	Other

Average Stream Velocity (m/sec) (61 62 63)

N = No Visible Movement
P = Stagnant Pool

(64 65 66) Water Width (m)

(67 68 69) Average Depth (m)

Water Level

(70)		(70)	
D	Dry	N	Normal
P	Pools	H	High
L	Low	F	Flood

Dominant Bed Material (71)

B	Boulder
C	Cobble
P	Pebble
S	Sand
T	Silt
Y	Clay
N	None (Use Remarks)

Sample Color (Except Plants)

	Adj		Noun	
72	73	74	75	76

V	V Lt	PK	Pink
L	Light	RD	Red
M	Medium	GN	Green
D	Dark	BU	Blue
CL	Clear	BN	Brown
WH	White	GY	Gray
YL	Yellow	BK	Black
ØR	Orange	ØT	Other

(77) **Odor of Sampled Material**

N	None
S	H_2S
Ø	Other

(78) **Results Request** (Use Remarks) R

Card Number 1 = 2

PLANT SAMPLE

(18 19) **Number of Plants Sampled** (Number of grabs for moss)

(20 21 22) **Trunk Diameter (m)** (1 m above ground)

(23 24 25) **Plant Height (m)** (Average of Plants Sampled)

Name of Tree, Deciduous

(26)		(26)	
R	Alto Verde	U	Locust
A	Ash	P	Maple
B	Beech	M	Mesquite
I	Birch	K	Oak, Other
D	Box Elder	V	Olive
F	Cherry	Y	Poplar
N	Cottonwood	S	Sycamore
E	Elm	T	Salt Cedar
H	Hackberry	G	Walnut
C	Hickory	X	Willow
W	Huisache	Ø	Other
L	Live Oak		

Name of Tree, Conifer

(27)		(27)	
A	N. Wh. Cedar	L	Larch
C	Cedar, Other	P	Pine
F	Fir	S	Spruce
H	Hemlock	Ø	Other
J	Juniper		

Name of Bush

(28)		(28)	
A	Alder	W	Witch Hazel
B	Blueberry	Y	Yew
P	Pussy Willow	Ø	Other

Name of Moss (29)

P	Peat
S	Sphagnum (live)
Ø	Other

Algae (30)

G	Blue-Green
B	Brown
Ø	Other

Table D-2 Continued

STREAM OR LAKE SEDIMENT

Sample Condition (31)
- D — Dry
- W — wet

Sample Treatment (32)
- N — None
- S — Sieved
- Ø — Other

(33 34) Number of Grabs

(35 36) % Organic Material (Field Estimate)

GENERAL WATER SAMPLES

Water Sample Treatment (37)
- N — None
- F — Filtered Only
- C — Acidified Only
- A — Acidified and Filtered
- Ø — Other

Depth of Visibility (m) (38 39 40)
C = Clear

(41 42 43 44 45) Conductivity (μmhos/cm)

(46 47 48) Dissolved O_2 (ppm)

(49 50 51) Temperature (°C)

(52 53 54) pH

(55) P — pH by Lo-Ion Paper

(56 57 58 59) Total Alkalinity (ppm)

(60 61 62 63) P Alkalinity (ppm)

(64 65 66 67) M Alkalinity (ppm)

Appearance of Water (68)
- C — Clear
- M — Murky
- A — Algal
- Ø — Other

(69 70 71 72 73) Discharge (liters/min)

REMARKS (Card 4)

(74 75 76 77) Identification of Producing Horizon (Geologic Unit Code)

Confidence of Producing Horizon Identification (78)
- H — High Degree
- R — Probable
- S — Possible

Source of Producing Horizon Identification (79)
- P — Publication
- W — Owner
- U — User
- G — Geologic Inference
- Ø — Other

(1) 3 Card Number

WELL WATER

Type of Well (18)
- D — Drilled
- P — Drive Point
- G — Dug
- U — Unknown
- Ø — Other

Power Classification (19)
- A — Artesian Flow
- E — Electric
- G — Gasoline
- W — Wind
- H — Hand
- Ø — Other

Casing (20)
- N — None (Below Water Table)
- S — Steel
- G — Galvanized
- P — Plastic
- U — Unknown
- Ø — Other

Pipe Composition (21)
- F — Steel
- Z — Galvanized
- C — Copper
- P — Plastic
- U — Unknown
- Ø — Other

Sample Location (22 23 24)
Meters from Well Head
H = Holding Tank (Use Remarks)

Where Sample Taken With Respect To Pressure Tank (25)
- B — Before
- A — After
- N — No Pressure Tank
- F — From Pressure Tank (Use Remarks)

Use of Well (26)
- M — Municipal
- H — Household
- S — Stock
- I — Irrigation
- A — All of above
- X — H and S
- Y — H and I
- Z — S and I
- N — None
- Ø — Other

