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DEPARTMENT OF NATURAL RESOURCE DEVELOPMENT  
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GEOLOGICAL SURVEY  
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Information Pamphlet No. 9

SAND AND GRAVEL RESOURCES IN  
DEUEL COUNTY, SOUTH DAKOTA

by

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Prepared in cooperation with  
the United States Geological Survey,  
East Dakota Conservancy Sub-District,  
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and Deuel County

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## INTRODUCTION

This pamphlet is one of a series of reports completed on the geology and hydrology of Deuel County, South Dakota. The purpose of this report is to indicate areas in which to search for sources of aggregate material. The quality of the deposits mapped was not analyzed nor the quantity of available reserves measured. These would require considerable more drilling and prior knowledge of the material specifications for each intended use.

Two other reports are part of this series. The first is a comprehensive, three-part publication entitled the "Geology and Water Resources of Deuel and Hamlin Counties, South Dakota." It contains the technical aspects of the study along with the basic data. It should be used in conjunction with this report as it defines and explains the distribution of earth materials in Deuel County. It will also help answer questions of geologic and hydrologic interest.

The second report is an information pamphlet entitled "The Major Aquifers in Deuel and Hamlin Counties, South Dakota." It shows the areal distribution of major glacial aquifers and gives their expected yields and quality. It also discusses the bedrock aquifers and their yields and quality.

## EXPLANATION OF TABLES

Table 1 is a list of test holes drilled in Deuel County along with their locations. Most of them have been drilled by either the South Dakota Geological Survey or the United States Geological Survey. A few have been supplied by private drillers or the State Highway Department. Only that part of the log which showed sand and/or gravel has been included in this table in order to reduce the amount of extraneous information. The complete log can be found in the basic data portion of the comprehensive report. The numbers correspond to the numbered test hole symbols on the map.

Table 2 is a list of sand and gravel pits on file with the South Dakota Department of Highways. Where the information is available, it also includes the average thickness of the sand and/or gravel being removed, the average thickness of overburden and the

type of material it contains. Average thickness values with a plus sign after them mean that the bottom of the pit is still in sand or gravel. The numbers refer to the numbered gravel pit symbols on the map.

## EXPLANATION OF MAP

The map shows the location of test holes, gravel pits, a few land marks and the areas of good, fair, and poor probability of finding sand and gravel. Test holes are indicated by a filled circle (●), a filled triangle (▲), a filled square (■), or an unfilled circle (○). The unfilled circle represents a location where no sand and/or gravel was encountered in the upper 25 feet of drilling. As such they contain no numbers because they are not listed in the tables. The other three symbols refer to holes which did hit sand and/or gravel in the upper 25 feet. A filled circle means that there was from 0-4 feet of overburden, a filled triangle stands for one which has 5-10 feet of overburden, and a filled square represents a location with 11-24 feet of overburden. The numbers beside each symbol refer to the test hole list in table 1 which tells the amount of sand and/or gravel present.

Gravel pits are designated by crossed pick and shovel (⌘). Those with numbers are listed in table 2 and have additional data on file with the District Highway Office of the South Dakota Department of Highways in Huron, South Dakota. No attempt has been made to differentiate the active from the inactive pits.

Using the test holes, gravel pit locations, topographic maps, air photos, and field observation, the County has been divided into three types of areas describing the probability of finding sand or gravel--good, fair, and poor. An area with a designation "good" has deposits that are fairly thick (14 feet or more) over a large area and covered by little overburden or are less consistent areally but are very thick. An area with a designation "fair" has deposits which (1) are not very thick or (2) have excessive overburden. An area with a designation "poor" has few deposits of sand and gravel. This does not mean there are no deposits in these areas. Some very productive pits are located in the "poor" areas, but the deposits are localized and difficult to locate without intensive exploration.

**TABLE 1. List of Test Holes in Deuel County, South Dakota,  
Which Contain Sand and/or Gravel in the Upper 25 Feet**

Lithologic descriptions, as listed, have been condensed from data contained in driller's logs on file at the South Dakota Geological Survey office,

Vermillion, South Dakota, and contain only information which has been deemed most useful for this study.

Test Hole No.	Location	Lithologic Description	From-to Feet
1	SW SW SW SW 33-118-50	Sand, very coarse, clayey; saturated Sand, very coarse; saturated, clean Sand, gray, very coarse; saturated, clean	5- 8 8-11 17-26
2	NW NE NW NE 4-117-50	Sand, fine, some clay; saturated, compact Gravel; very rocky	20-39 39-42
3	NW NW NW NW 30-117-50	Gravel, fine; oxidized, moist, dirty Sand, fine; oxidized, saturated, dirty Sand, fine; unoxidized, saturated, dirty	2- 6 13-15 15-21
4	NE NW NW NE 3-117-50	Sand and gravel, light-brown, fine to medium; dry	0- 1
5	NE NE NE NE 3-117-50	Sand, medium; dry, clean	1-20
6	SE SE SE NE 3-117-50	Sand, coarse; dry, clean Sand, fine; dry, clean Gravel, medium; dry, clean Gravel, cobbly; saturated, 1- to 2½-inch cobbles	1- 3 3- 6 6- 9 9-25
7	SE SE SE SE 3-117-50	Gravel, medium; saturated, clean Gravel, cobbly; saturated, unknown size, difficult drilling Sand, medium, silty; saturated, dirty Sand, medium, silty, clayey; saturated, dirty, hard	2- 7 7-15 15-30 30-40
8	SW SW SW SE 3-117-50	Gravel with sand, medium; saturated Gravel, medium; saturated, clean Gravel, pebbly; saturated Sand, coarse; saturated	2- 5 5-20 20-30 30-35
9	NW NE SW NW 10-117-50	Gravel, yellowish-brown, medium to coarse; saturated Gravel, fine, sandy Sand, gray, very coarse, gravelly Gravel and sand; few boulders	2-10 10-17 17-22 22-35
10	NW NW NW NW 15-117-50	Gravel, brown, fine, clayey; dry Gravel, brown, fine; moist, clean Sand, brown, very coarse; saturated, some clay Sand, gray, very coarse; clean, compact	0-10 10-15 15-33 33-56
11	NE NE NE NE 16-117-50	Sand and gravel, reddish-brown, fine to medium; dry Sand and gravel, reddish-brown, medium, clayey; moist	13-17 17-22
12	SW SW SW SW 15-117-50	Gravel, brown, medium; dry Sand, brown, very coarse and gravel, fine; saturated	0- 8 8-22
13	NE NE NE NE 21-117-50	Gravel	0-18

