

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DATA FOR WELLS AT THE LOW-LEVEL
RADIOACTIVE-WASTE BURIAL SITE IN THE
PALOS FOREST PRESERVE, ILLINOIS

By Julio C. Olimpio

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ABSTRACT

The U.S. Geological Survey is studying the geologic, hydrologic, and geochemical properties of the glacial drift and underlying bedrock at a low-level radioactive-waste burial site in the Palos Forest Preserve, 22 kilometers southwest of Chicago. Data collected from the 33 test wells drilled into the drift plus data from 4 wells drilled into the underlying dolomite bedrock are presented. Data include maps showing the location of the test wells, a general description of the drift, well-construction information, and lithologic descriptions of cores from the wells finished in the drift.

INTRODUCTION

In early 1943, the U.S. Army Corps of Engineers leased land from the Cook County Forest Preserve District to build a radioisotope research facility. The facility formed part of the Metallurgical Laboratory operated by the University of Chicago for the Manhattan Engineer District (the Manhattan Project). The facility, known as Site A (fig. 1), housed the world's first nuclear reactor. Plot M was the burial site for the low-level radioactive waste resulting from operations at the Metallurgical Laboratory.

The Argonne National Laboratory (ANL) has conducted a radiological monitoring program at Plot M since 1948. In 1954, at the request of ANL, the U.S. Geological Survey (USGS) studied the geologic, hydrologic, and chemical characteristics of the glacial drift at Plot M (W. J. Drescher, written commun., 1954) and advised ANL on its environmental monitoring program. In 1973, tritium was detected in water from a dolomite bedrock well at the Red Gate Woods picnic area. Consequently, the ANL monitoring program was expanded to include the Red Gate Woods well and other nearby forest preserve wells.

This study of ground-water flow and tritium migration at Plot M began in 1978. The two main objectives of the study are to determine the geologic, hydrologic, and geochemical properties of the drift that control the migration of tritium from the burial site to the underlying bedrock and to determine the

present extent of tritium in the drift. A third objective is to determine the rate and direction of tritium movement in water in the bedrock. The results of the study are needed by the U.S. Department of Energy to evaluate the need for remedial action at the Plot M site. Several test wells were drilled to help accomplish these objectives.

The purpose of this report is to present the physical description of each well and a description of the lithologic materials encountered.

ACKNOWLEDGMENTS

This investigation relied heavily on the Plot M environmental surveillance program by the Argonne National Laboratory. Especially helpful have been J. Sedlet, N. W. Golchert, and H. C. Svoboda of the Health Safety Section of ANL who have provided administrative and technical assistance throughout the project.

DRILLING PROGRAM

The Plot M site is situated on a moraine and is directly underlain by 25-30 meters of clayey silt. The clayey silt, which is the Wadsworth Till Member (of Willman and Frye, 1970) of the Wedron Formation, contains thin lenses and layers of sand and gravel and overlies sandy silt and gravel of the Malden Till Member (of Willman and Frye, 1970) of the Wedron Formation. The total thickness of the drift beneath the site ranges from 25 to 45 meters.

In 1976, under USGS supervision, ANL began construction of a network of test wells in the drift (fig. 2). Drilling at each site was accompanied by continuous split-spoon sampling to identify variations in lithologic properties. Cores and samples were logged in the field and sealed for laboratory analysis. Field observations were made of the lithology, texture, color, structure, and sedimentologic features of each sample. Vertical variations in lithology, grain-size distribution, and color were observed within both the Wadsworth and Malden tills. These vertical variations in the character of the drift were consistent at all test wells and were used to categorize the drift into seven lithostratigraphic units. The units are referred to, from the surface downward, as Units 1 through 7 (table 1). Units 1 through 5 represent the Wadsworth Till Member and Units 6 and 7 represent the Malden Till Member.

Table 2 includes information on the length of core recovered and the geologic log of each well finished in the drift. Table 3 includes the well-completion information for the four bedrock test wells drilled near Plot M (fig. 1) in 1976. A complete description of the techniques used to drill the pre-1979 wells, together with the results of the radionuclide analyses of all the core samples collected, is given by Golchert and Sedlet (1978).

REFERENCES

- Golchert, N. W., and Sedlet, Jacob, 1978, Radiological survey of Site A and Plot M: U.S. Department of Energy Report DOE/EV-0005/7, 89 p.
- Willman, H. B., and Frye, J. C., 1970, Pleistocene stratigraphy of Illinois: Illinois State Geological Survey Bulletin 94, 204 p.

FIGURES 1 and 2; TABLES 1 to 3

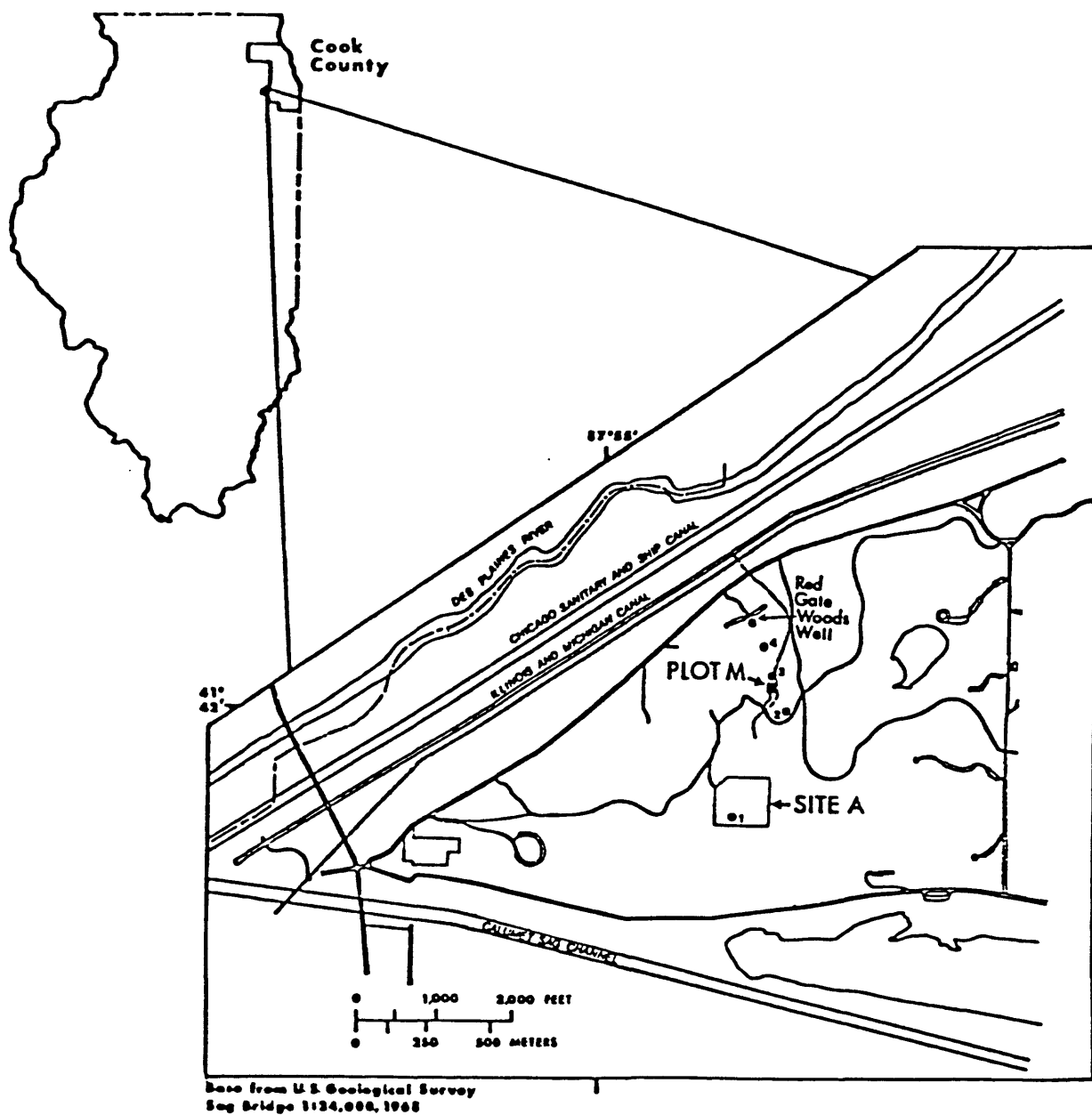


Figure 1.--Location of Plot M in the Palos Forest Preserve, Cook County, Illinois. Wells 1 through 4 and the Red Gate Woods well are finished in the underlying dolomite bedrock.

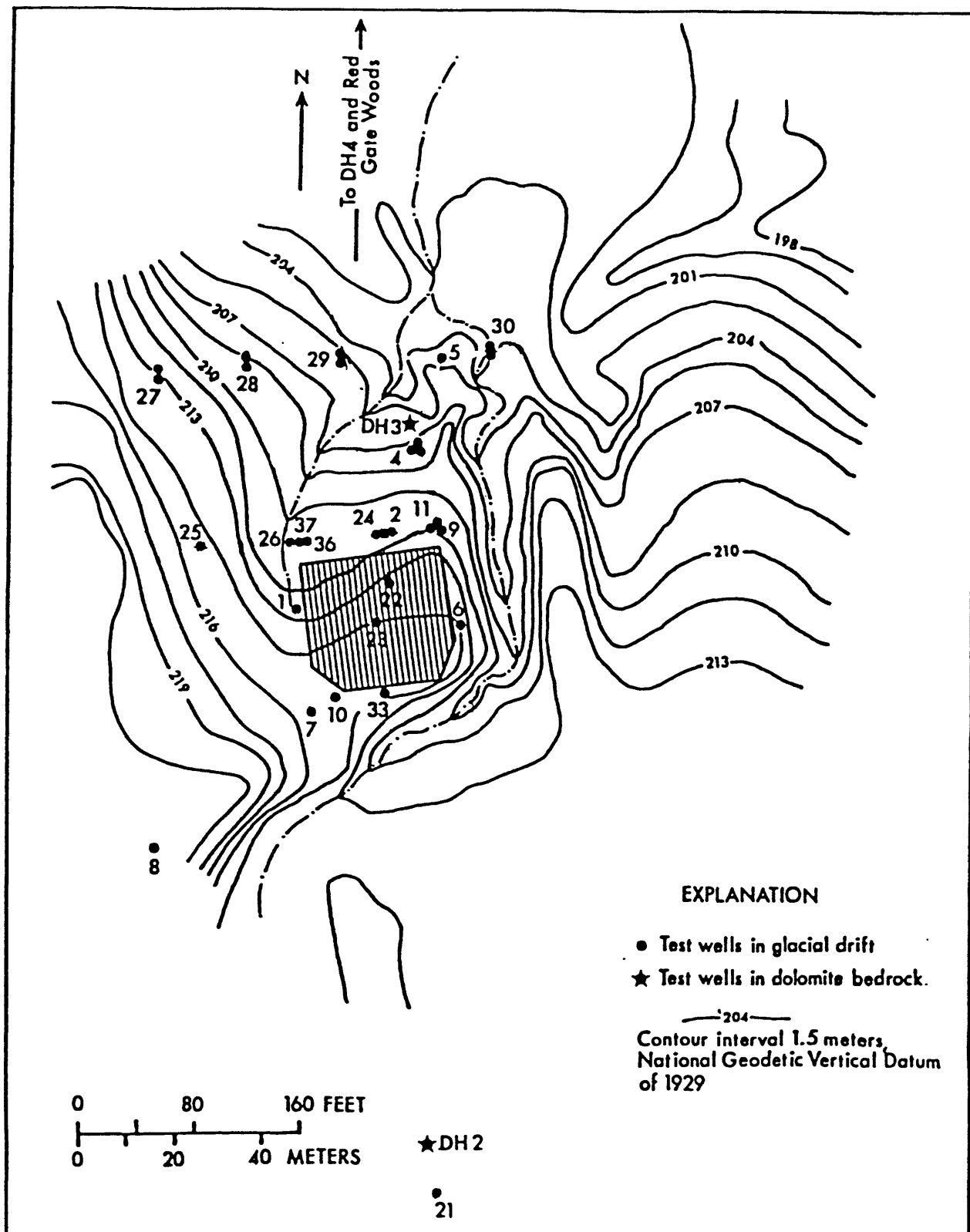


Table 1.--Geologic time-stratigraphic classification, rock-stratigraphic classification, and general description of the drift at the Plot M site

System	Series	Stage	Substage	Formation	Member	Unit (this report)	Depth (m)	Thick- ness (m)	Description
Quaternary	Pleistocene	Wisconsinan	Woodfordian	Wedron	Wadsworth Till ¹	1	5	5	Yellow-brown silty clay containing pebbles, stones; wide variety of mineral and rock fragments, oxidized fractures, discontinuous sand layers
						2	10	5	Alternating sequence of brown and gray-brown clayey silts containing pebbles, stones, and rocks; mostly dolomite and black shale grains, discontinuous sand and gravel layers
						3	15	5	Alternating sequence of brown and gray-brown clayey silts containing pebbles, stones; mostly dolomite and black shale grains, relatively low density, easy to drill and sample
						4	20	5	Alternating sequence of gray and gray-brown silts, few or no pebbles and stones; very dry and hard, relatively high density, difficult to drill and sample
					Malden Till ¹	5	25	5	Gray and light gray silt and sand, no pebbles, dry, stiff, brittle, extremely hard, difficult to drill and sample
						6	30	5	Gray-brown gravelly sandy silt, moist, all grains are dolomite
						7	35	5-7	Dark brown gravelly, clayey silt containing pebbles and stones, moist; only encountered in test well 36
Silurian	Niagaran						40	50	

¹ Willman and Frye, 1970.

