

# GROUND-WATER BASIC DATA

for

## EMMONS COUNTY, NORTH DAKOTA

by

C. A. ARMSTRONG  
U.S. Geological Survey

COUNTY GROUND-WATER STUDIES 23 — PART II  
**North Dakota State Water Commission**  
*Vernon Fahy, State Engineer*

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*Edwin A. Noble, State Geologist*

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## INTRODUCTION

The geology and ground-water investigation in Emmons County (fig. 1) was made cooperatively by the U.S. Geological Survey (USGS), North Dakota State Water Commission (NDSWC), North Dakota Geological Survey (NDGS), and Emmons County Water Management District. The results of the investigation will be published in three separate parts. Part 1 is an interpretive report describing the geology of the study area; part 2 is a compilation of the ground-water basic data; and part 3 is an interpretive report describing the ground-water resources. Part 2 makes available geologic and hydrologic data collected during the county investigation and functions as a reference for the other reports.

The stratigraphic nomenclature used in this report is that of the North Dakota Geological Survey and does not necessarily follow the usage of the U.S. Geological Survey.

The following table may be used to convert English units to SI (International System) units.

<u>Multiply English units</u>	<u>By</u>	<u>To obtain SI units</u>
Inches (in)	2.54	centimetres (cm)
	.0254	metres (m)
Feet (ft)	.3048	metres (m)
Miles (mi)	1.609	kilometres (km)
Square miles (mi <sup>2</sup> )	2.590	square kilometres (km <sup>2</sup> )
Acres	4,047	square metres (m <sup>2</sup> )
	.4047	hectares (ha)
Gallons (gal)	3.785	litres (l)
	3.785x10 <sup>-3</sup>	cubic metres (m <sup>3</sup> )
Gallons per minute (gal/min)	.06309	litres per second (l/s)
	6.309x10 <sup>-5</sup>	cubic metres per second (m <sup>3</sup> /s)
Cubic feet (ft <sup>3</sup> )	28.32	cubic decimetres (dm <sup>3</sup> )
	.02832	cubic metres (m <sup>3</sup> )

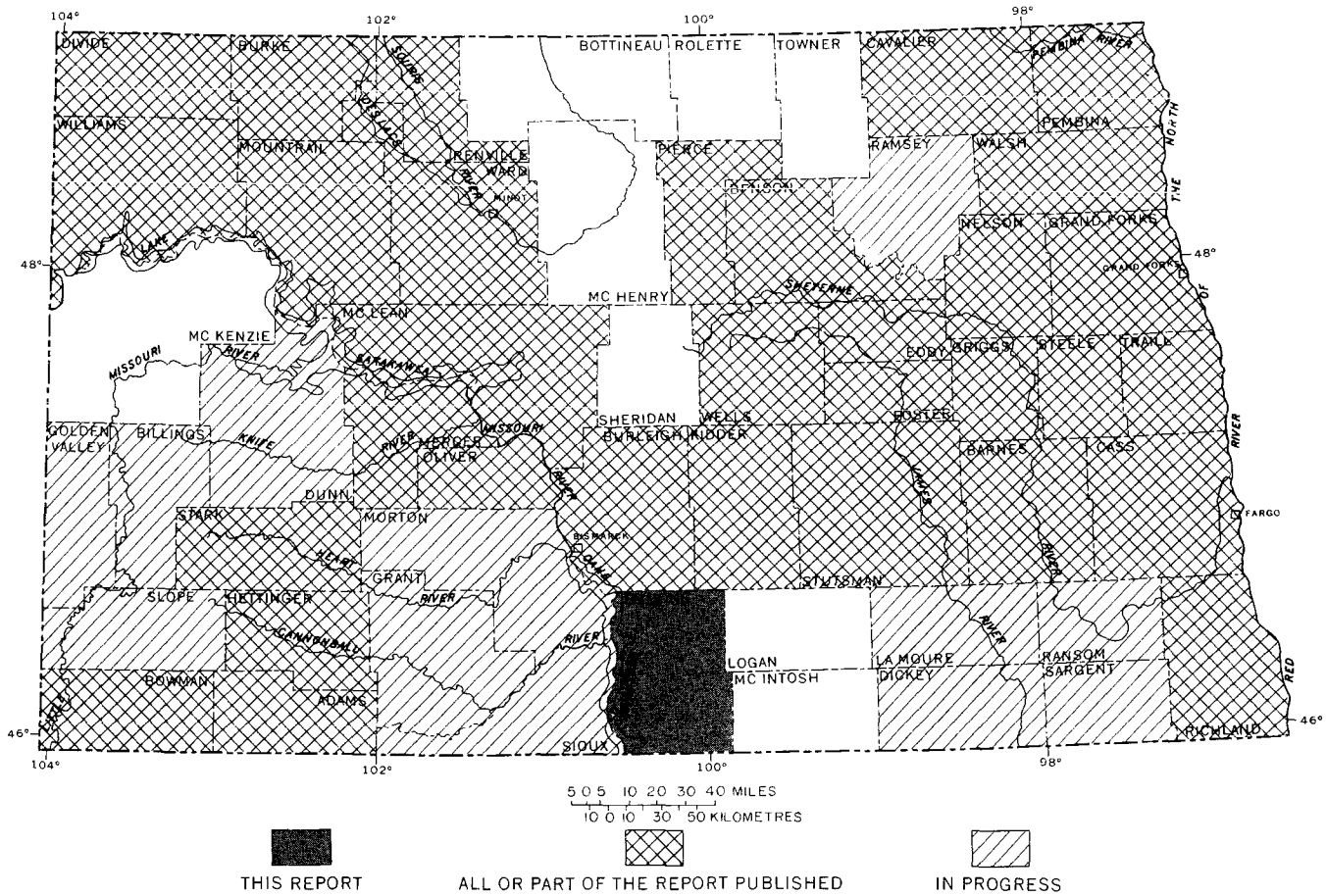


FIGURE 1.—County ground-water studies in North Dakota.

### Purpose

The purpose of the investigation was to provide detailed geologic and hydrologic information needed for the orderly development of water supplies for municipal, domestic, livestock, irrigation, industrial, and similar uses. Specifically, the objectives were to: (1) determine the location, extent, and nature of the major aquifers and confining beds; (2) evaluate the occurrence and movement of ground water, including the sources of recharge and discharge; (3) estimate the transmissivity of the aquifer and the potential yields of wells; (4) determine the quality of the ground water; and (5) estimate the water use.

### Well- and Location-Numbering System

The wells and test holes in the tables are numbered according to a system of land survey in use by the U.S. Bureau of Land Management and the North Dakota district of the U.S. Geological Survey. The U.S. Bureau of Land Management system is illustrated in figure 2. The first numeral denotes the township north of a base line, the second numeral denotes the range west of the fifth principal meridian, and the third numeral denotes the section in which the well is located. The letters A, B, C, and D designate, respectively, the northeast, northwest, southwest, and southeast quarter section, quarter-quarter section, and quarter-quarter-quarter section (10-acre (4-ha) tract). For example, well 132-076-15DAA is in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 132 N., R. 076 W. Consecutive terminal numerals are added if more than one well or test hole is recorded within a 10-acre tract. The location of each well and test hole in the tables is shown on plate 1 (in pocket).

The U.S. Geological Survey uses a station number that consists of 15 digits to identify wells nationally. The first seven digits denote the degrees, minutes, and seconds of north latitude. The next seven digits denote the degrees, minutes, and seconds of longitude. The final digit is a sequence number used to distinguish between wells within the same second of latitude and longitude. The U.S. Geological Survey station number may also be used to describe the location of other data-collection sites such as sample collection points on lakes and streams. Appendix A lists the conversion from the local well number to the U.S. Geological Survey station number.

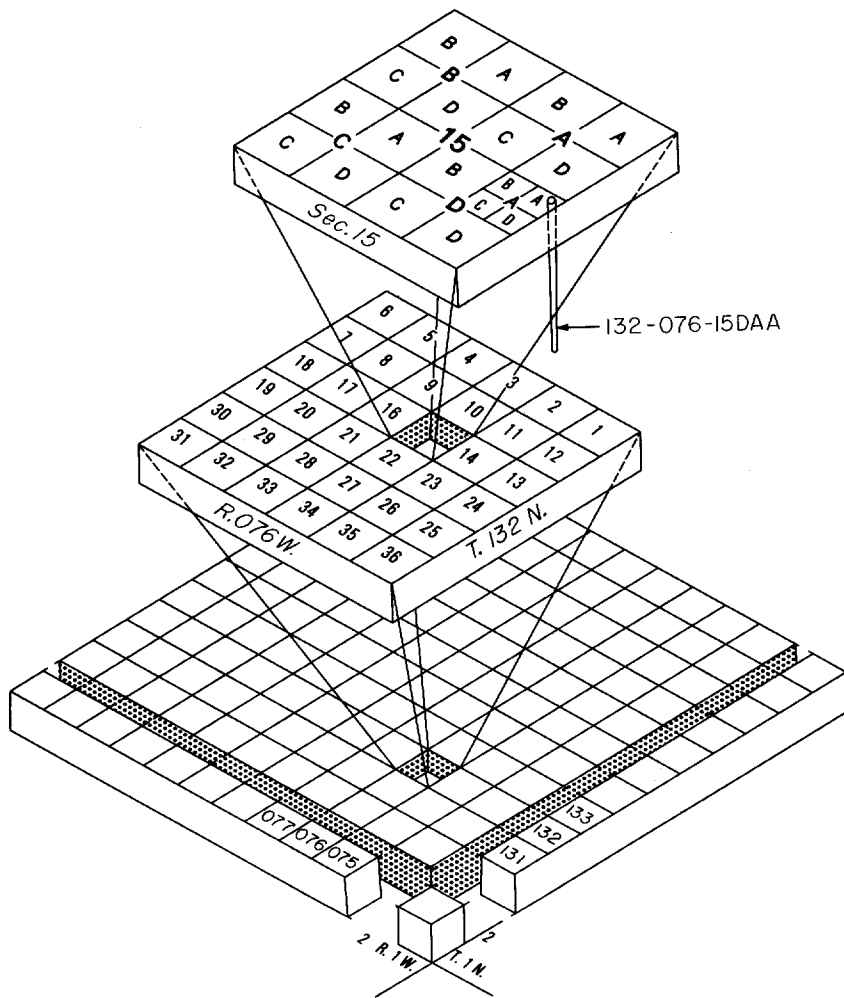


FIGURE 2.—System of numbering wells and test holes

### Acknowledgments

The author is indebted to the residents and officials of Emmons County who furnished essential information on wells and permitted measurements to be made and samples to be taken. Particular recognition is due to the following North Dakota State Water Commission personnel: L. L. Froelich and C. E. Naplin for logging of test holes, G. O. Muri for chemical analysis of water samples, and M. O. Lindvig for scheduling of drilling activities. Thanks are due Albrecht Well Work, Baumgartner Drilling Co., Allen Edwards, Empire Irrigation and Farmers Supply, Frederickson's, Inc., Mann Drilling Co., Shell Oil Co., J. Thurn, Wetch Drilling Co., and T. Wittikko for furnishing drillers' logs and other information in this report.

### EXPLANATION OF TABLES AND METHODS OF DATA COLLECTION

The data in this report were collected chiefly between 1970 and 1973 and are listed in tables 1-7. The points of collection are shown on plate 1. The data consist of the following: Geologic and hydrologic records for 1,193 wells and test holes; (2) water-level measurements in 76 observation wells; (3) lithologic and geophysical logs of 413 test holes and wells; (4) 265 chemical analyses of ground water; (5) 24 chemical analyses of water from streams and lakes; (6) 14 particle-size distribution graphs; and (7) heavy mineral determinations made from three cores taken from the Fox Hills Formation. The data are useful for evaluating geologic and ground-water conditions in Emmons County. For example, a person considering the construction of a new well can locate the proposed site on plate 1. Depth, water quality, lithology, and water level of nearby wells and test holes tapping the different aquifers can be determined from the tables. However, use of the data as a guide to conditions at different sites should be made with caution because of the lenticular character of the water-bearing rocks and varying water quality in some aquifers.

### Records of Wells and Test Holes

Records of selected wells and test holes are given in table 1. Well depth is the depth of casing for open-bottom wells or the base of the well screen. Most test holes were converted to observation wells for periodic water-level measurements and water-quality sampling. At some sites two or three observation wells were drilled in order to obtain water levels and

water samples from several aquifers. The observation wells were constructed of 1½-inch (3.1-cm) plastic casing with 3- or 6-foot (1- or 2-m) screens or 2-inch (5.1-cm) steel casing with 6- or 12-foot (2- or 4-m) screens. The observation wells were developed by backwashing with the deflocculant trisodium phosphate and were pumped a minimum of 8 hours for development before collection of water samples for analysis.

#### Water Levels in Selected Wells

Table 2 gives monthly and intermittent water levels in selected wells, in feet below land surface, that tap the major aquifers in Emmons County. Water-level measurements were made beginning in the late fall of 1971 and extending through the fall of 1973. Measurements will continue to be made in several wells as part of the statewide observation-well network to monitor changes in water levels as the ground-water resources of the area are developed.

#### Logs of Wells and Test Holes

Logs collected from water-well drillers and other sources and logs of test holes drilled as part of this project are included in table 3. Minor changes in word order have been made on some of the drillers' logs. Logs from test holes drilled during a previous investigation (Randich, 1963) are numbered between 1202 and 1245. Logs of test holes drilled as part of this project begin with number 8106. Most test holes drilled during this project and some municipal and industrial wells have geophysical logs in addition to a description of the materials penetrated. The geophysical logs are extremely useful for geologic correlation purposes. Grain-size determinations refer to the Wentworth (1922) size scale. The color descriptions were determined by comparing fresh samples with the Geological Society of America's rock color chart (1963).

#### Water Quality

The mineral constituents and physical properties of water are reported in the tables of analyses (tables 4 and 5). Water for samples was secured using the existing pumps from privately owned wells and with airlift from the NDSWC observation wells. Generally enough water to clear the well column and plumbing was pumped, then the sample was collected in a



polyethylene bottle. For those metals considered unstable, a separate sample was filtered and acidified before transport to the laboratory. Most of the samples were analyzed by the North Dakota State Water Commission, Bismarck, N. Dak. The analysis from well 131-077-16AAA was made by the U.S. Geological Survey, Salt Lake City, Utah. Methods of analyses were generally those described by Brown and others (1970). The results are expressed in milligrams per litre (mg/l) or micrograms per litre (ug/l). A microgram per litre is one-thousandth of a milligram per litre.

Drinking standards were established for interstate carriers by the U.S. Public Health Service (1946). These standards were amended in 1956 and in 1962 the standards were again changed and published in the Federal Register, effective date April 5, 1962. These are generally accepted by the North Dakota State Department of Health as guidelines applicable to public water supplies. These standards are:

*"Drinking water shall not contain impurities in concentrations which may be hazardous to the health of the consumers. It should not be excessively corrosive to the water supply system. Substances used in its treatment shall not remain in the water in concentrations greater than required by good practice. Substances which may have deleterious physiological effect, or for which physiological effects are not known, shall not be introduced into the system in a manner which would permit them to reach the consumer.*

*"The following chemical substances should not be present in a water supply in excess of the listed concentrations where, in the judgment of the Reporting Agency and the Certifying Authority, other more suitable supplies are or can be made available.*

<u>Substance</u>	<u>Concentrations in mg/l</u>
Alkyl Benzene Sulfonate (ABS)-----	0.5
Arsenic (As)-----	0.01
Chloride (Cl)-----	250.
Copper (Cu)-----	1.
Carbon Chloroform Extract (CCE)-----	0.2
Cyanide (CN)-----	0.01
Fluoride (F)-----	(See 5.23)
Iron (Fe)-----	0.3
Manganese (Mn)-----	0.05
Nitrate <sup>1</sup> (NO <sub>3</sub> )-----	45.
Phenols-----	0.001
Sulfate (SO <sub>4</sub> )-----	250.
Total Dissolved Solids-----	500.
Zinc (Zn)-----	5.

<sup>1</sup>In areas in which the nitrate content of water is known to be in excess of the listed concentration, the public should be warned of the potential dangers of using the water for infant feeding.

"The presence of the following substances in excess of the concentrations listed shall constitute grounds for rejection of the supply:

<u>Substance</u>	<u>Concentrations in mg/l</u>
Arsenic (As)-----	0.05
Barium (Ba)-----	1.0
Cadmium (Cd)-----	0.01
Chromium (Hexavalent) (Cr <sup>+6</sup> )-----	0.05
Cyanide (CN)-----	0.2
Fluoride (F)-----	(See 5.23)
Lead (Pb)-----	0.05
Selenium (Se)-----	0.01
Silver (Ag)-----	0.05

"5.23 Fluoride.--When fluoride is naturally present in drinking water, the concentration should not average more than the appropriate upper limit shown in the following table. Presence of fluoride in average concentrations greater than two times the optimum values listed shall constitute grounds for rejection of the supply.

"Where fluoridation (supplementation of fluoride in drinking water) is practiced, the average fluoride concentration shall be kept within the upper and lower control limits listed below:

<u>Annual average of maximum daily air temperatures<sup>1</sup></u>	<u>Recommended control limits-- Fluoride concentrations in mg/l</u>		
	<u>Lower</u>	<u>Optimum</u>	<u>Upper</u>
50.0 - 53.7-----	0.9	1.2	1.7
53.8 - 58.3-----	0.8	1.1	1.5
58.4 - 63.8-----	0.8	1.0	1.8
63.9 - 70.6-----	0.7	0.9	1.2
70.7 - 79.2-----	0.7	0.8	1.0
79.3 - 90.5-----	0.6	0.7	0.8

<sup>1</sup>Based on [Fahrenheit] temperature data obtained for a minimum of five years."

#### Mineral Constituents in Solution

##### Silica (SiO<sub>2</sub>)

Weathering processes dissolve silica from practically all rocks. Silica affects the usefulness of water because it can contribute to the formation of scale in pipes, water heaters, and boilers in the presence of calcium and magnesium.

##### Iron (Fe)

Iron is a widespread constituent in rocks and is easily leached by ground water under reducing conditions or in acidic water. Water containing more than 30 µg/l of iron, after exposure to air, may become discolored. Reddish-brown stains on porcelain or enamelware and fixtures and on fabrics washed in the water result from the iron-imparted turbidity.

#### Manganese (Mn)

Manganese in concentrations as low as 200 µg/l may cause a dark-brown or black stain on fabrics and porcelain fixtures. Ground water that contains high concentrations of iron may also have considerable amounts of manganese.

#### Calcium and Magnesium (Ca and Mg)

Limestone and similar rocks are the principal source of calcium and magnesium in natural water. Calcium and magnesium cause water hardness and, with anions, can form scale on utensils and in water heaters, boilers, and pipes.

#### Sodium and Potassium (Na and K)

Sodium and potassium are present in many igneous and sedimentary rocks. Sodium dissolves readily and when brought into solution it tends to remain in solution. Potassium is dissolved with greater difficulty and exhibits a stronger tendency to be reincorporated into solid weathering products, especially clay minerals. In most natural water the concentration of potassium is much lower than the concentration of sodium. Water that contains a large proportion of sodium salts may be unsatisfactory for irrigation on certain types of poorly drained soils. The presence of several hundred milligrams per litre of sodium in water can make it unsuitable for use in sodium-restricted diets (North Dakota State Department of Health, 1962).

#### Bicarbonate and Carbonate (HCO<sub>3</sub> and CO<sub>3</sub>)

Bicarbonate and carbonate ions are the major cause of alkalinity in most water. The significance of alkalinity to the domestic, agricultural, and industrial user is usually dependent upon the nature of the cations (Ca, Mg, Na, and K) associated with it. However, moderate amounts of alkalinity do not adversely affect most uses.

Alkalinity can be calculated from the analyses by using the formula:

$$\text{Alkalinity (As CaCO}_3\text{)} = 0.82 (\text{HCO}_3) + 1.67 (\text{CO}_3)$$

#### Sulfate (SO<sub>4</sub>)

Metallic sulfide minerals in both sedimentary and igneous rocks, upon weathering or with bacterial action, are converted to sulfates. Sulfate may also be dissolved from beds of gypsum and deposits of sodium sulfate.

#### Chloride (Cl)

Chloride is present in all natural waters, but the concentrations usually are low. Important sources of chloride are sedimentary rocks that were deposited under marine conditions.

#### Fluoride (F)

Fluoride in the ground water is probably derived from solution of fluorite, apatite, and hornblende minerals.

#### Nitrate (NO<sub>3</sub>) as Nitrogen (N)

The occurrence of high nitrate concentrations in shallow ground water has been attributed to leaching in feedlots or to fertilizer from irrigated fields where nitrogen compounds have been applied. High nitrate content is undesirable in drinking water because of its bitter taste and it has been reported to cause methemoglobinemia in infants (Comly, 1945).

#### Boron (B)

Boron is a constituent of the mineral tourmaline and may be present in biotite and amphiboles. In small quantities boron is essential for plant growth. Excessive concentrations in soil and in irrigation water are harmful for some plants.

#### Dissolved solids

The concentration of dissolved solids is calculated from the weight of residue on evaporation at 180°C from a known quantity of water.

### Properties and Characteristics of Water

#### Hardness

Calcium and magnesium are the principal cause of hardness. Hardness exhibits the characteristic of requiring greater quantities of soap to produce a lather as the hardness increases. Hard water also can contribute to the formation of scale in boilers, water heaters, radiators, and pipes, with a resultant decrease in the rate of water flow and(or) heat transfer.

The hardness that is equivalent to the alkalinity is called carbonate hardness, and any excess is called noncarbonate hardness. The carbonate hardness is the quantity that will contribute scale on heating and the noncarbonate hardness is the quantity of hardness that will remain after precipitation of the carbonate hardness. As a general reference, the U.S.

Geological Survey many times uses the following classification of water hardness.

<u>Calcium and magnesium hardness, as CaCO<sub>3</sub> (milligrams per litre)</u>	<u>Hardness description</u>
0-60	Soft
61-120	Moderately hard
121-180	Hard
More than 180	Very hard

Percent sodium and sodium-adsorption ratio (SAR)

The percent sodium is the percentage of sodium to all cations, with the cations in milliequivalents per litre. The displacement of calcium and magnesium by sodium in soils is slight unless the percent sodium is considerably higher than 50.

The term SAR (sodium-adsorption ratio) was introduced by the U.S. Salinity Laboratory Staff (1954). Their experiments show that the SAR relates to the degree water enters into cation-exchange reactions with soil. Sodium-adsorption ratio is expressed by the equation:

$$SAR = \frac{Na^+}{\sqrt{\frac{Ca^{++} + Mg^{++}}{2}}}$$

where the concentrations of the ions are expressed in milliequivalents per litre. The U.S. Salinity Laboratory Staff (1954) divided water into sixteen classes, depending upon the SAR and specific conductance. The classifications indicate the usefulness of water for irrigation of different crops on different types of soil.

Specific conductance (micromhos per centimetre at 25°C)

Specific conductance is a measure of the ability of water to conduct an electric current. Approximately 0.65 to 0.70 of the specific conductance is an estimate of the amount of dissolved solids (mg/l) in water.

Hydrogen-ion concentration (pH)

Hydrogen-ion concentration (activity) is expressed in terms of pH units. The values of pH often are used as one measure of the solvent power of water.

The hydrogen-ion concentrations affect the corrosiveness of water. A pH of 7.0 indicates that the water is neutral, neither acidic nor basic.

Readings progressively lower than 7.0 denote increasing acidity, and those progressively higher than 7.0 denote increasing alkalinity.

#### Temperature

Temperature is an important factor in evaluating the usefulness of water. This is evident for such a direct use as an industrial coolant. Temperature is also important, but perhaps not so evident, for its influence upon concentrations of dissolved gases and mineral matter in water. Water temperatures given in tables 1 and 4 are expressed in degrees Celsius (Centigrade). Degrees Celsius and the equivalent temperature in degrees Fahrenheit are given in appendix B.

#### Particle-Size Distribution Graphs

Particle-size distribution curves obtained from three cores in the Fox Hills Formation and 11 samples from the glacial drift are in table 6. The diagrams show the percentage of clay, silt, and sand in the samples.

#### Heavy Mineral Analyses

Heavy mineral analyses from three cores from the lower sand member of the Fox Hills Formation are in table 7. These analyses may be useful for correlation of Fox Hills beds throughout the Williston basin and surrounding areas.

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TABLE 1.--Records of wells and test holes

EXPLANATION

<u>Owner</u>	<u>Water-bearing material</u>
NDSWC 8151, North Dakota State Water Commission, test hole number 8151	Modifiers
NDSWC PW, North Dakota State Water Commission aquifer-test well, pumped well	2, fine grained 3, medium 4, coarse 6, clayey
NDSWC TM1, North Dakota State Water Commission aquifer-test wells	7, silty 8, sandy 9, gravelly
<u>Water level (feet)</u>	Major lithology
Water level, in feet below (+ above) land surface	F, shale G, gravel
F, well flows	P, clay R, sand and gravel S, sand V, sandstone Y, clayey gravel
<u>Use of water</u>	<u>Specific conductance</u>
H, domestic I, irrigation K, domestic and stock P, public supply S, stock U, unused Z, other	Value shown is the field specific conductance measured at the well at the time of inventory.
<u>Major aquifer</u>	
112, Pleistocene 211, Upper Cretaceous 217, Lower Cretaceous	
BDVL, buried valley BGFV, buried glaciofluvial DKOT, Dakota FXHL, Fox Hills HLCK, Hell Creek OTSH, outwash SBRG, Strasburg	

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (µMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
129-074-018CB	B. WEIGEL		130	--	24	1954	30	--	K	112BGFV	S	2050	--	--
129-074-058BB	NDSWC 8151	140	0	--	--	1971	--	--	U	--	--	--	--	1900
129-074-05DDA	E. GEFFRE		48	--	24	1958	7	--	K	112BGFV	--	1680	--	--
129-074-068BD	HAGUE		2476	--	4	1963	+207	--	P	217DKOT	S	--	27.0	1900
129-074-06DCB	T. VOLK		20	--	24	--	9	--	K	112BGFV	--	1700	--	--
129-074-10CAA	L. LIPP		77	--	--	--	30	--	K	112BGFV	S	1900	--	--
129-074-21BCC	NDSWC 8152	180	0	--	--	1971	--	--	U	--	--	--	--	1895
129-074-23DDA	L. SINKBEIL		68	--	--	1965	15	7-71	S	112BGFV	S	5850	7.0	--
129-074-28DAD	R. HUBER		112	--	4	--	--	--	S	112BGFV	S	2900	--	--
129-074-31CBC	E. HIRNING		38	--	24	--	29	--	K	112BGFV	--	--	8.0	--
129-074-33BCC	M. RUTSCHKE		88	--	30	1936	60	--	K	112BGFV	S	3300	--	--
129-074-33DAD	B. BOWER		2468	--	2	1961	F	--	K	217DKOT	S	3200	23.0	--
129-075-02DAB1	M. WEISBECK		15	--	24	1957	6	8-71	S	--	S	1410	9.0	--
129-075-02DAB2	M. WEISBECK		68	--	18	1959	5	--	K	112BGFV	S	2800	8.0	--
129-075-03ACA	G. GROSZ		10	--	48	--	3	8-71	K	1120TSH	S	--	--	--
129-075-04CBB1	J. BUECHLER		120	--	18	1958	20	--	H	--	S	2160	--	--
129-075-04CBB2	J. BUECHLER		35	--	18	1947	--	--	S	1120TSH	S	--	--	--
129-075-058BB	NDSWC 4499	360	244	238	1	1972	75	12-72	U	112BGFV	--	--	8.0	1803
129-075-05CBC	NDSWC 8688	375	300	294	--	1973	80	6-73	U	112SBRG	S	--	--	1807
129-075-06ADD	M. HOLLAAR		22	--	3	1925	19	8-71	S	112SBRG	S	1100	7.5	--
129-075-06BAB	P. NIEUWSMA		80	--	2	1958	75	--	H	112SBRG	S	--	--	--
129-075-098BB1	G. WELK		20	--	18	1953	10	--	S	112SBRG	4S	--	--	--
129-075-098BB2	G. WELK		20	--	18	1953	10	--	K	112SBRG	3S	2750	--	--
129-075-098BC	G. WELK		20	--	18	1953	10	--	S	112SBRG	2S	--	--	--
129-075-09DCD	J. HEIER		42	--	24	1972	14	10-72	H	112BGFV	--	3200	--	--
129-075-10DCC	R. HEIER		103	--	18	1932	62	8-71	K	112BGFV	S	3000	--	--
129-075-17DDA	P. NIEUWSMA		30	--	24	1920	18	--	K	112SBRG	S	1500	9.0	--
129-075-18B	G. NIEUWSMA		54	--	24	1973	20	--	S	--	--	--	--	--
129-075-18BAC	G. NIEUWSMA		34	--	--	1953	14	8-71	H	112SBRG	S	5400	--	--
129-075-18BDD	G. NIEUWSMA		46	--	24	1972	20	9-72	S	112SBRG	--	--	--	--
129-075-20CBB	P. NIEUWSMA		170	--	2	1955	100	--	K	211FXHL	S	1830	8.5	--
129-075-21CBC1	NIEUWSMA		33	--	18	1947	18	8-71	H	1120TSH	S	--	--	--
129-075-21CBC2	NIEUWSMA		25	--	36	--	10	--	S	1120TSH	S	1630	--	--
129-075-25DDD	NDSWC 8153	160	0	--	--	1971	--	--	U	--	--	--	--	1860
129-075-26DAC	W. FUHRER		80	--	18	1962	15	--	S	112BGFV	S	2400	--	--
129-075-26DDA	NDSWC 8154	200	0	--	--	1971	--	--	U	--	--	--	--	1790
129-075-27CAD	J. FUHRER		117	--	18	1938	--	--	K	112BGFV	--	3700	--	--
129-075-27CDB	NDSWC 8155	100	0	--	--	1971	--	--	U	--	--	--	--	1795
129-075-28BBC	F. BOLLINGER		17	--	24	--	4	--	U	1120TSH	S	--	--	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE ( $\mu$ MHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
129-075-29AAA	NDSWC 4504	160	0	--	--	1972	--	--	U	--	--	--	--	1750
129-075-29BBB	NDSWC 4503	420	284	278	1	1972	98	--	U	--	--	--	7.0	1820
129-076-03ACB	A. INT VELD T		2500	2398	2	1968	F	--	K	217DKOT	S	3380	--	1945
129-076-04ABA	NDSWC 8596	220	0	--	--	1972	--	--	U	--	--	--	--	--
129-076-04ABB	HOPE REFORM CH.		150	--	6	1963	120	--	H	112BGFV	--	2000	8.5	--
129-076-10BBB	L.COMPAAN		75	--	24	1925	55	--	S	211FXHL	--	1975	--	--
129-076-13BAB	E.HAAK		20	--	--	--	7	8-71	K	112OTSH	S	3000	--	--
129-076-15BCC	C.HUIZENGA		35	--	18	--	25	--	K	112BGFV	--	2900	--	--
129-076-17ACD	G.VANDER VORST		100	--	--	1969	--	--	H	--	--	3280	--	--
129-076-20BAB	E.VANDER VORST		130	--	2	1917	--	--	S	--	--	2410	--	--
129-076-21AAC	G.ROWERD INK		2629	--	2	1970	F	--	K	217DKOT	--	3050	--	2017
129-076-23CAD	H.DORNBUSH		18	--	--	--	--	--	K	112BGFV	--	1950	--	--
129-076-24AAA	A.HAAK		17	--	18	1954	9	8-47	K	112BGFV	--	3300	--	--
129-076-25AAA	NDSWC 4505	100	0	--	--	1972	--	--	U	--	--	--	--	1860
129-076-27CDD	M.VIKSE		87	--	24	1912	--	--	K	211FXHL	--	2525	--	--
129-077-01ADA	J.POOL		80	--	18	1936	60	--	K	--	--	6900	--	--
129-077-05DAD	S.VANDER LAAN		120	--	2	1951	--	--	K	211FXHL	S	2280	--	--
129-077-078BA1	A.BECKER		54	--	24	1966	20	--	H	112SBRG	--	975	--	--
129-077-078BA2	A.BECKER		110	--	4	1961	40	--	S	112SBRG	--	2070	--	--
129-077-09DBC	E.RYCKMAN		160	145	2	1966	128	7-72	K	211FXHL	S	3180	8.5	--
129-077-14BDB	D.RYCKMAN		110	--	24	1960	--	--	K	211FXHL	--	1315	--	--
129-077-15BAB	V.RYCKMAN		130	--	2	--	105	--	K	211FXHL	--	1220	--	--
129-077-17ADA	M.RENSKERS		120	--	18	--	34	--	K	--	--	2650	8.0	--
129-077-17CDD	J.VANDER LAAN		120	--	1	1915	--	--	K	211FXHL	--	1200	--	--
129-077-21ACC	K.RYCKMAN		87	--	2	1936	40	--	S	--	--	2560	7.9	--
129-077-27BBB	NDSWC 8595	360	0	--	--	1972	--	--	U	--	--	--	--	1765
129-077-27CAC	E.JONES		20	--	24	1950	12	--	K	--	G	2450	--	--
129-077-30ACD	A.SEYMOUR		185	--	2	1906	160	--	S	211FXHL	--	3850	--	--
129-077-33ACA	S.WILLIAMS		50	--	24	1968	--	--	K	211FXHL	--	1150	--	--
129-078-01DAA	A.BECKER		100	--	4	1968	75	--	K	211FXHL	--	2590	--	--
129-078-01DDD	NDSWC 8594	420	0	--	--	1972	--	--	U	--	--	--	--	1835
129-078-11DCC1	E.RYCKMAN		70	--	2	1966	55	--	K	211FXHL	--	1870	--	--
129-078-11DCC2	E.RYCKMAN		55	--	2	--	45	--	K	211FXHL	--	--	--	--
129-078-17CCA	L.LANGELIERS		30	--	30	1953	25	--	U	211FXHL	--	--	--	--
129-078-19CCD1	L.LANGELIERS		30	--	2	--	20	--	U	--	--	950	--	--
129-078-19CCD2	LANGELIERS		17	--	2	1970	7	--	K	--	--	1130	--	--
129-078-22CAD1	H.MEYER		10	--	60	--	3	--	H	--	--	--	--	--
129-078-22CAD2	H.MEYER		20	--	8	--	12	--	S	--	--	3850	--	--
129-078-23CCC	A.DOCKTER		130	--	1	1905	--	--	S	211FXHL	--	1280	--	--
129-078-27CCD1	P.MOSER		65	--	--	1955	30	--	K	211FXHL	--	1125	--	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE ( $\mu\text{MHOS}/\text{CM}$ @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
129-078-27CCD2	P.MOSER		60	--	24	1940	30	--	S	211FXHL	--	--	--	--
129-078-30BAA	L.LANGELIERS		12	--	1	1954	8	--	K	--	--	--	--	--
129-078-30DAD	NDSWC 8165	100	33	--	--	1971	--	--	U	--	35	--	--	1650
129-078-338CC	NDSWC 8166	60	0	--	--	1971	--	--	U	--	--	--	--	1655
130-074-02DAB1	L.SENGER		96	--	24	--	50	--	K	112BGFV	--	750	--	--
130-074-02DAB2	L.SENGER		54	--	24	1971	40	--	S	112BGFV	--	1500	9.0	--
130-074-03DD	FOREST OIL CORP		2472	--	--	--	--	--	U	--	--	--	--	1995
130-074-04ACC	F.HULM		105	105	24	--	90	--	K	112BGFV	--	1900	8.0	--
130-074-05CBC	C.ZAHN		60	--	24	1966	44	--	K	112BGFV	--	3180	7.5	--
130-074-05CCB	F.NOLZ		55	--	18	1973	18	7-73	S	--	--	--	--	--
130-074-06CCC	NDSWC 8672	220	0	--	--	1973	--	--	U	112BGFV	--	--	--	1870
130-074-11ABB1	E.WALD		25	--	24	--	--	--	H	112BGFV	--	560	--	--
130-074-11ABB2	E.WALD		90	--	24	--	--	--	S	--	--	--	--	--
130-074-17DCA1	A.HULM		146	--	4	1967	55	--	K	--	--	1290	--	--
130-074-17DCA2	A.HULM		110	--	30	1915	70	--	S	--	--	1550	7.5	--
130-074-18ADA	L.KRUMM		21	21	24	1941	16	--	S	--	--	780	8.0	--
130-074-19ADA1	B.MUMMEL		71	--	24	1952	60	--	K	--	--	2350	--	--
130-074-19ADA2	B.MUMMEL		30	--	24	1958	24	--	S	--	--	--	--	--
130-074-20AAA	J.HULM		18	--	36	1961	8	--	K	--	--	--	--	--
130-074-20AAB	J.HULM		36	--	18	1970	12	--	K	--	--	860	--	--
130-074-24DAA	A.FEIST		100	--	24	--	95	--	H	--	--	1800	--	--
130-074-25DDD	A.KLEIN		79	--	30	--	48	8-71	U	--	--	--	--	--
130-074-26ABB	A.WERLINGER		2506	2400	2	1969	--	--	K	217DKOT	S	--	26.5	--
130-074-28ACD	P.GLATT		2500	2437	2	1961	F	--	K	217DKOT	--	3100	24.5	--
130-074-29ADD	A.GOLDADE		130	--	--	--	83	7-72	K	--	--	1910	9.0	--
130-074-31CDC	HAGUE		130	--	24	1936	--	--	P	112BGFV	--	--	--	--
130-074-33BBC	F.WALD		2506	--	2	1960	F	--	K	217DKOT	S	3320	--	--
130-075-02DCC	NDSWC 8671	300	0	--	--	1973	--	--	U	--	--	--	--	1758
130-075-03BAD	P.HULM		28	28	24	1961	8	--	K	--	--	1110	--	--
130-075-03CDC	H.VAN SOEST		60	--	24	1970	--	--	K	--	--	1750	--	--
130-075-0688A	C.ROEHRICH		100	--	2	1961	--	--	K	--	--	1630	--	--
130-075-07AAB	P.ROEHRICH		227	180	6	1957	190	--	K	--	--	2200	8.5	--
130-075-07BAD1	J.BERNHARDT		14	--	24	--	9	8-57	H	--	S	--	--	--
130-075-07BAD2	J.BERNHARDT		7	--	36	1953	5	8-57	S	--	S	--	--	--
130-075-07BDA	J.BERNHARDT		310	--	2	--	124	--	K	--	--	2030	8.5	--
130-075-07CCC1	M.LIPP		16	--	24	--	10	--	S	112SBRG	--	3600	--	--
130-075-07CCC2	M.LIPP		16	--	24	1932	14	--	H	112SBRG	--	--	--	--
130-075-08DDB	E.NIEUSIMA		31	--	36	1956	25	8-57	S	--	--	--	--	--
130-075-08DDC	R.NIEUSMA		2488	2332	2	1968	F	--	K	217DKOT	S	3180	26.5	--
130-075-10BBB	NDSWC 4506	120	0	--	--	1972	--	--	U	--	--	--	--	1910

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LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE ( $\mu$ MHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
130-075-10BDD	P.NIEUWSMA		2580	--	2	1961	F	--	K	217DKOT	S	3050	20.0	--
130-075-11ADA	P.VOLK		134	--	24	1964	118	--	H	--	S	2600	--	--
130-075-11ADC	P.VOLK		40	--	24	1971	20	--	K	--	--	--	--	--
130-075-11ADD	P.VOLK		21	--	48	1952	18	8-57	H	--	S	--	--	--
130-075-12CCA	P.VOLK		14	--	36	--	2	8-57	S	--	--	--	--	--
130-075-12CCC	P.VOLK		25	--	24	1959	15	--	S	--	--	1650	7.5	--
130-075-20888	E.SILVERNAGEL		2411	--	2	1970	F	--	K	217DKOT	--	3150	--	--
130-075-20CCC1	NDSWC 4498	300	194	188	1	1972	19	--	U	112BDVL	3S	--	8.0	1838
130-075-20CCC2	NDSWC 4498A		33	14	1	1972	12	5-73	U	112BDVL	G	--	--	1836
130-075-21ABB	B.MATTERN		10	--	48	--	9	8-57	S	--	P	--	--	--
130-075-22DBD1	E.VOLK		15	--	36	1956	14	8-57	K	--	S	--	--	--
130-075-22DBD2	E.VOLK		15	--	48	1937	14	8-57	K	--	S	--	--	--
130-075-23AAD	P.KNOLL		18	--	24	--	14	--	K	--	--	1900	--	--
130-075-24CDB	EBERLE & WOLF		2432	2282	2	1970	F	--	K	217DKOT	--	3650	--	--
130-075-24DCC	J.EBERLE		18	--	24	1968	5	--	U	--	--	--	--	--
130-075-26ABB1	F.WOLF		16	--	48	--	12	8-57	K	--	S	--	--	--
130-075-26ABB2	F.WOLF		17	--	24	--	7	8-57	U	--	S	--	--	--
130-075-27CDB	T.WEISBECK		2340	2200	2	1963	F	8-71	K	217DKOT	--	3100	24.0	--
130-075-308881	R.HAAK		16	--	48	--	10	8-57	S	--	S	--	--	--
130-075-308882	R.HAAK		16	--	48	--	10	8-57	U	--	S	--	--	--
130-075-30CDC	NDSWC 8690	200	153	147	2	1973	--	--	U	112SBRG	S	--	7.0	1806
130-075-30CDD1	J.VAN VUGT		24	--	3	1963	14	--	H	112SBRG	--	1250	--	--
130-075-30CDD2	T.VAN VUGT		18	--	24	1912	14	--	S	112SBRG	--	--	--	--
130-075-30CDD3	NDSWC 8690D	182	153	147	2	1973	--	--	U	112SBRG	S	--	7.0	1806
130-075-30CDD4	NDSWC 8690F	280	258	252	2	1973	--	--	U	112SBRG	S	--	--	1806
130-075-30CDD5	NDSWC 8690G	210	184	178	2	1973	--	--	U	112SBRG	S	--	7.0	1806
130-075-30CDD6	NDSWC 8690H	40	26	23	1	1973	--	--	U	112SBRG	S	--	5.0	1806
130-075-31AAB	NDSWC 8689	400	300	294	2	1973	80	6-73	U	112SBRG	S	2180	8.0	1807
130-075-31BAA1	NDSWC 8690B	180	144	138	2	1973	73	--	U	112SBRG	S	--	7.0	1806
130-075-31BAA2	NDSWC 8690C	180	132	126	2	1973	71	6-73	U	112SBRG	S	--	7.0	1805
130-075-31BAA3	NDSWC 8690E	180	155	149	2	1973	72	6-73	U	112SBRG	S	--	7.0	1806
130-075-31BAA4	NDSWC PW1	200	175	--	--	--	--	--	Z	112SBRG	S	--	--	1805
130-075-31BAA5	NDSWC TM5	200	179	127	12	1973	72	--	U	112SBRG	--	--	7.5	1806
130-075-31BAA6	NDSWC TM5A		30	19	4	1973	9	8-73	U	112SBRG	R	--	7.0	1806
130-075-31BAA7	NDSWC TM6		30	20	--	1973	9	8-73	U	112SBRG	R	--	--	1806
130-075-31BAA8	NDSWC TM7		21	18	1	1973	--	8-73	U	112SBRG	--	--	6.5	1806
130-075-31BAD	P.HULM		46	46	18	1926	9	--	S	112SBRG	--	2000	8.0	--
130-075-31CAB	J.VAN VUGT		20	--	24	--	14	8-57	S	112SBRG	S	--	--	--
130-075-31CCC	NDSWC 8157	140	116	110	1	1971	74	10-71	U	112BGFV	S	--	8.0	1807
130-075-31CDD	P.DROOG		18	--	--	1958	12	--	H	112SBRG	S	--	--	1813

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (µMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
130-075-31DCC1	NDSWC 4501	420	390	378	2	1972	94	1-73	U	112SBRG	--	--	7.0	1819
130-075-31DCC2	NDSWC 4501A	200	184	178	1	1972	77	1-73	U	112SBRG	--	--	8.0	1810
130-075-31DCD	CHRIST. REF.CH.		15	--	30	1953	12	--	H	112SBRG	S	1800	--	--
130-075-32BCC	P.DROOG		14	--	24	--	12	8-57	S	112SBRG	--	--	--	--
130-075-32DCD1	NDSWC 4500	380	166	160	1	1972	65	1-73	U	112SBRG	3S	--	--	1798
130-075-32DCD2	NDSWC 4500A		19	10	1	1972	12	5-73	U	112SBRG	--	--	--	1798
130-075-33DDD	NDSWC 4502	160	0	--	--	1972	--	--	U	--	--	--	--	1796
130-075-35ADD	M.TSCHOSIK		105	--	24	--	80	8-57	S	--	S	--	--	--
130-076-02BBB	NDSWC 1222	52	0	--	5	1957	--	--	U	--	--	--	--	1804
130-076-03CBB	NDSWC 4508	480	369	357	2	1972	91	1-73	U	112SBRG	3S	--	--	1825
130-076-04ADD	NDSWC 1218	147	0	--	5	1957	--	--	U	--	--	--	--	--
130-076-04DCA	J.BAUMGARTNER		190	--	2	--	--	--	K	--	--	1950	--	--
130-076-08BBB	E.TERNES		80	--	24	1961	14	--	K	--	--	2600	--	--
130-076-09ACC	J.BAUMGARTNER		27	--	24	1973	12	4-73	S	--	R	--	--	--
130-076-09DDD1	A.DYK		22	--	24	1961	7	--	H	--	--	810	--	--
130-076-09DDD2	A.DYK		40	--	24	--	--	--	S	--	--	--	--	--
130-076-10BAA	T.MATTERN		202	--	4	1934	102	--	K	--	--	2000	8.5	--
130-076-12AAA	NDSWC 4497	440	0	--	--	1972	--	--	U	--	--	--	--	1837
130-076-12BBB	NDSWC 1210	136	0	--	5	1957	--	--	U	--	--	--	--	1822
130-076-13CCC	NDSWC 1211	168	0	--	5	1957	--	--	U	--	--	--	--	1826
130-076-14AAA	T.SHAEFBAUER		200	--	4	1968	--	--	K	--	--	1180	--	--
130-076-15AAB	P.DYK		16	--	24	--	4	8-57	S	--	G	--	--	--
130-076-18DDA	E.KRAMER		280	--	4	--	--	--	S	--	--	1450	8.5	--
130-076-23BBB	G.DYKEMA		42	--	24	1940	29	8-57	K	--	S	--	--	--
130-076-23DCD	A.DYKEMA		24	--	24	1954	6	8-57	K	--	P	--	--	--
130-076-26DAB	E.DYKEMA		20	--	72	1910	8	--	K	--	--	2430	--	--
130-076-27ACB	G.SLAGH		12	--	48	--	9	8-57	K	--	G	--	--	--
130-076-27CCB	V.VANDER VORST		170	--	2	1930	--	--	S	--	--	2830	--	--
130-076-28ADD	I.DORNBUSH		130	--	6	1940	125	--	K	--	--	3650	--	--
130-076-28BBB	A.DYKEMA		39	--	24	--	9	8-57	K	--	S	--	--	--
130-076-32DCD	D.DYKEMA		210	--	2	1920	170	--	K	--	--	2250	--	--
130-076-34DCD	R.RODENBURG		2527	2380	2	1969	F	8-71	K	217DKOT	--	3300	--	--
130-076-35AAA1	L.VAN BEEK		14	--	48	--	6	8-57	U	--	--	--	--	--
130-076-35AAA2	NDSWC 1212	168	0	--	5	1957	--	--	U	--	--	--	--	1832
130-076-35ADC	L.VAN BEEK		54	--	24	1957	29	8-57	S	--	P	--	--	--
130-076-35DDD	NDSWC 8159	60	0	--	--	1971	--	--	U	--	--	--	--	1850
130-076-36DCD	NDSWC 8158	160	0	--	--	1971	--	--	U	--	--	--	--	1800
130-077-01BCC	O.TERNIS		60	--	4	--	21	8-71	K	--	--	2000	--	--
130-077-01CCC	NDSWC 8597	100	43	37	1	1972	6	12-72	U	211FXHL	--	1500	8.0	1930
130-077-06AAD1	F.SILVERNAGLE		25	--	2	--	--	--	H	--	--	--	--	--

20

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (µMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
130-077-06AAD2	F.SILVERNAGLE		45	--	2	--	10	--	S	--	--	4600	--	--
130-077-07CDC	G.NAGLE		120	--	2	--	--	--	K	--	--	4000	--	--
130-077-09CBC	J.WAGNER		100	--	2	1945	45	--	H	--	--	1320	--	--
130-077-09DDC	L.KRAMER		148	--	4	1963	50	--	K	--	--	1500	--	--
130-077-10DCC	R.KRAMER		120	--	4	1925	--	--	S	--	--	1600	--	--
130-077-11ABB	A.TERNES		18	--	48	--	8	8-57	S	--	S	--	7.5	--
130-077-11BBA	L.TERNES		130	--	--	--	--	--	S	211FXHL	--	--	--	--
130-077-11CCC	L.TERNES		110	--	2	--	--	--	K	--	--	3850	--	--
130-077-1388A	I.REINBOLD		100	--	3	1920	20	--	H	211FXHL	--	1630	--	--
130-077-14AAA	NDSWC 8674	100	84	78	1	1973	11	6-73	U	211FXHL	S	--	8.5	1958
130-077-14DAA1	F.REINBOLD		100	--	4	1969	--	--	K	211FXHL	S	1600	--	--
130-077-14DAA2	F.REINBOLD		40	--	2	--	15	--	S	--	--	--	--	--
130-077-15ABB	R.KRAMER		120	--	4	1957	60	--	S	--	--	--	--	--
130-077-15DCB	C.VAN BEEK		80	--	3	--	--	--	K	--	--	1150	--	--
130-077-16DCB	S.BOSCH		100	--	2	--	70	--	K	--	--	3000	--	--
130-077-18A	E.GETZ		64	--	24	1973	39	6-73	S	--	--	--	--	--
130-077-18AAA	J.GETZ		90	--	2	1940	--	--	K	--	--	1800	--	--
130-077-23ABC	H.WAGNER		130	90	--	1971	29	7-71	K	211FXHL	--	--	--	--
130-077-26CCD	F.VAN BEEK		100	--	1	1940	--	--	K	--	--	2200	--	--
130-077-31CDA	G.BROOKS		17	--	--	--	15	8-71	U	--	--	--	--	--
130-077-33BAA	W.VANDER WAL		180	--	2	1930	--	--	H	--	--	1900	--	--
130-077-33DCB	I.VANDER LAAN		100	--	2	1920	--	--	K	--	--	4100	--	--
130-077-34DDD	W.RYCKMAN		108	--	2	1958	80	--	H	--	--	3800	--	--
130-078-05CCC	A.BROWN		65	--	2	--	30	--	K	--	--	<7000	--	--
130-078-10B81	A.WOLLMAN		110	--	2	1960	--	--	H	--	--	5800	--	--
130-078-10B82	A.WOLLMAN		110	--	2	1963	--	--	S	--	--	--	--	--
130-078-12ADD	L.NAGLE		240	--	2	--	--	--	H	--	--	980	--	--
130-078-12C881	E.FISCHER		212	--	2	1900	150	--	S	--	--	1900	--	--
130-078-12C882	E.FISCHER		212	--	2	1949	150	--	H	--	--	--	--	--
130-078-17C881	G.RUDY		26	23	2	1940	15	--	K	--	S	720	8.7	--
130-078-17C882	G.RUDY		60	45	4	1972	19	11-72	H	--	S	--	--	--
130-078-18B8C	NDSWC 8568	200	0	--	--	1972	--	--	U	--	--	--	--	1680
130-078-20AAD	A.KIEFFER		100	80	4	1972	45	6-72	S	211FXHL	S	1250	8.5	--
130-078-20ADC	A.KIEFFER		25	--	--	--	20	--	H	--	--	1580	--	--
130-078-21AAD1	F.JAKOBSEN		110	--	2	1967	F	8-71	K	--	--	--	--	--
130-078-21AAD2	F.JAKOBSEN		30	--	2	1925	F	--	K	--	--	1480	--	--
130-078-21AAD3	F.JAKOBSEN		35	--	2	1927	F	--	S	--	--	--	--	--
130-078-22B8C	NDSWC 8163	20	0	--	--	1971	--	--	N	--	--	--	--	--
130-078-26DCC	NDSWC 8593	240	0	--	--	1972	--	--	U	--	--	--	--	1740
130-078-27B8C	NDSWC 8164	220	0	--	--	1971	--	--	U	--	--	--	--	1765

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
130-078-28AA	PLACID OIL CO.		2389	--	--	--	--	--	U	--	--	--	--	1805
130-078-28DCB	F.JAKOBSEN		110	--	3	1970	15	--	K	--	--	2000	--	--
130-078-31ACA	H.LANGELIERS		320	--	2	1960	310	--	H	--	--	2000	--	--
130-078-31DBA	H.LANGELIERS		287	--	2	1951	60	--	S	--	--	--	--	--
130-078-360BA1	I.PAYNE		30	--	18	1963	15	--	S	--	--	--	--	--
130-078-360BA2	I.PAYNE		33	--	30	--	--	--	H	--	--	1380	--	--
130-079-02CDA	R.REIERSON		90	80	2	--	--	--	K	--	--	--	--	--
130-079-03CCC	NDSWC 8172	200	153	147	1	1971	52	10-71	U	112BGFV	S	880	8.0	1657
130-079-03DDC	NDSWC 8565	220	0	--	--	1972	--	--	U	--	--	--	--	1665
130-079-04AAA	NDSWC 8562	180	124	118	1	1972	43	12-72	U	112BGFV	R	1910	8.0	1647
130-079-04888	NDSWC 8168	180	143	137	1	1971	37	10-71	U	112BGFV	R	--	9.0	--
130-079-09DDA	L.PAUL		110	90	4	1972	55	6-72	S	211FXHL	S	680	9.5	1645
130-079-10DBB	A.RUDY		30	20	8	1972	16	11-72	S	112BGFV	--	--	--	--
130-079-12BDC	L.PUTNAM		13	--	24	1972	8	--	H	1120TSH	S	--	--	--
130-079-12BDD	G.PUTNAM		23	--	24	1972	10	9-72	S	--	S	--	--	--
130-079-13AAA1	NDSWC 8567	166	0	--	--	1972	--	--	U	--	--	--	--	1666
130-079-13AAA2	NDSWC 8567A		54	48	1	1972	4	12-72	U	112BDVL	3S	1860	--	1666
130-079-14CCC1	L.UMBER		130	--	2	1958	--	--	H	--	--	1080	--	--
130-079-14CCC2	L.UMBER		120	--	2	1940	--	--	S	--	--	--	--	--
131-074-02CBB1	T.MOLZER		42	--	24	1957	34	--	K	--	--	1580	--	--
131-074-02CBB2	T.MOLZER		38	--	24	1969	26	--	S	--	--	4200	--	--
131-074-02CBB3	T.MOLZER		--	--	--	--	--	--	S	--	--	--	--	--
131-074-03C0C	M.GRINSTEINER		55	--	24	1948	44	--	K	--	--	1620	7.0	--
131-074-04CCD1	P.KIEFER		36	--	24	--	9	8-71	H	--	--	820	8.0	--
131-074-04CCD2	P.KIEFER		27	--	20	1950	12	8-71	Z	--	--	2850	7.0	--
131-074-08ABD1	A.GEFROH		23	--	24	1960	11	--	K	--	--	1790	--	--
131-074-08ABD2	A.GEFROH		14	14	36	1951	9	--	K	--	--	950	9.0	--
131-074-08BA	FOREST OIL CORP.		2359	--	--	--	--	--	U	--	--	--	--	1919
131-074-09CBC	E.VETSCH		24	--	18	--	13	--	K	--	--	1050	--	--
131-074-10CCC	NDSWC 8588	40	0	--	--	1972	--	--	U	--	--	--	--	1915
131-074-14DDD1	L.WEBER		60	60	3	1961	--	--	H	--	--	1100	--	--
131-074-14DDD2	L.WEBER		20	20	24	1959	15	--	S	--	--	1800	7.5	--
131-074-14DDD3	L.WEBER		20	20	24	1959	15	--	S	--	--	4400	8.0	--
131-074-16ADA1	F.KIEFER		32	--	24	1944	12	--	H	--	--	2100	9.0	--
131-074-16ADA2	F.KIEFER		64	--	24	1960	20	--	S	--	--	2200	7.0	--
131-074-20DAA1	F.BUECHLER		92	92	22	--	45	--	H	112BGFV	--	1600	--	--
131-074-20DAA2	F.BUECHLER		52	--	22	1948	32	--	S	--	--	1490	8.0	--
131-074-21AA	PLACID OIL CO.		2610	--	--	--	--	--	U	--	--	--	--	1920
131-074-22CBA1	A.GEFROH		43	43	36	1956	22	--	K	--	--	1570	--	--
131-074-22CBA2	A.GEFROH		45	45	24	1965	23	--	S	--	--	1350	7.0	--



LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
131-074-278CA	A.FISCHER		45	--	24	1965	6	--	S	--	--	780	8.0	--
131-074-278CC	A.FISCHER		50	--	24	1950	17	--	H	--	--	1750	--	--
131-074-270BB1	J.SENGER		120	--	24	1969	--	--	K	--	--	1550	--	--
131-074-270BB2	J.SENGER		22	--	30	1973	13	7-73	S	--	--	--	--	--
131-074-270DC	E.WELK		19	19	24	1970	2	--	K	--	--	950	--	--
131-074-32AAA1	F.NEIS		28	--	24	1953	20	8-71	H	--	--	590	--	--
131-074-32AAA2	F.NEIS		90	--	24	--	40	--	S	--	--	530	--	--
131-074-32AAA3	F.NEIS		33	33	24	1970	21	8-71	U	--	--	--	--	--
131-074-34CAC	R.KIEFER		100	100	24	--	40	--	K	--	--	1190	--	--
131-075-05CBB	L.LAUNGER		20	--	24	1965	8	--	S	--	--	950	9.0	--
131-075-05CCB	J.SCHWAB		40	--	24	1967	8	--	K	--	--	1260	--	--
131-075-07AAA	R.BAUMAN		85	--	36	1971	--	--	K	112BGFV	--	1100	--	--
131-075-07AAB1	P.BAUMAN		37	--	24	--	17	8-57	K	--	G	--	8.3	--
131-075-07AAB2	P.BAUMAN		25	--	24	1957	12	8-57	S	--	G	--	8.3	--
131-075-08AAC	J.KRAFT		30	--	18	--	15	--	K	--	--	1950	7.0	--
131-075-08ADB	J.DRAFT		19	--	24	--	16	8-57	K	--	S	--	8.3	--
131-075-09ACA	W.IBACK		--	--	4	1967	14	--	K	--	--	1450	--	--
131-075-09ACD1	J.IBACH		16	--	24	1952	10	8-57	H	--	G	--	--	--
131-075-09ACD2	J.IBACH		30	--	24	--	21	8-57	K	--	G	--	--	--
23 131-075-09ADA	NDSWC 8670	280	253	247	1	1973	31	6-73	U	112BGFV	G	--	8.5	1860
131-075-13CDA1	L.WEICHEL		140	140	6	1968	20	--	K	--	--	1400	8.0	--
131-075-13CDA2	L.WEICHEL		140	140	28	1962	20	--	S	--	--	1410	8.0	--
131-075-14DDD	L.KELLER		180	--	4	1946	60	--	K	--	--	1825	--	--
131-075-15ACC	V.ZACHER		14	--	36	--	7	--	K	--	--	1300	--	--
131-075-17CCC	T.REIS		80	--	24	--	45	--	K	--	--	2180	8.0	--
131-075-17DC	L.REIS		69	--	24	1973	44	8-73	S	--	--	--	--	--
131-075-18DDD	T.BAUMGARTNER		48	--	18	--	12	--	K	--	--	1700	--	--
131-075-19BCB	J.KRUMM		27	--	24	1960	12	--	K	--	--	>400	--	--
131-075-20BCC	J.KRAFT		18	18	48	1934	14	--	K	--	--	1520	--	--
131-075-21ACB1	J.KELLER		40	--	24	--	31	8-57	H	--	S	--	8.9	--
131-075-21ACB2	J.KELLER		31	--	24	--	16	8-57	S	--	--	--	8.3	--
131-075-22DCD	NDSWC 8149	300	253	247	1	1971	+12	11-71	U	112BGFV	R	--	8.0	1815
131-075-23AAD	L.KELLER		20	20	24	1962	10	--	S	--	--	1720	9.5	--
131-075-23DCD	NDSWC 1217	84	0	--	5	1957	--	--	U	--	--	--	--	--
131-075-230DD	NDSWC 8150	180	0	--	--	1971	--	--	N	--	--	--	--	1850
131-075-248DB	E.GROSS		68	68	36	--	30	--	K	--	--	1480	--	--
131-075-26BCA1	J.SENGER		15	--	24	--	12	8-57	K	--	S	--	7.8	--
131-075-26BCA2	J.SENGER		20	--	24	--	8	8-57	S	--	S	--	7.8	--
131-075-26CC	T.WALD		38	--	24	--	15	8-57	K	--	S	--	8.3	--
131-075-27ADA	F.BAUMAN		120	--	6	1967	--	--	K	--	--	2130	--	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (MHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
131-075-28AAC	NDSWC 1216		136	--	5	1957	--	--	U	--	--	--	--	1834
131-075-288DA	P.ROEHRICH		62	--	24	1943	22	8-57	K	--	S	--	8.3	--
131-075-288DB	P.ROEHRICH		60	--	24	1968	45	--	K	--	--	1300	--	--
131-075-29ACD1	A.WALD		35	35	24	1965	20	--	H	--	--	2200	9.0	--
131-075-29ACD2	A.WALD		40	40	24	--	20	--	S	--	--	2780	8.5	--
131-075-29ACD3	A.WALD		40	40	24	1964	20	--	S	--	--	3100	7.0	--
131-075-29ADD	NDSWC 8673	40	0	--	--	1973	--	--	U	--	--	--	--	1890
131-075-31AAC	E.DOSCH		30	--	--	--	22	--	S	--	S	--	7.8	--
131-075-3288B1	NDSWC 1215	94	0	--	5	1957	--	--	K	--	--	--	--	1896
131-075-32C8B	WALD & VOLLER		2500	2353	2	1968	+180	--	K	217DKOT	--	3530	--	--
131-075-32CCA1	M.WALD		16	--	24	--	10	8-57	K	--	S	--	7.8	--
131-075-32CCA2	M.WALD		14	--	54	--	6	8-57	S	--	S	--	7.8	--
131-075-32CCA3	M.WALD		10	--	24	1920	6	--	H	--	--	2050	--	--
131-075-36AAA	NDSWC 1214	105	0	--	5	1957	--	--	U	--	--	--	--	--
131-076-01BCA	M.KRAFT		78	--	24	1967	34	--	K	--	--	1020	--	--
131-076-02DCC1	A.WIKENHEISER		88	--	24	1957	57	8-57	K	--	F	--	--	--
131-076-02DCC2	A.WIKENHEISER		53	--	24	--	27	8-57	K	--	F	--	8.3	--
131-076-02DCD	A.WIKENHEISER		55	--	24	1958	50	--	K	--	--	950	--	--
131-076-03C	W.SCHLOSSER		23	--	24	1973	15	--	S	--	--	--	--	--
131-076-03CCD1	NDSWC 8586	400	0	--	--	1972	--	--	U	--	--	--	--	1785
131-076-03CCD2	NDSWC 8586A	180	173	167	1	1972	50	12-72	U	112SBRG	S	--	--	1785
131-076-03DCC	W.SCHLOSSER		15	--	36	1946	10	8-71	K	--	--	1650	7.0	--
131-076-04DDC	NDSWC 1223	52	0	--	5	1957	--	--	U	--	--	--	--	1797
131-076-05BCB	NDSWC 8676	280	243	237	1	1973	150	--	U	--	S	--	--	1880
131-076-05CBC	NDSWC 8677	60	0	--	--	1973	--	--	U	--	--	--	--	1950
131-076-068AB1	J.VOLK		14	--	24	--	6	--	K	--	--	1600	--	--
131-076-068AB2	J.VOLK		17	--	48	--	8	8-57	K	--	G	--	7.8	--
131-076-068BB	J.ROHRICH		234	226	3	1955	134	--	H	--	--	--	--	--
131-076-08ABD	A.BICHLER		20	--	24	--	9	8-57	K	--	S	--	--	--
131-076-08ACB	A.BICKLER		2482	2330	2	1969	+254	7-71	--	217DKOT	S	3250	25.0	--
131-076-09ACC	A.BAUMGARTNER		56	--	24	1972	30	9-72	S	112SBRG	S	1690	7.5	--
131-076-09DB	W.FISCHER		50	--	24	1973	32	--	S	--	--	--	--	--
131-076-10CCD1	P.BRAUN		33	--	24	--	30	8-57	--	--	S	--	7.8	--
131-076-11DAA	J.BAUMGARTNER		68	--	24	--	40	--	K	--	--	2000	8.0	--
131-076-158BD	NDSWC 1226	42	0	--	5	1957	--	--	U	--	--	--	--	1778
131-076-17CCC	NDSWC 8918	380	0	--	--	1973	--	--	U	--	--	--	--	1802
131-076-18AAC	F.BAUMGARTNER		16	--	48	--	8	8-57	S	--	S	--	7.8	--
131-076-19BAA1	N.SCHERR		17	--	48	1895	9	8-57	K	--	S	--	--	--
131-076-19BAA2	N.SCHERR		9	--	36	--	7	8-57	U	--	S	--	--	--
131-076-19BAA3	E.WENINGER		20	--	48	1915	14	--	H	--	--	860	--	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
131-076-198AA4	E. MENINGER		240	--	4	1970	--	--	H	--	--	--	--	--
131-076-198BB	NDSWC 8920	420	218	212	1	1973	128	10-73	U	--	--	--	--	1853
131-076-20AACZ	BAUMGARTNER BRO.		74	--	24	--	22	8-57	U	--	S	--	--	--
131-076-21AB	A. FEIST		160	--	4	1973	80	8-73	H	--	--	--	--	--
131-076-22ABA	NDSWC 1220	63	0	--	5	1957	--	--	U	--	--	--	--	1800
131-076-22CDD	NDSWC 1221	53	0	--	5	1957	--	--	U	--	--	--	--	1808
131-076-23AAA	C. KELLER		85	70	4	1972	65	9-72	H	112SBRG	--	1150	--	--
131-076-23AAB	K. KELLER		23	--	24	--	11	8-57	K	--	S	--	7.8	--
131-076-23CCC	NDSWC 4495	560	350	338	1	1972	92	1-73	U	112SBRG	--	--	--	1815
131-076-23CDD	F. BOSCH		31	--	18	--	25	8-71	S	112SBRG	--	550	9.0	--
131-076-23DCC	S. FEIST		27	--	48	--	16	8-57	--	--	S	--	8.9	--
131-076-24BAB	J. FEIST		18	--	24	1962	13	--	K	--	--	2700	--	--
131-076-24DBC	P. VOLK		23	--	24	1960	15	--	H	--	--	1080	--	--
131-076-25DDC	NDSWC 1213	294	0	--	5	1957	--	--	U	--	--	--	--	1802
131-076-25DDD	M. KUSS		210	--	2	--	60	--	K	112SBRG	--	2450	--	--
131-076-26ACC	M. DOSCH		20	--	--	--	6	--	K	112SBRG	S	--	8.3	--
131-076-26BDC	J. KUSS		37	--	24	--	24	9-57	K	112SBRG	S	--	--	--
131-076-26CAA	J. WIKENHEISER		181	--	2	--	76	8-57	H	112SBRG	S	--	--	--
131-076-26CAB1	C. KELLER		174	--	24	1956	69	--	H	112SBRG	S	--	--	--
131-076-26CAB2	NDSWC 1202	260	0	--	5	1957	--	--	U	--	--	--	--	1818
131-076-26CBC	NDSWC 1203	115	0	--	5	1957	--	--	U	--	--	--	--	1816
131-076-26CBD	STRASBURG 2		180	160	12	--	80	--	P	112SBRG	--	980	9.0	--
131-076-26CC1	NDSWC 1207		168	--	5	1957	--	--	U	--	--	--	--	1828
131-076-26CC2	NDSWC 8160	430	404	398	2	1971	100	10-71	U	112SBRG	G	--	--	1820
131-076-26CDA	STRASBURG 1		182	167	6	1947	90	--	P	112SBRG	--	--	9.5	--
131-076-26DCB	C. H. ST. P. PAC. RR		140	--	--	--	--	--	K	112SBRG	--	--	--	--
131-076-26DDD	NDSWC 4496	660	364	358	1	1972	83	1-73	U	112SBRG	--	--	8.0	1807
131-076-27CCC	NDSWC 4507	180	0	--	--	1972	--	--	U	--	--	--	--	1840
131-076-28ABB	D. FEIST		12	--	30	--	4	8-71	U	--	--	--	--	--
131-076-28BB	C. SCHERR		6	--	--	--	5	8-57	S	--	S	--	--	--
131-076-28DAA	J. MATERI		275	259	6	1957	40	--	K	--	--	1680	--	--
131-076-29AA	U. SCHERR		6	--	48	1937	5	8-57	H	1120TSH	G	--	--	--
131-076-30CB	A. ROTH		184	--	4	1954	--	--	K	112SBRG	--	2180	--	--
131-076-30CCC	NDSWC 1206	210	0	--	5	1957	--	--	U	--	--	--	--	1812
131-076-30DDD	NDSWC 8161	460	223	217	1	1971	111	10-71	U	112SBRG	9S	--	8.5	1845
131-076-31ABB	J. BURGAD		16	--	96	1905	8	--	H	112SBRG	--	550	--	--
131-076-31BAC	J. BURGAD		260	--	4	1957	--	--	S	112SBRG	--	1800	--	--
131-076-32ABB	NDSWC 1219	167	167	--	5	1957	--	--	U	--	--	--	--	1850
131-076-33BBB	NDSWC 1205	147	0	--	5	1957	--	--	U	--	--	--	--	1905
131-076-34BBB	NDSWC 1204	105	0	--	5	1957	--	--	U	--	--	--	--	1848

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (µMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
131-076-35ABB	W.WIKENHEISER		44	--	24	--	33	8-57	U	--	S	--	--	--
131-076-35DDD	NDSWC 1209	126	0	--	5	1957	--	--	U	--	--	--	--	1812
131-076-36DAC	NDSWC 8916	320	0	--	--	1973	--	--	U	--	--	--	--	1820
131-077-02DBB1	H.MOSSET		37	--	2	--	14	--	S	--	--	1240	8.0	--
131-077-02DBB2	H.MOSSET		25	--	30	1971	11	7-62	K	--	--	--	--	--
131-077-04AAA	NDSWC 8599	320	0	--	--	1972	--	--	U	--	--	--	--	1755
131-077-058BB	NDSWC 8590	160	0	--	--	1972	--	--	U	--	--	--	--	1700
131-077-05CBA1	P.WAGNER		36	--	24	--	30	8-57	S	--	S	--	--	--
131-077-05CBA2	P.WAGNER		35	--	48	--	18	8-57	H	--	S	--	--	--
131-077-05CBB1	P.WAGNER		40	--	--	1964	20	--	H	--	--	1750	--	--
131-077-05CBB2	P.WAGNER		40	--	24	1938	26	--	S	--	--	--	--	--
131-077-06DBB	M.WALTHER		9	--	48	1940	9	8-57	S	--	S	--	--	--
131-077-08ACA1	A.SAUTER		60	--	--	--	43	8-57	K	--	--	--	--	--
131-077-08ACA2	A.SAUTER		26	--	24	--	23	8-57	K	--	--	--	--	--
131-077-08ACA3	A.SAUTER		37	--	--	--	34	8-57	S	--	--	--	--	--
131-077-08ACA4	A.SAUTER		19	--	24	--	15	8-57	S	--	--	--	--	--
131-077-09AAA	NDSWC 8598	120	0	--	--	1972	--	--	U	--	--	--	--	1810
131-077-09DAA1	M.JAHNER		70	--	8	1956	30	--	H	--	--	1140	--	--
131-077-09DAA2	M.JAHNER		30	--	30	1950	15	--	S	--	--	--	--	--
131-077-09DDA	R.JACOB		280	--	4	--	--	--	K	--	--	2100	--	--
131-077-10BCD	B.VOLK		14	--	60	--	6	8-57	K	--	S	--	7.2	--
131-077-12CCB	C.BURGAD		250	--	2	--	--	--	S	--	--	1950	--	--
131-077-14AAA	NDSWC 8603	380	243	237	1	1972	156	12-72	U	112SBRG	S	--	8.5	1875
131-077-14DAD	L.SCHWAB		220	--	--	1950	180	--	K	--	--	1380	--	--
131-077-16AAA	R.JACOB		2637	2569	2	1973	F	--	K	217DKOT	S	--	--	1920
131-077-18BC1	L.SCHERR		27	--	24	1953	12	8-57	S	--	S	--	7.8	--
131-077-18BC2	L.SCHERR		27	--	24	--	13	8-57	H	--	S	--	--	--
131-077-19AAA	NDSWC 8572	280	0	--	--	1972	--	--	U	--	--	--	--	1745
131-077-198BB	NDSWC 8571	280	0	--	--	1972	--	--	U	--	--	--	--	1745
131-077-20AAA	J.BDSCH		36	--	--	1971	11	--	K	--	--	1020	--	--
131-077-20BAA	J.SILVERNAGEL		13	--	18	--	5	--	U	--	--	--	7.8	--
131-077-20BAB	J.SILVERNAGEL		26	--	24	1955	9	8-57	S	--	G	--	7.8	--
131-077-21CAD	H.HEIDRICH		122	82	4	1972	30	9-72	S	211FXHL	--	1700	8.5	--
131-077-23DDC	A.HAGER		250	--	4	--	--	--	K	--	--	890	--	--
131-077-26ABA1	J.WAGNER		13	--	24	--	4	8-57	K	--	G	--	--	--
131-077-26ABA2	J.WAGNER		31	--	24	--	23	8-57	S	--	G	--	--	--
131-077-26ABA3	J.WAGNER		13	--	24	--	3	8-57	S	--	G	--	--	--
131-077-26DDD	NDSWC 8162	120	0	--	--	1971	--	--	N	--	--	--	--	1850
131-077-27CBC	NDSWC 8917	280	0	--	--	1973	--	--	U	--	--	--	--	1818
131-077-28BCB	A.ZACHER		175	--	2	--	--	--	K	--	--	1330	--	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
131-077-28CC	NDSWC 1208	84	0	--	5	1957	--	--	U	--	--	--	--	1795
131-077-29DA	M.ZACHER		22	--	30	1940	--	--	K	--	--	1400	7.0	--
131-077-32AD	F.NAGLE		60	--	2	1959	--	--	K	--	--	<7000	--	--
131-077-32ADB1	A.SILVERNAGEL		12	--	--	--	10	8-57	S	--	G	--	7.8	--
131-077-32ADB2	A.SILVERNAGEL		14	--	24	--	9	8-57	U	--	G	--	--	--
131-078-03CDB1	M.NAGEL		50	--	24	1962	--	--	H	--	--	680	--	--
131-078-03CDB2	M.NAGEL		50	--	12	1940	--	--	S	--	--	--	--	--
131-078-04DAA	NDSWC 8573	200	98	92	1	1972	3	12-72	U	112BDVL	--	--	8.0	1720
131-078-07AAB1	M.NAGEL		80	--	6	--	--	--	H	--	--	800	--	--
131-078-07AAB2	M.NAGLE		40	--	4	1962	--	--	S	--	--	--	--	--
131-078-10CDD	G.SCHAMLOCKER		60	--	18	--	40	--	K	--	--	1250	--	--
131-078-118BB1	M.SCHUMACHER		43	--	24	1950	13	--	H	--	--	1100	--	--
131-078-118BB2	M.SCHUMACHER		42	--	24	--	--	--	S	--	--	--	--	--
131-078-11DDB1	H.FEIST		50	--	18	1917	16	--	H	--	--	1600	--	--
131-078-11DDB2	H.FEIST		24	--	24	--	19	--	S	--	--	--	--	--
131-078-11DDB3	H.FEIST		24	--	72	1922	22	--	S	--	--	--	--	--
131-078-178DA	J.DIETZ		100	--	2	--	--	--	K	--	--	1180	--	--
131-078-18DBB1	J.GROSS		180	--	2	--	--	--	K	--	--	1600	--	--
131-078-18DBB2	J.GROSS		160	--	2	--	--	--	S	--	--	--	--	--
131-078-19DDD	P.RHOERICH		180	--	2	--	--	--	K	--	--	1630	--	--
131-078-20CAA	C.JOCHIM		310	--	2	1970	260	--	S	--	--	--	--	--
131-078-23ABB	NDSWC 8569	200	0	--	--	1972	--	--	U	--	--	--	--	1755
131-078-23BBB1	M.MOSSET		38	--	18	1959	28	--	H	--	--	900	--	--
131-078-23BBB2	M.MOSSET		100	--	--	1961	80	--	S	--	--	--	--	--
131-078-24BAB	NDSWC 8570	240	0	--	--	1972	--	--	U	--	--	--	--	1750
131-078-25ABB	E.HEIDRICH		30	--	30	1963	--	--	K	--	--	3350	--	--
131-078-30DBD	C.JOCHIM		210	--	2	1926	170	--	K	112BGFV	--	1500	--	--
131-078-31ACA1	A.BURGAD		165	--	2	--	--	--	K	--	--	1580	--	--
131-078-31ACA2	A.BURGAD		165	--	4	1961	--	--	S	--	--	--	--	--
131-079-02DBC	E.NAGEL		90	--	2	--	75	--	K	--	S	1900	--	--
131-079-10DCB	E.NAGEL		110	--	6	1947	75	--	K	--	--	1930	--	--
131-079-12BBC	H.NAGEL		105	--	4	1910	65	--	K	211FXHL	S	2100	--	--
131-079-15ADD	A.NAGEL ETAL		120	--	4	1927	80	--	K	211FXHL	--	1340	--	--
131-079-17ADB	A.GLASS		158	--	2	--	20	--	K	--	--	880	--	--
131-079-17CDD	A.GLASS		150	--	4	1961	60	--	S	--	--	--	--	--
131-079-17DDD	NDSWC 8170	158	0	--	--	1971	--	--	U	--	--	--	--	1645
131-079-20DDD	NDSWC 8169	200	0	--	--	1971	--	--	U	--	--	--	--	1655
131-079-24AAB	F.GLASS		25	--	24	--	--	--	K	--	--	2300	--	--
131-079-26CDC	H.UMBER		150	120	4	1972	F	7-73	S	112BGFV	--	1050	--	--
131-079-27ADC1	L.VANDER VORST		90	--	2	1966	--	--	K	--	--	1210	--	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
131-079-27ADC2	L.VANDER VORST		22	--	6	--	15	--	S	--	--	--	--	--
131-079-27ADD	L.VANDER VORST	142	136	122	4	1972	9	11-72	H	112BGFV	--	--	--	1645
131-079-28BCC	NDSWC 8564	200	0	--	--	1972	--	--	U	112BGFV	--	--	--	1645
131-079-28DDD	NDSWC 8171	180	45	42	1	1971	17	10-71	U	112BGFV	G	885	8.5	1645
131-079-32AAA	NDSWC 8167	200	143	137	1	1971	37	10-71	U	112BGFV	R	1410	9.0	1645
131-079-33CBB	NDSWC 8563	180	0	--	--	1972	--	--	U	112BGFV	--	--	--	1645
131-079-3588A	NDSWC 8173	200	0	--	--	1971	--	--	N	--	--	--	--	1655
131-079-35DDC	NDSWC 8566	220	54	48	1	1972	9	12-72	U	112BDVL	S	687	9.0	1670
131-079-35DDD1	J.JOCHIM		40	--	5	--	35	--	H	--	--	--	--	--
131-079-35DDD2	J.JOCHIM		40	--	5	--	35	--	S	--	--	900	--	--
132-074-01CCC	J.VETTER		24	24	24	1966	10	--	H	--	--	2900	--	--
132-074-02DAC	VETTER BROS.		2420	2276	2	--	F	--	K	217DKOT	S	2760	--	--
132-074-05BBD1	A.HORNER		50	50	--	--	45	--	K	--	--	1600	--	--
132-074-05BBD2	A.HORNER		130	90	--	1971	20	--	S	--	--	2120	--	--
132-074-05BBD3	A.HORNER		100	100	--	1969	20	--	S	--	--	--	--	--
132-074-07CDA	B.WULM		18	--	24	1972	14	--	S	--	--	4600	--	--
132-074-08AAA	A.WOLF		47	--	24	1972	12	10-72	S	1120TSH	S	--	--	--
132-074-09BBB	P.WOLF		26	--	24	1966	14	8-71	K	--	--	890	--	--
132-074-10BBB	C.BAUMSTARCK		49	--	24	1972	--	--	S	--	S	--	--	--
132-074-10BBD1	C.BAUMSTARCK		72	--	24	--	40	8-71	H	--	--	2600	--	--
132-074-10BBD2	C.BAUMSTARCK		120	100	2	1965	--	--	S	--	--	4700	--	--
132-074-11ADB1	R.VETTER		48	--	24	1948	25	8-71	H	--	--	1350	7.0	--
132-074-11ADB2	R.VETTER		30	--	24	1955	16	--	S	--	--	3500	6.0	--
132-074-14CDD1	J.ABERLE		85	--	18	1961	43	8-71	K	211FXHL	--	2350	8.0	--
132-074-14CDD2	J.ABERLE		85	--	24	1972	--	--	S	211FXHL	S	1790	--	--
132-074-150DD	NDSWC 8587	80	45	42	1	1972	8	1-73	U	1120TSH	R	934	8.0	--
132-074-18DCC	C.ROHRICH		56	--	24	1972	14	10-72	S	211FXHL	--	1250	--	--
132-074-18DCD1	C.ROHRICH		32	32	24	1956	29	--	H	--	--	4590	--	--
132-074-18DCD2	C.ROHRICH		40	38	24	--	32	--	S	--	--	3600	7.0	--
132-074-21DDA	G.KELSCH		16	--	36	--	14	8-71	S	--	--	820	--	--
132-074-25BB	FOREST OIL		2410	--	--	--	--	--	U	--	--	--	--	1951
132-074-28CCC1	M.GOLDADE		50	50	24	1966	20	--	K	--	--	690	8.0	--
132-074-28CCC2	M.GOLDADE		60	--	30	--	--	--	S	--	--	710	7.0	--
132-074-30AAB	L.HORNER		38	38	32	1966	12	--	K	--	--	3980	--	--
132-074-32DDA	J.MASTEL		45	--	24	1964	16	8-71	S	--	--	1600	7.0	--
132-074-32DDD1	J.MASTEL		56	56	24	1953	40	--	H	--	--	1490	9.0	--
132-074-32DDD2	J.MASTEL		52	--	18	1955	30	--	S	--	--	1790	8.0	--
132-075-010C	R.BOSCH		33	--	24	1973	20	--	S	--	--	--	--	--
132-075-02CAD1	A.WALD		120	--	24	--	100	--	K	--	--	1030	8.0	--
132-075-02CAD2	A.WALD		120	--	4	1961	100	--	K	--	--	1040	--	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (µMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
132-075-04AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	2038
132-075-04ABB	SHELL OIL CO.	160	--	--	--	--	--	--	U	--	--	--	--	2052
132-075-04BBB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1982
132-075-04DCD	F. JACOB		120	--	2	1955	--	--	K	--	--	900	--	--
132-075-05ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1980
132-075-05BBB	SHELL OIL CO.	160	--	--	--	--	--	--	U	--	--	--	--	1939
132-075-068AA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1900
132-075-08ADA	M. BOSCH		155	--	3	1946	125	--	K	--	--	880	8.0	--
132-075-09DDA	F. STOPPLER		37	--	4	1969	--	--	H	--	--	1050	--	--
132-075-10DCC	R. BOSCH		30	--	24	--	24	--	S	--	--	4800	7.0	--
132-075-128AD	R. BOSCH		30	--	24	--	2	--	S	--	--	700	7.0	--
132-075-12BCB	E. WOLFER		52	--	24	--	41	8-71	S	--	--	790	7.5	--
132-075-12BCC1	J. HOFF		16	--	24	--	6	8-57	K	--	--	--	7.8	--
132-075-12BCC2	E. WOLFOR		52	--	24	--	10	8-57	K	--	G	--	8.9	--
132-075-12BCC3	E. WOLFOR		56	--	6	--	42	8-57	S	--	G	--	--	--
132-075-17BCD	R. SENGER		100	--	24	1957	80	--	K	--	--	995	--	--
132-075-18CD	L. STOPPLER		32	--	24	1973	20	--	H	--	--	--	--	--
132-075-18CDC	L. STOPPLER		24	--	24	1952	12	--	H	--	--	4200	8.0	--
132-075-18CDD1	L. STOPPLER		30	--	24	--	16	8-57	S	--	--	--	7.8	--
132-075-18CDD2	L. STOPPLER		21	--	24	--	5	8-57	S	--	S	--	--	--
132-075-18CDD3	L. STOPPLER		14	--	24	--	7	8-57	S	--	S	--	--	--
132-075-20AAA	NDSWC 1231	31	0	--	5	1957	--	--	U	--	--	--	--	1810
132-075-20CAC	J. HORNER		37	--	24	--	29	--	H	--	S	--	7.8	--
132-075-20CBD	J. HORNER		40	--	24	--	33	--	H	--	--	950	--	--
132-075-21DCC1	M. HORNER		20	--	24	--	19	8-57	H	--	--	--	--	--
132-075-21DCC2	M. HORNER		35	--	2	1949	20	--	H	--	--	620	--	--
132-075-24DCC1	E. SCHIELE		18	--	24	1951	14	8-71	K	--	--	1550	--	--
132-075-24DCC2	E. SCHIELE		27	--	24	1956	13	8-71	S	--	--	1780	7.0	--
132-075-26B8C1	A. SINGER		21	--	18	1943	18	8-71	K	--	S	1400	7.0	--
132-075-26B8C2	A. SENGER		22	--	18	--	18	8-71	S	--	--	2400	7.0	--
132-075-27AAA	NDSWC 1232	21	0	--	5	1957	--	--	U	--	--	--	--	1834
132-075-27AAB1	J. VETTER		21	--	48	--	18	8-57	K	--	S	--	7.8	--
132-075-27AAB2	E. SENGER		28	--	24	1961	19	8-71	K	--	--	1150	--	--
132-075-27BA	J. & M. JANGULA		21	--	--	1973	13	--	S	--	--	--	--	--
132-075-27BAD	J. JANGULA		28	--	24	1962	14	8-71	H	--	--	2780	--	--
132-075-30B8C1	P. KELSCH		30	--	--	1952	20	--	H	--	--	1200	--	--
132-075-30B8C2	P. KELSCH		40	--	24	1959	30	--	S	--	--	1310	9.0	--
132-075-30BDC	P. BOSCH		15	--	24	1956	15	8-71	H	--	--	990	--	--
132-075-31AAC	J. HAGEL		43	--	24	--	19	8-71	S	--	--	1560	10.0	--
132-075-31CCC1	D. KELLER		50	--	18	--	10	8-71	H	--	--	3900	--	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
132-075-31CCC2	D.KELLER		133	--	--	1961	11	--	S	--	--	1950	8.0	--
132-075-31DC	F.KELLER		49	--	24	--	6	8-57	K	--	G	--	7.8	--
132-075-31DCB	F.HOFF		130	100	--	1969	--	--	S	--	--	1000	8.0	--
132-075-32DDB	F.HOFF		56	--	2	--	--	--	K	--	--	900	7.5	--
132-075-34ACA	J.BOSCH		16	--	18	--	9	8-71	H	--	--	830	--	--
132-075-34BBA	NDSWC 8914	60	0	--	--	1973	--	--	U	--	--	--	--	1870
132-075-34DAC	F. BERNHARDT		28	--	30	1932	11	8-71	K	--	--	620	--	--
132-075-34DDC	F. BERNHARDT		34	--	18	1967	16	8-71	S	--	--	2800	7.0	--
132-075-35AAD	J.GOLDADE		20	--	24	--	10	--	K	--	--	1590	--	--
132-075-35BDA1	A.BOSCH		20	--	4	1960	18	--	H	--	--	950	--	--
132-075-35BDA2	A.BOSCH		21	--	30	--	17	8-71	S	--	--	1300	10.0	--
132-076-01AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1866
132-076-01ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1838
132-076-018BB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1872
132-076-02ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1978
132-076-03AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1890
132-076-03ABB	SHELL OIL CO.	40	--	--	--	--	--	--	U	--	--	--	--	1912
132-076-04AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1950
132-076-04ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	2044
132-076-048BB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1926
132-076-05ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1851
132-076-05CCB	J.KLEIN		65	65	24	1951	45	--	K	--	--	1710	--	--
132-076-06AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1783
132-076-06ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1755
132-076-068BB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1791
132-076-06CAA	NDSWC 1245	21	0	--	5	1957	--	--	U	--	--	--	--	1733
132-076-07BBC	J.SCHMALTZ		2507	2374	2	1972	F	9-72	K	217DKOT	S	3460	30.0	1820
132-076-07BCC	NDSWC 1233	42	0	--	5	1957	--	--	U	--	--	--	8.3	1693
132-076-07CAA	G.SCHNEIDER		36	36	8	1972	14	10-72	S	1120TSH	R	--	--	--
132-076-07DAB	CITY OF LINTON		30	--	48	1934	20	5-59	U	--	G	--	7.8	--
132-076-07DAD	LINTON 1		72	62	8	1960	--	--	P	--	--	1460	9.0	--
132-076-08CCB1	LINTON 2		72	52	8	--	34	--	P	--	--	1200	9.0	--
132-076-08CCB2	LINTON 3		72	52	12	1966	34	--	P	--	--	--	--	--
132-076-10BDC	R.MAIER		45	35	4	1973	30	5-73	H	--	--	--	--	--
132-076-11BCC	M.SENGER		100	36	6	1966	50	--	K	--	--	1190	--	--
132-076-14BAC	E.BOSCH		12	--	48	--	9	--	H	--	--	1950	--	--
132-076-15DAA	NDSWC 1229	31	0	--	5	1957	--	--	U	--	--	--	--	1742
132-076-168CC	B.KELLER		25	--	4	1969	12	--	H	--	--	1400	--	--
132-076-168DD	T.SCHATZ		60	--	4	1963	32	--	H	--	--	1850	--	--
132-076-16DD	NDSWC 1228	31	0	--	5	1957	--	--	U	--	--	--	--	1723



