AGGREGATE RESOURCES IN MINNEHAHA COUNTY, SOUTH DAKOTA

by

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DEPARTMENT OF WATER AND NATURAL RESOURCES
DIVISION OF GEOLOGICAL SURVEY

Prepared in cooperation with the United States Geological Survey,
East Dakota Water Development District, South Dakota Department
of Transportation and Minnehaha County

Science Center, University of South Dakota 1990
STATE OF SOUTH DAKOTA
George S. Mickelson, Governor

DEPARTMENT OF WATER AND NATURAL RESOURCES
Floyd Matthew, Secretary

DIVISION OF GEOLOGICAL SURVEY
Merlin J. Tipton, State Geologist

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INTRODUCTION

This pamphlet is one of a series of reports describing the geology and water resources of Minnehaha County. It is designed to indicate the most promising areas in which to search for sources of coarse aggregate material. Quality of the deposits encountered was not analyzed, nor was the quantity of available reserves measured, as these would require prior knowledge of the material specifications for each intended use.

Other reports in the series include:


The first report contains a generalized evaluation of the yield, quality and location of major aquifers (water-bearing deposits) in a condensed, easy-to-read pamphlet. The second and third reports are more technical and present a more comprehensive investigation of the water resources and geology within the county area. All basic data used to compile these reports are available from the South Dakota Geological Survey’s open file.

It is recommended that the following publication, explaining how aggregate-bearing landforms may be recognized, be used as a companion reference to this pamphlet:


GEOL O GIC OVERVIEW

Minnehaha County lies on the gently sloping, southern flanks of the Coteau des Prairies in southeastern South Dakota. Much of the sand and gravel found in Minnehaha County is the result of the glaciers that covered this region thousands of years ago, late in the Pleistocene Epoch. The rest has been deposited by rivers and streams since the glaciers retreated. The following brief description of geologic terms should be used as an aid in further understanding the deposition of sand and gravel.
Till

Till is the term used to define the unsorted and unstratified material either laid down by an active glacier at the base of the ice, or deposited by a glacier as the ice melted. This mixture of boulders, gravel, sand, silt, and clay is often called "boulder clay" or "blue clay." Till covers most of Minnehaha County. Although it is not considered a source of sand and gravel, a few small isolated lenses may occur within the till.

Outwash

Outwash is a general term used to describe any deposits of clay, silt, sand, gravel or boulders that have been washed, sorted and subsequently deposited by flowing glacial meltwater. Outwash grain size depends upon material type and velocity of the water from which it was deposited. A lake or slowly flowing stream will usually deposit silts and clays, while rapidly flowing water may leave stream beds composed almost entirely of boulders. Most outwash, however, is a mixture of material between these two extremes, and is composed of an assortment of sand and gravel with minor amounts of finer and coarser materials.

Alluvium

Alluvium is the term used to describe material deposited by streams since the retreat of the glaciers. Made up of clay, silt, sand and gravel, the grain size of any particular deposit is governed by the same factors that determine grain size in glacial outwash. Alluvium occurs in the valleys of present-day streams and rivers, and where deposits consist primarily of sand and gravel, mining for materials may take place.

Terrace Deposits

Terrace deposits are flat topped fluvial deposits that may or may not be of glacial origin. Being remnants of former flood plains, the streams that formed them have since cut their channels deeper and developed new flood plains at lower elevations.

Eskers and Kanes

Eskers and kames are glacial landforms that were deposited directly from stagnating, melting ice. Kames usually appear as mound-like hills or short ridges. Generally, they are formed in or on the ice by the filling of crevasses or basin-like depressions. Kane terraces are short, irregular ridges of gravel, sand and silt formed by streams held high on a valley wall by glacial ice. Eskers appear as long, narrow, sinuous ridges and are formed
by streams in, on or under the ice. All these landforms can offer good possibilities for aggregate pit development.

**Bedrock**

Bedrock is the older, consolidated rock beneath the glacial deposits. In Minnehaha County, the bedrock consists of Sioux Quartzite, Corson Diabase, Split Rock Creek Formation, and near-shore, time equivalents of the Niobrara and Pierre Formations. Of these bedrock units, the Sioux Quartzite, Corson Diabase, and Split Rock Creek Formation crop out in Minnehaha County. Although the Split Rock Creek Formation is unsuitable, the Sioux Quartzite and Corson Diabase are both potential sources of aggregate. The Corson Diabase is very limited in areal extent, the Sioux Quartzite being far more extensive and therefore of greater economic interest. The Sioux Quartzite and the Corson Diabase are discussed later in the text. Generally when bedrock is found at the ground surface, no sand or gravel exists below that point.

**EXPLANATION OF TABLES**

Table 1 is a compilation of test holes that encountered sand and/or gravel in the upper 25 feet. This table lists:

a. location of the test hole,  
b. depth of sand and gravel deposits, and  
c. description of aggregate encountered.

The South Dakota Geological Survey (SDGS), U.S. Geological Survey, U.S. Bureau of Reclamation, U.S. Soil Conservation Service, South Dakota Department of Transportation, South Dakota Division of Water Rights, and private engineering and drilling companies contributed to the formation of this list. The complete set of drill-hole logs is on file at the South Dakota Geological Survey office in Vermillion.

Table 2 has been compiled from a list of gravel pits on file in Pierre with either the South Dakota Department of Transportation or the Office of Surface Mining, Department of Water and Natural Resources. The owner or operator, material type, and where possible, thickness of overburden and aggregate being mined, have been listed. The actual thickness of a deposit may be greater than that mined, because depth to the water table, changing material characteristics, or available mining equipment may limit excavation.
EXPLANATION OF PLATE 1

Plate 1 shows the location of test holes, gravel pits (proposed, active and inactive) and a few landmarks. Test holes are represented by three types of symbols. A dot (*) indicates the presence of sand or gravel within 25 feet of the land surface with 5 feet or less of overburden. A square (■) indicates that sand or gravel was encountered within 25 feet of the land surface, but that more than 5 feet of overburden exists. The above test holes are numbered and listed in Table 1. An open circle (○) indicates that no sand or gravel was found in the upper 25 feet.

Gravel pits and quartzite quarries are labeled with a crossed pick and shovel (X), those numbered are listed in Table 2. Additional information concerning the numbered gravel pits is on file with the Department of Transportation or the Office of Surface Mining, Department of Water and Natural Resources, Pierre, South Dakota.

To help illustrate the most promising areas, the map has been divided into three area types, each expressing the probability of discovering new sources of sand or gravel. Those areas designated as "good" indicate a comparatively thick deposit with thin overburden and underlying large tracts of land. Those considered "fair" lack one or more of these favorable attributes. Areas designated as "good" or "fair" have been assigned a color as well as a letter, and are discussed later in the text.

Areas designated as poor are composed mainly of till but may contain random deposits of sand and gravel. Although some of these deposits may be very productive, they are generally limited and difficult to locate.

The above three classifications evolved through an extensive test hole drilling program, the study of gravel pits, topographic map and aerial photograph interpretations, and field observations.

Sand and Gravel

Area A (designated "fair") is composed of stratified valley floor deposits situated around and associated with the drainage of Buffalo Lake. Deposits generally have less than 5 feet of overburden, but their total thickness rarely exceeds 10 feet. Most of the deposits are below or partially below the water table.

Area B (designated "good") represents over 40 square miles of aggregate deposits associated with the Skunk Creek valley. The deposits are valley train and terrace deposits, generally with less than 5 feet of overburden. Thickness of sand and gravel in some cases exceeds 50 feet. Rothrock (1926) states, "The deposits of Skunk Creek valley are largely medium to coarse gravels. In
the northern part there is a broad, shallow channel through the fill, which leaves the gravel in terraces along the sides of the valley, but in the lower 3 miles the gravels occupy the entire valley floor." In the upper reaches of West Branch Skunk Creek and around the Buffalo Ridge area, deposits can also be found in the form of ridge-like kame terraces. The abundance of gravel combined with the area's proximity to Sioux Falls has promoted the areas development. This has resulted in the greatest density of pits to be found in Minnehaha County.

Although deposits in some parts of area "C" (designated "fair") attain 30 feet in depth, aggregate is generally fine, and thickness of overburden varies considerably. Since these deposits are found along the valley floor of Colton Creek, high water table conditions will also affect development of this area.

Area "D" (designated "fair") deposits are similar to those found in the upper reaches of West Branch Skunk Creek. The deposits to the northwest of Grass Lake are ridge-like, ice-contact kame terrace deposits. Located to the south of Grass Lake is Rocky Ridge, a prominent "ice-crack" or disintegration ridge. This is another example of an aggregate-bearing, ice-contact landform. Sand and gravel pockets found in both areas are likely to be stratified but poorly sorted.

Area "E" (designated "fair") represents small, discontinuous sand and fine gravel deposits found along the valley floor of Long Creek. Overburden is less than 5 feet, and deposits are generally less than 10 feet thick. High water table levels may inhibit pit development.

Area "F" (designated "fair") is a small kame field. Pits have been in evidence since the 1920's and much of the more desirable material may already have been removed. In any remaining deposits, there is likely to be little or no overburden, but the material is also likely to be poorly sorted; i.e., very clayey and contain much "oversize" material.

Area "G" (designated "good") encompasses those deposits found in the present-day Big Sioux valley. Generally these deposits are finer than the Skunk Creek gravels (Rothrock, 1926), though there are exceptions to this statement. Valley-train deposits are found in the wide, flat bottomed, western limb of the Big Sioux Valley. These deposits are up to 20 feet thick and are generally covered by 5 feet of silty, alluvial overburden. The finer nature of these deposits, the overburden, and the high degree of saturation has resulted in less mining of this resource, in comparison to the Skunk Creek spillway.

The southern loop of the Big Sioux River represents a dramatic change in course brought about by a combination of ice damming to the south, and the near-surface occurrence of the Sioux Quartzite. There was very little deposition of sand and gravel in this narrow channel, and what terrace deposits there were have been

5
removed. Enormous quantities of sand and gravel are found as terrace and valley-wall deposits immediately northeast of the City of Sioux Falls. Although deposit thickness is up to 100 feet or more, this area is already heavily developed. The remainder of the Big Sioux valley affords smaller volumes of sand and gravel, though there are terrace deposits up to 40 feet thick near the City of Brandon, and valley-floor deposits over 50 feet thick in the vicinity of East Sioux Falls.

Area "H" (designated "fair") represents sand and gravel deposits within the Slip-up Creek valley. The upper reaches of Slip-up Creek valley contain only a few, discontinuous, valley-floor sand deposits. Thicker and coarser material can be found in the lower 3 miles of the creek valley, though many of the more productive terraces have already been opened.

Area "I" (designated "fair") contains terrace deposits within West Pipestone Creek valley, north of the City of Corson, and along the lower portion of Split Rock Creek. Most of the sand found in these discontinuous terrace deposits have an overburden of more than 5 feet. Much of this area has bedrock directly underlying these sands.

Area "J" (designated "fair") represents deposits found on the higher interfluvial ridges running northwest-southeast. Some of these deposits appear to be kame deposits, such as "Twin Mounds" found in the southern part of section 2, T. 104 N., R. 48 W., and others appear to be dune-sand deposits, consisting primarily of fine to medium sand.

In the northern part of area "K" (designated 'fair') valley-floor deposits can be found along Pipestone Creek. Overburden averages around 5 feet, and the material found seems to be predominantly a sand unit in the upper few feet underlain occasionally by a lower gravel unit. Most of these deposits are at or under the local water table. The southern part of this area is comprised of terrace deposits found in the vicinity of the City of Sherman. These generally sandy deposits are covered by 5 feet or less of overburden, are up to 20 feet thick, and directly overlie bedrock.

Area "L" (designated "fair") is a large kame field, running northeast-southwest in eastern Minnehaha County. These intermittent ice contact deposits probably represent slumping of supraglacial fluvial deposits onto underlying till. These positive features are hill-top deposits, usually with no overburden. Generally these deposits are poorly sorted and tend to be more sandy than gravel.

Area "M" (designated "fair") contains valley-floor deposits along a small unnamed tributary of Beaver Creek. A high water table and overburden averaging over 5 feet thick will make development of these deposits difficult.
Area "N" (designated "fair") represents buried outwash deposits found within Beaver Creek valley. These deposits must be considered marginal due to the 15 to 20 feet of overburden.

Area "Q" (designated "fair") contains valley-floor and terrace deposits within Beaver Creek and Four Mile Creek valleys. Although overburdens are generally less than 5 feet thick, most deposits are fine, with only a few scattered terraces offering coarser material.

The remainder of Minnehaha County has been mapped as "poor," though some areas will contain sand and/or gravel deposits. Due to the randomly scattered nature of such deposits, exploration efforts should first be concentrated in those areas marked "good" and "fair."

Corson Diabase

The Corson Diabase is found in several localized areas as remnants of small sill-like bodies intruded into the Sioux Quartzite (fig. 1). It is a very dark, medium- to coarse-grained igneous rock, and has been described as an olivine diabase (Sklar, 1982). Historically the Corson Diabase has been used as building stone, though at the present time no use is being made of this resource.

Sioux Quartzite

The Precambrian Sioux Quartzite is a metamorphosed pink sandstone that underlies most of Minnehaha County, and crops out in stream valleys and areas where the glacial drift has been eroded (fig. 1). Consisting of 97 to 99 percent silica, the majority of the formation is characterized by a pink orthoquartzite. Minor amounts of the formation are conglomeratic and a few beds are made up of a claystone or mudstone. An example of these claystone beds can be seen in Palisades State Park, near Garretson, South Dakota. The conglomerate beds are generally confined to the lower two-thirds of the formation (Southwick and others, 1986).

The Sioux Quartzite is broken into blocks by well-developed vertical and horizontal jointing. Three distinct directional trends in the vertical jointing of the rock have been noticed (Baldwin, 1949). The spacing of the joints in conjunction with the thickness of bedding is of prime importance when considering quarrying for a specific size of stone.

Because of the hardness, uniformity and attractive appearance, the Sioux Quartzite has lent itself well to many uses. Major present-day uses for the stone include concrete aggregate, railroad ballast, road construction, rip-rap for dams and river-bank stabilization, and production of ferro-silicon for the steel
industry. Minor and historical uses include gannister, abrasives, building stone, grinding pebbles and tube mill liners, monument stone, paving blocks, filter beds for sewage lagoons, poultry grit, foundry sand, and filler in certain building and cosmetic products.

Similar deposits to the Sioux Quartzite resting on and derived from complex terrains of older metamorphic and igneous rocks have been found to contain very significant deposits of gold and uranium (Southwick and others, 1986). To date, however, there have been no documented occurrences of economic or subeconomic mineralization in conjunction with the Sioux Quartzite.

**ECONOMIC CONSIDERATIONS**

It should be emphasized that this study is quite general and should be used only as a guide for further exploration and development. Some general geologic and economic factors to consider in selecting any quarry or gravel-pit site include site and quality of the outcrop, any jointing that may be present, overburden thickness, local water levels, development costs, transportation costs, future markets, and material specifications.

**SELECTED REFERENCES**


Figure 1. Map illustrating potential sources of bedrock aggregate in Minnehaha County.
<table>
<thead>
<tr>
<th>TABLE 1. LIST OF TEST HOLES IN MINNEHAHA COUNTY, SOUTH DAKOTA, WHICH CONTAIN SAND OR GRAVEL WITHIN 25 FEET OF THE LAND SURFACE.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
<tr>
<td>TEST HOLE NUMBER: 1</td>
</tr>
<tr>
<td>LOCATION: 101N-47W-04CB8B</td>
</tr>
<tr>
<td>LEGAL LOCATION: NW NW NW SW SEC. 04, T. 101 N., R. 47 W.</td>
</tr>
<tr>
<td>0 - 10.0 SAND, BROWN, FINE TO MEDIUM; OXIDIZED, DRY</td>
</tr>
<tr>
<td>10.0 - 12.0 GRAVEL, BROWN, COARSE; OXIDIZED, DRY</td>
</tr>
<tr>
<td>** ** **</td>
</tr>
<tr>
<td>TEST HOLE NUMBER: 2</td>
</tr>
<tr>
<td>LOCATION: 101N-47W-05CCBB</td>
</tr>
<tr>
<td>LEGAL LOCATION: NW SW SW NW SEC. 05, T. 101 N., R. 47 W.</td>
</tr>
<tr>
<td>15.0 - 21.0 SAND, TAN-BROWN, COARSE, VERY CLAYEY; OXIDIZED, MOIST</td>
</tr>
<tr>
<td>21.0 - 23.0 SAND, GRAY, COARSE, VERY CLAYEY; OXIDIZED, MOIST</td>
</tr>
<tr>
<td>23.0 - 25.0 GRAVEL, SANDY; OXIDIZED, SATURATED, LITTLE RETURN, BUT DRILLED LIKE VERY COARSE GRAVEL OR COBBLES</td>
</tr>
<tr>
<td>** ** **</td>
</tr>
<tr>
<td>TEST HOLE NUMBER: 3</td>
</tr>
<tr>
<td>LOCATION: 101N-47W-05CDDC</td>
</tr>
<tr>
<td>LEGAL LOCATION: SE SW SE SW SEC. 05, T. 101 N., R. 47 W.</td>
</tr>
<tr>
<td>2.0 - 15.0 SAND, FINE TO MEDIUM</td>
</tr>
<tr>
<td>15.0 - 19.0 SAND AND GRAVEL, FINE SAND TO MEDIUM GRAVEL</td>
</tr>
<tr>
<td>** ** **</td>
</tr>
<tr>
<td>TEST HOLE NUMBER: 4</td>
</tr>
<tr>
<td>LOCATION: 101N-47W-06CB8B</td>
</tr>
<tr>
<td>LEGAL LOCATION: NW NW NW SW SEC. 06, T. 101 N., R. 47 W.</td>
</tr>
<tr>
<td>14.0 - 33.0 SAND, COARSE; WITH MEDIUM TO COARSE GRAVEL</td>
</tr>
<tr>
<td>** ** **</td>
</tr>
</tbody>
</table>
TEST HOLE NUMBER:  5
LOCATION:  101N-47W-07BBBB  1
LEGAL LOCATION:  NW NW NW NW SEC. 07, T. 101 N., R. 47 W.

20.0 -  23.0  SAND AND GRAVEL, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER:  6
LOCATION:  101N-47W-08AAAA
LEGAL LOCATION:  NE NE NE NE SEC. 08, T. 101 N., R. 47 W.

21.0 -  70.0  SAND, BROWN, MEDIUM TO COARSE; OXIDIZED,
SOME FINE GRAVEL, BECOMES COARSER WITH
DEPTH TO A VERY COARSE GRAVEL AND
COBBLES, SOME SMALL CLAY LENSES, WITH
SOMETHING VERY HARD AT 51 FEET

* * * *

TEST HOLE NUMBER:  7
LOCATION:  101N-47W-08AAAA  2
LEGAL LOCATION:  NE NE NE NE SEC. 08, T. 101 N., R. 47 W.

21.0 -  70.0  SAND AND GRAVEL, BROWN, MEDIUM TO COARSE
SAND, MEDIUM TO COARSE GRAVEL; COARSER
WITH DEPTH

* * * *

TEST HOLE NUMBER:  8
LOCATION:  101N-47W-08DDDD
LEGAL LOCATION:  SE SE SE SE SEC. 08, T. 101 N., R. 47 W.

18.0 -  30.0  SAND AND GRAVEL, BROWN, MEDIUM TO COARSE;
OXIDIZED

* * * *

TEST HOLE NUMBER:  9
LOCATION:  101N-47W-15CCCC
LEGAL LOCATION:  SW SW SW NW SEC. 15, T. 101 N., R. 47 W.

0 -  6.0  SAND, REDDISH-BROWN, FINE TO COARSE,
SLIGHTLY PEBBLY; OXIDIZED, DRY
6.0 -  9.0  SAND, BROWN, FINE TO COARSE; OXIDIZED,
MOIST
9.0 -  12.0  SAND, BROWN, FINE TO COARSE; OXIDIZED,
SATURATED
12.0 -  14.0  GRAVEL; NO RETURN, DRILLED LIKE COBBLES,
HIT LARGE ROCK, BROKE BIT, ABANDONED
HOLE

* * * *
TEST HOLE NUMBER: 10
LOCATION: 101N-47W-15CBCC
LEGAL LOCATION: SW SW NW SW SEC. 15, T. 101 N., R. 47 W.

3.0 - 6.0 SAND, DARK-BROWN, GRAVELLY, SILTY; MOIST TO DRY, OXIDIZED

6.0 - 22.0 SAND, LIGHT-BROWN, FINE TO COARSE, SLIGHTLY CLAYEY; SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 11
LOCATION: 101N-47W-15DDAD
LEGAL LOCATION: SE NE SE SE SEC. 15, T. 101 N., R. 47 W.

8.0 - 25.0 SAND, LIGHT-BROWN, VERY FINE, CLAYEY, SILTY; SATURATED, OXIDIZED (TILL)

* * * *

TEST HOLE NUMBER: 12
LOCATION: 101N-47W-15DDDD
LEGAL LOCATION: SE SE SE SE SEC. 15, T. 101 N., R. 47 W.

2.0 - 5.0 SAND, BROWN, FINE TO MEDIUM, CLAYEY

* * * *

TEST HOLE NUMBER: 13
LOCATION: 101N-47W-16AAA
LEGAL LOCATION: NE NE NE NE SEC. 16, T. 101 N., R. 47 W.

0 - 5.0 SAND, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 14
LOCATION: 101N-47W-17DDDA
LEGAL LOCATION: NE SE SE NE SEC. 17, T. 101 N., R. 47 W.

6.0 - 30.0 SAND, BROWN, FINE TO COARSE, SILTY; SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 15
LOCATION: 101N-47W-17DAAD
LEGAL LOCATION: SE NE SE SEC. 17, T. 101 N., R. 47 W.

1.0 - 5.0 SAND, BROWN, FINE TO MEDIUM, CLAYEY

* * * *

TEST HOLE NUMBER: 16
LOCATION: 101N-47W-18ABBA
LEGAL LOCATION: NE NW NW NE SEC. 18, T. 101 N., R. 47 W.
0 - 4.0 SAND, BROWN, MEDIUM
12.0 - 17.0 SAND AND GRAVEL, COARSE, COBBLY

TEST HOLE NUMBER: 17
LOCATION: 101N-47W-18ADD
LEGAL LOCATION: SE SE NE SE SEC. 18, T. 101 N., R. 47 W.
2.0 - 20.0 SAND, RUSTY-BROWN, FINE TO COARSE, SILTY; SATURATED; OXIDIZED

TEST HOLE NUMBER: 18
LOCATION: 101N-47W-18DAAA
LEGAL LOCATION: NE NE SE SE SEC. 18, T. 101 N., R. 47 W.
1.0 - 12.0 GRAVEL, BROWN, MEDIUM TO COARSE
12.0 - 22.0 SAND, GRAY, FINE TO MEDIUM

TEST HOLE NUMBER: 19
LOCATION: 101N-47W-34BBB
LEGAL LOCATION: NW NW NW NW SEC. 34, T. 101 N., R. 47 W.
20.0 - 26.0 GRAVEL, COARSE; OXIDIZED, DRILLS FAST

TEST HOLE NUMBER: 20
LOCATION: 101N-48W-01CCCD
LEGAL LOCATION: SE SW SW SW SEC. 01, T. 101 N., R. 48 W.
0 - 4.6 SAND, BROWN, MEDIUM, SILTY, CLAYEY; OXIDIZED
32.0 - 54.0 SAND, REDDISH-BROWN, COARSE; SOME FINE TO
COARSE GRAVEL, WHITISH-BROWN CLAY FROM 48 TO 51 FEET, VERY GRAVELLY BELOW 51
FEET

TEST HOLE NUMBER: 21
LOCATION: 101N-48W-01CCCD 2
LEGAL LOCATION: SE SW SW SW SEC. 01, T. 101 N., R. 48 W.
24.0 - 52.0 SAND AND GRAVEL; SOME CLAY

* * *
TEST HOLE NUMBER: 22  
LOCATION: 101N-48W-02BCCB  
LEGAL LOCATION: NW SW SW NW SEC. 02, T. 101 N., R. 48 W.  

3.0 - 15.0 SAND, BROWN, MEDIUM; OXIDIZED  
15.0 - 38.0 SAND, BROWN, MEDIUM TO COARSE; OXIDIZED, SOME GRAVEL  
* * * *  

TEST HOLE NUMBER: 23  
LOCATION: 101N-48W-02CCCC  
LEGAL LOCATION: SW SW SW SW SEC. 02, T. 101 N., R. 48 W.  

0 - 16.0 GRAVEL, REDDISH-BROWN, MEDIUM, SANDY, WELL-SORTED; ROUNDED, OXIDIZED  
* * * *  

TEST HOLE NUMBER: 24  
LOCATION: 101N-48W-02CCCC 1  
LEGAL LOCATION: SW SW SW SW SEC. 02, T. 101 N., R. 48 W.  

1.0 - 16.0 SAND, MEDIUM; SOME GRAVEL  
* * * *  

TEST HOLE NUMBER: 25  
LOCATION: 101N-48W-03AAABA  
LEGAL LOCATION: NE NW NE NE SEC. 03, T. 101 N., R. 48 W.  

0 - 17.0 SAND, MEDIUM TO COARSE; SOME GRAVEL  
20.0 - 23.0 SAND, GRAY; SATURATED  
25.0 - 30.0 SAND, GRAY  
* * * *  

TEST HOLE NUMBER: 26  
LOCATION: 101N-48W-03AAABA 2  
LEGAL LOCATION: NE NW NE NE SEC. 03, T. 101 N., R. 48 W.  

0 - 15.0 SAND AND GRAVEL, BROWN, COARSE SAND, FINE TO MEDIUM GRAVEL  
* * * *  

TEST HOLE NUMBER: 27  
LOCATION: 101N-48W-03AAABA 3  
LEGAL LOCATION: NE NW NE NE SEC. 03, T. 101 N., R. 48 W.  

0 - 16.0 SAND AND GRAVEL, BROWN, FINE TO MEDIUM GRAVEL, COARSE SAND; OXIDIZED  
* * * *  

13
TEST HOLE NUMBER: 28
LOCATION: 101N-48W-03CBC
LEGAL LOCATION: SW NW NW SW SEC. 01, T. 101 N., R. 48 W.
******************************************************************
* THIS LOG CONTAINS UNVERIFIED INFORMATION *
******************************************************************

8.0 - 43.0 SAND

** * * *

TEST HOLE NUMBER: 29
LOCATION: 101N-48W-04AAAA
LEGAL LOCATION: NE NE NE NE SEC. 04, T. 101 N., R. 48 W.

0 - 22.0 SAND AND GRAVEL, BROWN, COARSE SAND TO MEDIUM GRAVEL

** * * *

TEST HOLE NUMBER: 30
LOCATION: 101N-48W-04CCDC
LEGAL LOCATION: SW SE SW SEC. 04, T. 101 N., R. 48 W.

10.0 - 22.0 GRAVEL, MEDIUM TO COARSE
32.0 - 26.0 SAND, MEDIUM TO COARSE; COMPOSED MAINLY OF QUARTZ AND SOME GREEN MINERAL

** * * *

TEST HOLE NUMBER: 31
LOCATION: 101N-48W-04CCCB
LEGAL LOCATION: NW SW SW SE SEC. 04, T. 101 N., R. 48 W.

3.0 - 14.0 SAND, MEDIUM TO COARSE; WITH GRAVEL

** * * *

TEST HOLE NUMBER: 32
LOCATION: 101N-48W-04DDDD
LEGAL LOCATION: SE SE SE SE SEC. 04, T. 101 N., R. 48 W.

2.0 - 16.0 GRAVEL, MEDIUM TO COARSE

** * * *

TEST HOLE NUMBER: 33
LOCATION: 101N-48W-05CCCC
LEGAL LOCATION: SW SW SW SW SEC. 05, T. 101 N., R. 48 W.

16.0 - 24.0 SAND, MEDIUM TO COARSE

** * * *
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<tr>
<th>TEST HOLE NUMBER:</th>
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<tbody>
<tr>
<td>LOCATION: 101N-48W-09ABAB</td>
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<tr>
<td>LEGAL LOCATION: NW NE NW NE SEC. 09, T. 101 N., R. 48 W.</td>
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</tr>
<tr>
<td>0 - 5.0</td>
<td>SAND AND GRAVEL, MEDIUM SAND TO COARSE GRAVEL; WITH SOME CLAY</td>
</tr>
<tr>
<td>5.0 - 16.0</td>
<td>SAND AND GRAVEL, MEDIUM SAND TO COARSE GRAVEL</td>
</tr>
<tr>
<td>22.0 - 25.0</td>
<td>SAND, MEDIUM TO COARSE; COMPOSED MAINLY OF QUARTZ AND SOME GREEN MINERAL</td>
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<tr>
<th>TEST HOLE NUMBER:</th>
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<td>LOCATION: 101N-48W-09ADDC</td>
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<tr>
<td>LEGAL LOCATION: SE SE SF NE SEC. 09, T. 101 N., R. 48 W.</td>
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<tr>
<td>8.0 - 22.0</td>
<td>SAND</td>
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<tr>
<td>7.0 - 21.0</td>
<td>GRAVEL, BROWN, FINE TO MEDIUM, VERY SANDY; OXIDIZED</td>
</tr>
<tr>
<td>24.0 - 27.0</td>
<td>SAND, BROWN, MEDIUM, GRAVELLY; OXIDIZED</td>
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<td>7.0 - 21.0</td>
<td>GRAVEL, BROWN, FINE TO MEDIUM, VERY SANDY; OXIDIZED</td>
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<td>8.0 - 19.0</td>
<td>SAND AND GRAVEL, MEDIUM TO COARSE; SOME ROCKS</td>
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<tr>
<td>1.0 - 21.0</td>
<td>SAND, MEDIUM TO COARSE</td>
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TEST HOLE NUMBER: 40
LOCATION: 101N-48W-11DAAA
LEGAL LOCATION: NE NE NE SE SEC. 11, T. 101 N., R. 48 W.

1.0 - 4.0 SAND, REDDISH-BROWN, FINE; OXIDIZED, DRY, CLEAN
13.0 - 17.0 SAND AND GRAVEL, REDDISH-BROWN, MEDIUM TO COARSE SAND, MEDIUM GRAVEL; OXIDIZED, MOIST

TEST HOLE NUMBER: 41
LOCATION: 101N-48W-12DDDA
LEGAL LOCATION: NE SE SE SE SEC. 11, T. 101 N., R. 48 W.

13.0 - 17.0 SAND AND GRAVEL, MEDIUM TO COARSE

TEST HOLE NUMBER: 42
LOCATION: 101N-48W-12DDDD
LEGAL LOCATION: SE SE SE SE SEC. 11, T. 101 N., R. 48 W.

5.0 - 15.0 SAND AND GRAVEL, MEDIUM SAND TO COARSE GRAVEL

TEST HOLE NUMBER: 43
LOCATION: 101N-48W-12ABB
LEGAL LOCATION: NW NW NW NE SEC. 12, T. 101 N., R. 48 W.

8.0 - 30.0 SAND AND GRAVEL, MEDIUM SAND TO COARSE GRAVEL

TEST HOLE NUMBER: 44
LOCATION: 101N-48W-12DADD
LEGAL LOCATION: SE SE NE SE SEC. 12, T. 101 N., R. 48 W.

18.0 - 37.0 SAND AND GRAVEL, MEDIUM TO COARSE

TEST HOLE NUMBER: 45
LOCATION: 101N-48W-13AAAA
LEGAL LOCATION: NE NE NE NE SEC. 13, T. 101 N., R. 48 W.

0 - 18.0 SAND, BROWN, MEDIUM, SILTY; OXIDIZED
TEST HOLE NUMBER: 46  
LOCATION: 101N-48W-13BAAB  
LEGAL LOCATION: NW NE NE NW SEC. 13, T. 101 N., R. 48 W.  
0 - 20.0 SAND, LIGHT-BROWN, FINE TO MEDIUM, SILTY; SATURATED, OXIDIZED  
* * *  

TEST HOLE NUMBER: 47  
LOCATION: 101N-48W-14AAAA  
LEGAL LOCATION: NE NE NE NE SEC. 14, T. 101 N., R. 48 W.  
0 - 7.0 SAND, MEDIUM; WITH COARSE GRAVEL  
7.0 - 9.0 GRAVEL, COARSE  
* * *  

TEST HOLE NUMBER: 48  
LOCATION: 101N-48W-15ABBA  
LEGAL LOCATION: NW NW NW NE SEC. 15, T. 101 N., R. 48 W.  
1.0 - 16.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL, SILTY; WELL-ROUNDED  
* * *  

TEST HOLE NUMBER: 49  
LOCATION: 101N-48W-15BBBA  
LEGAL LOCATION: NE NW NW NW SEC. 15, T. 101 N., R. 48 W.  
13.0 - 20.0 SAND AND GRAVEL, MEDIUM TO COARSE  
20.0 - 24.0 SAND AND GRAVEL, GRAY, MEDIUM TO COARSE; SOME CLAY, SOME ROCKS  
* * *  

TEST HOLE NUMBER: 50  
LOCATION: 101N-48W-15BBBB  
LEGAL LOCATION: NW NW NW NW SEC. 15, T. 101 N., R. 48 W.  
9.0 - 19.0 SAND AND GRAVEL, UNSORTED  
* * *  

TEST HOLE NUMBER: 51  
LOCATION: 101N-48W-16AAAA  
LEGAL LOCATION: NE NW NE NE SEC. 16, T. 101 N., R. 48 W.  
7.0 - 15.0 SAND  
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17
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<td>15.0 - 21.0 SAND, COARSE; SAMPLE TAKEN</td>
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<td>21.0 - 29.0 GRAVEL, COARSE</td>
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<td>1.0 - 17.0 SAND, FINE TO MEDIUM</td>
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<tr>
<td>17.0 - 23.0 SAND AND GRAVEL</td>
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<tr>
<td>24.0 - 42.0 SAND AND GRAVEL, MEDIUM TO COARSE</td>
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<td>2.0 - 8.0 SAND, BROWN, FINE TO MEDIUM; OXIDIZED, MOIST AT 6 FEET</td>
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<tr>
<td>8.0 - 32.0 SAND AND GRAVEL, BROWN, FINE TO MEDIUM SAND, MEDIUM TO COARSE GRAVEL; MOIST, OXIDIZED, HIT QUARTZITE AT 32 FEET</td>
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<td>0 - 12.0 SAND AND GRAVEL, FINE SAND TO COARSE GRAVEL</td>
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<tr>
<td>19.0 - 77.0 SAND AND GRAVEL, FINE SAND TO COARSE GRAVEL</td>
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<td>0 - 90.0 SAND AND GRAVEL, FINE SAND TO COARSE GRAVEL</td>
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<td>22.0 - 25.0</td>
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<td>TEST HOLE NUMBER: 63</td>
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LOCATION: 101N-48W-27BABB
LEGAL LOCATION: NW NW NE NW SEC. 27, T. 101 N., R. 48 W.

3.0 - 30.0 SAND AND GRAVEL, MEDIUM SAND TO COARSE GRAVEL

***

TEST HOLE NUMBER: 64
LOCATION: 101N-48W-27BBAB
LEGAL LOCATION: NW NE NW NW SEC. 27, T. 101 N., R. 48 W.

2.0 - 14.0 SAND, BROWN, MEDIUM TO COARSE; OXIDIZED
14.0 - 21.0 GRAVEL, BROWN, MEDIUM, SAVGY; OXIDIZED

***

TEST HOLE NUMBER: 65
LOCATION: 101N-48W-27BCCC
LEGAL LOCATION: SW SW NW SW SEC. 27, T. 101 N., R. 48 W.

7.0 - 22.0 SAND AND GRAVEL, MEDIUM TO COARSE

***

TEST HOLE NUMBER: 66
LOCATION: 101N-48W-27CDDD
LEGAL LOCATION: SW SW SW SW SEC. 27, T. 101 N., R. 48 W.

0 - 10.0 SAND, BROWN, FINE TO MEDIUM; OXIDIZED,
DRY, HIT QUARTZITE AT 10 FEET

***

TEST HOLE NUMBER: 67
LOCATION: 101N-48W-27DDDD
LEGAL LOCATION: SW SE SW SE SEC. 27, T. 101 N., R. 48 W.

2.0 - 17.0 SAND, REDISH-BROWN, MEDIUM; OXIDIZED,
DRY, SATURATED BELOW 12 FEET, HIT
QUARTZITE AT 17 FEET

***

TEST HOLE NUMBER: 68
LOCATION: 101N-48W-28ADAD
LEGAL LOCATION: SE NE SE NE SEC. 28, T. 101 N., R. 48 W.

1.0 - 49.0 SAND AND GRAVEL, MEDIUM SAND TO MEDIUM GRAVEL

***

TEST HOLE NUMBER: 69
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<tr>
<td>1.0 - 7.0 GRAVEL, MEDIUM</td>
<td>3.0 - 18.0 SAND, BROWN, MEDIUM TO COARSE</td>
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</table>
| 7.0 - 27.0 SAND, PEBBLY | * * * *

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<th>TEST HOLE NUMBER: 70</th>
<th>TEST HOLE NUMBER: 71</th>
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<tbody>
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<td>10.0 - 19.0 SAND AND GRAVEL, MEDIUM SAND TO COARSE GRAVEL; WITH SOME CLAY</td>
<td>10.0 - 19.0 SAND AND GRAVEL, MEDIUM SAND TO COARSE GRAVEL; WITH SOME CLAY</td>
</tr>
<tr>
<td>19.0 - 21.0 GRAVEL, VERY COARSE; WITH COBBLES</td>
<td>19.0 - 21.0 GRAVEL, VERY COARSE; WITH COBBLES</td>
</tr>
<tr>
<td>21.0 - 30.0 SAND AND GRAVEL, COARSE SAND TO COARSE GRAVEL</td>
<td>21.0 - 30.0 SAND AND GRAVEL, COARSE SAND TO COARSE GRAVEL</td>
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<td>3.0 - 7.0 SAND</td>
<td>2.0 - 7.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL, WELL ROUNDED</td>
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<th>TEST HOLE NUMBER: 74</th>
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| 11.0 - 19.0 GRAVEL, CLAYEY; QUARTZITE AT 19 FEET | * * * *

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LOCATION: 101N-48W-34BDA
LEGAL LOCATION: NE SE SW NW SEC. 34, T. 101 N., R. 48 W.
* THIS LOG CONTAINS UNVERIFIED INFORMATION *

18.0 - 24.0 SAND

* * * *

TEST HOLE NUMBER: 76
LOCATION: 101N-48W-34CBBB
LEGAL LOCATION: NW NW NW SW SEC. 34, T. 101 N., R. 48 W.

0 - 8.0 SAND

* * * *

TEST HOLE NUMBER: 77
LOCATION: 101N-49W-02AAA
LEGAL LOCATION: NE NE NE NE SEC. 02, T. 101 N., R. 49 W.

3.0 - 35.0 SAND, MEDIUM TO COARSE; SOME MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 78
LOCATION: 101N-49W-02BDDDD
LEGAL LOCATION: SE SE SE NW SEC. 02, T. 101 N., R. 49 W.

4.0 - 48.0 SAND, MEDIUM TO COARSE; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 79
LOCATION: 101N-49W-02BDDDD 2
LEGAL LOCATION: SE SE SE NW SEC. 02, T. 101 N., R. 49 W.

5.0 - 43.0 SAND, BROWN TO DARK-BROWN, MEDIUM TO COARSE; SOME FINE GRAVEL

* * * *

TEST HOLE NUMBER: 80
LOCATION: 101N-49W-02BDDDD 3
LEGAL LOCATION: SE SE SE NW SEC. 02, T. 101 N., R. 49 W.

2.0 - 46.0 SAND, BROWN, COARSE; SOME GRAVEL

* * * *

TEST HOLE NUMBER: 81
LOCATION: 101N-49W-02CBBB

22
LEGAL LOCATION: NW NW SE SW SEC. 02, T. 101 N., R. 49 W.

23.0 - 25.0 SAND AND GRAVEL, FINE SAND TO MEDIUM GRAVEL

**   **

TEST HOLE NUMBER: 82
LOCATION: 101N-49W-04ADDD
LEGAL LOCATION: SE SE SE NE SEC. 04, T. 101 N., R. 49 W.

12.0 - 22.0 SAND, FINE; DRY, WITH PEBBLY YELLOW CLAY
22.0 - 27.0 SAND, FINE; SOME CLAY

**   **

TEST HOLE NUMBER: 83
LOCATION: 101N-49W-04BA
LEGAL LOCATION: NE NW SEC. 04, T. 101 N., R. 49 W.

10.0 - 12.0 SAND AND GRAVEL
12.0 - 21.0 GRAVEL, COARSE
21.0 - 25.0 GRAVEL, SANDY
25.0 - 31.0 GRAVEL, COARSE; WITH QUARTZITE PEBBLES

**   **

TEST HOLE NUMBER: 84
LOCATION: 101N-49W-04DBBB
LEGAL LOCATION: NW NW SE NW SEC. 04, T. 101 N., R. 49 W.

7.0 - 28.0 SAND AND GRAVEL, VERY COARSE SAND, MEDIUM GRAVEL; LAMINATED

**   **

TEST HOLE NUMBER: 85
LOCATION: 101N-49W-04CBAA
LEGAL LOCATION: NE NE NW SW SEC. 04, T. 101 N., R. 49 W.

5.0 - 11.0 SAND, BROWN, FINE TO MEDIUM
11.0 - 46.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE SAND, FINE TO COARSE GRAVEL; SATURATED, CLEAN

**   **

TEST HOLE NUMBER: 86
LOCATION: 101N-49W-04CDDD
LEGAL LOCATION: SE SE SE SW SEC. 04, T. 101 N., R. 49 W.

5.0 - 15.0 SAND, REDDISH-BROWN, MEDIUM; OXIDIZED
15.0 - 25.0 SAND, VERY FINE TO COARSE
25.0 - 30.0 SAND, FINE TO VERY COARSE; WITH VERY
<table>
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<tr>
<th>Test Hole Number</th>
<th>Location</th>
<th>Legal Location</th>
<th>Depth</th>
<th>Description</th>
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<td>6.0 - 12.0 SAND AND GRAVEL, REDDISH</td>
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<td>12.0 - 16.0 SAND AND GRAVEL</td>
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<td>16.0 - 17.5 SAND, FINE, SILTY</td>
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<td></td>
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<td>17.5 - 38.0 SAND AND GRAVEL</td>
<td></td>
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<tr>
<td>93</td>
<td>101N-49W-06ABA</td>
<td>NE NW NE SEC. 06, T. 101 N., R. 49 W.</td>
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<td>8.0 - 14.0 SAND, MEDIUM</td>
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<td>14.0 - 26.0 SAND AND GRAVEL, COARSE SAND TO COARSE GRAVEL</td>
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<td>94</td>
<td>101N-49W-06ABAB</td>
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<td>6.0 - 16.0 GRAVEL; DIRTY</td>
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<td>16.0 - 29.0 GRAVEL, COARSE; CLEAN</td>
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<td>95</td>
<td>101N-49W-06ADCC</td>
<td>SW SW SE NE SEC. 06, T. 101 N., R. 49 W.</td>
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<td>7.0 - 48.0 SAND AND GRAVEL, MEDIUM SAND GRADING TO A COARSE GRAVEL</td>
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<td>96</td>
<td>101N-49W-06CDDC</td>
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<td>9.0 - 14.0 SAND, MEDIUM</td>
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<td></td>
<td></td>
<td>14.0 - 28.0 SAND AND GRAVEL, COARSE SAND TO COARSE GRAVEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>101N-49W-06D5CA</td>
<td>NE SW NW SE SEC. 06, T. 101 N., R. 49 W.</td>
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</tbody>
</table>
1.0 - 10.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, COARSE GRAVEL
10.0 - 18.0 GRAVEL, COARSE
18.0 - 36.0 SAND, MEDIUM TO VERY COARSE; WITH SOME COARSE GRAVEL

* * *

TEST HOLE NUMBER: 98
LOCATION: 101N-49W-06DC 1
LEGAL LOCATION: SW SE SEC. 06, T. 101 N., R. 49 W.