Frequency of Pumping (27)
- C — Constant (hourly)
- F — Frequent (daily)
- I — Infrequent (weekly)
- R — Rare (no recent use)

Depth to top of Producing Horizon (28 29 30 31)
(Meters)

Confidence of Producing Depth (32)
- H — High
- R — Probable
- S — Possible

Source of Producing Depth Information (33)
- P — Publication
- W — Owner
- U — User
- G — Geologic Inference
- Ø — Other

Total Well Depth (34 35 36 37)
(Meters)

Confidence of Total Depth (38)
- H — High
- R — Probable
- S — Possible

Source of Total Depth Information (39)
- P — Publications
- W — Owner
- U — User
- G — Geologic Inference
- Ø — Other

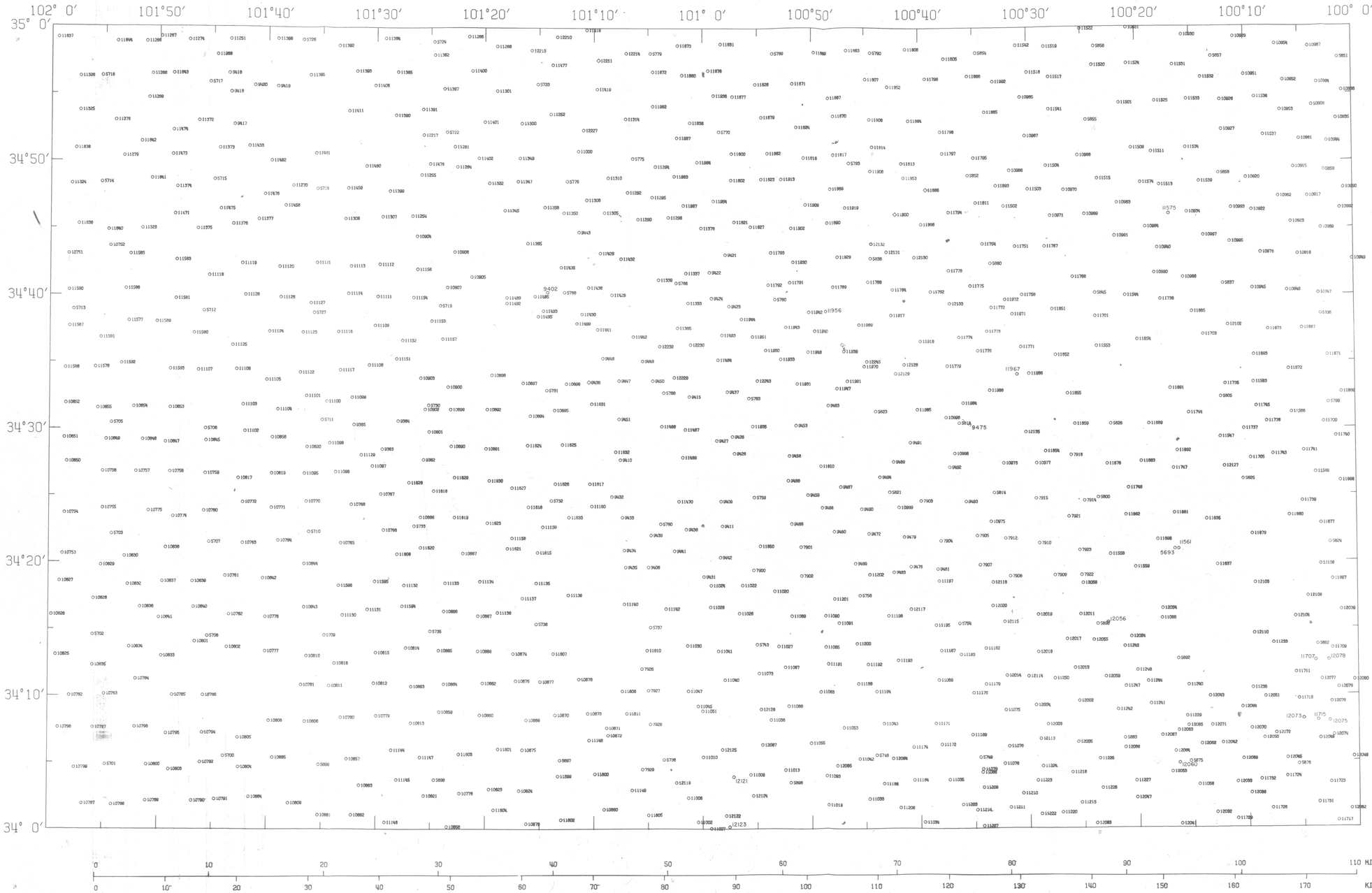
LAKE WATER

Type of Lake (55)
- N — Natural
- M — Manmade

Lake Area (56 57 58 59)
(sq km)