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132-076-17ACC1	L.BOSCH		20	20	6	1955	14	--	H	--	--	730	--	--
132-076-17ACC2	L.BOSCH		19	--	6	1961	16	--	S	--	--	880	9.0	--
132-076-178BB	NDSWC 1225	63	0	--	5	1957	--	--	U	--	--	--	--	1700
132-076-178BD	NDSWC 8122	80	0	--	--	1971	--	--	U	--	--	--	--	1705
132-076-17CCB	NDSWC 8582	140	0	--	--	1972	--	--	U	--	--	--	--	1705
132-076-17DDD	NDSWC 1227	31	0	--	5	1957	--	--	U	--	--	--	--	1720
132-076-18AAA	B.BAUMAN		35	29	24	1873	16	8-73	H	--	G	--	--	--
132-076-19DBC1	F.LIPP		60	--	24	1952	20	--	K	--	--	2700	--	--
132-076-19DBC2	F.LIPP		110	--	6	1966	35	--	S	--	--	--	--	--
132-076-218BB	SEC. LINE PROP.		100	--	4	--	13	9-57	U	--	G	--	--	--
132-076-23AAD	NDSWC 1230	31	0	--	5	1957	--	--	U	--	--	--	--	1765
132-076-26AAB1	M.NOEL		21	--	24	1961	14	8-71	H	--	--	830	--	--
132-076-26AAB2	M.NOEL		16	--	6	--	13	--	S	--	--	710	8.0	--
132-076-28BCC	P.FERDERER		23	--	48	--	16	8-57	H	--	S	--	7.8	--
132-076-29CBB	NDSWC 1224	57	0	--	5	1957	--	--	U	--	--	--	--	1729
132-076-30ADA1	P.HOLZER		30	--	24	1956	4	--	H	--	--	980	--	--
132-076-30ADA2	P.HOLZER		30	--	6	1967	4	--	S	--	--	--	--	--
132-076-30ADD	NDSWC 8679	200	0	--	--	1973	--	--	U	--	--	--	--	1730
132-076-30BBB	NDSWC 8579	60	0	--	--	1972	--	--	U	--	--	--	--	1750
132-076-31AAA	NDSWC 8675	340	0	--	--	1973	--	--	U	--	--	--	--	1780
132-076-31CDA	E.SCHELL		13	--	24	1961	10	--	K	--	--	980	--	--
132-076-31DDD	NDSWC 8678	420	284	278	1	1973	129	6-73	U	112SBRG	S	--	--	1855
132-076-34CDA	A.TSCHOSIK		70	--	24	1950	50	--	K	--	--	1600	--	--
132-076-35ADD	M.WOLF		57	--	24	1972	32	10-72	K	211FXHL	--	2230	--	--
132-077-01BAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1791
132-077-02AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1912
132-077-02ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1815
132-077-03ABB	SHELL OIL CO.	145	--	--	--	--	--	--	U	--	--	--	--	1697
132-077-04AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1696
132-077-04ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1682
132-077-05AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1689
132-077-05ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1787
132-077-05BBB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1773
132-077-06ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1745
132-077-07AAD	NDSWC 1236	42	0	--	5	1957	--	--	U	--	--	--	--	1636
132-077-09ADD1	T.BRANDNER		26	--	8	--	20	--	H	--	--	1000	--	--
132-077-09ADD2	T.BRANDNER		18	--	8	--	15	--	S	--	--	--	--	--
132-077-09ADD3	NDSWC 1235	84	0	--	5	1957	--	--	U	--	--	--	--	1655
132-077-10BBB	P.SILBERNAGEL		15	--	48	1902	8	--	S	--	--	--	--	--
132-077-12AB	E.MALSOM		29	--	24	1973	15	8-73	S	--	--	--	--	--

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132-077-12ABD	F. MALSAM		0	22	24	--	15	--	K	--	--	1430	--	--
132-077-1288B	NDSWC 1234	42	0	--	5	1957	--	--	U	--	--	--	--	1712
132-077-128CB	L. RICHTER		30	--	4	1968	15	--	K	--	--	850	--	--
132-077-15CBC	NDSWC 8680	160	0	--	--	1973	--	--	U	--	--	--	--	1725
132-077-15CCD	M. VOLK		40	--	18	1955	12	9-71	S	--	--	950	--	--
132-077-17DAD	J. DEISZ		15	--	48	--	10	--	K	--	--	--	--	--
132-077-18ABA1	C. KREMER		59	--	24	1954	54	9-57	K	--	S	--	--	--
132-077-18ABA2	C. KREMER		63	--	24	1963	--	--	K	--	--	1800	--	--
132-077-1888B	NDSWC 8602	180	0	--	--	1972	--	--	U	--	--	--	--	1703
132-077-198AC	F. BOSCH		10	--	56	1936	6	--	K	--	--	500	--	--
132-077-1988B	NDSWC 8581	140	73	67	1	1972	38	12-72	U	112SBRG	S	1240	8.0	1720
132-077-2088B1	R. KREMER		10	--	48	1971	9	--	H	--	--	890	--	--
132-077-2088B2	R. KREMER		97	--	2	1968	--	--	S	--	--	1610	--	--
132-077-2088B3	NDSWC 8580	282	0	--	--	1972	--	--	U	--	--	--	--	1720
132-077-20CC1	NDSWC 8601	300	0	--	--	1972	--	--	U	--	--	--	--	1713
132-077-20CC2	NDSWC 8601A	100	83	77	1	1972	34	12-72	U	112SBRG	S	1100	8.0	1713
132-077-21AAA	J. BOSCH		75	--	2	1962	45	--	S	112SBRG	--	--	--	--
132-077-21DAA1	J. BOSCH		120	--	4	1964	40	--	H	112SBRG	--	1080	--	--
132-077-21DAA2	J. BOSCH		120	--	2	1944	40	--	S	112SBRG	--	--	--	--
132-077-228BA1	M. VOLK		160	160	6	1969	12	--	H	112SBRG	--	1330	--	--
132-077-228BA2	M. VOLK		70	--	24	--	35	--	S	112SBRG	--	1080	9.0	--
132-077-24CC1	NDSWC 8578	280	0	--	--	1972	--	--	U	112SBRG	--	--	--	1685
132-077-24CC2	NDSWC 8578A	60	30	27	1	1972	3	12-72	U	112SBRG	--	597	7.5	1685
132-077-25AA	J. KNAPP		49	--	24	--	43	8-57	S	--	S	--	--	--
132-077-25ADB1	P. LIPP		70	--	4	1956	--	--	H	--	--	880	--	--
132-077-25ADB2	P. LIPP		75	--	4	1966	70	--	S	--	--	--	--	--
132-077-26ACC	NDSWC 8913	360	0	--	--	1973	--	--	U	--	--	--	--	1745
132-077-260BA	M. HORNER		32	--	24	--	10	--	H	--	--	800	--	--
132-077-260B1	M. HORNER		22	22	18	1946	8	--	K	112SBRG	--	1200	10.0	--
132-077-260B2	M. HORNER		230	220	4	1972	50	10-72	S	112SBRG	--	1630	10.0	--
132-077-270D1	NDSWC 8577	360	329	317	1	1972	60	12-72	U	112SBRG	R	1400	8.0	1750
132-077-270D2	NDSWC 8577A	100	83	77	1	1972	41	12-72	U	112SBRG	3S	1000	--	1750
132-077-28AAA	NDSWC 8912	400	336	330	1	1973	54	10-73	U	112SBRG	R	1460	9.0	1742
132-077-28ADA	S. NAGEL		29	--	24	--	26	8-57	K	--	S	--	--	--
132-077-288B0	NDSWC 8911	140	0	--	--	1973	--	--	U	--	--	--	--	1730
132-077-28DCC	NDSWC 8589	60	0	--	--	1972	--	--	U	--	--	--	--	1790
132-077-28DDD	NDSWC 8576	120	83	77	1	1972	52	12-72	U	112SBRG	--	1820	8.0	1760
132-077-29AAD	NDSWC 8910	140	90	87	1	1973	43	10-73	U	112SBRG	S	1300	9.0	1730
132-077-29ABB1	NDSWC 8681	200	164	158	1	1973	44	6-73	U	112SBRG	S	892	9.5	1720
132-077-29ABB2	NDSWC 8681A	120	104	98	--	1973	38	6-73	U	112SBRG	S	--	9.5	1719

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LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
132-077-29ABB3	R.KELSCH	174	--	--	--	1973	--	--	U	--	--	--	--	1724
132-077-29ADB	R.KELSCH	147	--	--	--	1973	--	--	U	--	--	--	--	--
132-077-29BAA	R.KELSCH	192	--	--	--	1973	--	--	U	--	--	--	--	1723
132-077-29BBA	NDSWC 8927	140	0	--	--	1973	--	--	U	--	--	--	--	1725
132-077-29BBB	R.KELSCH		80	--	4	1970	50	--	K	112SBRG	--	1180	--	--
132-077-29BCA	NDSWC 8908	180	0	--	--	1973	--	--	U	--	--	--	--	1712
132-077-29BDA	NDSWC 8909	140	0	--	--	1973	--	--	U	--	--	--	--	1718
132-077-29BDC	R. KELSH	80	--	--	--	1973	--	--	U	--	--	--	--	--
132-077-29DDA	NDSWC 8919	100	0	--	--	1973	--	--	U	--	--	--	--	1723
132-077-29DAB	NDSWC 8925	100	70	67	1	1973	21	10-73	U	112SBRG	--	996	8.5	1730
132-077-29DAC	R. KELSCH	120	--	--	--	1973	--	--	U	--	--	--	--	--
132-077-29DAD	NDSWC 8924	120	93	87	1	1973	26	10-73	U	112SBRG	--	1200	8.8	1735
132-077-29DBD	NDSWC 8926	100	70	67	1	1973	25	10-17	U	112SBRG	S	1140	8.5	1740
132-077-29DCC	NDSWC 8575	160	83	77	1	1972	21	12-72	U	112SBRG	4S	1190	--	1730
132-077-29DDD	NDSWC 8574	160	68	62	1	1972	28	12-72	U	112SBRG	4S	1080	8.0	1740
132-077-30ADA	NDSWC 8907	160	0	--	--	1973	--	--	U	--	--	--	--	1713
132-077-31ODD	M.SCHERR		11	--	24	--	6	8-57	K	--	G	--	--	--
132-077-33ADD1	NDSWC 8600	200	103	97	1	1972	32	12-72	U	112SBRG	S	723	8.0	1750
132-077-33ADD2	NDSWC 8600A	60	35	32	1	1972	3	12-72	U	112SBRG	S	696	8.0	1750
132-077-33CCC	NDSWC 8591	260	133	127	1	1972	36	12-72	U	112SBRG	S	806	8.0	1715
132-078-01AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1694
132-078-01ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1749
132-078-02AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1775
132-078-02BAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1711
132-078-02BBB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1688
132-078-02CA	C.REIDLINGER	230	--	--	--	--	--	--	U	--	--	--	--	--
132-078-03BAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1692
132-078-03BBB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1734
132-078-03DDC	F.OHLHAUSER		58	48	4	1972	34	10-72	S	--	--	--	--	--
132-078-04DAC	A.OHLHAUSER		44	34	4	1973	31	10-73	S	--	R	--	--	--
132-078-07AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1825
132-078-07BAA	SHELL OIL CO.	160	--	--	--	--	--	--	U	--	--	--	--	1837
132-078-07BBB	SHELL OIL CO.	160	--	--	--	--	--	--	U	--	--	--	--	1791
132-078-08ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1816
132-078-08DA	PEAK DRLG CO.		5877	--	--	--	--	--	U	--	--	--	--	1810
132-078-09AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1746
132-078-09ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1807
132-078-09BBB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1831
132-078-11DDC	NDSWC 8561	100	0	--	--	1972	--	--	U	--	--	--	--	1630
132-078-12DAC1	L.SEHN		23	17	36	1932	12	--	H	--	--	1210	--	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE @ 25°C (UMHOS/CM)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
132-078-12DAC2	L. SEHN		22	--	30	1948	16	8-71	S	--	--	1380	9.0	--
132-078-13BAA	NDSWC 8921	240	0	--	--	1973	--	--	U	--	--	--	--	1685
132-078-13BBB	R. KLAUDT	80	--	--	--	1973	--	--	U	--	--	--	--	--
132-078-13BBC	R. KLAUDT	60	--	--	--	1973	--	--	U	--	--	--	--	--
132-078-13CAA	R. KLAUDT	80	--	--	--	1973	--	--	U	--	--	--	--	--
132-078-14AAA1	R. KLAUDT		40	25	4	1961	13	--	K	112SBRG	--	1600	--	--
132-078-14AAA2	R. KLAUDT		53	48	4	1965	3	8-71	U	112SBRG	--	--	--	--
132-078-14AAA3	R. KLAUDT	100	--	--	--	1973	--	--	U	--	--	--	--	--
132-078-14ABB1	P. MASSET		16	--	24	--	13	--	S	--	--	1020	--	--
132-078-14ABB2	P. MASSET		35	--	24	1959	20	--	H	--	--	--	--	--
132-078-18ABA	H. TUTTLE		110	--	4	1965	35	--	K	--	--	1250	--	--
132-078-22ABD	J. JANGULA		90	80	6	1970	25	--	K	--	--	1200	--	--
132-078-23DDA	L. SEHN		--	--	4	--	18	--	S	--	--	520	10.0	--
132-078-25AAA	NDSWC 8592	180	0	--	--	1972	--	--	U	--	--	--	--	1685
132-078-25A0B1	M. WOLF		100	--	4	1956	20	--	K	--	--	1560	--	--
132-078-25ADB2	M. WOLF		36	--	18	1965	20	--	S	--	--	--	--	--
132-078-28CCC1	A. VETTER		80	--	4	1958	--	--	K	--	--	1250	--	--
132-078-28CCC2	A. VETTER		80	--	4	1920	--	--	S	--	--	--	--	--
132-078-31BDA1	O. VETTER		80	--	4	1957	--	--	K	211FXHL	S	1500	--	--
132-078-31BDA2	O. VETTER		80	--	4	1942	--	--	S	211FXHL	S	--	--	--
132-078-34AAB	S. VETTER		70	--	3	1930	F	8-57	S	--	--	710	7.8	--
132-078-34ABA	S. VETTER		20	--	4	1967	19	--	H	--	--	900	9.5	--
132-078-36CBC	A. FEIST		16	--	18	1952	15	--	H	--	--	930	--	--
132-079-01BDC	A. OHLHAUSER		200	--	2	1958	150	--	K	--	--	1770	9.5	--
132-079-03CBB	A. OHLHAUSER		28	--	6	1966	17	--	S	--	--	--	--	--
132-079-03CCD	A. OHLHAUSER		137	--	6	1961	130	--	K	211FXHL	S	820	--	--
132-079-03CDD	A. OHLHAUSER		105	100	4	1972	80	11-72	S	211FXHL	--	1030	--	--
132-079-09AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1611
132-079-09BAA	SHELL OIL CO.	130	--	--	--	--	--	--	U	--	--	--	--	1594
132-079-10BAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1725
132-079-11AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1826
132-079-11BAA	SHELL OIL CO.	145	--	--	--	--	--	--	U	--	--	--	--	1808
132-079-11BBB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1794
132-079-12BAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1781
132-079-12CCA1	A. RENSCHLER		110	--	2	1952	25	--	H	--	--	520	--	--
132-079-12CCA2	A. RENSCHLER		110	--	2	1902	25	--	S	--	--	770	--	--
132-079-14ABA	A. RENSCHLER		110	--	2	1952	25	--	S	--	--	--	--	--
132-079-14ADB	T. WALTHER		140	--	2	1962	--	--	K	--	--	770	9.5	--
133-074-02DCC	C. HUBER		180	--	2	1957	158	--	K	211FXHL	--	<500	--	--
133-074-03CCC	NDSWC	60	0	--	--	1971	--	--	U	--	--	--	--	2090

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
133-074-04CBC	M.KUNTZ		180	--	2	--	--	--	S	211FXHL	--	1100	9.0	--
133-074-04ddb	M.JACOB JR.		210	185	4	1948	165	--	S	211FXHL	--	694	--	--
133-074-05DAD	M.KUNTZ		200	--	4	1960	--	--	S	211FXHL	--	1110	7.0	--
133-074-09ACB	C.ROHRICH		140	--	2	1957	134	--	K	211FXHL	--	580	--	--
133-074-10BBB	NDSWC 8124	360	0	--	--	1971	--	--	U	--	--	--	--	2105
133-074-10CDA	A.SCHLOSSER		180	180	4	--	165	--	S	211FXHL	--	<500	8.0	--
133-074-14BAB	WALD BROS.		140	--	2	1936	--	--	S	211FXHL	--	<500	8.0	--
133-074-14CAA	V.HUBER		140	--	2	1956	120	--	K	211FXHL	--	298	10.0	--
133-074-15DAB	E.KUNTZ		72	72	2	1946	45	--	K	--	--	<500	9.0	--
133-074-20DDD	P.KRAMER		130	120	2	--	120	--	K	--	--	840	--	--
133-074-22CAC	J.WOLF		45	--	--	1957	40	--	H	--	--	<500	--	--
133-074-26DDC	J.KUNTZ		50	--	2	1961	30	--	K	--	--	780	9.5	--
133-074-27ABB	E.KUNTZ		20	20	2	--	8	--	H	--	--	<500	--	--
133-074-29AAD	P.KRAMER		120	110	2	1959	110	--	S	--	--	680	10.0	--
133-074-29BCD	P.KRAMER		170	115	4	1970	110	--	S	--	--	760	8.0	--
133-074-34ABB	L.KUNTZ		30	--	36	--	8	8-71	K	--	--	1050	7.0	--
133-074-35DCC	A.VETTER		120	--	2	--	--	--	S	--	--	490	8.5	--
133-075-07CDD	NDSWC 8585	200	114	108	1	1972	114	3-71	U	211FXHL	S	--	--	2025
133-075-08BBB	W.OHLHAUSER		125	--	2	1954	--	--	K	211FXHL	--	700	--	--
133-075-10DCD	S.LOEBB		80	--	2	1962	60	--	S	211FXHL	--	667	9.0	--
133-075-13CBB	A.WALD	205	132	132	4	1973	120	8-73	S	--	S	--	--	--
133-075-16BDC	B.JOB		175	146	2	1967	--	--	S	--	--	900	9.0	--
133-075-17CBC	A.HOFF		300	300	2	1963	--	--	S	--	--	950	8.0	--
133-075-17DDD	B.JOB		160	146	2	--	--	--	S	--	--	930	--	--
133-075-18DAA	A.HOFF		300	300	2	1965	--	--	K	--	--	930	--	--
133-075-20BCA	B.JOB	140	126	126	2	1973	110	--	S	--	6S	--	--	--
133-075-20BDB	B.JOB		160	146	2	1943	130	--	K	--	--	740	--	--
133-075-22BDA1	J.JAMES		80	--	3	1956	60	--	H	--	--	580	--	--
133-075-22BDA2	J.JAMES		100	--	4	--	60	--	S	--	--	590	7.0	--
133-075-22DDD	C.DOOLITTLE	54	42	42	4	1973	33	9-73	H	--	S	--	--	--
133-075-28ACD1	J.SCHWAB		104	--	4	1949	20	--	H	--	--	862	--	--
133-075-28ACD2	J.SCHWAB		14	--	36	--	11	--	S	--	--	1110	8.0	--
133-075-28CCC1	W.HANSON		100	40	4	1968	15	--	H	--	--	650	--	--
133-075-28CCC2	W.HANSON		50	50	--	--	20	--	S	--	--	700	8.0	--
133-075-34CCC	A.IBACH		140	140	4	1961	--	--	K	--	--	800	--	--
133-075-35CB	NO.ORDNANCE INC.		5359	--	--	1943	--	--	U	--	--	--	--	2015
133-076-05AAB	L.BRAUN	160	126	126	2	1973	100	9-73	S	--	6S	--	--	--
133-076-06BBB	C.DEIS		160	140	2	1958	120	--	H	--	--	1380	--	--
133-076-07BBA	F.DEIS		108	108	2	--	103	--	K	--	--	3400	9.0	--
133-076-07CAA	E.WILL		240	--	2	--	28	--	K	--	--	1750	9.0	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FTA)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE ( $\mu$ MHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
133-076-0988C1	J.WERNER		230	220	2	1960	180	--	H	211FXHL	--	2030	--	--
133-076-0988C2	J.WEBER		210	--	--	--	180	--	S	211FXHL	--	2350	8.0	--
133-076-098CC1	WEBER & WERNER	225	200	200	4	1973	--	--	S	211FXHL	6S	--	--	--
133-076-13CCD1	L.BECK		130	120	2	--	116	--	K	211FXHL	--	880	--	--
133-076-13CCD2	L.BECK		110	90	2	1958	80	--	S	211FXHL	--	900	8.0	--
133-076-1588B	NDSWC 1239	31	0	--	5	1957	--	--	U	--	--	--	--	--
133-076-1688B	J.SCHATZ		300	220	2	1953	--	--	K	211FXHL	--	2700	--	--
133-076-1688D	J.SCHATZ		186	186	2	1962	--	--	K	211FXHL	--	1290	8.0	--
133-076-17AAA	J.SCHATZ		245	235	2	1917	140	--	H	211FXHL	--	2000	9.0	--
133-076-18CBC	O.WILL		165	160	2	--	--	--	S	211FXHL	--	2400	9.0	--
133-076-21DAA	K.MC CULLEY		80	--	2	1947	5	--	H	211FXHL	--	2250	--	--
133-076-22BAB	NDSWC 8583	100	0	--	--	1972	--	--	U	--	--	--	--	--
133-076-2288C	V.MC CULLEY		114	110	2	--	20	--	H	211FXHL	--	1880	--	--
133-076-25DDC	T.ACKERMAN		180	180	2	1963	140	--	H	--	--	1770	--	--
133-076-28AAA	NDSWC 1238	21	0	--	5	1957	--	--	U	--	--	--	--	1813
133-076-31CCC	NDSWC 1240	31	0	--	5	1957	--	--	U	--	--	--	--	--
133-076-33CBD	NDSWC 1244	52	0	--	5	1957	--	--	U	--	--	--	--	1748
133-076-33CCD	NDSWC 1237	84	0	--	5	1957	--	--	U	--	--	--	--	1741
133-076-35DAA	ROESER&PENDLTON		5556	--	--	--	--	--	U	--	--	--	--	2002
133-076-36ABA	T.ACKERMAN		200	--	2	--	160	--	K	211FXHL	--	1100	--	--
133-076-36ACD	T.ACKERMAN		80	80	2	1967	30	--	S	211FXHL	--	580	8.0	--
133-076-36CBD	NDSWC 1244		52	--	5	1957	--	--	U	--	--	--	--	1748
133-077-02DBC	P.NELSON JR.		70	35	4	1950	20	--	H	--	--	1580	--	--
133-077-05ABD	E SERR		84	84	2	1957	70	--	H	--	--	4500	--	--
133-077-07CCC	A.WEBER		110	100	2	--	--	--	S	211FXHL	--	1380	--	--
133-077-10ABA1	N.BEITELSPACHER		110	110	4	1961	65	--	H	211FXHL	--	1600	--	--
133-077-10ABA2	N.BEITELSPACHER		60	60	2	1951	35	--	S	--	--	1620	--	--
133-077-10COD	J.HUBER		21	15	24	1951	15	--	H	--	--	1800	--	--
133-077-13DAB	O.WILL		160	--	4	1967	--	--	H	211FXHL	--	2000	--	--
133-077-14AAA	J.HUBER		130	130	4	--	120	--	S	211FXHL	--	1400	9.0	--
133-077-1488B	J.HUBER		130	--	2	1967	--	--	H	--	--	1600	--	--
133-077-158AA	NDSWC 8560	80	64	58	1	1972	16	12-72	U	112BDVL	R	1550	7.0	1760
133-077-16DDD	NDSWC 1243	42	0	--	--	1957	--	--	U	--	--	--	--	1732
133-077-21ACA1	M.FIEST		34	34	24	--	17	--	H	--	--	1170	10.0	--
133-077-21ACA2	M.FEIST		31	--	36	--	16	8-71	S	--	--	2250	8.0	--
133-077-21CCC	NDSWC 8923	140	0	--	--	1973	--	--	U	--	--	--	--	1690
133-077-23DAB	R.WEBER		110	110	2	--	100	--	S	211FXHL	--	850	7.0	--
133-077-24ABA	A.BERRETH		130	130	2	--	100	--	K	211FXHL	--	2300	9.0	--
133-077-25CCC	M.HOLZER		52	--	24	1956	37	9-57	K	--	S	--	--	8.3
133-077-26ABA	R.WEBER		110	--	2	1966	100	--	S	211FXHL	--	1780	8.0	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE @ 25°C (µMHOS/CM)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
133-077-26CCC	NDSWC 1241	10	0	--	5	1957	--	--	U	--	--	--	--	--
133-077-26DCB	R.WEBER		70	--	4	1968	55	--	H	211FXHL	--	1800	--	--
133-077-28BAA	NDSWC 1242	31	0	--	5	1957	--	--	U	--	--	--	--	1702
133-077-31CCC	NDSWC 8119	280	0	--	--	1971	--	--	U	--	--	--	--	1695
133-077-31CDD	NDSWC 8120	200	0	--	--	1971	--	--	U	--	--	--	--	1710
133-077-31DCD	NDSWC 8121	160	0	--	--	1971	--	--	U	--	S	--	--	1720
133-077-34DDA1	P.S ILBERNAGEL		45	--	24	1956	25	--	K	--	--	1340	--	--
133-077-34DDA2	P.S ILBERNAGEL		31	--	24	1947	25	--	S	--	--	--	--	--
133-077-34DDA3	P.S ILBERNAGEL		42	--	24	1971	26	--	S	--	--	--	--	--
133-077-35BAC	E.MALSON		20	--	24	--	9	9-57	K	--	V	--	7.2	--
133-077-35DDD	H.RENDLING		26	--	48	--	17	--	K	--	--	1040	--	--
133-078-04ACD1	C.LAWLER		47	42	4	1973	30	10-73	H	--	--	--	--	--
133-078-04ACD2	C.LAWLER		67	62	4	1973	31	10-73	S	--	7S	--	--	--
133-078-04CBC	NDSWC 8117	225	218	212	1	1971	14	10-71	U	112SBRG	G	1300	8.2	1675
133-078-05ADD	SHELL OIL CO.	160	--	--	--	--	--	--	U	--	--	--	--	1663
133-078-05BAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1665
133-078-05BBB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1643
133-078-05BBD	JT RANCH	175	--	--	--	1965	--	--	U	--	--	--	--	--
133-078-05DAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1670
133-078-06AAA	NDSWC 8115	220	93	87	1	1971	6	10-71	U	112SBRG	R	1710	--	1645
133-078-06AAD	JT RANCH	210	--	--	--	1965	--	--	U	--	--	--	8.0	--
133-078-06ADA	JT RANCH	223	--	--	--	1965	--	--	U	--	--	--	--	--
133-078-06BBA	JT RANCH	225	216	--	--	1964	30	2-64	U	112SBRG	--	--	--	--
133-078-06DAA	NDSWC 8116	220	0	--	--	1971	--	--	U	112SBRG	G	--	--	1660
133-078-08AAA	SHELL OIL CO.	127	--	--	--	--	--	--	U	--	--	--	--	1673
133-078-09BCC	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1718
133-078-09CCC1	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1805
133-078-09CCC2	O.OHLHAUSER		170	--	2	--	130	--	K	--	--	1200	--	--
133-078-10ADA	V.MAUSEMUND		--	--	--	--	--	--	S	--	--	640	--	--
133-078-10BAA	V.MAUSEMUND		25	25	72	1902	--	--	K	--	--	3400	--	--
133-078-14BCC	NDSWC 8922	280	183	177	1	1973	27	10-73	U	112SBRG	--	1420	9.0	1693
133-078-16CBB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1783
133-078-16CCC	SHELL OIL CO.	100	--	--	--	--	--	--	U	--	--	--	--	1830
133-078-17CAD	G.MC CRORY		160	140	2	1962	--	--	H	--	--	1380	10.0	--
133-078-18ADC	F.CHEROWN		120	--	2	1966	75	--	H	--	--	850	--	--
133-078-21BCC	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1821
133-078-22CAD	F.K IEMELE		120	120	2	--	--	--	S	211FXHL	--	580	8.0	--
133-078-22DDA	C.JOB		56	56	2	1957	40	--	H	--	--	991	9.0	--
133-078-23CCC	C.JOB		60	60	2	1968	30	--	S	--	--	710	8.0	--
133-078-27ACA	F.K IEMELE		120	100	2	1956	--	--	S	211FXHL	--	<500	9.0	--

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133-078-288BB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1824
133-078-29DAA	SHELL OIL CO.	160	--	--	--	--	--	--	U	--	--	--	--	1816
133-078-32AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1852
133-078-32DAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1872
133-078-32DDD1	E.BURKHARDT		220	--	2	1970	--	--	H	--	--	--	--	--
133-078-32DDD2	E.BURKHARDT		240	--	2	1910	115	--	K	--	--	1800	--	--
133-078-33ADB	M.OHLHAUSER		130	130	2	--	--	--	K	--	--	950	--	--
133-078-33CDA	D.OHLHAUSER		180	--	2	1925	140	--	K	--	--	1440	--	--
133-078-35DCC	G.JOB		70	--	2	1925	60	--	K	--	--	700	9.0	--
133-078-36DCC	NDSWC 8118	200	133	127	1	1971	32	10-71	U	112SBRG	--	864	--	1703
134-074-02ADD	D.NILSSEN EST.		85	85	2	1914	70	--	S	211FXHL	--	<500	7.5	--
134-074-02CBC	A.JOHNSON		90	60	2	1949	30	--	H	211FXHL	--	790	--	--
134-074-06DDA	A.OLSON SR.		70	--	2	1910	40	--	K	211FXHL	--	611	8.0	--
134-074-08DBA	A.HEDBLAD		80	70	2	1958	30	--	S	211FXHL	--	<500	--	--
134-074-10CCC	NDSWC 8668	80	50	47	1	1973	6	6-73	U	112BGFV	S	494	8.0	1955
134-074-11CDD	C.LAINE		130	120	4	1969	110	--	K	--	--	423	9.0	--
134-074-13CCB	A.WEIGEL		150	--	2	1947	140	--	H	--	--	<500	--	--
134-074-15CBB	NDSWC 8550	160	133	127	1	1972	19	12-72	U	211FXHL	S	590	7.5	1975
134-074-18DCD	G.LIVERSAGE		111	105	2	1972	96	6-72	S	211FXHL	--	--	--	--
134-074-24BAA	B.WEIGEL		160	--	4	1968	145	--	K	211FXHL	--	<500	8.5	--
134-074-31ACC	S.BERNHARDT		193	--	4	1960	--	--	K	211FXHL	--	1190	--	--
134-074-31ADC	S.BERNHARDT		160	160	2	1958	--	--	S	211FXHL	--	1300	8.0	--
134-074-32CCD	H.KUNDERT		280	280	2	1956	180	--	K	211FXHL	--	1410	10.0	--
134-075-0688B	J.WACKER		180	--	2	1928	--	--	S	211FXHL	--	950	8.0	--
134-075-08DCB	E.JENSEN		80	--	4	--	65	--	S	--	--	1070	8.0	--
134-075-09DAD	N.BAKER	120	110	110	4	1973	60	9-73	H	211FXHL	6S	--	--	--
134-075-12CDD1	S.MANDIGO		96	--	2	--	--	--	K	211FXHL	--	650	8.0	--
134-075-12CDD2	S.MANDIGO		84	84	4	1973	76	7-73	H	211FXHL	S	--	--	--
134-075-1588B	NDSWC 8551	280	103	97	1	1972	60	12-72	U	211FXHL	S	1060	7.5	2010
134-075-20CCC1	B.BUCK		240	240	4	1966	100	--	H	211FXHL	--	1280	9.0	--
134-075-20CCC2	B.BUCK		--	--	2	--	90	--	S	--	--	1050	7.0	--
134-075-288DB	L.NAUMANN		315	--	4	1963	100	--	H	211FXHL	--	880	--	--
134-075-29CDD	E.STRAND		150	--	4	--	110	--	H	211FXHL	--	750	9.0	--
134-075-30BD	MOBIL PROD		4346	--	--	--	--	--	U	--	--	--	--	2334
134-075-30DBC1	R.HEYNE		120	120	2	1957	90	--	H	211FXHL	--	650	--	--
134-075-30DBC2	R.HEYNE		130	130	2	1947	100	--	S	211FXHL	--	1000	8.0	--
134-075-34BAA	L.WITIKKO		130	130	2	--	120	--	S	211FXHL	--	458	7.0	--
134-075-34DAA	L.HUMANN		175	--	4	1970	175	--	K	211FXHL	--	580	--	--
134-076-0188C1	A.SCHIERMEISTER		170	170	2	1930	--	--	H	211FXHL	--	2000	--	--
134-076-0188C2	A.SCHIERMEISTER		170	--	4	1970	--	--	K	211FXHL	--	1380	--	--

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LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (µMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
134-076-02DDD1	R.SCHATZ		200	160	2	1958	90	--	H	211FXHL	--	2460	--	--
134-076-02DDD2	R.SCHATZ		180	165	2	1945	80	--	S	211FXHL	--	5400	8.0	--
134-076-04ABC	H.KURTZ	140	110	110	4	1973	86	9-73	S	211FXHL	S	--	--	--
134-076-05C8C1	L.BUCK		165	--	2	1952	80	--	H	211FXHL	--	1620	--	--
134-076-05C8C2	L.BUCK		185	185	2	1913	130	--	S	211FXHL	--	4300	--	--
134-076-06ABA	E.BAKER		140	140	2	1957	--	--	H	211FXHL	--	950	--	--
134-076-0788B	R.BUCK		180	136	2	--	--	--	K	211FXHL	--	700	--	--
134-076-07CCC	NDSWC 8682	80	0	--	--	1973	--	--	U	--	--	--	--	1996
134-076-0888D	E.BRINDLE		350	270	4	1972	210	10-72	S	211FXHL	--	1500	9.5	--
134-076-088CA	E.BRINDLE		200	160	2	1947	--	--	K	211FXHL	--	1700	--	--
134-076-08DDD	NDSWC 8552	220	0	--	--	1972	--	--	U	211FXHL	--	--	--	2045
134-076-10ADD1	E.BENEDICT		60	60	4	1970	--	--	H	211FXHL	--	1390	--	--
134-076-10ADD2	E.BENEDICT		35	35	4	1950	30	--	S	211FXHL	--	3180	8.0	--
134-076-10ADD3	E.BENEDICT	100	80	80	4	1973	46	9-73	H	211FXHL	6S	--	--	--
134-076-11CCC	E.BENEDICT		100	90	4	1961	55	--	S	211FXHL	--	1300	10.0	--
134-076-12DDD1	NDSWC 8126	340	0	--	--	1971	--	--	U	--	--	--	--	1995
134-076-12DDD2	NDSWC 8126A	100	83	77	1	1971	54	10-71	U	211FXHL	S	--	--	1995
134-076-1888B	A.SCHIERMEISTER		80	--	2	1945	60	--	H	211FXHL	--	--	--	--
134-076-19DDD	P.DREAGER		140	120	2	--	84	--	K	211FXHL	--	1750	9.0	--
134-076-20DCD	J.WEBER JR.		90	--	2	--	50	--	K	211FXHL	--	1750	7.0	--
134-076-21DCB	R.BAYER		224	224	4	1953	65	--	K	211FXHL	--	1200	--	--
134-076-23DCD	BROWNWBRODS.		120	120	2	--	100	--	H	211FXHL	--	1680	8.0	--
134-076-2788C	D.WAGNER		75	70	2	--	55	--	K	211FXHL	--	<500	--	--
134-076-28ABB1	N.WILHELM	80	42	42	4	1973	32	9-73	S	211FXHL	8P	--	--	--
134-076-28ABB2	N.WILHELM	80	42	42	4	1973	31	9-73	S	211FXHL	8P	--	--	--
134-076-28CDC	N.WILHELM		100	--	2	1908	70	--	K	211FXHL	--	1440	9.0	--
134-076-30ADC1	W.K IEMELE		240	--	4	1960	--	--	K	211FXHL	--	1800	--	--
134-076-30ADC2	W.K IEMELE		220	180	4	1972	78	11-72	S	211FXHL	--	--	--	--
134-076-32DDD	NDSWC 8125	240	0	--	--	1971	--	--	U	--	--	--	--	1955
134-076-33BAA	N.WILHELM		80	--	--	1964	--	--	S	211FXHL	--	1350	7.0	--
134-076-35CDD	C.WOHL		220	180	2	--	160	--	K	211FXHL	--	1350	10.0	--
134-076-35DDD	NDSWC 8584	260	0	--	--	1972	--	--	U	--	--	--	--	2013
134-077-04DAA1	E.SCHIERMEISTER		87	--	2	1972	20	--	H	211FXHL	--	<500	--	--
134-077-04DAA2	E.SCHIERMEISTER		60	60	2	--	15	--	S	211FXHL	--	800	8.0	--
134-077-10BBC1	M.WARD		125	--	2	1960	--	--	H	211FXHL	--	2000	--	--
134-077-10BBC2	M.WARD		125	--	2	1902	--	--	S	211FXHL	--	1280	--	--
134-077-13DDD	NDSWC 8683	40	0	--	--	1973	--	--	U	--	--	--	--	2025
134-077-14CDD1	E.FLEGEL		65	65	2	--	--	--	K	211FXHL	--	303	--	--
134-077-14CDD2	E.FLEGEL		17	17	48	--	8	8-71	S	--	--	1000	7.0	--
134-077-14DDD	NDSWC 8684	260	244	238	--	1973	191	6-73	U	211FXHL	S	--	--	1975

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
134-077-17CBD	H.WILL		280	--	2	1937	--	--	S	211FXHL	--	910	9.0	--
134-077-18CCB1	H.WILL JR.		230	220	2	--	200	--	S	211FXHL	--	1260	8.5	--
134-077-18CCB2	H.WILL		220	154	4	1972	142	11-72	K	211FXHL	--	1310	--	--
134-077-190CD	R.ZOLLER		140	100	2	1951	15	--	S	211FXHL	--	1050	8.0	--
134-077-20BBA1	H.WILL		270	--	2	1959	--	--	H	211FXHL	--	880	--	--
134-077-20BBA2	H.WILL		160	160	2	1933	159	--	S	211FXHL	--	850	9.0	--
134-077-22ADA	B.ORTMEYER		120	--	2	1913	60	--	K	211FXHL	--	<500	8.0	--
134-077-228BB	NDSWC 8559	280	183	177	1	1972	30	12-72	U	211FXHL	S	470	7.0	1920
134-077-22CCB1	NDSWC 8685	200	125	118	1	1973	124	6-73	U	211FXHL	2S	--	--	1905
134-077-22CCB2	NDSWC 8686	100	96	90	1	1973	DRY	--	U	211FXHL	S	--	--	1915
134-077-25ADA	S.NAGEL		270	250	6	1967	--	--	K	211FXHL	--	1930	8.0	--
134-077-258CC	S.NAGEL		120	120	6	--	60	--	S	211FXHL	--	<500	10.0	--
134-077-30ABB	R.ZOLLER		24	24	36	--	17	8-71	K	211FXHL	--	900	8.0	--
134-077-31DDO	A.BECK		340	300	--	--	--	--	H	211FXHL	--	1450	8.0	--
134-077-34CAB	E.GIMBEL		96	86	4	1964	36	--	K	211FXHL	--	1090	10.0	--
134-078-02CAB	A.OPP		217	200	2	1948	60	--	K	211FXHL	--	1350	--	--
134-078-04ABA	R.HUMANN		360	360	2	--	200	--	K	211FXHL	--	1050	9.5	--
134-078-04DDO	E.BAKER		330	--	2	1968	--	--	K	211FXHL	--	1550	8.0	--
134-078-05CCD	H.MORSTMEYER		245	230	2	1949	180	--	K	211FXHL	--	1220	--	--
134-078-08ADD	C.WATKINSON		360	320	2	1965	160	--	S	211FXHL	--	1310	8.5	--
134-078-08CBD	A.CORB IN JR.		160	128	2	1911	125	--	K	211FXHL	--	1500	8.0	--
134-078-10BAA	E.WANNER		300	280	2	1960	100	--	K	211FXHL	--	1350	--	--
134-078-10DDO	W.SCHIERMEISTER		150	150	4	1963	130	--	K	211FXHL	--	1040	--	--
134-078-11CAA	A.OPP		180	147	2	1972	127	10-72	S	211FXHL	--	--	--	--
134-078-12DBC	R.DHLHAUSER		90	--	2	--	--	--	K	211FXHL	--	1200	6.5	--
134-078-15DDO	NDSWC 8558	200	123	117	1	1972	29	12-72	U	211FXHL	S	--	--	1775
134-078-19AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1885
134-078-198AA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1779
134-078-20BCC	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1912
134-078-20CCC	SHELL OIL CO.	160	--	--	--	--	--	--	U	--	--	--	--	1824
134-078-22BAD	H.GRENZ		100	60	2	1972	34	6-72	S	--	--	--	--	--
134-078-22DAB	H.REIMER		80	50	4	1963	30	--	K	--	--	<500	--	--
134-078-24BCD	J.KRUMM		140	130	2	1941	120	--	K	211FXHL	--	1300	8.5	--
134-078-29CBB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1765
134-078-31AAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1803
134-078-31DAA	NDSWC 8114	140	0	--	--	1971	--	--	U	--	66	--	--	1710
134-078-32BBB	J.T.RANCH INC.		210	--	4	1966	--	--	H	--	2000	--	--	--
134-078-32BCC	SHELL OIL CO.	129	--	--	--	--	--	--	U	--	--	--	--	1712
134-079-02CCC	SHELL OIL CO.	105	--	--	--	--	--	--	U	--	--	--	--	1604
134-079-02CDD	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1607

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE @ 25°C (µMHOS/CM)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
134-079-020DD	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1718
134-079-12BCC	SHELL OIL CO.	120	--	--	--	--	--	--	U	--	--	--	--	1673
134-079-12CCC	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1608
134-079-13CAA	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1619
134-079-24AAA	SHELL OIL CO.	160	--	--	--	--	--	--	U	--	--	--	--	1748
134-079-24ABB	SHELL OIL CO.	150	--	--	--	--	--	--	U	--	--	--	--	1741
135-074-01BCB	J.FRIESTAD		70	--	3	--	15	--	H	--	--	580	--	--
135-074-06AAC	NDSWC 8662	80	0	--	--	1973	--	--	U	--	--	--	--	1871
135-074-06ADD	NDSWC 8663	100	73	67	1	1973	12	6-13	U	112BGFV	S	--	--	1876
135-074-09CCC	NDSWC 8143	100	0	--	--	1971	--	--	U	--	--	--	--	1930
135-074-10BBB	NDSWC 8144	140	103	97	1	1971	6	9-71	U	112OTSH	S	--	7.0	1900
135-074-11BAC	L.JOHNSON		80	--	4	1965	--	--	H	--	--	483	7.0	--
135-074-13ABA	M.STANLEY		137	--	2	1948	92	--	K	--	--	694	9.0	--
135-074-20BAA	NDSWC 8549	140	103	97	1	1972	+1	5-73	U	112BGFV	R	508	7.5	1891
135-074-26ABA	G.JUTILA		80	--	2	1950	70	--	H	--	--	900	9.0	--
135-074-30AAA1	E.&W.NELSON		60	--	2	1950	20	--	H	--	--	1770	--	--
135-074-30AAA2	W.NELSON		60	--	2	1963	20	--	H	--	--	1810	--	--
135-074-30BAA	G.PEARSON		100	--	2	1945	80	--	H	--	--	624	10.0	--
135-074-32BAA	NDSWC 8669	140	68	62	1	1973	3	6-73	U	211FXHL	S	639	7.5	1912
135-074-34BCC	L.STROM		60	--	2	1915	30	--	H	--	--	690	--	--
135-074-34CCB	NDSWC 8667	80	0	--	--	1973	--	--	U	--	--	--	--	1930
135-074-35BCB	C.JOHNSON		90	--	2	--	--	--	S	--	--	<500	--	--
135-075-01DDD	NDSWC 8142	120	93	87	1	1971	0	10-71	U	112BGFV	R	546	7.5	1863
135-075-03BBC	CREEK DAIRY		50	--	2	1948	25	--	H	--	--	1000	--	--
135-075-04CCB	T.MCLEISH		85	--	2	--	40	--	H	--	--	1030	10.0	--
135-075-05AAA	V.WAGNER		115	115	2	--	99	--	H	--	--	1000	8.0	--
135-075-10ABB	H.WALTHER		62	42	4	1973	32	4-73	H	--	S	--	--	--
135-075-10BCC	NDSWC 8664	120	70	67	1	1973	8	6-73	U	112BGFV	S	981	--	1886
135-075-12DBB	A.SEPANEN		24	--	2	1920	16	--	H	--	--	533	8.0	--
135-075-18ABC	C.FRANSEN		50	--	4	1965	40	--	K	--	--	970	10.0	--
135-075-22ABB	NDSWC 8548	180	0	--	--	1972	--	--	U	--	--	--	--	1880
135-075-26CCD	H.OHLHAUSER		78	--	2	--	65	--	S	--	--	580	9.0	--
135-075-28ADA	S.FRANSEN		40	--	4	1952	17	--	H	--	--	659	8.0	--
135-075-28CCC	C.FRANSEN		75	75	4	1963	65	--	K	--	--	1480	--	--
135-075-33DAA	C.SAVILLE		62	56	2	1947	45	--	H	--	--	900	--	--
135-075-34CBB	F.SAVILLE		65	60	2	1964	50	--	H	--	--	850	--	--
135-075-34DAC	H.OHLHAUSER		110	--	4	1970	95	--	K	--	--	1130	--	--
135-076-06ADC1	J.WESSEL		20	20	2	1951	12	--	H	--	--	1050	--	--
135-076-06ADC2	J.WESSEL		30	30	2	--	--	--	H	--	--	1030	--	--
135-076-08CCC	R.EISENBARTH		134	--	2	--	80	--	K	--	--	1650	--	--

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE ( $\mu$ MHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
135-076-10CDD	P. WEISER		128	--	2	1943	20	--	K	--	--	1630	--	--
135-076-16DBB	WEISER BROS.		127	--	4	1962	--	--	S	--	--	1200	10.0	--
135-076-178CB	H. SEEKLANDER		200	200	4	--	120	--	K	--	--	1500	--	--
135-076-188DB	E. WRIGHT		200	200	3	--	--	--	H	--	--	1650	--	--
135-076-19CCC1	NDSWC 8127	180	137	125	1	1971	59	10-71	U	211FXHL	S	1130	8.1	1975
135-076-19CCC2	NDSWC 8687A	140	132	126	2	1973	62	7-73	U	211FXHL	S	1110	8.0	1878
135-076-19CCC3	NDSWC 1887B	140	132	126	--	1973	62	--	U	211FXHL	S	1150	--	1878
135-076-19CCC4	NDSWC 8687C	140	132	126	2	1973	62	7-73	U	211FXHL	S	1170	--	1879
135-076-19CCC5	NDSWC TM1		145	117	6	1973	63	8-73	U	211FXHL	S	1210	8.5	1979
135-076-19CCC6	NDSWC TM2		89	83	2	1973	63	8-73	U	211FXHL	S	--	--	1979
135-076-22DCC	G. LANDSBERGER		125	--	2	1916	40	--	H	211FXHL	--	1800	--	--
135-076-23AAA	NDSWC 8666	40	0	--	--	1973	--	--	U	--	--	--	--	1920
135-076-248DB	H. WEBER		60	45	4	1965	40	--	S	211FXHL	--	1200	8.0	--
135-076-248BB	H. WEBER		60	--	2	--	40	--	K	211FXHL	--	880	--	--
135-076-258CC	E. HUMANN		80	--	2	--	--	--	H	211FXHL	--	710	9.0	--
135-076-298CB	HAZELTON 3		140	98	8	1968	55	--	P	211FXHL	S	1450	7.5	--
135-076-298AD	KURTZ BROS.		140	--	4	1965	80	--	K	211FXHL	--	1280	8.0	--
135-076-30ABD	F. APERT		--	120	2	1935	70	--	H	211FXHL	--	--	--	--
135-076-30ADA	HAZELTON 2		140	98	8	1964	60	7-71	P	211FXHL	--	--	--	--
135-076-30DAA1	NDSWC 8553	80	0	--	--	1972	--	--	U	211FXHL	--	--	--	2000
135-076-30DAA2	NDSWC 8554	180	133	127	--	1972	80	12-72	U	211FXHL	S	2210	7.5	2000
135-076-32DCD	J. GRENZ		150	150	4	1969	--	--	H	211FXHL	--	1310	--	--
135-077-04ACA	A. SCHERR	160	135	135	4	1973	122	8-73	S	211FXHL	S	--	--	--
135-077-04ACD	A. SCHERR		170	--	4	--	150	--	K	211FXHL	--	1700	--	--
135-077-10ADA	H. SCHMIDT		120	--	2	1936	110	--	K	211FXHL	--	812	8.0	--
135-077-21CDD	NDSWC 8555	200	128	122	1	1972	87	12-72	U	211FXHL	S	4120	7.0	2000
135-077-22DDD	J. KALBERER		120	--	4	1968	85	--	K	211FXHL	--	640	--	--
135-077-288BB	L. SCHMITKE		180	160	4	1972	118	10-72	H	211FXHL	--	--	--	--
135-077-288CA1	E. SCHMITCKE		220	--	4	1966	160	--	K	211FXHL	--	1290	9.0	--
135-077-288CA2	E. SCHMITCKE		160	--	2	1920	--	--	S	211FXHL	--	990	8.0	--
135-077-28DCD	H. APPERT		200	120	2	1917	90	--	K	211FXHL	--	700	--	--
135-077-32CDD1	J. MOSSET		250	235	2	--	80	--	K	211FXHL	--	980	10.0	--
135-077-32CDD2	J. MOSSET	250	240	220	6	1972	180	10-72	S	211FXHL	--	--	--	--
135-077-33DAA1	H. OPP		160	120	4	1963	60	--	K	211FXHL	--	1080	--	--
135-077-33DAA2	H. OPP		--	90	3	--	60	--	S	211FXHL	--	1600	--	--
135-078-028DD	E. BALLIET		80	80	2	--	60	--	K	--	--	1110	8.5	--
135-078-04DBA1	W. SCHIERMEISTER		180	--	--	--	100	--	K	211FXHL	--	1580	--	--
135-078-04DBA2	W. SCHIERMEISTER		180	--	2	--	100	--	K	211FXHL	--	--	--	--
135-078-06ACA	F. MARSHALL		76	--	2	1956	25	--	H	--	--	1710	--	--
135-078-07CCD	NDSWC 8107	80	0	--	--	1971	--	--	U	--	--	--	--	1680

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (µMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
135-078-11CCD	NDSWC 8657	80	0	--	--	1973	8	6-73	U	112BDVL	S	1760	8.0	1670
135-078-14CCC	NDSWC 8556	60	0	--	--	1972	--	--	U	--	--	--	--	1680
135-078-14DCD	NDSWC 8557	120	73	67	1	1972	+1	4-73	U	112BDVL	P	1590	8.0	1685
135-078-15ADC	C.GRENZ		125	--	4	1968	--	--	K	--	--	3210	--	--
135-078-15CDB	H.GRENZ		100	80	4	1972	68	6-72	S	--	--	--	--	--
135-078-18CBA	E.SCHIERMEISTER		95	--	2	1957	75	--	H	--	--	3100	--	--
135-078-20AAD	NDSWC 8113	140	0	--	--	1971	--	--	U	--	HR	--	--	1650
135-078-20ADD	NDSWC 8110	100	0	--	--	1971	--	--	U	--	--	--	--	1660
135-078-20DAD	NDSWC 8111	60	0	--	--	1971	--	--	U	--	--	--	--	1680
135-078-218BA	H.SCHIERMEISTER		90	--	2	1966	13	--	K	--	--	1860	--	--
135-078-21CAB	R.SCHIERMEISTER		60	--	2	1955	15	--	H	--	--	2290	--	--
135-078-22ABA1	E.GRENZ		90	--	2	1963	30	--	H	--	--	1660	--	--
135-078-22ABA2	E.GRENZ		24	--	12	--	6	7-91	S	--	--	2580	6.0	--
135-078-26ADC	H.SCHIERMEISTER		110	--	4	--	60	--	K	--	--	1650	--	--
135-078-28BBB	NDSWC 8112	40	0	--	--	1971	--	--	U	--	--	--	--	1730
135-079-13ADA	L.SCHIERMEISTER		65	--	2	1963	40	--	K	--	--	1200	10.0	--
135-079-13ADB	L.SCHIERMEISTER		60	--	2	1965	38	--	H	--	--	1980	10.0	--
135-079-24AAA	NDSWC 8108	180	143	137	1	1971	49	10-71	U	112BDVL	R	2020	7.5	1670
135-079-24BDD	NDSWC 8109	60	0	--	--	1971	--	--	U	--	--	--	--	1670
135-079-25DBC	D.HOLZ		200	--	4	--	--	--	K	--	--	1550	--	--
135-079-26CDA	A.CORBIN		130	--	4	1957	--	--	H	--	--	1700	9.0	--
136-074-08DDD	NDSWC 8147	120	0	--	--	1971	--	--	U	--	--	--	--	1915
136-074-10BBC	A.FEYEREISEN		150	--	2	--	60	--	K	211FXHL	--	852	9.0	--
136-074-13AAB	R.SVANES		190	180	4	1973	31	6-73	H	--	Y	--	--	--
136-074-13DAB	R.SVANES		70	46	4	1973	2	6-73	S	--	6S	--	--	--
136-074-15DAD	C.KUIPERS		90	--	4	1967	50	--	H	--	--	900	--	--
136-074-20BBB1	G.BOHLIN		95	80	4	1970	50	--	H	--	--	780	--	--
136-074-20BBB2	G.BOHLIN		80	60	2	1921	70	--	S	--	--	1300	--	--
136-074-20DCC	C.JACOBSON		105	--	4	1948	50	--	H	--	--	900	10.0	--
136-074-24DDB	C.SVANES		100	--	2	1946	40	--	H	--	--	790	--	--
136-074-27AAA	NDSWC 8146	300	0	--	--	1971	--	--	U	--	S	--	--	1900
136-074-30DDB	E.PETERSON	200	105	105	4	1973	29	7-73	H	211FXHL	--	--	--	--
136-074-31ACD1	E.EDHOLM		50	--	2	1955	18	--	K	--	--	1800	--	--
136-074-31ACD2	E.EDHOLM		50	38	4	1972	38	9-72	--	--	--	--	--	--
136-074-31ACD3	E.EDHOLM		140	50	4	1972	38	9-72	I	--	--	--	--	--
136-074-31DCC	NDSWC 8661	40	0	--	--	1973	--	--	U	--	--	--	--	1878
136-074-35ACC	T.L.PARSONAGE		170	--	4	1964	17	--	H	--	S	533	--	--
136-074-35BDD	M.BRANDNER		120	110	2	1962	5	--	H	--	--	544	--	--
136-074-35CAB	R.HANSEN		100	100	2	1943	F	--	H	--	S	655	7.0	--
136-074-35CDC	NDSWC 8145	80	0	--	--	1971	--	--	U	--	--	--	--	1895

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAMETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25°C)	TEMPERATURE (°C)	ALTITUDE OF LSD (FT)
136-075-04BAB	L+R RANCH	58	--	--	--	1973	--	--	U	--	S	--	--	--
136-075-04BCA	L+R RANCH	160	--	--	--	1973	--	--	U	--	R	--	9.0	--
136-075-06DDD	NDSWC 8546	340	0	--	--	1972	--	--	U	--	--	--	8.0	1890
136-075-10ADA	M. JOHNSON	102	75	75	4	1973	34	6-73	S	--	S	--	--	--
136-075-11BCA	M. JOHNSON		85	--	4	1947	60	--	H	--	--	1300	9.0	--
136-075-12ACB	F. KULANDA		85	--	2	1958	44	--	H	--	--	1150	--	--
136-075-14AAA	NDSWC 8148	220	113	107	1	1971	36	10-71	U	211FXHL	S	764	--	1910
136-075-18AAD	SAVILLE BROS.		100	--	2	1951	40	--	H	211FXHL	--	1380	8.0	--
136-075-20CDC	NDSWC 8665	40	0	--	--	1973	--	--	U	--	--	--	--	1840
136-075-24BAB1	R. SPLONSKOWSKI		140	--	2	1964	20	--	H	211FXHL	--	1600	--	--
136-075-24BAB2	R. SPLONSKOWSKI		110	--	2	1910	20	--	S	211FXHL	--	1450	--	--
136-075-26CBC	NDSWC 8547	40	0	--	--	1972	--	--	U	--	--	--	--	1865
136-075-27DAB1	L. STANTON		60	60	2	1957	20	--	H	211FXHL	--	1990	--	--
136-075-27DAB2	A. GRENSTEINER		54	54	4	1969	25	--	H	211FXHL	--	1650	--	--
136-075-27DAC1	POST OFFICE		80	80	2	1959	15	--	H	211FXHL	--	1920	--	--
136-075-27DAC2	J. HAMMER		80	45	2	1959	20	--	H	211FXHL	--	1740	--	--
136-075-27DBA	E. MATTILA		80	--	1	--	--	--	H	211FXHL	--	--	--	--
136-075-27DBD1	T. MOCK		73	73	3	1957	20	--	H	211FXHL	--	2010	--	--
136-075-27DBD2	J. WOLBAUM		80	70	4	1964	10	--	H	211FXHL	--	1870	--	--
136-075-30CAA	A. SILVERNAGEL		140	117	4	1972	82	8-72	S	211FXHL	--	--	--	--
136-075-300DB	A. SILVERNAGEL		117	117	4	1972	82	8-72	S	211FXHL	--	--	--	--
136-075-34CBD	NDSWC 8660	60	50	47	1	1973	16	6-73	U	211FXHL	S	804	8.0	1860
136-075-34CCC	NDSWC 8659	100	0	--	--	1973	--	--	U	--	--	--	--	1855
136-075-35CBD	F. VETTER		85	--	2	1958	58	--	H	211FXHL	--	1120	10.0	--
136-076-01ACA	L+R RANCH		330	270	4	1966	--	5-66	S	211FXHL	--	862	8.5	--
136-076-01BDB	L+R RANCH		250	--	4	1966	--	5-66	S	211FXHL	--	1320	9.0	--
136-076-02ADB	L+R RANCH		180	--	4	1966	--	--	S	211FXHL	--	1350	8.5	--
136-076-07BCC	NDSWC 8539	120	83	77	1	1972	4	11-72	U	211FXHL	S	614	8.0	1735
136-076-07CBC	NDSWC 8540	150	123	117	1	1972	4	11-72	U	112BDVL	S	1240	7.0	1735
136-076-08ABB	M. BENZ		115	--	4	1952	15	--	H	--	--	1100	--	--
136-076-10CAA	NDSWC 8658	40	0	--	--	1973	--	--	U	--	--	--	--	1750
136-076-13BAA	H. WOLBAUM		60	50	4	1973	38	3-73	H	--	6S	--	--	--
136-076-13BAB	H. WOLBAUM JR.		75	--	2	1955	30	--	H	--	--	--	--	--
136-076-150CD	S. ENGLEMAN		80	--	2	1914	80	--	H	--	--	1030	--	--
136-076-17DD	CHEVRON DIL CO.		3780	--	--	1967	--	--	U	--	--	--	--	1880
136-076-18CCA	R. SCHLITTENHART		150	--	3	--	30	--	K	211FXHL	--	1330	8.5	--
136-076-23DDC	A. JANGULA		170	--	--	1956	60	--	H	211FXHL	--	1800	--	--
136-076-26CAA	J. VETTER		280	--	2	1950	40	--	K	211FXHL	--	2590	10.0	--
136-076-32ABB	R. BUCK		160	--	3	1952	--	--	K	211FXHL	--	1330	--	--
136-077-01ADB	J. SCHERR		130	--	4	1920	80	--	K	211FXHL	--	1680	8.0	--

LOCAL WFL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT)	CASING DEPTH (FT)	CASING DIAM- ETER (IN)	DATE DRILLED (YEAR)	WATER LEVEL (FT)	DATE WATER LEVEL MEASURED	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCT- ANCE ( $\mu$ MHOS/CM @ 25°C)	TEM- PER- ATURE (°C)	ALTI- TUDE- OF LSD (FT)
136-077-048AB	J.VETTER		185	--	2	--	115	--	S	211FXHL	--	1580	9.0	--
136-077-06ACD1	M.OLSON		337	--	2	1958	240	--	H	211FXHL	--	1580	--	--
136-077-06ACD2	M.OLSON		200	--	2	1906	--	--	S	211FXHL	--	1460	8.5	--
136-077-10BDB	H.SOULE		218	--	2	1917	80	--	K	211FXHL	--	1500	9.0	--
136-077-10DCD1	Q.FOELL		0	--	--	--	F	--	S	211HLCK	--	1020	--	--
136-077-10DCD2	Q.FOELL		190	--	2	1910	--	--	H	--	--	1250	--	--
136-077-12ADD	G.ERHARDT		60	--	2	--	17	--	S	--	--	744	7.0	--
136-077-12DOD	NDSWC 8141	80	0	--	--	1971	--	--	U	--	--	--	--	1750
136-077-16AAD	NDSWC 8544	320	203	197	1	1972	14	12-72	U	112BDVL	S	1580	--	1745
136-077-16ADD	NDSWC 8543	140	83	77	1	1972	12	12-72	U	211FXHL	S	1110	7.0	1735
136-077-16DAD	NDSWC 8542	100	0	--	--	1972	--	--	U	--	--	--	--	1735
136-077-18DDC	B.HELD		160	--	2	1956	50	--	K	--	--	800	9.0	--
136-077-21DCD	P.MOCH		190	--	2	1915	160	--	K	211FXHL	S	1590	10.0	--
136-077-22ACC	F.BITZ		105	--	2	--	60	--	K	211FXHL	--	1450	--	--
136-077-24ADD	NDSWC 8541	40	0	--	--	1972	--	--	U	--	--	--	--	1775
136-077-298BB1	G.O'CALLAGHAN	213	212	172	14	1964	21	10-64	I	112BDVL	R	1110	--	1732
136-077-298BB2	NDSWC	180	176	166	3	1964	18	11-71	U	112BDVL	R	--	--	1732
136-077-298BB3	NDSWC		180	170	2	1964	22	10-64	U	112BDVL	R	--	--	1732
45 136-077-328AB	G.O'CALLAGHAN	140	115	115	4	1973	70	8-73	S	211FXHL	S	--	--	--
136-077-32CDB	R.DAHL		180	--	4	1970	140	--	K	211FXHL	--	2440	8.5	--
136-077-34AAC	E.MALARD		200	--	2	1926	90	--	K	211FXHL	--	2000	8.0	--
136-078-068CB	NDSWC 8656	180	144	138	1	1973	27	--	U	112BDVL	R	1820	9.5	1670
136-078-07BDB	NDSWC 8106	260	239	227	1	1971	68	10-71	U	211FXHL	S	2100	--	1710
136-078-14CDC	M.MARQUART		310	--	2	1952	40	--	K	211FXHL	--	1340	--	--
136-078-19ACD	L.CARLSON		120	--	2	1963	100	--	S	--	--	1780	8.5	--
136-078-24CCC	NDSWC 8545	210	0	--	--	1972	--	--	U	--	--	--	--	1810
136-078-24CDC	L.WEISZ		180	--	2	--	--	--	K	211FXHL	--	1380	9.0	--
136-078-328AB	N.SURBER		180	--	2	1964	120	--	K	211FXHL	--	--	--	--
136-078-34ABC1	J.WAHL		240	--	2	--	48	--	K	211FXHL	--	2650	--	--
136-078-34ABC2	J.WAHL	220	200	200	4	1973	120	10-73	S	211FXHL	S	--	--	--
136-079-02AAD	H.WOODLAND		140	--	2	--	40	--	S	--	--	1980	10.0	--
136-079-03DCC	H.WOODLAND	115	100	--	2	1968	--	--	S	--	--	--	--	--

TABLE 2.--Water levels in selected wells

EXPLANATION

Water levels shown have been adjusted to feet below or (+) above land surface

MP, measuring point

lsd, land surface datum

Depth to water, in feet below or (+) above land surface

129-075-05BBB MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Dec. 18, 1972..	75.05	Apr. 10.....	74.98	Aug. 13.....	75.52
Jan. 24, 1973..	74.99	May 10.....	75.00	Sept. 10.....	76.65
Feb. 15.....	75.09	June 11.....	75.06	Oct. 18.....	75.53
Mar. 20.....	75.00	July 10.....	75.31	Nov. 28.....	75.54

129-075-29BBB MP is top of 1½-inch plastic pipe 2.10 ft above lsd.

Jan. 24, 1973..	97.70	May 10.....	97.68	Sept. 10.....	98.25
Feb. 15.....	97.79	June 11.....	97.81	Oct. 18.....	98.22
Mar. 20.....	97.74	July 10.....	98.01	Nov. 28.....	98.30
Apr. 10.....	97.71	Aug. 13.....	98.19		

130-075-20CCC1 MP is top of 1½-inch plastic pipe 1.70 ft above lsd.

Jan. 24, 1973..	104.03	May 10.....	104.03	Sept. 10.....	104.77
Feb. 15.....	104.13	June 11.....	104.10	Oct. 18.....	104.60
Mar. 20.....	104.06	July 10.....	104.32	Nov. 28.....	104.55
Apr. 10.....	104.04	Aug. 13.....	104.60		

130-075-20CCC2 MP is top of 1½-inch plastic pipe 1.60 ft above lsd.

May 10, 1973..	12.50	Aug. 13.....	13.98	Nov. 28.....	16.97
June 11.....	12.35	Sept. 10.....	14.94		
July 10.....	12.34	Oct. 18.....	15.73		

130-075-31CCC MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Oct. 28, 1971..	73.94	July 12.....	73.55	Apr. 10.....	73.53
Nov. 29.....	73.84	Aug. 8.....	73.54	May 10.....	73.48
Dec. 16.....	74.10	Aug. 31.....	73.52	June 11.....	73.56
Jan. 11, 1972..	73.78	Sept. 14.....	73.46	July 10.....	73.80
Feb. 15.....	73.75	Oct. 19.....	73.65	Aug. 13.....	74.05
Mar. 14.....	73.76	Nov. 14.....	73.66	Sept. 10.....	74.18
Apr. 4.....	73.66	Dec. 17.....	73.63	Oct. 18.....	74.05
Apr. 19.....	73.62	Jan. 24, 1973..	73.59	Nov. 28.....	74.07
May 16.....	73.34	Feb. 15.....	73.68		
June 15.....	73.42	Mar. 20.....	73.57		



Depth to water, in feet below or (+) above land surface

130-075-31DCC1 (east well) MP is top of steel coupling 0.85 ft above lsd.					
Date	Water level	Date	Water level	Date	Water level
Jan. 24, 1973..	94.50	May 10.....	94.41	Sept. 10.....	95.06
Feb. 15.....	94.44	June 11.....	94.44	Oct. 18.....	95.18
Mar. 20.....	94.43	July 10.....	94.63	Nov. 28.....	95.20
Apr. 10.....	94.40	Aug. 13.....	95.65		
130-075-31DCC2 (west well) MP is top of 1¼-inch plastic pipe 1.75 ft above lsd.					
Jan. 24, 1973..	75.89	May 10.....	76.81	Sept. 10.....	77.56
Feb. 15.....	76.99	June 11.....	76.89	Oct. 18.....	77.42
Mar. 20.....	76.87	July 10.....	77.16	Nov. 28.....	77.42
Apr. 10.....	76.85	Aug. 13.....	77.41		
130-075-32DCD1 (west well) MP is top of 1¼-inch plastic pipe 1.75 ft above lsd.					
Jan. 24, 1973..	64.95	May 10.....	64.87	Sept. 10.....	65.61
Feb. 15.....	65.07	June 11.....	64.90	Oct. 18.....	65.47
Mar. 20.....	64.93	July 10.....	65.23	Nov. 28.....	65.49
Apr. 10.....	64.90	Aug. 13.....	65.47		
130-075-32DCD2 (east well) MP is top of 1¼-inch plastic pipe 1.0 ft above lsd.					
May 10, 1973..	11.91	Aug. 13.....	12.41	Nov. 28.....	16.31
June 11.....	11.99	Sept. 10.....	14.67		
July 10.....	12.07	Oct. 18.....	15.58		
130-076-03CBB MP is top of steel coupling 0.95 ft above lsd.					
Jan. 24, 1973..	91.34	May 10.....	91.03	Sept. 10.....	91.28
Feb. 15.....	91.24	June 13.....	91.07	Oct. 11.....	91.20
Mar. 20.....	91.07	July 13.....	91.28	Nov. 28.....	91.10
Apr. 10.....	91.03	Aug. 13.....	91.32		
130-077-01CCC MP is top of 1¼-inch plastic pipe 2.20 ft above lsd.					
Dec. 19, 1972..	6.25	Apr. 10.....	5.82	Aug. 13.....	7.47
Jan. 24, 1973..	6.34	May 8.....	5.81	Sept. 11.....	7.29
Feb. 15.....	6.47	June 13.....	6.12	Oct. 11.....	7.16
Mar. 20.....	6.19	July 13.....	6.98	Nov. 28.....	7.03

Depth to water, in feet below or (+) above land surface

130-077-14AAA MP is top of 1½-inch plastic pipe 2.25 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
June 13, 1973..	11.49	Aug. 13.....	13.58	Oct. 11.....	11.91
July 13.....	12.61	Sept. 11.....	12.46	Nov. 28.....	11.76

130-079-03CCC MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Oct. 28, 1971..	51.60	July 13.....	42.26	Apr. 10.....	49.88
Nov. 29.....	54.11	Aug. 8.....	43.39	May 8.....	48.85
Dec. 16.....	54.70	Aug. 31.....	45.90	June 13.....	49.15
Jan. 11, 1972..	55.26	Sept. 14.....	47.68	July 13.....	50.45
Feb. 15.....	54.22	Oct. 20.....	52.18	Aug. 13.....	51.84
Mar. 14.....	52.15	Nov. 13.....	54.40	Sept. 11.....	53.34
Apr. 4.....	48.55	Dec. 18.....	57.27	Oct. 18.....	54.57
Apr. 19.....	48.14	Jan. 24, 1973..	55.62	Nov. 28.....	53.26
May 16.....	45.97	Feb. 16.....	54.37		
June 15.....	42.90	Mar. 20.....	51.86		

130-079-04AAA MP is top of 1½-inch plastic pipe 2.35 ft above lsd.

Nov. 13, 1972..	39.86	Apr. 10.....	35.23	Sept. 11.....	38.79
Dec. 18.....	42.82	May 8.....	34.23	Oct. 18.....	40.05
Jan. 24, 1973..	41.08	June 13.....	34.42	Nov. 28.....	38.69
Feb. 16.....	39.83	July 13.....	35.88		
Mar. 20.....	37.25	Aug. 13.....	37.27		

130-079-04BBB MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Oct. 28, 1971..	36.93	July 13.....	27.09	Apr. 10.....	34.60
Nov. 29.....	39.54	Aug. 8.....	28.35	May 8.....	33.68
Dec. 16.....	39.66	Aug. 31.....	31.13	June 13.....	33.81
Jan. 11, 1972..	40.48	Sept. 14.....	32.92	July 13.....	35.58
Feb. 15.....	39.38	Oct. 20.....	37.38	Aug. 13.....	36.88
Mar. 14.....	36.95	Nov. 13.....	39.60	Sept. 11.....	38.40
Apr. 4.....	33.44	Dec. 18.....	42.73	Oct. 18.....	39.62
Apr. 19.....	33.02	Jan. 24, 1973..	40.58	Nov. 28.....	38.17
May 16.....	30.69	Feb. 16.....	39.40		
June 15.....	27.53	Mar. 20.....	36.61		

130-079-13AAA2 MP is top of 1½-inch plastic pipe 2.25 ft above lsd.

Nov. 13, 1972..	4.31	May 8.....	3.70	Sept. 11.....	4.95
Dec. 18.....	4.22	June 13.....	4.08	Oct. 18.....	4.67
Mar. 20, 1973..	3.67	July 13.....	4.65	Nov. 28.....	4.59
Apr. 10.....	3.56	Aug. 13.....	4.91		

131-075-09ADA MP is top of 1½-inch plastic pipe 2.80 ft above lsd.

June 11, 1973..	30.78	Aug. 16.....	31.05	Oct. 18.....	30.89
July 12.....	31.00	Sept. 12.....	31.02	Nov. 29.....	30.85

Depth to water, in feet below or (+) above land surface

131-075-22DCD MP is top of pressure valve 2.70 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Jan. 29, 1972..	Frozen	Aug. 31.....	+ 9.8	Apr. 10.....	+ 9.7
Apr. 4.....	+10.00	Sept. 14.....	+ 9.7	May 8.....	+ 9.9
May 16.....	+10.4	Dec. 18.....	Frozen	June 11.....	+ 9.6
June 15.....	+10.3	Jan. 24, 1973..	Frozen	July 12.....	+ 9.7
July 12.....	+10.00	Mar. 22.....	+ 9.7	Aug. 16.....	+ 9.2

131-076-03CCD2 MP is top of 1½-inch plastic pipe 2.70 ft above lsd.

Jan. 24, 1973..	49.94	May 10.....	49.87	Sept. 10.....	50.52
Feb. 15.....	50.03	June 13.....	49.82	Oct. 18.....	50.37
Mar. 20.....	49.92	July 12.....	50.19	Nov. 29.....	50.23
Apr. 10.....	49.89	Aug. 16.....	50.41		

131-076-05BCB MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

June 13, 1973..	150.12	Aug. 16.....	150.62	Oct. 15.....	150.66
July 13.....	150.60	Sept. 11.....	150.75	Nov. 29.....	150.60

131-076-26CCC2 MP is top of 1½-inch plastic pipe 0.90 ft above lsd.

