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Analytical results of insoluble-residue samples from the Paducah 1° x 2° quadrangle, Missouri, Illinois, and Kentucky: Drill holes nos. K1-K4.

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INTRODUCTION

Geochemical studies of the Paducah 1° x 2° quadrangle, Missouri, Illinois, and Kentucky, were initiated in 1986 as part of a multidisciplinary study of the quadrangle by the U.S. Geological Survey, the Missouri Division of Geology and Land Survey, the State Geological Survey Division of the Illinois Department of Energy and Natural Resources, and the Kentucky Geological Survey. The purpose of the study was to assess the mineral resource potential of the area by integrated geologic, geochemical, and geophysical studies.

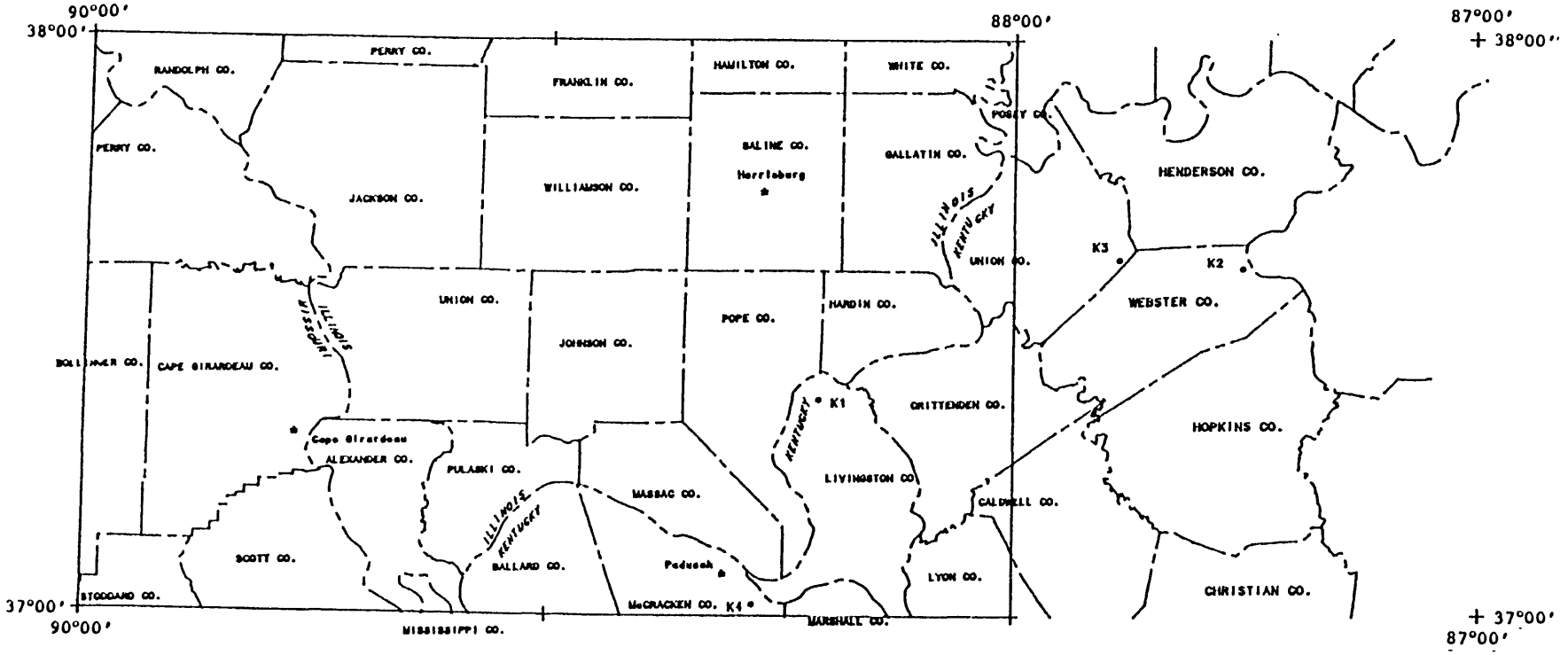
The geochemical studies have been directed at the characterization of the sedimentary rocks in the quadrangle through spectrographic analyses and ion-selective analyses of dilute(~2.4N)-hydrochloric-acid insoluble-residue samples of whole rock from widely-spaced drill holes. Drill holes have been selected for study from the sample libraries of the Missouri Division of Geology and Land Survey (MGLS), the Illinois State Geological Survey Division (ISGS), and the Kentucky Geological Survey (KGS). None of the holes are company confidential and none intersect economically significant mineralized ground.

The analytical results for drill hole no. K1 (#3469 - KGS), drill hole no. K2 (#18323 - KGS), drill hole no. K3 (#3854 - KGS), and drill hole no. K4 (#3148 - KGS) are given in this report. Drill hole no. K1 (Homer Day #1) is located at latitude 37°22'45", longitude 88°25'05" (Kentucky coordinate 20-K-13) in Livingston County, Kentucky; drill hole no. K2 (Jimmy Bell #1) is located at latitude 37°36'16", longitude 87°30'20" (Kentucky coordinate 23-N-24) in Webster County, Kentucky; drill hole no. K3 (F-1-F Camp Breckenridge) is located at latitude 37°37'16", longitude 87°46'15" (Kentucky coordinate 15-N-21) in Union County, Kentucky; drill hole no. K4 (George Allen #1) is located at latitude 37°01'16", longitude 88°33'20" (Kentucky coordinate 17-G-12) in McCracken County, Kentucky (fig. 1). Data for the insoluble-residue samples from drill holes K1, K2, K3, and K4 are listed in tables 2-5, respectively. Well name, well number, and county allow identification and location of files at the Kentucky Geological Survey.

SAMPLE PREPARATION

Insoluble residues were prepared by dissolving approximately 80 grams of crushed carbonate rock in repeated applications of 1:5 (~2.4N) hydrochloric acid until the carbonate was removed. The samples were then washed repeatedly with tap water and dried overnight at 50 °C.

The insoluble-residues were pulverized to minus 140 mesh (0.105 mm) in a vertical grinder equipped with ceramic plates. Some insoluble-residue samples contained only



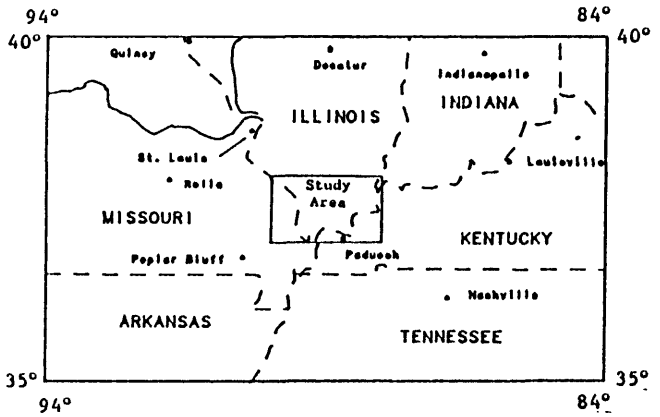


Figure 1.--Location of drill holes K1-K4, Paducah 1° x 2°quadrangle, Illinois, Missouri, and Kentucky.

a few milligrams of material, and these were hand ground with an agate mortar and pestle. A hand magnet was passed over the insoluble-residue samples before grinding to remove filings or chips of drill bit that might have been present.

SAMPLE ANALYSIS

Spectrographic Method

The insoluble-residue samples were analyzed for 35 elements using a semiquantitative, direct-current arc emission spectrographic method (Grimes and Marranzino, 1968). The elements analyzed and their lower limits of determination (LLD's) are listed in table 1. Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides and carbonates. Standard concentrations are geometrically spaced over any given order of magnitude of concentration as follows: 100, 50, 20, 10, and so forth. Samples whose concentrations are estimated to fall between those values are assigned values of 70, 30, 15, and so forth. The precision of the analytical method is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976). Values determined for the major elements (Ca, Fe, Mg, Na, P, and Ti) are given in weight percent; all others are given in parts per million (micrograms/gram). Analytical data for the drill holes are listed in tables 2-5.

Ion-selective Electrode Method

The insoluble-residue samples were also analyzed for fluorine (F) using an ion-selective electrode method (Hopkins, 1977; O'Leary and Meier, 1986). Samples are fused with a sodium carbonate-potassium carbonate-potassium nitrate flux and the fused sample is dissolved with citric acid. Sodium citrate buffer, which also serves as an ionic strength adjustor, is then added to this solution prior to determining the fluorine concentration by standard-additions technique. The LLD of this method is 100 ppm (.01%).

Analytical results using this method are also listed in tables 2-5.

DATA STORAGE SYSTEM

Upon completion of all analytical work, the results were entered into a computer data base called PLUTO. This data base contains both descriptive geological information and analytical data. Any or all of this information may be retrieved and converted to a binary form (STATPAC) for computerized statistical analysis or publication (Van Trump and Miesch, 1977).

DESCRIPTION OF DATA TABLES

Tables 2-5 list the results of analyses for the insoluble-residue samples. For these tables, the data are arranged so that column 1 contains the USGS-assigned sample numbers. For these sample numbers, the first letter indicates Kentucky; the next digit indicates the drill hole number. The final digits identify the depth from the bottom of the sample interval to the drill hole collar.

The stratigraphic unit of the sample is identified by a coded number in the last column of tables 2-5. The codes and corresponding formation names are listed in table 6.

Columns in which the element headings show the letter "s" below the element symbol indicates emission spectrographic analyses; "ise" indicates fluorine analyses by the ion-selective electrode method. A letter "N" in the tables indicates that a given element was looked for but not detected at the LLD shown in table 1. A "less than" symbol (<) entered in the tables in front of the LLD indicates that an element was observed but was below the lowest reporting value. If an element was observed above the highest reporting value, a "greater than" symbol (>) was entered in the tables in front of the upper limit of determination. If an element was not looked for in a sample, two dashes (--) are entered in the tables in place of an analytical value. Because of the formatting used in the computer program that produced the data tables, some of the elements listed in these tables (Fe, Mg, Ca, P, Ti, Ag, and Be) may carry one or more nonsignificant digits to the right of the significant digits. The analysts did not determine these elements to the accuracy suggested by the extra zeros.

Several elements had an "N" value throughout their respective table(s) and were therefore omitted from those tables as follows: Table 2--As, Au, Bi, Cd, Ge, Sb, Sn, and Th; Table 3--P, Au, Cd, Ge, Sb, and Th; Table 4--P, As, Au, Bi, Cd, Ge, Sb, and Th; Table 5--Au, Bi, Ge, Sb, Sn, and Th.

ACKNOWLEDGMENTS

The authors wish to thank Greg Bennett and F.W. Tippitt for their assistance in the preparation of the insoluble-residue samples.

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Table 1.—Limits of determination for the spectrographic analysis of insoluble-residue samples, based on a 10-mg sample.

Elements	Lower determination limit	Upper determination limit
	Weight percent	
Calcium (Ca)	0.05	20
Iron (Fe)	.05	20
Magnesium (Mg)	.02	10
Sodium (Na)	.2	5
Phosphorus (P)	.2	10
Titanium (Ti)	.002	1
	Parts per million	
Silver (Ag)	0.5	5,000
Arsenic (As)	200	10,000
Gold (Au)	10	500
Boron (B)	10	2,000
Barium (Ba)	20	5,000
Beryllium (Be)	1	1,000
Bismuth (Bi)	10	1,000
Cadmium (Cd)	20	500
Cobalt (Co)	10	2,000
Chromium (Cr)	10	5,000
Copper (Cu)	5	20,000
Gallium (Ga)	5	500
Germanium (Ge)	10	100
Lanthanum (La)	50	1,000
Manganese (Mn)	10	5,000
Molybdenum (Mo)	5	2,000
Niobium (Nb)	20	2,000
Nickel (Ni)	5	5,000
Lead (Pb)	10	20,000
Antimony (Sb)	100	10,000
Scandium (Sc)	5	100
Tin (Sn)	10	1,000
Strontium (Sr)	100	5,000
Thorium (Th)	100	2,000
Vanadium (V)	10	10,000
Tungsten (W)	20	10,000
Yttrium (Y)	10	2,000
Zinc (Zn)	200	10,000
Zirconium (Zr)	10	1,000
Palladium (Pd)*	5	1,000
Platinum (Pt)*	20	1,000

*Determined in heavy-mineral-concentrate samples only. Limits are for heavy-mineral-concentrate samples.

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.

[N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown.]

Sample	Latitude	Longitude	Ca-pct. s	Fe-pct. s	Mg-pct. s	Na-pct. s	P -pct. s	Ti-pct. s	Ag-ppm s
K10020	37 22 45	88 25 5	N	1	.03	N	N	.1	N
K10030	37 22 45	88 25 5	N	1.5	.1	N	N	.15	N
K10040	37 22 45	88 25 5	N	2	.1	N	N	.2	N
K10050	37 22 45	88 25 5	N	1.5	.1	N	N	.15	N
K10060	37 22 45	88 25 5	N	1.5	.1	N	N	.15	N
K10070	37 22 45	88 25 5	N	1	.03	N	N	.1	N
K10080	37 22 45	88 25 5	N	.7	.03	N	N	.1	N
K10090	37 22 45	88 25 5	N	.7	.05	N	N	.07	N
K10100	37 22 45	88 25 5	N	.3	.02	N	N	.03	N
K10110	37 22 45	88 25 5	N	.5	.02	N	N	.07	N
K10120	37 22 45	88 25 5	N	1	.05	N	N	.1	N
K10130	37 22 45	88 25 5	N	1.5	.15	N	N	.2	N
K10140	37 22 45	88 25 5	N	1.5	.2	N	N	.3	N
K10150	37 22 45	88 25 5	N	2	.15	N	N	.2	N
K10160	37 22 45	88 25 5	N	1.5	.1	N	N	.1	N
K10170	37 22 45	88 25 5	N	.7	.05	N	N	.03	N
K10180	37 22 45	88 25 5	N	1	.1	N	N	.15	N
K10190	37 22 45	88 25 5	N	2	.5	<.2	N	.3	N
K10200	37 22 45	88 25 5	N	1	.2	N	N	.2	N
K10210	37 22 45	88 25 5	N	2	.2	N	N	.2	N
K10220	37 22 45	88 25 5	N	1.5	.3	N	N	.2	N
K10230	37 22 45	88 25 5	N	1.5	.2	N	N	.3	N
K10240	37 22 45	88 25 5	N	1	.15	N	N	.2	N
K10250	37 22 45	88 25 5	N	.7	.1	N	N	.2	N
K10260	37 22 45	88 25 5	N	1.5	.5	N	N	.5	N
K10270	37 22 45	88 25 5	N	.7	.1	N	N	.3	N
K10280	37 22 45	88 25 5	N	1	.15	N	N	.5	N
K10290	37 22 45	88 25 5	N	1	.07	N	N	.15	N
K10300	37 22 45	88 25 5	N	.7	.07	N	N	.1	N
K10310	37 22 45	88 25 5	N	.5	.05	N	N	.07	N
K10320	37 22 45	88 25 5	N	.5	.05	N	N	.1	N
K10330	37 22 45	88 25 5	N	.7	.03	N	N	.05	N
K10340	37 22 45	88 25 5	N	.7	.07	N	N	.1	N
K10350	37 22 45	88 25 5	N	1.5	.15	N	N	.2	N
K10360	37 22 45	88 25 5	N	2	.2	N	N	.3	N
K10370	37 22 45	88 25 5	N	3	.5	N	N	.5	N
K10380	37 22 45	88 25 5	N	2	.7	N	N	.5	N
K10390	37 22 45	88 25 5	N	1.5	.5	N	N	.3	N
K10400	37 22 45	88 25 5	N	1.5	.3	N	N	.3	N
K10410	37 22 45	88 25 5	N	2	1	<.2	N	.5	N
K10420	37 22 45	88 25 5	N	3	.7	N	<.2	.5	N
K10430	37 22 45	88 25 5	N	2	.3	N	N	.3	N
K10440	37 22 45	88 25 5	N	.7	.1	N	N	.1	N
K10450	37 22 45	88 25 5	N	2	.15	N	N	.3	N
K10460	37 22 45	88 25 5	N	5	.15	N	N	.15	<.5
K10470	37 22 45	88 25 5	N	5	.2	N	N	.2	N
K10480	37 22 45	88 25 5	.05	2	.7	.2	N	.3	N
K10490	37 22 45	88 25 5	.1	5	1	.5	N	.5	N
K10500	37 22 45	88 25 5	N	3	1	.7	N	.5	N
K10510	37 22 45	88 25 5	<.05	3	1	1	N	.7	N
K10520	37 22 45	88 25 5	N	5	1.5	.7	N	.7	N
K10530	37 22 45	88 25 5	N	3	1	.7	N	.5	N
K10540	37 22 45	88 25 5	<.05	2	1	.5	N	.5	N
K10550	37 22 45	88 25 5	.05	5	1.5	1.5	N	.7	N
K10560	37 22 45	88 25 5	<.05	3	1	1	N	.5	N
K10570	37 22 45	88 25 5	N	5	2	1.5	N	.7	N
K10580	37 22 45	88 25 5	N	5	2	1	N	.5	N
K10590	37 22 45	88 25 5	N	5	1.5	1.5	N	.3	N
K10600	37 22 45	88 25 5	N	2	1	1	N	.3	N
K10610	37 22 45	88 25 5	<.05	1.5	.7	.3	N	.1	N

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	B-ppm s	Ba-ppm s	Be-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s
K10020	20	30	N	<10	10	<5	N	N	20	N	N
K10030	30	500	N	N	20	5	N	N	30	N	N
K10040	50	150	<1	N	15	5	N	N	50	N	N
K10050	30	100	<1	N	70	7	N	N	70	N	N
K10060	20	1,000	<1	N	20	5	N	N	70	N	N
K10070	15	1,000	N	N	<10	<5	N	N	10	N	N
K10080	10	30	N	N	20	<5	N	N	30	N	N
K10090	10	50	N	N	<10	<5	N	N	<10	N	N
K10100	<10	<20	N	N	N	N	N	N	N	N	N
K10110	<10	100	N	N	<10	N	N	N	<10	N	N
K10120	10	500	N	N	10	<5	N	N	N	N	N
K10130	20	150	N	<10	10	<5	N	N	15	N	N
K10140	50	300	<1	<10	30	5	N	N	20	N	N
K10150	30	150	<1	<10	20	5	N	N	15	N	N
K10160	15	50	N	N	10	N	N	N	10	N	N
K10170	<10	20	N	N	N	N	N	N	<10	N	N
K10180	20	150	N	N	<10	<5	N	N	10	N	N
K10190	70	200	<1	<10	70	7	20	N	20	N	N
K10200	50	100	N	N	30	5	<5	N	10	N	N
K10210	50	200	N	<10	30	10	5	N	20	N	N
K10220	50	150	N	N	30	<5	5	N	20	N	N
K10230	50	100	N	N	20	<5	N	N	10	N	N
K10240	30	70	N	N	10	<5	N	N	10	N	N
K10250	20	50	N	N	10	<5	<5	N	<10	N	N
K10260	70	200	<1	<10	30	5	10	N	15	N	<20
K10270	50	200	N	N	15	<5	N	N	10	N	N
K10280	70	200	N	N	20	5	<5	N	10	N	N
K10290	30	500	N	N	10	<5	N	N	<10	N	N
K10300	15	70	N	N	<10	N	N	N	20	N	N
K10310	20	50	N	N	<10	<5	N	N	<10	N	N
K10320	15	150	N	N	N	N	N	N	<10	N	N
K10330	10	20	N	N	N	N	N	N	N	N	N
K10340	20	100	N	N	<10	<5	N	N	10	N	N
K10350	50	150	N	<10	15	7	N	N	15	N	N
K10360	50	150	<1	<10	50	10	15	N	15	N	N
K10370	100	300	1	10	50	20	10	<50	20	N	<20
K10380	70	100	<1	10	100	20	15	<50	10	N	<20
K10390	50	100	<1	10	70	15	20	<50	15	N	<20
K10400	50	70	<1	10	50	10	7	N	10	N	N
K10410	70	150	<1	15	100	100	20	<50	15	N	<20
K10420	70	300	1.5	15	70	30	20	50	20	N	<20
K10430	50	100	N	<10	20	5	7	N	<10	N	N
K10440	15	50	N	<10	15	<5	N	N	N	N	N
K10450	20	30	N	10	10	30	<5	N	<10	N	N
K10460	15	70	<1	70	20	20	5	N	10	<5	N
K10470	20	1,500	N	15	20	7	10	N	15	N	N
K10480	50	150	N	10	70	20	20	N	20	N	N
K10490	50	100	N	<10	100	30	30	N	20	10	N
K10500	30	70	N	<10	100	10	30	N	20	N	N
K10510	50	150	N	<10	70	10	20	<50	20	N	N
K10520	70	100	<1	10	100	20	30	<50	20	N	N
K10530	50	100	N	10	150	15	50	N	15	N	N
K10540	50	200	<1	10	70	15	30	N	15	N	N
K10550	70	200	<1	10	150	30	50	N	30	15	N
K10560	50	150	<1	10	100	20	15	N	20	7	N
K10570	70	150	1	15	100	50	50	<50	50	N	<20
K10580	50	150	<1	10	70	<5	30	N	20	N	N
K10590	50	100	N	15	100	30	50	N	30	N	N
K10600	30	70	N	10	20	10	15	N	15	N	N
K10610	20	30	N	N	10	15	10	N	<10	N	N