3.0 - 6.0 GRAVEL, COARSE
6.0 - 10.0 SAND, BROWN, MEDIUM, Silty; DRY
10.0 - 36.0 SAND AND GRAVEL, MEDIUM BROWN SAND TO FINE GRAVEL; SATURATED

* * *

TEST HOLE NUMBER: 99
LOCATION: 101N-49W-06DC 3
LEGAL LOCATION: SW SE SEC. 06, T. 101 N., R. 49 W.

6.0 - 9.0 GRAVEL, BROWN, COARSE, SILTY; DRY
9.0 - 12.0 SAND, BROWN, MEDIUM; DRY
12.0 - 37.0 SAND AND GRAVEL, MEDIUM-BROWN, MOIST SAND TO MEDIUM GRAVEL; SATURATED

* * *

TEST HOLE NUMBER: 103
LOCATION: 101N-49W-06DC 4
LEGAL LOCATION: SW SE SEC. 06, T. 101 N., R. 49 W.

6.0 - 9.0 GRAVEL, BROWN, COARSE; DRY
9.0 - 12.0 SAND, BROWN, MEDIUM; DRY
12.0 - 23.0 SAND AND GRAVEL, MEDIUM-BROWN SAND TO FINE GRAVEL; SATURATED

* * *

TEST HOLE NUMBER: 101
LOCATION: 101N-49W-07AB 1
LEGAL LOCATION: NW NE SEC. 07, T. 101 N., R. 49 W.

5.0 - 48.0 SAND AND GRAVEL, FINE SAND AND COARSE GRAVEL

* * *

TEST HOLE NUMBER: 102
LOCATION: 101N-49W-07AB 2
LEGAL LOCATION: NW NE SEC. 07, T. 101 N., R. 49 W.

26
4.0 - 9.0 SAND, BROWN, CLAYEY, SILTY; DRY
9.0 - 12.0 SAND, DARK-BROWN, MEDIUM, GRAVELLY, SILTY; MOIST
12.0 - 14.0 GRAVEL, BROWN, FINE; SATURATED
14.0 - 23.0 GRAVEL, GRAY-BROWN, MEDIUM; SATURATED

* * *
TEST HOLE NUMBER: 103
LOCATION: 101N-49W-07AC 1
LEGAL LOCATION: SW NE SEC. 07, T. 101 N., R. 49 W.
14.0 - 45.0 SAND AND GRAVEL, FINE SAND TO COARSE GRAVEL

* * *
TEST HOLE NUMBER: 104
LOCATION: 101N-49W-07BA 1
LEGAL LOCATION: NE NW SEC. 07, T. 101 N., R. 49 W.
6.0 - 33.0 SAND, COARSE

* * *
TEST HOLE NUMBER: 105
LOCATION: 101N-49W-07BA 2
LEGAL LOCATION: NE NW SEC. 07, T. 101 N., R. 49 W.
10.0 - 15.0 SAND, BROWN, MEDIUM; DRY
15.0 - 28.0 SAND, BROWN, MEDIUM, SILTY, PEBBLY; SATURATED

* * *
TEST HOLE NUMBER: 106
LOCATION: 101N-49W-07BAAB
LEGAL LOCATION: NW NE NW SEC. 07, T. 101 N., R. 49 W.
17.0 - 38.0 SAND, VERY COARSE, GRAVELLY; CLAY LENSE AT 32 FEET, COARSE GRAVEL AT 37 FEET

* * *
TEST HOLE NUMBER: 107
LOCATION: 101N-49W-07BD 1
LEGAL LOCATION: SE NW SEC. 07, T. 101 N., R. 49 W.
5.0 - 39.0 GRAVEL, MEDIUM

* * *
TEST HOLE NUMBER: 108
LOCATION: 101N-49W-07BD 2
LEGAL LOCATION: SE NW SEC. 07, T. 101 N., R. 49 W.

4.0 - 9.0 SAND, FINE TO MEDIUM, PEBBLY; DRY
9.0 - 11.0 SAND, GRAY-BLACK, SILTY, CLAYEY; MOIST
11.0 - 23.0 SAND, GRAY-BLACK, SILTY, CLAYEY; SATURATED

* * * *

TEST HOLE NUMBER: 109
LOCATION: 101N-49W-07BD 3
LEGAL LOCATION: SE NW SEC. 07, T. 101 N., R. 49 W.

16.0 - 40.0 SAND AND GRAVEL, FINE SAND AND MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 110
LOCATION: 101N-49W-07BD 4
LEGAL LOCATION: SE NW SEC. 07, T. 101 N., R. 49 W.

0 - 16.0 GRAVEL, SILTY
16.0 - 40.0 SAND AND GRAVEL, MEDIUM SAND AND MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 111
LOCATION: 101N-49W-07BD 5
LEGAL LOCATION: SE NW SEC. 07, T. 101 N., R. 49 W.

8.0 - 28.0 SAND AND GRAVEL, FINE SAND TO MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 112
LOCATION: 101N-49W-07BD 6
LEGAL LOCATION: SE NW SEC. 07, T. 101 N., R. 49 W.

10.0 - 12.0 GRAVEL, COARSE, BROWN
12.0 - 13.0 SAND, BROWN, MEDIUM; MOIST
13.0 - 21.0 SAND AND GRAVEL, FINE; SATURATED

* * * *

TEST HOLE NUMBER: 113
LOCATION: 101N-49W-07DBBB
LEGAL LOCATION: NW NW SE NW SEC. 07, T. 101 N., R. 49 W.

3.0 - 9.0 SAND, COARSE
11.0 - 42.0 SAND, VERY COARSE TO COARSE, GRAVELLY; COARSE GRAVEL AT 40 FEET

28
TEST HOLE NUMBER: 114
LOCATION: 101N-49W-07CA 1
LEGAL LOCATION: NE SW SEC. 07, T. 101 N., R. 49 W.

13.0 - 50.0 SAND AND GRAVEL, FINE SAND TO MEDIUM GRAVEL, SILTY

***

TEST HOLE NUMBER: 115
LOCATION: 101N-49W-07CA 2
LEGAL LOCATION: NE SW SEC. 07, T. 101 N., R. 49 W.

10.0 - 12.0 SAND, BROWN, MEDIUM, SILTY; DRY
12.0 - 23.0 SAND, GRAY, SILTY; SATURATED

***

TEST HOLE NUMBER: 116
LOCATION: 101N-49W-07CBB
LEGAL LOCATION: NW NW SW SEC. 07, T. 101 N., R. 49 W.

* THIS LOG CONTAINS UNVERIFIED INFORMATION *

***********************

9.0 - 13.0 SAND, FINE
13.0 - 35.0 SAND; CLEAN

***

TEST HOLE NUMBER: 117
LOCATION: 101N-49W-08ABA
LEGAL LOCATION: NE NW NE SEC. 08, T. 101 N., R. 49 W.

7.0 - 34.0 SAND AND GRAVEL, FINE TO VERY COARSE

***

TEST HOLE NUMBER: 118
LOCATION: 101N-49W-08ABA
LEGAL LOCATION: NE NE NW NE SEC. 08, T. 101 N., R. 49 W.

5.0 - 42.0 SAND AND GRAVEL, FINE TO VERY COARSE

***

TEST HOLE NUMBER: 119
LOCATION: 101N-49W-08ABAC
LEGAL LOCATION: NW NE NW NE SEC. 08, T. 101 N., R. 49 W.

6.0 - 37.0 SAND AND GRAVEL, FINE TO VERY COARSE

29
TEST HOLE NUMBER: 120
LOCATION: 101N-49W-08ABAC 2
LEGAL LOCATION: SW NE NW NE SEC. 08, T. 101 N., R. 49 W.
   6.0 -  17.0  SAND AND GRAVEL

TEST HOLE NUMBER: 121
LOCATION: 101N-49W-08ABBD
LEGAL LOCATION: SE NW NW NE SEC. 08, T. 101 N., R. 49 W.
   5.0 -  37.0  SAND AND GRAVEL, FINE TO VERY COARSE

TEST HOLE NUMBER: 122
LOCATION: 101N-49W-08ADCC
LEGAL LOCATION: SW SW SE NE SEC. 08, T. 101 N., R. 49 W.
   5.0 -  37.0  SAND AND GRAVEL, FINE TO VERY COARSE

TEST HOLE NUMBER: 123
LOCATION: 101N-49W-08BBBD
LEGAL LOCATION: SE NW NW NW SEC. 08, T. 101 N., R. 49 W.
   15.0 -  20.0  GRAVEL, FINE, CLAYEY
   20.0 -  40.0  SAND AND GRAVEL, VERY COARSE SAND, VERY FINE GRAVEL

TEST HOLE NUMBER: 124
LOCATION: 101N-49W-08BCAC
LEGAL LOCATION: SW NE NW SW SEC. 08, T. 101 N., R. 49 W.
   5.0 -  7.0  GRAVEL, VERY COARSE

TEST HOLE NUMBER: 125
LOCATION: 101N-49W-08CDAD
LEGAL LOCATION: SE NE SE SW SEC. 08, T. 101 N., R. 49 W.
   0 -  20.0  SAND AND GRAVEL

TEST HOLE NUMBER: 126
LOCATION: 102N-49W-08DAAA

50
LEGAL LOCATION: NE NE NE SE SEC. 08, T. 101 N., R. 49 W.
5.0 - 26.0 SAND AND GRAVEL, FINE TO COARSE

* * *

TEST HOLE NUMBER: 127
LOCATION: 101N-49W-08DAAC
LEGAL LOCATION: SW NE NE SE SEC. 08, T. 101 N., R. 49 W.
7.0 - 17.0 SAND, COARSE TO VERY COARSE

* * *

TEST HOLE NUMBER: 128
LOCATION: 101N-49W-08DBAB
LEGAL LOCATION: NE NW NE SE SEC. 08, T. 101 N., R. 49 W.
0 - 1.0 SAND, GRAVEL AND CLAY
6.0 - 30.0 SAND AND GRAVEL, FINE TO MEDIUM SAND, FINE GRAVEL

* * *

TEST HOLE NUMBER: 129
LOCATION: 101N-49W-08DBBC
LEGAL LOCATION: SW NW NE SE SEC. 08, T. 101 N., R. 49 W.
0 - 1.0 GRAVEL AND CLAY
6.0 - 11.0 GRAVEL, FINE TO COARSE
11.0 - 19.0 GRAVEL AND SAND, FINE TO COARSE GRAVEL, COARSE SAND
19.0 - 29.0 GRAVEL AND SAND, FINE TO COARSE

* * *

TEST HOLE NUMBER: 130
LOCATION: 101N-49W-08DACC
LEGAL LOCATION: SW SW NE SE SEC. 08, T. 101 N., R. 49 W.
6.0 - 17.0 GRAVEL, SANDY; FEW PEBBLES, DRY
17.0 - 19.0 GRAVEL; GOOD
19.0 - 23.0 SAND AND GRAVEL
23.0 - 27.0 SAND AND CLAY; DIRTY SAND

* * *

TEST HOLE NUMBER: 131
LOCATION: 101N-49W-09BAAA
LEGAL LOCATION: NE NE NE NW SEC. 09, T. 101 N., R. 49 W.
4.0 - 20.0 SAND, MEDIUM, SILTY, WELL-SORTED; HARD DRILLING
20.0 - 30.0 SAND, COARSE TO VERY COARSE, SLIGHTLY
<table>
<thead>
<tr>
<th>Test Hole Number</th>
<th>Location</th>
<th>Legal Location</th>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>132</td>
<td>101N-49W-09BB</td>
<td>NW NW SEC. 09, T. 101 N., R. 49 W.</td>
<td>0</td>
<td>15.0 SAND, BROWN, FINE</td>
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<td></td>
<td></td>
<td>15.0</td>
<td>33.0 SAND, GRAY, FINE TO COARSE</td>
</tr>
<tr>
<td>133</td>
<td>101N-49W-09BBD</td>
<td>SE SW NW NW SEC. 09, T. 101 N., R. 49 W.</td>
<td>8.0</td>
<td>36.0 SAND AND GRAVEL</td>
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<tr>
<td>134</td>
<td>101N-49W-09BCC</td>
<td>NW SW NW SEC. 09, T. 101 N., R. 49 W.</td>
<td>3.0</td>
<td>25.0 SAND AND GRAVEL</td>
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<tr>
<td>135</td>
<td>101N-49W-09BCC</td>
<td>NW NW SW NW SEC. 09, T. 101 N., R. 49 W.</td>
<td>4.0</td>
<td>11.0 SAND, FINE</td>
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<td>11.0</td>
<td>30.0 GRAVEL, MEDIUM</td>
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<tr>
<td>136</td>
<td>101N-49W-11ACAB</td>
<td>NW NE SW NE SEC. 11, T. 101 N., R. 49 W.</td>
<td>1.0</td>
<td>3.0 SAND, FINE TO MEDIUM</td>
</tr>
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<td>20.0</td>
<td>46.0 SAND AND GRAVEL, COARSE; SOME ROCKS, COULD NOT PENETRATE, QUARTZITE(?), ABANDONED HOLE</td>
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<tr>
<td>137</td>
<td>101N-49W-11ACAB 2</td>
<td>NW NE SW NE SEC. 11, T. 101 N., R. 49 W.</td>
<td>1.0</td>
<td>5.0 SAND, BROWN, MEDIUM</td>
</tr>
</tbody>
</table>
21.0 - 28.0 SAND, BROWN, MEDIUM

* * * *

TEST HOLE NUMBER: 138
LOCATION: 101N-49W-11BACB
LEGAL LOCATION: NW SW NE NW SEC. 11, T. 101 N., R. 49 W.

0 - 2.0 GRAVEL
13.0 - 14.0 GRAVEL, COARSE
14.0 - 17.0 SAND, FINE TO COARSE
20.0 - 32.0 GRAVEL, VERY COARSE; POSSIBLY WITH SOME CLAY LAYERS

* * * *

TEST HOLE NUMBER: 139
LOCATION: 101N-49W-11BCDA
LEGAL LOCATION: NE SE SW NW SEC. 11, T. 101 N., R. 49 W.

0 - 7.0 SAND, MEDIUM, SILTY
10.0 - 22.0 SAND AND GRAVEL, FINE SAND TO MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 140
LOCATION: 101N-49W-11CDDC
LEGAL LOCATION: SW SE SE SW SEC. 11, T. 101 N., R. 49 W.

0 - 85.0 GRAVEL, FINE TO COARSE; ONE THIN CLAY SEAM

* * * *

TEST HOLE NUMBER: 141
LOCATION: 101N-49W-17BCDC
LEGAL LOCATION: SW SE SW NW SEC. 17, T. 101 N., R. 49 W.

12.0 - 20.0 SAND
20.0 - 23.5 GRAVEL

* * * *

TEST HOLE NUMBER: 142
LOCATION: 101N-49W-18BCDC
LEGAL LOCATION: SW NW NW SEC. 18, T. 101 N., R. 49 W.

5.0 - 14.0 GRAVEL

* * * *

TEST HOLE NUMBER: 143
LOCATION: 101N-49W-18BDCD

33
LEGAL LOCATION: SE SW NW SE SEC. 18, T. 101 N., R. 49 W.
14.0 - 25.0 GRAVEL

* * * *

TEST HOLE NUMBER: 144
LOCATION: 101N-49W-22DB 1
LEGAL LOCATION: NW SE SEC. 22, T. 101 N., R. 49 W.
4.0 - 13.5 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 145
LOCATION: 101N-49W-22DB 2
LEGAL LOCATION: NW SE SEC. 22, T. 101 N., R. 49 W.
2.0 - 5.0 SAND, CLAYEY
5.0 - 8.0 SAND
8.0 - 13.0 SAND, CLAYEY

* * * *

TEST HOLE NUMBER: 146
LOCATION: 101N-49W-22DB 3
LEGAL LOCATION: NW SE SEC. 22, T. 101 N., R. 49 W.
3.0 - 9.5 SAND

* * * *

TEST HOLE NUMBER: 147
LOCATION: 101N-49W-22DB 4
LEGAL LOCATION: NW SE SEC. 22, T. 101 N., R. 49 W.
2.5 - 7.0 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 148
LOCATION: 101N-49W-22DB 5
LEGAL LOCATION: NW SE SEC. 22, T. 101 N., R. 49 W.
0 - 3.5 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 149
LOCATION: 101N-49W-22DB 6
LEGAL LOCATION: NW SE SEC. 22, T. 101 N., R. 49 W.
0 - 4.5 SAND AND GRAVEL

34
TEST HOLE NUMBER: 150
LOCATION: 101N-49W-22DB 7
LEGAL LOCATION: NW SE SEC. 22, T. 101 N., R. 49 W.
7.5 - 11.0 GRAVEL, ROCKY

* * * *

TEST HOLE NUMBER: 151
LOCATION: 101N-49W-22DB 8
LEGAL LOCATION: NW SE SEC. 22, T. 101 N., R. 49 W.
4.0 - 9.0 GRAVEL
9.0 - 11.0 GRAVEL, VERY COARSE; CEMENTED, VERY HARD
DRILLING, EASIER FROM 10 TO 11 FEET

* * * *

TEST HOLE NUMBER: 152
LOCATION: 101N-49W-25DDDC
LEGAL LOCATION: SW SE SE SE SEC. 25, T. 101 N., R. 49 W.
23.0 - 28.0 GRAVEL; MIXED WITH SANDY, PEBBLY CLAY
(TILL)

* * * *

TEST HOLE NUMBER: 153
LOCATION: 101N-49W-27ACDD
LEGAL LOCATION: SE SE SW NE SEC. 27, T. 101 N., R. 49 W.
11.0 - 13.0 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 154
LOCATION: 101N-49W-27BABCD
LEGAL LOCATION: SW NW NE NW SEC. 27, T. 101 N., R. 49 W.
1.0 - 5.0 SAND, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 155
LOCATION: 101N-49W-30BC
LEGAL LOCATION: SW NW SEC. 30, T. 101 N., R. 49 W.
19.0 - 29.0 SAND, MEDIUM TO COARSE

* * * *

TEST HOLE NUMBER: 156

35
LOCATION: 101N-49W-31DA  1
LEGAL LOCATION: NE SE SEC. 31, T. 101 N., R. 49 W.

7.5 - 12.0 SAND AND GRAVEL

** **

TEST HOLE NUMBER:  157
LOCATION: 101N-49W-31DC
LEGAL LOCATION: SW SE SEC. 31, T. 101 N., R. 49 W.

2.0 - 15.5 GRAVEL

** **

TEST HOLE NUMBER:  158
LOCATION: 101N-49W-31DD
LEGAL LOCATION: SE SE SEC. 31, T. 101 N., R. 49 W.

7.0 - 13.0 SAND AND GRAVEL

** **

TEST HOLE NUMBER:  159
LOCATION: 101N-49W-31DD
LEGAL LOCATION: SF SE SEC. 31, T. 101 N., R. 49 W.

2.0 - 6.0 SAND AND GRAVEL

** **

TEST HOLE NUMBER:  160
LOCATION: 101N-49W-32DDA
LEGAL LOCATION: NE SE NE SEC. 32, T. 101 N., R. 49 W.

8.0 - 15.0 SAND (QUARTZITE WASH)

** **

TEST HOLE NUMBER:  161
LOCATION: 101N-50W-01ABB  1
LEGAL LOCATION: NW NW NW NE SEC. 01, T. 101 N., R. 50 W.

16.0 - 23.0 SAND, FINE TO COARSE; WITH FINE TO COARSE GRAVEL

** **

TEST HOLE NUMBER:  162
LOCATION: 101N-50W-01ABB
LEGAL LOCATION: NW NW NW NE SEC. 01, T. 101 N., R. 50 W.

16.0 - 26.0 SAND, FINE TO COARSE; WITH FINE TO MEDIUM GRAVEL

36
TEST HOLE NUMBER: 161
LOCATION: 101N-50W-01CCC 1
LEGAL LOCATION: SW SW SW SW SW SEC. 01, T. 101 N., R. 50 W.
12.0 - 14.0 SAND, FINE TO COARSE; OXIDIZED
16.0 - 24.0 SAND, FINE TO COARSE; OXIDIZED

TEST HOLE NUMBER: 164
LOCATION: 101N-50W-01CCCC 2
LEGAL LOCATION: SW SW SW SW SW SEC. 01, T. 101 N., R. 50 W.
12.0 - 16.0 GRAVEL, MEDIUM TO COARSE

TEST HOLE NUMBER: 165
LOCATION: 101N-50W-03BBA
LEGAL LOCATION: NE NW NW NW SEC. 03, T. 101 N., R. 50 W.
22.0 - 23.0 SAND; SOME CLAY, SATURATED

TEST HOLE NUMBER: 166
LOCATION: 101N-50W-03BBB
LEGAL LOCATION: NW NW NW NW SEC. 03, T. 101 N., R. 50 W.
17.0 - 21.0 SAND, YELLOWISH-BROWN, FINE TO MEDIUM

TEST HOLE NUMBER: 167
LOCATION: 101N-50W-03CCD
LEGAL LOCATION: SE SW SW SW SW SEC. 03, T. 101 N., R. 50 W.
19.0 - 24.0 SAND, MEDIUM, SILTY

TEST HOLE NUMBER: 168
LOCATION: 101N-50W-06DD
LEGAL LOCATION: SE SE SE SEC. 06, T. 101 N., R. 50 W.
8.0 - 14.0 SAND, FINE, CLAYEY

TEST HOLE NUMBER: 169
LOCATION: 101N-50W-07AB
LEGAL LOCATION: NW NE NE SEC. 07, T. 101 N., R. 50 W.
6.0 - 9.0 GRAVEL, VERY COARSE
9.0 - 12.0 GRAVEL, MEDIUM TO COARSE
12.0 - 36.0 SAND, MEDIUM TO COARSE

* * *

TEST HOLE NUMBER: 170
LOCATION: 101N-50W-07AABB
LEGAL LOCATION: NW NW NE NE SEC. 07, T. 101 N., R. 50 W.
12.0 - 19.0 GRAVEL, COARSE; SAMPLE TAKEN

* * *

TEST HOLE NUMBER: 171
LOCATION: 101N-50W-07ABAB
LEGAL LOCATION: NW NE NW NE SEC. 07, T. 101 N., R. 50 W.
4.0 - 15.0 GRAVEL, COARSE

* * *

TEST HOLE NUMBER: 172
LOCATION: 101N-50W-07BAA
LEGAL LOCATION: NE NE NW SEC. 07, T. 101 N., R. 50 W.
3.0 - 8.0 SAND, FINE, SILTY, CLAYEY
8.0 - 10.0 SAND AND GRAVEL, COARSE GRAVEL
17.0 - 52.0 SAND AND GRAVEL, MEDIUM SAND, COARSE GRAVEL

* * *

TEST HOLE NUMBER: 173
LOCATION: 101N-50W-07CCCC
LEGAL LOCATION: SW SW SW SW SEC. 07, T. 101 N., R. 50 W.
1.0 - 7.0 SAND, MEDIUM, SILTY

* * *

TEST HOLE NUMBER: 174
LOCATION: 101N-50W-08BBBB
LEGAL LOCATION: NW NW NW NW SEC. 08, T. 101 N., R. 50 W.
3.0 - 16.0 SAND AND GRAVEL, MEDIUM TO COARSE

* * *

TEST HOLE NUMBER: 175
LOCATION: 101N-50W-08CCBC
LEGAL LOCATION: SW NW SW NW SEC. 08, T. 101 N., R. 50 W.
3.0 - 13.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE
SAND, MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 176
LOCATION: 101N-50W-08BCC
LEGAL LOCATION: NW SW NW NW SEC. 08, T. 101 N., R. 50 W.

4.0 - 21.0 SAND AND GRAVEL, MEDIUM TO COARSE, ROCKY; ROCK AT 21 FEET, COULD NOT PENETRATE

* * * *

TEST HOLE NUMBER: 177
LOCATION: 101N-50W-09ADD
LEGAL LOCATION: SE SE NE SEC. 09, T. 101 N., R. 50 W.

1.0 - 5.0 SAND AND GRAVEL, COARSE SAND, FINE GRAVEL

* * * *

TEST HOLE NUMBER: 178
LOCATION: 101N-50W-09ADD
LEGAL LOCATION: SE SE NE SEC. 09, T. 101 N., R. 20 W.

3.0 - 5.0 SAND AND GRAVEL, REDDISH, FINE
5.0 - 10.0 SAND AND GRAVEL, MEDIUM SAND, FINE GRAVEL
10.0 - 18.0 GRAVEL, FINE; CLEAN

* * * *

TEST HOLE NUMBER: 179
LOCATION: 101N-50W-09BCC
LEGAL LOCATION: SW NW NW SEC. 09, T. 101 N., R. 50 W.

9.0 - 14.0 SAND, MEDIUM, SILTY

* * * *

TEST HOLE NUMBER: 180
LOCATION: 101N-50W-09ADD
LEGAL LOCATION: SE SE NE SEC. 09, T. 101 N., R. 50 W.

6.0 - 17.0 GRAVEL, COARSE

* * * *

TEST HOLE NUMBER: 181
LOCATION: 101N-50W-09DDD
LEGAL LOCATION: SE SE SE SEC. 09, T. 101 N., R. 50 W.

1.0 - 3.0 SAND, FINE TO MEDIUM
3.0 - 9.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE TO COARSE GRAVEL

39
9.0 - 18.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE GRAVEL

** * * *

TEST HOLE NUMBER: 182
LOCATION: 101N-50W-10DD
LEGAL LOCATION: SE SW SW SE SEC. 10, T. 101 N., R. 50 W.

9.0 - 15.0 GRAVEL, VERY COARSE

** * * *

TEST HOLE NUMBER: 183
LOCATION: 101N-50W-10DD
LEGAL LOCATION: SW SE SW SE SEC. 10, T. 101 N., R. 50 W.

16.0 - 19.0 GRAVEL AND SAND, COARSE GRAVEL

** * * *

TEST HOLE NUMBER: 184
LOCATION: 101N-50W-10DD
LEGAL LOCATION: SE SE SW SE SEC. 10, T. 101 N., R. 50 W.

3.0 - 4.0 SAND, DARK
10.0 - 17.0 SAND, COARSE; WITH CLAY BALLS
17.0 - 37.5 SAND, MEDIUM TO COARSE; INCOHERENT

** * * *

TEST HOLE NUMBER: 185
LOCATION: 101N-50W-12AD
LEGAL LOCATION: SW NL NE NE SEC. 12, T. 101 N., R. 50 W.

0.0 - 1.0 GRAVEL, CLAYEY
8.0 - 27.0 SAND AND GRAVEL, FINE TO VERY COARSE

** * * *

TEST HOLE NUMBER: 186
LOCATION: 101N-50W-13CC
LEGAL LOCATION: SW SW SW SEC. 17, T. 101 N., R. 50 W.

3.0 - 6.0 SAND AND GRAVEL, COARSE SAND, COARSE GRAVEL; UNSORTED
6.0 - 18.0 SAND AND GRAVEL, MEDIUM SAND, FINE GRAVEL

** * * *

TEST HOLE NUMBER: 187
LOCATION: 101N-50W-14AAA
LEGAL LOCATION: NE NE NE NE SEC. 14, T. 101 N., R. 50 W.
21.0 - 24.0 SAND, FINE TO COARSE

* * *

TEST HOLE NUMBER: 188
LOCATION: 101N-50W-14DACB
LEGAL LOCATION: NW SW NE SE SEC. 14, T. 101 N., R. 50 W.
*****************************************************************
* THIS LOG CONTAINS UNVERIFIED INFORMATION *
*****************************************************************

14.0 - 22.0 SAND

* * *

TEST HOLE NUMBER: 189
LOCATION: 101N-50W-14DCCA
LEGAL LOCATION: NE SW SW SE SEC. 14, T. 101 N., R. 50 W.

2.4 - 13.0 SAND AND GRAVEL, YELLOWISH-BROWN TO RED-DISH-BROWN, MEDIUM SAND TO MEDIUM PEBBLE GRAVEL, SOME VERY COARSE PEBBLE GRAVEL, CLAYEY, POORLY SORTED; OXIDIZED, SECONDARY WHITE CARBONATE, SLIGHT FUEL ODOR 5-7.5 FT, SLIGHT PAINT THINNER ODOR 10-12.5 FT, WET BELOW 7.5 FT

* * *

TEST HOLE NUMBER: 190
LOCATION: 101N-50W-14DCCC
LEGAL LOCATION: SW SW SW SE SEC. 14, T. 101 N., R. 50 W.

4.5 - 8.8 SAND, BROWN, MEDIUM TO VERY COARSE; WITH SOME VERY FINE PEBBLE GRAVEL, GASOLINE ODOR

8.8 - 17.5 SAND AND GRAVEL, GRAY-BROWN, MEDIUM SAND TO MEDIUM PEBBLE GRAVEL; PRIMARILY SAND NEAR TOP WITH AN INCREASE IN GRAVEL SIZE AND CONTENT WITH DEPTH, GASOLINE ODOR

* * *

TEST HOLE NUMBER: 191
LOCATION: 101N-50W-14DCCC 1
LEGAL LOCATION: SW SW SW SE SEC. 14, T. 101 N., R. 50 W.

3.8 - 17.5 SAND AND GRAVEL, YELLOWISH-BROWN TO RED-DISH-BROWN, MEDIUM SAND TO MEDIUM PEBBLE GRAVEL, SOME COARSE TO VERY COARSE PEBBLE GRAVEL, VERY CLAYEY, POORLY SORTED; HIGHLY OXIDIZED, WATER AT 14.6 FEET, DRILLER REPORTS GAS SMELL FROM
12.5 TO 17.5 FEET
SAND, BROWN, VERY FINZ TO COARSE, CLAYEY, MODERATELY SORTED; COAL FRAGMENTS, DRILLER REPORTS GAS ODOR

** ** **

TEST HOLE NUMBER: 192
LOCATION: 101N-50W-14DDAD
LEGAL LOCATION: SE NE SE SE SEC. 14, T. 101 N., R. 50 W.

3.3 - 7.7 SAND, REDDISH-BROWN, MEDIUM
7.7 - 8.8 SAND, BROWN, MEDIUM WTH SOME PEBBLES
8.8 - 13.8 SAND AND GRAVEL, GRAYISH, MEDIUM SAND TO VERY FINE PEBBLE GRAVEL; WITH SOME VERY COARSE PEBBLES, PETROLEUM ODOR
16.3 - 16.9 SAND, MEDIUM; PETROLEUM ODOR(?)

** ** **

TEST HOLE NUMBER: 193
LOCATION: 101N-50W-14DDCA
LEGAL LOCATION: NE SW SE SE SEC. 14, T. 101 N., R. 50 W.

3.5 - 7.0 SAND, REDDISH-BROWN, MEDIUM TO VERY COARSE; WITH SOME VERY FINE TO FINE PEBBLE GRAVEL, POSSIBLE FUEL-OIL ODOR AT 3.5 FEET, DEFINITE FUEL-OIL ODOR FROM 5 TO 7 FEET
7.0 - 7.5 SAND, GRAY, MEDIUM TO VERY COARSE; WITH SOME VERY FINE TO FINE PEBBLE GRAVEL, FUEL-OIL ODOR
7.5 - 13.5 SAND AND GRAVEL, REDDISH-BROWN, MEDIUM SAND TO MEDIUM PEBBLE GRAVEL, SLIGHTLY SILTY; FUEL-OIL ODOR

** ** **

TEST HOLE NUMBER: 194
LOCATION: 101N-50W-14DDDD
LEGAL LOCATION: SE SE SE SEC. 14, T. 101 N., R. 50 W.

7.5 - 10.0 SAND, GRAY, MEDIUM TO COARSE; FUEL-OIL ODOR
10.0 - 12.5 SAND, GRAY, MEDIUM TO COARSE, SILTY; FUEL-OIL OR GASOLINE ODOR
12.5 - 14.2 SAND, GRAY, MEDIUM TO COARSE; WITH PEBBLES, GASOLINE ODOR

** ** **

TEST HOLE NUMBER: 195
LOCATION: 101N-50W-15ADDC
LEGAL LOCATION: SW SE SE NE SEC. 15, T. 101 N., R. 50 W.
<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Volume (cu ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>38.0</td>
<td>Sand and gravel, medium to coarse</td>
</tr>
</tbody>
</table>

**TEST HOLE NUMBER:** 196  
**LOCATION:** 101N-50W-15BBBC  
**LEGAL LOCATION:** SW NW NW NW SEC. 15, T. 101 N., R. 50 W.  
| 4.0       | 5.0           | Gravel, fine to medium; loose |
| 5.0       | 10.0          | Sand and gravel |
| 10.0      | 18.0          | Gravel, fine to medium; some pebbles up to one inch in width |

**TEST HOLE NUMBER:** 197  
**LOCATION:** 101N-50W-15CBBB  
**LEGAL LOCATION:** NW NW NW SW SEC. 15, T. 101 N., R. 50 W.  
| 2.0       | 17.0          | Sand and gravel, medium to coarse; dry |

**TEST HOLE NUMBER:** 198  
**LOCATION:** 101N-50W-15CBCC  
**LEGAL LOCATION:** SW SW NW SW SEC. 15, T. 101 N., R. 50 W.  
| 3.0       | 5.0           | Sand and gravel, rust colored |
| 5.0       | 10.0          | Gravel, fine to medium; clean |
| 10.0      | 15.0          | Sand, gray, fine to medium |
| 24.0      | 25.0          | Sand and gravel, medium |
| 25.0      | 30.0          | Sand and gravel, very coarse sand, medium gravel |

**TEST HOLE NUMBER:** 199  
**LOCATION:** 101N-50W-15CCC  
**LEGAL LOCATION:** SW SW SW SEC. 15, T. 101 N., R. 50 W.  
| 14.0      | 29.0          | Sand, fine to medium, silty |

**TEST HOLE NUMBER:** 200  
**LOCATION:** 101N-50W-15AAA  
**LEGAL LOCATION:** NE NE NE SEC. 16, T. 101 N., R. 50 W.  
| 4.0       | 18.0          | Sand and gravel, coarse sand, fine gravel |

**TEST HOLE NUMBER:** 201  
**LOCATION:** 101N-50W-16BAAA  

---
LEGAL LOCATION: NE NE NE NW SEC. 16, T. 101 N., R. 50 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Percentage</th>
<th>Description</th>
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<tbody>
<tr>
<td>0</td>
<td>14.0</td>
<td>Sand and Gravel, Coarse Sand to Coarse Gravel</td>
</tr>
<tr>
<td>20.0</td>
<td>31.0</td>
<td>Sand and Gravel, Fine Sand to Fine Gravel; Clayey (?)</td>
</tr>
</tbody>
</table>

** * * *

TEST HOLE NUMBER: 202
LOCATION: 101N-50W-16BBB
LEGAL LOCATION: NW NW NW NW SEC. 16, T. 101 N., R. 50 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>29.0</td>
<td>Sand and Gravel, Medium to Coarse</td>
</tr>
</tbody>
</table>

** * * *

TEST HOLE NUMBER: 201
LOCATION: 101N-50W-16DA
LEGAL LOCATION: NE NE SE SEC. 16, T. 101 N., R. 50 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>18.0</td>
<td>Sand and Gravel, Coarse Sand, Coarse Gravel; Unsorted</td>
</tr>
</tbody>
</table>

** * * *

TEST HOLE NUMBER: 204
LOCATION: 101N-50W-17BBB
LEGAL LOCATION: NW NW NW NW SEC. 17, T. 101 N., R. 50 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>51.0</td>
<td>Sand, Medium to Coarse; Some Medium Gravel</td>
</tr>
</tbody>
</table>

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TEST HOLE NUMBER: 205
LOCATION: 101N-50W-17BCC
LEGAL LOCATION: SW SW NW NW SEC. 17, T. 101 N., R. 50 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>23.0</td>
<td>Sand and Gravel</td>
</tr>
<tr>
<td>23.0</td>
<td>43.0</td>
<td>Sand and Gravel, Fine Sand to Coarse Gravel</td>
</tr>
</tbody>
</table>

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TEST HOLE NUMBER: 206
LOCATION: 101N-50W-17DAB
LEGAL LOCATION: NW NE SE NW SEC. 17, T. 101 N., R. 50 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>4.0</td>
<td>Sand, Rust-Colored</td>
</tr>
<tr>
<td>4.0</td>
<td>20.0</td>
<td>Sand, Brown, Fine to Coarse</td>
</tr>
<tr>
<td>20.0</td>
<td>22.0</td>
<td>Sand and Gravel, Fine Sand to Fine Gravel</td>
</tr>
</tbody>
</table>
TEST HOLE NUMBER: 207
LOCATION: 101N-50W-17DDCC
LEGAL LOCATION: SW SW SE SE SEC. 17, T. 101 N., R. 50 W.
1.0 - 41.0 SAND AND GRAVEL, MEDIUM TO COARSE

TEST HOLE NUMBER: 208
LOCATION: 101N-50W-20CCBB
LEGAL LOCATION: NW NW SW SW SEC. 20, T. 101 N., R. 50 W.
16.0 - 46.0 SAND AND GRAVEL, BROWN; SOME COARSE GRAVEL, OXIDIZED

TEST HOLE NUMBER: 209
LOCATION: 101N-50W-23ABAB
LEGAL LOCATION: NW NE NW NE SEC. 23, T. 101 N., R. 50 W.
4.0 - 5.0 SAND, YELLOWISH-BROWN, MEDIUM TO VERY COARSE, GRAVELLY, MODERATELY SORTED; OXIDIZED
5.0 - 11.5 SAND AND GRAVEL, YELLOWISH-BROWN TO REDDISH-BROWN, MEDIUM SAND TO COARSE PEBBLE GRAVEL, CLAYEY, POORLY SORTED; HIGHLY OXIDIZED, HIT ROCK AT 11.5 AND COULD NOT PENETRATE FURTHER

TEST HOLE NUMBER: 210
LOCATION: 101N-50W-23ABBA
LEGAL LOCATION: NE NW NW NE SEC. 23, T. 101 N., R. 50 W.
5.0 - 9.5 SAND, BROWN, MEDIUM TO VERY COARSE, CONTAINS SOME VERY FINE PEBBLE GRAVEL, WELL-SORTED; OXIDIZED
9.5 - 10.5 SAND, YELLOWISH-BROWN TO REDDISH-BROWN, MEDIUM TO VERY COARSE; CONTAINS SOME VERY FINE TO FINE PEBBLE GRAVEL, WELL-SORTED; HIGHLY OXIDIZED, DRILLER REPORTS GAS ODOR
10.5 - 17.4 SAND AND GRAVEL, YELLOWISH-BROWN, MEDIUM SAND TO COARSE PEBBLE GRAVEL, CLAYEY, MODERATELY SORTED; OXIDIZED, ROCK LAYER AT 10.4 FT, WHITE CLAY LAYERS AT 15 FT, WATER AT 16.9 FT, LARGE ROCKS AT 15.4 AND 17.2 FT, PAINT THINNER AND ROTTEN GAS ODOR FROM 15 TO 17.4 FT

45
<table>
<thead>
<tr>
<th>TEST HOLE NUMBER: 211</th>
<th>LOCATION: 101N-50W-23ABBA 1</th>
<th>LEGAL LOCATION: NE NW NW NE SEC. 23, T. 101 N., R. 50 W.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0 - 17.2</td>
<td>SAND AND GRAVEL, YELLOWISH-BROWN, MEDIUM SAND TO COARSE PEbble GRAVEL, CLAYEY, POORLY SORTED; OXIDIZED, FAINT PAINT THINNER ODOR 10-12.5 FT, ROTTEN GAS ODOR 12.5-15 FT, AND STRONG GAS ODOR 15-17.2 FT, WET AT 17 FT; HIT ROCK AT 17.2 FT, COULD NOT PENETRATE</td>
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<tbody>
<tr>
<td>4.5 - 5.0</td>
<td>SAND, YELLOWISH-BROWN, MEDIUM TO VERY COARSE, WELL-SORTED</td>
<td></td>
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<tr>
<td>5.0 - 7.5</td>
<td>SAND AND GRAVEL, YELLOWISH-BROWN TO RED-DISH-BROWN, COARSE SAND TO FINE PEbble GRAVEL, SOME MEDIUM TO COARSE PEbble GRAVEL, POORLY SORTED; OXIDIZED, HIGHLY OXIDIZED ZONE AT 6.4 FT, CONTAINS MANY FRIABLE GRANITE PEBBLES THAT CRUMBLE TO GIVE SAND A WHITE APPEARANCE</td>
<td></td>
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<tr>
<td>7.5 - 10.0</td>
<td>SAND AND GRAVEL, DARK-YELLOWISH-BROWN, COARSE SAND TO COARSE PEbble GRAVEL, CLAYEY, POORLY SORTED; HIGHLY OXIDIZED</td>
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<tbody>
<tr>
<td>4.0 - 14.7</td>
<td>SAND AND GRAVEL, YELLOWISH-BROWN, MEDIUM SAND TO COARSE PEbble GRAVEL, SILTY TO CLAYEY, POORLY SORTED; OXIDIZED, WET AT 14.4 FEET, HIT ROCK AT 14.7 FEET, COULD NOT PENETRATE FURTHER</td>
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<tbody>
<tr>
<td>4.0 - 14.7</td>
<td>SAND AND GRAVEL, YELLOWISH-BROWN, MEDIUM SAND TO COARSE PEbble GRAVEL, SILTY TO CLAYEY, POORLY SORTED; OXIDIZED, HIT</td>
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ROCK AT 14.7 FEET, COULD NOT PENETRATE FURTHER

** **

TEST HOLE NUMBER: 215
LEGAL LOCATION: NW NW NW NE SEC. 23, T. 101 N., R. 50 W.