Jan. 11, 1972..	99.69	Aug. 31.....	99.67	May 10.....	98.89
Feb. 15.....	99.50	Sept. 14.....	99.69	June 11.....	99.27
Mar. 14.....	99.49	Oct. 19.....	99.66	July 12.....	99.53
Apr. 4.....	99.31	Nov. 14.....	99.53	Aug. 16.....	99.74
Apr. 19.....	99.27	Dec. 18.....	98.80	Sept. 10.....	99.90
May 16.....	99.10	Jan. 24, 1973..	99.15	Oct. 18.....	99.70
June 15.....	99.35	Feb. 15.....	99.18	Nov. 29.....	99.51
July 12.....	99.51	Mar. 20.....	98.98		
Aug. 8.....	99.54	Apr. 10.....	98.92		

131-076-26DDD MP is top of 1½-inch plastic pipe 2.45 ft above lsd.

Jan. 24, 1973..	82.63	May 10.....	82.43	Sept. 12.....	83.17
Feb. 15.....	82.74	June 13.....	82.35	Oct. 18.....	83.05
Mar. 20.....	82.53	July 12.....	82.84	Nov. 29.....	82.92
Apr. 10.....	82.49	Aug. 16.....	83.03		

131-076-30DDD MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Oct. 28, 1971..	111.20	July 12.....	110.94	Apr. 10.....	110.68
Nov. 29.....	111.13	Aug. 8.....	111.00	May 10.....	110.64
Dec. 16.....	111.15	Aug. 31.....	111.00	June 13.....	110.77
Jan. 11, 1972..	111.01	Sept. 14.....	111.03	July 13.....	111.04
Feb. 15.....	110.96	Oct. 19.....	110.98	Aug. 16.....	111.13
Mar. 14.....	110.94	Nov. 13.....	110.97	Sept. 11.....	111.10
Apr. 4.....	110.86	Dec. 18.....	110.85	Oct. 11.....	110.94
Apr. 19.....	110.78	Jan. 24, 1973..	110.78	Nov. 28.....	110.72
May 16.....	110.58	Feb. 15.....	110.81		
June 15.....	110.77	Mar. 20.....	110.68		

Depth to water, in feet below or (+) above land surface

131-077-14AAA MP is top of 1½-inch plastic pipe 2.60 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Dec. 19, 1972..	156.70	Apr. 10.....	156.58	Aug. 16.....	156.90
Jan. 24, 1973..	156.60	May 10.....	156.51	Sept. 11.....	156.93
Feb. 15.....	156.73	June 13.....	156.64	Oct. 11.....	156.76
Mar. 21.....	156.55	July 13.....	156.89	Nov. 29.....	156.56

131-078-04DAA MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Nov. 13, 1972..	3.46	Apr. 10.....	2.90	Sept. 11.....	3.84
Dec. 18.....	3.34	May 8.....	3.00	Oct. 18.....	3.42
Jan. 26, 1973..	3.05	June 13.....	3.32	Nov. 28.....	3.33
Feb. 16.....	2.91	July 13.....	3.88		
Mar. 21.....	2.86	Aug. 16.....	4.10		

131-079-28DDD MP is top of 1½-inch plastic pipe 1.80 ft above lsd.

Oct. 28, 1971..	17.26	July 13.....	16.26	Apr. 10.....	16.93
Nov. 29.....	17.30	Aug. 8.....	16.26	May 8.....	16.98
Dec. 16.....	17.20	Aug. 31.....	16.60	June 13.....	17.01
Jan. 11, 1972..	17.31	Sept. 14.....	16.63	July 13.....	17.13
Feb. 15.....	17.40	Oct. 20.....	16.67	Aug. 13.....	17.21
Mar. 14.....	17.13	Nov. 13.....	17.74	Sept. 11.....	17.27
Apr. 4.....	16.51	Dec. 18.....	16.76	Oct. 18.....	17.75
Apr. 19.....	16.54	Jan. 24, 1973..	16.86	Nov. 28.....	17.30
May 16.....	16.46	Feb. 16.....	16.89		
June 15.....	16.45	Mar. 20.....	16.92		

131-079-32AAA MP is top of 1½-inch plastic pipe 0.0 ft above lsd.

Oct. 28, 1971..	37.37	Mar. 14.....	37.31	July 13.....	27.35
Nov. 29.....	39.94	Apr. 4.....	33.76	Aug. 8.....	28.76
Dec. 16.....	40.46	Apr. 19.....	33.35	Aug. 31.....	30.71
Jan. 11, 1972..	40.88	May 16.....	30.97	Sept. 14.....	32.14
Feb. 15.....	39.75	June 15.....	27.87	Sept. 26	Well destroyed

131-079-35DCD MP is top of 1½-inch plastic pipe 2.50 ft above lsd.

Nov. 13, 1972..	9.07	Apr. 10.....	8.22	Sept. 11.....	9.23
Dec. 18.....	8.97	May 8.....	8.27	Oct. 18.....	9.97
Jan. 24, 1973..	8.86	June 13.....	8.82	Nov. 28.....	9.79
Feb. 15.....	8.74	July 13.....	9.50		
Mar. 20.....	8.40	Aug. 13.....	9.83		

132-074-15DDD MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Jan. 24, 1973..	7.90	May 8.....	7.75	Sept. 12.....	7.88
Feb. 15.....	7.89	June 11.....	7.80	Oct. 11.....	7.74
Mar. 20.....	7.37	July 12.....	7.94	Nov. 29.....	7.64
Apr. 10.....	7.61	Aug. 16.....	8.14		

Depth to water, in feet below or (+) above land surface

132-076-31DDD MP is top of 1½-inch plastic pipe 1.75 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
June 13, 1973..	128.65	Aug. 16.....	129.09	Oct. 15.....	129.15
July 13.....	129.05	Sept. 11.....	129.23	Nov. 29.....	129.12

132-077-19BBB MP is top of 1½-inch plastic pipe 2.40 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Dec. 19, 1972..	38.37	Apr. 10.....	38.30	Aug. 16.....	38.76
Jan. 26, 1973..	38.37	May 8.....	38.35	Sept. 11.....	38.74
Feb. 15.....	38.44	June 13.....	38.50	Oct. 16.....	38.53
Mar. 20.....	38.22	July 13.....	38.68	Nov. 28.....	38.48

132-077-20CCC2 MP is top of 1½-inch plastic pipe 2.60 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Dec. 19, 1972..	34.20	Apr. 10.....	34.19	Aug. 16.....	34.56
Jan. 26, 1973..	34.18	May 8.....	34.21	Sept. 11.....	34.41
Feb. 15.....	34.29	June 13.....	34.25	Oct. 15.....	34.24
Mar. 21.....	34.16	July 13.....	34.42	Nov. 28.....	34.23

132-077-24CCC2 MP is top of 1½-inch plastic pipe 2.30 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Dec. 19, 1972..	2.57	Apr. 10.....	1.04	Aug. 16.....	3.81
Jan. 26, 1973..	2.59	May 10.....	1.39	Sept. 11.....	3.74
Feb. 15.....	3.21	June 13.....	2.15	Oct. 15.....	2.31
Mar. 21.....	1.37	July 13.....	3.24	Nov. 29.....	2.64

132-077-27DDD1 (south well) MP is top of 1½-inch plastic pipe 2.35 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Dec. 19, 1972..	59.81	Apr. 10.....	59.75	Aug. 16.....	60.10
Jan. 26, 1973..	59.83	May 10.....	59.71	Sept. 11.....	60.12
Feb. 15.....	59.90	June 13.....	59.89	Oct. 11.....	59.79
Mar. 21.....	59.78	July 13.....	60.06	Nov. 29.....	59.88

132-077-27DDD2 (north well) MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Dec. 19, 1972..	41.39	Apr. 10.....	41.47	Aug. 16.....	41.59
Jan. 26, 1973..	41.40	May 10.....	41.26	Sept. 11.....	41.66
Feb. 15.....	41.63	June 13.....	41.42	Oct. 11.....	41.49
Mar. 21.....	41.42	July 13.....	41.52	Nov. 29.....	41.40

132-077-28DDD MP is top of 1½-inch plastic pipe 1.80 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Nov. 13, 1972..	52.32	Apr. 10.....	52.07	Sept. 11.....	52.26
Dec. 19.....	52.09	May 10.....	52.00	Oct. 11.....	52.12
Jan. 26, 1973..	52.08	June 13.....	52.11	Nov. 29.....	52.10
Feb. 15.....	52.24	July 13.....	52.27		
Mar. 21.....	52.05	Aug. 16.....	52.23		

Depth to water, in feet below or (+) above land surface

132-077-29ABB1 (east well) MP is top of 1½-inch plastic pipe 2.80 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
June 13, 1973..	43.51	Aug. 16.....	43.67	Oct. 15.....	43.53
July 13.....	43.67	Sept. 11.....	43.70	Nov. 28.....	43.51

132-077-29ABB2 (west well) MP is top of 1½-inch plastic pipe 1.60 ft above lsd.

June 13, 1973..	38.42	Aug. 16.....	38.57	Oct. 15.....	38.59
July 13.....	38.59	Sept. 11.....	38.64	Nov. 28.....	38.48

132-077-29DCC MP is top of 1½-inch plastic pipe 1.75 ft above lsd.

Nov. 13, 1972..	21.50	Apr. 10.....	21.27	Sept. 11.....	21.40
Dec. 19.....	21.39	May 10.....	21.19	Oct. 15.....	21.26
Jan. 26, 1973..	21.29	June 13.....	21.31	Nov. 28.....	21.07
Feb. 15.....	21.39	July 13.....	21.44		
Mar. 21.....	21.27	Aug. 16.....	21.45		

132-077-29DDD MP is top of 1½-inch plastic pipe 2.60 ft above lsd.

Nov. 13, 1972..	27.75	Apr. 10.....	27.50	Sept. 11.....	27.65
Dec. 19.....	27.61	May 10.....	27.45	Oct. 15.....	27.50
Jan. 26, 1973..	27.53	June 13.....	27.55	Nov. 28.....	27.43
Feb. 15.....	27.62	July 13.....	27.69		
Mar. 21.....	27.47	Aug. 16.....	27.70		

132-077-33ADD1 (north well) MP is top of 1½-inch plastic pipe 2.20 ft above lsd.

Dec. 19, 1972..	32.24	Apr. 10.....	32.24	Aug. 16.....	32.37
Jan. 26, 1973..	32.18	May 10.....	32.10	Sept. 11.....	32.39
Feb. 15.....	32.41	June 13.....	32.21	Oct. 15.....	32.27
Mar. 21.....	32.22	July 13.....	32.36	Nov. 29.....	32.15

132-077-33ADD2 (south well) MP is top of 1½-inch plastic pipe 2.20 ft above lsd.

Dec. 19, 1972..	2.67	Apr. 10.....	2.15	Aug. 16.....	3.91
Jan. 26, 1973..	2.62	May 10.....	2.54	Sept. 11.....	3.55
Feb. 15.....	3.02	June 13.....	3.08	Oct. 15.....	2.81
Mar. 21.....	2.25	July 13.....	3.67	Nov. 29.....	3.08

132-077-33CCC MP is top of 1½-inch plastic pipe 1.0 ft above lsd.

Dec. 19, 1972..	36.46	Apr. 10.....	36.33	Aug. 16.....	36.50
Jan. 26, 1973..	36.36	May 10.....	36.26	Sept. 11.....	36.48
Feb. 15.....	36.46	June 13.....	36.35	Oct. 15.....	36.35
Mar. 21.....	36.31	July 13.....	36.51	Nov. 28.....	36.32

Depth to water, in feet below or (+) above land surface

133-075-07CDD MP is top of 1¼-inch plastic pipe 3.50 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Mar. 21, 1973..	114.19	June 13.....	113.90	Sept. 11.....	114.02
Apr. 10.....	114.22	July 12.....	113.81		
May 10.....	113.75	Aug. 13.....	113.85		

133-077-15BAA MP is top of 1¼-inch plastic pipe 2.40 ft above lsd.

Nov. 14, 1972..	16.30	Apr. 10.....	16.31	Sept. 11.....	16.85
Dec. 19.....	16.45	May 8.....	16.25	Oct. 11.....	16.79
Jan. 24, 1973..	16.59	June 12.....	16.36	Nov. 29.....	16.93
Feb. 15.....	16.62	July 12.....	16.45		
Mar. 22.....	16.36	Aug. 10.....	16.74		

133-078-04CBC MP is top of 1¼-inch plastic pipe 2.0 ft above lsd.

Oct. 28, 1971..	14.10	July 13.....	12.04	Apr. 10.....	12.68
Nov. 29.....	14.46	Aug. 8.....	12.04	May 15.....	12.59
Dec. 16.....	14.24	Aug. 31.....	12.33	June 12.....	12.56
Jan. 11, 1972..	14.63	Sept. 14.....	12.45	July 13.....	12.79
Feb. 15.....	14.45	Oct. 20.....	12.68	Aug. 13.....	12.90
Mar. 14.....	14.22	Nov. 14.....	13.03	Sept. 12.....	12.98
Apr. 4.....	13.85	Dec. 19.....	13.31	Oct. 16.....	13.16
Apr. 19.....	13.56	Jan. 24, 1973..	13.30	Nov. 28.....	13.09
May 16.....	12.29	Feb. 15.....	13.24		
June 15.....	12.17	Mar. 20.....	12.89		

133-078-06AAA MP is top of 1¼-inch plastic pipe 2.0 ft above lsd.

Oct. 28, 1971..	5.94	July 13.....	3.58	Apr. 10.....	5.63
Nov. 29.....	7.67	Aug. 8.....	3.81	May 15.....	5.35
Dec. 16.....	6.95	Aug. 31.....	4.57	June 12.....	5.33
Jan. 11, 1972..	7.05	Sept. 14.....	4.99	July 12.....	5.69
Feb. 15.....	6.78	Oct. 20.....	6.06	Aug. 13.....	6.09
Mar. 14.....	6.09	Nov. 14.....	6.74	Sept. 12.....	6.47
Apr. 4.....	5.42	Dec. 19.....	7.45	Oct. 16.....	6.81
Apr. 19.....	5.36	Jan. 24, 1973..	7.15	Nov. 28.....	6.54
May 16.....	4.64	Feb. 15.....	6.87		
June 15.....	3.96	Mar. 20.....	6.14		

133-078-36DCC MP is top of 1¼-inch plastic pipe 2.0 ft above lsd.

Oct. 28, 1971..	31.79	July 13.....	31.54	Mar. 21.....	31.51
Nov. 29.....	31.80	Aug. 8.....	31.49	Apr. 10.....	31.48
Jan. 11, 1972..	31.68	Aug. 31.....	31.66	May 15.....	31.52
Feb. 15.....	31.77	Sept. 14.....	31.62	June 12.....	31.62
Mar. 14.....	31.77	Oct. 20.....	31.61	July 13.....	31.75
Apr. 4.....	31.34	Nov. 14.....	31.60	Aug. 16.....	31.78
Apr. 19.....	31.45	Dec. 19.....	31.57	Sept. 12.....	31.72
May 16.....	31.35	Jan. 24, 1973..	31.55	Oct. 15.....	31.68
June 15.....	31.51	Feb. 15.....	31.69	Nov. 28.....	31.65

Depth to water, in feet below or (+) above land surface

134-074-10CCC MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
June 13, 1973..	5.86	Aug. 16.....	6.59	Oct. 19.....	5.77
July 12.....	6.19	Sept. 11.....	5.60	Nov. 28.....	5.92

134-074-15CBB MP is top of 2-inch steel casing 1.0 ft above lsd.

Nov. 13, 1972..	18.63	Apr. 10.....	18.43	Sept. 11.....	18.18
Dec. 18.....	18.53	May 10.....	18.38	Oct. 19.....	18.44
Jan. 26, 1973..	18.58	June 12.....	18.37	Nov. 28.....	18.50
Feb. 15.....	18.71	July 12.....	18.36		
Mar. 21.....	18.40	Aug. 16.....	18.50		

134-075-15BBB MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Nov. 13, 1972..	60.36	Apr. 10.....	60.25	Sept. 11.....	60.25
Dec. 18.....	60.02	May 10.....	60.24	Oct. 19.....	60.33
Jan. 26, 1973..	60.29	June 12.....	60.26	Nov. 29.....	60.11
Feb. 15.....	60.44	July 12.....	60.27		
Mar. 21.....	60.28	Aug. 16.....	60.28		

134-076-12DDD2 MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Oct. 28, 1971..	54.36	July 14.....	53.42	Mar. 21.....	53.55
Nov. 29.....	53.76	Aug. 8.....	53.60	Apr. 10.....	53.52
Dec. 16.....	54.15	Aug. 31.....	53.77	May 10.....	53.44
Jan. 11, 1972..	53.68	Sept. 14.....	53.71	June 12.....	53.14
Feb. 15.....	53.74	Oct. 19.....	53.35	July 12.....	53.40
Apr. 4.....	53.25	Nov. 13.....	53.77	Aug. 16.....	53.46
Apr. 19.....	53.77	Dec. 18.....	53.18	Sept. 11.....	53.51
May 16.....	53.61	Jan. 24, 1973..	53.55	Oct. 19.....	53.55
June 15.....	53.98	Feb. 15.....	53.79	Nov. 29.....	53.39

134-077-14DDD MP is top of 1½-inch plastic pipe 1.50 ft above lsd.

June 12, 1973..	192.25	Aug. 10.....	192.24	Nov. 29.....	192.13
June 26.....	192.08	Sept. 12.....	192.31		
July 13.....	192.32	Oct. 18.....	192.18		

134-077-22CCB1 MP is top of 1½-inch plastic pipe 1.25 ft above lsd.

June 26, 1973..	123.87	Aug. 10.....	124.05	Oct. 28.....	124.07
July 13.....	124.11	Sept. 12.....	124.17	Nov. 29.....	124.30

134-078-15DDD MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Nov. 14, 1972..	29.11	Apr. 10.....	29.44	Sept. 12.....	29.81
Dec. 19.....	29.25	May 15.....	29.40	Oct. 15.....	28.90
Jan. 24, 1973..	29.35	June 12.....	29.45	Nov. 28.....	29.90
Feb. 16.....	29.39	July 13.....	29.65		
Mar. 21.....	29.51	Aug. 10.....	29.68		



Depth to water, in feet below or (+) above land surface

135-074-06ADD MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Date	Water Level	Date	Water Level	Date	Water Level
June 13, 1973..	11.55	Aug. 16.....	12.40	Oct. 19.....	11.87
July 12.....	12.13	Sept. 11.....	12.41	Nov. 29.....	11.76

135-074-10BBB MP is top of 1½-inch plastic pipe 1.90 ft above lsd.

Sept. 22, 1971..	6.18	July 14.....	6.13	Apr. 10.....	5.73
Oct. 28.....	6.10	Aug. 8.....	6.15	May 10.....	5.69
Nov. 29.....	6.02	Aug. 31.....	6.19	June 26.....	6.06
Dec. 16.....	6.10	Sept. 14.....	6.49	July 12.....	6.37
Jan. 11, 1972..	6.16	Oct. 19.....	6.35	Aug. 16.....	6.52
Feb. 15.....	6.27	Nov. 13.....	6.28	Sept. 11.....	6.61
Apr. 4.....	5.78	Dec. 18.....	6.15	Oct. 19.....	6.24
Apr. 20.....	5.53	Jan. 26, 1973..	6.18	Nov. 29.....	6.22
May 16.....	5.28	Feb. 15.....	6.00		
June 15.....	5.87	Mar. 21.....	5.87		

135-074-20BAA MP is top of 1½-inch plastic pipe 2.70 ft above lsd.

Apr. 10, 1973..	Frozen	July 12.....	.41	Oct. 19.....	+ .75
May 10.....	+1.16	Aug. 16.....	.76	Nov. 28.....	Frozen
June 12.....	+ .39	Sept. 11.....	.26		

135-074-32BAA MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

June 13, 1973..	3.21	Aug. 16.....	4.11	Oct. 19.....	2.24
July 12.....	4.28	Sept. 11.....	3.54	Nov. 29.....	2.18

135-075-01DDD MP is top of 1½-inch plastic pipe 2.25 ft above lsd.

Oct. 28, 1971..	0.24	Aug. 31.....	.80	July 12.....	.78
May 16, 1972..	+ .57	Sept. 14.....	.92	Aug. 16.....	1.34
June 15.....	+ .01	Oct. 19.....	.71	Sept. 11.....	.82
July 14.....	.24	May 10, 1973..	+ .22	Oct. 19.....	.30
Aug. 8.....	.30	June 12.....	.28		

135-075-10BCC MP is top of 1½-inch plastic pipe 2.30 ft above lsd.

June 13, 1973..	7.88	Aug. 16.....	8.26	Oct. 19.....	8.24
July 12.....	8.18	Sept. 11.....	8.33	Nov. 29.....	8.16

Depth to water, in feet below or (+) above land surface

135-076-19CCC1 MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Oct. 28, 1971..	59.10	July 14.....	58.27	Apr. 10.....	58.44
Nov. 29.....	58.60	Aug. 8.....	58.45	May 8.....	58.35
Dec. 16.....	58.95	Aug. 31.....	58.66	June 5.....	58.64
Jan. 11, 1972..	58.45	Sept. 14.....	58.61	July 12.....	58.52
Feb. 15.....	58.55	Oct. 19.....	58.49	Aug. 10.....	58.56
Mar. 14.....	58.52	Nov. 13.....	58.93	Sept. 10.....	58.76
Apr. 4.....	58.80	Dec. 21.....	58.22	Oct. 18.....	58.46
Apr. 20.....	58.77	Jan. 24, 1973..	58.44	Nov. 29.....	58.66
May 20.....	58.40	Feb. 15.....	58.87		
June 15.....	58.76	Mar. 20.....	58.65		

135-076-30DAA2 MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Nov. 13, 1972..	80.65	Apr. 10.....	80.40	Sept. 10.....	81.05
Dec. 21.....	80.21	May 8.....	80.32	Oct. 18.....	80.60
Jan. 24, 1973..	80.37	June 21.....	80.99	Nov. 28.....	80.67
Feb. 15.....	80.84	July 12.....	80.61		
Mar. 20.....	80.62	Aug. 10.....	80.90		

135-077-21CDD MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Dec. 21, 1972..	86.73	Apr. 10.....	86.85	Aug. 8.....	86.66
Jan. 24, 1973..	86.77	May 8.....	86.62	Sept. 10.....	86.89
Feb. 15.....	87.35	June 21.....	86.85	Oct. 18.....	86.49
Mar. 20.....	86.56	July 12.....	86.68	Nov. 29.....	86.49

135-078-11CCD MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

June 12, 1973..	7.50	Aug. 8.....	7.52	Oct. 15.....	7.56
July 12.....	7.65	Sept. 10.....	7.40	Nov. 28.....	7.27

135-078-14CDC MP is top of 1½-inch plastic pipe 2.20 ft above lsd.

Jan. 24, 1973..	Frozen	May 8.....	+1.20	Aug. 8.....	+ .72
Mar. 21.....	Frozen	June 12.....	+1.10	Sept. 10.....	+ .71
Apr. 10.....	+1.26	July 12.....	+ .87		Well destroyed

135-079-24AAA MP is top of 1½-inch plastic pipe 1.50 ft above lsd.

Oct. 28, 1971..	49.16	July 15.....	47.34	Apr. 10.....	49.59
Nov. 29.....	49.53	Aug. 8.....	47.47	May 8.....	49.31
Dec. 16.....	49.75	Aug. 31.....	48.27	June 12.....	49.20
Jan. 11, 1972..	49.75	Sept. 14.....	48.55	July 12.....	49.79
Feb. 15.....	49.74	Oct. 20.....	49.28	Aug. 8.....	50.16
Mar. 14.....	49.47	Nov. 13.....	49.62	Sept. 10.....	50.44
Apr. 4.....	49.06	Dec. 19.....	49.73	Oct. 15.....	50.62
Apr. 19.....	48.87	Jan. 24, 1973..	49.95	Nov. 28.....	50.54
May 18.....	48.24	Feb. 15.....	50.08		
June 15.....	47.67	Mar. 21.....	49.82		

Depth to water, in feet below or (+) above land surface

136-075-14AAA MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Date	Water level	Date	Water level	Date	Water level
Oct. 28, 1971..	36.29	July 14.....	36.27	Mar. 21.....	36.07
Nov. 29.....	36.31	Aug. 8.....	36.14	Apr. 10.....	36.14
Dec. 16.....	36.30	Aug. 31.....	36.09	May 10.....	36.15
Jan. 11, 1972..	36.25	Sept. 14.....	36.26	June 12.....	36.22
Feb. 15.....	36.29	Oct. 19.....	36.11	July 12.....	36.36
Apr. 4.....	36.40	Nov. 13.....	36.16	Aug. 16.....	36.56
Apr. 20.....	36.25	Dec. 18.....	36.09	Sept. 11.....	36.43
May 16.....	36.15	Jan. 26, 1973..	36.11	Oct. 19.....	36.36
June 15.....	36.24	Feb. 15.....	36.19	Nov. 29.....	36.36

136-075-34CBD MP is top of 1½-inch plastic pipe 2.25 ft above lsd.

June 13, 1973..	15.95	Aug. 16.....	16.24	Oct. 19.....	15.31
July 12.....	16.34	Sept. 11.....	15.69	Nov. 29.....	15.32

136-076-07BCC MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Nov. 21, 1972..	4.21	Apr. 10.....	3.56	Sept. 11.....	5.71
Dec. 21.....	4.33	May 10.....	3.49	Oct. 19.....	5.82
Jan. 26, 1973..	4.30	June 11.....	4.01	Nov. 29.....	5.93
Feb. 15.....	4.33	July 12.....	4.66		
Mar. 20.....	3.80	Aug. 10.....	5.35		

136-076-07CBC MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Nov. 21, 1972..	4.38	Apr. 10.....	3.60	Sept. 11.....	5.84
Dec. 21.....	4.51	May 10.....	3.65	Oct. 19.....	5.95
Jan. 26, 1973..	4.52	June 11.....	5.20	Nov. 29.....	6.10
Feb. 15.....	4.53	July 12.....	4.87		
Mar. 20.....	3.97	Aug. 10.....	5.49		

136-077-16AAD MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Nov. 16, 1972..	14.46	Apr. 10.....	14.21	Sept. 11.....	16.72
Dec. 17.....	14.46	May 10.....	14.17	Oct. 19.....	16.88
Jan. 26, 1973..	14.65	June 12.....	15.80	Nov. 29.....	17.10
Feb. 15.....	14.87	July 13.....	16.20		
Mar. 22.....	14.40	Aug. 13.....	16.76		

136-077-16ADD MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Nov. 16, 1972..	12.20	Apr. 10.....	12.00	Sept. 11.....	14.39
Dec. 17.....	12.23	May 10.....	12.03	Oct. 19.....	14.60
Jan. 26, 1973..	12.29	June 12.....	13.20	Nov. 29.....	14.80
Feb. 15.....	12.66	July 13.....	13.61		
Mar. 22.....	12.15	Aug. 13.....	14.40		

Depth to water, in feet below or (+) above land surface

136-077-29BBB2		MP is top of 3-inch plastic pipe 1.25 ft above 1st.	
Date	Water level	Date	Water level
Apr. 26, 1965..	21.28	Mar. 20.....	19.81
Apr. 30.....	21.27	Mar. 25.....	19.77
May 5.....	21.27	Mar. 30.....	19.77
May 10.....	21.27	Apr. 5.....	19.57
May 15.....	21.26	Apr. 10.....	19.48
May 20.....	21.26	Apr. 15.....	19.42
May 25.....	21.26	Apr. 20.....	19.35
May 31.....	21.02	Apr. 25.....	19.18
June 5.....	21.10	Apr. 30.....	19.13
June 10.....	21.07	May 5.....	19.10
June 15.....	21.12	May 10.....	18.97
June 20.....	21.00	May 15.....	18.82
June 28.....	22.36	May 20.....	18.81
June 30.....	21.32	May 25.....	18.75
Sept. 24.....	21.13	May 31.....	18.72
Oct. 5.....	21.05	June 5.....	18.68
Nov. 5.....	21.08	June 10.....	18.65
Nov. 25.....	21.26	June 15.....	18.67
Nov. 30.....	21.25	June 20.....	18.64
Dec. 5.....	21.22	June 25.....	18.62
Dec. 10.....	21.19	June 30.....	19.13
Dec. 15.....	21.19	July 5.....	18.87
Dec. 20.....	21.20	July 10.....	22.58
Dec. 25.....	21.15	July 14.....	27.24
Dec. 31.....	21.20	July 15.....	21.93
Jan. 4, 1966..	21.47	July 20.....	19.57
Feb. 4.....	22.60	July 31.....	19.98
Mar. 18.....	22.36	Aug. 5.....	29.16
Apr. 12.....	21.32	Aug. 10.....	23.88
May 10.....	19.93	Aug. 15.....	21.30
June 10.....	21.13	Aug. 20.....	19.78
July 14.....	22.55	Aug. 25.....	19.57
Aug. 19.....	21.36	Aug. 31.....	19.52
Sept. 30.....	19.93	Sept. 5.....	19.41
Oct. 14.....	20.00	Sept. 10.....	19.51
Nov. 14.....	19.96	Sept. 15.....	19.45
Dec. 12.....	20.02	Sept. 20.....	19.45
Jan. 9, 1967..	20.04	Sept. 25.....	19.45
Feb. 8.....	20.04	Sept. 30.....	19.45
Mar. 9.....	19.99	Oct. 5.....	19.42
Apr. 20.....	19.18	Oct. 10.....	19.45
May 31.....	18.87	Oct. 15.....	19.43
June 28.....	22.03	Oct. 20.....	19.45
July 25.....	23.67	Oct. 25.....	19.48
Aug. 21.....	21.35	Oct. 31.....	19.46
Sept. 18.....	19.73	Nov. 5.....	19.50
Oct. 18.....	19.73	Nov. 10.....	19.51
Nov. 29.....	19.70	Nov. 15.....	19.50
Dec. 26.....	19.68	Nov. 20.....	19.51
Jan. 25, 1968..	19.86	Nov. 25.....	19.50
Jan. 31.....	19.90	Nov. 30.....	19.50
Jan. 5.....	19.94	Dec. 5.....	19.53
Feb. 10.....	19.96	Dec. 10.....	19.56
Feb. 13.....	19.99	Dec. 15.....	19.48
Feb. 20.....	20.03	Dec. 20.....	19.47
Feb. 25.....	20.03	Dec. 25.....	19.51
Feb. 29.....	20.07	Dec. 31.....	19.52
Mar. 5.....	20.02	Jan. 5, 1969..	19.52
Mar. 10.....	20.00	Jan. 10.....	19.55
Mar. 15.....	19.95	Jan. 13.....	19.60
Apr. 12.....	19.95	Feb. 12.....	19.74
Apr. 30.....	19.77	Feb. 15.....	19.72
May 5.....	19.69	Feb. 20.....	19.76
May 10.....	19.57	Feb. 25.....	19.73
May 15.....	19.48	Feb. 28.....	19.72
May 20.....	19.42	Mar. 5.....	19.75
May 25.....	19.35	Mar. 10.....	19.78
May 31.....	19.18	Mar. 15.....	19.78
June 5.....	19.13	Mar. 20.....	19.81
June 10.....	19.10	Mar. 25.....	19.81
June 15.....	18.97	Mar. 27.....	19.84
June 20.....	18.82	Mar. 29.....	18.25
June 28.....	18.81	Mar. 31.....	18.19
June 30.....	18.75	Apr. 3.....	18.21
July 4.....	18.72	Apr. 6.....	18.23
July 5.....	18.68	Apr. 9.....	18.25
July 10.....	18.65	Apr. 10.....	18.32
July 15.....	18.67	Apr. 15.....	18.35
July 20.....	18.64	Apr. 20.....	18.28
July 25.....	18.62	Apr. 25.....	18.22
July 30.....	19.13	Apr. 28.....	18.21
July 5.....	18.87	Apr. 29.....	18.21
July 10.....	22.58	Apr. 30.....	18.16
July 14.....	27.24	Apr. 31.....	18.11
July 15.....	21.93	Apr. 3.....	18.11
July 20.....	19.57	Apr. 6.....	18.11
July 31.....	19.98	Apr. 9.....	18.02
Aug. 5.....	29.16	Apr. 10.....	18.03
Aug. 10.....	23.88	Apr. 13.....	18.08
Aug. 15.....	21.30	Apr. 15.....	19.83
Aug. 20.....	19.78	Apr. 18.....	19.66
Aug. 25.....	19.57	Apr. 20.....	18.99
Aug. 31.....	19.52	Apr. 25.....	18.86
Sept. 5.....	19.41	Apr. 28.....	18.83
Sept. 10.....	19.51	Apr. 30.....	18.80
Sept. 15.....	19.45	Apr. 3.....	18.82
Sept. 20.....	19.45	Apr. 6.....	18.80
Sept. 25.....	19.45	Apr. 9.....	18.74
Sept. 30.....	19.45	Apr. 12.....	18.77
Oct. 5.....	19.42	Apr. 15.....	18.75
Oct. 10.....	19.45	Apr. 18.....	18.78
Oct. 15.....	19.43	Apr. 21.....	18.78
Oct. 20.....	19.45	Apr. 24.....	18.78
Oct. 25.....	19.48	Apr. 27.....	18.78
Oct. 31.....	19.46	Apr. 30.....	18.78
Nov. 5.....	19.50	May 3.....	18.70
Nov. 10.....	19.50	May 6.....	18.70
Nov. 15.....	19.50	May 9.....	18.75
Nov. 20.....	19.51	May 12.....	18.75
Nov. 25.....	19.50	May 15.....	18.70
Nov. 30.....	19.50	May 18.....	18.70
Dec. 5.....	19.53	May 21.....	18.71
Dec. 10.....	19.56	May 24.....	18.80
Dec. 15.....	19.48	May 27.....	18.80
Dec. 20.....	19.47	May 30.....	18.80
Dec. 25.....	19.51	May 31.....	18.80
Dec. 31.....	19.52	Jun. 3.....	18.80
Jan. 5, 1970..	19.52	Jun. 6.....	18.26
Jan. 10.....	19.55	Jun. 9.....	18.26
Jan. 13.....	19.60	Jun. 12.....	18.21

Depth to water, in feet below or (+) above land surface

136-077-29BBB2--Continued

Date	Water Level	Date	Water Level	Date	Water Level
Apr. 30, 1970..	17.74	Mar. 10.....	18.26	Jan. 10.....	18.04
May 5.....	17.47	Mar. 15.....	18.20	Jan. 15.....	18.12
May 10.....	17.19	Mar. 20.....	18.19	Jan. 20.....	18.11
May 15.....	17.06	Mar. 25.....	17.96	Jan. 25.....	18.15
May 20.....	16.97	Mar. 31.....	17.70	Jan. 31.....	18.13
May 25.....	16.90	Apr. 5.....	17.70	Feb. 5.....	18.15
May 31.....	16.93	Apr. 10.....	17.52	Feb. 10.....	18.17
June 5.....	17.73	Apr. 15.....	17.44	Feb. 15.....	18.18
June 10.....	18.80	Apr. 20.....	17.40	Feb. 20.....	18.23
June 15.....	17.24	Apr. 25.....	17.30	Feb. 25.....	18.24
June 20.....	20.39	Apr. 30.....	17.23	Feb. 29.....	18.24
June 25.....	17.00	May 5.....	17.22	Mar. 5.....	18.24
June 30.....	16.85	May 10.....	17.22	Mar. 10.....	18.30
July 5.....	20.71	May 15.....	17.25	Mar. 15.....	18.06
July 10.....	26.78	May 20.....	17.23	Mar. 20.....	17.92
July 15.....	25.75	May 25.....	17.21	Mar. 25.....	17.69
July 20.....	24.74	May 31.....	17.32	Mar. 31.....	17.50
July 25.....	19.81	June 5.....	17.32	Apr. 5.....	17.39
July 31.....	20.66	June 10.....	17.32	Apr. 10.....	17.29
Aug. 5.....	18.39	June 15.....	17.22	Apr. 15.....	17.11
Aug. 21.....	19.80	June 20.....	17.01	Apr. 20.....	17.08
Aug. 25.....	19.04	June 25.....	16.92	Apr. 25.....	17.00
Aug. 31.....	18.59	June 30.....	16.87	Apr. 30.....	16.94
Sept. 5.....	18.41	July 5.....	16.92	May 5.....	16.83
Sept. 10.....	18.27	July 10.....	17.28	May 10.....	16.76
Sept. 15.....	18.27	July 15.....	19.08	May 15.....	16.64
Sept. 20.....	18.27	July 20.....	17.32	May 20.....	16.63
Sept. 25.....	18.06	July 25.....	19.08	May 25.....	16.67
Sept. 30.....	18.07	July 31.....	19.08	May 31.....	16.68
Oct. 5.....	18.06	Aug. 5.....	19.08	June 5.....	16.84
Oct. 10.....	18.03	Aug. 10.....	19.08	June 10.....	16.94
Oct. 15.....	18.04	Aug. 15.....	19.08	June 15.....	16.94
Oct. 20.....	18.04	Aug. 20.....	19.08	June 20.....	16.95
Oct. 25.....	18.00	Aug. 25.....	19.43	June 25.....	16.91
Oct. 31.....	18.00	Aug. 31.....	18.45	June 30.....	19.04
Nov. 5.....	18.00	Sept. 5.....	18.15	July 5.....	19.04
Nov. 10.....	18.01	Sept. 10.....	18.12	July 10.....	17.75
Nov. 15.....	18.08	Sept. 15.....	18.09	July 15.....	17.50
Nov. 20.....	18.13	Sept. 20.....	18.09	July 20.....	18.63
Nov. 25.....	18.18	Sept. 25.....	18.05	July 25.....	17.80
Nov. 29.....	18.18	Sept. 30.....	18.02	July 31.....	25.13
Dec. 7.....	17.93	Oct. 5.....	17.93	Aug. 5.....	31.93
Dec. 10.....	17.96	Oct. 10.....	17.94	Aug. 10.....	31.48
Dec. 15.....	17.96	Oct. 15.....	17.94	Aug. 15.....	24.98
Dec. 20.....	17.96	Oct. 20.....	17.94	Aug. 20.....	19.99
Dec. 25.....	17.97	Oct. 25.....	17.95	Aug. 25.....	18.99
Dec. 31.....	18.01	Oct. 31.....	17.91	Aug. 31.....	18.50
Jan. 5, 1971..	18.05	Nov. 5.....	17.95	Sept. 5.....	18.37
Jan. 10.....	18.03	Nov. 10.....	17.98	Sept. 10.....	18.13
Jan. 15.....	18.07	Nov. 15.....	17.98	Sept. 15.....	18.11
Jan. 20.....	18.06	Nov. 20.....	17.94	Sept. 20.....	18.10
Jan. 25.....	18.07	Nov. 25.....	17.94	Sept. 25.....	18.05
Jan. 31.....	18.10	Nov. 30.....	17.97	Sept. 30.....	18.04
Feb. 5.....	18.10	Dec. 5.....	17.99	Oct. 5.....	18.04
Feb. 10.....	18.13	Dec. 10.....	17.95	Oct. 10.....	17.93
Feb. 15.....	18.14	Dec. 15.....	17.96	Oct. 15.....	17.97
Feb. 20.....	18.19	Dec. 20.....	18.00	Oct. 20.....	17.98
Feb. 25.....	18.18	Dec. 25.....	18.04	Oct. 25.....	17.97
Feb. 28.....	18.20	Dec. 31.....	18.04	Oct. 31.....	17.93
Mar. 5.....	18.24	Jan. 5, 1972..	18.06	Nov. 5.....	17.93

Depth to water, in feet below or (+) above land surface

136-077-29B882--Continued

Date	Water level	Date	Water level	Date	Water level
Nov. 10, 1972..	17.93	Feb. 28.....	18.12	June 15.....	23.35
Nov. 15.....	17.94	Mar. 5.....	18.05	June 20.....	19.11
Nov. 20.....	17.96	Mar. 10.....	17.93	June 25.....	18.60
Nov. 25.....	17.96	Mar. 15.....	17.75	June 30.....	18.47
Nov. 30.....	17.95	Mar. 20.....	17.76	July 5.....	18.41
Dec. 10.....	17.96	Mar. 25.....	17.72	July 10.....	24.21
Dec. 15.....	17.99	Mar. 31.....	17.70	July 15.....	29.62
Dec. 20.....	17.98	Apr. 5.....	17.68	July 20.....	30.02
Dec. 25.....	17.98	Apr. 10.....	17.67	July 25.....	30.40
Dec. 31.....	17.97	Apr. 15.....	17.64	July 30.....	29.78
Jan. 5, 1973..	17.97	Apr. 20.....	17.56	Aug. 5.....	23.67
Jan. 10.....	18.01	Apr. 25.....	17.61	Aug. 10.....	20.60
Jan. 15.....	18.01	Apr. 30.....	17.61	Aug. 15.....	19.97
Jan. 20.....	18.01	May 5.....	17.60	Aug. 20.....	19.62
Jan. 25.....	18.01	May 10.....	17.64	Aug. 25.....	19.38
Jan. 31.....	18.03	May 15.....	18.49	Aug. 30.....	19.30
Feb. 5.....	18.05	May 20.....	17.84	Sept. 5.....	19.16
Feb. 10.....	18.06	May 25.....	17.85	Sept. 10.....	19.14
Feb. 15.....	18.12	May 30.....	19.34	Sept. 15.....	19.20
Feb. 20.....	18.12	June 5.....	24.42	Sept. 20.....	19.20
Feb. 25.....	18.12	June 10.....	26.18	Sept. 25.....	19.24

136-078-06BCB MP is top of 1½-inch plastic pipe 3.0 ft above lsd.


June 12, 1973..	26.86	Aug. 8.....	26.76	Oct. 15.....	26.93
July 12.....	27.30	Sept. 10.....	26.97	Nov. 28.....	26.80

136-078-07BDB MP is top of 1½-inch plastic pipe 2.0 ft above lsd.

Oct. 28, 1971..	68.50	July 15.....	65.58	Apr. 10.....	69.65
Nov. 29.....	69.27	Aug. 8.....	65.54	May 10.....	69.60
Dec. 16.....	69.60	Aug. 31.....	66.55	June 12.....	69.00
Jan. 11, 1972..	69.14	Sept. 14.....	67.18	July 12.....	69.97
Feb. 15.....	68.40	Oct. 19.....	69.42	Aug. 8.....	70.58
Mar. 14.....	68.22	Nov. 13.....	69.57	Sept. 10.....	71.21
Apr. 4.....	67.96	Dec. 11.....	69.99	Oct. 15.....	71.57
Apr. 19.....	67.79	Jan. 24, 1973..	69.17	Nov. 28.....	70.76
May 18.....	67.48	Feb. 15.....	69.32		
June 15.....	66.47	Mar. 20.....	69.31		

TABLE 3.--Logs of wells and test holes

EXPLANATION



Clay or claystone



Silt or siltstone



Gravel




Shale



Lignite



Till



Sand or sandstone

Potential given in millivolts (MV)

Resistance in ohms.

Geophysical logs are uncalibrated.

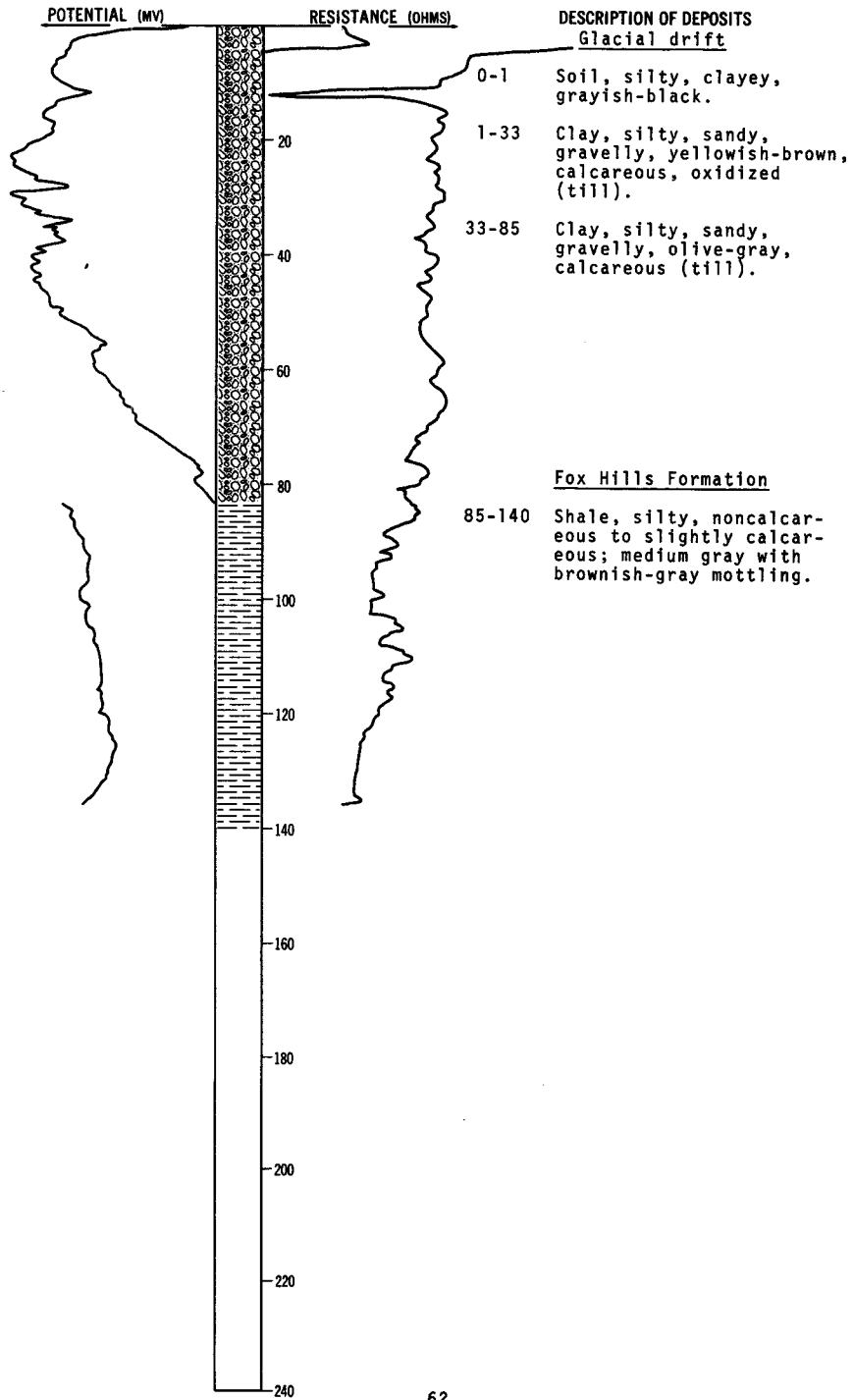
Depths shown are in feet below land surface.

LOCATION: 129-074-05BBB

DATE DRILLED: September 1971

ALTITUDE: 1900  
(FT, MSL)

DEPTH: 140  
(FT)



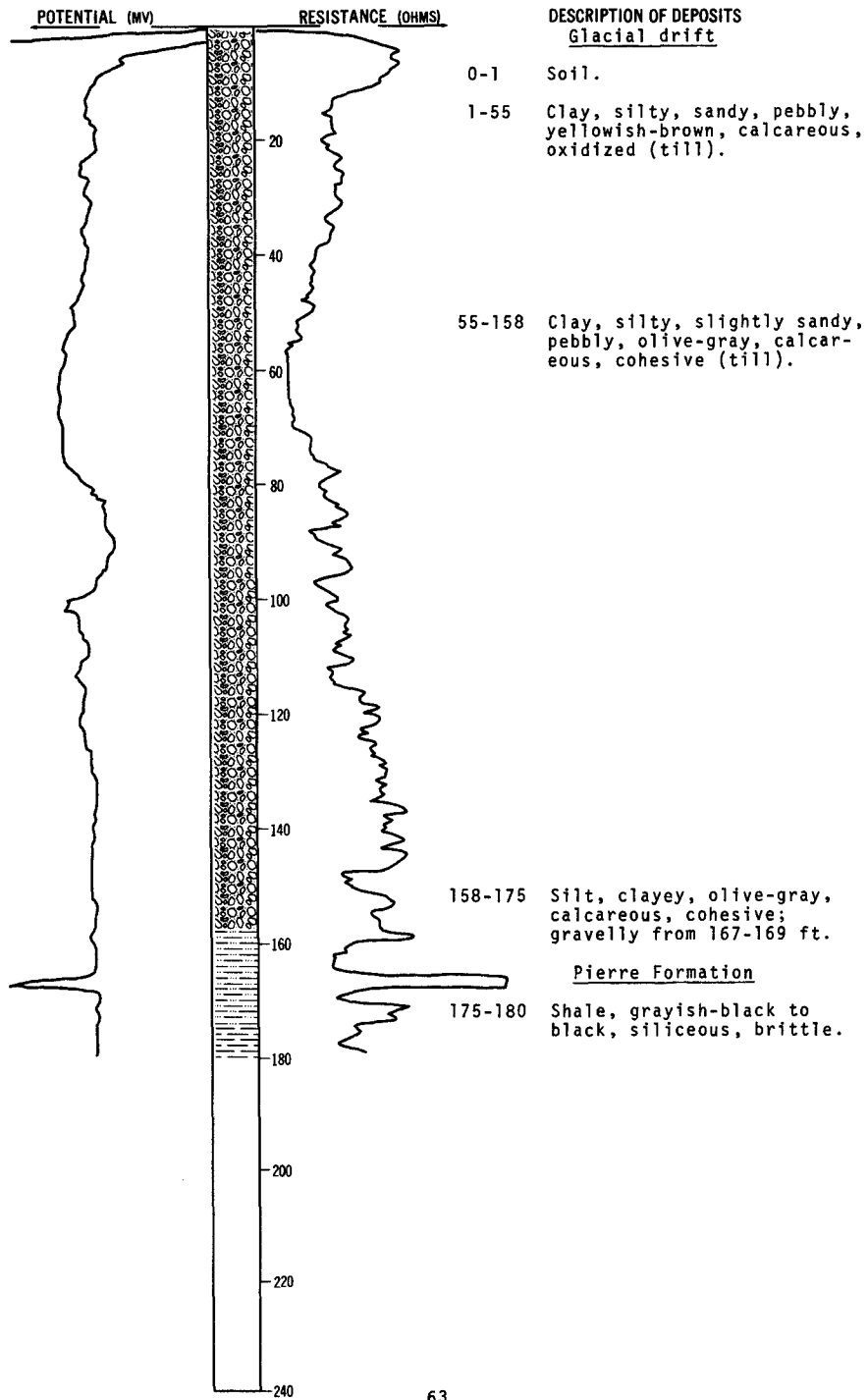


LOCATION: 129-074-21BCC

DATE DRILLED: September 1971

ALTITUDE: 1895  
(FT, MSL)

DEPTH: 180  
(FT)

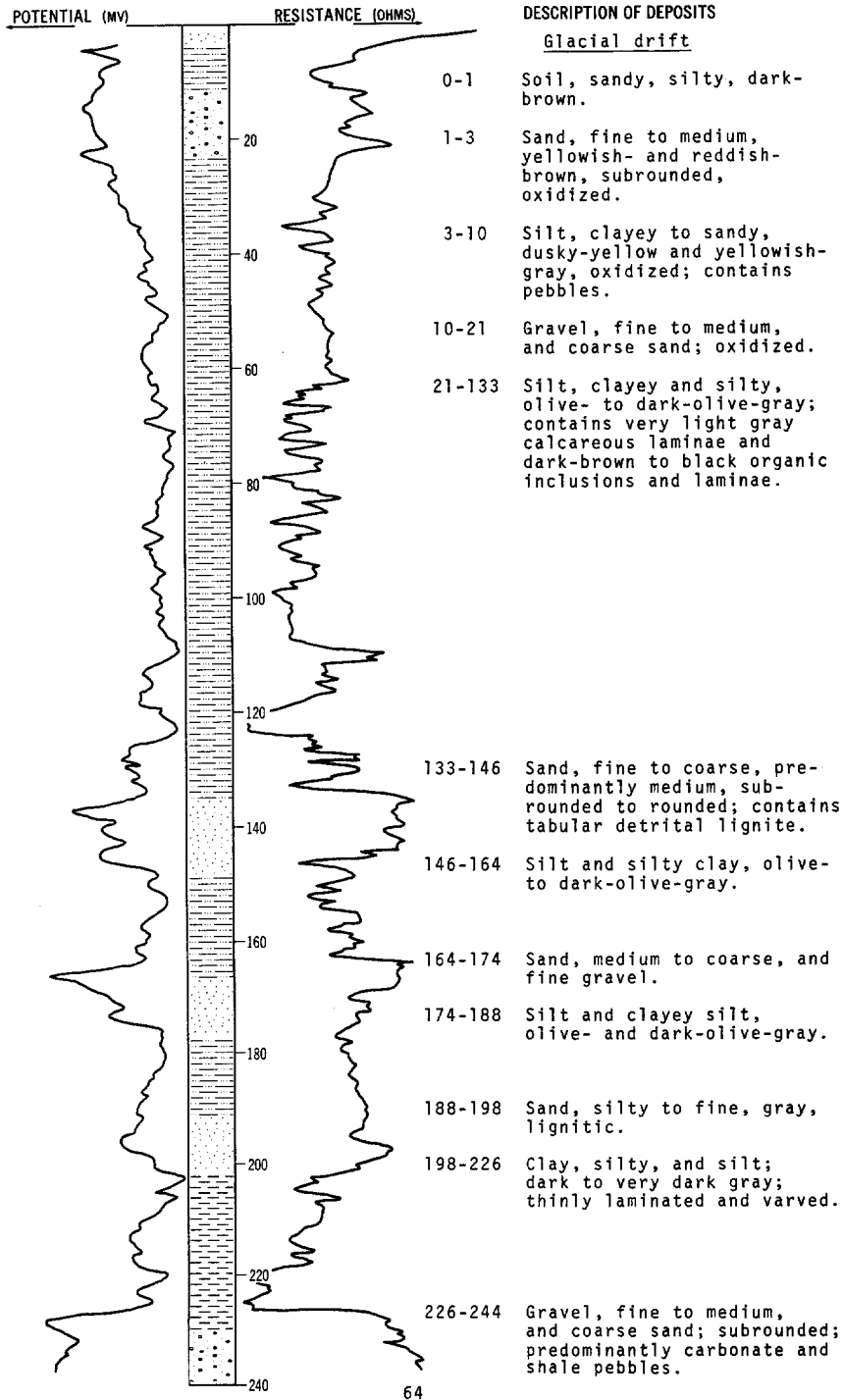


LOCATION: 129-075-05BBB

DATE DRILLED: November 1972

ALTITUDE: 1803  
(FT, MSL)

DEPTH: 360  
(FT)

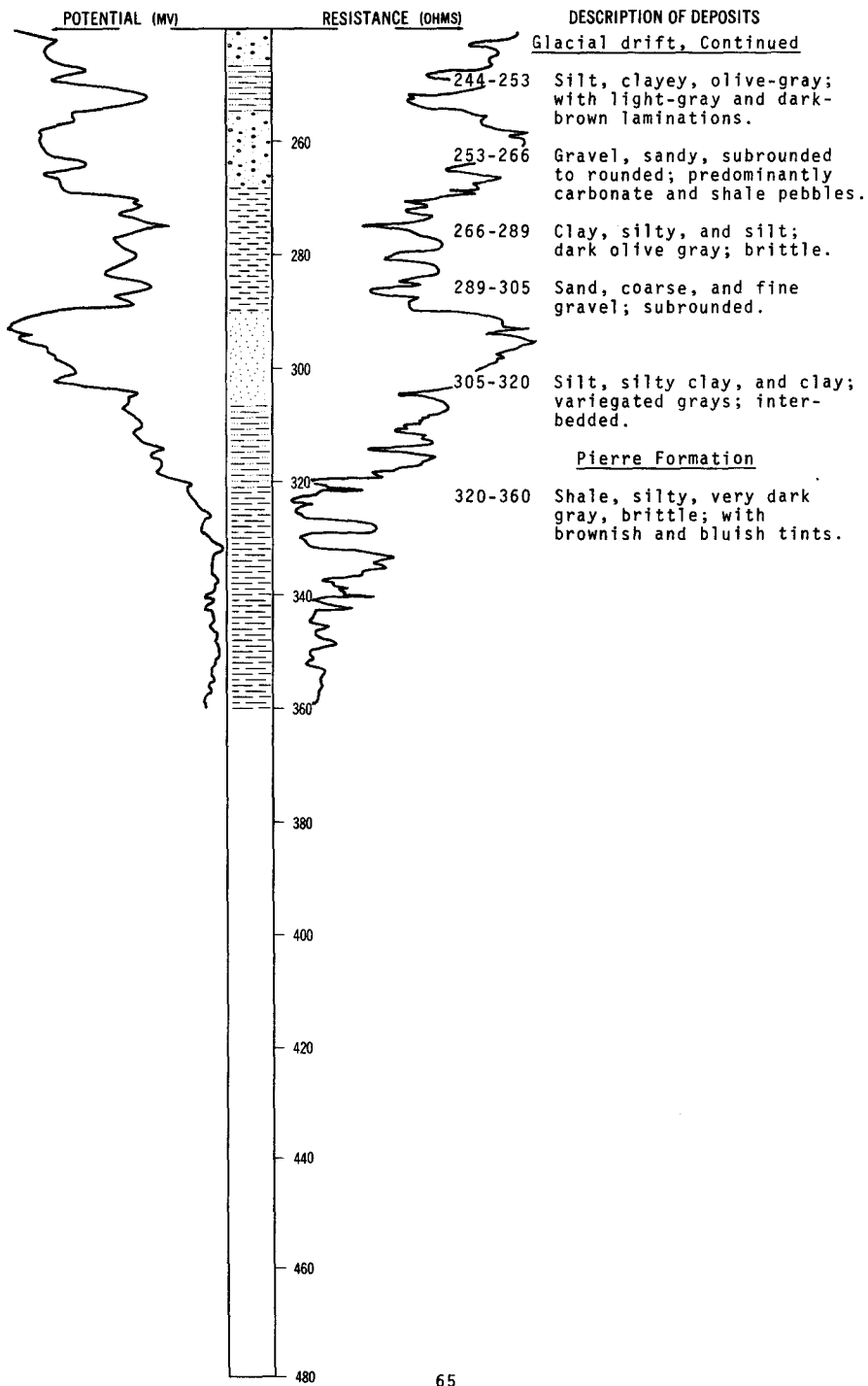


LOCATION: 129-075-05BBB

DATE DRILLED: November 1972

ALTITUDE: 1803  
(FT, MSL)

DEPTH: 360  
(FT)

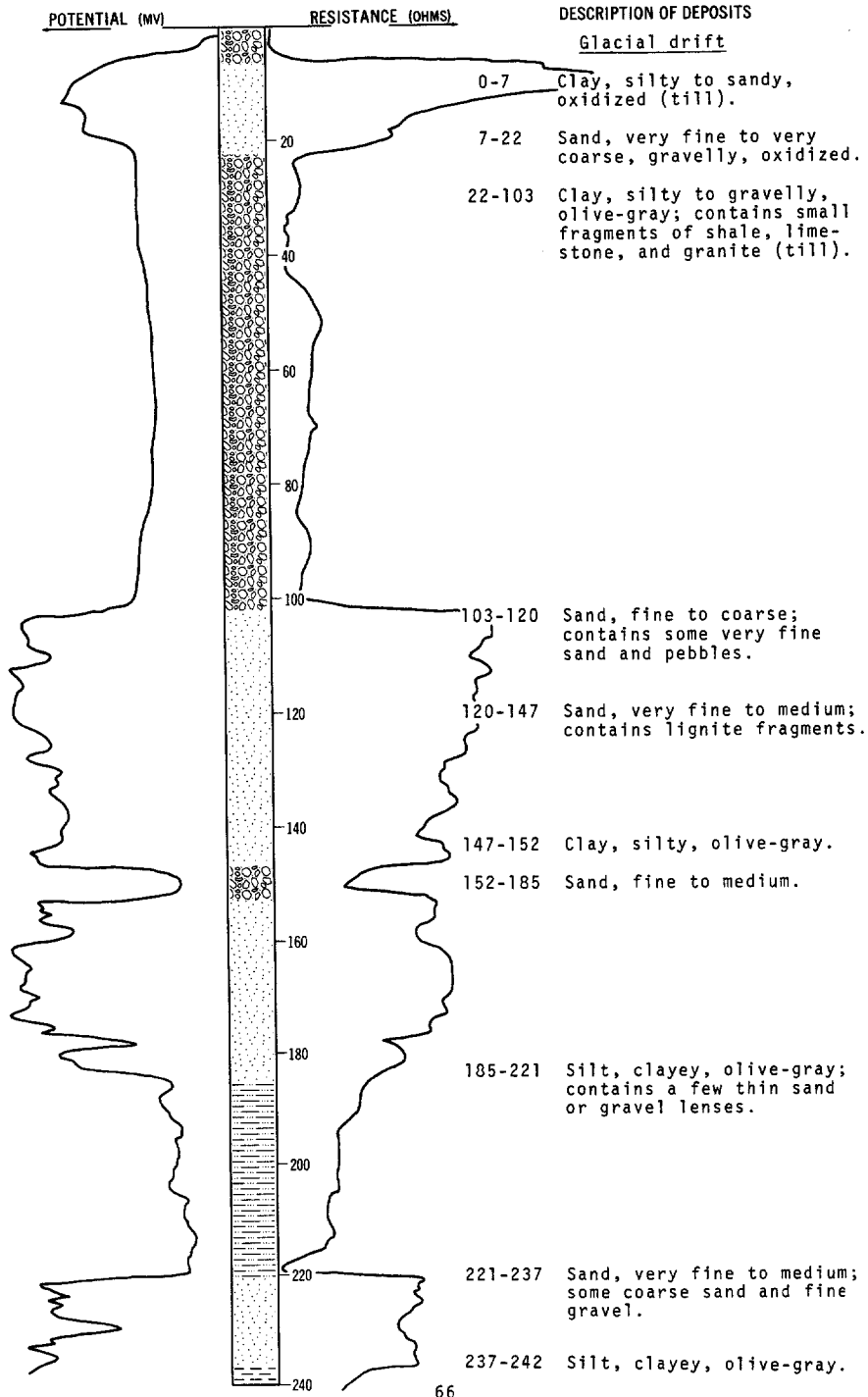


LOCATION: 129-075-05CBC

DATE DRILLED: June 1973

ALTITUDE: 1807  
(FT, MSL)

DEPTH: 375  
(FT)



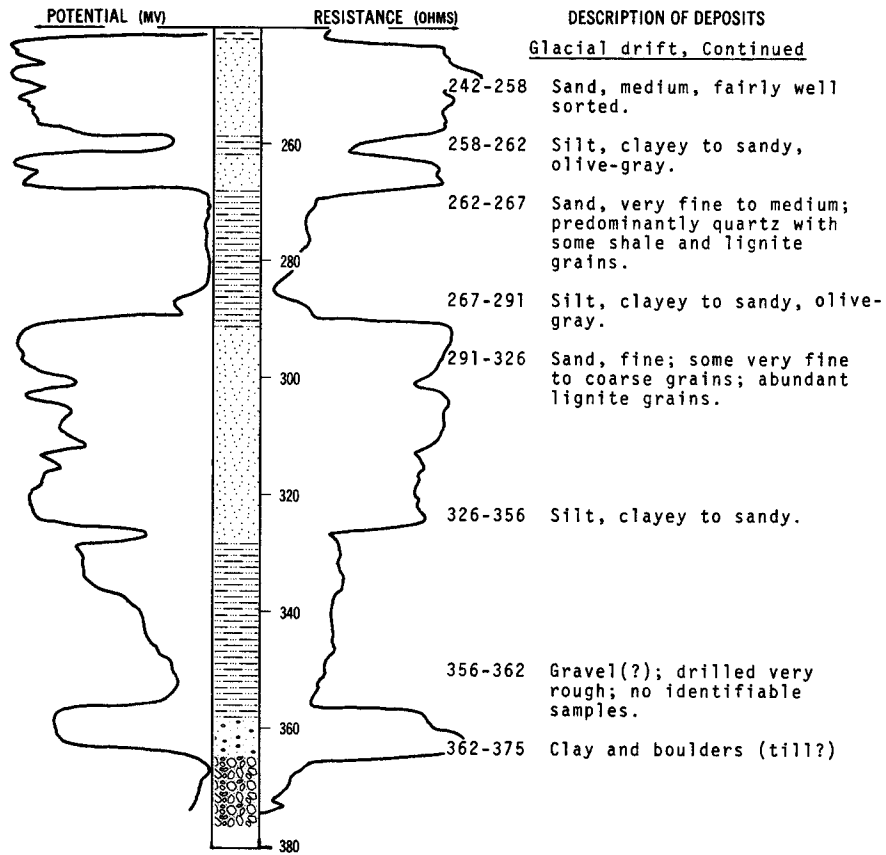
NDSWC 8688, Continued

LOCATION: 129-075-05CBC

DATE DRILLED: June 1973

ALTITUDE: 1807  
(FT, MSL)

DEPTH: 375  
(FT)



129-075-09DCD  
(Log from J. Thurn)

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
	Dirt, black-----	2	2
	Clay, yellow-----	37	39
	Sand-----	3	42

129-075-18B  
(Log from J. Thurn)

Altitude:

Date drilled: November 1973

Dirt, black-----	2	2
Clay, yellow-----	21	23
Clay, blue-----	31	54

129-075-18BDD  
(Log from J. Thurn)

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
	Dirt, black-----	6	6
	Sand-----	14	20
	Clay-----	10	30
	Sand-----	5	35
	Sand and clay-----	11	46

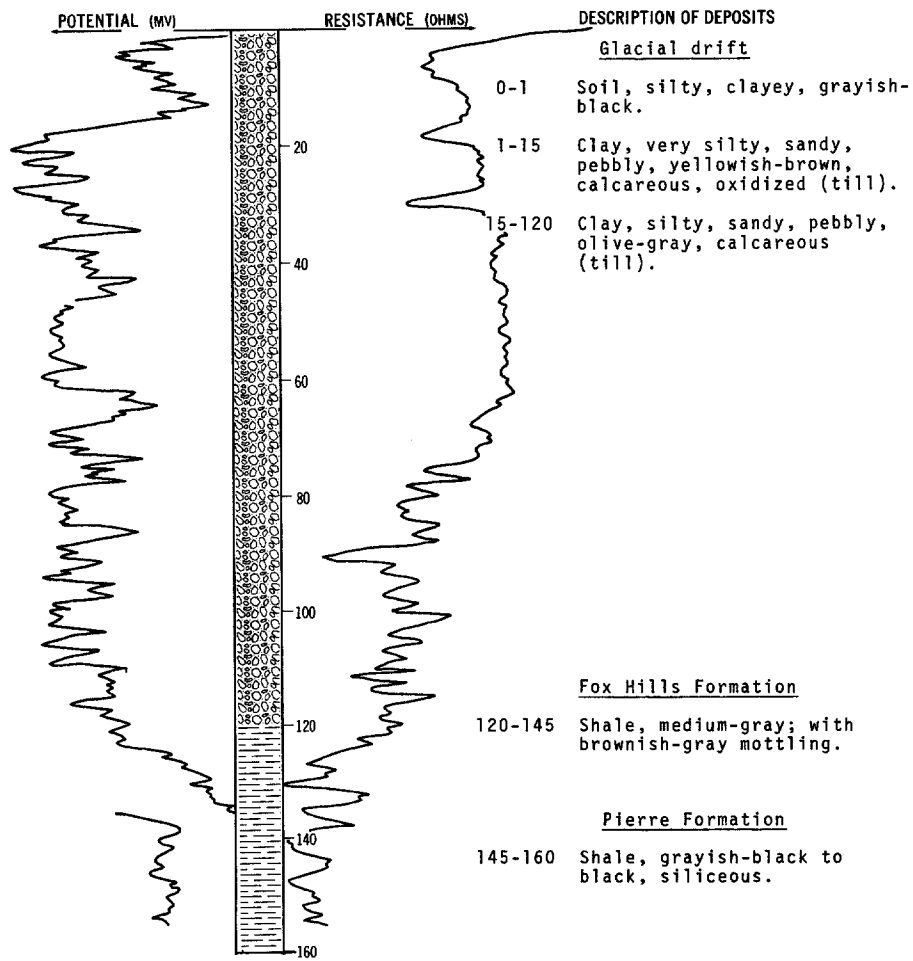
NDSWC 8153

LOCATION: 129-075-25DDD

DATE DRILLED: September 1971

ALTITUDE: 1860  
(FT, MSL)

DEPTH: 160  
(FT)

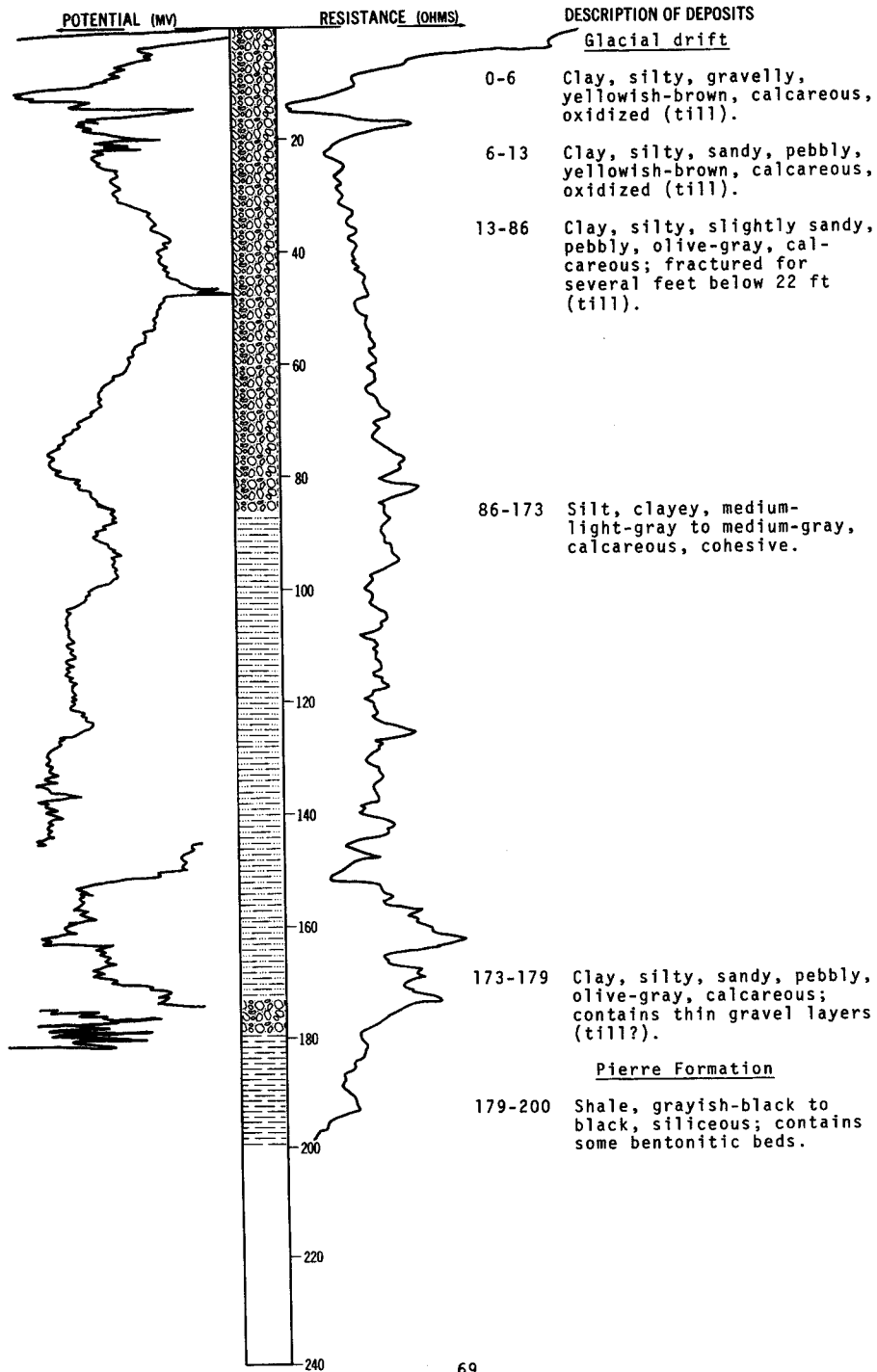


LOCATION: 129-075-26DDA

DATE DRILLED: September 1971

ALTITUDE: 1790  
(FT, MSL)

DEPTH: 200  
(FT)



129-075-27CDB  
NDSWC 8155

Altitude: 1795 ft

Date drilled: September 1971

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, silty, clayey, grayish-black-----	1	1
	Clay, very silty, pale-yellowish-brown, calcareous, oxidized-----	28	29
	Clay, very silty, olive-gray, calcareous; contains gravel lenses-----	4	33
	Clay, silty, sandy, pebbly, olive-gray (till)	19	52
	Clay, silty, calcareous; olive gray with dark-greenish-gray mottling-----	7	59
	Clay, silty, sandy, pebbly, olive-gray, calcareous (till)-----	27	86
Pierre Formation:			
	Shale, grayish-black to black, siliceous; locally bentonitic-----	14	100

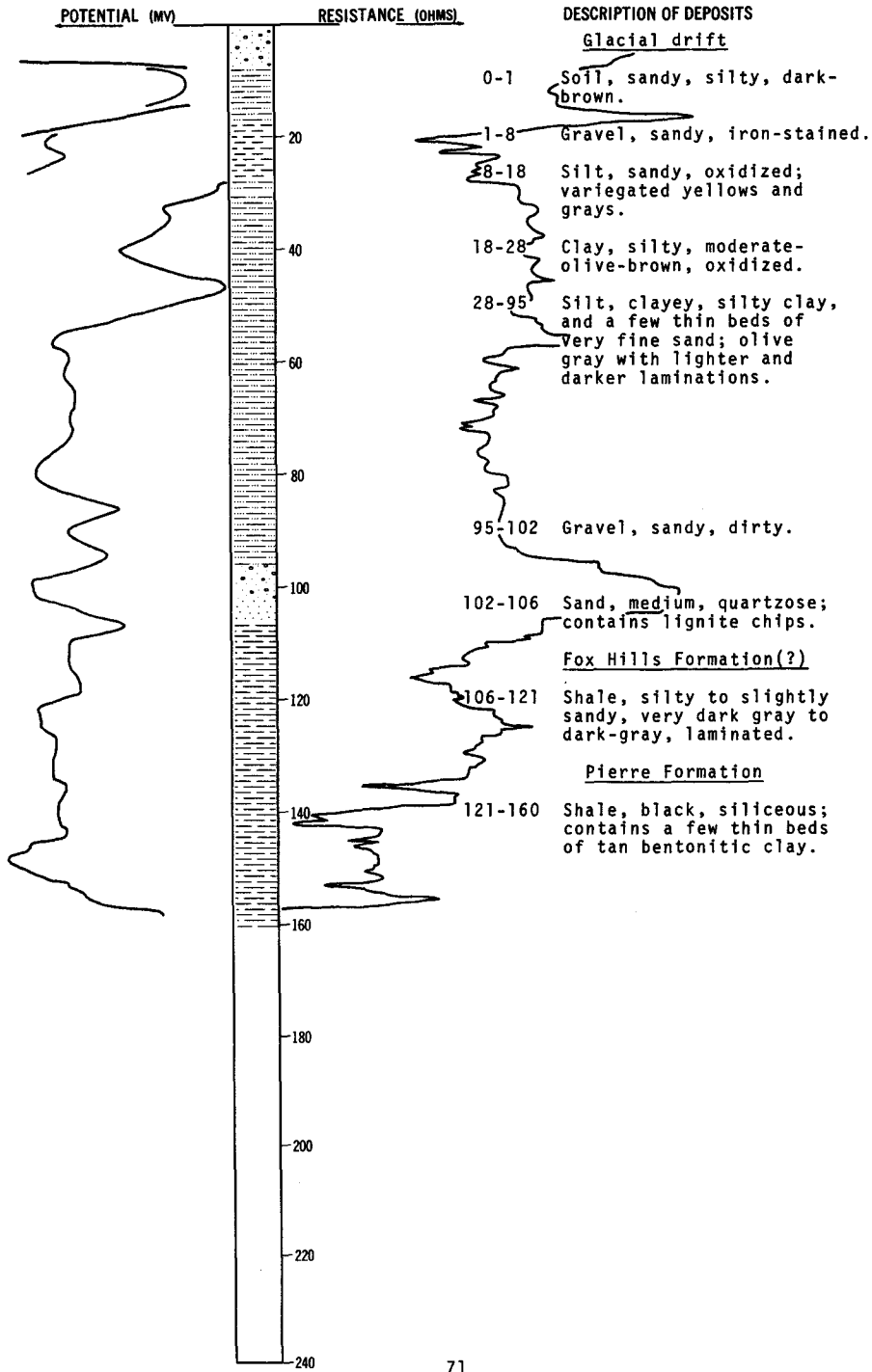


LOCATION: 129-075-29AAA

DATE DRILLED: December 1972

ALTITUDE: 1750  
(FT, MSL)

DEPTH: 160  
(FT)

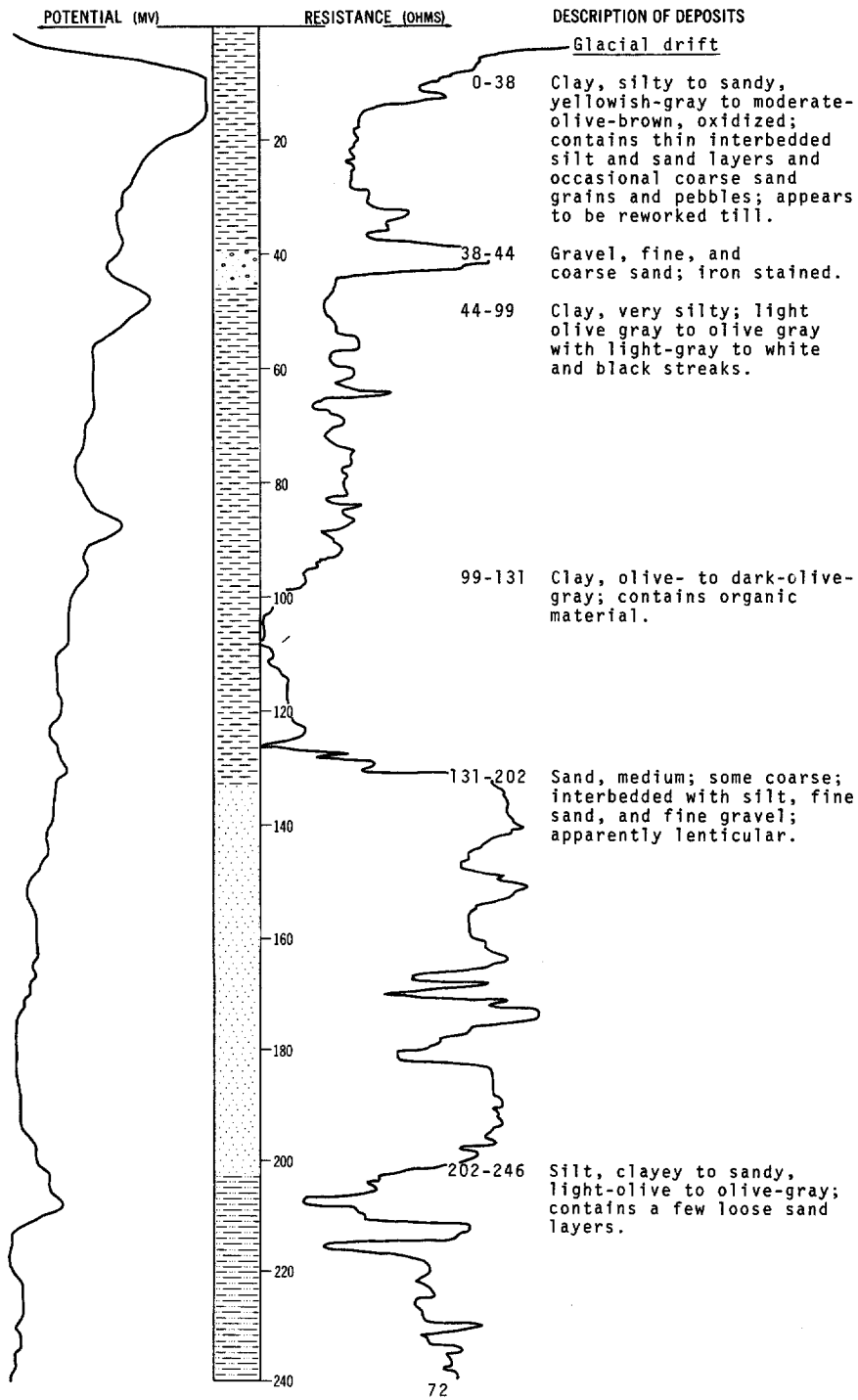


LOCATION: 129-075-29BBB

DATE DRILLED: December 1972

ALTITUDE: 1820  
(FT, MSL)

DEPTH: 420  
(FT)