Test Hole No.	Location	Lithologic Description	From-to Feet
14	SE SE SE SE 20-117-50	Gravel, medium; oxidized, saturated, dirty	8-17
15	NE NE NW NW 27-117-50	Sand, brown, medium to very coarse, gravelly; saturated Sand, gray, medium to coarse, silty Sand, gray, medium to coarse, gravelly	15-18 18-32 32-36
16	NE NE NE NE 22-117-50	Sand, medium to coarse; dry Sand, coarse; saturated, clean Gravel, medium; saturated, clean Sand, coarse; saturated, clean Sand, coarse; unoxidized, saturated Sand, coarse; unoxidized, dirty	1-8 12-15 15-20 20-30 30-40 40-55
17	SE SE SE SW 14-117-50	Sand, brown, medium; dry Sand, brown, medium; saturated Sand, very coarse and gravel, fine; some clay, very clean at 45 feet, more coarse beyond 58 feet	6-10 10-13 20-69
18	SE NE NE SW 14-117-50	Sand, light-brown, fine to very coarse, gravelly; dry Sand, light-brown, fine to medium, gravelly; dry	0-4 4-15
19	SE SW SW SE 11-117-50	Sand, tan, very fine; moist Sand, brown, fine to medium; saturated Sand, brown, medium to coarse Sand, brown, medium to coarse, silty Sand, brown, medium to very coarse, gravelly Sand and gravel, brown, medium to coarse Sand, brown, fine to medium, silty Sand and gravel, gray, coarse Sand, gray, medium to coarse, gravelly Sand and gravel, gray, medium to coarse Sand, gray, fine to medium, silty	2-4 4-6 6-8 8-15 15-20 20-30 30-43 43-44 44-46 46-55 55-59
20	NE NE NE NW 11-117-50	Gravel, medium; dirty Sand, medium to coarse; saturated Gravel, cobble; unknown size, impassable	1-4 4-14 14-20
21	NE NE NE NE 1-117-50	Sand, medium; dry Gravel, medium; dry Sand, coarse; saturated Sand, coarse; unoxidized, saturated, dirty	1-5 5-13 13-20 20-30
22	SW NW NW SW 25-117-50	Sand, black, silty, clayey; (soil) Sand and gravel, reddish-brown, medium; dry	0-2 2-5
23	SW SW SW SE 26-117-50	Gravel and sand, brown, medium; dry	4-5
24	SE SE SE NE 34-117-50	Sand, medium, pebbly; dry	1-9
25	SE SE SE SE 36-117-50	Gravel, fine, sandy	8-14
26	SW NW SW NW 6-117-49	Sand and gravel, light-brown, fine to medium; dry Sand and gravel, brown, medium to coarse; saturated at 5 feet Sand and gravel, brown, fine, silty Sand and gravel, brown, medium to coarse, silty; scattered cobbles Sand and gravel, gray, medium to coarse; scattered cobbles	0-3 3-8 8-14 14-18 18-26

Test Hole No.	Location	Lithologic Description	From-to Feet
		Sand and gravel, gray, fine to medium; scattered cobbles	28-38
		Sand, gray, coarse to very coarse, silty, gravelly	38-46
		Sand and gravel interbedded, gray, coarse	46-70
27	NW NE NE NE 8-117-49	Sand, fine; oxidized, dry, clean	1- 7
28	SE SE SE NE 3-117-49	Gravel, medium; oxidized, dry, fairly clean	2- 5
		Gravel, coarse; oxidized, dry, fairly clean	5-12
29	NW NW NW NW 14-117-49	Gravel, medium and sand, coarse; saturated	20-24
30	SW SE SW SE 14-117-49	Sand, fine; oxidized, moist, clean	6-12
31	NW NW NW NW 23-117-49	Sand and gravel, yellow, coarse last 2 feet	17-30
32	NE NW NW NW 26-117-49	Sand, gray green, medium; saturated, some clay	14-55
33	SW SW SW SW 28-117-49	Gravel, coarse; dry, clean	1-13
34	SW SW SW SW 25-117-49	Sand, coarse; dry, clean, very soft	0-12
		Sand, clayey; unoxidized, saturated	12-16
35	NW SW SW SW 7-117-48	Gravel, medium to coarse; dry	2- 6
		Sand, coarse; dry, clean	6-13
		Sand, medium to coarse; dry, dirty	13-30
36	NW NW NW SW 29-117-48	Gravel, coarse; dry, clean	1-12
		Sand, coarse, very clayey; oxidized, saturated	15-30
		Sand, coarse, clayey; unoxidized, saturated	30-55
37	SW SW SW SW 31-117-48	Sand, coarse; dry	1-17
38	SE NE SE SE 6-117-47	Gravel, medium	1- 4
39	SW SE SW SE 5-117-47	Sand, coarse, clayey; unoxidized	16-20
40	NE NE NE SE 18-117-47	Gravel, fine; dry, dirty	2- 6
		Gravel, medium; saturated, dirty	6-20
41	SW SW SW SE 18-117-47	Sand, fine to medium; saturated, very clean	6-17
		Sand, fine to medium; unoxidized; saturated	17-20
42	NW NW NW NW 30-117-47	Sand, coarse; saturated, clean	20-25
43	SE SE SW SW 17-117-47	Sand and gravel, light-brown, medium, dry	2- 4
		Sand, medium brown, medium to coarse, gravelly; dry	4- 9
		Sand, brown, fine to coarse, silty	9-16
44	SE SE NE NE 17-117-47	Sand and gravel, brown	0- 2
		Sand, brown	6- 8
		Sand, dark brown, clayey	8-13
45	SE SE SE SW 9-117-47	Sand, fine; dry	1- 6
		Sand, coarse; saturated, some clay	6-20
46	NW NW SW NW 16-117-47	Sand, fine to silt, black; saturated	1- 8
		Sand, coarse; saturated, dirty	8-12
		Sand, medium to coarse, clayey; unoxidized, saturated	15-30
		Sand, coarse; saturated, clean	30-43
		Gravel, coarse; saturated, unknown size range	43-45