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ni-ppm s	Pb-ppm s	Sc-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K10020	5	N	N	N	10	N	N	N	100	<.01	1
K10030	10	N	N	N	30	N	N	N	200	.02	1
K10040	15	N	N	N	50	N	N	N	500	.01	1
K10050	5	N	N	N	30	N	N	N	500	.01	1
K10060	10	N	N	N	20	30	N	N	300	<.01	1
K10070	5	N	N	N	15	<20	N	N	200	<.01	1
K10080	<5	N	N	N	10	N	N	N	150	<.01	1
K10090	<5	N	N	N	10	N	N	N	200	<.01	1
K10100	<5	N	N	N	<10	N	N	N	50	<.01	1
K10110	<5	N	N	N	<10	N	N	N	70	<.01	1
K10120	5	N	N	N	20	N	<10	N	200	.01	1
K10130	15	N	N	N	30	N	<10	N	500	.02	1
K10140	10	N	N	N	50	N	N	N	300	.02	1
K10150	10	N	N	N	20	N	N	N	200	.02	1
K10160	5	N	N	N	10	N	N	N	70	.01	1
K10170	<5	N	N	N	<10	N	N	N	20	<.01	1
K10180	7	<10	N	N	15	N	N	N	150	.01	1
K10190	20	N	<5	N	70	N	<10	N	200	.02	1
K10200	7	N	N	N	50	N	N	N	200	.02	1
K10210	15	N	N	N	50	N	N	N	200	.02	1
K10220	10	N	N	N	50	N	N	N	300	.02	1
K10230	7	N	N	N	50	N	N	N	300	.02	1
K10240	7	N	N	N	30	N	N	N	200	.01	1
K10250	5	300	N	N	30	N	N	N	200	.01	1
K10260	10	N	<5	N	50	N	10	N	500	.02	1
K10270	5	N	N	N	20	N	<10	N	300	.01	1
K10280	5	N	N	N	50	N	<10	N	300	.02	1
K10290	7	N	N	N	15	N	N	N	150	.01	1
K10300	<5	N	N	N	10	N	N	N	100	<.01	1
K10310	5	N	N	N	<10	N	N	N	70	<.01	1
K10320	<5	N	N	N	10	N	N	N	30	<.01	1
K10330	<5	N	N	N	<10	N	N	N	50	<.01	1
K10340	5	N	N	N	10	N	N	N	100	.01	1
K10350	10	N	N	N	20	N	N	N	200	.01	1
K10360	15	N	<5	N	50	N	<10	N	200	.01	1
K10370	50	N	5	N	50	N	10	N	300	.01	1
K10380	30	N	5	N	50	N	10	N	200	.01	1
K10390	20	N	5	N	50	N	10	N	200	.02	1
K10400	20	N	<5	N	30	N	<10	N	150	.02	1
K10410	30	N	7	N	50	N	10	N	200	.02	1
K10420	50	<10	<5	300	30	N	15	N	500	.04	1
K10430	15	N	N	N	20	20	N	N	150	.02	1
K10440	10	100	N	N	10	N	N	N	150	.02	1
K10450	30	N	N	N	20	N	N	N	500	.02	1
K10460	150	<10	N	N	15	N	N	N	150	.01	1
K10470	30	N	N	N	20	N	N	N	100	.02	3
K10480	30	15	<5	N	50	N	N	N	100	.03	3
K10490	50	10	<5	N	50	N	N	N	150	.08	3
K10500	20	<10	<5	N	50	N	N	N	30	.07	3
K10510	20	N	5	N	70	N	<10	N	70	.03	3
K10520	50	N	5	N	100	N	10	N	150	.03	3
K10530	30	N	5	N	70	N	<10	N	50	.04	3
K10540	20	N	<5	N	70	N	N	N	50	.08	3
K10550	70	10	<5	N	100	N	N	N	100	.1	3
K10560	30	N	<5	N	70	N	N	<200	70	.06	3
K10570	50	N	7	N	100	N	10	N	150	.06	3
K10580	30	<10	5	N	50	N	<10	N	70	.06	3
K10590	50	N	<5	N	50	N	<10	N	70	.03	3
K10600	20	N	<5	N	30	N	N	N	70	.03	3
K10610	10	N	N	N	20	N	N	N	15	.02	3

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Latitude	Longitude	Ca-pct. s	Fe-pct. s	Mg-pct. s	Na-pct. s	P -pct. s	Ti-pct. s	Ag-ppm s
K10620	37 22 45	88 25 5	.05	2	1	1	N	.3	N
K10630	37 22 45	88 25 5	N	1	.5	.3	N	.3	N
K10640	37 22 45	88 25 5	N	.7	.3	.2	N	.3	N
K10650	37 22 45	88 25 5	N	3	1	1	N	.5	N
K10660	37 22 45	88 25 5	<.05	5	1.5	1	N	.5	N
K10670	37 22 45	88 25 5	N	3	1	.7	N	.5	N
K10680	37 22 45	88 25 5	N	10	1.5	1	N	.3	<.5
K10690	37 22 45	88 25 5	N	5	1.5	.5	N	.5	N
K10700	37 22 45	88 25 5	N	2	1	.7	N	.2	N
K10710	37 22 45	88 25 5	<.05	2	1	1	N	.5	N
K10720	37 22 45	88 25 5	<.05	7	2	.7	N	.7	N
K10730	37 22 45	88 25 5	.07	5	1	.7	N	.2	N
K10740	37 22 45	88 25 5	N	3	1	.5	N	.3	N
K10750	37 22 45	88 25 5	N	3	1	.7	N	.5	N
K10760	37 22 45	88 25 5	<.05	3	1.5	.5	N	.5	N
K10770	37 22 45	88 25 5	N	5	1	1	N	.5	N
K10780	37 22 45	88 25 5	.07	5	2	.7	N	.7	N
K10790	37 22 45	88 25 5	.05	5	1.5	.5	N	.2	N
K10800	37 22 45	88 25 5	<.05	2	1.5	1	N	.2	N
K10810	37 22 45	88 25 5	.05	3	3	1	N	.5	N
K10820	37 22 45	88 25 5	.05	2	1.5	1.5	N	.5	N
K10830	37 22 45	88 25 5	.07	2	2	.7	N	.3	N
K10840	37 22 45	88 25 5	.07	3	2	.7	N	.2	N
K10850	37 22 45	88 25 5	.05	3	1.5	.7	N	.3	N
K10860	37 22 45	88 25 5	<.05	7	2	1	N	.5	N
K10870	37 22 45	88 25 5	.07	5	1.5	1.5	N	.5	N
K10880	37 22 45	88 25 5	.05	5	2	.7	N	.5	N
K10890	37 22 45	88 25 5	.05	5	1.5	1	N	.3	N
K10900	37 22 45	88 25 5	<.05	3	1.5	.7	N	.3	N
K10910	37 22 45	88 25 5	N	5	1	.5	N	.5	N
K10920	37 22 45	88 25 5	N	5	1.5	1	N	.3	N
K10930	37 22 45	88 25 5	N	5	1.5	.5	N	.5	N
K10940	37 22 45	88 25 5	N	3	2	1	N	.5	N
K10950	37 22 45	88 25 5	.05	3	1.5	.5	N	.3	N
K10960	37 22 45	88 25 5	.05	1.5	.7	.3	N	.2	N
K10970	37 22 45	88 25 5	N	2	1	.5	N	.3	N
K10980	37 22 45	88 25 5	N	3	.7	.3	N	.3	N
K10990	37 22 45	88 25 5	N	.5	.15	<.2	N	.15	N
K11000	37 22 45	88 25 5	N	.7	.2	.2	N	.2	N
K11010	37 22 45	88 25 5	N	.7	.2	.2	N	.1	N
K11020	37 22 45	88 25 5	N	1.5	.5	.3	N	.5	N
K11030	37 22 45	88 25 5	N	3	1	.5	N	.3	N
K11040	37 22 45	88 25 5	N	5	1.5	.5	N	.5	N
K11050	37 22 45	88 25 5	N	2	1	.3	N	.3	N
K11060	37 22 45	88 25 5	N	2	.7	.3	N	.5	N
K11070	37 22 45	88 25 5	N	3	.7	.3	N	.5	N
K11080	37 22 45	88 25 5	<.05	2	1	.3	N	.3	N
K11090	37 22 45	88 25 5	<.05	5	1.5	.7	N	.7	N
K11100	37 22 45	88 25 5	N	3	1.5	.7	N	.3	N
K11110	37 22 45	88 25 5	N	5	1.5	.5	N	.7	N
K11120	37 22 45	88 25 5	<.05	3	1	1	N	.3	N
K11130	37 22 45	88 25 5	<.05	3	1	.7	N	.5	N
K11140	37 22 45	88 25 5	N	1.5	.5	.5	N	.2	N
K11150	37 22 45	88 25 5	<.05	2	1	.7	N	.5	N
K11160	37 22 45	88 25 5	N	1.5	.5	.5	N	.3	N
K11170	37 22 45	88 25 5	N	2	.5	.7	N	.5	N
K11180	37 22 45	88 25 5	N	2	.7	.7	N	.5	N
K11190	37 22 45	88 25 5	N	1.5	.3	.7	N	.2	N
K11200	37 22 45	88 25 5	N	1.5	.7	1	N	.3	N
K11210	37 22 45	88 25 5	N	2	1	.7	N	.5	N

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	B-ppm s	Ba-ppm s	Be-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s
K10620	15	70	<1	<10	50	10	20	N	10	<5	N
K10630	20	<20	N	N	15	30	<5	N	N	N	N
K10640	15	100	N	N	50	<5	<5	N	<10	N	N
K10650	30	70	N	<10	50	7	30	N	15	N	N
K10660	50	150	<1	<10	100	7	50	N	10	N	N
K10670	50	150	<1	10	70	10	30	<50	20	N	N
K10680	20	2,000	<1	15	50	100	50	N	20	N	N
K10690	70	150	1	20	70	20	50	<50	15	N	N
K10700	20	70	N	<10	70	15	30	N	10	N	N
K10710	50	70	<1	<10	50	20	30	N	15	N	N
K10720	70	500	<1	<10	70	10	30	N	10	N	N
K10730	30	100	<1	<10	70	5	30	N	15	N	N
K10740	30	200	<1	<10	30	15	20	N	15	N	N
K10750	50	100	<1	10	70	15	30	<50	20	N	N
K10760	50	100	<1	10	70	20	30	N	30	N	N
K10770	30	100	<1	10	50	70	20	<50	30	N	<20
K10780	100	150	1.5	15	100	20	70	<50	50	N	<20
K10790	50	100	<1	<10	70	20	50	N	20	<5	N
K10800	30	70	N	N	50	5	<5	N	<10	N	N
K10810	50	200	1	10	150	15	50	<50	15	<5	N
K10820	50	150	N	<10	70	10	30	N	15	<5	N
K10830	30	70	N	10	70	10	50	N	15	N	N
K10840	30	100	N	<10	50	10	30	N	15	N	N
K10850	50	100	<1	10	70	15	50	N	20	<5	N
K10860	50	100	N	10	70	50	50	N	15	<5	N
K10870	30	70	N	<10	70	15	30	N	15	5	N
K10880	50	100	<1	10	50	20	70	N	15	<5	N
K10890	30	50	<1	<10	70	30	70	N	10	<5	N
K10900	30	70	N	<10	70	5	50	N	10	N	N
K10910	70	300	<1	20	50	15	20	<50	15	N	<20
K10920	30	50	N	10	70	10	30	N	10	N	N
K10930	70	70	<1	<10	100	10	50	N	20	N	N
K10940	50	100	N	<10	100	20	70	<50	30	N	N
K10950	30	50	N	20	50	15	30	N	20	N	N
K10960	30	100	N	N	20	5	10	N	10	N	N
K10970	50	70	1	<10	70	7	50	N	15	N	N
K10980	30	50	N	<10	30	20	<5	N	15	N	N
K10990	<10	70	N	N	10	<5	N	N	N	N	N
K11000	30	150	N	N	30	N	N	N	N	N	N
K11010	15	100	N	N	15	<5	N	N	N	N	N
K11020	30	50	<1	10	30	7	10	N	<10	N	N
K11030	50	70	1	30	100	15	50	<50	10	N	N
K11040	100	150	1.5	20	150	20	70	50	30	N	<20
K11050	30	100	N	15	70	10	30	N	<10	N	N
K11060	30	70	N	<10	70	20	20	N	10	N	N
K11070	50	70	<1	<10	50	10	20	N	15	N	N
K11080	50	50	<1	<10	70	10	20	N	10	N	N
K11090	50	70	1	10	200	15	50	N	10	N	N
K11100	50	50	<1	<10	150	10	30	N	15	N	N
K11110	70	100	<1	10	150	15	50	N	15	N	N
K11120	30	50	N	<10	150	10	30	N	10	N	N
K11130	50	50	<1	<10	100	20	30	N	15	N	N
K11140	20	150	N	10	30	20	15	N	<10	N	N
K11150	50	100	<1	10	100	20	20	N	20	N	N
K11160	30	100	N	<10	50	<5	10	N	<10	N	N
K11170	20	30	N	10	50	30	10	N	10	N	<20
K11180	20	70	N	N	30	5	15	N	10	N	N
K11190	15	50	N	N	30	<5	10	N	<10	N	N
K11200	20	70	N	<10	50	20	20	N	10	N	N
K11210	50	70	<1	10	30	7	20	N	15	N	<20

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ni-ppm s	Pb-ppm s	Sc-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K10620	15	N	<5	N	70	N	N	N	50	.08	3
K10630	N	N	N	N	15	N	N	N	300	.02	3
K10640	N	N	N	N	15	N	N	N	200	.02	3
K10650	15	N	<5	N	30	N	N	N	50	.06	3
K10660	15	N	<5	N	50	N	N	N	20	.08	3
K10670	20	N	<5	N	50	N	<10	N	100	.04	3
K10680	150	50	<5	100	30	N	<10	N	30	.02	3
K10690	70	10	5	N	70	N	<10	N	50	.04	3
K10700	15	<10	<5	N	30	N	N	N	15	.05	3
K10710	15	N	<5	N	30	N	N	N	50	.06	3
K10720	30	<10	<5	N	100	N	N	N	50	.06	3
K10730	10	N	<5	N	50	N	<10	N	70	.02	3
K10740	15	N	<5	N	50	N	N	N	100	.03	3
K10750	50	<10	5	N	70	N	<10	N	100	.02	3
K10760	50	N	<5	N	100	<20	<10	N	70	.03	3
K10770	20	N	<5	N	70	N	10	N	150	.02	3
K10780	50	10	7	N	100	N	<10	N	50	.08	3
K10790	30	<10	<5	N	50	N	N	<200	20	.11	3
K10800	20	N	<5	N	50	N	N	N	30	.11	3
K10810	30	<10	7	N	100	N	<10	N	50	.23	3
K10820	20	N	<5	N	70	N	N	N	70	.12	3
K10830	15	N	<5	N	50	N	N	N	50	.17	3
K10840	15	N	<5	N	50	N	N	N	20	.11	3
K10850	20	N	<5	N	70	N	N	N	70	.09	3
K10860	50	N	5	N	70	N	N	N	50	.1	3
K10870	30	N	<5	N	100	N	N	N	30	.1	3
K10880	50	<10	5	<100	70	N	N	<200	50	.11	3
K10890	30	<10	<5	N	70	N	N	N	20	.11	3
K10900	20	N	<5	N	70	N	N	N	30	.12	3
K10910	50	N	5	N	100	N	<10	N	300	.04	3
K10920	20	<10	<5	N	50	N	<10	N	70	.04	3
K10930	30	<10	5	N	100	N	<10	N	70	.04	3
K10940	20	<10	7	N	70	N	10	N	100	.04	3
K10950	70	10	<5	N	50	N	N	N	30	.06	3
K10960	10	N	N	N	30	N	N	N	50	.03	3
K10970	15	<10	5	N	50	N	<10	N	70	.05	3
K10980	50	N	<5	N	30	<20	<10	N	150	.04	3
K10990	<5	N	N	N	<10	N	N	N	150	.01	3
K11000	<5	N	N	N	15	N	N	N	200	.01	3
K11010	5	N	N	N	10	N	N	N	70	.02	3
K11020	15	N	<5	N	30	N	<10	N	100	.02	3
K11030	50	<10	5	N	50	N	<10	N	70	.05	3
K11040	70	<10	10	N	100	N	10	N	150	.04	3
K11050	20	N	<5	N	50	N	N	N	50	.08	3
K11060	20	N	<5	N	50	20	N	N	100	.06	3
K11070	20	N	<5	N	70	N	N	N	70	.08	3
K11080	15	N	<5	N	30	N	N	N	50	.12	3
K11090	50	N	7	N	100	N	<10	N	70	.1	3
K11100	20	<10	<5	N	70	N	N	N	30	.12	3
K11110	50	N	7	N	100	N	<10	N	50	.07	3
K11120	20	<10	<5	N	50	N	N	N	30	.09	3
K11130	15	N	<5	N	50	N	N	N	70	.06	3
K11140	10	N	N	N	20	N	N	N	100	.02	3
K11150	20	<10	5	N	50	N	<10	N	70	.03	3
K11160	10	N	N	N	30	N	N	N	150	.02	3
K11170	15	N	<5	N	30	N	<10	N	200	.02	
K11180	10	N	N	N	30	N	<10	N	300	.02	4
K11190	7	N	N	N	20	N	N	N	100	.01	4
K11200	15	<10	<5	N	30	N	<10	N	100	.02	4
K11210	20	N	5	N	50	N	<10	N	100	.02	4

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Latitude	Longitude	Ca-pct.	Fe-pct.	Mg-pct.	Na-pct.	P -pct.	Ti-pct.	Ag-ppm
			s	s	s	s	s	s	s
K11220	37 22 45	88 25 5	N	2	.7	.3	N	.3	N
K11230	37 22 45	88 25 5	<.05	5	1.5	.5	N	.5	N
K11240	37 22 45	88 25 5	.15	3	2	1	N	.7	N
K11250	37 22 45	88 25 5	.05	2	1.5	.7	N	.3	N
K11260	37 22 45	88 25 5	.07	3	1.5	.5	N	.5	N
K11270	37 22 45	88 25 5	<.05	1.5	1.5	1.5	N	.3	N
K11280	37 22 45	88 25 5	<.05	3	1.5	1	N	.5	N
K11290	37 22 45	88 25 5	<.05	2	1.5	.7	N	.5	N
K11300	37 22 45	88 25 5	<.05	3	1	1	N	.5	N
K11310	37 22 45	88 25 5	N	2	1.5	1	N	.5	N
K11320	37 22 45	88 25 5	N	2	1.5	1	N	.5	N
K11330	37 22 45	88 25 5	<.05	3	1.5	1	N	.5	N
K11340	37 22 45	88 25 5	<.05	2	1.5	1	N	.5	N
K11350	37 22 45	88 25 5	N	2	1.5	.5	N	.3	N
K11360	37 22 45	88 25 5	<.05	2	2	1	N	.5	N
K11370	37 22 45	88 25 5	N	2	1	.7	N	.3	N
K11380	37 22 45	88 25 5	<.05	1.5	1	1	N	.5	N
K11390	37 22 45	88 25 5	N	1.5	1	1.5	N	.5	N
K11400	37 22 45	88 25 5	N	1	1	1.5	N	.3	N
K11410	37 22 45	88 25 5	N	.5	1.5	1	N	.15	N
K11420	37 22 45	88 25 5	N	.5	.2	.7	N	.2	N
K11430	37 22 45	88 25 5	N	.5	.3	N	N	.15	N
K11440	37 22 45	88 25 5	N	.5	.3	N	N	.1	N
K11450	37 22 45	88 25 5	N	1.5	.7	.3	N	.3	N
K11460	37 22 45	88 25 5	N	1	.5	.7	N	.5	N
K11470	37 22 45	88 25 5	N	.7	.3	1	N	.3	N
K11480	37 22 45	88 25 5	N	1.5	.5	1.5	N	.2	N
K11490	37 22 45	88 25 5	N	.5	.2	.2	N	.5	N
K11500	37 22 45	88 25 5	N	.7	.3	.5	N	.1	N
K11510	37 22 45	88 25 5	N	1	.5	1	N	.3	N
K11520	37 22 45	88 25 5	N	.7	.3	.3	N	.2	N
K11530	37 22 45	88 25 5	N	.5	.2	.5	N	.3	N
K11540	37 22 45	88 25 5	N	.7	.3	N	N	.2	N
K11550	37 22 45	88 25 5	N	.5	.2	N	N	.2	N
K11560	37 22 45	88 25 5	N	1	.2	N	N	.2	N
K11570	37 22 45	88 25 5	N	1.5	1	<.2	N	.3	N
K11580	37 22 45	88 25 5	N	1	.3	N	N	.1	N
K11590	37 22 45	88 25 5	N	1	.5	N	N	.3	N
K11600	37 22 45	88 25 5	N	.3	.3	N	N	.15	N
K11610	37 22 45	88 25 5	N	.7	.5	N	N	.1	N
K11620	37 22 45	88 25 5	N	1	.7	N	N	.15	N
K11640	37 22 45	88 25 5	<.05	2	1	.3	N	.2	N
K11650	37 22 45	88 25 5	<.05	5	1.5	.3	N	.3	N
K11660	37 22 45	88 25 5	.05	5	2	.5	N	.5	N
K11670	37 22 45	88 25 5	<.05	3	1.5	.7	N	.5	N
K11680	37 22 45	88 25 5	<.05	3	1.5	.7	N	.5	N
K11690	37 22 45	88 25 5	<.05	2	1.5	1	N	.3	N
K11700	37 22 45	88 25 5	<.05	3	1.5	.7	N	.3	N
K11710	37 22 45	88 25 5	<.05	5	2	.7	N	.5	N
K11720	37 22 45	88 25 5	<.05	5	2	1	N	.3	N
K11730	37 22 45	88 25 5	.05	7	3	.7	N	.7	N
K11740	37 22 45	88 25 5	<.05	3	1.5	1	N	.3	N
K11750	37 22 45	88 25 5	<.05	3	2	1	N	.5	N
K11760	37 22 45	88 25 5	N	1	.7	.3	N	.2	N
K11770	37 22 45	88 25 5	.05	3	3	1	N	.5	N
K11780	37 22 45	88 25 5	<.05	2	1.5	.5	N	.3	N
K11790	37 22 45	88 25 5	<.05	3	1.5	1	N	.5	N
K11800	37 22 45	88 25 5	<.05	1.5	1	.3	N	.2	N
K11810	37 22 45	88 25 5	<.05	1	.7	<.2	N	.15	N
K11820	37 22 45	88 25 5	<.05	10	2	1	N	.3	N

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	B-ppm s	Ba-ppm s	Be-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s
K11220	50	70	N	10	50	15	20	N	10	N	N
K11230	70	100	<1	10	100	30	50	N	30	5	N
K11240	100	300	1	10	200	20	70	<50	30	5	N
K11250	70	70	<1	<10	150	15	50	N	20	<5	N
K11260	100	70	<1	10	200	30	30	N	20	<5	N
K11270	30	70	N	<10	300	20	70	N	10	<5	N
K11280	50	100	<1	10	200	20	70	N	15	<5	N
K11290	50	50	<1	<10	70	20	50	N	15	N	N
K11300	50	50	N	10	100	15	50	N	10	<5	N
K11310	30	70	N	<10	100	<5	70	N	10	N	N
K11320	30	70	<1	10	100	30	100	N	10	N	N
K11330	50	300	<1	10	100	5	70	N	10	N	N
K11340	50	50	<1	10	100	20	50	N	15	N	N
K11350	70	70	<1	10	100	10	50	N	<10	N	N
K11360	70	70	<1	10	100	10	100	<50	15	N	N
K11370	70	50	<1	10	150	10	50	N	10	N	N
K11380	100	700	<1	<10	100	15	30	<50	10	N	N
K11390	50	100	N	N	100	10	50	N	N	N	N
K11400	30	200	N	N	100	<5	30	N	<10	N	<20
K11410	<10	300	N	15	20	7	5	N	N	N	N
K11420	20	500	N	N	20	N	<5	N	N	N	<20
K11430	15	20	N	N	10	<5	N	N	N	N	N
K11440	15	20	N	N	<10	<5	N	N	N	N	N
K11450	30	50	N	<10	30	5	20	N	N	N	<20
K11460	50	70	N	N	20	<5	15	N	N	N	20
K11470	20	200	N	N	30	<5	10	N	N	N	<20
K11480	20	150	N	N	20	10	15	N	N	N	N
K11490	20	30	N	N	50	7	N	N	N	N	20
K11500	20	150	N	N	20	5	10	N	N	N	N
K11510	30	200	N	N	70	<5	15	N	N	N	<20
K11520	15	30	N	N	10	<5	N	N	N	N	<20
K11530	50	50	N	N	15	5	10	N	N	N	N
K11540	30	50	<1	N	15	5	15	N	N	N	<20
K11550	20	70	N	N	30	<5	N	N	N	N	N
K11560	30	70	N	N	15	5	5	N	N	N	N
K11570	30	100	N	N	20	<5	7	N	N	N	<20
K11580	20	300	N	N	10	5	<5	N	N	N	N
K11590	50	300	<1	N	20	<5	10	N	<10	N	<20
K11600	50	100	N	N	10	<5	N	N	N	N	N
K11610	10	30	N	N	<10	<5	N	N	N	N	N
K11620	20	500	N	N	30	<5	10	N	<10	N	N
K11640	70	500	<1	10	100	10	50	N	<10	N	N
K11650	50	70	<1	<10	100	200	100	N	<10	N	N
K11660	100	100	1	15	100	20	100	<50	10	N	N
K11670	50	70	<1	<10	100	100	70	N	<10	N	N
K11680	50	100	<1	10	100	15	50	<50	10	N	N
K11690	30	100	N	<10	100	30	70	N	15	N	N
K11700	30	70	N	<10	70	<5	50	N	10	N	N
K11710	70	150	<1	10	100	20	70	<50	15	N	N
K11720	30	100	<1	10	150	20	100	N	<10	N	N
K11730	100	150	1.5	20	100	50	70	<50	15	N	<20
K11740	20	70	N	<10	70	15	50	N	<10	<5	N
K11750	50	100	N	15	100	20	50	N	15	N	N
K11760	20	700	N	N	20	30	15	N	<10	N	N
K11770	50	100	N	10	100	10	70	N	10	N	N
K11780	30	70	N	<10	70	5	30	N	<10	N	N
K11790	50	70	N	N	70	<5	30	N	10	N	N
K11800	20	50	N	<10	20	5	10	N	<10	N	N
K11810	30	30	N	N	20	15	<5	N	10	N	N
K11820	50	70	<1	20	150	50	100	N	10	N	N