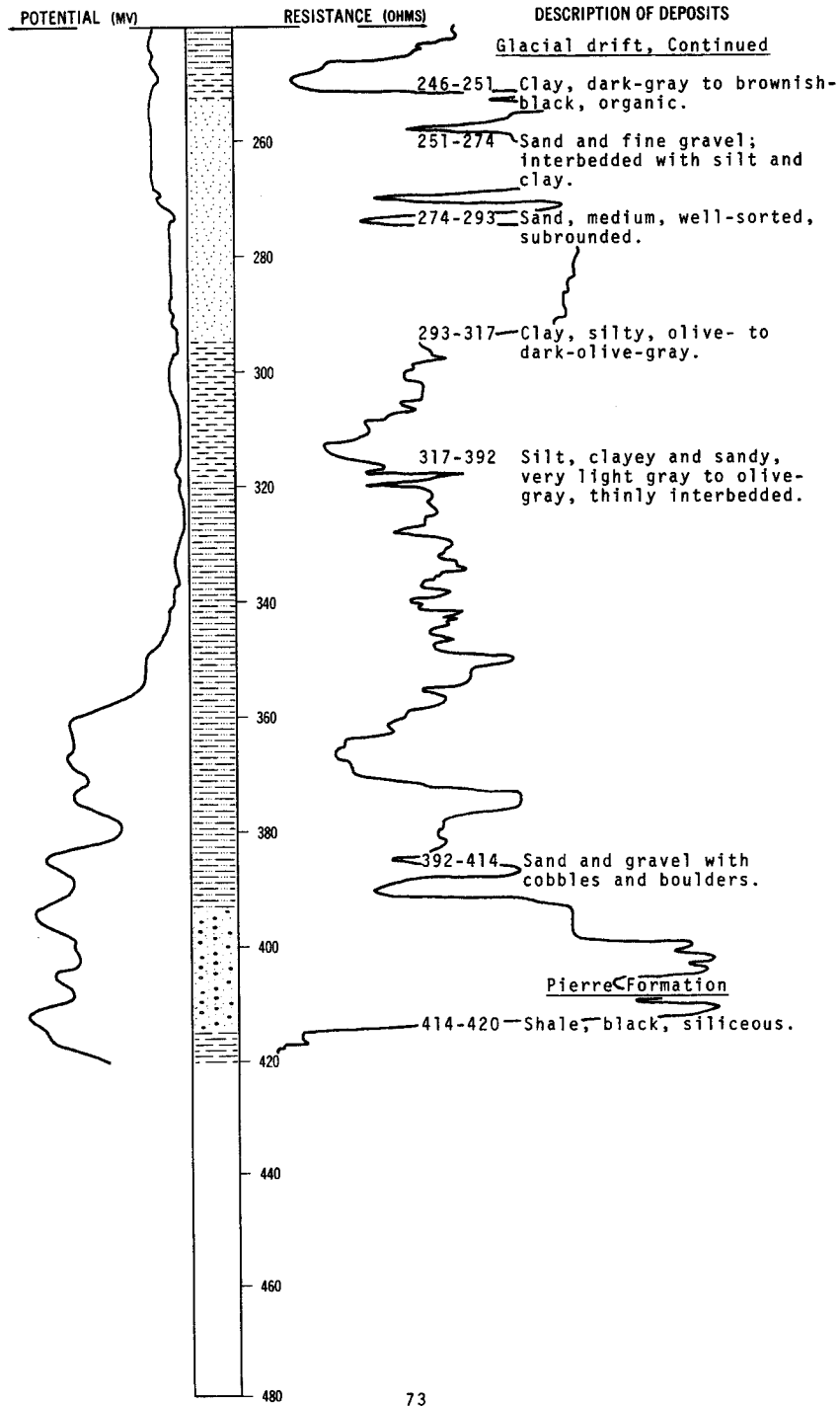


LOCATION: 129-075-29BBB

DATE DRILLED: December 1972

ALTITUDE: 1820  
(FT, MSL)

DEPTH: 420  
(FT)

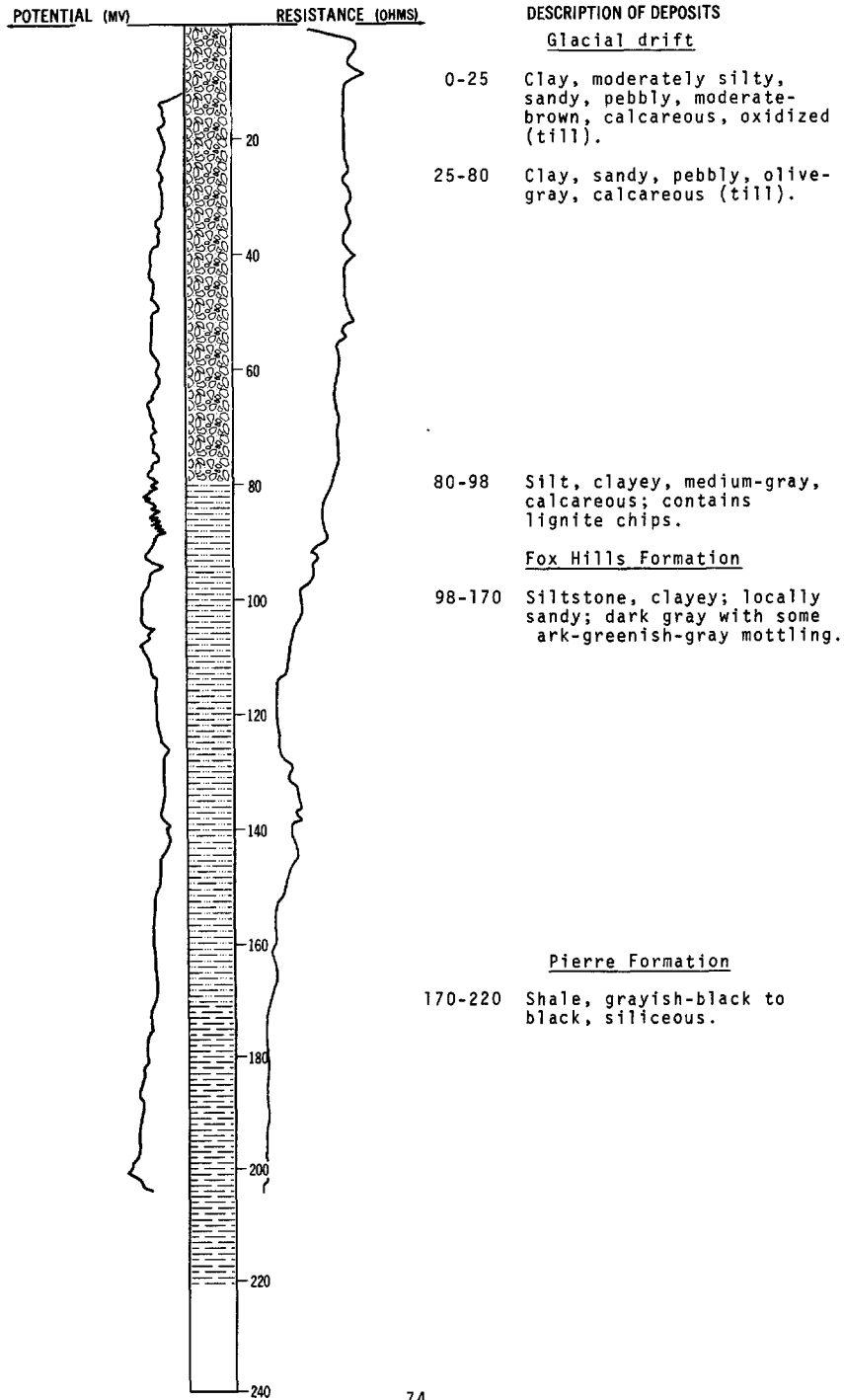


LOCATION: 129-076-04ABA

DATE DRILLED: November 1972

ALTITUDE: 1990  
(FT, MSL)

DEPTH: 220  
(FT)

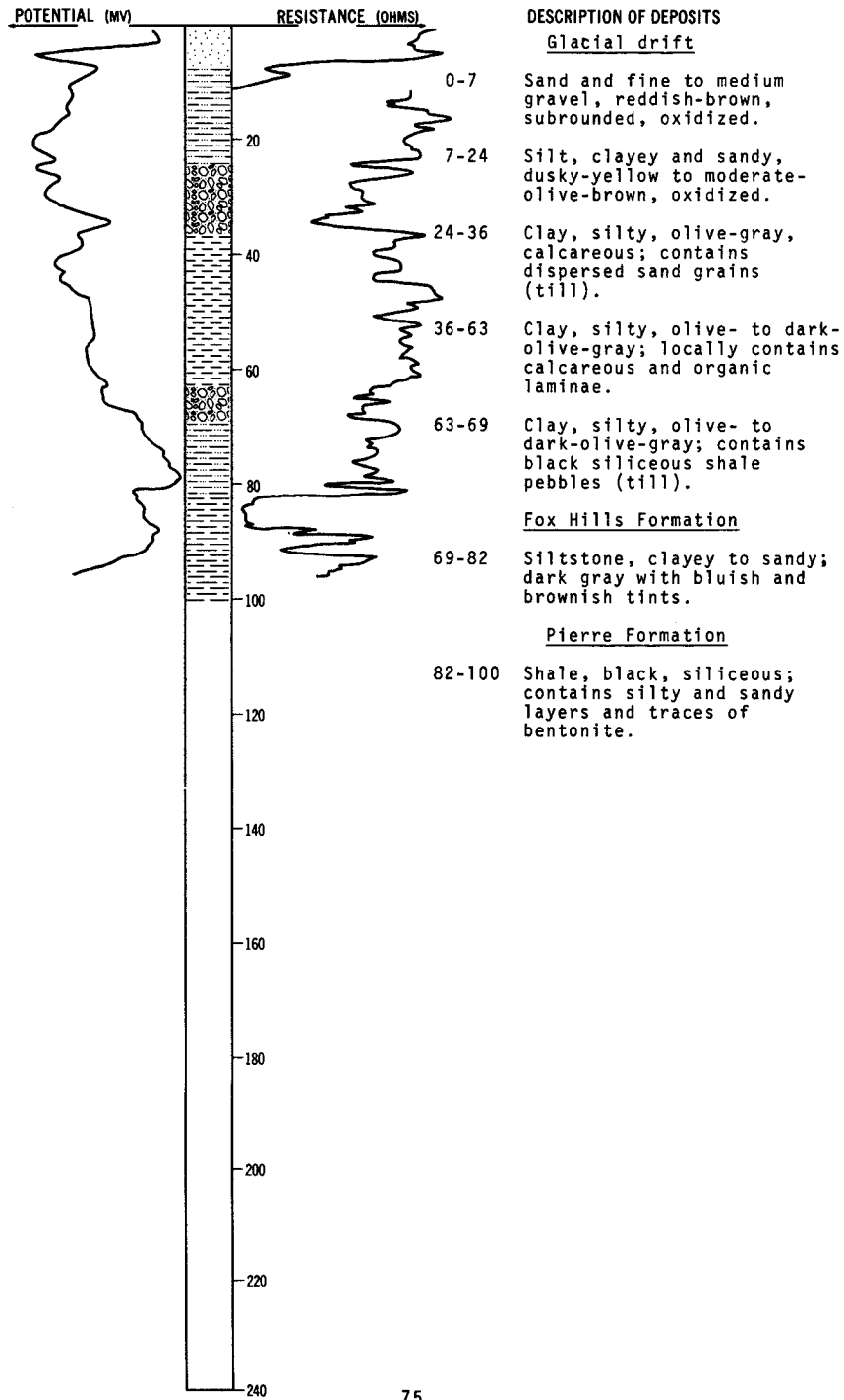


LOCATION: 129-076-25AAA

DATE DRILLED: December 1972

ALTITUDE: 1860  
(FT, MSL)

DEPTH: 100  
(FT)



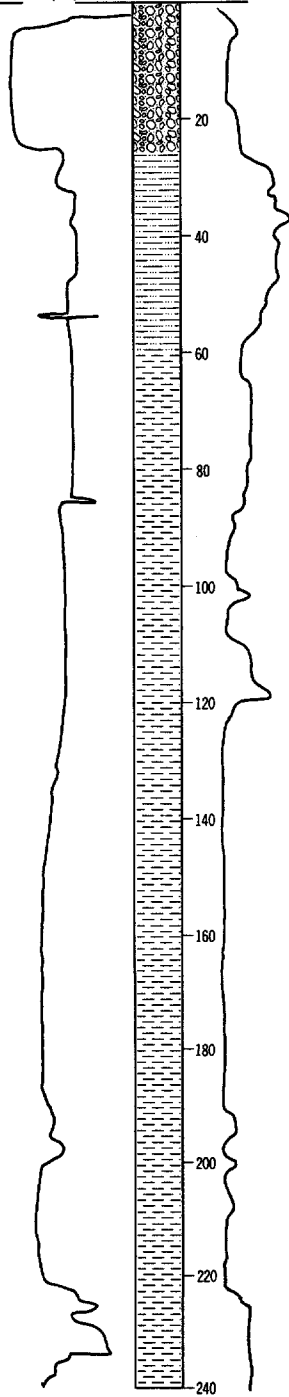
LOCATION: 129-077-27BBB

DATE DRILLED: November 1972

ALTITUDE: 1765  
(FT, MSL)

DEPTH: 360  
(FT)

POTENTIAL (MV) RESISTANCE (OHMS)



DESCRIPTION OF DEPOSITS

Glacial drift

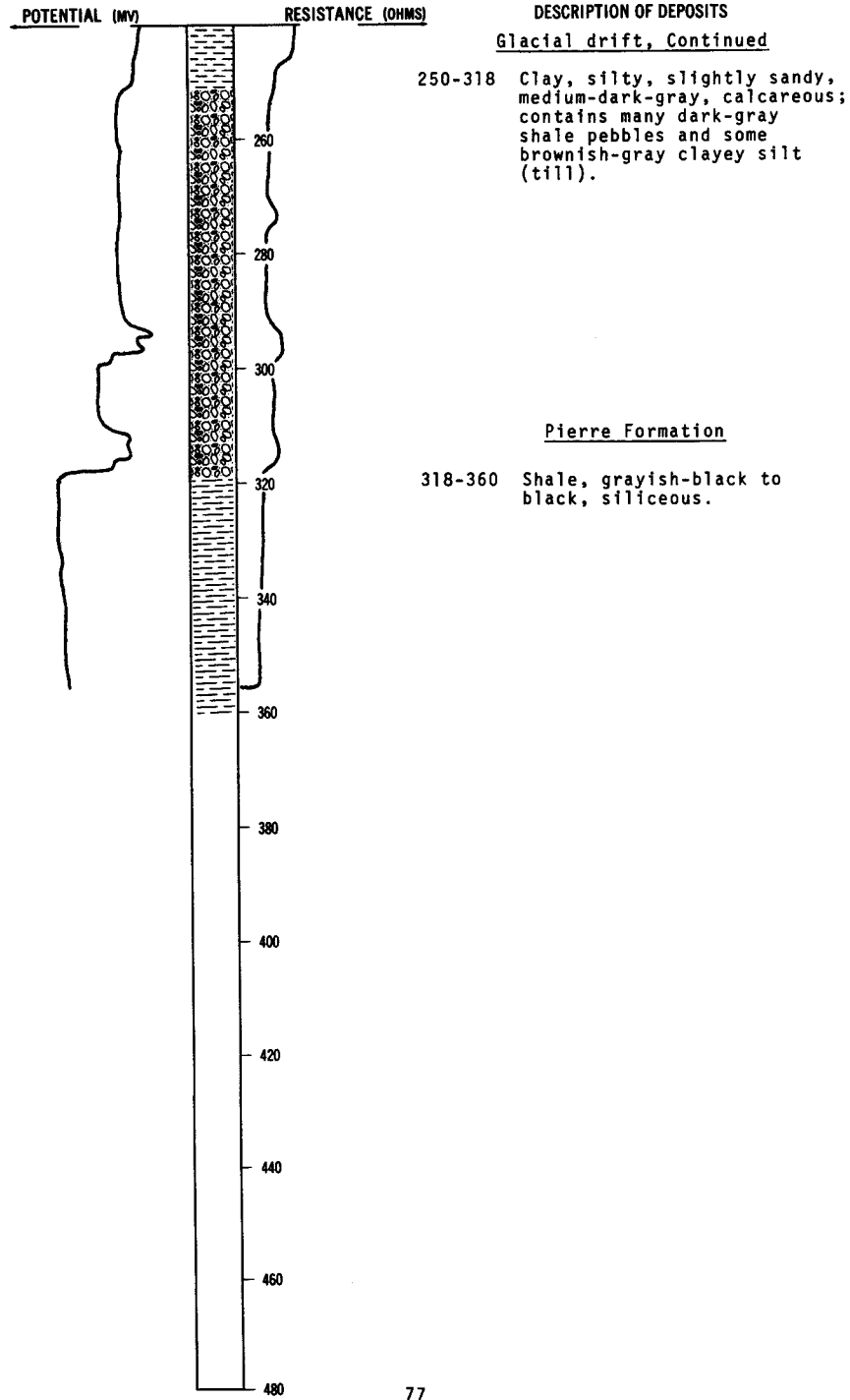
- 0-26 Clay, silty, slightly sandy and pebbly, moderate-yellowish-brown, oxidized (till).
- 26-60 Silt, clayey, medium-gray, calcareous; contains thin sand layers.
- 60-250 Clay, silty, locally sandy, calcareous; medium gray with some light-olive-gray and dark-greenish-gray mottling; contains scattered lignite chips.

LOCATION: 129-077-27BBB

DATE DRILLED: November 1972

ALTITUDE: 1765  
(FT, MSL)

DEPTH: 360  
(FT)

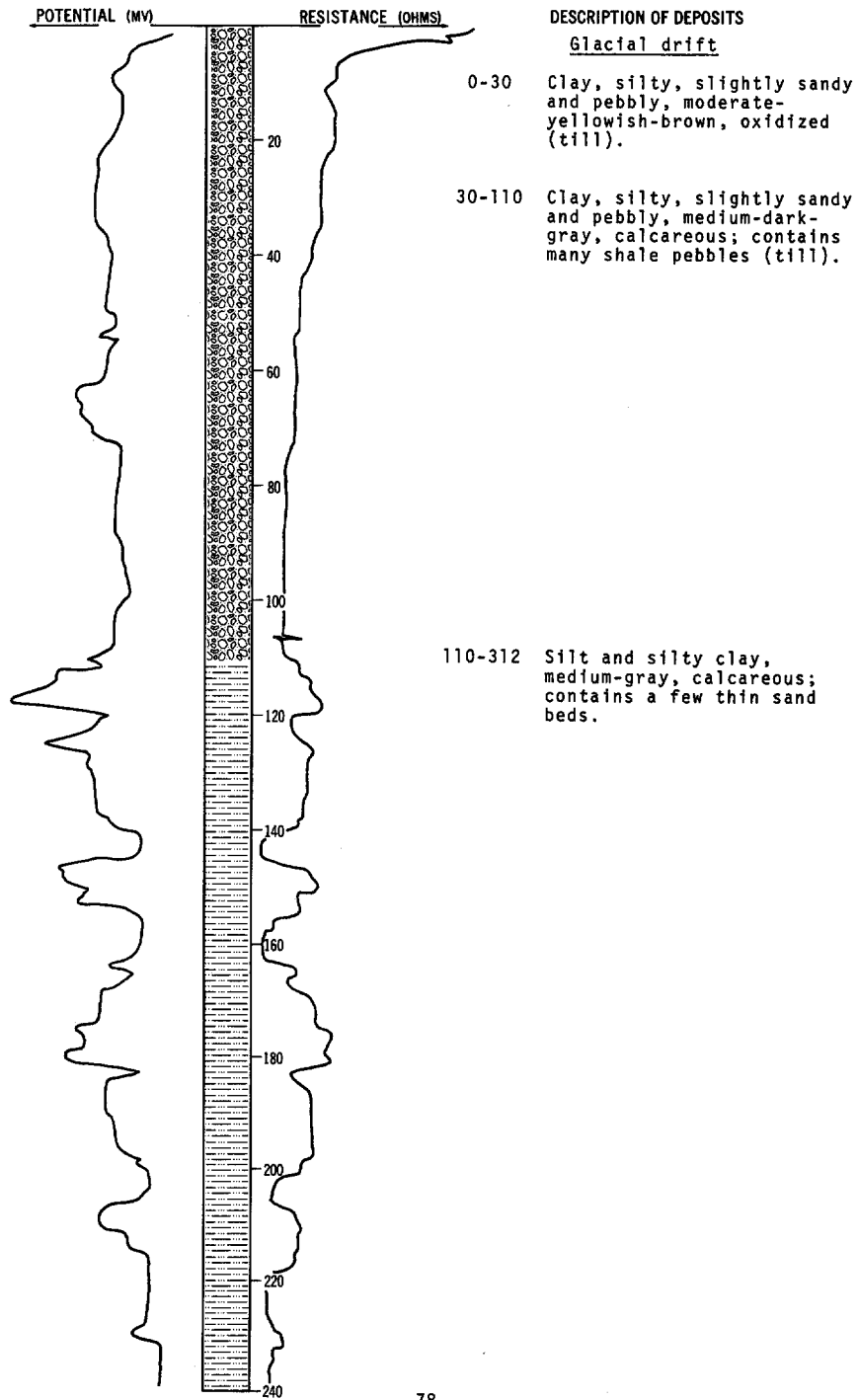


LOCATION: 129-078-01DDD

DATE DRILLED: November 1972

ALTITUDE: 1835  
(FT, MSL)

DEPTH: 420  
(FT)



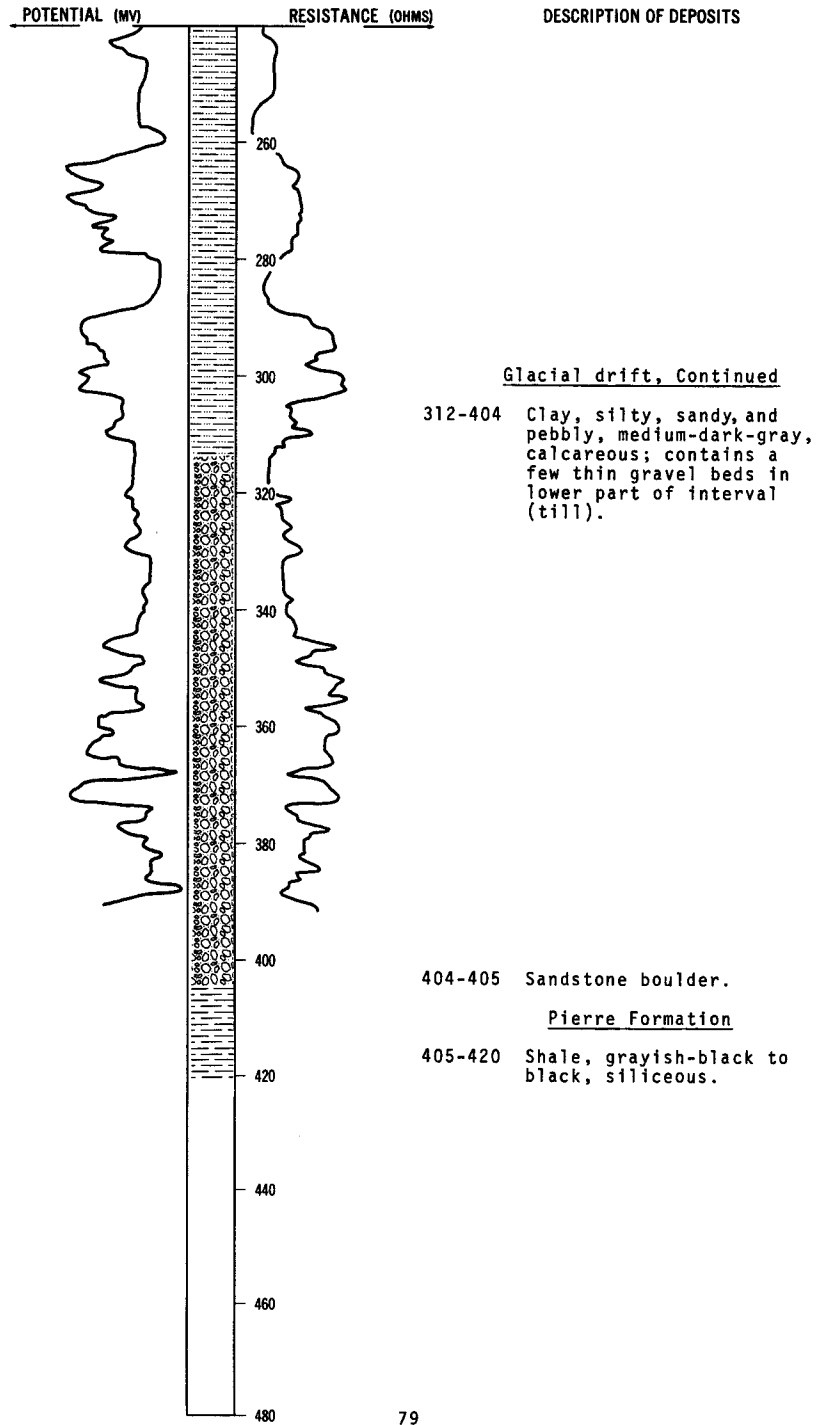


LOCATION: 129-078-01DDD

DATE DRILLED: November 1972

ALTITUDE: 1835  
(FT, MSL)

DEPTH: 420  
(FT)

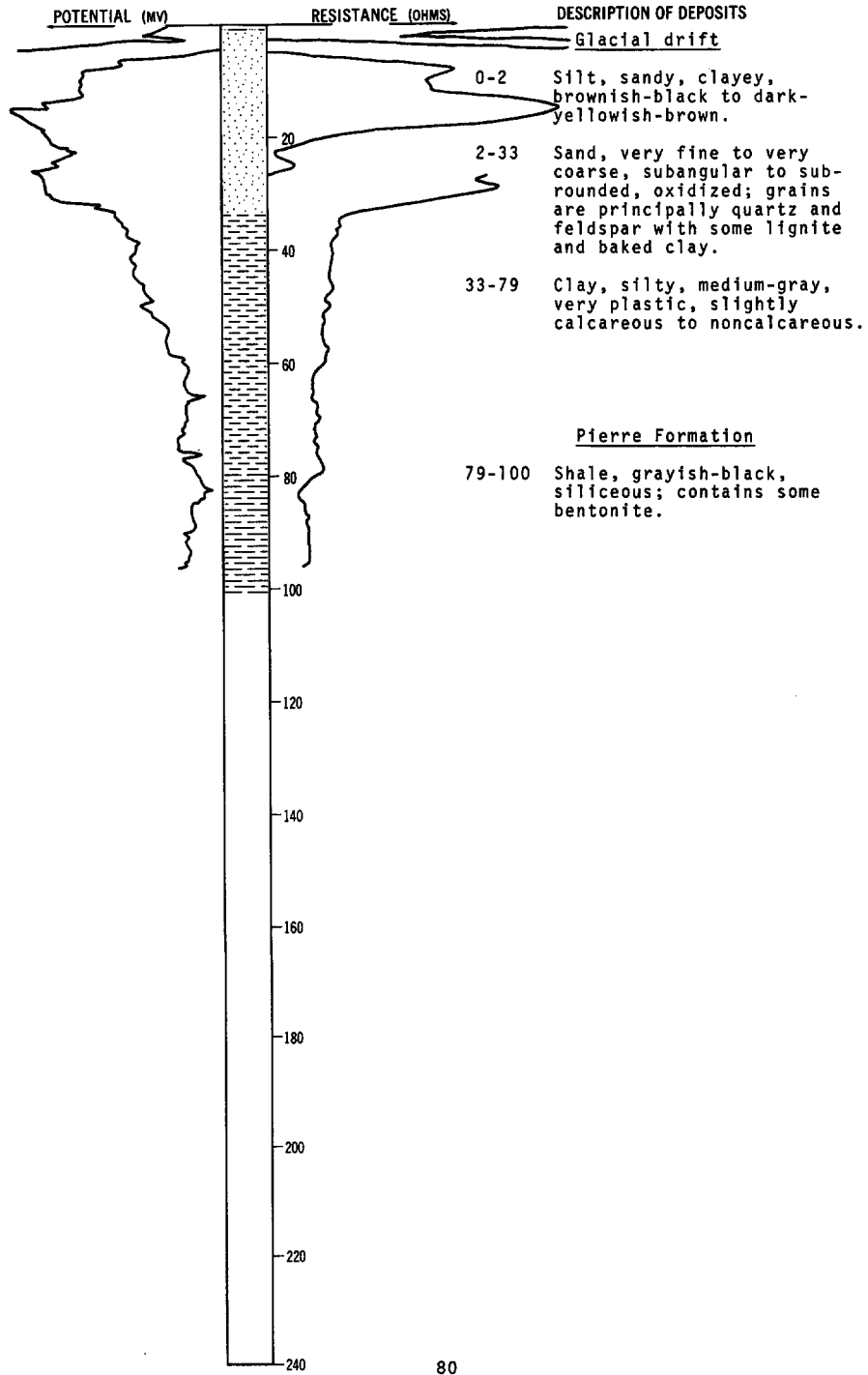


LOCATION: 129-078-30DAD

DATE DRILLED: October 1971

ALTITUDE: 1650  
(FT, MSL)

DEPTH: 100  
(FT)

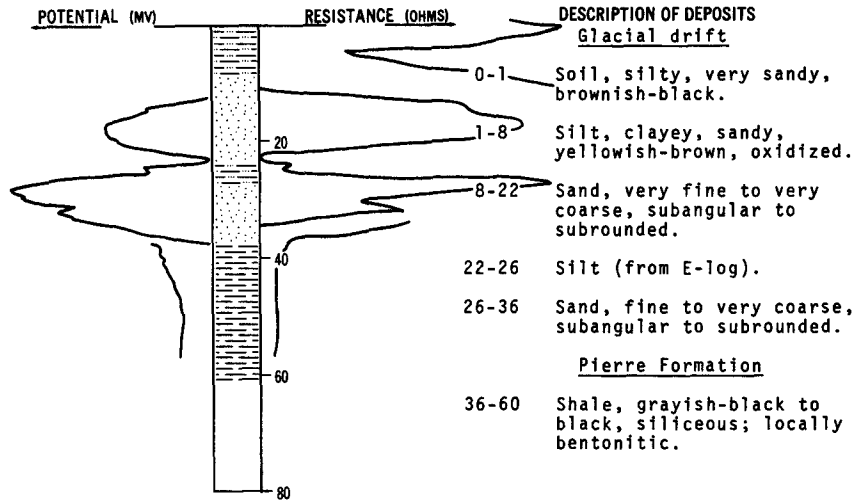


LOCATION: 129-078-33BCC

DATE DRILLED: October 1971

ALTITUDE: 1655  
(FT. MSL)

DEPTH: 60  
(FT)



130-074-05CCB  
(Log from Albrecht Well Work)

Altitude:

Date drilled: July 1973

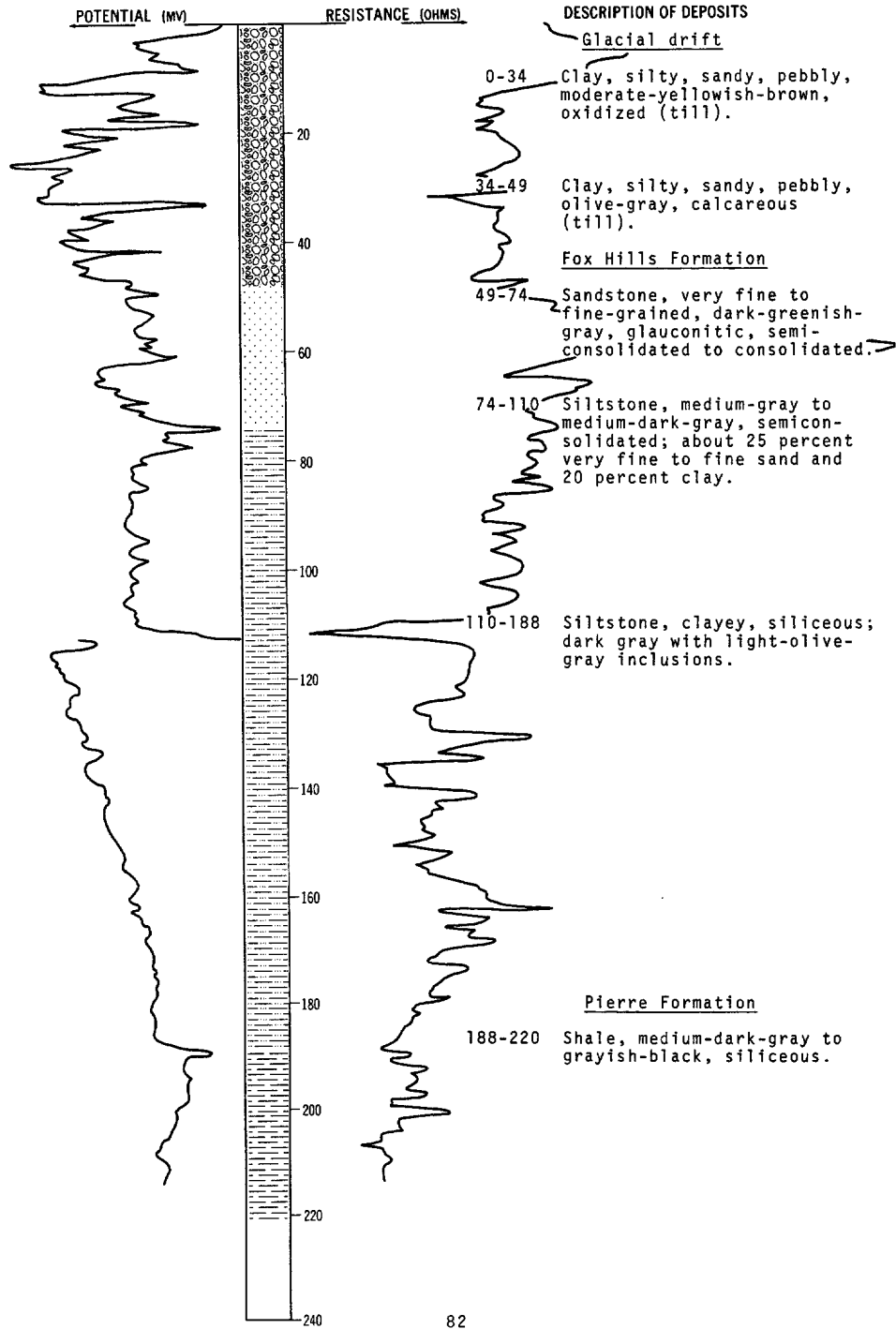
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black -----	3	3
	Clay, silty, gray -----	21	24
	Clay, mixed sand, and gravel -----	3	27
	Clay, blue -----	13	40
	Shale, black and sandy -----	15	55

LOCATION: 130-074-06CCC

DATE DRILLED: May 1973

ALTITUDE: 1870  
(FT, MSL)

DEPTH: 220  
(FT)

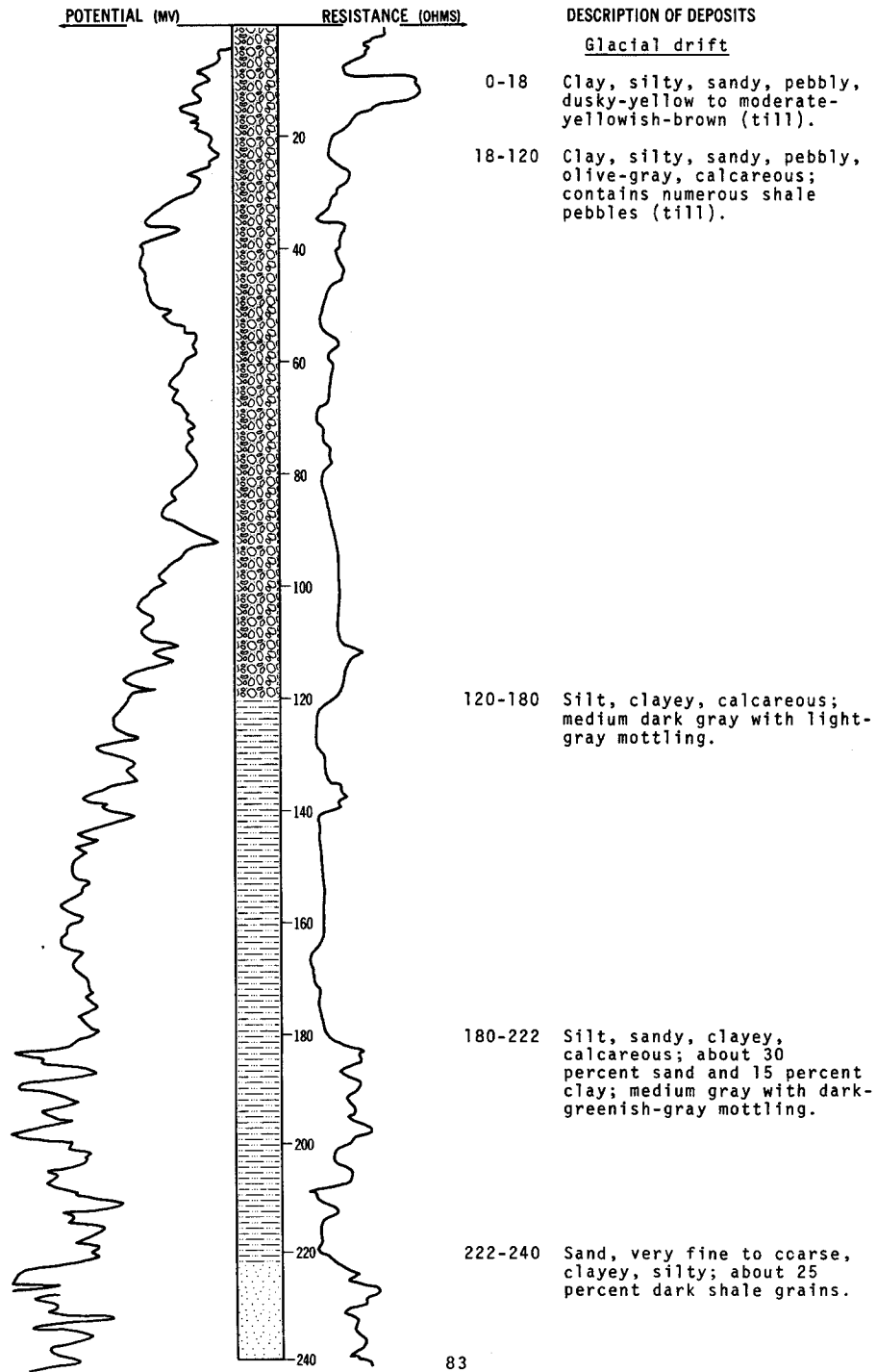


LOCATION: 130-075-02DCC

DATE DRILLED: May 1973

ALTITUDE: 1858  
(FT, MSL)

DEPTH: 300  
(FT)

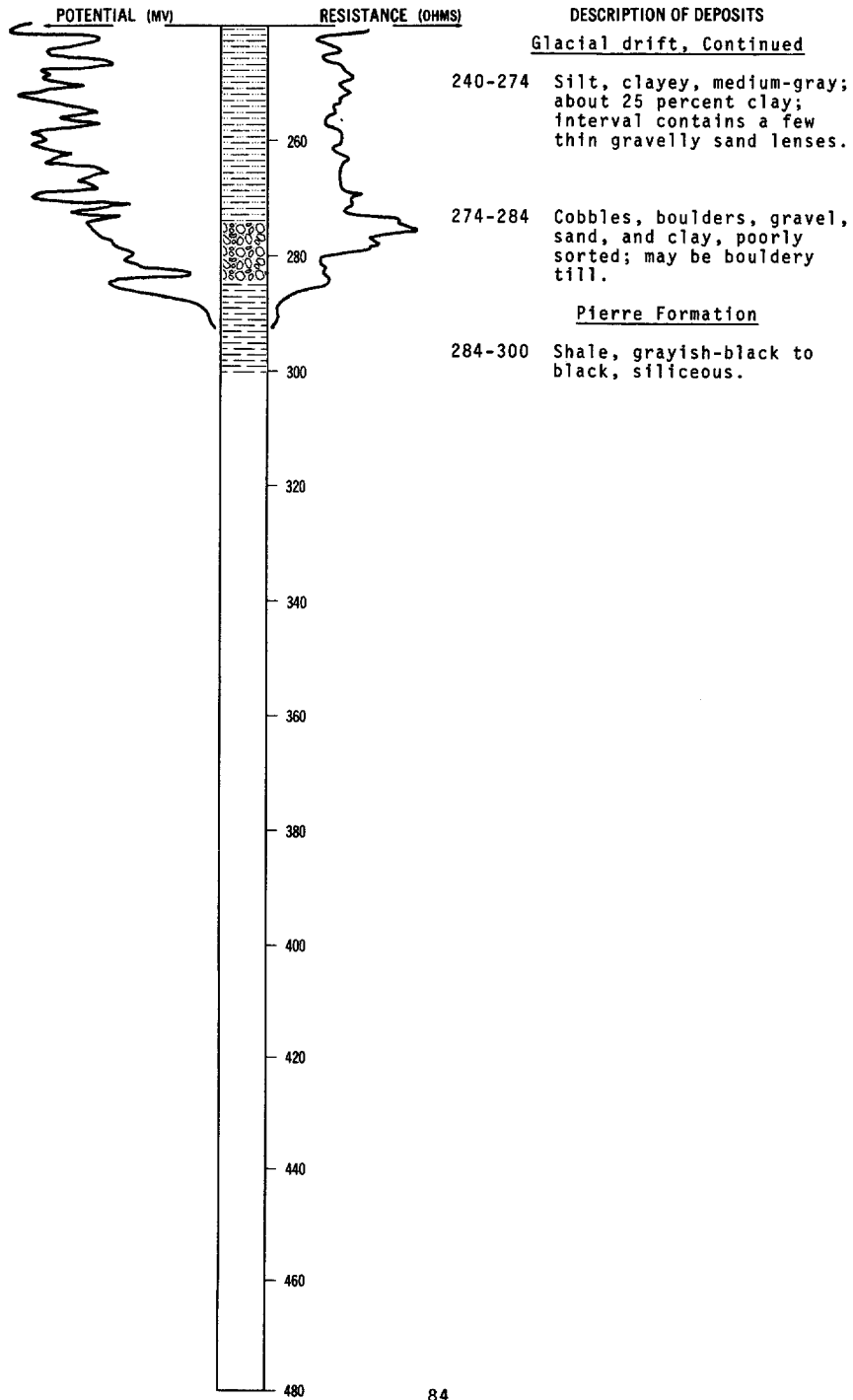


LOCATION: 130-075-02DCC

DATE DRILLED: May 1973

ALTITUDE: 1858  
(FT, MSL)

DEPTH: 300  
(FT)

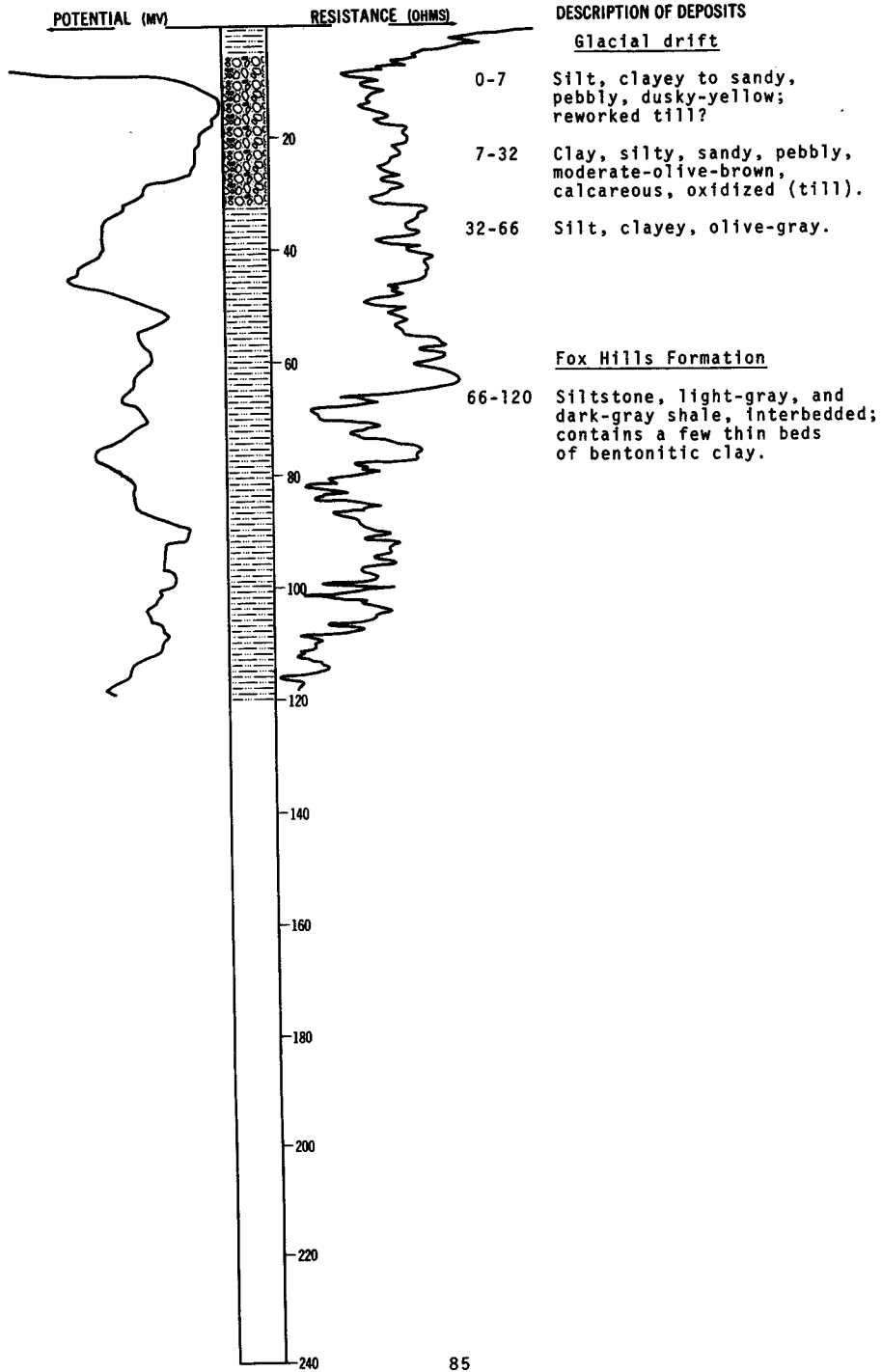


LOCATION: 130-075-10888

DATE DRILLED: December 1972

ALTITUDE: 1910  
(FT, MSL)

DEPTH: 120  
(FT)



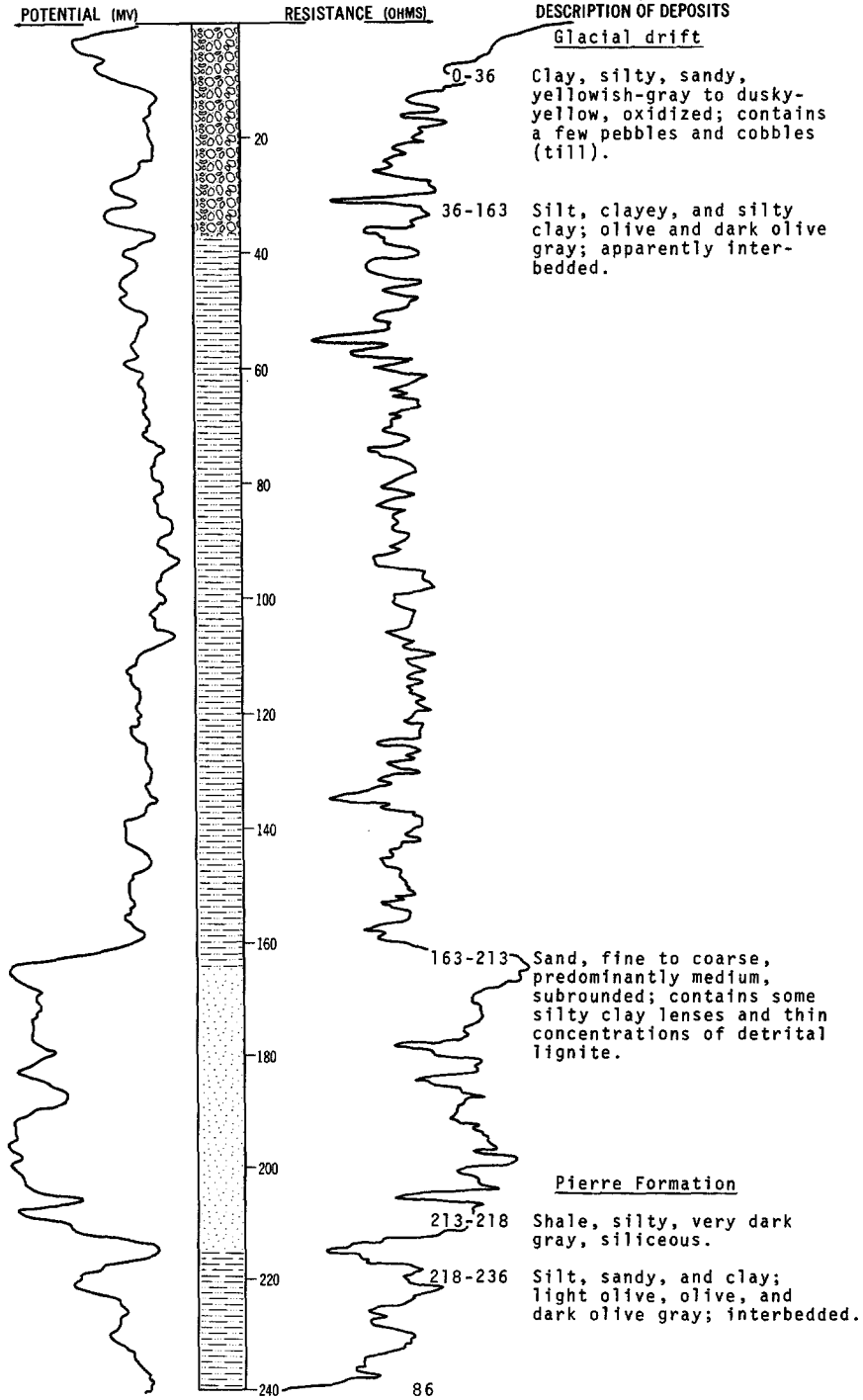
NDSWC 4498

LOCATION: 130-075-20CCC1

DATE DRILLED: November 1972

ALTITUDE: 1838  
(FT, MSL)

DEPTH: 300  
(FT)





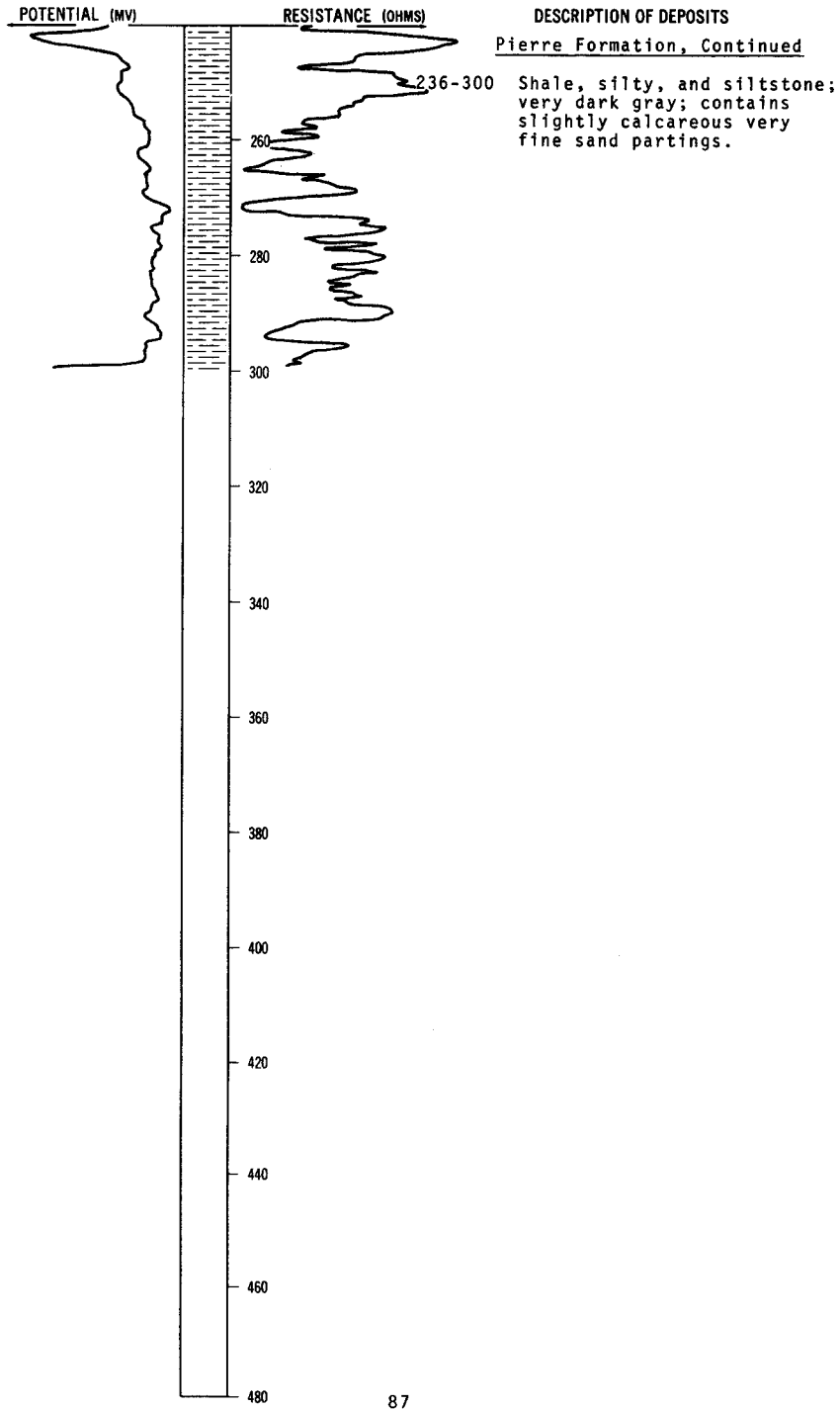
NDSWC 4498, Continued

LOCATION: 130-075-20CCC1

DATE DRILLED: November 1972

ALTITUDE: 1838  
(FT, MSL)

DEPTH: 300  
(FT)

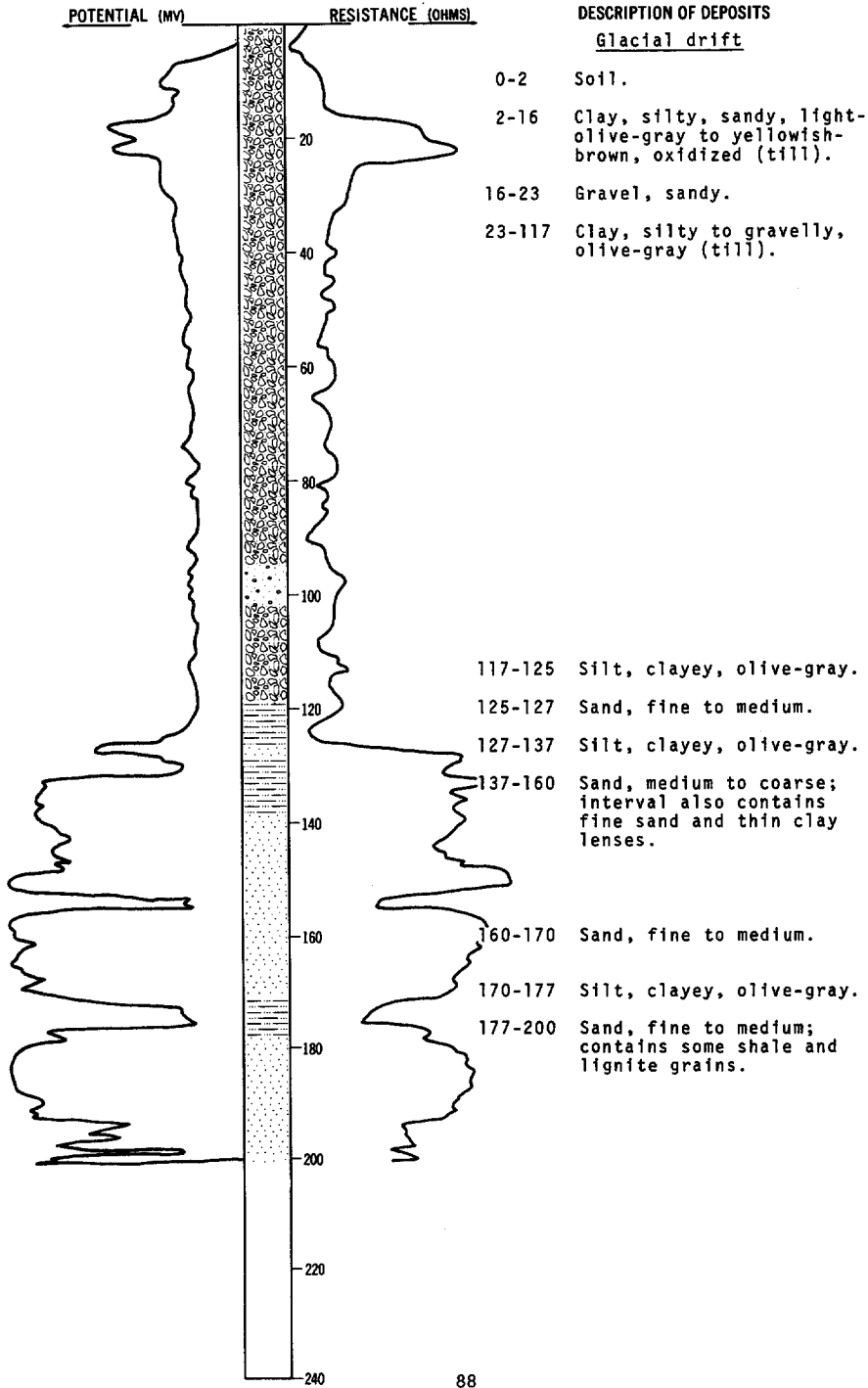


LOCATION: 130-075-30CDC

DATE DRILLED: June 1973

ALTITUDE: 1806  
(FT, MSL)

DEPTH: 200  
(FT)

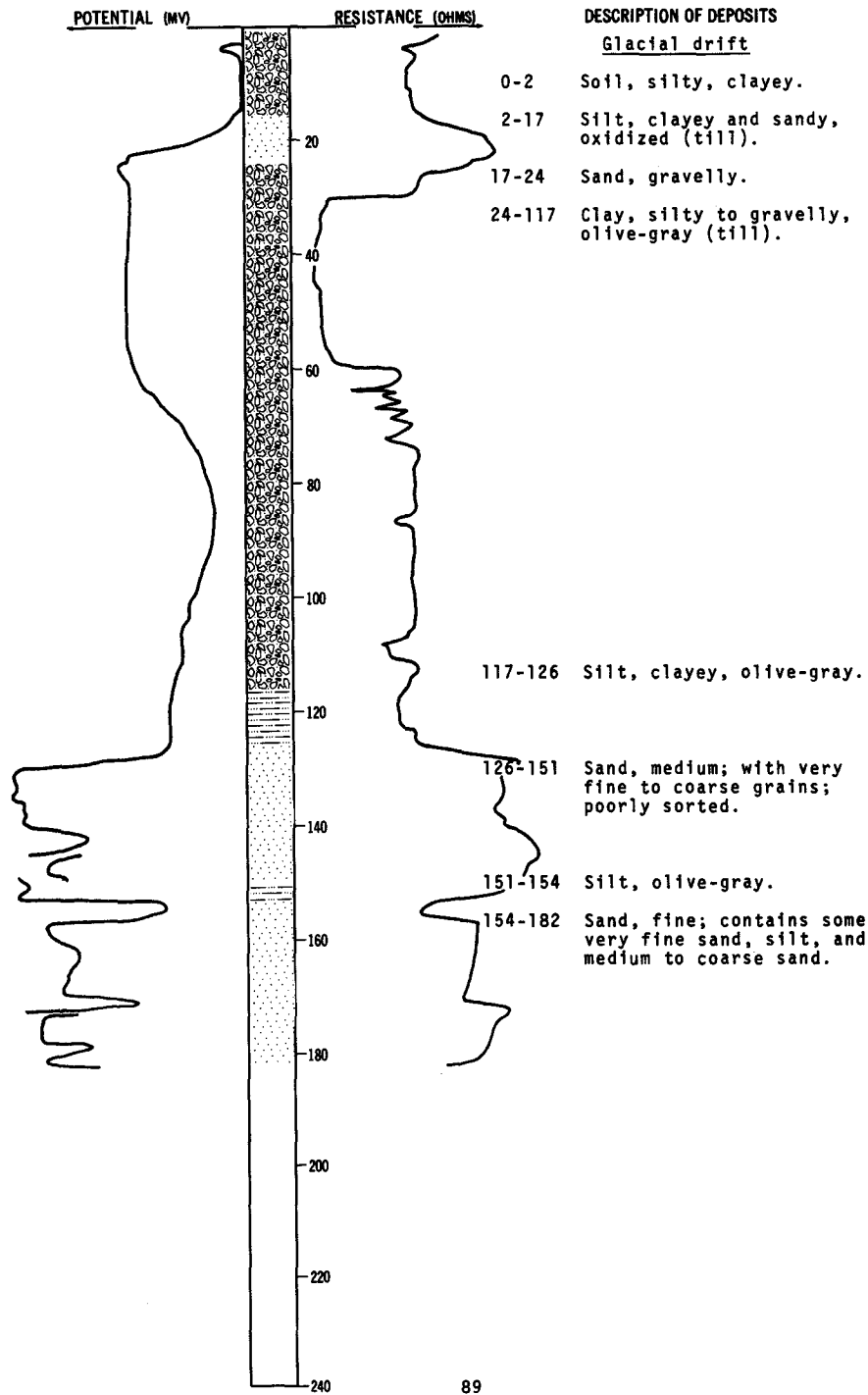


LOCATION: 130-075-30CDD3

DATE DRILLED: June 1973

ALTITUDE: 1806  
(FT, MSL)

DEPTH: 182  
(FT)

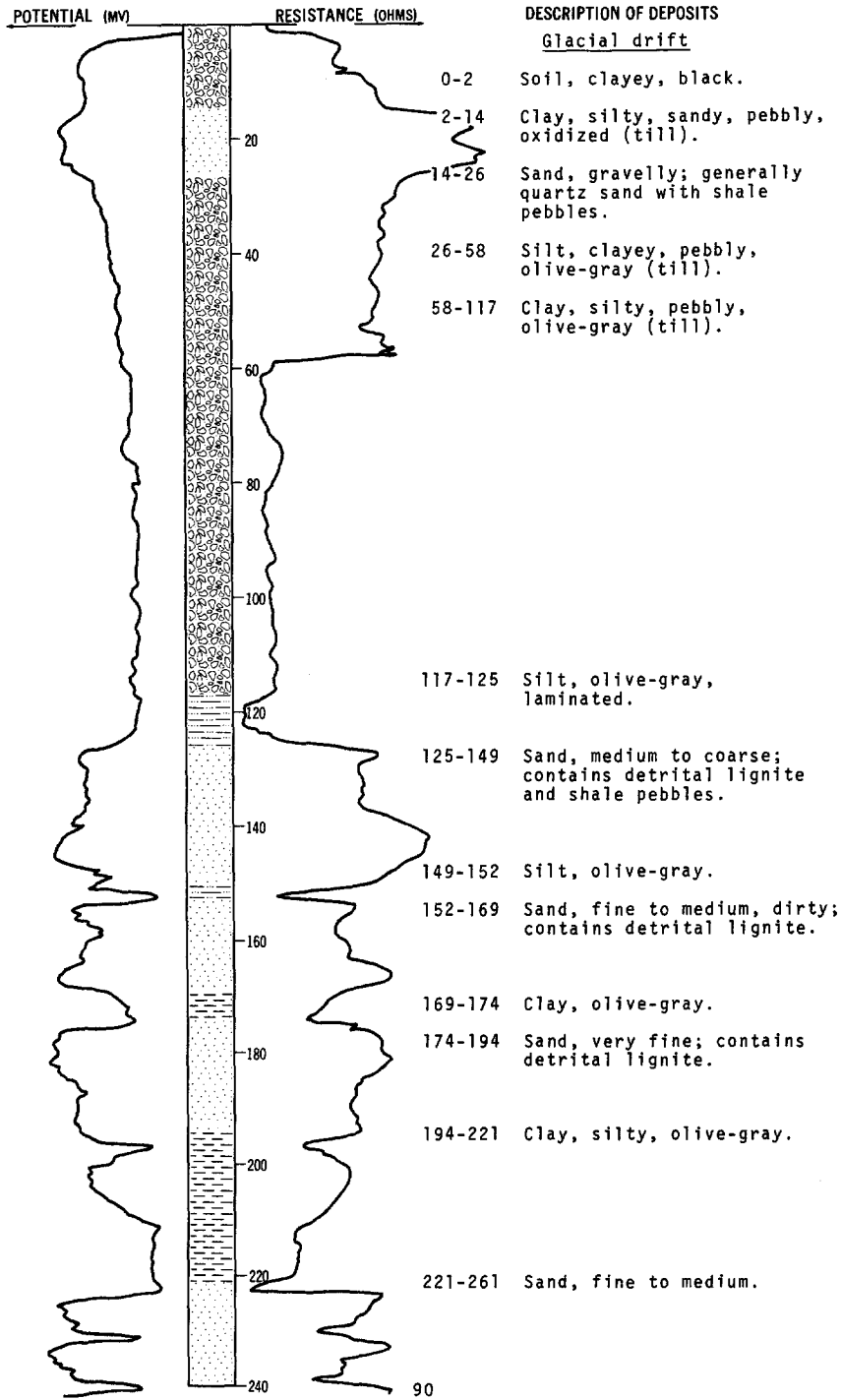


LOCATION: 130-075-30CDD4

DATE DRILLED: June 1973

ALTITUDE: 1806  
(FT, MSL)

DEPTH: 280  
(FT)



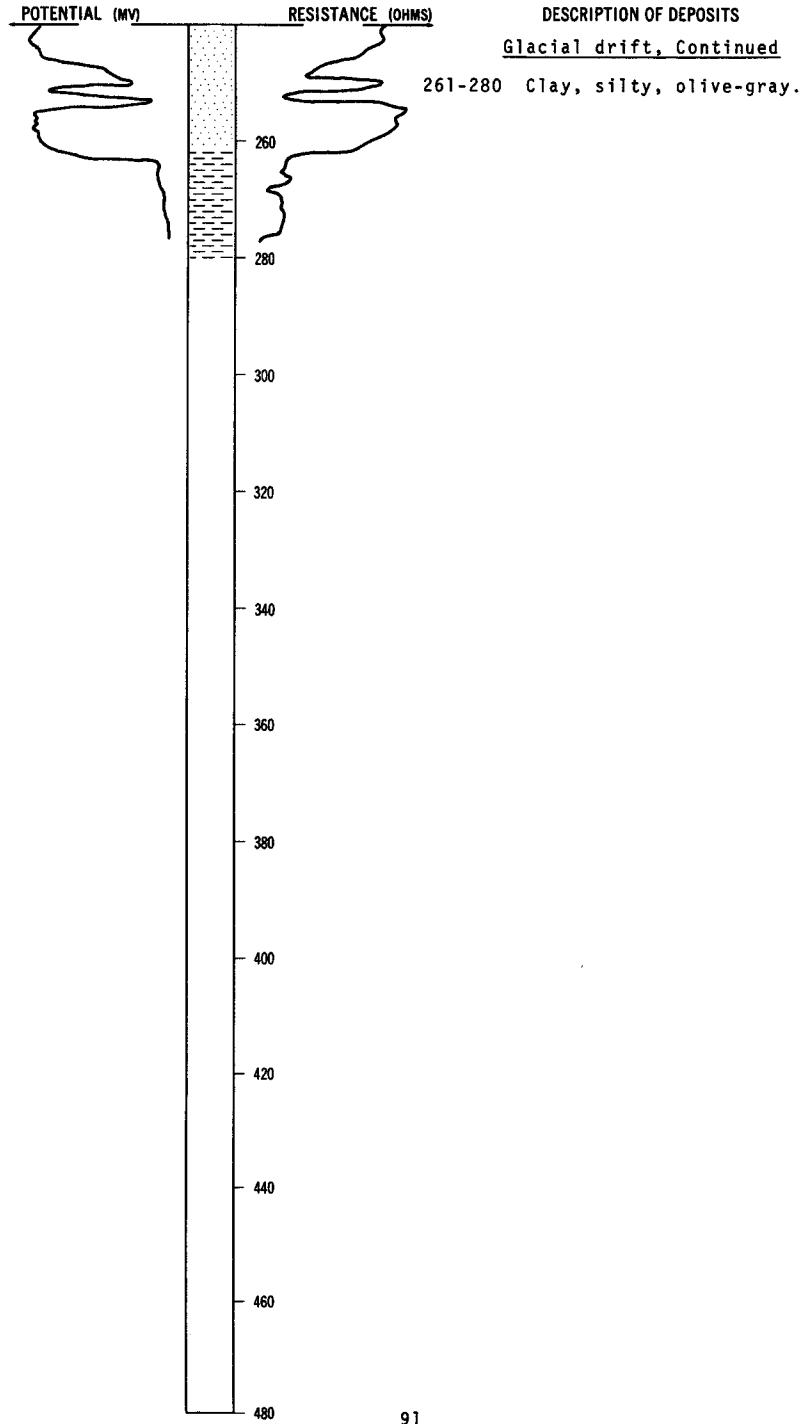
NDSWC 8690F, Continued

LOCATION: 130-075-30CDD4

DATE DRILLED: June 1973

ALTITUDE: 1806  
(FT. MSL)

DEPTH: 280  
(FT)

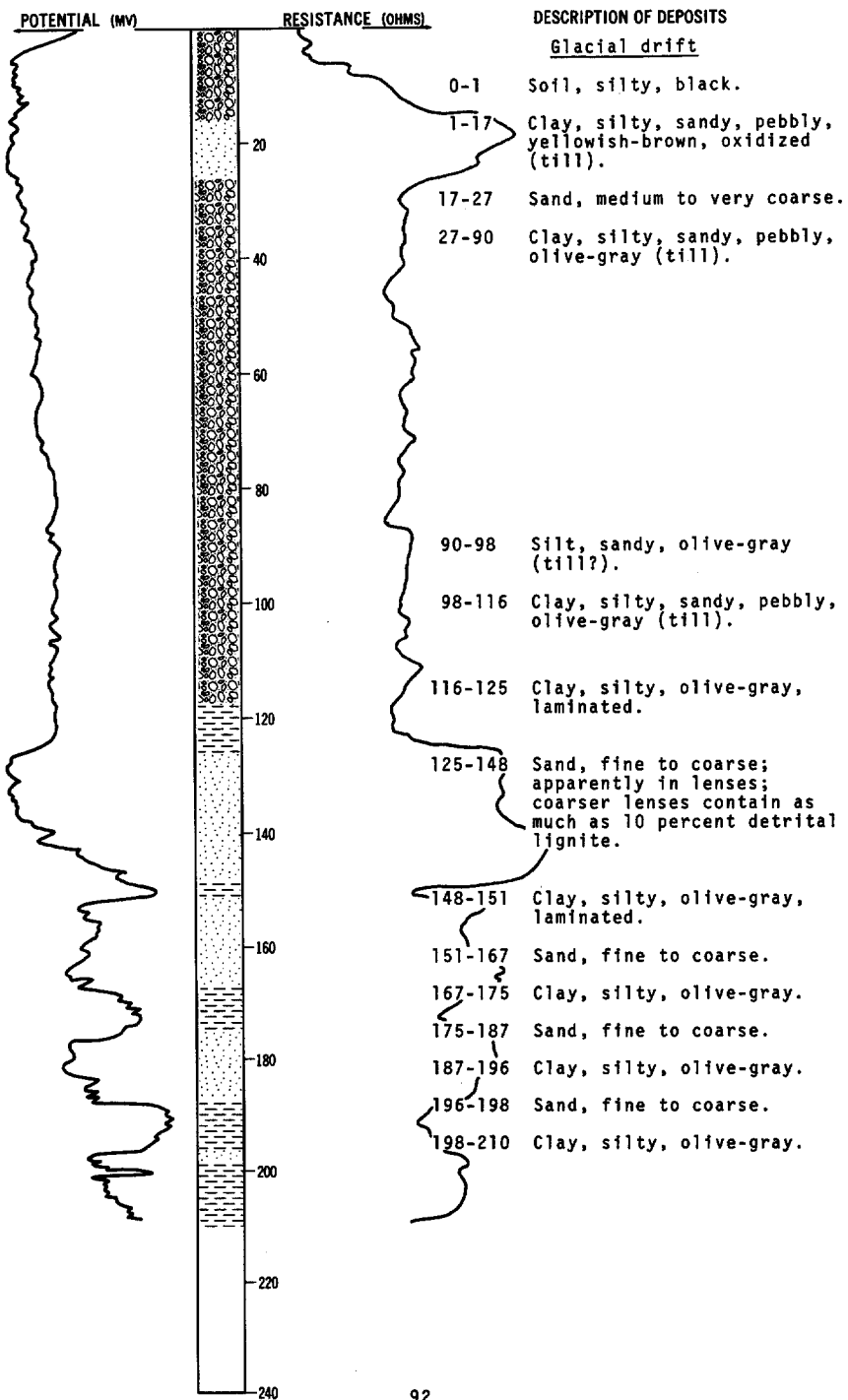


LOCATION: 130-075-30CDD5

DATE DRILLED: June 1973

ALTITUDE: 1806  
(FT, MSL)

DEPTH: 210  
(FT)



130-075-30CDD6  
NDSWC 8690H

Altitude: 1806 ft

Date drilled: June 1973

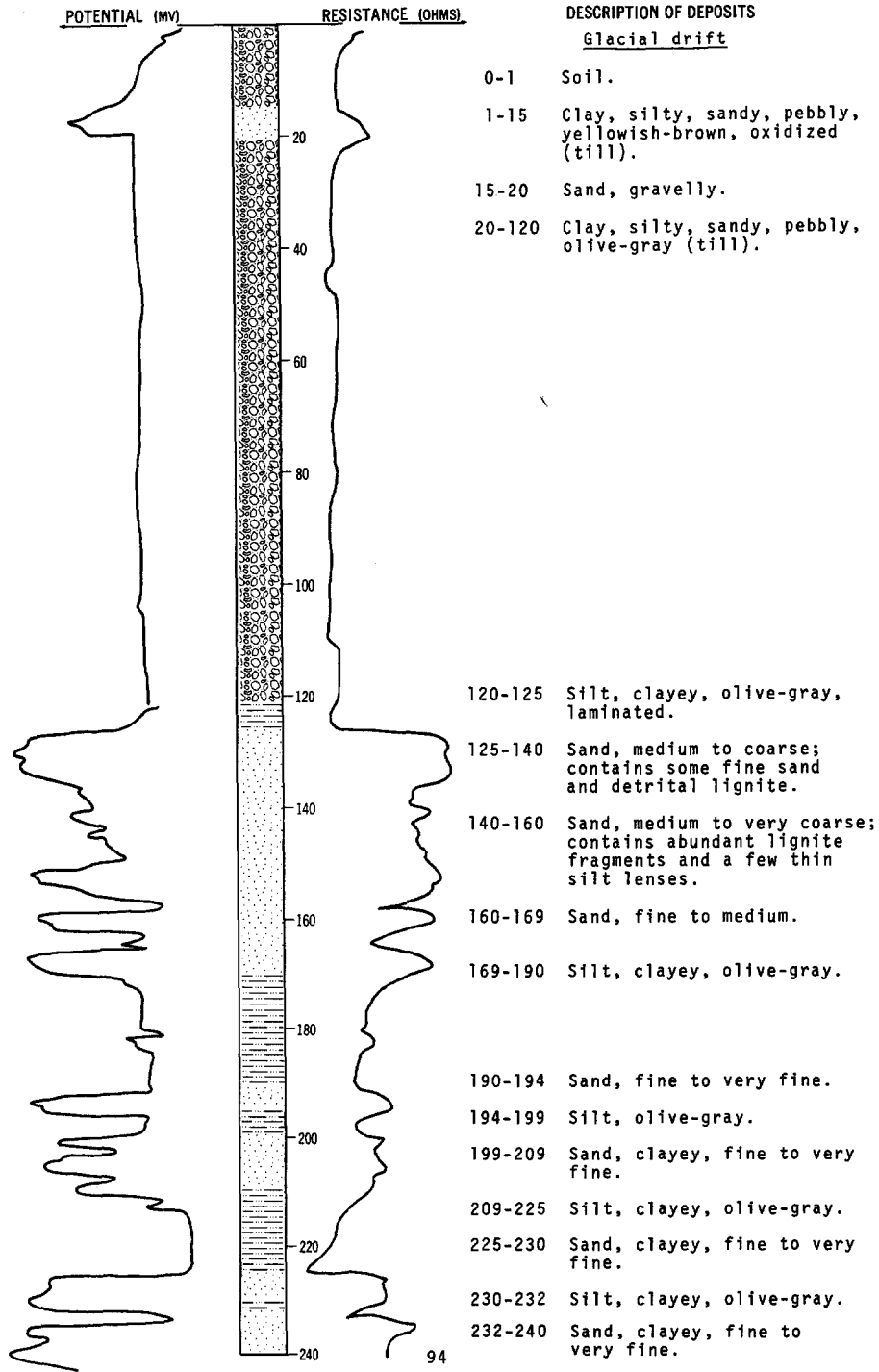
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, pebbly, yellowish-brown (till)-	16	16
	Sand, fine to coarse, gravelly; 30 percent gravel-----	10	26
	Clay, silty, pebbly, olive-gray (till)-----	14	40

LOCATION: 130-075-31ABB

DATE DRILLED: June 1973

ALTITUDE: 1807  
(FT, MSL)

DEPTH: 400  
(FT)



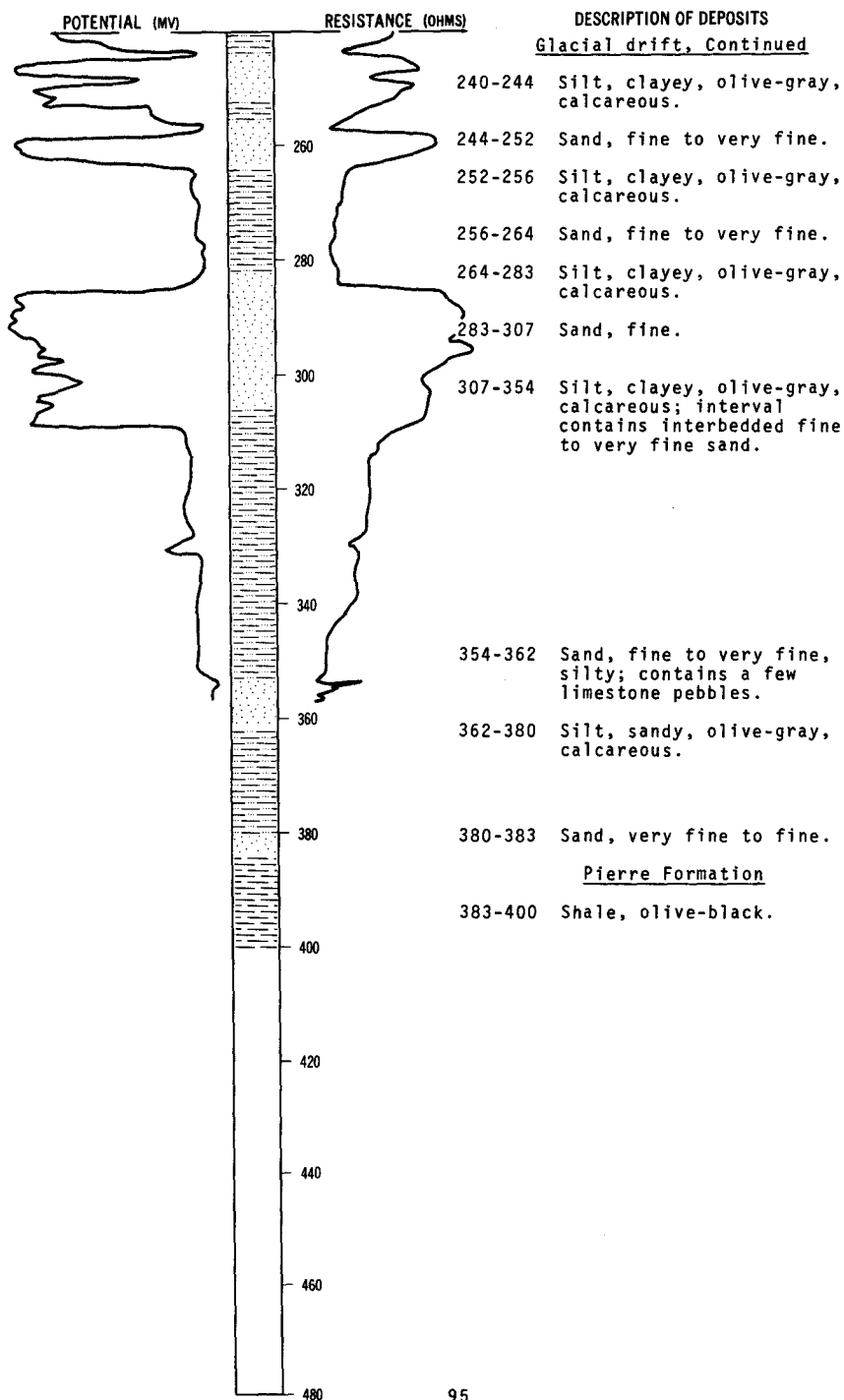


LOCATION: 130-075-31ABB

DATE DRILLED: June 1973

ALTITUDE: 1807  
(FT, MSL)

DEPTH: 400  
(FT)

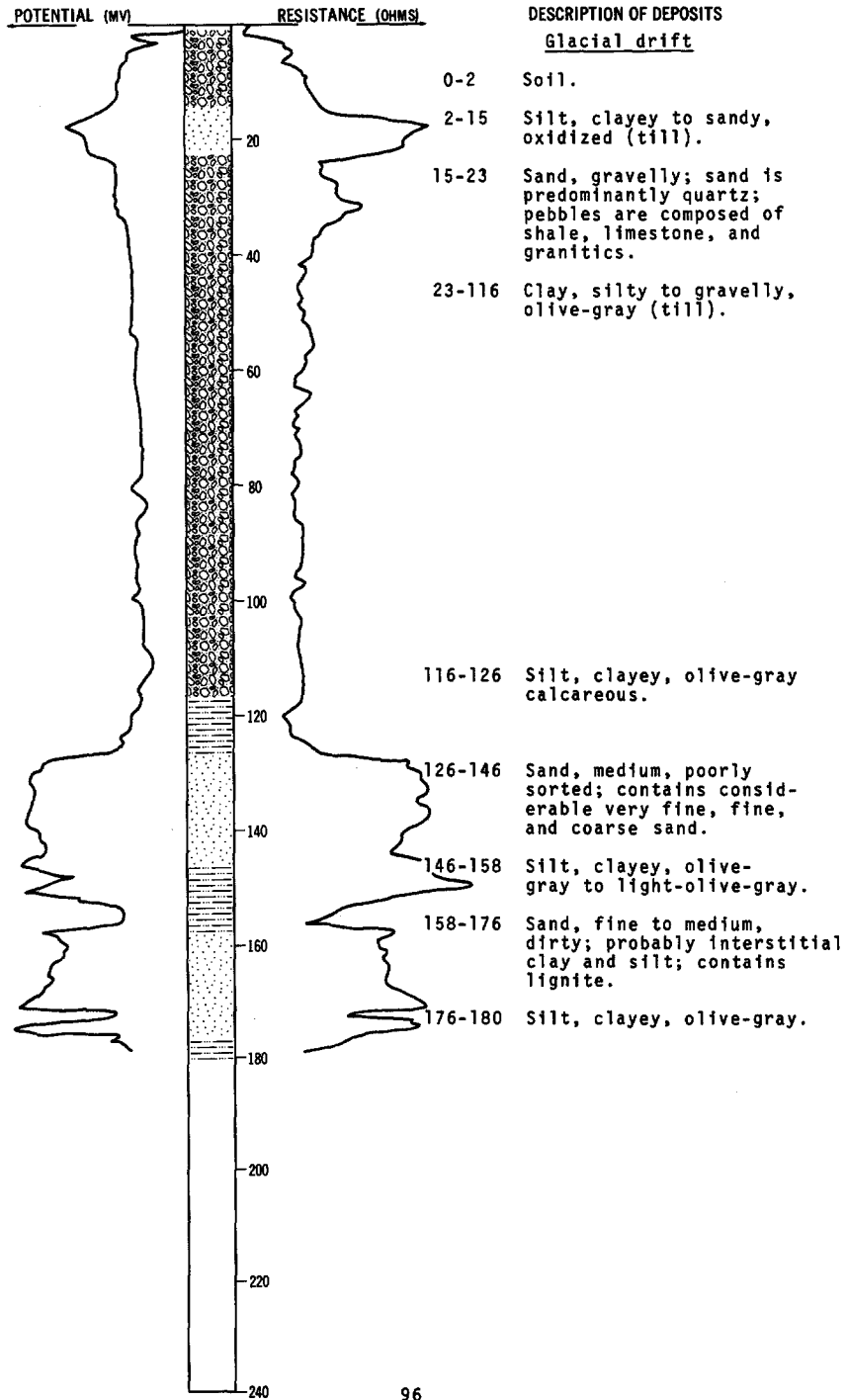


LOCATION: 130-075-31BAA1

ALTITUDE: 1806  
(FT, MSL)

DATE DRILLED: June 1973

DEPTH: 180  
(FT)

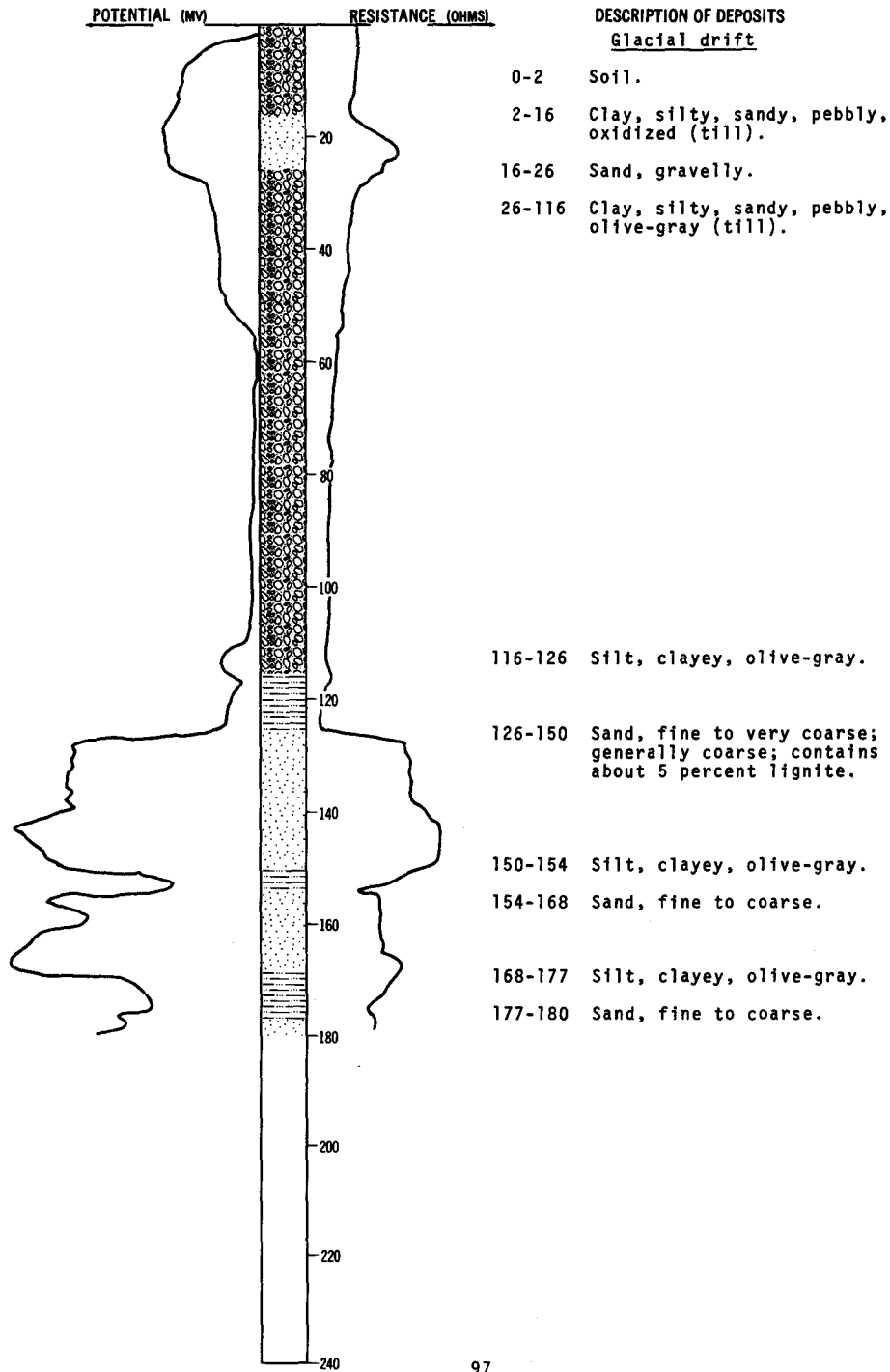


LOCATION: 130-075-31BAA2

DATE DRILLED: June 1973

ALTITUDE: 1805  
(FT, MSL)

DEPTH: 180  
(FT)

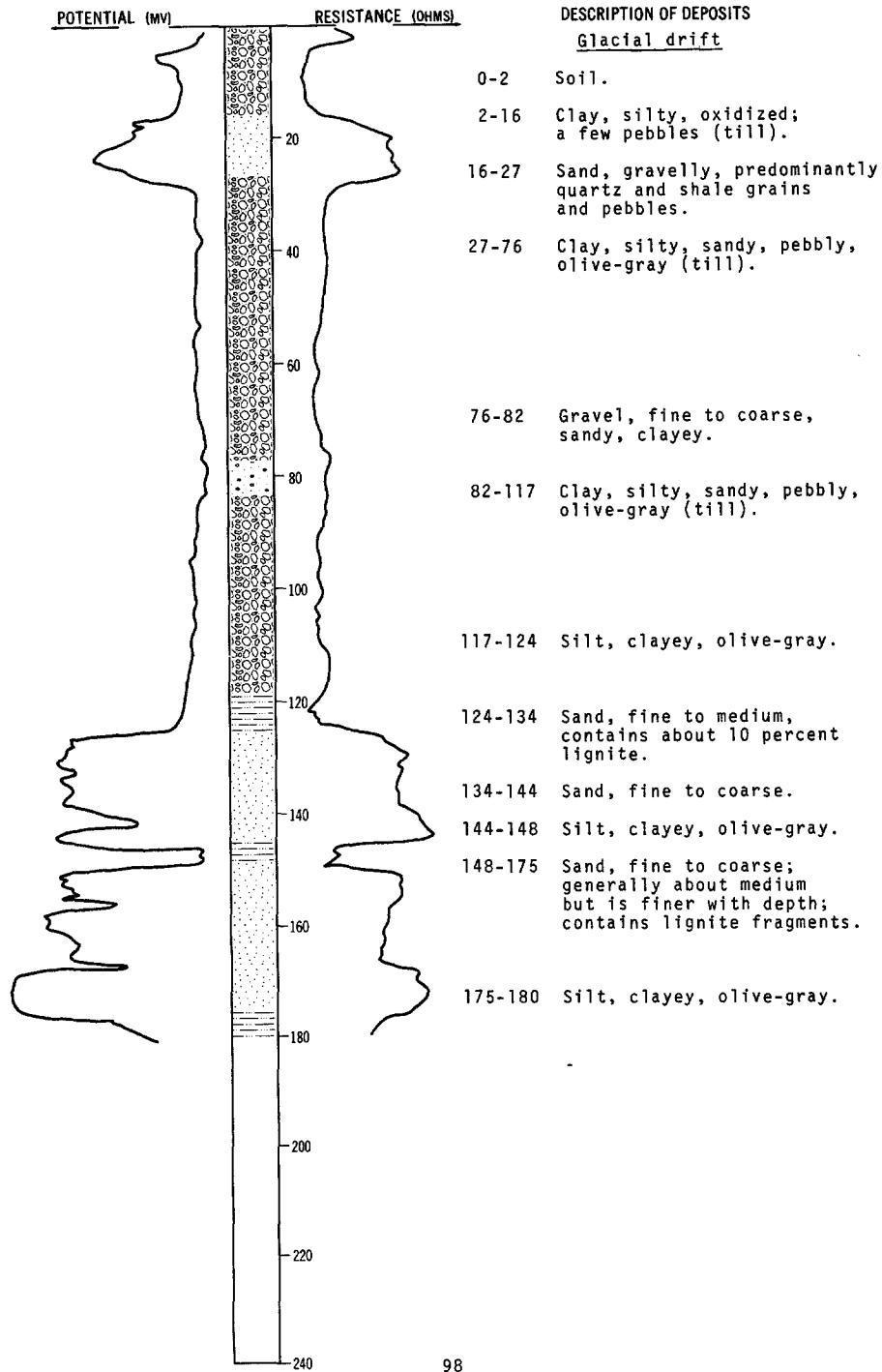


LOCATION: 130-075-31BAA3

ALTITUDE: 1806  
(FT, MSL)

DATE DRILLED: June 1973

DEPTH: 180  
(FT)



130-075-31BAA4  
(Mann Drilling Co.)