Table 2.--Test-well construction data and lithologic description
of cores at Plot M

Test well 1

Completion date: March 31, 1976

Location: 26 meters west of the center of Plot M

Site and well construction data:

Altitude of land surface 213.81 m

Altitude of measuring point (top of casing). 213.81 m

Depth to bottom of piezometer from land surface. 12.19 m

Type of piezometer: 1.52 m perforated PVC pipe, 6.35 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S7	0- 0.46		27.9	black topsoil over brown silty clay w/pebbles, plant fragments
1	76S8	0.46- 0.91		33.0	brown silty clay w/pebbles and stones
1	76S9	0.91- 1.37		24.8	grayish brown clay w/small stones
1		1.37- 1.83			
1	76S10	1.83- 2.29		27.9	grayish brown silty clay grading to gray silty clay
1		2.29- 2.74			
1	76S11	2.74- 3.20		11.4	brown silty clay w/large stones; numerous stones at bottom
1		3.20- 3.66			
1	76S12	3.66- 4.12		21.6	brown silty clay w/stones
1		4.12- 4.57			
1	76S13	4.57- 5.03		22.9	brown silty clay to 4.72 m; sand at 4.72 m w/stones
1		5.03- 5.49			
1		5.49- 5.94			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 1--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S14	5.94- 6.40		40.6	brown clayey silt w/stones, large variety of rock and mineral grains
1		6.40- 6.86			
1		6.86- 7.32			
2		7.32- 7.77			
2	76S15	7.77- 8.23		38.1	brownish gray clayey silt w/stones
2		8.23- 8.69			
2		8.69- 9.14			
2	76S16	9.14- 9.60		30.5	gray clayey silt w/limestone pebbles, stones, firm, moist
2		9.60-10.06			
2		10.06-10.52			
2	76S17	10.52-10.97		27.9	gray clayey silt w/limestone pebbles
2		10.97-11.43			
2		11.43-11.89			
2		11.89-12.34			
2	76S18	12.34-12.64	18-34-27	25.4	gray clay silt w/pebbles, firm, moist to wet; sand partings
		EOB 12.64 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 2

Completion date: April 6, 1976

Location: 26 meters north of the center of Plot M

Site and well construction data:

Altitude of land surface 211.07 m

Altitude of measuring point (top of casing). 211.13 m

Depth to bottom of piezometer from land surface. . . . 12.13 m

Type of piezometer: 1.52 m perforated PVC pipe, 6.35 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S41	0- 0.46		35.6	brown silty clay topsoil w/stones
1	76S42	0.46- 0.91		22.9	brown silty clay w/pebbles, stones
1	76S43	0.91- 1.37		22.9	brown silty clay w/pebbles, stones
1		1.37- 1.83			
1	76S44	1.83- 2.29		25.4	brown silty clay w/pebbles, stones, mottled
1		2.29- 2.74			
1		2.74- 3.20			
1	76S45	3.20- 3.66		35.6	brown silty clay w/pebbles, stones
1		3.66- 4.12			
1		4.12- 4.57			
1	76S46	4.57- 5.03		35.6	brown silty clay w/pebbles, stones
1		5.03- 5.49			
1		5.49- 5.94			
1	76S47	5.94- 6.40		55.9	brown gray silty clay to 6.25 m; con- tact w/brown clayey silt

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 2--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1		6.40- 6.86			
2		6.86- 7.32			
2	76S48	7.32- 7.77		27.9	brown clayey silt to 7.42 m; contact w/gray clayey silt w/pebbles, mostly dolomite
2		7.77- 8.23			
2		8.23- 8.69			
2		8.69- 9.14			
2	76S49	9.14- 9.60		43.2	gray clayey silt w/pebbles to 9.54 m; 1.3 cm sand layer at 9.54 m; contact w/brownish gray clayey silt
2		9.60-10.06			
2		10.06-10.52			
2	76S50	10.52-10.97		22.9	gray clayey silt w/pebbles, moist to wet to 10.82 m; 15.2 cm water-bearing sand and gravel w/clayey silt at 10.82 m
2		10.97-11.43			
2		11.43-11.89			
2	76S51	11.89-12.34		7.6	gray clayey silt
		EOB 12.34 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 3

Completion date: April 7, 1976

Location: 7 meters north of the northeast corner of Plot M

Site and well construction data:

Altitude of land surface 211.31 m

Altitude of measuring point (top of casing). 211.31 m

Depth to bottom of piezometer from land surface. . . . 12.19 m

Type of piezometer: 1.52 m perforated PVC pipe, 6.35 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S63	0- 0.46		27.9	brown silty clay w/grass, roots, plant fragments, stones
1	76S64	0.46- 0.91		33.0	brown silty clay w/pebbles
1	76S65	0.91- 1.37		30.5	brown silty clay w/pebbles
1		1.37- 1.83			
1	76S66	1.83- 2.29		22.9	brown clayey silt w/pebbles
1		2.29- 2.74			
1	76S67	2.74- 3.20		16.5	brown clayey silt w/pebbles
1		3.20- 3.66			
1		3.66- 4.12			
1		4.12- 4.57			
1	76S68	4.57- 5.03		26.7	brown clayey silt w/pebbles
1		5.03- 5.49			
1		5.49- 5.94			
2	76S69	5.94- 6.40		27.9	brown clayey silt w/pebbles

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 3--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2		6.40- 6.86			
2		6.86- 7.32			
2	76S70	7.32- 7.77		11.4	gray clayey silt w/pebbles, stones, mostly dolomite
2		7.77- 8.23			
2		8.23- 8.69			
2		8.69- 9.14			
2	76S71	9.14- 9.60		61.0	gray clayey silt, moist; grading to gray-brown clayey silt
2		9.60-10.06			
2		10.06-10.52			
2	76S72	10.52-10.97		53.3	grayish brown clayey silt w/pebbles, mostly dolomite
2		10.97-11.43			
3		11.43-11.89			
3	76S73	11.89-12.34		17.8	gray clayey silt w/pebbles, mostly dolomite
		EOB 12.50 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 4

Completion date: April 7, 1976

Location: 32 meters north-northwest of the northeast corner of Plot M, 26 m north-northeast of test well 2

Site and well construction data:

Altitude of land surface 207.87 m
 Altitude of measuring point (top of casing). 207.93 m
 Depth to bottom of piezometer from land surface. . . . 12.13 m
 Type of piezometer: 1.52 m perforated PVC pipe, 6.35 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S52	0- 0.46		33.6	brown silty clay w/stones, root tubes
1	76S53	0.46- 0.91		33.0	brown silty clay w/numerous pebbles
1		0.91- 1.37			
1	76S54	1.37- 1.83		25.4	brown clayey silt w/pebbles
1		1.83- 2.29			
1	76S55	2.29- 2.74		19.1	brown clayey silt; vertical fracture
1	76S56	2.74- 3.20		27.9	brown clayey silt and sand to 3.08 m; contact w/27.9 cm water-bearing sand w/small pebbles; contact w/brown clayey silt w/pebbles
1		3.20- 3.66			
1		3.66- 4.12			
1		4.12- 4.57			
2		4.57- 5.03			
2	76S57	5.03- 5.49		19.1	gray silty clay grading to brown clay to 5.18 m; contact w/15.2 cm brown silty sand at 5.18 m

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 4--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2		5.49- 5.94			
2	76S58	5.94- 6.40		29.2	gray clayey silt w/limestone pebbles
2		6.40- 6.86			
2		6.86- 7.32			
2	76S59	7.32- 7.77		48.3	brown-gray clayey silt; contact w/gray-brown clayey silt
2		7.77- 8.23			
2		8.23- 8.69			
2		8.69- 9.14			
2	76S60	9.14- 9.60		22.9	gray-brown clayey silt w/numerous pebbles
2		9.60-10.06			
2		10.06-10.52			
2	76S61	10.52-10.97		61.0	gray clayey silt w/pebbles, mostly dolomite
2		10.97-11.43			
2		11.43-11.89			
2	76S62	11.89-12.34		30.5	gray clayey silt w/pebbles, moist to wet
EOB 12.50 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 5

Completion date: April 8, 1976

Location: 60 meters north of the northeast corner of Plot M

Site and well construction data:

Altitude of land surface 204.89 m

Altitude of measuring point (top of casing). 205.06 m

Depth to bottom of piezometer from land surface. . . . 12.02 m

Type of piezometer: 1.52 m perforated PVC pipe, 6.35 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S85	0- 0.46		20.3	yellow-brown silty clay w/plant fragments, tree roots
1	76S86	0.46- 0.91		21.6	brown silty clay w/tree roots
1	76S87	0.91- 1.37		16.5	brown silty clay w/stones
1		1.37- 1.83			
1	76S88	1.83- 2.29		21.6	brown silty clay w/stones
1		2.29- 2.74			
1	76S89	2.74- 3.20		36.8	brown-gray silty clay w/limestone pebbles; grading to brown clayey silt; grading to gray clayey silt w/pebbles
1		3.20- 3.66			
2		3.66- 4.12			
2		4.12- 4.57			
2	76S90	4.57- 5.03		39.4	gray clayey silt w/pebbles, mostly dolomite
2		5.03- 5.49			
2		5.49- 5.94			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 5--Continued

Unit No.	Sample No.	Depth interval recovery	Blow counts	Recovery (cm)	Description
2	76S91	5.94- 6.40		20.3	gray clayey silt w/pebbles, stones, mostly dolomite
2		6.40- 6.86			
2		6.86- 7.32			
2	76S92	7.32- 7.77		48.3	gray clayey silt to 7.70 m; 5.1 cm sand layer at 7.77 m; contact w/gray- brown clayey silt w/numerous pebbles
2		7.77- 8.23			
2		8.23- 8.69			
2		8.69- 9.14			
2	76S93	9.14- 9.60		39.4	gray clayey silt; grading to brown- gray clayey silt w/pebbles, stones, mostly dolomite
2		9.60-10.06			
2		10.06-10.52			
2	76S94	10.52-10.97		31.8	gray clayey silt w/few pebbles; grad- ing to brownish-gray clayey silt w/numerous large stones and pebbles
2		10.97-11.43			
2		11.43-11.89			
2	76S95	11.89-12.19		16.5	gray clayey silt w/pebbles
		EOB 12.19 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 6

Completion date: April 5, 1976

Location: 30 meters south of the northeast corner of Plot M, 18 meters northeast of the southeast corner

Site and well construction data:

Altitude of land surface 214.64 m

Altitude of measuring point (top of casing). 214.84 m

Depth of bottom of piezometer from land surface. . . . 11.99 m

Type of piezometer: 1.52 m perforated PVC pipe, 6.35 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S30	0- 0.46		25.4	brown silty clay w/stones, root tubes
1		0.46- 0.91			
1	76S31	0.91- 1.37		33.0	brown silty clay w/stones, moist
1	76S32	1.37- 1.83		32.5	brown silty clay w/stones, mottled; sand parting at 1.79 m
1		1.83- 2.29			
1	76S33	2.29- 2.74		25.9	brown silty clay w/pebbles, stones, mottled
1	76S34	2.74- 3.20		32.4	brown silty clay w/pebbles, stones
1		3.20- 3.66			
1		3.66- 4.12			
1		4.12- 4.57			
1	76S35	4.57- 5.03		13.9	brown silty clay w/pebbles, large variety of rocks and minerals
1		5.03- 5.49			
2		5.49- 5.94			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 6--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	76S36	5.94- 6.40		44.0	gray clayey silt w/pebbles, stones, mostly dolomite
2		6.40- 6.86			
2		6.86- 7.32			
2	76S37	7.32- 7.77		22.2	gray clayey silt w/pebbles, stones, mostly dolomite
2		7.77- 8.23			
2		8.23- 8.69			
2		8.69- 9.14			
2	76S38	9.14- 9.60		12.7	gray clayey silt w/stones
2		9.60-10.06			
2		10.06-10.52			
2	76S39	10.52-10.97		21.6	gray clayey silt w/pebbles, stones; sand parting at 10.75 m
2		10.97-11.43			
2		11.43-11.89			
2		11.89-12.34			
2	76S40	12.34-12.65		27.9	gray clayey silt w/pebbles, stones, mostly dolomite
EOB 12.65 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 7

Completion date: April 2, 1976

Location: 38 meters southeast of the center of Plot M

Site and well construction data:

Altitude of land surface 216.26 m

Altitude of measuring point (top of casing). 216.40 m

Depth to bottom of piezometer from land surface. . . . 12.05 m

Type of piezometer: 1.52 m perforated PVC pipe, 6.35 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S19	0- 0.46		17.8	brown silty clay
1	76S20	0.46- 0.91		22.9	brown silty clay w/pebbles, stones
1		0.91- 1.37			
1	76S21	1.37- 1.83		15.2	brown silty clay w/pebbles, stones
1		1.83- 2.29			
1	76S22	2.29- 2.74		30.5	brown silty clay w/pebbles, stones
1		2.74- 3.20			
1	76S23	3.20- 3.66		33.0	brown clayey silt w/pebbles, stones, sandy
1		3.66- 4.12			
1		4.12- 4.57			
1	76S24	4.57- 5.03		40.6	brown clayey silt w/pebbles, sandy
1		5.03- 5.49			
1		5.49- 5.94			
1	76S25	5.94- 6.40		43.2	brownish gray clayey silt
2		6.40- 6.86			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 7--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2		6.86- 7.32			
2		7.32- 7.77			
2	76S26	7.77- 8.23		35.6	gray clayey silt w/pebbles, mostly dolomite
2		8.23- 8.69			
2		8.69- 9.14			
2	76S27	9.14- 9.60		45.7	dark gray clayey silt w/pebbles, mostly dolomite
2		9.60-10.06			
2		10.06-10.52			
2	76S28	10.52-10.97		--	gray clayey silt w/pebbles, sand, gravel
2		10.97-11.43			
2		11.43-11.89			
2		11.89-12.34			
2	76S29	12.34-12.65		--	gray clayey silt w/pebbles, mostly dolomite
EOB 12.65 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 8

Completion date: April 8, 1976

Location: 67 meters southwest of test well 7

Site and well construction data:

Altitude of land surface 222.80 m

Altitude of measuring point (top of casing). 222.88 m

Depth of bottom of piezometer from land surface. . . . 12.11 m

Type of piezometer: 1.52 m perforated PVC pipe, 6.35 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S74	0- 0.46		36.8	yellow-brown silty clay w/pebbles, root tubes
1	76S75	0.46- 0.91		23.5	brown silty clay w/few pebbles
1	76S76	0.91- 1.37		21.6	brown silty clay w/pebbles; mottled
1		1.37- 1.83			
1	76S77	1.83- 2.29		21.6	brown clayey silt, mottled
1		2.29- 2.74			
1		2.74- 3.20			
1	76S78	3.20- 3.66		21.6	brown clayey silt w/pebbles, mottled; 5.1 cm sand parting at 3.40 m
1		3.66- 4.12			
1		4.12- 4.57			
1	76S79	4.57- 5.03		20.3	brown clayey silt w/pebbles; 45° fracture, 30.5 cm in length
1		5.03- 5.49			
1		5.49- 5.94			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 8--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	76S80	5.94- 6.40		43.2	brown clayey silt w/few pebbles; vertical fractures
2		6.40- 6.86			
2		6.86- 7.32			
2	76S81	7.32- 7.77		34.3	brown clayey silt; 45° fracture, 30.5 cm in length
2		7.77- 8.23			
2		8.23- 8.69			
2		8.69- 9.14			
2	76S82	9.14- 9.60		45.1	brown clayey silt w/pebbles to 9.26 m; then gray clayey silt w/limestone pebbles
2		9.60-10.06			
2		10.06-10.52			
2	76S83	10.52-10.97		--	brown clayey silt
2		10.97-11.43			
2		11.43-11.89			
2	76S84	11.89-12.34		--	gray clayey silt, moist
		EOB 12.50 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 9

Completion date: April 28, 1976

Location: Northeast corner of Plot M

Site and well construction data: Slant borehole, 45° angle towards northeast
beneath Plot M