MICROFICHE OF FIELD AND LABORATORY DATA

Microfiche Contents



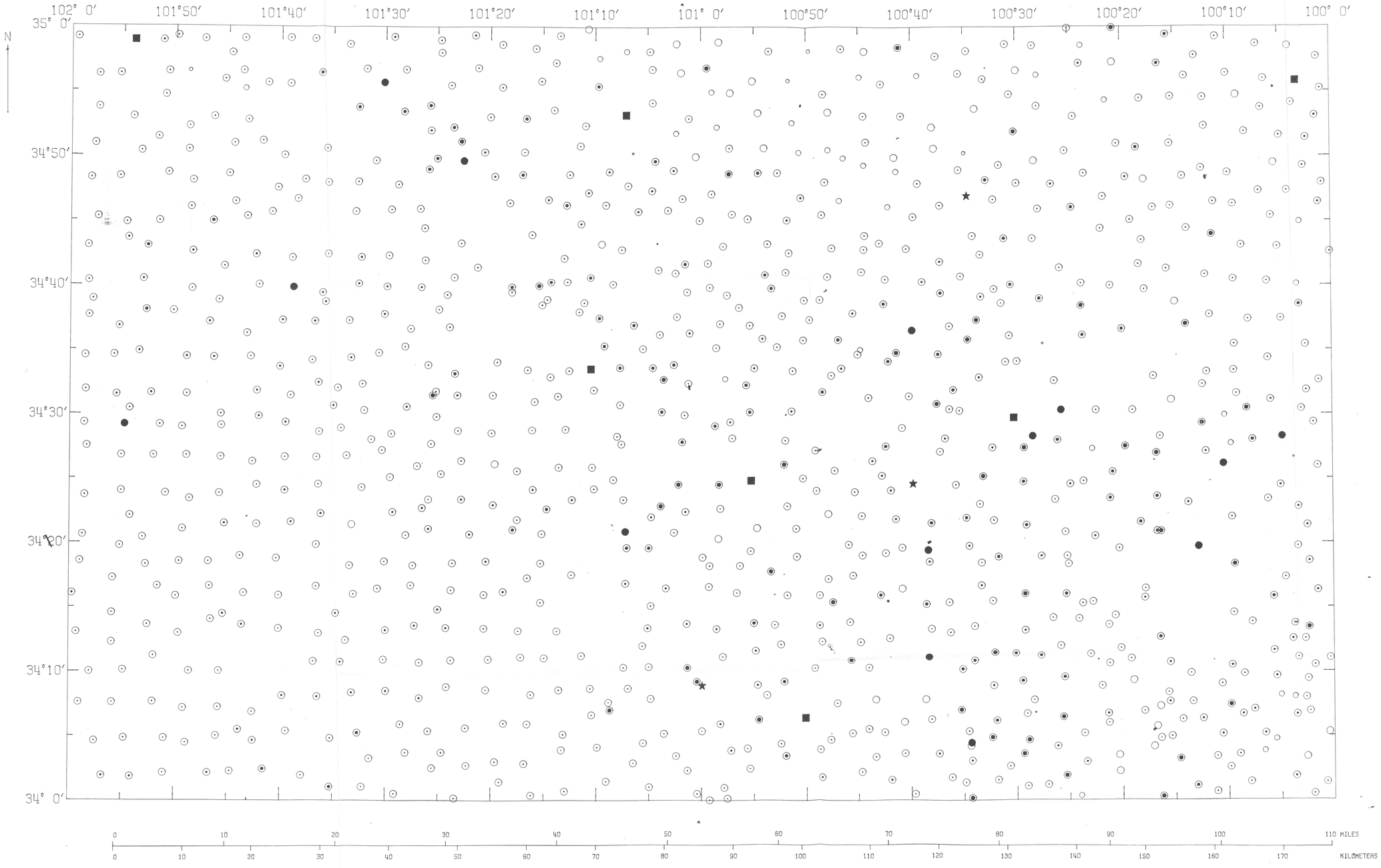
LEGEND

- ○ WELL WATER
- ◇ SPRING WATER

PLATE 1
PLAINVIEW QUADRANGLE
SAMPLE LOCATION MAP
WELLS AND SPRINGS

SCALE 1: 250000

969 SAMPLES PLOTTED