Altitude: Date drilled: July 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Till, buff-----	1	15
	Clay, gray-----	2	17
	Sand-----	10	27
	Till-----	63	90
	Sand-----	6	96
	Clay-----	30	126
	Sand-----	4	130
	Clay and sand stringers-----	30	160
	Sand-----	13	173
	Clay-----	7	180

130-075-31BAA5  
(Mann Drilling Co.)

Altitude: Date drilled: July 1973

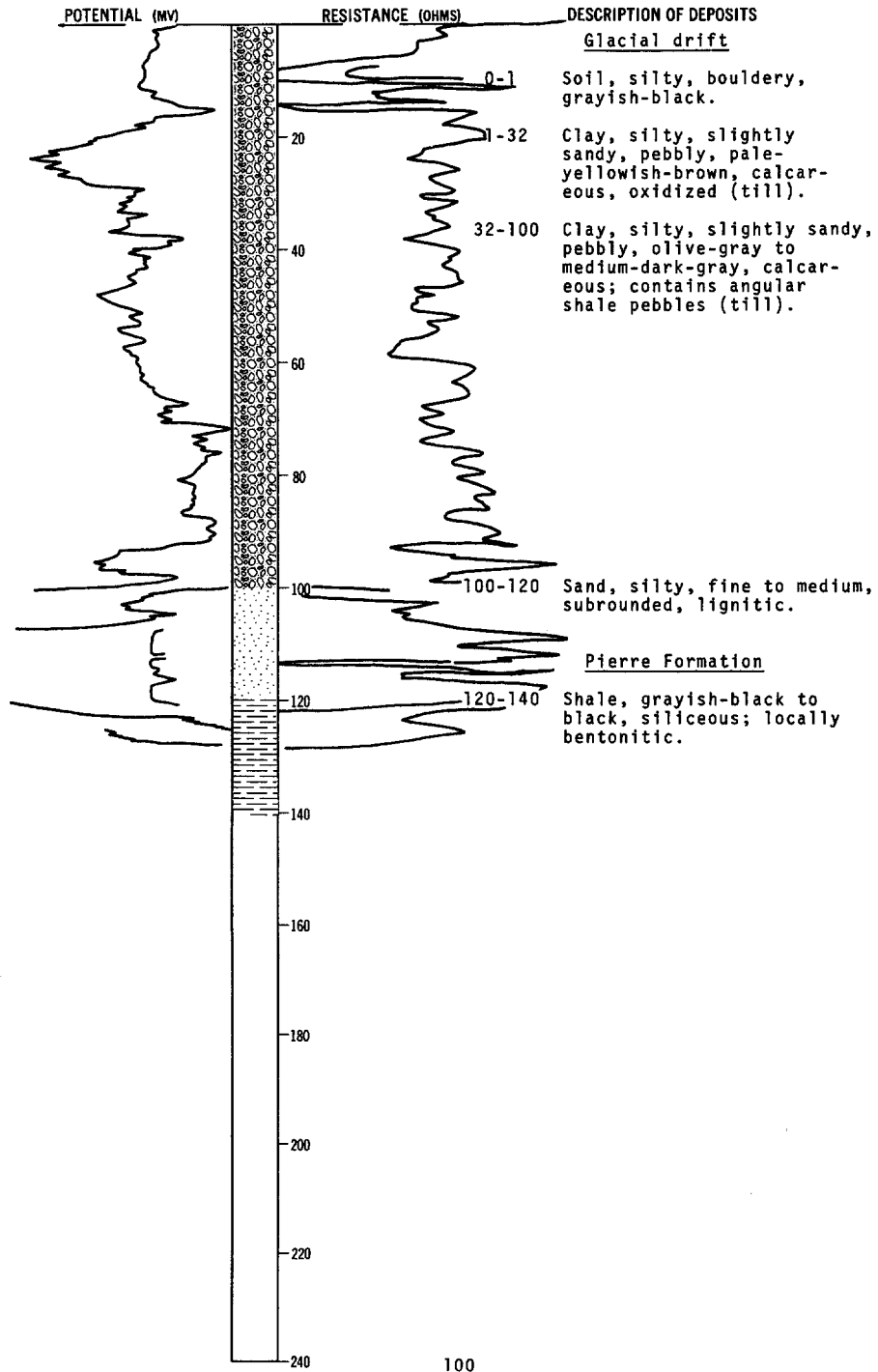
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Clay, buff-----	1	17
	Sand-----	11	18
	Till-----	94	122
	Sand, fine-----	8	130
	Sand, fine to coarse, lignite-----	13	143
	Clay with sand-----	5	148
	Sand, fine to silty-----	32	180
	Silt-----	20	200

LOCATION: 130-075-31CCC

DATE DRILLED: September 1971

ALTITUDE: 1807  
(FT, MSL)

DEPTH: 140  
(FT)

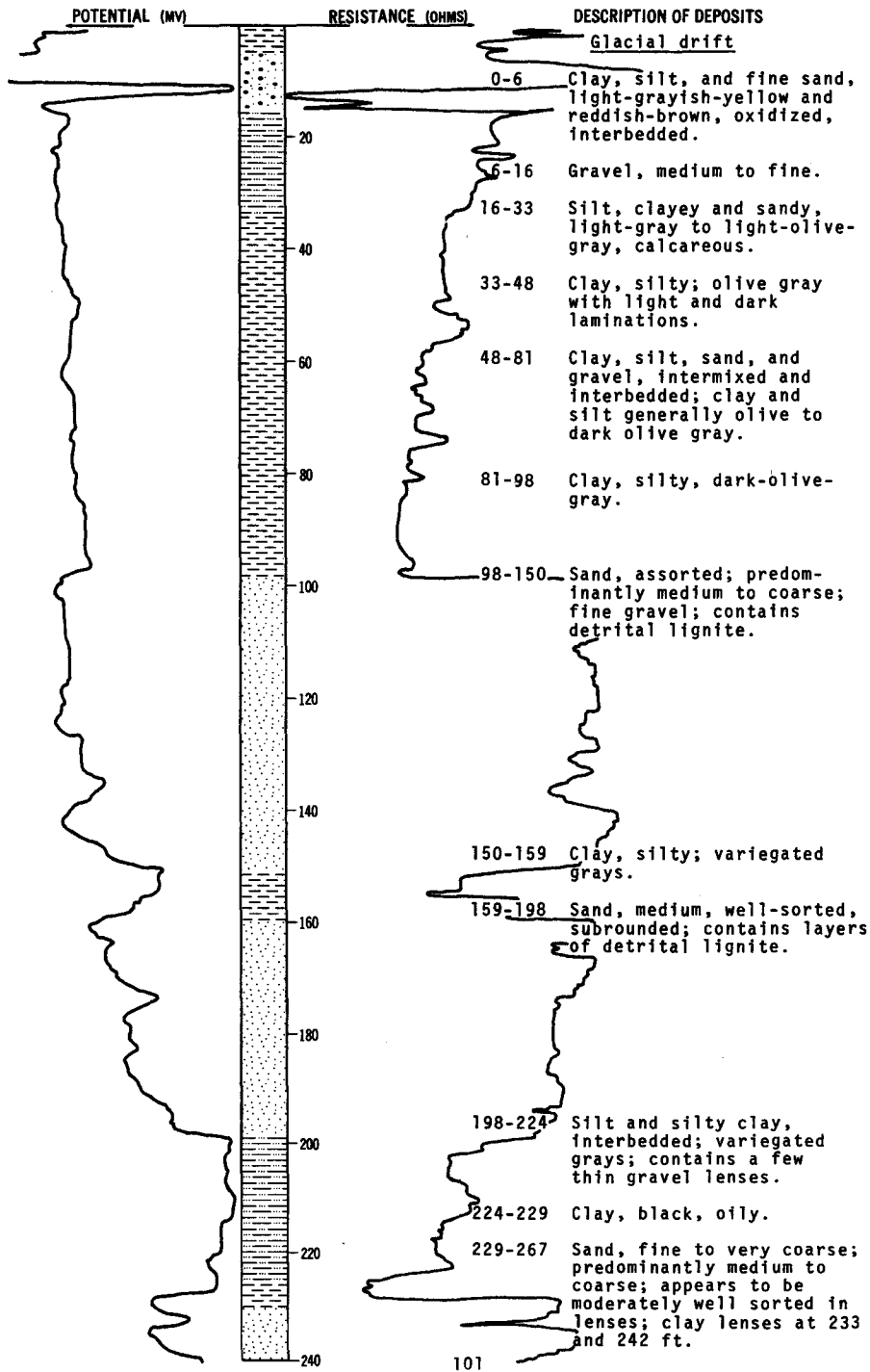


LOCATION: 130-075-31DCC1

DATE DRILLED: November 1972

ALTITUDE: 1809  
(FT. MSL)

DEPTH: 420  
(FT)



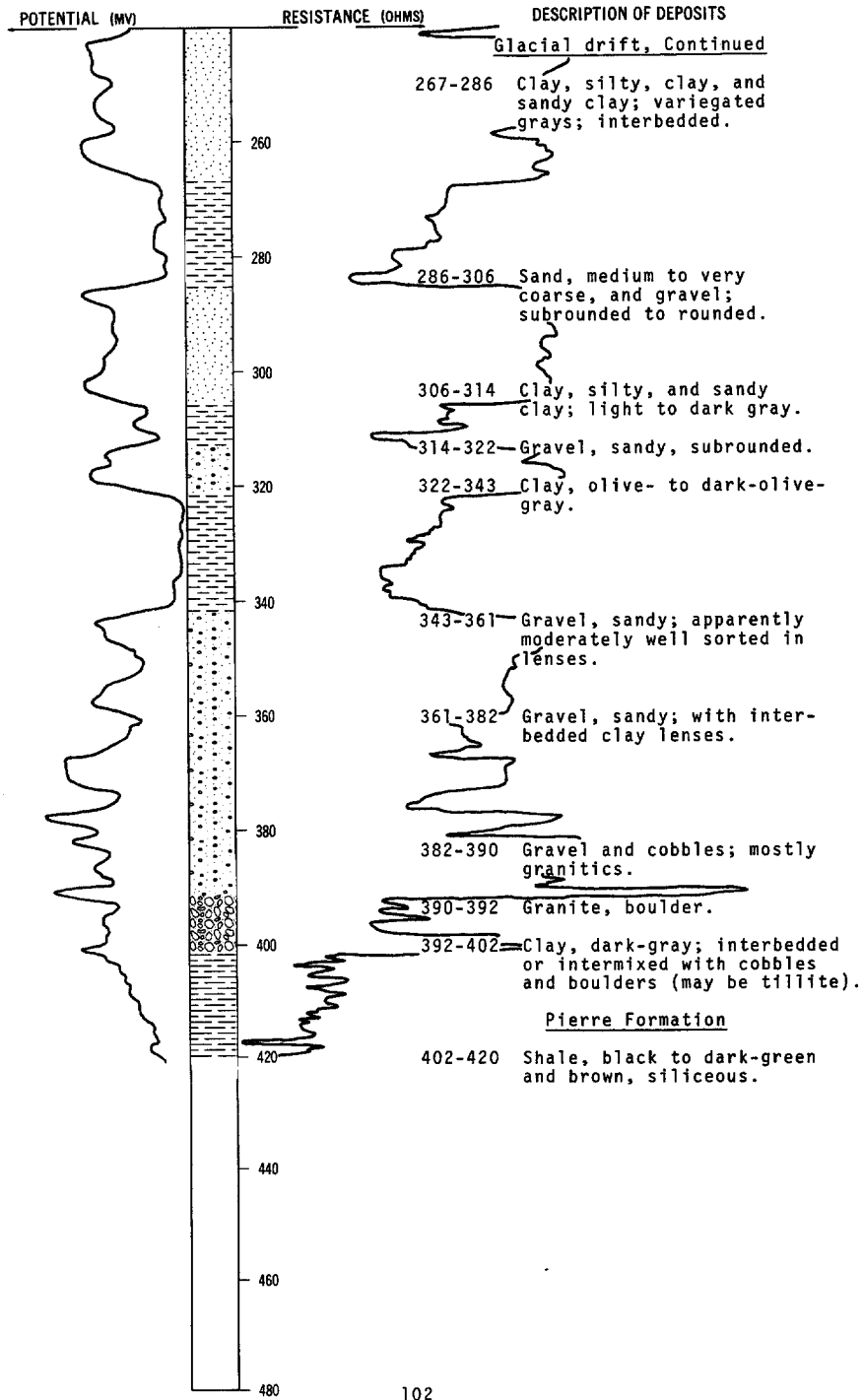
NDSWC 4501, Continued

LOCATION: 130-075-31DCC1

DATE DRILLED: November 1972

ALTITUDE: 1809  
(FT, MSL)

DEPTH: 420  
(FT)



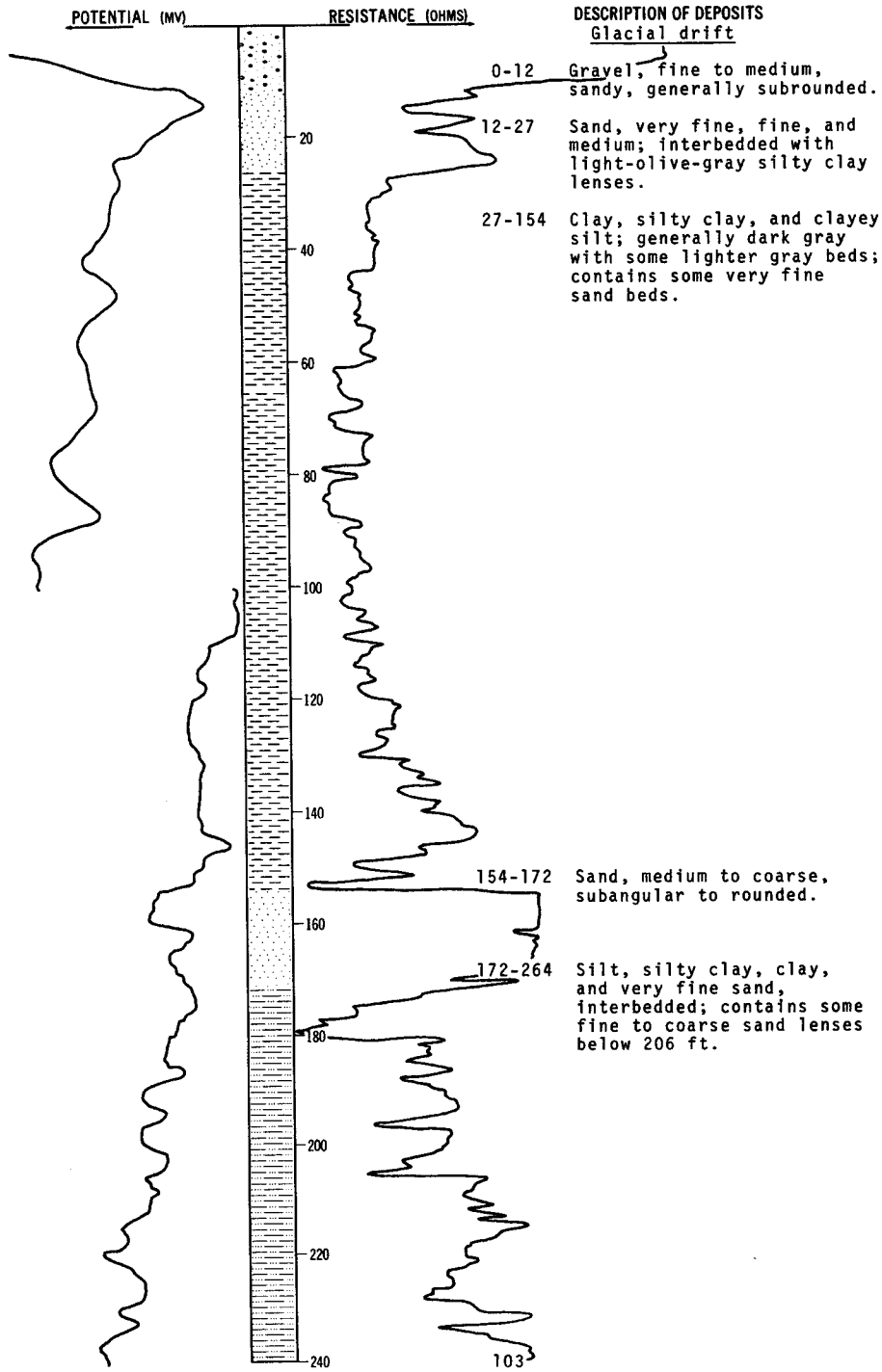


LOCATION: 130-075-32DCD1

DATE DRILLED: November 1972

ALTITUDE: 1798  
(FT, MSL)

DEPTH: 380  
(FT)



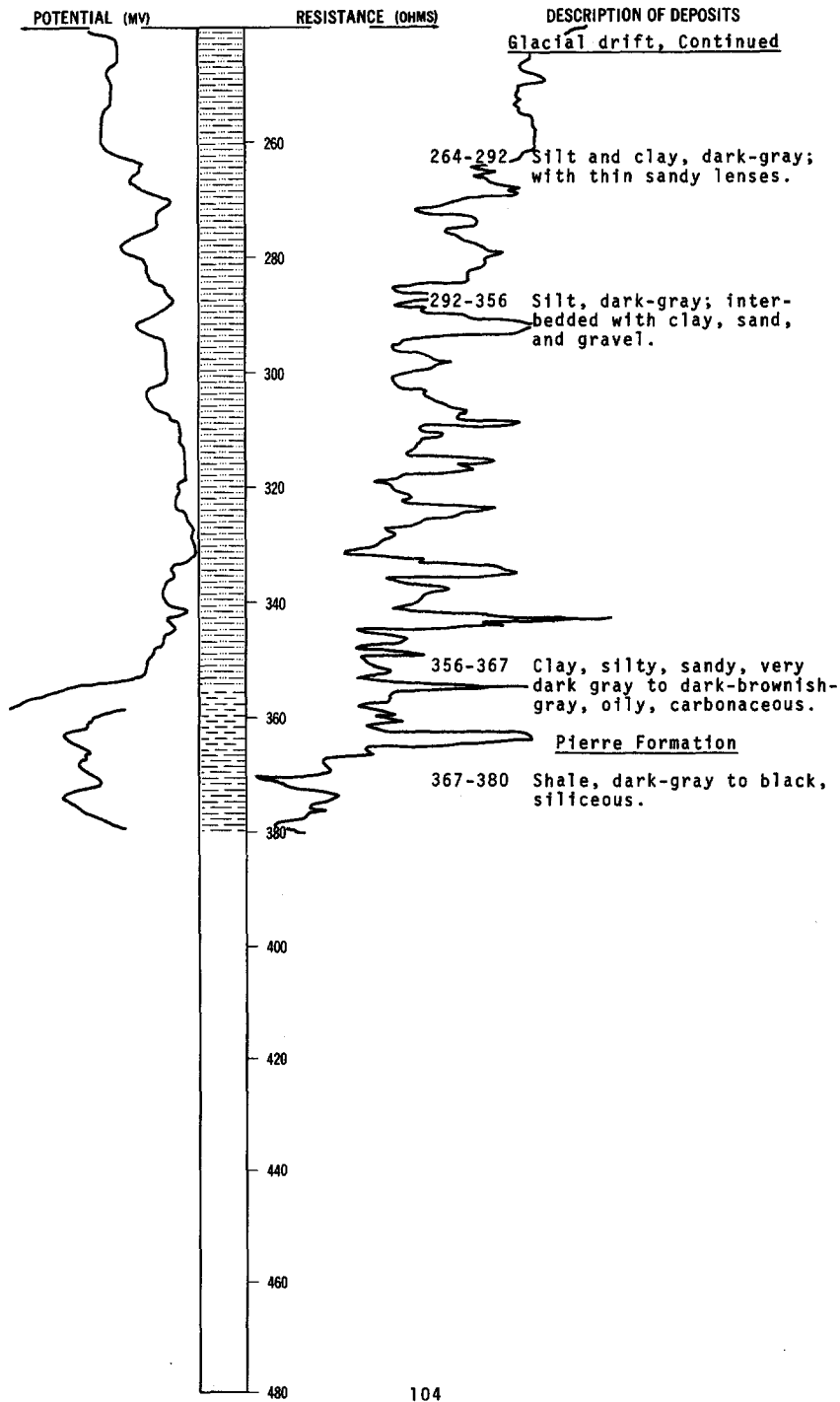
NDSWC 4500, Continued

LOCATION: 130-075-32DCD1

DATE DRILLED: November 1972

ALTITUDE: 1798  
(FT, MSL)

DEPTH: 380  
(FT)

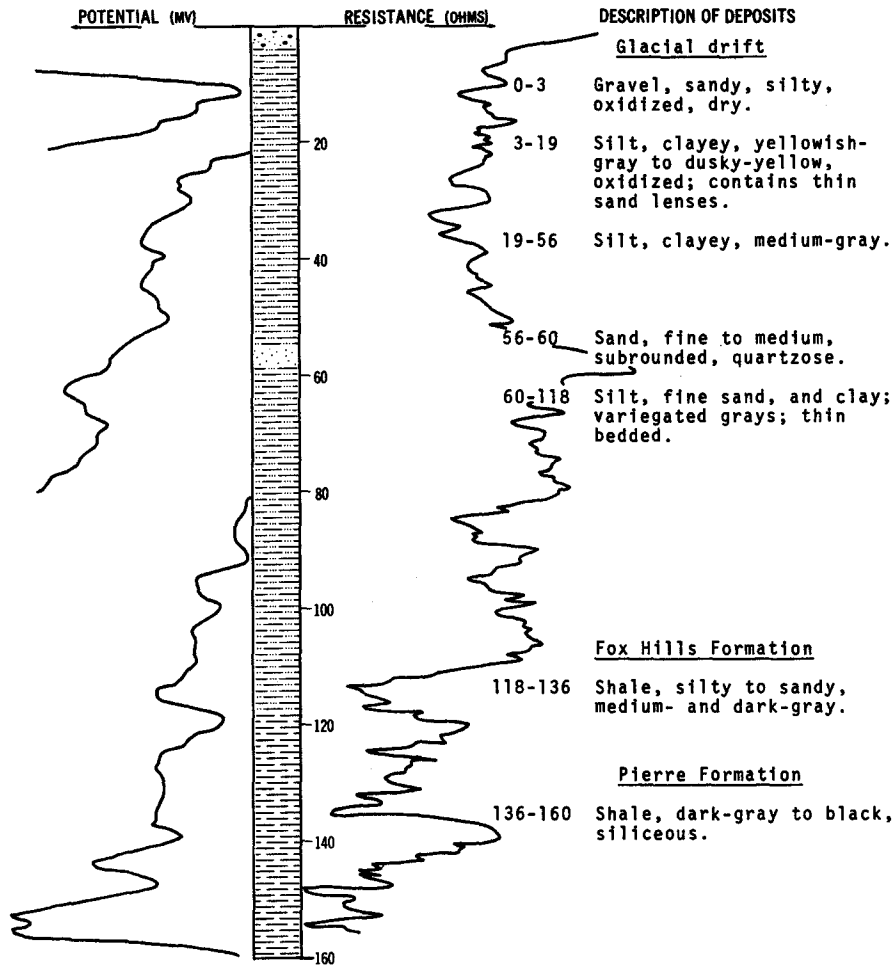


LOCATION: 130-075-33DDD

DATE DRILLED: December 1972

ALTITUDE: 1796  
(FT, MSL)

DEPTH: 160  
(FT)



130-076-02BBB  
Test hole 1222  
(Randich, 1963)

Altitude: 1804 ft

Date drilled: October 1957

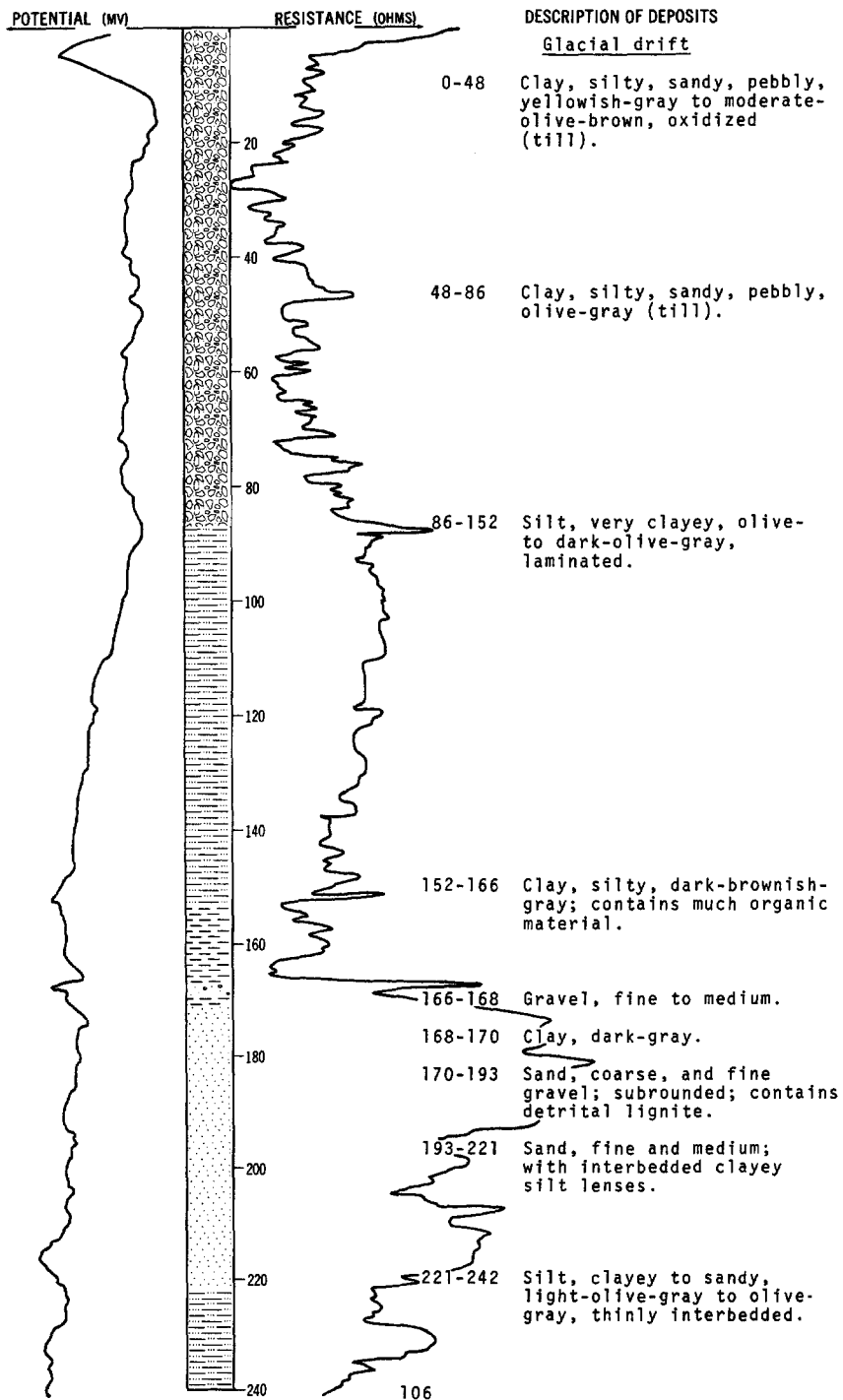
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Glacial drift:</u>			
	Topsoil, black-----	2	2
	Clay, light-gray, and fine to medium gravel (till)-----	9	11
	Gravel, fine to coarse, shale pebbles and cobbles-----	10	21
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	22	43
	Clay, sandy, light-gray-----	9	52

LOCATION: 130-076-03CBB

DATE DRILLED: December 1972

ALTITUDE: 1825  
(FT, MSL)

DEPTH: 480  
(FT)

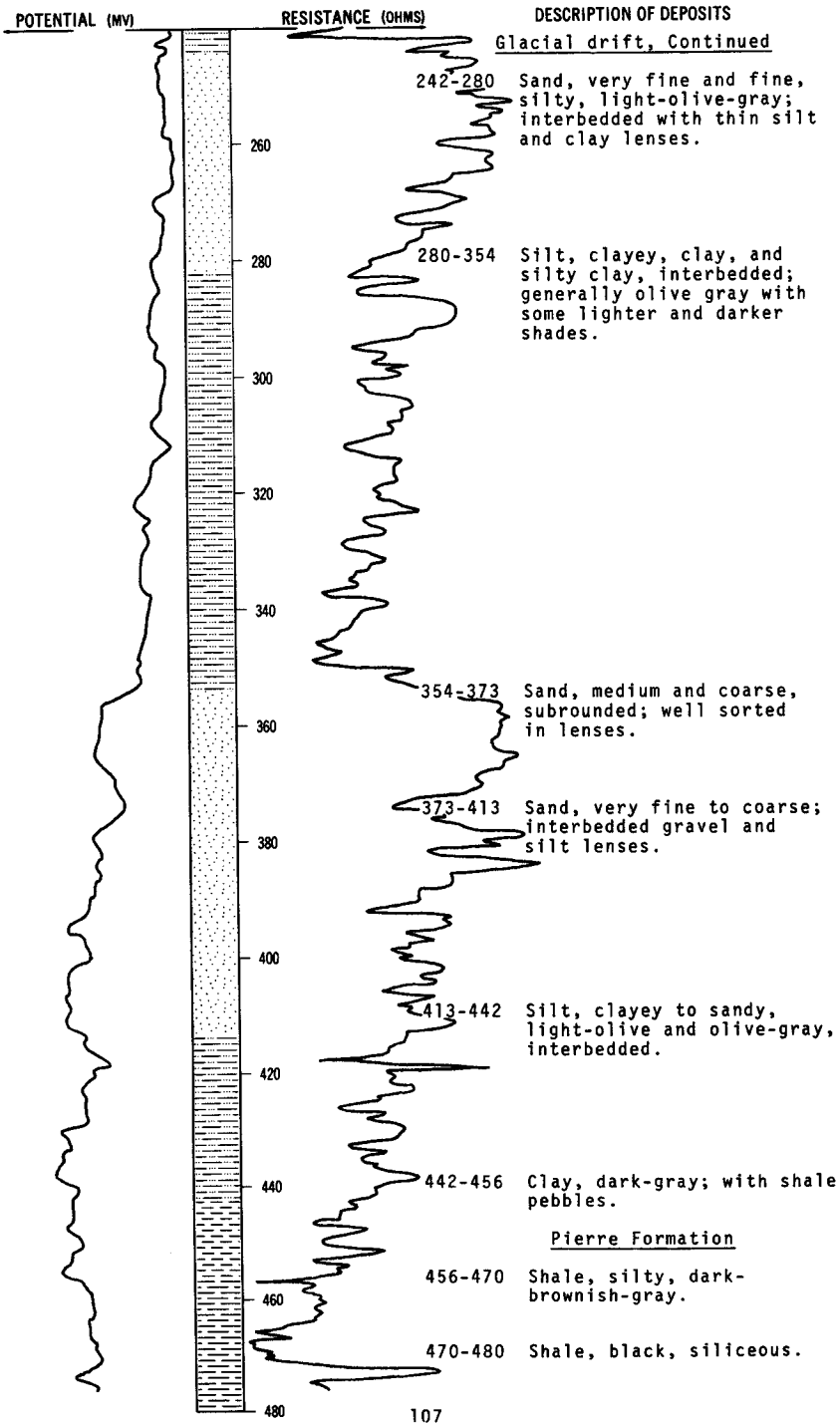


LOCATION: 130-076-03CBB

DATE DRILLED: December 1972

ALTITUDE: 1825  
(FT, MSL)

DEPTH: 480  
(FT)



130-076-04ADD  
Test hole 1218  
(Randich, 1963)

Altitude: Date drilled: October 1957

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil, black-----	1	1
	Clay, light-brown, fine to medium gravel, and shale pebbles (till)-----	35	36
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	103	139
	Clay, sandy, light-gray-----	8	147

130-076-09ACC  
(Log from J. Thurn)

Altitude: Date drilled: April 1973

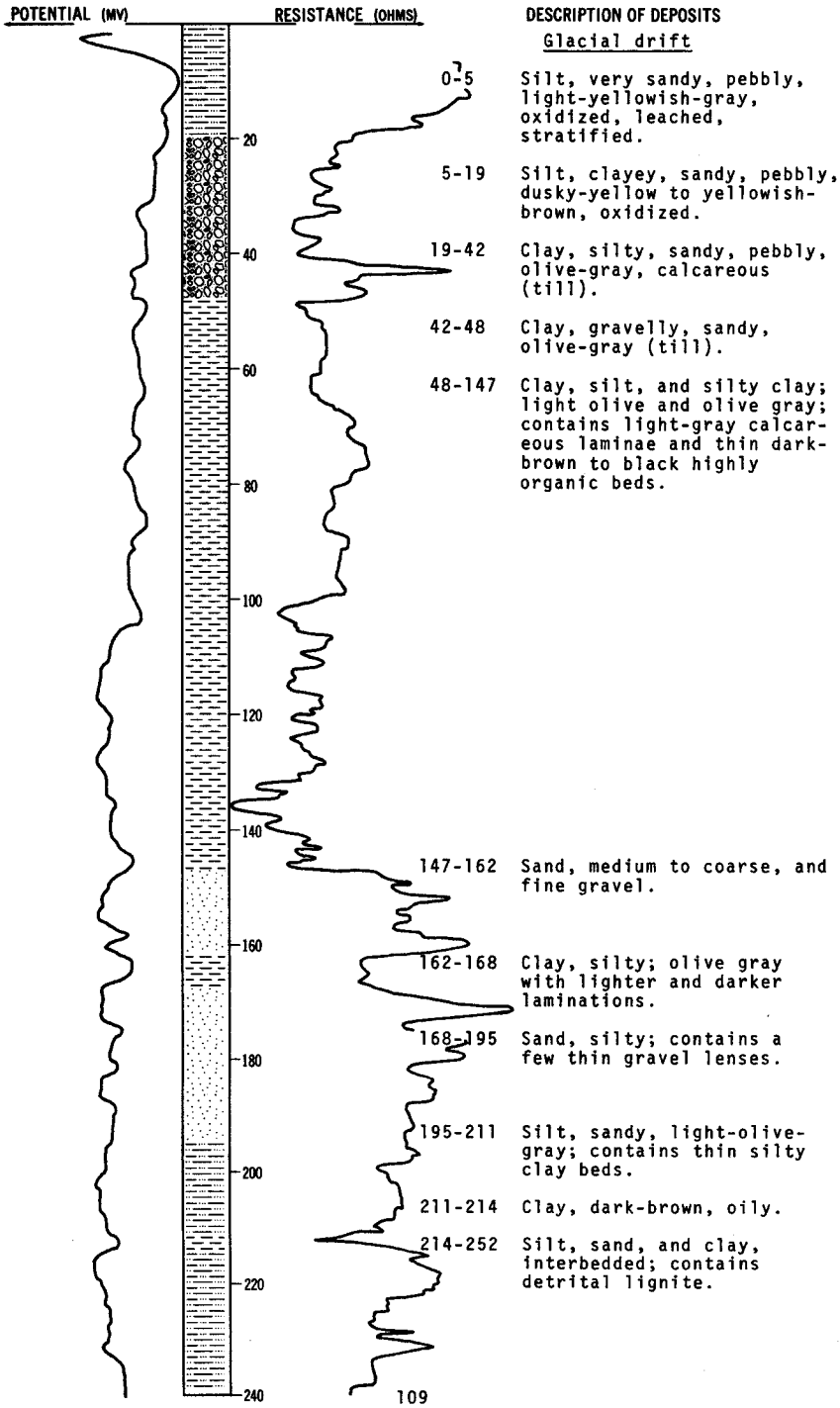
	Soil, black-----	3	3
	Clay, yellow-----	17	20
	Sand and gravel-----	7	27

LOCATION: 130-076-12AAA

DATE DRILLED: November 1972

ALTITUDE: 1837  
(FT, MSL)

DEPTH: 440  
(FT)



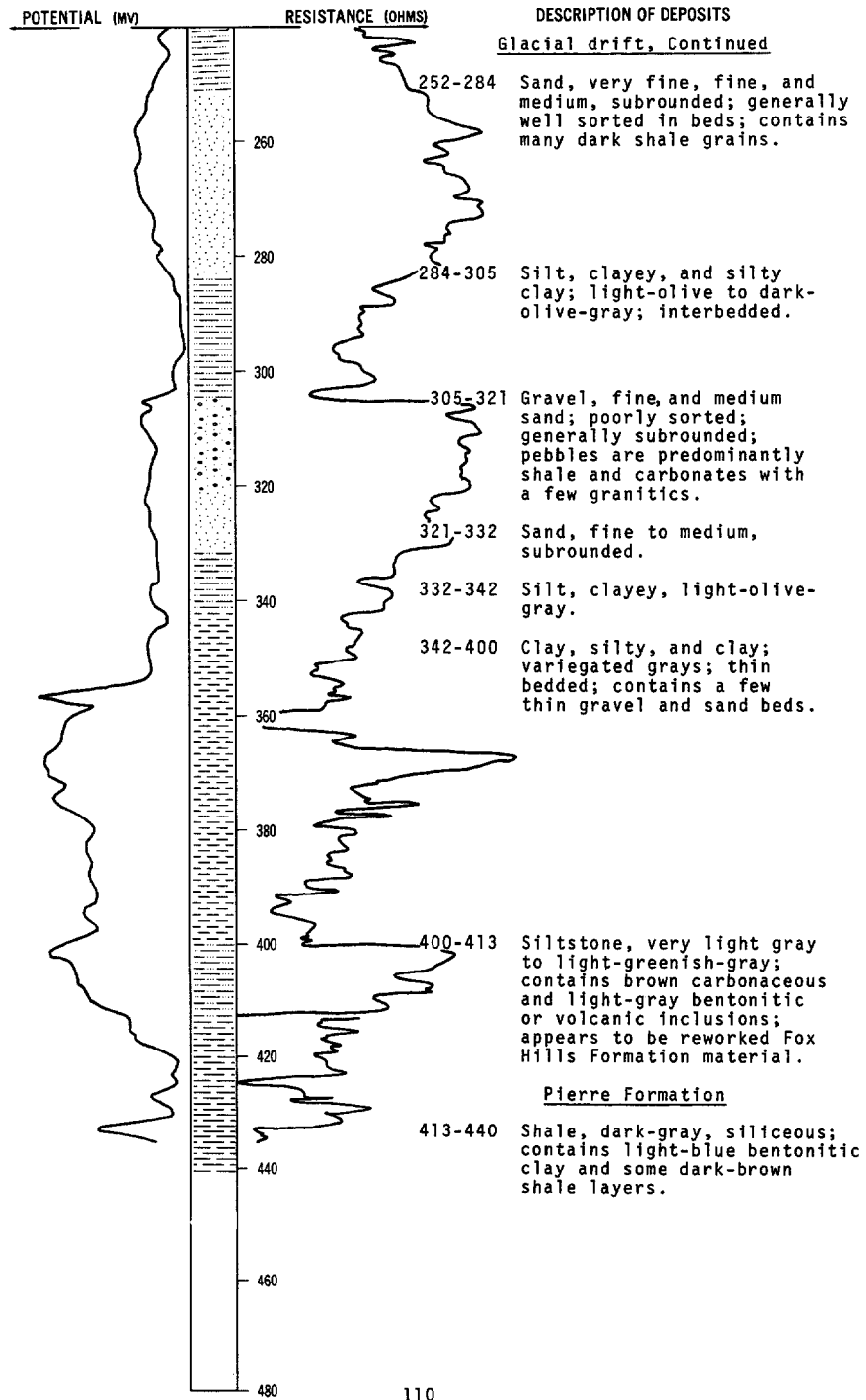
NDSWC 4497, Continued

LOCATION: 130-076-12AAA

DATE DRILLED: November 1972

ALTITUDE: 1837  
(FT, MSL)

DEPTH: 440  
(FT)





130-076-12888  
 Test hole 1210  
 (Randich, 1963)

Altitude: 1822 ft

Date drilled: September 1957

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	2	2
	Clay, light-brown, and fine to medium gravel (till)-----	38	40
	Clay, light-brown, and abundant fine to medium gravel (till)-----	14	54
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	69	123
	Clay, sandy, light-gray-----	13	136

130-076-13000  
 Test hole 1211  
 (Randich, 1963)

Altitude: 1826 ft

Date drilled: September 1957

Glacial drift:			
	Topsoil, black-----	1	1
	Clay, light-brown, and fine to medium gravel (till)-----	24	25
	Clay, sandy, gray-----	11	36
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	39	75
	Gravel, fine to coarse, and shale pebbles-----	33	108
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	48	156
Fox Hills Formation:			
	Clay, sandy, light-gray-----	12	168

130-076-35AAA 2  
 Test hole 1212  
 (Randich, 1963)

Altitude: 1832 ft

Date drilled: 1957

Glacial drift:			
	Topsoil, black-----	4	4
	Clay, light-brown, and fine to medium gravel (till)-----	5	9
	Clay, light-brown, and abundant fine to medium gravel (till)-----	11	20
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	138	158
Pierre Formation:			
	Shale, gray-----	10	168

130-076-35DDD  
 NDSWC 8159

Altitude: 1850 ft

Date drilled: September 1971

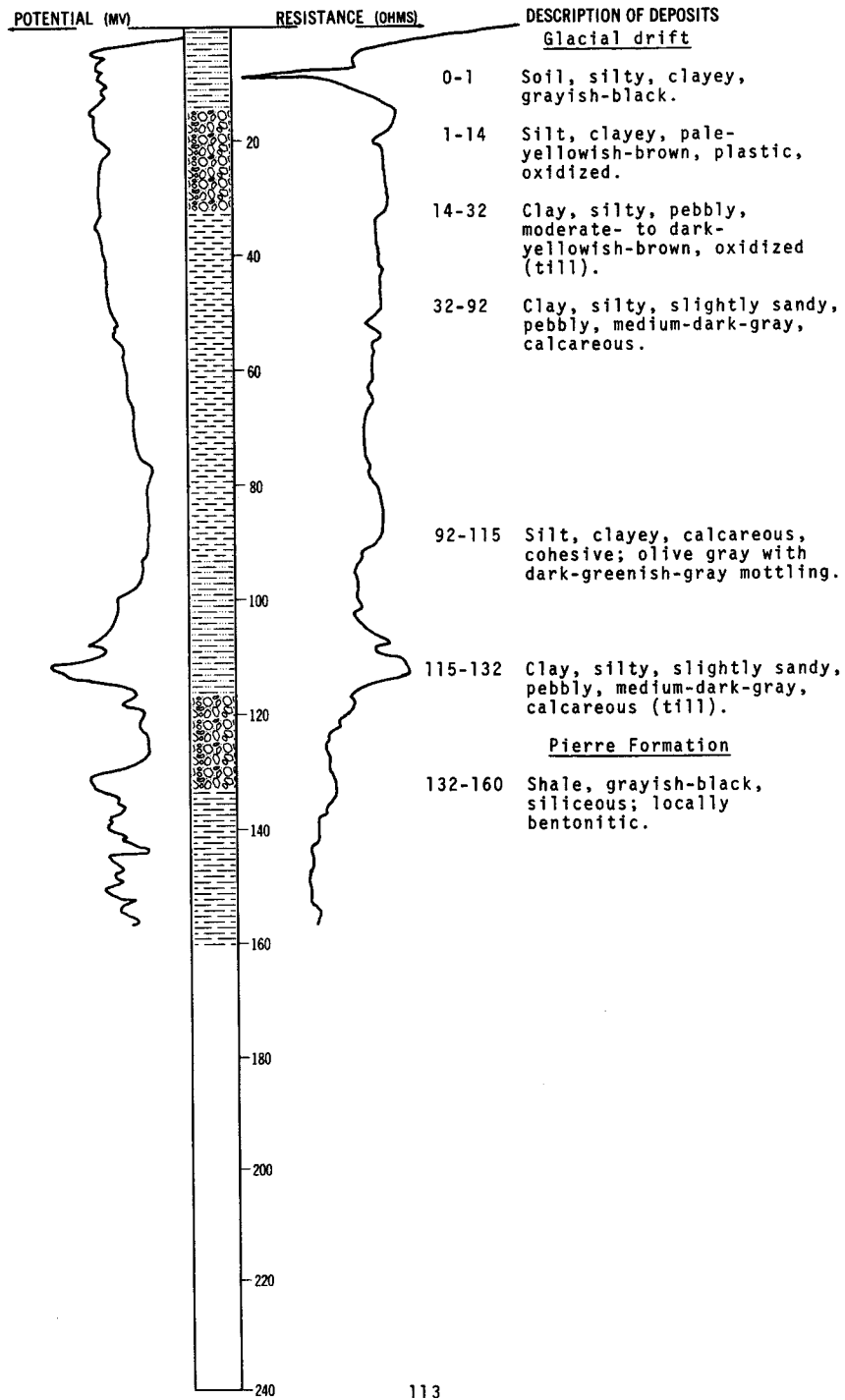
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, silty, clayey, grayish-black-----	1	1
	Clay, silty, sandy, pebbly, moderate- yellowish-brown, calcareous, oxidized (till)-----	9	10
Fox Hills Formation:			
	Shale, silty, slightly sandy, oxidized; dark yellowish brown with medium-gray mottling-----	5	15
	Shale, silty, slightly sandy, medium-gray, moderately indurated-----	45	60

LOCATION: 130-076-36DCC

DATE DRILLED: September 1971

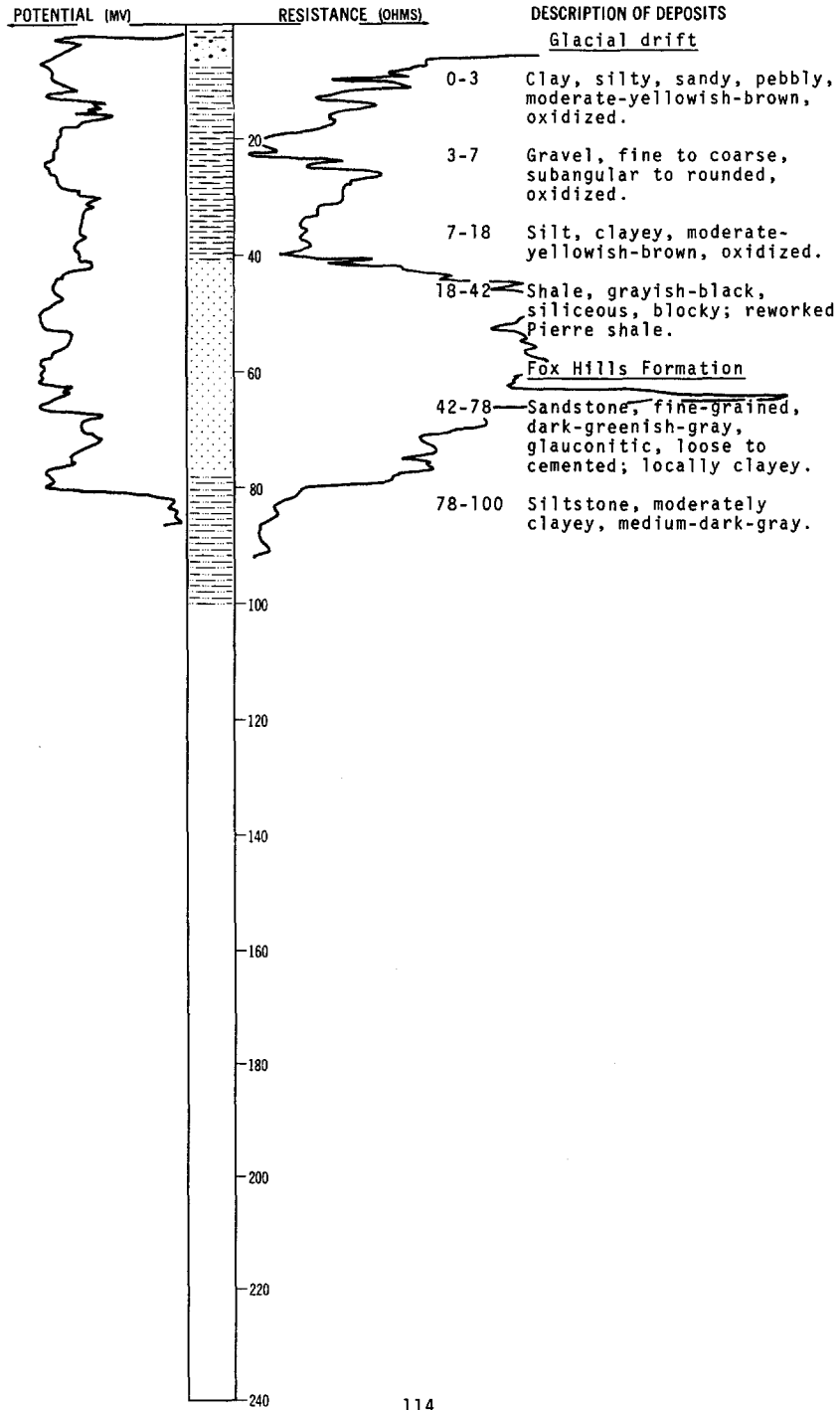
ALTITUDE: 1800  
(FT, MSL)

DEPTH: 160  
(FT)



LOCATION: 130-077-01CCC  
 ALTITUDE: 1930  
 (FT, MSL)

DATE DRILLED: November 1972  
 DEPTH: 100  
 (FT)

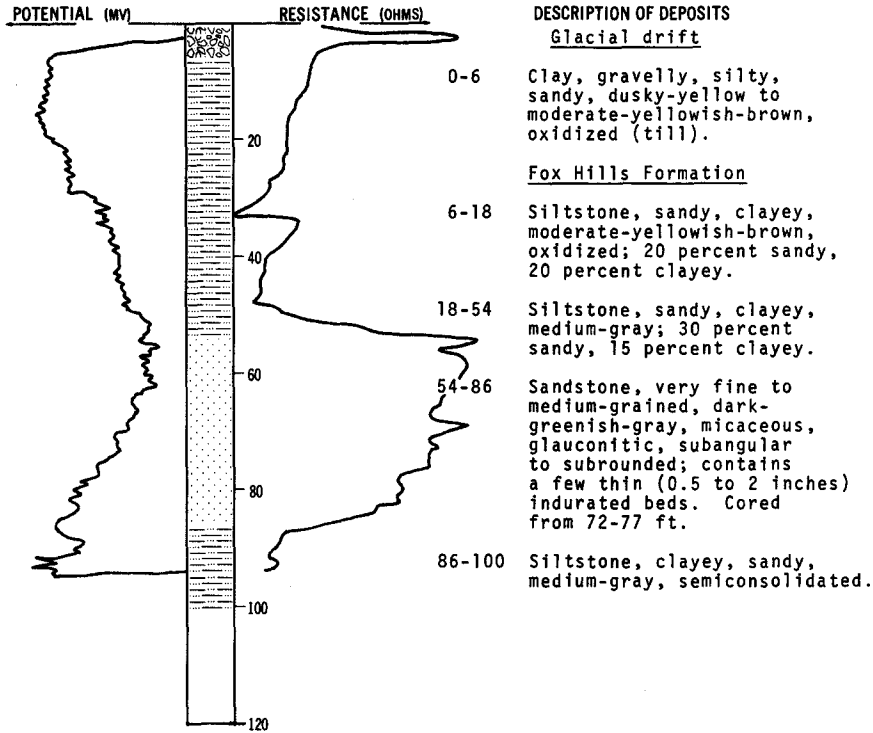


LOCATION: 130-077-14AAA

DATE DRILLED: May 1973

ALTITUDE: 1958  
(FT, MSL)

DEPTH: 100  
(FT)



130-077-18A  
(Log from J. Thurn)

Altitude:

Date drilled: June 1973

Geologic source	Material	Thickness (feet)	Depth (feet)
	Dirt, black-----	3	3
	Shale, blue-----	61	64

130-078-17CBB2  
(Log from Witikko Drilling)

Altitude:

Date drilled: November 1972

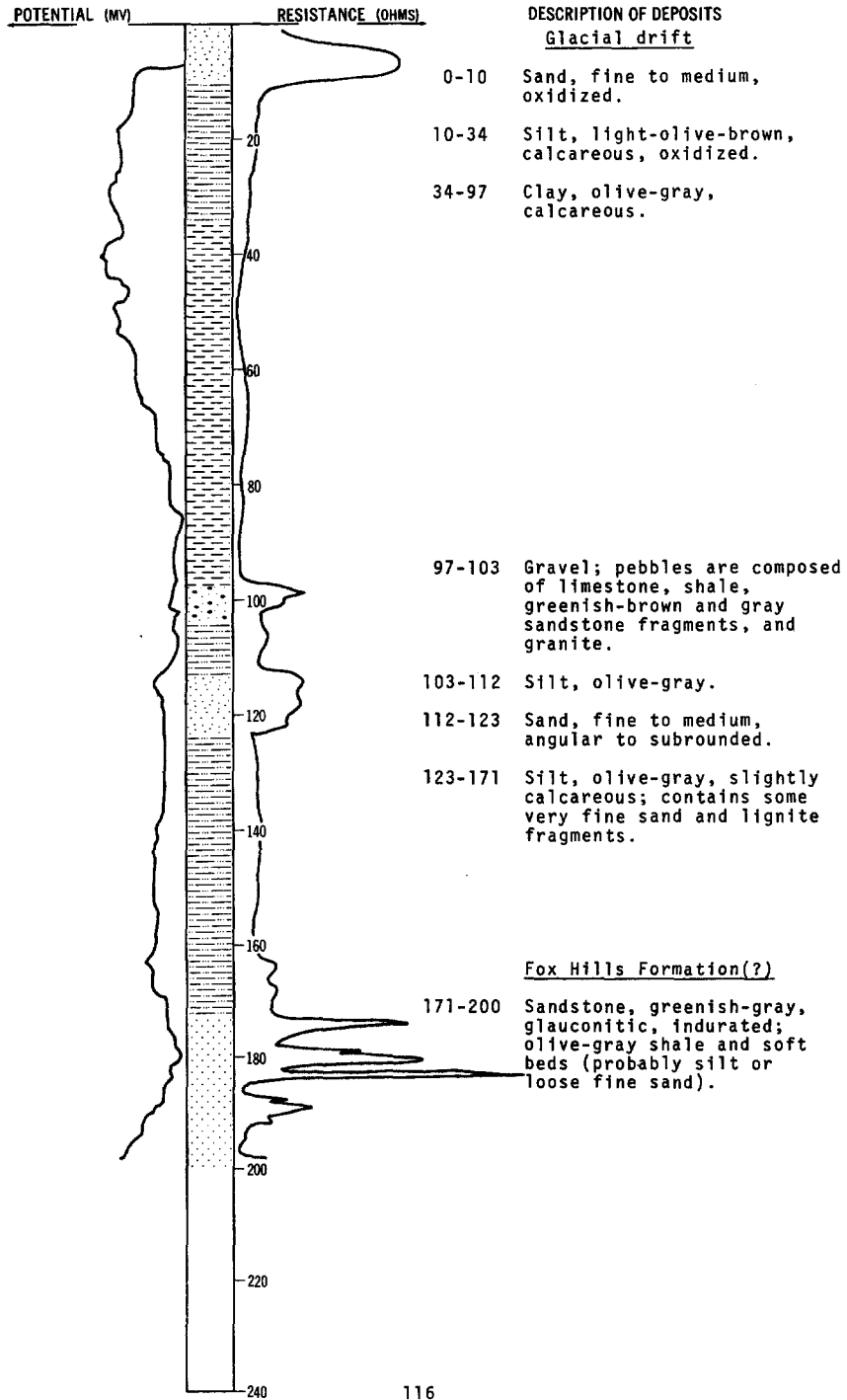
	Soil, black-----	1	1
	Sand, brown-----	13	14
	Clay, yellow-----	13	27
	Clay, sandy, blue-----	6	33
	Clay, gray-----	17	50
	Sand, silty, gray-----	10	60

LOCATION: 130-078-18BBC

ALTITUDE: 1680  
(FT, MSL)

DATE DRILLED: November 1972

DEPTH: 200  
(FT)



130-078-20AAD  
(Log from Baumgartner Drilling Co.)

Altitude:		Date drilled: June 1972	
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Clay, brown-----	40	40
	Clay, gray-----	22	62
	Sand, dirty-----	2	64
	Clay, gray-----	26	90
	Sand, fine to coarse-----	10	100

130-078-22BBC  
NDSWC 8163

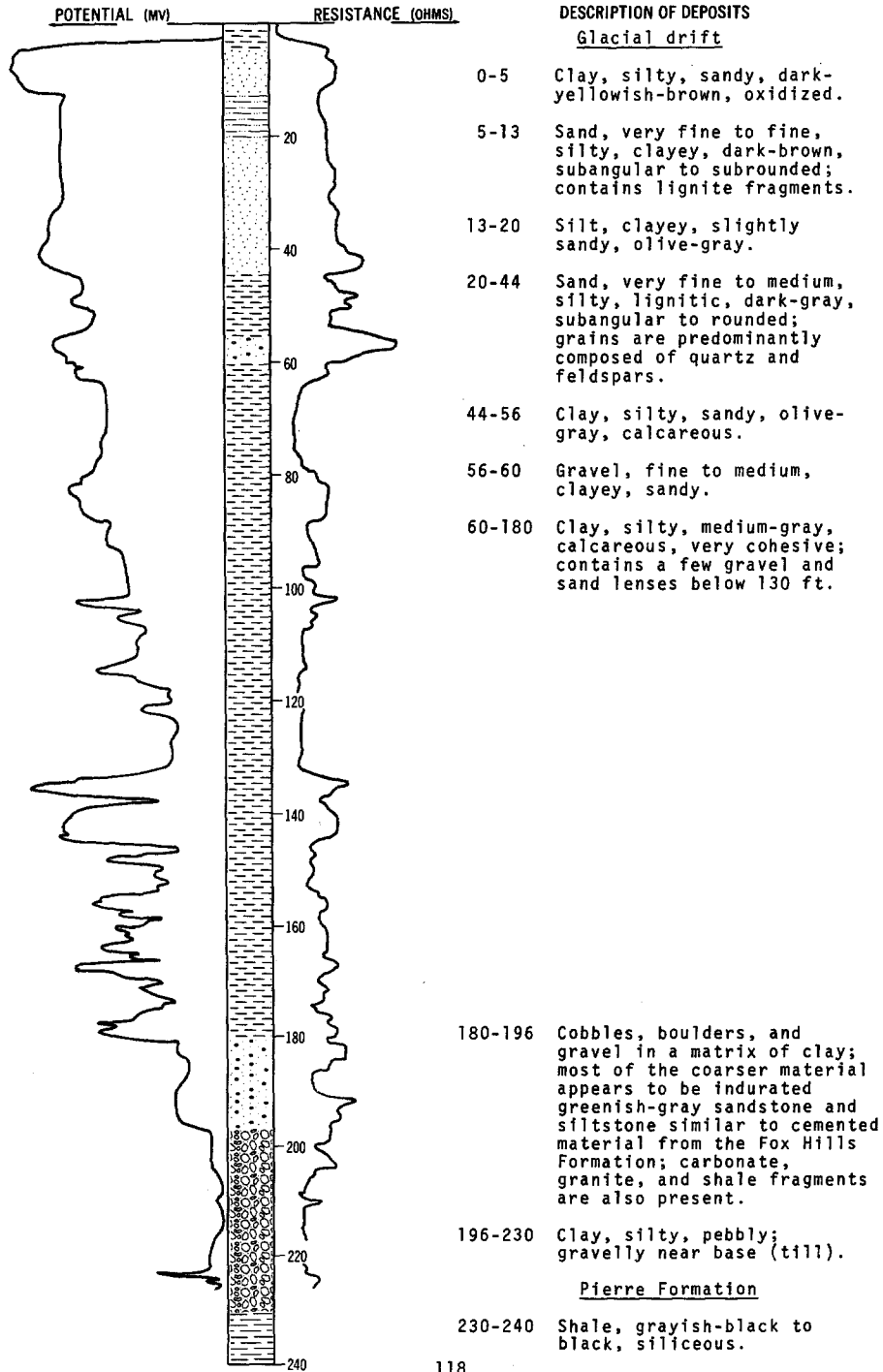
Altitude: 1720 ft		Date drilled: October 1971	
Glacial drift:			
	Soil, silty, sandy, brownish-black-----	1	1
	Silt, clayey, sandy, dark-yellowish-brown, oxidized-----	4	5
	Sand, fine, silty, subangular, oxidized-----	11	16
	Clay, very silty, olive-gray, calcareous----	4	20

LOCATION: 130-078-26DCC

ALTITUDE: 1740  
(FT, MSL)

DATE DRILLED: November 1972

DEPTH: 240  
(FT)



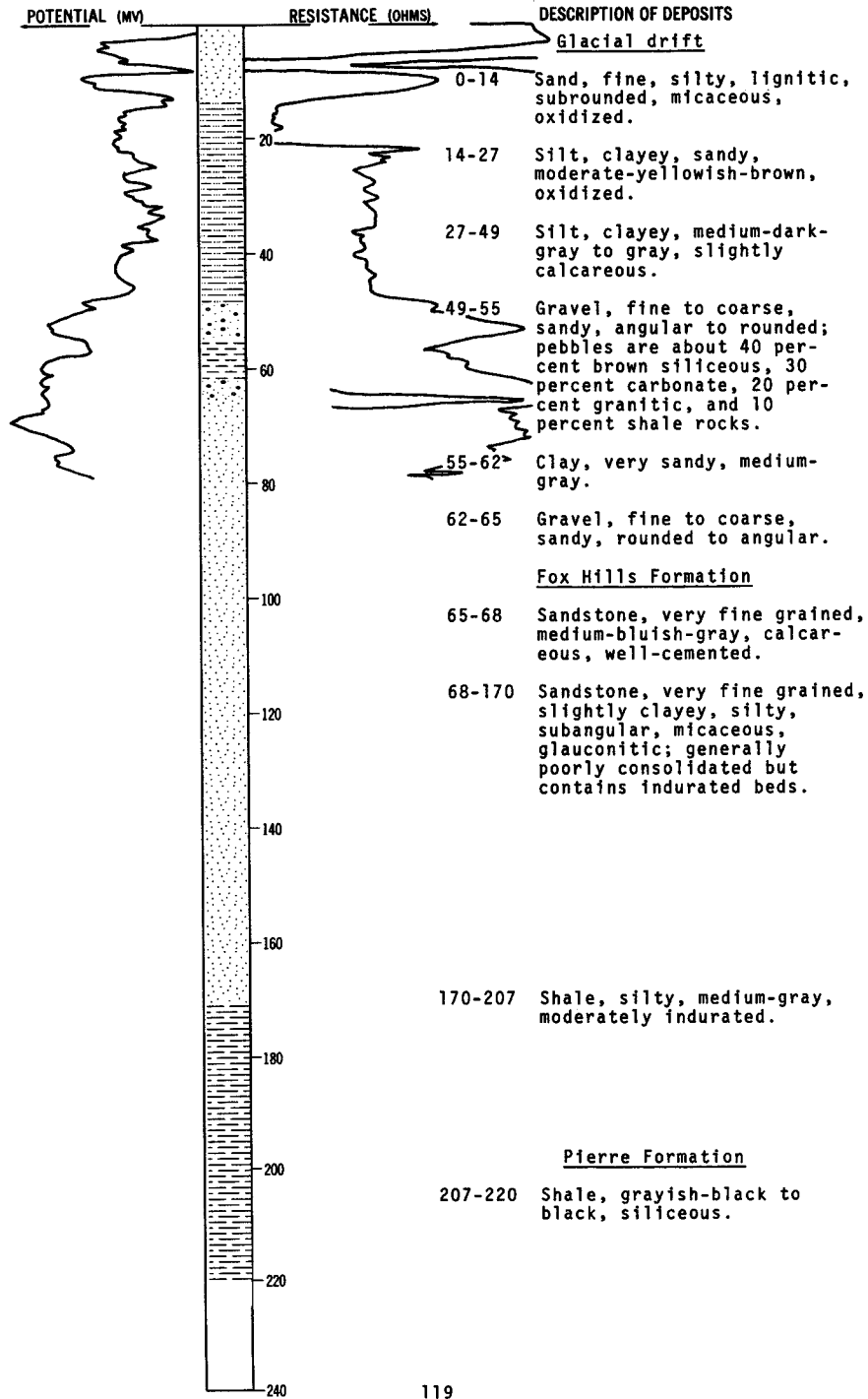


LOCATION: 130-078-27BBC

DATE DRILLED: October 1971

ALTITUDE: 1765  
(FT, MSL)

DEPTH: 220  
(FT)

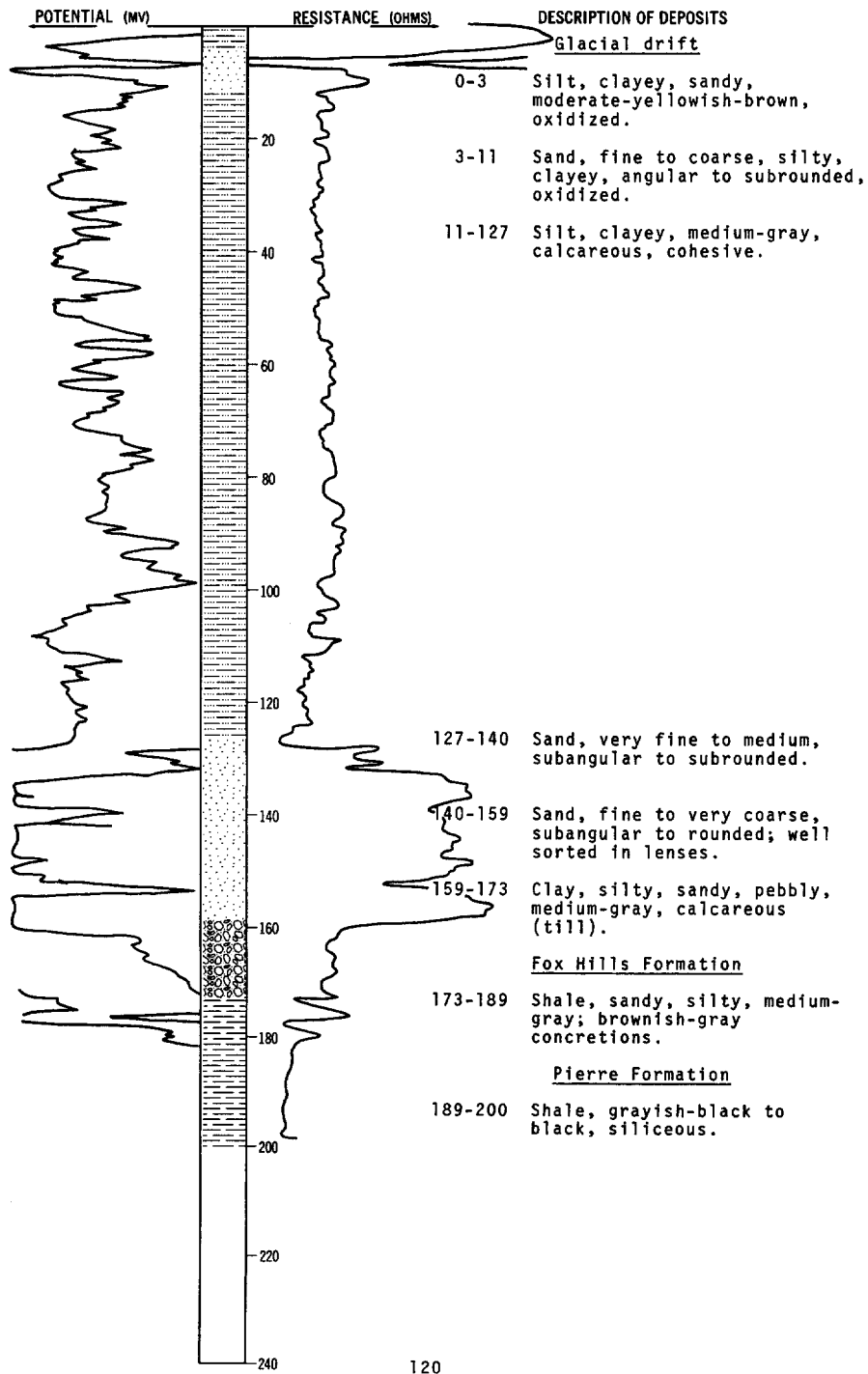


LOCATION: 130-079-03CCC

DATE DRILLED: October 1971

ALTITUDE: 1657  
(FT, MSL)

DEPTH: 200  
(FT)

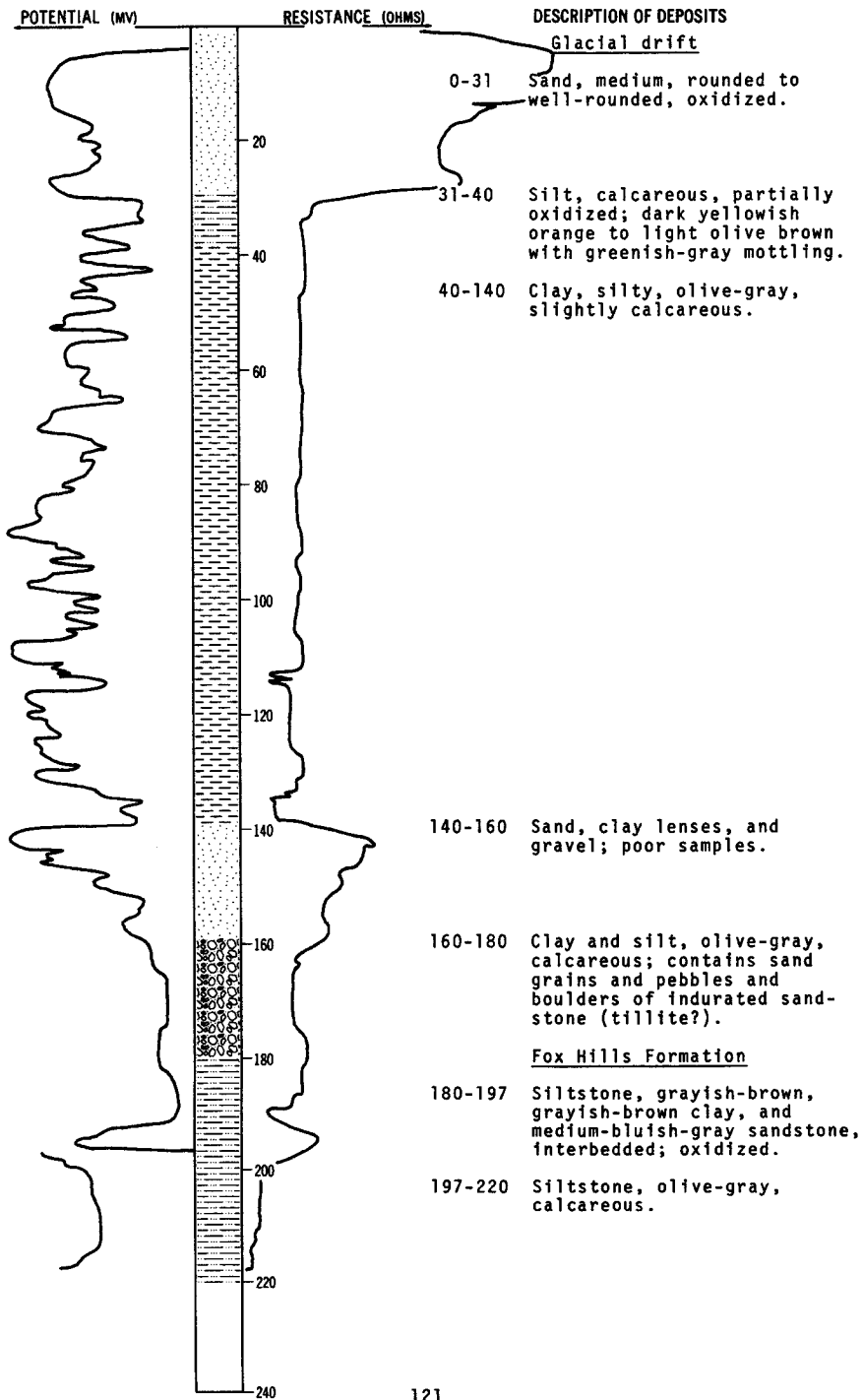


LOCATION: 130-079-03DDC

DATE DRILLED: November 1972

ALTITUDE: 1665  
(FT, MSL)

DEPTH: 220  
(FT)

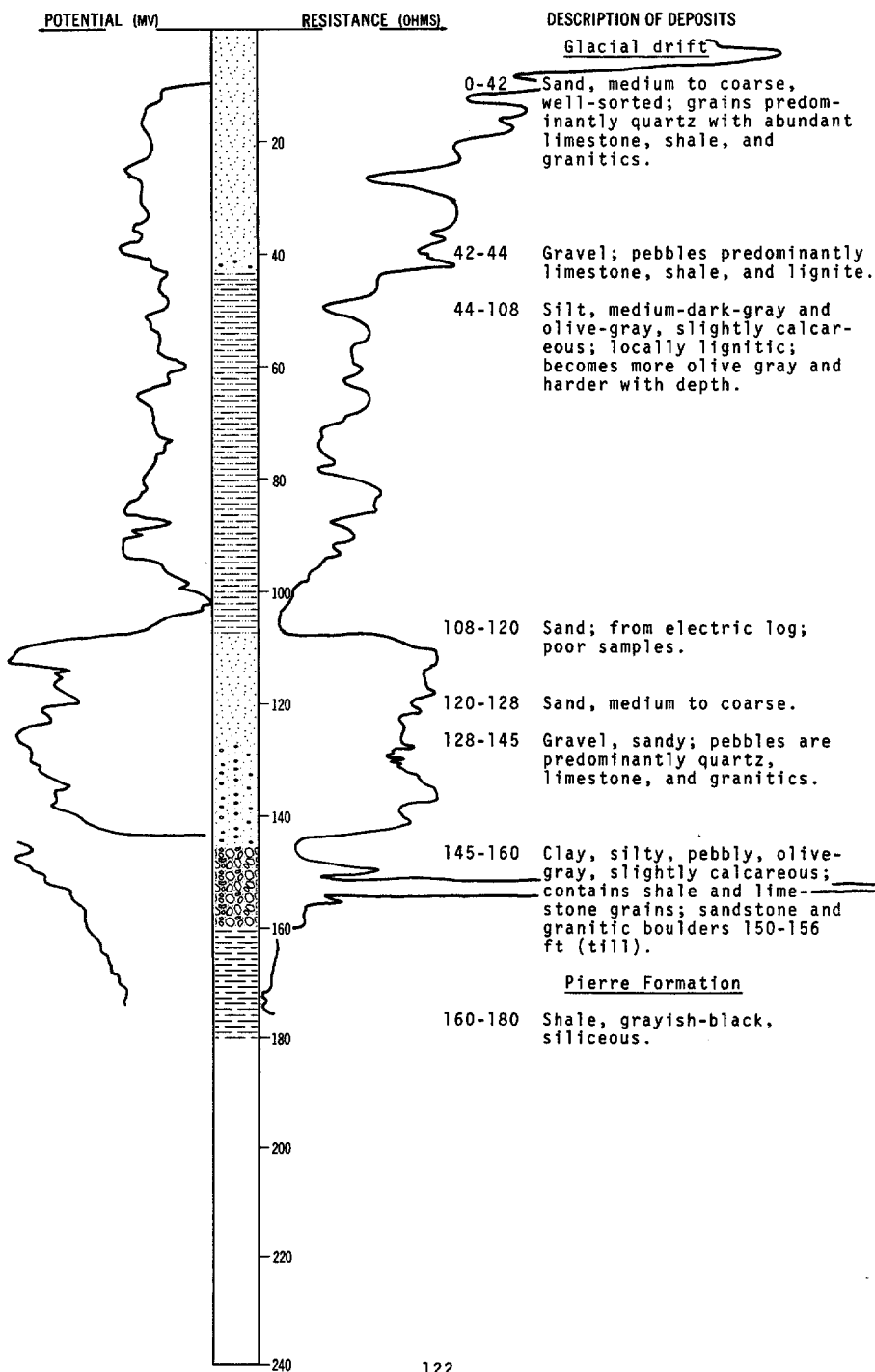


LOCATION: 130-079-04AAA

DATE DRILLED: November 1972

ALTITUDE: 1647  
(FT. MSL)

DEPTH: 180  
(FT)

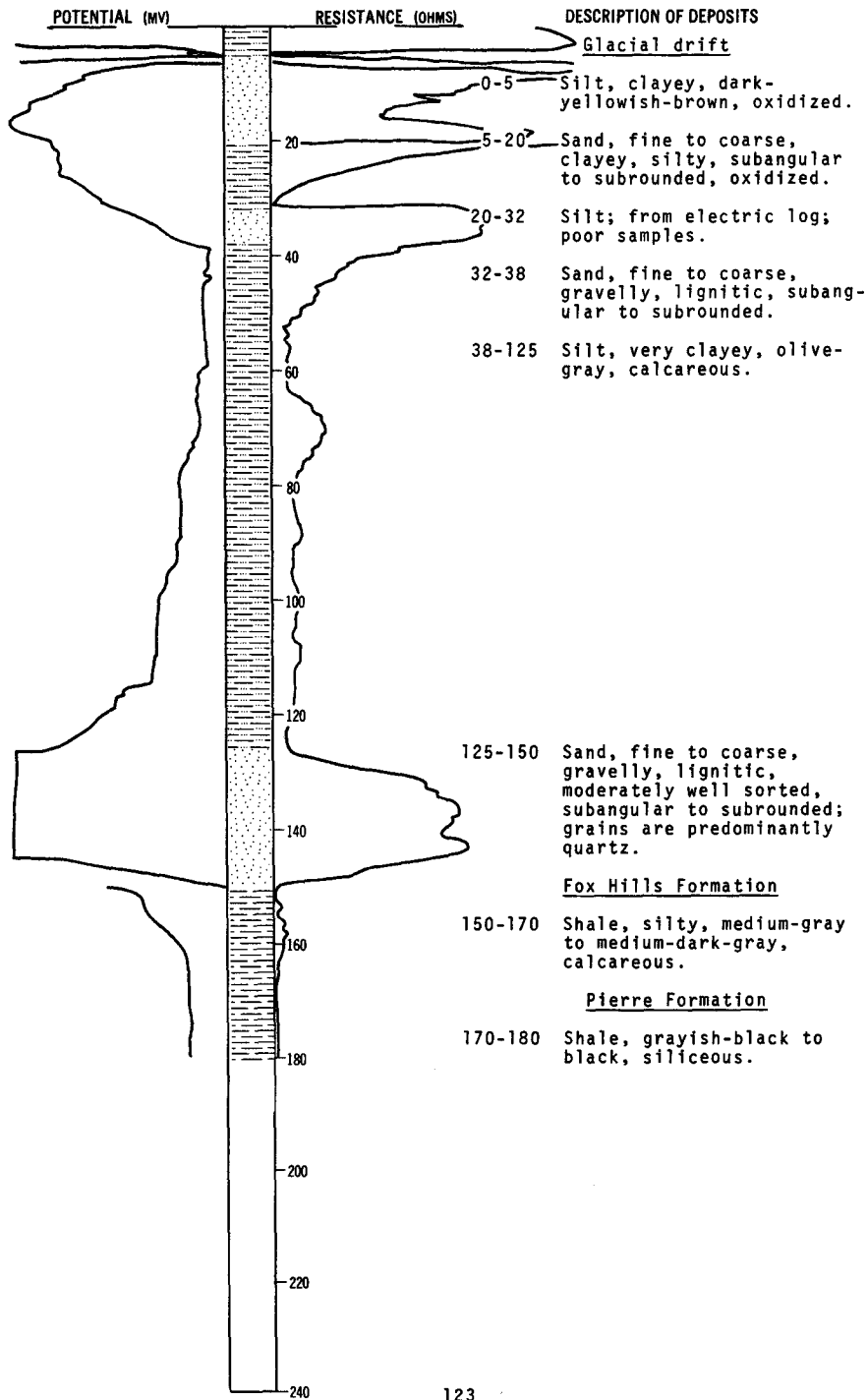


LOCATION: 130-079-04BBB

DATE DRILLED: October 1971

ALTITUDE: 1645  
(FT, MSL)

DEPTH: 180  
(FT)



130-079-09DDA  
(Log from Baumgartner Drilling Co.)