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ni-ppm s	Pb-ppm s	Sc-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K11220	30	N	<5	N	30	N	N	N	100	.02	4
K11230	30	10	5	N	100	30	N	N	70	.12	4
K11240	50	10	7	N	150	N	10	N	150	.11	4
K11250	30	<10	<5	N	100	N	N	N	50	.14	4
K11260	50	N	<5	N	150	N	N	N	70	.11	4
K11270	30	<10	<5	N	100	N	N	N	30	.13	4
K11280	50	10	<5	N	100	N	N	N	50	.1	4
K11290	20	N	<5	N	70	N	N	N	50	.12	4
K11300	30	N	<5	N	70	N	N	N	70	.07	4
K11310	30	N	5	N	70	N	<10	N	70	.07	4
K11320	50	N	5	N	50	N	N	N	50	.04	4
K11330	30	N	5	N	100	N	N	N	70	.08	4
K11340	20	N	<5	N	100	N	N	N	70	.06	4
K11350	20	N	<5	N	70	N	N	N	70	.06	4
K11360	20	N	5	N	100	N	<10	N	70	.04	4
K11370	20	N	<5	N	100	N	N	N	70	.04	4
K11380	15	N	<5	N	70	N	N	N	150	.04	4
K11390	10	N	<5	N	50	N	<10	N	100	.05	4
K11400	10	N	N	N	30	N	N	N	150	.03	5
K11410	7	N	N	N	<10	N	N	N	100	.04	5
K11420	N	N	N	N	10	N	N	N	200	.03	5
K11430	<5	N	N	N	10	N	N	N	100	.03	5
K11440	5	N	N	N	10	N	N	<200	50	.03	5
K11450	10	N	N	N	30	N	N	N	100	.07	5
K11460	5	N	N	N	50	N	N	N	200	.06	5
K11470	5	N	N	N	20	N	N	N	150	.05	5
K11480	7	N	N	N	20	N	N	N	150	.04	5
K11490	N	20	N	N	15	N	N	N	1,000	.02	5
K11500	7	N	N	N	15	N	N	N	70	.04	5
K11510	5	N	N	N	20	N	N	N	300	.03	5
K11520	<5	N	N	N	15	N	N	N	150	.02	5
K11530	<5	N	N	N	15	N	N	N	300	.03	5
K11540	<5	N	N	N	15	N	N	N	150	.03	5
K11550	<5	N	N	N	10	N	N	N	200	.03	5
K11560	5	N	N	N	15	N	N	N	100	.03	5
K11570	7	<10	N	N	20	N	N	N	200	.03	5
K11580	7	N	N	N	15	N	N	N	70	.06	5
K11590	5	N	N	N	20	N	N	N	150	.04	5
K11600	<5	N	N	N	10	N	N	N	70	.04	5
K11610	<5	N	N	N	15	N	N	<200	50	.02	5
K11620	7	N	N	N	20	N	N	N	30	.03	5
K11640	20	N	<5	N	70	150	N	N	70	.08	5
K11650	50	N	<5	N	100	50	N	N	50	.06	5
K11660	70	N	5	N	150	N	N	N	70	.12	5
K11670	30	500	<5	N	100	N	N	N	70	.08	5
K11680	30	N	5	N	150	N	<10	N	100	.08	5
K11690	20	N	<5	<100	100	N	N	N	70	.12	5
K11700	20	N	<5	N	100	N	N	N	50	.13	5
K11710	50	N	7	500	100	N	<10	N	100	.11	5
K11720	30	<10	<5	N	70	N	N	N	30	.11	5
K11730	50	10	7	N	200	N	<10	N	70	.15	5
K11740	20	<10	<5	150	50	N	N	N	30	.17	6
K11750	30	N	<5	N	70	N	N	N	300	.12	6
K11760	5	N	N	>5,000	30	N	N	N	300	.11	6
K11770	20	N	5	<100	100	N	N	N	70	.27	6
K11780	15	N	<5	N	50	N	N	N	100	.08	6
K11790	15	N	<5	N	50	N	N	N	150	.07	6
K11800	10	N	N	N	30	N	N	N	150	.05	6
K11810	10	N	N	N	30	N	N	N	100	.05	6
K11820	70	15	<5	N	50	100	<10	N	70	.1	6

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Latitude	Longitude	Ca-pct. s	Fe-pct. s	Mg-pct. s	Na-pct. s	P -pct. s	Ti-pct. s	Ag-ppm s
K11830	37 22 45	88 25 5	N	3	1.5	.7	N	.2	N
K11840	37 22 45	88 25 5	<.05	1.5	2	1	N	.3	N
K11850	37 22 45	88 25 5	.05	2	2	1	N	.5	N
K11860	37 22 45	88 25 5	N	1.5	1.5	.7	N	.2	N
K11870	37 22 45	88 25 5	.05	2	2	1	N	.2	N
K11880	37 22 45	88 25 5	.07	3	1	1	N	.5	N
K11890	37 22 45	88 25 5	<.05	1	.5	.3	N	.3	N
K11900	37 22 45	88 25 5	.05	2	1.5	.3	N	.5	N
K11910	37 22 45	88 25 5	<.05	2	1.5	1	N	.2	N
K11920	37 22 45	88 25 5	.05	2	2	.5	N	.5	2
K11930	37 22 45	88 25 5	N	5	1.5	1	N	.3	N
K11940	37 22 45	88 25 5	.07	2	1.5	1	N	.5	N
K11950	37 22 45	88 25 5	.05	3	3	.5	N	.5	N
K11960	37 22 45	88 25 5	<.05	1.5	2	1.5	N	.3	N
K11970	37 22 45	88 25 5	.07	2	2	1	N	.5	N
K11980	37 22 45	88 25 5	<.05	3	1.5	.7	N	.2	N
K11990	37 22 45	88 25 5	<.05	1.5	1	1	N	.2	N
K12000	37 22 45	88 25 5	.07	2	1	2	N	.5	N
K12010	37 22 45	88 25 5	<.05	1	.7	<.2	N	.2	N
K12026	37 22 45	88 25 5	.05	3	1.5	.3	N	.3	N

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	B-ppm s	Ba-ppm s	Be-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s
K11830	20	50	N	<10	70	5	20	N	N	N	N
K11840	30	70	<1	<10	70	10	50	N	10	N	N
K11850	30	70	<1	15	150	15	70	N	<10	N	N
K11860	20	50	N	<10	70	10	70	N	10	N	N
K11870	50	>5,000	<1	<10	100	7	100	N	N	N	N
K11880	20	>5,000	<1	<10	100	7	50	N	N	N	N
K11890	50	70	1	N	30	5	10	N	N	N	<20
K11900	50	70	<1	15	100	7	50	N	15	N	N
K11910	30	70	N	N	50	7	30	N	<10	N	N
K11920	50	200	2	<10	100	20	50	N	10	N	N
K11930	30	100	N	N	70	5	50	N	N	N	N
K11940	70	70	<1	10	100	15	50	N	10	N	N
K11950	70	70	N	10	100	7	70	N	<10	N	N
K11960	50	50	N	N	70	10	50	N	<10	N	N
K11970	70	1,000	<1	10	100	15	70	N	10	N	N
K11980	50	70	N	<10	70	10	30	<50	<10	N	N
K11990	50	50	<1	<10	50	7	30	N	<10	N	N
K12000	70	70	<1	10	100	10	50	N	10	N	N
K12010	20	30	N	N	15	5	10	N	<10	N	N
K12026	30	70	N	10	70	20	50	70	15	N	N

TABLE 2--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K1, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ni-ppm s	Pb-ppm s	Sc-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K11830	20	N	N	N	30	N	N	N	30	.08	6
K11840	20	N	N	100	50	N	N	N	100	.14	6
K11850	30	N	5	N	70	N	N	N	100	.08	6
K11860	15	N	<5	N	50	<20	N	N	30	.12	6
K11870	20	N	5	700	50	N	N	N	30	.18	6
K11880	20	N	5	200	50	N	N	N	70	.24	6
K11890	10	N	N	N	30	N	N	N	300	.11	6
K11900	20	N	7	N	70	N	<10	N	100	.07	6
K11910	15	N	<5	N	50	N	N	N	70	.06	6
K11920	20	<10	5	N	70	30	N	<200	70	.23	6
K11930	20	<10	N	N	50	N	N	N	50	.1	6
K11940	30	N	<5	N	70	N	N	N	70	.23	6
K11950	30	N	<5	N	100	N	N	N	50	.36	6
K11960	20	N	<5	N	50	N	N	N	50	.22	6
K11970	30	N	7	>5,000	70	N	<10	N	70	.07	6
K11980	20	N	N	<100	50	N	N	N	30	.07	6
K11990	20	N	<5	N	50	N	N	N	70	.08	6
K12000	20	N	5	N	70	N	N	N	500	.05	6
K12010	7	N	N	N	20	N	N	<200	150	.09	6
K12026	30	<10	5	150	30	N	N	N	50	.14	6

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.

[N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown.]

Sample	Latitude	Longitude	Ca-pct. s	Fe-pct. s	Mg-pct. s	Na-pct. s	Ti-pct. s	Ag-ppm s	As-ppm s	B-ppm s
K206010	37 36 16	87 30 20	.1	5	1	.5	.3	N	N	50
K206110	37 36 16	87 30 20	<.05	2	.5	.3	.1	1	N	20
K206150	37 36 16	87 30 20	<.05	1	.2	<.2	.07	N	N	15
K206190	37 36 16	87 30 20	.2	1.5	1	.2	.1	N	N	15
K206230	37 36 16	87 30 20	<.05	.7	.3	N	.05	N	N	15
K206270	37 36 16	87 30 20	<.05	.3	.2	N	.03	N	N	10
K206310	37 36 16	87 30 20	.2	.15	.3	N	.01	N	N	<10
K206350	37 36 16	87 30 20	.1	1.5	.3	N	.07	N	N	15
K206390	37 36 16	87 30 20	.15	1	.7	.2	.15	N	N	20
K206430	37 36 16	87 30 20	.2	1.5	.7	<.2	.07	N	N	10
K206470	37 36 16	87 30 20	.05	2	.3	<.2	.1	N	N	15
K206510	37 36 16	87 30 20	.07	1.5	.5	<.2	.1	N	N	20
K206550	37 36 16	87 30 20	<.05	1	.15	N	.03	N	N	10
K206590	37 36 16	87 30 20	.07	1.5	.15	N	.05	N	N	20
K206630	37 36 16	87 30 20	<.05	1.5	.3	.2	.1	N	N	15
K206670	37 36 16	87 30 20	.05	1.5	.5	.3	.15	N	N	10
K206710	37 36 16	87 30 20	.05	3	.5	.3	.2	N	N	20
K206750	37 36 16	87 30 20	.5	1.5	1	.2	.2	N	N	20
K206790	37 36 16	87 30 20	.1	1	.3	<.2	.07	N	N	10
K206830	37 36 16	87 30 20	.05	5	1	.5	.3	<.5	N	50
K206870	37 36 16	87 30 20	<.05	5	.7	.7	.15	.7	N	30
K206920	37 36 16	87 30 20	.05	5	.3	<.2	.1	.5	N	30
K206960	37 36 16	87 30 20	N	1.5	.15	N	.05	N	N	<10
K207000	37 36 16	87 30 20	N	2	.2	N	.07	N	N	10
K207040	37 36 16	87 30 20	N	2	.5	.2	.15	N	N	10
K207080	37 36 16	87 30 20	.07	3	.5	.2	.3	N	N	20
K207120	37 36 16	87 30 20	N	2	.3	.2	.2	N	N	15
K207160	37 36 16	87 30 20	.15	.7	.7	<.2	.15	N	N	20
K207200	37 36 16	87 30 20	3	2	3	.3	.3	N	N	30
K207240	37 36 16	87 30 20	.3	1	.5	.2	.1	N	N	20
K207280	37 36 16	87 30 20	.7	5	1	<.2	.1	.5	N	20
K207320	37 36 16	87 30 20	<.05	.7	.15	N	.05	N	N	<10
K207360	37 36 16	87 30 20	.15	1.5	.3	N	.05	N	N	10
K207400	37 36 16	87 30 20	.07	2	.3	N	.1	1	N	15
K207440	37 36 16	87 30 20	N	5	.15	N	.7	<.5	N	10
K207480	37 36 16	87 30 20	N	3	.2	<.2	.15	N	N	20
K207520	37 36 16	87 30 20	<.05	2	.5	.3	.2	N	N	50
K207560	37 36 16	87 30 20	.15	1.5	.5	.3	.15	N	N	30
K207600	37 36 16	87 30 20	<.05	1	.2	<.2	.07	N	N	10
K207640	37 36 16	87 30 20	<.05	.7	.03	N	.01	N	N	N
K207680	37 36 16	87 30 20	.05	.7	.02	N	.01	N	N	N
K207720	37 36 16	87 30 20	.05	1	.07	N	.02	<.5	N	N
K207760	37 36 16	87 30 20	<.05	.5	.1	N	.03	N	N	N
K207800	37 36 16	87 30 20	N	.2	.05	N	.015	N	N	N
K207840	37 36 16	87 30 20	<.05	.3	.07	N	.03	N	N	N
K207880	37 36 16	87 30 20	<.05	.2	.03	N	.015	N	N	N
K207920	37 36 16	87 30 20	N	.1	<.02	N	.005	N	N	N
K207960	37 36 16	87 30 20	<.05	.3	.07	N	.02	N	N	N
K208000	37 36 16	87 30 20	N	.2	.02	N	.02	N	N	N
K208040	37 36 16	87 30 20	N	.3	.03	N	.02	N	N	N
K208080	37 36 16	87 30 20	N	.5	.05	N	.03	N	N	N
K208120	37 36 16	87 30 20	<.05	1	.2	N	.1	N	N	20
K208160	37 36 16	87 30 20	<.05	.7	.15	N	.05	N	N	20
K208200	37 36 16	87 30 20	N	.3	.1	N	.02	N	N	N
K208240	37 36 16	87 30 20	N	.15	.03	N	.015	N	N	N
K208280	37 36 16	87 30 20	<.05	.3	.1	N	.02	N	N	N
K208320	37 36 16	87 30 20	N	.5	.15	N	.03	N	N	10
K208360	37 36 16	87 30 20	.05	1	.2	N	.05	N	N	15
K208400	37 36 16	87 30 20	.05	1	.3	N	.07	N	N	20
K208440	37 36 16	87 30 20	<.05	.7	.15	N	.02	N	N	N

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s
K206010	150	N	N	10	50	30	50	<50	15	15	<20
K206110	70	N	N	<10	10	2,000	15	N	<10	5	N
K206150	50	N	N	N	<10	15	5	N	N	N	N
K206190	70	N	N	N	10	150	20	N	N	5	N
K206230	30	N	N	N	<10	30	5	N	N	N	N
K206270	50	N	N	N	N	5	N	N	N	N	N
K206310	<20	N	N	N	N	7	N	N	N	N	N
K206350	70	N	N	N	<10	20	<5	N	N	5	N
K206390	100	N	N	N	20	30	30	N	N	<5	N
K206430	70	N	N	N	<10	20	10	N	N	5	N
K206470	50	N	N	N	<10	20	10	N	N	<5	N
K206510	70	N	N	N	<10	30	10	N	N	5	N
K206550	30	N	N	N	N	15	N	N	N	N	N
K206590	50	N	N	N	N	20	N	N	N	N	N
K206630	100	N	N	N	10	20	15	N	N	<5	N
K206670	100	N	N	10	15	30	20	N	N	7	N
K206710	300	N	N	<10	15	50	20	N	<10	5	N
K206750	200	N	N	<10	10	20	30	N	<10	15	N
K206790	70	N	N	N	<10	10	5	N	N	5	N
K206830	200	<1	N	15	15	70	30	N	30	10	N
K206870	100	N	N	<10	15	70	20	N	50	15	N
K206920	100	N	N	<10	<10	70	10	N	10	20	N
K206960	70	N	N	N	N	50	N	N	N	7	N
K207000	100	N	N	N	N	30	N	N	N	7	N
K207040	300	N	N	<10	20	50	15	N	<10	10	N
K207080	300	N	N	10	30	70	30	N	<10	10	N
K207120	200	N	N	<10	20	50	15	N	<10	7	N
K207160	200	N	N	N	10	15	15	N	N	10	N
K207200	300	N	N	<10	70	20	50	N	N	30	N
K207240	100	N	N	N	N	7	<5	N	10	7	N
K207280	200	N	N	<10	10	30	10	N	15	15	N
K207320	70	N	N	N	N	7	N	N	N	7	N
K207360	50	N	N	N	N	10	N	N	<10	5	N
K207400	70	N	N	10	10	50	10	N	<10	7	N
K207440	50	N	N	30	<10	300	5	N	N	7	N
K207480	100	N	N	10	20	70	10	N	<10	10	N
K207520	150	N	N	20	10	70	10	N	20	<5	N
K207560	100	N	N	10	15	30	15	N	15	5	N
K207600	50	N	N	10	<10	10	N	N	<10	<5	N
K207640	20	N	N	N	N	15	N	N	N	5	N
K207680	20	N	N	N	N	7	N	N	N	<5	N
K207720	30	N	N	N	N	15	N	N	N	5	N
K207760	30	N	N	N	N	5	N	N	N	N	N
K207800	<20	N	N	N	N	<5	N	N	N	N	N
K207840	30	N	N	N	N	<5	N	N	N	<5	N
K207880	30	N	N	N	N	N	N	N	N	N	N
K207920	30	N	N	N	N	N	N	N	N	N	N
K207960	30	N	N	N	N	7	N	N	N	<5	N
K208000	20	N	N	N	N	N	N	N	N	<5	N
K208040	20	N	N	N	N	5	N	N	N	7	N
K208080	30	N	N	N	N	30	N	N	N	5	N
K208120	100	N	N	N	<10	20	5	N	N	7	N
K208160	50	N	N	N	N	20	N	N	N	20	N
K208200	30	N	N	N	N	5	N	N	N	5	N
K208240	30	N	N	N	N	N	N	N	N	5	N
K208280	70	N	N	N	N	<5	N	N	N	7	N
K208320	30	N	N	N	N	10	N	N	N	7	N
K208360	70	N	N	N	N	15	N	N	N	7	N
K208400	50	N	N	<10	<10	15	<5	N	N	10	N
K208440	50	N	N	N	N	20	N	N	N	7	N

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ni-ppm s	Pb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K206010	20	30	<5	N	N	70	N	<10	N	100	.1	41
K206110	20	300	N	100	N	20	N	N	200	20	.04	41
K206150	5	30	N	N	N	10	N	N	N	10	.02	41
K206190	7	30	N	N	N	15	N	N	N	10	.03	41
K206230	5	N	N	N	N	10	N	N	N	15	.02	41
K206270	<5	N	N	N	N	<10	N	N	N	<10	.01	41
K206310	N	N	N	N	N	N	N	N	N	N	.01	41
K206350	7	<10	N	N	N	10	N	N	N	30	.02	41
K206390	7	15	N	N	N	20	N	N	N	30	.03	41
K206430	5	N	N	N	N	10	N	N	N	10	.02	41
K206470	7	20	N	N	N	10	N	N	N	20	.02	41
K206510	7	<10	N	N	N	10	N	N	N	20	.02	41
K206550	<5	<10	N	N	N	N	N	N	500	20	<.01	41
K206590	<5	10	N	N	N	<10	N	N	700	10	.01	41
K206630	7	20	N	N	N	10	N	N	N	30	.03	41
K206670	10	20	N	N	N	15	N	N	N	30	.03	41
K206710	15	50	N	N	N	15	N	N	<200	50	.03	41
K206750	10	15	N	N	N	15	20	N	N	70	.04	41
K206790	5	15	N	N	N	<10	N	N	N	30	.03	41
K206830	15	150	<5	N	N	30	<20	N	<200	70	.05	41
K206870	10	150	N	N	N	20	N	N	300	30	.03	41
K206920	10	30	N	N	N	10	N	N	700	50	.02	41
K206960	5	20	N	N	N	<10	N	N	N	50	<.01	41
K207000	7	150	N	N	N	<10	N	N	N	30	<.01	41
K207040	10	100	N	N	N	15	N	N	N	70	.02	41
K207080	30	50	N	N	N	20	N	N	N	150	.03	41
K207120	10	200	N	N	N	15	N	N	N	50	.02	41
K207160	5	15	N	N	N	10	N	N	N	100	.03	41
K207200	15	<10	N	N	N	30	N	N	N	70	.05	41
K207240	5	N	N	N	N	<10	N	N	N	30	<.01	41
K207280	10	30	N	N	N	10	N	N	N	50	.02	41
K207320	5	N	N	N	N	N	N	N	N	50	.01	41
K207360	7	<10	N	N	N	<10	N	N	N	70	.01	41
K207400	20	20	N	N	N	15	N	N	N	30	.02	41
K207440	20	1,500	N	N	N	<10	70	N	N	20	.01	41
K207480	15	70	N	N	N	15	30	N	N	20	.02	41
K207520	15	700	N	N	N	20	50	N	N	50	.02	41
K207560	10	500	N	N	N	20	<20	N	N	30	.02	41
K207600	5	N	N	N	N	10	20	N	N	10	.02	41
K207640	<5	N	N	N	N	N	N	N	N	10	<.01	41
K207680	<5	<10	N	N	N	N	N	N	N	<10	.02	41
K207720	5	10	N	N	N	N	N	N	N	10	.02	41
K207760	5	N	N	N	N	<10	N	N	N	15	.02	41
K207800	<5	N	N	N	N	N	N	N	N	10	.02	41
K207840	<5	N	N	N	N	N	N	N	N	10	.02	41
K207880	N	N	N	N	N	N	N	N	N	15	<.01	41
K207920	N	15	N	N	N	N	30	N	N	N	<.01	41
K207960	<5	N	N	N	N	<10	N	N	N	10	.02	41
K208000	<5	N	N	N	N	N	N	N	N	20	.02	41
K208040	<5	N	N	N	N	<10	N	N	N	<10	.02	41
K208080	<5	N	N	N	N	<10	N	N	N	10	.02	41
K208120	5	<10	N	N	N	15	<20	N	N	30	.02	41
K208160	5	N	N	N	N	10	N	N	N	10	.02	41
K208200	<5	<10	N	N	N	N	N	N	N	<10	.02	41
K208240	N	N	N	N	N	N	N	N	N	30	<.01	41
K208280	N	N	N	N	N	<10	N	N	N	20	.01	41
K208320	5	<10	N	N	N	<10	N	N	N	10	.02	41
K208360	5	N	N	N	N	<10	20	N	N	30	.02	41
K208400	5	15	N	N	N	10	70	N	N	<10	.02	41
K208440	5	N	N	N	N	<10	N	N	N	20	.02	41

