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Information Pamphlet No. 33

SAND AND GRAVEL RESOURCES IN
MOODY COUNTY, SOUTH DAKOTA

by

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United States Geological Survey,
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and Moody County

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INTRODUCTION

This pamphlet is one of a series of reports describing the geology and water resources of Moody County. It is designed to be an uncomplicated, non-technical aid in the search for sand and gravel deposits.

Other reports in the series include:

- a. Major aquifers in Lake and Moody Counties, South Dakota: South Dakota Geological Survey Information Pamphlet no. 31, Hanson, Donald S., U.S. Geological Survey, 1986.
- b. Water resources of Lake and Moody Counties, South Dakota: U.S. Geological Survey Water Resources Investigations Report no. 84-4209, Hanson, Donald S., 1986.
- c. Geology of Lake and Moody Counties, South Dakota: South Dakota Geological Survey Bulletin no. 35, Hammond, Richard (in preparation).

Report (a.) describes the availability, quality, and location of major aquifers (water-bearing deposits) in a short, easy to read, pamphlet. Report (b.) is a more technical and somewhat more exhaustive investigation of the water resources of the Counties. Report (c.) is a scientific investigation of the geology of Lake and Moody Counties.

GEOLOGIC OVERVIEW

Most of the sand and gravel deposits found in Moody County were deposited by glacial ice or meltwater, that covered the region thousands of years ago. Some sand and gravel has been deposited by streams since the retreat of the glaciers. A short description of geologic terms used in this text follows.

Glacial Till

The glaciers were large masses of ice that thousands of years ago, originated from snow accumulations to the north. These glaciers flowed southward to the area that is now Moody County, picking up earth debris as they went. Some of this debris, a mixture of clay, silt, sand, gravel, and boulders was redeposited directly from the ice. Till, the term used to describe this mixture, is also often called "blue clay" or "boulder clay." In the Moody County area the till is made up primarily of clay and is not considered a source of sand and gravel. However, small isolated sand and gravel hills or lenses may occur.

Glacial Outwash

Glacial outwash is the term used to describe any deposit of glacial debris which has been washed and sorted by water flowing from melting glacier ice. The grain size of these deposits depends upon the velocity of the water which deposited it and the type of material. Deposits left by slow flowing streams are made up primarily of silts and clays. Very fast flowing streams may have left streambeds composed entirely of boulders. Most glacial outwash, however, is made up of an assortment of sand and gravel, with minor amounts of finer and coarser materials. Deposits of glacial outwash are the major source of sand and gravel in Moody County.

Alluvium

Alluvium is the term used to describe the material deposited by streams since the retreat of the glaciers. Grain size of the alluvial deposits is determined by the same factors as glacial outwash. Alluvium is found in the valleys of present-day streams and can often be a good source of sand and gravel.

Terrace Deposits

Terrace deposits are flat-topped alluvial or outwash deposits that are remnants of former flood plains. The streams which made them have since cut their channels deeper and developed new flood plains at lower levels. Some of the sand and gravel found in Moody County occurs in this type of deposit.

EXPLANATION OF TABLES

Table 1 is a list of only those test holes in which sand or gravel was encountered within 25 feet of the land surface. This table gives the location of the test hole, and the depth and description of the sand and gravel deposits. The complete logs of all the test holes drilled in Moody County are on file at the South Dakota Geological Survey in Vermillion, South Dakota.

Table 2 is a list of sand and gravel pits on file with the South Dakota Department of Transportation, Division of Highways in Pierre, South Dakota. Where possible, this table gives the landowner and location of the pit, the average thickness of overburden, the average thickness of sand and gravel being mined, and the type of aggregate deposit. The actual thickness of a deposit may be greater than that which is listed in the table as being mined.

EXPLANATION OF MAP

The map shows the location of the test holes and sand and gravel pits. It also shows the towns, major highways, and major lakes, rivers, and creeks.

Test-hole data are shown on the map using three types of map symbols. A dot (●) represents a test hole in which sand or gravel was found within 25 feet of the land surface, with 0 to 5 feet of overburden. A square (■) indicates that sand or gravel was found within 25 feet of the land surface but greater than 5 feet of overburden was encountered. These two types of symbols are numbered and the pertinent test-hole information is listed in table 1. The third symbol is an open circle (○), which indicates that no sand or gravel was found within 25 feet of the land surface. Logs of these test holes are available at the South Dakota Geological Survey in Vermillion, South Dakota. Locations of the sand and gravel pits are indicated by a crossed pick and shovel (⌘). The pits which are numbered are listed in table 2, and additional information is on file at the Department of Transportation, Division of Highways, in Pierre, South Dakota. No attempt was made to distinguish the inactive pits from the actively mined pits.

To aid in the delineation of the most promising areas of finding sand and gravel, the map has been divided into three area types, "good," "fair," and "poor." These three types of areas were differentiated using test-hole data, sand and gravel pit locations, soil survey information, topographic map and aerial photograph interpretation, and field observations. Areas with a "good" or "fair" probability of finding sand and gravel have been assigned a letter on the map and are discussed further in the following section.

Sand and gravel deposits found in the "good" areas are generally thick, have very little overburden, and cover a broad area. In these areas, much mining for sand and gravel has already occurred and is occurring at the present time. Sand and gravel deposits found in the "fair" areas are generally thinner, have more overburden, or are laterally discontinuous. There are sand and gravel deposits in the "poor" areas, but a very expensive and exhaustive exploration program would be needed to locate all of these deposits.

Sand and Gravel

Area "A" is an outwash deposit encompassing about 12 square miles within the Pipestone Creek valley. It is a fairly continuous body of sand and gravel, but has been designated as "fair," because the deposit is relatively thin, averaging about 10 feet in thickness, with an average of about 7 feet of overburden in the test holes drilled.

Area "B," designated as "fair," contains discontinuous sand and gravel deposits within the valley of West Pipestone Creek. The outwash deposits here consist mostly of fine sand, with a good deal of silty alluvial overburden.

Area "C," designated as "fair," represents outwash deposits within the Brookfield Creek Valley. The sand and gravel deposits are thicker in the downstream portion of the area and are thin and become more discontinuous in the upstream portion.

Area "D," designated as "good," is a very large continuous body of outwash sand and gravel, encompassing about 59 square miles within the valley of the Big Sioux River. The thickness of the deposit may exceed 50 feet in some spots. The overall area, however, averages about 18 feet in thickness for all the test holes drilled. The amount of overburden is quite variable over the length of the area, but averages about 3 feet in thickness for all the test holes drilled. A great deal of mining for sand and gravel has occurred and is occurring in this area.

Area "E," designated as "good," represents outwash deposits of sand and gravel within the Skunk Creek valley. Area "E" is a thick, narrow segment of a much larger deposit found in Lake and Minnehaha Counties.

Area "F," designated as "fair," contains discontinuous sand and gravel deposits within the Bachelor Creek valley. The sand and gravel is found in isolated remnants of terraces along the valley walls. The valley floor contains mostly silty alluvial deposits but some fine sand may also be present.

Area "G," designated as "fair," represents sand and gravel deposits within the Squaw Creek valley. Outwash deposits here remain as thin terrace remnants along the valley walls.

Area "H," contains sand and gravel deposits within the Flaudreau Creek Valley. Sand and gravel deposits found along the valley floor are thin and discontinuous and have been designated as "fair." Also included in area "H," are several thick terrace deposits which have been designated as good. These terrace deposits have an average thickness of about 20 feet with very little overburden. Several large pits are found in these portions of area "H."

Area "I," designated as "fair," contains very thin and isolated outwash deposits in the valley of Mud Creek.

Area "J" represents outwash deposits associated with the Spring Creek valley. The portion of Area "J" which is designated as "good" contains thick, continuous terrace deposits along the valley walls. These deposits average about 20 feet in thickness with an average of about 2 feet of overburden in the test holes drilled. In the northeast portion of Area "J" is an extension of these terrace deposits which is very thin and has been designated

as "fair." Also designated as "fair" is an area representing thin terrace deposits along the walls of a small unnamed creek which enters Spring Creek from the north.

Area "K," designated as "fair," represents thin, discontinuous terrace deposits along the valley walls of two unnamed creeks which merge and enter the Big Sioux River.

Area "L" represents outwash deposits associated with the Battle Creek valley. Within Area "L" is an area of higher elevation, designated as "poor," in which glacial till is found cropping out at the surface. On the western side of this till area is the valley of the present day Battle Creek. This portion of Area "L," designated as "fair," contains fine sand and silty alluvial deposits along the valley floor and has glacial till cropping out along the valley walls. Along the eastern side of the glacial till area is a valley containing thick, continuous outwash deposits which were probably left by an alternate route used by the ancient Battle Creek. This portion of Area "L," designated as "good," has sand and gravel deposits averaging about 20 feet in thickness with very little overburden. Several large pits are located in this portion of Area "L."

ECONOMIC CONSIDERATIONS

It should be emphasized that this study is quite general and should be used only as a guide to further exploration and development of the sand and gravel resources. The development of a specific site will depend upon material specifications for the desired use, development costs, transportation costs, and future markets.

TABLE 1. LIST OF TEST HOLES IN MOODY COUNTY, SOUTH DAKOTA,
WHICH CONTAIN SAND OR GRAVEL WITHIN 25 FEET OF THE
LAND SURFACE.

LITHOLOGIC DESCRIPTIONS, AS LISTED, HAVE BEEN CONDENSED FROM
DATA CONTAINED IN 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.
NUMERICAL VALUES INDICATE DEPTH IN FEET BELOW LAND SURFACE.

TEST HOLE NUMBER: 1
LOCATION: 105N-47W-03CCDC
LEGAL LOCATION: SW SE SW SW SEC. 03, T. 105 N., R. 47 W.

7 - 9 SAND, BROWN, FINE, CLAYEY, SILTY; MOIST,
OXIDIZED

* * * *

TEST HOLE NUMBER: 2
LOCATION: 105N-47W-04AAAA
LEGAL LOCATION: NE NE NE NE SEC. 04, T. 105 N., R. 47 W.

3 - 15 SAND AND GRAVEL, MEDIUM

* * * *

TEST HOLE NUMBER: 3
LOCATION: 105N-47W-04CCCC
LEGAL LOCATION: SW SW SW SW SEC. 04, T. 105 N., R. 47 W.

15 - 33 GRAVEL, BROWNISH-BLACK, FINE TO MEDIUM,
CLAYEY, SANDY; SATURATED, CLEANER AND
SANDIER WITH DEPTH

* * * *

TEST HOLE NUMBER: 4
LOCATION: 105N-47W-04DCCD
LEGAL LOCATION: SE SW SW SE SEC. 04, T. 105 N., R. 47 W.

0 - 4 SAND, BROWN, MEDIUM TO COARSE, PEBBLY;
DRY, OXIDIZED
8 - 16 SAND, TAN, CLAYEY, PEBBLY; SATURATED,
OXIDIZED

* * * *

TEST HOLE NUMBER: 5
LOCATION: 105N-47W-09CCCC
LEGAL LOCATION: SW SW SW SW SEC. 09, T. 105 N., R. 47 W.

10 - 14 GRAVEL, FINE, SANDY, CLAYEY; SATURATED
14 - 20 GRAVEL, FINE, SANDY; SATURATED, CLEAN

* * * *

TEST HOLE NUMBER: 6
LOCATION: 105N-47W-16AABB
LEGAL LOCATION: NW NW NE NE SEC. 16, T. 105 N., R. 47 W.

11 - 14 GRAVEL, BROWN, FINE, SILTY, SANDY,
CLAYEY; SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 7
LOCATION: 105N-47W-17BAAA
LEGAL LOCATION: NE NE NE NW SEC. 17, T. 105 N., R. 47 W.

4 - 6 SAND, LIGHT-BROWN, MEDIUM, VERY CLAYEY,
PEBBLY; MOIST, OXIDIZED
6 - 11 GRAVEL, LIGHT-BROWN, MEDIUM, SANDY;
SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 8
LOCATION: 105N-47W-17DCCC
LEGAL LOCATION: SW SW SW SE SEC. 17, T. 105 N., R. 47 W.

4 - 12 SAND, BROWN, COARSE, GRAVELLY, CLAYEY;
SATURATED

* * * *

TEST HOLE NUMBER: 9
LOCATION: 105N-47W-17DDDD
LEGAL LOCATION: SE SE SE SE SEC. 17, T. 105 N., R. 47 W.

3 - 8 SAND, REDDISH-BROWN, PEBBLY; DRY,
OXIDIZED

* * * *

TEST HOLE NUMBER: 10
LOCATION: 105N-47W-18DAAA
LEGAL LOCATION: NE NE NE SE SEC. 18, T. 105 N., R. 47 W.

12 - 33 SAND, YELLOW, FINE, (EOLIAN?)

* * * *

TEST HOLE NUMBER: 11
LOCATION: 105N-47W-18DDDC
LEGAL LOCATION: SW SE SE SE SEC. 18, T. 105 N., R. 47 W.

3 - 7 SAND, REDDISH-BROWN, WELL SORTED; DRY,
OXIDIZED

7 - 13 SAND, REDDISH-BROWN, CLAYEY; DRY,
OXIDIZED

* * * *

TEST HOLE NUMBER: 12
LOCATION: 105N-47W-19CDDD
LEGAL LOCATION: SE SE SE SW SEC. 19, T. 105 N., R. 47 W.

9 - 17 SAND, MEDIUM-BROWN, SILTY, PEBBLY; DRY,
OXIDIZED

24 - 28 SAND, MEDIUM-BROWN, CLAYEY; SATURATED,
OXIDIZED

* * * *

TEST HOLE NUMBER: 13
LOCATION: 105N-47W-20DCDD
LEGAL LOCATION: SE SE SW SE SEC. 20, T. 105 N., R. 47 W.

5 - 9 SAND, BROWN, FINE TO MEDIUM, SILTY,
CLAYEY; MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 14
LOCATION: 105N-47W-31AABA
LEGAL LOCATION: NE NW NE NE SEC. 31, T. 105 N., R. 47 W.

16 - 23 GRAVEL, FINE, SANDY, CLAYEY; SATURATED

* * * *

TEST HOLE NUMBER: 15
LOCATION: 105N-47W-31BBBA
LEGAL LOCATION: NE NW NW NW SEC. 31, T. 105 N., R. 47 W.

3 - 24 SAND, REDDISH-BROWN, PEBBLY; DRY,
OXIDIZED
24 - 28 SAND, REDDISH-BROWN, CLAYEY; MOIST,
OXIDIZED

* * * *

TEST HOLE NUMBER: 16
LOCATION: 105N-47W-31BCCC
LEGAL LOCATION: SW SW SW NW SEC. 31, T. 105 N., R. 47 W.

5 - 7 SAND, BROWN, SILTY, PEBBLY, POORLY
SORTED; MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 17
LOCATION: 105N-47W-31CDCD
LEGAL LOCATION: SE SW SE SW SEC. 31, T. 105 N., R. 47 W.

5 - 9 SAND, TANNISH-BROWN, GRAVELLY; DRY,
OXIDIZED
9 - 14 SAND, MEDIUM-BROWN, GRAVELLY; MOIST,
OXIDIZED
19 - 28 SAND, MEDIUM-BROWN, CLAYEY, PEBBLY;
SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 18
LOCATION: 105N-47W-32BCCC
LEGAL LOCATION: SW SW SW NW SEC. 32, T. 105 N., R. 47 W.

9 - 14 GRAVEL, BROWN, SILTY, SANDY, POORLY
RTED; SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 19
LOCATION: 105N-48W-02DCCD
LEGAL LOCATION: SE SW SW SE SEC. 02, T. 105 N., R. 48 W.

15 - 19 SAND, LIGHT-BROWN, FINE, VERY SILTY;

SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 20
LOCATION: 105N-48W-04BAA
LEGAL LOCATION: NE NE NW SEC. 04, T. 105 N., R. 48 W.

4 -	9	SAND AND GRAVEL, COARSE SAND, FINE GRAVEL
9 -	19	GRAVEL, MEDIUM TO COARSE
19 -	27	GRAVEL, MEDIUM

* * * *

TEST HOLE NUMBER: 21
LOCATION: 105N-48W-07ADDD
LEGAL LOCATION: SE SE SE NE SEC. 07, T. 105 N., R. 48 W.

0 -	7	SAND, BLACK, FINE, CLAYEY; MOIST
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* * * *

TEST HOLE NUMBER: 22
LOCATION: 105N-48W-07CDD
LEGAL LOCATION: SE SE SW SEC. 07, T. 105 N., R. 48 W.

1 -	4	SAND, VERY FINE TO MEDIUM, SILTY
4 -	6	SAND AND GRAVEL, FINE TO COARSE SAND, SILTY
6 -	9	SAND AND GRAVEL, MEDIUM TO VERY COARSE SAND, FINE TO MEDIUM GRAVEL
9 -	13	SAND AND GRAVEL, MEDIUM TO VERY COARSE SAND, FINE TO COARSE GRAVEL

* * * *

TEST HOLE NUMBER: 23
LOCATION: 105N-48W-08AABA
LEGAL LOCATION: NE NW NE NE SEC. 08, T. 105 N., R. 48 W.

4 -	9	GRAVEL, MEDIUM-BROWN, SANDY, CLAYEY, POORLY SORTED; MOIST, OXIDIZED
9 -	16	SAND, MEDIUM-BROWN, CLAYEY, POORLY SORTED; SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 24

LOCATION: 105N-48W-11AAAA

LEGAL LOCATION: NE NE NE NE SEC. 11, T. 105 N., R. 48 W.

9 - 14 SAND, BROWN, MEDIUM, SILTY, CLAYEY;
SATURATED, OXIDIZED, SOME GRAVEL

* * * *

TEST HOLE NUMBER: 25

LOCATION: 105N-48W-17BBAA

LEGAL LOCATION: NE NE NW NW SEC. 17, T. 105 N., R. 48 W.

3 - 5 SAND, REDDISH-BROWN, SILTY; DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 26

LOCATION: 105N-48W-17CCC

LEGAL LOCATION: SW SW SW SEC. 17, T. 105 N., R. 48 W.

2 - 7 SAND, VERY FINE TO FINE, SILTY AND CLAYEY
7 - 13 SAND, VERY FINE TO MEDIUM, SILTY; SOME
GRAVEL
13 - 16 SAND AND GRAVEL, FINE TO COARSE SAND,
SILTY

* * * *

TEST HOLE NUMBER: 27

LOCATION: 105N-48W-18AAB

LEGAL LOCATION: NW NE NE SEC. 18, T. 105 N., R. 48 W.

4 - 14 SAND, MEDIUM, VERY SILTY

* * * *

TEST HOLE NUMBER: 28

LOCATION: 105N-48W-18ABAA

LEGAL LOCATION: NE NE NW NE SEC. 18, T. 105 N., R. 48 W.

4 - 14 SAND, MEDIUM, SILTY; SATURATED BELOW 14
FEET

* * * *

TEST HOLE NUMBER: 29

LOCATION: 105N-48W-18BBB

LEGAL LOCATION: NW NW NW SEC. 18, T. 105 N., R. 48 W.

1 - 9 SAND, FINE TO COARSE
9 - 15 SAND, FINE TO COARSE, SLIGHTLY SILTY
15 - 20 GRAVEL, FINE TO MEDIUM, SILTY

* * * *

TEST HOLE NUMBER: 30
LOCATION: 105N-48W-18CBBB 1
LEGAL LOCATION: NW NW NW SW SEC. 18, T. 105 N., R. 48 W.

4 - 13 GRAVEL, COARSE; SAMPLE TAKEN

* * * *

TEST HOLE NUMBER: 31
LOCATION: 105N-48W-18CBBB 2
LEGAL LOCATION: NW NW NW SW SEC. 18, T. 105 N., R. 48 W.

1 - 12 GRAVEL, COARSE; ROCKS AT 10 TO 12 FEET

* * * *

TEST HOLE NUMBER: 32
LOCATION: 105N-48W-18DCBB
LEGAL LOCATION: NW NW SW SE SEC. 18, T. 105 N., R. 48 W.

8 - 19 SAND, MEDIUM TO COARSE; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 33
LOCATION: 105N-48W-18DDAA
LEGAL LOCATION: NE NE SE SE SEC. 18, T. 105 N., R. 48 W.

8 - 18 SAND, MEDIUM TO COARSE; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 34
LOCATION: 105N-48W-18DDCC
LEGAL LOCATION: SW SW SE SE SEC. 18, T. 105 N., R. 48 W.

2 - 5 SAND, DARK-BROWN, CLAYEY
5 - 15 SAND, BROWN, CLAYEY

* * * *

TEST HOLE NUMBER: 35
LOCATION: 105N-48W-19AAAA
LEGAL LOCATION: NE NE NE NE SEC. 19, T. 105 N., R. 48 W.

1 - 17 GRAVEL, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 36
LOCATION: 105N-48W-19AADD
LEGAL LOCATION: SE SE NE NE SEC. 19, T. 105 N., R. 48 W.

8 - 22 SAND, MEDIUM TO COARSE; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 37
LOCATION: 105N-48W-19ABB
LEGAL LOCATION: NW NW NE SEC. 19, T. 105 N., R. 48 W.

1 - 3 SAND, FINE TO MEDIUM
3 - 23 GRAVEL, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 38
LOCATION: 105N-48W-19BABB
LEGAL LOCATION: NW NW NE NW SEC. 19, T. 105 N., R. 48 W.

2 - 9 SAND, BROWN, CLAYEY; CHANGING TO COARSE
SAND
9 - 10 GRAVEL, COARSE
10 - 15 SAND, BROWN, CLAYEY

* * * *

TEST HOLE NUMBER: 39
LOCATION: 105N-48W-19BBB
LEGAL LOCATION: NW NW NW SEC. 19, T. 105 N., R. 48 W.