Test Hole No.	Location	Lithologic Description	From to Feet
47	NW NW NW NE 20-117-47	Sand, dark-brown, very coarse; saturated Sand, dark-brown, very fine; saturated Sand, coarse, pebbly; saturated, some clay	5-29 29-66 66-77
48	SW SE SE SW 20-117-47	Gravel, medium; dry	1-7
49	NW NW NW SW 29-117-47	Sand, coarse; saturated, dirty Sand, coarse; unoxidized, saturated, dirty Gravel, medium to coarse; unoxidized, saturated, dirty	15-22 22-30 30-35
50a	SW SW SW SW 21-117-47	Sand, coarse and gravel, medium	17-19
50b	SW SW SW SW 21-117-47	Sand, fine to medium, clayey; saturated Sand, coarse, very clayey; saturated	2-6 6-20
51	NW NW NW NE 28-117-47	Sand, light-brown, fine to coarse, gravelly Sand, dark-brown, fine to medium Sand, gray, fine to medium; saturated Sand, gray, very fine to medium, silty Sand, gray, very fine to very coarse, silty Sand, gray, very fine to very coarse, silty; some clay Sand, gray, medium to very coarse	2-3 3-4 4-8 8-13 14-20 20-23 23-29
52	SE SE SE SW 28-117-47	Sand, fine; moist Sand and clay; moist	5-12 12-16
53	NW NE NW NW 34-117-47	Sand, brown, medium; saturated	0-2
54	SW SE SW NW 34-117-47	Sand, yellow-brown, very fine to fine, silty; dry Sand, brown, very fine to fine; saturated at 5 feet Sand, gray, fine to very coarse	2-3 3-8 8-11
55	SE SE SW SE 8-116-50	Sand; dry, clean	0-2
56	SE SE SE NW 17-116-50	Sand, fine to medium, clayey, silty; some gravel	2-10
57	SW NW NW NW 20-116-50	Gravel, coarse; dry	1-3
58	SW SW NW NW 19-116-50	Gravel, coarse, clayey; dry	1-10
59	SE SE SE SE 16-116-50	Sand Gravel	0-1 10-12
60	SE SE SE SW 2-116-50	Gravel and sand, brown, medium to coarse	8-13
61	NW NW NW NE 13-116-50	Gravel, coarse; dry, dirty	9-18
62	SE SW SE NE 13-116-50	Sand, medium to coarse, gravelly; saturated, dense	20-25
63	SW SW NW NW 33-116-50	Gravel, medium; dry, clean Sand, coarse; dry, clean Gravel, pebbly; 1- to 2-inch size, impassable	0-10 10-15 15-20
64	SE SE SE SE 31-116-50	Gravel, medium; dirty	5-6
65	SW SW SE SW 17-116-49	Gravel, coarse; dry, clean	0-9
66	SW SE SE SW 19-116-49	Sand, reddish-brown, medium to coarse; dry Gravel and sand, reddish-brown, fine to medium; saturated, dirty	6-8 8-30

Test Hole No.	Location	Lithologic Description	From-to Feet
67	SW SW NW NE 1 116-49	Sand, black, medium to coarse; saturated Sand, coarse; saturated, clean Sand, black, coarse; oxidized, saturated Sand, medium to coarse; silty; saturated, dirty	1- 5 5- 9 9-15 15-25
68	SW SE SE SE 15 116-49	Rocks Gravel, medium to coarse; saturated, dirty Sand, medium; oxidized, saturated, dirty Sand, coarse; unoxidized, saturated, dirty	20-21 21-25 25-35 35-40
69a	SW SW SW NW 29 116-49	Sand, light-brown, clayey, silty; moist	2- 3
69b	SW SW SE SE 30-116-49	Gravel, light-brown, coarse, silty; saturated Sand and gravel, brown, fine to medium, silty	7-10 10-14
70	NW NW NW NW 32-116-49	Sand and gravel, reddish-brown Sand and gravel, clayey; saturated	0- 1 5- 7
71	SE SW SE SE 32 116-49	Gravel, brown, fine to medium, sandy; dry	1-11
72	SW SW SW SW 33-116-49	Sand and gravel, brown; dry, mostly sand, few boulders Gravel, medium; dry, few boulders Gravel, medium; saturated, few boulders	0- 7 7-18 18-19
73	NW SW SW NW 33 116-48	Sand, brown, medium; dry, uniform Gravel, fine and sand, very coarse; some clay, fairly clean Gravel, fine and sand, very coarse; saturated, little clay, clean	0- 4 4- 6 6-13
74	SE SE SE SE 28 116 48	Sand, very coarse, clayey; saturated	15-19
75	NE SW NE NW 3 116 47	Gravel, medium; moist	2- 6
76	NE NE SE SE 16-116-47	Sand; some fine gravel, very little silt and clay, well-graded Sand, fine, silty; poorly graded	4- 8 8-10
77	NW NE NE NW 34 116 47	Sand, coarse; saturated, dirty Gravel, medium, saturated, dirty Gravel, cobble, clayey; unknown size, impassable	3- 8 8-13 13-19
78	NW NW NW SW 33-116 47	Sand, very fine to silt Sand, fine to coarse, very silty; saturated at about 16 feet; sticky	4- 9 14-19
79	SW SE SE SW 34-116 47	Sand and gravel, medium, clayey; sticky Sand and gravel	10-15 15-40
80	NE NW NE NE 7 115 50	Gravel, coarse; oxidized, dry, dirty	1- 2
81	NW NE NW NE 4-115-50	Gravel, cobble and pebbles; unknown size, impassable	10-15
82	NE NE NW NW 19-115-50	Gravel and boulders, impassable	0- 5
83	SE SW SW SW 16 115-50	Gravel, cobbly; oxidized, some clay	4- 6
84	NE NE NE SE 4 115 50	Sand, coarse; dry, clean Gravel, coarse, pebbly; dry, very hard drilling Sand, coarse; saturated, clean	1- 7 7-23 23-40



Test Hole No.	Location	Lithologic Description	From-to Feet
85	NE NE NE NW 10-115-50	Gravel, coarse; dry, clean, boulders, impassable	0-25
86	SW SW SW NW 11-115-50	Sand, coarse; dry, very dirty Sand, coarse; saturated, dirty	9-19 19-23
87	NE NE NE NW 14-115-50	Boulders, impassable	10- ?
88	SW SE SW SE 22-115-50	Sand, medium; moist, clean	3- 7
89	NW NW SW SW 13-115-50	Sand, coarse; dry, very dirty Gravel, pebbly, clayey; hard drilling, impassable	1-10 10-15
90	NW NE NW NW 24-115-50	Gravel and boulders, impassable	0- 5
91	SW SW SE NW 24-115-50	Gravel, coarse; dry, dirty Gravel, cobble; dirty, difficult drilling, impassable	1- 4 4-10
92	SW SW SW SE 24-115-50	Sand and gravel	3- 9
93	SW SW SE SE 4-115-49	Gravel, dark-gray, medium, silty, clayey; saturated Gravel, orange-brown, very coarse, silty Gravel, brown, coarse, silty	1- 4 4- 8 8-10
94a	SE SE SE SE 4-115-49	Sand, pebbly; some yellow clay Sand, coarse, pebbly; some yellow clay Sand, dark-brown, coarse, clayey Sand, fine to medium, pebbly; some yellow clay	3- 5 7-11 11-15 15-38
94b	SE SE SE SE 4-115-49	Sand and gravel, reddish-brown; poorly sorted Sand and gravel, medium to coarse; saturated	0- 8 8-22
94c	SE SE SE SE 4-115-49	Sand and gravel; saturated, dirty Gravel layers, coarse	1-20 20-27
95	NE NW NW NW 31-115-49	Gravel, rocks; some clay	1- 6
96	SE SE SE SE 3-115-49	Sand, coarse, clayey; saturated Gravel, coarse; saturated, dirty Gravel, medium to coarse; unoxidized, saturated, clean	13-20 20-30 30-35
97	SE SE SE NE 10-115-49	Sand, rusty brown, fine to medium, gravelly; dry Sand and gravel, dark-brown, fine; saturated at 14 feet, some silt Sand, dark-brown, gravelly, silty Sand and gravel, gray, fine to medium	0- 8 8-15 15-20 20-32
98	NE NE SE SE 10-115-49	Gravel, coarse, pebbly	14-45
99	SE SW SE 10-115-49	Gravel, brown, silty, sandy; saturated at 6 feet Gravel and sand, gray, fine to medium	4-12 12-18
100	NW NW NW NW 14-115-49	Sand, brownish-gray, clayey, pebbly; moist Sand, reddish-brown, clayey, pebbly Sand and gravel, medium; saturated	2- 6 6- 7 7-15
101	NE NE NE SE 11-115-49	Gravel, very clayey; saturated, dirty, cohesive	20-30