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Latitude	Longitude	Ca-pct.	Fe-pct.	Mg-pct.	Na-pct.	Ti-pct.	Ag-ppm	As-ppm	B-ppm
			s	s	s	s	s	s	s	s
K208480	37 36 16	87 30 20	.1	1	.1	N	.03	N	N	10
K208520	37 36 16	87 30 20	N	.7	.07	N	.03	N	N	15
K208560	37 36 16	87 30 20	<.05	.7	.15	N	.05	N	N	15
K208680	37 36 16	87 30 20	<.05	1	.1	N	.03	N	N	10
K208720	37 36 16	87 30 20	.1	.2	.05	N	.01	N	N	<10
K208760	37 36 16	87 30 20	<.05	.7	.05	N	.015	N	N	10
K208800	37 36 16	87 30 20	.2	.5	.07	N	.02	N	N	15
K208840	37 36 16	87 30 20	<.05	.7	.1	N	.05	N	N	15
K208880	37 36 16	87 30 20	N	.7	.2	N	.07	N	N	15
K208920	37 36 16	87 30 20	N	1.5	.3	N	.1	<.5	N	20
K208960	37 36 16	87 30 20	<.05	1	.3	N	.07	<.5	N	20
K209000	37 36 16	87 30 20	.15	1	.3	<.2	.1	N	N	20
K209040	37 36 16	87 30 20	.1	2	.7	<.2	.15	.5	N	30
K209080	37 36 16	87 30 20	.07	1	.5	N	.1	.5	N	20
K209120	37 36 16	87 30 20	.07	1.5	.5	.7	.1	.7	N	30
K209160	37 36 16	87 30 20	.1	1.5	.2	1.5	.07	<.5	N	10
K209200	37 36 16	87 30 20	<.05	.5	.07	.5	.03	N	N	N
K209240	37 36 16	87 30 20	<.05	.7	.1	1	.05	N	N	<10
K209280	37 36 16	87 30 20	.05	2	.7	1	.2	N	N	30
K209320	37 36 16	87 30 20	.05	1.5	.7	.3	.2	N	N	30
K209360	37 36 16	87 30 20	<.05	.7	.2	.7	.07	N	N	10
K209400	37 36 16	87 30 20	N	.5	.1	.5	.03	N	N	N
K209440	37 36 16	87 30 20	.2	1.5	1	2	.15	N	N	<10
K209480	37 36 16	87 30 20	N	1.5	.3	1.5	.15	N	N	20
K209520	37 36 16	87 30 20	.2	3	1	2	.3	N	N	30
K209560	37 36 16	87 30 20	.05	2	.3	2	.1	N	N	15
K209600	37 36 16	87 30 20	.05	1	.15	1	.05	N	N	10
K209640	37 36 16	87 30 20	.1	2	.5	.7	.1	N	N	50
K209680	37 36 16	87 30 20	<.05	3	.2	1	.05	N	N	<10
K209720	37 36 16	87 30 20	N	.5	.1	<.2	.02	N	N	<10
K209760	37 36 16	87 30 20	<.05	.3	.05	N	.01	N	N	10
K209800	37 36 16	87 30 20	<.05	.2	.05	N	.01	N	N	<10
K209840	37 36 16	87 30 20	N	.15	.03	N	.015	N	N	10
K209880	37 36 16	87 30 20	.07	.7	.3	<.2	.05	N	N	15
K209920	37 36 16	87 30 20	<.05	.7	.2	<.2	.03	N	N	15
K209960	37 36 16	87 30 20	N	.5	.1	N	.02	N	N	<10
K210000	37 36 16	87 30 20	N	.2	.05	N	.015	N	N	<10
K210040	37 36 16	87 30 20	N	.05	.02	N	.005	N	N	<10
K210080	37 36 16	87 30 20	N	.3	.07	N	.02	N	N	10
K210120	37 36 16	87 30 20	<.05	1	.15	N	.05	N	N	15
K210160	37 36 16	87 30 20	N	.2	.02	N	.015	N	N	10
K210200	37 36 16	87 30 20	N	.3	.05	N	.02	N	N	10
K210240	37 36 16	87 30 20	<.05	1.5	1	1	.3	N	N	50
K210280	37 36 16	87 30 20	N	.5	.15	<.2	.05	N	N	15
K210320	37 36 16	87 30 20	.05	.7	.15	<.2	.07	N	N	10
K210360	37 36 16	87 30 20	<.05	.5	.15	N	.05	N	N	<10
K210400	37 36 16	87 30 20	<.05	.7	.2	<.2	.07	N	N	10
K210440	37 36 16	87 30 20	.07	2	.5	.5	.2	<.5	N	30
K210480	37 36 16	87 30 20	N	1	.2	<.2	.07	N	N	20
K210520	37 36 16	87 30 20	N	.7	.07	N	.03	N	N	10
K210560	37 36 16	87 30 20	.1	1	.2	N	.05	N	N	15
K210600	37 36 16	87 30 20	N	1	.05	N	.02	N	N	<10
K210640	37 36 16	87 30 20	.05	1	.2	.3	.1	N	N	20
K210680	37 36 16	87 30 20	N	2	.2	.2	.07	<.5	N	15
K210720	37 36 16	87 30 20	<.05	1.5	.3	.2	.1	N	N	20
K210760	37 36 16	87 30 20	<.05	1	.15	<.2	.05	N	N	15
K210800	37 36 16	87 30 20	.15	.5	.07	N	.02	N	N	10
K210840	37 36 16	87 30 20	.07	.7	.1	N	.03	N	N	10
K210880	37 36 16	87 30 20	.15	.5	.05	N	.02	N	N	15
K210920	37 36 16	87 30 20	.1	.3	.03	N	.015	N	N	10

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s
K208480	70	N	N	N	N	15	N	N	N	10	N
K208520	30	N	N	N	N	5	N	N	N	5	N
K208560	30	N	N	N	N	7	N	N	N	<5	N
K208680	<20	N	N	N	N	7	N	N	N	7	N
K208720	N	N	N	N	N	<5	N	N	N	7	N
K208760	<20	N	N	N	N	<5	N	N	N	N	N
K208800	20	N	N	N	N	<5	N	N	N	10	N
K208840	20	N	N	N	N	7	N	N	N	10	N
K208880	30	N	N	N	<10	30	N	N	N	7	N
K208920	30	N	N	<10	10	50	5	N	N	20	N
K208960	50	N	N	N	<10	20	N	N	N	30	N
K209000	70	N	N	N	<10	15	N	N	10	5	N
K209040	100	N	N	<10	15	20	10	N	<10	10	N
K209080	150	N	N	<10	<10	100	<5	N	<10	5	N
K209120	100	N	N	20	10	500	10	N	<10	7	N
K209160	20	N	N	N	<10	70	10	N	N	15	N
K209200	20	N	N	N	N	5	N	N	N	N	N
K209240	100	N	N	N	N	5	<5	N	<10	N	N
K209280	100	N	N	<10	20	15	15	N	15	7	N
K209320	700	N	N	N	15	10	10	N	10	5	N
K209360	150	N	N	N	<10	5	5	N	<10	N	N
K209400	50	N	N	N	N	5	<5	N	N	N	N
K209440	200	N	N	N	20	20	15	N	<10	5	N
K209480	200	N	N	N	10	10	10	N	<10	5	N
K209520	200	N	N	<10	30	15	20	N	30	5	N
K209560	150	N	N	10	<10	7	7	N	<10	10	N
K209600	50	N	N	N	<10	20	N	N	<10	10	N
K209640	150	N	N	<10	10	70	10	N	15	10	N
K209680	30	N	N	<10	<10	15	<5	N	N	7	N
K209720	20	N	N	N	N	5	N	N	N	N	N
K209760	<20	N	N	N	N	<5	N	N	N	N	N
K209800	30	N	N	N	N	<5	N	N	N	N	N
K209840	30	N	N	N	N	<5	N	N	N	N	N
K209880	30	N	N	N	N	7	N	N	<10	N	N
K209920	20	N	N	N	N	30	N	N	N	<5	N
K209960	30	N	N	N	N	<5	N	N	N	N	N
K210000	20	N	N	N	N	N	N	N	N	N	N
K210040	20	N	N	N	N	N	N	N	N	N	N
K210080	<20	N	N	N	N	<5	N	N	N	<5	N
K210120	70	N	N	N	N	10	<5	N	N	5	N
K210160	20	N	N	N	N	<5	N	N	N	7	N
K210200	30	N	N	N	N	<5	N	N	N	50	N
K210240	200	<1	N	<10	20	15	30	N	50	20	N
K210280	100	N	N	N	N	5	N	N	<10	N	N
K210320	70	N	N	N	N	5	N	N	N	5	N
K210360	70	N	N	N	N	15	N	N	N	15	N
K210400	70	N	N	N	<10	20	N	N	N	20	N
K210440	300	N	N	15	20	70	7	N	20	1,000	N
K210480	50	N	N	N	N	7	N	N	<10	50	N
K210520	30	N	N	15	N	500	N	N	N	20	N
K210560	30	N	N	N	N	10	N	N	N	200	N
K210600	70	N	N	70	N	1,000	N	N	N	100	N
K210640	2,000	N	N	N	<10	10	N	N	15	150	N
K210680	70	N	N	<10	<10	50	N	N	<10	200	N
K210720	70	N	N	<10	<10	10	N	N	10	100	N
K210760	30	N	N	N	N	20	N	N	<10	70	N
K210800	20	N	N	N	N	5	N	N	N	20	N
K210840	30	N	N	N	N	10	N	N	N	20	N
K210880	20	N	N	N	N	<5	N	N	N	30	N
K210920	<20	N	N	N	N	<5	N	N	N	10	N

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ni-ppm s	Pb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K208480	5	15	N	N	N	<10	20	N	N	20	.02	41
K208520	5	N	N	N	N	<10	N	N	N	<10	.01	41
K208560	7	N	N	N	N	<10	N	N	1,000	<10	.02	41
K208680	5	150	N	N	N	<10	50	N	N	N	.01	41
K208720	<5	N	N	N	N	N	N	N	N	N	.01	41
K208760	N	N	N	N	N	N	N	N	N	N	<.01	41
K208800	N	150	N	N	N	N	N	N	<200	N	<.01	41
K208840	<5	70	N	N	N	<10	N	N	N	10	.01	41
K208880	5	N	N	N	N	10	N	N	N	10	.01	41
K208920	7	100	N	N	N	15	<20	N	N	15	.02	41
K208960	7	<10	N	N	N	15	N	N	N	20	.02	41
K209000	<5	<10	N	N	N	10	N	N	700	20	.02	41
K209040	10	100	N	N	N	15	<20	N	N	30	.02	41
K209080	7	15	N	N	N	10	N	N	N	30	.03	41
K209120	15	200	N	N	N	10	N	N	1,000	30	.03	41
K209160	7	300	N	N	N	<10	N	N	1,000	30	.02	41
K209200	N	30	N	N	N	N	N	N	<200	30	.01	41
K209240	<5	N	N	N	N	<10	N	N	N	70	.02	41
K209280	10	20	N	N	N	15	N	N	N	70	.04	41
K209320	10	N	N	N	<100	20	20	N	N	150	.05	41
K209360	5	N	N	N	N	15	N	N	N	150	.01	41
K209400	<5	50	N	N	N	<10	N	N	N	70	.01	41
K209440	7	1,500	N	N	N	15	N	N	N	200	.04	41
K209480	7	15	N	N	N	20	<20	N	N	150	.03	41
K209520	10	N	<5	N	N	50	N	N	N	150	.04	41
K209560	5	10	N	N	N	15	N	N	N	70	.04	41
K209600	7	<10	N	N	N	10	<20	N	N	30	.02	41
K209640	15	200	N	N	N	20	<20	N	N	30	.03	41
K209680	7	15	N	N	N	10	N	N	N	<10	.03	41
K209720	5	20	N	N	N	<10	N	N	N	10	.01	41
K209760	<5	15	N	N	N	N	N	N	N	N	<.01	41
K209800	<5	N	N	N	<100	N	N	N	N	N	<.01	41
K209840	<5	N	N	N	N	N	N	N	N	N	<.01	41
K209880	5	N	N	N	N	15	N	N	N	20	.01	41
K209920	5	N	N	N	N	10	N	N	N	<10	.01	41
K209960	<5	N	N	N	N	10	N	N	N	15	<.01	41
K210000	<5	N	N	N	N	<10	N	N	N	15	<.01	41
K210040	N	N	N	N	N	N	N	N	N	N	<.01	41
K210080	<5	N	N	N	N	<10	N	N	N	20	.02	41
K210120	5	N	N	N	N	10	N	N	N	20	<.01	41
K210160	<5	N	N	N	N	<10	N	N	N	30	<.01	41
K210200	<5	N	N	N	N	<10	N	N	N	10	<.01	41
K210240	10	200	<5	N	N	30	N	N	N	100	.02	41
K210280	<5	N	N	N	N	10	N	N	N	50	.01	41
K210320	5	10	N	N	N	10	N	N	N	50	.02	41
K210360	5	10	N	N	N	10	N	N	N	50	.02	41
K210400	7	N	N	N	N	15	N	N	N	70	.01	41
K210440	20	30	N	N	N	30	N	N	N	100	.02	41
K210480	5	10	N	N	N	10	N	N	N	15	.01	41
K210520	50	N	N	N	N	N	70	N	<200	<10	.01	41
K210560	5	15	N	N	N	<10	N	N	N	<10	.02	41
K210600	200	<10	N	N	N	N	200	N	500	10	<.01	41
K210640	7	10	N	N	N	15	N	N	N	20	.04	41
K210680	10	15	N	N	N	10	N	N	N	70	.02	41
K210720	7	10	N	N	N	15	N	N	N	20	.02	41
K210760	7	<10	N	N	N	10	N	N	N	10	.02	41
K210800	<5	N	N	N	N	N	N	N	N	N	.01	41
K210840	5	N	N	N	N	<10	N	N	N	15	.02	41
K210880	<5	30	N	N	N	<10	N	N	N	<10	.01	41
K210920	<5	N	N	N	N	N	N	N	N	N	<.01	41

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Latitude	Longitude	Ca-pct. s	Fe-pct. s	Mg-pct. s	Na-pct. s	Ti-pct. s	Ag-ppm s	As-ppm s	B-ppm s
K210960	37 36 16	87 30 20	2	.7	.2	N	.015	N	N	10
K211000	37 36 16	87 30 20	.15	.5	.15	N	.02	N	N	10
K211040	37 36 16	87 30 20	.07	3	.7	.7	.15	2	N	20
K211080	37 36 16	87 30 20	.1	2	1	1	.3	N	N	50
K211120	37 36 16	87 30 20	<.05	1	.2	<.2	.07	N	N	30
K211160	37 36 16	87 30 20	N	1	.15	<.2	.05	N	N	20
K211200	37 36 16	87 30 20	N	.7	.15	N	.05	N	N	15
K211240	37 36 16	87 30 20	.05	1.5	.3	.2	.15	N	N	20
K211280	37 36 16	87 30 20	<.05	2	1	1.5	.3	N	N	30
K211320	37 36 16	87 30 20	.05	1.5	.3	<.2	.1	N	N	10
K211360	37 36 16	87 30 20	.05	1.5	.3	.2	.1	N	N	10
K211400	37 36 16	87 30 20	.05	1	.2	<.2	.07	N	N	10
K211440	37 36 16	87 30 20	.05	1	.2	<.2	.1	N	N	15
K211480	37 36 16	87 30 20	<.05	1.5	.3	.2	.1	N	N	15
K211520	37 36 16	87 30 20	.07	2	.5	.3	.2	N	N	30
K211560	37 36 16	87 30 20	.07	1	.2	<.2	.07	N	N	15
K211600	37 36 16	87 30 20	.3	1.5	.3	<.2	.1	N	N	20
K211640	37 36 16	87 30 20	.2	1.5	.2	<.2	.07	N	N	10
K211680	37 36 16	87 30 20	2	2	.7	<.2	.2	N	N	15
K211720	37 36 16	87 30 20	.15	.7	.1	N	.03	N	N	10
K211760	37 36 16	87 30 20	.2	.5	.15	N	.02	N	N	15
K211800	37 36 16	87 30 20	N	1.5	.7	.5	.2	N	N	50
K211840	37 36 16	87 30 20	.07	.7	.2	N	.07	N	N	15
K211880	37 36 16	87 30 20	.05	1	.15	N	.07	N	N	10
K211920	37 36 16	87 30 20	.3	1	.3	N	.1	N	N	30
K211960	37 36 16	87 30 20	1	1.5	.2	N	.05	N	N	15
K212000	37 36 16	87 30 20	.5	2	.3	N	.1	N	N	20
K212040	37 36 16	87 30 20	.15	5	1.5	1	.5	N	N	100
K212080	37 36 16	87 30 20	.2	5	1.5	.7	.2	N	N	50
K212120	37 36 16	87 30 20	.3	5	2	.7	.3	N	N	70
K212160	37 36 16	87 30 20	--	--	--	--	--	--	--	--
K212200	37 36 16	87 30 20	.3	5	2	.2	.3	N	N	100
K212240	37 36 16	87 30 20	15	3	2	.7	.2	N	N	70
K212280	37 36 16	87 30 20	3	.7	.5	N	.07	N	N	100
K212320	37 36 16	87 30 20	5	.3	.3	N	.02	N	N	20
K212360	37 36 16	87 30 20	5	5	3	1.5	.3	N	N	100
K212400	37 36 16	87 30 20	3	2	1.5	.3	.2	N	N	70
K212440	37 36 16	87 30 20	.2	3	1.5	1	.3	N	N	70
K212480	37 36 16	87 30 20	--	--	--	--	--	--	--	--
K212520	37 36 16	87 30 20	--	--	--	--	--	--	--	--
K212560	37 36 16	87 30 20	--	--	--	--	--	--	--	--
K212600	37 36 16	87 30 20	2	5	3	.2	.5	.5	N	200
K212640	37 36 16	87 30 20	10	2	2	.3	.2	.7	N	50
K212680	37 36 16	87 30 20	1.5	3	3	1	.3	N	N	70
K212720	37 36 16	87 30 20	10	2	1	<.2	.15	N	N	50
K212760	37 36 16	87 30 20	7	1.5	1	N	.1	<.5	N	70
K212800	37 36 16	87 30 20	20	.5	.3	N	.05	.5	N	20
K212840	37 36 16	87 30 20	10	1.5	.3	N	.07	.7	N	20
K212880	37 36 16	87 30 20	--	--	--	--	--	--	--	--
K212920	37 36 16	87 30 20	20	2	.5	N	.07	<.5	N	15
K212960	37 36 16	87 30 20	15	5	1.5	.7	.5	.5	N	70
K213000	37 36 16	87 30 20	10	7	2	1	.5	1.5	N	100
K213040	37 36 16	87 30 20	7	3	1	.3	.2	1.5	<200	70
K213080	37 36 16	87 30 20	--	--	--	--	--	--	--	--
K213120	37 36 16	87 30 20	3	5	1	.2	.3	7	700	100
K213160	37 36 16	87 30 20	2	3	.7	.3	.2	1.5	N	50
K213200	37 36 16	87 30 20	20	.7	.2	N	.05	<.5	N	15
K213240	37 36 16	87 30 20	20	2	.5	<.2	.1	.7	N	30
K213280	37 36 16	87 30 20	20	3	1.5	<.2	.2	1	N	200
K213320	37 36 16	87 30 20	10	3	2	N	.5	N	N	700

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s
K210960	20	N	N	N	N	10	N	N	N	5	N
K211000	20	N	N	N	N	<5	N	N	N	7	N
K211040	100	N	N	10	15	15	20	N	50	7	N
K211080	200	N	N	10	20	15	50	N	50	7	N
K211120	70	N	N	N	N	15	10	N	N	5	N
K211160	30	N	N	N	N	10	<5	N	N	7	N
K211200	30	N	N	N	N	5	N	N	N	<5	N
K211240	100	N	N	<10	<10	20	10	N	N	20	N
K211280	200	N	N	<10	20	30	30	N	30	20	N
K211320	70	N	N	N	<10	15	10	N	<10	20	N
K211360	100	N	N	N	<10	20	15	N	<10	7	N
K211400	70	N	N	N	N	15	10	N	N	5	N
K211440	70	N	N	N	<10	15	<5	N	<10	5	N
K211480	50	N	N	N	N	10	10	N	<10	10	N
K211520	100	N	N	N	<10	15	15	N	20	5	N
K211560	50	N	N	N	N	10	N	N	<10	10	N
K211600	100	N	N	N	<10	20	<5	N	10	20	N
K211640	150	N	N	N	<10	10	N	N	N	15	N
K211680	100	N	N	<10	10	30	15	N	<10	20	N
K211720	30	N	N	N	N	7	N	N	N	5	N
K211760	30	N	N	N	N	10	N	N	N	<5	N
K211800	70	N	N	N	10	10	10	N	30	7	N
K211840	50	N	N	N	N	7	N	N	<10	N	N
K211880	20	N	N	N	N	7	N	N	<10	<5	N
K211920	50	N	N	N	N	30	N	N	<10	5	N
K211960	30	N	N	N	N	15	N	N	N	N	N
K212000	70	N	N	N	<10	30	10	N	N	5	N
K212040	300	<1	N	10	30	30	50	<50	100	10	N
K212080	150	<1	N	<10	20	30	20	N	30	7	N
K212120	200	<1	N	10	30	30	30	N	50	5	N
K212160	--	--	--	--	--	--	--	--	--	--	--
K212200	150	<1	N	10	70	50	50	N	30	7	N
K212240	150	N	N	<10	50	20	50	N	20	<5	N
K212280	20	N	N	N	N	5	N	N	<10	N	N
K212320	<20	N	N	N	N	<5	N	N	N	N	N
K212360	300	N	N	15	100	30	100	N	30	5	N
K212400	500	N	N	<10	15	15	20	N	30	N	N
K212440	1,500	<1	N	10	30	20	30	N	70	20	N
K212480	--	--	--	--	--	--	--	--	--	--	--
K212520	--	--	--	--	--	--	--	--	--	--	--
K212560	--	--	--	--	--	--	--	--	--	--	--
K212600	300	1.5	N	15	70	70	50	N	50	15	<20
K212640	1,500	<1	N	<10	15	70	30	N	20	N	N
K212680	300	1	N	10	50	50	70	N	30	<5	N
K212720	1,000	N	N	<10	10	100	7	N	15	<5	N
K212760	500	N	N	<10	<10	100	10	N	10	N	N
K212800	1,000	N	N	10	N	700	N	N	10	N	N
K212840	2,000	N	N	70	N	2,000	<5	N	<10	N	N
K212880	--	--	--	--	--	--	--	--	--	--	--
K212920	>5,000	N	N	50	<10	1,000	<5	N	N	N	N
K212960	>5,000	1	N	30	20	1,000	50	N	70	N	N
K213000	>5,000	1.5	10	200	100	5,000	100	N	50	5	N
K213040	>5,000	1	15	150	15	5,000	20	N	50	7	N
K213080	--	--	--	--	--	--	--	--	--	--	--
K213120	>5,000	2	150	1,500	50	3,000	70	N	50	15	N
K213160	>5,000	<1	<10	100	20	1,500	50	N	<10	<5	N
K213200	>5,000	N	N	10	<10	150	10	N	N	N	N
K213240	>5,000	N	N	100	10	300	20	N	<10	<5	N
K213280	>5,000	1	<10	500	30	5,000	30	N	15	7	N
K213320	5,000	5	N	300	70	1,000	50	<50	30	N	N