1 - 4 SAND, FINE TO MEDIUM
4 - 20 GRAVEL, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 40
LOCATION: 105N-48W-19BBBB 1
LEGAL LOCATION: NW NW NW NW SEC. 19, T. 105 N., R. 48 W.

1 - 24 SAND, YELLOW, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 41
LOCATION: 105N-48W-19BBBB 2
LEGAL LOCATION: NW NW NW NW SEC. 19, T. 105 N., R. 48 W.

6 - 20 SAND, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 42
LOCATION: 105N-48W-19BCCC
LEGAL LOCATION: SW SW SW NW SEC. 19, T. 105 N., R. 48 W.

2 - 25 SAND, CLAYEY; CHANGING TO COARSE SAND

* * * *

TEST HOLE NUMBER: 43
LOCATION: 105N-48W-19CBCC
LEGAL LOCATION: SW SW NW SW SEC. 19, T. 105 N., R. 48 W.

5 - 16 SAND, FINE TO MEDIUM, CLAYEY; CLAY
CONTENT DECREASES WITH DEPTH
16 - 28 SAND, MEDIUM TO COARSE; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 44
LOCATION: 105N-48W-19CCCD
LEGAL LOCATION: SE SW SW SW SEC. 19, T. 105 N., R. 48 W.

4 - 9 SAND, FINE, SILTY; SATURATED
9 - 13 SAND, MEDIUM
13 - 15 SAND, COARSE; SOME FINE GRAVEL

* * * *

TEST HOLE NUMBER: 45
LOCATION: 105N-48W-19DAAA
LEGAL LOCATION: NE NE NE SE SEC. 19, T. 105 N., R. 48 W.

2 - 20 SAND, BROWN, CLAYEY

* * * *

TEST HOLE NUMBER: 46
LOCATION: 105N-48W-19DDAA
LEGAL LOCATION: NE NE SE SE SEC. 19, T. 105 N., R. 48 W.

5 - 9 SAND, MEDIUM TO COARSE
10 - 24 SAND, MEDIUM TO COARSE; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 47
LOCATION: 105N-48W-19DDCC
LEGAL LOCATION: SW SW SE SE SEC. 19, T. 105 N., R. 48 W.

1 - 4 GRAVEL
4 - 10 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 48
LOCATION: 105N-48W-20CCCC
LEGAL LOCATION: SW SW SW SW SEC. 20, T. 105 N., R. 48 W.

1 - 12 GRAVEL, MEDIUM, SANDY

* * * *

TEST HOLE NUMBER: 49
LOCATION: 105N-48W-22DCCD
LEGAL LOCATION: SE SW SW SE SEC. 22, T. 105 N., R. 48 W.

10 - 15 SAND, BROWN, SILTY, GRAVELLY; SATURATED,
OXIDIZED

* * * *

TEST HOLE NUMBER: 50
LOCATION: 105N-48W-23DDDC
LEGAL LOCATION: SW SE SE SE SEC. 23, T. 105 N., R. 48 W.

15 - 20 SAND, BROWN, FINE, SILTY, CLAYEY; VERY
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 51
LOCATION: 105N-48W-24CDDC
LEGAL LOCATION: SW SE SE SW SEC. 24, T. 105 N., R. 48 W.

4 -	10	SAND, REDDISH-BROWN, POORLY SORTED; DRY, OXIDIZED
10 -	17	SAND, REDDISH-TAN, GRAVELLY; DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 52
LOCATION: 105N-48W-24DDDD
LEGAL LOCATION: SE SE SE SE SEC. 24, T. 105 N., R. 48 W.

22 -	30	SAND, BROWN, MEDIUM, SILTY, CLAYEY; SATURATED, OXIDIZED
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* * * *

TEST HOLE NUMBER: 53
LOCATION: 105N-48W-29BBA
LEGAL LOCATION: NE NW NW SEC. 29, T. 105 N., R. 48 W.

2 -	4	SAND, FINE
4 -	9	SAND, FINE; CHANGING TO GRAVEL
9 -	14	GRAVEL, MEDIUM, SANDY
14 -	24	SAND, FINE TO MEDIUM
24 -	34	SAND, FINE

* * * *

TEST HOLE NUMBER: 54
LOCATION: 105N-48W-29BBAA 1
LEGAL LOCATION: NE NE NW NW SEC. 29, T. 105 N., R. 48 W.

2 -	9	SAND, FINE
9 -	14	GRAVEL; SOME SAND
14 -	24	SAND, FINE TO MEDIUM; SATURATED
24 -	34	SAND, FINE

* * * *

TEST HOLE NUMBER: 55
LOCATION: 105N-48W-29BBAA 2

LEGAL LOCATION: NE NE NW NW SEC. 29, T. 105 N., R. 48 W.

5 - 30 SAND, BROWN, CLAYEY

* * * *

TEST HOLE NUMBER: 56

LOCATION: 105N-48W-30AAAA 1

LEGAL LOCATION: NE NE NE NE SEC. 30, T. 105 N., R. 48 W.

2 - 9 SAND, BROWN; SOME GRAVEL
11 - 20 SAND

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TEST HOLE NUMBER: 57

LOCATION: 105N-48W-30AAAA 2

LEGAL LOCATION: NE NE NE NE SEC. 30, T. 105 N., R. 48 W.

1 - 3 SAND, VERY FINE TO COARSE, SILTY
3 - 12 GRAVEL, SILTY, SANDY
12 - 14 SAND AND GRAVEL, MEDIUM TO VERY COARSE
SAND
14 - 16 GRAVEL, FINE TO COARSE, SANDY

* * * *

TEST HOLE NUMBER: 58

LOCATION: 105N-48W-30BABB

LEGAL LOCATION: NW NW NE NW SEC. 30, T. 105 N., R. 48 W.

2 - 12 SAND, MEDIUM TO VERY COARSE; SOME FINE
GRAVEL

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TEST HOLE NUMBER: 59

LOCATION: 105N-48W-30CBCC

LEGAL LOCATION: SW SW NW SW SEC. 30, T. 105 N., R. 48 W.

1 - 3 GRAVEL, FINE TO COARSE, SANDY

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TEST HOLE NUMBER: 60

LOCATION: 105N-48W-30CCCC

LEGAL LOCATION: SW SW SW SW SEC. 30, T. 105 N., R. 48 W.

2 - 4 SAND, BROWN, MEDIUM
4 - 6 GRAVEL
6 - 10 SAND

* * * *

TEST HOLE NUMBER: 61
LOCATION: 105N-48W-30DDAB
LEGAL LOCATION: NW NE SE SE SEC. 30, T. 105 N., R. 48 W.

5 - 20 SAND, BROWN, CLAYEY; CLAY CONTENT
DECREASING AND SAND BECOMING COARSER
WITH DEPTH

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TEST HOLE NUMBER: 62
LOCATION: 105N-48W-31ABBA
LEGAL LOCATION: NE NW NW NE SEC. 31, T. 105 N., R. 48 W.

3 - 10 SAND, COARSE, CLAYEY
10 - 11 GRAVEL, COARSE
11 - 20 SAND
20 - 21 GRAVEL, COARSE

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TEST HOLE NUMBER: 63
LOCATION: 105N-48W-31ACCA
LEGAL LOCATION: NE SW SW NE SEC. 31, T. 105 N., R. 48 W.

5 - 30 SAND, BROWN, CLAYEY

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TEST HOLE NUMBER: 64
LOCATION: 105N-48W-33DDDD 1
LEGAL LOCATION: SE SE SE SE SEC. 33, T. 105 N., R. 48 W.

10 - 15 SAND AND GRAVEL, MEDIUM TO COARSE

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TEST HOLE NUMBER: 65
LOCATION: 105N-48W-33DDDD 2
LEGAL LOCATION: SE SE SE SE SEC. 33, T. 105 N., R. 48 W.

14 - 23 SAND, FINE

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TEST HOLE NUMBER: 66
LOCATION: 105N-48W-33DDDD 3
LEGAL LOCATION: SE SE SE SE SEC. 33, T. 105 N., R. 48 W.

5 - 9 SAND, BROWN, COARSE, SILTY, GRAVELLY;
SATURATED, OXIDIZED

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TEST HOLE NUMBER: 67
LOCATION: 105N-48W-34BBAA
LEGAL LOCATION: NE NE NW NW SEC. 34, T. 105 N., R. 48 W.

5 - 11 SAND, BROWN, MEDIUM, GRAVELLY; SATURATED,
OXIDIZED

* * * *

TEST HOLE NUMBER: 68
LOCATION: 105N-48W-36DDDA 2
LEGAL LOCATION: NE SE SE SE SEC. 36, T. 105 N., R. 48 W.

18 - 31 SAND, MEDIUM TO COARSE

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TEST HOLE NUMBER: 69
LOCATION: 105N-49W-02AAB
LEGAL LOCATION: NW NE NE SEC. 02, T. 105 N., R. 49 W.

4 - 16 SAND AND GRAVEL, CLAYEY
16 - 26 GRAVEL, FINE TO MEDIUM; CLEAN

* * * *

TEST HOLE NUMBER: 70
LOCATION: 105N-49W-02ABA
LEGAL LOCATION: NE NW NE SEC. 02, T. 105 N., R. 49 W.

4 - 8 SAND, FINE TO MEDIUM, SILTY
8 - 28 SAND AND GRAVEL, MEDIUM TO COARSE SAND,

FINE GRAVEL; CLEAN

* * * *

TEST HOLE NUMBER: 71
LOCATION: 105N-49W-03BAA
LEGAL LOCATION: NE NE NW SEC. 03, T. 105 N., R. 49 W.

6 - 10 GRAVEL, COARSE

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TEST HOLE NUMBER: 72
LOCATION: 105N-49W-03DAA
LEGAL LOCATION: NE NE SE SEC. 03, T. 105 N., R. 49 W.

2 - 5 SAND, BROWN, CLAYEY
5 - 12 SAND AND GRAVEL, MEDIUM TO COARSE SAND;
SOME CLAY

* * * *

TEST HOLE NUMBER: 73
LOCATION: 105N-49W-04ADDD
LEGAL LOCATION: SE SE SE NE SEC. 04, T. 105 N., R. 49 W.

5 - 9 GRAVEL, COARSE; DRY, OXIDIZED

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TEST HOLE NUMBER: 74
LOCATION: 105N-49W-04BCB
LEGAL LOCATION: NW SW NW SEC. 04, T. 105 N., R. 49 W.

4 - 15 GRAVEL, FINE TO COARSE

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TEST HOLE NUMBER: 75
LOCATION: 105N-49W-04DAD
LEGAL LOCATION: SE NE SE SEC. 04, T. 105 N., R. 49 W.

3 - 20 GRAVEL, FINE TO VERY COARSE

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TEST HOLE NUMBER: 76

LOCATION: 105N-49W-04DDD

LEGAL LOCATION: SE SE SE SEC. 04, T. 105 N., R. 49 W.

2 - 12 SAND AND GRAVEL, FINE SAND, FINE TO
COARSE GRAVEL; CLEAN
12 - 15 GRAVEL, FINE TO COARSE; SOME PEBBLES AND
COBBLESTONES, CLEAN

* * * *

TEST HOLE NUMBER: 77

LOCATION: 105N-49W-04DDDD

LEGAL LOCATION: SE SE SE SE SEC. 04, T. 105 N., R. 49 W.

5 - 8 GRAVEL, COARSE, SANDY
9 - 28 GRAVEL, VERY COARSE, SANDY; SAND LENS AT
15 TO 17 FEET

* * * *

TEST HOLE NUMBER: 78

LOCATION: 105N-49W-05DAA

LEGAL LOCATION: NE NE SE SEC. 05, T. 105 N., R. 49 W.

4 - 22 GRAVEL, FINE TO COARSE

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TEST HOLE NUMBER: 79

LOCATION: 105N-49W-06ADDA

LEGAL LOCATION: NE SE SE NE SEC. 06, T. 105 N., R. 49 W.

1 - 10 SAND, BROWN, GRAVELLY, POORLY SORTED;
MOIST, CLEAN

* * * *

TEST HOLE NUMBER: 80

LOCATION: 105N-49W-10AAA

LEGAL LOCATION: NE NE NE SEC. 10, T. 105 N., R. 49 W.

0 - 10 SAND AND GRAVEL, FINE TO COARSE SAND,
FINE GRAVEL; CLEAN
10 - 17 SAND, MEDIUM TO COARSE; CLEAN
17 - 24 GRAVEL, MEDIUM TO COARSE; CLEAN

* * * *

TEST HOLE NUMBER: 81
LOCATION: 105N-49W-10AAAB
LEGAL LOCATION: NW NE NE NE SEC. 10, T. 105 N., R. 49 W.

8 - 15 GRAVEL, MEDIUM TO FINE, SANDY, SUBROUND

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TEST HOLE NUMBER: 82
LOCATION: 105N-49W-10ABB
LEGAL LOCATION: NW NW NE SEC. 10, T. 105 N., R. 49 W.

1 - 37 SAND AND GRAVEL, FINE TO MEDIUM SAND,
COARSE GRAVEL

* * * *

TEST HOLE NUMBER: 83
LOCATION: 105N-49W-10CBC
LEGAL LOCATION: SW NW SW SEC. 10, T. 105 N., R. 49 W.

3 - 7 GRAVEL, FINE TO COARSE
7 - 15 SAND, FINE TO COARSE, CLAYEY
15 - 25 SAND, FINE
25 - 30 SAND, FINE TO COARSE

* * * *

TEST HOLE NUMBER: 84
LOCATION: 105N-49W-10DAA
LEGAL LOCATION: NE NE SE SEC. 10, T. 105 N., R. 49 W.

0 - 5 GRAVEL, FINE TO COARSE; PEBBLES, CLEAN
5 - 18 SAND AND GRAVEL, COARSE SAND, FINE TO
COARSE GRAVEL; CLEAN

* * * *

TEST HOLE NUMBER: 85
LOCATION: 105N-49W-10DCC
LEGAL LOCATION: SW SW SE SEC. 10, T. 105 N., R. 49 W.

1 - 10 SAND, VERY FINE
10 - 20 SAND, FINE TO MEDIUM
20 - 33 GRAVEL, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 86
LOCATION: 105N-49W-11BAB
LEGAL LOCATION: NW NE NW SEC. 11, T. 105 N., R. 49 W.

2 - 7 SAND, FINE TO COARSE, CLAYEY
7 - 12 GRAVEL, FINE TO COARSE, CLAYEY

* * * *

TEST HOLE NUMBER: 87
LOCATION: 105N-49W-11DAA
LEGAL LOCATION: NE NE SE SEC. 11, T. 105 N., R. 49 W.

1 - 16 SAND, VERY FINE
16 - 20 SAND, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 88
LOCATION: 105N-49W-11DDDD
LEGAL LOCATION: SE SE SE SE SEC. 11, T. 105 N., R. 49 W.

5 - 15 GRAVEL, FINE, SANDY

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TEST HOLE NUMBER: 89
LOCATION: 105N-49W-12BBB
LEGAL LOCATION: NW NW NW SEC. 12, T. 105 N., R. 49 W.

2 - 17 SAND AND GRAVEL, COARSE SAND, FINE
GRAVEL; CLEAN
17 - 20 SAND, COARSE; CLEAN
20 - 32 SAND, FINE TO COARSE; CLEAN

* * * *

TEST HOLE NUMBER: 90
LOCATION: 105N-49W-13ABBB
LEGAL LOCATION: NW NW NW NE SEC. 13, T. 105 N., R. 49 W.

3 - 9 SAND, COARSE
9 - 17 SAND, MEDIUM; SATURATED BELOW 14 FEET

* * * *

TEST HOLE NUMBER: 91

LOCATION: 105N-49W-14AAAA
LEGAL LOCATION: NE NE NE NE SEC. 14, T. 105 N., R. 49 W.

2 - 14 SAND, COARSE; SATURATED AT 14 FEET
14 - 19 GRAVEL, FINE

* * * *

TEST HOLE NUMBER: 92
LOCATION: 105N-49W-14BAA
LEGAL LOCATION: NE NE NW SEC. 14, T. 105 N., R. 49 W.

1 - 6 SAND, FINE TO MEDIUM
6 - 10 SAND, MEDIUM TO VERY COARSE
10 - 11 GRAVEL, COARSE
11 - 16 SAND, COARSE

* * * *

TEST HOLE NUMBER: 93
LOCATION: 105N-49W-14BCC
LEGAL LOCATION: SW SW NW SEC. 14, T. 105 N., R. 49 W.

0 - 15 SAND AND GRAVEL, FINE TO COARSE SAND,
FINE GRAVEL; CLEAN
15 - 25 GRAVEL, COARSE; CLEAN
25 - 28 GRAVEL, COARSE; SOME PEBBLES AND
COBBLESTONES

* * * *

TEST HOLE NUMBER: 94
LOCATION: 105N-49W-15AAAA
LEGAL LOCATION: NE NE NE NE SEC. 15, T. 105 N., R. 49 W.

4 - 19 SAND, FINE; SATURATED AT 14 FEET
19 - 24 SAND AND GRAVEL; FINE TO COARSE GRAVEL
24 - 32 SAND, COARSE

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TEST HOLE NUMBER: 95
LOCATION: 105N-49W-15ADDA
LEGAL LOCATION: NE SE SE NE SEC. 15, T. 105 N., R. 49 W.

2 - 5 SAND, BROWN, CLAYEY
5 - 24 SAND, BROWN, SOME CLAY; CHANGING TO

24 - 25 COARSE SAND AND VERY LITTLE CLAY
GRAVEL, COARSE; UNABLE TO PENETRATE

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TEST HOLE NUMBER: 96
LOCATION: 105N-49W-15BBB
LEGAL LOCATION: NW NW NW SEC. 15, T. 105 N., R. 49 W.

5 - 27 SAND, FINE

* * * *

TEST HOLE NUMBER: 97
LOCATION: 105N-49W-15BBBA
LEGAL LOCATION: NE NW NW NW SEC. 15, T. 105 N., R. 49 W.

15 - 34 SAND, BROWN, VERY COARSE

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TEST HOLE NUMBER: 98
LOCATION: 105N-49W-16AAAB
LEGAL LOCATION: NW NE NE NE SEC. 16, T. 105 N., R. 49 W.

21 - 24 SAND, REDDISH-BROWN, CLAYEY; MOIST,
OXIDIZED

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TEST HOLE NUMBER: 99
LOCATION: 105N-49W-23DADD
LEGAL LOCATION: SE SE NE SE SEC. 23, T. 105 N., R. 49 W.

7 - 16 GRAVEL

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TEST HOLE NUMBER: 100
LOCATION: 105N-49W-24DCDD
LEGAL LOCATION: SE SE SW SE SEC. 24, T. 105 N., R. 49 W.

10 - 11 GRAVEL, MEDIUM-BROWN, COARSE, SILTY
SANDY; DRY, OXIDIZED, ABANDONED HOLE

* * * *

TEST HOLE NUMBER: 101
LOCATION: 105N-49W-25ACDD
LEGAL LOCATION: SE SE SW NE SEC. 25, T. 105 N., R. 49 W.

10 - 18 SAND, COARSE TO VERY COARSE; POORLY
SORTED

* * * *

TEST HOLE NUMBER: 102
LOCATION: 105N-49W-25BDDC
LEGAL LOCATION: SW SE SE NW SEC. 25, T. 105 N., R. 49 W.

3 - 35 SAND, COARSE; SOME GRAVEL

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TEST HOLE NUMBER: 103
LOCATION: 105N-49W-25CCAA
LEGAL LOCATION: NE NE SW SW SEC. 25, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

5 - 19 SAND, RED

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TEST HOLE NUMBER: 104
LOCATION: 105N-49W-25CCAB
LEGAL LOCATION: NW NE SW SW SEC. 25, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

6 - 13 SAND

* * * *

TEST HOLE NUMBER: 105
LOCATION: 105N-49W-25CCAC
LEGAL LOCATION: SW NE SW SW SEC. 25, T. 105 N., R. 49 W.

2 - 19 SAND, BROWN, COARSE

* * * *

TEST HOLE NUMBER: 106
LOCATION: 105N-49W-25CCDA
LEGAL LOCATION: NE SE SW SW SEC. 25, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

3 - 15 GRAVEL

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TEST HOLE NUMBER: 107
LOCATION: 105N-49W-25CDAA
LEGAL LOCATION: NE NE SE SW SEC. 25, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

3 - 18 GRAVEL

* * * *

TEST HOLE NUMBER: 108
LOCATION: 105N-49W-25CDAB
LEGAL LOCATION: NW NE SE SW SEC. 25, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

2 - 4 GRAVEL
4 - 17 GRAVEL; CLEAN

* * * *

TEST HOLE NUMBER: 109
LOCATION: 105N-49W-25CDBA
LEGAL LOCATION: NE NW SE SW SEC. 25, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

5 - 13 SAND; CLEAN

* * * *

TEST HOLE NUMBER: 110
LOCATION: 105N-49W-25CDDA
LEGAL LOCATION: NE SE SE SW SEC. 25, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

5 - 14 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 111
LOCATION: 105N-49W-25CDDB
LEGAL LOCATION: NW SE SE SW SEC. 25, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

3 - 14 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 112
LOCATION: 105N-49W-25DDDD 1
LEGAL LOCATION: SE SE SE SE SEC. 25, T. 105 N., R. 49 W.

3 - 11 GRAVEL, FINE, SANDY, FAIRLY WELL-ROUNDED
11 - 12 GRAVEL, COARSE; SATURATED BELOW 4 FEET

* * * *

TEST HOLE NUMBER: 113
LOCATION: 105N-49W-25DDDD 2
LEGAL LOCATION: SE SE SE SE SEC. 25, T. 105 N., R. 49 W.

1 - 11 GRAVEL, FINE, SANDY, FAIRLY WELL-SORTED

* * * *

TEST HOLE NUMBER: 114
LOCATION: 105N-49W-26ADAA
LEGAL LOCATION: NE NE SE NE SEC. 26, T. 105 N., R. 49 W.