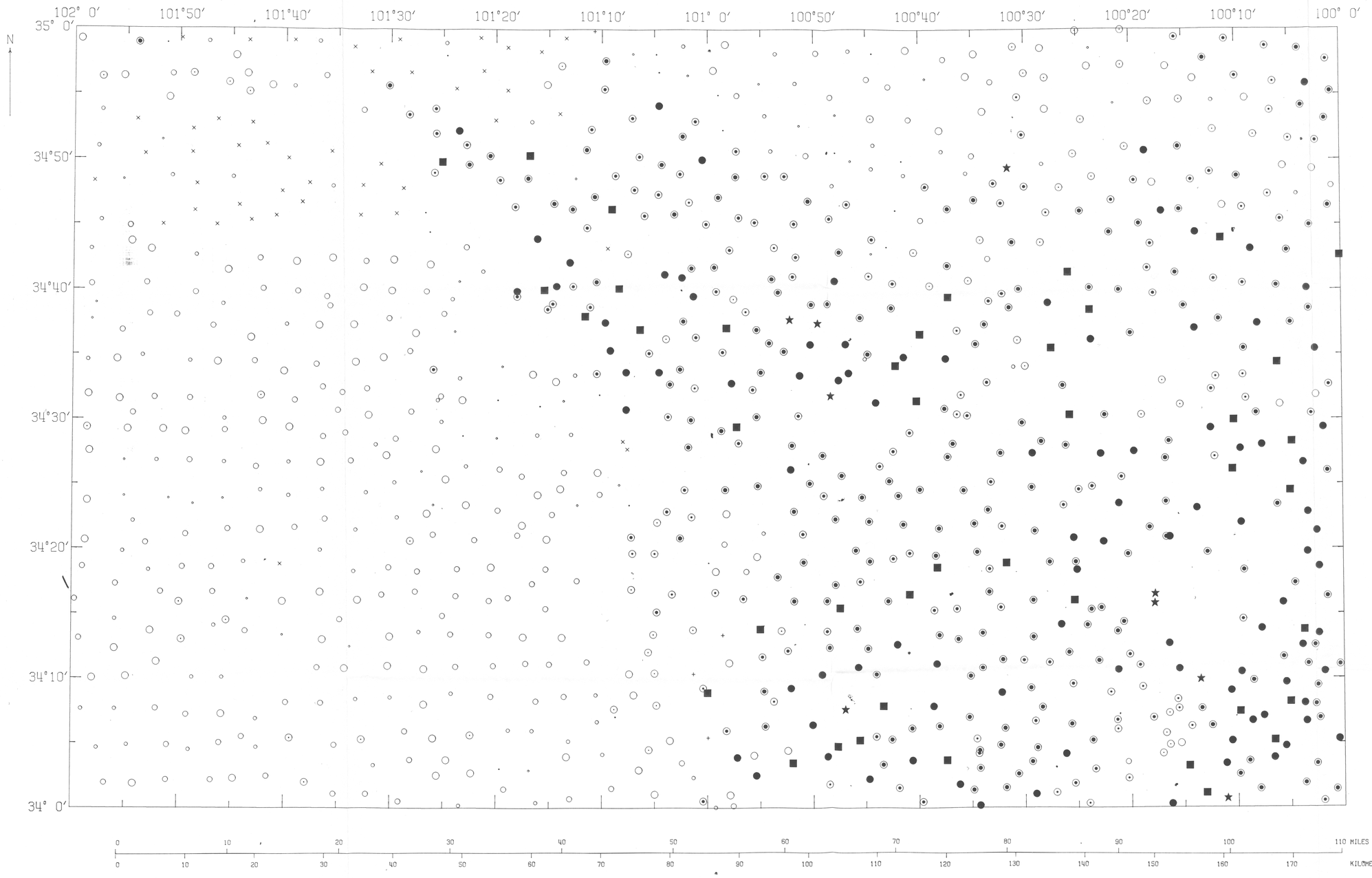
CONCENTRATION (C) RANGES (ppb)

∘	0.10 ≤ C <	0.15
○	0.15 ≤ C <	0.35
○	0.35 ≤ C <	1.00
○	1.00 ≤ C <	2.00
⊙	2.00 ≤ C <	5.00
⊙	5.00 ≤ C <	9.00
⊙	9.00 ≤ C <	13.00
◉	13.00 ≤ C <	20.00
◉	20.00 ≤ C <	30.00
●	30.00 ≤ C <	60.00
■	60.00 ≤ C <	90.00
★	C ≥	90.00