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ni-ppm s	Pb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K210960	5	N	N	N	<100	N	N	N	N	N	<.01	41
K211000	<5	N	N	N	N	N	N	N	N	<10	<.01	41
K211040	30	15	N	N	N	30	N	N	N	30	.01	41
K211080	20	15	<5	N	N	50	N	N	N	100	.05	41
K211120	5	N	N	N	N	15	N	N	N	20	.01	41
K211160	5	N	N	N	N	10	N	N	N	15	.02	41
K211200	5	N	N	N	N	10	N	N	N	10	<.01	41
K211240	10	<10	N	N	N	20	N	N	N	15	.02	41
K211280	15	N	<5	N	N	50	N	N	N	30	.05	41
K211320	7	N	N	N	N	15	N	N	N	20	.03	41
K211360	7	10	N	N	N	15	N	N	N	50	<.01	41
K211400	5	N	N	N	N	10	N	N	N	15	<.01	41
K211440	5	N	N	N	N	15	N	N	N	30	.03	41
K211480	5	N	N	N	N	10	N	N	N	20	.01	41
K211520	7	N	N	N	N	30	N	N	N	70	.09	41
K211560	<5	50	N	N	N	<10	N	N	N	15	.04	41
K211600	7	<10	N	N	N	15	N	N	N	20	.01	41
K211640	7	N	N	N	N	10	N	N	N	20	.04	41
K211680	15	20	N	N	<100	30	N	N	N	30	.05	41
K211720	<5	N	N	N	N	<10	N	N	N	10	.11	41
K211760	5	N	N	N	N	<10	N	N	N	10	.05	41
K211800	7	100	N	N	N	30	N	N	N	30	<.01	41
K211840	<5	N	N	N	N	<10	N	N	N	15	.02	41
K211880	<5	N	N	N	N	10	N	N	N	15	<.01	41
K211920	5	50	N	N	N	10	N	N	N	15	<.01	41
K211960	<5	300	N	N	N	<10	N	N	N	<10	.02	41
K212000	10	200	N	N	N	15	N	N	N	15	<.01	41
K212040	20	300	7	N	N	70	N	<10	N	100	.04	41
K212080	20	50	<5	N	N	50	N	N	N	50	.12	41
K212120	30	70	<5	N	N	70	N	N	N	70	.08	41
K212160	--	--	--	--	--	--	--	--	--	--	.02	41
K212200	30	300	<5	N	N	70	N	N	N	70	.19	41
K212240	15	30	N	N	300	30	N	N	N	30	.07	41
K212280	<5	15	N	N	<100	15	N	N	N	10	.14	41
K212320	N	<10	N	N	100	<10	N	N	N	<10	.08	41
K212360	30	2,000	5	N	150	50	N	<10	N	20	.26	41
K212400	15	15	<5	N	<100	30	N	N	N	20	.12	41
K212440	20	<10	5	N	N	50	N	<10	N	70	.05	41
K212480	--	--	--	--	--	--	--	--	--	--	.05	41
K212520	--	--	--	--	--	--	--	--	--	--	.02	41
K212560	--	--	--	--	--	--	--	--	--	--	.17	41
K212600	50	100	5	N	100	70	N	N	N	150	.13	41
K212640	10	200	<5	N	300	30	N	N	N	70	.05	41
K212680	15	100	<5	N	N	50	N	N	N	50	.07	41
K212720	7	150	N	N	200	15	N	N	N	20	.05	41
K212760	7	200	N	N	150	10	N	N	N	15	.02	41
K212800	20	20	N	N	300	<10	70	N	N	10	<.01	41
K212840	50	150	N	N	200	<10	N	N	N	10	<.01	41
K212880	--	--	--	--	--	--	--	--	--	--	.02	41
K212920	50	70	N	N	1,000	<10	N	N	N	15	.02	41
K212960	20	100	<5	N	1,000	30	N	<10	N	70	.06	41
K213000	150	200	5	N	2,000	50	N	<10	N	70	.06	41
K213040	150	200	<5	N	1,000	20	N	N	N	30	.05	41
K213080	--	--	--	--	--	--	--	--	--	--	.06	41
K213120	1,000	1,000	N	N	3,000	15	N	N	<200	70	.07	41
K213160	100	200	N	N	700	10	20	N	N	100	.03	41
K213200	<5	50	N	N	1,000	<10	N	N	N	50	.01	41
K213240	20	100	N	N	2,000	<10	N	<10	N	100	.02	41
K213280	150	150	N	N	1,500	20	N	N	N	50	.02	41
K213320	70	30	5	N	200	50	N	<10	N	70	.02	41

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Latitude	Longitude	Ca-pct.	Fe-pct.	Mg-pct.	Na-pct.	Ti-pct.	Ag-ppm	As-ppm	B-ppm
			s	s	s	s	s	s	s	s
K213360	37 36 16	87 30 20	15	5	2	N	.3	<.5	N	500
K213400	37 36 16	87 30 20	5	5	3	.7	.5	.5	N	500
K213440	37 36 16	87 30 20	3	3	.7	.3	.3	.7	N	150
K213480	37 36 16	87 30 20	.15	.3	.02	<.2	.05	N	N	N

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s
K213360	2,000	3	N	150	70	3,000	50	<50	20	N	N
K213400	2,000	5	N	100	70	3,000	70	<50	100	<5	N
K213440	>5,000	1.5	N	150	70	1,000	50	<50	10	5	N
K213480	200	N	N	N	N	20	N	N	N	N	N

TABLE 3--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K2, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ni-ppm s	Pb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K213360	50	150	5	N	500	30	N	N	N	70	.06	41
K213400	50	100	7	N	150	50	N	<10	N	100	.12	41
K213440	30	50	<5	N	200	30	N	<10	N	100	.06	41
K213480	N	N	N	N	N	<10	<20	N	N	30	<.01	41

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.

[N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown.]

Sample	Latitude	Longitude	Ca-pct.	Fe-pct.	Mg-pct.	Na-pct.	Ti-pct.	Ag-ppm	B-ppm
			s	s	s	s	s	s	s
K31770	37 37 16	87 46 15	N	3	1	1	.5	N	70
K31800	37 37 16	87 46 15	N	2	1	1	.3	N	50
K31830	37 37 16	87 46 15	N	3	1	1.5	.5	N	70
K31860	37 37 16	87 46 15	N	3	.7	1	.3	N	70
K31890	37 37 16	87 46 15	N	2	.5	.7	.3	N	50
K31920	37 37 16	87 46 15	N	3	.5	.5	.3	N	70
K31950	37 37 16	87 46 15	N	2	.3	.2	.3	N	30
K31980	37 37 16	87 46 15	N	3	.5	.3	.5	N	70
K32010	37 37 16	87 46 15	N	2	.5	.5	.3	N	50
K32040	37 37 16	87 46 15	N	1.5	.3	<.2	.2	N	30
K32070	37 37 16	87 46 15	N	1.5	.5	.3	.2	N	30
K32100	37 37 16	87 46 15	<.05	5	1	1.5	.5	N	100
K32130	37 37 16	87 46 15	N	1.5	.5	1	.3	N	70
K32160	37 37 16	87 46 15	N	1.5	.3	.7	.2	N	30
K32190	37 37 16	87 46 15	N	.5	.15	.5	.15	N	20
K32250	37 37 16	87 46 15	N	2	.7	.7	.3	N	50
K32280	37 37 16	87 46 15	N	3	.7	1	.5	N	70
K32310	37 37 16	87 46 15	N	2	1	1	.5	N	50
K32340	37 37 16	87 46 15	N	3	1	1	.5	N	100
K32370	37 37 16	87 46 15	N	2	1	1	.5	N	70
K32400	37 37 16	87 46 15	N	2	1	1	.3	N	70
K32430	37 37 16	87 46 15	N	5	1	.5	.5	N	100
K32460	37 37 16	87 46 15	N	3	1	.5	.5	N	50
K32490	37 37 16	87 46 15	N	2	.5	.3	.2	N	50
K32520	37 37 16	87 46 15	N	1.5	.3	<.2	.3	N	70
K32550	37 37 16	87 46 15	N	2	1	.5	.5	N	70
K32580	37 37 16	87 46 15	.05	2	.7	.3	.5	N	100
K32610	37 37 16	87 46 15	<.05	3	1.5	.7	.3	N	50
K32640	37 37 16	87 46 15	.15	5	2	1	.5	N	150
K32670	37 37 16	87 46 15	.05	5	1.5	.5	.3	N	100
K32700	37 37 16	87 46 15	<.05	2	1	.7	.2	N	50
K32730	37 37 16	87 46 15	.05	5	.7	<.2	.3	N	100
K32760	37 37 16	87 46 15	<.05	3	1	.3	.3	N	50
K32790	37 37 16	87 46 15	.05	5	1.5	.5	.3	N	70
K32820	37 37 16	87 46 15	.2	7	2	.3	.5	N	150
K32850	37 37 16	87 46 15	.15	5	1.5	.3	.3	N	100
K32880	37 37 16	87 46 15	.2	3	1	.2	.2	N	70
K32910	37 37 16	87 46 15	.2	5	2	.5	.5	N	100
K32940	37 37 16	87 46 15	.1	5	2	.5	.5	N	100
K32970	37 37 16	87 46 15	.05	2	1	.2	.2	N	50
K33000	37 37 16	87 46 15	<.05	2	1	.5	.2	N	30
K33030	37 37 16	87 46 15	.15	2	1	.5	.3	N	50
K33060	37 37 16	87 46 15	.07	1.5	.7	<.2	.2	N	50
K33090	37 37 16	87 46 15	<.05	1	.5	<.2	.15	N	30
K33120	37 37 16	87 46 15	10	2	1.5	.5	.3	N	70
K33150	37 37 16	87 46 15	.2	2	.7	.5	.3	N	50
K33180	37 37 16	87 46 15	.1	2	1	.5	.3	N	50
K33210	37 37 16	87 46 15	10	1.5	1	.5	.3	N	50
K33240	37 37 16	87 46 15	.2	2	1	.3	.3	N	70
K33270	37 37 16	87 46 15	<.05	1.5	.7	.3	.2	N	50
K33300	37 37 16	87 46 15	.05	2	1	.3	.3	N	70
K33330	37 37 16	87 46 15	.05	3	1	.2	.3	N	70
K33360	37 37 16	87 46 15	<.05	1.5	1	.2	.2	N	70
K33390	37 37 16	87 46 15	<.05	2	1	.2	.3	N	50
K33420	37 37 16	87 46 15	N	2	.7	1	.3	N	30
K33450	37 37 16	87 46 15	<.05	2	.7	1	.5	N	70
K33480	37 37 16	87 46 15	N	2	1	.3	.3	N	70
K33510	37 37 16	87 46 15	N	5	1.5	.3	.5	N	100
K33540	37 37 16	87 46 15	.05	2	1	.3	.2	N	50
K33570	37 37 16	87 46 15	.07	3	1	.5	.3	N	70

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ba-ppm s	Be-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K31770	200	<1	10	100	30	70	N	20	N	<20	20
K31800	200	<1	<10	100	70	70	N	20	N	N	20
K31830	300	1	10	150	30	100	N	30	N	<20	50
K31860	300	<1	10	100	20	50	N	20	N	N	30
K31890	70	<1	10	70	15	30	N	20	N	N	30
K31920	100	<1	<10	30	15	30	N	20	N	<20	20
K31950	150	N	<10	50	20	30	N	10	N	N	20
K31980	150	<1	10	100	20	50	N	15	N	<20	30
K32010	200	N	<10	70	20	30	N	15	N	N	20
K32040	100	N	N	50	5	10	N	<10	N	N	7
K32070	150	N	N	20	7	15	N	10	N	N	10
K32100	700	1	15	200	30	100	<50	50	<5	<20	50
K32130	300	N	<10	100	15	30	N	20	N	<20	15
K32160	200	N	N	30	5	5	N	<10	N	N	7
K32190	70	N	N	30	<5	N	N	N	N	N	<5
K32250	100	N	<10	50	15	30	N	15	N	N	15
K32280	150	<1	10	100	30	30	N	20	N	<20	30
K32310	200	<1	<10	100	70	30	N	30	N	<20	20
K32340	200	1	10	150	20	50	<50	20	N	<20	50
K32370	150	<1	<10	100	20	30	<50	15	N	N	30
K32400	200	<1	10	100	20	30	N	10	N	N	20
K32430	200	<1	15	100	30	50	<50	20	<5	<20	30
K32460	150	<1	10	100	15	50	N	15	N	N	20
K32490	150	N	<10	50	10	30	N	10	N	N	15
K32520	300	N	N	70	7	10	N	<10	N	N	10
K32550	500	1	<10	100	10	30	<50	20	N	<20	20
K32580	200	<1	10	150	15	20	<50	15	N	<20	30
K32610	150	N	<10	150	<5	100	N	10	N	N	20
K32640	500	1.5	15	200	70	100	50	15	5	<20	70
K32670	300	1	15	150	10	100	<50	10	N	<20	50
K32700	300	N	N	100	20	50	N	<10	N	N	15
K32730	200	<1	N	50	10	20	N	10	N	<20	30
K32760	100	N	<10	150	10	50	N	<10	5	N	30
K32790	150	<1	<10	150	10	70	N	10	<5	N	50
K32820	1,000	<1	10	200	20	100	<50	15	<5	<20	50
K32850	500	<1	10	150	30	70	N	10	<5	N	30
K32880	3,000	<1	<10	100	5	50	N	10	N	N	20
K32910	1,000	1	10	150	7	100	50	15	N	<20	50
K32940	300	<1	10	150	15	100	<50	15	<5	<20	50
K32970	200	N	N	30	7	15	N	<10	N	N	15
K33000	70	<1	<10	70	10	20	N	<10	N	N	15
K33030	100	<1	<10	70	5	30	N	<10	N	N	15
K33060	50	N	N	30	<5	7	N	<10	N	N	15
K33090	30	N	N	20	<5	7	N	N	N	N	10
K33120	200	<1	N	70	5	30	N	10	N	N	15
K33150	100	N	N	100	<5	20	N	<10	<5	N	20
K33180	100	N	N	100	7	50	N	<10	N	N	20
K33210	70	N	N	70	<5	15	N	N	N	N	15
K33240	50	<1	N	70	<5	20	N	<10	N	N	20
K33270	50	<1	N	50	7	10	N	10	5	N	15
K33300	100	<1	N	70	7	30	N	<10	7	N	30
K33330	70	1	<10	70	15	30	N	10	<5	N	50
K33360	70	N	N	50	10	15	N	<10	N	N	20
K33390	50	<1	N	70	5	15	N	<10	N	N	20
K33420	200	N	<10	100	10	15	N	N	N	N	15
K33450	100	N	<10	70	10	20	N	10	N	N	20
K33480	300	<1	<10	100	5	30	N	<10	5	N	30
K33510	70	1	<10	100	5	30	N	<10	N	N	50
K33540	50	<1	N	70	<5	20	N	<10	N	N	15
K33570	100	<1	<10	100	7	30	N	10	N	N	20

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Pb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K31770	<10	7	N	N	70	N	<10	N	100	.04	3
K31800	<10	5	N	N	50	<20	<10	N	100	.05	3
K31830	10	10	N	N	70	N	10	N	150	.03	3
K31860	<10	<5	N	N	50	N	<10	N	100	.05	4
K31890	<10	<5	N	N	30	N	N	<200	200	.04	4
K31920	<10	<5	N	N	50	N	N	N	300	.03	4
K31950	N	N	N	N	30	N	N	N	150	.01	4
K31980	<10	<5	N	N	50	N	<10	N	200	.02	4
K32010	N	<5	N	N	50	N	N	N	150	.03	4
K32040	N	N	N	N	30	N	N	N	150	.02	4
K32070	N	N	N	N	50	N	N	N	70	.02	4
K32100	10	10	N	N	100	N	10	N	150	.03	4
K32130	N	<5	N	N	50	N	<10	N	200	.02	4
K32160	N	N	N	N	30	N	N	N	150	.02	4
K32190	N	N	N	N	10	N	N	N	100	.01	4
K32250	<10	<5	N	N	30	N	N	N	70	.04	4
K32280	N	5	N	N	50	N	<10	N	150	.03	4
K32310	N	<5	N	N	50	N	<10	N	150	.03	4
K32340	N	7	N	N	70	N	10	N	200	.04	4
K32370	<10	<5	N	N	50	N	<10	N	150	.04	4
K32400	<10	<5	N	N	50	N	<10	N	70	.04	4
K32430	100	7	N	200	70	N	<10	N	100	.04	5
K32460	N	5	N	N	70	N	N	N	100	.05	5
K32490	<10	<5	N	N	30	50	N	N	50	.04	5
K32520	N	N	N	N	30	N	N	N	300	.02	5
K32550	<10	7	N	N	70	N	<10	N	200	.02	5
K32580	10	<5	N	<100	100	N	<10	N	300	.03	5
K32610	<10	5	N	N	50	N	N	N	70	.11	5
K32640	<10	10	N	5,000	150	30	10	N	150	.14	5
K32670	<10	7	N	2,000	100	N	<10	N	70	.11	6
K32700	N	<5	N	700	30	20	N	N	70	.11	6
K32730	N	<5	N	3,000	50	30	<10	N	300	.08	6
K32760	N	<5	N	1,000	50	N	N	N	50	.16	6
K32790	30	5	N	1,500	70	30	<10	200	100	.18	6
K32820	<10	10	N	>5,000	100	100	<10	N	70	.21	6
K32850	N	7	N	5,000	70	<20	<10	<200	70	.27	6
K32880	15	5	N	>5,000	50	100	N	200	30	.31	6
K32910	N	10	N	>5,000	100	30	10	<200	50	.19	6
K32940	N	7	N	5,000	100	50	<10	<200	70	.19	6
K32970	1,500	N	N	1,000	30	30	N	N	30	.19	6
K33000	10	<5	N	500	30	N	N	N	30	.21	6
K33030	100	<5	N	5,000	50	150	N	N	30	.26	6
K33060	N	N	N	1,000	30	N	N	N	20	.15	6
K33090	N	N	N	150	20	N	N	N	10	.12	6
K33120	<10	5	N	3,000	50	50	N	N	30	.23	6
K33150	N	<5	N	2,000	50	N	N	N	20	.18	6
K33180	<10	<5	N	1,500	50	N	N	N	20	.13	6
K33210	N	<5	N	1,500	50	<20	N	N	30	.19	7
K33240	N	<5	N	1,000	50	N	N	N	30	.23	7
K33270	N	N	N	1,000	30	N	N	N	20	.19	7
K33300	N	<5	N	1,500	50	N	N	N	30	.19	7
K33330	N	5	N	300	70	N	N	N	30	.27	7
K33360	N	N	N	700	30	N	N	N	20	.18	7
K33390	15	<5	N	200	50	N	N	N	20	.19	7
K33420	N	<5	N	N	50	N	N	N	30	.12	7
K33450	<10	<5	N	200	50	N	N	N	100	.13	7
K33480	N	5	N	5,000	50	20	N	N	50	.25	7
K33510	N	5	N	N	70	N	N	N	70	.23	7
K33540	N	<5	N	200	30	N	N	N	30	.12	7
K33570	N	5	N	300	50	N	N	N	30	.27	7

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Latitude	Longitude	Ca-pct.	Fe-pct.	Mg-pct.	Na-pct.	Ti-pct.	Ag-ppm	B-ppm
			s	s	s	s	s	s	s
K33600	37 37 16	87 46 15	<.05	3	1	.5	.3	N	70
K33630	37 37 16	87 46 15	<.05	2	.7	.3	.2	N	50
K33660	37 37 16	87 46 15	.05	2	.7	.2	.3	N	50
K33690	37 37 16	87 46 15	.05	2	.7	.5	.3	N	50
K33720	37 37 16	87 46 15	<.05	2	.5	.7	.2	N	50
K33750	37 37 16	87 46 15	.07	2	.5	.3	.3	N	70
K33780	37 37 16	87 46 15	.05	5	1	.5	.5	N	70
K33810	37 37 16	87 46 15	<.05	2	.3	.2	.2	N	50
K33840	37 37 16	87 46 15	<.05	1.5	.2	.3	.15	N	30
K33870	37 37 16	87 46 15	<.05	2	.5	.5	.3	N	50
K33900	37 37 16	87 46 15	<.05	1.5	.3	.7	.2	N	30
K33930	37 37 16	87 46 15	<.05	1.5	.3	.5	.15	N	30
K33960	37 37 16	87 46 15	.05	2	.5	.5	.2	N	50
K33990	37 37 16	87 46 15	<.05	1.5	.3	.3	.15	N	30
K34020	37 37 16	87 46 15	.05	1.5	.3	.5	.2	N	50
K34050	37 37 16	87 46 15	.07	1	.3	.5	.15	N	50
K34080	37 37 16	87 46 15	.1	1	.2	.3	.15	N	70
K34110	37 37 16	87 46 15	.1	1	.2	.7	.15	N	30
K34140	37 37 16	87 46 15	.05	1.5	.3	.5	.2	N	70
K34170	37 37 16	87 46 15	<.05	1.5	.5	.5	.2	N	50
K34200	37 37 16	87 46 15	N	1.5	.5	.3	.15	N	50
K34230	37 37 16	87 46 15	<.05	1.5	.5	.3	.2	N	70
K34260	37 37 16	87 46 15	<.05	1	.3	.5	.1	N	50
K34290	37 37 16	87 46 15	<.05	1	.3	.7	.15	N	50
K34320	37 37 16	87 46 15	<.05	1.5	.3	1	.2	<.5	70
K34350	37 37 16	87 46 15	N	2	.7	.7	.3	N	100
K34380	37 37 16	87 46 15	N	1.5	.7	1	.3	N	70
K34410	37 37 16	87 46 15	N	1.5	.3	.7	.15	N	50
K34440	37 37 16	87 46 15	N	2	.5	.5	.2	N	70
K34470	37 37 16	87 46 15	N	2	.3	1	.2	N	50
K34500	37 37 16	87 46 15	N	3	.5	1	.2	N	70
K34530	37 37 16	87 46 15	N	3	.7	1	.2	N	70
K34560	37 37 16	87 46 15	N	3	.7	.7	.3	N	100
K34580	37 37 16	87 46 15	<.05	1.5	.7	1	.15	N	50
K34590	37 37 16	87 46 15	N	2	1	1.5	.3	N	100
K34620	37 37 16	87 46 15	N	2	.7	1	.2	N	70
K34650	37 37 16	87 46 15	<.05	3	1	1	.3	N	150
K34695	37 37 16	87 46 15	.15	2	1	1	.2	.7	100
K34710	37 37 16	87 46 15	N	5	.7	.7	.15	.5	50
K34740	37 37 16	87 46 15	.1	1.5	.7	.7	.1	N	70
K34770	37 37 16	87 46 15	<.05	1.5	1	1	.2	N	70
K34790	37 37 16	87 46 15	.07	2	1	1.5	.3	N	100
K34830	37 37 16	87 46 15	<.05	1.5	.7	.5	.2	N	100
K34860	37 37 16	87 46 15	.05	.7	.2	<.2	.07	N	50
K34890	37 37 16	87 46 15	.1	1	.3	N	.05	N	50
K34920	37 37 16	87 46 15	.05	.7	.2	N	.07	N	50
K34950	37 37 16	87 46 15	.15	1.5	.3	<.2	.1	N	70
K34980	37 37 16	87 46 15	.1	1	.3	<.2	.1	N	50
K35010	37 37 16	87 46 15	.1	.7	.5	<.2	.1	N	100
K35030	37 37 16	87 46 15	N	.7	.1	N	.03	N	30
K35070	37 37 16	87 46 15	.15	.5	.2	N	.03	N	50
K35100	37 37 16	87 46 15	.3	.5	.5	N	.03	N	70
K35130	37 37 16	87 46 15	.07	.5	.15	N	.05	N	70
K35160	37 37 16	87 46 15	<.05	.2	.07	N	.02	N	50
K35190	37 37 16	87 46 15	<.05	.5	.1	N	.05	N	70
K35220	37 37 16	87 46 15	.15	.3	.2	N	.05	N	100
K35250	37 37 16	87 46 15	.07	.2	.1	N	.02	N	50
K35280	37 37 16	87 46 15	.05	.5	.15	N	.03	N	50
K35310	37 37 16	87 46 15	<.05	.7	.3	<.2	.07	N	70
K35340	37 37 16	87 46 15	<.05	.7	.2	N	.05	N	50