5 - 10 SAND, BROWN, CLAYEY
10 - 18 SAND, BROWN, COARSE; SOME CLAY

* * * *

TEST HOLE NUMBER: 115
LOCATION: 105N-49W-26DAAA
LEGAL LOCATION: NE NE NE SE SEC. 26, T. 105 N., R. 49 W.

9 - 21 SAND AND ROCKS

* * * *

TEST HOLE NUMBER: 116
LOCATION: 105N-49W-26DADD
LEGAL LOCATION: SE SE NE SE SEC. 26, T. 105 N., R. 49 W.

7 - 18 SAND, MEDIUM TO COARSE; SOME GRAVEL

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TEST HOLE NUMBER: 117
LOCATION: 105N-49W-26DDBD
LEGAL LOCATION: SE NW SE SE SEC. 26, T. 105 N., R. 49 W.

6 - 25 SAND, COARSE, CLAYEY; CLAY CONTENT
DECREASING WITH DEPTH
25 - 26 GRAVEL, COARSE

* * * *

TEST HOLE NUMBER: 118
LOCATION: 105N-49W-26DDDA
LEGAL LOCATION: NE SE SE SE SEC. 26, T. 105 N., R. 49 W.

4 - 5 GRAVEL
5 - 10 SAND, BROWN, CLAYEY
10 - 17 SAND, COARSE
17 - 21 GRAVEL; CHANGING TO COARSE SAND

* * * *

TEST HOLE NUMBER: 119
LOCATION: 105N-49W-34DAAA
LEGAL LOCATION: NE NE NE SE SEC. 34, T. 105 N., R. 49 W.

5 - 25 SAND, MEDIUM TO COARSE; SOME GRAVEL

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TEST HOLE NUMBER: 120
LOCATION: 105N-49W-34DAAD
LEGAL LOCATION: SE NE NE SE SEC. 34, T. 105 N., R. 49 W.

5 - 31 SAND, MEDIUM TO COARSE

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TEST HOLE NUMBER: 121
LOCATION: 105N-49W-34DACA
LEGAL LOCATION: NE SW NE SE SEC. 34, T. 105 N., R. 49 W.

5 - 15 SAND, BROWN, CLAYEY
15 - 30 SAND, COARSE; SOME CLAY

* * * *

TEST HOLE NUMBER: 122
LOCATION: 105N-49W-34DADD
LEGAL LOCATION: SE SE NE SE SEC. 34, T. 105 N., R. 49 W.

6 - 18 SAND, MEDIUM TO COARSE; SOME GRAVEL

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TEST HOLE NUMBER: 123
LOCATION: 105N-49W-34DCD
LEGAL LOCATION: SE SW SE SEC. 34, T. 105 N., R. 49 W.

2 -	8	GRAVEL, FINE, SANDY, SILTY
8 -	19	SAND, MEDIUM TO VERY COARSE; SOME GRAVEL
19 -	21	GRAVEL, VERY COARSE, SANDY
21 -	26	SAND, FINE TO MEDIUM, SILTY; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 124
LOCATION: 105N-49W-34DCDD
LEGAL LOCATION: SE SE SW SE SEC. 34, T. 105 N., R. 49 W.

4 -	15	SAND, BROWN; SOME CLAY, CHANGING TO COARSE SAND WITH LESS CLAY
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TEST HOLE NUMBER: 125
LOCATION: 105N-49W-34DDAD
LEGAL LOCATION: SE NE SE SE SEC. 34, T. 105 N., R. 49 W.

6 -	18	SAND, BROWN CHANGING TO GRAY, CLAYEY
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TEST HOLE NUMBER: 126
LOCATION: 105N-49W-34DDBB
LEGAL LOCATION: NW NW SE SE SEC. 34, T. 105 N., R. 49 W.

7 -	20	SAND, BROWN, MEDIUM TO COARSE, CLAYEY
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TEST HOLE NUMBER: 127
LOCATION: 105N-49W-35AAAA 1
LEGAL LOCATION: NE NE NE NE SEC. 35, T. 105 N., R. 49 W.

4 -	18	SAND AND GRAVEL, COARSE SAND, CLAYEY
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TEST HOLE NUMBER: 128
LOCATION: 105N-49W-35AAAA 2
LEGAL LOCATION: NE NE NE NE SEC. 35, T. 105 N., R. 49 W.

1 - 17 GRAVEL, SANDY, SUBANGULAR; LARGE

* * * *

TEST HOLE NUMBER: 129
LOCATION: 105N-49W-35AABB 1
LEGAL LOCATION: NW NW NE NE SEC. 35, T. 105 N., R. 49 W.

4 - 16 SAND, COARSE, CLAYEY
16 - 17 GRAVEL, COARSE; ROCKS

* * * *

TEST HOLE NUMBER: 130
LOCATION: 105N-49W-35AABB 2
LEGAL LOCATION: NW NW NE NE SEC. 35, T. 105 N., R. 49 W.

6 - 23 SAND, MEDIUM TO COARSE; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 131
LOCATION: 105N-49W-35AADD
LEGAL LOCATION: SE SE NE NE SEC. 35, T. 105 N., R. 49 W.

5 - 18 SAND, MEDIUM TO COARSE; SOME GRAVEL

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TEST HOLE NUMBER: 132
LOCATION: 105N-49W-35ABBB
LEGAL LOCATION: NW NW NW NE SEC. 35, T. 105 N., R. 49 W.

12 - 40 SAND, MEDIUM; WITH MUCH TAN, SILTY CLAY,
SOME GRAVEL, GRAVEL INCREASES WITH
DEPTH

* * * *

TEST HOLE NUMBER: 133
LOCATION: 105N-49W-35ABDB
LEGAL LOCATION: NW SE NW NE SEC. 35, T. 105 N., R. 49 W.

2 - 5 SAND, MEDIUM TO COARSE
5 - 11 SAND, COARSE; AND CLAY

12 - 17 SAND, COARSE; SOME CLAY

* * * *

TEST HOLE NUMBER: 134
LOCATION: 105N-49W-35ADAD
LEGAL LOCATION: SE NE SE NE SEC. 35, T. 105 N., R. 49 W.

5 - 20 SAND, COARSE; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 135
LOCATION: 105N-49W-35BADD
LEGAL LOCATION: SE SE NE NW SEC. 35, T. 105 N., R. 49 W.

5 - 10 SAND, COARSE

* * * *

TEST HOLE NUMBER: 136
LOCATION: 105N-49W-35CBDA
LEGAL LOCATION: NE SE NW SW SEC. 35, T. 105 N., R. 49 W.

5 - 8 SAND, BROWN, CLAYEY
8 - 10 GRAVEL

* * * *

TEST HOLE NUMBER: 137
LOCATION: 105N-49W-35CCAD
LEGAL LOCATION: SE NE SW SW SEC. 35, T. 105 N., R. 49 W.

4 - 22 SAND, BROWN, MEDIUM TO COARSE; SOME
GRAVEL

* * * *

TEST HOLE NUMBER: 138
LOCATION: 105N-49W-35CDCD
LEGAL LOCATION: SE SW SE SW SEC. 35, T. 105 N., R. 49 W.

2 - 4 SAND, FINE TO MEDIUM
4 - 10 GRAVEL, BROWN, SANDY
10 - 25 SAND, BROWN, COARSE

* * * *

TEST HOLE NUMBER: 139
LOCATION: 105N-49W-35DADA
LEGAL LOCATION: NE SE NE SE SEC. 35, T. 105 N., R. 49 W.

4 - 9 SAND, MEDIUM TO COARSE; GRAVEL MATRIX

* * * *

TEST HOLE NUMBER: 140
LOCATION: 105N-49W-35DCDC
LEGAL LOCATION: SW SE SW SE SEC. 35, T. 105 N., R. 49 W.

2 - 4 SAND, VERY FINE TO MEDIUM, SILTY
4 - 20 GRAVEL, FINE TO COARSE, SANDY
20 - 25 SAND AND GRAVEL, MEDIUM TO VERY COARSE
SAND, FINE GRAVEL, SILTY, CLAYEY

* * * *

TEST HOLE NUMBER: 141
LOCATION: 105N-49W-35DDDD 1
LEGAL LOCATION: SE SE SE SE SEC. 35, T. 105 N., R. 49 W.

2 - 6 SAND, FINE TO COARSE
6 - 8 GRAVEL, FINE TO COARSE; SANDY QUARTZITE
PEBBLES COMMON

* * * *

TEST HOLE NUMBER: 142
LOCATION: 105N-49W-35DDDD 2
LEGAL LOCATION: SE SE SE SE SEC. 35, T. 105 N., R. 49 W.

1 - 7 GRAVEL, FINE, SANDY
7 - 11 GRAVEL, MEDIUM, SANDY

* * * *

TEST HOLE NUMBER: 143
LOCATION: 105N-49W-36ACCB
LEGAL LOCATION: NW SW SW NE SEC. 36, T. 105 N., R. 49 W.

9 - 12 SAND, COARSE

* * * *

TEST HOLE NUMBER: 144

LOCATION: 105N-49W-36BADA
LEGAL LOCATION: NE SE NE NW SEC. 36, T. 105 N., R. 49 W.

4 - 6 GRAVEL
6 - 15 SAND, COARSE, CLAYEY; CLAY DECREASES WITH
DEPTH, SOME GRAVEL

* * * *

TEST HOLE NUMBER: 145
LOCATION: 105N-49W-36CACC
LEGAL LOCATION: SW SW NE SW SEC. 36, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

3 - 9 GRAVEL

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TEST HOLE NUMBER: 146
LOCATION: 105N-49W-36BCA
LEGAL LOCATION: NE SW NW SW SEC. 36, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

4 - 5 GRAVEL
5 - 12 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 147
LOCATION: 105N-49W-36BCC
LEGAL LOCATION: SW SW NW SW SEC. 36, T. 105 N., R. 49 W.

2 - 5 SAND, BROWN, MEDIUM
5 - 10 SAND, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 148
LOCATION: 105N-49W-36CBCD 1
LEGAL LOCATION: SE SW NW SW SEC. 36, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

5 - 19 GRAVEL

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TEST HOLE NUMBER: 149
LOCATION: 105N-49W-36CBCD 2
LEGAL LOCATION: SE SW NW SW SEC. 36, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

5 - 13 GRAVEL

* * * *

TEST HOLE NUMBER: 150
LOCATION: 105N-49W-36CBDB
LEGAL LOCATION: NW SE NW SW SEC. 36, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

4 - 10 GRAVEL
10 - 14 SAND, MEDIUM

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TEST HOLE NUMBER: 151
LOCATION: 105N-49W-36CBDC
LEGAL LOCATION: SW SE NW SW SEC. 36, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

3 - 16 GRAVEL

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TEST HOLE NUMBER: 152
LOCATION: 105N-49W-36CCAA
LEGAL LOCATION: NE NE SW SW SEC. 36, T. 105 N., R. 49 W.
PRELIMINARY LOG -- SUBJECT TO CHANGE

3 - 12 GRAVEL

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TEST HOLE NUMBER: 153
LOCATION: 105N-49W-36CCCB
LEGAL LOCATION: NW SW SW SW SEC. 36, T. 105 N., R. 49 W.

2 - 3 GRAVEL, COARSE

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TEST HOLE NUMBER: 154
LOCATION: 105N-49W-36CCCC
LEGAL LOCATION: SW SW SW SW SEC. 36, T. 105 N., R. 49 W.

1 - 3 GRAVEL, COARSE; ROCKS, UNABLE TO
PENETRATE

* * * *

TEST HOLE NUMBER: 155

LOCATION: 105N-49W-36CCDD
LEGAL LOCATION: SE SE SW SW SEC. 36, T. 105 N., R. 49 W.

1 - 3 SAND, FINE TO MEDIUM, SILTY
3 - 8 GRAVEL, FINE TO COARSE, SANDY
8 - 10 SAND AND GRAVEL, MEDIUM TO VERY COARSE
SAND
10 - 12 GRAVEL, FINE TO COARSE, SANDY

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TEST HOLE NUMBER: 156
LOCATION: 105N-49W-36CDDC
LEGAL LOCATION: SW SE SE SW SEC. 36, T. 105 N., R. 49 W.

4 - 17 SAND AND GRAVEL, COARSE SAND

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TEST HOLE NUMBER: 157
LOCATION: 105N-49W-36DAAA
LEGAL LOCATION: NE NE NE SE SEC. 36, T. 105 N., R. 49 W.

2 - 9 SAND, VERY FINE TO MEDIUM, SILTY, CLAYEY
9 - 14 SAND, MEDIUM TO VERY COARSE; SOME GRAVEL
14 - 24 SAND AND GRAVEL, MEDIUM TO VERY COARSE
SAND, FINE TO MEDIUM GRAVEL; MUCH
LIGNITE OR CHARCOAL
24 - 34 SAND AND GRAVEL, MEDIUM TO VERY COARSE
SAND

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TEST HOLE NUMBER: 158
LOCATION: 105N-49W-36DCDD
LEGAL LOCATION: SE SE SW SE SEC. 36, T. 105 N., R. 49 W.

1 - 5 SAND, FINE TO COARSE
5 - 15 SAND AND GRAVEL, MEDIUM TO VERY COARSE
SAND, FINE TO COARSE GRAVEL
15 - 23 SAND AND GRAVEL, MEDIUM TO VERY COARSE
SAND, FINE TO MEDIUM GRAVEL
23 - 25 GRAVEL, FINE TO COARSE, SANDY AND SILTY

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TEST HOLE NUMBER: 159
LOCATION: 105N-49W-36DDAA

LEGAL LOCATION: NE NE SE SE SEC. 36, T. 105 N., R. 49 W.

25 - 30 SAND, MEDIUM TO COARSE

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TEST HOLE NUMBER: 160
LOCATION: 105N-50W-01BBBB 1
LEGAL LOCATION: NW NW NW NW SEC. 01, T. 105 N., R. 50 W.

20 - 22 GRAVEL, BROWN, VERY COARSE; SATURATED,
OXIDIZED

* * * *

TEST HOLE NUMBER: 161
LOCATION: 105N-50W-01BBBB 2
LEGAL LOCATION: NW NW NW NW SEC. 01, T. 105 N., R. 50 W.

8 - 12 GRAVEL, COARSE TO MEDIUM, SANDY

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TEST HOLE NUMBER: 162
LOCATION: 105N-50W-02AABB
LEGAL LOCATION: NW NW NE NE SEC. 02, T. 105 N., R. 50 W.

6 - 16 SAND, BROWN, COARSE, VERY GRAVELLY,
CLAYEY; VERY MOIST, OXIDIZED
16 - 21 GRAVEL, BROWN, COARSE; SATURATED,
OXIDIZED

* * * *

TEST HOLE NUMBER: 163
LOCATION: 105N-50W-19BBBB
LEGAL LOCATION: NW NW NW NW SEC. 19, T. 105 N., R. 50 W.

1 - 17 SAND, YELLOW, FINE, SILTY

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TEST HOLE NUMBER: 164
LOCATION: 105N-50W-19CBCC
LEGAL LOCATION: SW SW NW SW SEC. 19, T. 105 N., R. 50 W.

5 - 19 SAND, REDDISH-BROWN, MEDIUM, GRAVELLY;
MOIST, OXIDIZED, SATURATED AT 10 FEET,
GRADES TO A FINE GRAVEL

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TEST HOLE NUMBER: 165
LOCATION: 105N-50W-21AAAD
LEGAL LOCATION: SE NE NE NE SEC. 21, T. 105 N., R. 50 W.

18 - 40 GRAVEL, FINE, SANDY; CLAY LAYER AT 32 TO
35 FEET

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TEST HOLE NUMBER: 166
LOCATION: 105N-50W-28CCC
LEGAL LOCATION: SW SW SW SEC. 28, T. 105 N., R. 50 W.

5 - 9 SAND, FINE
9 - 27 SAND, MEDIUM TO COARSE

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TEST HOLE NUMBER: 167
LOCATION: 105N-50W-28CCDC
LEGAL LOCATION: SW SE SW SW SEC. 28, T. 105 N., R. 50 W.

1 - 23 SAND, RED, MEDIUM TO COARSE, SILTY;
MOIST
23 - 38 SAND, GRAYISH-BROWN, MEDIUM, SILTY, VERY
PEBBLY; VERY MOIST

* * * *

TEST HOLE NUMBER: 168
LOCATION: 105N-50W-29BBBB
LEGAL LOCATION: NW NW NW NW SEC. 29, T. 105 N., R. 50 W.

2 - 51 GRAVEL, MEDIUM TO COARSE

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TEST HOLE NUMBER: 169
LOCATION: 105N-50W-29DBCB
LEGAL LOCATION: NW SW NW SE SEC. 29, T. 105 N., R. 50 W.

8 - 10 SAND, REDDISH-BROWN, MEDIUM; MOIST,
OXIDIZED
10 - 14 SAND, BROWN, MEDIUM, CLAYEY; SATURATED,
OXIDIZED
14 - 24 SAND, GRAY, FINE TO MEDIUM; SATURATED,
UNOXIDIZED, GRADES TO A FINE GRAVEL
24 - 27 GRAVEL, GRAY, VERY COARSE; SATURATED,
UNOXIDIZED, ABANDONED HOLE

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TEST HOLE NUMBER: 170
LOCATION: 105N-50W-30AAD
LEGAL LOCATION: SE NE NE SEC. 30, T. 105 N., R. 50 W.

0 - 4 SAND, MEDIUM
4 - 9 SAND, MEDIUM TO COARSE
9 - 24 SAND, COARSE
24 - 50 SAND, MEDIUM

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TEST HOLE NUMBER: 171
LOCATION: 105N-50W-33BAA
LEGAL LOCATION: NE NE NW SEC. 33, T. 105 N., R. 50 W.

2 - 4 SAND, MEDIUM
4 - 14 SAND, MEDIUM TO COARSE
14 - 20 SAND AND GRAVEL, MEDIUM SAND, FINE GRAVEL

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TEST HOLE NUMBER: 172
LOCATION: 105N-50W-33CDD
LEGAL LOCATION: SE SE SW SEC. 33, T. 105 N., R. 50 W.

1 - 4 SAND, MEDIUM TO COARSE
4 - 9 SAND AND GRAVEL, MEDIUM SAND, COARSE
GRAVEL
9 - 14 GRAVEL, FINE TO COARSE
14 - 19 SAND AND GRAVEL, COARSE SAND, MEDIUM
GRAVEL
19 - 44 SAND AND GRAVEL, COARSE SAND, FINE GRAVEL

* * * *

TEST HOLE NUMBER: 173
LOCATION: 105N-50W-33DCCC
LEGAL LOCATION: SW SW SW SE SEC. 33, T. 105 N., R. 50 W.

3 - 33 SAND, REDDISH-BROWN, FINE TO COARSE

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TEST HOLE NUMBER: 174
LOCATION: 105N-50W-33DDC
LEGAL LOCATION: SW SE SE SEC. 33, T. 105 N., R. 50 W.

4 - 9 SAND, SILTY
9 - 16 SAND AND GRAVEL, COARSE SAND AND MEDIUM
GRAVEL

* * * *

TEST HOLE NUMBER: 175
LOCATION: 105N-50W-33DDCC
LEGAL LOCATION: SW SW SE SE SEC. 33, T. 105 N., R. 50 W.

3 - 23 SAND, REDDISH-BROWN, COARSE, PEBBLY,
CLAYEY

* * * *

TEST HOLE NUMBER: 176
LOCATION: 105N-50W-34CCC 1
LEGAL LOCATION: SW SW SW SEC. 34, T. 105 N., R. 50 W.

1 - 5 SAND, REDDISH-BROWN, FINE TO MEDIUM;
SOME SMALL PEBBLES
5 - 10 SAND AND GRAVEL, REDDISH-BROWN, FINE TO
COARSE SAND, FINE TO COARSE GRAVEL
10 - 12 SAND, FINE TO MEDIUM
12 - 35 SAND AND GRAVEL, FINE TO COARSE SAND,
FINE GRAVEL

* * * *

TEST HOLE NUMBER: 177
LOCATION: 105N-50W-34CCC 2
LEGAL LOCATION: SW SW SW SEC. 34, T. 105 N., R. 50 W.

1 - 5 SAND, FINE TO COARSE, PEBBLY
5 - 10 SAND, FINE TO MEDIUM
10 - 35 GRAVEL, FINE

* * * *

TEST HOLE NUMBER: 178
LOCATION: 105N-50W-34CCCC
LEGAL LOCATION: SW SW SW SW SEC. 34, T. 105 N., R. 50 W.

3 - 23 SAND, REDDISH-BROWN, FINE, SILTY, PEBBLY;
MOIST
23 - 51 SAND, GRAYISH-BROWN, VERY SILTY, PEBBLY;
SATURATED

* * * *

TEST HOLE NUMBER: 179
LOCATION: 106N-47W-03BBBB
LEGAL LOCATION: NW NW NW NW SEC. 03, T. 106 N., R. 47 W.

1 - 6 SAND, BROWN, FINE, SILTY

* * * *

TEST HOLE NUMBER: 180
LOCATION: 106N-47W-22CCAA
LEGAL LOCATION: NE NE SW SW SEC. 22, T. 106 N., R. 47 W.

4 - 12 SAND, BROWN, SILTY, PEBBLY, POORLY
SORTED; MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 181
LOCATION: 106N-47W-27CDCC
LEGAL LOCATION: SW SW SE SW SEC. 27, T. 106 N., R. 47 W.

3 - 9 SAND, BROWN, FEW PEBBLES, POORLY SORTED;
MOIST, CLEAN
9 - 15 SAND, LIGHT-BROWN, CLAYEY, WELL SORTED;
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 182
LOCATION: 106N-47W-33DCDC
LEGAL LOCATION: SW SE SW SE SEC. 33, T. 106 N., R. 47 W.