3.3 - 12.0 SAND, BROWN TO YELLOWISH-BROWN, FINE TO VERY COARSE, SILTY, GRAVELLY, WELL-SORTED; BROWN CLAY FROM 3.7 TO 8.9 AND 10.5 TO 10.6 FEET, FAINT PETROLEUM ODOR FROM 8 TO 12 FEET

12.0 - 14.0 SAND AND GRAVEL, YELLOWISH-BROWN, MEDIUM SAND TO COARSE PEBBLE GRAVEL, SILTY; CONTAINS BOULDERS, HARD DRIVING, OXIDIZED, FAINT PETROLEUM ODOR

14.0 - 16.0 GRAVEL, YELLOWISH-BROWN, VERY FINI TO MEDIUM PEBBLES, SANDY, CLAYEY; OXIDIZED, SATURATED, STRONG PETROLEUM ODOR

16.0 - 20.0 SAND AND GRAVEL, YELLOWISH-BROWN TO REDISH-BROWN, VERY COARSE SAND TO MEDIUM PEBBLE GRAVEL, CLAYEY; HIGHLY OXIDIZED, SATURATED, FAINT PETROLEUM ODOR FROM 18 TO 20 FEET

** **

TEST HOLE NUMBER: 216
LEGAL LOCATION: NW NW NW NE SEC. 23, T. 101 N., R. 50 W.

4.4 - 7.0 SAND, YELLOWISH-BROWN, MEDIUM TO COARSE, GRAVELLY, CLAYEY, WELL-SORTED; OXIDIZED

7.0 - 22.5 SAND AND GRAVEL, YELLOWISH-BROWN, MEDIUM SAND TO COARSE PEBBLE GRAVEL, CLAYEY, POORLY SORTED; OXIDIZED, COBBLE GRAVEL ZONE AT 7 FT, WET AT 15 FT, NO SAMPLE 15-17.5 FT, ROTTEN GAS ODOR 17.5-20 FEET

** **

TEST HOLE NUMBER: 217
LOCATION: 101N-50W-23ABBB 2
LEGAL LOCATION: NW NW NW NE SEC. 23, T. 101 N., R. 50 W.

4.3 - 17.5 SAND AND GRAVEL, YELLOWISH-BROWN, COARSE SAND TO FINE PEBBLE GRAVEL, WITH SOME MEDIUM TO COARSE PEBBLE GRAVEL, CLAYEY, MODERATELY SORTED; OXIDIZED NOT CLAYEY FROM 5 TO 7.8 FEET, DAMP BELOW

47
12.1 FEET, COBBLE GRAVEL FROM 12.1 TO 17.5 FEET

20.0 - 25.0 GRAVEL, YELLOWISH-BROWN, VERY FINE TO MEDIUM PEBBLE GRAVEL, SILTY TO SANDY, CLAYEY, POORLY SORTED; OXIDIZED, HIGHLY OXIDIZED FROM 22.5 TO 25 FEET, CONTAINS WATER, PAINT THINNER ODOR

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TEST HOLE NUMBER: 218
LOCATION: 101N-50W-23ABBB 3
LEGAL LOCATION: NW NW NW NE SEC. 23, T. 101 N., R. 50 W.

4.6 - 7.5 SAND AND GRAVEL, YELLOWISH-BROWN, MEDIUM SAND TO MEDIUM PEBBLE GRAVEL, SOME COARSE PEBBLE GRAVEL, SILTY TO CLAYEY, POORLY SORTED; OXIDIZED

7.5 - 10.0 SAND, YELLOWISH-BROWN, COARSE TO VERY COARSE, GRAVELLY, WELL-SORTED; OXIDIZED, CLEAN

10.0 - 17.5 SAND AND GRAVEL, YELLOWISH-BROWN, MEDIUM SAND TO MEDIUM PEBBLE GRAVEL, SOME VERY COARSE PEBBLE GRAVEL, SILTY TO CLAYEY, POORLY SORTED; OXIDIZED, PAINT THINNER ODOR 12.5 TO 15 FEET, ROTTEN GAS ODOR FROM 15 TO 17.5 FEET, WATER BELOW 16.71 FEET

17.5 - 20.0 GRAVEL, YELLOWISH-BROWN, VERY FINE TO MEDIUM PEBBLE GRAVEL, SANDY, CLAYEY, MODERATELY SORTED; OXIDIZED, ROTTEN GAS ODOR 17.5 TO 18 FEET

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TEST HOLE NUMBER: 219
LOCATION: 101N-50W-23ABBB 4
LEGAL LOCATION: NW NW NW NE SEC. 23, T. 101 N., R. 50 W.

3.0 - 5.5 SAND, REDDISH-BROWN, FINE TO MEDIUM

5.5 - 7.4 SAND AND GRAVEL; PAINT PETROLEUM ODOR

7.4 - 13.0 SAND AND GRAVEL; WEATHERED GASOLINE ODOR

13.0 - 18.0 SAND AND GRAVEL; STRONG GASOLINE AND PAINT THINNER ODOR

***

TEST HOLE NUMBER: 220
LOCATION: 101N-50W-23ABBC
LEGAL LOCATION: SW NW NW NE SEC. 23, T. 101 N., R. 50 W.

2.8 - 6.0 SAND, BROWN, MEDIUM TO VERY COARSE, GRAVELLY, SILTY, MODERATELY SORTED; OXIDIZED

48
6.0 - 14.0 SAND AND GRAVEL, YELLOWISH-BROWN, MEDIUM SAND TO COARSE PEBBLE GRAVEL, CLAYEV, POORLY SORTED; OXIDIZED, DARK-RED SANDY CLAY 6.3 TO 6.4 FEET, MOIST, PETROLEUM ODOR 8 TO 10 FEET, HNU READING IN SAMPLE JAR ABOUT 15 PPM
14.0 - 19.0 GRAVEL, YELLOWISH-BROWN TO REDDISH-BROWN, VERY FINE TO COARSE PEBBLES, VERY SANDY, CLAYEV, POORLY SORTED; HIGHLY OXIDIZED, WET AT 15.4 FEET, GRAY-BROWN CLAY 18.1 TO 18.5 FEET
19.0 - 21.0 SAND AND GRAVEL, YELLOWISH-BROWN TO REDDISH-BROWN, COARSE SAND TO MEDIUM PEBBLE GRAVEL, VERY CLAYEV; HIGHLY OXIDIZED, POORLY SORTED, GRAY-BROWN CLAY LAYER 20.3 TO 20.7 FEET

TEST HOLE NUMBER: 221
LOCATION: 101N-50W-21ABBC 1
LEGAL LOCATION: SW NW NW NE SEC. 23, T. 191 N., R. 50 W.

3.5 - 6.0 SAND AND GRAVEL, YELLOWISH-BROWN TO REDDISH-BROWN, MEDIUM SAND TO COARSE PEBBLE GRAVEL, SILTY, POORLY SORTED; HIGHLY OXIDIZED, DRY
10.0 - 12.0 SAND AND GRAVEL, YELLOWISH-BROWN, MEDIUM SAND TO VERY FINE PEBBLE GRAVEL, MODERATELY SORTED; OXIDIZED, DRY
12.0 - 14.0 SAND, YELLOWISH-BROWN, MEDIUM SAND TO VERY COARSE SAND, SOME VERY FINE TO FINE PEBBLE GRAVEL; OXIDIZED, DRY
14.0 - 20.0 SAND AND GRAVEL, YELLOWISH-BROWN TO REDDISH-BROWN, COARSE SAND TO FINE PEBBLE GRAVEL, SOME MEDIUM TO COARSE PEBBLES, CLAYEV, MODERATELY SORTED; OXIDIZED, WET, HIT BOULDER AT 15 FT, COULD NOT PENERTRATE, MOVED 10 FT WEST, DRILLED 20 FT, NO SAMPLES 15 TO 20 FEET

TEST HOLE NUMBER: 222
LOCATION: 101N-50W-23ABBD
LEGAL LOCATION: SE NW NW NE SEC. 23, T. 101 N., R. 50 W.

2.3 - 12.5 SAND AND GRAVEL, YELLOWISH-BROWN TO REDDISH-BROWN, MEDIUM SAND TO VERY COARSE PEBBLE GRAVEL, SOME MUCH GRAVEL, CLAYEV; HIGHLY OXIDIZED
15.0 - 25.0 SAND AND GRAVEL, YELLOWISH-BROWN, MEDIUM SAND TO VERY COARSE PEBBLE GRAVEL, CLAYEV, POORLY SORTED; YELLOWISH-BROWN
TO LIGHT-GRAY CLAY PRESENT FROM 17.5 TO
20 FT, WET AT 16.5 FT, NO SAMPLE 19.5
TO 22.5 FT, OXIDIZED, ROTTEN ODOR FROM
22.5 TO 25 FEET

** * * *

TEST HOLE NUMBER: 223
LOCATION: 101N-50W-23ABBD 1
LEGAL LOCATION: NE NW NW NE SEC. 23, T. 101 N., R. 50 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>18.0</td>
</tr>
<tr>
<td>SAND AND GRAVEL, REDDISH-BROWN TO YELLOW-BROWN, COARSE SAND TO VERY COARSE PEBBLE GRAVEL, CLAYEY, POORLY SORTED; OXIDIZED, DRY, NO SAMPLE FROM 6-8 AND 12-14 FT DUE TO ROCKS, FAINT PETROLEUM ODOR BELOW 10 FT(?), WET AT 16 FT, GRAY-BROWN CLAY LAYERS 15.4-15.8 FEET</td>
<td></td>
</tr>
</tbody>
</table>

** * * *

TEST HOLE NUMBER: 224
LOCATION: 101N-50W-23ADAA
LEGAL LOCATION: NE NE SE NE SEC. 23, T. 101 N., R. 50 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0</td>
<td>15.0</td>
</tr>
<tr>
<td>15.0</td>
<td>30.0</td>
</tr>
<tr>
<td>GRAVEL, FINE TO MEDIUM; CLEAN</td>
<td></td>
</tr>
<tr>
<td>SAND; WITH SOME GRAVEL, CLEAN</td>
<td></td>
</tr>
</tbody>
</table>

** * * *

TEST HOLE NUMBER: 225
LOCATION: 101N-50W-23BAAA
LEGAL LOCATION: NE NW NW NW SEC. 23, T. 101 N., R. 50 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.0</td>
<td>16.0</td>
</tr>
<tr>
<td>GRAVEL, FINE TO VERY COARSE</td>
<td></td>
</tr>
</tbody>
</table>

** * * *

TEST HOLE NUMBER: 226
LOCATION: 101N-50W-23DAAA
LEGAL LOCATION: NE NE SE SEC. 23, T. 101 N., R. 50 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>18.0</td>
</tr>
<tr>
<td>SAND AND GRAVEL, COARSE SAND, COARSE GRAVEL; UNSORTED</td>
<td></td>
</tr>
<tr>
<td>18.0</td>
<td>65.0</td>
</tr>
<tr>
<td>SAND, MEDIUM TO COARSE</td>
<td></td>
</tr>
</tbody>
</table>

** * * *

TEST HOLE NUMBER: 227
LOCATION: 101N-50W-23DADD
LEGAL LOCATION: SE SE NE SE SEC. 23, T. 101 N., R. 50 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.3</td>
<td>64.0</td>
</tr>
<tr>
<td>SAND, FINE TO COARSE</td>
<td></td>
</tr>
</tbody>
</table>

50
TEST HOLE NUMBER: 228
LOCATION: 101N-50W-23DADD 1
LEGAL LOCATION: SE SE NE SE SEC. 27, T. 101 N., R. 50 W.
3.0 - 5.0 Gravel and silt, rust-brown
5.0 - 30.0 Sand and gravel, medium

TEST HOLE NUMBER: 229
LOCATION: 101N-50W-23DDDD
LEGAL LOCATION: SE SE SE SE SEC. 23, T. 101 N., R. 50 W.
5.0 - 8.0 Sand and gravel, medium to coarse
8.0 - 78.0 Sand, medium to coarse; some fine gravel

TEST HOLE NUMBER: 230
LOCATION: 101N-50W-24ACDD
LEGAL LOCATION: SE SE SW NE SEC. 24, T. 101 N., R. 50 W.
10.0 - 24.0 Sand, medium to coarse; some fine gravel

TEST HOLE NUMBER: 231
LOCATION: 101N-50W-24BBAB
LEGAL LOCATION: NW NE NW NW SEC. 24, T. 101 N., R. 50 W.
0 - 1.0 Gravel, coarse, quartzite (parking lot)
12.0 - 16.0 Sand, brown, clayey; moist
16.0 - 29.0 Sand, brown, silty, clayey; saturated

TEST HOLE NUMBER: 232
LOCATION: 101N-50W-24BBBB
LEGAL LOCATION: NW NW NW NW SEC. 24, T. 101 N., R. 50 W.
5.0 - 11.0 Gravel, coarse, silty; dry

TEST HOLE NUMBER: 233
LOCATION: 101N-50W-24BADD
LEGAL LOCATION: NW SE NW NW SEC. 24, T. 101 N., R. 50 W.
4.0 - 10.0 Sand, red-brown, gravelly; dry
10.0 - 15.0 Gravel, coarse
15.0 - 24.0 Sand, red-brown, medium; dry to moist
24.0 - 43.0 Sand, brown, medium; saturated, gets hard

51
TO DRILL TOWARD THE BOTTOM

** * * *

TEST HOLE NUMBER: 234
LOCATION: 101N-50W-24CBB
LEGAL LOCATION: SW NW NW SW SEC. 24, T. 101 N., R. 50 W.

10.0 - 15.0 SAND AND GRAVEL; CLEAN
15.0 - 27.0 GRAVEL; CLEAN

** * * *

TEST HOLE NUMBER: 235
LOCATION: 101N-50W-24CDAB
LEGAL LOCATION: NW NE SE SW SEC. 24, T. 101 N., R. 50 W.

13.0 - 61.0 GRAVEL, COARSE

** * * *

TEST HOLE NUMBER: 236
LOCATION: 101N-50W-24DACC
LEGAL LOCATION: SW SW NE SE SEC. 24, T. 101 N., R. 50 W.

6.0 - 10.0 GRAVEL, FINE; CLEAN
10.0 - 20.0 SAND, COARSE; GRAVEL
20.0 - 25.0 GRAVEL, FINE TO COARSE; SOME PEBBLES UP TO 4 INCHES IN DIAMETER
25.0 - 31.0 SAND, MEDIUM; SMALL SHALE FRAGMENTS

** * * *

TEST HOLE NUMBER: 237
LOCATION: 101N-50W-24DBBA
LEGAL LOCATION: NE NW NW SE SEC. 24, T. 101 N., R. 50 W.

5.0 - 30.0 SAND AND GRAVEL

** * * *

TEST HOLE NUMBER: 238
LOCATION: 101N-50W-24DACC
LEGAL LOCATION: SW SE SE SE SEC. 24, T. 101 N., R. 50 W.

4.0 - 5.0 GRAVEL, BROWN; DIRTY
5.0 - 37.0 GRAVEL, FINE TO MEDIUM; CLEAN

** * * *

TEST HOLE NUMBER: 239
LOCATION: 101N-50W-25ADBA
LEGAL LOCATION: NE NW SE SE SEC. 25, T. 101 N., R. 50 W.

52
10.0 - 30.0 GRAVEL; CLEAN
* * * *

TEST HOLE NUMBER: 240
LOCATION: 101N-50W-25BADD
LEGAL LOCATION: SE SE NW NW SEC. 25, T. 101 N., R. 50 W.
3.0 - 5.0 SAND AND GRAVEL, REDDISH, FINE
5.0 - 10.0 GRAVEL, RED-BROWN, MEDIUM
10.0 - 15.0 SAND, FINE, WELL-SORTED
15.0 - 40.0 SAND AND GRAVEL
* * * *

TEST HOLE NUMBER: 241
LOCATION: 101N-50W-25BBB
LEGAL LOCATION: NW NW NW SEC. 25, T. 101 N., R. 50 W.
2.0 - 7.0 SAND AND GRAVEL, COARSE SAND, FINE GRAVEL
7.0 - 14.0 SAND, MEDIUM TO COARSE
14.0 - 37.0 SAND, MEDIUM
* * * *

TEST HOLE NUMBER: 242
LOCATION: 101N-50W-25DBCA
LEGAL LOCATION: NE SW NW SE SEC. 25, T. 101 N., R. 50 W.
8.0 - 14.0 GRAVEL, FINE TO MEDIUM; CLEAN
19.0 - 25.0 SAND, COARSE; WITH GRAVEL
* * * *

TEST HOLE NUMBER: 243
LOCATION: 101N-50W-29AAAA
LEGAL LOCATION: NE NE NE NW SEC. 29, T. 101 N., R. 50 W.
15.0 - 21.0 SAND, BROWN, FINE TO MEDIUM, VERY CLAYEY,
silty; very few fine pebbles, oxidized, saturated
* * * *

TEST HOLE NUMBER: 244
LOCATION: 101N-50W-10BABB
LEGAL LOCATION: NW NW NE NE SEC. 30, T. 101 N., R. 50 W.
0 - 5.0 SAND, BROWN, FINE TO COARSE; OXIDIZED,
DRY
5.0 - 23.0 SAND AND GRAVEL, BROWN, FINE TO COARSE
SAND, FINE GRAVEL, CLAYEY; OXIDIZED,
SATURATED
23.0 - 38.0 SAND AND GRAVEL, GRAY, MEDIUM TO COARSE

53
SAND, FINE TO MEDIUM GRAVEL, SLIGHTLY CLAYEY; UNOXIDIZED, SATURATED

* * * *

TEST HOLE NUMBER: 245
LOCATION: 101N-51W-16AAAA 1
LEGAL LOCATION: NE NE NE NE SEC. 16, T. 101 N., R. 51 W.

0 - 2.0 SAND, BROWN

* * * *

TEST HOLE NUMBER: 246
LOCATION: 101N-51W-33AAAA
LEGAL LOCATION: NE NE NE NE SEC. 37, T. 101 N., R. 51 W.

0 - 5.0 SAND, BROWN, FINE TO COARSE, CLAYEY

* * * *

TEST HOLE NUMBER: 247
LOCATION: 101N-51W-35CAAA 1
LEGAL LOCATION: NE NE NE SW SEC. 35, T. 101 N., R. 51 W.

15.0 - 36.0 SAND AND GRAVEL, CLAYEY, SUBANGULAR TO SUBROUND; SATURATED, ROCK 22 TO 23 FEET, LESS THAN 10 PERCENT CLAY, GRAVEL 1/4-INCH IN DIAMETER, GRADES TO CLAY

* * * *

TEST HOLE NUMBER: 248
LOCATION: 101N-51W-35CAAA 3
LEGAL LOCATION: NE NE NE SW SEC. 35, T. 101 N., R. 51 W.

1.0 - 5.0 SAND AND GRAVEL, FINE; CLAY

* * * *

TEST HOLE NUMBER: 249
LOCATION: 101N-51W-35CAAA 4
LEGAL LOCATION: NE NE NE SW SEC. 35, T. 101 N., R. 51 W.

5.0 - 10.0 SAND AND CLAY, FINE TO COARSE SAND, VERY MOIST

10.0 - 17.0 SAND, CLAYEY; LESS THAN 40 PERCENT CLAY, SATURATED AT 12 TO 13 FEET

19.0 - 20.0 GRAVELS; HEAVY

* * * *

TEST HOLE NUMBER: 250
LOCATION: 101N-51W-35CAAA 5

54
LEGAL LOCATION: NE NE NE SW SEC. 35, T. 101 N., R. 51 W.

0 - 1.0 SAND AND SILT; ORGANIC MATERIAL
1.0 - 5.0 SAND AND CLAY, FINE TO COARSE SAND; VERY GRANBY, FEW FINES, VERY LITTLE MOISTURE
5.0 - 15.0 SAND, FINE TO COARSE; SOME CLAY, MORE FINES, VERY MOIST
15.0 - 41.0 SAND, FINE TO VERY COARSE; SATURATED, LESS FINES, SMALL GRAVELS

** **

TEST HOLE NUMBER: 251
LOCATION: 101N-51W-35CADA 1
LEGAL LOCATION: SE NE NE SW SEC. 35, T. 101 N., R. 51 W.

8.0 - 20.0 SAND, YELLOW, FINE TO COARSE, SILTY; SATURATED
20.0 - 52.0 SAND, GRAY, FINE TO COARSE, SILTY; ALSO SOME FINE GRAVEL, SATURATED

** **

TEST HOLE NUMBER: 252
LOCATION: 101N-51W-35CADA 2
LEGAL LOCATION: SE NE NE SW SEC. 35, T. 101 N., R. 51 W.

8.0 - 20.0 SAND, GRAY, FINE TO COARSE

** **

TEST HOLE NUMBER: 253
LOCATION: 101N-51W-35CADA 5
LEGAL LOCATION: SE NE NE SW SEC. 35, T. 101 N., R. 51 W.

15.0 - 17.0 SAND LENSE(?); DRILLER REPORTED EASY DRILLING, NO CUTTINGS

** **

TEST HOLE NUMBER: 254
LOCATION: 101N-51W-35CADA 6
LEGAL LOCATION: SE NE NE SW SEC. 35, T. 101 N., R. 51 W.

10.0 - 30.0 SAND, TAN TO BROWN, VERY FINE, CLAYEY; SATURATED, VERY LOOSE, ODOR AND SHEEN ON CUTTINGS, NO CUTTINGS 20 TO 30 FEET

** **

TEST HOLE NUMBER: 255
LOCATION: 101N-51W-35CADA 7
LEGAL LOCATION: SE NE NE SW SEC. 35, T. 101 N., R. 51 W.

55
11.0 - 18.0 SAND, TAN TO BROWN, FINE; SATURATED, SOME FINES
18.0 - 22.0 GRAVEL(?); NO CUTTINGS, DRILL CHATTER
22.0 - 33.0 SAND, TAN TO BROWN, VERY FINE, CLAYEY;
SATURATED, VERY LOOSE, SOME GRAVEL LESS THAN 1/4-INCH IN DIAMETER

** **

TEST HOLE NUMBER: 256
LOCATION: 101N-51W-35CACC 2
LEGAL LOCATION: SW SW NE SW SEC. 35, T. 101 N., R. 51 W.

2.0 - 15.0 SAND; WITH CLAY
15.0 - 28.0 SAND, GRAY; WITH MORE CLAY THAN FROM 2 TO
15 FEET

** **

TEST HOLE NUMBER: 257
LOCATION: 101N-51W-35CACC 3
LEGAL LOCATION: SW SW NE SW SEC. 35, T. 101 N., R. 51 W.

3.0 - 15.0 SAND, YELLOW, SILTY, VERY CLAYEY

** **

TEST HOLE NUMBER: 258
LOCATION: 101N-51W-35CACC 4
LEGAL LOCATION: SW SW NE SW SEC. 35, T. 101 N., R. 51 W.

1.0 - 4.0 SAND AND GRAVEL

** **

TEST HOLE NUMBER: 259
LOCATION: 101N-51W-35CACC 7
LEGAL LOCATION: SW SW NE SW SEC. 35, T. 101 N., R. 51 W.

7.0 - 10.0 SAND, BROWN, MEDIUM TO COARSE, CLAYEY;
OXIDIZED, MIXED WITH GRAVEL, LOOSE TO SEMI-FIRM
10.0 - 25.0 SAND, MEDIUM TO COARSE, CLAYEY; WATER
SATURATED, EASY DRILLING

** **

TEST HOLE NUMBER: 260
LOCATION: 101N-51W-35CACC 8
LEGAL LOCATION: SW SW NE SW SEC. 35, T. 101 N., R. 51 W.

7.0 - 9.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE
SAND, 1/8-INCH TO 3/4-INCH GRAVEL,
WELL-ROUNDED TO SUBANGULAR; MOIST

56
9.0 - 29.0 SAND, TAN TO BROWN, MEDIUM TO COARSE, CLAYEY; SEMI-FIRM TO VERY LOOSE SAND AT 20 FEET, SATURATED, SOME GRAVEL BUT LESS THAN 10 PERCENT

** **

TEST HOLE NUMBER: 261
LOCATION: 101N-51W-35CADA 1
LEGAL LOCATION: NE SE NE SW SEC. 35, T. 101 N., R. 51 W.

3.0 - 18.0 SAND, YELLOW, FINE TO MEDIUM
20.0 - 22.0 SAND, YELLOW, FINE TO MEDIUM

** **

TEST HOLE NUMBER: 262
LOCATION: 101N-51W-35CADA 2
LEGAL LOCATION: NE SE NE SW SEC. 36, T. 101 N., R. 51 W.

2.0 - 6.0 SAND AND GRAVEL, RUST-COLORED

** **

TEST HOLE NUMBER: 263
LOCATION: 101N-51W-35CADA 3
LEGAL LOCATION: NE SE NE SW SEC. 35, T. 101 N., R. 51 W.

5.0 - 8.6 SAND AND GRAVEL, GRAY

** **

TEST HOLE NUMBER: 264
LOCATION: 101N-51W-35CADA 6
LEGAL LOCATION: NE SE NE SW SEC. 35, T. 101 N., R. 51 W.

0 - 6.0 SAND, REDDISH-BROWN, MEDIUM TO COARSE; SOME FINE GRAVEL; POORLY SORTED; SATURATED BELOW 6 FEET
6.0 - 11.0 SAND AND GRAVEL, REDDISH-BROWN; MEDIUM SAND TO COARSE GRAVEL; SATURATED

** **

TEST HOLE NUMBER: 265
LOCATION: 101N-51W-35CADA 9
LEGAL LOCATION: NE SE NE SW SEC. 35, T. 101 N., R. 51 W.

23.0 - 30.0 SAND, DARK-TAN TO BROWN, CLAYEY; SATURATED, VERY LOOSE Ooze, COOR, OILY SHEEN ON CUTTING

** **

57
TEST HOLE NUMBER: 266
LOCATION: 101N-51W-35CADD 1
LEGAL LOCATION: SE SE NE SW SEC. 35, T. 101 N., R. 51 W.

9.0 - 11.0 SAND, YELLOW, FINE TO MEDIUM; SATURATED

TEST HOLE NUMBER: 267
LOCATION: 101N-51W-35CADD 4
LEGAL LOCATION: SE SE NE SW SEC. 35, T. 101 N., R. 51 W.

0 - 10.0 SAND AND GRAVEL, COARSE GRAVEL, 1/8-INCH TO 2 INCHES IN DIAMETER, SUBANGULAR TO WELL-ROUNDED; MIXED WITH CLAY, SATURATED AT 8 FEET
10.0 - 43.0 SAND, TAN TO BROWN, FINE; 30 TO 50 PERCENT CLAY AND FINES; VERY LOOSE OOZE GRADES TO MEDIUM TO COARSE DARKER COLORED SAND

TEST HOLE NUMBER: 268
LOCATION: 101N-51W-35CBAB
LEGAL LOCATION: NW NE NW SW SEC. 35, T. 101 N., R. 51 W.

5.0 - 12.0 SAND AND GRAVEL, CLAYEY

TEST HOLE NUMBER: 269
LOCATION: 101N-51W-35CBAB 1
LEGAL LOCATION: NW NE NW SW SEC. 35, T. 101 N., R. 51 W.

4.0 - 6.0 SAND, DARK-YELLOWISH-BROWN; 5 TO 15 PERCENT GRAVEL, 55 TO 75 PERCENT MOSTLY MEDIUM AND FINE SAND, 20 TO 30 PERCENT MEDIUM PLASTICITY FINES, MOIST

TEST HOLE NUMBER: 270
LOCATION: 101N-51W-35CBB 1
LEGAL LOCATION: NW NW NW SW SEC. 35, T. 101 N., R. 51 W.

0 - 3.0 SANDS AND SILTS; ORGANIC MATTER (TOPSOIL)

TEST HOLE NUMBER: 271
LOCATION: 101N-51W-35CBC 1
LEGAL LOCATION: SE SW NW SW SEC. 35, T. 101 N., R. 51 W.

58
22.0 - 37.0 SAND, GRAY, SILTY; SOME CLAY (TILL?)

TEST HOLE NUMBER: 272
LOCATION: 101N-51W-35CBCD 4
LEGAL LOCATION: SE SW NW SW SEC. 35, T. 101 N., R. 51 W.

6.0 - 9.0 SAND AND GRAVEL, REDDISH-BROWN, CLAYEY

TEST HOLE NUMBER: 273
LOCATION: 101N-51W-35CBCD 5
LEGAL LOCATION: SE SW NW SW SEC. 35, T. 101 N., R. 51 W.

4.0 - 6.0 SAND AND GRAVEL, BROWN; WITH SOME CLAY

TEST HOLE NUMBER: 274
LOCATION: 101N-51W-35CBDC 1
LEGAL LOCATION: SW SE NW SW SEC. 35, T. 101 N., R. 51 W.

3.0 - 7.0 SAND, BROWN; WITH CLAY

TEST HOLE NUMBER: 275
LOCATION: 101N-51W-35CBDC 4
LEGAL LOCATION: SW SE NW SW SEC. 35, T. 101 N., R. 51 W.

6.0 - 8.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND,
1/8-INCH TO 1-INCH IN DIAMETER GRAVEL
13.0 - 14.0 GRAVEL LENSES; NO CUTTINGS, DRILL CHATTER
21.0 - 50.0 SAND, TAN TO BROWN, CLAYEY; OXIDIZED,
SATURATED, LOOSE Ooze, NO CUTTINGS
FROM 30 TO 50 FEET

TEST HOLE NUMBER: 276
LOCATION: 101N-51W-35CCCC 1
LEGAL LOCATION: SW SW NW SW SEC. 35, T. 101 N., R. 51 W.

4.0 - 6.0 SAND, BROWN, MEDIUM TO COARSE; SOME FINE
GRAVEL; SATURATED

TEST HOLE NUMBER: 277
LOCATION: 101N-51W-35CCCC 3
LEGAL LOCATION: SW SW NW SW SEC. 35, T. 101 N., R. 51 W.

59
2.0 - 5.0 SAND, GRAYISH-BROWN, CLAYEY; 5 TO 15 PERCENT GRAVEL, 45 TO 65 PERCENT MOSTLY MEDIUM AND FINE SAND, 30 TO 40 PERCENT MEDIUM PLASTICITY FINES, WET

** * * *

TEST HOLE NUMBER:  278
LOCATION: 101N-51W-35DBAC 1
LEGAL LOCATION: SW NE NW SE SEC. 35, T. 101 N., R. 51 W.

4.0 - 5.0 GRAVEL, BROWN, MEDIUM TO COARSE, SANDY; SATURATED

** * * *

TEST HOLE NUMBER:  279
LOCATION: 101N-51W-35DBBC
LEGAL LOCATION: SW NW NW SE SEC. 35, T. 101 N., R. 51 W.

5.0 - 24.0 SAND, BROWN, MEDIUM TO COARSE, SLIGHTLY CLAYEY; SATURATED
24.0 - 29.0 SAND AND GRAVEL(?), CLAYEY; SAND IS COARSER THAN INTERVAL FROM 5 TO 24 FEET; SATURATED

** * * *

TEST HOLE NUMBER:  280
LOCATION: 101N-51W-35DBCA 3
LEGAL LOCATION: NE SW NW SE SEC. 35, T. 101 N., R. 51 W.

4.0 - 6.0 SAND AND GRAVEL, BROWN, MEDIUM SAND TO COARSE GRAVEL, CLAYEY; SATURATED

** * * *

TEST HOLE NUMBER:  281
LOCATION: 101N-51W-35DBCA 4
LEGAL LOCATION: NE SW NW SE SEC. 35, T. 101 N., R. 51 W.

2.0 - 5.0 GRAVEL, COARSE, ANGULAR, POORLY SORTED; DRY

** * * *

TEST HOLE NUMBER:  282
LOCATION: 101N-52W-16AAAA
LEGAL LOCATION: NE NE NE NE SEC. 16, T. 101 N., R. 52 W.

0 - 4.0 SAND, RUST-BROWN, COARSE

** * * *

60
TEST HOLE NUMBER: 283
LOCATION: 101N-52W-22AABA
LEGAL LOCATION: NE NW NE NE SEC. 22, T. 101 N., R. 52 W.
0 - 3.0 SAND, REDDISH-BROWN, COARSE, VERY CLAYEY; OXIDIZED, DRY
9.0 - 13.0 GRAVEL, REDDISH-BROWN, COBBLY, VERY CLAYEY; OXIDIZED, DRY
13.0 - 32.0 GRAVEL, BROWN, COBBLY, SLIGHTLY CLAYEY; OXIDIZED, DRY; HIT ROCK ABANDONED HOLE

* * * *

TEST HOLE NUMBER: 284
LOCATION: 101N-52W-22CABC
LEGAL LOCATION: SW SW NW SW SEC. 22, T. 101 N., R. 52 W.
3.0 - 14.0 SAND, YELLOW-BROWN, CLAYEY, GRAVELLY; SATURATED, COULD NOT PENETRATE FURTHER

* * * *

TEST HOLE NUMBER: 285
LOCATION: 101N-52W-27DCCD
LEGAL LOCATION: SE SW SW SE SEC. 27, T. 101 N., R. 52 W.
8.0 - 22.0 SAND, RUST-BROWN, MEDIUM TO COARSE, CLAYEY; OXIDIZED, SATURATED

* * * *

TEST HOLE NUMBER: 286
LOCATION: 101N-52W-34DADD
LEGAL LOCATION: SE NE SE SE SEC. 34, T. 101 N., R. 52 W.
10.0 - 24.0 SAND, GRAY, MEDIUM TO COARSE, CLAYEY, SLIGHTLY GRAVELLY; UNOXIDIZED, SATURATED

* * * *

TEST HOLE NUMBER: 287
LOCATION: 101N-52W-36BBBC
LEGAL LOCATION: SW NW NW NW SEC. 36, T. 101 N., R. 52 W.
0 - 38.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE SAND, MEDIUM TO COARSE GRAVEL, SLIGHTLY CLAYEY; OXIDIZED, MOIST AT 16 FEET

* * * *

TEST HOLE NUMBER: 288
LOCATION: 102N-47W-06CCDC
LEGAL LOCATION: SW SE SW SW SEC. 06, T. 102 N., R. 47 W.

61
9.0 - 11.0 GRAVEL, MEDIUM

* * * *

TEST HOLE NUMBER: 289
LOCATION: 102N-47W-07AAD
LEGAL LOCATION: SE NE NE NE SEC. 07, T. 102 N., R. 47 W.
1.0 - 19.0 SAND, BROWN, MEDIUM TO COARSE; SOME GRAVEL, HIT ROCK AT 20 FEET
19.0 - 25.0 GRAVEL, COARSE

* * * *

TEST HOLE NUMBER: 290
LOCATION: 102N-47W-07DDAD
LEGAL LOCATION: SE NE SE SE SEC. 07, T. 102 N., R. 47 W.
0 - 28.0 SAND, REDDISH-BROWN, FINE TO COARSE, SLIGHTLY CLAYEY; WITH SOME GRAVEL, DRY, OXIDIZED

* * * *

TEST HOLE NUMBER: 291
LOCATION: 102N-47W-08ABAB
LEGAL LOCATION: NW NE NW NE SEC. 08, T. 102 N., R. 47 W.
16.0 - 48.0 SAND, REDDISH-BROWN, MEDIUM TO COARSE, SLIGHTLY CLAYEY; OXIDIZED, DRY

* * * *

TEST HOLE NUMBER: 292
LOCATION: 102N-47W-10AABB
LEGAL LOCATION: NW NW NE NE SEC. 10, T. 102 N., R. 47 W.
10.0 - 12.0 SAND, BROWN, MEDIUM; OXIDIZED, SATURATED

* * * *

TEST HOLE NUMBER: 293
LOCATION: 102N-47W-10DADA
LEGAL LOCATION: NE SE NE SE SEC. 10, T. 102 N., R. 47 W.
9.0 - 22.0 SAND AND GRAVEL, BROWN, COARSE SAND, MEDIUM GRAVEL, CLAYEY; OXIDIZED, SATURATED

* * * *

TEST HOLE NUMBER: 294
LOCATION: 102N-47W-16AAAA
LEGAL LOCATION: NE NE NE NE SEC. 16, T. 102 N., R. 47 W.
25.0 - 41.0 SAND AND GRAVEL; WITH CLAY LAYERS
   ** **

TEST HOLE NUMBER: 295
LOCATION: 102N-47W-18AABB
LEGAL LOCATION: NW NW NE NE SEC. 18, T. 102 N., R. 47 W.
   0 - 1.0 SAND AND GRAVEL, BROWN, COARSE SAND, FINE TO COARSE GRAVEL, CLAYEY; OXIDIZED, DRY
   11.0 - 19.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE SAND, FINE TO COARSE GRAVEL, SLIGHTLY CLAYEY; OXIDIZED, MOIST
   ** **

TEST HOLE NUMBER: 294
LOCATION: 102N-47W-18BBBB 1
LEGAL LOCATION: NW NW NW NW SEC. 18, T. 102 N., R. 47 W.
   21.0 - 30.0 SAND AND GRAVEL, COARSE SAND AND FINE GRAVEL
   ** **

TEST HOLE NUMBER: 297
LOCATION: 102N-47W-18BBBB 2
LEGAL LOCATION: NW NW NW NW SEC. 18, T. 102 N., R. 47 W.
   17.0 - 26.0 SAND AND GRAVEL, MEDIUM SAND TO MEDIUM GRAVEL
   ** **

TEST HOLE NUMBER: 298
LOCATION: 102N-47W-22BABB
LEGAL LOCATION: NW NW NE NW SEC. 22, T. 102 N., R. 47 W.
   9.0 - 30.0 SAND, GRAY, FINE TO MEDIUM, SLIGHTLY CLAYEY; OXIDIZED, SATURATED
   ** **

TEST HOLE NUMBER: 299
LOCATION: 102N-47W-22CCBB
LEGAL LOCATION: NW NW SW SW SEC. 22, T. 102 N., R. 47 W.
   12.0 - 26.0 SAND, TAN-BROWN, MEDIUM, VERY CLAYEY; OXIDIZED, SATURATED
   ** **

TEST HOLE NUMBER: 300
LOCATION: 102N-47W-33AAAA

43
LEGAL LOCATION: NE NE NE SE SEC. 33, T. 102 N., R. 47 W.

6.0 - 30.0 SAND AND GRAVEL, MEDIUM SAND TO FINER GRAVEL; WITH CLAY

* * * *

TEST HOLE NUMBER: 301
LOCATION: 102N-47W-33DDAA
LEGAL LOCATION: NE NE NE SE SEC. 33, T. 102 N., R. 47 W.

5.0 - 15.0 SAND, LIGHT-BROWN, FINE TO COARSE, PEBBLY; SATURATED, OXIDIZED
15.0 - 25.0 SAND, LIGHT-BROWN, FINE; SATURATED, OXIDIZED

* * * *

TEST HOLE NUMBER: 302
LOCATION: 102N-47W-34BBBB
LEGAL LOCATION: NW NW NW NW SEC. 34, T. 102 N., R. 47 W.

9.0 - 23.0 SAND AND GRAVEL, BROWN, MEDIUM SAND, MEDIUM TO COARSE GRAVEL; OXIDIZED, SOME ROCKS

* * * *

TEST HOLE NUMBER: 303
LOCATION: 102N-47W-34CCCC
LEGAL LOCATION: SW SW SW SW SEC. 34, T. 102 N., R. 47 W.

0 - 31.0 SAND AND GRAVEL, BROWN TO REDDISH-BROWN; OXIDIZED, GRADES FROM A FINE SAND TO A COARSE GRAVEL

* * * *

TEST HOLE NUMBER: 304
LOCATION: 102N-47W-34CCCC 2
LEGAL LOCATION: SW SW SW SW SEC. 34, T. 102 N., R. 47 W.

1.0 - 31.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, MEDIUM TO COARSE GRAVEL

* * * *

TEST HOLE NUMBER: 305
LOCATION: 102N-47W-34DDAA
LEGAL LOCATION: NE NE NE SE SEC. 34, T. 102 N., R. 47 W.

6.0 - 10.0 SAND, BROWN, FINE TO MEDIUM, SILTY; SATURATED, OXIDIZED
10.0 - 24.0 SAND, GRAY, FINE TO MEDIUM, SILTY;
SATURATED, UNOXIDIZED

** **

TEST HOLE NUMBER: 306
LOCATION: 102N-48W-02DDCC
LEGAL LOCATION: SW SW SE SE Sec. 02, T. 102 N., R. 48 W.
6.0 - 8.0 SAND AND GRAVEL, BROWN, COARSE SAND, COARSE GRAVEL; OXIDIZED, MOIST, HIT QUARTZITE AT 6 FEET

** **

TEST HOLE NUMBER: 307
LOCATION: 102N-48W-03AAAA
LEGAL LOCATION: NE NE NE NE Sec. 03, T. 102 N., R. 48 W.
1.0 - 20.0 SAND, LIGHT-BROWN, MEDIUM TO COARSE, PEBBLY; SUBBROUNDED

** **

TEST HOLE NUMBER: 308
LOCATION: 102N-48W-03BBBB
LEGAL LOCATION: NW NW NW NW Sec. 03, T. 102 N., R. 48 W.
15.0 - 20.0 SAND, BROWN, MEDIUM TO COARSE, POORELY SORTED; SOME GRAVEL

** **

TEST HOLE NUMBER: 309
LOCATION: 102N-48W-10DDAA
LEGAL LOCATION: NE NE SE SE Sec. 10, T. 102 N., R. 48 W.
5.0 - 11.0 SAND AND GRAVEL, BROWN, FINE TO COARSE SAND, MEDIUM GRAVEL

** **

TEST HOLE NUMBER: 310
LOCATION: 102N-48W-11BBBB
LEGAL LOCATION: NE NW NW NW Sec. 11, T. 102 N., R. 48 W.
5.0 - 21.0 GRAVEL, GRAY, SANDY, SILTY; SATURATED, UNOXIDIZED
21.0 - 23.0 GRAVEL, COARSE, SANDY, SILTY; SATURATED, UNOXIDIZED, HIT BEDROCK (QUARTZITE?)

** **

TEST HOLE NUMBER: 311
LOCATION: 102N-48W-12CDC

65
LEGAL LOCATION: SW SE SW SE SEC. 12, T. 102 N., R. 48 W.

0 - 2.0 SAND, TAN-BROWN, FINE TO MEDIUM, VERY CLAYEY; OXIDIZED, DRY
2.0 - 6.0 SAND, TAN-BROWN, FINE TO MEDIUM, VERY CLAYEY; OXIDIZED, MOIST

* * * *

TEST HOLE NUMBER: 312
LOCATION: 102N-48W-21AAAD
LEGAL LOCATION: SE NE NE SE SEC. 21, T. 102 N., R. 48 W.

14.0 - 30.0 SAND, BROWN, MEDIUM; OXIDIZED

* * * *

TEST HOLE NUMBER: 313
LOCATION: 102N-48W-21DDBD
LEGAL LOCATION: SE SE SE SE SEC. 21, T. 102 N., R. 48 W.

0 - 16.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE SAND, FINE GRAVEL; OXIDIZED
19.0 - 26.0 SAND, BROWN, MEDIUM TO COARSE; OXIDIZED

* * * *

TEST HOLE NUMBER: 314
LOCATION: 102N-48W-23AAAB
LEGAL LOCATION: NE NE SE NE SEC. 23, T. 102 N., R. 48 W.