Altitude of land surface 212.17 m

Altitude of measuring point (top of casing). 212.17 m

Horizontal distance from measuring point 12.93 m

Depth of bottom of piezometer from land surface. . . . 13.90 m

Type of piezometer: 1.52 m perforated PVC pipe, 6.35 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S111	0- 0.46		25.4	brown silty clay
1		0.46- 0.91			
1	76S112	0.91- 1.37		28.6	brown silty clay
1	76S113	1.37- 1.83		24.6	brown silty clay w/pebbles, stones
1	76S114	1.83- 2.29		22.2	0.63 cm sand parting at 2.10 m; brown silty clay w/pebbles, stones
1		2.29- 2.74			
1		2.74- 3.20			
1	76S115	3.20- 3.66		27.3	brown silty clay w/pebbles, stones
1		3.66- 4.12			
1	76S116	4.12- 4.57		24.1	brown clayey silt w/stones; 7.6 cm sand layer at 4.50 m
1		4.57- 5.03			
1	76S117	5.03- 5.49		39.4	brown clayey silt w/numerous pebbles, moist to 5.40 m; contact w/gray-brown clayey silt w/few pebbles grading to gray clayey silt

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 9--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1		5.49- 5.94			
1	76S118	5.94- 6.40		24.1	brown clayey silt w/pebbles, moist
2		6.40- 6.96			
2	76S119	6.96- 7.32		29.2	brownish gray clayey silt w/numerous pebbles, moist to wet; contact w/gray clayey silt w/pebbles
2		7.32- 7.77			
2		7.77- 8.23			
2	76S120	8.23- 8.69		38.1	gray clayey silt w/pebbles, moist to wet, mostly dolomite grains
2		8.69- 9.14			
2	76S121	9.14- 9.60		12.7	gray clayey silt w/stones, mottled, moist
2		9.60-10.06			
2		10.06-10.52			
2	76S122	10.52-10.97		37.5	gray clayey silt w/pebbles, mostly dolomite
2		10.97-11.43			
2	76S123	11.43-11.89		16.5	brown silty sand, moist
2		11.89-12.34			
2		12.34-13.11			
2	76S124	13.11-13.15		24.1	gray-brown clayey silt
		EOB 13.15 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 10

Completion date: April 26, 1976

Location: Southwest corner of Plot M

Site and well construction data: Slant borehole, 45° angle towards northeast beneath Plot M

Altitude of land surface 216.34 m

Altitude of measuring point (top of casing). 216.34 m

Horizontal distance from measuring point 12.93 m

Depth of bottom of piezometer from land surface. 12.50 m

Type of piezometer: 1.56 m perforated PVC pipe, 6.35 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S96	0- 0.46		20.3	brown silty clay
1	76S97	0.46- 0.91		29.2	brown silty clay to 0.91 m; contact w/dark brown silty clay
1	76S98	0.91- 1.37		29.2	brown silty clay
1	76S99	1.37- 1.83		21.0	brown silty clay, mottled
1	76S100	1.83- 2.29		19.1	brown silty clay, mottled
1		2.29- 2.74			
1		2.74- 3.20			
1	76S101	3.20- 3.66		33.7	brown silty clay w/pebbles
1		3.66- 4.12			
1	76S102	4.12- 4.57		35.6	brown clayey silt w/pebbles
1		4.57- 5.03			
1	76S103	5.03- 5.49		42.5	brown clayey silt
1		5.49- 5.94			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 10--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S104	5.94- 6.40		47.6	brown clayey silt w/pebbles to 6.71 m; contact w/gray-brown clayey silt w/pebbles, mostly dolomite
2		6.40- 6.96			
2	76S105	6.96- 7.32		31.8	brown clayey silt w/pebbles to 7.62 m; contact w/gray-brown clayey silt
2		7.32- 7.77			
2		7.77- 8.23			
2	76S106	8.23- 8.69		33.0	gray clayey silt w/pebbles, mostly dolomite
2		8.69- 9.14			
2	76S107	9.14- 9.60		26.6	gray-brown clayey silt to 9.75 m; contact w/brown-gray silt w/pebbles
2		9.60-10.06			
2		10.06-10.52			
2	76S108	10.52-10.97		17.1	brown-gray clayey silt w/pebbles
2		10.97-11.43			
2	76S109	11.43-11.89		14.6	gray clayey silt w/pebbles, stones, moist
2		11.89-12.34			
2		12.34-13.11			
2	76S110	13.11-13.15		27.9	gray clayey silt w/pebbles, stones, moist
EOB 13.15 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 11

Completion date: September 7, 1977

Location: Northeast corner of Plot M, next to test well 3

Site and well construction data: 3 test wells; a 37.80 m and a 20.73 m well nest in one borehole, and an adjacent 11.89 m test well

Altitude of land surface: 11.89 m test well. 211.14 m
20.73 m test well. 211.14 m
37.80 m test well. 211.14 m

Altitude of measuring point (top of casing): 11.89 m test well. . 211.21 m
20.73 m test well. . 211.25 m
37.80 m test well. . 211.25 m

Depth of bottom of piezometer from land surface: 11.89 m test well. . 11.82 m
20.73 m test well. . 20.62 m
37.80 m test well. . 37.69 m

Type of piezometer: 1.52 m slotted PVC pipe, 5.08 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	77S87	0- 0.46		45.7	brown silty clay w/pebbles, hard
1		0.46- 0.91			
1		0.91- 1.37			
1	77S88	1.37- 1.83		45.7	not available
1		1.83- 2.29			
1		2.29- 2.74			
1	77S89	2.74- 3.20		45.7	not available
1		3.20- 3.66			
1		3.66- 4.12			
1		4.12- 4.57			
1	77S90	4.57- 5.03		45.7	not available

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 11--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1		5.03- 5.49			
1		5.49- 5.94			
2	77S91	5.94- 6.40		45.7	brown-gray clayey silt w/pebbles, hard
2		6.40- 6.96			
2		6.96- 7.32			
2	77S92	7.32- 7.77		45.7	not available
2		7.77- 8.23			
2		8.23- 8.69			
2		8.69- 9.14			
2	77S93	9.14- 9.60		45.7	not available
2		9.60-10.06			
2		10.06-10.52			
2	77S94	10.52-10.97		45.7	not available
2		10.97-11.43			
3		11.43-11.89			
3	77S95	11.89-12.34		45.7	not available
3		12.34-13.11			
3		13.11-13.56			
3	77S96	13.56-14.02		45.7	not available
3		14.02-14.48			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 11--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
3		14.48-14.94			
3	77S97	14.94-15.39		45.7	not available
3		15.39-15.85			
3		15.85-16.31			
3		16.31-16.76			
3	77S98	16.76-17.22		45.7	not available
3		17.22-17.68			
3		17.68-18.14			
3	77S99	18.14-18.59		--	gray clayey silt w/pebbles, stones, hard
3		18.59-19.05			
3		19.05-19.51			
4	77S100	19.51-19.96		22.9	not available
4		19.96-20.42			
4		20.42-20.88			
4		20.88-21.33			
4	77S101	21.33-21.79		25.4	not available
4		21.79-22.25			
4		22.25-22.71			
4	77S102	22.71-23.16		30.5	not available

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 11--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
4		23.16-23.62			
4		23.62-24.08			
4	77S103	24.08-24.53		30.5	gray silt w/pebbles, stones, dense
5		24.53-24.99			
5		24.99-25.45			
5		25.45-25.91			
5	77S104	25.91-26.37		27.9	not available
5		26.37-26.82			
5		26.82-27.28			
5	77S105	27.28-27.74		12.7	not available
5		27.74-28.19			
5		28.19-28.65			
5	77S106	28.65-29.11		10.2	gray silt, very dense
5		29.11-29.57			
5		29.57-30.02			
5		30.02-30.48			
5	77S107	30.48-30.94		15.2	gray sandy silt, very dense
5		30.94-31.39			
6		31.39-31.85			
6	77S108	31.85-32.32		45.7	not available

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 11--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
6		32.32-33.22			
6		33.22-33.68			
6	77S109	33.68-34.14		15.2	gray silt w/pebbles, stones, very dense
6		34.14-34.60			
6		34.60-35.05			
6	77S110	35.05-35.51		38.1	not available
6		35.51-35.97			
6		35.97-36.42			
6	77S111	36.42-36.88		38.1	gray silt w/pebbles, stones, very dense
6		36.88-37.34			
6		37.34-37.80			
6	77S112	37.80-38.25		38.1	not available
		EOB 38.56 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 21

Completion date: October 1, 1976

Location: 160 meters south of Plot M on the south edge of the forest preserve road

Site and well construction data:

Altitude of land surface 221.13 m

Altitude of measuring point (top of casing). 221.20 m

Depth to bottom of test well from land surface 22.86 m

Type of well: 2.54 cm diameter PVC pipe, no piezometer

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S291	0- 0.46	2-4-4	35.6	brown silty clay
1		0.46- 0.91			
1		0.91- 1.37			
1	76S292	1.37- 1.83	8-10-16	45.7	brown silty clay, trace of sand, gravel
1		1.83- 2.29			
1		2.29- 2.74			
1	76S293	2.74- 3.20	10-12-19	45.7	brown silty clay, trace of sand, gravel
1		3.20- 3.66			
1		3.66- 4.12			
1		4.12- 4.57			
1	76S294	4.57- 5.03	22-34-20	15.2	brown silty clay to 4.70 m; 10.2 cm gravel layer
1		5.03- 5.49			
1		5.49- 5.94			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 21--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	76S295	5.94- 6.40	9-14-24	45.7	brown silty clay, trace of sand, gravel
1		6.40- 6.96			
1		6.96- 7.32			
1	76S296	7.32- 7.77	12-27-28	45.7	brown silty clay, trace of sand, gravel
2		7.77- 8.23			
2		8.23- 8.69			
2		8.69- 9.14			
2	76S297	9.14- 9.60	9-14-19	45.7	gray clayey silt, trace of sand, gravel
2		9.60-10.06			
2		10.06-10.52			
2	76S298	10.52-10.97	8-13-16	45.7	gray clayey silt w/gravel, trace of sand
2		10.97-11.43			
2		11.43-11.89			
2	76S299	11.89-12.34	10-11-14	45.7	gray clayey silt w/gravel, trace of sand
2		12.34-13.11			
2		13.11-13.56			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 21--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	76S300	13.56-14.02	17-20-22	45.7	gray clayey silt w/gravel, trace of sand, to 15.50 m; layer of dolomite gravel at bottom of sample
2		14.02-14.48			
2		14.48-14.94			
2	76S301	14.94-15.39	14-50-30	45.7	gray clayey silt; grading to dolomite gravel (12.7 cm); grading to grayish brown clayey silt
3		15.39-15.84			
3		15.84-16.30			
3		16.30-16.76			
3	76S302	16.76-17.22	32-38-54	30.5	gray clayey silt to 16.80 m; contact w/20 cm of gravel
3		17.22-17.68			
3		17.68-18.14			
3	76S303	18.14-18.59	20-26-29	30.5	gray clayey silt, trace of sand, gravel
3		18.59-19.05			
3		19.05-19.51			
4	76S304	19.51-19.96	17-17-18	30.5	gray clayey silt, trace of sand, gravel, wet
4		19.96-20.42			
4		20.42-20.88			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 21--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
4		20.88-21.34			
4	76S305	21.34-21.79	17-23-50	30.5	gray clayey silt to 21.60 m; contact w/sand
4		21.79-22.25			
4		22.25-22.71			
4	76S306	22.71-22.86	30-30-29	30.5	gray clayey silt, trace of sand, gravel
		EOB 22.86 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 22

Completion date: April 18, 1977

Location: 10 meters northeast of the center of Plot M, borehole passes through
burial ground

Site and well construction data: test boring sealed to surface after drilling

Altitude of land surface 213.0 m

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1		0- 0.46			trench cover and concrete cap
1		0.46- 0.91			
1	77S1	0.91- 1.37	--	--	yellow-brown silty clay
1		1.37- 1.83			
1	77S2	1.83- 2.29	--	--	yellow-brown clayey silt
1	77S3	2.29- 2.74	--	--	yellow-brown clayey silt w/pebbles, mottled
1	77S4	2.74- 3.20	--	--	brown clayey silt
1	77S5	3.20- 3.66	--	--	brown clayey silt w/pebbles
1	77S6	3.66- 4.12	--	--	yellow-brown clayey silt
1	77S7	4.12- 4.57	--	--	brown clayey silt w/few pebbles
1	77S8	4.57- 5.03	--	--	brown clayey silt, mottled
1	77S9	5.03- 5.49	--	--	brown clayey silt w/few pebbles, mottled
1	77S10	5.49- 5.94	--	--	brown clayey silt w/few pebbles, mottled
2		5.94- 6.40			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 22--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2		6.40- 6.96			
2		6.96- 7.32			
2	77S11	7.32- 7.77	--	--	brown clayey silt w/few pebbles, mottled
2		7.77- 8.23			
2		8.23- 8.69			
2		8.69- 9.14			
2	77S12	9.14- 9.60	--	--	brown clayey silt
2		9.60-10.06			
2		10.06-10.52			
2	77S13	10.52-10.97	--	--	gray-brown clayey silt w/few pebbles
2		10.97-11.43			
2		11.43-11.89			
2	77S14	11.89-12.34	--	--	gray-brown clayey silt grading to gray clayey silt w/pebbles, mostly dolomite
2		12.34-13.11			
2		13.11-13.56			
2	77S15	13.56-14.02	--	--	gray clayey silt w/pebbles, mostly dolomite
2		14.02-14.48			
2		14.48-14.94			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 22--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
3	77S16	14.94-15.39	--	--	gray clayey silt w/few pebbles
3		15.39-15.85			
3		15.85-16.31			
3	77S17	16.31-16.76	--	--	gray clayey silt w/few limestone pebbles
3		16.76-17.22			
3		17.22-17.68			
3		17.68-18.14			
3	77S18	18.14-18.59	--	--	gray clayey silt; 1.9 cm sand layer at 18.59 m
3		18.59-19.05			
3		19.05-19.51			
3	77S19	19.51-19.96	--	--	gray clayey silt w/pebbles, mostly dolomite
3		19.96-20.42			
3		20.42-20.88			
3		20.88-21.33			
3	77S20	21.33-21.79	--	--	gray silt w/few pebbles
4		21.79-22.25			
4		22.25-22.71			
4	77S21	22.71-23.16	--	--	gray silt w/few pebbles, stones

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 22--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
4		23.16-23.62			
4		23.62-24.08			
4	77S22	24.08-24.53	--	--	gray silt
		EOB 24.84 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 23

Completion date:

Location: 5 meters east of center of Plot M, borehole passes through burial ground

Site and well construction data: test boring sealed to surface after drilling

Altitude of land surface 213.40 m

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1		0- 0.46			trench cover and concrete cap
1		0.46- 0.91			
1		0.91- 1.37	--	--	gray-black silty clay grading to yellow-brown silty clay
1	77S24	1.37- 1.83	--	--	yellow-gray silty clay grading to yellowish brown silty clay
1	77S25	1.83- 2.29	--	--	yellow-gray silty clay; 1.3 cm piece of graphite
1	77S26	2.29- 2.74	--	--	yellow-brown silty clay, mottled
1	77S27	2.74- 3.20	--	--	brown silty clay w/pebbles, mottled
1	77S28	3.20- 3.66	--	--	brown silty clay, mottled
1	77S29	3.66- 4.12	--	--	brown silty clay, mottled; 1.32 m sand parting at 4.00 m
1	77S30	4.12- 4.57	--	--	gray clayey silt w/pebbles, mostly dolomite
1	77S31	4.57- 5.03	--	--	gray clayey silt
1	77S32	5.03- 5.49	--	--	gray clayey silt; grading to yellow- gray clayey silt w/pebbles
1	77S33	5.49- 5.94	--	--	gray clayey silt w/pebbles, stones, mostly dolomite