Test Hole No.	Location	Lithologic Description	From-to Feet
102	NE NE NE NE 14-115-49	Sand and gravel, medium; saturated, dirty Sand, gray, fine to medium Sand, gray, medium to coarse, gravelly	1- 9 14-17 17-22
103	SW SW SW NW 14-115-49	Gravel, brown, fine to medium, sandy Gravel, brown, medium; saturated at 9 feet, some coarse Gravel, brown, medium to coarse, silty	3- 7 7-11 11-13
104	SW SW SW SW 14-115-49	Sand, brown, silty, sandy Sand and gravel, clayey; saturated	1- 3 3- 9
105	NE NE SE SE 12-115-49	Gravel, coarse; dry, clean Sand, medium; dry, clean Sand, coarse; saturated, clean	1-22 22-35 35-40
106	NE NE NE NE 13-115-49	Sand, medium to coarse; moist, dirty Sand, coarse; moist	15-40 40-50
107	NW NW NW NE 13-115-49	Sand, medium to coarse; dry, clean Sand, medium; moist, clean	1- 7 7-17
108	NE SE SE 14-115-49	Sand and gravel, medium to coarse; saturated, dirty	1-15
109	NE NE NW NE 23-115-49	Sand and gravel; dry Sand and gravel; saturated	1- 2 2-13
110	SE SE SE SE 13-115-49	Sand, buff, silty, saturated, few pebbles Sand, brown, clayey Sand, brown Sand and gravel	5- 6 8-12 12-17 17-34
111	NW NW SW NE 24-115-49	Gravel and sand, coarse; some clay Gravel, fine, pebbly; trace of clay Gravel, clayey Gravel, gray, clayey	7-22 22-30 30-57 57-68
112	SE SW SE SW 23-115-49	Gravel, coarse and sand, coarse Gravel, cobbles; tough drilling	5-14 14-15
113	SE SE SE SW 23-115-49	Gravel, clayey, sandy; saturated Gravel, medium to coarse, sandy	4-12 12-18
114	NE NE NW NE 26-115-49	Gravel and sand; saturated	4-15
115	NW NW NW NW 25-115-49	Gravel, reddish brown, clayey, sandy; saturated	4-29
116	SW SW NW NW 5-115-48	Sand, medium; saturated, dirty Sand, medium; unoxidized, saturated, dirty	9-20 20-40
117	SW SW SW SW 5-115-48	Gravel, coarse	0-46
118	SE SE SW SW 7-115-48	Sand, fine; dry, depth determined with spade	0- 4
119	NE NE NE NE 19-115-48	Sand, medium; dry, clean Gravel, medium; moist	1- 6 6- 9
120	SW NW NW SE 19-115-48	Gravel and sand, brown, fine to coarse, silty; dry	0- 8
121	NW SW SW SE 19-115-48	Gravel, coarse; dry, clean	1-12

Test Hole No.	Location	Lithologic Description	From-to Feet
122	SE SE SE SE 19-115-48	Gravel and sand; some pebbles Sand and gravel, clayey, pebbly	0-11 11-29
123	NE NE NE NE 30-115-48	Gravel and sand, reddish-brown; dry Sand and gravel, brown; dirty Sand and gravel, brown; saturated Sand, brown; saturated	5-12 12-16 16-27 27-37
124	SE SE NE NW 29-115-48	Gravel and sand, brown, medium to very coarse; dry	3-10
125	NE NE NE NW 29-115-48	Gravel, brown, very coarse, sandy; dry	2-8
126	SW SW SW SW 2-115-48	Sand, coarse; dry	1-5
127	NE NE NE NE 11-115-48	Gravel, coarse	0-5
128	SW SW NW NW 12-115-48	Sand, very coarse, very clayey	4-9
129	NW NW NW NE 14-115-48	Gravel and rocks	1-3
130	NW NW NW NW 28-115-48	Sand, very fine, silty; moist	2-13
131	NE NE NE NW 28-115-48	Gravel and sand, brown, fine to coarse, silty; dry Gravel, brown, medium to coarse, sandy; moist, some silt Sand, brown, medium to very coarse, silty, gravelly; moist Sand, buff, very fine to medium Sand, brown, fine to coarse, silty Sand, gray, medium to coarse; saturated at 50 feet	5-8 14-16 16-21 21-41 41-46 46-52
132	SE SE SE SE 21-115-48	Gravel and sand, fine Gravel, fine to medium and sand Gravel, fine to medium and sand; some yellow clay Gravel, fine to medium and sand	18-24 24-52 52-63 63-85
133	SE SE SE SE 29-115-48	Gravel, cobbles and boulders; some as much as 10 inches in diameter on the surface; impassable	0-20
134	SE SE SE NE 32-115-48	Sand, medium to coarse, clayey; saturated, dirty	1-12
135	SE SE SE SE 32-115-48	Gravel, brown, medium, clayey	2-5
136	NW NW NW NE 27-115-48	Sand, brown, fine to medium; moist, some coarse gravel Sand, brown, medium to very coarse, silty; moist, some very fine sand layers Sand, brown, very fine to medium; some coarse gravel Sand, very fine to fine; some coarse gravel Sand, brown, very fine to medium Sand, gray, very fine to medium; saturated at 54 feet Sand, gray, very fine to medium; some interbedded silt	8-12 12-21 21-29 29-41 41-45 45-76 76-96
137	NE NE NE NE 24-115-48	Sand, fine to medium; dry Sand, fine; dry, clean	1-5 5-13