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ba-ppm s	Be-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K33600	100	<1	N	70	10	15	N	15	N	N	20
K33630	50	<1	N	50	<5	10	N	<10	N	N	15
K33660	70	<1	N	70	10	15	N	10	N	N	20
K33690	150	N	N	50	5	10	N	10	N	N	15
K33720	150	N	N	30	7	10	N	15	N	N	20
K33750	150	<1	N	20	7	15	N	15	N	N	30
K33780	200	<1	<10	100	5	30	N	10	N	N	50
K33810	1,000	N	N	20	10	7	N	<10	N	N	15
K33840	300	N	N	15	5	5	N	<10	N	N	10
K33870	200	N	N	15	7	10	N	<10	N	N	15
K33900	200	N	N	20	5	7	N	N	N	N	10
K33930	100	N	N	15	5	10	N	N	N	N	7
K33960	300	N	N	20	7	10	N	<10	N	N	10
K33990	100	N	N	15	5	7	N	N	N	N	7
K34020	70	N	N	15	7	5	N	N	N	N	10
K34050	200	N	N	10	7	7	N	N	N	N	7
K34080	150	N	N	<10	7	<5	N	N	N	N	10
K34110	100	N	N	10	10	<5	N	<10	N	N	7
K34140	150	N	N	15	10	5	N	<10	N	N	10
K34170	100	N	N	20	7	10	N	N	N	N	15
K34200	50	N	N	20	5	15	N	N	N	N	15
K34230	50	N	N	30	5	15	N	N	N	N	15
K34260	100	N	N	15	5	10	N	N	N	N	7
K34290	300	N	N	20	7	10	N	N	N	N	10
K34320	500	N	N	50	15	20	N	<10	N	N	20
K34350	300	1	<10	70	20	20	N	10	N	N	50
K34380	150	<1	<10	70	20	50	N	10	5	N	50
K34410	70	<1	<10	30	30	15	N	<10	20	N	30
K34440	100	1	15	20	50	15	N	10	30	N	30
K34470	100	<1	15	30	30	20	N	<10	30	N	20
K34500	200	<1	10	30	50	20	N	15	15	N	20
K34530	150	<1	15	50	70	30	N	15	20	N	20
K34560	150	<1	15	70	50	20	N	15	20	N	30
K34580	70	<1	<10	30	100	15	N	<10	10	N	30
K34590	200	<1	10	70	50	30	N	15	10	N	20
K34620	100	<1	10	70	70	20	N	10	20	N	50
K34650	150	1	15	70	150	30	N	15	15	N	50
K34695	150	<1	10	70	200	30	N	20	20	N	150
K34710	100	<1	15	50	150	15	N	15	10	N	50
K34740	100	N	15	30	50	20	N	20	5	N	15
K34770	100	<1	10	50	20	20	N	20	N	N	15
K34790	200	<1	<10	70	50	50	N	20	5	N	20
K34830	70	N	<10	20	20	15	N	10	<5	N	15
K34860	1,000	N	N	<10	10	N	N	<10	N	N	7
K34890	700	N	N	<10	10	N	N	<10	N	N	5
K34920	30	N	N	<10	7	N	N	N	N	N	7
K34950	100	N	N	10	15	<5	N	<10	N	N	7
K34980	30	N	N	10	7	N	N	<10	N	N	7
K35010	50	N	N	10	10	N	N	<10	N	N	10
K35030	<20	N	N	N	5	N	N	N	N	N	10
K35070	<20	N	N	N	<5	N	N	N	N	N	<5
K35100	20	N	N	N	<5	N	N	<10	N	N	<5
K35130	20	N	N	N	<5	N	N	N	N	N	5
K35160	<20	N	N	N	<5	N	N	N	N	N	<5
K35190	30	N	N	N	5	N	N	N	N	N	5
K35220	30	N	N	<10	N	N	N	N	N	N	5
K35250	20	N	N	N	N	N	N	N	N	N	<5
K35280	<20	N	N	<10	<5	N	N	N	N	N	5
K35310	300	N	<10	10	10	<5	N	<10	N	N	7
K35340	30	N	N	10	5	N	N	N	N	N	5

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Pb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K33600	N	<5	N	N	70	<20	N	N	50	.24	7
K33630	N	<5	N	N	50	N	N	N	30	.18	7
K33660	N	<5	N	N	50	N	N	N	30	.18	7
K33690	N	<5	N	300	50	N	N	N	50	.15	7
K33720	N	N	N	N	50	N	N	N	50	.15	7
K33750	N	<5	N	100	70	N	N	N	50	.16	7
K33780	N	5	N	700	100	N	<10	N	70	.16	7
K33810	N	N	N	3,000	50	N	N	N	30	.1	7
K33840	N	N	N	300	30	N	N	N	20	.09	7
K33870	<10	N	N	200	70	N	N	N	30	.1	7
K33900	N	N	N	150	50	N	N	N	20	.09	7
K33930	N	N	N	N	30	N	N	N	20	.1	7
K33960	N	N	N	<100	50	N	N	N	30	.09	7
K33990	N	N	N	N	30	N	N	N	20	.1	7
K34020	N	N	N	N	50	N	N	N	30	.09	7
K34050	N	N	N	1,000	30	N	N	N	20	.09	7
K34080	N	N	N	500	50	N	N	N	30	.09	7
K34110	N	N	N	<100	30	N	N	N	30	.06	7
K34140	N	N	N	100	50	N	N	N	50	.07	7
K34170	N	N	N	150	50	N	N	N	50	.1	7
K34200	N	N	N	N	30	N	N	N	20	.08	7
K34230	N	<5	N	<100	50	N	N	N	30	.07	7
K34260	N	N	N	200	20	N	N	N	20	.05	7
K34290	N	N	N	N	30	N	N	N	20	.04	7
K34320	N	<5	N	N	50	N	N	N	30	.04	7
K34350	N	5	N	N	50	N	<10	N	50	.04	8
K34380	<10	5	N	N	100	N	N	N	30	.04	10
K34410	<10	<5	N	N	200	N	N	N	20	.04	10
K34440	<10	<5	N	N	100	N	N	N	20	.04	10
K34470	N	<5	N	N	70	N	N	N	30	.03	10
K34500	<10	<5	N	N	70	N	N	N	30	.03	10
K34530	15	5	N	N	70	N	N	N	30	.03	10
K34560	<10	5	N	N	70	N	<10	N	50	.03	10
K34580	10	<5	N	N	70	N	N	N	20	.07	10
K34590	10	5	N	N	100	N	<10	N	70	.04	10
K34620	10	5	N	N	150	N	<10	N	30	.05	10
K34650	15	7	N	N	200	N	<10	N	50	.06	10
K34695	10	5	<10	N	300	N	<10	N	30	.08	10
K34710	10	<5	N	N	100	150	N	N	30	.08	10
K34740	<10	N	N	N	50	N	N	N	20	.08	10
K34770	N	<5	N	N	50	N	N	N	30	.11	10
K34790	<10	<5	N	N	50	N	N	N	70	.13	10
K34830	<10	N	N	N	50	N	N	N	50	.07	10
K34860	N	N	N	N	20	N	N	N	15	.03	10
K34890	N	N	N	N	10	20	N	N	<10	.04	10
K34920	N	N	N	N	15	N	N	N	<10	.03	10
K34950	N	N	N	N	20	N	N	N	20	.03	10
K34980	N	N	N	N	20	N	N	N	20	.03	10
K35010	N	N	N	N	30	N	N	N	15	.03	10
K35030	N	N	N	N	10	N	N	N	10	.01	10
K35070	N	N	N	N	<10	N	N	N	<10	.01	10
K35100	N	N	N	N	10	N	N	N	10	.01	10
K35130	N	N	N	N	15	N	N	N	10	.01	10
K35160	N	N	N	N	<10	N	N	N	10	<.01	10
K35190	N	N	N	N	15	N	N	N	<10	.01	10
K35220	N	N	N	N	10	N	N	N	15	.01	10
K35250	N	N	N	N	<10	N	N	N	<10	<.01	10
K35280	N	N	N	N	10	N	N	N	20	.02	10
K35310	N	N	N	N	20	N	N	N	30	.02	10
K35340	N	N	N	N	15	N	N	N	15	.02	10

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Latitude	Longitude	Ca-pct. s	Fe-pct. s	Mg-pct. s	Na-pct. s	Ti-pct. s	Ag-ppm s	B-ppm s
K35370	37 37 16	87 46 15	.1	.5	.1	N	.05	N	50
K35400	37 37 16	87 46 15	<.05	.15	.03	N	.015	N	20
K35430	37 37 16	87 46 15	.15	.7	.2	N	.07	N	50
K35460	37 37 16	87 46 15	.2	.5	.2	N	.07	N	70
K35490	37 37 16	87 46 15	.1	1	.3	<.2	.07	N	50
K35520	37 37 16	87 46 15	.15	.7	.2	N	.07	N	50
K35550	37 37 16	87 46 15	.15	.2	.1	N	.02	N	30
K35580	37 37 16	87 46 15	.2	.3	.2	N	.05	N	50
K35610	37 37 16	87 46 15	.3	.5	.3	N	.03	N	30
K35635	37 37 16	87 46 15	.5	.2	.5	N	.02	N	30
K35660	37 37 16	87 46 15	.07	1	.7	.2	.1	N	50
K35700	37 37 16	87 46 15	.2	.5	1	<.2	.05	N	70
K35730	37 37 16	87 46 15	.15	.7	.7	N	.07	N	30
K35760	37 37 16	87 46 15	.15	.7	.7	N	.05	N	30
K35790	37 37 16	87 46 15	.15	1	1	.3	.1	N	50
K35820	37 37 16	87 46 15	.15	.5	.3	.2	.05	N	30
K35850	37 37 16	87 46 15	.2	.7	.7	.3	.07	N	30
K35910	37 37 16	87 46 15	.3	.7	1	.3	.1	N	50
K35940	37 37 16	87 46 15	.15	.7	.7	.3	.1	N	50
K35970	37 37 16	87 46 15	.2	1	1	.5	.1	N	50
K36000	37 37 16	87 46 15	.07	1	.7	.3	.15	N	50
K36030	37 37 16	87 46 15	.15	1.5	1	.7	.2	N	70
K36060	37 37 16	87 46 15	.05	1.5	1	.7	.2	N	50
K36080	37 37 16	87 46 15	.05	2	1	1	.2	N	70
K36120	37 37 16	87 46 15	.05	2	1.5	1.5	.3	N	50
K36150	37 37 16	87 46 15	.07	3	1	1.5	.3	N	50
K36180	37 37 16	87 46 15	<.05	5	1.5	2	.5	N	70
K36210	37 37 16	87 46 15	<.05	1.5	1.5	1.5	.3	N	70
K36250	37 37 16	87 46 15	.07	2	1.5	1	.5	N	100
K36270	37 37 16	87 46 15	<.05	.5	.2	.2	.1	N	50
K36300	37 37 16	87 46 15	.1	.7	.15	<.2	.07	N	30
K36330	37 37 16	87 46 15	N	1.5	1	2	.3	N	30
K36360	37 37 16	87 46 15	N	3	1	1.5	.5	N	100
K36390	37 37 16	87 46 15	N	3	1.5	2	.5	N	50
K36420	37 37 16	87 46 15	N	2	.7	2	.5	N	50
K36450	37 37 16	87 46 15	N	5	1.5	2	.5	N	70
K36480	37 37 16	87 46 15	N	2	1	1.5	.2	N	50
K36510	37 37 16	87 46 15	<.05	3	1.5	1.5	.3	N	100
K36540	37 37 16	87 46 15	.07	2	1	1	.3	N	70
K36570	37 37 16	87 46 15	<.05	1.5	1	1	.2	N	70
K36600	37 37 16	87 46 15	.07	3	1	2	.3	N	100
K36600	37 37 16	87 46 15	.07	3	1	2	.3	N	100
K36630	37 37 16	87 46 15	.05	3	1	2	.3	N	70
K36630	37 37 16	87 46 15	.05	3	1	2	.3	N	70
K36660	37 37 16	87 46 15	.05	5	1	2	.3	N	70
K36660	37 37 16	87 46 15	.05	5	1	2	.3	N	70
K36690	37 37 16	87 46 15	.07	2	.7	.5	.2	N	70
K36690	37 37 16	87 46 15	.07	2	.7	.5	.2	N	70
K36720	37 37 16	87 46 15	<.05	1	.3	.3	.15	N	50
K36720	37 37 16	87 46 15	<.05	1	.3	.3	.15	N	50
K36750	37 37 16	87 46 15	.15	3	1	1	.5	N	100
K36750	37 37 16	87 46 15	.15	3	1	1	.5	N	100
K36780	37 37 16	87 46 15	.1	2	1	.7	.2	N	70
K36780	37 37 16	87 46 15	.1	2	1	.7	.2	N	70
K36810	37 37 16	87 46 15	.05	2	.7	.7	.2	N	70
K36810	37 37 16	87 46 15	.05	2	.7	.7	.2	N	70
K36840	37 37 16	87 46 15	.07	3	1	1	.3	<.5	100
K36840	37 37 16	87 46 15	.07	3	1	1	.3	<.5	100
K36870	37 37 16	87 46 15	.05	3	1	.7	.3	N	100
K36870	37 37 16	87 46 15	.05	3	1	.7	.3	N	100

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ba-ppm s	Be-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K35370	20	N	N	N	<5	N	N	N	N	N	5
K35400	N	N	N	N	N	N	N	N	N	N	<5
K35430	50	N	N	N	5	N	N	<10	N	N	7
K35460	30	N	N	N	<5	N	N	<10	N	N	5
K35490	50	N	N	<10	<5	N	N	<10	N	N	10
K35520	30	N	N	N	<5	N	N	<10	N	N	10
K35550	<20	N	N	N	N	N	N	N	N	N	<5
K35580	500	N	N	N	N	N	N	N	N	N	5
K35610	20	N	N	N	N	N	N	N	N	N	<5
K35635	<20	N	N	N	N	N	N	N	N	N	<5
K35660	200	N	<10	10	10	10	N	<10	N	N	20
K35700	30	N	N	<10	5	5	N	10	N	N	7
K35730	70	N	N	<10	<5	N	N	N	N	N	5
K35760	30	N	N	N	N	N	N	N	N	N	5
K35790	100	N	N	10	<5	10	N	<10	N	N	7
K35820	70	N	N	<10	<5	5	N	N	N	N	10
K35850	50	N	N	10	5	<5	N	N	N	N	5
K35910	100	N	N	10	<5	10	N	<10	N	N	7
K35940	50	N	N	10	5	7	N	N	N	N	5
K35970	70	N	N	15	7	15	N	<10	N	N	5
K36000	70	N	N	500	5	<5	N	<10	N	N	5
K36030	150	N	N	150	10	20	N	10	N	N	10
K36060	100	N	N	70	7	15	N	15	N	N	10
K36080	100	N	<10	200	15	50	N	20	N	N	15
K36120	150	<1	<10	100	10	50	N	15	N	N	15
K36150	200	<1	10	70	5	30	N	15	N	N	20
K36180	300	<1	10	70	7	70	N	30	N	N	30
K36210	200	N	15	70	20	70	N	20	N	N	50
K36250	200	<1	10	70	5	50	N	30	N	N	30
K36270	50	N	<10	10	20	N	N	N	N	N	100
K36300	20	N	N	<10	<5	N	N	N	N	N	<5
K36330	200	N	<10	30	15	30	N	20	N	N	7
K36360	300	<1	10	50	15	50	N	30	N	<20	20
K36390	300	<1	10	50	30	50	N	50	N	N	15
K36420	200	<1	10	20	20	30	N	30	5	N	20
K36450	300	<1	15	100	30	50	N	50	N	N	20
K36480	200	N	<10	50	15	70	N	20	N	N	10
K36510	300	1	10	70	20	100	N	50	N	N	15
K36540	200	<1	<10	30	20	30	N	30	N	N	10
K36570	150	<1	<10	20	15	50	N	30	N	N	10
K36600	300	<1	10	50	15	50	<50	50	N	N	15
K36600	300	<1	10	50	15	50	<50	50	N	N	15
K36630	200	<1	10	50	20	50	N	30	N	N	20
K36630	200	<1	10	50	20	50	N	30	N	N	20
K36660	200	<1	15	70	30	70	N	50	<5	N	20
K36660	200	<1	15	70	30	70	N	50	<5	N	20
K36690	150	N	N	15	10	20	N	30	N	N	15
K36690	150	N	N	15	10	20	N	30	N	N	15
K36720	70	N	<10	<10	5	5	N	<10	N	N	15
K36720	70	N	<10	<10	5	5	N	<10	N	N	15
K36750	200	<1	10	30	20	50	<50	30	N	<20	20
K36750	200	<1	10	30	20	50	<50	30	N	<20	20
K36780	300	N	<10	20	10	50	N	20	N	N	30
K36780	300	N	<10	20	10	50	N	20	N	N	30
K36810	150	N	<10	20	15	30	N	20	N	N	15
K36810	150	N	<10	20	15	30	N	20	N	N	15
K36840	150	1	10	30	20	50	N	20	N	N	30
K36840	150	1	10	30	20	50	N	20	N	N	30
K36870	200	1	<10	20	20	30	N	30	N	N	20
K36870	200	1	<10	20	20	30	N	30	N	N	20

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Pb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K35370	N	N	N	N	15	N	N	N	<10	N	10
K35400	N	N	N	N	N	N	N	N	N	N	10
K35430	N	N	N	N	10	N	N	N	10	.02	10
K35460	N	N	N	N	15	N	N	N	15	.01	10
K35490	N	N	N	N	15	N	N	N	10	.01	10
K35520	N	N	N	N	10	N	N	N	15	N	10
K35550	N	N	N	N	<10	N	N	N	N	N	10
K35580	N	N	N	N	15	N	N	N	10	.02	10
K35610	<10	N	N	N	<10	N	N	N	<10	N	15
K35635	50	N	N	N	<10	N	N	N	10	N	15
K35660	70	N	N	N	20	N	N	N	30	.03	15
K35700	100	N	N	N	15	N	N	N	10	.03	15
K35730	N	N	N	N	15	N	N	N	15	.03	15
K35760	N	N	N	N	10	N	N	N	10	.03	15
K35790	N	N	N	N	20	N	N	N	20	.04	15
K35820	N	N	N	N	10	N	N	N	15	.03	15
K35850	N	N	N	N	10	N	N	N	20	.04	15
K35910	N	N	N	N	15	N	N	N	30	.04	15
K35940	N	N	N	N	15	N	N	N	50	.04	15
K35970	<10	N	N	N	20	N	N	N	50	.08	15
K36000	N	N	N	N	20	N	N	N	20	.04	15
K36030	<10	<5	N	N	30	N	N	N	30	.05	15
K36060	10	<5	N	N	30	N	N	N	50	.05	15
K36080	<10	<5	N	N	50	N	N	N	50	.04	15
K36120	N	<5	N	N	50	N	N	N	70	.08	15
K36150	15	<5	N	N	50	N	N	N	150	.06	15
K36180	<10	5	N	N	70	N	N	N	100	.05	15
K36210	<10	5	N	N	50	N	N	N	70	.04	15
K36250	<10	5	N	N	70	N	N	N	70	.05	15
K36270	N	N	N	N	15	N	N	N	10	.02	15
K36300	N	N	N	N	10	N	N	N	<10	.02	15
K36330	N	<5	N	N	30	N	<10	N	70	.03	22
K36360	<10	5	N	N	70	N	10	N	200	.06	22
K36390	<10	5	N	N	50	N	<10	N	100	.04	22
K36420	<10	5	N	N	50	N	<10	N	150	.04	22
K36450	15	7	N	N	70	N	10	N	100	.05	22
K36480	20	<5	N	N	30	N	N	N	30	.04	22
K36510	10	5	N	N	50	N	N	N	70	.05	22
K36540	N	5	N	N	50	N	N	N	50	.05	22
K36570	<10	<5	N	N	30	N	N	N	70	.06	22
K36600	10	5	N	N	70	N	<10	N	70	.05	22
K36600	10	5	N	N	70	N	<10	N	70	.05	22
K36630	10	5	N	N	50	N	N	N	50	.05	22
K36630	10	5	N	N	50	N	N	N	50	.05	22
K36660	<10	7	N	N	100	<20	N	N	70	.06	25
K36660	<10	7	N	N	100	<20	N	N	70	.06	25
K36690	1,000	<5	N	N	50	N	N	N	30	.04	25
K36690	1,000	<5	N	N	50	N	N	N	30	.04	25
K36720	N	N	N	N	30	N	N	N	15	.02	25
K36720	N	N	N	N	30	N	N	N	15	.02	25
K36750	<10	5	N	N	70	N	<10	N	70	.05	25
K36750	<10	5	N	N	70	N	<10	N	70	.05	25
K36780	N	<5	N	N	50	N	N	N	30	.05	25
K36780	N	<5	N	N	50	N	N	N	30	.05	25
K36810	N	<5	N	N	50	N	N	N	30	.04	25
K36810	N	<5	N	N	50	N	N	N	30	.04	25
K36840	N	7	N	N	70	N	<10	N	50	.05	25
K36840	N	7	N	N	70	N	<10	N	50	.05	25
K36870	30	5	N	<100	100	30	N	300	30	.04	25
K36870	30	5	N	<100	100	30	N	300	30	.04	25