10.0 - 11.0 SAND, ORANGE-BROWN, FINE TO MEDIUM; DRY TO MOIST, OXIDIZED
14.0 - 19.0 GRAVEL, BROWN, MEDIUM TO COARSE GRADING INTO MEDIUM TO FINE, VERY CLAYEY; LITTLE SAND, MOIST, OXIDIZED
19.0 - 38.0 SAND AND GRAVEL, LIGHT-BROWN TO BROWN, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL, LOUNDED; MOIST, OXIDIZED, GRAVEL AND CLAY CONTENT INCREASE WITH DEPTH

* * * *

TEST HOLE NUMBER: 315
LOCATION: 102N-48W-23CDCC
LEGAL LOCATION: SE SE SW SW SEC. 23, T. 102 N., R. 48 W.

0 - 33.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE SAND, FINE TO MEDIUM GRAVEL; SOME COARSE GRAVEL

* * * *
TEST HOLE NUMBER: 316
LOCATION: 102N-48W-23DAAD
LEGAL LOCATION: SE NE NE SS SEC. 23, T. 102 N., R. 48 W.

6.0 - 17.0 SAND AND GRAVEL, BROWN, MEDIUM SAND, FINE GRAVEL, SLIGHTLY CLAYEY; OXIDIZED, MOIST

** * * *

TEST HOLE NUMBER: 317
LOCATION: 102N-48W-24BAAD
LEGAL LOCATION: NE NE NE NW SEC. 24, T. 102 N., R. 48 W.

2.0 - 8.0 SAND, BROWN, FINE TO MEDIUM; LITTLE CLAY, DRY, OXIDIZED
8.0 - 13.0 SAND, LIGHT-BROWN TO DARK-BROWN, FINE TO MEDIUM; LITTLE CLAY, SOME GRAVEL FROM 10 FEET, DRY, OXIDIZED
13.0 - 17.0 SAND, YELLOW-BROWN TO BROWN, FINE TO MEDIUM; LITTLE CLAY, SOME GRAVEL, DRY, OXIDIZED
17.0 - 31.0 GRAVEL, DARK-BROWN, FINE TO MEDIUM, SANDY, ROUNDED; SOME CLAY, DRY TO MOIST, OXIDIZED

** * * *

TEST HOLE NUMBER: 318
LOCATION: 102N-48W-27CDDD
LEGAL LOCATION: SE SE SE SW SEC. 27, T. 102 N., R. 48 W.

2.0 - 22.0 SAND, FINE TO MEDIUM

** * * *

TEST HOLE NUMBER: 319
LOCATION: 102N-48W-28CACB
LEGAL LOCATION: NW SW NE SW SEC. 28, T. 102 N., R. 48 W.

2.0 - 30.0 SAND, BROWN, FINE TO COARSE

** * * *

TEST HOLE NUMBER: 320
LOCATION: 102N-48W-29BDDB
LEGAL LOCATION: SE SE SE NW SEC. 29, T. 102 N., R. 48 W.

8.0 - 16.0 SAND, MEDIUM TO COARSE

** * * *

TEST HOLE NUMBER: 321
LOCATION: 102N-48W-29DABR

67
LEGAL LOCATION: NW NW NE SE SEC. 29, T. 102 N., R. 48 W.

6.0 - 26.0 SAND, FINE TO COARSE; WITH SOME CLAY

* * *

TEST HOLE NUMBER: 322
LOCATION: 102N-48W-30ADD
LEGAL LOCATION: SE SE SE NE SEC. 30, T. 102 N., R. 48 W.

20.0 - 27.0 SAND AND GRAVEL, FINE SAND TO MEDIUM GRAVEL, SLIGHTLY CLAYTY

* * *

TEST HOLE NUMBER: 323
LOCATION: 102N-48W-30ADD 1
LEGAL LOCATION: SE SE SE NE SEC. 30, T. 102 N., R. 48 W.

20.0 - 26.0 SAND AND GRAVEL, BROWN, FINE TO COARSE SAND, MEDIUM TO COARSE GRAVEL

* * *

TEST HOLE NUMBER: 324
LOCATION: 102N-48W-30CADA
LEGAL LOCATION: NE SE NE SW SEC. 30, T. 102 N., R. 48 W.

5.0 - 22.5 SAND AND GRAVEL

* * *

TEST HOLE NUMBER: 325
LOCATION: 102N-48W-30CBBC
LEGAL LOCATION: SW NW NW SW SEC. 30, T. 102 N., R. 48 W.

0 - 12.0 SAND, MEDIUM, SILTY
22.0 - 32.0 SAND, BRIGHT-ORANGE, MEDIUM; ALSO SOME PELLETS OF SAND

* * *

TEST HOLE NUMBER: 326
LOCATION: 102N-48W-30CBBC 1
LEGAL LOCATION: SW NW NW SW SEC. 30, T. 102 N., R. 48 W.

8.0 - 8.0 SAND, MEDIUM TO COARSE; SOME ROCKS

* * *

TEST HOLE NUMBER: 327
LOCATION: 102N-48W-30CCCB
LEGAL LOCATION: NW SW SW SW SEC. 30, T. 102 N., R. 48 W.
18.0 - 22.0 GRAVEL, COARSE; SAMPLE TAKEN, LARGE COBBLES PREVENTED FURTHER DRILLING

* * *

TEST HOLE NUMBER: 322
LOCATION: 102N-48W-30CCCC
LEGAL LOCATION: SW SW SW SW SEC. 10, T. 102 N., R. 48 W.

1.0 - 12.0 SAND, BROWN, MEDIUM; OXIDIZED, SOME YELLOWISH-BROWN CLAY
12.0 - 18.0 SAND AND GRAVEL, BROWN, MEDIUM SAND, MEDIUM TO COARSE GRAVEL; OXIDIZED
18.0 - 22.0

* * *

TEST HOLE NUMBER: 329
LOCATION: 101N-48W-30CCCC 1
LEGAL LOCATION: SW SW SW SW SEC. 10, T. 102 N., R. 48 W.

10.0 - 11.0 GRAVEL, RUST-COLORED, COARSE
11.0 - 15.0 SAND AND GRAVEL, GRAY, FINE SAND TO FINE GRAVEL, SILTY

* * *

TEST HOLE NUMBER: 330
LOCATION: 102N-48W-30DADC
LEGAL LOCATION: SW SE NE SE SEC. 30, T. 102 N., R. 48 W.

7.0 - 12.0 SAND AND GRAVEL; SOME BLACK SILTSTONE

* * *

TEST HOLE NUMBER: 331
LOCATION: 102N-48W-30DCDC
LEGAL LOCATION: SW SE SW SE SEC. 30, T. 102 N., R. 48 W.

5.0 - 19.5 SAND, BROWN, COARSE; SOME GRAVEL, MOIST

* * *

TEST HOLE NUMBER: 332
LOCATION: 102N-48W-31AADD
LEGAL LOCATION: SE SE NE NE SEC. 31, T. 102 N., R. 48 W.

7.0 - 8.5 SAND AND GRAVEL

* * *

TEST HOLE NUMBER: 333
LOCATION: 102N-48W-31BADD
LEGAL LOCATION: NW NW NW NW SEC. 31, T. 102 N., R. 48 W.

69
8.0 - 12.0 GRAVEL

***

TEST HOLE NUMBER: 334
LOCATION: 102N-48W-32BCCD
LEGAL LOCATION: SE SE SW NW SEC. 32, T. 102 N., R. 48 W.
8.5 - 31.0 SAND AND GRAVEL

***

TEST HOLE NUMBER: 335
LOCATION: 102N-48W-33CABA
LEGAL LOCATION: NE NW NW SW SEC. 33, T. 102 N., R. 48 W.
2.0 - 3.0 GRAVEL, COARSE

***

TEST HOLE NUMBER: 336
LOCATION: 102N-48W-33CBBB
LEGAL LOCATION: NW NW NW SW SEC. 33, T. 102 N., R. 48 W.
1.0 - 18.0 SAND AND GRAVEL, MEDIUM

***

TEST HOLE NUMBER: 337
LOCATION: 102N-48W-33DABA
LEGAL LOCATION: NE NW NE SE SEC. 33, T. 102 N., R. 48 W.
0 - 3.0 GRAVEL
12.0 - 24.0 SAND AND GRAVEL, FINE SAND TO MEDIUM GRAVEL
24.0 - 26.0 GRAVEL, COARSE

***

TEST HOLE NUMBER: 338
LOCATION: 102N-48W-33DBBA
LEGAL LOCATION: NE NW NW SE SEC. 33, T. 102 N., R. 48 W.
0 - 8.0 SAND, BROWN, FINE TO MEDIUM, SILTY
8.0 - 15.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL
15.0 - 18.0 GRAVEL, VERY COARSE; ANGULAR

***

TEST HOLE NUMBER: 339
LOCATION: 102N-48W-33DCDD
LEGAL LOCATION: SE SE SW SE SEC. 33, T. 102 N., R. 48 W.
12.0 - 19.0 SAND, MEDIUM TO COARSE; SATURATED AT 17
FEET
19.0 - 29.0 SAND AND GRAVEL, COARSE SAND, FINE GRAVEL

** * **

TEST HOLE NUMBER: 340
LOCATION: T02N-R8W-3300 DC
LEGAL LOCATION: SE SE SE SE SEC. 33, T. 102 N., R. 48 W.
********************************************************************
* THIS LOG CONTAINS UNVERIFIED INFORMATION *
********************************************************************

8.0 - 49.0 SAND

** * **

TEST HOLE NUMBER: 341
LOCATION: T02N-R8W-34 AA
LEGAL LOCATION: NE NE NE NE SEC. 34, T. 102 N., R. 48 W.

12.0 - 17.0 SAND, COARSE
17.0 - 20.0 SAND, MEDIUM TO COARSE
20.0 - 41.0 GRAVEL, MEDIUM TO COARSE

** * **

TEST HOLE NUMBER: 342
LOCATION: T02N-R8W-34 BC
LEGAL LOCATION: SW SW SW NW SEC. 34, T. 102 N., R. 48 W.

7.0 - 32.0 SAND, FINE TO COARSE; WITH FINE TO COARSE GRAVEL WHICH OCCURS IN LAYERS IN THE SAND

** * **

TEST HOLE NUMBER: 343
LOCATION: T02N-R8W-34 BC
LEGAL LOCATION: SE SW SW NW SEC. 34, T. 102 N., R. 48 W.

0 - 19.0 SAND AND GRAVEL, FINE TO COARSE SAND AND FINE GRAVEL
19.0 - 41.0 SAND AND GRAVEL, FINE TO COARSE

** * **

TEST HOLE NUMBER: 344
LOCATION: T02N-R8W-34 BC
LEGAL LOCATION: SE SE SW NW SEC. 34, T. 102 N., R. 48 W.

1.0 - 46.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND AND FINE TO COARSE GRAVEL; ROCKS AT 35 D 45 FEET

71
<table>
<thead>
<tr>
<th>TEST HOLE NUMBER: 345</th>
<th>LOCATION: 102N-48W-34CABA</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEGAL LOCATION: NE NW NE SW SEC. 34, T. 102 N., R. 48 W.</td>
<td></td>
</tr>
<tr>
<td>1.0 - 12.0 SAND, BROWN, MEDIUM TO COARSE; OXIDIZED</td>
<td></td>
</tr>
<tr>
<td>12.0 - 37.0 GRAVEL, BROWN, MEDIUM TO VERY COARSE; OXIDIZED</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>TEST HOLE NUMBER: 346</th>
<th>LOCATION: 102N-48W-34CABA 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEGAL LOCATION: NE NW NE SW SEC. 34, T. 102 N., R. 48 W.</td>
<td></td>
</tr>
<tr>
<td>5.0 - 14.0 SAND, BROWN, MEDIUM TO COARSE; OXIDIZED</td>
<td></td>
</tr>
<tr>
<td>14.0 - 36.0 GRAVEL, BROWN, MEDIUM TO VERY COARSE; OXIDIZED</td>
<td></td>
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<table>
<thead>
<tr>
<th>TEST HOLE NUMBER: 347</th>
<th>LOCATION: 102N-48W-34CABA 3</th>
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<tbody>
<tr>
<td>LEGAL LOCATION: NE NW NE SW SEC. 34, T. 102 N., R. 48 W.</td>
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</tr>
<tr>
<td>4.0 - 7.0 SAND, BROWN, MEDIUM TO COARSE; OXIDIZED</td>
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</tr>
<tr>
<td>7.0 - 36.0 GRAVEL, BROWN, MEDIUM TO COARSE; OXIDIZED</td>
<td></td>
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</tbody>
</table>

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<tr>
<th>TEST HOLE NUMBER: 348</th>
<th>LOCATION: 102N-48W-34CC</th>
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<tbody>
<tr>
<td>LEGAL LOCATION: SW SW SEC. 34, T. 102 N., R. 48 W.</td>
<td></td>
</tr>
<tr>
<td>2.0 - 4.0 SAND AND GRAVEL, COARSE SAND, FINE GRAVEL</td>
<td></td>
</tr>
<tr>
<td>4.0 - 9.0 SAND AND GRAVEL, MEDIUM SAND, COARSE GRAVEL</td>
<td></td>
</tr>
<tr>
<td>9.0 - 14.0 SAND AND GRAVEL, MEDIUM SAND, MEDIUM GRAVEL</td>
<td></td>
</tr>
<tr>
<td>14.0 - 19.0 SAND, COARSE</td>
<td></td>
</tr>
<tr>
<td>19.0 - 29.0 SAND, MEDIUM TO COARSE</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>TEST HOLE NUMBER: 349</th>
<th>LOCATION: 102N-48W-35ABB</th>
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<tbody>
<tr>
<td>LEGAL LOCATION: NW NW NW NE SEC. 35, T. 102 N., R. 48 W.</td>
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</tr>
<tr>
<td>16.0 - 24.0 GRAVEL, BROWN, MEDIUM TO COARSE; OXIDIZED</td>
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<tr>
<td>24.0 - 31.0 SAND, FINE TO MEDIUM; MOSTLY QUARTZ</td>
<td></td>
</tr>
</tbody>
</table>

72
| TEST HOLE NUMBER: | 350 |
| LOCATION: 102N-4SW-35ABB2 | |
| LEGAL LOCATION: NW NW NW NE SEC. 35, T. 102 N., R. 48 W. | |
| 15.0 - 25.0 | GRAVEL, BROWN, MEDIUM TO COARSE; OXIDIZED |
| 25.0 - 32.8 | SAND, FINE TO MEDIUM; MOSTLY QUARTZ |
| ** ** ** |

| TEST HOLE NUMBER: | 351 |
| LOCATION: 102N-4SW-35BAAA | |
| LEGAL LOCATION: NE NE NE NW SEC. 35, T. 102 N., R. 48 W. | |
| 10.0 - 32.0 | SAND AND GRAVEL, FINE TO COARSE |
| ** ** ** |

| TEST HOLE NUMBER: | 352 |
| LOCATION: 102N-4SW-35BBBB | |
| LEGAL LOCATION: NW NW NW NW SEC. 35, T. 102 N., R. 48 W. | |
| 7.0 - 9.0 | SAND AND GRAVEL, MEDIUM TO COARSE |
| 11.0 - 34.0 | SAND AND GRAVEL, MEDIUM TO COARSE |
| ** ** ** |

| TEST HOLE NUMBER: | 353 |
| LOCATION: 102N-4SW-35BBC | |
| LEGAL LOCATION: SW SW NW NW SEC. 35, T. 102 N., R. 48 W. | |
| 22.0 - 36.0 | SAND AND GRAVEL, BROWN, MEDIUM; OXIDIZED |
| ** ** ** |

| TEST HOLE NUMBER: | 354 |
| LOCATION: 102N-4SW-35BCCD | |
| LEGAL LOCATION: SW SW SE SW SEC. 35, T. 102 N., R. 48 W. | |
| 0 - 15.0 | SAND, FINE TO MEDIUM; SOME GRAVEL |
| 15.0 - 19.0 | SAND AND GRAVEL, FINE SAND TO MEDIUM GRAVEL |
| ** ** ** |

| TEST HOLE NUMBER: | 355 |
| LOCATION: 102N-4SW-35CDCDCC | |
| LEGAL LOCATION: SW SW SE SW SEC. 35, T. 102 N., R. 48 W. | |
| 2.0 - 17.0 | SAND AND GRAVEL, MEDIUM SAND TO COARSE GRAVEL |
| ** ** ** |

| TEST HOLE NUMBER: | 356 |
| LOCATION: 102N-4SW-35CDCC | |
| LEGAL LOCATION: SW SW SE SW SEC. 35, T. 102 N., R. 48 W. | |
| ** ** ** |

| ** ** ** |

73
LOCATION: 102N-48W-36DDAA
LEGAL LOCATION: NE NE SE SE SEC. 36, T. 102 N., R. 48 W.

12.0 - 15.0 SAND, BROWN, MEDIUM TO COARSE; OXIDIZED
25.0 - 30.0 SAND, REDDISH-BROWN, MEDIUM; OXIDIZED

* * *

TEST HOLE NUMBER: 357
LOCATION: 102N-49W-01AAAB
LEGAL LOCATION: NW NE NE NE SEC. 01, T. 102 N., R. 49 W.

5.0 - 25.0 SAND, BROWN, MEDIUM TO COARSE; TURNS TO GRAY AT 15 FEET

* * *

TEST HOLE NUMBER: 358
LOCATION: 102N-49W-01CCCC
LEGAL LOCATION: SW SW SW SW SEC. 01, T. 102 N., R. 49 W.

2.0 - 7.0 GRAVEL, FINE TO MEDIUM; WITH CLAY
7.0 - 14.0 GRAVEL, MEDIUM TO COARSE; WITH CLAY

* * *

TEST HOLE NUMBER: 359
LOCATION: 102N-49W-03AAAA
LEGAL LOCATION: NE NE NE NW SEC. 03, T. 102 N., R. 49 W.

0 - 6.0 SAND, BROWN, CLAYEY
6.0 - 28.0 SAND, YELLOW-BROWN, CLAYEY; SATURATED

* * *

TEST HOLE NUMBER: 360
LOCATION: 102N-49W-03BCCC
LEGAL LOCATION: SW SW SW NW SEC. 03, T. 102 N., R. 49 W.

2.0 - 35.0 SAND AND GRAVEL, BROWN, FINE TO COARSE SAND, FINE TO COARSE GRAVEL

* * *

TEST HOLE NUMBER: 361
LOCATION: 102N-49W-04AAAA
LEGAL LOCATION: NE NE NE NE SEC. 04, T. 102 N., R. 49 W.

10.0 - 20.0 SAND, COARSE; DINGY
20.0 - 25.0 SAND; AND SOME GRAVEL
25.0 - 30.0 GRAVEL, FINE, SANDY

* * *
TEST HOLE NUMBER: 362
LOCATION: 102N-49W-04AB
LEGAL LOCATION: NW NE SEC. 04, T. 102 N., R. 49 W.

12.0 - 15.0 SAND, FINE
15.0 - 30.0 SAND, COARSE IN UPPER PART

* * *

TEST HOLE NUMBER: 363
LOCATION: 102N-49W-04BBB
LEGAL LOCATION: NW NW NW SEC. 04, T. 102 N., R. 49 W.

10.0 - 12.0 SAND AND GRAVEL, FINE
12.0 - 15.0 SAND, COARSE; CLEAN
15.0 - 20.0 GRAVEL, COARSE
20.0 - 25.0 SAND; WOOD FRAGMENTS AT 20.5 FEET
25.0 - 28.0 SAND OR GRAVEL

* * *

TEST HOLE NUMBER: 364
LOCATION: 102N-49W-04BBB 1
LEGAL LOCATION: NW NW NW SEC. 04, T. 102 N., R. 49 W.

12.0 - 15.0 SAND, DARK-GREY TO BLACK, COARSE, CLAYEY
15.0 - 30.0 SAND, DARK-GREY TO BLACK, MEDIUM TO COARSE

* * *

TEST HOLE NUMBER: 365
LOCATION: 102N-49W-05AB
LEGAL LOCATION: NW NE SEC. 05, T. 102 N., R. 49 W.

5.0 - 10.0 SAND, COARSE
12.0 - 15.0 SAND, COARSE
15.0 - 26.0 GRAVEL

* * *

TEST HOLE NUMBER: 366
LOCATION: 102N-49W-05ABAB
LEGAL LOCATION: NW NE NW NE SEC. 05, T. 102 N., R. 49 W.

2.0 - 34.0 SAND AND GRAVEL, BROWN, MEDIUM SAND, MEDIUM GRAVEL

* * *

TEST HOLE NUMBER: 367
LOCATION: 102N-49W-05BBB
LEGAL LOCATION: NW NW NW NW SEC. 05, T. 102 N., R. 49 W.

75
<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.0</td>
<td>Sand, Yellow-Brown, Medium to Coarse</td>
</tr>
</tbody>
</table>

**TEST HOLE NUMBER: 368**
LOCATION: 102N-49W-08ACDD
LEGAL LOCATION: SE SE SW NE SEC. 08, T. 102 N., R. 49 W.

<table>
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<tr>
<th>Depth (ft)</th>
<th>Description</th>
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<tbody>
<tr>
<td>7.0</td>
<td>Sand, Gray, Medium to Fine; Saturated, with Clay</td>
</tr>
<tr>
<td>17.0</td>
<td>Gravel, Fine; with Fine to Coarse Sand, 10 Percent Clay</td>
</tr>
<tr>
<td>20.0</td>
<td>Gravel, Fine to PEA; with Fine to Coarse Sand, 5 Percent Clay</td>
</tr>
<tr>
<td>24.0</td>
<td>Gravel, Fine to PEA; with Fine to Coarse Sand, Clean</td>
</tr>
</tbody>
</table>

**TEST HOLE NUMBER: 369**
LOCATION: 102N-49W-08BAAB
LEGAL LOCATION: NW NE NE NW SEC. 08, T. 102 N., R. 49 W.

* THIS LOG CONTAINS UNVERIFIED INFORMATION *

<table>
<thead>
<tr>
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<tbody>
<tr>
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**TEST HOLE NUMBER: 370**
LOCATION: 102N-49W-08CC
LEGAL LOCATION: SW SW SEC. 08, T. 102 N., R. 49 W.

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<tr>
<td>9.0</td>
<td>Sand, Medium to Coarse</td>
</tr>
<tr>
<td>14.0</td>
<td>Sand, Medium; to Fine Gravel</td>
</tr>
<tr>
<td>19.0</td>
<td>Sand, Coarse; to Fine Gravel</td>
</tr>
<tr>
<td>24.0</td>
<td>Sand, Medium; to Fine Gravel</td>
</tr>
</tbody>
</table>

**TEST HOLE NUMBER: 371**
LOCATION: 102N-49W-08C1CD
LEGAL LOCATION: SE SW SW SEC. 08, T. 102 N., R. 49 W.

* THIS LOG CONTAINS UNVERIFIED INFORMATION *

<table>
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<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>11.0</td>
<td>Sand</td>
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</tbody>
</table>

**TEST HOLE NUMBER: 372**
LOCATION: 102N-49W-08CD1
LEGAL LOCATION: SE SW SW SW SEC. 08, T. 102 N., R. 49 W.

11.0 - 12.0 SAND, FINE
12.0 - 20.0 GRAVEL, FINE; CLEAN AT BASE
20.0 - 25.0 GRAVEL, FINE, MEDIUM
25.0 - 30.0 SAND, FINE; CLEAN

*** ***

TEST HOLE NUMBER: 373
LOCATION: 102N-49W-08C
LEGAL LOCATION: SW SW SE SW SEC. 08, T. 102 N., R. 49 W.

10.0 - 23.0 SAND AND GRAVEL, GREENISH, FINE SAND TO FINE GRAVEL
23.0 - 11.0 GRAVEL, COARSE

*** ***

TEST HOLE NUMBER: 374
LOCATION: 102N-49W-08D
LEGAL LOCATION: SW SE SW SEC. 08, T. 102 N., R. 49 W.

10.0 - 20.0 SAND, BROWN, MEDIUM, WELL-SORTED
20.0 - 30.0 SAND AND GRAVEL, VERY COARSE SAND, VERY FINE GRAVEL

*** ***

TEST HOLE NUMBER: 375
LOCATION: 102N-49W-08D
LEGAL LOCATION: SE SE SW SEC. 08, T. 102 N., R. 49 W.

14.0 - 35.0 SAND, BROWN, MEDIUM; GRADES TO A MEDIUM GRAVEL WITH DEPTH

*** ***

TEST HOLE NUMBER: 376
LOCATION: 102N-49W-09A
LEGAL LOCATION: NE NW NE NW SEC. 09, T. 102 N., R. 49 W.

* THIS LOG CONTAINS UNVERIFIED INFORMATION *

6.0 - 10.0 SAND
14.0 - 74.0 SAND AND GRAVEL

*** ***

TEST HOLE NUMBER: 377
LOCATION: 102N-49W-09B
LEGAL LOCATION: NW NE NW NW SEC. 09, T. 102 N., R. 49 W.

77
8.0 - 14.0 SAND AND GRAVEL, COARSE SAND AND FINE GRAVEL
14.0 - 35.0 GRAVEL, FINE TO COARSE
* * * *

TEST HOLE NUMBER: 375
LOCATION: 102N-49W-09BBAB 2
LEGAL LOCATION: NW NE NW NW SEC. 09, T. 102 N., R. 49 W.
10.0 - 34.6 GRAVEL, GRAY, MEDIUM TO COARSE; SOME GRAY COARSE SAND
* * * *

TEST HOLE NUMBER: 379
LOCATION: 102N-49W-09BBAB 3
LEGAL LOCATION: NW NE NW NW SEC. 09, T. 102 N., R. 49 W.
4.0 - 37.0 SAND, BROWN, MEDIUM; SOME GRAVEL
* * * *

TEST HOLE NUMBER: 380
LOCATION: 102N-49W-10AAAA
LEGAL LOCATION: NE NE NE NE SEC. 10, T. 102 N., R. 49 W.
0 - 2.0 SAND, FINE
24.0 - 27.0 SAND, MEDIUM
* * * *

TEST HOLE NUMBER: 381
LOCATION: 102N-49W-12AABB
LEGAL LOCATION: NW NW NE NE SEC. 12, T. 102 N., R. 49 W.
15.0 - 16.0 SAND, FINE
* * * *

TEST HOLE NUMBER: 382
LOCATION: 102N-49W-14AAAA
LEGAL LOCATION: NE NE NE NE SEC. 14, T. 102 N., R. 49 W.
5.0 - 11.0 SAND AND GRAVEL
* * * *

TEST HOLE NUMBER: 383
LOCATION: 102N-49W-14AAAB
LEGAL LOCATION: NW NE NE NE SEC. 14, T. 102 N., R. 49 W.
2.0 - 22.0 SAND AND GRAVEL, MEDIUM SAND TO MEDIUM GRAVEL; WELL ROUNDED TO ANGULAR

78
TEST HOLE NUMBER: 384
LOCATION: 102N-49W-14AAAB 2
LEGAL LOCATION: NW NE NE NE SEC. 14, T. 102 N., R. 49 W.

0 - 18.0 SAND AND GRAVEL, BROWN, COARSE SAND, MEDIUM TO COARSE GRAVEL

* * *

TEST HOLE NUMBER: 385
LOCATION: 102N-49W-14DDDA 1
LEGAL LOCATION: NE SE SE SE SEC. 14, T. 102 N., R. 49 W.

0 - 11.0 SAND AND GRAVEL, FINE SAND TO MEDIUM GRAVEL; WELL ROUNDED

* * *

TEST HOLE NUMBER: 386
LOCATION: 102N-49W-14DDDA 2
LEGAL LOCATION: NE SE SE SE SEC. 14, T. 102 N., R. 49 W.

0 - 8.0 GRAVEL, MEDIUM TO COARSE

* * *

TEST HOLE NUMBER: 387
LOCATION: 102N-49W-15CBBB
LEGAL LOCATION: NW NW NW SW SEC. 15, T. 102 N., R. 49 W.

4.0 - 7.0 SAND, MEDIUM TO COARSE; WITH BROWN CLAY
10.0 - 20.0 SAND AND GRAVEL, COARSE SAND AND FINE GRAVEL; SOME BROWN CLAY BUT NOT AS MUCH AS FROM 4 TO 7 FEET

* * *

TEST HOLE NUMBER: 388
LOCATION: 102N-49W-16ABB
LEGAL LOCATION: NW NW NE SEC. 16, T. 102 N., R. 49 W.

9.0 - 17.0 GRAVEL, COARSE, SANDY AT TOP
17.0 - 20.0 SAND, SILTY
20.0 - 30.0 GRAVEL AND SAND

* * *

TEST HOLE NUMBER: 389
LOCATION: 102N-49W-16BB
LEGAL LOCATION: NW NW SEC. 16, T. 102 N., R. 49 W.

9.0 - 15.0 GRAVEL, COARSE, FINE AT TOP; CLEAN
15.0 - 24.0 GRAVEL, COARSE; CLEAN, SOME SAND AT BASE
24.0 - 26.0 GRAVEL

** **

TEST HOLE NUMBER: 390
LOCATION: 102N-49W-16CCDC
LEGAL LOCATION: SW SE SW SW SEC. 16, T. 102 N., R. 49 W.

8.0 - 17.0 SAND, CLAYEY
17.0 - 38.0 SAND AND GRAVEL, VERY COARSE SAND, VERY FINE GRAVEL

** **

TEST HOLE NUMBER: 391
LOCATION: 102N-49W-17AB
LEGAL LOCATION: NW NE SEC. 17, T. 102 N., R. 49 W.

0 - 10.0 SAND, COARSE
10.0 - 20.0 GRAVEL AND SAND; CLEAN AT TOP
20.0 - 30.0 SAND AND GRAVEL, COARSE AT BASE

** **

TEST HOLE NUMBER: 392
LOCATION: 102N-49W-17CAAC
LEGAL LOCATION: SW SW NE SW SEC. 17, T. 102 N., R. 49 W.

8.0 - 20.0 SAND, MEDIUM, CLAYEY
20.0 - 38.0 SAND AND GRAVEL, VERY COARSE SAND, VERY FINE GRAVEL, SILTY; CLEANER FROM 30 FEET

** **

TEST HOLE NUMBER: 393
LOCATION: 102N-49W-17CDCD
LEGAL LOCATION: SE SW SE SW SEC. 17, T. 102 N., R. 49 W.

4.0 - 41.0 SAND, BROWN, MEDIUM

** **

TEST HOLE NUMBER: 394
LOCATION: 102N-49W-17DACC
LEGAL LOCATION: SW SW NE SE SEC. 17, T. 102 N., R. 49 W.

14.0 - 22.0 SAND AND GRAVEL, BLACK, VERY COARSE SAND, FINE GRAVEL, CLAYEY
22.0 - 33.0 SAND AND GRAVEL, VERY COARSE SAND, FINE GRAVEL

** **

80
TEST HOLE NUMBER: 395
LOCATION: 102N-49W-20ACC
LEGAL LOCATION: SW SW NE NE SEC. 20, T. 102 N., R. 49 W.

14.0 - 16.0 SAND, CLAYEY
16.0 - 35.0 SAND AND GRAVEL, VERY COARSE SAND, FINE GRAVEL

** **

TEST HOLE NUMBER: 396
LOCATION: 102N-49W-20ABA 1
LEGAL LOCATION: NE NW NE SEC. 20, T. 102 N., R. 49 W.

6.0 - 16.0 SAND AND GRAVEL, BROWN, 60 PERCENT FINE TO COARSE SAND, 40 PERCENT FINE TO MEDIUM GRAVEL
16.0 - 22.0 SAND AND GRAVEL, 60 PERCENT FINE TO COARSE SAND, 40 PERCENT FINE TO MEDIUM GRAVEL
22.0 - 36.0 SAND AND GRAVEL, GRAY, 45 PERCENT FINE TO COARSE SAND, 45 PERCENT FINE TO MEDIUM GRAVEL, 10 PERCENT COARSE GRAVEL

** **

TEST HOLE NUMBER: 397
LOCATION: 102N-49W-20ABA 2
LEGAL LOCATION: NE NW NE SEC. 20, T. 102 N., R. 49 W.

7.0 - 18.0 SAND AND GRAVEL, BROWN, 70 PERCENT FINE TO COARSE SAND, 30 PERCENT FINE TO MEDIUM GRAVEL
18.0 - 21.0 SAND AND GRAVEL, GRAY, 40 PERCENT FINE TO COARSE SAND, 60 PERCENT FINE TO MEDIUM GRAVEL
21.0 - 28.0 SAND AND GRAVEL, 70 PERCENT MEDIUM TO COARSE SAND, 30 PERCENT FINE TO MEDIUM GRAVEL

** **

TEST HOLE NUMBER: 398
LOCATION: 102N-49W-20ABA 3
LEGAL LOCATION: NE NW NE SEC. 20, T. 102 N., R. 49 W.

6.0 - 18.0 SAND AND GRAVEL, 40 PERCENT FINE TO COARSE SAND, 60 PERCENT FINE TO MEDIUM GRAVEL
18.0 - 27.0 SAND AND GRAVEL, 60 PERCENT MEDIUM TO COARSE SAND, 40 PERCENT FINE TO MEDIUM GRAVEL

81
TEST HOLE NUMBER: 399
LEGAL LOCATION: NE NE NW NE SEC. 20, T. 102 N., R. 49 W.

<table>
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<th>Depth</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.0</td>
<td>12.0</td>
<td>SAND, DARK-BROWN, GRAVELLY; VERY DIRTY, WET</td>
</tr>
<tr>
<td>12.0</td>
<td>17.0</td>
<td>SAND, LIGHT-BROWN, GRAVELLY; DIRTY</td>
</tr>
<tr>
<td>17.0</td>
<td>18.0</td>
<td>SAND AND GRAVEL, GRAY, FINE TO MEDIUM</td>
</tr>
<tr>
<td>18.0</td>
<td>20.0</td>
<td>SAND AND GRAVEL, GRAY, FINE TO COARSE</td>
</tr>
<tr>
<td>20.0</td>
<td>24.0</td>
<td>SAND AND GRAVEL, FINE TO MEDIUM</td>
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<tr>
<td>24.0</td>
<td>25.0</td>
<td>SAND AND GRAVEL, COARSE</td>
</tr>
<tr>
<td>25.0</td>
<td>29.0</td>
<td>SAND AND GRAVEL, FINE TO MEDIUM</td>
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TEST HOLE NUMBER: 400
LEGAL LOCATION: NE NW NW NE SEC. 20, T. 102 N., R. 49 W.

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<th>Depth</th>
<th>Percentage</th>
<th>Description</th>
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<tbody>
<tr>
<td>14.0</td>
<td>17.0</td>
<td>SAND AND GRAVEL, GRAYISH-BROWN, MEDIUM; VERY DIRTY, WET</td>
</tr>
<tr>
<td>17.0</td>
<td>22.0</td>
<td>SAND AND GRAVEL, GRAY, FINE</td>
</tr>
<tr>
<td>22.0</td>
<td>25.0</td>
<td>SAND AND GRAVEL, MEDIUM SAND, COARSE GRAVEL</td>
</tr>
<tr>
<td>25.0</td>
<td>37.0</td>
<td>SAND AND GRAVEL, FINE TO MEDIUM</td>
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TEST HOLE NUMBER: 401
LOCATION: 102N-19W-20ABBB
LEGAL LOCATION: NW NW NW NE SEC. 20, T. 102 N., R. 49 W.

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<th>Depth</th>
<th>Percentage</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>8.0</td>
<td>13.0</td>
<td>GRAVEL, FINE TO MEDIUM; WITH SAND AND BROWN CLAY, SATURATED</td>
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<tr>
<td>13.0</td>
<td>20.0</td>
<td>GRAVEL, FINE TO MEDIUM; WITH SAND, CLEAN</td>
</tr>
<tr>
<td>20.0</td>
<td>33.0</td>
<td>GRAVEL, FINE TO COARSE; WITH SAND, CLEAN</td>
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TEST HOLE NUMBER: 402
LOCATION: 102N-19W-20ACBB
LEGAL LOCATION: NW NW SW NE SEC. 20, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Percentage</th>
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<td>SAND, MEDIUM TO COARSE; WITH BROWN CLAY</td>
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<tr>
<td>20.0</td>
<td>42.0</td>
<td>SAND, MEDIUM TO COARSE; WITH FINE TO COARSE GRAVEL</td>
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TEST HOLE NUMBER: 403
LOCATION: 102N-19W-20ACCB
LEGAL LOCATION: NW SE SW NE SEC. 20, T. 102 N., R. 49 W.
9.0 - 14.0 Sand, fine to coarse; with some brown clay
14.0 - 19.0 Sand, medium to coarse; with gravel and brown clay
19.0 - 29.0 Sand and gravel, coarse sand, fine to coarse gravel; with some clay

** **

Test Hole Number: 404
Location: 102N-49W-20ACDC 1
Legal Location: SE SE SW NE Sec. 20, T. 102 N., R. 49 W.
8.0 - 18.0 Sand, medium to coarse
18.0 - 44.0 Sand and gravel, medium to coarse sand to coarse gravel

** **

Test Hole Number: 405
Location: 102N-49W-20ACDC 2
Legal Location: SW SE SW NE Sec. 20, T. 102 N., R. 49 W.
11.0 - 18.0 Sand, medium to coarse
18.0 - 23.0 Sand and gravel, medium to coarse sand, medium to coarse gravel
23.0 - 37.0 Sand, medium to coarse; with fine to medium gravel

** **

Test Hole Number: 406
Location: 102N-49W-20ACDD
Legal Location: SE SE SW NE Sec. 20, T. 102 N., R. 49 W.
15.0 - 26.0 Sand, coarse; with fine to coarse gravel and heavy clay-silt

** **

Test Hole Number: 407
Location: 102N-49W-20BAAA
Legal Location: NE NE NE NW Sec. 20, T. 102 N., R. 49 W.
7.0 - 19.0 Gravel, coarse; with sand and some clay
19.0 - 38.0 Gravel, medium; with sand, clean

** **

Test Hole Number: 408
Location: 102N-49W-20BACD
Legal Location: SE SW NE NW Sec. 20, T. 102 N., R. 49 W.
7.0 - 12.0 Sand and clay
12.0 - 31.0 SAND AND GRAVEL, FINE TO COARSE SAND, FINE GRAVEL; CLEAN

* * *

TEST HOLE NUMBER: 409
LEGAL LOCATION: SW SW SE NW SEC. 20, T. 102 N., R. 49 W.
12.0 - 19.0 SAND, FINE TO MEDIUM; WITH SILT AND CLAY
19.0 - 33.0 GRAVEL, FINE TO MEDIUM; WITH SAND AND SOME CLAY

* * *

TEST HOLE NUMBER: 410
LOCATION: 102N-49W-20CD
LEGAL LOCATION: SE SW SEC. 20, T. 102 N., R. 49 W.
9.0 - 15.0 SAND AND GRAVEL
15.0 - 20.0 GRAVEL
20.0 - 25.0 SAND
25.0 - 45.0 GRAVEL

* * *

TEST HOLE NUMBER: 411
LOCATION: 102N-49W-20DADB
LEGAL LOCATION: NW NW NE SE SEC. 20, T. 102 N., R. 49 W.
9.0 - 19.0 SAND, MEDIUM; WITH DARK-GRAY CLAY, SATURATED
23.0 - 28.0 GRAVEL, FINE; WITH SAND AND CLAY

* * *

TEST HOLE NUMBER: 412
LOCATION: 102N-49W-20BBDD
LEGAL LOCATION: SE SE NW SE SEC. 20, T. 102 N., R. 49 W.
9.0 - 17.0 GRAVEL, FINE, SANDY, CLAYEY, SILTY
17.0 - 38.0 GRAVEL, FINE

* * *

TEST HOLE NUMBER: 413
LOCATION: 102N-49W-20DCCC
LEGAL LOCATION: SW SW SE SEC. 20, T. 102 N., R. 49 W.
8.0 - 10.0 GRAVEL, COARSE
10.0 - 30.0 GRAVEL AND SAND

* * *

84
TEST HOLE NUMBER: 414
LOCATION: 102N-49W-20DCD 1
LEGAL LOCATION: SE SW SE SEC. 20, T. 102 N., R. 49 W.
12.0 - 35.0 SAND AND GRAVEL

* * *

TEST HOLE NUMBER: 415
LOCATION: 102N-49W-20DCD 2
LEGAL LOCATION: SE SW SE SEC. 20, T. 102 N., R. 49 W.
10.0 - 34.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE GRAVEL

* * *

TEST HOLE NUMBER: 416
LOCATION: 102N-49W-20DCD 3
LEGAL LOCATION: SE SW SE SEC. 20, T. 102 N., R. 49 W.
14.0 - 17.0 SAND, BROWN, FINE TO COARSE; VERY DIRTY, 10 PERCENT MEDIUM TO COARSE GRAVEL
17.0 - 34.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE GRAVEL

* * *

TEST HOLE NUMBER: 417
LOCATION: 102N-49W-20DCD 4
LEGAL LOCATION: SE SW SE SEC. 20, T. 102 N., R. 49 W.
13.0 - 16.0 SAND, FINE TO COARSE; 20 PERCENT FINE TO MEDIUM GRAVEL
16.0 - 34.0 SAND AND GRAVEL, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL

* * *

TEST HOLE NUMBER: 418
LOCATION: 102N-49W-20DCD 5
LEGAL LOCATION: SE SW SE SEC. 20, T. 102 N., R. 49 W.
12.0 - 20.0 SAND AND GRAVEL, RUST-COLORED, FINE TO COARSE SAND, MEDIUM GRAVEL; DIRTY
20.0 - 26.0 SAND AND GRAVEL, GRAY, MEDIUM TO COARSE SAND, FINE TO MEDIUM GRAVEL

* * *

TEST HOLE NUMBER: 419
LOCATION: 102N-49W-20DCD 6
LEGAL LOCATION: SE SW SE SEC. 20, T. 102 N., R. 49 W.

85
12.0 - 33.0 SAND AND GRAVEL, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL

TEST HOLE NUMBER: 420
LOCATION: 102N-49W-20DCD 7
LEGAL LOCATION: SE SW SE SEC. 20, T. 102 N., R. 49 W.

14.0 - 23.0 SAND AND GRAVEL, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL, SILTY

23.0 - 32.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE TO MEDIUM GRAVEL

TEST HOLE NUMBER: 421
LOCATION: 102N-49W-20DCD 8
LEGAL LOCATION: SE SW SE SEC. 20, T. 102 N., R. 49 W.

7.0 - 36.0 SAND AND GRAVEL, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL

TEST HOLE NUMBER: 422
LOCATION: 102N-49W-20DCD 9
LEGAL LOCATION: SE SW SE SEC. 20, T. 102 N., R. 49 W.

7.0 - 23.0 SAND AND GRAVEL, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL

23.0 - 35.0 SAND AND GRAVEL, FINE TO COARSE SAND, FINE TO COARSE GRAVEL

TEST HOLE NUMBER: 423
LOCATION: 102N-49W-21BBA
LEGAL LOCATION: NE NW NW SEC. 21, T. 102 N., R. 49 W.

2.0 - 15.0 GRAVEL, FINE TO COARSE, CLAYEY

15.0 - 20.0 GRAVEL, COARSE

20.0 - 27.0 SAND AND GRAVEL, FINE TO COARSE SAND, COARSE GRAVEL

TEST HOLE NUMBER: 424
LOCATION: 102N-49W-21BCAC
LEGAL LOCATION: SW NE SW NW SEC. 21, T. 102 N., R. 49 W.