Test Hole No.	Location	Lithologic Description	From to Feet
138	NW NW NW NW 25-115-48	Sand, gray, very fine to coarse, silty, clayey Gravel, gray, fine, silty, sandy	15-21 21-26
139	SW SW SW SW 7-115-47	Sand, fine to medium, dry	1-3
140	SE SE NE NE 4-115-47	Sand, very red, coarse; oxidized, dry, dirty Sand, coarse, clayey; oxidized, moist Gravel and pebbles; moist, dirty Sand, coarse; saturated, dirty Sand, coarse; unoxidized, saturated, dirty	0-13 13-20 20-30 30-45 45-55
141	NW NW NE SE 4-115-47	Gravel, fine; dry, dirty Sand, coarse, dry, dirty	0-3 3-10
142	SW NE SE SE 4-115-47	Sand, medium to coarse, silty Gravel and sand, silty	0-5 5-10
143	NE SW SE SW 3-115-47	Gravel, medium to coarse; saturated, dirty Sand, coarse; unoxidized, saturated, some clay	12-16 16-27
144	NW NW NW SW 10-115-47	Sand, dark gray, very fine to medium, silty, clayey; saturated Sand, gray, fine to medium, silty, gravelly	7-13 13-18
145	SW SW SW NW 9-115-47	Sand, light-brown, very fine to fine, very silty; dry Sand, dark brown, medium to very coarse, gravelly; dry Sand, brown, very fine to medium; moist	2-7 7-14 14-17
146	SW SW SE SW 8-115-47	Sand, brown, fine to medium, silty; saturated	6-13
147	NE SE SE SE 8-115-47	Sand, dark brown, medium; saturated, dirty	14-18
148	SW SW NW NW 16-115-47	Sand, fine; dry, clean Gravel, medium; moist, dirty	1-10 20-35
149	NE NE NE NE 16-115-47	Sand, light-brown, medium to very coarse, silty, gravelly Sand, dark brown, medium to very coarse, silty, gravelly Sand, light brown, medium, silty Gravel and sand, gray, coarse to very coarse, well rounded	0-17 17-35 35-45 45-67
150	NW NW NW SW 15-115-47	Gravel, coarse	15-33
151	SW SW SE SE 16-115-47	Sand, brown, medium to very coarse, gravelly; moist	18-26
152	SW SW SW SW 16-115-47	Sand, brown, very fine to fine; moist Sand, brown, very fine to fine, silty; moist, some clay	14-17 17-21
153	SE SE SE SW 17-115-47	Gravel, coarse; dry, dirty	0-7
154	NW NW NW SW 17-115-47	Gravel, medium to coarse; dry, dirty Gravel, cobble; dry, 1 to 2 inches in diameter	1-15 15-20
155	SE SE SE SE 18-115-47	Gravel and sand, brown, fine to medium, silty; dry	2-7

Test Hole No.	Location	Lithologic Description	From-to Feet
		Sand, gray and brown, medium, silty, gravelly; saturated at 13 feet, some interbedded clay	7-15
156	SW SW SW NW 20-115-47	Sand, dark brownish-gray, fine to medium, silty; dry	2-4
		Sand, orange-brown, very fine to fine, silty; dry	13-15
		Sand, orange-brown, very fine to fine, silty, gravelly; dry	15-18
157	NE NE NE NW 30-115-47	Sand, gray	11-30
158	NE NW NW NW 29-115-47	Sand, coarse; dry, dirty	3-13
160	NE NE NE NE 29-115-47	Sand, dark brownish-gray, silty	0-1
		Sand, brown, medium, silty	1-2
		Sand, brown, fine to very coarse, gravelly; dry	2-4
		Sand, brown, fine to very coarse, mostly medium, silty; dry; few pebbles	4-12
161	NW NW NE NW 9-114-50	Gravel, medium; dry, dirty	2-6
162	SW SE SE SE 18-114-50	Sand and silt; dry	1-5
		Gravel, cobble; unknown size, impassable	5-15
163	NW SW NW SW 19-114-50	Gravel and rocks	2-5
164	SW SW SW SE 19-114-50	Sand, fine; dry, dirty	1-3
		Gravel, medium; dry, dirty	3-7
		Sand, fine to coarse; dry, dirty	7-20
		Gravel, fine to medium; saturated, clean	20-30
		Gravel, fine; unoxidized, saturated, clean	30-40
165	SE 19-114-50	Gravel, yellowish; unsorted, dirty	7-10
		Gravel, bluish; unsorted, dirty	10-12
		Sand, coarse; sorted, dirty	12-15
		Gravel; dirty	15-20
		Gravel, coarse; dirty	20-30
		Sand, coarse; sorted, fairly clean	30-33
166	SW SW SW SE 17-114-50	Gravel, fine to coarse; dry, clean	0-10
		Gravel, cobble; about 3 inches in diameter, impassable	10-20
167	SW SW SW SW 16-114-50	Gravel, coarse; some clay layers	0-41
168	NE NE NW SE 16-114-50	Sand	1-13
		Gravel	13-19
169a	NW NW NW SW 15-114-50	Sand, brown, silty	0-2
		Gravel	7-8
		Sand, dark-brown to black, fine to coarse; some gravel and silt	8-29
		Gravel	29-31
		Sand, dark-brown to black, fine to coarse; some gravel and silt	31-33
		Gravel; compact, heavy	33-38
169b	NW NW NW SW 15-114-50	Gravel, fine to medium	7-8
		Sand, black, fine, silty; some gravel	8-29
		Gravel	29-30

Test Hole No.	Location	Lithologic Description	From-to Feet
170	SW SW NE SE 16-114-150	Sand, dark-brown to gray Gravel, dark-brown to gray Sand, dark-brown to gray Gravel, dark-brown to gray Sand, dark-brown to gray Gravel, dark-brown to gray	2-13 13-16 16-26 26-28 28-33 33-35
171	SW 15-114-50	Gravel, brown; unsorted, dirty	4- 9
172	SW NW NW NW 22 114-50	Gravel Sand; saturated at 8 feet	3- 7 7-29
173	NE 21-114 50	Gravel, yellow brown Gravel, yellow brown, medium Gravel, yellow-brown; heavy Sand, yellow-brown, gravelly Gravel, yellow brown, medium	2- 3 3- 8 8-25 25-33 33-61
174	SW SW SE SW 32-114-50	Gravel, medium; dry, dirty Gravel, cobble; difficult drilling, impassable	5-10 10-15
175	SE SE NE SE 33 114-50	Gravel, medium; dry, dirty	1- 3
176	NE NE NE NW 7 114 49	Sand, fine, clayey; saturated	6-20
177	NW 7-114-49	Gravel, brown; poorly sorted, dirty, impassable	10-15
178	NW NW NW SW 7 114-49	Gravel, medium; saturated, dirty Gravel, cobble; about 2 3 inches in diameter, hard drilling, impassable	15-35 35-40
179	NW NW SW SE 7-114 49	Gravel, fine to medium, silty; saturated Gravel, cobble; saturated, about 2-3 inches in diameter	15-20 20-35
180	NW NW NW NW 30-114-49	Gravel and sand	8-12
181	NW NE NE NE 14 114 49	Gravel, rocks; impassable	1- 4
182	SE SE NE SE 34 114-49	Gravel, coarse; dry, clean Sand, coarse; dry, dirty Sand, coarse; unoxidized, dirty	2- 8 8-15 15-19
183	SE SW SW SE 6-114 48	Gravel, medium; dry, fairly clean	2- 7
184	NW NW NW SW 7 114 48	Gravel, medium; dry, dirty	1- 5
185	SW SW SE SW 2 114 48	Sand, yellow, coarse, clayey; saturated	10-15
186	SE SE SE SE 2 114 48	Sand, brown, very coarse, clayey; saturated	7-11
187	SW SW SW NW 11 114 48	Sand, very coarse, clayey; saturated	4-11
188	NE NE NE NE 15-114 48	Gravel stringer at 18 feet	18- ?
189	NW NW NW NE 15-114 48	Gravel and sand, brown, medium; saturated Sand, brown, medium to coarse, silty	7- 8 8-17
190	NE NE NE NE 16-114 48	Sand, coarse to very coarse, clayey	8-12
191	SE SE SE SW 16 114 48	Sand, reddish brown, gravelly; dry Sand, light-brown, very fine to medium; dry Sand, brown, fine to very coarse; saturated at 12 feet	0- 3 8-11 11-15