Altitude: Date drilled: June 1972

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Clay, brown-----	35	35
	Clay, gray-----	55	90
	Sand, coarse-----	10	100
	Sandstone, fractured-----	10	110

130-079-10DBB  
(Log from Witikko Drilling)

Altitude: Date drilled: November 1972

	Soil, black-----	1	1
	Sand, brown-----	15	16
	Clay, yellow-----	4	20
	Sand, bluish gray-----	10	30

130-079-12BDC  
(Log from J. Thurn)

Altitude: Date drilled: September 1972

	Dirt, black-----	6	6
	Sand-----	7	13

130-079-12BDD  
(Log from J. Thurn)

Altitude: Date drilled: September 1972

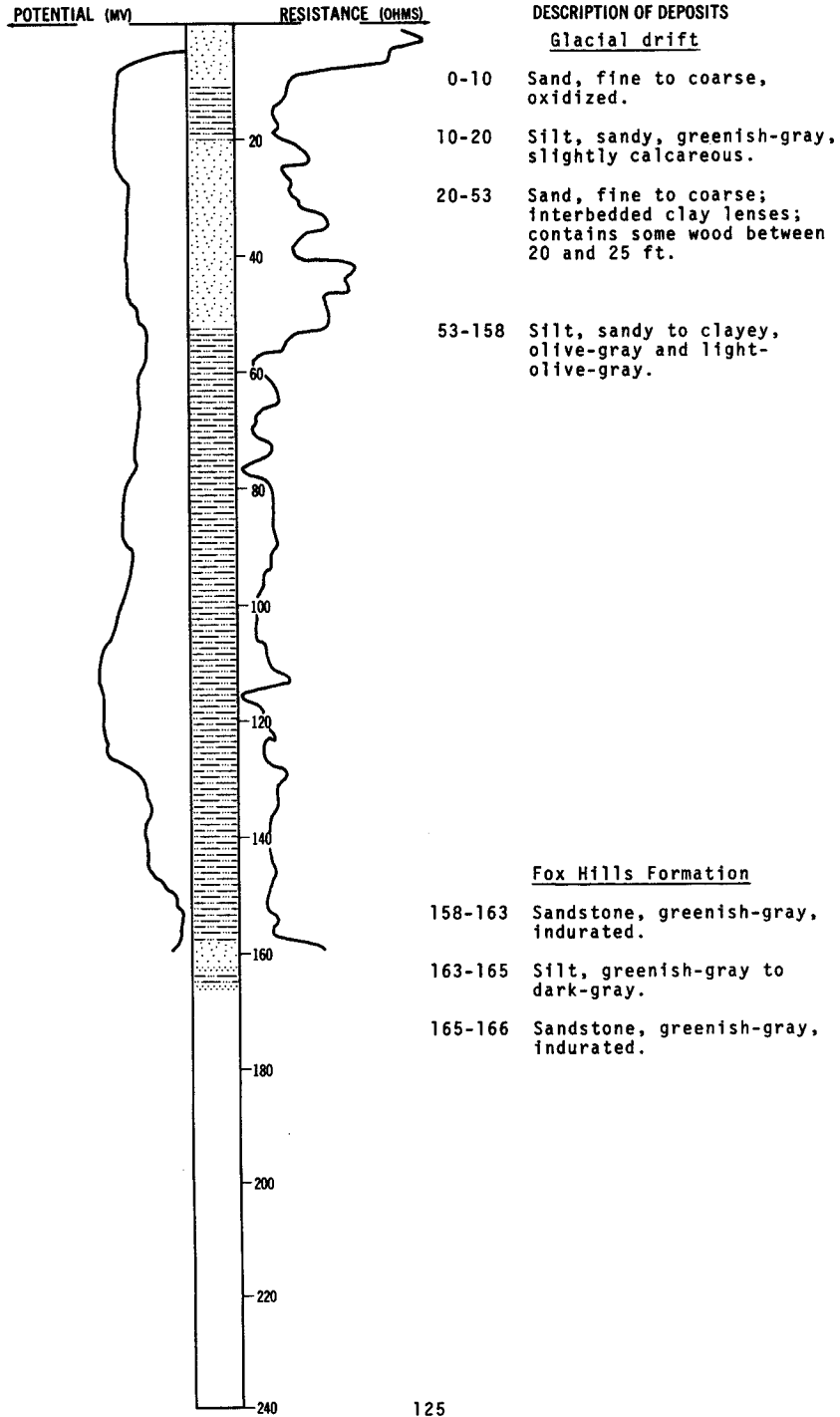
	Soil, black-----	5	5
	Sand-----	18	23

LOCATION: 130-079-13AAA1

DATE DRILLED: March 1972

ALTITUDE: 1666  
(FT, MSL)

DEPTH: 166  
(FT)



131-074-10CCC  
NDSWC 8588

Altitude: 1915 ft

Date drilled: November 1972

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Gravel, fine to coarse, sandy, subangular to rounded, poorly sorted, oxidized-----	5	5
	Sand, very fine to medium, dark-gray, lignitic, subangular, well sorted-----	10	15
Fox Hills Formation:			
	Siltstone, clayey, medium-dark-gray, semi-indurated-----	20	35
Pierre Formation:			
	Shale, grayish-black, siliceous-----	5	40

131-074-27DBB2  
(Log from Albrecht Well Work)

Altitude:

Date drilled: July 1973

Topsoil, black-----	3	3
Clay, silty, yellow-----	10	13
Sand and gravel-----	4	17
Clay, mixed with dark sand-----	5	22
Shale, black, hard-----	-	22

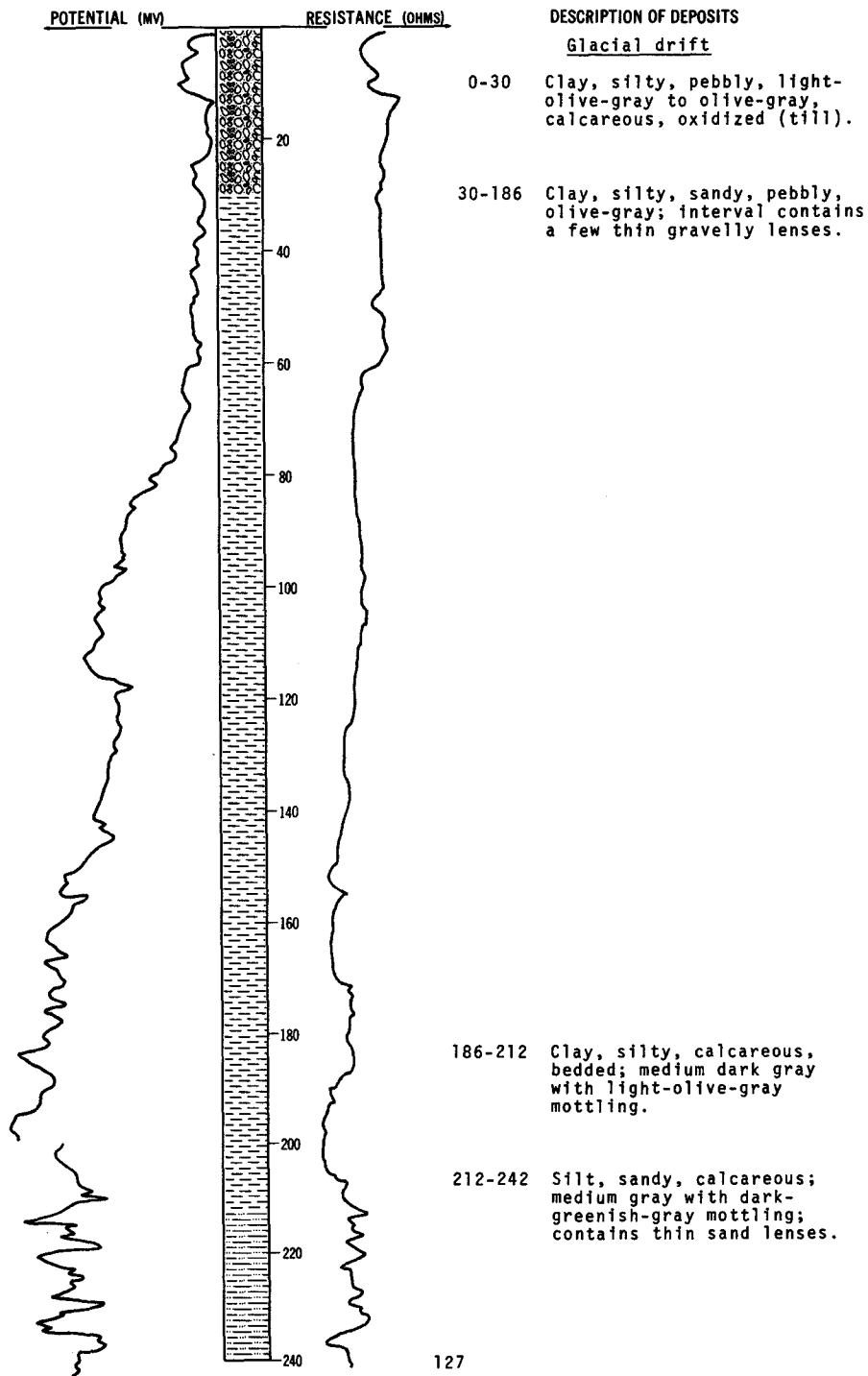


LOCATION: 131-075-09ADA

DATE DRILLED: May 1973

ALTITUDE: 1860  
(FT, MSL)

DEPTH: 280  
(FT)



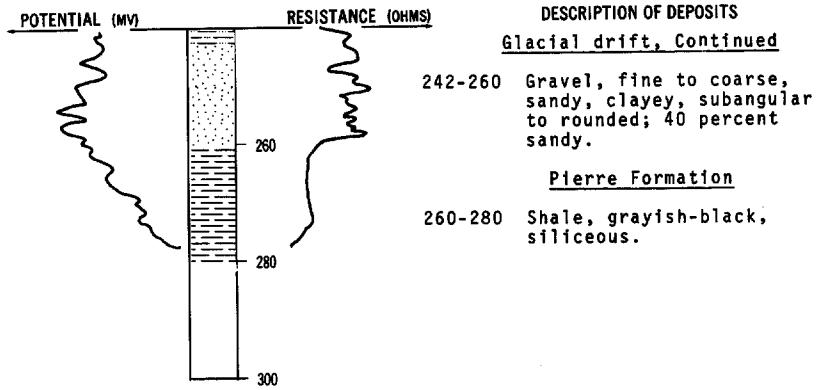
NDSWC 8670, Continued

LOCATION: 131-075-09ADA

DATE DRILLED: May 1973

ALTITUDE: 1860  
(FT, MSL)

DEPTH: 280  
(FT)



131-075-17DC  
(Log from J. Thurn)

Altitude:

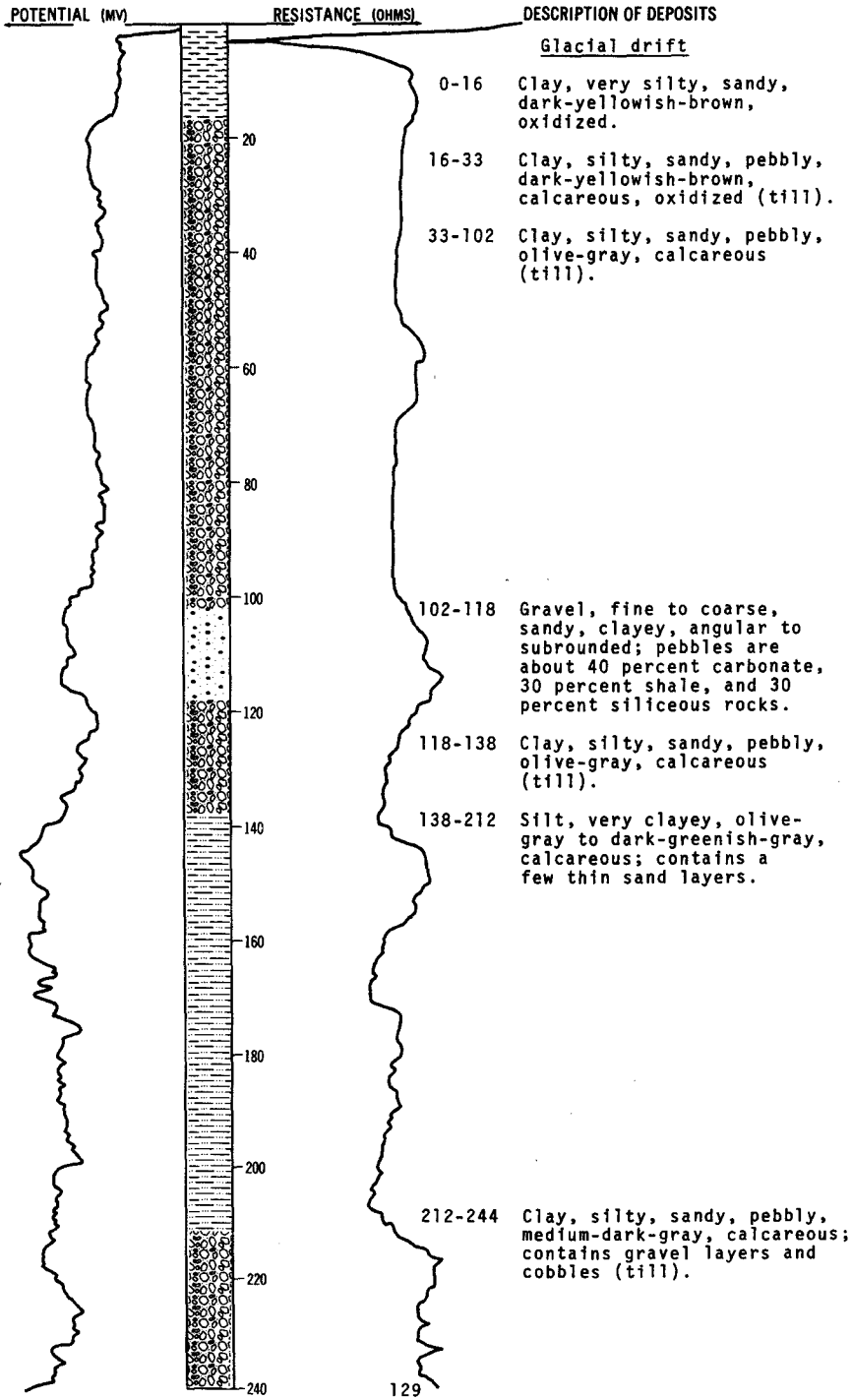
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Soil, black-----	3	3
	Clay, yellow-----	27	30
	Shale, blue-----	39	69

LOCATION: 131-075-22DCD

DATE DRILLED: September 1971

ALTITUDE: 1815  
(FT, MSL)

DEPTH: 300  
(FT)

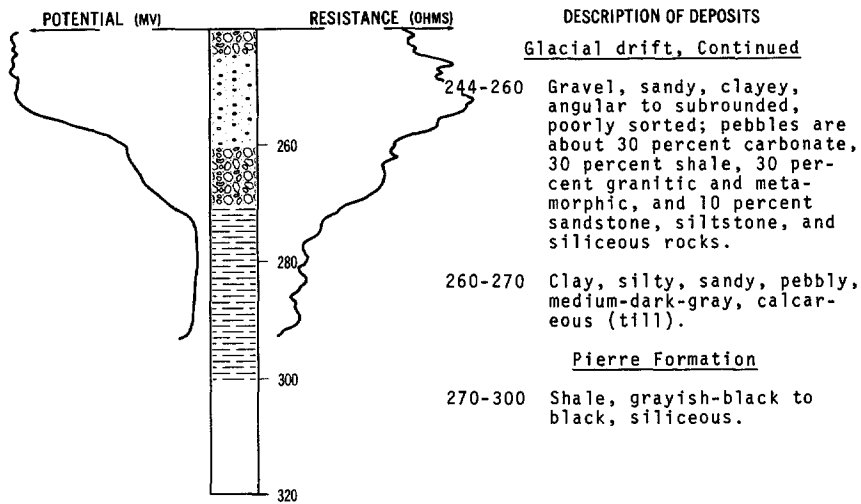


LOCATION: 131-075-22DCD

DATE DRILLED: September 1971

ALTITUDE: 1815  
(FT, MSL)

DEPTH: 300  
(FT)



131-075-23DCD  
Test hole 1217  
(Randich, 1963)

Altitude:

Date drilled: October 1957

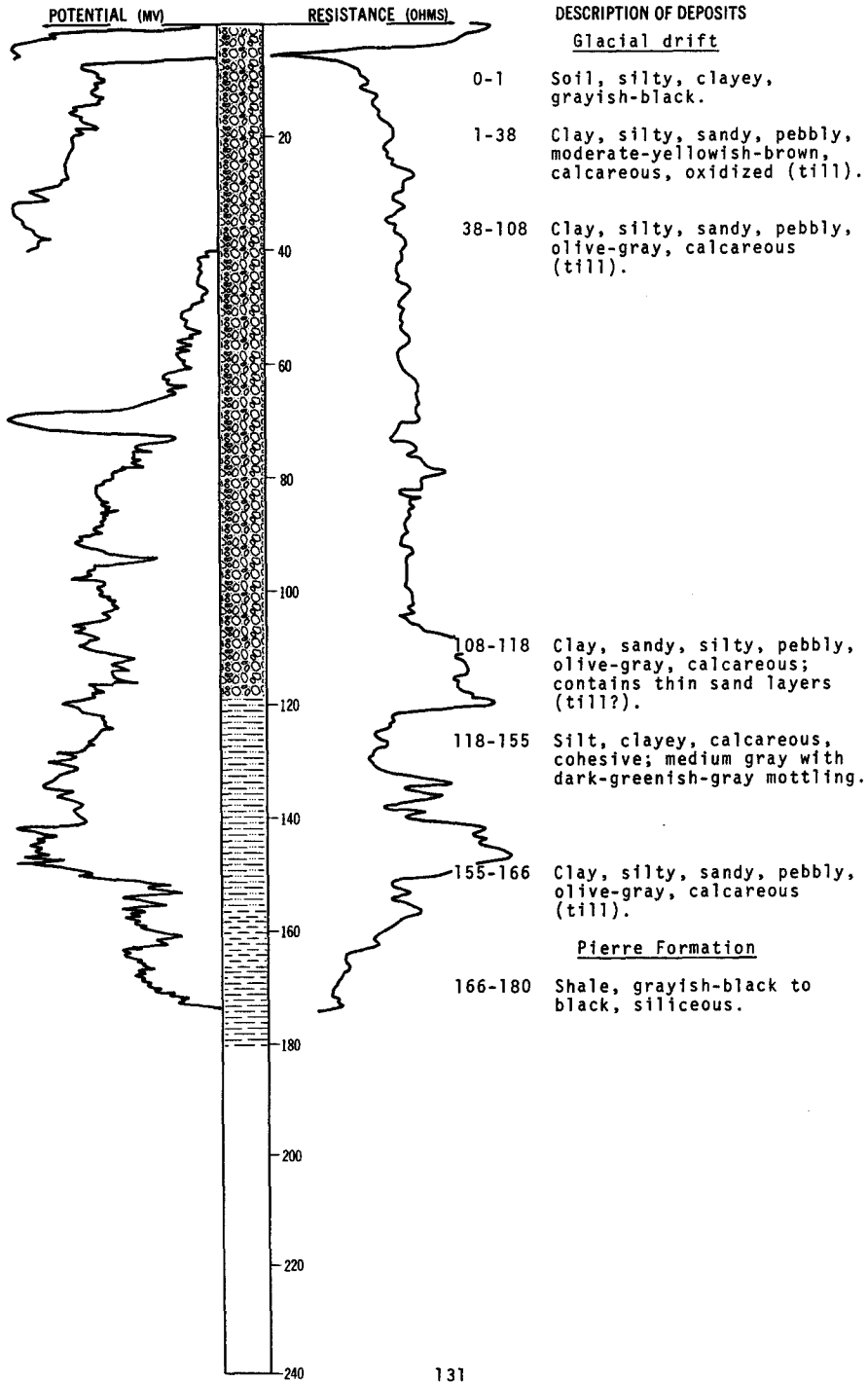
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil, black-----	1	1
	Clay, light-gray, and fine to medium gravel (till)-----	15	16
	Clay, gray, fine to medium gravel, cobbles, and shale pebbles (till)-----	68	84

LOCATION: 131-075-23DDD

DATE DRILLED: September 1971

ALTITUDE: 1850  
(FT, MSL)

DEPTH: 180  
(FT)



131-075-28AAC  
 Test hole 1216  
 (Randich, 1963)

Altitude: 1834 ft Date drilled: October 1957

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil, black-----	2	2
	Clay, smooth, light-brown-----	9	11
	Clay, light-brown, and fine to medium gravel (till)-----	18	29
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	92	121
Fox Hills Formation:			
	Clay, sandy, light-gray-----	15	136

131-075-29ADD  
 NDSWC 8673

Altitude: 1890 ft Date drilled: May 1973

Glacial drift:			
	Clay, sandy, silty, pebbly, dusky-yellow to moderate-yellowish-brown, oxidized (till)	5	5
Fox Hills Formation:			
	Siltstone, clayey, sandy, yellowish-brown to dark-yellowish-brown, semiindurated, oxidized; 30 percent clay-----	10	15
	Siltstone, sandy, clayey, medium-dark-gray--	25	40

131-075-32BBB  
 Test hole 1215  
 (Randich, 1963)

Altitude: 1896 ft Date drilled: October 1957

Glacial drift:			
	Topsoil, black-----	1	1
	Clay, light-brown, and fine to medium gravel (till)-----	30	31
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	44	75
	Gravel, fine to coarse, and shale pebbles---	9	84
Fox Hills Formation:			
	Clay, sandy, light-gray-----	10	94

131-075-36AAA  
Test hole 1214  
(Randich, 1963)

Altitude: Date drilled: October 1957

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil, black-----	2	2
	Clay, light-brown, and fine to medium gravel (till)-----	19	21
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	64	85
Fox Hills Formation:			
	Clay, sandy, light-gray-----	20	105

131-076-03C  
(Log from J. Thurn)

Altitude: Date drilled: October 1973

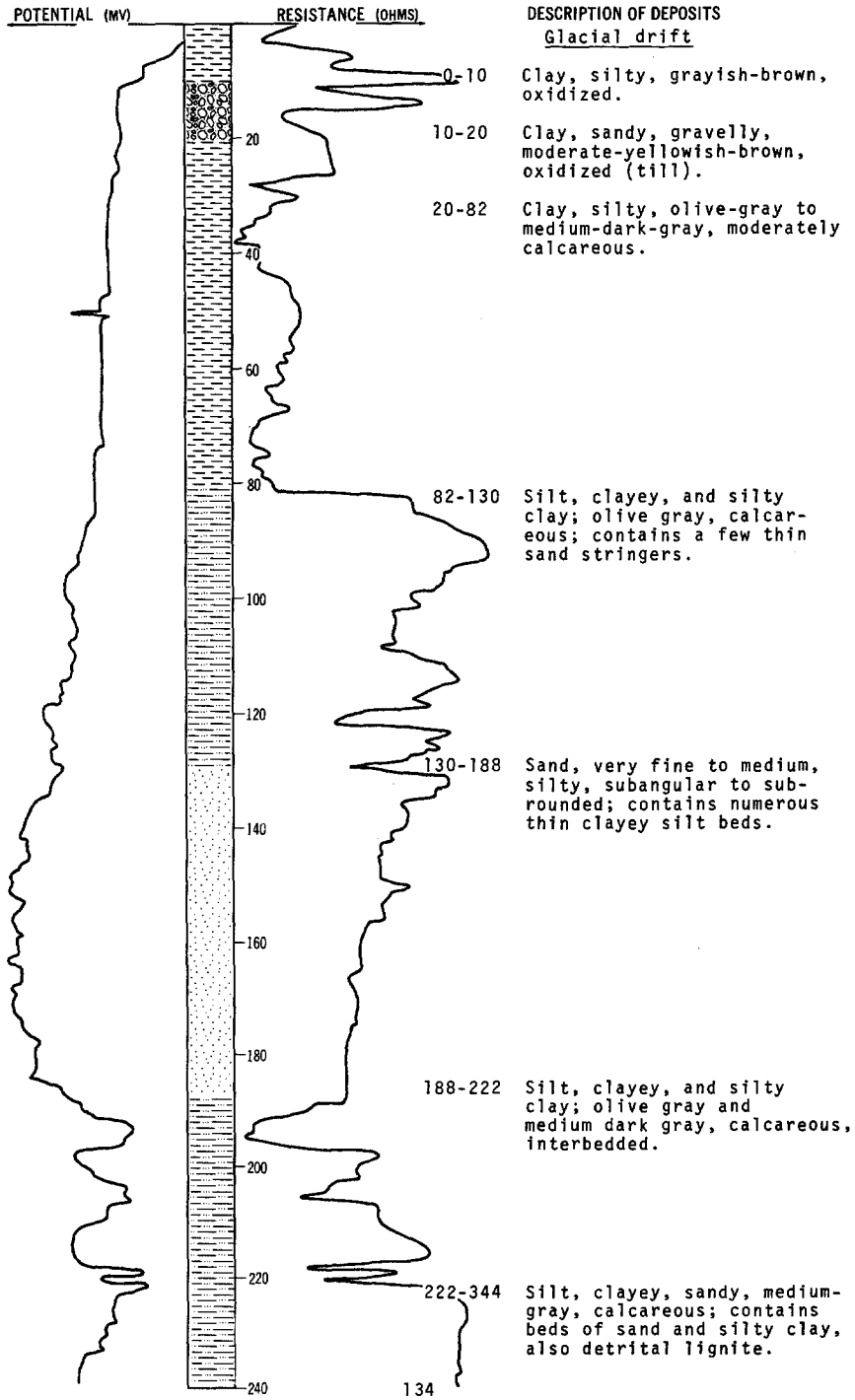
Dirt, black-----	2	2
Clay, yellow-----	16	18
Sand-----	5	23

LOCATION: 131-076-03CCD

DATE DRILLED: November 1972

ALTITUDE: 1785  
(FT, MSL)

DEPTH: 400  
(FT)



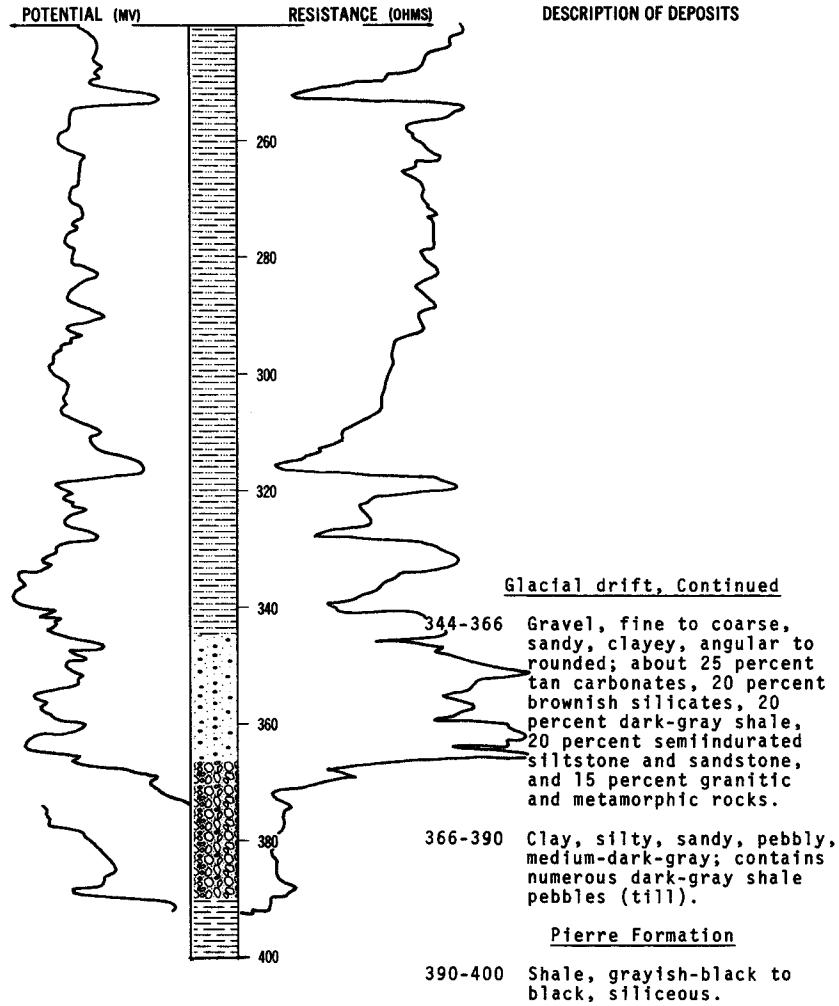


LOCATION: 131-076-03CCD

DATE DRILLED: November 1972

ALTITUDE: 1785  
(FT, MSL)

DEPTH: 400  
(FT)



131-076-04DDC  
Test hole 1223  
(Randich, 1963)

Altitude: 1797 ft

Date drilled: October 1957

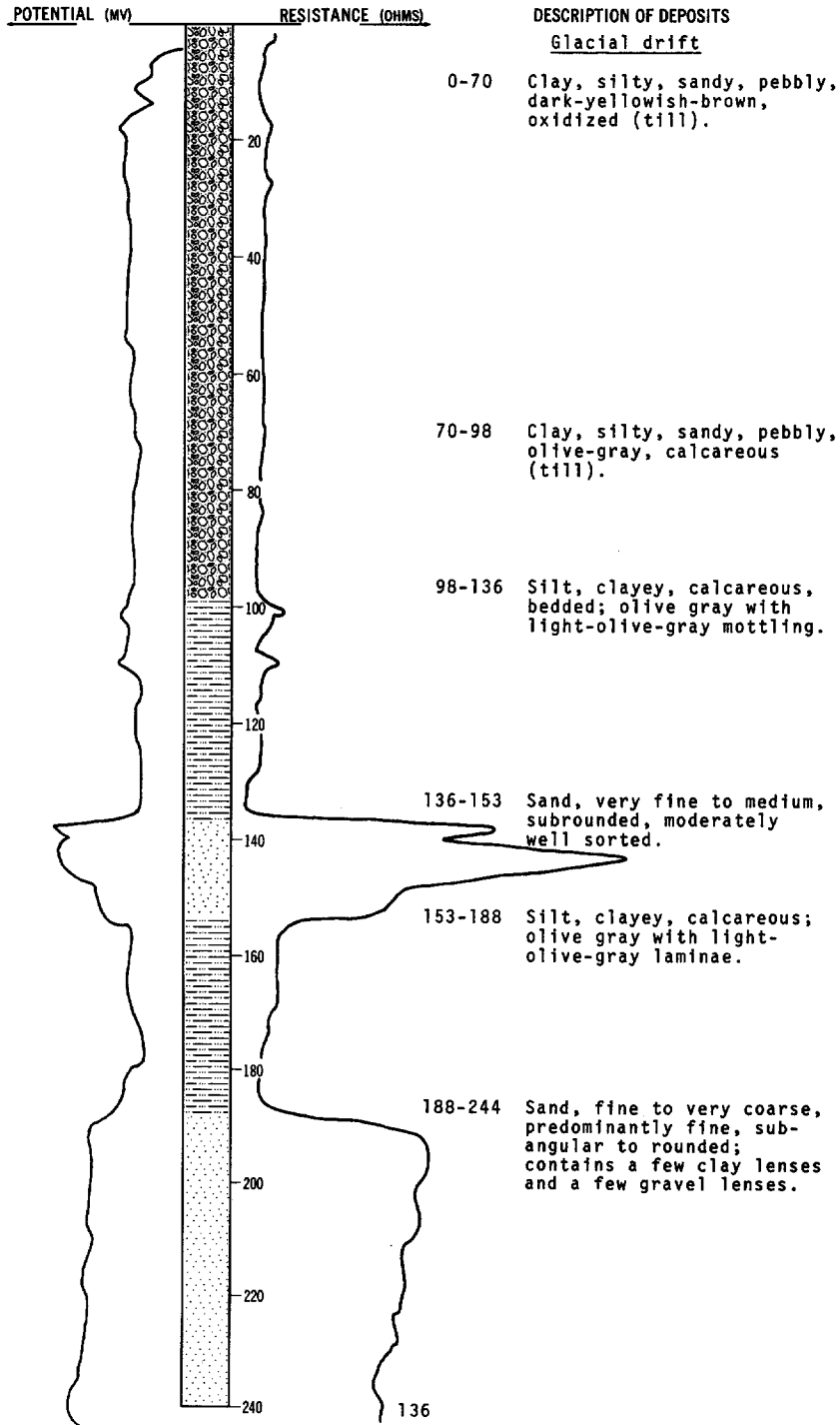
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Glacial drift:</u>			
	Topsoil, black-----	2	2
	Sand, fine to coarse, clayey-----	9	11
	Gravel, fine to coarse, and cobbles-----	16	27
<u>Fox Hills Formation:</u>			
	Clay, sandy, light-gray-----	25	52

LOCATION: 131-076-05BCB

DATE DRILLED: May 1973

ALTITUDE: 1880  
(FT, MSL)

DEPTH: 280  
(FT)



LOCATION: 131-076-05BCB

DATE DRILLED: May 1973

ALTITUDE: 1880  
(FT, MSL)

DEPTH: 280  
(FT)



131-076-05CBC  
NDSWC 8677

Altitude: 1950 ft

Date drilled: May 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, sandy, pebbly, moderate-yellowish-brown, oxidized (till)-----	20	20
Fox Hills Formation:			
	Sandstone, fine-grained, dark-yellowish-brown, subangular, well-sorted, oxidized---	30	50
	Siltstone, medium-gray, siliceous, moderately indurated-----	10	60

131-076-09ACC  
(Log from J. Thurn)

Altitude:

Date drilled: September 1972

Dirt, black-----	5	5
Clay, blue-----	40	45
Sand-----	11	56

131-076-09DB  
(Log from J. Thurn)

Altitude:

Date drilled: November 1973

Dirt, black-----	2	2
Clay, yellow-----	44	46
Sand-----	4	50

131-076-158BD  
Test hole 1226  
(Randich, 1963)

Altitude: 1778 ft

Date drilled: October 1957

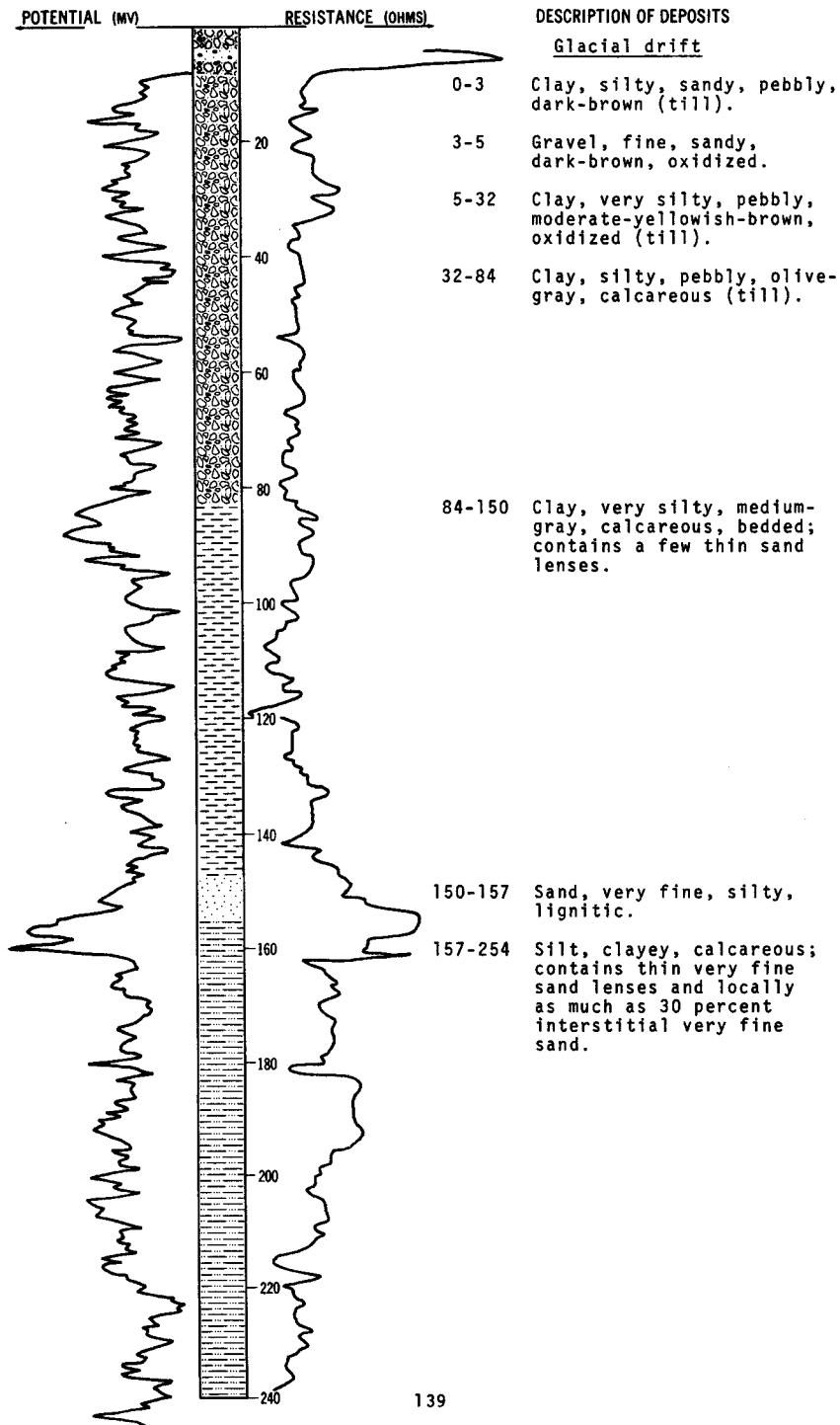
Glacial drift:			
	Topsoil, black-----	2	2
	Clay, light-brown, and fine to medium gravel (till)-----	9	11
	Gravel, fine to coarse, and cobbles-----	5	16
Fox Hills Formation:			
	Clay, sandy, light-gray-----	26	42

LOCATION: 131-076-17CCC

DATE DRILLED: October 1973

ALTITUDE: 1802  
(FT, MSL)

DEPTH: 380  
(FT)



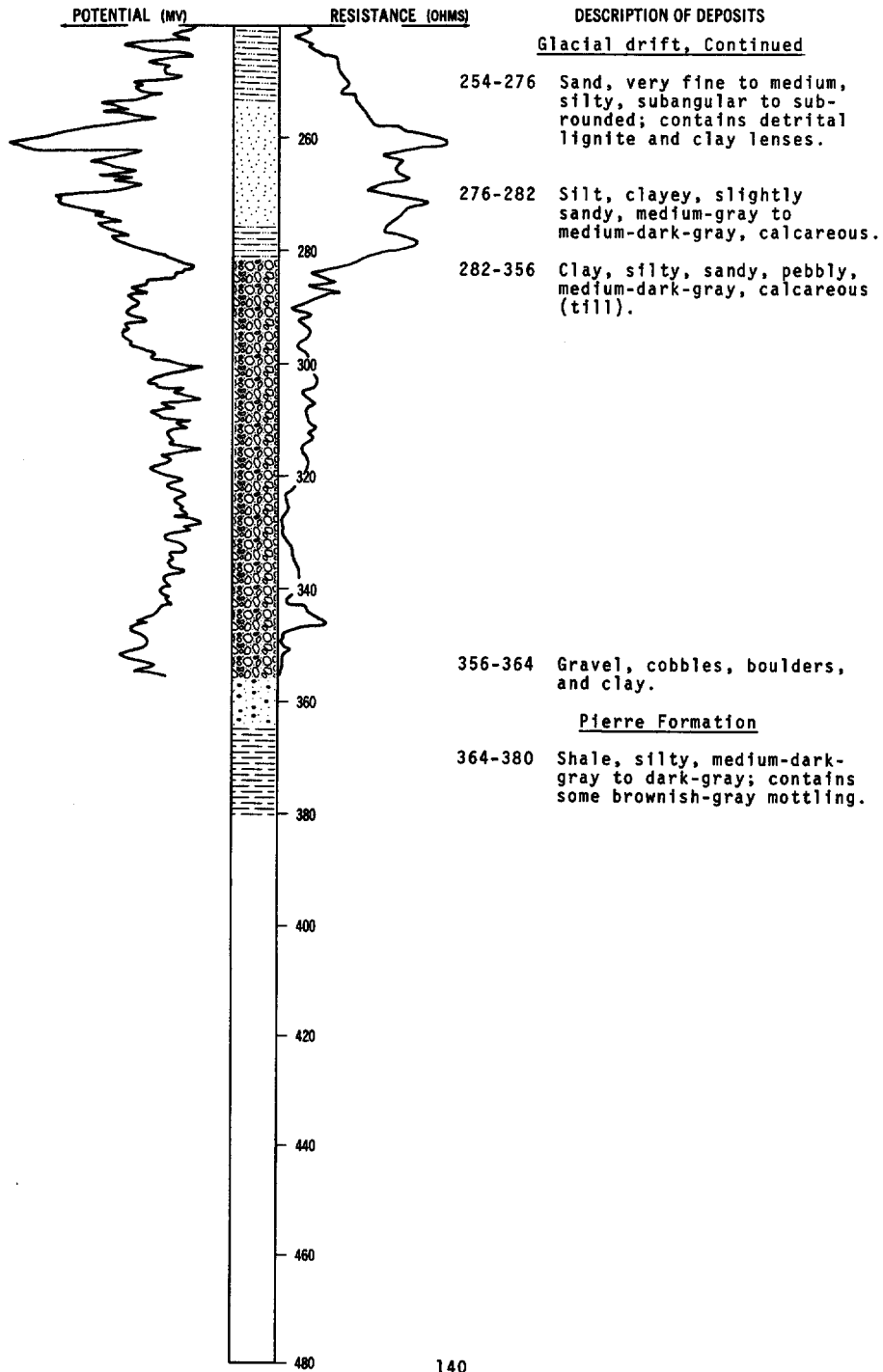
NDSWC 8918, Continued

LOCATION: 131-076-17CCC

DATE DRILLED: October 1973

ALTITUDE: 1802  
(FT, MSL)

DEPTH: 380  
(FT)

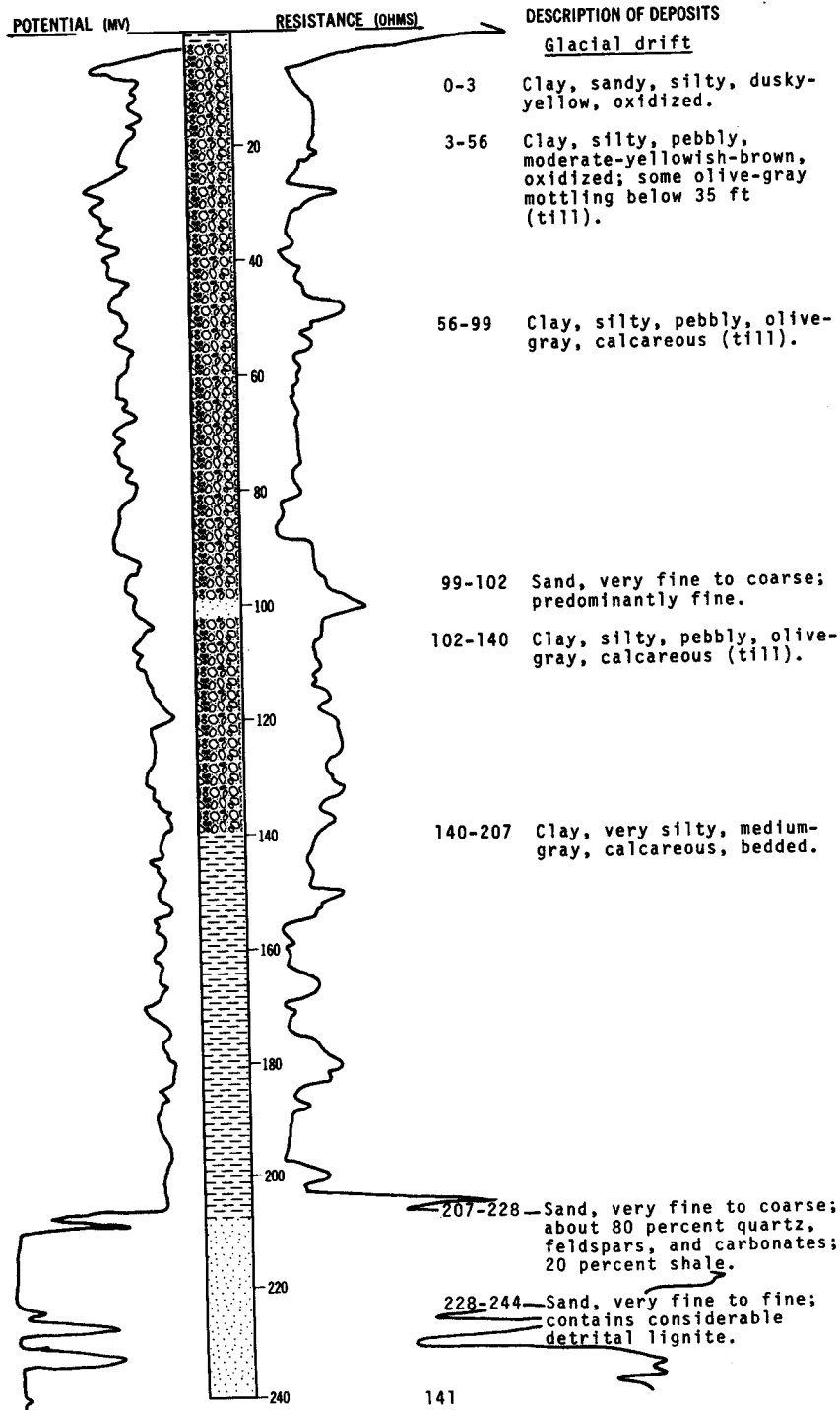


LOCATION: 131-076-19888

DATE DRILLED: October 1973

ALTITUDE: 1853  
(FT, MSL)

DEPTH: 420  
(FT)

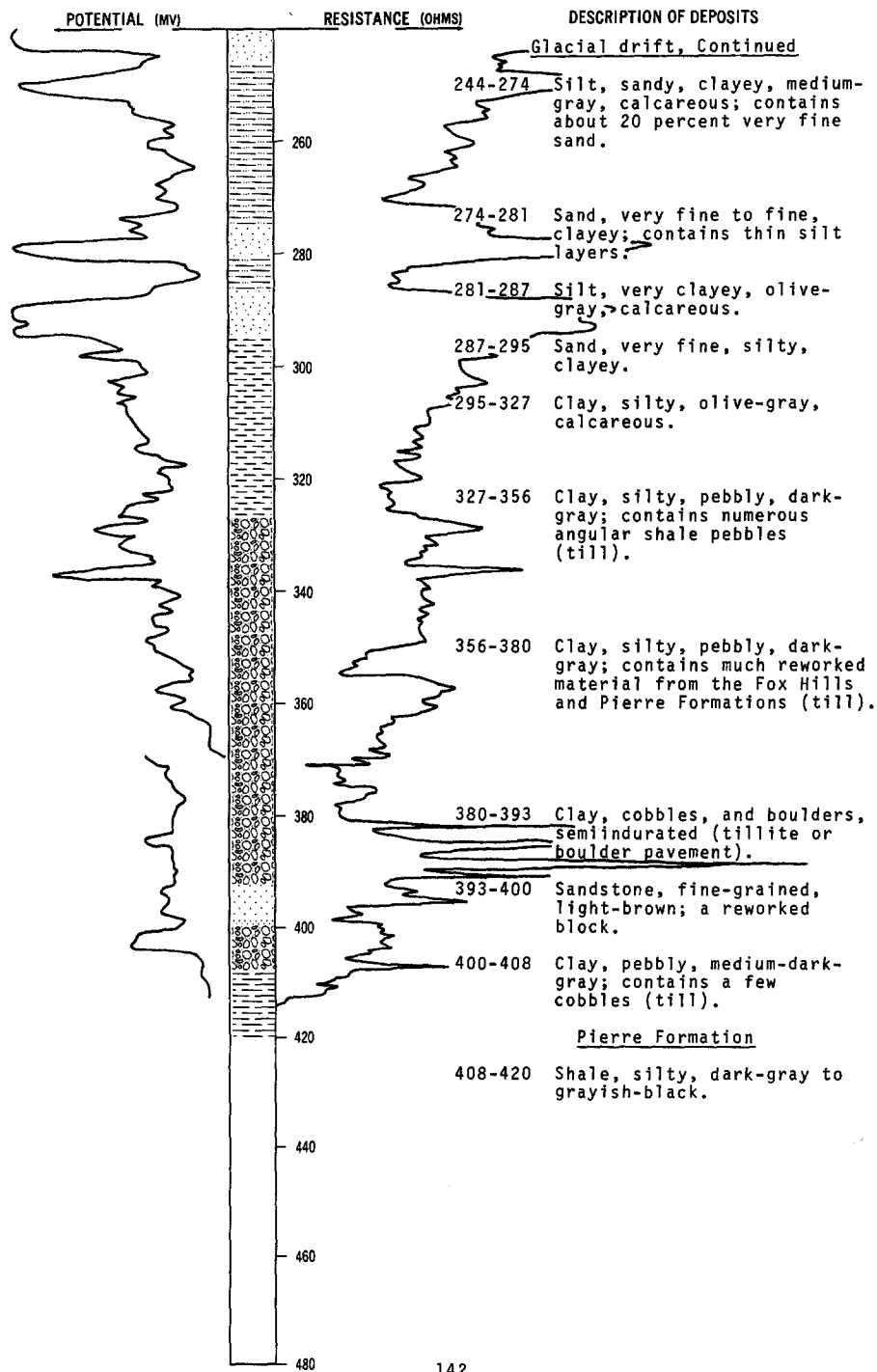


LOCATION: 131-076-19BBB

DATE DRILLED: October 1973

ALTITUDE: 1853  
(FT, MSL)

DEPTH: 420  
(FT)





131-076-21AB  
(Log from Baumgartner Drilling Co.)

Altitude: Date drilled: August 1973

Geologic source	Material	Thickness (feet)	Depth (feet)
	Clay, brown-----	32	32
	Clay, blue-----	104	136
	Sand, coarse-----	16	152
	Clay, blue-----	8	160

131-076-22ABA  
Test hole 1220  
(Randich, 1963)

Altitude: 1800 ft Date drilled: October 1957

Glacial drift:			
	Topsoil, black-----	3	3
	Clay, light-brown, and fine to medium gravel (till)-----	3	6
	Gravel, fine to coarse, and cobbles-----	31	37
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	6	43
Fox Hills Formation:			
	Clay, sandy, light-gray-----	20	63

131-076-22CDD  
Test hole 1221  
(Randich, 1963)

Altitude: 1808 ft Date drilled: October 1957

Glacial drift:			
	Topsoil, black-----	1	1
	Clay, light-brown, and fine to medium gravel (till)-----	6	7
	Gravel, fine to coarse, and shale pebbles---	3	10
	Gravel, fine to coarse, and cobbles-----	13	23
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	6	29
Fox Hills Formation:			
	Clay, sandy, light-gray-----	24	53

131-076-23AAA  
(Log from Baumgartner Drilling Co.)

Altitude: Date drilled: September 1972

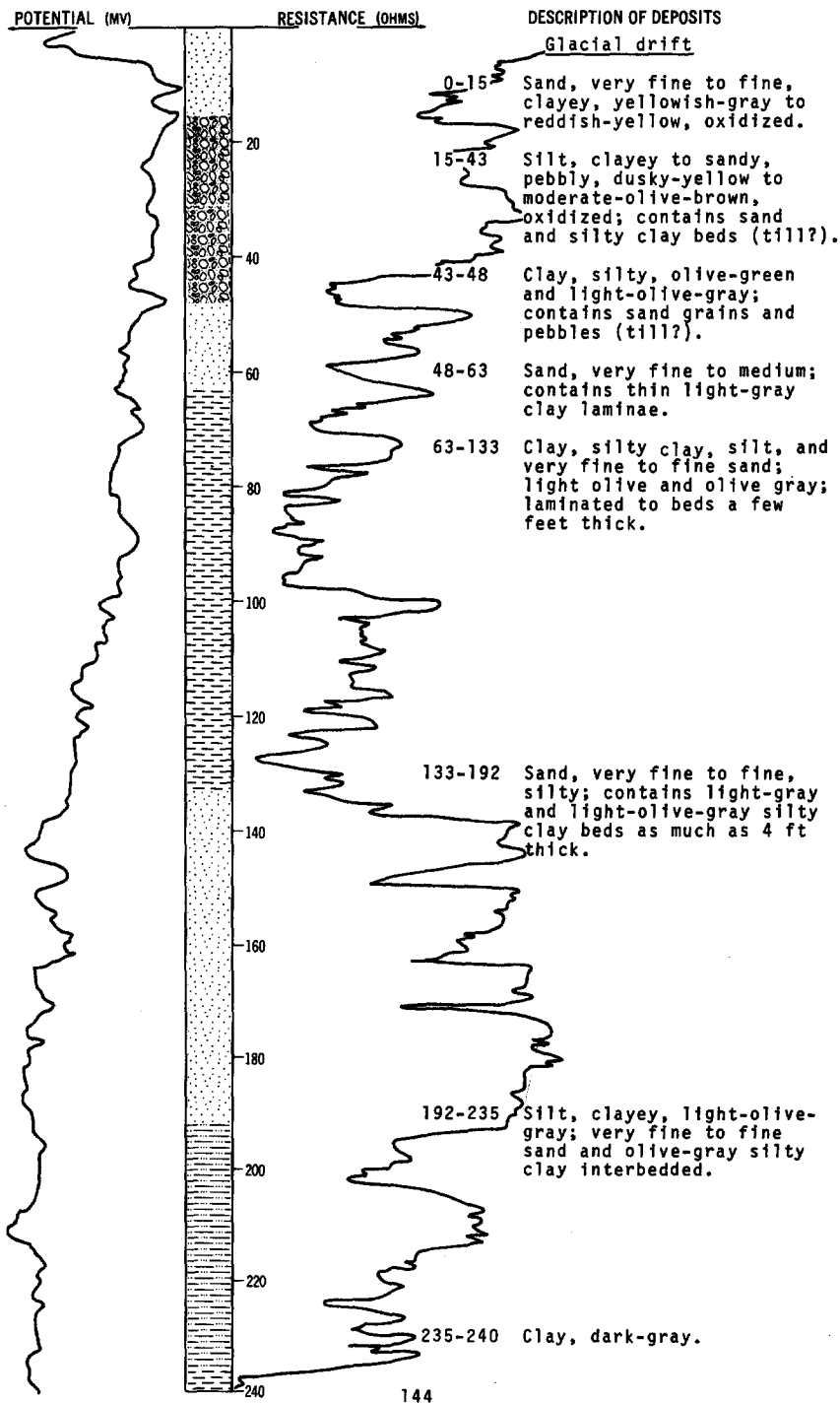
	Clay-----	12	12
	Gravel-----	4	16
	Clay-----	2	18
	Gravel-----	4	22
	Clay-----	46	68
	Sand, coarse-----	17	85

LOCATION: 131-076-23CCC

DATE DRILLED: November 1972

ALTITUDE: 1815  
(FT, MSL)

DEPTH: 560  
(FT)



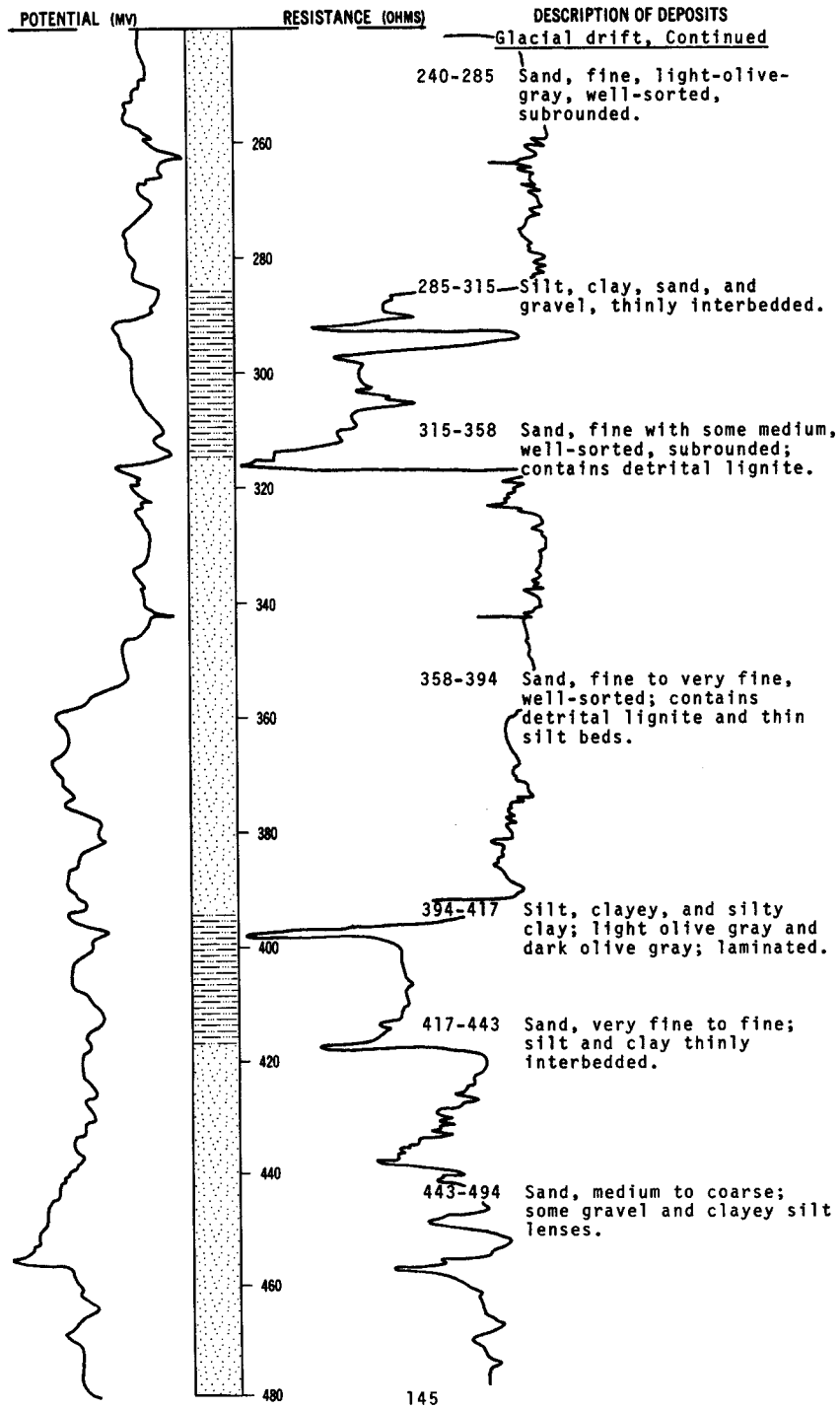
NDSWC 4495, Continued

LOCATION: 131-076-23CCC

DATE DRILLED: November 1972

ALTITUDE: 1815  
(FT, MSL)

DEPTH: 560  
(FT)



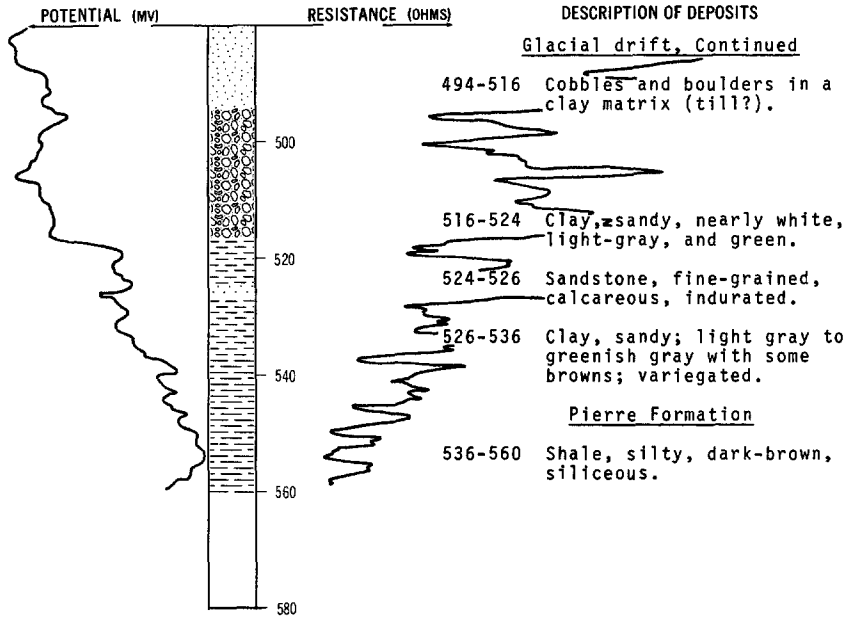
NDSWC 4495, Continued

LOCATION: 131-076-23CCC

DATE DRILLED: November 1972

ALTITUDE: 1815  
(FT, MSL)

DEPTH: 560  
(FT)



131-076-25DDC  
Test hole 1213  
(Randich, 1963)

Altitude: 1802 ft

Date drilled: September 1957

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil, black-----	2	2
	Clay, light-brown, and fine to medium gravel (till)-----	26	28
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	45	73
	Gravel, fine to coarse, and cobbles-----	6	79
	Clay, smooth, gray-----	56	135
Fox Hills Formation:			
	Clay, sandy, gray, and lignite fragments----	95	230
	Clay, sandy, light-gray-----	64	294

131-076-26CAB2  
 Test hole 1202  
 (Randich, 1963)

Altitude: 1818 ft

Date drilled: September 1957

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil, sandy, black-----	2	2
	Clay, sandy, brown, and fine gravel (till)--	24	26
	Sand, fine to medium, silty-----	6	32
	Gravel, fine to coarse, and medium to coarse sand-----	6	38
	Clay, sandy, light-gray, and fine to medium gravel (till)-----	28	66
	Sand, fine to coarse, and lignite fragments-	6	72
Fox Hills Formation:			
	Clay, sandy, light-gray, and lignite fragments-----	103	175
	Clay, sandy, light-gray-----	85	260

131-076-26CBC  
 Test hole 1203  
 (Randich, 1963)

Altitude: 1816 ft

Date drilled: September 1957

Glacial drift:			
	Topsoil, black-----	1	1
	Clay, gray, and fine to medium gravel (till)	4	5
	Clay, smooth, light-brown-----	21	26
Fox Hills Formation:			
	Clay, sandy, gray-----	58	84
	Sand, fine, silty, and lignite fragments---	8	92
	Clay, sandy, light-gray-----	23	115

131-076-26CCC1  
 Test hole 1207  
 (Randich, 1963)

Altitude: 1828 ft

Date drilled: September 1957

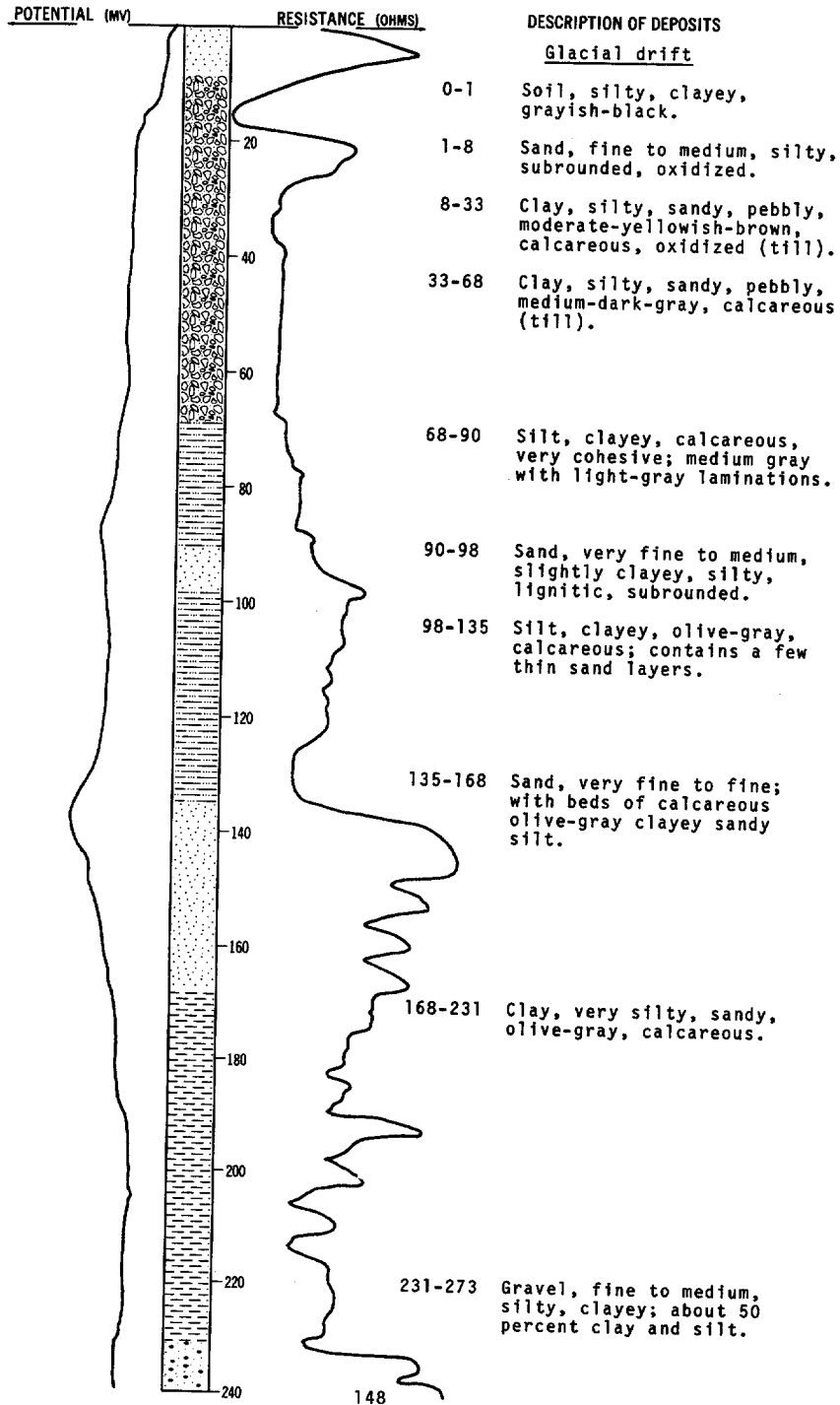
Glacial drift:			
	Topsoil, black-----	1	1
	Clay, light-brown, and fine to medium gravel (till)-----	18	19
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	15	34
	Clay, sandy, light-gray-----	134	168

LOCATION: 131-076-26CCC2

DATE DRILLED: September 1971

ALTITUDE: 1820  
(FT, MSL)

DEPTH: 430  
(FT)



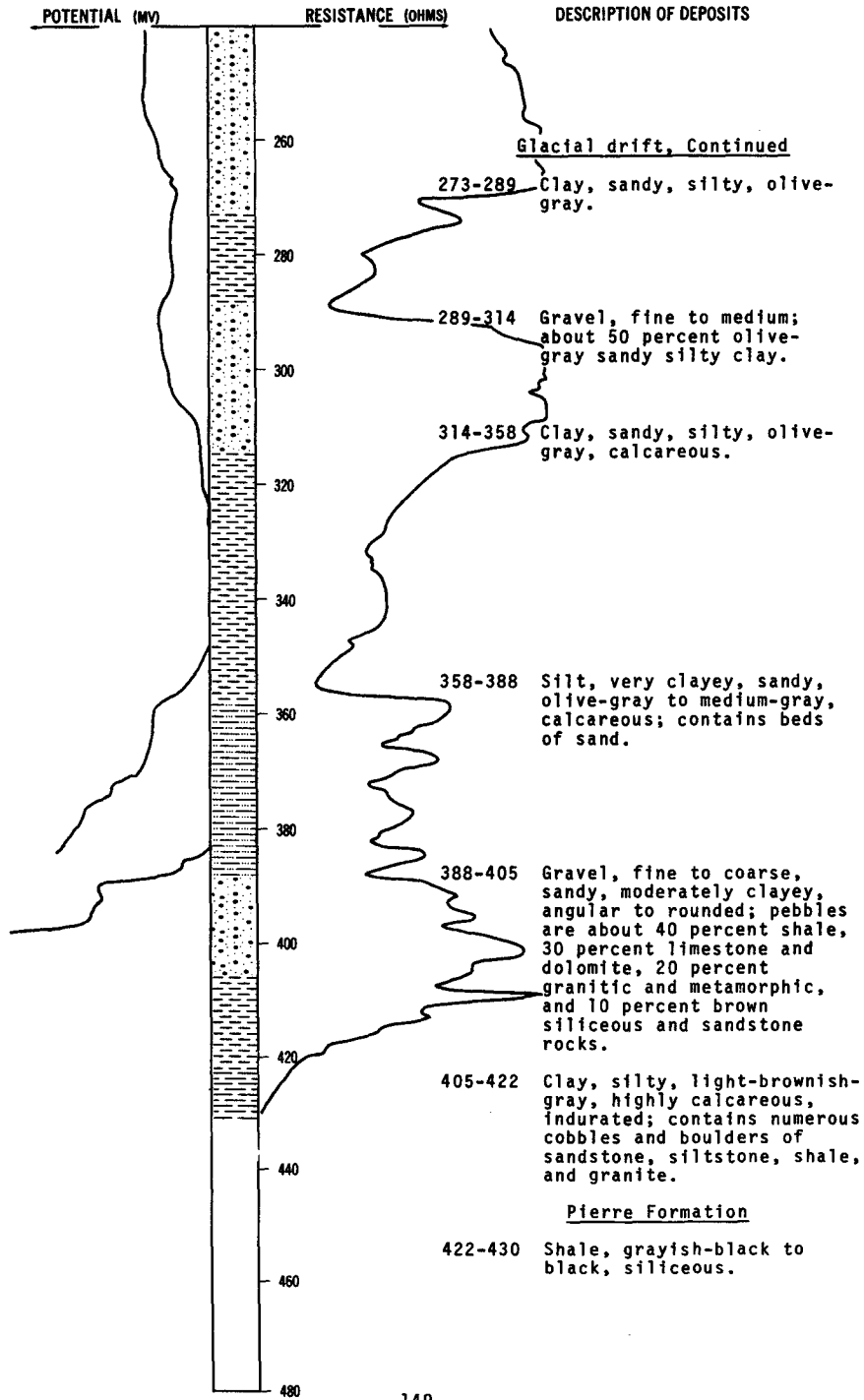
NDSWC 8160, Continued

LOCATION: 131-076-26CCC2

DATE DRILLED: September 1971

ALTITUDE: 1820  
(FT, MSL)

DEPTH: 430  
(FT)

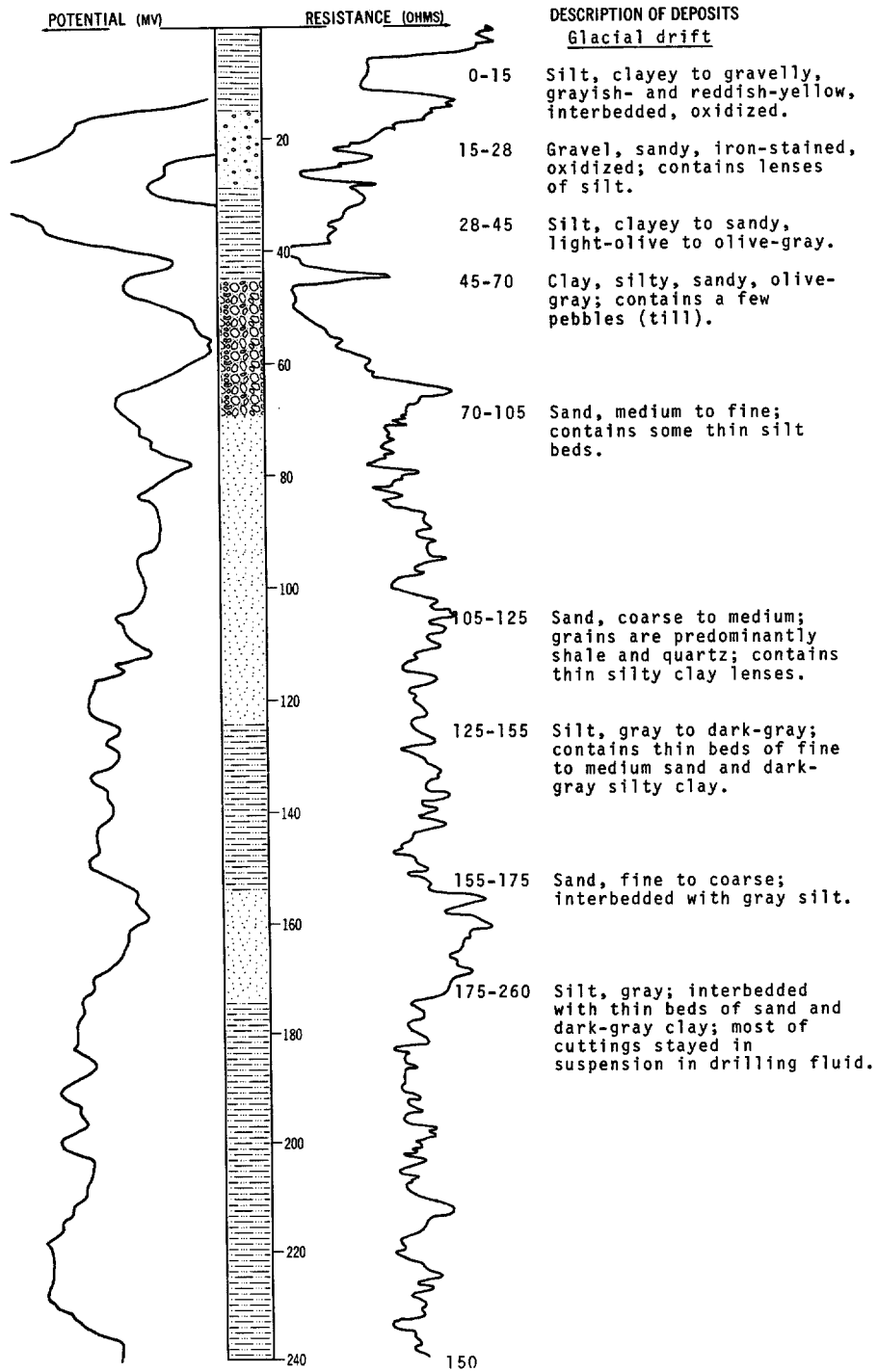


LOCATION: 131-076-26DDD

DATE DRILLED: November 1972

ALTITUDE: 1807  
(FT, MSL)