8.0 - 15.0 GRAVEL, VERY FINE, CLAYEY

15.0 - 25.0 SAND AND GRAVEL, VERY COARSE SAND, FINF GRAVEL

86
TEST HOLE NUMBER: 425
LOCATION: 102N-49W-21CCC
LEGAL LOCATION: SW SW SW SEC. 21, T. 102 N., R. 49 W.

9.0 - 10.6 SAND AND GRAVEL
10.0 - 20.0 SAND
20.0 - 25.0 SAND, COARSE; SOME GRAVEL
25.0 - 72.0 SAND, MEDIUM; CLEAN

TEST HOLE NUMBER: 426
LOCATION: 101N-49W-21CCD
LEGAL LOCATION: SE SW SW SEC. 21, T. 102 N., R. 49 W.

6.0 - 17.0 SAND AND GRAVEL, BROWN, FINE TO COARSE
      SAND, FINE TO MEDIUM GRAVEL
17.0 - 30.0 SAND AND GRAVEL, GRAY, FINE TO COARSE
      SAND, FINE TO MEDIUM GRAVEL; LIGHT SILT
      AND CLAY

TEST HOLE NUMBER: 427
LOCATION: 102N-49W-21CDBB
LEGAL LOCATION: NW NW SE SW SEC. 21, T. 102 N., R. 49 W.

7.0 - 12.0 SAND, COARSE, SILTY
12.0 - 27.0 SAND AND GRAVEL, VERY COARSE SAND, VERY
      FINE GRAVEL

TEST HOLE NUMBER: 428
LOCATION: 102N-49W-21DBBB
LEGAL LOCATION: SE SE NW SE SEC. 21, T. 102 N., R. 49 W.

* THIS LOG CONTAINS UNVERIFIED INFORMATION *

2.0 - 20.0 SAND

TEST HOLE NUMBER: 429
LOCATION: 102N-49W-21DCC
LEGAL LOCATION: SW SW SE SEC. 21, T. 102 N., R. 49 W.

6.0 - 13.0 GRAVEL
13.0 - 16.0 SAND, FINE
16.0 - 21.0 SAND, COARSE
21.0 - 26.0 GRAVEL, COARSE; BOULDERS AND CLAY

87
STREAKS
* * *

TEST HOLE NUMBER: 430
LOCATION: 102N-49W-210DDAB
LEGAL LOCATION: NW NE SE SE SEC. 21, T. 102 N., R. 49 W.
***********************************************************************
* THIS LOG CONTAINS UNVERIFIED INFORMATION *
***********************************************************************

15.0 - 26.0 SAND AND GRAVEL
* * *

TEST HOLE NUMBER: 431
LOCATION: 102N-49W-22BBB
LEGAL LOCATION: NW NW NW NW SEC. 22, T. 102 N., R. 49 W.

6.0 - 10.0 SAND, MEDIUM TO COARSE
* * *

TEST HOLE NUMBER: 432
LEGAL LOCATION: NW NW NW NW SEC. 22, T. 102 N., R. 49 W.

1.0 - 13.0 SAND, BROWN, MEDIUM; SOME CLAY
* * *

TEST HOLE NUMBER: 433
LOCATION: 102N-49W-25CCDD
LEGAL LOCATION: SE SE SW SW SEC. 25, T. 102 N., R. 49 W.

1.0 - 8.0 SAND AND GRAVEL, BROWN, MEDIUM SAND,
MEDIUM TO coarse GRAVEL; OXIDIZED, SOME COBBLES
12.0 - 16.0 SAND AND GRAVEL, BROWN, MEDIUM SAND,
MEDIUM GRAVEL; OXIDIZED
* * *

TEST HOLE NUMBER: 434
LOCATION: 102N-49W-25CCDD 2
LEGAL LOCATION: SE SE SW SW SEC. 25, T. 102 N., R. 49 W.

0 - 8.0 SAND AND GRAVEL, BROWN, MEDIUM SAND,
MEDIUM TO coarse GRAVEL
12.0 - 16.0 SAND AND GRAVEL, BROWN, MEDIUM SAND,
MEDIUM GRAVEL; OXIDIZED
* * *

88
TEST HOLE NUMBER: 435
LOCATION: 102N-49W-28ABB
LEGAL LOCATION: NW NW NW NE SEC. 28, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>SAND, MEDIUM</td>
</tr>
<tr>
<td>10.0</td>
<td>SAND AND GRAVEL, COARSE SAND, FINE GRAVEL</td>
</tr>
<tr>
<td>20.0</td>
<td>SAND AND GRAVEL, VERY COARSE SAND, FINE GRAVEL</td>
</tr>
</tbody>
</table>

* * * *

TEST HOLE NUMBER: 436
LOCATION: 102N-49W-28BBAB
LEGAL LOCATION: NW NE NW NW SEC. 28, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0</td>
<td>GRAVEL, FINE; SAND</td>
</tr>
</tbody>
</table>

* * * *

TEST HOLE NUMBER: 437
LOCATION: 102N-49W-28BBDC
LEGAL LOCATION: SW SE NW NW SEC. 28, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>SAND AND GRAVEL, COARSE SAND, FINE GRAVEL, SILTY</td>
</tr>
<tr>
<td>7.0</td>
<td>SAND, VERY COARSE, SILTY</td>
</tr>
</tbody>
</table>

* * * *

TEST HOLE NUMBER: 438
LOCATION: 102N-49W-28BCDC
LEGAL LOCATION: SW SE SW NW SEC. 28, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>SAND, VERY COARSE, CLAYEY; GRAVEL</td>
</tr>
<tr>
<td>10.0</td>
<td>SAND AND GRAVEL, VERY COARSE SAND, VERY FINE GRAVEL</td>
</tr>
</tbody>
</table>

* * * *

TEST HOLE NUMBER: 439
LOCATION: 102N-49W-28CADD
LEGAL LOCATION: SE SE NE SW SEC. 28, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>SAND AND GRAVEL, VERY COARSE SAND, FINE GRAVEL</td>
</tr>
</tbody>
</table>

* * * *

TEST HOLE NUMBER: 440
LOCATION: 102N-49W-28CECC
LEGAL LOCATION: SW SW NW SW SEC. 28, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>6.0</td>
<td>SAND, FINE; WITH SILT AND CLAY</td>
</tr>
<tr>
<td>9.0</td>
<td>GRAVEL, FINE; WITH SAND, SILT AND CLAY</td>
</tr>
</tbody>
</table>

89
14.0 - 23.0 gravel, fine to coarse; with sand, silt and clay
23.0 - 40.0 gravel, fine to coarse; with sand

** **

Test hole number: 441
Location: 102N-49W-28CCAC
Legal location: SW NE SW SW sec. 28, T. 102 N., R. 49 W.

7.0 - 8.0 sand, brown, very fine to fine
15.0 - 24.0 sand, medium to coarse; with some fine gravel
24.0 - 30.0 sand, very fine to coarse; with fine gravel

** **

Test hole number: 442
Location: 102N-49W-28CCC
Legal location: SW SW SW sec. 28, T. 102 N., R. 49 W.

5.0 - 23.0 gravel; fine sand at base
23.0 - 36.0 gravel, coarse

** **

Test hole number: 443
Location: 102N-49W-28CCD
Legal location: SE SW SW sec. 28, T. 102 N., R. 49 W.

14.0 - 31.0 sand and gravel, fine to coarse sand, fine to coarse gravel

** **

Test hole number: 444
Location: 102N-49W-28CCD 1
Legal location: SE SW SW sec. 28, T. 102 N., R. 49 W.

12.0 - 17.0 sand, fine to coarse; gravel, fine to medium, silty
17.0 - 23.0 sand, fine to coarse; gravel, fine to medium, slightly silty
23.0 - 28.0 sand and gravel, gray, fine to coarse sand, fine to medium gravel

** **

Test hole number: 445
Location: 102N-49W-28CCD 2
Legal location: SE SW SW sec. 28, T. 102 N., R. 49 W.

9.0 - 14.0 sand, fine to medium, silty; scattered

90
<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.0</td>
<td>SAND, BROWN, FINE TO COARSE, SILTY; SOME FINE TO MEDIUM GRAVEL</td>
</tr>
<tr>
<td>17.0</td>
<td>SAND, GRAY, FINE TO COARSE SAND, SILTY; FINE TO MEDIUM GRAVEL</td>
</tr>
</tbody>
</table>

** TEST HOLE NUMBER: 446  
LOCATION: 102N-49W-28CCD  
LEGAL LOCATION: SE SW SW SEC. 28, T. 102 N., R. 49 W.  

<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.0</td>
<td>SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE TO MEDIUM GRAVEL, SILTY TO VERY SILTY</td>
</tr>
<tr>
<td>17.0</td>
<td>SAND, MEDIUM TO COARSE, SLIGHTLY SILTY; SOME FINE GRAVEL</td>
</tr>
<tr>
<td>21.0</td>
<td>SAND AND GRAVEL, GRAY, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL, SLIGHTLY SILTY</td>
</tr>
</tbody>
</table>

** TEST HOLE NUMBER: 447  
LOCATION: 102N-49W-28CCD  
LEGAL LOCATION: SE SW SW SEC. 28, T. 102 N., R. 49 W.  

<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.0</td>
<td>SAND, BROWN, MEDIUM TO COARSE; SOME FINE TO MEDIUM GRAVEL</td>
</tr>
<tr>
<td>19.0</td>
<td>SAND, FINE TO COARSE; SOME SCATTERED FINE GRAVEL</td>
</tr>
<tr>
<td>22.0</td>
<td>SAND AND GRAVEL, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL</td>
</tr>
</tbody>
</table>

** TEST HOLE NUMBER: 448  
LOCATION: 102N-49W-28CCD  
LEGAL LOCATION: SE SW SW SEC. 28, T. 102 N., R. 49 W.  

<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.0</td>
<td>SAND AND GRAVEL, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL, SILTY</td>
</tr>
<tr>
<td>23.0</td>
<td>SAND, MEDIUM TO COARSE, SLIGHTLY SILTY; SOME FINE TO MEDIUM GRAVEL</td>
</tr>
</tbody>
</table>

** TEST HOLE NUMBER: 449  
LOCATION: 102N-49W-28CCD  
LEGAL LOCATION: SE SW SW SEC. 28, T. 102 N., R. 49 W.  

<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.0</td>
<td>SAND AND GRAVEL, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL, SLIGHTLY SILTY</td>
</tr>
</tbody>
</table>

91
TEST HOLE NUMBER: 450
LEGAL LOCATION: SW SW SE SW SEC. 28, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Sand Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.0</td>
<td>15.0 SAND, MEDIUM TO COARSE</td>
</tr>
<tr>
<td>15.0</td>
<td>30.0 SAND AND GRAVEL, VERY COARSE SAND, FINE GRAVEL</td>
</tr>
</tbody>
</table>

* * *

TEST HOLE NUMBER: 451
LOCATION: 102N-49W-28CDD
LEGAL LOCATION: SE SE SW SEC. 28, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.0</td>
<td>24.0 GRAVEL</td>
</tr>
<tr>
<td>24.0</td>
<td>28.0 GRAVEL AND SAND</td>
</tr>
</tbody>
</table>

* * *

TEST HOLE NUMBER: 452
LOCATION: 102N-49W-28DBBB
LEGAL LOCATION: NW NW NW SE SEC. 28, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Sand Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10.0 SAND, MEDIUM, WELL-SORTED; SILLED</td>
</tr>
<tr>
<td>10.0</td>
<td>15.0 SAND, COARSE</td>
</tr>
<tr>
<td>15.0</td>
<td>30.0 SAND AND GRAVEL, VERY COARSE SAND, FINE GRAVEL</td>
</tr>
</tbody>
</table>

* * *

TEST HOLE NUMBER: 453
LOCATION: 102N-49W-28DDDD
LEGAL LOCATION: SE SE SE SEC. 28, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Sand Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.0</td>
<td>14.0 SAND, FINE</td>
</tr>
<tr>
<td>14.0</td>
<td>34.0 SAND, MEDIUM</td>
</tr>
</tbody>
</table>

* * *

TEST HOLE NUMBER: 454
LOCATION: 102N-49W-28DDDD
LEGAL LOCATION: SE SE SE SEC. 28, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Sand Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.0</td>
<td>32.0 SAND, COARSE, VERY COARSE TOWARD BOTTOM</td>
</tr>
</tbody>
</table>

* * *

TEST HOLE NUMBER: 455
LOCATION: 102N-49W-29AAAB
LEGAL LOCATION: NW NE NE SE SEC. 29, T. 102 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.0</td>
<td>17.0 GRAVEL AND SAND, CLAYEY</td>
</tr>
</tbody>
</table>

92
17.0 - 45.0 SAND AND GRAVEL, VERY COARSE SAND, VERY FINE GRAVEL

TEST HOLE NUMBER: 456
LOCATION: 102N-49W-29ADD
LEGAL LOCATION: SW SE SE NE SEC. 29, T. 102 N., R. 49 W.

14.0 - 35.0 SAND AND GRAVEL

TEST HOLE NUMBER: 457
LOCATION: 102N-49W-29BADD
LEGAL LOCATION: SE SW SE NW SEC. 29, T. 102 N., R. 49 W.

11.0 - 16.0 SAND, MEDIUM
16.0 - 18.0 GRAVEL
18.0 - 35.0 SAND; WITH FINE GRAVEL

TEST HOLE NUMBER: 458
LOCATION: 102N-49W-29CC
LEGAL LOCATION: SW SW SEC. 29, T. 102 N., R. 49 W.

5.0 - 14.0 SAND, GRAVELLY
18.0 - 21.0 SAND AND GRAVEL; BOULDERS
21.0 - 33.0 SAND, LIGHT-BROWN, COARSE; WET

TEST HOLE NUMBER: 459
LOCATION: 102N-49W-29CC 1
LEGAL LOCATION: SW SW SEC. 29, T. 102 N., R. 49 W.

4.0 - 11.0 GRAVEL
12.0 - 14.0 GRAVEL
14.0 - 23.0 GRAVEL, VERY COARSE
23.0 - 34.0 SAND, VERY COARSE; CLEAN

TEST HOLE NUMBER: 460
LOCATION: 102N-49W-29CC 2
LEGAL LOCATION: SW SW SEC. 29, T. 102 N., R. 49 W.

12.0 - 20.0 SAND, LIGHT-BROWN; CLEAN, MOIST
20.0 - 28.0 SAND AND CLAY, GRAY; WET

TEST HOLE NUMBER: 461

93
LOCATION: 102N-49W-29CC  3
LEGAL LOCATION: SW SW SW SEC. 29, T. 102 N., R. 49 W.

10.0 - 17.0 GRANITE, COARSE; SOME CLAY AT TOP
17.0 - 25.0 GRANITE
25.0 - 27.0 SAND, FINE

* * *

TEST HOLE NUMBER: 462
LOCATION: 102N-49W-29CD
LEGAL LOCATION: SE SW SEC. 29, T. 102 N., R. 49 W.

14.0 - 19.0 SAND, FINE TO COARSE
19.0 - 24.0 SAND, MEDIUM TO COARSE
24.0 - 29.0 SAND, FINE TO MEDIUM

* * *

TEST HOLE NUMBER: 463
LOCATION: 102N-49W-29DCA
LEGAL LOCATION: NE NE SW SE SEC. 29, T. 102 N., R. 49 W.

4.0 - 10.0 GRAVEL AND SAND, MEDIUM
10.0 - 22.0 SAND, VERY COARSE; GRAVEL

* * *

TEST HOLE NUMBER: 464
LOCATION: 102N-49W-29DD
LEGAL LOCATION: SE SE SEC. 29, T. 102 N., R. 49 W.

10.0 - 30.0 GRAVEL

* * *

TEST HOLE NUMBER: 465
LOCATION: 102N-49W-29DDA
LEGAL LOCATION: NE SE SE SE SEC. 29, T. 102 N., R. 49 W.

0 - 3.0 SAND, MEDIUM, WELL-SORTED
3.0 - 32.0 SAND AND GRAVEL, VERY COARSE SAND, FINE
      GRAVEL

* * *

TEST HOLE NUMBER: 466
LOCATION: 102N-49W-30DD
LEGAL LOCATION: SE SE SEC. 30, T. 102 N., R. 49 W.

0 - 1.0 SAND AND CLAY, BLACK; MOIST (TOPSOIL)
1.0 - 6.0 SAND, LIGHT-BROWN, GRAVELLY; MOIST
6.0 - 12.0 GRAVEL, COARSE

94
<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.0</td>
<td>SAND, GRAVELLY</td>
<td>* * *</td>
</tr>
<tr>
<td>1.0</td>
<td>GRavel, BOULDERY; VERY CLEAN</td>
<td></td>
</tr>
<tr>
<td>12.0</td>
<td>GRavel, COARSE</td>
<td>* * *</td>
</tr>
<tr>
<td>20.0</td>
<td>SAND, FINE TO MEDIUM; SATURATED</td>
<td>* * *</td>
</tr>
<tr>
<td>2.0</td>
<td>SAND, DARK-BROWN, CLAYEY; DRY</td>
<td></td>
</tr>
<tr>
<td>4.0</td>
<td>SAND AND GRAVEL, FINE; DIRTY, DRY</td>
<td></td>
</tr>
<tr>
<td>7.0</td>
<td>SAND, REDDISH-BROWN, MEDIUM; DRY</td>
<td></td>
</tr>
<tr>
<td>12.0</td>
<td>GRAVEL, BROWN, MEDIUM TO COARSE, SANDY; VERY DIRTY</td>
<td></td>
</tr>
<tr>
<td>22.0</td>
<td>SAND AND GRAVEL, GRAY, FINE</td>
<td>* * *</td>
</tr>
<tr>
<td>11.0</td>
<td>SAND AND GRAVEL, COARSE GRAVEL; FAIRLY CLEAN</td>
<td></td>
</tr>
<tr>
<td>23.0</td>
<td>SAND AND GRAVEL, COARSE SAND, FINE GRAVEL</td>
<td>* * *</td>
</tr>
<tr>
<td>3.0</td>
<td>SAND, MEDIUM</td>
<td></td>
</tr>
<tr>
<td>11.0</td>
<td>SAND, MEDIUM TO COARSE; WITH GRAVEL</td>
<td></td>
</tr>
<tr>
<td>16.0</td>
<td>SAND AND GRAVEL, COARSE SAND TO COARSE GRAVEL</td>
<td>* * *</td>
</tr>
</tbody>
</table>
TEST HOLE NUMBER: 472
LOCATION: 102N-49W-32ABBB
LEGAL LOCATION: NW NW NW NE SEC. 32, T. 102 N., R. 49 W.

15.0 - 25.0 SAND, FINE; WITH CLAY
25.0 - 29.0 SAND AND GRAVEL; LITTLE CLAY

* * *

TEST HOLE NUMBER: 473
LOCATION: 102N-49W-32ABCA
LEGAL LOCATION: NE SW NW NE SEC. 32, T. 102 N., R. 49 W.

10.0 - 17.0 SAND, FINE TO COARSE; WITH GRAVEL LENSES
17.0 - 27.0 SAND AND GRAVEL, FINE GRAVEL; WITH SOME CLAY

* * *

TEST HOLE NUMBER: 474
LOCATION: 102N-49W-32ABCA 2
LEGAL LOCATION: NE SW NW NE SEC. 32, T. 102 N., R. 49 W.

8.0 - 12.0 GRAVEL, FINE; WITH SAND AND BROWN CLAY
12.0 - 25.0 GRAVEL AND SAND, FINE TO PEA-SIZE GRAVEL,
      FINE TO COARSE SAND; CLEAN
25.0 - 29.0 GRAVEL AND SAND, FINE TO COARSE GRAVEL,
      FINE TO COARSE SAND

* * *

TEST HOLE NUMBER: 475
LOCATION: 102N-49W-32ABC
LEGAL LOCATION: SW SW NW NE SEC. 32, T. 102 N., R. 49 W.

15.0 - 37.0 SAND AND GRAVEL, VERY COARSE SAND, FINE GRAVEL

* * *

TEST HOLE NUMBER: 476
LOCATION: 102N-49W-32ADAC
LEGAL LOCATION: SW NE SE NE SEC. 32, T. 102 N., R. 49 W.

15.0 - 16.0 SAND; WITH FINE TO COARSE GRAVEL
16.0 - 20.0 SAND AND GRAVEL, MEDIUM SAND, FINE GRAVEL; WITH SOME CLAY
20.0 - 24.0 SAND AND GRAVEL, MEDIUM SAND TO MEDIUM GRAVEL
24.0 - 28.0 SAND, FINE TO COARSE

* * *

TEST HOLE NUMBER: 477

96
LOCATION: 102N-49W-32AQAD
LEGAL LOCATION: SE SE NE SEC. 32, T. 102 N., R. 49 W.

9.0 - 23.0 SAND, FINE TO COURSE; CLEAN, SATURATED
23.0 - 30.0 GRAVEL AND SAND, FINE TO COURSE GRAVEL,
       FINE TO COURSE SAND

* * * *

TEST HOLE NUMBER: 478
LOCATION: 102N-49W-32ABB
LEGAL LOCATION: NW NW SE NE SEC. 32, T. 102 N., R. 49 W.

6.0 - 14.0 SAND, FINE TO MEDIUM; CLEAN
14.0 - 30.0 GRAVEL AND SAND, FINE GRAVEL, FINE TO
       COURSE SAND; CLEAN

* * * *

TEST HOLE NUMBER: 479
LOCATION: 102N-49W-32BAB
LEGAL LOCATION: NW NE NW SEC. 32, T. 102 N., R. 49 W.

11.0 - 16.0 SAND, MEDIUM
16.0 - 30.0 SAND, MEDIUM TO COURSE; WITH SOME COURSE
       GRAVEL

* * * *

TEST HOLE NUMBER: 480
LOCATION: 102N-49W-32CAD
LEGAL LOCATION: SE SE SW SEC. 32, T. 102 N., R. 49 W.

5.0 - 10.0 SAND AND GRAVEL, COURSE GRAVEL
10.0 - 15.0 GRAVEL, VERY COARSE
15.0 - 27.0 SAND AND GRAVEL

* * * *

TEST HOLE NUMBER: 481
LOCATION: 102N-49W-33ACCC
LEGAL LOCATION: SW SW SW NW SEC. 33, T. 102 N., R. 49 W.

7.0 - 12.0 SAND, FINE TO COURSE; WITH CLAY AND FINE
     TO MEDIUM GRAVEL
12.0 - 32.0 SAND, MEDIUM TO COURSE; WITH CLAY AND
       FINE TO MEDIUM GRAVEL

* * * *

TEST HOLE NUMBER: 482
LOCATION: 102N-49W-33BAAB
LEGAL LOCATION: NE NE NE NW SEC. 33, T. 102 N., R. 49 W.
3.0 - 11.0 SAND, BROWN, FINE TO MEDIUM
11.0 - 23.0 SAND, MEDIUM TO COARSE; WITH FINE GRAVEL, BROWN SILT AND CLAY
23.0 - 27.0 SAND, MEDIUM TO COARSE; WITH FINE TO COARSE GRAVEL AND BROWN CLAY

** **

TEST HOLE NUMBER: 483
LOCATION: 102N-49W-33BBAA
LEGAL LOCATION: NE NE NW NW SEC. 33, T. 102 N., R. 49 W.
3.0 - 12.0 SAND, BROWN, VERY FINE TO FINE
12.0 - 15.0 SAND, FINE TO COARSE; WITH SOME CLAY AND FINE GRAVEL
15.0 - 30.0 SAND, MEDIUM TO COARSE; WITH FINE TO MEDIUM GRAVEL

** **

TEST HOLE NUMBER: 484
LOCATION: 102N-49W-33BBBA
LEGAL LOCATION: NE NW NW NW SEC. 33, T. 102 N., R. 49 W.
10.0 - 12.0 SAND, BROWN, FINE TO VERY COARSE; DIRTY
12.0 - 18.0 SAND, BROWN, FINE, GRAVELLY; DIRTY
18.0 - 22.0 SAND AND GRAVEL, GRAY, FINE TO MEDIUM; SOME COARSE GRAVEL
22.0 - 27.0 SAND AND GRAVEL, GRAY, MEDIUM; SEVERAL INCHES OF CLAY AT 25 FEET, SOME COARSE GRAVEL

** **

TEST HOLE NUMBER: 485
LOCATION: 102N-49W-33BBBB
LEGAL LOCATION: NW NW NW NW SEC. 33, T. 102 N., R. 49 W.
10.0 - 16.0 SAND, DARK-BROWN, FINE TO VERY COARSE; WET, VERY DIRTY, SOME FINE GRAVEL
16.0 - 24.0 SAND AND GRAVEL, BROWN, FINE; DIRTY, COAL FRAGMENTS
24.0 - 32.0 SAND AND GRAVEL, GRAY, FINE TO MEDIUM

** **

TEST HOLE NUMBER: 486
LOCATION: 102N-49W-33BBBB
LEGAL LOCATION: NW SE NW NW SEC. 33, T. 102 N., R. 49 W.
10.0 - 16.0 SAND, COARSE; SOME CLAY
16.0 - 18.0 SAND, COARSE; 40 PERCENT GRAVEL, DIRTY
18.0 - 41.0 SAND AND GRAVEL, COARSE SAND TO COARSE GRAVEL; WITH STREAKS OF VERY COARSE

98
<table>
<thead>
<tr>
<th>Test Hole Number</th>
<th>Location</th>
<th>Legal Location</th>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>487</td>
<td>102N-49W-33BCBA</td>
<td>NE NW SW NW SEC. 33, T. 102 N., R. 49 W.</td>
<td>7.0 - 12.0</td>
<td>Gravel and sand, fine gravel, coarse sand, silty</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.0 - 18.0</td>
<td>Gravel and sand, fine gravel, medium to coarse sand; clean</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18.0 - 35.0</td>
<td>Gravel and sand, fine gravel, very coarse sand</td>
</tr>
<tr>
<td>488</td>
<td>102N-49W-33BDcB</td>
<td>NW SW SE NW SEC. 33, T. 102 N., R. 49 W.</td>
<td>3.0 - 7.0</td>
<td>Sand, orangeish-brown, very fine to fine</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7.0 - 9.0</td>
<td>Sand, fine to medium; with some gravel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9.0 - 14.0</td>
<td>Sand, fine to coarse; with fine to medium gravel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14.0 - 25.0</td>
<td>Sand, fine to coarse; with fine to coarse gravel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25.0 - 37.0</td>
<td>Gravel, fine to coarse; with coarse sand</td>
</tr>
<tr>
<td>489</td>
<td>102N-49W-33CABB</td>
<td>NW NW NE SW SEC. 33, T. 102 N., R. 49 W.</td>
<td>3.0 - 17.0</td>
<td>Sand, fine to medium; with some gravel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>17.0 - 24.0</td>
<td>Sand, medium to coarse; with some gravel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24.0 - 36.0</td>
<td>Sand, coarse; with fine to coarse gravel</td>
</tr>
<tr>
<td>490</td>
<td>102N-49W-33CADD</td>
<td>SE SE NE SW SEC. 33, T. 102 N., R. 49 W.</td>
<td>5.0 - 7.0</td>
<td>Sand, medium, clayey</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7.0 - 9.0</td>
<td>Sand, medium to coarse</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9.0 - 12.0</td>
<td>Gravel and sand, coarse gravel, medium to coarse sand</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.0 - 33.0</td>
<td>Sand, very coarse</td>
</tr>
<tr>
<td>491</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

99
LOCATION: 102N-49W-33CDDD
LEGAL LOCATION: SE SE SE SW SEC. 33, T. 102 N., R. 49 W.

2.0 - 9.0 SAND, FINE; WITH CLAY AND SILT
9.0 - 27.0 SAND, MEDIUM TO COARSE; CLEAN

* * *

TEST HOLE NUMBER: 492
LOCATION: 102N-49W-33DBAA
LEGAL LOCATION: NE NE NW SE SEC. 33, T. 102 N., R. 49 W.

5.0 - 12.0 SAND, COARSE, SLIGHTLY SILTY
12.0 - 22.0 SAND, COARSE TO VERY COARSE
22.0 - 30.0 SAND AND GRAVEL, VERY COARSE SAND, VERY FINE GRAVEL

* * *

TEST HOLE NUMBER: 493
LOCATION: 102N-49W-33DDCC
LEGAL LOCATION: SW SW SE SE SEC. 33, T. 102 N., R. 49 W.

4.0 - 36.0 SAND AND GRAVEL, VERY COARSE SAND, VERY FINE GRAVEL

* * *

TEST HOLE NUMBER: 494
LOCATION: 102N-49W-34ABB
LEGAL LOCATION: NW NW NE SEC. 34, T. 102 N., R. 49 W.

23.0 - 30.0 SAND, FINE, CLAYEY, PEBBLY

* * *

TEST HOLE NUMBER: 495
LOCATION: 102N-49W-36ADAB
LEGAL LOCATION: NW NE SE NE SEC. 36, T. 102 N., R. 49 W.

15.0 - 19.0 SAND, VERY COARSE

* * *

TEST HOLE NUMBER: 496
LOCATION: 102N-49W-36ADDC
LEGAL LOCATION: SW SE NE NE SEC. 36, T. 102 N., R. 49 W.

13.0 - 17.0 SAND, BROWN, SILTY

* * *

TEST HOLE NUMBER: 497
LOCATION: 102N-49W-36BBBB

100
LEGAL LOCATION: NW NW NW NW SEC. 36, T. 102 N., R. 49 W.

1.0 - 6.0 SAND, BROWN, MEDIUM; OXIDIZED
20.0 - 26.0 SAND, BROWN, MEDIUM; OXIDIZED, SOME FINE GRAVEL

** ** *

TEST HOLE NUMBER: 498
LOCATION: 102N-49W-36DCCD
LEGAL LOCATION: SE SW SW SE SEC. 36, T. 102 N., R. 49 W.

4.0 - 16.0 SAND, MEDIUM TO COARSE; SOME GRAVEL

** ** *

TEST HOLE NUMBER: 499
LOCATION: 102N-49W-36DCCD 2
LEGAL LOCATION: SE SW SW SE SEC. 36, T. 102 N., R. 49 W.

7.0 - 10.0 SAND, BROWN, MEDIUM TO COARSE

** ** *

TEST HOLE NUMBER: 500
LOCATION: 102N-50W-07CCCD
LEGAL LOCATION: SW SW SW SW SEC. 07, T. 102 N., R. 50 W.

0 - 8.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL

** ** *

TEST HOLE NUMBER: 501
LOCATION: 102N-50W-19BCCDC
LEGAL LOCATION: SW SE SW NW SEC. 19, T. 102 N., R. 50 W.

1.0 - 22.0 GRAVEL, COARSE; LARGE ROCKS LAST 3 FEET

** ** *

TEST HOLE NUMBER: 502
LOCATION: 102N-50W-19CCBB
LEGAL LOCATION: NW NW SW SEC. 19, T. 102 N., R. 50 W.

3.0 - 9.0 SAND, FINE TO MEDIUM, CLAYEY
9.0 - 10.0 GRAVEL, COARSE

** ** *

TEST HOLE NUMBER: 503
LOCATION: 102N-50W-19CCBB
LEGAL LOCATION: NW NW NW SW SEC. 19, T. 102 N., R. 50 W.

101
<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
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<tbody>
<tr>
<td>0</td>
<td>SAND, BROWN, MEDIUM; OXIDIZED</td>
</tr>
<tr>
<td>20.0</td>
<td>SAND AND GRAVEL, BROWN, MEDIUM TO COARSE</td>
</tr>
</tbody>
</table>

* * * *

**TEST HOLE NUMBER: 504**
LEGAL LOCATION: NW NW SE SEC. 19, T. 102 N., R. 50 W.
<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
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<tbody>
<tr>
<td>9.0</td>
<td>SAND, MEDIUM</td>
</tr>
<tr>
<td>14.0</td>
<td>SAND, MEDIUM TO COARSE</td>
</tr>
</tbody>
</table>

* * * *

**TEST HOLE NUMBER: 505**
LEGAL LOCATION: SW SW SW SW SW SEC. 27, T. 102 N., R. 50 W.
<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.0</td>
<td>SAND AND GRAVEL, MEDIUM SAND TO COARSE GRAVEL</td>
</tr>
</tbody>
</table>

* * * *

**TEST HOLE NUMBER: 506**
LEGAL LOCATION: NW NW NE SEC. 03, T. 102 N., R. 51 W.
<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>SAND AND GRAVEL, COARSE SAND</td>
</tr>
<tr>
<td>8.0</td>
<td>SAND, MEDIUM TO COARSE</td>
</tr>
</tbody>
</table>

* * * *

**TEST HOLE NUMBER: 507**
LEGAL LOCATION: NW NW NW NE SEC. 03, T. 102 N., R. 51 W.
<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>SAND, MEDIUM TO COARSE; DRY</td>
</tr>
</tbody>
</table>

* * * *

**TEST HOLE NUMBER: 508**
LEGAL LOCATION: SE SE NE SEC. 03, T. 102 N., R. 51 W.
<table>
<thead>
<tr>
<th>Depth</th>
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<tbody>
<tr>
<td>4.0</td>
<td>GRAVEL, COARSE</td>
</tr>
<tr>
<td>6.0</td>
<td>SAND, BROWN, SILTY</td>
</tr>
</tbody>
</table>

* * * *

**TEST HOLE NUMBER: 509**
LEGAL LOCATION: SE NE NE SE SEC. 03, T. 102 N., R. 51 W.
<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>SAND, MEDIUM</td>
</tr>
</tbody>
</table>

102
5.0 - 10.0 Gravel; loose; sample taken at 3 feet

** **

Test hole number: 510
Location: 102N-51W-10AAA
Legal location: NE NE NE sec. 10, T. 102 N., R. 51 W.

3.0 - 8.0 Sand and gravel, reddish-brown, clayey
8.0 - 12.0 Sand and gravel, coarse sand, coarse gravel, clayey
12.0 - 15.0 Gravel, coarse

** **

Test hole number: 511
Location: 102N-51W-12CCC
Legal location: SW SW SW SW sec. 12, T. 102 N., R. 51 W.

0 - 12.0 Sand and gravel, fine sand to fine gravel, silty

** **

Test hole number: 512
Location: 102N-51W-13DBBC
Legal location: SW NW NW SE sec. 13, T. 102 N., R. 51 W.

14.0 - 18.0 Sand, medium to coarse
18.0 - 21.0 Sand and gravel; with rocks and clay

** **

Test hole number: 513
Location: 102N-51W-258CCB
Legal location: NW SW NW NW sec. 25, T. 102 N., R. 51 W.

1.0 - 7.0 Sand and gravel, fine to medium sand, fine to coarse gravel, rounded; dry to moist, some clay, oxidized, abandoned site after 3 attempts to penetrate beyond 7 feet

** **

Test hole number: 514
Location: 102N-51W-25DDDD
Legal location: SE SE SE SE sec. 25, T. 102 N., R. 51 W.

5.0 - 15.0 Sand and gravel, coarse sand to coarse gravel; with white rocks

** **
TEST HOLE NUMBER: 515
LOCATION: 102N-51W-26CCCD
LEGAL LOCATION: SE SW SW SW SEC. 26, T. 102 N., R. 51 W.

1.0 - 5.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE SAND, FINE TO COARSE GRAVEL, CLAYEY; OXIDIZED, DRY

***

TEST HOLE NUMBER: 516
LOCATION: 102N-51W-36BBBB
LEGAL LOCATION: NW NW NW NW SEC. 36, T. 102 N., R. 51 W.

6.0 - 16.0 SAND, ORANGE-BROWN, FINE TO MEDIUM; SOME FINE TO MEDIUM GRAVEL, SATURATED, OXIDIZED, HIT ROCK ABANDONED HOLE

***

TEST HOLE NUMBER: 517
LOCATION: 102N-52W-10AAAA
LEGAL LOCATION: NE NE NE NE SEC. 10, T. 102 N., R. 52 W.

15.0 - 22.0 GRAVEL, BROWN, MEDIUM TO COARSE; SOME CLAY

***

TEST HOLE NUMBER: 518
LOCATION: 102N-52W-27CCCD
LEGAL LOCATION: SE SW SE SW SEC. 27, T. 102 N., R. 52 W.

7.0 - 9.0 SAND, TAN-BROWN, FINE TO MEDIUM; OXIDIZED, SATURATED

***

TEST HOLE NUMBER: 519
LOCATION: 102N-52W-27DCDC
LEGAL LOCATION: SW SE SW SE SEC. 27, T. 102 N., R. 52 W.

24.0 - 30.0 GRAVEL, GRAY; SATURATED, UNOXIDIZED

***

TEST HOLE NUMBER: 520
LOCATION: 102N-52W-36CCDC
LEGAL LOCATION: SW SE SW SW SEC. 35, T. 102 N., R. 52 W.

6.0 - 9.0 SAND, REDDISH-BROWN, MEDIUM TO COARSE, SLIGHTLY CLAYEY, SLIGHTLY GRAVELLY; OXIDIZED, SATURATED

104
TEST HOLE NUMBER:  521  
LOCATION:  103N-47W-04AAAA  
LEGAL LOCATION:  NW NE NE SE SEC. 04, T. 103 N., R. 47 W.  
0 -  9.0  GRAVEL, BROWN, MEDIUM TO COARSE  

TEST HOLE NUMBER:  522  
LOCATION:  103N-47W-04ADAA  
LEGAL LOCATION:  NE NE SE NE SEC. 04, T. 103 N., R. 47 W.  
6.0 - 24.0  SAND, BROWN, FINE TO COARSE; CLEAN, DRY, OXIDIZED, SATURATED AT 12 FEET  

TEST HOLE NUMBER:  523  
LOCATION:  103N-47W-05AADD  
LEGAL LOCATION:  SE SE NE NE SEC. 05, T. 103 N., R. 47 W.  
5.0 - 15.0  SAND AND GRAVEL, MEDIUM SAND, MEDIUM GRAVEL; OXIDIZED, SOME CLAY LAYERS THROUGHOUT  

TEST HOLE NUMBER:  524  
LOCATION:  103N-47W-05DDDA  
LEGAL LOCATION:  NE SE SE SE SEC. 05, T. 103 N., R. 47 W.  
16.0 - 17.0  SAND AND GRAVEL, BROWN, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL, CLAYEY; OXIDIZED, MOIST  
19.0 - 22.0  SAND AND GRAVEL, BROWN, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL, CLAYEY; OXIDIZED, MOIST  
25.0 - 26.0  SAND, BROWN, FINE TO MEDIUM, SLIGHTLY CLAYEY; OXIDIZED, MOIST  

TEST HOLE NUMBER:  525  
LOCATION:  103N-47W-15DCCD  
LEGAL LOCATION:  SE SW SW SE SEC. 15, T. 103 N., R. 47 W.  
10.0 - 30.0  SAND, MEDIUM TO COARSE, SLIGHTLY CLAYEY  

TEST HOLE NUMBER:  516  
LOCATION:  103N-47W-15DDAC  

105
LEGAL LOCATION: SW NE SE SE SE SEC. 15, T. 103 N., R. 47 W.

14.0 - 29.0 SAND, REDDISH-BROWN, FINE TO MEDIUM, SOME COARSE TO VERY COARSE; VERY SLIGHTLY HARD

* * *

TEST HOLE NUMBER: 527
LOCATION: 103N-47W-15D0A
LEGAL LOCATION: SE NE SE SE SEC. 15, T. 103 N., R. 47 W.

11.0 - 16.0 SAND, MEDIUM TO COARSE, SLIGHTLY CLAYEY
16.0 - 28.0 SAND, REDDISH-BROWN, MEDIUM TO VERY COARSE, VERY SLIGHTLY CLAYEY

* * *

TEST HOLE NUMBER: 528
LOCATION: 103N-47W-15D0BA
LEGAL LOCATION: NE NW SE SE SEC. 15, T. 103 N., R. 47 W.

15.0 - 24.0 SAND, REDDISH-BROWN, FINE TO COARSE, SOME VERY COARSE

* * *

TEST HOLE NUMBER: 529
LOCATION: 103N-47W-15D0BB
LEGAL LOCATION: SE NW SE SE SEC. 15, T. 103 N., R. 47 W.

22.0 - 34.0 SAND, REDDISH-BROWN, FINE TO MEDIUM, SLIGHTLY CLAYEY; WITH SOME COARSE SAND

* * *

TEST HOLE NUMBER: 530
LOCATION: 103N-47W-15D0CC
LEGAL LOCATION: SW SW SE SE SEC. 15, T. 103 N., R. 47 W.

11.0 - 18.0 GRAVEL, COARSE TO VERY COARSE

* * *

TEST HOLE NUMBER: 531
LOCATION: 103N-47W-15D0DA 1
LEGAL LOCATION: NE SE SE SE SEC. 15, T. 103 N., R. 47 W.

20.0 - 35.0 SAND, BROWN, FINE TO MEDIUM, SLIGHTLY CLAYEY

* * *

TEST HOLE NUMBER: 532

104
LOCATION: 103N-47W-15DDDA 2
LEGAL LOCATION: NE SE SE SE SEC. 15, T. 103 N., R. 47 W.

11.0 - 16.0 SAND, BROWN, CLAYEY
16.0 - 32.0 SAND, REDDISH-BROWN, MEDIUM TO COARSE
SOME VERY COARSE; SLIGHTLY CLAYEY

***

TEST HOLE NUMBER: 533
LOCATION: 103N-47W-15DDDC 1
LEGAL LOCATION: SW SE SE SE SEC. 15, T. 103 N., R. 47 W.

12.0 - 16.0 SAND, REDDISH-BROWN, MEDIUM TO VERY
COARSE

***

TEST HOLE NUMBER: 534
LOCATION: 103N-47W-15DDDC 2
LEGAL LOCATION: SW SE SE SE SEC. 15, T. 103 N., R. 47 W.

14.0 - 28.0 SAND, REDDISH-BROWN, FINE TO COARSE;
VERY SLIGHTLY HARD

***

TEST HOLE NUMBER: 535
LOCATION: 103N-47W-15DDDD
LEGAL LOCATION: SE SE SE SE SEC. 15, T. 103 N., R. 47 W.

16.0 - 32.0 SAND, BROWN, COARSE TO VERY COARSE; SOME
GRAVEL FROM 27 TO 32 FEET

***

TEST HOLE NUMBER: 536
LOCATION: 103N-47W-19DDDD
LEGAL LOCATION: SE SE SE SE SEC. 19, T. 103 N., R. 47 W.

1.0 - 7.0 SAND, YELLOWISH-BROWN, VERY FINE, CLAYEY;
OXIDIZED
7.0 - 13.0 SAND, OXANGISH-BROWN, MEDIUM TO COARSE;
OXIDIZED
13.0 - 14.0 SAND, PINK, MEDIUM TO COARSE; MOSTLY
QUARTZ

***

TEST HOLE NUMBER: 537
LOCATION: 103N-47W-22BAAA
LEGAL LOCATION: NE NW NE NW SEC. 22, T. 103 N., R. 47 W.