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 23--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1		5.94- 6.40			
1		6.40- 6.96			
1		6.96- 7.32			
2	77S34	7.32- 7.77	--	--	gray clayey silt
2		7.77- 8.23			
2		8.23- 8.69			
2		8.69- 9.14			
2	77S35	9.14- 9.60	--	--	gray clayey silt w/pebbles
2		9.60-10.06			
2		10.06-10.52			
2	77S36	10.52-10.97	--	--	gray clayey silt w/numerous pebbles
2		10.97-11.43			
2		11.43-11.89			
2	77S37	11.89-12.34	--	--	brown silty clay
2		12.34-13.11			
2		13.11-13.56			
2	77S38	13.56-14.02	--	--	gray-brown silty clay w/pebbles
3		14.02-14.48			
3		14.48-14.94			
3	77S39	14.94-15.39	--	--	brown silt w/pebbles, sandy

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 23--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
3		15.39-15.85			
3		15.85-16.31			
3		16.31-16.76			
3	77S40	16.76-17.22	--	--	gray clayey silt to 17.10 m; contact w/gray silt
3		17.22-17.68			
3		17.68-18.14			
3	77S41	18.14-18.59	--	--	gray clayey silt, grading to gray silt
3		18.59-19.05			
3		19.05-19.51			
3	77S42	19.51-19.96	--	--	gray clayey silt w/stones
3		19.96-20.42			
3		20.42-20.88			
3		20.88-21.33			
3	77S43	21.33-21.79	--	--	brown clayey silt w/few pebbles
4		21.79-22.25			
4		22.25-22.71			
4	77S44	22.71-23.16	--	--	gray clayey silt w/few pebbles
4		23.16-23.62			
4		23.62-24.08			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 23--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
4	77S45	24.08-24.53	--	--	gray clayey silt w/pebbles, stones, mostly dolomite
4		24.53-24.99			
4		24.99-25.45			
4	77S46	25.45-25.91	--	--	gray silt
4		25.91-26.37			
4		26.37-26.82			
4		26.82-27.28			
4	77S47	27.28-27.74	--	--	gray silt
4		27.74-28.19			
4		28.19-28.65			
4	77S48	28.65-29.11	--	--	gray silt
4		29.11-29.57			
4		29.57-30.02			
4		30.02-30.48			
4	77S49	30.48-30.93	--	--	gray silt
		EOB 30.93 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 24

Completion date: May 3, 1978

Location: Next to test well 2, 26 meters north of the center of Plot M

Site and well construction data: 2 test wells; a 22.86 m test well west of test well 2 and a 38.10 m test well east of test well 2

Altitude of land surface: 22.86 m test well. 211.07 m
38.10 m test well. 211.01 m

Altitude of measuring point (top of casing): 22.86 m test well. . 211.16 m
38.10 m test well. . 211.02 m

Depth of bottom of piezometer from land surface: 22.86 m test well. . 22.77 m
38.10 m test well. . 38.09 m

Type of piezometer: 1.52 m perforated PVC pipe, 6.35 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1		0- 0.46			
1		0.46- 0.91			
1		0.91- 1.37			
1	78S1	1.37- 1.83	9-14-17	45.7	brown silty clay w/weathered pebbles
1		1.83- 2.29			
1		2.29- 2.74			
1	78S2	2.74- 3.20	10-11-12	61.0	brown silty clay w/pebbles
1		3.20- 3.66			
1		3.66- 4.12			
1		4.12- 4.57			
1	78S3	4.57- 5.03	7-10-11	53.3	brown silty clay w/pebbles, stones, sandy
1		5.03- 5.49			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 24--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1		5.49- 5.94			
1	78S4	5.94- 6.40	15-17-24	61.0	brown silty clay w/pebbles to 6.55 m; contact w/gray silty clay to 7.62 m
1		6.40- 6.96			
2		6.96- 7.32			
2		7.32- 7.77			
2	78S5	7.77- 8.23	21-18-23	61.0	brown silty clay w/pebbles to 7.77 m; gray-brown silty clay w/pebbles, stones, gritty
2		8.23- 8.69			
2		8.69- 9.14			
2	78S6	9.14- 9.60	15-18-22	45.7	gray-brown silty clay
2		9.60-10.06			
2		10.06-10.52			
2	78S7	10.52-10.97	8-11-25	45.7	gray-brown clayey silt; grading to brown, red-gray clayey silt
2		10.97-11.43			
2		11.43-11.89			
2		11.89-12.34			
3	78S8	12.34-13.11	8-13-18	45.7	sandy gravelly, clayey silt at 12.39 m; grading to grayish brown clayey silt
3		13.11-13.56			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 24--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
3	78S9	13.56-14.02	8-10-14	45.7	gray-brown clayey silt
3		14.02-14.48			
3		14.48-14.94			
3		14.94-15.39			
3	78S10	15.39-15.85	10-19-27	45.7	gray clayey silt w/pebbles, gritty, mostly dolomite grains
3		15.85-16.31			
3		16.31-16.76			
3	78S11	16.76-17.22		7.6	brown-gray clayey silt w/pebbles, stones, moist
3		17.22-17.68			
3		17.68-18.14			
3	78S12	18.14-18.59	20-21-22	45.7	brown-gray clayey silt, moist, 17.8 cm sandy, clayey silt at 18.44 m
3		18.59-19.05			
3		19.05-19.51			
3	78S13	19.51-19.96	11-17-16	30.5	brown-gray clayey silt w/few pebbles, stones
3		19.96-20.42			
3		20.42-20.88			
4		20.88-21.33			
4	78S14	21.33-21.79	15-28-32	45.7	gray clayey silt, no pebbles (clean), dry

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 24--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
4		21.79-22.25			
4		22.25-22.71			
4	78S15	22.71-23.16	18-29-27	35.6	gray clayey silt w/few pebbles
4		23.16-23.62			
4		23.62-24.08			
4	78S16	24.08-24.53	22-28-39	15.2	gray clayey silt, clean, dry
4		24.53-24.99			
4		24.99-25.45			
4		25.45-25.91			
4	78S17	25.91-26.37	22-43-45	17.8	gray clayey silt, clean, dry
4		26.37-26.82			
5		26.82-27.28			
5	78S18	27.28-27.74	35-90	17.8	gray clayey silt
5		27.74-28.19			
5		28.19-28.65			
5	78S19	28.65-29.11	29-55-60	26.7	gray clayey silt
5		29.11-29.57			
5		29.57-30.02			
5		30.02-30.48			
5	78S20	30.48-30.94	31-75	30.5	gray clayey silt

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 24--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
5		30.94-31.39			
5		31.39-31.85			
5	78S21	31.85-32.31	20-26-27	30.5	gray clayey silt
5		32.31-33.22			
5		33.22-33.68			
6	78S22	33.68-34.14	12-55-48	27.9	brown silt, pebbles, stones, sandy; grading to gray clayey silt
6		34.14-34.60			
6		34.60-35.05			
6	78S23	35.05-35.51	9-13-15	17.8	brown-gray silt w/large stones
6		35.51-35.97			
6		35.97-36.42			
6	78S24	36.42-36.88	35-35-46	45.7	gray silt w/numerous stones
6		36.88-37.34			
6		37.34-37.80			
6		37.80-38.25			
6	78S25	38.25-38.71	48-48-58	17.8	gray silt w/numerous pebbles, stones
		EOB 38.71 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 25

Completion date: October 5, 1979

Location: 33 meters west of test well 26, 55 meters south of test well 27

Site and well construction data:

Altitude of land surface 216.10 m

Altitude of measuring point (top of casing). 216.20 m

Depth of bottom of piezometer from land surface. . . . 18.34 m

Type of piezometer: 1.22 m slotted PVC pipe, 5.08 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1		0- 0.46			
1		0.46- 0.91			
1		0.91- 1.37			
1		1.37- 1.83			
1		1.83- 2.29			
1		2.29- 2.74			
1		2.74- 3.20			
1		3.20- 3.66			
1		3.66- 4.12			
1		4.12- 4.57			
1		4.57- 5.03			
1		5.03- 5.49			
1		5.49- 5.94			
1	79S212	5.94- 6.40	16-19-50/5	50.5	yellow-brown silty clay w/pebbles (large variety), gritty, very hard, dense, dry, sand partings coated w/ plant fragments; 45° oxidized fracture

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 25--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1		6.40- 6.86			
1		6.86- 7.32			
1	79S213	7.32- 7.77	17-22-25	35.6	yellow-brown silty clay w/pebbles (large variety); pyrite; shell fragments
1		7.77- 8.23			
1		8.23- 8.69			
1	79S214	8.69- 9.14	40-36-34	35.6	yellow-brown silty clay w/pebbles, large stones, mottled, brittle, dry; orange-brown oxidized partings
1		9.14- 9.60			
1		9.60-10.06			
1		10.06-10.52			
1	79S215	10.52-10.97	34-28-26	20.3	yellow-brown clayey silt w/pebbles, stones, rocks, dry, flaky, very hard, 5.1 cm orange-brown oxidized zone
1		10.97-11.43			
1		11.43-11.89			
1	79S216	11.89-12.34	14-19-20	20.3	yellow-brown clayey silt w/limestone pebbles, stones, hard
1		12.34-12.80			
1		12.80-13.26			
1		13.26-13.72			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 25--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	79S217	13.72-14.17	15-17-19	45.7	yellow-brown clayey silt to 14.17 m; contact w/gray clayey silt w/pebbles
2		14.17-14.63			
2		14.63-15.09			
2	79S218	15.09-15.55	14-17-17	50.5	dark gray clayey silt w/few pebbles; sand parting at 15.39 m; two graded silt units in last 15 cm are moist, soft, dense
2		15.55-16.00			
2		16.00-16.46			
2	79S219	16.46-16.92	11-14-17	35.6	gray clayey silt w/few pebbles, soft, mostly dolomite grains
2		16.92-17.37			
2	79S220	17.37-17.83	14-18-21	40.6	gray clayey silt w/few pebbles, mostly dolomite grains
		EOB 19.81 m			

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 26

Completion date: October 9, 1979

Location: 10 meters northeast of the northeast corner of Plot M

Site and well construction data:

Altitude of land surface 210.77 m

Altitude of measuring point (top of casing). 210.99 m

Depth of bottom of piezometer from land surface. 18.22 m

Type of piezometer: 1.22 m slotted PVC pipe, 5.08 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	79S221	0- 0.46	8-12-15	15.2	brown stoney clay soil
1	79S222	0.46- 0.91	11-10-18	15.2	brown clayey soil, root tubes, plant fragments
1	79S223	0.91- 1.37	20-20-24	25.4	brown clayey soil w/stones, plant fragments; 2.5 cm dry yellow sand layer at 1.16 m
1	79S224	1.37- 1.83	13-18-21	25.4	yellow-brown silty clay w/pebbles, mottled, hard, dry, flaky, brittle
1	79S225	1.83- 2.29	23-25-29	25.4	yellow-brown silty clay w/pebbles (large variety), flaky, brittle; plant fragments, Fe oxidation, pyrite; 45° fracture at 1.83 m
1	79S226	2.29- 2.74	14-20-25	61.0	yellow-brown silty clay w/pebbles (large variety); vertical fracture (25.4 cm) oxidized w/plant debris
1	79S227	2.74- 3.20	14-20-26	45.7	brown silty clay w/pebbles, hard, dry
1	79S228	3.20- 3.66	20-21-25	40.6	brown silty clay w/pebbles, hard, dry; wet spot at 3.35 m; moist vertical fracture at 3.51 m
1	79S229	3.66- 4.12	9-11-15	35.6	brown silty clay w/pebbles, soft, moist, mottled; Fe oxidation

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 26--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	79S230	4.12- 4.57	7-7-10	35.6	brown silty clay w/pebbles, soft, moist, mottled; Fe oxidation
1	79S231	4.57- 5.03	11-13-13	30.5	brown silty clay, soft, moist, mottled
1	79S232	5.03- 5.49	9-13-18	50.8	brown silty clay, soft, moist
1	79S233	5.49- 5.94	24-27-27	50.8	brown silty clay, soft, moist; 5.1 cm water-bearing sand layer at 5.94 m
1	79S234	5.94- 6.40	13-19-50	35.6	brown silty clay; 30.5 cm water-bearing sand layer w/stones at 6.10 m
1	79S235	6.40- 6.86	19-15-16	45.7	watery sand to 6.55 m; contact w/brown silty clay w/pebbles and stones
1	79S236	6.86- 7.32	37-32-27	40.6	brown clayey silt w/pebbles and stones
1	79S237	7.32- 7.77	9-12-17	45.7	brown clayey silt grading to brown-gray clayey silt w/pebbles, stones, mottled
2	79S238	7.77- 8.23	18-20-28	35.6	brown-gray clayey silt w/numerous pebbles and stones, moist, iron oxidation
2	79S239	8.23- 8.69	11-13-18	30.5	brown-gray clay silt w/pebbles, gritty
2	79S240	8.69- 9.14		NR	
2	79S241	9.14- 9.60	25-18-18	30.5	brown-gray clayey silt w/pebbles, gritty
2	79S242	9.60-10.06	12-13-16	40.6	brown-gray clayey silt to 9.75 m; contact dark gray clayey silt w/pebbles, dry, hard, dense
2	79S243	10.06-10.52	10-15-19	30.5	dark gray silt to 10.21 m; contact w/brown silt w/pebbles and stones

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 26--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	79S244	10.52-10.97	12-15-17	40.6	brown silt w/few pebbles, gritty, clean
2	79S245	10.97-11.43	39-25-23	30.5	brown silt w/few pebbles, gritty, moist, dense
2	79S246	11.43-11.89	9-12-16	40.6	brown clayey silt w/pebbles, stones, gritty; 5.1 cm oxidized zone at 11.43 m
2	79S247	11.89-12.34	12-11-13	25.4	gray-brown clayey silt w/pebbles, stones, gritty, moist, soft
2	79S248	12.34-12.80	18-48-12	15.2	gray-brown clayey silt
2	79S249	12.80-13.26	10-12-45	20.3	wet gravelly clayey silt w/pebbles, stones
2	79S250	13.26-13.72	7-8-11	40.6	wet gravelly clayey silt grading to brown-gray clayey silt
2	79S251	13.72-14.17	6-11-13	30.5	brown-gray clay; grading to pink-brown silt, moist, clean
2	79S252	14.17-14.63	5-7-24	35.6	pink-brown silt w/stones, pebbles, clean
2	79S253	14.63-15.09	18-11-23	20.3	pink-brown silt to 14.69 m; contact w/brown silt; graded layers of silt and sand
2	79S254	15.09-15.55	10-14-26	40.6	brown clayey silt w/pebbles, gritty, moist, soft
3	79S255	15.55-16.00	26-22-22	40.6	brown clayey silt; grading to brown-gray clayey silt
3	79S256	16.00-16.46	10-20-21	35.6	brown-gray clayey silt; grading to gray-brown clayey silt w/pebbles; stones