DEPTH: 660  
(FT)



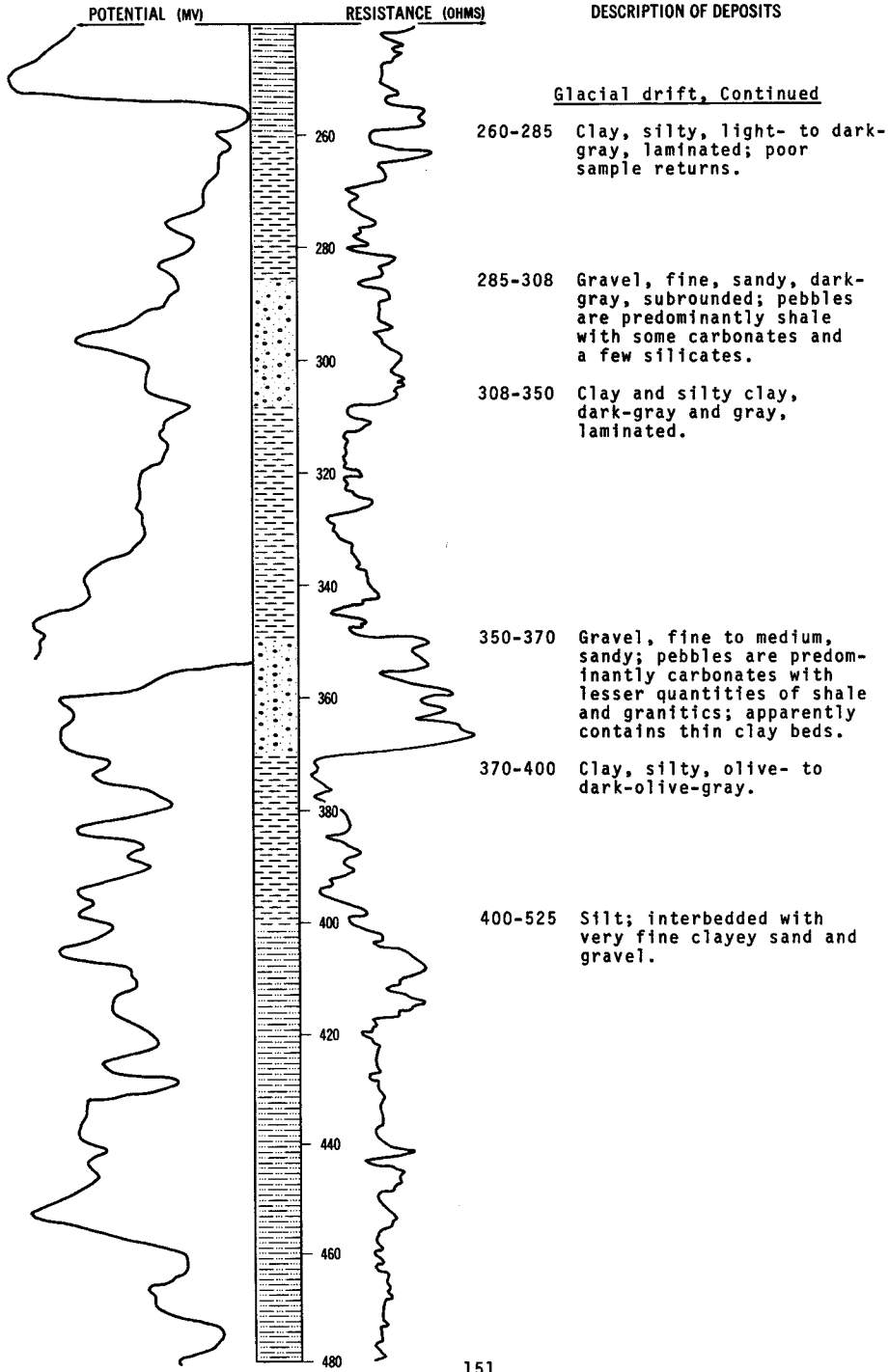


LOCATION: 131-076-26DDD

DATE DRILLED: November 1972

ALTITUDE: 1807  
(FT, MSL)

DEPTH: 660  
(FT)



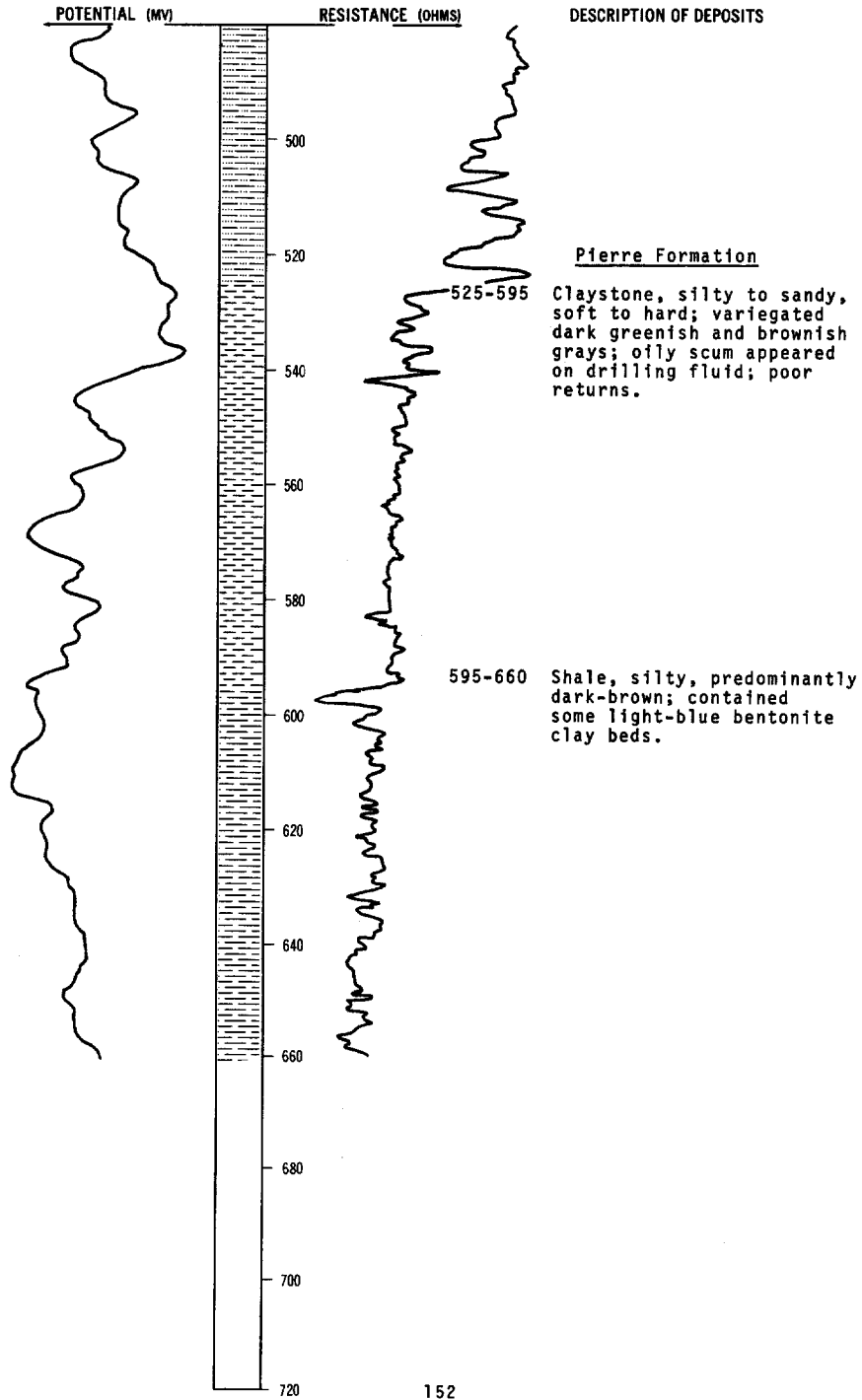
NDSWC 4496, Continued

LOCATION: 131-076-26DDD

DATE DRILLED: November 1972

ALTITUDE: 1807  
(FT, MSL)

DEPTH: 660  
(FT)

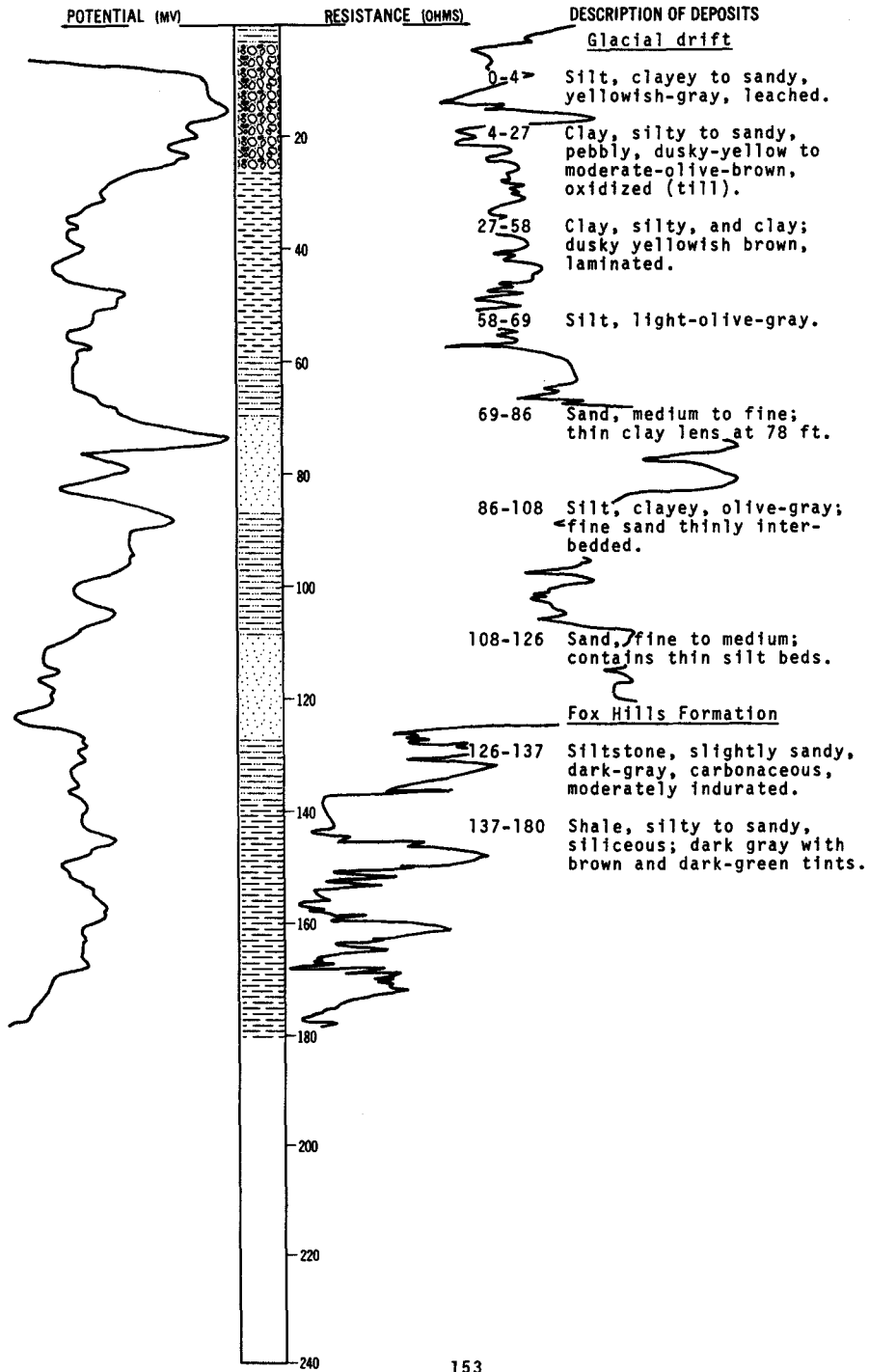


LOCATION: 131-076-27CCC

DATE DRILLED: December 1972

ALTITUDE: 1840  
(FT, MSL)

DEPTH: 180  
(FT)



131-076-30CCC  
 Test hole 1206  
 (Randich, 1963)

Altitude: 1812 ft

Date drilled: September 1957

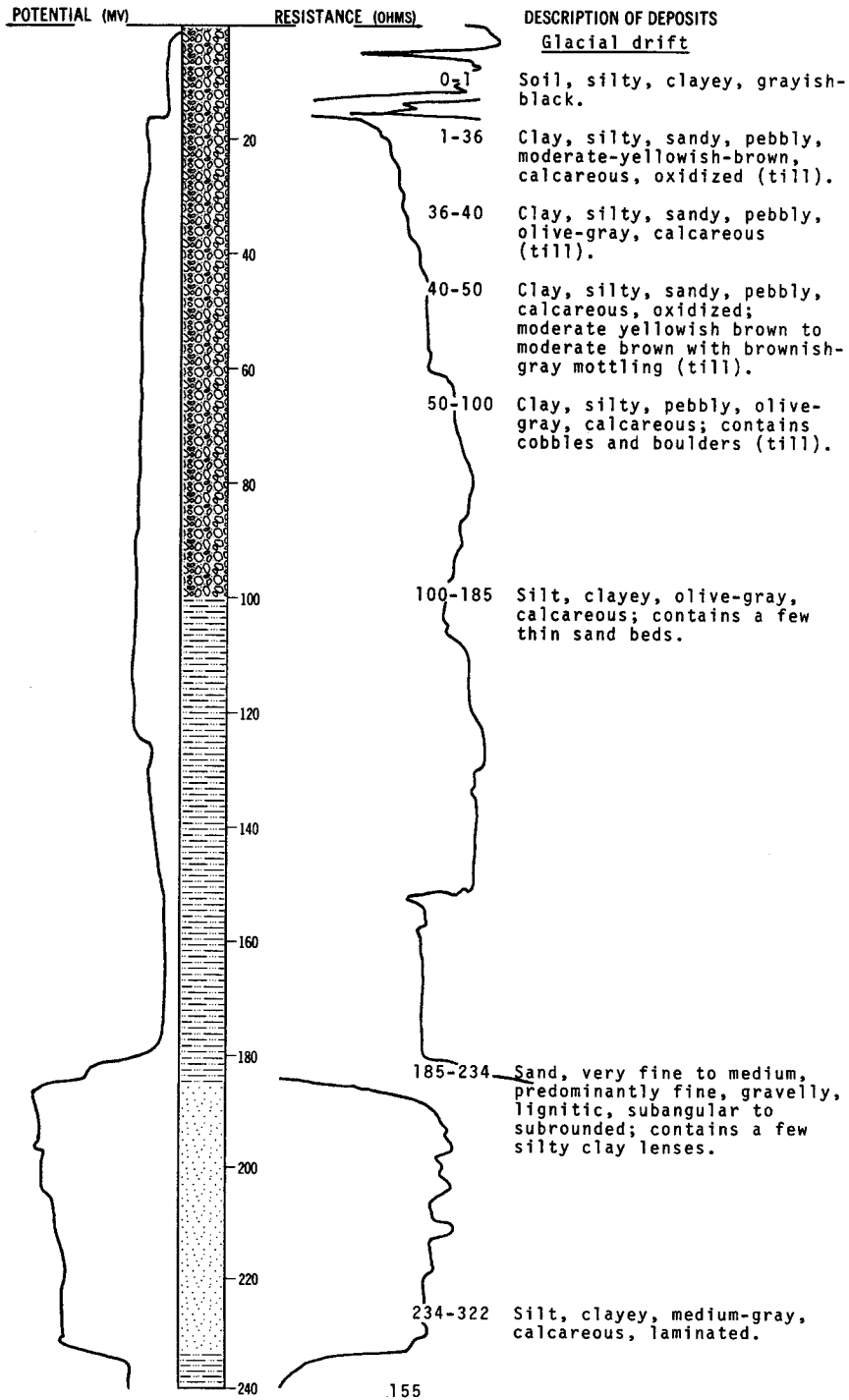
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Alluvium and colluvium:			
	Topsoil, black-----	1	1
	Clay, smooth, dark-gray-----	12	13
Glacial drift:			
	Clay, smooth, brown-----	13	26
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	171	197
Fox Hills Formation:			
	Clay, sandy, light-gray-----	13	210

LOCATION: 131-076-30DDD

DATE DRILLED: October 1971

ALTITUDE: 1845  
(FT, MSL)

DEPTH: 460  
(FT)

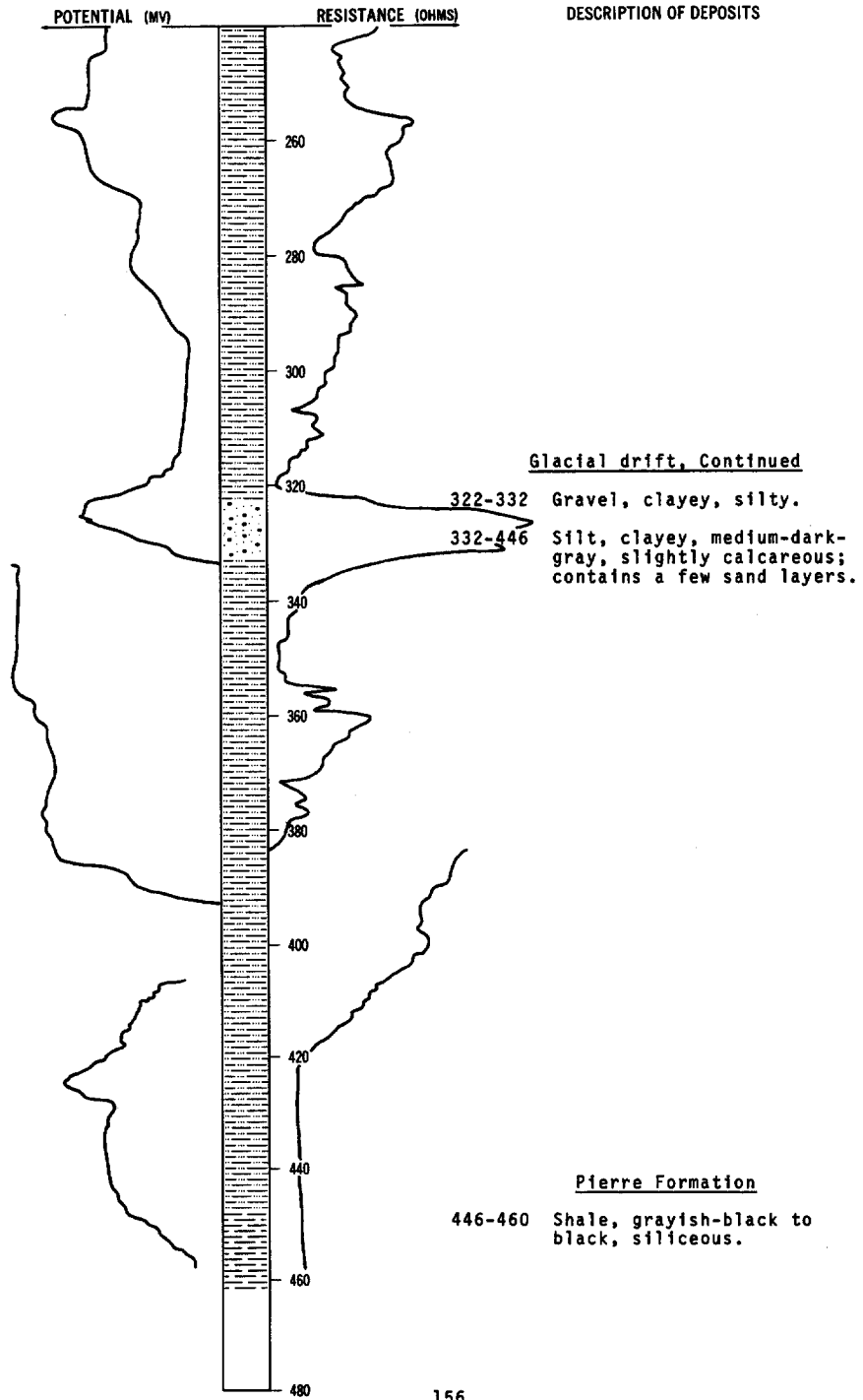


LOCATION: 131-076-30DDD

DATE DRILLED: October 1971

ALTITUDE: 1845  
(FT, MSL)

DEPTH: 460  
(FT)





131-076-35000  
Test hole 1209  
(Randich, 1936)

Altitude: 1812 ft

Date drilled: September 1957

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil, black-----	2	2
	Clay, sandy, brown, and fine gravel (till)---	3	5
	Sand, fine to coarse, and fine gravel-----	5	10
	Gravel, fine to coarse, and cobbles-----	10	20
	Gravel, fine to medium, and coarse sand-----	22	42
	Clay, gray, fine to medium gravel, and shale pebbles (till)-----	73	115
Fox Hills Formation:			
	Clay, sandy, light-gray-----	11	126

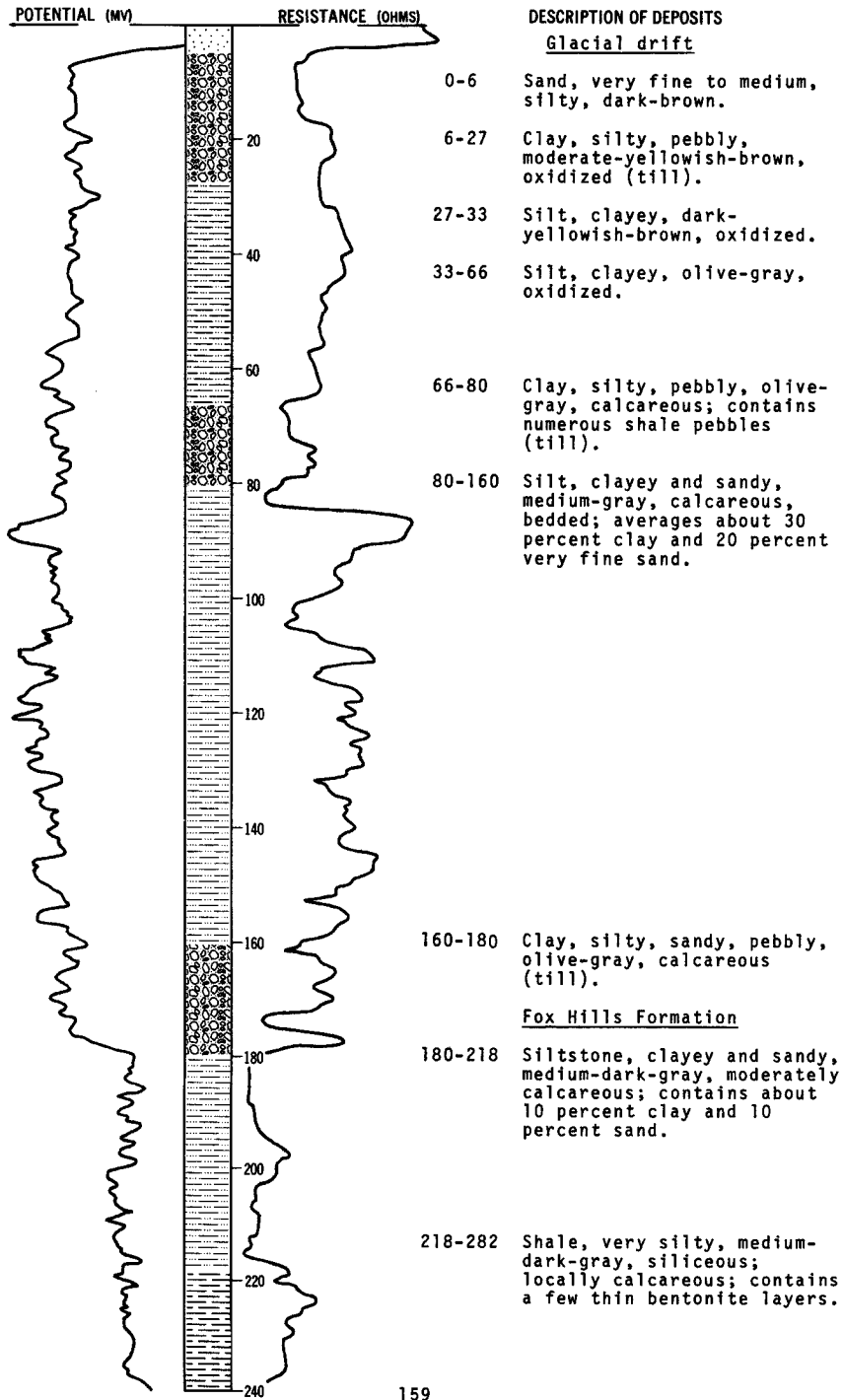


LOCATION: 131-076-36DAC

DATE DRILLED: October 1973

ALTITUDE: 1820  
(FT, MSL)

DEPTH: 320  
(FT)



LOCATION: 131-076-36DAC

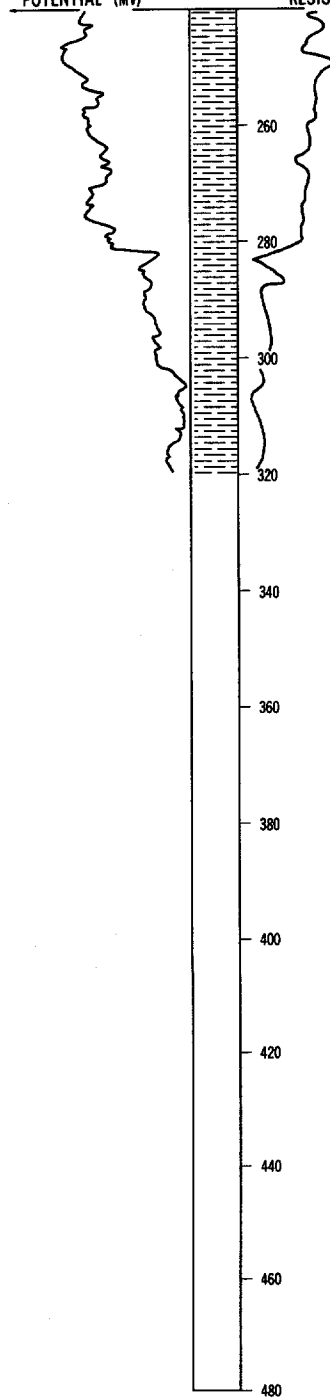
DATE DRILLED: October 1973

ALTITUDE: 1820  
(FT, MSL)

DEPTH: 320  
(FT)

POTENTIAL (MV)      RESISTANCE (OHMS)

DESCRIPTION OF DEPOSITS



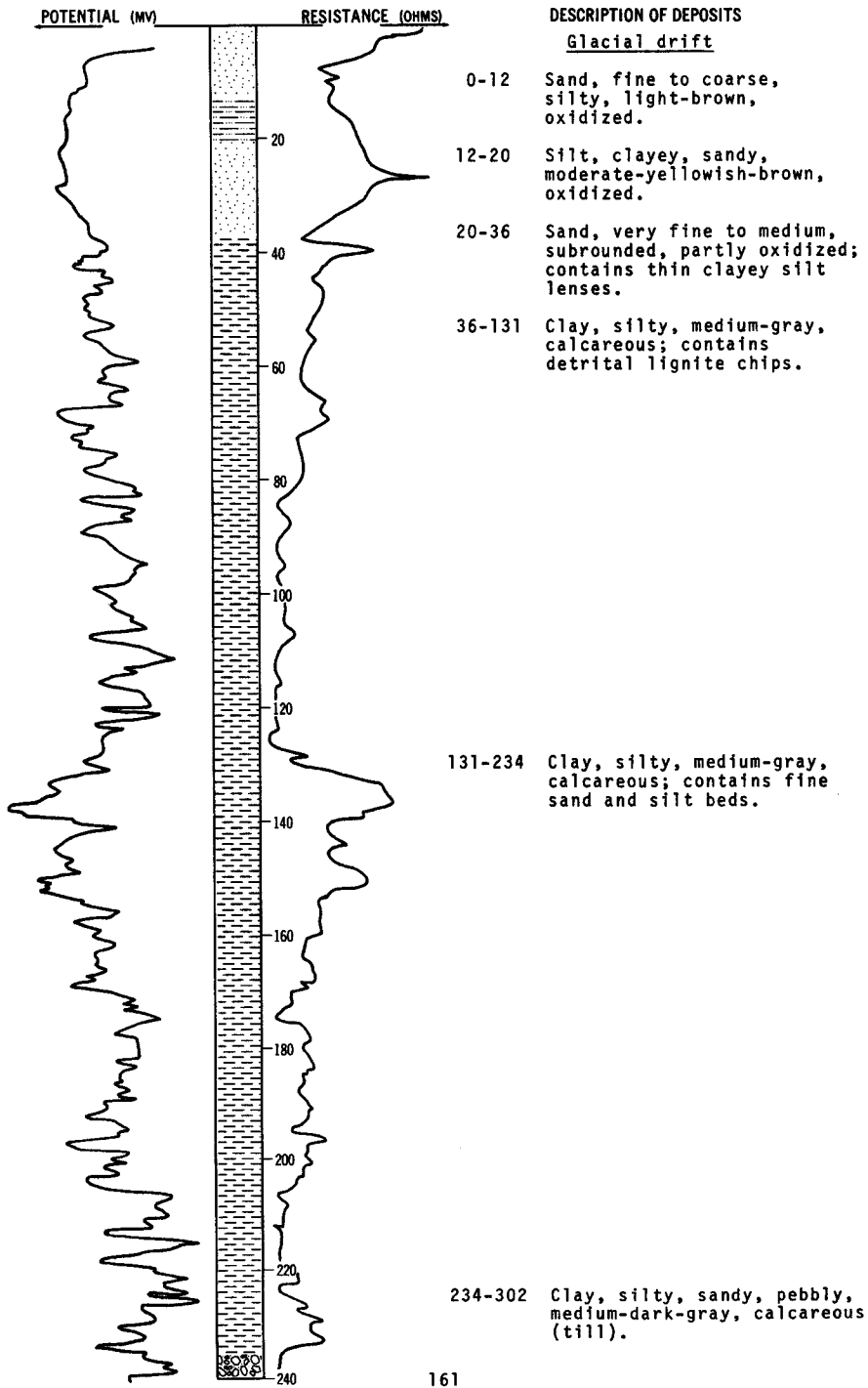
Pierre Formation  
282-320 Shale, dark-gray, siliceous;  
contains a few thin bentonite  
beds.

LOCATION: 131-077-04AAA

DATE DRILLED: November 1972

ALTITUDE: 1755  
(FT, MSL)

DEPTH: 320  
(FT)



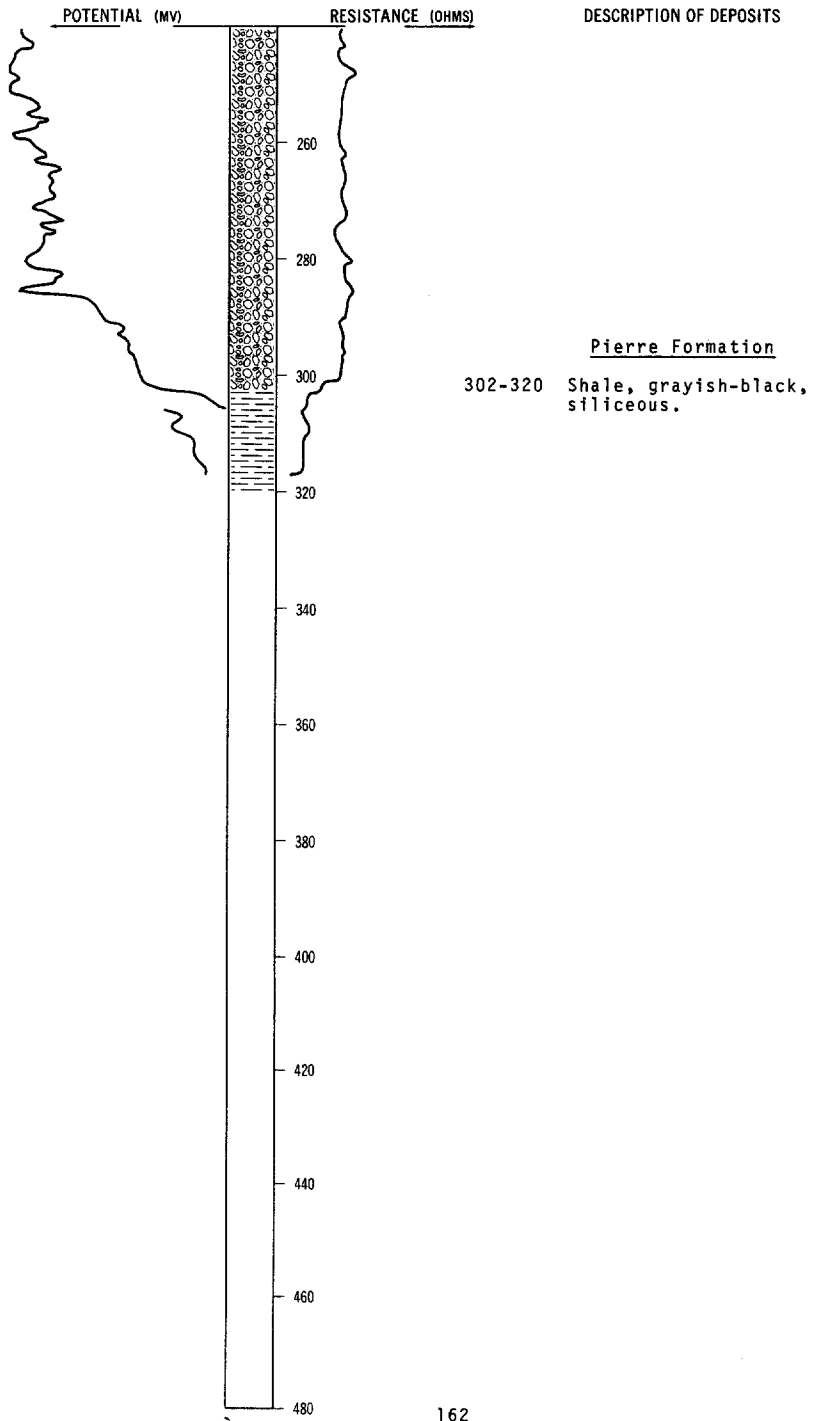
NDSWC 8599, Continued

LOCATION: 131-077-04AAA

DATE DRILLED: November 1972

ALTITUDE: 1755  
(FT. MSL)

DEPTH: 320  
(FT)

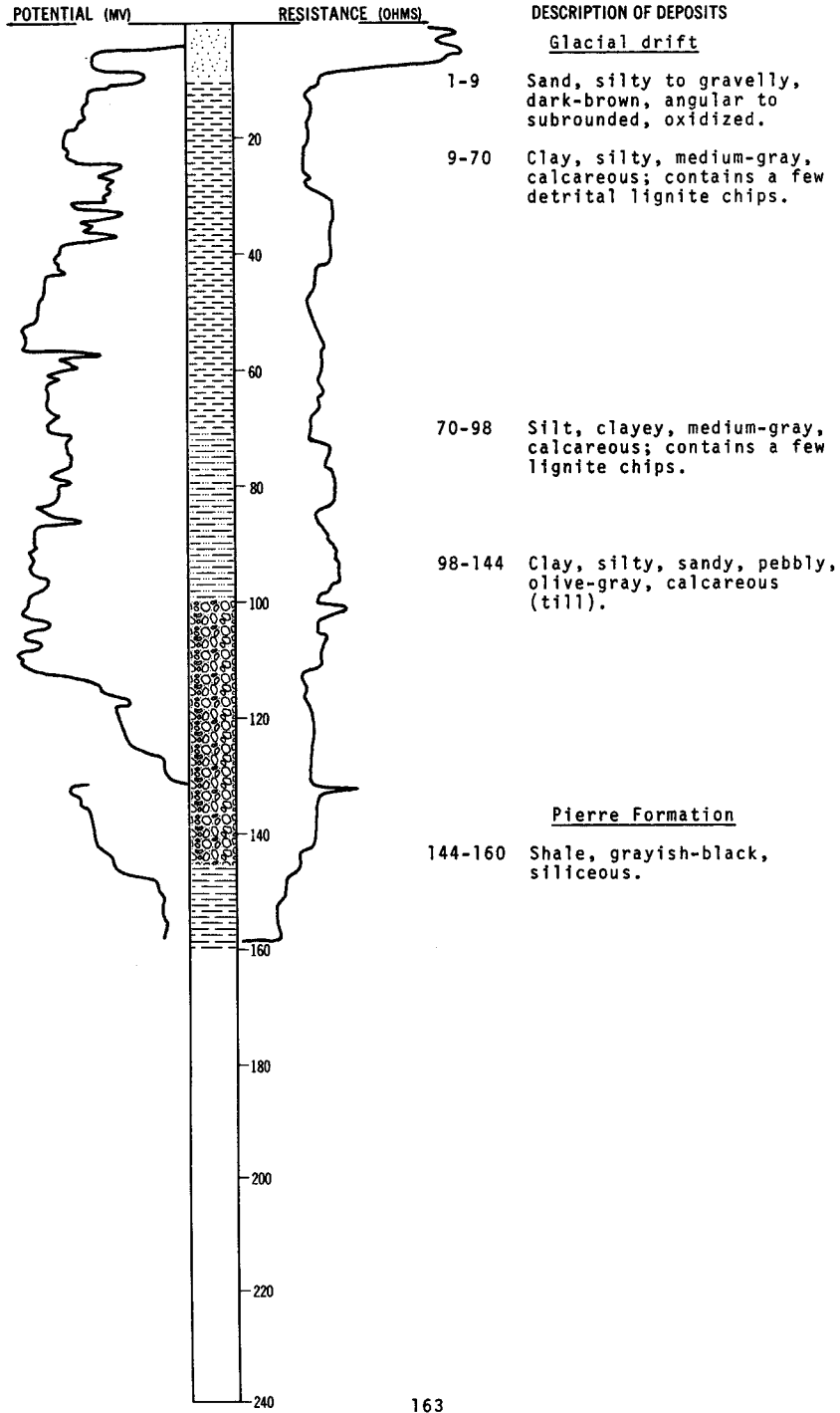


LOCATION: 131-077-05888

DATE DRILLED: November 1972

ALTITUDE: 1700  
(FT, MSL)

DEPTH: 160  
(FT)

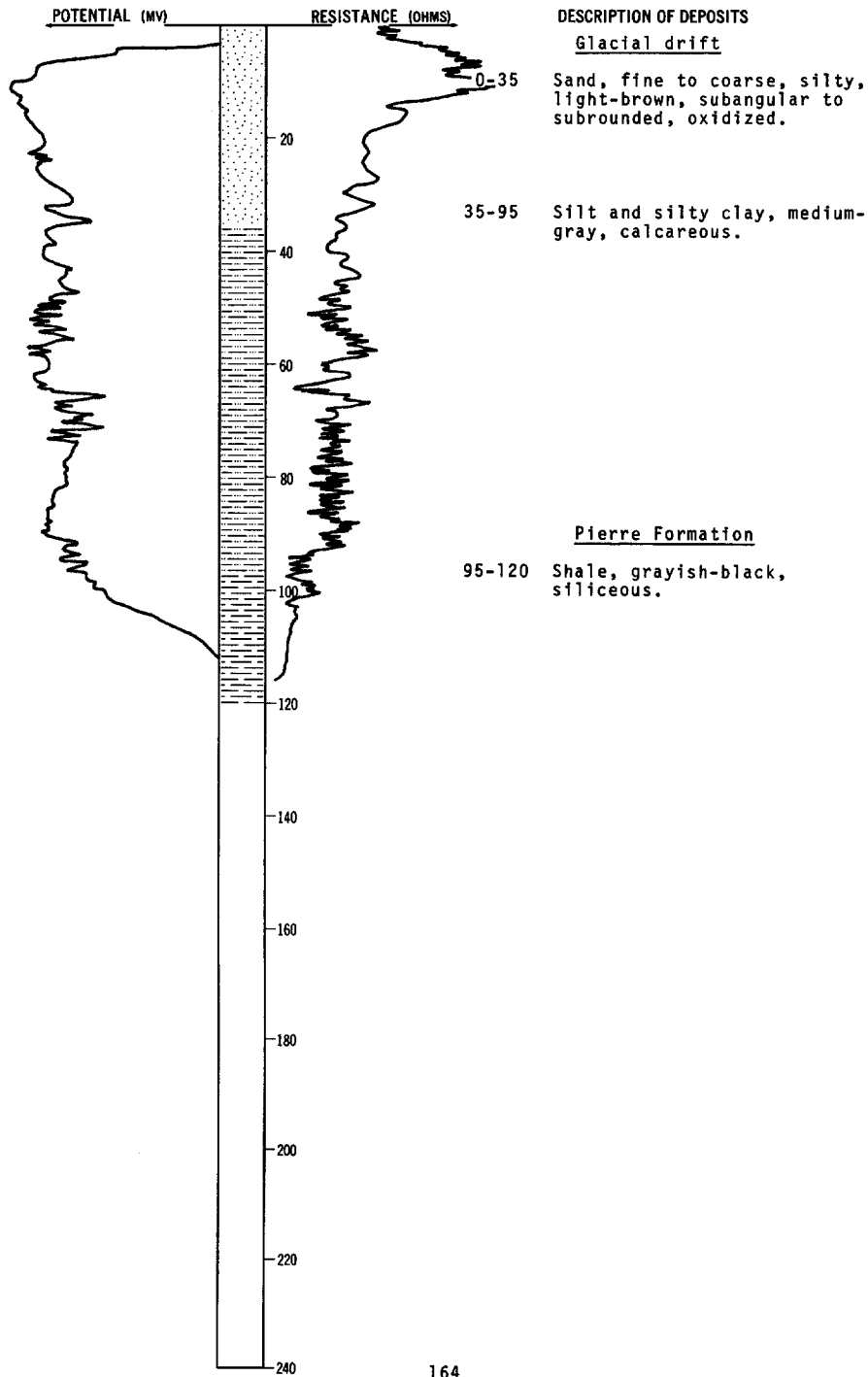


LOCATION: 131-077-09AAA

DATE DRILLED: November 1972

ALTITUDE: 1810  
(FT, MSL)

DEPTH: 120  
(FT)

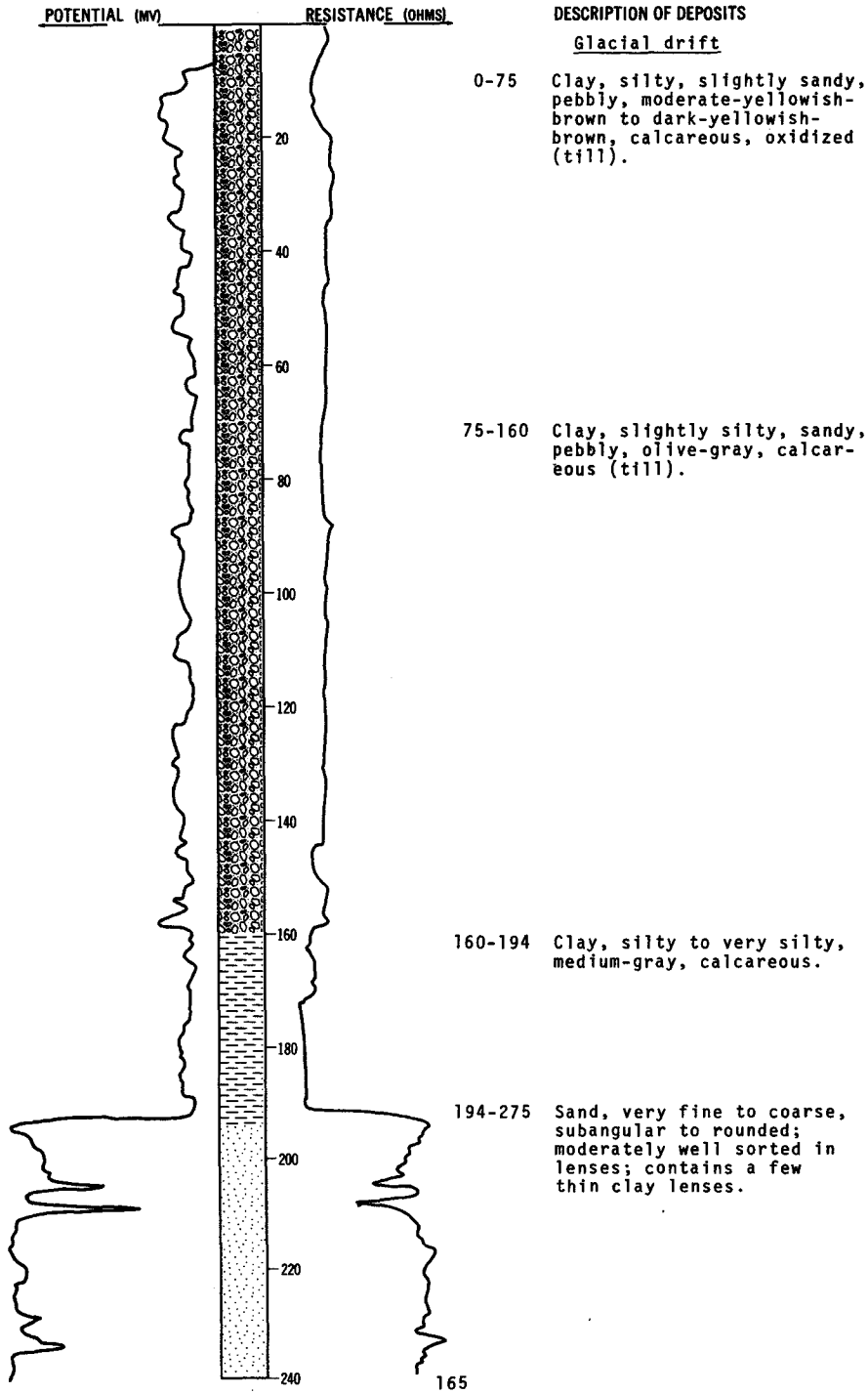


LOCATION: 131-077-14AAA

DATE DRILLED: December 1972

ALTITUDE: 1875  
(FT, MSL)

DEPTH: 380  
(FT)

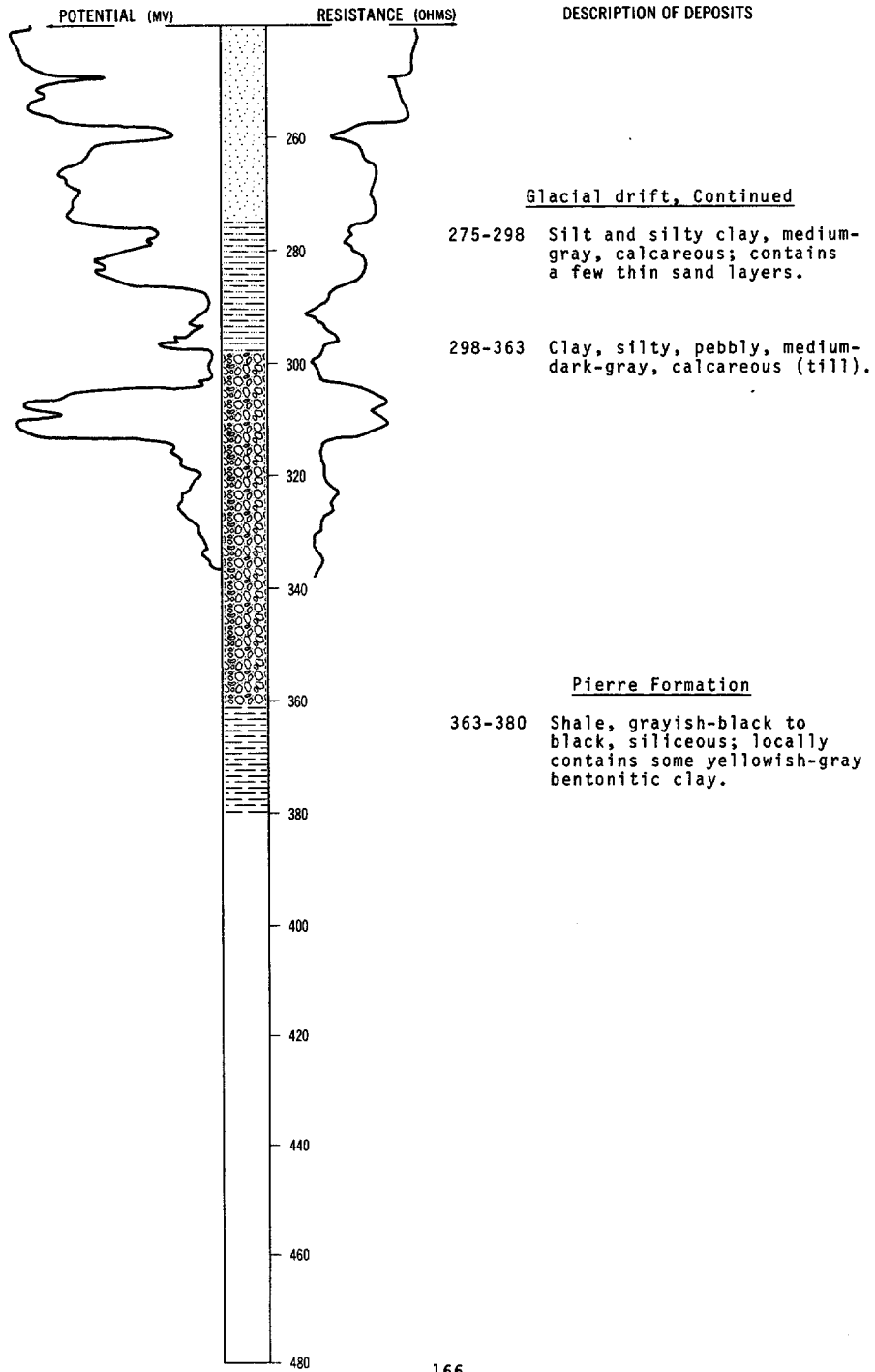


LOCATION: 131-077-14AAA

DATE DRILLED: December 1972

ALTITUDE: 1875  
(FT, MSL)

DEPTH: 380  
(FT)



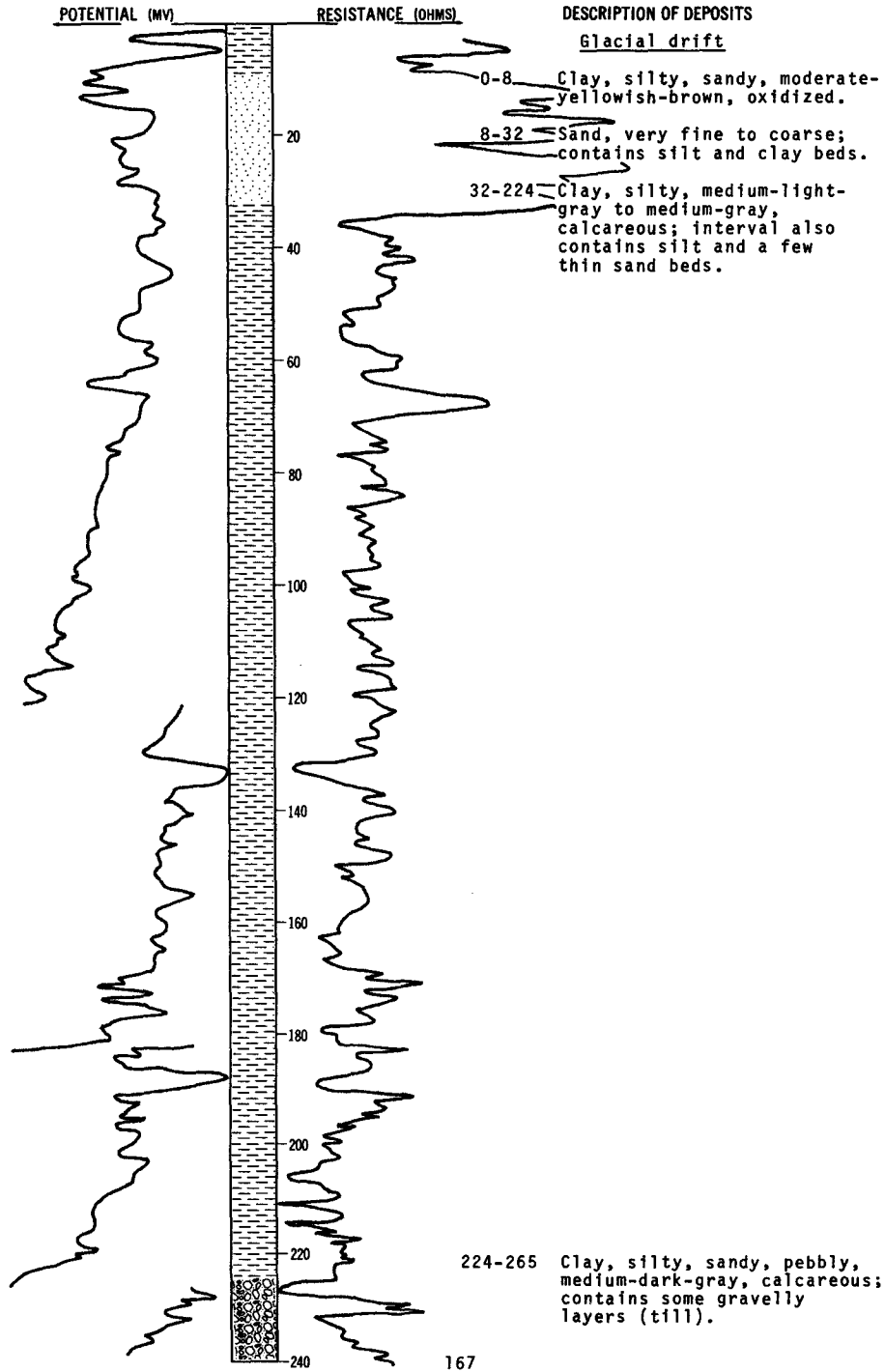


LOCATION: 131-077-19AAA

DATE DRILLED: November 1972

ALTITUDE: 1745  
(FT, MSL)

DEPTH: 280  
(FT)



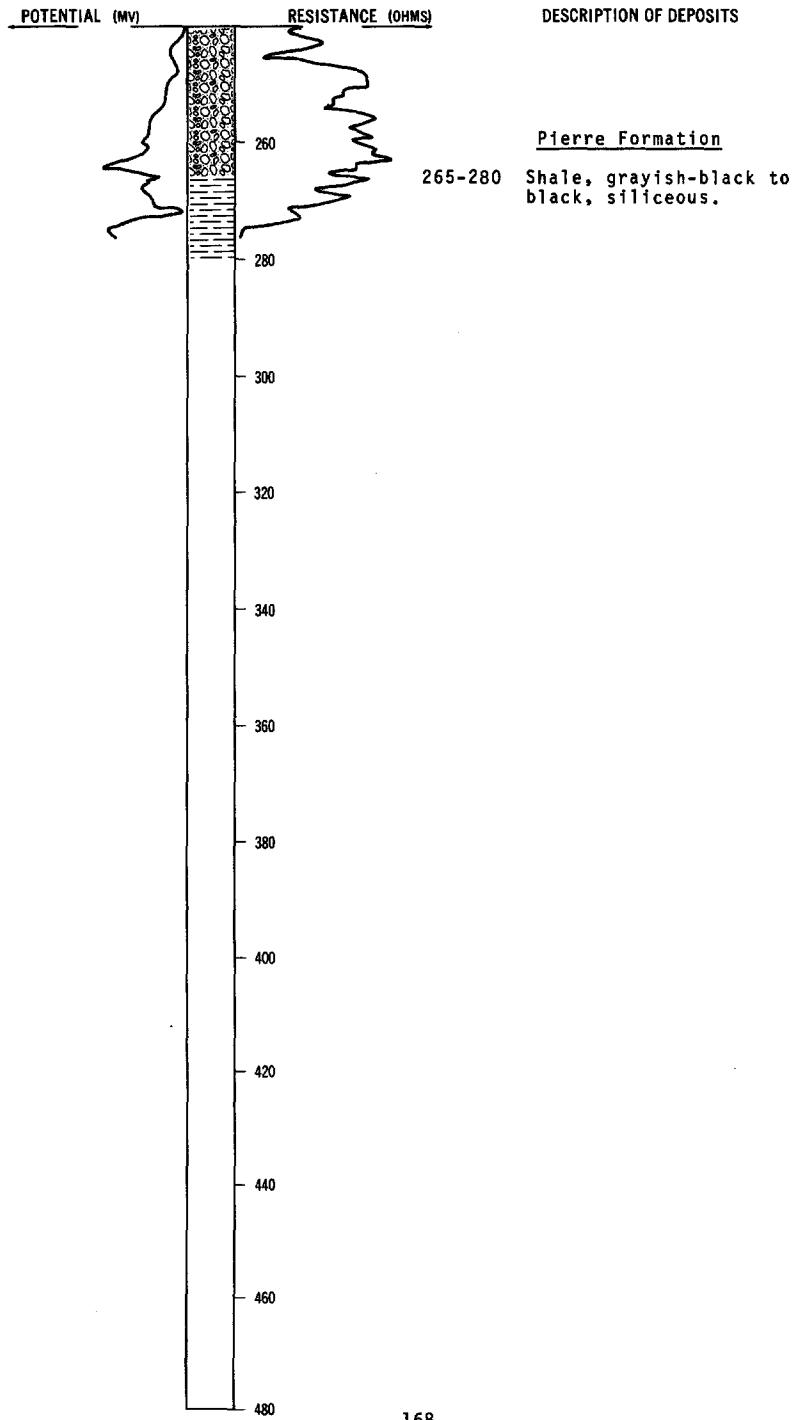
NDSWC 8572, Continued

LOCATION: 131-077-19AAA

DATE DRILLED: November 1972

ALTITUDE: 1745  
(FT, MSL)

DEPTH: 280  
(FT)

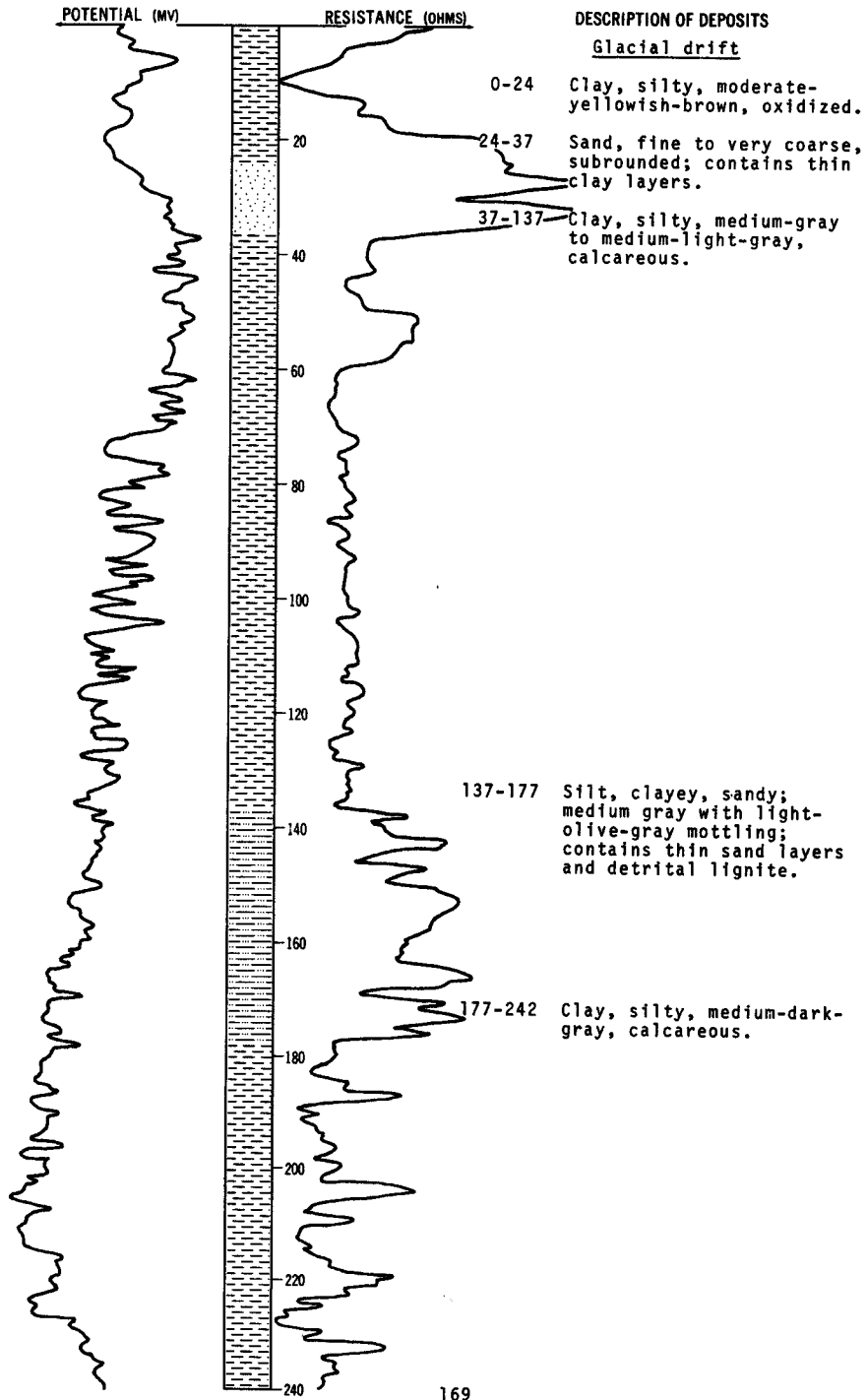


LOCATION: 131-077-19BBB

DATE DRILLED: November 1972

ALTITUDE: 1745  
(FT, MSL)

DEPTH: 280  
(FT)



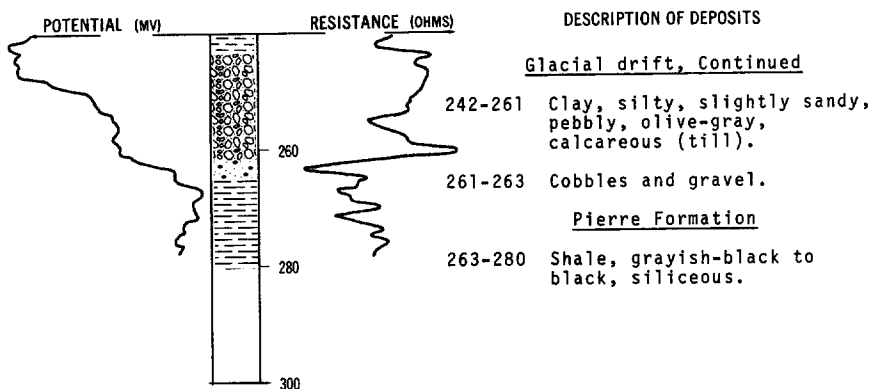
NDSWC 8571, Continued

LOCATION: 131-077-19BBB

DATE DRILLED: November 1972

ALTITUDE: 1745  
(FT, MSL)

DEPTH: 280  
(FT)



131-077-21CAD  
(Log from Baumgartner Drilling Co.)

Altitude: Date drilled: September 1972

Geologic source	Material	Thickness (feet)	Depth (feet)
	Clay-----	80	80
Fox Hills Formation:			
	Clay, sandy-----	20	100
	Sandstone-----	22	122
	Shale-----	--	122

131-077-26DDD  
NDSWC 8162

Altitude: 1850 ft Date drilled: October 1971

Glacial drift:

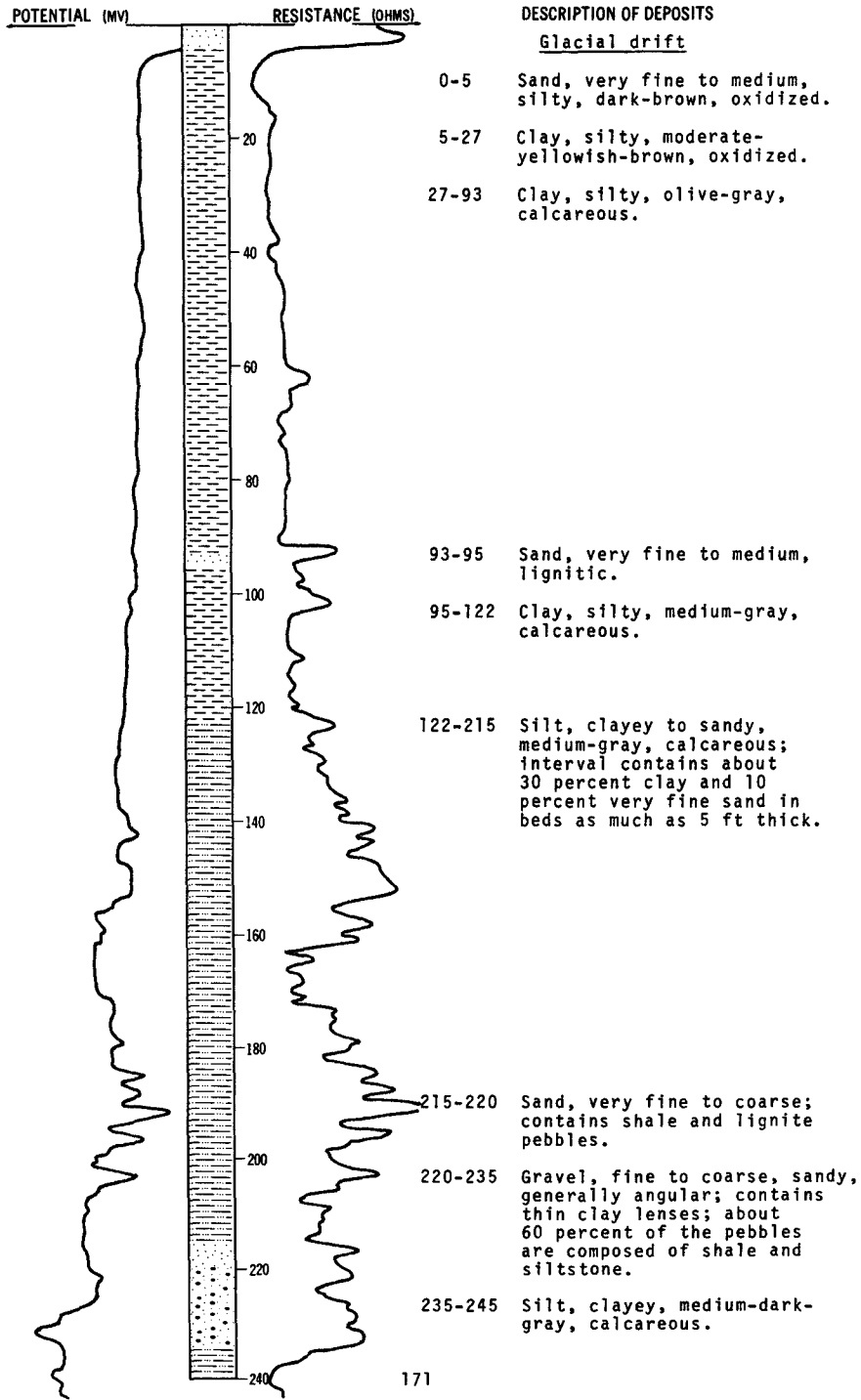
Clay, silty, sandy, pebbly, moderate-yellowish-brown to dark-yellowish-brown, oxidized; a few cobbles (till)-----	35	35
Clay, silty, sandy, pebbly, olive-gray, calcareous; a few cobbles (till)-----	85	120

LOCATION: 131-077-27CBC

DATE DRILLED: October 1973

ALTITUDE: 1818  
(FT, MSL)

DEPTH: 280  
(FT)

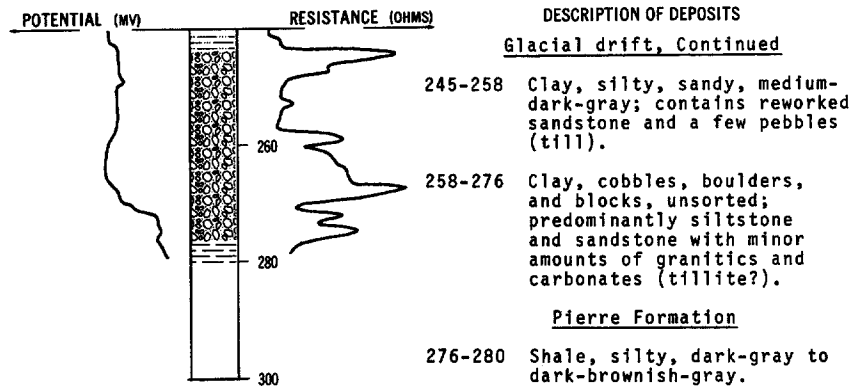


LOCATION: 131-077-27CBC

DATE DRILLED: October 1973

ALTITUDE: 1818  
(FT. MSL)

DEPTH: 280  
(FT)



131-077-28CCC  
Test hole 1208  
(Randich, 1963)

Altitude: 1795 ft

Date drilled: September 1957

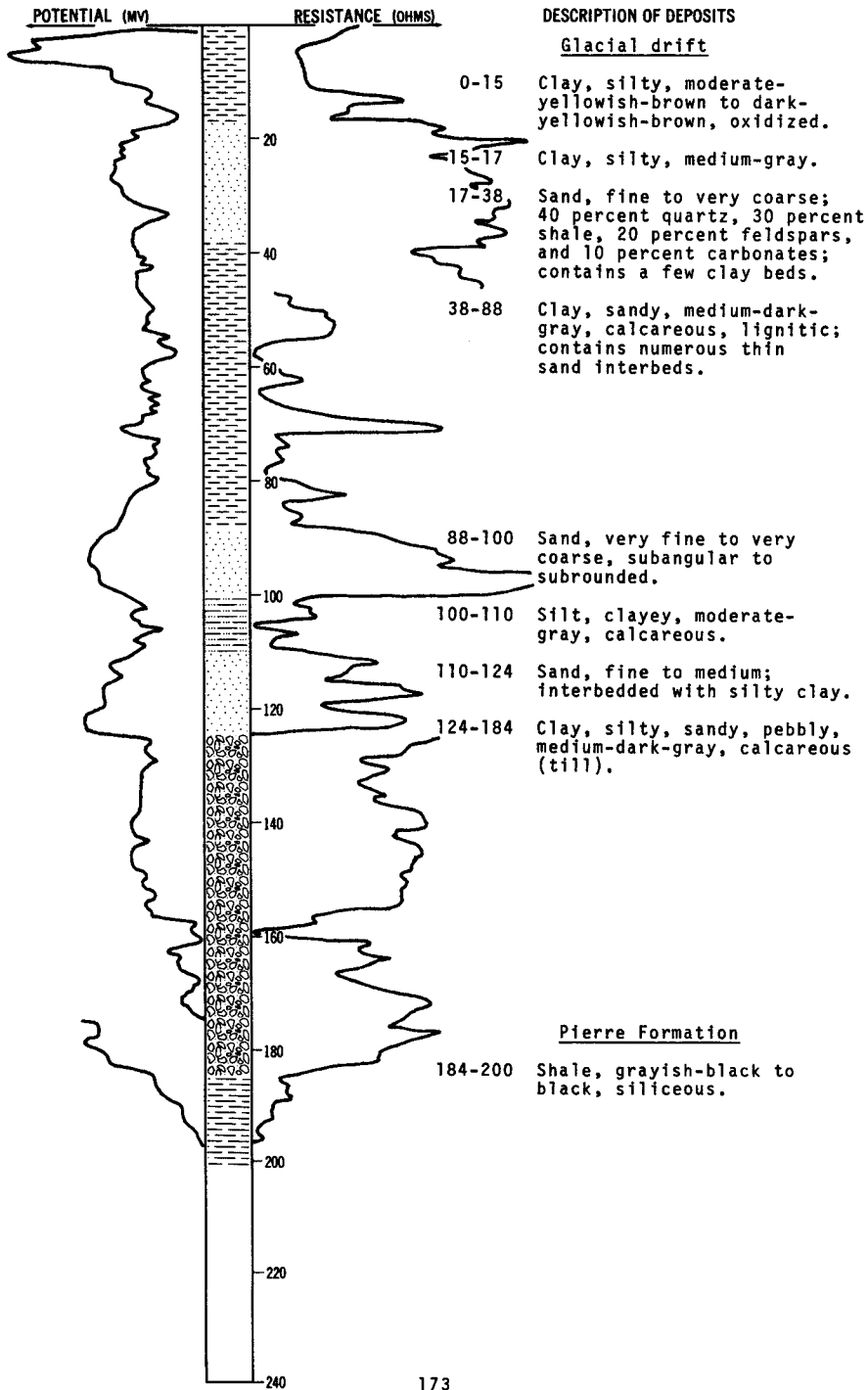
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Alluvium and colluvium:</u>			
	Topsoil, black-----	1	1
	Clay, sandy and silty, light-gray-----	11	12
<u>Glacial drift:</u>			
	Gravel, fine to coarse (outwash)-----	4	16
<u>Fox Hills Formation:</u>			
	Clay, sandy, gray-----	58	74
	Clay, sandy, light-gray-----	10	84

LOCATION: 131-078-04DAA

DATE DRILLED: November 1972

ALTITUDE: 1720  
(FT, MSL)

DEPTH: 200  
(FT)

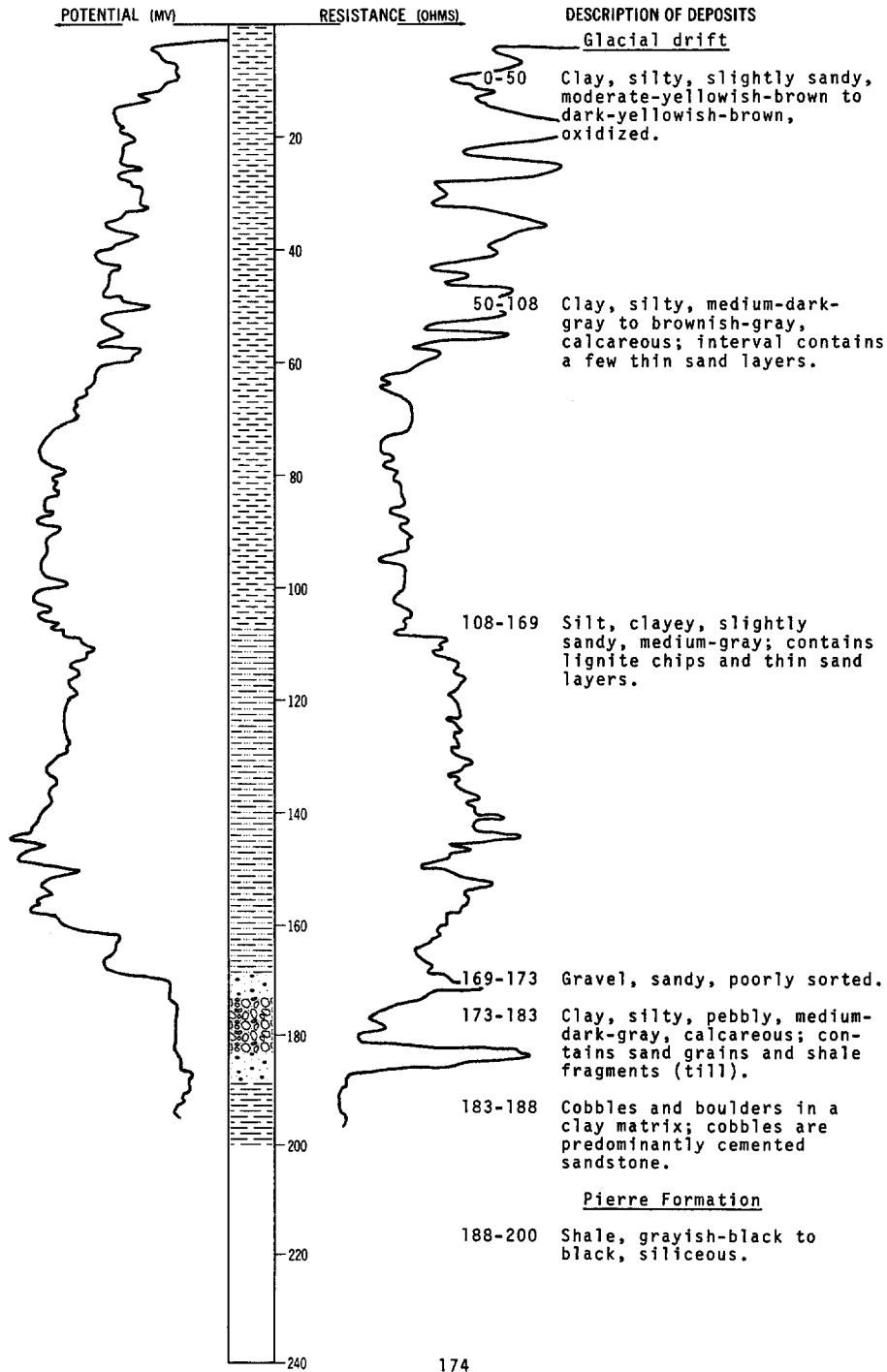


LOCATION: 131-078-23ABB

DATE DRILLED: November 1972

ALTITUDE: 1755  
(FT, MSL)

DEPTH: 200  
(FT)



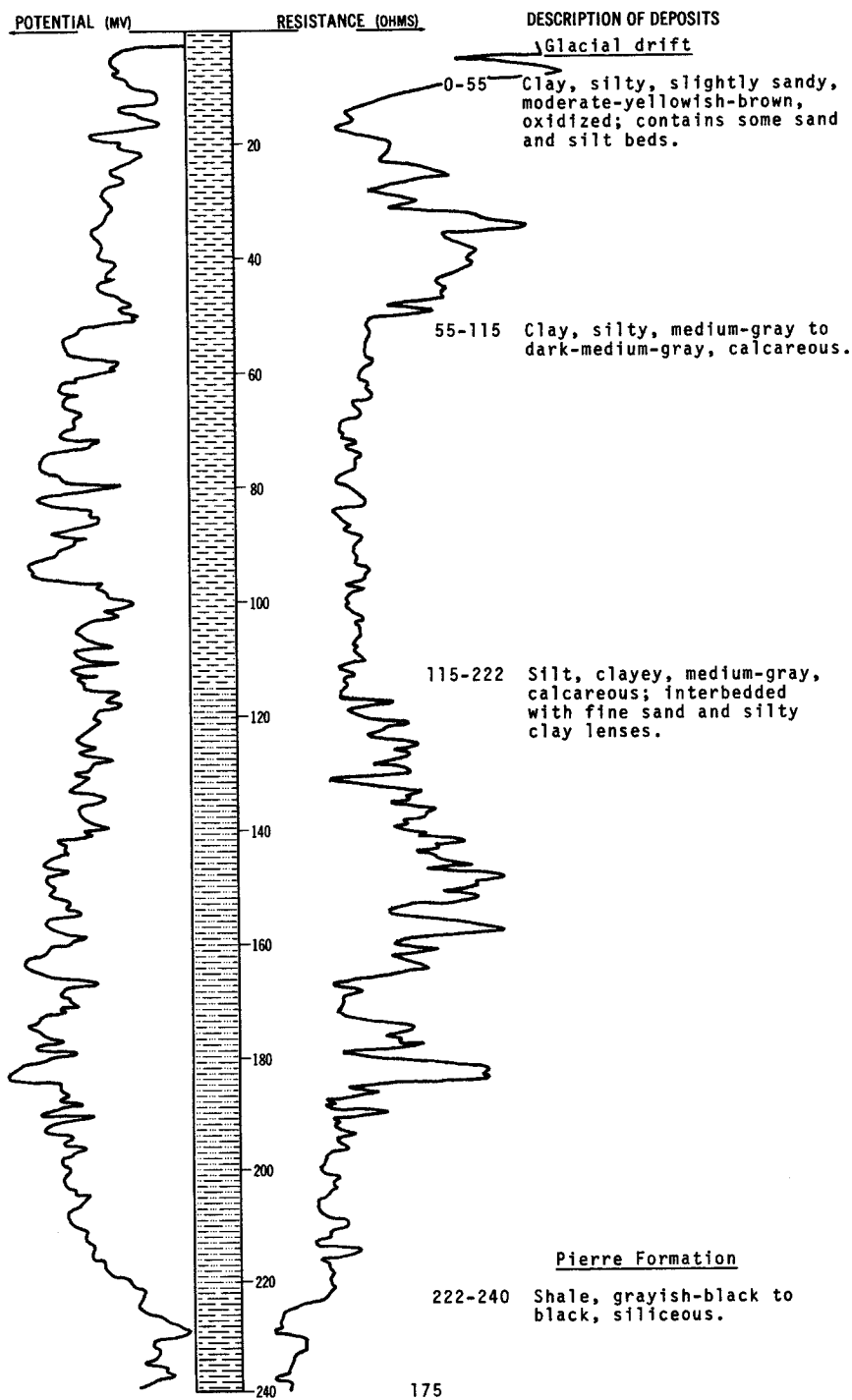


LOCATION: 131-078-24BAB

DATE DRILLED: November 1972

ALTITUDE: 1750  
(FT, MSL)

DEPTH: 240  
(FT)

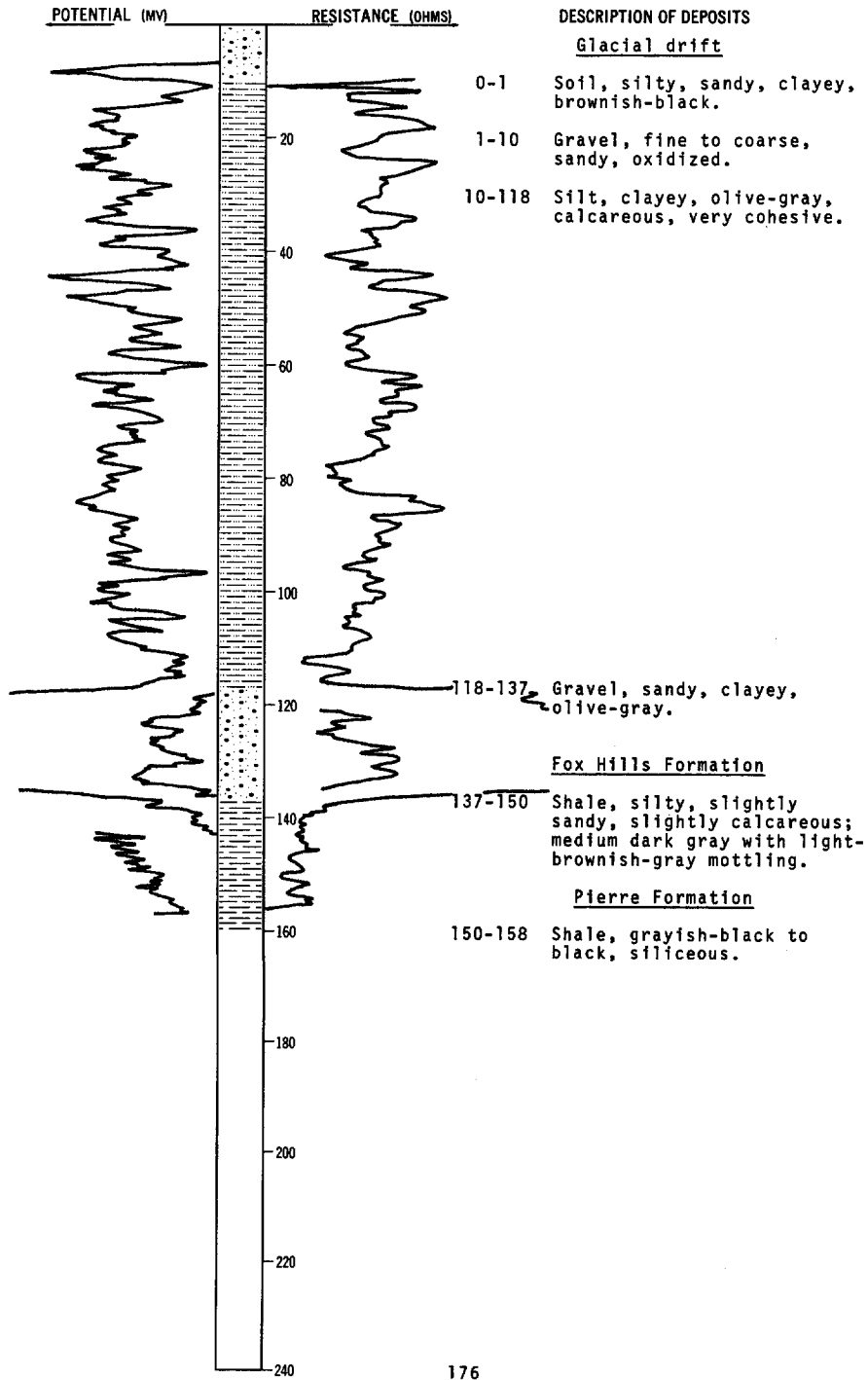


LOCATION: 131-079-17DDD

DATE DRILLED: October 1971

ALTITUDE: 1645  
(FT, MSL)

DEPTH: 158  
(FT)

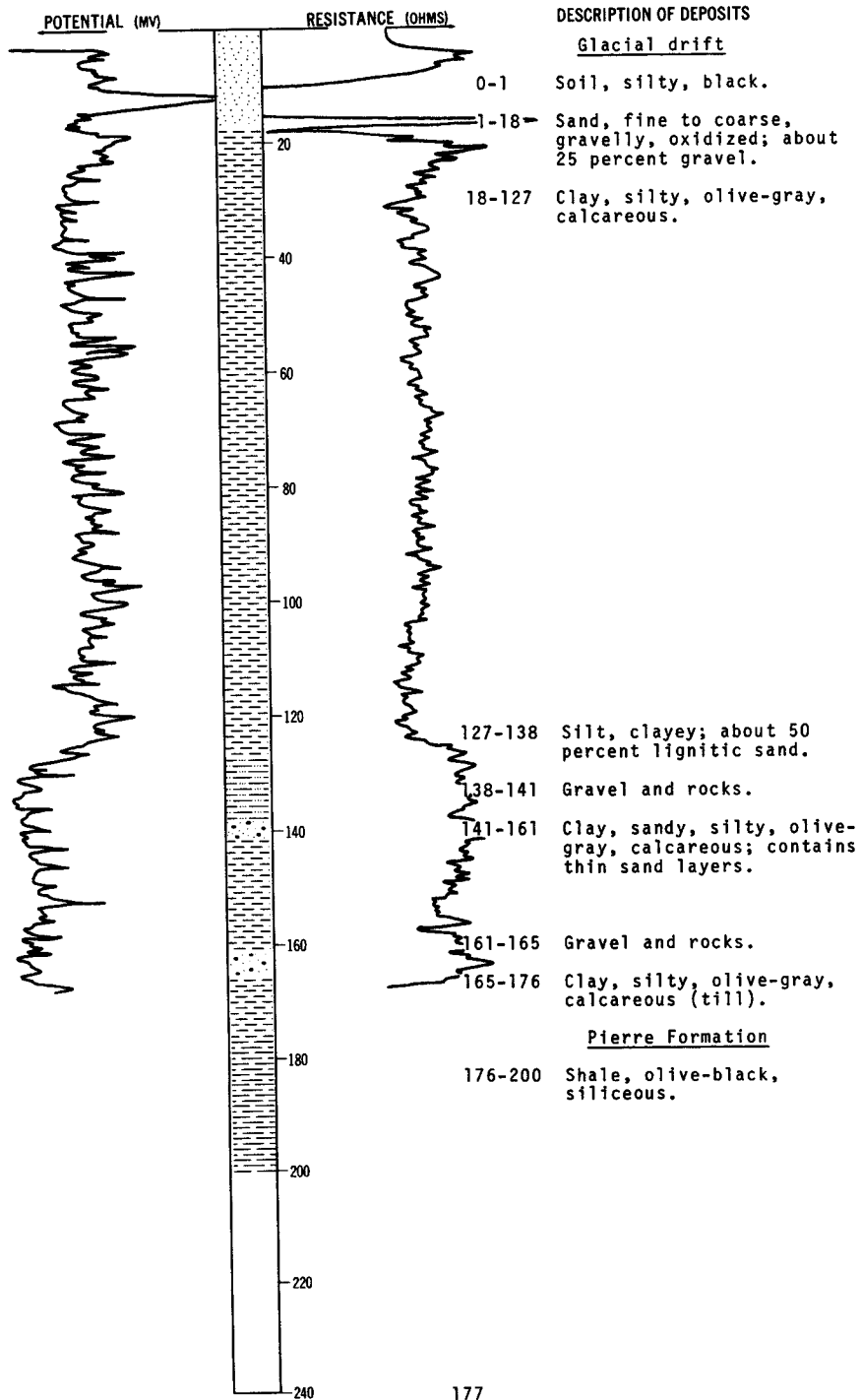


LOCATION: 131-079-20DDD

DATE DRILLED: October 1971

ALTITUDE: 1655  
(FT, MSL)

DEPTH: 200  
(FT)



131-079-26CDC  
(Log from Baumgartner Drilling Co.)