23.0 - 41.0 SAND, GRAYISH-BROWN, FINE TO MEDIUM,
VERY CLAYEY; DRILLED HARDER THAN INTERVAL FROM 4 TO 23 FEET

* * *

TEST HOLE NUMBER: 538
LEGAL LOCATION: NW NW NW SEC. 01, T. 103 N., R. 48 W.
5.0 - 12.0 GRAVEL, BROWN, MEDIUM TO COARSE; OXIDIZED
13.0 - 27.0 SAND, BROWN, VERY COARSE, GRADIENT TO A FINE TO COARSE GRAVEL WITH DEPTH; OXIDIZED

* * *

TEST HOLE NUMBER: 539
LEGAL LOCATION: SW SE SE SW SEC. 01, T. 103 N., R. 48 W.
23.0 - 24.0 GRAVEL(?); NO RETURN, HIT QUARTZITE AT 24 FEET

* * *

TEST HOLE NUMBER: 540
LOCATION: 103N-48W-06BABB
LEGAL LOCATION: NW NW NE NW SEC. 06, T. 103 N., R. 48 W.
1.0 - 6.0 SAND AND GRAVEL, BROWN, MEDIUM

* * *

TEST HOLE NUMBER: 541
LOCATION: 103N-48W-06BABB 1
LEGAL LOCATION: NW NW NE NW SEC. 06, T. 103 N., R. 48 W.
4.0 - 7.0 SAND AND GRAVEL, BROWN, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL, CLAYEY; MOIST

* * *

TEST HOLE NUMBER: 542
LOCATION: 103N-48W-11AAAA
LEGAL LOCATION: NE NE NE NE SEC. 11, T. 103 N., R. 48 W.
14.0 - 16.0 GRAVEL(?), COBBLY; HIT QUARTZITE AT 16 FEET

* * *

TEST HOLE NUMBER: 543
LOCATION: 103N-48W-18BBAA
LEGAL LOCATION: NE NE NW NW SEC. 18, T. 103 N., R. 48 W.

5.0 - 12.0 SAND, BROWN, MEDIUM; OXIDIZED

** **

TEST HOLE NUMBER: 544
LOCATION: 103N-48W-19CCBB
LEGAL LOCATION: NW NW NW SW SEC. 19, T. 103 N., R. 48 W.

10.0 - 16.0 SAND, BROWN, FINE TO MEDIUM, VERY CLAYEY; FEW PEBBLES, OXIDIZED, SATURATED

** **

TEST HOLE NUMBER: 545
LOCATION: 103N-48W-23CCDC
LEGAL LOCATION: SW SE SW SW SEC. 23, T. 103 N., R. 48 W.

19.0 - 31.0 SAND, BROWN, MEDIUM TO COARSE, VERY SLIGHTLY CLAYEY

** **

TEST HOLE NUMBER: 546
LOCATION: 103N-48W-24ABAA
LEGAL LOCATION: NE NE NW NE SEC. 24, T. 103 N., R. 48 W.

2.0 - 10.0 SAND, LIGHT-BROWN, FINE TO COARSE; SOME GRAVEL

** **

TEST HOLE NUMBER: 547
LOCATION: 103N-48W-24ABBA
LEGAL LOCATION: NE NW NW NE SEC. 24, T. 103 N., R. 48 W.

8.0 - 11.0 GRAVEL, BROWN, MEDIUM TO COARSE; OXIDIZED

** **

TEST HOLE NUMBER: 548
LOCATION: 103N-48W-26ABAA
LEGAL LOCATION: NE NW NW NE SEC. 26, T. 103 N., R. 48 W.

4.0 - 12.0 SAND AND GRAVEL, BROWN, FINE TO COARSE SAND, FINE TO VERY COARSE GRAVEL; OXIDIZED

** **

TEST HOLE NUMBER: 549
LOCATION: 103N-48W-26BBBP
LEGAL LOCATION: NW NW NW NW SEC. 26, T. 103 N., R. 48 W.

109
15.0 - 35.0 SAND, BROWN, MEDIUM TO COARSE
  * * *

TEST HOLE NUMBER: 550
LOCATION: 103N-48W-26CBBB
LEGAL LOCATION: NW NW NW SW SEC. 26, T. 103 N., R. 48 W.
1.0 - 19.0 SAND, BROWN, COARSE TO VERY COARSE;
     SOME GRAVEL
  * * *

TEST HOLE NUMBER: 551
LOCATION: 103N-48W-26CCCD
LEGAL LOCATION: SE SW SW SW SEC. 26, T. 103 N., R. 48 W.
12.0 - 24.0 SAND, GRAYISH-BROWN, MEDIUM TO COARSE
  * * *

TEST HOLE NUMBER: 552
LOCATION: 103N-48W-26CDDD
LEGAL LOCATION: SE SE SE SW SEC. 26, T. 103 N., R. 48 W.
21.0 - 64.0 SANDSTONE, BLACK; 1/4- TO 1/8-INCH CHIPS,
     DRILLED HARD, DRIED OUT TO LIGHT-
     GRAYISH-BROWN
  * * *

TEST HOLE NUMBER: 553
LOCATION: 103N-48W-27DDAA
LEGAL LOCATION: NE NE SE SE SEC. 27, T. 103 N., R. 48 W.
20.0 - 28.0 SAND, ORANGEISH-BROWN, MEDIUM TO COARSE;
     SOME GRAVEL, OCCASIONALLY DRILLED HARD
  * * *

TEST HOLE NUMBER: 554
LOCATION: 103N-48W-27DDDB
LEGAL LOCATION: SE NW SE SE SEC. 27, T. 103 N., R. 48 W.
12.0 - 20.0 SAND, BROWN, MEDIUM TO COARSE, VERY
     SLIGHTLY CLAYY; QUARTZITE BOULDER
     AT 18 TO 19 FEET
25.0 - 45.0 SAND, ORANGE, FINE TO MEDIUM, WELL
     SORTED
  * * *

TEST HOLE NUMBER: 555
LOCATION: 103N-48W-27DDDC

110
<table>
<thead>
<tr>
<th>Test Hole Number</th>
<th>Location</th>
<th>Legal Location</th>
<th>Sand Type/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>556</td>
<td>103N-48W-270000</td>
<td>SE SE SE SEC. 27, T. 103 N., R. 48 W.</td>
<td>9.0 - 11.0 Sand, brown, coarse to very coarse; some pebbles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11.0 - 15.0 Sand, orangish-brown, fine to medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15.0 - 32.0 Sand, light-brown, fine to medium; some very coarse sand and some pebbles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>** * * * **</td>
</tr>
<tr>
<td>557</td>
<td>103N-48W-290000</td>
<td>NE SW NE NE SEC. 29, T. 103 N., R. 48 W.</td>
<td>14.0 - 18.0 Gravel, medium to coarse; with rocks</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18.0 - 24.0 Gravel, medium to coarse; with medium to coarse sand</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24.0 - 26.0 Gravel, fine, well-sorted; abundant quartz pebbles</td>
</tr>
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<td>** * * * **</td>
</tr>
<tr>
<td>558</td>
<td>103N-48W-340000</td>
<td>NE NE NE NE SEC. 34, T. 103 N., R. 48 W.</td>
<td>10.0 - 18.0 Gravel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>** * * * **</td>
</tr>
<tr>
<td>559</td>
<td>103N-48W-350000</td>
<td>NW NE NW NW SEC. 35, T. 103 N., R. 48 W.</td>
<td>7.0 - 17.0 Sand, reddish-brown and gray, coarse sand to fine gravel; some layers of green clay</td>
</tr>
<tr>
<td></td>
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<td>** * * * **</td>
</tr>
<tr>
<td>560</td>
<td>103N-48W-350000</td>
<td>SE SE SEC. 27, T. 103 N., R. 48 W.</td>
<td>5.0 - 20.0 Sand, brownish-gray, medium to coarse, slightly clayey</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>** * * * **</td>
</tr>
</tbody>
</table>
LEGAL LOCATION: SW SW SW NW SEC. 35, T. 103 N., R. 48 W.
4.0 - 18.0 SAND, BROWN, MEDIUM TO VERY COARSE; SOME GRAVEL

** **

TEST HOLE NUMBER: 561
LOCATION: 103N-49W-04ABAA
LEGAL LOCATION: NE NE NW NE SEC. 04, T. 103 N., R. 49 W.
6.0 - 16.0 SAND, BROWN, FINE, CLAYEY; OXIDIZED, SATURATED, CLAY CONTENT INCREASES FROM 12 FEET ON

** **

TEST HOLE NUMBER: 562
LOCATION: 103N-49W-05BB
LEGAL LOCATION: NW NW SEC. 05, T. 103 N., R. 49 W.
10.0 - 20.0 SAND, COARSE; CLEAN

** **

TEST HOLE NUMBER: 563
LOCATION: 103N-49W-05BRAB
LEGAL LOCATION: NW NE NW NW SEC. 05, T. 103 N., R. 49 W.
4.0 - 15.0 SAND, GRAY, FINE

** **

TEST HOLE NUMBER: 564
LOCATION: 103N-49W-05BBCC
LEGAL LOCATION: SW SW NW NW SEC. 05, T. 103 N., R. 49 W.
7.0 - 20.0 SAND, GRAY, FINE
20.0 - 21.0 GRAVEL, VERY COARSE

** **

TEST HOLE NUMBER: 565
LOCATION: 103N-49W-06AA
LEGAL LOCATION: NE NE SEC. 06, T. 103 N., R. 49 W.
15.0 - 25.0 SAND, COARSE
25.0 - 33.0 GRAVEL; AND SMALL AMOUNT OF SAND

** **

TEST HOLE NUMBER: 566
LOCATION: 103N-49W-06AABA
LEGAL LOCATION: NE NW NE NE SEC. 06, T. 103 N., R. 49 W.

112
15.0 -   26.0  SAND, GRAY, MEDIUM TO FINE

* * *

TEST HOLE NUMBER:  567
LOCATION:  103N-49W-06ABBA
LEGAL LOCATION:  NE NE NW NE SEC. 06, T. 103 N., R. 49 W.

10.0 -   38.0  SAND, GRAY, MEDIUM TO COARSE; SOME GRAVEL

* * *

TEST HOLE NUMBER:  568
LOCATION:  103N-49W-06ABB
LEGAL LOCATION:  NW NW NE SEC. 06, T. 103 N., R. 49 W.

15.0 -   20.0  SAND, COARSE AND FINE
20.0 -   25.0  SAND AND GRAVEL, COARSE SAND
25.0 -   34.0  GRAVEL, COARSE; AND QUARTZITE BOULDERS

* * *

TEST HOLE NUMBER:  569
LOCATION:  103N-49W-06ACAA
LEGAL LOCATION:  NE NE SW NE SEC. 06, T. 103 N., R. 49 W.

13.0 -   37.0  SAND, GRAY; SOME GRAVEL

* * *

TEST HOLE NUMBER:  570
LOCATION:  103N-49W-06ACBA
LEGAL LOCATION:  NE NW SW NE SEC. 06, T. 103 N., R. 49 W.

15.0 -   37.0  SAND AND GRAVEL, GRAY; CLEAN

* * *

TEST HOLE NUMBER:  571
LOCATION:  103N-49W-06ACDD
LEGAL LOCATION:  SE SE SW NE SEC. 06, T. 103 N., R. 49 W.

17.0 -   37.0  SAND, COARSE; SOME GRAVEL

* * *

TEST HOLE NUMBER:  572
LOCATION:  103N-49W-06BA
LEGAL LOCATION:  NE NW SEC. 06, T. 103 N., R. 49 W.

20.0 -   25.0  GRAVEL, VERY COARSE
25.0 -   30.0  SAND AND GRAVEL
TEST HOLE NUMBER: 573
LOCATION: 103N-49W-06BAA
LEGAL LOCATION: NE NE NW NW SEC. 06, T. 103 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.0</td>
<td>15.0 SAND, BROWN; SOME GRAVEL</td>
</tr>
<tr>
<td>15.0</td>
<td>30.0 SAND, GRAY; SOME GRAVEL</td>
</tr>
</tbody>
</table>

TEST HOLE NUMBER: 574
LOCATION: 103N-49W-06BAA
LEGAL LOCATION: NE NE SE NW SEC. 06, T. 103 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.0</td>
<td>24.0 SAND, GRAY, MEDIUM</td>
</tr>
<tr>
<td>24.0</td>
<td>27.0 GRAVEL; SOME SAND</td>
</tr>
</tbody>
</table>

TEST HOLE NUMBER: 575
LOCATION: 103N-49W-05DADD
LEGAL LOCATION: SE SE NE SE SEC. 06, T. 103 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.0</td>
<td>20.0 SAND, GRAY; SOME GRAVEL</td>
</tr>
<tr>
<td>20.0</td>
<td>22.0 GRAVEL, VERY COARSE</td>
</tr>
</tbody>
</table>

TEST HOLE NUMBER: 576
LOCATION: 103N-49W-06BCC
LEGAL LOCATION: SW SW NW SE SEC. 06, T. 103 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.0</td>
<td>20.0 SAND, BROWN, FINE</td>
</tr>
<tr>
<td>20.0</td>
<td>36.0 SAND, GRAY, MEDIUM</td>
</tr>
</tbody>
</table>

TEST HOLE NUMBER: 577
LOCATION: 103N-49W-07AAA
LEGAL LOCATION: NE NE SEC. 07, T. 103 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.0</td>
<td>19.0 SAND, MEDIUM TO COARSE</td>
</tr>
<tr>
<td>19.0</td>
<td>34.0 SAND, COARSE; TO FINE GRAVEL</td>
</tr>
</tbody>
</table>

TEST HOLE NUMBER: 578
LOCATION: 103N-49W-07BAAA 1
LEGAL LOCATION: NE NE NE NW SEC. 07, T. 103 N., R. 49 W.

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0</td>
<td>20.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL</td>
</tr>
<tr>
<td>20.0</td>
<td>44.0 GRAVEL, FINE TO COARSE</td>
</tr>
</tbody>
</table>
TEST HOLE NUMBER: 579
LOCATION: 103N-49W-07BAAA 2
LEGAL LOCATION: NE NE NE NW SEC. 07, T. 103 N., R. 49 W.
10.0 - 13.0 SAND, FINE TO MEDIUM, SILTY; SOFT
13.0 - 30.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL, SILTY

TEST HOLE NUMBER: 580
LOCATION: 103N-49W-08AB
LEGAL LOCATION: NW NE SEC. 08, T. 103 N., R. 49 W.
19.0 - 24.0 SAND, MEDIUM TO COARSE

TEST HOLE NUMBER: 581
LOCATION: 103N-49W-08ADD
LEGAL LOCATION: SE SE NE SEC. 08, T. 103 N., R. 49 W.
12.0 - 17.0 GRAVEL; DIRTY, POOR SAMPLE
17.0 - 24.0 SAND AND GRAVEL, VERY COARSE SAND TO FINE TO MEDIUM GRAVEL; CLEAN

TEST HOLE NUMBER: 582
LOCATION: 103N-49W-09ccc
LEGAL LOCATION: SW SW SE SEC. 08, T. 103 N., R. 49 W.
9.0 - 14.0 SAND, COARSE
14.0 - 25.0 SAND AND GRAVEL, COARSE
25.0 - 28.0 GRAVEL, COARSE; BOULDERS

TEST HOLE NUMBER: 583
LOCATION: 103N-49W-09BAA
LEGAL LOCATION: NE NE NW SEC. 09, T. 103 N., R. 49 W.
10.0 - 15.0 SAND, FINE, SILTY; SOME CLAY, WATER-LAID

TEST HOLE NUMBER: 584
LOCATION: 103N-49W-16ACCC
LEGAL LOCATION: SW SW SW NE SEC. 16, T. 103 N., R. 49 W.
4.0 - 10.0 SAND, FINE TO COARSE, SILTY
10.0 - 14.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL
14.0 - 31.0 GRAVEL, FINE TO COARSE

* * * *

TEST HOLE NUMBER: 585
LOCATION: 103N-49W-16ADD
LEGAL LOCATION: SE SE SE NE SEC. 16, T. 103 N., R. 49 W.
8.0 - 10.0 GRAVEL, FINE TO COARSE
16.0 - 17.0 GRAVEL

* * * *

TEST HOLE NUMBER: 586
LOCATION: 103N-49W-16BCCC
LEGAL LOCATION: SW SW SW NW SEC. 16, T. 103 N., R. 49 W.
3.0 - 12.0 SAND, FINE TO MEDIUM
12.0 - 24.0 SAND AND GRAVEL, FINE SAND TO COARSE GRAVEL
24.0 - 32.0 GRAVEL, COARSE

* * * *

TEST HOLE NUMBER: 587
LOCATION: 103N-49W-16DBB
LEGAL LOCATION: NW NW SE SE SEC. 16, T. 103 N., R. 49 W.
5.0 - 11.0 SAND; WITH MUCH SILT AND CLAY, HIGHLY OXIDIZED; WATER-LAID, SLIGHTLY PERMEABLE
11.0 - 21.0 SAND AND GRAVEL; POOR SAMPLE

* * * *

TEST HOLE NUMBER: 588
LOCATION: 103N-49W-17AAA
LEGAL LOCATION: NE NE NE SE SEC. 17, T. 103 N., R. 49 W.
10.0 - 12.0 SAND AND SILT, FINE; SOME CLAY, SATURATED

* * * *

TEST HOLE NUMBER: 589
LOCATION: 103N-49W-17BA
LEGAL LOCATION: NE NW SEC. 17, T. 103 N., R. 49 W.
15.0 - 20.0 SAND AND GRAVEL, COARSE; CLEAN
20.0 - 28.0 GRAVEL, COARSE

* * * *

TEST HOLE NUMBER: 590
LOCATION: 103N-49W-17DABD

116
LEGAL LOCATION: SE NW NE SE SEC. 17, T. 103 N., R. 49 W.

* THIS LOG CONTAINS UNVERIFIED INFORMATION *

***************************************************************************

7.0 - 25.0 GRAVEL

** ** *

TEST HOLE NUMBER: 591
LOCATION: 103N-49W-17DSAB
LEGAL LOCATION: NW NE NW SE SEC. 17, T. 103 N., R. 49 W.

10.0 - 24.0 SAND, GRAY, FINE TO COARSE; MANY SHELLS
24.0 - 15.0 GRAVEL, COARSE

** ** *

TEST HOLE NUMBER: 592
LOCATION: 103N-49W-17DBDC
LEGAL LOCATION: SW SE NW SE SEC. 17, T. 103 N., R. 49 W.

13.0 - 34.0 GRAVEL, FINE; SAMPLE TAKEN

** ** *

TEST HOLE NUMBER: 593
LOCATION: 103N-49W-18AA
LEGAL LOCATION: NE NE SEC. 18, T. 103 N., R. 49 W.

9.0 - 15.0 SAND AND GRAVEL, COARSE SAND
15.0 - 25.0 SAND, COARSE
25.0 - 35.0 GRAVEL AND SAND

** ** *

TEST HOLE NUMBER: 594
LOCATION: 103N-49W-18ACBB
LEGAL LOCATION: NW NW SW NE SEC. 18, T. 103 N., R. 49 W.

14.0 - 16.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL, SILTY
24.0 - 43.0 SAND AND GRAVEL, FINE SAND TO COARSE GRAVEL; VERY WELL ROUNDED

** ** *

TEST HOLE NUMBER: 595
LOCATION: 103N-49W-200DB
LEGAL LOCATION: NW SE SEC. 20, T. 103 N., R. 49 W.

15.0 - 25.0 SAND AND GRAVEL
25.0 - 30.0 SAND, FINE
TEST HOLE NUMBER: 596
LOCATION: 103N-49W-21CA
LEGAL LOCATION: NE SW SEC. 21, T. 103 N., R. 49 W.

15.0 - 20.0 SAND AND GRAVEL, COARSE SAND
20.0 - 30.0 SAND; AND SOME GRAVEL

TEST HOLE NUMBER: 597
LOCATION: 103N-49W-11CB
LEGAL LOCATION: NW SW SEC. 21, T. 103 N., R. 49 W.

0 - 10.0 SAND AND CLAY, FINE SAND
10.0 - 20.0 SAND, COARSE
20.0 - 25.0 GRAVEL, FINE
25.0 - 30.0 GRAVEL, COARSE

TEST HOLE NUMBER: 598
LOCATION: 103N-49W-28CDD
LEGAL LOCATION: SE SE SW SEC. 28, T. 103 N., R. 49 W.

14.0 - 24.0 SAND, MEDIUM TO COARSE
24.0 - 28.0 SAND, MEDIUM

TEST HOLE NUMBER: 599
LOCATION: 103N-49W-28DB
LEGAL LOCATION: NW SE SEC. 28, T. 103 N., R. 49 W.

4.0 - 9.0 SAND, FINE, SILTY
9.0 - 14.0 SAND, FINE, GRAINING TO COARSE SAND
14.0 - 40.0 SAND, MEDIUM TO COARSE

TEST HOLE NUMBER: 600
LOCATION: 103N-49W-29CDCC
LEGAL LOCATION: SW SW SE SW SEC. 29, T. 103 N., R. 49 W.

24.0 - 25.0 SAND AND GRAVEL, FINE SAND TO COARSE GRAVEL; OXIDIZED

TEST HOLE NUMBER: 601
LOCATION: 103N-49W-29DCCD
LEGAL LOCATION: SE SW SW SE SEC. 29, T. 103 N., R. 49 W.

118
20.0 – 24.0 SAND AND GRAVEL; OXIDIZED
* * * *

TEST HOLE NUMBER: 603
LOCATION: 103N-49W-31L10A
LEGAL LOCATION: NE SE SE SEC. 31, T. 103 N., R. 49 W.

1.0 – 14.0 SAND, BROWN, FINE, SILTY; MOIST
* * * *

TEST HOLE NUMBER: 603
LOCATION: 103N-49W-32CCC
LEGAL LOCATION: SW SW SW SEC. 32, T. 103 N., R. 49 W.

10.5 – 30.0 SAND AND GRAVEL, COARSE SAND
* * * *

TEST HOLE NUMBER: 604
LOCATION: 103N-49W-33BBBA
LEGAL LOCATION: NE NW NW NW SEC. 33, T. 103 N., R. 49 W.

13.0 – 20.0 SAND, WHITE, FINE TO COARSE; WITH FINE TO MEDIUM GRAVEL
21.0 – 28.0 SAND AND GRAVEL; SUBROUNDED, INTERBEDDED
* * * *

TEST HOLE NUMBER: 605
LOCATION: 103N-49W-34BAA
LEGAL LOCATION: NE NE NW NW SEC. 34, T. 103 N., R. 49 W.

20.0 – 31.0 SAND AND GRAVEL, COARSE SAND TO MEDIUM GRAVEL; OXIDIZED
* * * *

TEST HOLE NUMBER: 606
LOCATION: 103N-50W-04BBB
LEGAL LOCATION: NW NW NW NW SEC. 04, T. 103 N., R. 50 W.

0 – 9.0 SAND, BROWN, SILTY
* * * *

TEST HOLE NUMBER: 607
LOCATION: 103N-50W-05ABB
LEGAL LOCATION: NW NW NE SEC. 05, T. 103 N., R. 50 W.

10.0 – 12.0 SAND, COARSE
12.0 – 14.0 SAND AND GRAVEL, MEDIUM SAND
14.0 – 24.0 SAND, MEDIUM TO COARSE, SILTY

119
24.0 - 29.0 SAND, COARSE

** **

TEST HOLE NUMBER: 608
LOCATION: 103N-50W-05BABB
LEGAL LOCATION: NW NW NE NW SEC. 05, T. 103 N., R. 50 W.

3.0 - 7.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL, VERY SILTY
7.0 - 25.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL

** **

TEST HOLE NUMBER: 609
LOCATION: 103N-50W-05BBB
LEGAL LOCATION: NW NW NW SEC. 05, T. 103 N., R. 50 W.

4.0 - 9.0 SAND, SILTY
9.0 - 14.0 SAND, MEDIUM TO COARSE, SILTY
14.0 - 24.0 SAND AND GRAVEL, COARSE SAND, FINE GRAVEL

** **

TEST HOLE NUMBER: 610
LOCATION: 103N-50W-05CCCC
LEGAL LOCATION: SW SW SW SW SEC. 05, T. 103 N., R. 50 W.

3.0 - 27.0 SAND AND GRAVEL, MEDIUM TO COARSE

** **

TEST HOLE NUMBER: 611
LOCATION: 103N-50W-06CCD
LEGAL LOCATION: SE SW SW SEC. 06, T. 103 N., R. 50 W.

2.0 - 14.0 SAND, MEDIUM, SILTY
14.0 - 20.0 SAND, MEDIUM TO COARSE
20.0 - 24.0 SAND AND GRAVEL, COARSE SAND, FINE GRAVEL

** **

TEST HOLE NUMBER: 612
LOCATION: 103N-50W-07AAA
LEGAL LOCATION: NE NE NE SEC. 07, T. 103 N., R. 50 W.

3.0 - 9.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE GRAVEL
9.0 - 19.0 SAND, FINE TO MEDIUM
19.0 - 29.0 SAND AND GRAVEL, COARSE SAND, FINE GRAVEL

** **

120
TEST HOLE NUMBER: 613
LOCATION: 103N-50W-07DCD
LEGAL LOCATION: SE SW SE SEC. 07, T. 103 N., R. 50 W.

1.0 - 13.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE GRAVEL
13.0 - 14.0 SAND AND GRAVEL, COARSE GRAVEL
14.0 - 24.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE TO MEDIUM GRAVEL
24.0 - 36.0 SAND AND GRAVEL, COARSE SANT

* * *

TEST HOLE NUMBER: 614
LOCATION: 103N-50W-08BBB
LEGAL LOCATION: NW NW NW SEC. 08, T. 103 N., R. 50 W.

2.0 - 19.0 SAND, MEDIUM, SILTY
19.0 - 24.0 SAND, MEDIUM
24.0 - 39.0 SAND, FINE, CLAYEY

* * *

TEST HOLE NUMBER: 615
LOCATION: 103N-50W-08CCC
LEGAL LOCATION: SW SW SW SEC. 08, T. 103 N., R. 50 W.

2.0 - 12.0 SAND, BROWN, MEDIUM TO COARSE
12.0 - 51.0 SAND AND GRAVEL, COARSE SAND, FINE TO MEDIUM GRAVEL

* * *

TEST HOLE NUMBER: 616
LOCATION: 103N-50W-09DDDD
LEGAL LOCATION: SE SE SE SEC. 09, T. 103 N., R. 50 W.

7.0 - 24.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL

* * *

TEST HOLE NUMBER: 617
LOCATION: 103N-50W-12DDDD
LEGAL LOCATION: SE SE SE SEC. 12, T. 103 N., R. 50 W.

0 - 6.0 SAND

* * *

TEST HOLE NUMBER: 618
LOCATION: 103N-50W-17CCC
LEGAL LOCATION: SW SW SW SEC. 17, T. 103 N., R. 50 W.

4.0 - 9.0 SAND, CLAYEY

121
9.0 - 14.0 SAND, MEDIUM, SILTY
14.0 - 31.0 SAND, MEDIUM TO COARSE

* * *

TEST HOLE NUMBER: 619
LOCATION: 103N-50W-17CCC 1
LEGAL LOCATION: SW SW SW SEC. 17, T. 103 N., R. 50 W.

2.0 - 9.0 SAND, CIAYEV
9.0 - 14.0 SAND, MEDIUM, SILTY
14.0 - 28.0 SAND, MEDIUM TO COARSE

* * *

TEST HOLE NUMBER: 620
LOCATION: 103N-50W-17CCCC
LEGAL LOCATION: SW SW SW SW SEC. 17, T. 103 N., R. 50 W.

2.0 - 29.0 SAND AND GRAVEL, MEDIUM TO COARSE

* * *

TEST HOLE NUMBER: 621
LOCATION: 103N-50W-18AAAA
LEGAL LOCATION: NE NE NE NE SEC. 18, T. 103 N., R. 50 W.

4.0 - 31.0 GRAVEL, MEDIUM TO COARSE

* * *

TEST HOLE NUMBER: 622
LOCATION: 103N-50W-18BABB
LEGAL LOCATION: NW NE NW SEC. 18, T. 103 N., R. 50 W.

1.0 - 8.0 SAND, FINE TO MEDIUM
8.0 - 14.0 SAND AND GRAVEL, FINE TO MEDIUM SAND,
     FINE GRAVEL
14.0 - 20.0 GRAVEL AND SAND, FINE TO MEDIUM GRAVEL,
      COARSE SAND
20.0 - 26.0 GRAVEL, FINE TO COARSE

* * *

TEST HOLE NUMBER: 623
LOCATION: 103N-50W-19AAAA
LEGAL LOCATION: NE NE NE SEC. 19, T. 103 N., R. 50 W.

3.0 - 9.0 SAND, MEDIUM TO COARSE, SILTY
9.0 - 14.0 SAND, MEDIUM
14.0 - 24.0 SAND, MEDIUM TO COARSE

* * *

122
TEST HOLE NUMBER: 624
LOCATION: 103N-50W-19BAAA
LEGAL LOCATION: NE NE NE NW SEC. 19, T. 103 N., R. 50 W.
  0 -  2.0  GRAVEL; ROAD FILL
  9.0 - 27.0  SAND AND GRAVEL, FINE SAND TO COARSE GRAVEL, WELL ROUNDED

TEST HOLE NUMBER: 625
LOCATION: 103N-50W-19BBAA
LEGAL LOCATION: NE NW NW SEC. 19, T. 103 N., R. 50 W.
  8.0 - 16.0  SAND, MEDIUM TO COARSE

TEST HOLE NUMBER: 626
LOCATION: 103N-50W-19BCCC
LEGAL LOCATION: SW SW SW NW SEC. 19, T. 103 N., R. 50 W.
  3.0 - 28.0  GRAVEL, SANDY, SUBROUNDED; LESS THAN 1-INCH IN DIAMETER

TEST HOLE NUMBER: 627
LOCATION: 103N-50W-28AAAA
LEGAL LOCATION: NE NE NE NE SEC. 28, T. 103 N., R. 50 W.
  25.0 - 27.0  SAND, FINE TO MEDIUM

TEST HOLE NUMBER: 628
LOCATION: 103N-50W-30CBBB
LEGAL LOCATION: NW NW NW SW SEC. 30, T. 103 N., R. 50 W.
  3.0 - 27.0  SAND AND GRAVEL, FINE SAND TO COARSE GRAVEL; WELL ROUNDED

TEST HOLE NUMBER: 629
LOCATION: 103N-50W-31BBBB
LEGAL LOCATION: NW NW NW NW SEC. 31, T. 103 N., R. 50 W.
  6.0 - 12.0  SAND AND GRAVEL, FINE SAND TO FINE GRAVEL

TEST HOLE NUMBER: 630
LOCATION: 103N-50W-33AAAA
LEGAL LOCATION: NE NE NE NE SEC. 33, T. 103 N., R. 50 W.

  20.0 - 25.0 Gravel, coarse; with brown, silty, sandy clay (till)

* * *

TEST HOLE NUMBER: 631
LOCATION: 103N-51W-02CBB
LEGAL LOCATION: SW NW NW SW SEC. 02, T. 103 N., R. 51 W.

  13.0 - 25.0 Sand, tan-brown, medium to coarse, very clayey; saturated, oxidized, gravelly from 22 to 25 feet
  25.0 - 34.0 Gravel, tan-brown, fine to medium, sandy, clayey; saturated, oxidized

* * *

TEST HOLE NUMBER: 632
LOCATION: 103N-51W-10CCCC
LEGAL LOCATION: SW SW SW SW SEC. 10, T. 103 N., R. 51 W.

  15.0 - 18.0 Sand, fine to coarse; with some gravel

* * *

TEST HOLE NUMBER: 633
LOCATION: 103N-51W-14BBA
LEGAL LOCATION: NE NW NW SEC. 14, T. 103 N., R. 51 W.

  2.0 - 26.0 Sand, brown, clayey

* * *

TEST HOLE NUMBER: 634
LOCATION: 103N-51W-14BBBC
LEGAL LOCATION: SW NW NW NW SEC. 14, T. 103 N., R. 51 W.

  18.0 - 29.0 Sand and gravel, brown; some coarse gravel

* * *

TEST HOLE NUMBER: 635
LOCATION: 103N-51W-14CDDC
LEGAL LOCATION: SW SE SE SW SEC. 14, T. 103 N., R. 51 W.

  10.0 - 14.0 Sand, very coarse; various rock types

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TEST HOLE NUMBER: 636

* * *

124
<table>
<thead>
<tr>
<th>Test Hole Number</th>
<th>Location</th>
<th>Legal Location</th>
<th>Soil Type and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>617</td>
<td>103N-51W-19BADD</td>
<td>SE SW SW SEC. 19, T. 103 N., R. 51 W.</td>
<td>0 - 4.0 Gravel, reddish-brown, fine to coarse, sandy; moist, oxidized</td>
</tr>
<tr>
<td>638</td>
<td>103N-51W-19DDDD</td>
<td>SE SE SE SE SEC. 19, T. 103 N., R. 51 W.</td>
<td>1.0 - 20.0 Sand and gravel, medium to coarse</td>
</tr>
<tr>
<td>639</td>
<td>103N-51W-20CCCC</td>
<td>SW SW SW SEC. 20, T. 103 N., R. 51 W.</td>
<td>24.0 - 25.0 Gravel, fine</td>
</tr>
<tr>
<td>640</td>
<td>103N-51W-23BABB</td>
<td>NW NW NE NW SEC. 23, T. 103 N., R. 51 W.</td>
<td>2.0 - 15.0 Sand, creamy-brown, medium to coarse, very clayey; moist to saturated, oxidized</td>
</tr>
<tr>
<td>641</td>
<td>103N-51W-25BDDC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

125
LEGAL LOCATION: SW SE SE NW SEC. 25, T. 103 N., R. 51 W.

4.0 - 15.0 SAND, MEDIUM TO COARSE
15.0 - 41.0 SAND AND GRAVEL, GRAY, MEDIUM TO COARSE

***

TEST HOLE NUMBER: 642
LOCATION: 103N-51W-25CBBB 1
LEGAL LOCATION: NW NW NW SW SEC. 25, T. 103 N., R. 51 W.

15.0 - 18.0 SAND, FINE TO MEDIUM, SLIGHTLY GRAVELLY; OXIDIZED, SATURATED

***

TEST HOLE NUMBER: 643
LOCATION: 103N-51W-25CBBB 2
LEGAL LOCATION: NW NW NW SW SEC. 25, T. 103 N., R. 51 W.

15.0 - 19.0 SAND, BROWN, FINE TO MEDIUM, VERY CLAYEY; OXIDIZED, SATURATED

***

TEST HOLE NUMBER: 644
LOCATION: 103N-51W-27CDDD
LEGAL LOCATION: SE SE SE SW SEC. 27, T. 103 N., R. 51 W.

6.0 - 10.0 SAND, BROWN, MEDIUM, CLAYEY; OXIDIZED, UNSATURATED

***

TEST HOLE NUMBER: 645
LOCATION: 103N-51W-28CBB
LEGAL LOCATION: NW NW SW SEC. 28, T. 103 N., R. 51 W.

1.0 - 5.0 SAND AND GRAVEL, FINE TO MEDIUM SAND, COARSE GRAVEL
5.0 - 10.0 SAND AND GRAVEL, COARSE SAND, FINE TO MEDIUM GRAVEL

***

TEST HOLE NUMBER: 646
LOCATION: 103N-51W-28CBB
LEGAL LOCATION: NW NW NW SW SEC. 28, T. 103 N., R. 51 W.

1.0 - 7.0 SAND AND GRAVEL, FINE SAND TO COARSE GRAVEL, SLIGHTLY SILTY

***

- 126
TEST HOLE NUMBER: 647
LOCATION: 103N-51W-28CCBC
LEGAL LOCATION: SW NW SW SW Sec. 28, T. 103 N., R. 51 W.

5.0 - 10.0 SAND AND GRAVEL; SOME CLAY

** **

TEST HOLE NUMBER: 648
LOCATION: 103N-51W-28CCC
LEGAL LOCATION: SW SW SW Sec. 28, T. 103 N., R. 51 W.

9.0 - 14.0 SAND, MEDIUM TO COARSE, SILTY

14.0 - 17.0 GRAVEL, FINE TO COARSE

** **

TEST HOLE NUMBER: 649
LOCATION: 103N-51W-30ADDA
LEGAL LOCATION: NE SE NE NE Sec. 30, T. 103 N., R. 51 W.

0 - 18.0 GRAVEL, BROWNISH-RED, COARSE, SANDY; DRY, OXIDIZED

18.0 - 33.0 GRAVEL, REDDISH-BROWN, FINE TO MEDIUM, SILTY; MOIST, OXIDIZED

** **

TEST HOLE NUMBER: 650
LOCATION: 103N-51W-30AABB
LEGAL LOCATION: NW NW NE NE Sec. 32, T. 103 N., R. 51 W.

1.0 - 7.0 GRAVEL, REDDISH-BROWN, FINE TO COARSE, SANDY; DRY, OXIDIZED

7.0 - 12.0 SAND, REDDISH-BROWN, FINE TO COARSE, SLIGHTLY CLAYEY, GRAVELLY; MOIST, OXIDIZED

** **

TEST HOLE NUMBER: 651
LOCATION: 103N-51W-32AADD
LEGAL LOCATION: SE NE NE Sec. 32, T. 103 N., R. 51 W.

3.0 - 6.0 GRAVEL, VERY COARSE

** **

TEST HOLE NUMBER: 652
LOCATION: 103N-51W-33BCC
LEGAL LOCATION: SW SW NW Sec. 33, T. 103 N., R. 51 W.

1.0 - 3.0 SAND, BROWN, SILTY

3.0 - 8.0 SAND AND GRAVEL, BROWN

127
18.0 - 24.5 SAND, BROWN, SILTY; MOIST

** **

TEST HOLE NUMBER: 653
LOCATION: 103N=51W-33CDDD
LEGAL LOCATION: SE SE NW SEC. 33, T. 103 N., R. 51 W.

3.9 - 12.6 GRAVEL, BROWN, FINE TO COARSE, SANDY

** **

TEST HOLE NUMBER: 654
LOCATION: 103N=51W-31CDDD
LEGAL LOCATION: SE SE SE SW SEC. 33, T. 103 N., R. 51 W.

4.0 - 6.0 SAND AND GRAVEL; HARD ROCK AT 6 FEET, COULD NOT PENETRATE (QUARTZITE?)

** **

TEST HOLE NUMBER: 655
LOCATION: 103N=51W-33CDDD
LEGAL LOCATION: SE SE SE SW SEC. 33, T. 103 N., R. 51 W.

2.0 - 7.0 SAND AND GRAVEL, COARSE
10.0 - 11.0 GRAVEL, COARSE

** **

TEST HOLE NUMBER: 656
LOCATION: 103N=51W-33ACC
LEGAL LOCATION: SW SW NE SEC. 34, T. 103 N., R. 51 W.

9.0 - 7.0 GRAVEL, FINE TO COARSE

** **

TEST HOLE NUMBER: 657
LOCATION: 103N=51W-34ADD
LEGAL LOCATION: SE SE NE SEC. 34, T. 103 N., R. 51 W.

1.0 - 3.0 SAND, FINE TO MEDIUM
3.0 - 5.0 GRAVEL, COARSE
5.0 - 8.0 SAND, MEDIUM TO COARSE
8.0 - 40.0 SAND, VERY FINE, CLAYEY

** **

TEST HOLE NUMBER: 658
LOCATION: 103N=51W-34CCCC
LEGAL LOCATION: SW SW SW SW SEC. 34, T. 103 N., R. 51 W.

1.0 - 5.0 SAND AND GRAVEL, FINE SAND TO FINE

128 -
GRAVEL, SLIGHTLY SILTY

TEST HOLE NUMBER: 659
LOCATION: 103N-51W-35ADC
LEGAL LOCATION: SW SE NE SEC. 35, T. 103 N., R. 51 W.
4.2 - 13.6 SAND, SILTY
13.6 - 20.5 SAND, GRAY-GREEN, FINE TO COARSE, GRAVELLY

TEST HOLE NUMBER: 660
LOCATION: 103N-51W-35CCC
LEGAL LOCATION: SW SW SW SEC. 35, T. 103 N., R. 51 W.
2.0 - 7.0 SAND AND GRAVEL, COARSE SAND, FINE GRAVEL
7.0 - 15.0 SAND AND GRAVEL, FINE TO MEDIUM SAND, FINE GRAVEL
15.0 - 26.0 SAND, BROWN, VERY FINE, CLAYEY

TEST HOLE NUMBER: 661
LOCATION: 103N-51W-35CCD
LEGAL LOCATION: SE SE SW SW SEC. 35, T. 103 N., R. 51 W.
8.0 - 9.0 GRAVEL
9.0 - 28.0 SAND, FINE; SAMPLE TAKEN

TEST HOLE NUMBER: 662
LOCATION: 103N-51W-35CDCC
LEGAL LOCATION: SW SW SE SW SEC. 35, T. 103 N., R. 51 W.
5.0 - 33.0 SAND, BROWN, FINE TO COARSE; CLAY LAYER FROM 28 TO 29 FEET

TEST HOLE NUMBER: 663
LOCATION: 103N-51W-35DCE
LEGAL LOCATION: SE SW SE SEC. 35, T. 103 N., R. 51 W.
10.0 - 11.0 GRAVEL AND SAND, COARSE SAND
11.0 - 14.0 SAND, COARSE

TEST HOLE NUMBER: 664

129
LOCATION: 103N-51W-36BCC
LEGAL LOCATION: SW SW NW SEC. 36, T. 103 N., R. 81 W.

0 - 8.0 SAND, BROWN, MEDIUM TO COARSE

***

TEST HOLE NUMBER: 665
LOCATION: 103N-51W-36BCD
LEGAL LOCATION: SE SW NW SEC. 36, T. 103 N., R. 51 W.

0 - 1.0 SAND, BLACK, SILTY
1.0 - 3.0 SAND, BROWN, COARSE
3.0 - 11.5 GRAVEL, SANDY
11.5 - 15.0 SAND, GRAY, COARSE
15.0 - 21.5 GRAVEL, SANDY

***

TEST HOLE NUMBER: 666
LOCATION: 103N-52W-03BBBS
LEGAL LOCATION: NW NW SW NW SW SEC. 03, T. 103 N., R. 52 W.

6.0 - 13.0 SAND, YELLOW, MEDIUM TO COARSE

***

TEST HOLE NUMBER: 667
LOCATION: 103N-52W-07CCCB
LEGAL LOCATION: NW SW SW SW SEC. 03, T. 103 N., R. 62 W.

12.0 - 43.0 SAND AND GRAVEL, CLAYEY

***

TEST HOLE NUMBER: 668
LOCATION: 103N-51W-07CCCC
LEGAL LOCATION: SW SW SW SW SEC. 07, T. 103 N., R. 52 W.

12.0 - 16.0 SAND, BROWN AND RED, FINE; OXIDIZED

***

TEST HOLE NUMBER: 669
LOCATION: 103N-52W-10ADDA
LEGAL LOCATION: NE SE SE NE SEC. 10, T. 103 N., R. 52 W.