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 26--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
3	79S257	16.46-16.92	15-25-50/4	35.6	gray-brown clayey silt; grading to silt w/pebbles, large stones, soft, moist
3	79S258	16.92-17.37	26-20-20	NR	rocks
3	79S259	17.37-17.83	12-16-17	15.2	gray-brown clayey silt w/pebbles, mottled
3	79S260	17.83-18.29	19-15-16	30.5	brown-gray clayey silt; grading to gray clayey silt w/pebbles, gritty, moist, soft
EOB 19.81 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 27

Completion date: September 27, 1979

Location: 30 meters west of test well 28, 62 meters northwest of the northwest
corner of Plot M

Site and well construction data: 2 test wells; 18.44 m, 24.54 m

Altitude of land surface: 18.44 m test well. 213.21 m
24.54 m test well. 213.36 m

Altitude of measuring point (top of casing): 18.44 m test well. . 212.91 m
24.54 m test well. . 212.84 m

Depth of bottom of piezometer from land surface: 18.44 m test well. . 18.74 m
24.54 m test well. . 25.05 m

Type of piezometer: 1.22 m slotted PVC pipe, 5.08 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	79S106	0.15- 0.61	9-10-12	10.2	yellow-brown soil
1	79S107	0.61- 1.07	14-15-32	15.2	
1	79S108	1.07- 1.52	20-24-27	20.3	brown clayey soil, dry, flaky, root tubes
1	79S109	1.52- 1.98	32-37-42	10.2	brown-gray clayey soil, dry, hard
1	79S110	1.98- 2.44	15-19-24	43.2	brown clayey soil w/pebbles, stones, dry, hard; plant debris; Fe oxidation
1	79S111	2.44- 2.90	15-16-22	45.7	brown silty clay w/pebbles, stones, dry, hard
1	79S112	2.90- 3.35	22-27-6	35.6	brown silty clay w/pebbles, stones; plant fragments, Fe oxidation
1	79S113	3.35- 3.81	10-12-16	40.6	brown silty clay w/stones to 3.66 m; 3.66 to 3.81 m sand, dry

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 27--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	79S114	3.81- 4.27	16-12-15	30.5	2.5 cm sand, sand parting at 3.96 m; brown silty clay w/pebbles, stones, dense, dry, hard, mottled
1	79S115	4.27- 4.72	7-9-11	40.6	brown silty clay w/pebbles, stones; dry to moist, soft; pyrite
1	79S116	4.72- 5.18	9-12-13	35.6	brown silty clay w/pebbles, stones; dry to moist
1	79S117	5.18- 5.64	9-12-21	35.6	brown silty clay w/pebbles, stones, dry, hard
1	79S118	5.64- 6.10	12-14-15	10.2	brown silty clay, dry, hard, pyrite
1	79S119	6.10- 6.55	22-24-26	10.2	brown silty clay w/stones, dry, hard
1	79S120	6.55- 7.01	14-16-24	50.8	brown silty clay w/pebbles, stones, dry, hard
1	79S121	7.01- 7.47	12-10-12	45.7	brown silty clay to 7.16 m; then wet, light brown clay w/sand partings to 7.32 m; then moist light brown clayey silt w/pebbles
1	79S122	7.47- 7.93	12-30-15	50.8	brown clayey silt w/pebbles, large stones; dry to moist
1	79S123	7.93- 8.38	17-22-26	35.6	brown silty clay, moist to 8.08 m; contact w/brown clayey silt w/pebbles; limestone stones
1	79S124	8.38- 8.84	37-49-48	NR	rocks
1	79S125	8.84- 9.30	17-19-23	61.0	brown clayey silt w/oxidized pebbles to 9.14 m; contact w/brown-gray clayey silt w/oxidized stones and pebbles, dense, mottled; dry to moist

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 27--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	79S126	9.30- 9.75	58-50/3	NR	(rock in auger)
2	79S127	9.75-10.21	12-13-17	61.0	brown gray clayey silt to 9.91 m; contact w/pink-brown clayey silt w/ pebbles to 10.10 m; contact w/brown- gray clayey silt w/pebbles, stones; grading to gray clayey silt, moist
2	79S128	10.21-10.67	21-24-15	30.5	gray-brown clayey silt w/pebbles; dry to moist
2	79S129	10.67-11.13	10-13-15	35.6	gray-brown clayey silt w/pebbles, stones; dry to moist
2	79S130	11.13-11.58	100-20-12	20.3	gray clayey silt w/few pebbles, moist, soft
2	79S131	11.58-12.04	24-17-23	10.2	gray clayey silt w/few pebbles, moist, soft
2	79S132	12.04-12.50	14-19-18	40.6	gray-brown clayey silt w/numerous pebbles, stones, moist, soft
2	79S133	12.50-12.95	10-16-18	61.0	brown clayey silt w/pebbles, stones to 12.65 m; contact w/gray silt w/ pebbles
2	79S134	12.95-13.41	18-15-16	50.8	brown-gray clayey silt w/pebbles, dense, hard, dry to moist
2	79S135	13.41-13.87	16-22-25	50.8	brown-gray clayey silt w/pebbles, dense, hard, moist
2	79S136	13.87-14.35	45-37-50/5	40.6	brown-gray clayey silt w/pebbles to 14.17 m; contact w/15.3 cm dry, yellow sand
2	79S137	14.35-14.78	100/3	15.2	gray clayey silt to 14.48 m; 5.1 cm sand layer brown-gray clayey silt w/ pebbles to 14.81 m; brown

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 27--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	79S138	14.78-15.24	10-12-15	50.8	gray clayey silt; grading downwards to brown-gray clayey silt, moist, soft
2	79S139	15.24-15.70	9-11-17	25.4	brown-gray clayey silt; soft, moist; contact w/gray clayey silt
2	79S140	15.70-16.15	16-19-27	30.5	gray clayey silt w/few pebbles, soft w/buff bleach zone at 15.73 m
2	79S141	16.15-16.61	20-18-21	61.0	brown-gray silt; grading downward to gray clayey silt w/pebbles, stones
2	79S142	16.61-17.07	10-16-18	61.0	gray clayey silt w/pebbles, stones, moist, soft
2	79S143	17.07-17.52	16-18-26	40.6	gray clayey silt w/few pebbles, dry to moist, soft
2	79S144	17.52-17.98	17-19-43	20.3	gray clayey silt w/pebbles to 17.62 m; contact 5.1 cm yellow, oxidized, sand (sharp, clear, red Fe oxidation)
2	79S145	17.98-18.44	26-33-36	30.5	gray clayey silt w/stones; yellow sand parting at 18.01 m
2	79S146	18.44-18.90	11-13-10	40.6	gray clayey silt w/pebbles, stones, moist, soft
2	79S147	18.90-19.35	38-26-21	30.5	gray clayey silt w/pebbles, stones to 19.05 m; contact w/gray clayey silt w/few pebbles or stones, gritty, moist
2	79S148	19.35-19.81	43-26-24	35.6	grayish brown clayey silt; 2.8 cm, lenses of broken rock, sand, gravel near 19.66 m
3	79S149	19.81-20.27	22-18-24	30.5	gray clayey silt w/pebbles, moist
3	79S150	20.27-20.73	21-26-23	30.5	gray clayey silt w/pebbles, stones; dry to moist

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 27--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
3	79S151	20.73-21.18	14-18-24	35.6	gray clayey silt w/pebbles, stones; dry to moist
3	79S152	21.18-21.64	16-20-20	10.6	gray clayey silt w/pebbles, stones; dry to moist
3	79S153	21.64-22.10	21-21-26	40.6	gray clayey silt w/pebbles; dry to moist, brittle
3	79S154	22.10-22.56	35-31-26	50.8	gray clayey silt w/pebbles; dry to moist, brittle
3	79S155	22.56-23.01	35-32-23	35.6	gray clayey silt w/pebbles, dry
3	79S156	23.01-23.47	17-24-25	45.7	gray clayey silt w/few pebbles, dry, brittle
3	79S157	23.47-23.93	24-25-31	45.7	gray clayey silt w/few pebbles; dry to moist
3	79S158	23.93-24.38	20-23-23	30.5	gray clayey silt w/few pebbles; dry to moist
EOB 25.91 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 28

Completion date: October 3, 1979

Location: 65 meters north-northwest of the northwest corner of Plot M

Site and well construction data: 2 test wells; 18.44 m, 24.54 m

Altitude of land surface: 18.44 m test well. 208.54 m
24.54 m test well. 208.63 m

Altitude of measuring point (top of casing): 18.44 m test well. . 208.73 m
24.54 m test well. . 208.79 m

Depth to bottom of piezometer from land surface: 18.44 m test well. . 18.25 m
24.54 m test well. . 24.38 m

Type of piezometer: 1.22 m slotted PVC pipe, 5.08 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	79S1	0.31- 0.76	5-4-5	29.2	brown silty clay, dry, hard, mottled
1	79S2	0.76- 1.22	8-10-11	35.6	brown silty clay, dry, hard, mottled
1	79S3	1.22- 1.66	8-10-11	45.7	brown-gray silty clay w/pebbles, dry, hard; Fe oxidation
1	79S4	1.66- 2.13	7-11-13	48.3	brown-gray silty clay w/pebbles, dry, hard; Fe oxidation; 2.5 cm wet zone at 1.83 m
1	79S5	2.13- 2.59	10-14-18	50.8	brown-gray silty clay, dense, hard, mottled; zone of wetness at 2.29 m
1	79S6	2.59- 3.05	11-13-15	50.8	brown-gray silty clay w/pebbles, dense, hard, mottled
1	79S7	3.05- 3.51	10-15-14	50.8	brown-gray silty clay w/pebbles, dense, hard; Fe oxidation stains, pyrite
1	79S8	3.51- 3.96	9-14-14	50.8	brown silty clay w/pebbles; 7.6 cm sand lense at 4.11 m

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 28--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	79S9	3.96- 4.42	10-15-17	61.0	brown silty clay w/pebbles, stones, hard, dense; Fe oxidation
1	79S10	4.42- 4.88	9-14-17	55.9	brown silty clay w/pebbles, hard, dense; Fe oxidation
1	79S11	4.88- 5.33	16-22-19	55.9	brown silty clay w/pebbles, stones; Fe oxidation; 3 sand partings near 5.33 m
1	79S12	5.33- 5.79	20-20-18	38.1	brown muddy sand w/pebbles; water- bearing sand layer from 5.33 to 5.50 m
1	79S13	5.79- 6.25	6-11-14	45.7	brown silty clay w/pebbles, stones, dense; Fe oxidation; 5.1 cm water- bearing sand lenses at 5.79 and 6.10 m
1	79S14	6.25- 6.70	21-24-26	30.5	brown silty clay w/pebbles, Fe oxida- tion; 5.08 cm water-bearing sand lense at 6.71 m
1	79S15	6.70- 7.16	14-18-22	NR	
1	79S16	7.16- 7.60	14-50	NR	(augered 0.9 m to get past large rock)
1		7.60- 8.08			
2	79S17	8.08- 8.53	17-19-19	61.0	brown silty clay to 8.23 m; contact w/light brown silty clay to 8.38 m; contact w/gray clay
2	79S18	8.53- 8.99	14-18-26	55.9	gray silty clay w/limestone pebbles; stones, dense, moist
2	79S19	8.99- 9.45	22-24-28	61.0	gray silty clay w/limestone pebbles, stones, gravel, Fe oxidation
2	79S20	9.45- 9.90	22-22-29	NR	

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 28--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	79S21	9.90-10.36	20-14-19	35.6	gray clayey silt w/pebbles, stones, dense
2	79S22	10.36-10.82	15-14-25	40.6	dark gray clayey silt w/pebbles
2	79S23	10.82-11.28	24-36-24	45.7	dark gray clayey silt w/pebbles, moist
2	79S24	11.28-11.73	20-19-14	35.6	dark gray clayey silt w/sand, pebbles, stones, moist
2	79S25	11.73-12.19	7-12-17	61.0	dark gray clayey silt w/pebbles, stones, moist
2	79S26	12.19-12.65	18-12-17	45.7	gray clayey silt w/sand, pebbles, stones, dense
2	79S27	12.65-13.10	8-13-13	55.9	brown-gray clayey silt w/sand, peb- bles, Fe oxidation; grading to gray clayey silt; horizontal fracture at 12.80 m; 2.5 cm sand lense at 12.80 m
2	79S28	13.10-13.56	8-10-12	61.0	gray clayey silt w/pebbles, dense
2	79S29	13.56-14.02	9-12-17	45.7	gray clayey silt w/pebbles, stones; wet sandy clayey silt at 13.56 m
2	79S30	14.02-14.48	32-13-17	45.7	sandy clayey silt 14.02 to 14.17 m; gray clayey silt w/pebbles
2	79S31	14.48-14.94	12-15-20	30.5	5.1 cm wet sand lense at 14.48 m; gray clayey silt w/pebbles, Fe oxida- tion
2	79S32	14.94-15.39	10-14-16	61.0	clayey silt w/pebbles and Fe oxida- tion; grading to more dense silts; horizontal fracture at 15.00 m
2	79S33	15.39-15.85	8-10-18	35.6	gray clayey silt, moist, dense

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 28--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	79S34	15.85-16.31	13-16-24	61.0	gray clayey silt w/pebbles, Fe oxidation
2	79S35	16.31-16.76	38-25-26	61.0	gray clayey silt w/pebbles, gritty; dry, moist
3	79S36	16.76-17.22	17-23-21	50.8	10.12 cm water-bearing sand layer at 16.76 m; gray clayey silt w/pebbles, stones, moist, dense
3	79S37	17.22-17.68	54-35-34	35.6	gray clayey silt w/pebbles, mottled
3	79S38	17.68-18.14	32-34-50/5	NR	
3	79S39	18.14-18.59	32-35-49	25.4	gray clayey silt w/pebbles, moist
3	79S40	18.59-19.05	22-31-40	45.7	gray clayey silt w/pebbles; dry to moist
3	79S41	19.05-19.51	17-23-30	33.0	gray clayey silt w/limestone pebbles, moist, hard
3	79S42	19.51-19.96	37-32-39	50.8	gray clayey silt w/few pebbles; dry to moist
3	79S43	19.96-20.42	20-40-50/5	NR	
3	79S44	20.42-20.88	22-29-36	50.8	gray clayey silt w/pebbles, stones, moist, dense; 2 sand partings at 21.03 m
3	79S45	20.88-21.33	25-34-35	10.1	
3	79S46	21.33-21.79	25-34-50	15.2	gray clayey silt
3	79S47	21.79-22.25	41-31-53	25.4	gray clayey silt w/pebbles, stones, moist, dense
3	79S48	22.25-22.71	25-33-50/5	NR	

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 28--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
4	79S49	22.71-23.16	46-36-34	50.8	gray clayey silt w/pebbles, stones, moist, mottled
4	79S50	23.16-23.62	52-32-32	25.4	gray clayey silt w/pebbles, very hard; dry to moist, mottled
4	79S51	23.62-24.08	30-39-47	35.6	gray clayey silt w/pebbles, stones, hard, dry
4	79S52	24.08-24.53	24-31-35	50.8	gray clayey silt w/few pebbles, hard, dry
EOB 24.53 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 29