17 - 28 GRAVEL, GRAYISH-BLACK, CLAYEY, SANDY;
SATURATED

* * * *

TEST HOLE NUMBER: 183
LOCATION: 106N-48W-05ABBC
LEGAL LOCATION: SW NW NW NE SEC. 05, T. 106 N., R. 48 W.

6 -	13	SAND, BROWN, FINE; DRY
13 -	22	SAND, BROWN, COARSE, PEBBLY; MOIST
22 -	40	SAND, BROWN, COARSE, PEBBLY; SATURATED

* * * *

TEST HOLE NUMBER: 184
LOCATION: 106N-48W-05ACCC
LEGAL LOCATION: SW SW SW NE SEC. 05, T. 106 N., R. 48 W.

5 -	13	SAND, BROWN, DRY
13 -	14	SAND, BROWN, COARSE; MOIST
14 -	15	GRAVEL
15 -	40	SAND, BROWN, COARSE; SATURATED

* * * *

TEST HOLE NUMBER: 185
LOCATION: 106N-48W-05CAB
LEGAL LOCATION: NW NE SW SEC. 05, T. 106 N., R. 48 W.

0 -	5	SAND, FINE TO MEDIUM, CLAYEY
5 -	8	SAND AND GRAVEL, FINE TO COARSE SAND, FINE GRAVEL
8 -	10	SAND AND GRAVEL, FINE TO MEDIUM SAND, COARSE GRAVEL
10 -	20	SAND, FINE TO COARSE
20 -	22	GRAVEL AND COBBLESTONES

* * * *

TEST HOLE NUMBER: 186
LOCATION: 106N-48W-05CBAD
LEGAL LOCATION: SE NE NW SW SEC. 05, T. 106 N., R. 48 W.

11 -	12	GRAVEL
12 -	14	SAND, BROWN, GRAVELLY; MOIST
14 -	15	GRAVEL
15 -	23	SAND, BROWN, PEBBLY; MOIST
23 -	27	SAND, BROWN, PEBBLY; SATURATED

* * * *

TEST HOLE NUMBER: 187

LOCATION: 106N-48W-05CCAA

LEGAL LOCATION: NE NE SW SW SEC. 05, T. 106 N., R. 48 W.

3 - 26 GRAVEL, COARSE, SANDY

* * * *

TEST HOLE NUMBER: 188

LOCATION: 106N-48W-05CCAD

LEGAL LOCATION: SE NE SW SW SEC. 05, T. 106 N., R. 48 W.

2 - 10 GRAVEL, VERY SANDY; DRY
10 - 11 GRAVEL, COARSE; DRY
11 - 17 GRAVEL, SANDY; SATURATED
17 - 38 SAND, FINE

* * * *

TEST HOLE NUMBER: 189

LOCATION: 106N-48W-05CCDD 1

LEGAL LOCATION: SE SE SW SW SEC. 05, T. 106 N., R. 48 W.

4 - 27 GRAVEL, FINE; SAMPLE TAKEN

* * * *

TEST HOLE NUMBER: 190

LOCATION: 106N-48W-06CCCD

LEGAL LOCATION: SE SW SW SW SEC. 06, T. 106 N., R. 48 W.

22 - 25 SAND, MEDIUM-BROWN, MEDIUM, GRAVELLY;
MOIST, OXIDIZED
25 - 28 GRAVEL, BROWN, COARSE, CLAYEY, SILTY,
SANDY; MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 191

LOCATION: 106N-48W-07ABA

LEGAL LOCATION: NE NW NE SEC. 07, T. 106 N., R. 48 W.

0 - 15 SAND AND GRAVEL, COARSE SAND, FINE TO
COARSE GRAVEL; COBBLESTONES

* * * *

TEST HOLE NUMBER: 192

LOCATION: 106N-48W-07ACDD

LEGAL LOCATION: SE SE SW NE SEC. 07, T. 106 N., R. 48 W.

5 -	7	SAND, RED-BROWN, FINE; OXIDIZED, MOIST
9 -	11	SAND, PEBBLY, POORLY SORTED; OXIDIZED, MOIST
11 -	14	GRAVEL
14 -	19	SAND, COARSE, PEBBLY; SATURATED, SOME CLAY
19 -	32	SAND, MEDIUM

* * * *

TEST HOLE NUMBER: 193

LOCATION: 106N-48W-07ADD

LEGAL LOCATION: SE SE NE SEC. 07, T. 106 N., R. 48 W.

0 -	8	SAND AND GRAVEL, FINE TO MEDIUM SAND, COARSE GRAVEL; CLEAN
8 -	10	GRAVEL, COARSE
10 -	41	SAND AND GRAVEL, FINE TO MEDIUM SAND, COARSE GRAVEL

* * * *

TEST HOLE NUMBER: 194

LOCATION: 106N-48W-07BABA

LEGAL LOCATION: NE NW NE NW SEC. 07, T. 106 N., R. 48 W.

5 -	24	GRAVEL, COARSE, SANDY; DRY
24 -	38	GRAVEL, COARSE; SATURATED

* * * *

TEST HOLE NUMBER: 195

LOCATION: 106N-48W-07BCBC

LEGAL LOCATION: SW NW SW NW SEC. 07, T. 106 N., R. 48 W.

4 -	22	GRAVEL, COARSE, SANDY
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TEST HOLE NUMBER: 196

LOCATION: 106N-48W-07BCCB

LEGAL LOCATION: NW SW SW NW SEC. 07, T. 106 N., R. 48 W.

5 -	7	GRAVEL, BROWN, SANDY; DRY
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7 - 20 SAND, BROWN, PEBBLY
20 - 23 SAND, BROWN, PEBBLY, GRAVELLY; SATURATED

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TEST HOLE NUMBER: 197
LOCATION: 106N-48W-07CABB
LEGAL LOCATION: NW NW NE SW SEC. 07, T. 106 N., R. 48 W.

8 - 13 SAND, RED-BROWN, SILTY, PEBBLY; DRY
13 - 29 SAND, BROWN, SILTY, PEBBLY; SATURATED

* * * *

TEST HOLE NUMBER: 198
LOCATION: 106N-48W-07CADD
LEGAL LOCATION: SE SE NE SW SEC. 07, T. 106 N., R. 48 W.

3 - 6 SAND, DARK-BROWN, GRAVELLY; DRY, DIRTY,
OXIDIZED
6 - 14 SAND, REDDISH-BROWN, MEDIUM; DRY,
OXIDIZED
14 - 18 GRAVEL, BROWN, COARSE; SATURATED
18 - 20 SAND, DARK-GRAY, VERY CLAYEY; SATURATED

* * * *

TEST HOLE NUMBER: 199
LOCATION: 106N-48W-07CCBC
LEGAL LOCATION: SW NW SW SW SEC. 07, T. 106 N., R. 48 W.

4 - 6 SAND, DARK-BROWN, COARSE, GRAVELLY;
MOIST, OXIDIZED
6 - 20 GRAVEL, DARK-BROWN, MEDIUM-COARSE, SANDY;
SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 200
LOCATION: 106N-48W-07DAA
LEGAL LOCATION: NE NE SE SEC. 07, T. 106 N., R. 48 W.

2 - 4 GRAVEL, FINE
4 - 11 SAND, FINE TO MEDIUM

* * * *

TEST HOLE NUMBER: 201

LOCATION: 106N-48W-07DDAD

LEGAL LOCATION: SE NE SE SE SEC. 07, T. 106 N., R. 48 W.

1 - 17 SAND, COARSE; SOME MEDIUM SAND
17 - 27 GRAVEL, VERY FINE; SOME COARSE AND MEDIUM
SAND

* * * *

TEST HOLE NUMBER: 202

LOCATION: 106N-48W-08BCDD

LEGAL LOCATION: SE SE SW NW SEC. 08, T. 106 N., R. 48 W.

10 - 22 SAND, BROWN, FINE
22 - 48 SAND, DARK-BROWN, PEBBLY

* * * *

TEST HOLE NUMBER: 203

LOCATION: 106N-48W-15ABAB

LEGAL LOCATION: NW NE NW NE SEC. 15, T. 106 N., R. 48 W.

6 - 7 SAND, BROWN, MEDIUM; MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 204

LOCATION: 106N-48W-17BBCC

LEGAL LOCATION: SW SW NW NW SEC. 17, T. 106 N., R. 48 W.

0 - 5 SAND, BROWN, MEDIUM, CLAYEY, WELL
SORTED; DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 205

LOCATION: 106N-48W-18BBB

LEGAL LOCATION: NW NW NW SEC. 18, T. 106 N., R. 48 W.

2 - 10 SAND, FINE TO COARSE
10 - 15 SAND AND GRAVEL, COARSE SAND, FINE TO
MEDIUM GRAVEL
15 - 29 GRAVEL, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 206

LOCATION: 106N-48W-18BBCB

LEGAL LOCATION: NW SW NW NW SEC. 18, T. 106 N., R. 48 W.

8 - 9 GRAVEL, COARSE
9 - 15 SAND, UNSORTED; SATURATED, WITH SILT
15 - 34 SAND, BROWN, PEBBLY, SILTY; SATURATED

* * * *

TEST HOLE NUMBER: 207

LOCATION: 106N-48W-18BCCC

LEGAL LOCATION: SW SW SW NW SEC. 18, T. 106 N., R. 48 W.

11 - 32 SAND, BROWN, CLAYEY; SATURATED

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TEST HOLE NUMBER: 208

LOCATION: 106N-48W-21AAAA

LEGAL LOCATION: NE NE NE NE SEC. 21, T. 106 N., R. 48 W.

6 - 9 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 209

LOCATION: 106N-48W-22CCDC

LEGAL LOCATION: SW SE SW SW SEC. 22, T. 106 N., R. 48 W.

5 - 9 SAND, BROWN, COARSE, SILTY, GRAVELLY;
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 210

LOCATION: 106N-48W-24BBAB

LEGAL LOCATION: NW NE NW NW SEC. 24, T. 106 N., R. 48 W.

8 - 17 SAND, BROWN, COARSE, VERY CLAYEY;
SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 211

LOCATION: 106N-48W-24CCCC

LEGAL LOCATION: SW SW SW SW SEC. 24, T. 106 N., R. 48 W.

5 - 10 SAND, BROWN, MEDIUM, SILTY, PEBBLY; VERY
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 212
LOCATION: 106N-48W-28DCCD
LEGAL LOCATION: SE SW SW SE SEC. 28, T. 106 N., R. 48 W.

5 - 19 SAND, BROWN, COARSE, VERY GRAVELLY;
MOIST, OXIDIZED, SATURATED AT 10 FEET

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TEST HOLE NUMBER: 213
LOCATION: 106N-49W-02CCCB
LEGAL LOCATION: NW SW SW SW SEC. 02, T. 106 N., R. 49 W.

1 - 6 GRAVEL, BROWN, SANDY; DRY

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TEST HOLE NUMBER: 214
LOCATION: 106N-49W-04AABA
LEGAL LOCATION: NE NW NE NE SEC. 04, T. 106 N., R. 49 W.

0 - 4 SAND, MEDIUM-BROWN, PEBBLY, POORLY
SORTED; DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 215
LOCATION: 106N-49W-04BAAA
LEGAL LOCATION: NE NE NE NW SEC. 04, T. 106 N., R. 49 W.

2 - 5 GRAVEL, BROWN, SANDY; DRY
5 - 9 SAND, BROWN, PEBBLY, POORLY SORTED;
MOIST, CLEAN

* * * *

TEST HOLE NUMBER: 216
LOCATION: 106N-49W-11DABA
LEGAL LOCATION: NE NW NE SE SEC. 11, T. 106 N., R. 49 W.

6 - 7 GRAVEL, BROWN, COARSE; SANDY
7 - 11 SAND, BROWN, COARSE; SATURATED

* * * *

TEST HOLE NUMBER: 217
LOCATION: 106N-49W-11DBB
LEGAL LOCATION: NW NW SE SEC. 11, T. 106 N., R. 49 W.

4 - 7 SAND, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 218
LOCATION: 106N-49W-12DAB
LEGAL LOCATION: NW NE SE SEC. 12, T. 106 N., R. 49 W.

4 - 12 GRAVEL, COARSE
12 - 14 GRAVEL, FINE TO MEDIUM
14 - 19 SAND, MEDIUM TO COARSE
19 - 26 SAND, COARSE; MATERIAL BECAME TOO COARSE
TO CONTINUE

* * * *

TEST HOLE NUMBER: 219
LOCATION: 106N-49W-12DABA
LEGAL LOCATION: NE NW NE SE SEC. 12, T. 106 N., R. 49 W.

3 - 6 SAND, BROWN, FINE TO MEDIUM, PEBBLY,
POORLY SORTED; MOIST
6 - 9 GRAVEL
9 - 18 SAND, MEDIUM-BROWN, FINE TO COARSE,
PEBBLY; MOIST
18 - 26 SAND, MEDIUM-BROWN, FINE TO COARSE,
PEBBLY; SATURATED

* * * *

TEST HOLE NUMBER: 220
LOCATION: 106N-49W-12DCBB
LEGAL LOCATION: NW NW SW SE SEC. 12, T. 106 N., R. 49 W.

3 - 5 SAND, RED-BROWN; OXIDIZED, MOIST, WITH
SOME PEBBLES
6 - 11 GRAVEL, COARSE

* * * *

TEST HOLE NUMBER: 221

LOCATION: 106N-49W-12DDB

LEGAL LOCATION: NW SE SE SEC. 12, T. 106 N., R. 49 W.

0 - 3 SAND AND GRAVEL, FINE TO COARSE GRAVEL;
COBBLESTONES
3 - 15 GRAVEL, FINE TO MEDIUM; COBBLESTONES

* * * *

TEST HOLE NUMBER: 222

LOCATION: 106N-49W-13BCBB

LEGAL LOCATION: NW NW SW NW SEC. 13, T. 106 N., R. 49 W.

1 - 3 SAND, MEDIUM
3 - 11 GRAVEL, BROWN, SANDY

* * * *

TEST HOLE NUMBER: 223

LOCATION: 106N-49W-14ADC

LEGAL LOCATION: SW SE NE SEC. 14, T. 106 N., R. 49 W.

7 - 12 GRAVEL, FINE
12 - 23 SAND, FINE TO COARSE

* * * *

TEST HOLE NUMBER: 224

LOCATION: 106N-49W-14CCD

LEGAL LOCATION: SE SW SW SEC. 14, T. 106 N., R. 49 W.

1 - 7 SAND AND GRAVEL, FINE TO COARSE SAND,
FINE GRAVEL
7 - 22 GRAVEL, FINE TO COARSE; PEBBLES

* * * *

TEST HOLE NUMBER: 225

LOCATION: 106N-49W-14CDA

LEGAL LOCATION: NE SE SW SEC. 14, T. 106 N., R. 49 W.

7 - 15 GRAVEL, MEDIUM TO COARSE, SILTY

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TEST HOLE NUMBER: 226

LOCATION: 106N-49W-14CDCB

LEGAL LOCATION: NW SW SE SW SEC. 14, T. 106 N., R. 49 W.

3 - 10 SAND, BROWN, GRAVELLY; SATURATED
10 - 12 GRAVEL
12 - 17 SAND, BROWN, GRAVELLY; SATURATED

* * * *

TEST HOLE NUMBER: 227
LOCATION: 106N-49W-14DBAA
LEGAL LOCATION: NE NE NW SE SEC. 14, T. 106 N., R. 49 W.

3 - 10 GRAVEL, COARSE; SOME REDDISH-BROWN SAND,
DRY
10 - 14 SAND; MEDIUM-BROWN, PEBBLY; MOIST, SOME
CLAY
14 - 20 SAND, MEDIUM-BROWN, SILTY, PEBBLY;
SATURATED

* * * *

TEST HOLE NUMBER: 228
LOCATION: 106N-49W-14DBD
LEGAL LOCATION: SE NW SE SEC. 14, T. 106 N., R. 49 W.

0 - 3 SAND AND GRAVEL, FINE TO COARSE GRAVEL;
PEBBLES, CLEAN
3 - 13 SAND AND GRAVEL, COARSE SAND, FINE TO
MEDIUM GRAVEL; CLEAN

* * * *

TEST HOLE NUMBER: 229
LOCATION: 106N-49W-15DCD
LEGAL LOCATION: SE SW SE SEC. 15, T. 106 N., R. 49 W.

2 - 7 GRAVEL, COARSE, CLAYEY
7 - 22 SAND, COARSE
22 - 36 SAND AND GRAVEL, COARSE SAND, FINE GRAVEL

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TEST HOLE NUMBER: 230
LOCATION: 106N-49W-15DDDD
LEGAL LOCATION: SE SE SE SE SEC. 15, T. 106 N., R. 49 W.

8 - 18 GRAVEL

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TEST HOLE NUMBER: 231
LOCATION: 106N-49W-21AAAA
LEGAL LOCATION: NE NE NE NE SEC. 21, T. 106 N., R. 49 W.

1 - 3 SAND, REDDISH-BROWN, MEDIUM

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TEST HOLE NUMBER: 232
LOCATION: 106N-49W-22DDDD
LEGAL LOCATION: SE SE SE SE SEC. 22, T. 106 N., R. 49 W.

0 - 7 SAND, FINE, SILTY
7 - 24 GRAVEL, FINE TO COARSE; COARSE, CLEAN SAND

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TEST HOLE NUMBER: 233
LOCATION: 106N-49W-23ACD
LEGAL LOCATION: SE SW NE SEC. 23, T. 106 N., R. 49 W.

1 - 5 GRAVEL, FINE TO COARSE
5 - 14 SAND, FINE TO COARSE
14 - 15 GRAVEL, FINE TO COARSE

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TEST HOLE NUMBER: 234
LOCATION: 106N-49W-23ADC
LEGAL LOCATION: SW SE NE SEC. 23, T. 106 N., R. 49 W.

15 - 30 SAND, LIGHT-GRAY CHANGING TO DARK-GRAY,
FINE, CLAYEY

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TEST HOLE NUMBER: 235
LOCATION: 106N-49W-23BDA
LEGAL LOCATION: NE SE NW SEC. 23, T. 106 N., R. 49 W.

2 - 6 SAND, FINE, SILTY
6 - 15 SAND AND GRAVEL, COARSE SAND, FINE TO
COARSE GRAVEL

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TEST HOLE NUMBER: 236
LOCATION: 106N-49W-23BDD
LEGAL LOCATION: SE SE NW SEC. 23, T. 106 N., R. 49 W.

4 - 15 SAND AND GRAVEL, FINE TO COARSE SAND,
COARSE GRAVEL, CLAYEY

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TEST HOLE NUMBER: 237
LOCATION: 106N-49W-23CCD
LEGAL LOCATION: SE SW SW SEC. 23, T. 106 N., R. 49 W.

4 - 9 SAND, COARSE GRADING TO FINE
9 - 14 SAND, FINE TO MEDIUM

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TEST HOLE NUMBER: 238
LOCATION: 106N-49W-23DDC
LEGAL LOCATION: SW SE SE SEC. 23, T. 106 N., R. 49 W.

0 - 4 GRAVEL, COARSE, SILTY
4 - 9 SAND, FINE TO MEDIUM
9 - 10 SAND, FINE

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TEST HOLE NUMBER: 239
LOCATION: 106N-49W-25BBBB
LEGAL LOCATION: NW NW NW NW SEC. 25, T. 106 N., R. 49 W.

1 - 5 SAND, REDDISH-BROWN, WELL SORTED; MOIST,
OXIDIZED
7 - 15 GRAVEL, GRAY, SANDY, CLAYEY; VERY MOIST,
UNOXIDIZED

* * * *

TEST HOLE NUMBER: 240
LOCATION: 106N-49W-26BABB
LEGAL LOCATION: NW NW NE NW SEC. 26, T. 106 N., R. 49 W.

8 - 18 GRAVEL, MEDIUM, SANDY

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TEST HOLE NUMBER: 241
LOCATION: 106N-49W-26CCC
LEGAL LOCATION: SW SW SW SEC. 26, T. 106 N., R. 49 W.

4 - 9 SAND, MEDIUM TO COARSE
9 - 11 SAND, MEDIUM

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TEST HOLE NUMBER: 242
LOCATION: 106N-49W-26DDC
LEGAL LOCATION: SW SE SE SEC. 26, T. 106 N., R. 49 W.

14 - 19 SAND, MEDIUM, SILTY
19 - 24 SAND, MEDIUM

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TEST HOLE NUMBER: 243
LOCATION: 106N-49W-34ABB
LEGAL LOCATION: NW NW NE SEC. 34, T. 106 N., R. 49 W.

14 - 24 SAND, MEDIUM TO FINE, SILTY
24 - 29 SAND, FINE, SILTY

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TEST HOLE NUMBER: 244
LOCATION: 106N-49W-35BAAA
LEGAL LOCATION: NE NE NE NW SEC. 35, T. 106 N., R. 49 W.

1 - 16 GRAVEL, MEDIUM TO COARSE

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TEST HOLE NUMBER: 245
LOCATION: 106N-49W-35BAB
LEGAL LOCATION: NW NE NW SEC. 35, T. 106 N., R. 49 W.

2 - 15 SAND AND GRAVEL, COARSE SAND, FINE
GRAVEL; CLEAN

* * * *

TEST HOLE NUMBER: 246
LOCATION: 106N-49W-35CDDD
LEGAL LOCATION: SE SE SE SW SEC. 35, T. 106 N., R. 49 W.

2 - 18 GRAVEL, COARSE, SANDY

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TEST HOLE NUMBER: 247
LOCATION: 106N-49W-36CCCC
LEGAL LOCATION: SW SW SW SW SEC. 36, T. 106 N., R. 49 W.

4 - 20 SAND, REDDISH-BROWN, MEDIUM, WELL
SORTED; MOIST, CLEAN
20 - 28 SAND, REDDISH-BROWN, MEDIUM, WELL SORTED;
SATURATED, CLEAN, OXIDIZED

* * * *

TEST HOLE NUMBER: 248
LOCATION: 106N-50W-06BBBB
LEGAL LOCATION: NW NW NW NW SEC. 06, T. 106 N., R. 50 W.