16.0 - 27.0 SAND AND GRAVEL, GRAY, FINE SAND, MEDIUM GRAVEL, VER; CLAYEY

***

TEST HOLE NUMBER: 670
LOCATION: 103N-52W-11DDCD

130
LEGAL LOCATION: SE SW SE SE SEC. 11, T. 103 N., R. 52 W.

0 - 3.0 SAND AND GRAVEL, REDDISH-BROWN, COARSE SAND, MEDIUM GRAVEL; OXIDIZED

* * *

TEST HOLE NUMBER: 671
LOCATION: 103N-52W-13DDCC
LEGAL LOCATION: SW SW SE SE SEC. 13, T. 103 N., R. 52 W.

1.0 - 11.0 SAND, REDDISH-BROWN, MEDIUM, CLAYEY; OXIDIZED
11.0 - 21.0 SAND AND GRAVEL, REDDISH-BROWN, MEDIUM SAND, COARSE GRAVEL; OXIDIZED
21.0 - 47.0 SAND AND GRAVEL, REDDISH-BROWN, MEDIUM SAND, MEDIUM GRAVEL, CLAYEY; OXIDIZED, HIT ROCK AT 47 FEET, COULD NOT PENETRATE

* * *

TEST HOLE NUMBER: 672
LOCATION: 103N-52W-14ABBB
LEGAL LOCATION: NW NW NW NE SEC. 14, T. 103 N., R. 52 W.

9.0 - 13.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE TO MEDIUM GRAVEL

* * *

TEST HOLE NUMBER: 673
LOCATION: 103N-52W-21CBB
LEGAL LOCATION: NW NW SW SEC. 21, T. 103 N., R. 52 W.

1.0 - 7.0 SAND, BROWN, SILTY

* * *

TEST HOLE NUMBER: 674
LOCATION: 103N-52W-24AAAA
LEGAL LOCATION: NE NE NE NE SEC. 24, T. 103 N., R. 52 W.

0 - 5.0 SAND AND GRAVEL, FINE SAND TO MEDIUM GRAVEL
25.0 - 34.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL; POSSIBLY WITH SOME THIN OLIVE-COLORED CLAY LAYERS

* * *

TEST HOLE NUMBER: 675
LOCATION: 103N-52W-25CCCC
LEGAL LOCATION: SW SW SW SW SEC. 25, T. 103 N., R. 52 W.

111
8.0 - 14.0 Sand and gravel, medium to very coarse; cobbles, dry, could not penetrate rocks
* * *

TEST HOLE NUMBER: 676
LOCATION: 103N-52W-26SDDDD
LEGAL LOCATION: SE SE SE SE SEC. 25, T. 103 N., R. 52 W.
0 - 6.0 Sand, coarse
* * *

TEST HOLE NUMBER: 677
LOCATION: 103N-52W-27AAAD
LEGAL LOCATION: SE NE NE NE SEC. 27, T. 103 N., R. 52 W.
1.0 - 3.0 Gravel, red-brown, medium
5.0 - 7.0 Gravel, red-brown, medium
* * *

TEST HOLE NUMBER: 678
LOCATION: 104N-47W-06DCCC
LEGAL LOCATION: SW SW SW SE SEC. 06, T. 104 N., R. 47 W.
8.0 - 16.0 Sand, brown, medium, slightly clayey; oxidized, saturated
16.0 - 22.0 Sand, gray, medium, slightly clayey; unoxidized, saturated
* * *

TEST HOLE NUMBER: 679
LOCATION: 104N-47W-08DCCC
LEGAL LOCATION: SW SW SW SE SEC. 08, T. 104 N., R. 47 W.
3.0 - 20.0 Sand, light-brown, medium to coarse; white clay layer at 12 feet, some gravel
* * *

TEST HOLE NUMBER: 680
LOCATION: 104N-47W-15CBBC
LEGAL LOCATION: SW NW NW SW SEC. 15, T. 104 N., R. 47 W.
5.0 - 13.0 Sand and gravel, fine to coarse sand, medium to coarse gravel
* * *

TEST HOLE NUMBER: 681
LOCATION: 104N-47W-15CBCC
LEGAL LOCATION: SW SW NW SW SEC. 15, T. 104 N., R. 47 W.

9.0 - 13.0 SAND AND GRAVEL, FINE TO COARSE SAND, MEDIUM GRAVEL

* * *

TEST HOLE NUMBER: 682
LOCATION: 104N-47W-15CCBC
LEGAL LOCATION: SW NW SW SW SEC. 15, T. 104 N., R. 47 W.

5.0 - 13.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE SAND, FINE TO MEDIUM GRAVEL

* * *

TEST HOLE NUMBER: 683
LOCATION: 104N-47W-15CCCC
LEGAL LOCATION: SW SW SW SW SEC. 15, T. 104 N., R. 47 W.

5.0 - 21.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE SAND, MEDIUM GRAVEL; OXIDIZED, MOIST TO SATURATED

* * *

TEST HOLE NUMBER: 684
LOCATION: 104N-47W-18DCCC
LEGAL LOCATION: SW SW SW SE SEC. 18, T. 104 N., R. 47 W.

4.0 - 16.0 SAND, BROWN, FINE TO MEDIUM, VERY CLAYEY; MOIST, OXIDIZED

* * *

TEST HOLE NUMBER: 685
LOCATION: 104N-47W-19DDDA
LEGAL LOCATION: NE SE SE SE SEC. 19, T. 104 N., R. 47 W.

1.0 - 5.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE SAND, FINE TO COARSE GRAVEL, SLIGHTLY CLAYEY; DRY, OXIDIZED

5.0 - 8.0 GRAVEL, BROWN, MEDIUM TO COARSE, VERY CLAYEY; MOIST, OXIDIZED, SATURATED AT 7 FEET

8.0 - 41.0 SAND, BROWN, FINE TO COARSE, CLAYEY; SOME FINE GRAVEL, SATURATED, OXIDIZED

* * *

TEST HOLE NUMBER: 686
LOCATION: 104N-47W-20DDDA
LEGAL LOCATION: NE SE SE NW SEC. 20, T. 104 N., R. 47 W.

137
0 - 8.0  SAND, BROWN, FINE TO COARSE, CLAYEY; SOME FINE TO MEDIUM GRAVEL, MOIST, OXIDIZED
8.0 - 15.0 GRAVEL, FINE TO MEDIUM, CLAYEY TO VERY CLAYEY, SANDY, MOIST, OXIDIZED

** **

TEST HOLE NUMBER: 687
LOCATION: 104N-47W-29CCC
LEGAL LOCATION: SW SW SW SW SEC. 29, T. 104 N., R. 47 W.

7.0 - 8.0  SAND

** **

TEST HOLE NUMBER: 688
LOCATION: 104N-47W-33CCCCB
LEGAL LOCATION: NW SW SW SW SEC. 33, T. 104 N., R. 47 W.

1.0 - 10.0 SAND AND GRAVEL, BROWN, FINE TO MEDIUM SAND, FINE TO COARSE GRAVEL, ROUNDED; LITTLE CLAY, OXIDIZED, DRY
10.0 - 14.0 SAND, BROWN, FINE TO MEDIUM; LITTLE CLAY, DRY TO MOIST, OXIDIZED, SOME COARSE SAND
14.0 - 16.0 GRAVEL; LOST BIT, UNABLE TO CONTINUE

** **

TEST HOLE NUMBER: 689
LOCATION: 104N-47W-33CCCCB 1
LEGAL LOCATION: NW SW SW SW SEC. 33, T. 104 N., R. 47 W.

1.0 - 19.0 SAND, BROWN, FINE TO MEDIUM, SLIGHTLY CLAYEY; DRY TO MOIST, OXIDIZED, GRAVEL STRINGERS AT 4 TO 5 FEET, 9 TO 10 FEET AND 15 TO 17 FEET
19.0 - 23.0 GRAVEL, FINE TO COARSE; LITTLE RETURN

** **

TEST HOLE NUMBER: 690
LOCATION: 104N-47W-34AAABA
LEGAL LOCATION: NE NW NE NE SEC. 34, T. 104 N., R. 47 W.

23.0 - 24.0 SAND, BROWN, MEDIUM

** **

TEST HOLE NUMBER: 691
LOCATION: 104N-47W-34DDDD 1
LEGAL LOCATION: SE SE SE SE SEC. 34, T. 104 N., R. 47 W.

134
4.0 - 15.0  SAND, MEDIUM TO COARSE

TEST HOLE NUMBER:  692
LOCATION:  104N-47W-34R20DD 2
LEGAL LOCATION:  SE SE SE SE SEC. 34, T. 104 N., R. 47 W.

5.0 - 17.0  SAND, MEDIUM TO COARSE

TEST HOLE NUMBER:  693
LOCATION:  104N-48W-02DAAD 1
LEGAL LOCATION:  SE NE NE SE SEC. 02, T. 104 N., R. 48 W.

2.0 -  8.0  SAND, BROWN, MEDIUM; OXIDIZED
19.0 - 27.0  SAND, BROWN, MEDIUM TO COARSE; OXIDIZED

TEST HOLE NUMBER:  694
LOCATION:  104N-48W-02DAAD 2
LEGAL LOCATION:  SE NE NE SE SEC. 02, T. 104 N., R. 48 W.

0 -  8.0  SAND, BROWN, MEDIUM, SILTY, CLAYEY; OXIDIZED
22.0 - 32.0  SAND, BROWN, MEDIUM TO COARSE; OXIDIZED

TEST HOLE NUMBER:  695
LOCATION:  104N-48W-02DAAD 3
LEGAL LOCATION:  SE NE NE SE SEC. 02, T. 104 N., R. 48 W.

1.0 - 13.0  SAND, BROWN, MEDIUM TO COARSE; OXIDIZED

TEST HOLE NUMBER:  696
LOCATION:  104N-48W-02DABB
LEGAL LOCATION:  NW NW NE SE SEC. 02, T. 104 N., R. 48 W.

0 -  2.0  SAND AND GRAVEL, BROWN, FINE TO COARSE; SAND, FINE TO COARSE GRAVEL, CLAYEY; OXIDIZED, DRY
2.0 - 24.0  SAND, BROWN, FINE TO MEDIUM, SLIGHTLY CLAYEY; VERY FEW FINE PEBBLES, DAMP, OXIDIZED, CLAY CONTENT INCREASES WITH DEPTH

TEST HOLE NUMBER:  697

115
LOCATION: 104N-48W-02DADB
LEGAL LOCATION: SE NW NE SE SEC. 02, T. 104 N., R. 48 W.

0 - 4.0 SAND, BROWN, FINE TO MEDIUM; OXIDIZED, DRY
4.0 - 25.0 SAND, LIGHT-BROWN, FINE TO MEDIUM, WELL-SORTED; VERY CLEAN, DRY, OXIDIZED, CLAY CONTENT EVIDENT AT 20 FEET AND INCREASES WITH DEPTH

***

TEST HOLE NUMBER: 698
LOCATION: 104N-48W-02DCBA
LEGAL LOCATION: NE NW SW SE SEC. 02, T. 104 N., R. 48 W.

1.0 - 4.0 GRAVEL, BROWN TO BLACK, MEDIUM TO COARSE; SOME FINE TO COARSE SAND, DRY, OXIDIZED
4.0 - 9.0 SAND AND GRAVEL, TAN TO BROWN, FINE TO COARSE SAND, FINE TO COARSE GRAVEL, POORLY SORTED; DRY, OXIDIZED
9.0 - 58.0 SAND, BROWN, FINE TO MEDIUM, WELL-SORTED; VERY CLEAN, DRY, OXIDIZED, SOME SMALL CLAY LENSES AND GRAVEL STRINGERS PRESENT, SATURATED AT APPROXIMATELY 57 FEET

***

TEST HOLE NUMBER: 699
LOCATION: 104N-48W-02DCEB 1
LEGAL LOCATION: SE NW SW SE SEC. 02, T. 104 N., R. 48 W.

0 - 15.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE SAND, FINE TO MEDIUM GRAVEL, SLIGHTLY CLAYEY; DRY TO MOIST, OXIDIZED
15.0 - 42.0 SAND, YELLOW-BROWN, FINE TO MEDIUM, SLIGHTLY CLAYEY; DRY TO MOIST, OXIDIZED

***

TEST HOLE NUMBER: 700
LOCATION: 104N-48W-02DCEB 2
LEGAL LOCATION: SE NW SW SE SEC. 02, T. 104 N., R. 48 W.

0 - 4.0 SAND AND GRAVEL, RED-BROWN, FINE TO COARSE SAND, FINE GRAVEL, CLAYEY; DRY, OXIDIZED
4.0 - 9.0 SAND, TAN-BROWN, FINE TO MEDIUM, SLIGHTLY CLAYEY; OXIDIZED, MOIST
9.0 - 10.0 SAND AND GRAVEL, BROWN, FINE TO COARSE SAND, FINE GRAVEL, SLIGHTLY CLAYEY; OXIDIZED, MOIST
10.0 - 42.0 SAND, BROWN, MEDIUM, SLIGHTLY CLAYEY,

136
WELL-SORTED; OXIDIZED, MOIST, FEW THIN CLAY LENSES

* * *

TEST HOLE NUMBER: 701
LOCATION: 104N-48W-02DCCD
LEGAL LOCATION: SE SW SW SE SEC. 02, T. 104 N., R. 48 W.

1.0 - 6.0 SAND, LIGHT-BROWN, FINE, VERY SILTY, CLAYEY, WELL-SORTED; DRY, OXIDIZED
6.0 - 10.0 SAND, DARK-BROWN, FINE TO MEDIUM, CLAYEY; DRY TO MOIST, OXIDIZED
10.0 - 18.0 SAND, LIGHT-BROWN, FINE, VERY SILTY; SOME CLAY, DRY, OXIDIZED
18.0 - 35.0 SAND, DARK-BROWN, MEDIUM TO COARSE, SLIGHTLY CLAYEY; SATURATED, OXIDIZED

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TEST HOLE NUMBER: 702
LOCATION: 104N-48W-11BBBB
LEGAL LOCATION: NW NW NW NW SEC. 11, T. 104 N., R. 48 W.

17.0 - 19.0 SAND, YELLOWISH-BROWN, MEDIUM

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TEST HOLE NUMBER: 703
LOCATION: 104N-48W-11BBBB 1
LEGAL LOCATION: NW NW NW NW SEC. 11, T. 104 N., R. 48 W.

1.0 - 2.0 SAND, BROWN, MEDIUM, CLAYEY; OXIDIZED, DRY
7.0 - 19.0 SAND, LIGHT-BROWN, MEDIUM TO COARSE, VERY CLAYEY; OXIDIZED, SATURATED, CLAY LENS AT 15 TO 16 FEET AND 17 TO 18 FEET
19.0 - 22.0 SAND, GRAY, MEDIUM TO COARSE, VERY CLAYEY; UNOXIDIZED, SATURATED

* * *

TEST HOLE NUMBER: 704
LOCATION: 104N-48W-11BCCC
LEGAL LOCATION: SW SW SW NW SEC. 11, T. 104 N., R. 48 W.

6.0 - 14.0 SAND, YELLOW-BROWN, FINE TO MEDIUM, CLAYEY; OXIDIZED, SATURATED
14.0 - 22.0 SAND, GRAY-BROWN, MEDIUM TO COARSE; SATURATED, UNOXIDIZED

* * *

TEST HOLE NUMBER: 705

137
LOCATION: 104N-48W-110DAD
LEGAL LOCATION: SE NE SE SE SEC. 11, T. 104 N., R. 48 W.

6.0 - 23.0 SAND, TAN-BROWN, FINE TO MEDIUM. SLIGHTLY CLAYEY; OXIDIZED, SATURATED. SAND IS FINE BEYOND 13 FEET AND CLAY CONTENT INCREASES WITH DEPTH BEYOND .7 FEET

* * * *

TEST HOLE NUMBER: 706
LOCATION: 104N-48W-12DAAD
LEGAL LOCATION: NE NE NE SE SEC. 12, T. 104 N., R. 48 W.

2.0 - 5.0 SAND, BROWN, FINE TO MEDIUM

* * * *

TEST HOLE NUMBER: 707
LOCATION: 104N-48W-13BCCC
LEGAL LOCATION: SW SW SW NW SEC. 13, T. 104 N., R. 48 W.

9.0 - 25.0 SAND, YELLOW-BROWN, FINE, SLIGHTLY CLAYEY; MOIST TO SATURATED, OXIDIZED

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TEST HOLE NUMBER: 708
LOCATION: 104N-48W-15AADDA
LEGAL LOCATION: SE SE NE NE SEC. 15, T. 104 N., R. 48 W.

8.0 - 18.0 SAND, BROWN, MEDIUM TO COARSE; OXIDIZED
22.0 - 38.0 SAND AND GRAVEL, BROWN, FINE SAND, FINE TO MEDIUM GRAVEL, SOME COBBLES, OXIDIZED

* * * *

TEST HOLE NUMBER: 709
LOCATION: 104N-48W-15AADD 2
LEGAL LOCATION: SE SE NE NE SEC. 15, T. 104 N., R. 48 W.

8.0 - 28.0 SAND, BROWN, FINE TO COARSE

* * * *

TEST HOLE NUMBER: 710
LOCATION: 104N-48W-15AADD 3
LEGAL LOCATION: SE SE NE NE SEC. 15, T. 104 N., R. 48 W.

9.0 - 23.0 SAND AND GRAVEL, FINE TO COARSE SAND, MEDIUM GRAVEL, VERY CLAYEY; SOME CLAY LAYERS, OXIDIZED

138
TEST HOLE NUMBER: 711
LOCATION: 104N-48W-15CCC
LEGAL LOCATION: SW SW SW SW SEC. 15, T. 104 N., R. 48 W.

10.0 - 30.0 SAND, FINE TO MEDIUM, SILTY

TEST HOLE NUMBER: 712
LOCATION: 104N-48W-17DAAA
LEGAL LOCATION: NE NE NE SE SEC. 17, T. 104 N., R. 48 W.

17.0 - 21.0 GRAVEL, BROWN, MEDIUM, SANDY

TEST HOLE NUMBER: 713
LOCATION: 104N-48W-21DDDD
LEGAL LOCATION: SE SE SE SE SEC. 21, T. 104 N., R. 48 W.

16.0 - 24.0 GRAVEL, TAN-BROWN, FINE, VERY CLAYEY, SLIGHTLY SANDY; OXIDIZED, SATURATED

TEST HOLE NUMBER: 714
LOCATION: 104N-48W-22DDDD
LEGAL LOCATION: SE SE SE SE SEC. 22, T. 104 N., R. 48 W.

7.0 - 12.0 SAND, BROWN, FINE TO MEDIUM, CLAYEY TO VERY CLAYEY; OXIDIZED, SATURATED

TEST HOLE NUMBER: 715
LOCATION: 104N-48W-26DCCC
LEGAL LOCATION: SW SW SE SEC. 26, T. 104 N., R. 48 W.

10.0 - 27.0 SAND, DARK-BROWN, MEDIUM TO COARSE, CLAYEY, GRAVELLY; OXIDIZED, SATURATED AT 10 FEET

TEST HOLE NUMBER: 716
LOCATION: 104N-48W-27DAAA
LEGAL LOCATION: NE NE NE SE SEC. 27, T. 104 N., R. 48 W.

7.0 - 12.0 GRAVEL, MEDIUM TO COARSE; WITH LIGHT-GREY SILT

* * * *
TEST HOLE NUMBER: 717
LOCATION: 104N-48W-27DAAB 2
LEGAL LOCATION: NE NE NE SE SEC. 27, T. 104 N., R. 48 W.

8.0 - 12.0 SAND, FINE, CLAYEY
12.0 - 18.0 SAND, CLAYEY

* * *

TEST HOLE NUMBER: 718
LOCATION: 104N-48W-27DAAB
LEGAL LOCATION: NW NE NE SE SEC. 27, T. 104 N., R. 48 W.

1.0 - 23.0 SAND, BROWN, FINE TO MEDIUM; OXIDIZED

* * *

TEST HOLE NUMBER: 719
LOCATION: 104N-48W-35DDC
LEGAL LOCATION: SW SE SE SEC. 35, T. 104 N., R. 48 W.

5.0 - 9.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND, FINE GRAVEL
9.0 - 15.0 SAND, MEDIUM

* * *

TEST HOLE NUMBER: 720
LOCATION: 104N-49W-01AABA
LEGAL LOCATION: NE NW NE NE SEC. 01, T. 104 N., R. 49 W.

9.0 - 14.0 SAND, MEDIUM TO COARSE
14.0 - 19.0 SAND, COARSE

* * *

TEST HOLE NUMBER: 721
LOCATION: 104N-49W-01ABAC
LEGAL LOCATION: SW NE NW NE SEC. 01, T. 104 N., R. 49 W.

10.0 - 20.0 SAND, BROWN

* * *

TEST HOLE NUMBER: 722
LOCATION: 104N-49W-01ABAD
LEGAL LOCATION: SE NE NW NE SEC. 01, T. 104 N., R. 49 W.

7.0 - 9.0 SAND, FINE; SOME CLAY STRINGERS
9.0 - 22.0 SAND

* * *

TEST HOLE NUMBER: 723

140
LOCATION: 104N-49W-01ABC 1
LEGAL LOCATION: SW NW NW NE SEC. 01, T. 104 N., R. 49 W.

5.0 - 22.0 SAND, BROWN

* * * *

TEST HOLE NUMBER: 724
LOCATION: 104N-49W-01ABBC 2
LEGAL LOCATION: SW NW NW NE SEC. 01, T. 104 N., R. 49 W.

4.0 - 17.0 GRAVEL

* * * *

TEST HOLE NUMBER: 725
LOCATION: 104N-49W-01ABCA
LEGAL LOCATION: NE SW NW NE SEC. 01, T. 104 N., R. 49 W.

3.0 - 9.0 SAND
9.0 - 22.0 GRAVEL; CLEAN

* * * *

TEST HOLE NUMBER: 726
LOCATION: 104N-49W-01ABCC
LEGAL LOCATION: SW NW NW SEC. 01, T. 104 N., R. 49 W.

11.0 - 30.0 SAND

* * * *

TEST HOLE NUMBER: 727
LOCATION: 104N-49W-01ABCD
LEGAL LOCATION: SE SW NW NE SEC. 01, T. 104 N., R. 49 W.

11.0 - 31.0 SAND, WELL-SORTED

* * * *

TEST HOLE NUMBER: 728
LOCATION: 104N-49W-01ABDF
LEGAL LOCATION: NW SE NW SEC. 01, T. 104 N., R. 49 W.

7.0 - 9.0 SAND, RED
9.0 - 18.0 SAND, FINE
18.0 - 24.0 SAND; CLEAN

* * * *

TEST HOLE NUMBER: 729
LOCATION: 104N-49W-01ABDC
LEGAL LOCATION: SW SE NW NE SEC. 01, T. 104 N., R. 49 W.

141
7.0 - 15.0 SAND AND GRAVEL
15.0 - 22.0 SAND, FINE

***

TEST HOLE NUMBER: 730
LOCATION: 104N-49W-01ABDD
LEGAL LOCATION: SE SE NW NE SEC. 01, T. 104 N., R. 49 W.
13.0 - 24.0 SAND; CLEAN

***

TEST HOLE NUMBER: 731
LOCATION: 104N-49W-01ACAB
LEGAL LOCATION: NW NE SW NE SEC. 01, T. 104 N., R. 49 W.
3.0 - 5.0 SAND, BROWN, FINE
7.0 - 15.0 SAND
15.0 - 25.0 SAND; CLEAN

***

TEST HOLE NUMBER: 732
LOCATION: 104N-49W-01ACBA 1
LEGAL LOCATION: NE NW SW NE SEC. 01, T. 104 N., R. 49 W.
14.0 - 27.0 GRAVEL, WELL-SORTED; CLEAN

***

TEST HOLE NUMBER: 733
LOCATION: 104N-49W-01ACBA 2
LEGAL LOCATION: NE NW SW NE SEC. 01, T. 104 N., R. 49 W.
12.0 - 28.0 SAND, WELL-SORTED

***

TEST HOLE NUMBER: 734
LOCATION: 104N-49W-01ACBD
LEGAL LOCATION: SE NW SW NE SEC. 01, T. 104 N., R. 49 W.
4.0 - 7.0 SAND
7.0 - 27.0 SAND, WELL-SORTED

***

TEST HOLE NUMBER: 735
LOCATION: 104N-49W-01BAAA
LEGAL LOCATION: NE NE NE NW SEC. 01, T. 104 N., R. 49 W.
5.0 - 10.0 SAND, DARK-BROWN, CLAYEY
10.0 - 12.0 GRAVEL
12.0 - 20.0 SAND, MEDIUM TO COARSE

** * * *

TEST HOLE NUMBER: 736
LOCATION: 104N-49W-01BBBD
LEGAL LOCATION: SE NW NW NW SEC. 01, T. 104 N., R. 49 W.

2.0 - 9.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND

** * * *

TEST HOLE NUMBER: 737
LOCATION: 104N-49W-01BBCC
LEGAL LOCATION: SW SW NW NW SEC. 01, T. 104 N., R. 49 W.

2.0 - 17.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND

** * * *

TEST HOLE NUMBER: 738
LOCATION: 104N-49W-01BCCC
LEGAL LOCATION: SW SW SW NW SEC. 01, T. 104 N., R. 49 W.

2.0 - 13.0 SAND AND GRAVEL, MEDIUM TO COARSE SAND

** * * *

TEST HOLE NUMBER: 739
LOCATION: 104N-49W-02ABAB
LEGAL LOCATION: NW NE NW NE SEC. 02, T. 104 N., R. 49 W.

7.0 - 18.0 SAND, MEDIUM TO COARSE; SOME GRAVEL

** * * *

TEST HOLE NUMBER: 740
LOCATION: 104N-49W-02ABB
LEGAL LOCATION: NW NW NE NE SEC. 02, T. 104 N., R. 49 W.

6.0 - 20.0 SAND, MEDIUM TO COARSE; SOME GRAVEL

** * * *

TEST HOLE NUMBER: 741
LOCATION: 104N-49W-02BBA
LEGAL LOCATION: NE NE NW NW SEC. 02, T. 104 N., R. 49 W.

6.0 - 20.0 SAND, MEDIUM TO COARSE; SOME GRAVEL

** * * *

TEST HOLE NUMBER: 742
<table>
<thead>
<tr>
<th>Test Hole Number</th>
<th>Location</th>
<th>Legal Location</th>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
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<td>743</td>
<td>104N-49W-02BBB 1</td>
<td>NW NW NW NW SE. 02, T. 104 N., R. 49 W.</td>
<td>3.0</td>
<td>5.0 - Sand, Fine to Medium; Some Clay</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.0</td>
<td>20.0 - Sand, Coarse</td>
</tr>
<tr>
<td>744</td>
<td>104N-49W-02BBB</td>
<td>NW NW NW NW SE. 02, T. 104 N., R. 49 W.</td>
<td>4.0</td>
<td>8.0 - Sand and Gravel, Coarse; Unable to Penetrate</td>
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<tr>
<td>745</td>
<td>104N-49W-02BCC</td>
<td>SW SW NW NW SW SE. 02, T. 104 N., R. 49 W.</td>
<td>1.0</td>
<td>8.0 - Sand, Very Fine to Medium, Silty</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8.0</td>
<td>11.0 - Gravel, Fine to Very Coarse, Sandy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11.0</td>
<td>13.0 - Sand, Medium to Very Coarse; Some Gravel</td>
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<tr>
<td>746</td>
<td>104N-49W-02BAD</td>
<td>SW NW SE SW SE. 02, T. 104 N., R. 49 W.</td>
<td>3.0</td>
<td>9.0 - Sand, Medium to Coarse; Some Gravel</td>
</tr>
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<td></td>
<td></td>
<td>10.0</td>
<td>11.0 - Sand, Coarse (?)</td>
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<tr>
<td>747</td>
<td>104N-49W-02BAA</td>
<td>NE NE NW NW SE. 02, T. 104 N., R. 49 W.</td>
<td>5.0</td>
<td>6.0 - Sand, Fine to Medium</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>6.0</td>
<td>9.0 - Sand, Coarse; Some Gravel, Unable to Penetrate</td>
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</table>
TEST HOLE NUMBER: 748
LOCATION: 104N-49W-03AAAA
LEGAL LOCATION: NE NE NE NE SEC. 03, T. 104 N., R. 49 W.

4.0 - 20.0 SAND, MEDIUM TO COARSE; SOME GRAVEL

TEST HOLE NUMBER: 749
LOCATION: 104N-49W-03AAAD
LEGAL LOCATION: NW NE NE NE SEC. 03, T. 104 N., R. 49 W.

4.0 - 10.0 SAND, MEDIUM; SOME CLAY
10.0 - 15.0 SAND, MEDIUM TO COARSE; SOME CLAY
15.0 - 20.0 SAND, COARSE; SOME GRAVEL

TEST HOLE NUMBER: 750
LOCATION: 104N-49W-03AADD
LEGAL LOCATION: SE SE NE NE SEC. 03, T. 104 N., R. 49 W.

5.0 - 8.0 SAND, BROWN, CLAYEY
8.0 - 20.0 SAND, MEDIUM TO COARSE; SOME CLAY; CLAY CONTENT DECREASING WITH DEPTH

TEST HOLE NUMBER: 751
LOCATION: 104N-49W-03ABBA
LEGAL LOCATION: NE NW NW NE SEC. 03, T. 104 N., R. 49 W.

6.0 - 19.0 SAND, MEDIUM TO COARSE; SOME GRAVEL

TEST HOLE NUMBER: 752
LOCATION: 104N-49W-03ABDA
LEGAL LOCATION: NE SE NW NE SEC. 03, T. 104 N., R. 49 W.

5.0 - 10.0 SAND, BROWN, COARSE, CLAYEY
10.0 - 11.0 GRAVEL, FINE
11.0 - 19.0 SAND, COARSE; SOME GRAVEL

TEST HOLE NUMBER: 753
LOCATION: 104N-49W-03BDBA
LEGAL LOCATION: NE NW SE NW SEC. 03, T. 104 N., R. 49 W.

6.0 - 13.0 GRAVEL, COARSE
TEST HOLE NUMBER: 754
LOCATION: 104N-49W-03DAAA
LEGAL LOCATION: NE NE NE SE SEC. 03, T. 104 N., R. 49 W.
2.0 - 5.0 SAND, BROWN, CLAYEY
5.0 - 12.0 SAND, MEDIUM TO COARSE; GRAVEL; SOME CLAY

TEST HOLE NUMBER: 755
LOCATION: 104N-49W-03DAAA 1
LEGAL LOCATION: NE NE NE SE SEC. 03, T. 104 N., R. 49 W.
4.0 - 9.0 SAND, FINE TO MEDIUM
9.0 - 10.0 GRAVEL, VERY COARSE

TEST HOLE NUMBER: 756
LOCATION: 104N-49W-03DADC
LEGAL LOCATION: SW SE NE SE SEC. 03, T. 104 N., R. 49 W.
7.0 - 9.0 SAND, MEDIUM TO COARSE; SOME CLAY
9.0 - 11.0 SAND AND GRAVEL, COARSE

TEST HOLE NUMBER: 757
LOCATION: 104N-49W-03DDCC
LEGAL LOCATION: SW SW SE SE SEC. 03, T. 104 N., R. 49 W.
9.0 - 18.0 SAND, FINE; SAMPLE TAKEN
18.0 - 22.0 GRAVEL

TEST HOLE NUMBER: 758
LOCATION: 104N-49W-01DDCC 1
LEGAL LOCATION: SW SW SE SE SEC. 03, T. 104 N., R. 49 W.
5.0 - 11.0 SAND, MEDIUM

TEST HOLE NUMBER: 759
LOCATION: 104N-49W-07CCBB
LEGAL LOCATION: NW NW SW SW SEC. 07, T. 104 N., R. 49 W.
2.0 - 6.0 SAND AND GRAVEL, BROWN, MEDIUM SAND, MEDIUM TO COARSE GRAVEL; OXIDIZED

146
TEST HOLE NUMBER: 760
LOCATION: 104N-49W-10RAB
LEGAL LOCATION: NW NE NE SEC. 10, T. 104 N., R. 49 W.

5.0 - 15.0 SAND, BROWN, COARSE; SOME CLAY

** * **

TEST HOLE NUMBER: 761
LOCATION: 104N-49W-10AABC
LEGAL LOCATION: SW NW NE NE SEC. 10, T. 104 N., R. 49 W.

2.0 - 10.0 SAND, REDDISH-BROWN, CLAYEY
10.0 - 11.0 GRAVEL

** * **

TEST HOLE NUMBER: 762
LOCATION: 104N-49W-10ACCB
LEGAL LOCATION: NW SW SW NE SEC. 10, T. 104 N., R. 49 W.

5.0 - 15.0 SAND, BROWN, CLAYEY
15.0 - 17.0 GRAVEL, COARSE

** * **

TEST HOLE NUMBER: 763
LOCATION: 104N-49W-10ADDC
LEGAL LOCATION: SW SE SE NE SEC. 10, T. 104 N., R. 49 W.

5.0 - 11.0 SAND, MEDIUM TO COARSE; SOME CLAY

** * **

TEST HOLE NUMBER: 764
LOCATION: 104N-49W-10DABB
LEGAL LOCATION: NW NW NE SE SEC. 10, T. 104 N., R. 49 W.

5.0 - 9.0 SAND, BROWN; SOME CLAY
9.0 - 10.0 GRAVEL
10.0 - 16.0 SAND, COARSE; SOME CLAY

** * **

TEST HOLE NUMBER: 765
LOCATION: 104N-49W-11BBCC
LEGAL LOCATION: SW SW NW NW SEC. 11, T. 104 N., R. 49 W.

2.0 - 13.0 SAND, MEDIUM TO COARSE

** * **

TEST HOLE NUMBER: 766
LOCATION: 104N-49W-11BCCB

147
LEGAL LOCATION: NW SW SW NW SEC. 11, T. 104 N., R. 49 W.
5.0 - 13.0 SAND, BROWN; CHANGING TO GRAVEL
* * * *
TEST HOLE NUMBER: 767
LOCATION: 104N-49W-11BCCC
LEGAL LOCATION: SW SW SW NW SEC. 11, T. 104 N., R. 49 W.
2.0 - 10.0 SAND, MEDIUM TO COARSE; SOME GRAVEL
10.0 - 13.0 GRAVEL, FINE TO MEDIUM, SANDY
* * * *
TEST HOLE NUMBER: 768
LOCATION: 104N-49W-11BCDB
LEGAL LOCATION: NW SE SW NW SEC. 11, T. 104 N., R. 49 W.
2.0 - 5.0 SAND, BROWN, CLAYEY
* * * *
TEST HOLE NUMBER: 769
LOCATION: 104N-49W-11CBB
LEGAL LOCATION: NW NW SW SW SEC. 14, T. 104 N., R. 49 W.
1.0 - 5.0 SAND, GRAY, FINE TO MEDIUM
* * * *
TEST HOLE NUMBER: 770
LOCATION: 104N-49W-17CACD
LEGAL LOCATION: SE SW NE SW SEC. 17, T. 104 N., R. 49 W.
*****************************************************************************
*****************************************************************************
5.0 - 6.0 GRAVEL
15.0 - 58.0 SAND AND GRAVEL
* * * *
TEST HOLE NUMBER: 771
LOCATION: 104N-49W-17CADB
LEGAL LOCATION: NW SE NE SW SEC. 17, T. 104 N., R. 49 W.
*****************************************************************************
* THIS LOG CONTAINS UNVERIFIED INFORMATION *
*****************************************************************************
5.0 - 6.0 GRAVEL
12.0 - 67.0 SAND AND GRAVEL
* * * *
148
TEST HOLE NUMBER: 772
LOCATION: 104N-49W-17CCAB
LEGAL LOCATION: NW NE SW SW SEC. 17, T. 104 N., R. 49 W.

<table>
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<th>Depth</th>
<th>Description</th>
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<tbody>
<tr>
<td>8.0</td>
<td>SAND, BROWN, SILTY</td>
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<tr>
<td>12.0</td>
<td>SAND AND GRAVEL, MEDIUM SAND TO MEDIUM GRAVEL</td>
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TEST HOLE NUMBER: 773
LOCATION: 104N-49W-20ADAC
LEGAL LOCATION: SW NE SE NE SEC. 20, T. 104 N., R. 49 W.

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<tbody>
<tr>
<td>2.0</td>
<td>SAND, BROWN, CLAYEY</td>
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TEST HOLE NUMBER: 774
LOCATION: 104N-49W-20BBBC
LEGAL LOCATION: NW SW NW NW SEC. 20, T. 104 N., R. 49 W.

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<td>24.0</td>
<td>SAND, MEDIUM TO COARSE; SOME CLAY</td>
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TEST HOLE NUMBER: 775
LOCATION: 104N-49W-20CCDD
LEGAL LOCATION: SE SE SW SW SEC. 20, T. 104 N., R. 49 W.

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<tr>
<td>1.0</td>
<td>SAND, FINE TO MEDIUM, SILTY</td>
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<tr>
<td>8.0</td>
<td>SAND, VERY FINE TO COARSE, SILTY; SOME GRAVEL, THIN CLAY BEDS</td>
</tr>
<tr>
<td>21.0</td>
<td>GRAVEL, SANDY AND SILTY</td>
</tr>
<tr>
<td>22.0</td>
<td>SAND, VERY FINE; SOME GRAVEL, VERY SILTY AND CLAYEY</td>
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TEST HOLE NUMBER: 776
LOCATION: 104N-49W-20CDDC
LEGAL LOCATION: SW SE SW SEC. 20, T. 104 N., R. 49 W.

<table>
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<tbody>
<tr>
<td>0</td>
<td>SAND, FINE TO MEDIUM, SILTY</td>
</tr>
<tr>
<td>10.0</td>
<td>SAND, FINE, SILTY AND CLAYEY</td>
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TEST HOLE NUMBER: 777
LOCATION: 104N-49W-20CCDC
LEGAL LOCATION: SW SW SE SW SEC. 20, T. 104 N., R. 49 W.

<table>
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<tbody>
<tr>
<td>1.0</td>
<td>SAND, VERY FINE TO MEDIUM, SILTY</td>
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149
** **

TEST HOLE NUMBER: 778
LOCATION: 104N-49W-20CDD
LEGAL LOCATION: SE SE SE SW SEC. 20, T. 104 N., R. 49 W.

2.0 - 15.0 SAND, DARK-BROWN, FINE, CLAYEY
15.0 - 25.0 SAND, GRAY, FINE; GRAVEL, FINE, CLAYEY

** **

TEST HOLE NUMBER: 779
LOCATION: 104N-49W-20DAA
LEGAL LOCATION: NE NE NE SE SEC. 20, T. 104 N., R. 49 W.

2.0 - 16.0 SAND, VERY FINE TO MEDIUM, SILTY, CLAYEY

** **

TEST HOLE NUMBER: 780
LOCATION: 104N-49W-20DADA
LEGAL LOCATION: NE SE NE SE SEC. 20, T. 104 N., R. 49 W.

5.0 - 7.0 SAND, MEDIUM TO COARSE
7.0 - 20.0 SAND, COARSE
20.0 - 25.0 SAND, MEDIUM; SOME CLAY
25.0 - 35.0 GRAVEL

** **

TEST HOLE NUMBER: 781
LOCATION: 104N-49W-20DDAD
LEGAL LOCATION: SE NE SE SE SEC. 20, T. 104 N., R. 49 W.

6.0 - 18.0 SAND, MEDIUM TO COARSE
18.0 - 21.0 GRAVEL

** **

TEST HOLE NUMBER: 782
LOCATION: 104N-49W-20DDCC
LEGAL LOCATION: SW SW SE SE SEC. 20, T. 104 N., R. 49 W.

2.0 - 20.0 SAND AND GRAVEL

** **

TEST HOLE NUMBER: 783
LOCATION: 104N-49W-20DDDA
LEGAL LOCATION: NE SE SE SE SEC. 20, T. 104 N., R. 49 W.

10.0 - 18.0 SAND, BROWN, FINE TO MEDIUM, SILTY
18.0 - 27.0 SAND AND GRAVEL, FINE TO COARSE

150
TEST HOLE NUMBER:  784
LOCATION: 104N-49W-20DDDB
LEGAL LOCATION: NW SE SE SE SEC. 20, T. 104 N., R. 49 W.

   2.0 =  15.0  SAND
   15.0 =  25.0  GRAVEL

** * * *

TEST HOLE NUMBER:  785
LOCATION: 104N-49W-20DDDC
LEGAL LOCATION: SW SE SE SE SEC. 20, T. 104 N., R. 49 W.

   7.0 =  25.0  SAND, MEDIUM TO COARSE
   25.0 =  29.0  GRAVEL

** * * *

TEST HOLE NUMBER:  786
LOCATION: 104N-49W-21CBBB
LEGAL LOCATION: NW NW NW SW SEC. 21, T. 104 N., R. 49 W.

   0   =   6.0  SAND, BROWN, FINE TO MEDIUM, SILTY; HARD
   6.0   =  11.0  SAND, MEDIUM, SLIGHTLY SILTY

** * * *

TEST HOLE NUMBER:  787
LOCATION: 104N-49W-21CCCD
LEGAL LOCATION: SE SW SW SEC. 21, T. 104 N., R. 49 W.

   6.0 =  14.0  SAND, MEDIUM TO COARSE
   14.0 =  20.0  GRAVEL

** * * *

TEST HOLE NUMBER:  788
LOCATION: 104N-49W-25BBBB
LEGAL LOCATION: NW NW NW NW SEC. 25, T. 104 N., R. 49 W.

   13.0 =  15.0  SAND, BROWN, MEDIUM
   20.0 =  24.0  SAND, BROWN, MEDIUM, SILTY; SOME CLAY

** * * *

TEST HOLE NUMBER:  789
LOCATION: 104N-49W-27CCDC
LEGAL LOCATION: SW SE SW SW SEC. 27, T. 104 N., R. 49 W.

   1.0 =  4.0  SAND, BROWN, MEDIUM TO COARSE, SLIGHTLY CLAYEY; SATURATED, OXIDIZED

151
** TEST HOLE NUMBER: 790  
LOCATION: 104N-49W-29AAAA  
LEGAL LOCATION: NE NE NE NE SEC. 29, T. 104 N., R. 49 W.  
2.0 - 23.0 SAND, VERY FINE TO MEDIUM, SILTY AND CLAYEY  

** TEST HOLE NUMBER: 791  
LOCATION: 104N-49W-29ADD  
LEGAL LOCATION: SE SE NE SEC. 29, T. 104 N., R. 49 W.  
5.0 - 30.0 SAND, BROWN, CLAYEY; CHANGING TO COARSE SAND AND CLAY  

** TEST HOLE NUMBER: 792  
LOCATION: 104N-49W-31CCCC  
LEGAL LOCATION: SW SW SW SW SEC. 31, T. 104 N., R. 49 W.  
4.0 - 9.0 SAND, FINE  
9.0 - 14.0 SAND, FINE TO MEDIUM; SATURATED  
19.0 - 24.0 SAND, FINE, CLAYEY  

** TEST HOLE NUMBER: 793  
LOCATION: 104N-49W-31CCCC 1  
LEGAL LOCATION: SW SW SW SW SEC. 31, T. 104 N., R. 49 W.  
9.0 - 43.0 SAND, FINE  

** TEST HOLE NUMBER: 794  
LOCATION: 104N-49W-31CCCC 2  
LEGAL LOCATION: SW SW SW SW SEC. 31, T. 104 N., R. 49 W.  
8.0 - 23.0 SAND AND GRAVEL, FINE SAND TO FINE GRAVEL, SILTY; WITH CLAY LAYERS  
23.0 - 24.0 GRAVEL  

** TEST HOLE NUMBER: 795  
LOCATION: 104N-49W-31CCCC 3  
LEGAL LOCATION: SW SW SW SW SEC. 31, T. 104 N., R. 49 W.  
4.0 - 9.0 SAND, FINE  
9.0 - 19.0 SAND, FINE TO MEDIUM
19.0 - 34.0 SAND, FINE, CLAYEY

***

TEST HOLE NUMBER: 796
LOCATION: 104N-49W-31C00DD
LEGAL LOCATION: SE SE SE SW Sec. 31, T. 104 N., R. 49 W.