PLATE 2
PLAINVIEW QUADRANGLE
CANADIAN SYMBOL PLOT
WELLS & SPRINGS
URANIUM

SCALE 1: 250000

969 SAMPLES PLOTTED



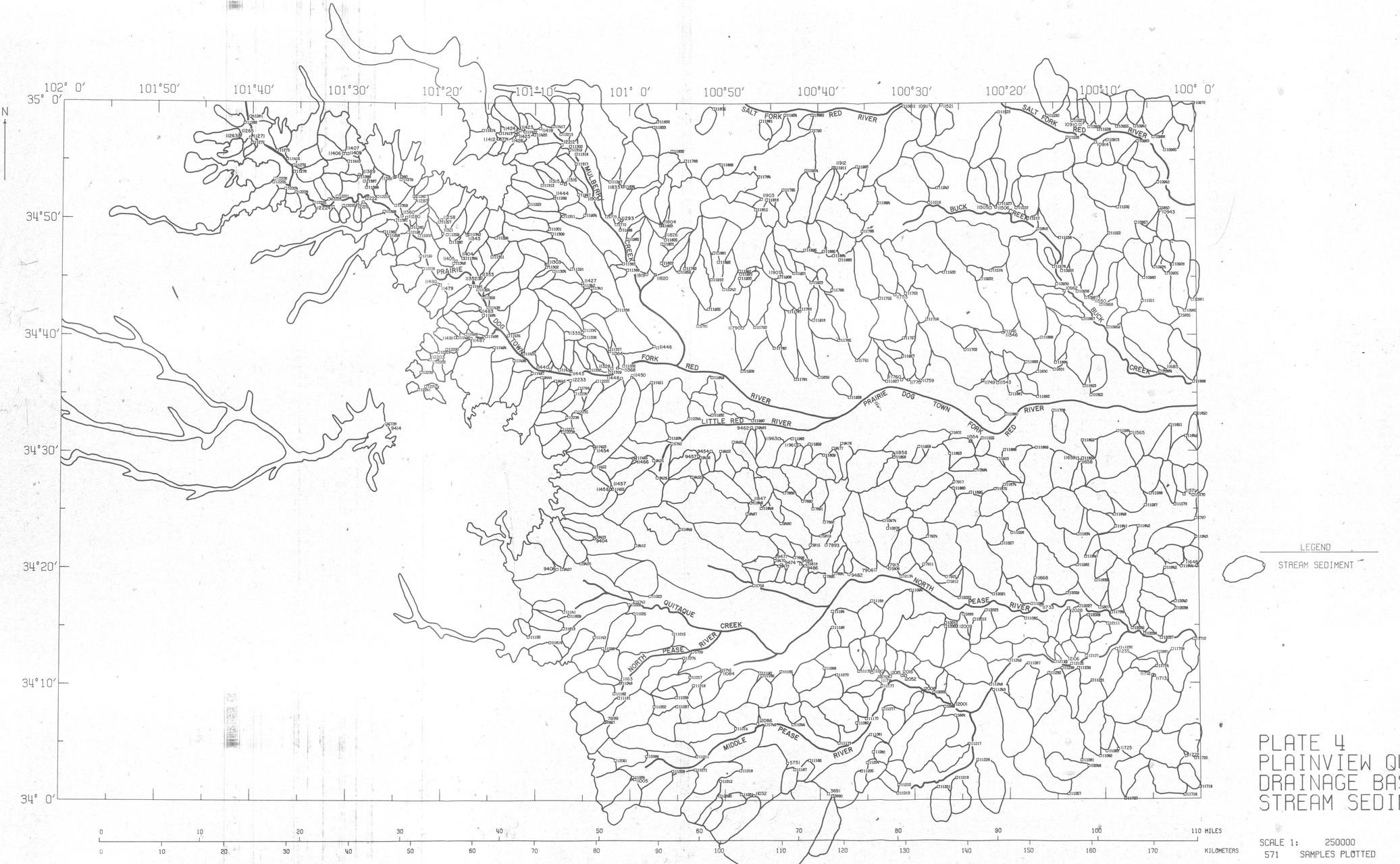
CONCENTRATION (C) RANGES (μmhos/cm)

+	0.0 ≤ C < 300.00
×	300.00 ≤ C < 480.00
·	480.00 ≤ C < 550.00
◦	550.00 ≤ C < 600.00
○	600.00 ≤ C < 675.00
○	675.00 ≤ C < 775.00
○	775.00 ≤ C < 1050.00
⊙	1050.00 ≤ C < 1330.00
⊙	1330.00 ≤ C < 1660.00
⊙	1660.00 ≤ C < 2300.00
◉	2300.00 ≤ C < 3200.00
◉	3200.00 ≤ C < 4200.00
●	4200.00 ≤ C < 6000.00
■	6000.00 ≤ C < 9000.00
★	C ≥ 9000.00