5 - 18 GRAVEL, MEDIUM TO COARSE, SANDY; CLAY
LENS AT 10 TO 12 FEET

* * * *

TEST HOLE NUMBER: 249
LOCATION: 106N-50W-15CCCC
LEGAL LOCATION: SW SW SW SW SEC. 15, T. 106 N., R. 50 W.

0 - 2 SAND, BROWN, MEDIUM
12 - 22 SAND, BROWN, MEDIUM; BROWN TILL LENS AT
15 TO 18 FEET

* * * *

TEST HOLE NUMBER: 250
LOCATION: 106N-50W-21CBBB
LEGAL LOCATION: NW NW NW SW SEC. 21, T. 106 N., R. 50 W.

5 - 12 SAND, BROWN, MEDIUM, CLAYEY, GRAVELLY;
SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 251
LOCATION: 106N-50W-21DCCD
LEGAL LOCATION: SE SW SW SE SEC. 21, T. 106 N., R. 50 W.

1 - 9 SAND, BROWN, MEDIUM, CLAYEY, GRAVELLY;
DRY, OXIDIZED

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TEST HOLE NUMBER: 252
LOCATION: 106N-50W-21DDCD
LEGAL LOCATION: SE SW SE SE SEC. 21, T. 106 N., R. 50 W.

7 - 11 SAND, BROWN, MEDIUM, CLAYEY; SATURATED,
OXIDIZED

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TEST HOLE NUMBER: 253
LOCATION: 106N-50W-26CCBB
LEGAL LOCATION: NW NW SW SW SEC. 26, T. 106 N., R. 50 W.

15 - 16 GRAVEL, BROWN, COARSE; SATURATED,
OXIDIZED

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TEST HOLE NUMBER: 254
LOCATION: 106N-50W-27BCBB
LEGAL LOCATION: NW NW SW NW SEC. 27, T. 106 N., R. 50 W.

16 - 20 SAND, BROWN, MEDIUM, VERY CLAYEY;
SATURATED, OXIDIZED
20 - 22 GRAVEL, BROWN, COARSE, VERY CLAYEY;
SATURATED, OXIDIZED

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TEST HOLE NUMBER: 255
LOCATION: 106N-50W-28BBBB
LEGAL LOCATION: NW NW NW NW SEC. 28, T. 106 N., R. 50 W.

7 - 10 GRAVEL, REDDISH-BROWN, COARSE; DRY,
OXIDIZED
10 - 14 SAND, REDDISH-BROWN, MEDIUM, PEBBLY; DRY,
OXIDIZED
14 - 21 SAND, REDDISH-BROWN, COARSE, GRAVELLY;

MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 256
LOCATION: 107N-47W-09DDDD
LEGAL LOCATION: SE SE SE SE SEC. 09, T. 107 N., R. 47 W.

4 - 7 SAND, BROWN, COARSE, SILTY; SATURATED,
OXIDIZED
7 - 13 GRAVEL, BROWN, COARSE, SILTY, SANDY;
SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 257
LOCATION: 107N-47W-10CBCB
LEGAL LOCATION: NW SW NW SW SEC. 10, T. 107 N., R. 47 W.

4 - 12 SAND, REDDISH-BROWN, SILTY, GRAVELLY;
DRY, OXIDIZED
19 - 23 SAND, REDDISH-BROWN, GRAVELLY, POORLY
SORTED; DRY, OXIDIZED
23 - 26 SAND, REDDISH-BROWN, CLAYEY, GRAVELLY;
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 258
LOCATION: 107N-47W-10DCBD
LEGAL LOCATION: SE NW SW SE SEC. 10, T. 107 N., R. 47 W.

0 - 11 GRAVEL, BROWN, SILTY, SANDY; DRY,
OXIDIZED

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TEST HOLE NUMBER: 259
LOCATION: 107N-47W-15CCBC
LEGAL LOCATION: SW NW SW SW SEC. 15, T. 107 N., R. 47 W.

0 - 3 GRAVEL, MEDIUM, SILTY, SANDY; DRY
OXIDIZED
3 - 9 GRAVEL, REDDISH-BROWN, VERY SANDY, SILTY;
DRY, OXIDIZED
9 - 12 GRAVEL, COARSE; DRY, CLEAN
12 - 19 GRAVEL, COARSE, SILTY, SANDY; DRY
19 - 28 SAND, GRAY, CLAYEY, PEBBLY; SATURATED,

UNOXIDIZED

* * * *

TEST HOLE NUMBER: 260
LOCATION: 107N-47W-16CCCC
LEGAL LOCATION: SW SW SW SW SEC. 16, T. 107 N., R. 47 W.

1 - 9 SAND
18 - 27 GRAVEL, MEDIUM

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TEST HOLE NUMBER: 261
LOCATION: 107N-47W-18CCBC
LEGAL LOCATION: SW NW SW SW SEC. 18, T. 107 N., R. 47 W.

4 - 21 GRAVEL, COARSE

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TEST HOLE NUMBER: 262
LOCATION: 107N-47W-19ADDA
LEGAL LOCATION: NE SE SE NE SEC. 19, T. 107 N., R. 47 W.

3 - 10 SAND, REDDISH-BROWN, SILTY, CLAYEY,
GRAVELLY; MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 263
LOCATION: 107N-47W-19CBCC
LEGAL LOCATION: SW SW NW SW SEC. 19, T. 107 N., R. 47 W.

5 - 8 SAND, GRAYISH-BROWN, SILTY; MOIST,
OXIDIZED

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TEST HOLE NUMBER: 264
LOCATION: 107N-47W-20DADD
LEGAL LOCATION: SE SE NE SE SEC. 20, T. 107 N., R. 47 W.

0 - 5 SAND, BROWN, PEBBLY, POORLY SORTED;
MOIST, OXIDIZED
5 - 15 GRAVEL, REDDISH-BROWN, SILTY, SANDY;
MOIST, OXIDIZED

15 - 20 GRAVEL, TAN, SILTY, SANDY; MOIST,
OXIDIZED

* * * *

TEST HOLE NUMBER: 265
LOCATION: 107N-47W-21BCBB
LEGAL LOCATION: NW NW SW NW SEC. 21, T. 107 N., R. 47 W.

8 - 20 GRAVEL, BROWN, CLAYEY, SANDY; MOIST,
OXIDIZED, SATURATED AT 12 FEET

* * * *

TEST HOLE NUMBER: 266
LOCATION: 107N-47W-22BBBB
LEGAL LOCATION: NW NW NW NW SEC. 22, T. 107 N., R. 47 W.

3 - 28 GRAVEL, COARSE, SANDY

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TEST HOLE NUMBER: 267
LOCATION: 107N-47W-30AABA
LEGAL LOCATION: NE NW NE NE SEC. 30, T. 107 N., R. 47 W.

0 - 4 SAND, REDDISH-BROWN, GRAVELLY, POORLY
SORTED; DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 268
LOCATION: 107N-48W-04ABBA
LEGAL LOCATION: NE NW NW NE SEC. 04, T. 107 N., R. 48 W.

4 - 11 SAND, BROWN, FINE, PEBBLY; DRY
11 - 16 SAND, GOLD, MEDIUM, PEBBLY; MOIST
16 - 25 GRAVEL, COARSE

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TEST HOLE NUMBER: 269
LOCATION: 107N-48W-05AAAA
LEGAL LOCATION: NE NE NE NE SEC. 05, T. 107 N., R. 48 W.

0 - 1 GRAVEL, COARSE
1 - 13 SAND, BROWN, COARSE, PEBBLY; DRY

13 - 21 SAND, GOLDEN-BROWN; MOIST

* * * *

TEST HOLE NUMBER: 270
LOCATION: 107N-48W-05DAAA
LEGAL LOCATION: NE NE NE SE SEC. 05, T. 107 N., R. 48 W.

12 - 16 SAND, BLACK, PEBBLY, POORLY SORTED;
SATURATED

16 - 21 SAND, BROWN, PEBBLY, POORLY SORTED;
SATURATED

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TEST HOLE NUMBER: 271
LOCATION: 107N-48W-05DBC
LEGAL LOCATION: SW NW SE SEC. 05, T. 107 N., R. 48 W.

9 - 14 SAND, MEDIUM
14 - 27 SAND AND GRAVEL

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TEST HOLE NUMBER: 272
LOCATION: 107N-48W-05DCC 1
LEGAL LOCATION: SW SW SE SEC. 05, T. 107 N., R. 48 W.

1 - 8 SAND, COARSE, SILTY
8 - 10 GRAVEL, MEDIUM TO COARSE, SILTY
10 - 20 SAND, MEDIUM TO COARSE
20 - 30 SAND AND GRAVEL, COARSE SAND, FINE TO
MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 273
LOCATION: 107N-48W-05DCC 2
LEGAL LOCATION: SW SW SE SEC. 05, T. 107 N., R. 48 W.

7 - 44 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 274
LOCATION: 107N-48W-05DCCC
LEGAL LOCATION: SW SW SW SE SEC. 05, T. 107 N., R. 48 W.

1 - 8 SAND, COARSE, SILTY
8 - 10 GRAVEL, MEDIUM TO COARSE, SILTY
10 - 20 SAND, MEDIUM TO COARSE
20 - 30 GRAVEL, FINE TO MEDIUM; COARSE SAND

* * * *

TEST HOLE NUMBER: 275
LOCATION: 107N-48W-08AAA
LEGAL LOCATION: NE NE NE SEC. 08, T. 107 N., R. 48 W.

3 - 12 GRAVEL, SILTY, SANDY

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TEST HOLE NUMBER: 276
LOCATION: 107N-48W-08AAAA
LEGAL LOCATION: NE NE NE NE SEC. 08, T. 107 N., R. 48 W.

2 - 8 GRAVEL, MEDIUM, SANDY
9 - 21 GRAVEL, COARSE, VERY SANDY; ROCKS AT 20
TO 21 FEET

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TEST HOLE NUMBER: 277
LOCATION: 107N-48W-08ADD
LEGAL LOCATION: SE SE NE SEC. 08, T. 107 N., R. 48 W.

0 - 4 SAND, FINE
4 - 18 SAND AND GRAVEL, FINE SAND, FINE TO
COARSE GRAVEL; WITH PEBBLES AND
COBBLESTONES
18 - 53 GRAVEL, FINE TO COARSE

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TEST HOLE NUMBER: 278
LOCATION: 107N-48W-08DDA
LEGAL LOCATION: NE SE SE SEC. 08, T. 107 N., R. 48 W.

0 - 12 SAND, FINE, CLAYEY
12 - 18 SAND, COARSE, CLAYEY
18 - 34 SAND, MEDIUM TO COARSE; CLEAN

* * * *

TEST HOLE NUMBER: 279

LOCATION: 107N-48W-09BDD

LEGAL LOCATION: SE SE NW SEC. 09, T. 107 N., R. 48 W.

4 -	9	SAND, MEDIUM TO VERY COARSE, ROUNDED; GRANULES AND PEBBLES OF LIMESTONE, DOLOMITE, SLATE, GRANITE, AND SHALE, ACCESSORY MINERALS INCLUDE IRON OXIDES, FELDSPAR, TOURMALINE AND HORNBLLENDE
9 -	24	SAND, MEDIUM TO VERY COARSE, ROUNDED GRAVELLY; PEBBLES OF DOLOMITE, SLATE LIMESTONE, GRANITE, SCHIST, SHALE, IRONSTONE, MINERALS INCLUDE CHERT, TOURMALINE, FELDSPAR, IRON OXIDES
24 -	29	SAND, MEDIUM TO VERY COARSE, ROUNDED; FRAGMENTS OF LIMESTONE, GRANITE, SLATE, DOLOMITE, SCHIST, SHALE, MINERALS INCLUDE TOURMALINE, FELDSPAR, PYRITE, IRON OXIDES AND CHERT

* * * *

TEST HOLE NUMBER: 280

LOCATION: 107N-48W-09CAA

LEGAL LOCATION: NE NE SW SEC. 09, T. 107 N., R. 48 W.

1 -	8	SAND AND GRAVEL, FINE SAND, FINE TO COARSE GRAVEL
8 -	15	SAND, FINE TO COARSE
15 -	39	SAND AND GRAVEL, COARSE SAND, FINE TO MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 281

LOCATION: 107N-48W-09CBB

LEGAL LOCATION: NW NW SW SEC. 09, T. 107 N., R. 48 W.

3 -	12	SAND, MEDIUM; CLEAN
12 -	20	SAND AND GRAVEL, COARSE SAND, FINE GRAVEL
20 -	37	GRAVEL, FINE TO COARSE

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TEST HOLE NUMBER: 282

LOCATION: 107N-48W-10CCC

LEGAL LOCATION: SW SW SW SEC. 10, T. 107 N., R. 48 W.

9 -	19	SAND, VERY COARSE TO COARSE; SOME PEBBLES
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TEST HOLE NUMBER: 283
LOCATION: 107N-48W-12CBCC
LEGAL LOCATION: SW SW NW SW SEC. 12, T. 107 N., R. 48 W.

4 - 9 SAND, GRAYISH-BROWN, CLAYEY, GRAVELLY;
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 284
LOCATION: 107N-48W-14ADDA
LEGAL LOCATION: NE SE SE NE SEC. 14, T. 107 N., R. 48 W.

1 - 3 SAND, BROWN, SILTY, POORLY SORTED;
DRY, OXIDIIZED

* * * *

TEST HOLE NUMBER: 285
LOCATION: 107N-48W-14CCCC
LEGAL LOCATION: SW SW SW SW SEC. 14, T. 107 N., R. 48 W.

4 - 6 GRAVEL, REDDISH-BROWN, SILTY, SANDY; DRY,
OXIDIZED
6 - 9 SAND, REDDISH-BROWN, SILTY; DRY, OXIDIZED
9 - 15 GRAVEL, BROWN, SILTY, SANDY; DRY,
OXIDIZED

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TEST HOLE NUMBER: 286
LOCATION: 107N-48W-14DDD
LEGAL LOCATION: SE SE SE SEC. 14, T. 107 N., R. 48 W.

9 - 14 SAND, BROWNISH-GRAY, VERY FINE, ROUNDED;
SOME SILT AND CLAY
14 - 19 SAND, VERY FINE TO FINE, ROUNDED;
GRANULES OF ROCK FRAGMENTS, ACCESSORY
MINERALS
19 - 25 SAND, FINE TO COARSE, GRAVELLY, ROUNDED;
PEBBLES OF LIMESTONE, GRANITE, SLATE,
SHALE, ACCESSORY MINERALS INCLUDE
FELDSPAR, TOURMALINE, IRON OXIDES,
PYRITE, AND CHERT

* * * *

TEST HOLE NUMBER: 287
LOCATION: 107N-48W-15BAA
LEGAL LOCATION: NE NE NW SEC. 15, T. 107 N., R. 48 W.

9 - 19 SAND, MEDIUM TO COARSE
19 - 28 GRAVEL

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TEST HOLE NUMBER: 288
LOCATION: 107N-48W-16AAAA 1
LEGAL LOCATION: NE NE NE NE SEC. 16, T. 107 N., R. 48 W.

10 - 20 GRAVEL, DARK-BROWN, FINE TO MEDIUM

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TEST HOLE NUMBER: 289
LOCATION: 107N-48W-16AAAA 2
LEGAL LOCATION: NE NE NE NE SEC. 16, T. 107 N., R. 48 W.

7 - 18 GRAVEL, COARSE, SANDY

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TEST HOLE NUMBER: 290
LOCATION: 107N-48W-20CDAD
LEGAL LOCATION: SE NE SE SW SEC. 20, T. 107 N., R. 48 W.

9 - 11 GRAVEL
17 - 38 SAND, BROWN, COARSE; SATURATED

* * * *

TEST HOLE NUMBER: 291
LOCATION: 107N-48W-20DCC
LEGAL LOCATION: SW SW SE SEC. 20, T. 107 N., R. 48 W.

7 - 20 SAND, DARK-BROWN, MEDIUM TO COARSE,
GRAVELLY; CLEAN
20 - 40 SAND AND GRAVEL, MEDIUM TO COARSE SAND,
MEDIUM TO COARSE GRAVEL; COBBLESTONES,
CLEAN

* * * *

TEST HOLE NUMBER: 292

LOCATION: 107N-48W-20DCDC

LEGAL LOCATION: SW SE SW SE SEC. 20, T. 107 N., R. 48 W.

2 -	13	SAND, BROWN, CLAYEY
13 -	15	SAND, GRAY, PEBBLY; MOIST
15 -	24	SAND, GRAY, PEBBLY; SATURATED

* * * *

TEST HOLE NUMBER: 293

LOCATION: 107N-48W-21DDAA

LEGAL LOCATION: NE NE SE SE SEC. 21, T. 107 N., R. 48 W.

12 -	25	SAND, FINE; SATURATED
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TEST HOLE NUMBER: 294

LOCATION: 107N-48W-23AAAA

LEGAL LOCATION: NE NE NE NE SEC. 23, T. 107 N., R. 48 W.

12 -	20	SAND, MEDIUM TO COARSE, CLAYEY
20 -	25	GRAVEL, FINE, CLAYEY
25 -	28	SAND, FINE, CLAYEY

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TEST HOLE NUMBER: 295

LOCATION: 107N-48W-23DAA

LEGAL LOCATION: NE NE SE SEC. 23, T. 107 N., R. 48 W.

4 -	9	SAND, MEDIUM
9 -	18	SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 296

LOCATION: 107N-48W-25BCCB

LEGAL LOCATION: NW SW SW NW SEC. 25, T. 107 N., R. 48 W.

1 -	5	SAND, BROWN, MEDIUM, WELL SORTED; MOIST, CLEAN
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TEST HOLE NUMBER: 297

LOCATION: 107N-48W-26BAA

LEGAL LOCATION: NE NE NW SEC. 26, T. 107 N., R. 48 W.

9 - 25 SAND, MEDIUM

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TEST HOLE NUMBER: 298

LOCATION: 107N-48W-27AAC

LEGAL LOCATION: SW NE NE SEC. 27, T. 107 N., R. 48 W.

9 - 14 SAND, MEDIUM
14 - 22 SAND AND GRAVEL

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TEST HOLE NUMBER: 299

LOCATION: 107N-48W-27AAD

LEGAL LOCATION: SE NE NE SEC. 27, T. 107 N., R. 48 W.

10 - 20 SAND, FINE TO MEDIUM, SILTY
20 - 30 SAND, FINE TO COARSE

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TEST HOLE NUMBER: 300

LOCATION: 107N-48W-27BAB

LEGAL LOCATION: NW NE NW SEC. 27, T. 107 N., R. 48 W.

8 - 10 SAND, COARSE, CLAYEY
10 - 25 SAND, FINE TO COARSE
25 - 30 SAND, FINE; SOME GRAVEL LAYERS

* * * *

TEST HOLE NUMBER: 301

LOCATION: 107N-48W-28ABAD 1

LEGAL LOCATION: SE NE NW NE SEC. 28, T. 107 N., R. 48 W.

2 - 7 GRAVEL, MEDIUM, CLAYEY, SANDY

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TEST HOLE NUMBER: 302

LOCATION: 107N-48W-28ABAD 2

LEGAL LOCATION: SE NE NW NE SEC. 28, T. 107 N., R. 48 W.

3 - 8 GRAVEL, COARSE, SANDY; GAS ODOR AT
7 TO 8 FEET

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TEST HOLE NUMBER: 303
LOCATION: 107N-48W-28ABAD 3
LEGAL LOCATION: SE NE NW NE SEC. 28, T. 107 N., R. 48 W.

4 - 9 GRAVEL, REDDISH-BROWN, COARSE, VERY SANDY

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TEST HOLE NUMBER: 304
LOCATION: 107N-48W-28ABCA 5
LEGAL LOCATION: NE SW NW NE SEC. 28, T. 107 N., R. 48 W.

8 - 11 GRAVEL, BROWN, COARSE, VERY CLAYEY,
SANDY; SATURATED
11 - 18 SAND, BROWN, MEDIUM, CLAYEY; SATURATED

* * * *

TEST HOLE NUMBER: 305
LOCATION: 107N-48W-28ABCA 6
LEGAL LOCATION: NE SW NW NE SEC. 28, T. 107 N., R. 48 W.

6 - 8 SAND, BROWNISH-GRAY, MEDIUM, CLAYEY;
GASOLINE SATURATED
8 - 15 GRAVEL, GRAY-BROWN, MEDIUM, VERY SILTY,
GASOLINE SATURATED

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TEST HOLE NUMBER: 306
LOCATION: 107N-48W-28ABCA 7
LEGAL LOCATION: NE SW NW NE SEC. 28, T. 107 N., R. 48 W.

1 - 5 SAND, BROWN, MEDIUM, SILTY; MOIST
5 - 9 SAND, LIGHT-BROWN, MEDIUM TO COARSE, VERY
SILTY; MOIST
9 - 14 GRAVEL, BROWN, FINE TO MEDIUM, VERY
SANDY; SATURATED

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TEST HOLE NUMBER: 307
LOCATION: 107N-48W-28ABCA 8

LEGAL LOCATION: NE SW NW NE SEC. 28, T. 107 N., R. 48 W.

0 - 6 SAND, BLACK, SILTY; MOIST (FILL)
9 - 11 SAND, BROWN, MEDIUM, CLAYEY; SATURATED

* * * *

TEST HOLE NUMBER: 308
LOCATION: 107N-48W-28ABCD
LEGAL LOCATION: SE SW NW NE SEC. 28, T. 107 N., R. 48 W.

7 - 14 SAND, BLACK, VERY SILTY, CLAYEY;
SATURATED (ALLUVIUM)

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TEST HOLE NUMBER: 309
LOCATION: 107N-48W-28ABDA 1
LEGAL LOCATION: NE SE NW NE SEC. 28, T. 107 N., R. 48 W.