Completion date: September 25, 1979

Location: 83 meters north-northwest of the center of Plot M, 30 meters west of test well 5

Site and well construction data: 2 test wells; 18.44 m, 24.54 m

Altitude of land surface: 18.44 m test well. 206.50 m
24.54 m test well. 206.50 m

Altitude of measuring point (top of casing): 18.44 m test well. . 206.62 m
24.54 m test well. . 206.62 m

Depth of bottom of piezometer from land surface: 18.44 m test well. . 18.32 m
24.54 m test well. . 24.42 m

Type of piezometer: 1.22 m slotted PVC pipe, 5.08 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	79S53	0.15- 0.61	6-6-5	22.9	brown silty clay soil w/stones, dry, weathered, brittle, plant fragments
1	79S54	0.61- 1.07	4-6-10	22.9	brown clay soil w/stones, dry, tree stems, root tubes
1	79S55	1.07- 1.52	23-20-21	25.4	brown clay soil w/pebbles, stones, dry
1	79S56	1.52- 1.98	16-22-18	NR	
1	79S57	1.98- 2.44	14-19-20	20.3	brown clayey soil w/plant fragments, dry, hard; 20.3 cm vertical fracture sand coated at 1.98 m; three 2.5 cm dry sand lenses at 2.29 m
1	79S58	2.44- 2.90	10-18-17	61.0	25.4 cm water-bearing sand layer at 2.44 m; contact w/brown silty clay w/pebbles
1	79S59	2.90- 3.35	9-14-17	35.6	brown silty clay w/Fe oxidized pebbles, stones, moist, hard

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 29--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	79S60	3.35- 3.81	47-23-35	40.6	brown silty clay w/oxidized pebbles, stones, plant fragments, moist, very hard
1	79S61	3.81- 4.27	11-14-19	66.0	brown silty clay w/numerous pebbles, stones, mottled, oxidized zones, dense, very hard
1	79S62	4.27- 4.72	12-17-21	45.7	brown silty clay w/large pebbles, stones
1	79S63	4.72- 5.18	9-14-16	45.7	brown-gray silty clay w/pebbles, stones, plant fragments, moist
2	79S64	5.18- 5.64	13-17-19	35.6	brown-gray silty clay w/pebbles, stones, moist
2	79S65	5.64- 6.10	5-5-9	NR	
2	79S66	6.10- 6.55	11-16-16	40.6	brown gray silty clay to 6.25 m; grading to gray silty clay w/pebbles, stones
2	79S67	6.55- 7.01	12-24-24	40.6	gray silty clay w/pebbles; 10.2 cm oxidized zone, brown at 6.71 m
2	79S68	7.01- 7.47	10-12-17	40.6	gray-brown clayey silt w/pebbles, stones, plant fragments, mottling, moist, soft
2	79S69	7.47- 7.93	12-16-20	45.7	gray-brown clayey silt w/pebbles, moist, dense
2	79S70	7.93- 8.38	9-50/3	35.1	gray clayey silt w/pebbles, stones, oxidized, mottled
2	79S71	8.38- 8.84	25-18-14	45.7	dark gray clayey silt w/numerous peb- bles, stones, very hard

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 29--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	79S72	8.84- 9.30	7-12-14	45.7	gray-brown clayey silt w/pebbles, large stones, mottled to 9.10 m; then brown clayey silt
2	79S73	9.30- 9.75	10-15-17	45.7	brown clayey silt w/pebbles, stones
2	79S74	9.75-10.21	9-14-22	45.7	brown clayey silt w/pebbles, few stones, moist; gray pebbly/sandy zone 10.2 cm thick at 10.06 m
2	79S75	10.21-10.67	15-12-17	15.2	gray-brown clayey silt w/large stones
2	79S76	10.67-11.13	10-11-14	45.7	water-bearing dolomite gravel and stones at 10.67 to 10.83 m; contact w/brown clayey silt w/pebbles, stones, moist
2	79S77	11.13-11.58	7-12-16	35.6	brown-gray clayey silt w/pebbles, stones, hard, moist
2	79S78	11.58-12.04	12-19-37	45.7	brown-gray clayey silt w/numerous pebbles, stones; 15.2 cm gray gravel- ly silt at 11.89 m
2	79S79	12.04-12.50	24-24-22	45.7	gravel to 12.19 m; gray clayey silt coarsening to gravelly clay at 12.34 m; contact w/clayey silt
2	79S80	12.50-12.95	17-20-23	40.6	brown-gray clayey silt w/few pebbles, minor oxidation, moist
2	79S81	12.95-13.41	42-22-20	35.6	gray clayey silt w/pebbles to 13.11 m; contact w/brown clayey silt w/pebbles, gritty, moist; soft
2	79S82	13.41-13.87	10-15-17	35.6	gray-brown clayey silt w/pebbles, stones

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 29--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
3	79S83	13.87-14.35	19-17-21	40.6	gray-brown clayey silt w/pebbles to 14.02 m; then gray silt w/pebbles, stones
3	79S84	14.35-14.78		35.6	brown-gray clayey silt w/pebbles, stones
3	79S85	14.78-15.24	12-17-20	45.7	brown-gray clayey silt w/pebbles, mottled, moist
3	79S86	15.24-15.70	23-35-26	45.7	gray-brown silt w/pebbles, stones, moist, hard
3	79S87	15.70-16.15	8-9-12	45.7	brown silt w/few pebbles, stones, moist, soft
3	79S88	16.15-16.61	8-13-20	50.8	brown silt w/few pebbles, stones, moist, soft
3	79S89	16.61-17.07	16-24-24	61.0	brown silt, water-bearing, soft to 16.92 m; contact w/gray clayey silt; contact clayey silt w/pebbles
3	79S90	17.07-17.52	11-25-26	35.6	gray clayey silt w/few pebbles, very hard, dry
3	79S91	17.52-17.98	20-34-29	35.6	gray-brown clayey silt w/few pebbles, dense, dry to moist
3	79S92	17.98-18.44	24-32-25	61.0	gray-brown clayey silt w/few pebbles, dense, dry, hard
3	79S93	18.44-18.90	16-23-23	50.8	brown-gray clayey silt w/pebbles, moist, hard
3	79S94	18.90-19.35	16-18-32	61.0	brown-gray clayey silt w/pebbles, moist

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 29--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
3	79S95	19.35-19.81	21-12-20	35.6	gray clayey silt to 19.51 m; sand partings at 19.51 m; contact w/thin brown silt w/pebbles, stones, moist to wet, gritty
3	79S96	19.81-20.27	23-17-22	61.0	gray clayey silt to 19.96 m; contact w/brown silt w/pebbles, stones, moist
3	79S97	20.27-20.73	15-19-20	40.6	brown wet silt to 20.42 m; contact w/gray clayey silt w/pebbles, stones
4	79S98	20.73-21.18	14-21-27	45.7	brown-gray clayey silt w/pebbles, stones, moist, dense, hard
4	79S99	21.18-21.64	31-36-26	50.8	gray clayey silt w/pebbles, stones, moist, dense, hard
4	79S100	21.64-22.10	26-33-35	50.8	gray clayey silt w/pebbles; brown silty seam at 21.79 m
4	79S101	22.10-22.56	24-38-30	35.6	gray clayey silt w/few pebbles, dry to moist, dense, very hard
4	79S102	22.56-23.01	40-50/5	25.4	gray clayey silt w/few pebbles, dry to moist, dense, very hard
4	79S103	23.01-23.47	38-45-31	35.6	gray-brown silt w/few pebbles, dense, very hard
4	79S104	23.47-23.93	33-50/5	25.4	gray-brown clayey silt w/few pebbles, dry to moist, hard
4	79S105	23.93-24.38	38-52-52	35.6	gray-brown clayey silt w/few pebbles, dry to moist, hard
EOB 25.91 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 30

Completion date: October 3, 1979

Location: 65 meters north-northeast of the northeast corner of Plot M, 15 meters east of test well 5

Site and well construction data: 2 test wells; 18.44 m, 24.54 m

Altitude of land surface: 18.44 m test well. 203.79 m
24.54 m test well. 203.76 m

Altitude of measuring point (top of casing): 18.44 m test well. . 204.10 m
24.54 m test well. . 204.08 m

Depth of bottom of piezometer from land surface: 18.44 m test well. . 18.13 m
24.54 m test well. . 24.22 m

Type of piezometer: 1.22 m slotted PVC pipe, 5.08 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	79S159	0- 0.46	3-6-6	15.2	brown clayey soil w/stones
1	79S160	0.46- 0.91	10-12-12	30.5	brown clayey soil w/stones, dry, root tubes
1	79S161	0.91- 1.37	11-16-16	35.6	yellow-brown silty clay w/stones, plant fragments, dry
1	79S162	1.37- 1.83	16-25-29	25.4	brown silty clay, plant fragments, hard, dense, dry
1	79S163	1.83- 2.29	8-10-16	40.6	yellow-brown silty clay w/pebbles; grading to brown-gray silty clay w/stones
2	79S164	2.29- 2.74		NR	
2	79S165	2.74- 3.20	19-18-14	NR	
2	79S166	3.20- 3.66	10.15-16	10.2	brown-gray silty clay w/pebbles and stones, dry
2	79S167	3.66- 4.12	30-22-16	15.2	brown-gray silty clay w/pebbles and stones, dry

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 30--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	79S168	4.12- 4.57	9-12-13	35.6	brown-gray silty clay, silt w/stones, dry, brittle
2	79S169	4.57- 5.03	35-19-18	15.2	brown-gray silty clay w/pebbles, stones, rocks
2	79S170	5.03- 5.49	13-14-14	15.2	brown-gray silty clay w/stones, hard, dry
2	79S171	5.49- 5.94	9-12-21	35.6	brown-gray silty clay to 5.55 m; 5.1 cm wet gravelly sand at 5.55 m, 5.79 m, 5.94 m; contact w/brown-gray silty clay w/pebbles, moist, soft
2	79S172	5.94- 6.40	12-15-17	15.2	brown-gray clayey silt w/pebbles, stones, gravel, sandy
2	79S173	6.40- 6.96	18-18-13	10.2	brown-gray clayey silt w/pebbles, wet
2	79S174	6.96- 7.32	7-8-12	15.2	gray-brown clayey silt w/pebbles, moist
2	79S175	7.32- 7.77	7-10-12	50.8	brown clayey silt w/pebbles, moist, soft to 7.62 m; grading to brown-gray clayey silt w/pebbles, stones, dry to moist, dense, hard
2	79S176	7.77- 8.23	10-15-16	50.8	gray clayey silt w/pebbles, dry, hard to 8.10 m; grading to gray-brown clayey silt w/pebbles, moist, soft
2	79S177	8.23- 8.69	15-16-11	35.6	gray-brown clayey silt w/pebbles, stones
2	79S178	8.69- 9.14	13-17-21	45.7	gray clayey silt w/few pebbles, hard, dense, dry
2	79S179	9.14- 9.60	18-20-18	30.5	gray clayey silt w/few pebbles, hard, dense, dry

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 30--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	79S180	9.60-10.06	21-34-33	30.5	gray clayey silt w/few pebbles, hard, dense, dry
2	79S181	10.06-10.52	36-35-39	NR	rocks
3	79S182	10.52-10.97		NR	rocks
3	79S183	10.97-11.43		NR	rocks
3	79S184	11.43-11.89	15-33-20	40.6	brown clayey silt w/numerous stones, gritty, hard, dry, brittle
3	79S185	11.89-12.34		NR	rocks
3	79S186	12.34-13.11	24-19-10	20.3	brown clayey silt w/stones, gritty, moist to wet, soft
3	79S187	13.11-13.56	7-9-18	35.6	brown clayey silt w/pebbles, stones, gritty, moist, soft; grading to brown- gray clayey silt w/few pebbles
3	79S188	13.56-14.02	10-18-27	45.7	brown-gray clayey silt w/few pebbles; grading to gray clayey silt
3	79S189	14.02-14.48	22-31-31	30.5	gray clayey silt w/few pebbles, dry, hard, brittle
3	79S190	14.48-14.94	18-24-26	61.0	gray clayey silt w/few pebbles, dry, hard, brittle
3	79S191	14.94-15.39	21-21-27	50.8	gray clayey silt w/few pebbles, dry to moist, hard
3	79S192	15.39-15.85	13-20-27	61.0	gray clayey silt w/few pebbles, dry to moist, hard; sand parting at 15.70 m
3	79S193	15.85-16.31	18-21-19	35.6	gray clayey silt w/few pebbles, dry to moist, hard, brittle

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 30--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
3	79S194	16.61-16.76	8-50/5	35.6	gray clayey silt w/few pebbles, dry to moist, hard, brittle (stones at bottom) to 16.61 m
3	79S195	16.76-17.22	25-21-20	40.6	gray clayey silt; grading to brown clayey silt w/pebbles, stones, dry
3	79S196	17.22-17.68	24-20-22	30.5	brown clayey silt w/pebbles, stones, gritty, moist
4	79S197	17.68-18.14	17-18-18	35.6	brown clayey silt w/pebbles, gritty, soft, moist; grading to gray-brown clayey silt
4	79S198	18.14-18.59		NR	
4	79S199	18.59-19.05		NR	rocks
4	79S200	19.05-19.51	25-26-26	35.6	gray-brown clayey silt w/few pebbles, moist, hard
4	79S201	19.51-19.96	34-50/4	15.2	gray-brown clayey silt w/stones, dry to moist, brittle
4	79S202	19.96-20.42	19-30-38	50.8	gray silt w/stones, dry, brittle, soft, flaky
4	79S203	20.42-20.88	41-35-34	40.6	gray silt w/few stones, dry, brittle, soft, flaky
4	79S204	20.88-21.33	28-37-31	35.6	gray silt, dry, flaky
4	79S205	21.33-21.79	15-23-25	45.7	gray silt, dry, flaky
4	79S206	21.79-22.25	20-35-28	30.5	gray silt, dry, flaky
4	79S207	22.25-22.71	19-36-38	50.8	gray silt, dry, flaky

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 30--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
4	79S208	22.71-23.16	35-32-30	40.6	gray silt, dry, flaky; 0.63 cm wide 45° fracture fitted w/clean dry sand
4	79S209	23.16-23.62	20-27-36	61.0	gray silt, dry, 0.63 cm wide 45° fracture filled w/clean dry sand; sand parting at 23.17 m; 5.1 cm dry layer at 23.20 m; flaky to 23.47 m; contact w/wet sandy, light brown silt, soft, dense
4	79S210	23.62-24.08	29-42-50/4	30.5	gray silt, dry
4	79S211	24.08-24.53	23-34-56	45.7	wet sandy silt to 24.08 m; contact w/gray silt, moist, hard
EOB 24.99 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 33

Completion date: June 11, 1980

Location: 2 meters south of the south boundary of Plot M, halfway between the
southeast corner and the southwest corner of the burial site

Site and well construction data:

Altitude of land surface 215.20 m

Altitude of measuring point (top of casing). 215.50 m

Depth to bottom of piezometer from land surface. 27.10 m

Type of piezometer: 1.22 m slotted PVC pipe, 5.08 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	80S85	0- 0.46	1-4-5	25.4	topsoil (10 cm), yellow-brown clay soil
1	80S86	0.46- 0.91	3-4-4	20.3	brown clayey soil w/pebbles, stones, dry; plant fragments; wide variety of rocks, minerals
1	80S87	0.91- 1.37	3-4-4	10.2	brown silty clay w/pebbles, stones, moist, oxidized, soft
1	80S88	1.37- 1.83	5-7-7	25.4	brown silty clay w/pebbles, stones, moist, oxidized, soft, plant fragments
1	80S89	1.83- 2.29	5-10-18	30.5	brown silty clay w/pebbles, stones, moist, oxidized, soft; grading down- wards to brown silty clay, dry, hard
1	80S90	2.29- 2.74	14-21-26	40.6	brown silty clay w/pebbles, stones, dry, hard, wide variety of rocks (dolomite, shale, granite), minerals (including pyrite); oxidized, mottled
1	80S91	2.74- 3.20	15-16-17	45.7	brown silty clay w/pebbles, dry, hard; moist at 3.20 m
1	80S92	3.20- 3.66	8-10-12	40.6	brown silty clay w/pebbles to 3.30 m; clay w/silt and sand, moist to wet, soft to 3.40 m; brown silty clay w/ pebbles, dry, hard

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 33--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	80S93	3.66- 4.12	9-12-16	35.6	brown silty clay w/pebbles, dry, hard, wide variety of rocks (numerous black shale grains) and minerals
1	80S94	4.12- 4.57	10-12-14	50.8	brown silty clay w/pebbles, few stones, dry, hard, numerous dolomite and black shale grains
1	80S95	4.57- 5.03	6-10-13	25.4	brown clayey silt w/pebbles, dry, hard, numerous black shale grains
1	80S96	5.03- 5.49	16-18-21	50.8	brown clayey silt w/pebbles, few stones to 5.28 m; contact w/gray-brown clayey silt w/pebbles, dry to moist, hard, mostly dolomite and black shale pebbles
2	80S97	5.49- 5.94		NR	
2	80S98	5.94- 6.40		NR	
2	80S99	6.40- 6.86	9-11-17	25.4	gray-brown clayey silt w/pebbles, stones, dry to moist, soft, wide variety of rocks and minerals
2	80S100	6.86- 7.32	19-22-20	25.4	gray-brown clayey silt w/pebbles, stones; grading downwards to yellow-brown clayey silt, oxidized, mottled, numerous dolomite and black shale grains, vertical fracture
2	80S101	7.32- 7.77	7-10-16	40.6	gray-brown clayey silt w/pebbles, stones, dry to moist, mostly dolomite and black shale grains
2	80S102	7.77- 8.23	9-12-14	61.0	gray-brown clayey silt w/pebbles, stones to 8.33 m; contact w/brown sandy silt, moist to wet, soft; 25 cm inclined fracture, oxidized, w/2.5 cm bleach zone

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 33--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	80S103	8.23- 8.69	10-14-18	20.3	brown sandy silt w/pebbles, stones; grading downwards to gray-brown clayey silt w/pebbles, stones, moist, soft, gritty
2	80S104	8.69- 9.14	11-14-17	30.5	gray-brown clayey silt w/pebbles, stones, moist, soft, gritty
2	80S105	9.14- 9.60	12-15-16	20.3	gray-brown clayey silt w/pebbles, few stones, moist, soft, mottled, mostly dolomite and black shale grains
2	80S106	9.60-10.06	13-14-17	61.0	gray-brown clayey silt w/pebbles to 9.75 m; contact w/gray-brown clayey silt w/numerous pebbles, stones, rocks; inclined fracture w/2 cm bleach zone
2	80S107	10.06-10.52	9-12-15	45.7	gray-brown clayey silt w/pebbles, stones, moist to wet, soft, mostly dolomite grains
2	80S108	10.52-10.97	24-28-27	35.6	gray-brown clayey silt w/pebbles, stones, rocks; horizontal fracture w/bleach zone at 10.61 m
2	80S109	10.97-11.43	9-21-15	30.5	gray-brown clayey silt w/pebbles, stones, rocks
2	80S110	11.43-11.89	7-11-13	40.6	gray-brown clayey silt w/pebbles, stones, rocks to 11.68 m; contact w/brown silty clay, sandy, gritty, moist, soft
2	80S111	11.89-12.34	9-13-16	35.6	brown silty clay, sandy, moist, soft to 11.98 m; contact w/brown clayey silt w/pebbles; grading downwards to pink clayey silt

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 33--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	80S112	12.34-12.80	10-11-15	35.6	pink clayey silt w/rocks (all dolomite); grading downwards to brown silt, dry to moist, soft; grading downwards to brown silt w/sand, wet, soft
2	80S113	12.80-13.26	14-22-25	35.6	brown silt w/sand to 12.85 m; contact w/gray-brown clayey silt w/pebbles, 1.3 cm sand layer at 13.05 m, 5 cm pink clay layer at 13.10 m, then gray-brown clayey silt, dry, hard
2	80S114	13.26-13.72	8-12-18	45.7	gray-brown clayey silt w/pebbles to 13.51 m; contact w/brown silt, moist, gritty, mostly dolomite grains
2	80S115	13.72-14.17	21-13-18	45.7	brown silt w/pebbles, moist, soft, dolomite, black shale, and pyrite grains
2	80S116	14.17-14.63	12-18-24	61.0	brown silt, moist, gritty, soft, dolomite and black shale grains
3	80S117	14.63-15.09	11-17-19	25.4	brown silt, moist, gritty, soft; grading downwards to gray-brown clayey silt w/pebbles, stones, dolomite and black shale
3	80S118	15.09-15.55	14-20-29	25.4	gray-brown clayey silt w/pebbles, stones
3	80S119	15.55-16.00		NR	
3	80S120	16.00-16.46	24-23-24	35.6	gray-brown clayey silt w/pebbles, stones to 16.05 m; contact w/wet sandy dolomite gravel to 16.15 m; contact w/brown silt, moist, soft
3	80S121	16.46-16.92	8-14-18	35.6	brown silt w/few pebbles, moist, soft, mostly dolomite grains

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 33--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
3	80S122	16.92-17.37	10-22-37	45.7	brown silt w/few pebbles, moist, soft; 2.54 cm sand parting at 17.17 m and at 17.20 m
3	80S123	17.37-17.83	36-28-31	30.5	light brown silt w/sand to 17.42 m; contact w/gray-brown clayey silt to 17.48 m; contact w/sand to 17.52 m; contact w/gray-brown clayey silt to 17.63 m; contact w/sand
3	80S124	17.83-18.29	13-14-21	15.2	sand to 17.86 m; contact w/gray-brown clayey silt to 17.96 m; contact w/sand, gravel to 18.06 m; contact w/ gray-brown silt, no pebbles, stones, dry to moist, hard
3	80S125	18.29-18.75	13-14-23	48.3	gray-brown silt, dry to moist
3	80S126	18.75-19.20	19-25-25	40.6	gray-brown silt, dry to moist
3	80S127	19.20-19.66	19-22-19	40.6	gray-brown silt, dry to moist to 19.30 m; contact w/brown silt w/peb- bles, stones, dry to moist, soft, mostly dolomite grains
3	80S128	19.66-20.12	79-38-23	10.2	brown silt w/pebbles, stones, dry to moist; rock in sampler
3	80S129	20.12-20.57	17-21-21	20.3	brown silt w/few pebbles, rocks
4	80S130	20.57-21.03	14-19-18	30.5	brown silt w/few pebbles to 20.83 m; grading downwards to gray-brown silt w/few pebbles, stones, dry
4	80S131	21.03-21.49	26-32-28	15.2	gray-brown silt w/few pebbles, dry, hard
4	80S132	21.49-21.95	15-29-27	20.3	gray-brown silt w/few pebbles, stones, dry, hard, brittle

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 33--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
4	80S133	21.95-22.40	14-27-42	25.4	gray-brown silt w/few pebbles, stones, dry, hard, brittle
4	80S134	22.40-22.86	15-21-30	35.6	gray-brown silt w/few pebbles, stones, dry, hard, brittle
4	80S135	22.86-23.32	22-27-27	50.8	gray-brown silt w/few pebbles, stones, dry, hard, brittle, all grains dolo- mite, gray mottling
4	80S136	23.32-23.77	24-30-25	35.6	gray-brown silt w/few pebbles, stones, dry, hard, brittle
4	80S137	23.77-24.23	34-42-68	40.6	gray-brown silt to 23.88 m; contact w/gray-brown silt, no pebbles, stones (clean), dry, very hard
4	80S138	24.23-24.69	67-89-106	25.4	gray-brown silt, clean, dry, very hard
4	80S139	24.69-25.14	25-25-29	35.6	gray-brown silt, clean, dry to moist
4	80S140	25.14-25.60	30-49-90	20.3	gray-brown silt, clean, dry, very hard
4	80S141	25.60-26.06	60-100/5	20.3	gray-brown silt, clean, dry, very hard
4	80S142	26.06-26.52	26-28-29	35.6	gray-brown silt, clean, dry, very hard
4	80S143	26.52-26.97	40-57-64	40.6	gray-brown silt, clean, dry, very hard, 5.08 cm sand layer at 26.67 m
4	80S144	26.97-27.43	37-65-50	35.6	gray-brown silt, clean, dry, very hard
EOB 27.43 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 34

Completion date: June 12, 1980

Location: Next to test wells 4, 35

Site and well construction data:

Altitude of land surface 207.76 m

Altitude of measuring point (top of casing). 207.80 m

Depth of bottom of piezometer from land surface. . . . 27.43 m

Type of piezometer: 1.22 m slotted PVC pipe, 5.08 cm diameter

No samples collected during drilling.

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 35

Completion date: June 23, 1980

Location: Next to test wells 4, 34

Site and well construction data:

Altitude of land surface 207.85 m

Altitude of measuring point (top of casing). 208.00 m

Depth to bottom of piezometer from land surface. 33.38 m

Type of piezometer: 1.22 m slotted PVC pipe, 5.08 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	80S145	0.15- 0.60	3-3-5	15.2	black topsoil, yellow silty clay
1	80S146	0.60- 1.07	5-8-12	25.4	yellow-brown clay w/pebbles, plant fragments oxidized, moist, hard, wide variety of rock and mineral grains
1	80S147	1.07- 1.52	14-22-21	30.5	yellow-brown clay w/pebbles, stones, oxidized, dry to moist, hard
1	80S148	1.52- 1.98	23-27-28	NR	
1	80S149	1.98- 2.44	10-14-15	NR	
1	80S150	2.44- 2.90	15-16-21	10.2	yellow-brown silty clay w/pebbles, stones, oxidized, moist, soft
1	80S151	2.90- 3.35	5-7-10	15.2	yellow-brown silty clay w/pebbles, stones, oxidized, moist, wide variety of rock and mineral grains including shale, granite, dolomite, pyrite, quartz, mica, blue-green (Cu) and orange (Fe) mottling
1	80S152	3.35- 3.81	10-12-15	25.4	yellow-brown silty clay w/pebbles, stones, oxidized, moist, abundant black shale grains

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 35--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	80S153	3.81- 4.27	7-11-13	30.5	brown silty clay w/pebbles, stones; grading downwards to gray-brown silty clay w/pebbles, stones, abundant pyrite
2	80S154	4.27- 4.72	9-10-14	33.0	gray-brown silty clay w/pebbles, few stones, dry to moist, soft, mostly dolomite and black shale grains
2	80S155	4.72- 5.18	20-30-28	25.4	gray-brown silty clay to 4.88 m; contact w/water-bearing sand, 5.1 cm thick
2	80S156	5.18- 5.64	9-11-16	35.6	10.16 cm water-bearing sand to 5.27 m; contact w/gray-brown clayey silt w/ pebbles, few stones
2	80S157	5.64- 6.10	9-14-20	15.2	gray-brown clayey silt w/pebbles, few stones and rocks, moist, soft, mostly dolomite, shale, pyrite grains
2	80S158	6.10- 6.54	17-20-20	40.6	gray-brown clayey silt w/pebbles, few stones, moist, hard
2	80S159	6.54- 7.01	12-19-24	35.6	gray-brown clayey silt w/pebbles, few stones, moist, hard
2	80S160	7.01- 7.47	16-24-24	25.4	gray-brown clayey silt w/pebbles, few stones, moist, hard
2	80S161	7.47- 7.93	19-26-14	30.5	gray-brown clayey silt w/pebbles to 7.49 m; contact w/water-bearing sand, 10.2 cm thick to 7.59 m; contact w/ gray-brown clayey silt w/pebbles, few stones
2	80S162	7.93- 8.38	14-20-27	35.6	gray-brown clayey silt w/few pebbles, stones

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 35--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	80S163	8.38- 8.84	12-22-48	10.2	gray-brown clayey silt w/few pebbles, stones
2	80S164	8.84- 9.30	11-18-25	20.3	gray-brown clayey silt w/few pebbles to 8.99 m; contact w/brown clayey silt w/pebbles, stones, moist, soft, gritty, mostly dolomite, black shale, green shale grains
2	80S165	9.30- 9.75	20-25-24	15.2	brown clayey silt w/pebbles, stones; grading downwards to brown clayey silt w/few pebbles, stones
2	80S166	9.75-10.21	14-17-21	25.4	brown clayey silt w/few pebbles, stones, moist, soft
2	80S167	10.21-10.67	8-10-12	30.5	brown clayey silt w/few pebbles, moist, soft to 10.52 m; contact w/pink clayey silt 5.1 cm thick; contact w/brown clayey silt w/abundant pebbles, stones, mostly black shale and dolomite
2	80S168	10.67-11.13	8-13-12	25.4	brown clayey silt w/pebbles, stones, moist, very soft
2	80S169	11.13-11.58	7-7-10	35.6	brown clayey silt w/pebbles, stones, red-brown mottling to 11.28 m; contact w/red-brown sandy silt, 5.1 cm thick, to 11.33 m; contact w/brown clayey silt, 5.1 cm thick, to 11.38 m; contact w/red-brown sandy silt
2	80S170	11.58-12.04	9-17-33	40.6	brown clayey silt w/pebbles, moist, soft, mostly dolomite and shale grains, to 11.89 m; contact w/wet gravel 5.08 cm thick, and brown silt and gravel