Test Hole No.	Location	Lithologic Description	From-to Feet
		Sand and gravel, brown, medium to coarse Sand, gray, medium, gravelly	15-25 25-34
192	NW SW SW SW 15-114-48	Sand, tan, medium to coarse, silty; sticky	10-15
193	NE NE NW NE 32-114-48	Sand, brown, very coarse; saturated Sand, dark-gray; saturated, some clay	8-17 17-23
194	NW NW NW NW 23-114-48	Sand, fine; saturated	12-15
195	NW NW NW NE 14-114-48	Sand, reddish-brown, medium, silty; saturated	5- 8
196	SE NE NE NE 14-114-48	Gravel, reddish-brown, coarse; saturated, fairly clean	2-30
197	SE SE SE NE 12-114-48	Gravel, fine; dry, dirty Gravel, fine, clayey; saturated	2- 8 18-20
198	SE SE SE SE 27-114-48	Gravel, brown, sandy; dirty	0- 4
199	NW NW NE NE 35-114-48	Gravel, yellow, fine; dry, pea gravel Sand, yellow, medium, clayey; saturated	2- 5 12-21
200	SE SE SE SW 36-114-48	Sand, gray, medium, gravelly	15-16
201	SW SE SW SW 15-114-47	Sand, light-brown; some gravel	0- 3
202	SE SE SW SW 5-113-50	Gravel, brown, coarse; dry, impassable	4-12
203	NW NW NW NW 17-113-50	Gravel, fine and sand, very coarse, clayey; saturated, many scattered rocks	4-10
204	NE NE NE SW 18-113-50	Sand, reddish-brown, silty, gravelly; dry Sand, brown, silty, gravelly; dry Gravel and sand, medium to coarse, silty; dry, numerous boulders, very coarse in layers	0- 3 3- 8 8-37
205	NE NE NE NE 17-113-50	Sand, medium; some ½ inch pebbles	2-13
206	SE SE SE SE 4-113-50	Gravel; many rocks, hard drilling	3- 6
207	NE NE NE NE 9-113-50	Sand Gravel	0- 5 5- 7
208	NW NW NW NW 15-113-50	Gravel, brown; dry, rocks at 15 feet, impass- able	0-15
209	SW SW NW NW 20-113-50	Sand, clayey; dry	1- 7
210	NE NE NE SE 19-113-50	Sand, brown, fine to medium, silty, gravelly; dry, some thin, silty, yellow-brown clay layers Gravel, medium to coarse, silty, sandy; dry Sand, light-brown, medium to coarse, gravelly; saturated at 16 feet, slightly silty Sand, brown, medium to coarse Sand, brown, coarse, gravelly	3- 6 6-15 15-19 19-24 24-35
211a	NW NW NW NW 29-113-50	Sand, reddish-brown; moist Sand, brown; moist, interbedded clay layers, dirty Sand, buff, fine to medium; saturated Sand, brown, medium to coarse	9-11 11-12 12-27 27-34

Test Hole No.	Location	Lithologic Description	From-to Feet
211b	NW NW NW NW 29-113-50	Sand, yellow-brown, medium; saturated, clean Gravel, very coarse; saturated, clean Sand, gray, very coarse and gravel, gray, fine	8-18 18-25 25-32
212	SE SE SE NE 30-113-50	Gravel, medium; dry, clean Gravel, fine; saturated, clean Gravel, fine; unoxidized, saturated, clean	1-9 9-45 45-48
213	SE SE NW NW 31-113-50	Sand and gravel	7-39
214	SW SW SW SW 29-113-50	Sand, very coarse and gravel, fine; saturated, clean	9-31
215	SE SE SE SE 31-113-50	Sand, brown, medium Sand, very coarse; saturated, clean Sand, very coarse and gravel, fine; saturated, clean Gravel, cobble	5-9 9-30 30-41 41-42
216	SW SW SW SW 28-113-50	Sand, fine to medium; dry	2-15
217	SW SW SW NW 28-113-50	Gravel, brown, medium to coarse, sandy; saturated Sand, fine to very fine; few scattered coarse grains Sand, fine to very fine; few thin gravel layers Sand, gray, medium to very coarse Sand, gray, medium to very coarse; few gray, fine gravel layers	12-13 13-19 19-23 23-28 28-37
218	SE SE NE NE 22-113-50	Gravel, brown, coarse; saturated	3-6
219	SW SW SW SW 11-113-50	Sand, brown, medium; dry	2-3
220	SW SW SW SW 12-113-50	Gravel, medium; dry	2-9
221	NW SW NW NW 24-113-50	Sand, very coarse and gravel; saturated, dirty	3-15
222	SE SE SE SE 13-113-50	Gravel, medium; dry, clean Sand, fine to medium; clean Gravel, fine; saturated	5-8 8-12 12-23
223	NE NE NE SE 24-113-50	Sand, dark brown, silty, clayey Gravel, light brown, fine to medium, very silty, sandy; dry Sand, medium, gravelly, rocky; moist at 12 feet	0-2 2-8 8-13
224	SW SW SW SE 24-113-50	Sand and gravel, dark brown, medium, very silty; dry Gravel and sand, medium to coarse; moist Gravel, brown, medium to coarse, very sandy, silty; saturated at 22 feet	0-10 10-12 12-25
225a	NE NE NE NE 26-113-50	Gravel and sand, yellow-brown	1-15
225b	NE NE NE NE 26-113-50	Sand, light brown, gravelly; dry, dirty Sand, brown, gravelly; moist	0-9 9-11
226	NE NE NE NE 35-113-50	Sand, medium to coarse; dry, dirty Sand, fine to medium, clayey; moist, dirty	7-20 20-25