2 - 11 GRAVEL, BROWN, MEDIUM, CLAYEY; MOIST

* * * *

TEST HOLE NUMBER: 310
LOCATION: 107N-48W-28ABDA 2
LEGAL LOCATION: NE SE NW NE SEC. 28, T. 107 N., R. 48 W.

6 - 9 GRAVEL, LIGHT-GRAY-BROWN, COARSE, SANDY
9 - 12 GRAVEL, GRAY, COARSE, SANDY; SATURATED
WITH GASOLINE; SPLITSPOON SAMPLE
CONTAINED LIQUID GASOLINE AT 9 TO 10
FEET
12 - 13 SAND, TAN, FINE, SILTY; GASOLINE ODOR

* * * *

TEST HOLE NUMBER: 311
LOCATION: 107N-48W-28ABDA 3
LEGAL LOCATION: NE SE NW NE SEC. 28, T. 107 N., R. 48 W.

6 - 9 GRAVEL, YELLOW, COARSE TO MEDIUM, VERY
SANDY

* * * *

TEST HOLE NUMBER: 312

LOCATION: 107N-48W-28ABDA 4
LEGAL LOCATION: NE SE NW NE SEC. 28, T. 107 N., R. 48 W.

4 - 10 GRAVEL, YELLOW-BROWN, MEDIUM, SILTY,
SANDY; SLIGHT GASOLINE ODOR, NO
SEDIMENT DISCOLORATION

* * * *

TEST HOLE NUMBER: 313
LOCATION: 107N-48W-28ABDA 5
LEGAL LOCATION: NE SE NW NE SEC. 28, T. 107 N., R. 48 W.

4 - 11 GRAVEL, MEDIUM, SANDY; SATURATED WITH
GASOLINE AT 8 TO 11 FEET

* * * *

TEST HOLE NUMBER: 314
LOCATION: 107N-48W-28ABDA 6
LEGAL LOCATION: NE SE NW NE SEC. 28, T. 107 N., R. 48 W.

3 - 14 GRAVEL, FINE TO MEDIUM; SLIGHT GASOLINE
ODOR

* * * *

TEST HOLE NUMBER: 315
LOCATION: 107N-48W-28ABDA 7
LEGAL LOCATION: NE SE NW NE SEC. 28, T. 107 N., R. 48 W.

2 - 11 GRAVEL, FINE TO COARSE; SLIGHT GASOLINE
ODOR

* * * *

TEST HOLE NUMBER: 316
LOCATION: 107N-48W-28ABDA 8
LEGAL LOCATION: NE SE NW NE SEC. 28, T. 107 N., R. 48 W.

3 - 12 GRAVEL, FINE TO MEDIUM

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TEST HOLE NUMBER: 317
LOCATION: 107N-48W-28ABDA 9
LEGAL LOCATION: NE SE NW NE SEC. 28, T. 107 N., R. 48 W.

2 - 13 GRAVEL, FINE TO MEDIUM; SLIGHT GASOLINE
ODOR

* * * *

TEST HOLE NUMBER: 318
LOCATION: 107N-48W-28ABDA10
LEGAL LOCATION: NE SE NW NE SEC. 28, T. 107 N., R. 48 W.

2 - 12 GRAVEL, FINE TO MEDIUM

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TEST HOLE NUMBER: 319
LOCATION: 107N-48W-28ABDB 1
LEGAL LOCATION: NW SE NW NE SEC. 28, T. 107 N., R. 48 W.

2 - 10 GRAVEL, BROWN, MEDIUM, CLAYEY, SANDY; DRY

* * * *

TEST HOLE NUMBER: 320
LOCATION: 107N-48W-28ABDB 3
LEGAL LOCATION: NW SE NW NE SEC. 28, T. 107 N., R. 48 W.

4 - 12 GRAVEL, MEDIUM TO COARSE; SLIGHT GASOLINE
ODOR?

* * * *

TEST HOLE NUMBER: 321
LOCATION: 107N-48W-28ABDB 4
LEGAL LOCATION: NW SE NW NE SEC. 28, T. 107 N., R. 48 W.

3 - 11 GRAVEL, YELLOW, SILTY, SANDY; MOIST AT
10.5 FEET

* * * *

TEST HOLE NUMBER: 322
LOCATION: 107N-48W-28CCC
LEGAL LOCATION: SW SW SW SEC. 28, T. 107 N., R. 48 W.

0 - 5 SAND, FINE
8 - 20 SAND, FINE TO COARSE

20 - 22 GRAVEL, MEDIUM
22 - 30 SAND, FINE TO COARSE

* * * *

TEST HOLE NUMBER: 323
LOCATION: 107N-48W-28CDDD
LEGAL LOCATION: SE SE SE SW SEC. 28, T. 107 N., R. 48 W.

3 - 4 SAND, REDDISH-BROWN, SILTY, POORLY
SORTED; DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 324
LOCATION: 107N-48W-29ABA
LEGAL LOCATION: NE NW NE SEC. 29, T. 107 N., R. 48 W.

1 - 20 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 325
LOCATION: 107N-48W-29ADB
LEGAL LOCATION: NW SE NE SEC. 29, T. 107 N., R. 48 W.

0 - 35 SAND AND GRAVEL, FINE TO COARSE SAND,
COARSE GRAVEL; WITH PEBBLES AND
COBBLESTONES

* * * *

TEST HOLE NUMBER: 326
LOCATION: 107N-48W-29BAB
LEGAL LOCATION: NW NE NW SEC. 29, T. 107 N., R. 48 W.

4 - 9 SAND AND GRAVEL
9 - 29 SAND, MEDIUM TO COARSE

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TEST HOLE NUMBER: 327
LOCATION: 107N-48W-29CCDC
LEGAL LOCATION: SW SE SW SW SEC. 29, T. 107 N., R. 48 W.

0 - 25 SAND, COARSE
25 - 27 GRAVEL, COARSE

* * * *

TEST HOLE NUMBER: 328
LOCATION: 107N-48W-29DAA
LEGAL LOCATION: NE NE SE SEC. 29, T. 107 N., R. 48 W.

0 - 5 SAND, FINE TO COARSE
5 - 10 SAND AND GRAVEL, FINE TO COARSE,
COARSE GRAVEL; CLEAN
10 - 15 SAND AND GRAVEL, COARSE SAND, FINE TO
COARSE GRAVEL
15 - 30 SAND AND GRAVEL, COARSE SAND, COARSE
GRAVEL; WITH PEBBLES AND COBBLESTONES,
CLEAN

* * * *

TEST HOLE NUMBER: 329
LOCATION: 107N-48W-29DCCD
LEGAL LOCATION: SE SW SW SE SEC. 29, T. 107 N., R. 48 W.

0 - 26 GRAVEL, SANDY; WELL ROUNDED

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TEST HOLE NUMBER: 330
LOCATION: 107N-48W-29DDC
LEGAL LOCATION: SW SE SE SEC. 29, T. 107 N., R. 48 W.

0 - 45 SAND AND GRAVEL, FINE TO MEDIUM SAND,
FINE TO COARSE GRAVEL; WITH PEBBLES
AND COBBLESTONES

* * * *

TEST HOLE NUMBER: 331
LOCATION: 107N-48W-32ABB
LEGAL LOCATION: NW NW NE SEC. 32, T. 107 N., R. 48 W.

0 - 8 SAND, FINE TO MEDIUM, SILTY
8 - 12 SAND, COARSE; CLEAN
12 - 28 SAND AND GRAVEL, COARSE SAND, FINE TO
MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 332

LOCATION: 107N-48W-32ABBÈ
LEGAL LOCATION: NW NW NW NE SEC. 32, T. 107 N., R. 48 W.

0 - 8 SAND, FINE TO MEDIUM, SILTY
8 - 12 SAND, COARSE; CLEAN
12 - 28 GRAVEL, FINE TO MEDIUM; COARSE SAND

* * * *

TEST HOLE NUMBER: 333
LOCATION: 107N-48W-32BAB
LEGAL LOCATION: NW NE NW SEC. 32, T. 107 N., R. 48 W.

4 - 19 SAND, MEDIUM TO COARSE
19 - 24 GRAVEL

* * * *

TEST HOLE NUMBER: 334
LOCATION: 107N-48W-32CDA
LEGAL LOCATION: NE SE SW SEC. 32, T. 107 N., R. 48 W.

4 - 12 SAND, MEDIUM

* * * *

TEST HOLE NUMBER: 335
LOCATION: 107N-49W-03DDAA
LEGAL LOCATION: NE NE SE SE SEC. 03, T. 107 N., R. 49 W.

8 - 12 GRAVEL

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TEST HOLE NUMBER: 336
LOCATION: 107N-49W-28DDCC
LEGAL LOCATION: SW SW SE SE SEC. 28, T. 107 N., R. 49 W.

0 - 4 SAND, BROWN, GRAVELLY, POORLY SORTED;
DRY

* * * *

TEST HOLE NUMBER: 337
LOCATION: 107N-49W-30BBAA
LEGAL LOCATION: NE NE NW NW SEC. 30, T. 107 N., R. 49 W.

2 - 11 SAND, REDDISH-BROWN, GRAVELLY, POORLY
SORTED; MOIST, DIRTY, OXIDIZED

* * * *

TEST HOLE NUMBER: 338
LOCATION: 107N-49W-30DADD
LEGAL LOCATION: SE SE NE SE SEC. 30, T. 107 N., R. 49 W.

10 - 15 SAND, REDDISH-BROWN, GRAVELLY; VERY
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 339
LOCATION: 107N-49W-31ABAA
LEGAL LOCATION: NE NE NW NE SEC. 31, T. 107 N., R. 49 W.

5 - 7 GRAVEL, REDDISH-BROWN, CLAYEY, SANDY;
SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 340
LOCATION: 107N-49W-33BCBB
LEGAL LOCATION: NW NW SW NW SEC. 33, T. 107 N., R. 49 W.

4 - 10 GRAVEL, MEDIUM-BROWN, CLAYEY, SANDY;
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 341
LOCATION: 107N-49W-33CBCB
LEGAL LOCATION: NW SW NW SW SEC. 33, T. 107 N., R. 49 W.

4 - 5 SAND, LIGHT-BROWN, WELL SORTED; MOIST

* * * *

TEST HOLE NUMBER: 342
LOCATION: 107N-49W-34CCCC
LEGAL LOCATION: SW SW SW SW SEC. 34, T. 107 N., R. 49 W.

1 - 15 GRAVEL, MEDIUM TO COARSE, SANDY

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TEST HOLE NUMBER: 343
LOCATION: 107N-50W-21ADAA
LEGAL LOCATION: NE NE SE NE SEC. 21, T. 107 N., R. 50 W.

0 - 7 SAND AND GRAVEL, CLAYEY

* * * *

TEST HOLE NUMBER: 344
LOCATION: 107N-50W-24BCBB
LEGAL LOCATION: NW NW SW NW SEC. 24, T. 107 N., R. 50 W.

1 - 5 SAND, BROWN, FINE, CLAYEY; MOIST,
OXIDIZED

* * * *

TEST HOLE NUMBER: 345
LOCATION: 108N-47W-03ABDA
LEGAL LOCATION: NE SE NW NE SEC. 03, T. 108 N., R. 47 W.

6 - 11 GRAVEL, BROWN, COARSE, SANDY; DRY
11 - 14 SAND, BROWN, FINE; DRY
14 - 23 GRAVEL, VERY COARSE; DRY, ABANDONED HOLE

* * * *

TEST HOLE NUMBER: 346
LOCATION: 108N-47W-04AAA
LEGAL LOCATION: NE NE NE SEC. 04, T. 108 N., R. 47 W.

0 - 12 GRAVEL, FINE TO COARSE, CLAYEY
12 - 50 SAND AND GRAVEL, COARSE SAND, FINE TO
MEDIUM GRAVEL, CLAYEY

* * * *

TEST HOLE NUMBER: 347
LOCATION: 108N-47W-04BBCB
LEGAL LOCATION: NW SW NW NW SEC. 04, T. 108 N., R. 47 W.

2 - 5 GRAVEL, COARSE; DRY
5 - 10 SAND, BROWN, COARSE, VERY GRAVELLY; DRY
10 - 11 GRAVEL, COARSE; DRY
11 - 18 SAND, GOLDEN-BROWN, MEDIUM; MOIST
18 - 28 SAND, BROWN, COARSE; SATURATED

* * * *

TEST HOLE NUMBER: 348
LOCATION: 108N-47W-04DAAD
LEGAL LOCATION: SE NE NE SE SEC. 04, T. 108 N., R. 47 W.

1 - 6 SAND, BROWN, MEDIUM TO COARSE, PEBBLY;
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 349
LOCATION: 108N-47W-07ABB
LEGAL LOCATION: NW NW NE SEC. 07, T. 108 N., R. 47 W.

12 - 17 SAND, COARSE
17 - 28 GRAVEL, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 350
LOCATION: 108N-47W-07DCCC
LEGAL LOCATION: SW SW SW SE SEC. 07, T. 108 N., R. 47 W.

0 - 8 SAND, MEDIUM-BROWN, MEDIUM, WELL SORTED;
DRY, OXIDIZED
8 - 10 SAND, REDDISH-BROWN, FINE, CLAYEY, WELL
SORTED; MOIST, OXIDIZED
10 - 17 SAND, REDDISH-BROWN, COARSE, GRAVELLY;
MOIST, OXIDIZED
17 - 24 SAND, MEDIUM-BROWN, COARSE, GRAVELLY,
CLAYEY; MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 351
LOCATION: 108N-47W-08ABA
LEGAL LOCATION: NE NW NE SEC. 08, T. 108 N., R. 47 W.

4 - 9 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 352
LOCATION: 108N-47W-08BBBB
LEGAL LOCATION: NW NW NW NW SEC. 08, T. 108 N., R. 47 W.

1 - 2 SAND, BROWN, MEDIUM TO COARSE, GRAVELLY;
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 353
LOCATION: 108N-47W-08CBBC
LEGAL LOCATION: SW NW NW SW SEC. 08, T. 108 N., R. 47 W.

0 - 11 GRAVEL, BROWN, COARSE, SANDY; DRY

* * * *

TEST HOLE NUMBER: 354
LOCATION: 108N-47W-09ABB
LEGAL LOCATION: NW NW NE SEC. 09, T. 108 N., R. 47 W.

1 - 9 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 355
LOCATION: 108N-47W-09ADDA
LEGAL LOCATION: NE SE SE NE SEC. 09, T. 108 N., R. 47 W.

0 - 2 GRAVEL, BROWN, COARSE, SANDY; DRY

* * * *

TEST HOLE NUMBER: 356
LOCATION: 108N-47W-10ABB
LEGAL LOCATION: NW NW NE SEC. 10, T. 108 N., R. 47 W.

3 - 9 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 357
LOCATION: 108N-47W-18AAA
LEGAL LOCATION: NE NE NE SEC. 18, T. 108 N., R. 47 W.

0 - 17 SAND AND GRAVEL, FINE SAND, MEDIUM TO
COARSE GRAVEL, VERY SILTY

* * * *

TEST HOLE NUMBER: 358
LOCATION: 108N-47W-18CDDD
LEGAL LOCATION: SE SE SE SW SEC. 18, T. 108 N., R. 47 W.

- 0 - 5 SAND, REDDISH-BROWN, CLAYEY, GRAVELLY;
DRY, OXIDIZED
- 5 - 20 SAND, REDDISH-BROWN, SILTY, GRAVELLY;
DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 359
 LOCATION: 108N-47W-19BBBC
 LEGAL LOCATION: SW NW NW NW SEC. 19, T. 108 N., R. 47 W.

- 1 - 15 SAND, COARSE, PEBBLY

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TEST HOLE NUMBER: 360
 LOCATION: 108N-47W-19BCCC
 LEGAL LOCATION: SW SW SW NW SEC. 19, T. 108 N., R. 47 W.

- 1 - 4 SAND, BROWN, COARSE, SILTY, GRAVELLY; DRY
- 4 - 8 SAND, GOLDEN-BROWN, FINE, WELL SORTED;
DRY, CLEAN
- 8 - 13 SAND, REDDISH-BROWN, GRAVELLY; DRY
- 13 - 18 SAND, BROWN, VERY GRAVELLY, CLAYEY,
POORLY SORTED; DRY, DIRTY
- 18 - 25 GRAVEL, BROWN, SANDY, POORLY SORTED;
MOIST, CLEAN

* * * *

TEST HOLE NUMBER: 361
 LOCATION: 108N-48W-06CCDD
 LEGAL LOCATION: SE SE SW SW SEC. 06, T. 108 N., R. 48 W.

- 2 - 15 SAND, BROWN, MEDIUM TO COARSE, SILTY,
GRAVELLY; MOIST, OXIDIZED, SATURATED AT
12 FEET

* * * *

TEST HOLE NUMBER: 362
 LOCATION: 108N-48W-08BBBC
 LEGAL LOCATION: SW NW NW NW SEC. 08, T. 108 N., R. 48 W.

- 1 - 5 GRAVEL, MEDIUM-BROWN, MEDIUM, SANDY;
MOIST

* * * *

TEST HOLE NUMBER: 363
LOCATION: 108N-48W-11AABB
LEGAL LOCATION: NW NW NE NE SEC. 11, T. 108 N., R. 48 W.

0 - 4 SAND, REDDISH-BROWN, CLAYEY; MOIST,
OXIDIZED

* * * *

TEST HOLE NUMBER: 364
LOCATION: 108N-48W-13CBCC
LEGAL LOCATION: SW SW NW SW SEC. 13, T. 108 N., R. 48 W.

1 - 5 SAND, LIGHT-BROWN, MEDIUM, WELL SORTED;
MOIST, CLEAN
5 - 10 SAND, REDDISH-BROWN, FINE TO COARSE,
POORLY SORTED; MOIST, CLEAN
11 - 24 SAND, REDDISH-BROWN, POORLY SORTED;
MOIST, OXIDIZED, SOME GRAVEL
24 - 28 SAND, REDDISH-BROWN, CLAYEY, POORLY
SORTED; MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 365
LOCATION: 108N-48W-14BCCC
LEGAL LOCATION: SW SW SW NW SEC. 14, T. 108 N., R. 48 W.

0 - 4 SAND, REDDISH-BROWN, SILTY, PEBBLY; DRY,
OXIDIZED
9 - 16 SAND, REDDISH-BROWN, CLAYEY, GRAVELLY;
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 366
LOCATION: 108N-48W-19CCCC 1
LEGAL LOCATION: SW SW SW SW SEC. 19, T. 108 N., R. 48 W.

1 - 8 SAND, FINE TO COARSE; FINE TO MEDIUM
GRAVEL, CLEAN
8 - 12 GRAVEL, FINE TO COARSE; CLEAN
12 - 18 GRAVEL, FINE TO MEDIUM; FINE SAND, CLEAN

* * * *

TEST HOLE NUMBER: 367
LOCATION: 108N-48W-19CCCC 2
LEGAL LOCATION: SW SW SW SW SEC. 19, T. 108 N., R. 48 W.

3 - 21 GRAVEL, MEDIUM, VERY SANDY

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TEST HOLE NUMBER: 368
LOCATION: 108N-48W-19DDDC
LEGAL LOCATION: SW SE SE SE SEC. 19, T. 108 N., R. 48 W.

1 - 12 GRAVEL, REDDISH-BROWN, SANDY, POORLY
SORTED; DRY, CLEAN, OXIDIZED

* * * *

TEST HOLE NUMBER: 369
LOCATION: 108N-48W-22BBBB
LEGAL LOCATION: NW NW NW NW SEC. 22, T. 108 N., R. 48 W.

0 - 3 GRAVEL, MEDIUM TO COARSE

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TEST HOLE NUMBER: 370
LOCATION: 108N-48W-23BBBB
LEGAL LOCATION: NW NW NW NW SEC. 23, T. 108 N., R. 48 W.

0 - 3 SAND, LIGHT-BROWN, FINE, WELL SORTED;
DRY, OXIDIZED
3 - 16 SAND, REDDISH-BROWN, MEDIUM, GRAVELLY,
POORLY SORTED; DRY, OXIDIZED
16 - 21 GRAVEL, REDDISH-BROWN, COARSE, SANDY;
DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 371
LOCATION: 108N-48W-23CBB
LEGAL LOCATION: NW NW SW SEC. 23, T. 108 N., R. 48 W.

0 - 7 GRAVEL, MEDIUM TO COARSE, SILTY

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TEST HOLE NUMBER: 372

LOCATION: 108N-48W-23CCCC

LEGAL LOCATION: SW SW SW SW SEC. 23, T. 108 N., R. 48 W.

1 - 6 GRAVEL, REDDISH-BROWN, MEDIUM, SANDY,
POORLY SORTED; DRY, OXIDIZED

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TEST HOLE NUMBER: 373

LOCATION: 108N-48W-25AAAA

LEGAL LOCATION: NE NE NE NE SEC. 25, T. 108 N., R. 48 W.

15 - 23 SAND, REDDISH-BROWN, GRAVELLY; MOIST,
OXIDIZED

23 - 28 SAND, REDDISH-BROWN, CLAYEY; MOIST,
OXIDIZED

* * * *

TEST HOLE NUMBER: 374

LOCATION: 108N-48W-27ABAB

LEGAL LOCATION: NW NE NW NE SEC. 27, T. 108 N., R. 48 W.

0 - 4 SAND, BROWN, SILTY, GRAVELLY, POORLY
SORTED; DRY, OXIDIZED

4 - 7 GRAVEL, BROWN, COARSE

* * * *

TEST HOLE NUMBER: 375

LOCATION: 108N-48W-27BCDB

LEGAL LOCATION: NW SE SW NW SEC. 27, T. 108 N., R. 48 W.