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Latitude	Longitude	Ca-pct.	Fe-pct.	Mg-pct.	Na-pct.	Ti-pct.	Ag-ppm	B-ppm
			s	s	s	s	s	s	s
K36900	37 37 16	87 46 15	<.05	1	.3	<.2	.2	N	50
K36900	37 37 16	87 46 15	<.05	1	.3	<.2	.2	N	50
K36930	37 37 16	87 46 15	<.05	3	1.5	1.5	.5	N	100
K36930	37 37 16	87 46 15	<.05	3	1.5	1.5	.5	N	100
K36960	37 37 16	87 46 15	.1	3	1	1	.3	N	100
K36960	37 37 16	87 46 15	.1	3	1	1	.3	N	100
K36990	37 37 16	87 46 15	<.05	5	1	1.5	.5	N	100
K36990	37 37 16	87 46 15	<.05	5	1	1.5	.5	N	100
K37020	37 37 16	87 46 15	.1	2	1	1	.3	N	100
K37020	37 37 16	87 46 15	.1	2	1	1	.3	N	100
K37050	37 37 16	87 46 15	.07	2	.7	.7	.2	N	70
K37050	37 37 16	87 46 15	.07	2	.7	.7	.2	N	70
K37080	37 37 16	87 46 15	.05	3	1	1.5	.3	N	100
K37080	37 37 16	87 46 15	.05	3	1	1.5	.3	N	100
K37110	37 37 16	87 46 15	<.05	3	1	1.5	.5	N	150
K37110	37 37 16	87 46 15	<.05	3	1	1.5	.5	N	150
K37140	37 37 16	87 46 15	<.05	3	1	1.5	.3	N	100
K37140	37 37 16	87 46 15	<.05	3	1	1.5	.3	N	100
K37170	37 37 16	87 46 15	.05	5	1.5	2	.3	N	70
K37170	37 37 16	87 46 15	.05	5	1.5	2	.3	N	70
K37200	37 37 16	87 46 15	.07	2	1.5	.7	.2	N	70
K37200	37 37 16	87 46 15	.07	2	1.5	.7	.2	N	70
K37230	37 37 16	87 46 15	.07	3	1.5	1	.3	N	70
K37230	37 37 16	87 46 15	.07	3	1.5	1	.3	N	70
K37260	37 37 16	87 46 15	.15	2	1	1.5	.2	N	50
K37260	37 37 16	87 46 15	.15	2	1	1.5	.2	N	50
K37300	37 37 16	87 46 15	<.05	2	1	1.5	.3	N	100
K37300	37 37 16	87 46 15	<.05	2	1	1.5	.3	N	100
K37320	37 37 16	87 46 15	.2	3	1	1	.3	N	100
K37320	37 37 16	87 46 15	.2	3	1	1	.3	N	100
K37350	37 37 16	87 46 15	.2	3	2	.7	.3	N	70
K37350	37 37 16	87 46 15	.2	3	2	.7	.3	N	70
K37380	37 37 16	87 46 15	.2	5	2	.7	.3	N	100
K37380	37 37 16	87 46 15	.2	5	2	.7	.3	N	100
K37410	37 37 16	87 46 15	10	1.5	1	1	.15	N	70
K37410	37 37 16	87 46 15	10	1.5	1	1	.15	N	70
K37440	37 37 16	87 46 15	20	.7	.5	.2	.07	N	20
K37440	37 37 16	87 46 15	20	.7	.5	.2	.07	N	20
K37460	37 37 16	87 46 15	20	.5	.7	.3	.07	N	30
K37460	37 37 16	87 46 15	20	.5	.7	.3	.07	N	30
K37500	37 37 16	87 46 15	15	1.5	2	.5	.2	N	50
K37500	37 37 16	87 46 15	15	1.5	2	.5	.2	N	50
K37530	37 37 16	87 46 15	10	2	1.5	1.5	.2	N	70
K37530	37 37 16	87 46 15	10	2	1.5	1.5	.2	N	70
K37550	37 37 16	87 46 15	.5	2	2	.5	.2	N	50
K37550	37 37 16	87 46 15	.5	2	2	.5	.2	N	50
K37580	37 37 16	87 46 15	.3	3	1.5	1	.3	N	70
K37580	37 37 16	87 46 15	.3	3	1.5	1	.3	N	70
K37610	37 37 16	87 46 15	.15	1.5	1.5	.5	.3	N	70
K37610	37 37 16	87 46 15	.15	1.5	1.5	.5	.3	N	70
K37640	37 37 16	87 46 15	.05	2	1	.5	.3	N	70
K37640	37 37 16	87 46 15	.05	2	1	.5	.3	N	70
K37670	37 37 16	87 46 15	.1	2	2	.3	.3	N	100
K37670	37 37 16	87 46 15	.1	2	2	.3	.3	N	100
K37700	37 37 16	87 46 15	<.05	1.5	1	<.2	.15	N	70
K37700	37 37 16	87 46 15	<.05	1.5	1	<.2	.15	N	70
K37730	37 37 16	87 46 15	.1	3	2	.3	.3	N	100
K37730	37 37 16	87 46 15	.1	3	2	.3	.3	N	100
K37760	37 37 16	87 46 15	.05	1.5	.5	.2	.1	N	30
K37760	37 37 16	87 46 15	.05	1.5	.5	.2	.1	N	30

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ba-ppm s	Be-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K36900	100	N	N	15	<5	10	N	<10	N	N	7
K36900	100	N	N	15	<5	10	N	<10	N	N	7
K36930	300	<1	10	70	20	100	<50	30	N	<20	50
K36930	300	<1	10	70	20	100	<50	30	N	<20	50
K36960	200	<1	<10	50	20	50	N	30	N	N	20
K36960	200	<1	<10	50	20	50	N	30	N	N	20
K36990	200	<1	10	70	15	70	N	30	N	N	70
K36990	200	<1	10	70	15	70	N	30	N	N	70
K37020	500	<1	10	20	10	50	N	20	N	<20	20
K37020	500	<1	10	20	10	50	N	20	N	<20	20
K37050	300	N	15	20	15	30	N	15	N	N	50
K37050	300	N	15	20	15	30	N	15	N	N	50
K37080	300	<1	<10	70	20	100	N	30	N	N	30
K37080	300	<1	<10	70	20	100	N	30	N	N	30
K37110	300	1	10	70	20	100	N	30	N	<20	70
K37110	300	1	10	70	20	100	N	30	N	<20	70
K37140	300	<1	10	70	20	100	N	30	N	N	100
K37140	300	<1	10	70	20	100	N	30	N	N	100
K37170	300	<1	10	100	30	100	N	50	5	N	30
K37170	300	<1	10	100	30	100	N	50	5	N	30
K37200	200	<1	10	70	20	50	N	20	5	N	20
K37200	200	<1	10	70	20	50	N	20	5	N	20
K37230	700	<1	10	70	20	70	N	30	<5	N	30
K37230	700	<1	10	70	20	70	N	30	<5	N	30
K37260	200	<1	<10	50	15	50	N	10	<5	N	20
K37260	200	<1	<10	50	15	50	N	10	<5	N	20
K37300	300	<1	10	50	7	70	N	15	N	N	50
K37300	300	<1	10	50	7	70	N	15	N	N	50
K37320	300	1	30	50	30	70	<50	50	<5	N	100
K37320	300	1	30	50	30	70	<50	50	<5	N	100
K37350	200	<1	10	100	30	70	N	50	N	N	30
K37350	200	<1	10	100	30	70	N	50	N	N	30
K37380	200	<1	15	70	50	70	N	50	N	N	50
K37380	200	<1	15	70	50	70	N	50	N	N	50
K37410	300	N	<10	20	15	30	N	10	<5	N	15
K37410	300	N	<10	20	15	30	N	10	<5	N	15
K37440	300	N	N	<10	5	5	N	<10	N	N	<5
K37440	300	N	N	<10	5	5	N	<10	N	N	<5
K37460	500	N	N	<10	<5	7	N	<10	N	N	5
K37460	500	N	N	<10	<5	7	N	<10	N	N	5
K37500	300	N	<10	20	10	20	N	20	N	N	15
K37500	300	N	<10	20	10	20	N	20	N	N	15
K37530	500	N	<10	30	15	50	N	15	N	N	20
K37530	500	N	<10	30	15	50	N	15	N	N	20
K37550	500	N	<10	30	30	20	N	20	5	N	20
K37550	500	N	<10	30	30	20	N	20	5	N	20
K37580	700	N	10	50	20	50	N	15	<5	N	30
K37580	700	N	10	50	20	50	N	15	<5	N	30
K37610	300	N	<10	20	50	30	N	15	<5	N	150
K37610	300	N	<10	20	50	30	N	15	<5	N	150
K37640	200	N	<10	20	15	30	N	15	N	N	15
K37640	200	N	<10	20	15	30	N	15	N	N	15
K37670	150	N	<10	30	50	20	N	20	N	N	15
K37670	150	N	<10	30	50	20	N	20	N	N	15
K37700	100	N	<10	15	15	20	N	15	N	N	10
K37700	100	N	<10	15	15	20	N	15	N	N	10
K37730	300	<1	10	70	20	50	N	20	N	N	30
K37730	300	<1	10	70	20	50	N	20	N	N	30
K37760	100	N	<10	<10	10	5	N	<10	<5	N	7
K37760	100	N	<10	<10	10	5	N	<10	<5	N	7

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Pb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K36900	30	N	N	N	20	N	N	N	100	.03	25
K36900	30	N	N	N	20	N	N	N	100	.03	25
K36930	1,000	10	N	<100	100	N	10	N	70	.06	25
K36930	1,000	10	N	<100	100	N	10	N	70	.06	25
K36960	50	5	N	N	100	N	N	N	50	.08	25
K36960	50	5	N	N	100	N	N	N	50	.08	25
K36990	<10	7	N	N	150	30	<10	N	70	.08	25
K36990	<10	7	N	N	150	30	<10	N	70	.08	25
K37020	15	<5	N	<100	70	N	N	N	50	.06	25
K37020	15	<5	N	<100	70	N	N	N	50	.06	25
K37050	15	<5	N	N	50	N	N	N	30	.06	25
K37050	15	<5	N	N	50	N	N	N	30	.06	25
K37080	20	7	N	<100	70	N	<10	N	50	.09	25
K37080	20	7	N	<100	70	N	<10	N	50	.09	25
K37110	<10	7	N	<100	100	N	<10	N	100	.08	25
K37110	<10	7	N	<100	100	N	<10	N	100	.08	25
K37140	<10	7	N	150	100	N	<10	N	70	.1	25
K37140	<10	7	N	150	100	N	<10	N	70	.1	25
K37170	10	7	N	N	100	N	<10	N	50	.08	25
K37170	10	7	N	N	100	N	<10	N	50	.08	25
K37200	10	5	N	N	100	<20	N	N	30	.17	25
K37200	10	5	N	N	100	<20	N	N	30	.17	25
K37230	10	7	N	N	100	N	N	N	50	.17	25
K37230	10	7	N	N	100	N	N	N	50	.17	25
K37260	1,000	5	N	N	70	N	<10	N	30	.28	25
K37260	1,000	5	N	N	70	N	<10	N	30	.28	25
K37300	100	7	N	N	70	N	<10	N	50	.1	25
K37300	100	7	N	N	70	N	<10	N	50	.1	25
K37320	2,000	10	N	N	100	N	<10	N	70	.1	25
K37320	2,000	10	N	N	100	N	<10	N	70	.1	25
K37350	300	5	N	N	70	N	N	N	30	.22	25
K37350	300	5	N	N	70	N	N	N	30	.22	25
K37380	70	5	N	N	70	20	N	N	50	.38	25
K37380	70	5	N	N	70	20	N	N	50	.38	25
K37410	10	<5	N	>5,000	30	N	N	N	30	.18	25
K37410	10	<5	N	>5,000	30	N	N	N	30	.18	25
K37440	<10	N	N	>5,000	15	N	N	N	15	.12	25
K37440	<10	N	N	>5,000	15	N	N	N	15	.12	25
K37460	N	N	N	>5,000	15	N	N	N	15	.06	25
K37460	N	N	N	>5,000	15	N	N	N	15	.06	25
K37500	<10	<5	N	5,000	50	N	<10	N	30	.12	25
K37500	<10	<5	N	5,000	50	N	<10	N	30	.12	25
K37530	700	5	N	>5,000	50	N	<10	N	30	.16	25
K37530	700	5	N	>5,000	50	N	<10	N	30	.16	25
K37550	3,000	<5	N	3,000	50	N	N	N	100	.28	25
K37550	3,000	<5	N	3,000	50	N	N	N	100	.28	25
K37580	1,000	5	N	5,000	70	N	<10	<200	200	.2	32
K37580	1,000	5	N	5,000	70	N	<10	<200	200	.2	32
K37610	15	<5	N	100	50	N	N	N	70	.24	32
K37610	15	<5	N	100	50	N	N	N	70	.24	32
K37640	100	<5	N	N	50	N	N	N	70	.11	32
K37640	100	<5	N	N	50	N	N	N	70	.11	32
K37670	N	<5	N	N	50	N	N	N	70	.1	32
K37670	N	<5	N	N	50	N	N	N	70	.1	32
K37700	N	N	N	<100	30	N	N	N	50	.05	32
K37700	N	N	N	<100	30	N	N	N	50	.05	32
K37730	10	<5	N	<100	50	N	N	N	100	.12	32
K37730	10	<5	N	<100	50	N	N	N	100	.12	32
K37760	N	N	N	N	20	N	N	N	70	.03	32
K37760	N	N	N	N	20	N	N	N	70	.03	32

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Latitude	Longitude	Ca-pct.	Fe-pct.	Mg-pct.	Na-pct.	Ti-pct.	Ag-ppm	B-ppm
			s	s	s	s	s	s	s
K37780	37 37 16	87 46 15	N	.5	.2	N	.07	N	30
K37810	37 37 16	87 46 15	.05	1.5	.7	<.2	.1	.5	50
K37840	37 37 16	87 46 15	.05	5	.5	.2	.2	<.5	50
K37870	37 37 16	87 46 15	.05	3	1.5	1	.2	N	50
K37900	37 37 16	87 46 15	N	2	1.5	1	.3	N	70
K37930	37 37 16	87 46 15	7	1.5	1.5	.5	.2	N	50
K37960	37 37 16	87 46 15	5	2	1.5	1	.5	N	50
K37990	37 37 16	87 46 15	15	.5	1	<.2	.07	N	50
K38020	37 37 16	87 46 15	20	.3	1	.2	.07	N	30
K38050	37 37 16	87 46 15	>20	.2	.7	<.2	.03	N	50
K38080	37 37 16	87 46 15	20	.7	1	.2	.1	N	30
K38110	37 37 16	87 46 15	15	.2	.7	.2	.03	N	20
K38140	37 37 16	87 46 15	20	.1	.5	<.2	.03	N	30
K38170	37 37 16	87 46 15	15	.5	.7	<.2	.05	N	50
K38200	37 37 16	87 46 15	>20	.7	1	.2	.1	N	70
K38230	37 37 16	87 46 15	20	.5	1	.3	.07	N	50
K38260	37 37 16	87 46 15	20	.7	1.5	.3	.1	N	50
K38290	37 37 16	87 46 15	15	1	2	.5	.15	N	30
K38320	37 37 16	87 46 15	.5	1	1.5	.3	.2	N	30
K38350	37 37 16	87 46 15	<.05	1	1.5	.5	.2	N	20
K38380	37 37 16	87 46 15	<.05	2	1	.3	.3	N	30
K38410	37 37 16	87 46 15	.07	2	1.5	.3	.3	N	50
K38440	37 37 16	87 46 15	<.05	1	.5	<.2	.1	N	20
K38470	37 37 16	87 46 15	.05	1.5	1	.3	.1	N	30
K38500	37 37 16	87 46 15	.05	1.5	1	.2	.15	N	30
K38530	37 37 16	87 46 15	.05	1	.7	.2	.1	N	20
K38560	37 37 16	87 46 15	.07	2	1.5	,3	.2	N	50
K38590	37 37 16	87 46 15	<.05	3	1	1	.5	N	100
K38600	37 37 16	87 46 15	N	1	.3	.2	.1	N	50

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Ba-ppm s	Be-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s
K37780	70	N	N	<10	5	N	N	N	N	N	5
K37810	700	N	<10	10	20	5	N	10	<5	N	10
K37840	>5,000	N	<10	20	20	10	N	15	5	N	15
K37870	>5,000	N	10	50	30	50	N	15	7	N	20
K37900	1,000	N	<10	70	50	30	N	10	5	N	20
K37930	300	N	<10	30	30	15	N	<10	<5	N	15
K37960	500	N	10	100	30	30	N	10	N	N	20
K37990	200	N	N	15	5	5	N	<10	N	N	<5
K38020	200	N	N	<10	<5	<5	N	N	N	N	<5
K38050	100	N	N	N	7	N	N	N	<5	N	N
K38080	100	N	N	10	5	<5	N	10	<5	N	<5
K38110	200	N	N	<10	5	N	N	N	N	N	N
K38140	150	N	N	N	<5	N	N	N	N	N	N
K38170	500	N	N	<10	5	N	N	N	N	N	<5
K38200	300	N	N	10	7	5	N	<10	<5	N	5
K38230	200	N	N	<10	5	<5	N	N	<5	N	5
K38260	300	N	N	10	<5	5	N	<10	N	N	7
K38290	700	N	N	15	15	20	N	10	N	N	10
K38320	1,000	N	N	15	10	10	N	<10	N	N	10
K38350	500	N	<10	30	20	20	N	<10	N	N	15
K38380	500	N	<10	30	15	20	N	10	N	N	15
K38410	700	N	<10	50	20	30	N	15	5	N	20
K38440	1,500	N	N	<10	15	<5	N	<10	<5	N	7
K38470	1,000	N	N	10	15	20	N	<10	10	N	7
K38500	150	N	N	10	15	20	N	<10	<5	N	10
K38530	100	N	N	<10	10	15	N	N	7	N	7
K38560	500	<1	<10	15	20	30	N	15	15	N	15
K38590	300	<1	10	70	20	70	<50	20	N	N	30
K38600	100	N	N	<10	15	<5	N	N	N	N	10

TABLE 4--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K3, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Pb-ppm s	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K37780	N	N	N	N	10	N	N	N	150	.02	32
K37810	20	N	N	500	20	N	N	N	200	.05	41
K37840	15	<5	N	200	30	N	N	N	70	.05	41
K37870	15	<5	N	<100	50	N	N	N	100	.12	41
K37900	20	<5	N	2,000	30	N	N	N	70	.16	41
K37930	<10	<5	N	3,000	20	N	N	<200	50	.11	41
K37960	<10	5	N	5,000	50	N	<10	N	100	.08	41
K37990	N	N	N	3,000	15	N	N	N	20	.08	41
K38020	N	N	N	>5,000	10	N	N	N	15	.09	41
K38050	30	N	N	>5,000	<10	N	N	<200	10	.05	41
K38080	N	N	N	3,000	15	N	N	N	20	.04	41
K38110	N	N	N	>5,000	<10	N	N	N	15	.06	41
K38140	N	N	N	>5,000	<10	N	N	N	10	.05	41
K38170	10	N	N	>5,000	10	N	N	N	50	.06	41
K38200	N	N	N	>5,000	20	N	N	N	70	.06	41
K38230	N	N	N	>5,000	15	N	N	N	50	.06	41
K38260	N	N	N	5,000	20	N	N	N	50	.12	41
K38290	<10	N	N	>5,000	20	N	N	N	70	.23	41
K38320	N	N	N	>5,000	20	N	N	N	70	.23	41
K38350	N	N	N	1,500	20	N	N	N	100	.13	41
K38380	<10	N	N	500	20	N	N	N	100	.12	41
K38410	15	N	N	N	30	N	N	N	150	.1	41
K38440	N	N	N	N	10	N	N	N	70	.06	41
K38470	N	N	N	N	15	N	N	N	100	.09	41
K38500	<10	N	N	N	20	N	N	N	70	.1	41
K38530	N	N	N	N	15	N	N	500	30	.09	41
K38560	N	<5	N	N	30	N	<10	N	100	.14	41
K38590	10	7	N	N	100	N	<10	N	70	.09	41
K38600	N	N	N	N	20	N	N	N	50	.04	41

TABLE 5--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K4, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.

[N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown.]