Test Hole No.	Location	Lithologic Description	From-to Feet
227	SW SW SW SE 25-113-50	Sand, brown, very silty, gravelly; dry Gravel and sand, fine to medium, very silty; dry	3- 5 5-11
228	SW SE SW SE 36-113-50	Gravel and sand, very light-brown, very silty; dry Gravel and sand, brown, medium to coarse, silty; dry	0- 3 3-10
229	SE SE SE SE 36-113-50	Sand, coarse; oxidized, saturated	5-20
230	NW 19-113-49	Gravel, heavy; moist, some small rocks	2- 6
231	SE NE SE NE 19-113-49	Gravel, cobble; impassable	8-?
232	SW SW SW SW 19-113-49	Gravel Gravel	11-13 18-19
233	SW SW SW NW 30-113-49	Sand, dark-brown, very silty, gravelly; dry Sand, brown, silty, gravelly; dry Gravel and sand, medium to coarse; dry	2- 3 3- 8 8-16
234	SW SW SW SW 30-113-49	Sand, medium to coarse; dry	1- 3
235	NW NW NW SE 31-113-49	Gravel	2-19
236	SW SW SW SW 29-113-49	Gravel, cobble; impassable	7-?
237	SE SE SW SW 15-113-49	Gravel; many rocks, impassable	11-13
238	NE NW NW NW 2-113-149	Gravel, cobble; impassable	2-?
239	SW SW NW NW 12-113-49	Sand, medium to coarse; dry, dirty Gravel, coarse; dry, dirty	2- 6 6-16
240	SW SW SW SE 12-113-49	Gravel and sand, light-brown, silty; dry Sand, brown, silty, gravelly; saturated at 6 feet Gravel and sand, gray, fine to coarse, silty Sand, fine to medium, silty	2- 4 4-12 12-13 13-21
241	SE SE SE SE 13-113-49	Gravel, medium; saturated, dirty	10-16
242	SE SE SW SW 23-113-49	Gravel	3- 6
243	SE SE SW SW 33-113-49	Gravel, rocky; dry, some clay	2- 5
244	SE SE SE SE 36-113-49	Gravel, rocky; oxidized, dry, some clay	1- 7
245	NW NW NW NW 18-113-48	Sand, medium; oxidized, saturated, clean Sand, clayey; oxidized, saturated, dirty	4-13 13-19
246	NE NW NE NE 4-113-48	Sand, light-brown, medium, rocky; dry Sand, light-brown; moist, some rocks	4- 8 9-20
247	SE SW SW SW 19-113-48	Gravel	1- 6
248	SW SE SE SE 19-113-48	Gravel	5- 8
249	SW SE SW SE 20-113-48	Sand Gravel	4- 5 5-17
250	NW NE NE NE 10-113-48	Gravel, medium; saturated Sand and gravel, light-brown, fine	9-10 14-21

Test Hole No.	Location	Lithologic Description	From-to Feet
251	SW SW SW SW 1-113-48	Gravel, sandy; saturated Sand	14-16 16-24
252	NW NW NE NW 23 113-48	Gravel, medium to coarse; dry Sand, light-brown, very coarse; saturated Sand, medium to very coarse; saturated Sand, dark-gray, very fine; saturated	2-13 13-21 21-24 24-60
253	SW SW NW NW 23 113-48	Sand, coarse and gravel, light brown; dry Sand, very coarse; saturated Gravel, gray, fine; saturated Sand, very fine to medium	1-13 13-22 22-29 29-59
254	SE SE SW SW 23 113-48	Gravel	9-27
255	SE SW SE SW 22-113-48	Gravel	1-26
256	SW SW SW SW 22-113-48	Sand, light brown, fine to very coarse, gravelly; dry Sand, brown, fine to very coarse, silty; saturated at 7 feet Sand, brownish gray, very fine	0- 3 3- 7 14-18
257	NE NE NE NE 33-113-48	Gravel, medium; saturated, dirty	12-29
258	NW NE NE NW 34 113-48	Sand, light brown, gravelly; dry, slightly silty Gravel and sand, brown, fine to very coarse, silty; dry, some cobble Gravel, medium to very coarse, sandy, cobbly; dry	1- 3 3- 8 8-21
259	NE NE NE NE 34-113-48	Sand, coarse, clayey; dry, dirty	1- 6
260	SE SE SE SE 34 113-48	Gravel, rocky; some clay, impassable	1- 3
261	NE NE NE NW 21-113-47	Sand, medium and gravel, light-brown; satu- rated, some rocks	4-15
262	NE NE NE NE 29-113-47	Gravel	1- 4

TABLE 2. List of sand and gravel pits in Deuel County, South Dakota, which are on file at the District Office, South Dakota Department of Highways, Huron, South Dakota.

Pit No.	Owner and Address	Description	Type	Average Depth in Feet	Average Depth of Stripping in Feet
1	Crocker, George — Goodwin	SE¼ 9-117-50	Gravel	10.7+	1.5
2	Swanz, Don — Strandburg	NW¼ 11-117-50	Gravel		
3	Bjerke, Don — Clear Lake	SW¼ 11-117-50	Gravel	9.0	1.5
4	Swanz, Don — Strandburg	SE¼ 11-117-50	Gravel	12.0+	1.5
5		NW¼ 6-117-49	Gravel		
6	Roe — Revillo	NW¼ 4-117-49			
7	Roe — Revillo	NE¼ 4-117-49	Filler		
8	Beekman, W. O., and Geo. — Revillo	NE¼ 13-117-49	Filler		
9	Walseth, E. E. — Clear Lake	NW¼ 19-117-48			
10	Toben, Doug — Clear Lake	NE¼ 30-117-48	Gravel	9.5	2.0
11	Kruze, Lloyd — Marietta, Minn.	SW¼ 20-117-47	Gravel	9.0	1.6
12	Kruze, Roger — Marietta, Minn.	SW¼ NE¼ 20-117-47	Gravel	12.0+	1.8
13	Quisley, Muriel — Goodwin	SW¼ 12-116-50		7.5	2.5
14	Kleveter, Wm. — Goodwin	SW¼ SE¼ 12-116-50		7.5	2.5
15	Rhyme, Orin — Clear Lake	NW¼ 30-116-49			
16		NE¼ 31-116-49	Filler		
17	Winter, Emery — Altamont	SE¼ 21-116-49		14.2+	2.5
18	Webber, Fred — Washington	NW¼ 26-116-49			