5 - 13 SAND, BROWN, GRAVELLY; MOIST

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TEST HOLE NUMBER: 376

LOCATION: 108N-48W-29BBC

LEGAL LOCATION: SW NW NW SEC. 29, T. 108 N., R. 48 W.

4 - 14 SAND, MEDIUM

14 - 23 GRAVEL

* * * *

TEST HOLE NUMBER: 377

LOCATION: 108N-48W-29CBB

LEGAL LOCATION: NW NW SW SEC. 29, T. 108 N., R. 48 W.

1 - 7 SAND AND GRAVEL, COARSE SAND, FINE GRAVEL
7 - 12 GRAVEL, FINE TO COARSE

* * * *

TEST HOLE NUMBER: 378

LOCATION: 108N-48W-29CCCC

LEGAL LOCATION: SW SW SW SW SEC. 29, T. 108 N., R. 48 W.

3 - 28 GRAVEL, VERY COARSE, SANDY; ROCKS AT 19
TO 21 FEET

* * * *

TEST HOLE NUMBER: 379

LOCATION: 108N-48W-29DDDD

LEGAL LOCATION: SE SE SE SE SEC. 29, T. 108 N., R. 48 W.

0 - 4 SAND, MEDIUM-BROWN, CLAYEY; DRY,
OXIDIZED

* * * *

TEST HOLE NUMBER: 380

LOCATION: 108N-48W-30DDA

LEGAL LOCATION: NE SE SE SEC. 30, T. 108 N., R. 48 W.

6 - 15 GRAVEL, FINE TO COARSE, CLAYEY

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TEST HOLE NUMBER: 381

LOCATION: 108N-48W-31AAA

LEGAL LOCATION: NE NE NE SEC. 31, T. 108 N., R. 48 W.

4 - 14 GRAVEL, FINE TO COARSE, CLAYEY; DRY

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TEST HOLE NUMBER: 382

LOCATION: 108N-48W-32BCC

LEGAL LOCATION: SW SW NW SEC. 32, T. 108 N., R. 48 W.

4 - 24 SAND AND GRAVEL
24 - 28 SAND, COARSE

* * * *

TEST HOLE NUMBER: 383
LOCATION: 108N-48W-32BDA
LEGAL LOCATION: NE SE NW SEC. 32, T. 108 N., R. 48 W.

4 - 19 SAND, MEDIUM TO COARSE
19 - 31 GRAVEL

* * * *

TEST HOLE NUMBER: 384
LOCATION: 108N-48W-32CCC
LEGAL LOCATION: SW SW SW SEC. 32, T. 108 N., R. 48 W.

5 - 10 GRAVEL, FINE TO COARSE, CLAYEY
10 - 30 SAND, FINE TO COARSE, GRAVELLY AND CLAYEY

* * * *

TEST HOLE NUMBER: 385
LOCATION: 108N-48W-32DAAA
LEGAL LOCATION: NE NE NE SE SEC. 32, T. 108 N., R. 48 W.

1 - 10 SAND, BROWN, MEDIUM TO COARSE, GRAVELLY;
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 386
LOCATION: 108N-48W-33ABAB
LEGAL LOCATION: NW NE NW NE SEC. 33, T. 108 N., R. 48 W.

11 - 22 SAND, BROWN, COARSE; DRY

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TEST HOLE NUMBER: 387
LOCATION: 108N-49W-02CCCC
LEGAL LOCATION: NW SW SW SW SEC. 02, T. 108 N., R. 49 W.

1 - 3 GRAVEL, WHITE, SANDY; DRY
3 - 10 GRAVEL, YELLOW, FINE, SANDY; DRY

* * * *

TEST HOLE NUMBER: 388
LOCATION: 108N-49W-02DDAD
LEGAL LOCATION: SE NE SE SE SEC. 02, T. 108 N., R. 49 W.

0 - 3 SAND, LIGHT-BROWN, GRAVELLY; DRY,
OXIDIZED

* * * *

TEST HOLE NUMBER: 389
LOCATION: 108N-49W-03CBCB
LEGAL LOCATION: NW SW NW SW SEC. 03, T. 108 N., R. 49 W.

0 - 7 SAND, BROWN, FINE, PEBBLY; DRY

* * * *

TEST HOLE NUMBER: 390
LOCATION: 108N-49W-04CCD
LEGAL LOCATION: SE SW SW SEC. 04, T. 108 N., R. 49 W.

1 - 10 SAND, FINE TO MEDIUM
10 - 25 GRAVEL, FINE TO COARSE

* * * *

TEST HOLE NUMBER: 391
LOCATION: 108N-49W-04DDD
LEGAL LOCATION: SE SE SE SEC. 04, T. 108 N., R. 49 W.

1 - 6 SAND, FINE TO MEDIUM, SILTY
6 - 11 SAND AND GRAVEL, FINE TO VERY COARSE
SAND, FINE TO COARSE GRAVEL

* * * *

TEST HOLE NUMBER: 392
LOCATION: 108N-49W-05ACB
LEGAL LOCATION: NW SW NE SEC. 05, T. 108 N., R. 49 W.

2 - 32 SAND AND GRAVEL, COARSE SAND, FINE TO
MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 393
LOCATION: 108N-49W-05BBB

LEGAL LOCATION: NW NW NW SEC. 05, T. 108 N., R. 49 W.

0 - 25 GRAVEL, FINE TO COARSE; CLEAN

* * * *

TEST HOLE NUMBER: 394

LOCATION: 108N-49W-05BBBB

LEGAL LOCATION: NW NW NW NW SEC. 05, T. 108 N., R. 49 W.

2 - 21 GRAVEL, COARSE, SANDY; THIN CLAY LAYER AT
15 FEET

* * * *

TEST HOLE NUMBER: 395

LOCATION: 108N-49W-05BDD

LEGAL LOCATION: SE SE NW SEC. 05, T. 108 N., R. 49 W.

1 - 9 SAND AND GRAVEL
9 - 19 SAND, MEDIUM
19 - 24 GRAVEL

* * * *

TEST HOLE NUMBER: 396

LOCATION: 108N-49W-05CBC

LEGAL LOCATION: SW NW SW SEC. 05, T. 108 N., R. 49 W.

1 - 10 SAND, FINE TO MEDIUM
10 - 15 SAND AND GRAVEL, FINE TO COARSE SAND,
FINE GRAVEL

* * * *

TEST HOLE NUMBER: 397

LOCATION: 108N-49W-05CCC

LEGAL LOCATION: SW SW SW SEC. 05, T. 108 N., R. 49 W.

0 - 22 SAND AND GRAVEL, FINE SAND, FINE TO
COARSE GRAVEL; CLEAN

* * * *

TEST HOLE NUMBER: 398

LOCATION: 108N-49W-05CCD

LEGAL LOCATION: SE SW SW SEC. 05, T. 108 N., R. 49 W.

4 - 14 SAND AND GRAVEL
14 - 17 SAND, MEDIUM

* * * *

TEST HOLE NUMBER: 399
LOCATION: 108N-49W-05CDC
LEGAL LOCATION: SW SE SW SEC. 05, T. 108 N., R. 49 W.

2 - 12 SAND, FINE TO COARSE, SILTY
12 - 22 SAND, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 400
LOCATION: 108N-49W-05DCD
LEGAL LOCATION: SE SW SE SEC. 05, T. 108 N., R. 49 W.

3 - 9 SAND AND GRAVEL
9 - 16 SAND, COARSE

* * * *

TEST HOLE NUMBER: 401
LOCATION: 108N-49W-06ADD
LEGAL LOCATION: SE SE NE SEC. 06, T. 108 N., R. 49 W.

2 - 8 SAND AND GRAVEL

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TEST HOLE NUMBER: 402
LOCATION: 108N-49W-06BDC
LEGAL LOCATION: SW SE NW SEC. 06, T. 108 N., R. 49 W.

1 - 14 SAND, FINE TO MEDIUM
14 - 29 GRAVEL

* * * *

TEST HOLE NUMBER: 403
LOCATION: 108N-49W-06DADD
LEGAL LOCATION: SE SE NE SE SEC. 06, T. 108 N., R. 49 W.

6 - 8 SAND, COARSE

8 - 24 GRAVEL, COARSE, SANDY, WELL-ROUNDED

* * * *

TEST HOLE NUMBER: 404
LOCATION: 108N-49W-07AAA
LEGAL LOCATION: NE NE NE SEC. 07, T. 108 N., R. 49 W.

10 - 15 GRAVEL, FINE TO COARSE, CLAYEY
15 - 20 SAND, COARSE; CLEAN

* * * *

TEST HOLE NUMBER: 405
LOCATION: 108N-49W-07AADD 1
LEGAL LOCATION: SE SE NE NE SEC. 07, T. 108 N., R. 49 W.

10 - 15 GRAVEL, FINE TO COARSE, CLAYEY
15 - 20 SAND, COARSE; CLEAN

* * * *

TEST HOLE NUMBER: 406
LOCATION: 108N-49W-07BCBB
LEGAL LOCATION: NW NW SW NW SEC. 07, T. 108 N., R. 49 W.

8 - 10 SAND, COARSE, PEBBLY
10 - 21 GRAVEL, COARSE, SANDY, WELL-ROUNDED

* * * *

TEST HOLE NUMBER: 407
LOCATION: 108N-49W-07CDDC
LEGAL LOCATION: SW SE SE SW SEC. 07, T. 108 N., R. 49 W.

10 - 12 SAND, BROWN, GRAVELLY; DRY

* * * *

TEST HOLE NUMBER: 408
LOCATION: 108N-49W-08DDA
LEGAL LOCATION: NE SE SE SEC. 08, T. 108 N., R. 49 W.

4 - 14 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 409
LOCATION: 108N-49W-09ABB 1
LEGAL LOCATION: NW NW NE SEC. 09, T. 108 N., R. 49 W.

2 -	7	SAND, VERY FINE TO FINE, SILTY
7 -	18	SAND, FINE TO COARSE, SILTY
18 -	23	SAND, MEDIUM TO VERY COARSE, SLIGHTLY SILTY
23 -	34	SAND AND GRAVEL, MEDIUM TO VERY COARSE SAND, FINE TO MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 410
LOCATION: 108N-49W-09ABB 2
LEGAL LOCATION: NW NW NE SEC. 09, T. 108 N., R. 49 W.

1 -	6	SAND, MEDIUM TO COARSE; SOME GRAVEL, SILTY
6 -	12	SAND, FINE TO COARSE, SILTY
12 -	18	SAND, FINE TO COARSE; THIN GRAVEL BEDS BETWEEN 12 AND 17 FEET, VERY SILTY
18 -	31	SAND AND GRAVEL, MEDIUM TO VERY COARSE SAND, FINE TO COARSE GRAVEL

* * * *

TEST HOLE NUMBER: 411
LOCATION: 108N-49W-09ADD
LEGAL LOCATION: SE SE NE SEC. 09, T. 108 N., R. 49 W.

2 -	4	SAND, FINE TO MEDIUM, SILTY
4 -	12	GRAVEL, FINE TO COARSE, SANDY
12 -	18	SAND AND GRAVEL, MEDIUM TO VERY COARSE SAND
18 -	28	GRAVEL, MEDIUM, SANDY

* * * *

TEST HOLE NUMBER: 412
LOCATION: 108N-49W-09BAA
LEGAL LOCATION: NE NE NW SEC. 09, T. 108 N., R. 49 W.

9 -	19	SAND, FINE
19 -	32	GRAVEL

* * * *

TEST HOLE NUMBER: 413
LOCATION: 108N-49W-09BBB
LEGAL LOCATION: NW NW NW SEC. 09, T. 108 N., R. 49 W.

7 -	12	SAND, FINE TO MEDIUM, SILTY
12 -	19	SAND, FINE TO COARSE, SILTY; SOME GRAVEL
19 -	24	SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE TO MEDIUM GRAVEL, SILTY

* * * *

TEST HOLE NUMBER: 414
LOCATION: 108N-49W-09DBD
LEGAL LOCATION: SE NW SE SEC. 09, T. 108 N., R. 49 W.

4 -	19	SAND, FINE TO COARSE
19 -	24	SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 415
LOCATION: 108N-49W-09DDA
LEGAL LOCATION: NE SE SE SEC. 09, T. 108 N., R. 49 W.

1 -	4	SAND, FINE TO MEDIUM
4 -	17	SAND AND GRAVEL, COARSE TO VERY COARSE SAND, FINE TO MEDIUM GRAVEL
17 -	26	SAND, MEDIUM TO COARSE; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 416
LOCATION: 108N-49W-10BABA
LEGAL LOCATION: NE NW NE NW SEC. 10, T. 108 N., R. 49 W.

0 -	7	GRAVEL, BROWN, SANDY; DRY
7 -	13	SAND, LIGHT-BROWN; DRY

* * * *

TEST HOLE NUMBER: 417
LOCATION: 108N-49W-10BCBC
LEGAL LOCATION: SW NW SW NW SEC. 10, T. 108 N., R. 49 W.

2 -	28	GRAVEL, VERY COARSE, SANDY
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TEST HOLE NUMBER: 418
LOCATION: 108N-49W-10CDA
LEGAL LOCATION: NE SE SW SEC. 10, T. 108 N., R. 49 W.

2 - 28 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 419
LOCATION: 108N-49W-11BAAA
LEGAL LOCATION: NE NE NE NW SEC. 11, T. 108 N., R. 49 W.

0 - 3 SAND, REDDISH-BROWN, FINE, SILTY, WELL
SORTED; DRY, OXIDIZED
3 - 10 SAND, BROWN, MEDIUM, WELL SORTED; DRY,
OXIDIZED
10 - 15 GRAVEL, BROWN, SANDY, POORLY SORTED;
DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 420
LOCATION: 108N-49W-12BAAA
LEGAL LOCATION: NE NE NE NW SEC. 12, T. 108 N., R. 49 W.

4 - 8 SAND, BROWN, FINE, GRAVELLY, POORLY
SORTED; DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 421
LOCATION: 108N-49W-15BAA
LEGAL LOCATION: NE NE NW SEC. 15, T. 108 N., R. 49 W.

3 - 9 SAND, VERY FINE TO MEDIUM, SILTY AND
CLAYEY
9 - 14 SAND, FINE TO COARSE; SOME GRAVEL, SILTY
14 - 25 SAND AND GRAVEL, MEDIUM TO COARSE SAND,
FINE TO MEDIUM GRAVEL
25 - 27 GRAVEL, SANDY

* * * *

TEST HOLE NUMBER: 422
LOCATION: 108N-49W-15BBA
LEGAL LOCATION: NE NW NW SEC. 15, T. 108 N., R. 49 W.

2 - 7 SAND, VERY FINE TO MEDIUM, SILTY AND
CLAYEY
7 - 12 SAND, FINE TO COARSE, SILTY; SOME GRAVEL
12 - 20 SAND AND GRAVEL, COARSE TO VERY COARSE
SAND, FINE TO MEDIUM GRAVEL
20 - 22 GRAVEL, FINE TO COARSE, SANDY
22 - 25 SAND, FINE TO COARSE; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 423
LOCATION: 108N-49W-15BBB
LEGAL LOCATION: NW NW NW SEC. 15, T. 108 N., R. 49 W.

1 - 8 SAND, FINE TO MEDIUM
8 - 18 SAND, COARSE

* * * *

TEST HOLE NUMBER: 424
LOCATION: 108N-49W-15CBB 1
LEGAL LOCATION: NW NW SW SEC. 15, T. 108 N., R. 49 W.

1 - 8 SAND, FINE TO COARSE, SLIGHTLY SILTY;
SOME GRAVEL
8 - 15 SAND AND GRAVEL, FINE TO COARSE SAND,
FINE GRAVEL
15 - 21 GRAVEL, FINE TO MEDIUM, SANDY

* * * *

TEST HOLE NUMBER: 425
LOCATION: 108N-49W-15CBB 2
LEGAL LOCATION: NW NW SW SEC. 15, T. 108 N., R. 49 W.

1 - 5 SAND, FINE TO MEDIUM, SILTY; SOME GRAVEL
5 - 6 GRAVEL, FINE TO MEDIUM, SANDY
6 - 11 GRAVEL, FINE, CLAYEY, SILTY; SOME SAND
11 - 15 SAND, FINE TO COARSE, CLAYEY, SILTY; SOME
GRAVEL

* * * *

TEST HOLE NUMBER: 426
LOCATION: 108N-49W-15DCDC
LEGAL LOCATION: SW SE SW SE SEC. 15, T. 108 N., R. 49 W.

3 - 24 GRAVEL, COARSE, SANDY

* * * *

TEST HOLE NUMBER: 427
LOCATION: 108N-49W-16ABB 1
LEGAL LOCATION: NW NW NE SEC. 16, T. 108 N., R. 49 W.

3 - 6 SAND AND GRAVEL, MEDIUM TO COARSE SAND
6 - 13 GRAVEL, FINE TO COARSE, SANDY

* * * *

TEST HOLE NUMBER: 428
LOCATION: 108N-49W-16ABB 2
LEGAL LOCATION: NW NW NE SEC. 16, T. 108 N., R. 49 W.

2 - 4 SAND, VERY FINE TO MEDIUM, SILTY
4 - 7 SAND AND GRAVEL, MEDIUM TO COARSE SAND
7 - 12 SAND AND GRAVEL, MEDIUM TO VERY COARSE
SAND, FINE TO MEDIUM GRAVEL, SLIGHTLY
SILTY
12 - 13 SAND AND GRAVEL, MEDIUM TO COARSE SAND

* * * *

TEST HOLE NUMBER: 429
LOCATION: 108N-49W-16BAB
LEGAL LOCATION: NW NE NW SEC. 16, T. 108 N., R. 49 W.

2 - 14 SAND, MEDIUM TO COARSE
14 - 18 SAND AND GRAVEL, MEDIUM TO VERY COARSE
SAND, FINE TO COARSE GRAVEL
18 - 21 SAND AND GRAVEL, FINE TO VERY COARSE
SAND, FINE GRAVEL
21 - 23 SAND, FINE TO COARSE

* * * *

TEST HOLE NUMBER: 430
LOCATION: 108N-49W-16BBB
LEGAL LOCATION: NW NW NW SEC. 16, T. 108 N., R. 49 W.

2 - 10 SAND AND GRAVEL, MEDIUM TO COARSE SAND,
FINE TO COARSE GRAVEL
10 - 14 SAND AND GRAVEL, COARSE TO VERY COARSE
SAND, FINE TO COARSE GRAVEL
14 - 18 SAND AND GRAVEL, MEDIUM TO VERY COARSE
SAND, FINE TO COARSE GRAVEL

18 - 23 SAND AND GRAVEL, MEDIUM TO VERY COARSE
SAND, FINE TO MEDIUM GRAVEL
23 - 26 GRAVEL, FINE, SANDY, SILTY

* * * *

TEST HOLE NUMBER: 431
LOCATION: 108N-49W-17BBAB
LEGAL LOCATION: NW NE NW NW SEC. 17, T. 108 N., R. 49 W.

10 - 15 SAND, GOLDEN-BROWN, VERY FINE; MOIST
15 - 21 SAND, BROWNISH-GRAY; MOIST
21 - 28 SAND, BROWNISH-GRAY; SATURATED

* * * *

TEST HOLE NUMBER: 432
LOCATION: 108N-49W-20AAAA
LEGAL LOCATION: NE NE NE NE SEC. 20, T. 108 N., R. 49 W.

5 - 24 SAND, GOLDEN-BROWN, PEBBLY; DRY

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TEST HOLE NUMBER: 433
LOCATION: 108N-49W-21AAAA 1
LEGAL LOCATION: NE NE NE NE SEC. 21, T. 108 N., R. 49 W.

2 - 11 SAND, BROWN, FINE TO COARSE, PEBBLY

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TEST HOLE NUMBER: 434
LOCATION: 108N-49W-21AAAA 2
LEGAL LOCATION: NE NE NE NE SEC. 21, T. 108 N., R. 49 W.

1 - 8 SAND, BROWN, FINE TO COARSE; SOME FINE
GRAVEL

* * * *

TEST HOLE NUMBER: 435
LOCATION: 108N-49W-21ABA
LEGAL LOCATION: NE NW NE SEC. 21, T. 108 N., R. 49 W.

3 - 5 SAND, FINE TO MEDIUM
5 - 7 GRAVEL, COARSE

7 - 19 SAND, MEDIUM TO VERY COARSE
19 - 27 SAND, VERY FINE TO FINE, SILTY

* * * *

TEST HOLE NUMBER: 436
LOCATION: 108N-49W-21ABBB
LEGAL LOCATION: NW NW NW NE SEC. 21, T. 108 N., R. 49 W.

3 - 7 SAND, VERY COARSE, PEBBLY, WELL-ROUNDED
9 - 17 GRAVEL, COARSE, VERY SANDY

* * * *

TEST HOLE NUMBER: 437
LOCATION: 108N-49W-21BAA
LEGAL LOCATION: NE NE NW SEC. 21, T. 108 N., R. 49 W.

4 - 14 GRAVEL
14 - 29 SAND, MEDIUM TO COARSE

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TEST HOLE NUMBER: 438
LOCATION: 108N-49W-21BBA
LEGAL LOCATION: NE NW NW SEC. 21, T. 108 N., R. 49 W.

2 - 6 SAND, VERY FINE TO FINE
6 - 7 GRAVEL, COARSE
7 - 12 SAND, FINE TO COARSE
12 - 30 SAND, COARSE TO VERY COARSE

* * * *

TEST HOLE NUMBER: 439
LOCATION: 108N-49W-21DDA
LEGAL LOCATION: NE SE SE SEC. 21, T. 108 N., R. 49 W.

6 - 8 SAND, VERY FINE TO FINE
8 - 30 SAND, MEDIUM TO VERY COARSE

* * * *

TEST HOLE NUMBER: 440
LOCATION: 108N-49W-22ABB
LEGAL LOCATION: NW NW NE SEC. 22, T. 108 N., R. 49 W.