5.0 - 35.0 SAND, DARK-BROWN, CLAYEY; CHANGING TO
COARSE SAND AND GRAVEL

***

TEST HOLE NUMBER: 797
LOCATION: 104N-49W-31C00DD 1
LEGAL LOCATION: SE SE SE SW Sec. 31, T. 104 N., R. 49 W.

17.0 - 29.0 SAND, MEDIUM; SATURATED

***

TEST HOLE NUMBER: 798
LOCATION: 104N-49W-32BACB
LEGAL LOCATION: NW SW NE NW Sec. 32, T. 104 N., R. 49 W.

2.0 - 25.0 SAND, BROWN, CLAYEY

***

TEST HOLE NUMBER: 799
LOCATION: 104N-49W-32CACCC
LEGAL LOCATION: SW SW NE SW Sec. 32, T. 104 N., R. 49 W.

12.0 - 41.0 SAND, GRAY

***

TEST HOLE NUMBER: 800
LOCATION: 104N-49W-32CBBB
LEGAL LOCATION: NW NW NW SW Sec. 32, T. 104 N., R. 49 W.

10.0 - 25.0 SAND, GRAY, CLAYEY; CHANGING TO COARSE
SAND, WITH SOME CLAY

***

TEST HOLE NUMBER: 801
LOCATION: 104N-49W-32CCCC
LEGAL LOCATION: SW SW SW SW Sec. 32, T. 104 N., R. 49 W.

15.0 - 24.0 SAND, COARSE; GRAVEL

***

153
TEST HOLE NUMBER: 802
LOCATION: 104N-69W-32DBBD
LEGAL LOCATION: SE NW NW SE SEC. 32, T. 104 N., R. 49 W.

2.0 - 35.0 SAND, BLACK, FINE TO MEDIUM, CLAYEY;
COARSER SAND AND LESS CLAY AT 15 FEET
** * **

TEST HOLE NUMBER: 803
LOCATION: 104N-69W-33DBCD
LEGAL LOCATION: SE SW NW SE SEC. 32, T. 104 N., R. 49 W.

6.0 - 15.0 SAND, GRAY, FINE; SOME CLAY
15.0 - 17.0 GRAVEL, VERY COARSE
** * **

TEST HOLE NUMBER: 804
LOCATION: 104N-50W-04AABA
LEGAL LOCATION: NE NW NE NE SEC. 04, T. 104 N., R. 50 W.

7.0 - 14.0 GRAVEL, COARSE
** * **

TEST HOLE NUMBER: 805
LOCATION: 104N-50W-04ABB
LEGAL LOCATION: NW NW NW NE SEC. 04, T. 104 N., R. 50 W.

4.0 - 57.0 SAND AND GRAVEL, MEDIUM TO COARSE
** * **

TEST HOLE NUMBER: 806
LOCATION: 104N-50W-04DCC
LEGAL LOCATION: SW SW SE SEC. 04, T. 104 N., R. 50 W.

2.0 - 20.0 GRAVEL, FINE
20.0 - 30.0 GRAVEL, MEDIUM
** * **

TEST HOLE NUMBER: 807
LOCATION: 104N-50W-04DCCC 1
LEGAL LOCATION: SW SW SW SE SEC. 04, T. 104 N., R. 50 W.

2.0 - 19.0 GRAVEL, SANDY, SUBANGULAR, LESS THAN 1.5
INCHES IN DIAMETER(?)
20.0 - 47.0 GRAVEL, SANDY, SUBANGULAR, LESS THAN 1.5
INCHES IN DIAMETER
** * **

154
<table>
<thead>
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<th>LEGAL LOCATION:</th>
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<tr>
<td>2.0 -</td>
<td>18.0</td>
<td>GRAVEL, FINE</td>
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<tr>
<td>18.0 -</td>
<td>30.0</td>
<td>GRAVEL, MEDIUM</td>
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<tr>
<td>6.0 -</td>
<td>9.0</td>
<td>GRAVEL, BROWN, MEDIUM; OXIDIZED</td>
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<th>LEGAL LOCATION:</th>
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<tr>
<td>1.0 -</td>
<td>6.0</td>
<td>GRAVEL, RED-BROWN, MEDIUM TO COARSE; OXIDIZED, UNSATURATED</td>
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<th>LEGAL LOCATION:</th>
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<td>GRAVEL, COARSE</td>
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<tr>
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<td>45.0</td>
<td>GRAVEL, FINE TO MEDIUM</td>
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<td>9.0</td>
<td>SAND, BLACK, Silty</td>
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<tr>
<td>9.0 -</td>
<td>32.0</td>
<td>SAND, MEDIUM TO COARSE, SILTY</td>
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<th>LEGAL LOCATION:</th>
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<td>4.0 -</td>
<td>18.0</td>
<td>SAND AND GRAVEL, GRAY, MEDIUM TO COARSE; NOT VERY GOOD</td>
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<td>814</td>
<td>155</td>
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LOCATION: 104N-50W-16ACAA
LEGAL LOCATION: NE NE SW NE SEC. 16, T. 104 N., R. 50 W.
* THIS LOG CONTAINS UNVERIFIED INFORMATION *

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<th>Material Description</th>
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TEST HOLE NUMBER: 815
LOCATION: 104N-50W-16BAA
LEGAL LOCATION: NE NE NW NW SEC. 16, T. 104 N., R. 50 W.

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TEST HOLE NUMBER: 816
LOCATION: 104N-50W-16CAA
LEGAL LOCATION: NE NE SW SEC. 16, T. 104 N., R. 50 W.

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TEST HOLE NUMBER: 817
LOCATION: 104N-50W-16CDA
LEGAL LOCATION: NE SE SW SEC. 16, T. 104 N., R. 50 W.

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<td>25.0</td>
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TEST HOLE NUMBER: 818
LOCATION: 104N-50W-20AABA
LEGAL LOCATION: NE NW NE NE SEC. 20, T. 104 N., R. 50 W.

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156
TEST HOLE NUMBER:  819  
LOCATION:  104N-50W-20ABAA  
LEGAL LOCATION:  NE NE NW NE SEC. 20, T. 104 N., R. 50 W.

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<th>Description</th>
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<td>10.0</td>
<td>SAND, MEDIUM TO COARSE</td>
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<td>10.0</td>
<td>40.0</td>
<td>SAND AND GRAVEL, MEDIUM TO COARSE</td>
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TEST HOLE NUMBER:  820  
LOCATION:  104N-50W-20Dcc  
LEGAL LOCATION:  SW SW SE SEC. 20, T. 104 N., R. 50 W.

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<tr>
<td>15.0</td>
<td>35.0</td>
<td>GRAVEL, COARSE</td>
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TEST HOLE NUMBER:  821  
LOCATION:  104N-50W-21CCCC  
LEGAL LOCATION:  SW SW SW SEC. 21, T. 104 N., R. 50 W.

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<td>SAND, FINE TO COARSE</td>
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<td>25.0</td>
<td>SAND AND GRAVEL, COARSE</td>
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<td></td>
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<td>SAND, FINE GRAVEL</td>
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TEST HOLE NUMBER:  822  
LOCATION:  104N-50W-21CCCC  
LEGAL LOCATION:  SW SW SW SW SEC. 21, T. 104 N., R. 50 W.

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<tr>
<td>3.0</td>
<td>18.0</td>
<td>GRAVEL, MEDIUM TO COARSE</td>
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TEST HOLE NUMBER:  823  
LOCATION:  104N-50W-22BBBB  
LEGAL LOCATION:  NW NW NW NW SEC. 22, T. 104 N., R. 50 W.

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<th>Depth</th>
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<tr>
<td></td>
<td></td>
<td>SAND TO COARSE GRAVEL</td>
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TEST HOLE NUMBER:  824  
LOCATION:  104N-50W-29AAA  
LEGAL LOCATION:  NE NE NE SEC. 29, T. 104 N., R. 50 W.

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<th>Depth</th>
<th>Percentage</th>
<th>Description</th>
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<td>2.0</td>
<td>4.0</td>
<td>SAND, MEDIUM</td>
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<tr>
<td>4.0</td>
<td>14.0</td>
<td>SAND, MEDIUM TO COARSE</td>
</tr>
<tr>
<td>14.0</td>
<td>19.0</td>
<td>SAND, COARSE</td>
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<tr>
<td>19.0</td>
<td>32.0</td>
<td>SAND, MEDIUM TO COARSE</td>
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157
### TEST HOLE NUMBER: 825
**LOCATION:** 104N-50W-29BAB  
**LEGAL LOCATION:** NW NE NW SEC. 29, T. 104 N., R. 50 W.  

<table>
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<th>Depth</th>
<th>Grain Size</th>
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<td>4.0</td>
<td>9.0 SAND, FINE, SILTY</td>
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<td>9.0</td>
<td>14.0 SAND, FINE TO MEDIUM, SILTY</td>
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<tr>
<td>14.0</td>
<td>20.0 SAND, MEDIUM TO COARSE</td>
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### TEST HOLE NUMBER: 826
**LOCATION:** 104N-50W-31CDD  
**LEGAL LOCATION:** SE SE SW SEC. 31, T. 104 N., R. 50 W.  

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<tr>
<td>2.0</td>
<td>4.0 SAND AND GRAVEL, MEDIUM SAND, FINE GRAVEL</td>
</tr>
<tr>
<td>4.0</td>
<td>14.0 SAND, MEDIUM</td>
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<tr>
<td>14.0</td>
<td>19.0 SAND, MEDIUM TO COARSE</td>
</tr>
<tr>
<td>19.0</td>
<td>24.0 SAND, COARSE</td>
</tr>
<tr>
<td>24.0</td>
<td>43.0 SAND, MEDIUM TO COARSE</td>
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### TEST HOLE NUMBER: 827
**LOCATION:** 104N-50W-31DDDC  
**LEGAL LOCATION:** SW SE SE SE SEC. 31, T. 104 N., R. 50 W.  

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<th>Depth</th>
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<tr>
<td>2.0</td>
<td>18.0 GRAVEL, COARSE, SANDY, SUB Rounded</td>
</tr>
<tr>
<td>20.0</td>
<td>32.0 GRAVEL, COARSE, SANDY, SUB Rounded</td>
</tr>
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### TEST HOLE NUMBER: 828
**LOCATION:** 104N-50W-32BABA  
**LEGAL LOCATION:** NE NW NE NW SEC. 32, T. 104 N., R. 50 W.  

<table>
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<th>Depth</th>
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<tbody>
<tr>
<td>2.0</td>
<td>22.0 SAND AND GRAVEL, MEDIUM TO COARSE</td>
</tr>
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### TEST HOLE NUMBER: 829
**LOCATION:** 104N-50W-33AAAA  
**LEGAL LOCATION:** NE NE NE NE SEC. 33, T. 104 N., R. 50 W.  

<table>
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<tr>
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<td>7.0 SAND, RUST-BROWN, COARSE, CLAYY</td>
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### TEST HOLE NUMBER: 830
**LOCATION:** 104N-50W-33ADDA  
**LEGAL LOCATION:** NE SE SE NE SEC. 33, T. 104 N., R. 50 W.  

158
1.0 - 5.0 SAND, REDDISH-BROWN, FINE, CLAYEY; MOIST, OXIDIZED

** **

TEST HOLE NUMBER: 831
LOCATION: 104N-51W-07B
LEGAL LOCATION: NW NW NW SEC. 07, T. 104 N., R. 51 W.

0 - 6.0 SAND, BROWN, FINE, CLAYEY; OXIDIZED

** **

TEST HOLE NUMBER: 831
LOCATION: 104N-51W-09B
LEGAL LOCATION: NW NW NW SEC. 09, T. 104 N., R. 51 W.

7.0 - 10.0 SAND, TAN-BROWN, MEDIUM, VERY CLAYEY, GRAVELLY FROM 8 TO 10 FEET; OXIDIZED, SATURATED

** **

TEST HOLE NUMBER: 833
LOCATION: 104N-51W-09D
LEGAL LOCATION: SE SE SE SE SEC. 09, T. 104 N., R. 51 W.

9.0 - 13.0 SAND, REDDISH-BROWN, MEDIUM TO COARSE; SOME MEDIUM GRAVEL, OXIDIZED

** **

TEST HOLE NUMBER: 834
LOCATION: 104N-51W-22B
LEGAL LOCATION: NE NE NE NW SEC. 22, T. 104 N., R. 51 W.

25.0 - 28.0 GRAVEL, BROWN, COARSE; OXIDIZED

** **

TEST HOLE NUMBER: 835
LOCATION: 104N-51W-22C
LEGAL LOCATION: SW SE SW SE SEC. 22, T. 104 N., R. 51 W.

0 - 3.0 SAND, REDDISH-BROWN, FINE, CLAYEY, SILTY; MOIST, OXIDIZED

3.0 - 10.0 GRAVEL, REDDISH-BROWN, MEDIUM, CLAYEY, SANDY; OXIDIZED, SATURATED AT 5 FEET

10.0 - 19.0 SAND, REDDISH-BROWN, FINE TO MEDIUM, CLAYEY, GRAVELLY; SATURATED, OXIDIZED

19.0 - 31.0 SAND, REDDISH-BROWN, FINE TO MEDIUM, VERY CLAYEY; SATURATED, OXIDIZED

** **

159
TEST HOLE NUMBER: 836
LOCATION: 104N-51W-27ABBA
LEGAL LOCATION: NE NW NW NE SEC. 27, T. 104 N., R. 51 W.

10.0 - 28.0 SAND AND GRAVEL, BROWN, MEDIUM TO COARSE SAND, FINE TO MEDIUM GRAVEL; 2 FOOT CLAY LAYER AT 15 FEET

* * *

TEST HOLE NUMBER: 837
LOCATION: 104N-51W-33DDAA
LEGAL LOCATION: NE NE SE SE SEC. 33, T. 104 N., R. 51 W.

2.0 - 44.0 SAND, LIGHT-BROWN, FINE, SILTY, CLAYEY; MOIST, OXIDIZED

* * *

TEST HOLE NUMBER: 838
LOCATION: 104N-51W-33DDAA 1
LEGAL LOCATION: NE NE SE SE SEC. 33, T. 104 N., R. 51 W.

9.0 - 22.0 SAND, BROWN, FINE TO COARSE; OXIDIZED
24.0 - 31.0 SAND, GRAY, FINE TO COARSE; UNOXIDIZED

* * *

TEST HOLE NUMBER: 839
LOCATION: 104N-51W-33DDAA 2
LEGAL LOCATION: NE NE SE SE SEC. 33, T. 104 N., R. 51 W.

5.0 - 22.0 SAND, BROWN, FINE TO COARSE; OXIDIZED
22.0 - 31.0 SAND, GRAY, FINE TO COARSE; UNOXIDIZED, INTERMITTENT THIN LAYERS OF CLAY

* * *

TEST HOLE NUMBER: 840
LOCATION: 104N-51W-35BBBC
LEGAL LOCATION: NW SW NW NW SEC. 35, T. 104 N., R. 51 W.

8.0 - 17.0 SAND, BROWN, FINE TO MEDIUM, SILTY; MOIST TO SATURATED, OXIDIZED

* * *

TEST HOLE NUMBER: 841
LOCATION: 104N-51W-35DDAA
LEGAL LOCATION: NE NE SE SE SEC. 35, T. 104 N., R. 51 W.

1.0 - 21.0 SAND, BROWN, MEDIUM TO COARSE; OXIDIZED, CLAYEY FROM 1 TO 8 FEET
21.0 - 25.0 SAND, GRAY, COARSE; UNOXIDIZED

160
TEST HOLE NUMBER: 842
LOCATION: 104N-51W-35DDAA 1
LEGAL LOCATION: NE NE SE SE SEC. 35, T. 104 N., R. 51 W.
17.0 – 21.0 SAND, TAN-BROWN, VERY FINE, VERY CLAYEY; OXIDIZED, SATURATED

TEST HOLE NUMBER: 843
LOCATION: 104N-52W-02ADD
LEGAL LOCATION: SE SE NE SE SEC. 02, T. 104 N., R. 52 W.
5.0 – 13.0 SAND AND GRAVEL, BROWN, FINE TO MEDIUM SAND, FINE GRAVEL, CLAYEY; OXIDIZED, SATURATED
13.0 – 15.0 SAND AND GRAVEL, GRAY, FINE TO MEDIUM SAND, FINE TO COARSE GRAVEL, VERY CLAYEY; UNOXIDIZED, SATURATED

TEST HOLE NUMBER: 844
LOCATION: 104N-52W-03DDAA
LEGAL LOCATION: NE NE NE SE SEC. 03, T. 104 N., R. 52 W.
1.0 – 3.0 SAND AND GRAVEL, BROWN TO BLACK, FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL
3.0 – 14.0 SAND, DARK-BROWN, FINE, CLAYEY, SILTY, GRAVELLY; SATURATED AT 5 FEET, GRAVEL CONTENT INCREASES WITH DEPTH

TEST HOLE NUMBER: 845
LOCATION: 104N-52W-10AAAA
LEGAL LOCATION: NE NE NE NE SEC. 10, T. 104 N., R. 52 W.
15.0 – 20.0 GRAVEL, BROWN, MEDIUM TO COARSE, CLAYEY, SUBANGULAR; SATURATED, OXIDIZED

TEST HOLE NUMBER: 846
LOCATION: 104N-52W-11BAAA
LEGAL LOCATION: NE NE NE NW SEC. 11, T. 104 N., R. 52 W.
3.0 – 5.0 SAND, BROWN, FINE TO MEDIUM; VERY FEW PEBBLES, OXIDIZED, DRY
5.0 – 7.0 SAND, BROWN, FINE TO MEDIUM, CLAYEY; VERY FEW PEBBLES, OXIDIZED, MOIST
7.0 – 10.0 SAND, BROWN, FINE TO MEDIUM, CLAYEY; VERY
FEW PEBBLES, OXIDIZED, SATURATED

** * * *

** TEST HOLE NUMBER: 847 **
LOCATION: 104N-52W-27CCCD
LEGAL LOCATION: SE SW SW SW SEC. 27, T. 104 N., R. 52 W.

20.0 - 27.0 SAND AND GRAVEL, GRAY; COARSE SAND TO MEDIUM TO COARSE GRAVEL, UNOXIDIZED, SOME COBBLES

** * * *

** TEST HOLE NUMBER: 848 **
LOCATION: 104N-52W-28BCCC
LEGAL LOCATION: SW SW SW NW SEC. 28, T. 104 N., R. 52 W.

1.0 - 9.0 GRAVEL, BROWN, FINE TO COARSE, CLAYEV, ROUNDED; SOME SAND, DRY, OXIDIZED

9.0 - 11.0 SAND, ORANGE-BROWN, FINE TO MEDIUM, VERY CLAYEV, SILTY; MOIST TO SATURATED, OXIDIZED

** * * *

** TEST HOLE NUMBER: 849 **
LOCATION: 104N-52W-34CDDC
LEGAL LOCATION: SW SE SE SW SEC. 34, T. 104 N., R. 52 W.

7.0 - 10.0 SAND AND GRAVEL, BROWN, FINE TO COARSE SAND, FINE, WITH A LITTLE MEDIUM GRAVEL, VERY SILTY, VERY CLAYEV; OXIDIZED, SATURATED

** * * *

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**TABLE 2.** List of sand and gravel pits and quartzite quarries in Minnehaha County, on file at the Department of Transportation, Division of Highways, Pierre, South Dakota, and at the Department of Water and Natural Resources, Office of Surface Mining, Pierre, South Dakota.

**EXPLANATION:**

**Column Description:**
- a. Landowner and/or pit operator and address
- b. Location - given in half and quarter sections, section number, township, and range
- c. Aggregate type
- d. Average thickness of deposits in feet
- e. Average thickness of overburden in feet

**Pit 1**
- a. Landowner: **E. Pearson - Brandon**
- b. Location: NW 1/4 Sec. 3, T. 101 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----

**Pit 2**
- a. Landowner: **E. Pearson - Brandon**
- b. Location: NE 1/4 NW 1/4 sec. 3, T. 101 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): 15
- e. Overburden thickness (ft): 1

**Pit 3**
- a. Landowner: **Brandon Tea Ready-Mix, Inc. - Brandon**
- b. Location: NW 1/4 Sec. 3, T. 101 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----

**Pit 4**
- a. Landowner: **Department of Transportation - Pierre**
- b. Location: NW 1/4 sec. 10, T. 101 N., R. 48 W.
- c. Aggregate type: Gravel
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----

**Pit 5**
- a. Landowner: **Myrl and Roy's Paving, Inc. - Sioux Falls**
- b. Location: Sec. 20, T. 101 N., R. 48 W.
- c. Aggregate type: Quartzite
- d. Deposit thickness (ft): ----
- e. Overburden thickness (ft): ----
Pit 6

a. Landowner: Myrl and Roy’s Paving, Inc. - Sioux Falls
b. Location: NW 1/4 SW 1/4 sec. 27, T. 101 N., R. 48 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 7

a. Landowner: Perry Estate
b. Location: NE 1/4 sec. 28, T. 101 N., R. 48 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 8

a. Landowner: Myrl and Roy’s Paving, Inc. - Sioux Falls
b. Location: SW 1/4 NE 1/4 sec. 28, T. 101 N., R. 48 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 9

a. Landowner: Myrl and Roy’s Paving, Inc. - Sioux Falls
b. Location: NE 1/4 Sec. 29, T. 101 N., R. 48 W.
c. Aggregate type: Quartzite
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 10

a. Landowner: City of Sioux Falls - Sioux Falls
b. Location: Sec. 1, T. 101 N., R. 49 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 11

a. Landowner: ----
b. Location: NE 1/4 sec. 2, T. 101 N., R. 49 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 11.5
e. Overburden thickness (ft): 2.5

Pit 12

a. Landowner: Concrete Materials - Sioux Falls
b. Location: S 1/2 sec. 2, T. 101 N., R. 49 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

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Pit 13
a. Landowner: Fred Traub - Sioux Falls
b. Location: NE 1/4 sec. 3, T. 101 N., R. 49 W.
c. Aggregate type: Sand
d. Deposit thickness (ft): 6
e. Overburden thickness (ft): 2

Pit 14
a. Landowner: Fred Traub - Sioux Falls
b. Location: SE 1/4 sec. 3, T. 101 N., R. 49 W.
c. Aggregate type: Sand
d. Deposit thickness (ft): 12 - 18
e. Overburden thickness (ft): 2

Pit 15
a. Landowner: Myrl and Roy's Paving, Inc. - Sioux Falls
b. Location: NW 1/4 sec. 11, T. 101 N., R. 49 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 16
a. Landowner: Myrl and Roy's Paving, Inc. - Sioux Falls
b. Location: NE 1/4 SW 1/4 sec. 11, T. 101 N., R. 49 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 17
a. Landowner: Concrete Materials - Sioux Falls
b. Location: NE 1/4 SW 1/4 sec. 11, T. 101 N., R. 49 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 18
a. Landowner: Mrs. Frank Lacey - Sioux Falls
b. Location: SE 1/4 SW 1/4 sec. 11, T. 101 N., R. 49 W.
c. Aggregate type: Sand and gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 19
a. Landowner: Myrl and Roy's Paving, Inc. - Sioux Falls
b. Location: NW 1/4 SE 1/4 sec. 11, T. 101 N., R. 49 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----
Pit 20
a. Landowner: Concrete Materials - Sioux Falls
b. Location: NE 1/4 NW 1/4 sec. 14, T. 101 N., R. 49 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 21
a. Landowner: Friessen Construction, Inc.
b. Location: SE 1/4 NW 1/4 sec. 14, T. 101 N., R. 49 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 22
a. Landowner: Concrete Materials Company - Sioux Falls
b. Location: NW 1/4 sec. 18, T. 101 N., R. 49 W.
c. Aggregate type: Quartzite
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 23
a. Landowner: Concrete Materials Company - Sioux Falls
b. Location: NE 1/4 sec. 31, T. 101 N., R. 49 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 24
a. Landowner: SD Department of Highways - Pierre
b. Location: S 1/2 NE 1/4 sec. 31, T. 101 N., R. 49 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 25
a. Landowner: SD Department of Highways - Pierre
b. Location: W 1/2 sec. 31, T. 101 N., R. 49 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 26
a. Landowner: Department of Transportation - Pierre
b. Location: W 1/2 SE 1/4 sec. 31, T. 101 N., R. 49 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

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Pit 27
a. Landowner: SD Department of Highways - Pierre
b. Location: SE 1/4 sec. 31, T. 101 N., R. 49 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 28
a. Landowner: Concrete Materials Company - Sioux Falls
b. Location: NW 1/4 sec. 32, T. 101 N., R. 49 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 29
a. Landowner: Friessen Construction, Inc. - Sioux Falls
b. Location: S 1/2 SW 1/4 SW 1/4 sec. 5, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 30
a. Landowner: H. Beckman
b. Location: W 1/2 NS 1/4 sec. 6, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 31
a. Landowner: Lloyd Meyer - Hartford
b. Location: NW 1/4 sec. 6, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 32
a. Landowner: Reynolds Construction Company - Sioux Falls
b. Location: E 1/2 SW 1/4 sec. 6, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 33
a. Landowner: Minnehaha Co. Highway Department - Sioux Falls
b. Location: E 1/2 SE 1/4 sec. 6, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----
Pit 34
a. Landowner: Minnehaha County - Sioux Falls
b. Location: NW 1/4 SE 1/4 sec. 6, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 35
a. Landowner: Reynolds Construction Company - Sioux Falls
b. Location: SW 1/4 SE 1/4 sec. 6, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 36
a. Landowner: Harold Allen - Sioux Falls
b. Location: NE 1/4 sec. 8, T. 101 N., R. 50 W.
c. Aggregate type: Gravel

d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 37
a. Landowner: City of Sioux Falls - Sioux Falls
b. Location: N 1/2 NW 1/4 sec. 8, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 38
a. Landowner: Unzelman Schultz - Sioux Falls
b. Location: SW 1/4 NW 1/4 sec. 8, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 39
a. Landowner: Myrl and Roy's Paving, Inc. - Sioux Falls
b. Location: SW 1/4 NW 1/4 sec. 8, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 40
a. Landowner: Soukup Construction, Inc. - Sioux Falls
b. Location: SE 1/4 NW 1/4 sec. 8, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----
Pit 41

a. Landowner: Soukup Construction, Inc. - Sioux Falls
b. Location: E 1/2 SW 1/4 sec. 8, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 42

a. Landowner: City of Sioux Falls - Sioux Falls
b. Location: NW 1/4 SW 1/4 sec. 8, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 43

a. Landowner: Myrl and Roy's Paving, Inc. - Sioux Falls
b. Location: SW 1/4 SW 1/4 sec. 8, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 44

a. Landowner: Mrs. Eleanor Battles - Sioux Falls
b. Location: NW 1/4 SE 1/4 sec. 8, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 6.3
e. Overburden thickness (ft): 3.1

Pit 45

a. Landowner: Myrl and Roy's Paving, Inc. - Sioux Falls
b. Location: SE 1/4 SE 1/4 sec. 8, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 46

a. Landowner: Hagen Grading - Sioux Falls
b. Location: NW 1/4 sec. 9, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 47

a. Landowner: Soukup Construction Inc. - Sioux Falls
b. Location: NW 1/4 sec. 9, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----
Pit 48
a. Landowner: Diadem Corporation - Sioux Falls
b. Location: SW 1/4 NW 1/4 sec. 9, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 49
a. Landowner: Concrete Materials - Sioux Falls
b. Location: SW 1/4 SE 1/4 sec. 12, T. 101 N., R. 50 W.
c. Aggregate type: Quartzite
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 50
a. Landowner: Concrete Materials - Sioux Falls
b. Location: SE 1/4 SE 1/4 sec. 12, T. 101 N., R. 50 W.
c. Aggregate type: Quartzite
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 51
a. Landowner: Concrete Materials - Sioux Falls
b. Location: NW 1/4 NE 1/4 sec. 13, T. 101 N., R. 50 W.
c. Aggregate type: Quartzite
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 52
a. Landowner: Myrl and Roy’s Paving, Inc. - Sioux Falls
b. Location: NE 1/4 sec. 15, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 53
a. Landowner: Frank Lady - Sioux Falls
b. Location: SW 1/4 NE 1/4 sec. 15, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 8.7
e. Overburden thickness (ft): 5

Pit 54
a. Landowner: Myrl and Roy’s Paving, Inc. - Sioux Falls
b. Location: E 1/2 NW 1/4 sec. 15, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----
Pit 55
a. Landowner: Beulah Oakes - Sioux Falls
b. Location: W 1/2 NW 1/4 sec. 15, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 14
e. Overburden thickness (ft): 4

Pit 56
a. Landowner: Eagle Sand and Gravel Company - Sioux Falls
b. Location: SW 1/4 sec. 15, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 57
a. Landowner: Hagen Grading - Sioux Falls
b. Location: SW 1/4 sec. 15, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 58
a. Landowner: Fodness Gravel - Sioux Falls
b. Location: SW 1/4 sec. 15, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 59
a. Landowner: Beulah Oakes - Sioux Falls
b. Location: E 1/2 NE 1/4 sec. 16, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 13
e. Overburden thickness (ft): 6

Pit 60
a. Landowner: Myrl and Roy's Paving, Inc. - Sioux Falls
b. Location: SE 1/4 NE 1/4 sec. 16, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 61
a. Landowner: Christina Weinacht - Sioux Falls
b. Location: E 1/2 NW 1/4 sec. 16, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 11.6
e. Overburden thickness (ft): 4
Pit 62
a. Landowner: Concrete Materials - Sioux Falls
b. Location: NW 1/4 sec. 16, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 63
a. Landowner: Hagen Grading - Sioux Falls
b. Location: NW 1/4 sec. 16, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 64
a. Landowner: Hagen Grading - Sioux Falls
b. Location: NE 1/4 SE 1/4 sec. 16, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 65
a. Landowner: Hagen Grading - Sioux Falls
b. Location: S 1/2 SE 1/4 sec. 16, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 66
a. Landowner: Eagle Sand and Gravel Company - Sioux Falls
b. Location: SE 1/4 sec. 16, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 67
a. Landowner: Asphalt Surfacing Company - Sioux Falls
b. Location: NE 1/4 NE 1/4 sec. 17, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 68
a. Landowner: D. Hyland - Sioux Falls
b. Location: NE 1/4 sec. 17, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 11.8
e. Overburden thickness (ft): 3.3
Pit 69
a. Landowner: D. Hylland – Sioux Falls
b. Location: NE 1/4 sec. 17, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 17
e. Overburden thickness (ft): 2

Pit 70
a. Landowner: Sokup Construction, Inc. – Sioux Falls
b. Location: NE 1/4 NW 1/4 sec. 17, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 71
a. Landowner: Myrl and Roy’s Paving, Inc. – Sioux Falls
b. Location: NW 1/4 NW 1/4 sec. 17, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 72
a. Landowner: Friessen Construction, Inc. – Sioux Falls
b. Location: NE 1/4 SE 1/4 sec. 17, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 73
a. Landowner: Don Runge Construction, Inc. – Sioux Falls
b. Location: S 1/2 NE 1/4 sec. 23, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 74
a. Landowner: Don Runge Construction, Inc. – Sioux Falls
b. Location: SE 1/4 NW 1/4 sec. 23, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 75
a. Landowner: Hayward Estates – Sioux Falls
b. Location: N 1/2 N 1/2 sec. 23, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 12-15
e. Overburden thickness (ft): 2.5-3.6

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Pit 76
a. Landowner: Don Runge Construction, Inc. - Sioux Falls
b. Location: N 1/2 SE 1/4 sec. 23, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 77
a. Landowner: Don Runge Construction, Inc. - Sioux Falls
b. Location: E 1/2 SW 1/4 SW 1/4 SE 1/4 sec. 23, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 78
a. Landowner: C. Delbridge - Sioux Falls
b. Location: SW 1/4 NW 1/4 sec. 24, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 79
a. Landowner: C. Delbridge - Sioux Falls
b. Location: SW 1/4 SW 1/4 sec. 24, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 80
a. Landowner: Clarence Sherman - Sioux Falls
b. Location: Sec. 25, T. 101 N., R. 50 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 9.5
e. Overburden thickness (ft): 3.5

Pit 81
a. Landowner: Friessen Construction, Inc. - Sioux Falls
b. Location: Sec. 25, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 82
a. Landowner: Harry Hanson - Sioux Falls
b. Location: E 1/2 NE 1/4 sec. 26, T. 101 N., R. 50 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----
Pit 83
a. Landowner: Arthur Ruud - Hartford
b. Location: SW 1/4 sec. 25, T. 101 N., R. 51 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 84
a. Landowner: Arthur Ruud - Hartford
b. Location: SE 1/4 sec. 26, T. 101 N., R. 51 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 20
e. Overburden thickness (ft): 2

Pit 85
a. Landowner: Ralph T. Frickson - Humboldt
b. Location: NW 1/4 sec. 27, T. 101 N., R. 52 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 86
a. Landowner: Milo Johnson - Valley Springs
b. Location: W 1/2 NE 1/4 sec. 8, T. 102 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 87
a. Landowner: Mrs. Deschepper - Garretson
b. Location: SW 1/4 NE 1/4 sec. 8, T. 102 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 10
e. Overburden thickness (ft): 2

Pit 88
a. Landowner: Milo Johnson - Valley Springs
b. Location: E 1/2 NW 1/4 sec. 8, T. 102 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 89
a. Landowner: Milo Johnson - Valley Springs
b. Location: SW 1/4 sec. 8, T. 102 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----
Pit 90
a. Landowner: Milo Johnson - Valley Springs
b. Location: SW 1/4 sec. 8, T. 102 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 91
a. Landowner: Art Evenson - Valley Springs
b. Location: E 1/2 SW 1/4 sec. 27, T. 102 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 92
a. Landowner: Art Evenson - Valley Springs
b. Location: W 1/2 SW 1/4 sec. 27, T. 102 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 93
a. Landowner: Art Evenson - Valley Springs
b. Location: E 1/2 SE 1/4 sec. 28, T. 102 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 94
a. Landowner: J. Boersma - Valley Springs
b. Location: W 1/2 SE 1/4 sec. 33, T. 102 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 95
a. Landowner: Myrtle Jones - San Francisco, California
b. Location: SW 1/4 NW 1/4 sec. 22, T. 102 N., R. 48 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 96
a. Landowner: Palmar Karl - Brandon
b. Location: NE 1/2 sec. 23, T. 102 N., E. 48 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

176
Pit 97
a. Landowner: Eelst Swenson - Corson
b. Location: NE 1/4 SE 1/4 sec. 23, T. 102 N., R. 48 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 24
 e. Overburden thickness (ft): 4.3

Pit 98
a. Landowner: Henry Thoreson - Brandon
b. Location: NW 1/2 NW 1/4 sec. 24, T. 102 N., R. 48 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
 e. Overburden thickness (ft): ----

Pit 99
a. Landowner: Dewey Christopherson - Brandon
b. Location: S 1/2 NW 1/4 sec. 24, T. 102 N., R. 48 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 12
 e. Overburden thickness (ft): 5

Pit 100
a. Landowner: Dewey Christopherson - Brandon
b. Location: SE 1/4 SW 1/4 sec. 24, T. 102 N., R. 48 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 8
 e. Overburden thickness (ft): 2.5

Pit 101
a. Landowner: Fred Rist - Sioux Falls
b. Location: NW 1/4 SW 1/4 sec. 30, T. 102 N., R. 48 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 10
 e. Overburden thickness (ft): 2.6

Pit 102
a. Landowner: Robert Bruns
b. Location: NW 1/4 NW 1/4 sec. 31, T. 102 N., R. 48 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
 e. Overburden thickness (ft): ----

Pit 103
a. Landowner: Martin Graff - Brandon
b. Location: SW 1/4 sec. 34, T. 102 N., R. 48 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 7.2
 e. Overburden thickness (ft): 4.2

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Pit 104
a. Landowner: Clara Johnson - Sioux Falls
b. Location: SW 1/4 sec. 24, T. 102 N., R. 49 W.
c.Aggregate type: Gravel
d. Deposit thickness (ft): 15
e. Overburden thickness (ft): 2-3

Pit 105
a. Landowner: Harry Eckert - Sioux Falls
b. Location: E 1/2 SE 1/4 sec. 25, T. 102 N., R. 49 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 10
e. Overburden thickness (ft): 2.3

Pit 106
a. Landowner: Krueger Excavating, Inc. - Sioux Falls
b. Location: NW 1/4 NE 1/4 sec. 35, T. 102 N., R. 49 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 107
a. Landowner: Ray Parkham - Sioux Falls
b. Location: NW 1/4 sec. 36, T. 102 N., R. 49 W.
c. Aggregate type: Sand
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 108
a. Landowner: G. Norton - Sioux Falls
b. Location: SW 1/4 sec. 36, T. 102 N., R. 49 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 9.8
e. Overburden thickness (ft): 3.6

Pit 109
a. Landowner: G. Norton - Sioux Falls
b. Location: SW 1/4 sec. 36, T. 102 N., R. 49 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 11.3
e. Overburden thickness (ft): 3.6

Pit 110
a. Landowner: Diamond D. Construction - Hartford
b. Location: NW 1/4 sec. 2, T. 102 N., R. 51 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

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<tr>
<th>Pit 111</th>
<th>Landowner:  Douglas Doggett - Hartford</th>
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<td>Location: NW 1/4 sec. 2, T. 102 W., R. 51 W.</td>
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<td>Deposit thickness (ft): 6.5</td>
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<th>Pit 112</th>
<th>Landowner:  Charles Main - Hartford</th>
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<td>Deposit thickness (ft): 5</td>
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<td>Overburden thickness (ft): 3.1</td>
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<th>Landowner:  Fred Ruback - Hartford</th>
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<td>Location: NW 1/4 sec. 13, T. 102 W., R. 51 W.</td>
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<td>Deposit thickness (ft): 15</td>
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<td>Overburden thickness (ft): 3.5</td>
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<th>Landowner:  Chris Sorensen - Hartford</th>
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<td>Location: SE 1/4 sec. 13, T. 102 W., R. 51 W.</td>
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<td>Deposit thickness (ft): 18</td>
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<td>Overburden thickness (ft): 3.5</td>
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<th>Pit 115</th>
<th>Landowner:  Zacharias Construction - Hartford</th>
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<td>Location: SE 1/4 sec. 13, T. 102 W., R. 51 W.</td>
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<td>Aggregate type:</td>
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<td>Deposit thickness (ft):</td>
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<th>Pit 116</th>
<th>Landowner:  Else Johnson - Sioux Falls</th>
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<th>Pit 117</th>
<th>Landowner:  Herman Kriens - Watertown</th>
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<td>Location: NE 1/4 sec. 25, T. 102 W., R. 51 W.</td>
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<td>Deposit thickness (ft):</td>
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<td>Overburden thickness (ft):</td>
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Pit 118
a. Landowner: Ralph Tyler - Hartford
b. Location: W 1/2 SW 1/4 sec. 25, T. 102 N., R. 51 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 6
e. Overburden thickness (ft): 3

Pit 119
a. Landowner: ----
b. Location: SW 1/4 sec. 27, T. 102 N., R. 52 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 120
a. Landowner: Donald Smith - Valley Springs
b. Location: NE 1/4 sec. 3, T. 103 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 10
e. Overburden thickness (ft): 6

Pit 121
a. Landowner: Anderson
b. Location: NE 1/4 sec. 4, T. 103 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 122
a. Landowner: Walter Planagan - Garretson
b. Location: NW 1/4 sec. 20, T. 103 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 123
a. Landowner: Walter Planagan - Garretson
b. Location: SW 1/4 sec. 20, T. 103 N., R. 47 W.
c. Aggregate type: Sand and Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 124
a. Landowner: C. Woolridge - Garretson
b. Location: NE 1/4 sec. 29, T. 103 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 12
e. Overburden thickness (ft): 2
Pit 125
a. Landowner: E. Coyle – Hartford
b. Location: SW 1/4 sec. 19, T. 103 N., R. 51 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 126
a. Landowner: D. Johnson – Brookings
b. Location: SE 1/4 sec. 19, T. 103 N., R. 51 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 15
e. Overburden thickness (ft): 2

Pit 127
a. Landowner: A & J Salvage – Colton
b. Location: SE 1/4 sec. 20, T. 103 N., R. 51 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 128
a. Landowner: Colton Redi-Mix – Colton
b. Location: SE 1/4 sec. 20, T. 103 N., R. 51 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 129
a. Landowner: A & J Salvage – Colton
b. Location: NE 1/4 sec. 30, T. 103 N., R. 51 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 130
a. Landowner: Herman Hotchkiss – Humboldt
b. Location: NE 1/4 sec. 10, T. 103 N., R. 52 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 7.3
e. Overburden thickness (ft): 2.8

Pit 131
a. Landowner: Walter Gimsbach – Hartford
b. Location: NE 1/4 sec. 24, T. 103 N., R. 52 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 15
e. Overburden thickness (ft): 4.5
Pit 132

a. Landowner: Colton Redi-Mix - Colton
b. Location: NE 1/4 sec. 24, T. 103 N., R. 52 W.
c. Aggregate type: ----
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 133

a. Landowner: W. Sieverding - Hartford
b. Location: SW 1/4 sec. 25, T. 103 N., R. 52 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 9
e. Overburden thickness (ft): 3

Pit 134

a. Landowner: Rekstad
b. Location: SW 1/4 sec. 19, T. 104 N., R. 47 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): 18
e. Overburden thickness (ft): 4

Pit 135

a. Landowner: Laura Wicks - Dell Rapids
b. Location: W 1/2 NW 1/4 sec. 1, T. 104 N., R. 49 W.
c. Aggregate type: Gravel
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 136

a. Landowner: L. G. Everist - Dell Rapids
b. Location: SE 1/4 sec. 10, T. 104 N., R. 49 W.
c. Aggregate type: Crushed stone - quartzite
d. Deposit thickness (ft): ----
e. Overburden thickness (ft): ----

Pit 137

a. Landowner: M. Eulberg - Dell Rapids
b. Location: NE 1/4 sec. 4, T. 104 N., R. 50 W.
c. Aggregate type: Sand and Gravel
d. Deposit thickness (ft): 8-10
e. Overburden thickness (ft): 2