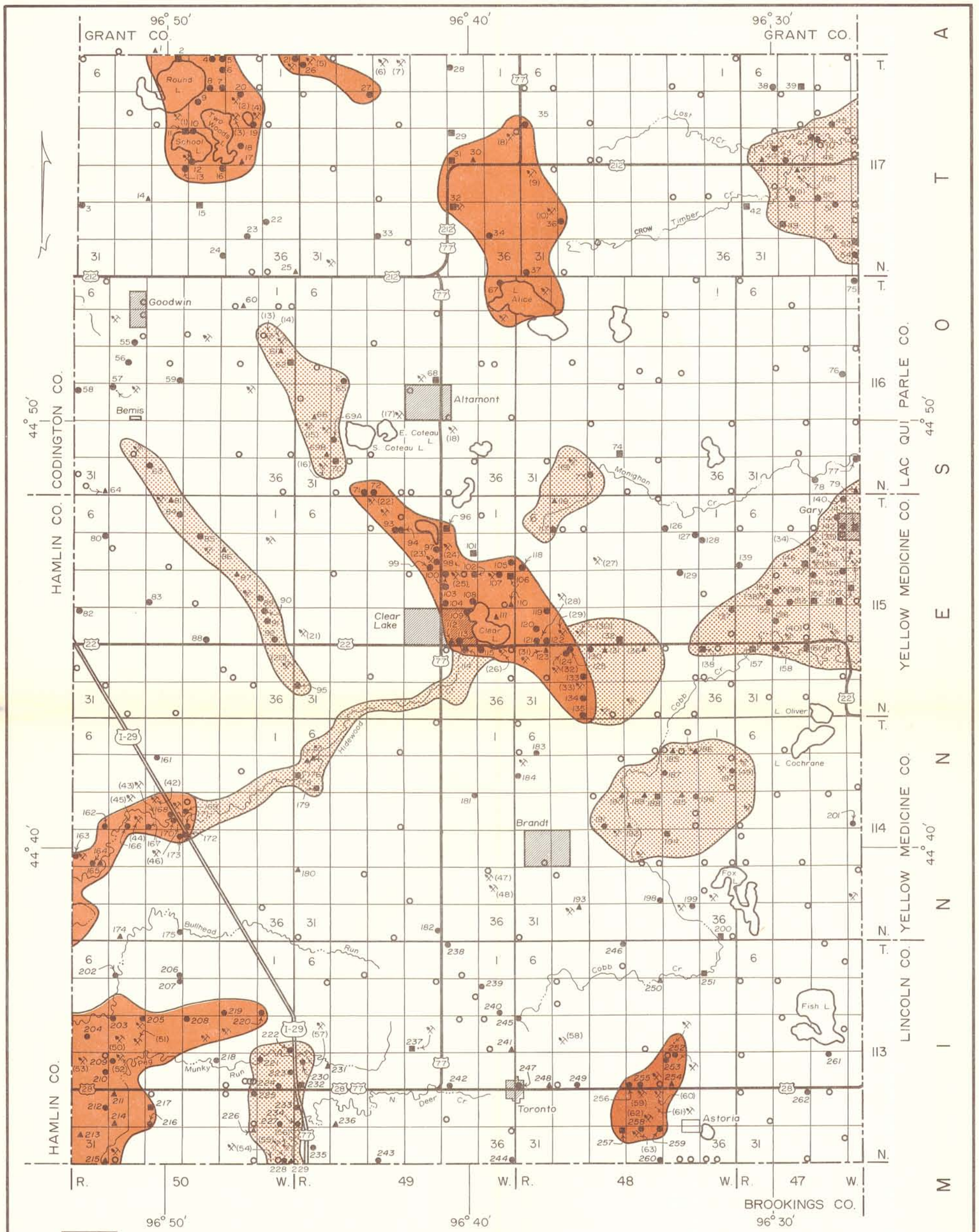
Table 2 - continued.

Pit No.	Owner and Address	Description	Type	Average Depth in Feet	Average Depth of Stripping in Feet
19	Walters, Clarence — Gary	NW¼ NE¼ 32-116-48		11.4+	1.4
20	Uckert, Manford — Clear Lake	NE¼ SE¼ 25-115-50			
21		SW¼ 19-115-49			
22	Johnson, Joe — Clear Lake	NW¼ 4-115-49			
23	Krieger, Orin — Clear Lake	SE¼ 10-115-49			
24	Weber, Fred J. — Clear Lake	NW¼ 11-115-49			
25	Kluckman, Arthur — Clear Lake	E½ NW¼ 14-115-49			
26		NW¼ NE¼ 25-115-49	Filler		
27		SW¼ 9-115-48	Sand		
28	Paulson, Elmer — Clear Lake	SE¼ 19-115-48		7.2+	2.8
29	Boeke, Carl — Clear Lake	SW¼ 20-115-48	Filler	9.8	3.3
30	Boeke, Carl — Clear Lake	SE¼ 20-115-48	Filler	9.0	1.0
31	Angle, Glen — Clear Lake	NE¼ 30-115-48	Gravel		
32	Nordquist, Harold — Clear Lake	NW¼ 29-115-48			
33	Ceforek, Lloyd — Clear Lake	NE¼ 32-115-48	Gravel	5.8+	2.0
34	Beste, Henry — Gary	W½ NW¼ 9-115-47		8.5	2.5
35	Beste, Henry — Gary	SE¼ NW¼ 9-115-47		10.1+	3.9
36	Hults, Laverne S. — Gary	S½ SW¼ 9-115-47			
37		S½ SW¼ 10-115-47			
38	Rogne, Arnold and Chaplin of Calvary Cathedral — Sioux Falls	SE¼ 18-115-47			

39	Miller, Woodrow — Gary	SW¼ 17-115-47					
40	Brevick, Arnold K — Watertown	SE¼ SW¼ 20-115-47	Sand				
41		SW¼ SE¼ 21-115-47	Filler				
42	McKay, Burdette and Violet — Clear Lake	NW¼ 16-114-50	Gravel				
43	McKay, Bert — Clear Lake	NW¼ SW¼ 16-114-50	Gravel	5.2+		4.1	
44	Gerth, Herman F. — Estelline	SE¼ 17-114-50	Gravel	7.4+		2.6	
45	Kasdorf, Art — Clear Lake	SE¼ SW¼ 17-114-50	Gravel	10.3+		1.3	
46	Wheeler, Parker — Clear Lake	SE¼ 16-114-50	Gravel	8.2+		1.1	
47	Wold, Jennings — Brandt	NW¼ 25-114-49					
48	Wold, Jennings — Brandt	NE¼ SW¼ 25-114-49					
49	Olson, Lawrence — Gary	NW¼ 7-114-47					
50	Brown, Clarence — Estelline	SW¼ 17-113-50					
51	Brown, Clarence — Estelline	SE¼ 17-113-50					
52	Muelder, Henry — Estelline	NW¼ 20-113-50					
53	Tekronty, Lubert	NW¼ 19-113-50					
54	Johnson, C. J. — Estelline	SE¼ SW¼ 36-113-50					
55	Johnson, C. J. — Estelline	SW¼ SE¼ 36-113-50					
56	Brookings County	NE¼ SE¼ 36-113-50					
57	Buschenfeld, Melvin — Toronto	NW¼ 19-113-49	Gravel	9.2+		4.0	
58	Hanna, Raymond — Toronto	SW¼ 17-113-48					
59	Sorenson, S. R. — Toronto	NE¼ NW¼ 27-113-48					

Table 2 -- continued.

Pit No.	Owner and Address	Description	Type	Average Depth in Feet	Average Depth of Stripping in Feet
60	Landmark, Vernon — Astoria	NE¼ NE¼ 27-113-48			
61	Montgomery, Clarence — Astoria	E½ 27-113-48			
62	Montgomery, Clarence — Astoria	S½ 27-113-48			
63	Lokkenburg, John — Toronto	NW¼ 34-113-48		7.5+	2.6



- Good probability of finding sand or gravel deposits.
- Fair probability of finding sand or gravel deposits.
- Poor probability of finding sand or gravel deposits.

(17)X Gravel pit. Number in parentheses refers to Table 3.

0 1 2 3 4 5 6 miles

- 198● Test hole containing sand or gravel in upper 25 feet with 0-4 feet of overburden. Number refers to Table 1.
- 61▲ Test hole containing sand or gravel in upper 25 feet with 5-10 feet of overburden. Number refers to Table 1.
- 200■ Test hole containing sand or gravel in upper 25 feet with 11-25 feet of overburden. Number refers to Table 1.
- Test hole containing no sand or gravel in upper 25 feet.

Map showing test holes, gravel pits, and sand and gravel deposits in Deuel County.