PLATE 3
PLAINVIEW QUADRANGLE
CANADIAN SYMBOL PLOT
WELLS & SPRINGS
CONDUCTIVITY

SCALE 1: 250000

969 SAMPLES PLOTTED



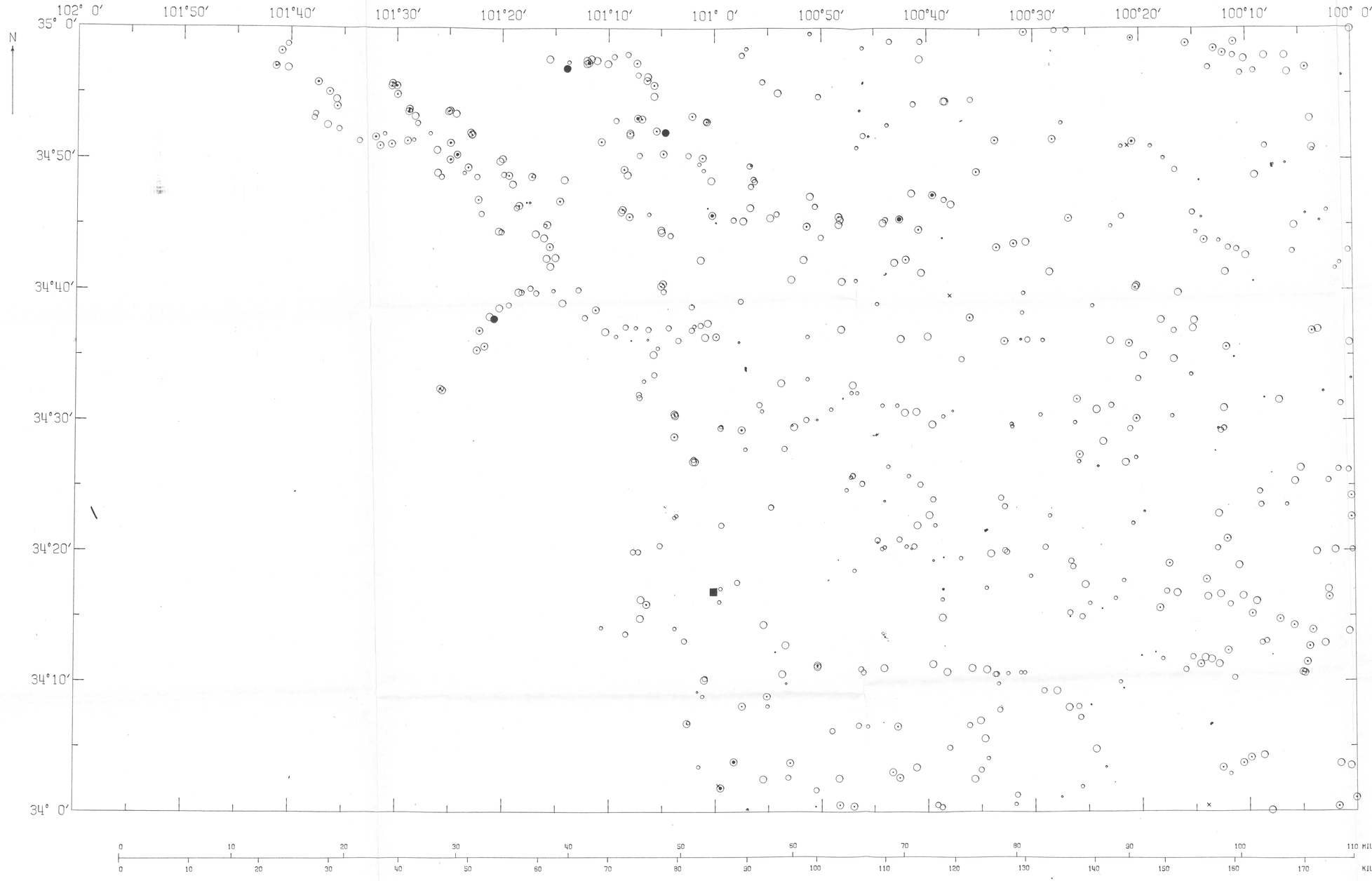
LEGEND

STREAM SEDIMENT

PLATE 4
PLAINVIEW QUADRANGLE
DRAINAGE BASIN AND SAMPLE LOCATION MAP
STREAM SEDIMENT

SCALE 1: 250000

571 SAMPLES PLOTTED