Sample	Latitude	Longitude	Ca-pct.	Fe-pct.	Mg-pct.	Na-pct.	P -pct.	Ti-pct.	Ag-ppm	As-ppm
			s	s	s	s	s	s	s	s
K40505	37 1 16	88 33 20	.3	.7	.2	N	N	.07	.5	N
K40520	37 1 16	88 33 20	1	1	.3	N	N	.05	<.5	N
K40535	37 1 16	88 33 20	.7	.7	.15	N	N	.07	<.5	N
K40591	37 1 16	88 33 20	2	1.5	.5	.2	N	.1	.5	N
K40603	37 1 16	88 33 20	2	2	.7	.5	N	.2	.7	N
K40620	37 1 16	88 33 20	5	2	1.5	.3	N	.15	N	N
K40640	37 1 16	88 33 20	.7	1.5	.5	.5	N	.15	.7	N
K40655	37 1 16	88 33 20	2	2	1	1.5	N	.3	1	N
K40675	37 1 16	88 33 20	1	3	.7	1	N	.3	.5	N
K40690	37 1 16	88 33 20	3	3	3	1.5	N	.3	N	N
K40705	37 1 16	88 33 20	.7	5	2	1.5	N	.5	<.5	N
K40720	37 1 16	88 33 20	.05	2	1.5	1	N	.3	N	N
K40735	37 1 16	88 33 20	.07	3	1	1.5	N	.3	N	N
K40750	37 1 16	88 33 20	.07	3	.7	1	N	.3	<.5	N
K40765	37 1 16	88 33 20	.2	5	1.5	1.5	N	.3	N	N
K40780	37 1 16	88 33 20	.2	7	1.5	1.5	N	.2	N	N
K40795	37 1 16	88 33 20	.15	5	1	1.5	N	.2	N	N
K40810	37 1 16	88 33 20	.15	7	1.5	1.5	N	.3	N	N
K40830	37 1 16	88 33 20	.15	7	2	1.5	N	.3	N	N
K40845	37 1 16	88 33 20	<.05	7	1.5	1.5	N	.3	N	N
K40865	37 1 16	88 33 20	<.05	3	2	1.5	N	.2	N	N
K40880	37 1 16	88 33 20	.07	5	3	1.5	N	.3	N	N
K40895	37 1 16	88 33 20	.07	5	2	1.5	N	.3	N	N
K40910	37 1 16	88 33 20	.15	3	2	1.5	N	.3	<.5	N
K40925	37 1 16	88 33 20	.07	3	1	1.5	N	.2	.5	N
K40945	37 1 16	88 33 20	.15	5	1.5	1	N	.2	<.5	N
K40960	37 1 16	88 33 20	2	5	3	1.5	N	.3	.5	N
K40970	37 1 16	88 33 20	3	3	3	1.5	N	.2	.5	N
K40990	37 1 16	88 33 20	1.5	2	1	.5	N	.15	.7	N
K41000	37 1 16	88 33 20	.1	1.5	.2	<.2	N	.07	N	N
K41015	37 1 16	88 33 20	N	7	1.5	1.5	N	.3	N	N
K41030	37 1 16	88 33 20	.07	1	.07	N	N	.03	N	N
K41045	37 1 16	88 33 20	.2	20	.1	N	N	.05	N	200
K41060	37 1 16	88 33 20	.1	.7	.03	N	N	.007	N	N
K41075	37 1 16	88 33 20	.1	.3	.03	N	N	.01	N	N
K41090	37 1 16	88 33 20	.15	.5	.02	N	N	.01	N	N
K41105	37 1 16	88 33 20	<.05	.1	<.02	N	N	.007	N	N
K41120	37 1 16	88 33 20	.07	.15	.05	N	N	.01	N	N
K41135	37 1 16	88 33 20	<.05	.1	.02	N	N	.005	N	N
K41150	37 1 16	88 33 20	.07	.1	.05	N	N	.007	N	N
K41165	37 1 16	88 33 20	.15	.1	.03	N	N	.01	N	N
K41180	37 1 16	88 33 20	.1	.15	.07	N	N	.007	N	N
K41195	37 1 16	88 33 20	.2	1	.05	N	N	.007	N	N
K41210	37 1 16	88 33 20	.05	.5	.03	N	N	.015	N	N
K41225	37 1 16	88 33 20	<.05	.7	<.02	N	N	.007	N	N
K41240	37 1 16	88 33 20	.05	.5	<.02	N	N	.01	N	N
K41255	37 1 16	88 33 20	N	.2	<.02	N	N	.005	N	N
K41270	37 1 16	88 33 20	<.05	.15	.02	N	N	.015	N	N
K41285	37 1 16	88 33 20	N	.1	<.02	N	N	.003	N	N
K41300	37 1 16	88 33 20	N	.15	<.02	N	N	.003	N	N
K41315	37 1 16	88 33 20	.2	.15	.03	N	N	.005	N	N
K41330	37 1 16	88 33 20	N	.15	<.02	N	N	.005	N	N
K41345	37 1 16	88 33 20	N	.5	<.02	N	N	.003	N	N
K41360	37 1 16	88 33 20	N	.3	<.02	N	N	.003	N	N
K41375	37 1 16	88 33 20	N	.15	<.02	N	N	.002	N	N
K41390	37 1 16	88 33 20	N	.1	<.02	N	N	.003	N	N
K41405	37 1 16	88 33 20	<.05	.1	N	N	N	<.002	N	N
K41420	37 1 16	88 33 20	<.05	.3	<.02	N	N	.005	N	N
K41435	37 1 16	88 33 20	N	.2	<.02	N	N	.002	N	N
K41450	37 1 16	88 33 20	.05	<.05	<.02	N	N	<.002	N	N

TABLE 5--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K4, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	B-ppm s	Ba-ppm s	Be-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s
K40505	50	100	N	N	N	N	5	N	N	<10	N
K40520	30	200	N	N	N	<10	5	N	N	N	N
K40535	30	150	N	N	N	<10	<5	N	N	N	N
K40591	50	500	N	N	N	10	7	7	N	<10	N
K40603	70	300	N	N	N	20	20	15	N	10	N
K40620	70	1,500	N	N	<10	20	20	15	N	20	<5
K40640	70	500	N	N	N	20	20	10	N	<10	N
K40655	100	2,000	<1	N	N	70	50	30	<50	15	5
K40675	100	1,500	N	N	N	30	50	20	N	15	5
K40690	70	1,000	<1	N	<10	50	30	50	N	50	<5
K40705	150	700	1	N	15	100	50	100	100	100	<5
K40720	100	300	1	N	10	50	30	30	<50	50	N
K40735	70	200	<1	N	<10	70	70	50	N	20	7
K40750	70	150	1	N	10	70	100	15	N	50	50
K40765	100	200	1	N	30	50	70	30	N	100	100
K40780	100	300	1.5	N	30	30	100	50	N	70	70
K40795	70	200	1	N	30	20	70	30	N	30	100
K40810	100	300	1.5	N	20	50	70	30	N	100	70
K40830	150	300	2	N	20	50	150	30	<50	150	50
K40845	70	200	1	N	15	70	100	50	N	50	50
K40865	100	200	1	N	15	70	50	50	N	50	15
K40880	150	500	1	N	15	70	70	50	<50	150	10
K40895	150	300	1	N	10	100	70	70	<50	70	7
K40910	100	300	1.5	N	15	70	100	50	<50	100	50
K40925	70	150	<1	N	10	70	70	30	N	30	20
K40945	100	200	1	N	15	50	100	20	N	50	15
K40960	150	300	2	N	15	70	150	30	<50	70	7
K40970	100	200	1.5	N	10	50	200	30	N	100	10
K40990	50	100	<1	N	<10	20	150	15	N	30	10
K41000	30	50	N	N	N	N	30	5	N	30	N
K41015	100	300	1.5	N	15	50	70	30	N	70	7
K41030	20	30	N	N	N	N	10	N	N	15	N
K41045	<10	50	N	N	30	<10	70	<5	N	30	7
K41060	N	N	N	N	N	N	<5	N	N	N	N
K41075	N	<20	N	N	N	N	<5	N	N	N	N
K41090	15	<20	N	N	N	N	<5	N	N	<10	N
K41105	<10	<20	N	N	N	N	N	N	N	N	N
K41120	10	<20	N	N	N	N	N	N	N	N	N
K41135	10	N	N	N	N	N	N	N	N	N	N
K41150	<10	N	N	N	N	N	N	N	N	N	N
K41165	15	20	N	N	N	N	N	N	N	<10	N
K41180	10	N	N	N	N	N	N	N	N	N	N
K41195	10	<20	N	N	N	N	5	N	N	<10	N
K41210	10	<20	N	N	N	N	N	N	N	<10	N
K41225	30	<20	N	N	N	N	N	N	N	<10	N
K41240	20	<20	N	N	N	N	N	N	N	<10	N
K41255	N	N	N	N	N	N	N	N	N	N	N
K41270	10	<20	N	N	N	N	N	N	N	N	N
K41285	<10	N	N	N	N	N	N	N	N	N	N
K41300	30	N	N	N	N	N	N	N	N	N	N
K41315	30	<20	N	N	N	N	N	N	N	N	N
K41330	<10	<20	N	N	N	N	N	N	N	N	N
K41345	15	N	N	N	N	N	N	N	N	<10	N
K41360	10	N	N	N	N	N	N	N	N	N	N
K41375	15	N	N	N	N	N	N	N	N	N	N
K41390	20	N	N	N	N	N	<5	N	N	N	N
K41405	50	N	N	N	N	N	N	N	N	N	N
K41420	15	N	N	N	N	N	N	N	N	N	N
K41435	20	N	N	N	N	N	N	N	N	N	N
K41450	30	N	N	N	N	N	N	N	N	N	N

TABLE 5--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K4, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sc-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K40505	N	7	N	N	N	50	N	N	N	20	.04	2
K40520	N	7	N	N	200	50	N	N	N	10	.06	2
K40535	N	5	N	N	1,000	10	N	N	N	15	.06	2
K40591	N	7	N	N	<100	20	N	N	N	15	.09	2
K40603	N	15	N	<5	200	30	N	N	N	20	.1	2
K40620	N	15	<10	<5	100	70	N	N	N	30	.09	2
K40640	N	20	N	N	500	30	N	N	N	20	.1	2
K40655	N	50	N	5	5,000	50	N	N	N	70	.12	2
K40675	N	70	N	<5	150	50	N	N	N	50	.08	2
K40690	N	30	15	<5	N	70	N	<10	N	30	.06	2
K40705	<20	100	10	10	N	200	N	15	<200	100	.06	2
K40720	N	70	N	7	N	100	N	<10	N	50	.04	2
K40735	N	70	15	5	N	200	N	<10	N	30	.06	2
K40750	N	150	15	<5	N	500	N	<10	<200	50	.05	2
K40765	N	150	15	5	N	300	N	10	N	30	.05	11
K40780	N	100	15	5	N	150	N	<10	N	30	.05	11
K40795	N	100	20	5	N	150	N	<10	N	30	.04	11
K40810	N	70	20	5	N	150	N	<10	N	50	.04	11
K40830	N	70	30	7	N	150	N	10	N	50	.04	11
K40845	N	70	20	5	N	100	N	<10	N	30	.04	11
K40865	N	30	15	5	N	100	N	<10	300	50	.04	11
K40880	<20	50	20	10	N	200	N	10	<200	100	.04	11
K40895	<20	30	15	7	N	150	N	10	N	100	.04	11
K40910	N	100	20	7	N	200	N	10	<200	70	.05	11
K40925	N	70	20	<5	N	150	N	N	N	30	.05	11
K40945	N	100	20	5	N	150	N	<10	N	50	.05	11
K40960	N	70	30	7	N	100	N	10	N	70	.07	11
K40970	N	100	20	7	N	100	N	<10	N	30	.08	11
K40990	N	100	<10	<5	N	200	N	N	N	20	.06	10
K41000	N	10	N	N	N	30	20	N	N	15	.02	10
K41015	N	30	30	5	N	150	<20	<10	N	150	.06	10
K41030	N	<5	N	N	N	<10	N	N	N	<10	<.01	10
K41045	N	150	100	N	N	30	N	N	200	N	.02	10
K41060	N	<5	N	N	N	N	N	N	N	15	<.01	10
K41075	N	<5	N	N	N	N	N	N	N	70	<.01	10
K41090	N	N	N	N	N	N	N	N	N	10	<.01	10
K41105	N	N	N	N	N	N	N	N	N	<10	<.01	10
K41120	N	N	N	N	N	N	N	N	N	20	<.01	10
K41135	N	N	N	N	N	N	N	N	<200	<10	<.01	10
K41150	N	N	N	N	N	N	N	N	N	<10	<.01	10
K41165	N	N	N	N	N	N	N	N	<200	30	.02	10
K41180	N	N	N	N	N	N	N	N	700	<10	<.01	10
K41195	N	N	N	N	N	N	N	N	200	15	.1	10
K41210	N	N	N	N	N	N	N	N	N	15	<.01	10
K41225	N	N	N	N	N	N	N	N	N	10	<.01	10
K41240	N	N	N	N	N	N	N	N	N	30	<.01	10
K41255	N	N	N	N	N	N	N	N	N	N	<.01	10
K41270	N	N	N	N	N	N	N	N	N	15	<.01	10
K41285	N	N	N	N	N	N	N	N	N	<10	<.01	10
K41300	N	N	N	N	N	N	N	N	N	N	<.01	10
K41315	N	N	N	N	N	N	N	N	N	<10	.13	10
K41330	N	N	N	N	N	N	N	N	N	10	<.01	10
K41345	N	N	N	N	N	N	N	N	N	20	<.01	10
K41360	N	N	N	N	N	N	N	N	N	<10	<.01	10
K41375	N	N	N	N	N	N	N	N	N	<10	<.01	10
K41390	N	N	N	N	N	N	N	N	N	N	<.01	10
K41405	N	N	<10	N	N	N	N	N	N	<10	<.01	10
K41420	N	N	N	N	N	N	N	N	N	N	<.01	10
K41435	N	N	<10	N	N	N	N	N	N	15	<.01	10
K41450	N	N	10	N	N	N	N	N	N	N	<.01	10

TABLE 5--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K4, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Latitude	Longitude	Ca-pct. s	Fe-pct. s	Mg-pct. s	Na-pct. s	P -pct. s	Ti-pct. s	Ag-ppm s	As-ppm s
K41465	37 1 16	88 33 20	<.05	.1	<.02	N	N	.002	N	N
K41480	37 1 16	88 33 20	N	<.05	<.02	N	N	N	N	N
K41495	37 1 16	88 33 20	3	.1	<.02	N	N	.005	N	N
K41510	37 1 16	88 33 20	1.5	.07	<.02	N	N	<.002	N	N
K41525	37 1 16	88 33 20	.07	.15	.02	N	N	.005	N	N
K41540	37 1 16	88 33 20	N	.15	<.02	N	N	.002	N	N
K41555	37 1 16	88 33 20	.05	.1	<.02	N	N	.005	N	N
K41570	37 1 16	88 33 20	.07	.07	.02	N	N	.003	N	N
K41585	37 1 16	88 33 20	.15	.2	.02	N	N	.005	N	N
K41600	37 1 16	88 33 20	.1	.1	<.02	N	N	.002	N	N
K41615	37 1 16	88 33 20	.15	.3	.02	N	N	.005	N	N
K41630	37 1 16	88 33 20	.5	.15	.02	N	N	.003	N	N
K41645	37 1 16	88 33 20	1	.2	.1	N	N	.007	N	N
K41660	37 1 16	88 33 20	2	.7	.15	N	N	.01	N	N
K41675	37 1 16	88 33 20	.5	.1	.05	N	N	.003	N	N
K41690	37 1 16	88 33 20	.2	.07	<.02	N	N	.003	N	N
K41705	37 1 16	88 33 20	.1	.15	.02	N	N	.003	N	N
K41720	37 1 16	88 33 20	.05	.1	.02	N	N	.002	N	N
K41735	37 1 16	88 33 20	.07	.15	.02	N	N	.003	N	N
K41750	37 1 16	88 33 20	.7	.7	.03	N	N	.01	N	N
K41765	37 1 16	88 33 20	1	.7	.15	N	N	.01	N	N
K41780	37 1 16	88 33 20	.3	.3	.1	N	N	.003	N	N
K41795	37 1 16	88 33 20	.3	.1	.07	N	N	.003	N	N
K41810	37 1 16	88 33 20	.15	.1	.03	N	N	.005	N	N
K41825	37 1 16	88 33 20	.2	.2	.05	N	N	.01	N	N
K41840	37 1 16	88 33 20	.15	.2	.07	N	N	.005	N	N
K41855	37 1 16	88 33 20	.2	.1	.15	N	N	.01	N	N
K41870	37 1 16	88 33 20	.3	.3	.2	N	N	.015	N	N
K41885	37 1 16	88 33 20	.2	.1	.15	N	N	.01	N	N
K41898	37 1 16	88 33 20	.15	.1	.07	N	N	.007	N	N
K41913	37 1 16	88 33 20	.2	.1	.1	N	N	.01	N	N
K41930	37 1 16	88 33 20	.15	.1	.05	N	N	.003	N	N
K41945	37 1 16	88 33 20	.5	.15	.15	N	N	.01	N	N
K41959	37 1 16	88 33 20	.15	.15	.1	N	N	.01	N	N
K41975	37 1 16	88 33 20	.3	.2	.2	N	N	.02	N	N
K41992	37 1 16	88 33 20	.3	.2	.15	N	N	.015	N	N
K42005	37 1 16	88 33 20	5	.3	.5	N	N	.02	N	N
K42020	37 1 16	88 33 20	10	.3	.2	N	N	.02	N	N
K42035	37 1 16	88 33 20	.5	.2	.3	N	N	.015	N	N
K42044	37 1 16	88 33 20	.2	.3	.2	N	N	.02	N	N

TABLE 5--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K4, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	B-ppm s	Ba-ppm s	Be-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	Ga-ppm s	La-ppm s	Mn-ppm s	Mo-ppm s
K41465	50	N	N	N	N	N	N	N	N	N	N
K41480	30	N	N	N	N	N	N	N	N	N	N
K41495	50	N	N	20	N	N	20	N	N	N	N
K41510	30	N	N	<20	N	N	15	N	N	N	N
K41525	70	<20	N	N	N	N	200	N	N	N	N
K41540	50	N	N	N	N	N	N	N	N	N	N
K41555	70	N	N	N	N	N	<5	N	N	N	N
K41570	30	N	N	N	N	N	<5	N	N	N	N
K41585	50	N	N	N	N	N	N	N	N	N	N
K41600	30	N	N	N	N	N	N	N	N	N	N
K41615	50	N	N	N	N	N	N	N	N	<10	N
K41630	70	N	N	N	N	N	<5	N	N	N	N
K41645	30	N	N	N	N	N	<5	N	N	N	N
K41660	15	N	N	<20	N	N	10	N	N	10	N
K41675	30	N	N	N	N	N	<5	N	N	N	N
K41690	20	N	N	N	N	N	N	N	N	N	N
K41705	70	N	N	N	N	N	5	N	N	N	N
K41720	30	N	N	N	N	N	7	N	N	N	N
K41735	50	<20	N	N	N	N	<5	N	N	N	N
K41750	20	N	N	N	N	N	10	N	N	N	N
K41765	30	<20	N	N	N	N	<5	N	N	N	N
K41780	15	N	N	N	N	N	N	N	N	N	N
K41795	70	<20	N	N	N	N	N	N	N	N	N
K41810	70	N	N	N	N	N	N	N	N	N	N
K41825	30	<20	N	N	N	N	N	N	N	N	N
K41840	15	N	N	N	N	N	N	N	N	N	N
K41855	20	N	N	N	N	N	50	N	N	N	N
K41870	20	<20	N	N	N	N	N	N	N	N	N
K41885	30	<20	N	N	N	N	<5	N	N	N	N
K41898	20	N	N	N	N	N	N	N	N	N	N
K41913	30	N	N	N	N	N	N	N	N	N	N
K41930	20	N	N	N	N	N	N	N	N	N	N
K41945	30	<20	N	N	N	N	N	N	N	N	N
K41959	10	N	N	N	N	N	<5	N	N	N	N
K41975	30	<20	N	N	N	N	<5	N	N	N	N
K41992	<10	N	N	N	N	N	<5	N	N	N	N
K42005	15	20	N	N	N	N	<5	N	N	<10	N
K42020	10	<20	N	N	N	N	15	N	N	N	N
K42035	<10	N	N	N	N	N	<5	N	N	N	N
K42044	15	<20	N	N	N	N	5	N	N	N	N

TABLE 5--ANALYTICAL RESULTS OF INSOLUBLE-RESIDUE SAMPLES FROM DRILL HOLE NO. K4, PADUCAH 1 x 2 DEGREE QUADRANGLE, ILLINOIS, MISSOURI, AND KENTUCKY.--Continued

Sample	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sc-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	F-pct. ise	Form #
K41465	N	N	N	N	N	N	N	N	N	N	<.01	10
K41480	N	N	N	N	N	N	N	N	N	N	<.01	10
K41495	N	N	N	N	N	N	N	N	10,000	<10	2.14	10
K41510	N	N	N	N	N	N	N	N	7,000	N	2.02	10
K41525	N	N	N	N	N	N	N	N	200	N	.05	10
K41540	N	N	N	N	N	N	N	N	N	<10	.01	10
K41555	N	N	N	N	N	N	N	N	700	10	.01	10
K41570	N	N	N	N	N	N	N	N	300	<10	.03	10
K41585	N	N	N	N	N	N	N	N	N	20	<.01	10
K41600	N	N	N	N	N	N	N	N	N	10	<.01	10
K41615	N	N	N	N	N	N	N	N	N	10	<.01	10
K41630	N	N	N	N	N	N	N	N	1,000	<10	.38	10
K41645	N	N	10	N	N	N	N	N	<200	N	.02	10
K41660	N	<5	150	N	N	<10	N	N	2,000	15	.1	10
K41675	N	N	N	N	N	N	N	N	N	<10	<.01	10
K41690	N	N	N	N	N	N	N	N	N	N	<.01	10
K41705	N	N	N	N	N	N	N	N	N	<10	<.01	10
K41720	N	N	N	N	N	N	N	N	N	N	<.01	10
K41735	N	N	N	N	N	N	N	N	N	20	<.01	10
K41750	N	<5	700	N	N	N	N	N	N	20	.58	10
K41765	N	N	N	N	N	<10	N	N	N	10	.19	10
K41780	N	N	N	N	N	N	N	N	N	N	.02	10
K41795	N	N	N	N	N	N	N	N	N	<10	<.01	10
K41810	N	N	N	N	N	N	N	N	N	<10	<.01	10
K41825	N	N	N	N	N	N	N	N	N	N	.01	10
K41840	N	N	N	N	N	N	N	N	N	N	.02	15
K41855	N	N	N	N	N	N	N	N	N	N	.02	15
K41870	N	N	N	N	N	N	N	N	N	<10	.02	15
K41885	N	N	N	N	N	N	N	N	N	N	<.01	15
K41898	N	N	N	N	N	N	N	N	N	N	<.01	15
K41913	N	N	<10	N	N	N	N	N	N	N	<.01	15
K41930	N	N	N	N	N	N	N	N	N	N	<.01	15
K41945	N	N	N	N	N	N	N	N	N	10	<.01	15
K41959	N	N	N	N	N	N	N	N	N	N	<.01	15
K41975	N	N	N	N	N	<10	N	N	N	<10	.01	15
K41992	N	N	N	N	N	N	N	N	N	N	.02	15
K42005	N	N	2,000	N	N	<10	N	N	N	<10	2.4	15
K42020	N	N	7,000	N	N	<10	N	N	N	10	5.44	15
K42035	N	<5	N	N	N	N	N	N	N	10	.08	15
K42044	N	<5	N	N	N	<10	N	N	N	<10	.05	15

Table 6. Formation Codes

Code	Formation
0	Cretaceous - undifferentiated
1	Pennsylvanian - undifferentiated
2	Mississippian - undifferentiated
3	Upper Chester Series
4	Middle Chester Series
5	Lower Chester Series
6	Upper Valmeyeran Series
7	Lower Valmeyeran Series
8	Kinderhookian Series
10	Devonian - undifferentiated
11	New Albany Group
12	Hunton Group
15	Silurian - undifferentiated
20	Ordovician - undifferentiated
21	Cincinnatian Series - undifferentiated
22	Maquoketa Group
23	Champlainian Series - undifferentiated
24	Cape Group
25	Galena Group
26	Platteville Group
27	Ancell Group
28	Glenwood Formation
29	Rock Levee Formation
30	Joachim Formation
31	Dutchtown Formation
32	St. Peter Formation
40	Canadian Series - undifferentiated
41	Knox Megagroup - undifferentiated
42	Prairie du Chien Group - undifferentiated
43	Everton Formation
44	Shakopee Formation
45	New Richmond Formation

Table 6. Formation Codes (Continued)

Code	Formation
46	Oneota Formation
48	Lower Ordovician - undifferentiated
49	Black Rock Formation
50	Smithville Formation
51	Powell Formation
52	Cotter Formation
53	Jefferson City Formation
54	Roubidoux Formation
55	Gasconade Formation
56	Gunter Formation
60	Cambro-Ordovician - undifferentiated
61	Cambrian - undifferentiated
62	Trempealeauan Series - undifferentiated
63	Eminence Formation
64	Potosi Formation
65	Franconian Series - undifferentiated
66	Franconia Formation
67	Ironton-Galesville Formations
68	Derby-Doerun Formations
78	Elvins Formation
69	Davis Formation
70	Reagan Formation
71	Dresbachian Series - undifferentiated
72	Eau Claire Formation
73	Bonneterre Formation
74	Mt. Simon Formation
75	Lamotte Formation
76	Bonneterre-Lamotte Transition Zone
80	Precambrian - undifferentiated
81	Precambrian granite