1 - 12 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 441
LOCATION: 108N-49W-22BBB
LEGAL LOCATION: NW NW NW SEC. 22, T. 108 N., R. 49 W.

1 - 4 SAND AND GRAVEL
4 - 13 SAND, MEDIUM

* * * *

TEST HOLE NUMBER: 442
LOCATION: 108N-49W-22BBB
LEGAL LOCATION: NW NW NW NW SEC. 22, T. 108 N., R. 49 W.

6 - 14 GRAVEL, FINE; SAMPLE TAKEN

* * * *

TEST HOLE NUMBER: 443
LOCATION: 108N-49W-22BCC
LEGAL LOCATION: SW SW NW SEC. 22, T. 108 N., R. 49 W.

3 - 9 SAND, FINE TO MEDIUM, SILTY
9 - 20 GRAVEL, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 444
LOCATION: 108N-49W-22CAC
LEGAL LOCATION: SW NE SW SEC. 22, T. 108 N., R. 49 W.

4 - 9 SAND, COARSE
9 - 11 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 445
LOCATION: 108N-49W-22DCD
LEGAL LOCATION: SE SW SE SEC. 22, T. 108 N., R. 49 W.

4 - 9 SAND AND GRAVEL
9 - 14 SAND, COARSE
14 - 18 GRAVEL

* * * *

TEST HOLE NUMBER: 446
LOCATION: 108N-49W-23CBC
LEGAL LOCATION: SW NW SW SEC. 23, T. 108 N., R. 49 W.

4 - 14 SAND, COARSE

* * * *

TEST HOLE NUMBER: 447
LOCATION: 108N-49W-23CCC
LEGAL LOCATION: SW SW SW SEC. 23, T. 108 N., R. 49 W.

4 - 9 SAND, FINE
9 - 17 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 448
LOCATION: 108N-49W-25AAA
LEGAL LOCATION: NE NE NE SEC. 25, T. 108 N., R. 49 W.

4 - 24 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 449
LOCATION: 108N-49W-25ADDA
LEGAL LOCATION: NE SE SE NE SEC. 25, T. 108 N., R. 49 W.

0 - 5 SAND, DARK-BROWN, SILTY; MOIST, DIRTY
5 - 10 SAND, DARK-BROWN; VERY MOIST, CLEAN
10 - 15 SAND, GRAYISH-BROWN, POORLY SORTED;
SATURATED, CLEAN
15 - 24 SAND, GRAY, GRAVELLY, CLAYEY, POORLY
SORTED; SATURATED

* * * *

TEST HOLE NUMBER: 450
LOCATION: 108N-50W-01AAB
LEGAL LOCATION: NW NE NE SEC. 01, T. 108 N., R. 50 W.

4 - 14 SAND, MEDIUM TO COARSE, SUBROUNDED TO
ROUNDED; FRAGMENTS OF GRANITE, SLATE
AND SHALE, ACCESSORY MINERALS INCLUDE
FELDSPAR, TOURMALINE, HORNBLLENDE, MICA,
AND IRON OXIDES

- 14 - 24 SAND AND GRAVEL, MEDIUM TO VERY COARSE SAND, ROUNDED; PEBBLES OF SHALE, SLATE, GRANITE, MINERALS INCLUDE IRON OXIDES, MICA, CHERT, HORNBLLENDE, TOURMALINE
- 24 - 34 SAND AND GRAVEL, COARSE TO VERY COARSE, ROUNDED TO SUBROUNDED SAND; PEBBLES OF LIMESTONE, GRANITE, SLATE, DOLOMITE AND SCHIST, MINERALS INCLUDE MICA, CHERT, FELDSPAR, HORNBLLENDE, TOURMALINE, IRON

* * * *

TEST HOLE NUMBER: 451
 LOCATION: 108N-50W-05AAAB
 LEGAL LOCATION: NW NE NE NE SEC. 05, T. 108 N., R. 50 W.

- 5 - 10 GRAVEL, BROWN, FINE TO MEDIUM, SANDY, POORLY SORTED; DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 452
 LOCATION: 108N-50W-05CBCD
 LEGAL LOCATION: SE SW NW SW SEC. 05, T. 108 N., R. 50 W.

- 0 - 3 SAND, TAN, PEBBLY; DRY, OXIDIZED
- 3 - 15 SAND, REDDISH-BROWN, GRAVELLY; DRY, OXIDIZED
- 15 - 25 SAND, MEDIUM-BROWN, GRAVELLY; MOIST, OXIDIZED
- 25 - 32 SAND, LIGHT-BROWN, FINE, WELL SORTED; MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 453
 LOCATION: 108N-50W-05CDCD
 LEGAL LOCATION: SE SW SE SW SEC. 05, T. 108 N., R. 50 W.

- 4 - 12 SAND, BROWN, COARSE, GRAVELLY; VERY MOIST, OXIDIZED
- 12 - 25 GRAVEL, BROWN, COARSE, SANDY; SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 454
 LOCATION: 108N-50W-06CBC
 LEGAL LOCATION: SW NW SW SEC. 06, T. 108 N., R. 50 W.

4 - 7 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 455
LOCATION: 108N-50W-06CDCC
LEGAL LOCATION: SW SW SE SW SEC. 06, T. 108 N., R. 50 W.

2 - 5 SAND, BROWN, VERY GRAVELLY; DRY
5 - 11 GRAVEL, BROWN, COARSE
11 - 30 SAND, GOLDEN-BROWN, FINE TO COARSE;
DRY

* * * *

TEST HOLE NUMBER: 456
LOCATION: 108N-50W-06DDDD
LEGAL LOCATION: SE SE SE SE SEC. 06, T. 108 N., R. 50 W.

4 - 11 SAND, REDDISH-BROWN, GRAVELLY; MOIST,
OXIDIZED
11 - 28 GRAVEL, DARK-REDDISH-BROWN, SANDY, POORLY
SORTED; MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 457
LOCATION: 108N-50W-07BCBB
LEGAL LOCATION: NW NW SW NW SEC. 07, T. 108 N., R. 50 W.

3 - 4 SAND, LIGHT-BROWN, FINE, WELL SORTED;
DRY, OXIDIZED
4 - 9 SAND, REDDISH-BROWN, COARSE, SILTY,
PEBBLY; DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 458
LOCATION: 108N-50W-08AABB
LEGAL LOCATION: NW NW NE NE SEC. 08, T. 108 N., R. 50 W.

5 - 30 SAND, LIGHT-BROWN, PEBBLY, POORLY SORTED;
MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 459
LOCATION: 108N-50W-08CCDD
LEGAL LOCATION: SE SE SW SW SEC. 08, T. 108 N., R. 50 W.

4 - 10 SAND, MEDIUM-BROWN, GRAVELLY; DRY,
OXIDIZED
10 - 15 GRAVEL, MEDIUM-BROWN, SANDY; MOIST,
OXIDIZED
21 - 28 SAND, MEDIUM-BROWN, CLAYEY; VERY MOIST,
OXIDIZED

* * * *

TEST HOLE NUMBER: 460
LOCATION: 108N-50W-08DCDD
LEGAL LOCATION: SE SE SW SE SEC. 08, T. 108 N., R. 50 W.

0 - 3 SAND, REDDISH-BROWN, GRAVELLY, COBBLY;
MOIST, OXIDIZED
3 - 6 GRAVEL, BROWN, COARSE; MOIST, OXIDIZED

* * * *

TEST HOLE NUMBER: 461
LOCATION: 108N-50W-12AABB
LEGAL LOCATION: NW NW NE NE SEC. 12, T. 108 N., R. 50 W.

4 - 15 SAND, REDDISH-BROWN, FINE, SILTY, WELL
SORTED; DRY, OXIDIZED
15 - 28 SAND, REDDISH-BROWN, FINE, SILTY; MOIST,
OXIDIZED

* * * *

TEST HOLE NUMBER: 462
LOCATION: 108N-50W-18AAAA
LEGAL LOCATION: NE NE NE NE SEC. 18, T. 108 N., R. 50 W.

3 - 9 SAND, REDDISH-BROWN, SILTY, PEBBLY,
POORLY SORTED; DRY, OXIDIZED
9 - 16 GRAVEL, BROWN, MEDIUM, VERY SANDY, POORLY
SORTED; MOIST, OXIDIZED
16 - 19 SAND, BROWN, GRAVELLY; MOIST, OXIDIZED
19 - 25 GRAVEL, BROWN, COARSE, SANDY; MOIST,
OXIDIZED
25 - 28 SAND, MEDIUM-BROWN, COARSE, CLAYEY;
SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 463
LOCATION: 108N-50W-18ADDD
LEGAL LOCATION: SE SE SE NE SEC. 18, T. 108 N., R. 50 W.

6 - 8 SAND, BROWN, VERY COARSE; DRY

* * * *

TEST HOLE NUMBER: 464
LOCATION: 108N-50W-19DADD
LEGAL LOCATION: SE SE NE SE SEC. 19, T. 108 N., R. 50 W.

5 - 10 GRAVEL, BROWN, COARSE; SATURATED
10 - 23 SAND, GRAY; SATURATED

* * * *

TEST HOLE NUMBER: 465
LOCATION: 108N-50W-20BAAB
LEGAL LOCATION: NW NE NE NW SEC. 20, T. 108 N., R. 50 W.

12 - 18 SAND, GOLDEN-BROWN, MEDIUM; MOIST
18 - 28 SAND, GOLDEN-BROWN, MEDIUM; SATURATED

* * * *

TEST HOLE NUMBER: 466
LOCATION: 108N-50W-21AAAA
LEGAL LOCATION: NE NE NE NE SEC. 21, T. 108 N., R. 50 W.

0 - 3 SAND, CLAYEY

* * * *

TEST HOLE NUMBER: 467
LOCATION: 108N-50W-30AABA
LEGAL LOCATION: NE NW NE NE SEC. 30, T. 108 N., R. 50 W.

5 - 13 SAND, BROWN, PEBBLY; MOIST
13 - 28 SAND, BROWN, VERY COARSE; SATURATED

* * * *

TEST HOLE NUMBER: 468
LOCATION: 108N-50W-30BAAA
LEGAL LOCATION: NE NE NE NW SEC. 30, T. 108 N., R. 50 W.

5 - 10 SAND, BROWN, MEDIUM, SILTY; DRY,
OXIDIZED, SOME GRAVEL
10 - 16 SAND, REDDISH-BROWN, SILTY; MOIST,
OXIDIZED, SOME GRAVEL, SATURATED AT 13
FEET

* * * *

TABLE 2. List of sand and gravel pits in Moody County, South Dakota, which are on file at the Department of Transportation, Division of Highways, in Pierre, South Dakota.

EXPLANATION:

Column Description:

- a. Landowner and address
- b. Location - given as half and quarter sections, section, township, and range
- c. Aggregate type
- d. Average thickness of deposits in feet
- e. Average thickness of overburden in feet

Pit 1

- a. Landowner: G. A. Rogness - Jasper, Minnesota
- b. Location: NW 1/4, sec. 34 T. 105 N., R. 47 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----

Pit 2

- a. Landowner: Lee Anderson - Trent
- b. Location: NW 1/4 sec. 3, T. 105 N., R. 49 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 9.0
- e. Overburden thickness (ft): 4.5

Pit 3

- a. Landowner: Vernon Wiles - Trent
- b. Location: E 1/2, sec. 3, T. 105 N., R. 49 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 8.9
- e. Overburden thickness (ft): 3.8

Pit 4

- a. Landowner: Mrs. Henry Schreier - Dell Rapids
- b. Location: SE 1/4 sec. 4, T. 105 N., R. 49 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 6.0
- e. Overburden thickness (ft): 3.0

Pit 5

- a. Landowner: Max Crisp - Dell Rapids
- b. Location: NW 1/4 sec. 7, T. 105 N., R. 49 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 6.4
- e. Overburden thickness (ft): 3.0

Pit 6

- a. Landowner: Henry Leuning - Dell Rapids
- b. Location: SE 1/4 sec. 35, T. 105 N., R. 49 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 5.0
- e. Overburden thickness (ft): 1.5

Pit 7

- a. Landowner: Myron Joneson - Dell Rapids
- b. Location: S 1/2 sec. 36, T. 105 N., R. 49 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 12
- e. Overburden thickness (ft): 2

Pit 8

- a. Landowner: Simon Ulik - Chester
- b. Location: NE 1/4 sec. 12, T. 105 N., R. 50 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 6.5
- e. Overburden thickness (ft): 4.1

Pit 9

- a. Landowner: Henry Schornhorst - Egan
- b. Location: NE 1/4 sec. 7, T. 106 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----

Pit 10

- a. Landowner: Verlyn Rentschler -
- b. Location: SE 1/4 sec. 11, T. 106 N., R. 49 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 9.5
- e. Overburden thickness (ft): 4.2

Pit 11

- a. Landowner: Marie Cohen - Billings, Montana
- b. Location: SW 1/4 sec. 14, T. 106 N., R. 49 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 6.4
- e. Overburden thickness (ft): 5.5

Pit 12

- a. Landowner: R. Johnson - Egan
- b. Location: SW 1/4 sec. 23, T. 106 N., R. 49 W.
- c. Aggregate type: Sand
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----

Pit 13

- a. Landowner: Reuben Johnson - Egan
- b. Location: E 1/2 NW 1/4 sec. 26, T. 106 N., R. 49 W.
- c. Aggregate type: Sand
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----

Pit 14

- a. Landowner: Reuben Johnson - Egan
- b. Location: NW 1/4 sec. 26, T. 106 N., R. 49 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 4.7
- e. Overburden thickness (ft): 3.0

Pit 15

- a. Landowner: Robert Lee - Flandreau
- b. Location: SE 1/4 SE 1/4 sec. 16, T. 107 N., R. 47 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 11.7
- e. Overburden thickness (ft): 2.0

Pit 16

- a. Landowner: -----
- b. Location: S 1/2 sec. 19, T. 107 N., R. 47 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----

Pit 17

- a. Landowner: -----
- b. Location: SE 1/4 sec. 20, T. 107 N., R. 47 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 20
- e. Overburden thickness (ft): 0

Pit 18

- a. Landowner: Don Brockhouse -
- b. Location: NE 1/4 sec. 21, T. 107 N., R. 47 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 11.8
- e. Overburden thickness (ft): 2.6

Pit 19

- a. Landowner: William Tiedeman - Flandreau
- b. Location: W 1/2 SE 1/4 sec. 13, T. 107 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 9.0
- e. Overburden thickness (ft): 1.8

Pit 20

- a. Landowner: Moody County - Flandreau
- b. Location: NE 1/4 sec. 29, T. 107 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----

Pit 21

- a. Landowner: Reinhart Kuhle - Flandreau
- b. Location: N 1/2 SE 1/4 NE 1/4 sec. 29, T. 107 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 17.5
- e. Overburden thickness (ft): 3.0

Pit 22

- a. Landowner: Leslie and Viola Bennett - Flandreau
- b. Location: SE 1/4 SE 1/4 NE 1/4 sec. 29, T. 107 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 9.4
- e. Overburden thickness (ft): 3.0

Pit 23

- a. Landowner: Anton Kuehle - Flandreau
- b. Location: N 1/2 SE 1/4 sec. 29, T. 107 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 10.0
- e. Overburden thickness (ft): 5.0

Pit 24

- a. Landowner: James Corcoran - Pipestone, Minnesota
- b. Location: S 1/2 SE 1/4 sec. 29, T. 107 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 15.1
- e. Overburden thickness (ft): 3.8

Pit 25

- a. Landowner: Nellie Youel - Flandreau
- b. Location: N 1/2 NW 1/4 sec. 32, T. 107 N., R. 49 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 6.5
- e. Overburden thickness (ft): 3.9

Pit 26

- a. Landowner: ----
- b. Location: SE 1/4 Sec. 36, T. 107 N., R. 50 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----

Pit 27

- a. Landowner: A. C. Anderson - Elkton
- b. Location: SE 1/4 sec. 7, T. 108 N., R. 47 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----

Pit 28

- a. Landowner: Carl Larson
- b. Location: SW 1/4 sec. 18, T. 108 N., R. 47 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 15.3
- e. Overburden thickness (ft): 3.5

Pit 29

- a. Landowner: John C. Henderson - Elkton
- b. Location: NW 1/4 sec. 19, T. 108 N., R. 47 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 25.0
- e. Overburden thickness (ft): 2.0

Pit 30

- a. Landowner: Art Lalonde - Elkton
- b. Location: NW 1/4 sec. 8, T. 108 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 5.0
- e. Overburden thickness (ft): 1.6

Pit 31

- a. Landowner: Bill Armstrong - Flandreau
- b. Location: NE 1/4 SW 1/4 sec. 27, T. 108 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 10.0
- e. Overburden thickness (ft): 3.0

Pit 32

- a. Landowner: Clarence E. Hagel - Flandreau
- b. Location: N 1/2 NE 1/4 sec. 31, T. 108 N., R. 48 W.
- c. Aggregate type: Sand
- d. Deposit thickness (ft): 8.0
- e. Overburden thickness (ft): 4.3

Pit 33

- a. Landowner: Bill Armstrong - Flandreau
- b. Location: SW 1/4 SW 1/4 sec. 33, T. 108 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 10.7
- e. Overburden thickness (ft): 2.6

Pit 34

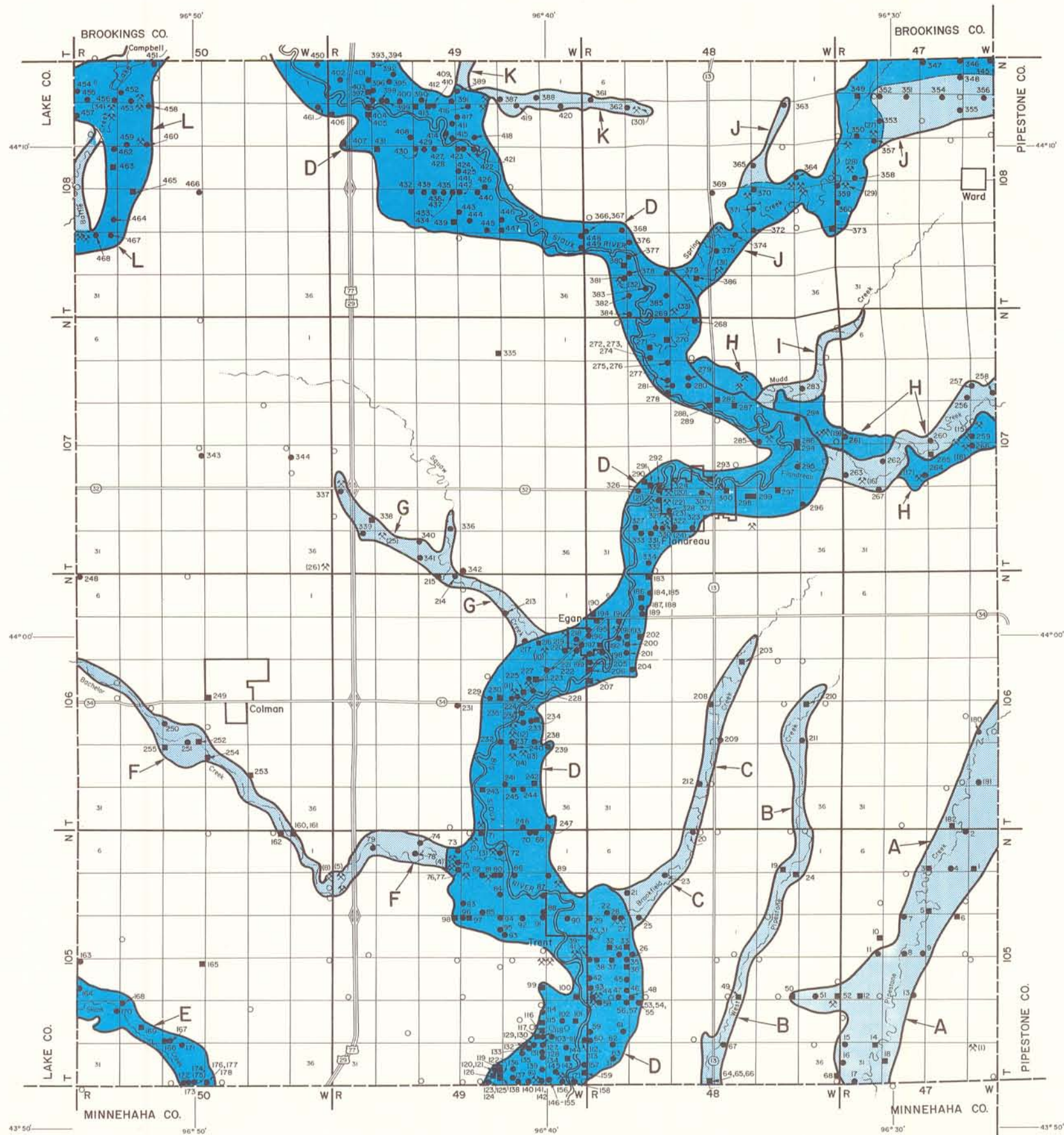
- a. Landowner: George H. Strenge - Volga
- b. Location: E 1/2 NE 1/4 sec. 7, T. 108 N., R. 50 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 9.5
- e. Overburden thickness (ft): 0.8



Index map of South Dakota showing location of Moody County.

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Sectionized township



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

Letters A through L designate areas described in the text.

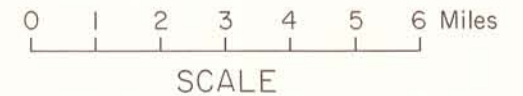
● 50 Test hole containing sand or gravel within 25 feet of the land surface with 0-5 feet of overburden. Number refers to Table I.

■ 44 Test hole containing sand or gravel within 25 feet of the land surface with greater than 5 feet of overburden. Number refers to Table I.

○ Test hole containing no sand or gravel within 25 feet of the land surface.

(*) Sand and gravel pits - those with a number are listed in Table 2.

--- Approximate boundary



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