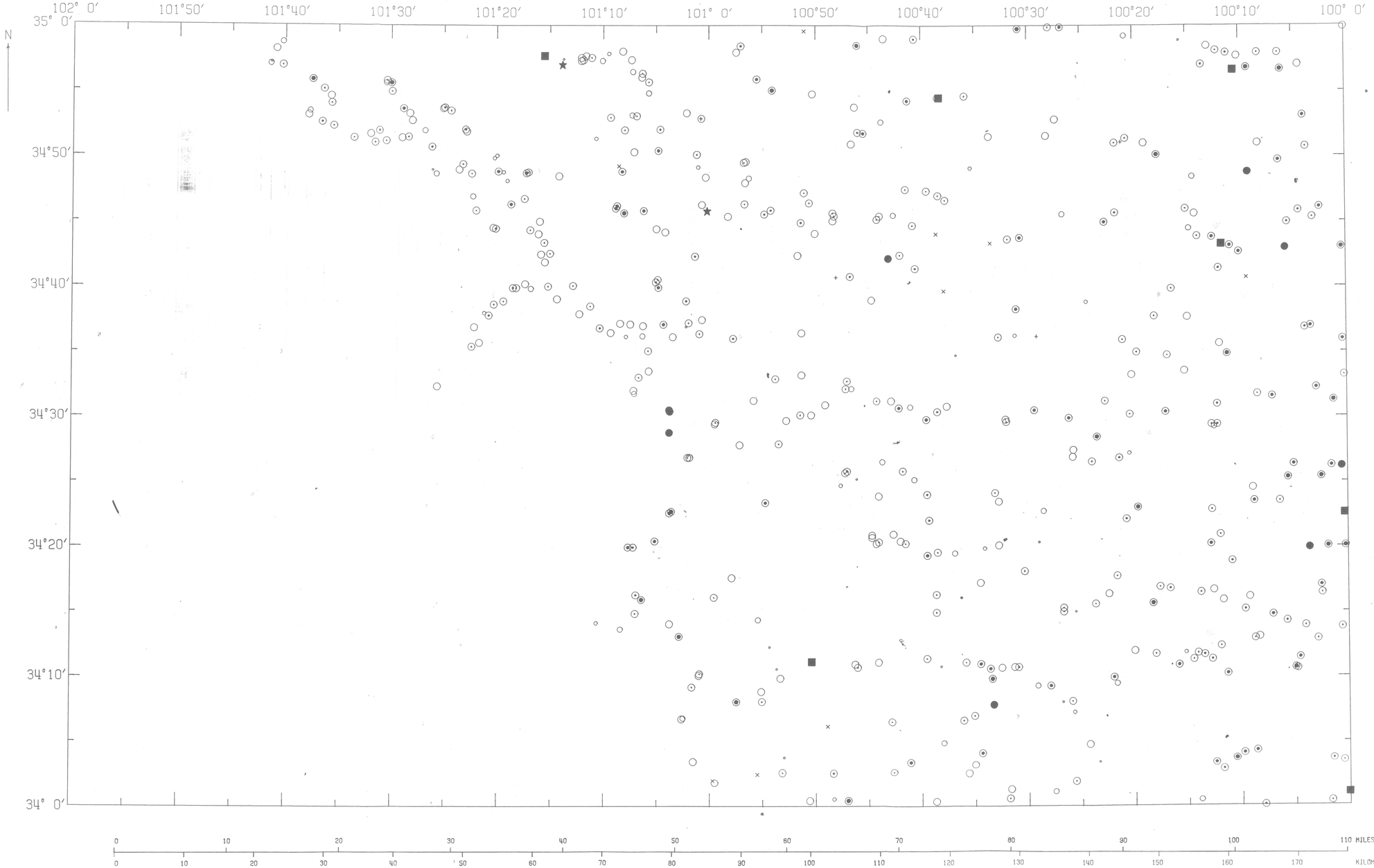
CONCENTRATION (C) RANGES (ppm)

+	0.0	≤ C <	0.25
×	0.25	≤ C <	0.50
·	0.50	≤ C <	0.70
∘	0.70	≤ C <	0.90
○	0.90	≤ C <	1.20
○	1.20	≤ C <	1.50
○	1.50	≤ C <	1.90
⊙	1.90	≤ C <	2.40
⊙	2.40	≤ C <	2.90
⊙	2.90	≤ C <	3.40
◉	3.40	≤ C <	4.00
◉	4.00	≤ C <	4.70
●	4.70	≤ C <	6.00
■	6.00	≤ C <	10.00