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 35--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	80S171	12.04-12.50	19-13-11	25.4	gray-brown clayey silt to 12.19 m; contact w/sandy gravel 5.1 cm thick to 12.24 m; contact w/brown clayey silt w/pebbles, soft, mostly dolomite grains
2	80S172	12.50-12.95	9-21-38	7.6	brown clayey silt, soft
2	80S173	12.95-13.41	18-21-26	NR	
3	80S174	13.41-13.87	10-16-19	15.2	gray-brown silt, few pebbles, moist, soft
3	80S175	13.87-14.33	14-19-22	NR	
3	80S176	14.33-14.78	8-18-20	35.6	gray-brown silt w/few pebbles, moist, soft, mostly dolomite and black shale grains
3	80S177	14.78-15.24	30-35-35	61.0	brown clayey silt w/few pebbles, dry to moist, hard, brittle, nearly all grains are dolomites
3	80S178	15.24-15.70		NR	
3	80S179	15.70-16.15	26-28-31	61.0	brown clayey silt w/few pebbles, dry to moist, hard
3	80S180	16.15-16.61		NR	
3	80S181	16.61-17.07	6-13-18	30.5	brown clayey silt w/few pebbles (clean), moist, soft, all grains dolomite
3	80S182	17.07-17.52	21-22-31	61.0	brown clayey silt w/pebbles; grading to gray silt, clean, moist
3	80S183	17.52-17.98	21-23-24	40.6	gray silt, clean, moist; grading down- wards to gray-brown silt and gravel

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 35--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
3	80S184	17.98-18.44	18-21-26	45.7	gray-brown silt w/pebbles, stones, to 18.07 m; contact w/gray-brown silt, clean, moist, soft
4	80S185	18.44-18.90	23-30-37	35.6	gray-brown silt, clean, moist, soft
4	80S186	18.90-19.36	13-16-18	38.1	gray-brown silt, clean, moist, soft
4	80S187	19.36-19.81	21-27-60	35.6	gray-brown silt, very clean; grading downwards to gray-brown silt, clean, dry to moist, hard, brittle
4	80S188	19.81-20.27	36-32-44	NR	
4	80S189	20.27-20.73	92-51-52	15.2	rock in sampler, gray-brown silt, clean, hard to 20.36 m; contact w/brown silt, gritty, moist, soft
4	80S190	20.73-21.18	12-13-15	35.6	brown silt, gritty, moist, soft
4	80S191	21.18-21.64	22-17-16	7.6	brown silt, gritty, moist, soft
4	80S192	21.64-22.10	24-23-22	35.6	brown silt, gritty, moist, soft
4	80S193	22.10-22.56	23-25-32	NR	
4	80S194	22.56-23.01	12-13-20	38.1	brown silt, gritty, moist, soft
4	80S195	23.01-23.47	27-29-30	40.6	brown silt, gritty, moist, soft to 23.10 m; contact w/gray-brown silt w/few pebbles, dry to moist, hard
5	80S196	23.47-23.93	14-28-41	35.6	gray-brown silt, no pebbles (clean), very dry, hard
5	80S197	23.93-24.38	36-40-41	40.6	gray-brown silt, clean, very dry, hard, fresh dolomite rock in sampler
5	80S198	24.38-24.84	36-42-100/5	30.5	gray-brown silt w/few rocks, dry, very hard

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 35--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
5	80S199	24.84-25.30		NR	
5	80S200	25.30-25.76	22-35-37	35.6	gray-brown silt w/few rocks, dry, hard
5	80S201	25.76-26.21	52-34-29	20.3	rock in sampler, gray-brown silt w/ few rocks, dry, hard
5	80S202	26.21-26.70	22-29-34	35.6	gray-brown silt w/few rocks, dry, hard, flaky
5	80S203	26.70-27.13	30-22-22	45.7	gray-brown silt w/few rocks, dry, hard, flaky
5	80S204	27.13-27.58	15-17-27	50.8	gray-brown silt; grading downward to gray-brown silt w/sand, moist to wet, stiff, flaky
5	80S205	27.58-28.04	77-100/4	61.0	gray-brown silt; grading downward to gray-brown silt w/sand; grading down- ward to light brown silty sand, dry, very hard, flaky
5	80S206	28.04-28.50	59-89-100/5	35.6	light brown silty sand, dry, very hard, flaky
5	80S207	28.50-28.96	53-69-100/5	15.2	light brown silty sand, dry, very hard, no pebbles, brittle, flaky
5	80S208	28.96-29.41	51-35-36	35.6	light brown silty sand to 29.02 m; contact w/wet silty sand, 12.7 cm thick; grading to sandy silt
5	80S209	29.41-29.87	98-100/5	15.2	light brown silty sand w/several thin sand partings, dry, very hard
5	80S210	29.87-30.33	21-30-30	30.5	light brown silty sand to 30.02 m; contact w/white dolomite gravel, sand, wet, soft, loose

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 35--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
5	80S211	30.33-30.78	7-9-11	20.3	white sand to 30.41 m; contact w/gray gravelly silt w/pebbles, stones, moist to wet, soft
6	80S212	30.78-31.24	30-12-8	15.2	gray gravelly silt w/stones
6	80S213	31.24-31.70	10-25-18	NR	
6	80S214	31.70-32.16	11-20-30	15.2	gray gravelly silt w/stones
6	80S215	32.16-32.61	100/0	NR	rocks
6	80S216	32.61-33.07	100/6	NR	rocks
6	80S217	33.07-33.52	100/0	NR	rocks and bedrock (?)
EOB 33.52 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 36

Completion date: June 30, 1980

Location: Next to test well 26

Site and well construction data:

Altitude of land surface 210.77 m

Altitude of measuring point (top of casing). 210.92 m

Depth to bottom of piezometer from land surface. . . . 38.71 m

Type of piezometer: 1.22 m slotted PVC pipe, 5.08 cm diameter

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
1	80S218	1.22- 1.68	9-9-9	30.5	yellow-brown clay w/pebbles, plant fragments, moist, soft, wide variety of rock and mineral grains
1	80S219	2.74- 3.20	15-16-24	35.6	brown clay w/pebbles, dry to moist, hard, oxidized, numerous black shale grains, several vertical fractures
1	80S220	4.27- 4.72	8-9-12	50.8	brown silty clay w/pebbles, mostly dolomite, black and green shale grains
1	80S221	5.79- 6.25	12-34-34	15.2	brown silty clay w/pebbles; grading downward to gray-brown clayey silt w/gravel, moist to wet
2	80S222	7.32- 7.77	7-9-13	40.6	gray-brown clayey silt w/pebbles, stones, dry to moist, soft, mostly dolomite and black shale grains
2	80S223	8.84- 9.29	4-7-11	40.6	gray-brown clayey silt w/pebbles, stones, moist, soft
2	80S224	10.36-10.82	15-22-29	NR	
2	80S225	11.89-12.34	4-8-10	35.5	gray-brown clayey silt w/numerous pebbles, stones, moist, very soft, mostly dolomite, black shale, pyrite

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 36--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
2	80S226	13.41-13.87	7-9-11	61.0	gray-brown clayey silt to 13.85 m; contact w/pink clayey silt w/few pebbles, moist, soft, mostly dolomite and black shale grains
2	80S227	14.93-15.39	8-18-25	35.6	brown clayey silt w/numerous pebbles, stones; grading downward to gray-brown clayey silt w/few pebbles, stones, dry to moist, soft
3	80S228	16.45-16.91	8-10-12	35.6	gray-brown clayey silt to 16.52 m; contact w/brown clayey silt w/few pebbles, wet, soft, nearly all grains are dolomite
3	80S229	17.98-18.44	8-13-18	35.6	gray-brown silt w/few pebbles, moist, soft
3	80S230	18.44-18.90	17-18-25	30.5	gray-brown silt w/few pebbles, dry to moist
3	80S231	18.90-19.35	8-13-16	50.8	gray-brown silt, no pebbles (clean), dry to moist
3	80S232	19.35-19.81	6-14-15	50.8	gray-brown silt, clean, dry to moist
3	80S233	19.81-20.27	15-20-25	40.6	gray-brown silt, clean, dry, hard, brittle
3	80S234	20.27-20.72	10-22-11	61.0	gray-brown silt, clean, dry, hard, gravelly sand at 20.50 m
3	80S235	20.72-21.18	2-14-17	25.4	gray-brown silt, clean, dry, hard, wet sand and gravel at bottom of sampler
3	80S236	21.18-21.64	14-19-13	38.1	gray-brown silt to 21.27 m; contact w/brown silt w/pebbles, moist to wet, soft, gritty, all grains are dolomite

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 36--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow count	Recovery (cm)	Description
3	80S237	21.64-22.10	14-22-24	15.2	brown silt w/few pebbles
3	80S238	22.10-22.56	20-16-21	38.1	brown silt w/few pebbles
3	80S239	22.56-23.01	13-15-22	50.8	brown silt to 22.67 m; contact w/ gray-brown silt w/pebbles, stones, dry to moist, brittle, stiff, all grains are dolomite
3	80S240	23.01-23.47	23-26-30	25.4	gray-brown silt w/pebbles, stones, dry to moist
4	80S241	23.47-23.92	15-22-27	30.5	gray-brown silt w/pebbles, stones, rocks, dry
4	80S242	23.92-24.38		NR	
4	80S243	24.38-24.84	13-23-32	20.3	gray-brown silt w/pebbles, stones, rocks, dry to 24.41 m; contact w/ brown silt w/pebbles, stones, rocks, dry to moist, all grains are dolomite
4	80S244	24.84-25.30		NR	
4	80S245	25.30-25.76	22-34-31	30.5	gray-brown clayey silt w/pebbles, stones, rocks, dry to moist, brittle, stiff, hard, all grains are dolomite
4	80S246	25.76-26.21	25-28-29	35.6	gray-brown clayey silt w/pebbles, stones
4	80S247	26.21-26.67	18-26-39	25.4	gray-brown clayey silt w/pebbles, stones, dry, hard, gritty
4	80S248	26.67-27.13	42-33-48	25.4	gray-brown silt w/few pebbles, stones, dry to moist, hard, brittle, stiff
4	80S249	27.13-27.58	42-38-33	45.7	gray-brown silt w/few pebbles, stones, dry, hard

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 36--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
4	80S250	27.58-28.04	23-24-38	15.2	gray-brown silt, no pebbles, stones (clean), dry, hard
4	80S251	28.04-28.50	62-54-40	35.6	gray-brown silt, clean, dry, very hard
4	80S252	28.50-28.96	28-30-54	25.4	gray-brown silt, clean, dry, hard, 5.1 cm sand layer at 28.77 m
4	80S253	28.96-29.41	20-25-37	35.6	gray-brown sandy silt, dry, hard, 2.5 cm sand layers at 29.11 m, 29.32 m
5	80S254	29.41-29.87	400-100/5	25.4	gray-brown sandy silt, dry, very hard, brittle, stiff
5	80S255	29.87-30.33	100/6	4.0	light gray-brown sandy silt, dry to moist, very hard, brittle, stiff
5	80S256	30.33-30.78	70-65-200/4	7.5	light gray sandy silt
5	80S257	30.78-31.24	100/3	NR	
5	80S258	31.24-31.70	37-67-90	30.5	gray-brown silt, clean, dry to moist, hard, brittle, stiff
5	80S259	31.70-32.16	22-36-52	30.5	gray-brown silt, clean, dry, hard
5	80S260	32.16-32.61	57-100/5	15.2	gray-brown silt, clean, dry to moist, hard
5	80S261	32.61-33.07	44-81-100/5	25.4	light gray sandy silt, clean, moist to wet, very hard
5	80S262	33.07-33.52	23-61-100/5	25.4	light gray sandy silt, clean, moist to wet, very hard
5	80S263	33.52-33.99	44-64-59	35.6	light gray sandy silt, clean, dry, hard

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 36--Continued

Unit No.	Sample No.	Depth interval (meters)	Blow counts	Recovery (cm)	Description
5	80S264	33.99-34.44	37-71-90	20.3	light gray sandy silt to 34.07 m; contact w/gray-brown sandy silt w/ pebbles, wet; grading downward to gray-brown silt w/sand to 34.19 m; contact w/light gray gravelly silt w/pebbles, stones, rocks, wet
5	80S265	34.44-34.90	22-23-10	15.2	light gray gravelly silt w/sand, gravel, all grains are fresh dolomite
6	80S266	34.90-35.36	7-10-27	30.5	light gray gravelly silt w/pebbles, stones, rocks, wet
6	80S267	35.36-35.81	51-41-42	15.2	light gray gravelly silt w/pebbles, stones, rocks
6	80S268	35.81-36.27	44-63-52	35.6	light gray gravelly silt w/pebbles, stones, rocks, moist
6	80S269	36.27-36.73	40-35-36	30.5	light gray gravelly silt w/pebbles, stones, rocks
6	80S270	36.73-37.18	52-50-70	20.3	light gray gravelly silt w/pebbles, stones, rocks
6	80S271	37.18-37.64		NR	
7	80S272	37.64-38.10	15-37-52	15.2	light gray gravelly silt to 37.79 m; contact w/dark brown clayey silt w/ pebbles, dry, hard
7	80S273	38.10-38.55		NR	
7	80S274	38.55-38.86	100/6	15.2	dark brown clayey silt w/pebbles; bedrock at 38.86 m
EOB 38.86 m					

Table 2.--Test-well construction data and lithologic description
of cores at Plot M--Continued

Test well 37

Completion date: July 3, 1980

Location: Next to test wells 26, 36

Site and well construction data:

Altitude of land surface 210.77 m

Altitude of measuring point (top of casing). 210.92 m

Depth to bottom of piezometer from land surface. 27.28 m

Type of piezometer: 1.22 m slotted PVC pipe, 5.08 cm diameter

No samples collected during drilling.

Table 3.--Site and well construction data of bedrock test wells
in the forest preserve near Plot M

DH1

Completion date: September 17, 1976

Location: Site A, at the top of the ridge in the Palos Forest
Preserve

Site and well construction data (values are in meters):

Altitude of land surface	226.46
Altitude of measuring point (top of casing). . . .	227.06
Depth to bedrock from land surface	51.81
Depth to bottom of casing from land surface. . . .	53.34
Depth to bottom of borehole from land surface. . .	65.53
Type of casing: black steel, 12.7 cm diameter	

DH2

Completion date: September 20, 1976

Location: 160 meters south of Plot M on the north side of the
forest preserve road; near SB21

Site and well construction data (values are in meters):

Altitude of land surface	219.79
Altitude of measuring point (top of casing). . . .	220.39
Depth to bedrock from land surface	46.93
Depth to bottom of casing from land surface. . . .	48.77
Depth to bottom of borehole from land surface. . .	61.26
Type of casing: black steel, 12.7 cm diameter	

DH3

Completion date: September 23, 1976

Location: 30 meters north-northwest of the northeast corner
of Plot M; near SB4

Site and well construction data (values are in meters):

Altitude of land surface	207.08
Altitude of measuring point (top of casing). . . .	207.68
Depth to bedrock from land surface	37.18
Depth to bottom of casing from land surface. . . .	39.01
Depth to bottom of borehole from land surface. . .	52.73
Type of casing: black steel, 12.7 cm diameter	

Table 3.--Site and well construction data of bedrock test wells
in the forest preserve near Plot M--Continued

DH4

Completion date: September 28, 1976

Location: Approximately 200 meters north of Plot M next to
forest preserve road

Site and well construction data (values are in meters):

Altitude of land surface	205.64
Altitude of measuring point (top of casing). . . .	206.24
Depth to bedrock from land surface	33.22
Depth to bottom of casing from land surface. . . .	35.35
Depth to bottom of borehole from land surface. . .	85.34
Type of casing: black steel, 12.7 cm diameter	