PLATE 5
PLAINVIEW QUADRANGLE
CANADIAN SYMBOL PLOT
STREAM SEDIMENT
URANIUM FLUOROMETRIC

SCALE 1: 250000

571 SAMPLES PLOTTED



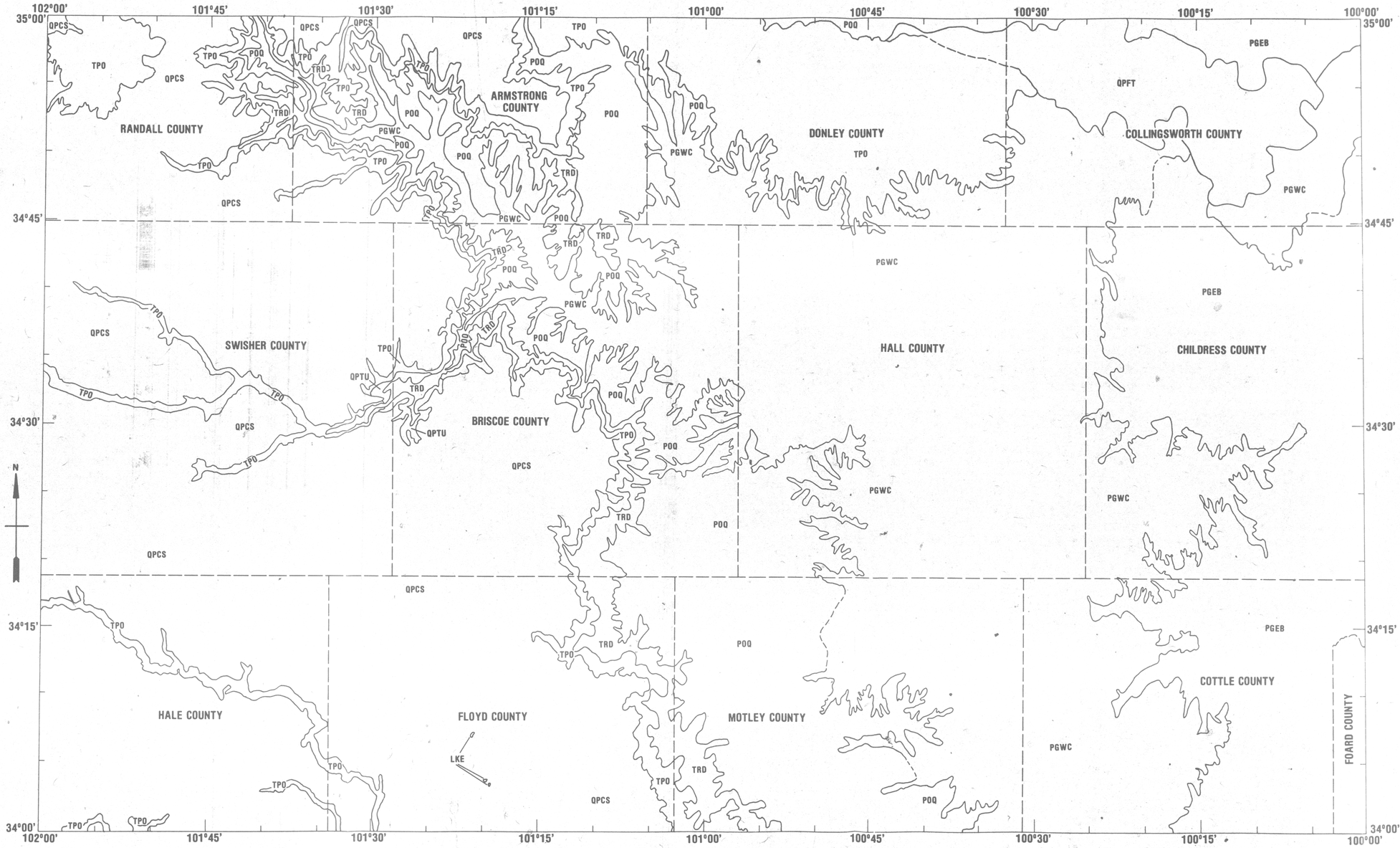
CONCENTRATION (C) RANGES (ppm)

+	0.0	≤ C <	2.00
×	2.00	≤ C <	3.00
◦	3.00	≤ C <	4.00
○	4.00	≤ C <	5.00
○	5.00	≤ C <	6.00
○	6.00	≤ C <	8.00
⊙	8.00	≤ C <	9.00
⊙	9.00	≤ C <	10.00
⊙	10.00	≤ C <	11.00
⊙	11.00	≤ C <	13.00
◉	13.00	≤ C <	15.00
●	15.00	≤ C <	17.00
■	17.00	≤ C <	35.00
★		C ≥	35.00

PLATE 6
PLAINVIEW QUADRANGLE
CANADAIN SYMBØL PLØT
STREAM SEDIMENT
THØRIUM

SCALE 1: 250000

489 SAMPLES PLØTTED



GENERALIZED GEOLOGIC MAP OF THE PLAINVIEW QUADRANGLE

System	Series/Stage	Geologic Code Group	Geologic Code Formation	Unit Name
Quaternary			QPFT	Fluviatile Terrace Deposits
	Pleistocene		QPCS	Windblown Cover Sand
			QPTU	Tule
Tertiary	Pliocene		TPO	Ogallala
Cretaceous		LKE		Edwards
Triassic		TRD		Dockum
Permian	Ochoan	POQ		Quartermaster
	Guadalupian	PGWC		Whitehorse and Cloud Chief
			PGEB	Blaine

Source of Geology for Geologic Map.

1. Barnes, V. E.; and Eifler, G. K., Jr.; Geologic Atlas of Texas, Plainview Sheet (1968).
2. Smith, J. T.; Ground-water Resources of Collingsworth County, Texas (1970).

LEGEND

PLATE 7