Altitude: Date drilled: June 1972

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Sand, brown, dirty-----	25	25
	Clay, gray-----	85	110
	Sand, fine-----	6	116
	Clay, gray-----	21	137
	Gravel-----	3	140
	Sand rock, hard -----	10	150

131-079-27ADD  
(Log from Witikko Drilling)

Altitude: Date drilled: November 1972

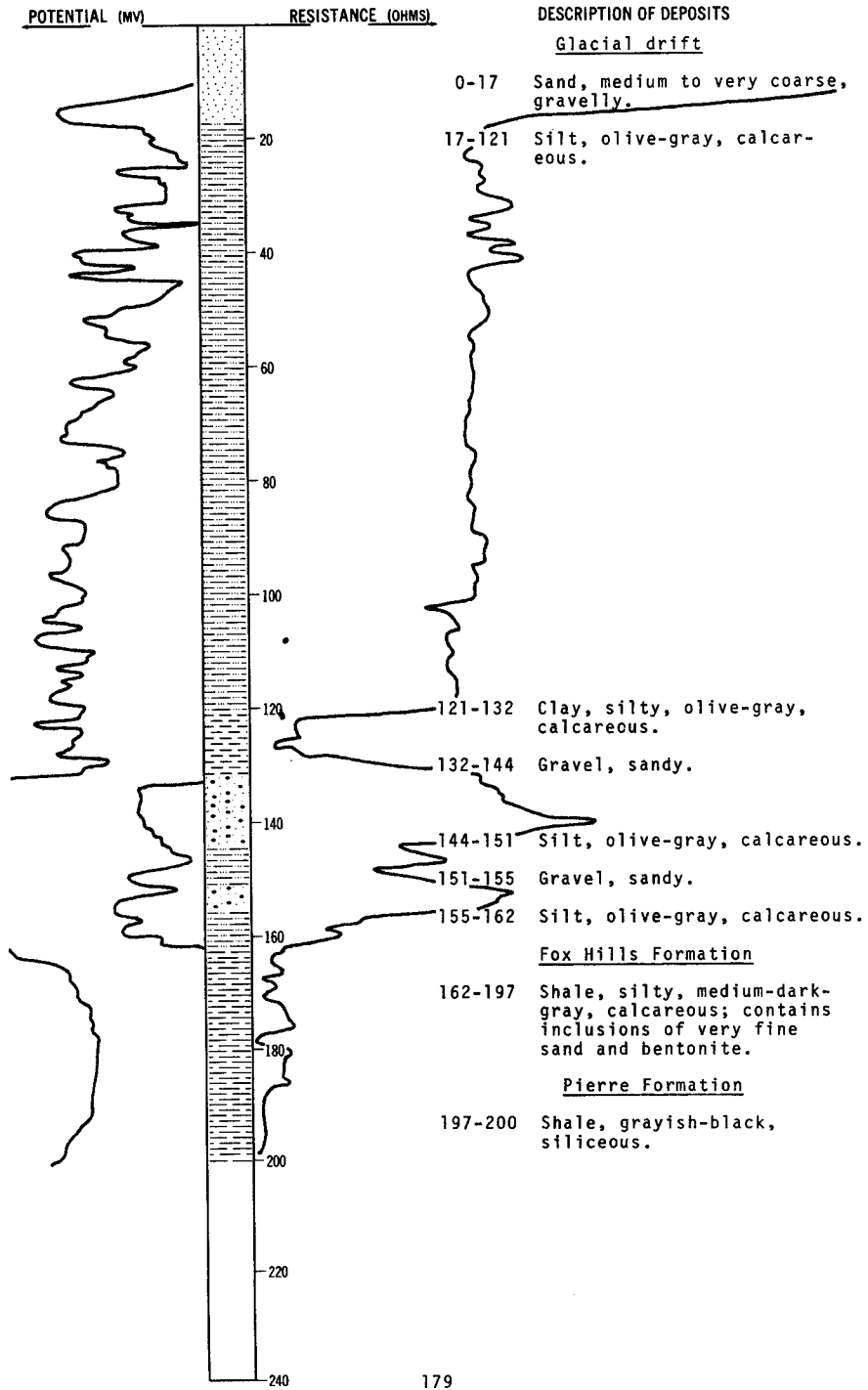
	Soil, black-----	1	1
	Sand, brown-----	6	7
	Clay, brown-----	21	28
	Clay, gray-----	15	43
	Sand, gray-----	3	46
	Clay, gray-----	44	90
	Sand rock-----	13	103
	Sand-----	3	106
	Clay, gray-----	22	128
	Sand, blue-----	8	136
	Clay, gray-----	6	142

LOCATION: 131-079-28BCC

DATE DRILLED: November 1972

ALTITUDE: 1645  
(FT, MSL)

DEPTH: 200  
(FT)

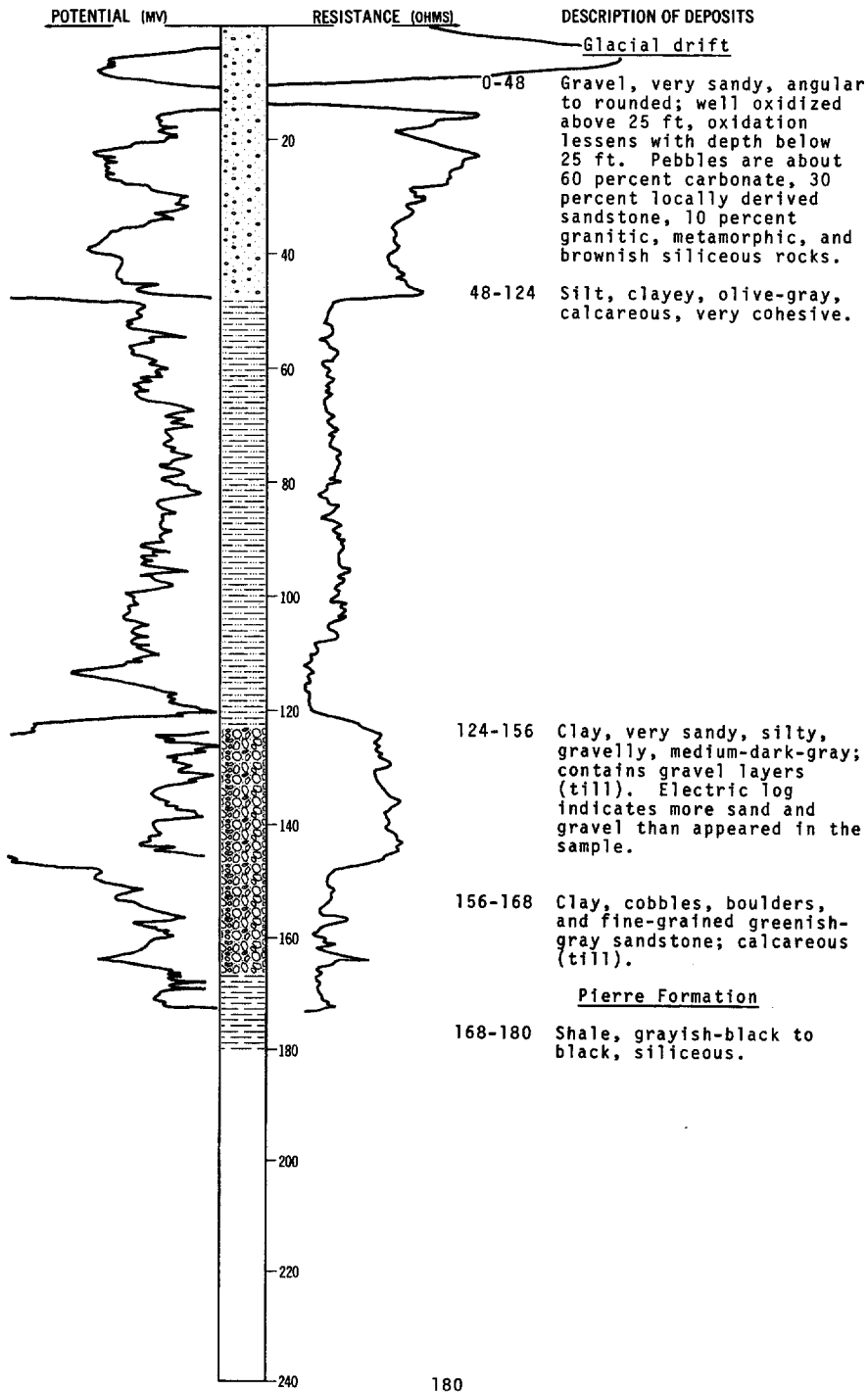


LOCATION: 131-079-28DDD

DATE DRILLED: October 1971

ALTITUDE: 1645  
(FT, MSL)

DEPTH: 180  
(FT)

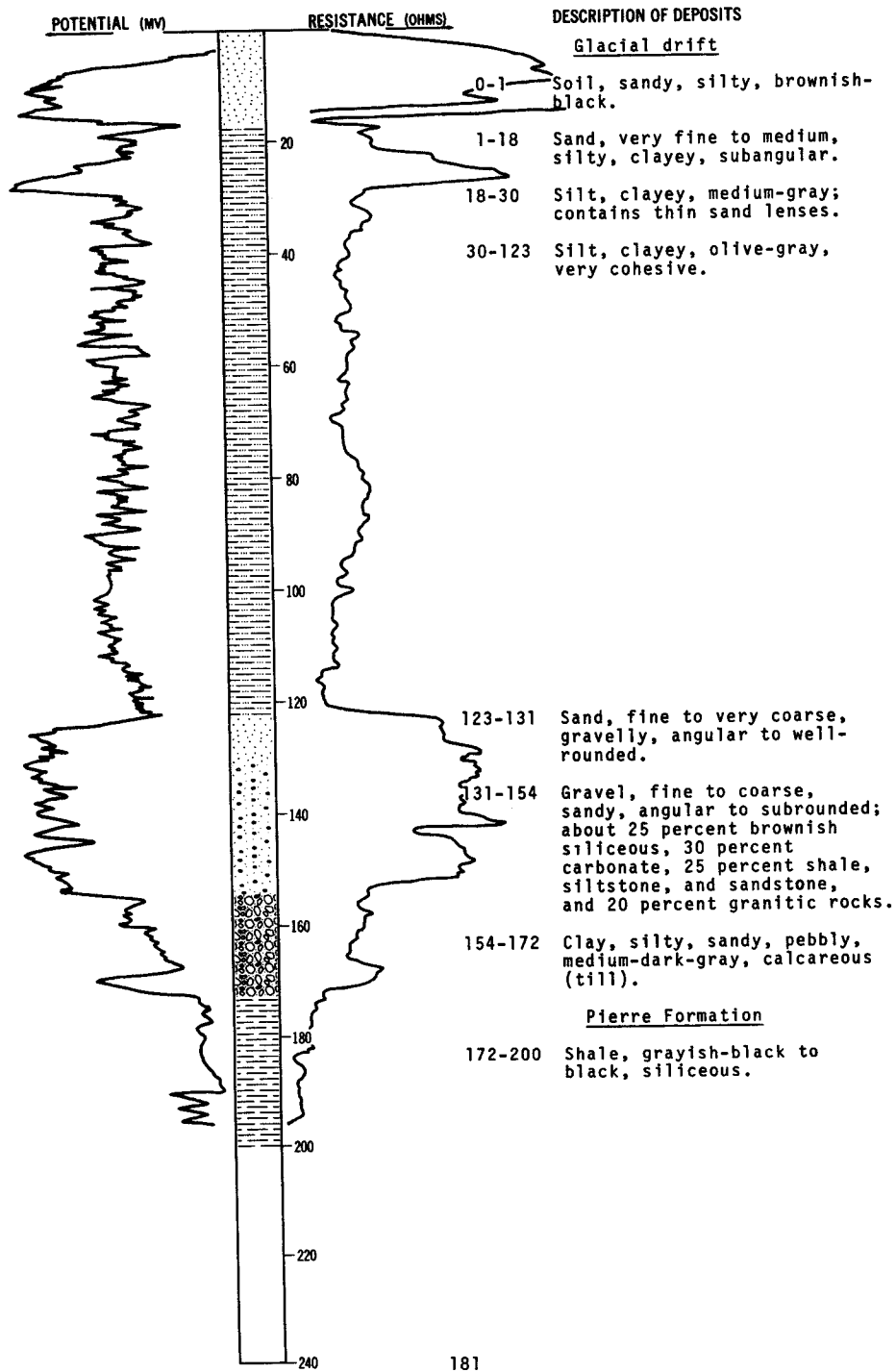


LOCATION: 131-079-32AAA

DATE DRILLED: October 1971

ALTITUDE: 1645  
(FT, MSL)

DEPTH: 200  
(FT)

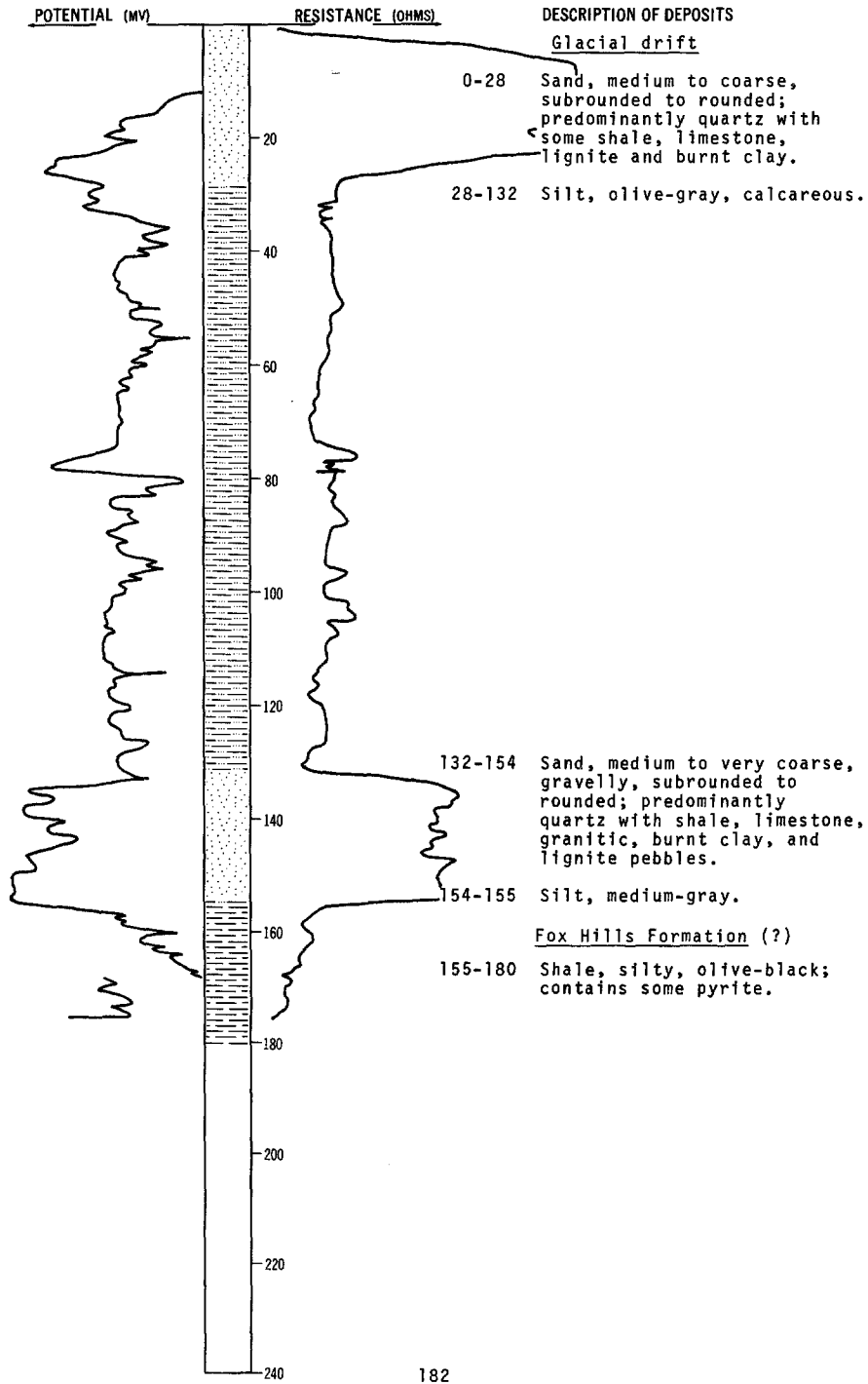


LOCATION: 131-079-33CBB

DATE DRILLED: November 1972

ALTITUDE: 1645  
(FT, MSL)

DEPTH: 180  
(FT)



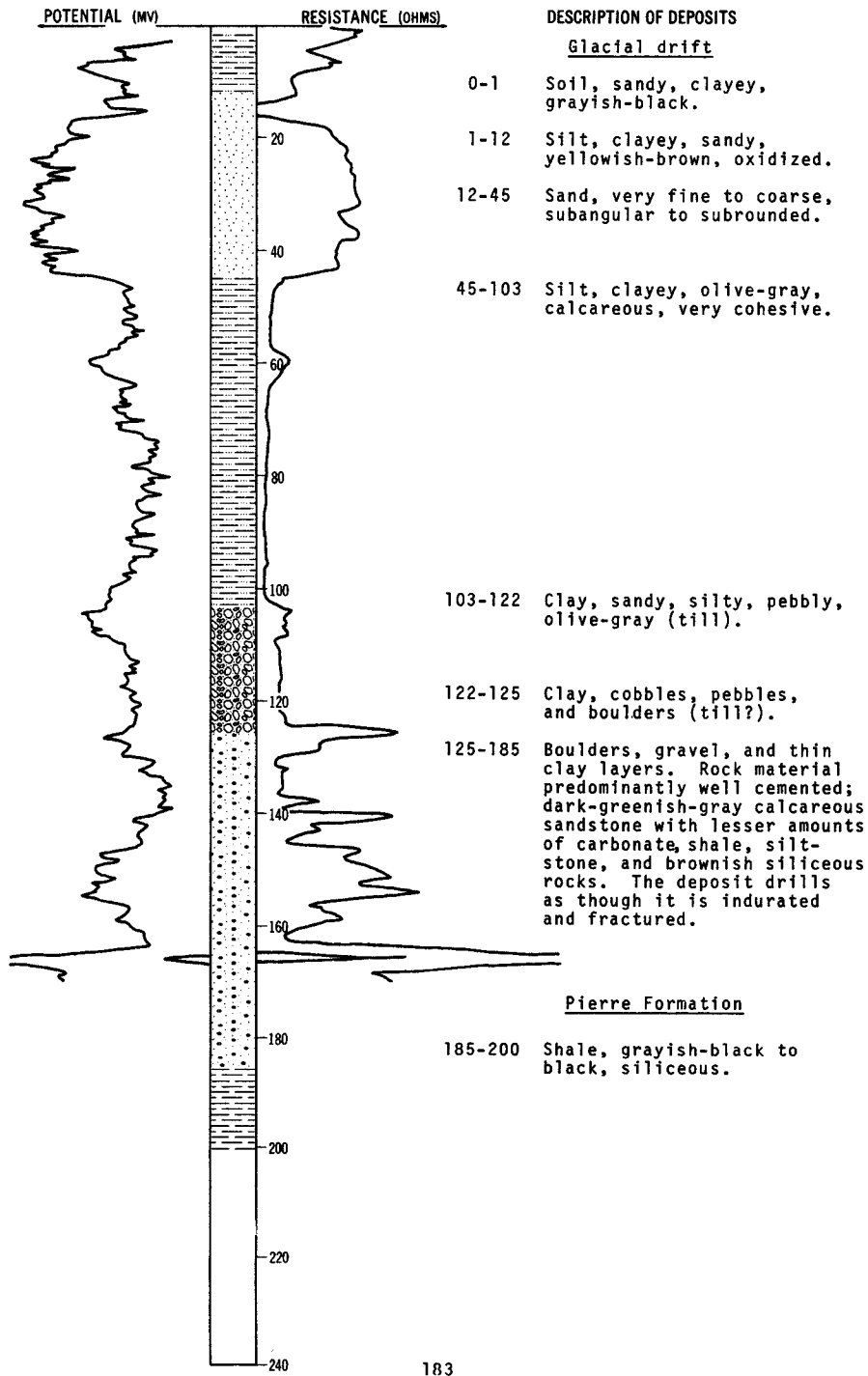


LOCATION: 131-079-35BBA

DATE DRILLED: October 1971

ALTITUDE: 1655  
(FT, MSL)

DEPTH: 200  
(FT)

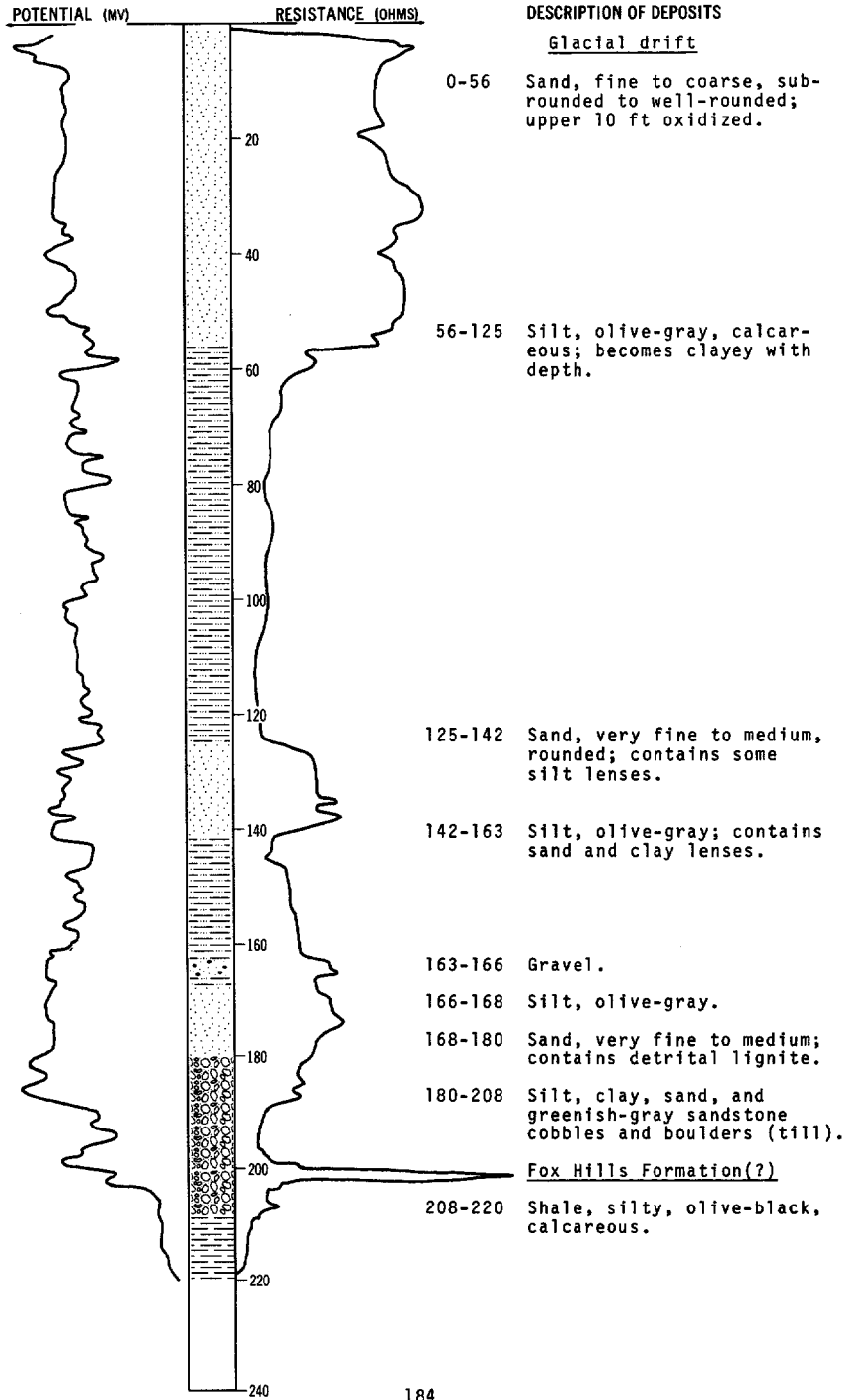


LOCATION: 131-079-35DCD

DATE DRILLED: November 1972

ALTITUDE: 1670  
(FT, MSL)

DEPTH: 220  
(FT)



132-074-08AAA  
(Log from J. Thurn)

Altitude: Date drilled: December 1972

Geologic source	Material	Thickness (feet)	Depth (feet)
	Gravel-----	3	3
	Sand-----	22	25
	Shale, blue-----	22	47

132-074-10BBB  
(Log from J. Thurn)

Altitude: Date drilled: July 1972

	Soil, black-----	4	4
	Sand, yellow-----	31	35
	Clay, blue-----	14	49

132-074-14CDD2  
(Log from J. Thurn)

Altitude: Date drilled: July 1972

	Sand-----	20	20
	Shale, blue-----	65	85

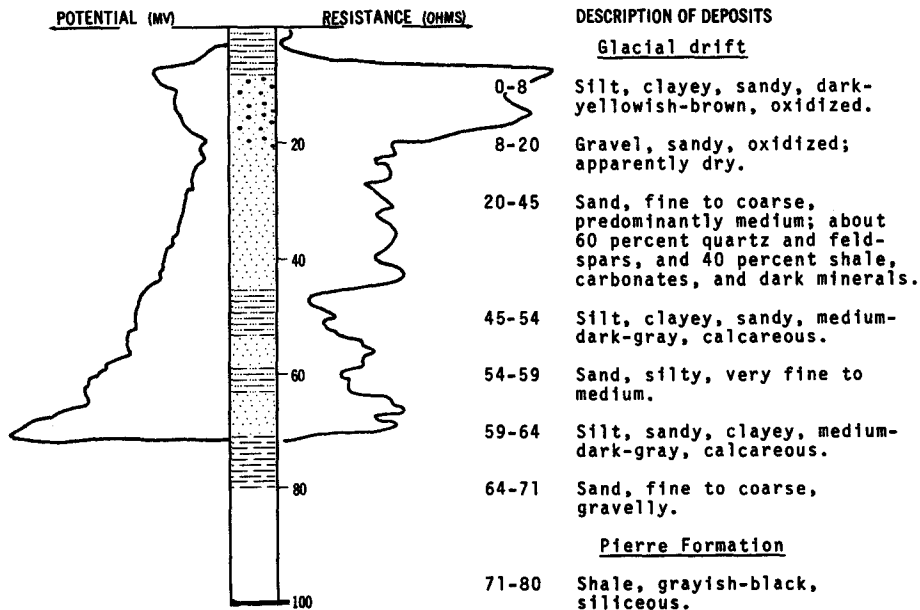
NDSWC 8587

LOCATION: 132-074-15DDD

DATE DRILLED: November 1972

ALTITUDE: 1865  
(FT, MSL)

DEPTH: 80  
(FT)



132-074-18DCC  
(Log from J. Thurn)

Altitude: Date drilled: October 1972

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Soil, black-----	2	2
	Loam, sandy-----	18	20
	Shale, black-----	36	56

132-075-04AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 2038 ft

	Clay, yellow-----	49	49
	Shale and sandstone-----	101	150

132-075-04ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 2052 ft

	Clay, yellow-----	49	49
	Shale and sandstone-----	111	160

132-075-04BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1982 ft

	Surface-----	3	3
	Clay-----	6	9
	Gravel-----	2	11
	Clay and gravel-----	5	16
	Clay-----	38	54
	Shale-----	96	150

132-075-05 ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1980 ft

	Clay-----	35	35
	Shale and sandstone-----	115	150

132-075-05BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1939 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Clay-----	10	10
	Shale and sandstone; hard sandstone at 129-130 and 139-140 ft-----	140	150

132-075-06BAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1900 ft

	Surface-----	3	3
	Clay and gravel-----	9	12
	Clay-----	16	28
	Shale-----	122	150

132-075-10C  
(Log from J. Thurn)

Altitude:

	Dirt, black-----	3	3
	Clay, yellow-----	17	20
	Shale, blue-----	10	33

132-075-18CD  
(Log from J. Thurn)

Altitude:

	Soil, black-----	2	2
	Clay, yellow-----	13	15
	Shale, blue-----	17	32

132-075-20AAA  
Test hole 1231  
(Randich, 1963)

Altitude: 1810 ft

Date drilled: October 1957

Alluvium and colluvium:			
	Topsoil, black-----	2	2
	Sand, fine to medium, silty-----	10	12
Glacial drift:			
	Gravel, medium to coarse, clayey (outwash)--	13	25
Pierre Formation:			
	Shale, gray-----	6	31



132-076-01ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1838 ft

Geologic source	Material	Thickness (feet)	Depth (feet)
	Clay and gravel-----	13	13
	Shale, blue-----	137	150

132-076-01BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1872 ft

	Clay and sand-----	20	20
	Shale and sandstone-----	110	130
	Shale, firm-----	20	150

132-076-02ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1978 ft

	Surface-----	3	3
	Clay and gravel-----	7	10
	Clay-----	8	18
	Clay and sandstone-----	46	64
	Clay-----	20	84
	Clay, bentonite(?)-----	12	96
	Clay and sandstone-----	6	102
	Shale-----	48	150

132-076-03AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1890 ft

	Clay-----	8	8
	Shale, brown-----	29	37
	Shale, blue-----	113	150

132-076-04AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1950 ft

	Surface-----	3	3
	Clay and rocks-----	9	12
	Clay-----	29	41
	Shale-----	109	150

132-076-04ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 2044 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Clay-----	12	12
	Sandstone and clay-----	72	84
	Shale, blue-----	66	150

132-076-04BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1926 ft

	Clay-----	20	20
	Shale-----	80	100
	Shale and sandstone-----	50	150

132-076-05ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1851 ft

	Surface-----	3	3
	Clay-----	19	22
	Shale-----	23	45
	Rock-----	3	48
	Shale-----	102	150

132-076-06AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1783 ft

	Clay and gravel (strip)-----	22	22
	Shale and sandstone-----	88	110
	Shale, firm-----	40	150

132-076-06ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1755 ft

	Clay-----	30	30
	Sandstone, gravel, and clay-----	70	100
	Shale-----	50	150



132-076-06BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1791 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Clay-----	12	12
	Shale, blue-----	138	150

132-076-06CAA  
Test hole 1245  
(Randich, 1963)

Altitude: 1733 ft

Date drilled: October 1957

Alluvium and colluvium:			
	Topsoil, black-----	3	3
	Clay, sandy, and silty, light-brown-----	8	11
Glacial drift:			
	Clay, sandy, gray (outwash)-----	5	16
Pierre Formation:			
	Shale, gray-----	5	21

132-076-07BCC  
Test hole 1233  
(Randich, 1963)

Altitude: 1693 ft

Date drilled: October 1957

Glacial drift:			
	Topsoil, black-----	1	1
	Sand, fine to coarse (outwash)-----	4	5
	Gravel, fine to coarse (outwash)-----	5	10
	Gravel, fine to coarse, cobbles, and shale pebbles (outwash)-----	24	34
Pierre Formation:			
	Shale, gray-----	8	42

132-076-07CAA  
(Log from Witikko Drilling)

Altitude:

Date drilled: October 1972

	Soil-----	2	2
	Clay, dark brown-----	20	22
	Sand, brown-----	4	26
	Gravel-----	10	36

132-076-10BDC  
(Log from Witikko Drilling)

Altitude:

Date drilled: May 1973

	Topsoil, black-----	1	1
	Sand, silty, brown-----	27	28
	Clay, brown-----	10	38
	Gravel-----	7	45

132-076-15DAA  
 Test hole 1229  
 (Randich, 1963)

Altitude: 1742 ft

Date drilled: October 1957

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Alluvium and colluvium:			
	Topsoil, black-----	2	2
	Clay, sandy and silty, light-brown-----	9	11
Glacial drift:			
	Gravel, fine to coarse, clayey (outwash)----	11	22
Pierre Formation:			
	Shale, gray-----	9	31

132-076-16DDD  
 Test hole 1228  
 (Randich, 1963)

Altitude: 1723 ft

Date drilled: October 1957

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Alluvium and colluvium:			
	Topsoil, black-----	1	1
	Clay, sandy and silty, brown-----	4	5
Glacial drift:			
	Gravel, fine to coarse (outwash)-----	5	10
	Gravel, fine to coarse, and cobbles (outwash)-----	10	20
	Gravel, fine to coarse, and shale pebbles (outwash)-----	6	26
Pierre Formation:			
	Shale, gray-----	5	31

132-076-17BBB  
 Test hole 1225  
 (Randich, 1963)

Altitude: 1700 ft

Date drilled: October 1957

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Alluvium and colluvium:			
	Topsoil, black-----	2	2
	Clay, silty, dark-brown-----	9	11
Glacial drift:			
	Gravel, fine to coarse, and cobbles (outwash)-----	23	34
	Clay, sandy, gray (outwash)-----	2	36
	Gravel, fine, and fine to coarse sand (outwash)-----	6	42
	Clay, sandy, light-gray-----	21	63

132-076-17BBD  
NDSWC 8122

Altitude: 1705 ft

Date drilled: September 1971

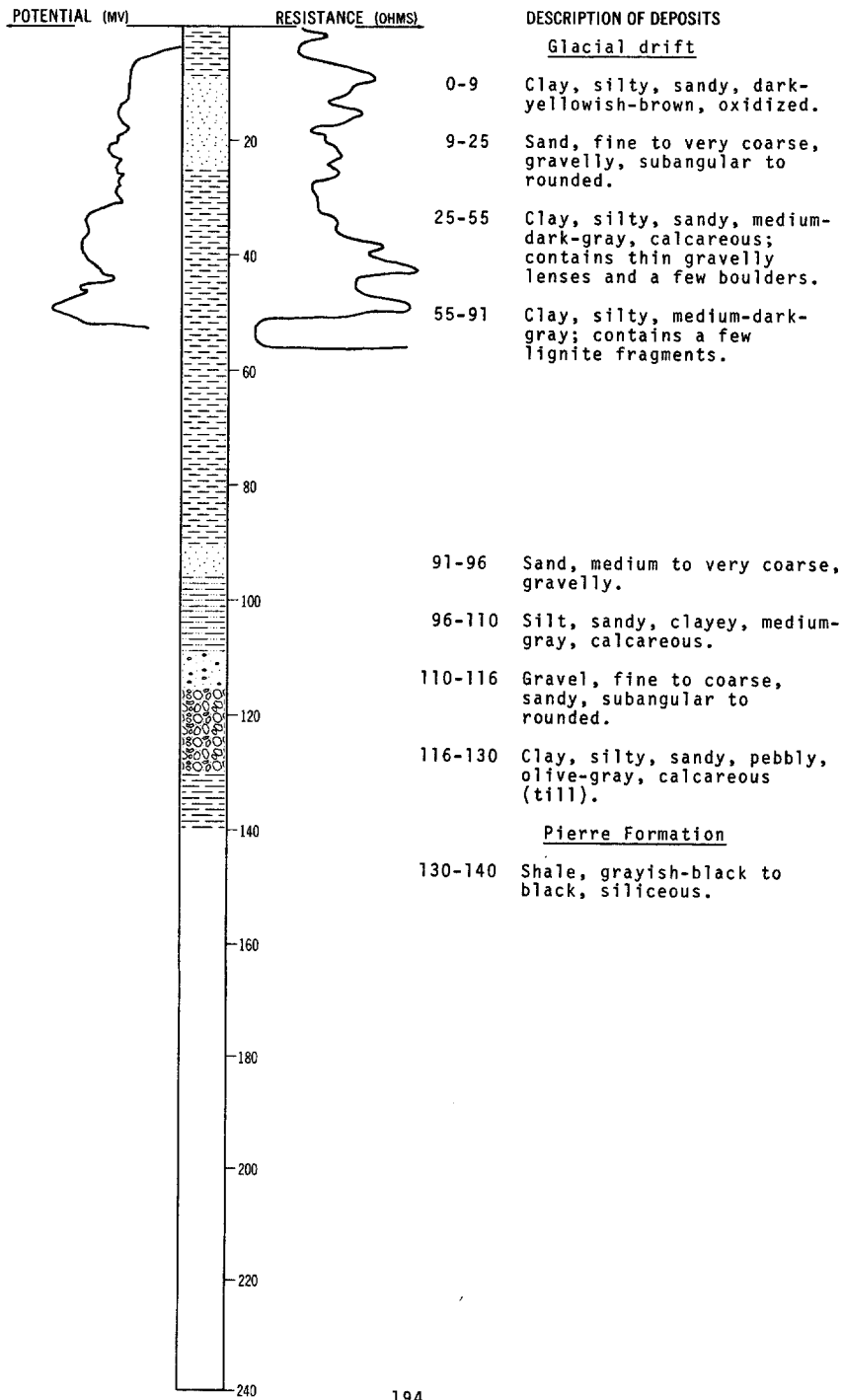
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, silty, sandy, clayey, grayish-black---	1	1
	Clay, silty, sandy, dark-yellowish-brown, calcareous, oxidized-----	13	14
	Clay, silty, sandy, olive-gray, calcareous--	6	20
	Sand, gravelly, fine to coarse, subangular to subrounded; pebbles and grains are predominantly quartz and shale-----	7	27
	Silt, clayey, sandy, calcareous; olive gray with light-olive-gray mottling-----	21	48
	Clay, silty, sandy, pebbly, olive-gray, calcareous (till)-----	6	54
	Silt, clayey, sandy, medium-dark-gray, calcareous-----	18	72
Pierre Formation:			
	Shale, grayish-black to black, siliceous----	8	80

LOCATION: 132-076-17CCB

DATE DRILLED: November 1972

ALTITUDE: 1705  
(FT, MSL)

DEPTH: 140  
(FT)



132-076-17DDD  
 Test hole 1227  
 (Randich, 1963)

Altitude:	1720 ft	Date drilled:	October 1957
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Alluvium and colluvium:			
	Topsoil, black-----	2	2
	Clay, sandy and silty, dark-brown-----	9	11
Glacial drift:			
	Gravel, fine to coarse (outwash)-----	10	21
Pierre Formation:			
	Shale, gray-----	10	31

132-076-18AAA  
 (Log from Witikko Drilling)

Altitude:		Date drilled:	August 1973
	Topsoil, black-----	1	1
	Sand and clay, brown-----	6	7
	Clay, brown-----	11	18
	Gravel and sand-----	3	21
	Clay, gray-----	8	29
	Gravel-----	6	35

132-076-23AAD  
 Test hole 1230  
 (Randich, 1963)

Altitude:	1765 ft	Date drilled:	October 1957
Glacial drift:			
	Topsoil, black-----	2	2
	Sand, fine to coarse, silty (outwash)-----	9	11
	Gravel, fine to coarse, cobbles, and shale pebbles (outwash)-----	15	26
Pierre Formation:			
	Shale, gray-----	5	31

132-076-29CBB  
 Test hole 1224  
 (Randich, 1963)

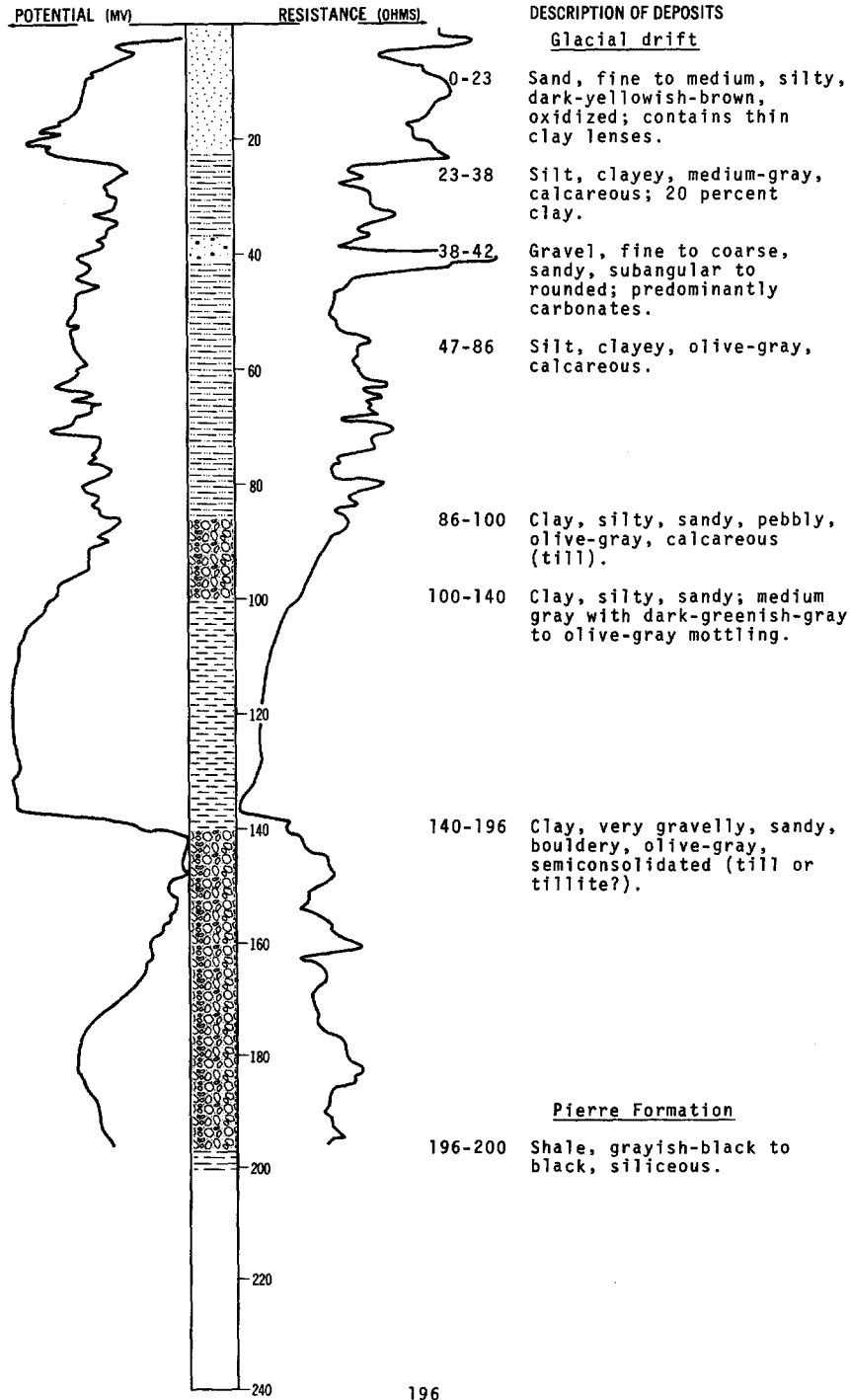
Altitude:	1729 ft	Date drilled:	October 1957
Alluvium and colluvium:			
	Topsoil, black-----	1	1
	Sand, fine to medium, silty-----	11	12
Glacial drift:			
	Clay, smooth, gray (outwash)-----	16	28
	Gravel, fine to coarse (outwash)-----	2	30
Fox Hills Formation:			
	Clay, sandy, light-gray-----	27	57

LOCATION: 132-076-30ADD

ALTITUDE: 1730  
(FT, MSL)

DATE DRILLED: May 1973

DEPTH: 200  
(FT)



132-076-30BBB  
NDSWC 8579

Altitude: 1750 ft

Date drilled: November 1972

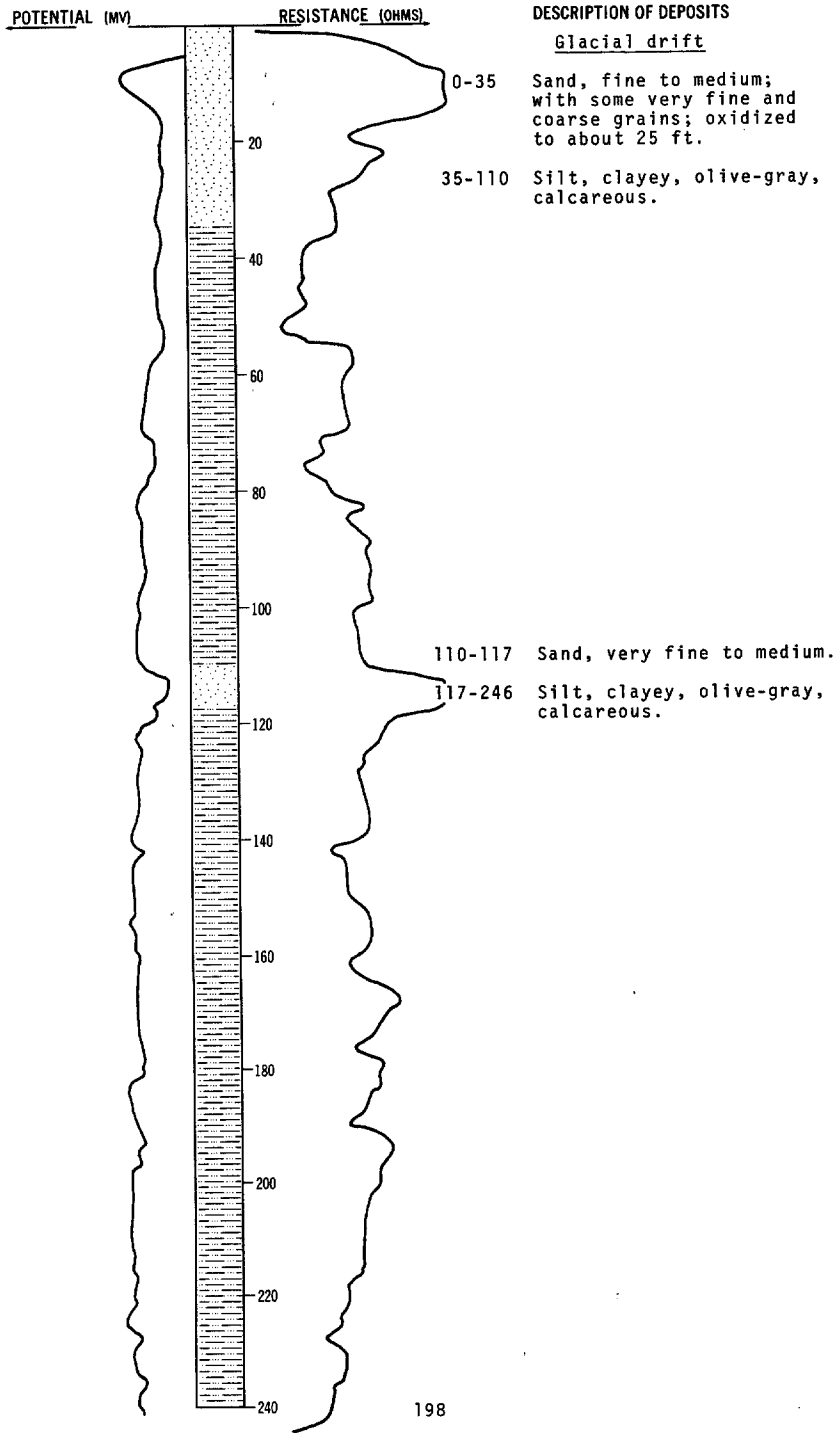
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Soil, sandy, silty, brownish-black-----	1	1
Glacial drift:			
	Sand, medium to very coarse, silty, dark-brown, subangular to subrounded, oxidized-	6	7
	Clay, silty, moderate-yellowish-brown, oxidized-----	22	29
	Gravel, fine to medium, sandy, angular to subrounded; about 60 percent shale, 20 percent carbonate, and 20 percent siltstone and sandstone pebbles; interbedded with clay lenses-----	9	38
Pierre Formation:			
	Shale, grayish-black, siliceous-----	22	60

LOCATION: 132-076-31AAA

DATE DRILLED: May 1973

ALTITUDE: 1780  
(FT, MSL)

DEPTH: 340  
(FT)



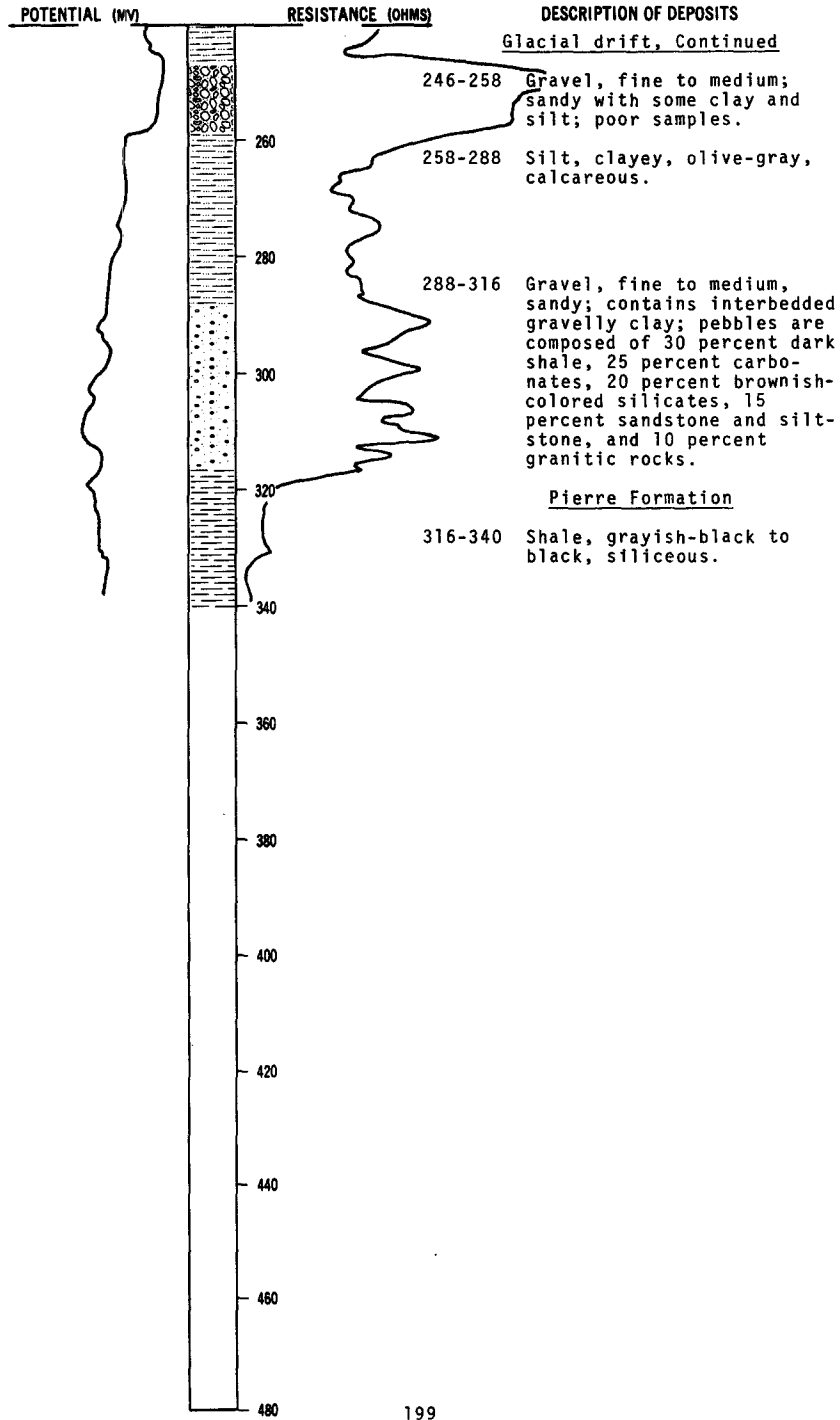


LOCATION: 132-076-31AAA

DATE DRILLED: May 1973

ALTITUDE: 1780  
(FT, MSL)

DEPTH: 340  
(FT)



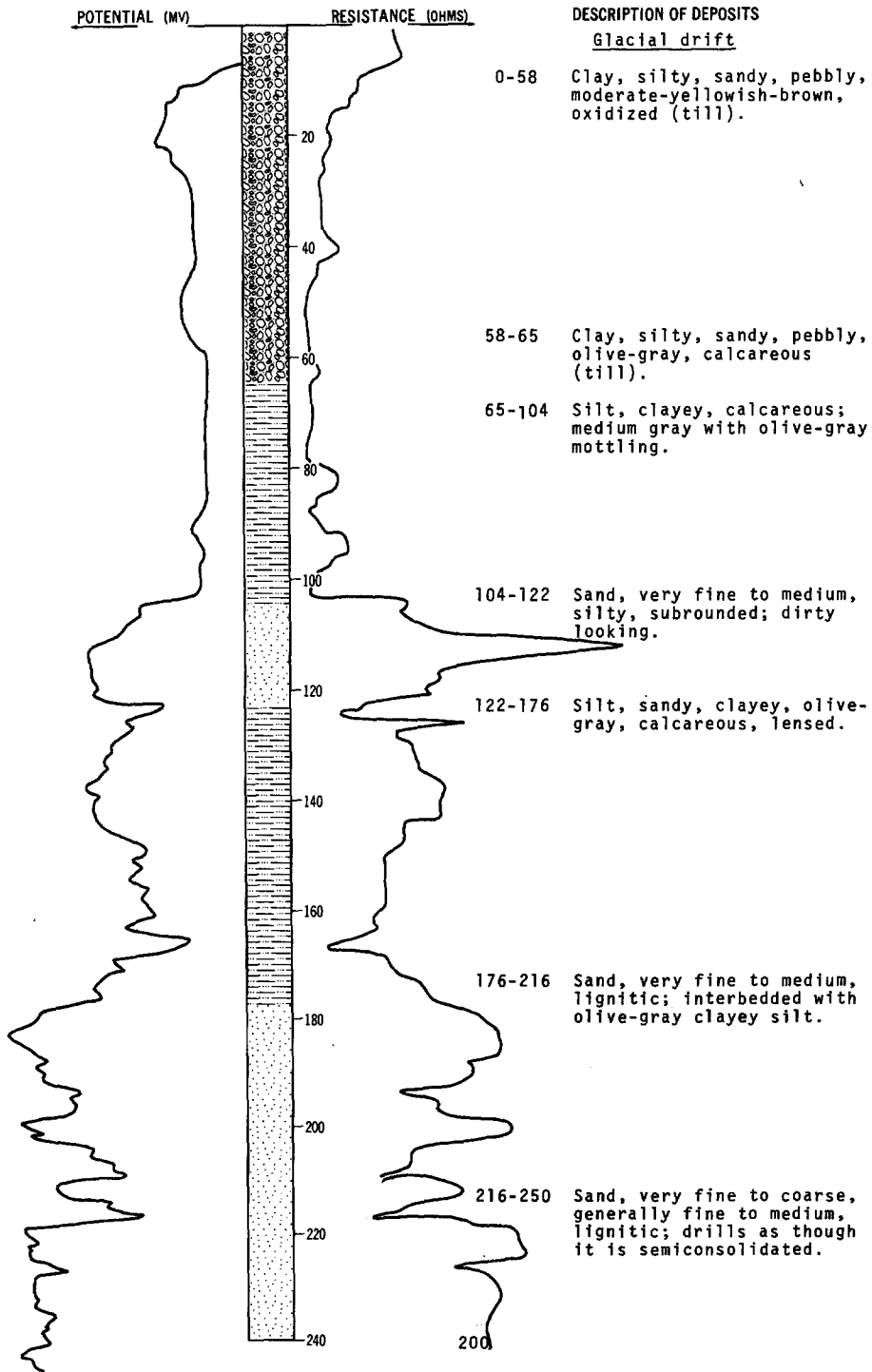
NDSWC 8678

LOCATION: 132-076-31DDD

DATE DRILLED: May 1973

ALTITUDE: 1855  
(FT, MSL)

DEPTH: 420  
(FT)

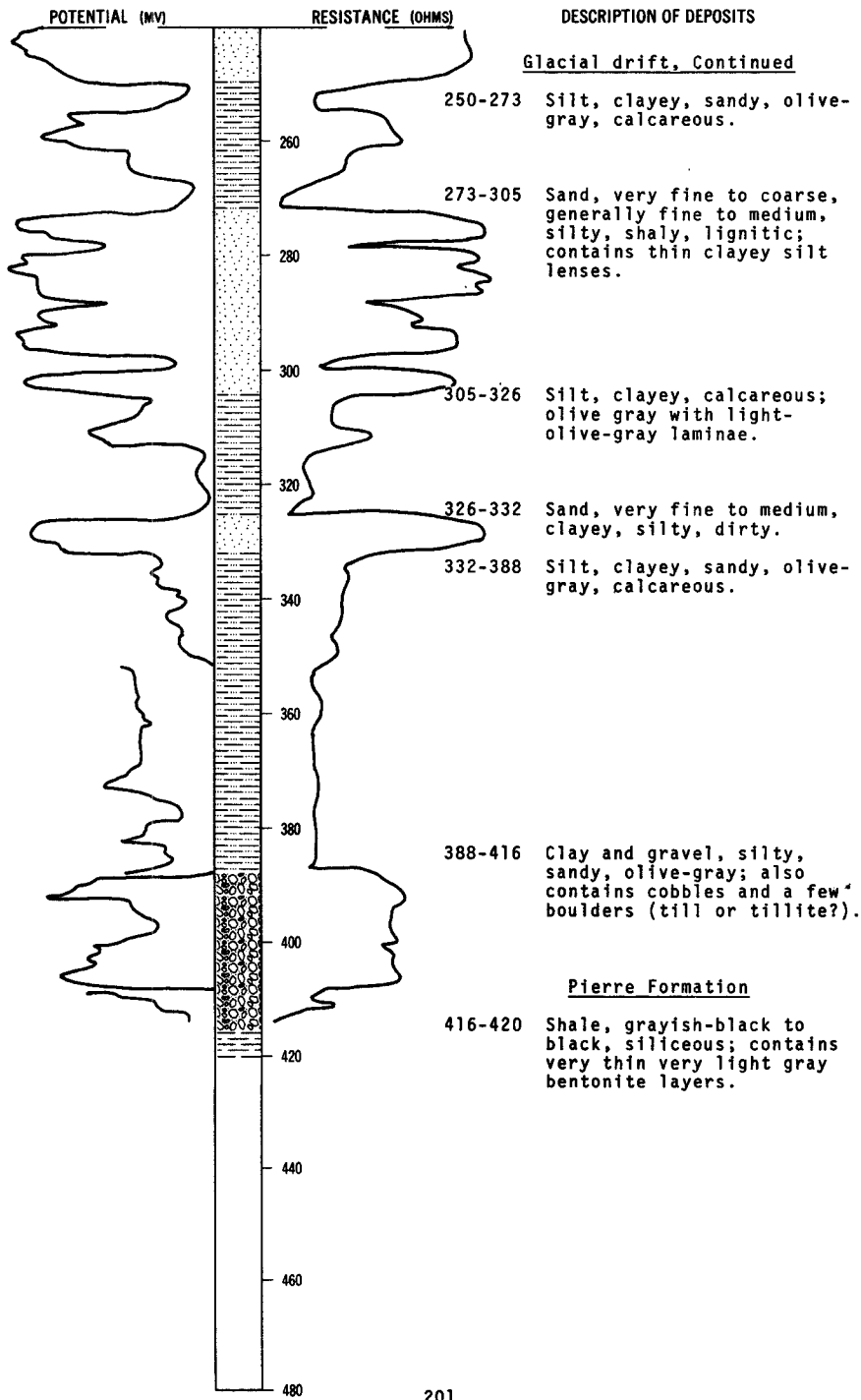


LOCATION: 132-076-31DDD

DATE DRILLED: May 1973

ALTITUDE: 1855  
(FT, MSL)

DEPTH: 420  
(FT)



132-076-35ADD  
(Log from J. Thurn)

Altitude: Date drilled: October 1972

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Soil, black-----	2	2
	Shale, yellow-----	33	35
	Shale, blue-----	22	57

132-077-01BAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1791 ft

	Surface-----	3	3
	Clay-----	35	38
	Shale-----	112	150

132-077-02AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1912 ft

	Clay-----	8	8
	Clay and sandstone-----	53	61
	Shale, blue-----	89	150

132-077-02 ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1815 ft

	Clay, yellow-----	25	25
	Shale and sandstone (hard sandstone at 33-35 and 62-63 ft)-----	95	120
	Shale, firm-----	30	150

132-077-03ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1697 ft

	Clay, gravel, and sandstone-----	55	55
	Shale-----	10	65
	Sandstone, soft; gravel strips and shale----	80	145

132-077-04AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1699 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Sand-----	21	21
	Shale, blue-----	129	150

132-077-04 ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1682 ft

	Surface-----	3	3
	Clay-----	108	111
	Clay and sandstone breaks-----	10	121
	Shale-----	29	150

132-077-05AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1689 ft

	Clay-----	7	7
	Gravel-----	2	9
	Clay, blue-----	61	70
	Clay and gravel-----	50	120
	Shale-----	30	150

132-077-05ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1787 ft

	Sand and clay-----	7	7
	Sandstone-----	28	35
	Shale-----	115	150

132-077-05BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1773 ft

	Clay-----	4	4
	Sandstone-----	45	49
	Shale, blue-----	101	150

132-077-06ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude:	1745 ft	Date drilled:	1949
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Surface-----	3	3
	Clay-----	23	26
	Shale-----	124	150

132-077-07AAD  
Test hole 1236  
(Randich, 1963)

Altitude:	1636 ft	Date drilled:	October 1957
Alluvium and colluvium:			
	Topsoil, black-----	1	1
	Sand, fine to coarse, silty-----	20	21
Glacial drift:			
	Gravel, fine to coarse (outwash)-----	15	36
Fox Hills Formation:			
	Clay, sandy, gray-----	6	42

132-077-09ADD3  
Test hole 1235  
(Randich, 1963)

Altitude:	1655 ft	Date drilled:	October 1957
Alluvium and colluvium:			
	Topsoil, black-----	3	3
	Clay, sandy, dark-brown-----	8	11
	Clay, sandy and silty, gray-----	5	16
Glacial drift:			
	Gravel, fine to coarse, and shale pebbles (outwash)-----	13	29
	Sand, fine to coarse, silty (outwash)-----	14	43
	Clay, smooth, gray (outwash)-----	21	64
	Gravel, fine to coarse, and shale pebbles (outwash)-----	9	73
Fox Hills Formation:			
	Clay, sandy, light-gray-----	11	84

132-077-12AB  
(Log from J. Thurn)

Altitude:		Date drilled:	August 1973
	Dirt, black-----	4	4
	Clay, yellow-----	16	20
	Sand-----	4	24
	Clay, blue-----	3	27
	Sand-----	2	29

132-077-12888  
 Test hole 1234  
 (Randich, 1963)

Altitude: 1712 ft

Date drilled: October 1957

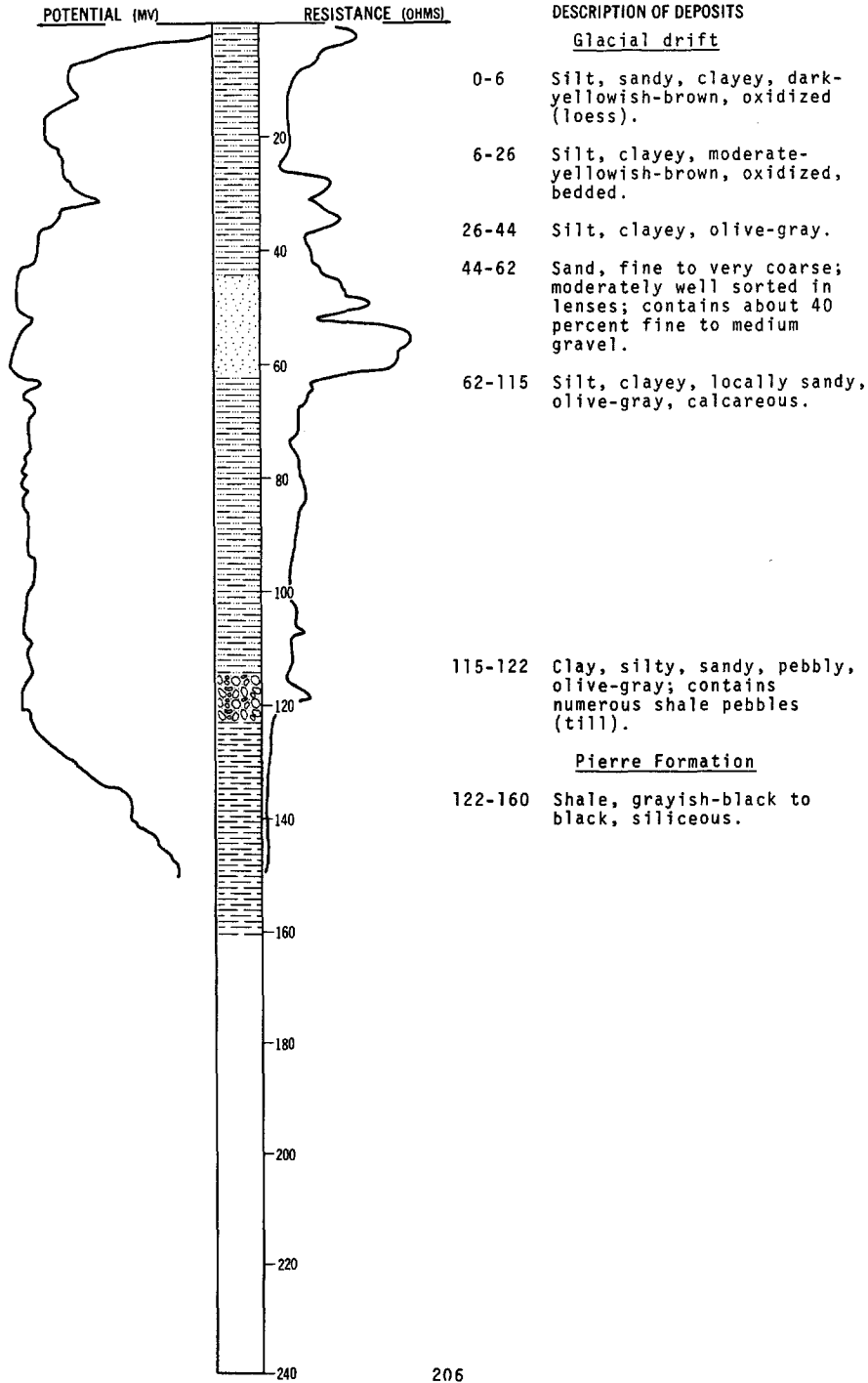
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Alluvium and colluvium:			
	Topsoil, black-----	1	1
	Clay, sandy and silty, light-brown-----	8	9
Glacial drift:			
	Gravel, fine to medium, clayey (outwash)----	12	21
	Gravel, medium to coarse, cobbles, and shale pebbles (outwash)-----	13	34
Pierre Formation:			
	Shale, gray-----	8	42

LOCATION: 132-077-15CBC

DATE DRILLED: May 1973

ALTITUDE: 1725  
(FT, MSL)

DEPTH: 160  
(FT)



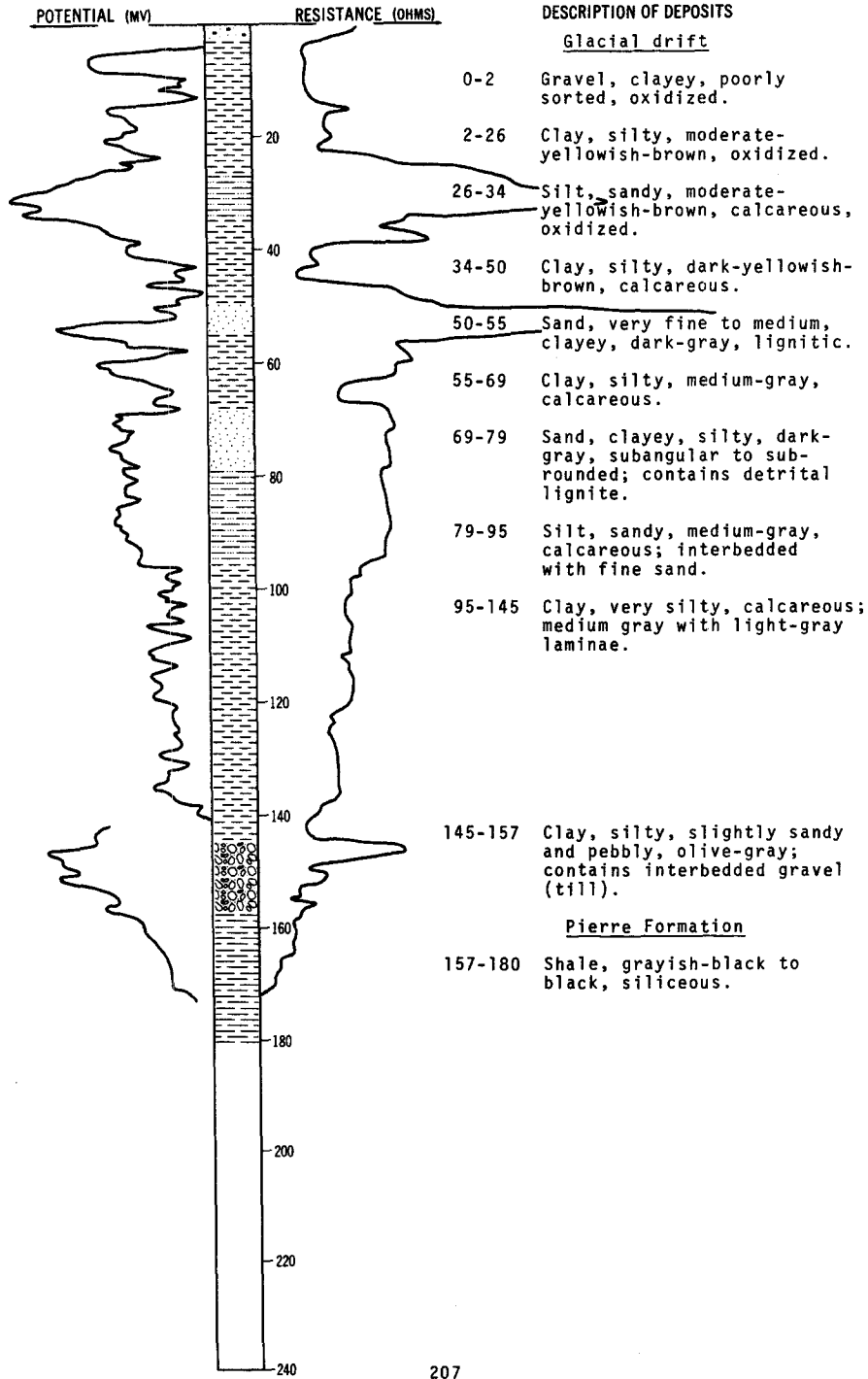


LOCATION: 132-077-18BBB

DATE DRILLED: December 1972

ALTITUDE: 1703  
(FT, MSL)

DEPTH: 180  
(FT)

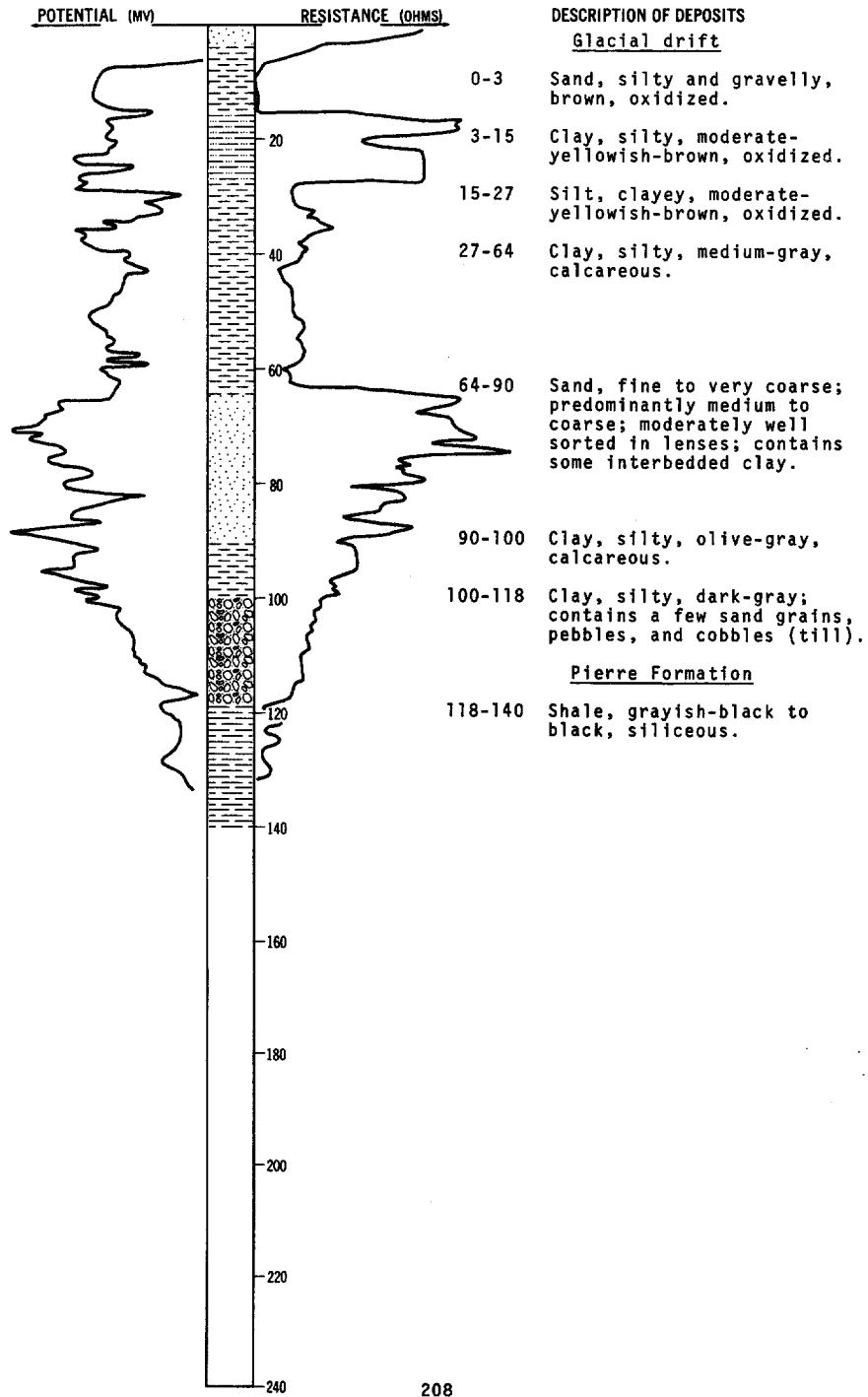


LOCATION: 132-077-19BBB

DATE DRILLED: November 1972

ALTITUDE: 1720  
(FT, MSL)

DEPTH: 140  
(FT)

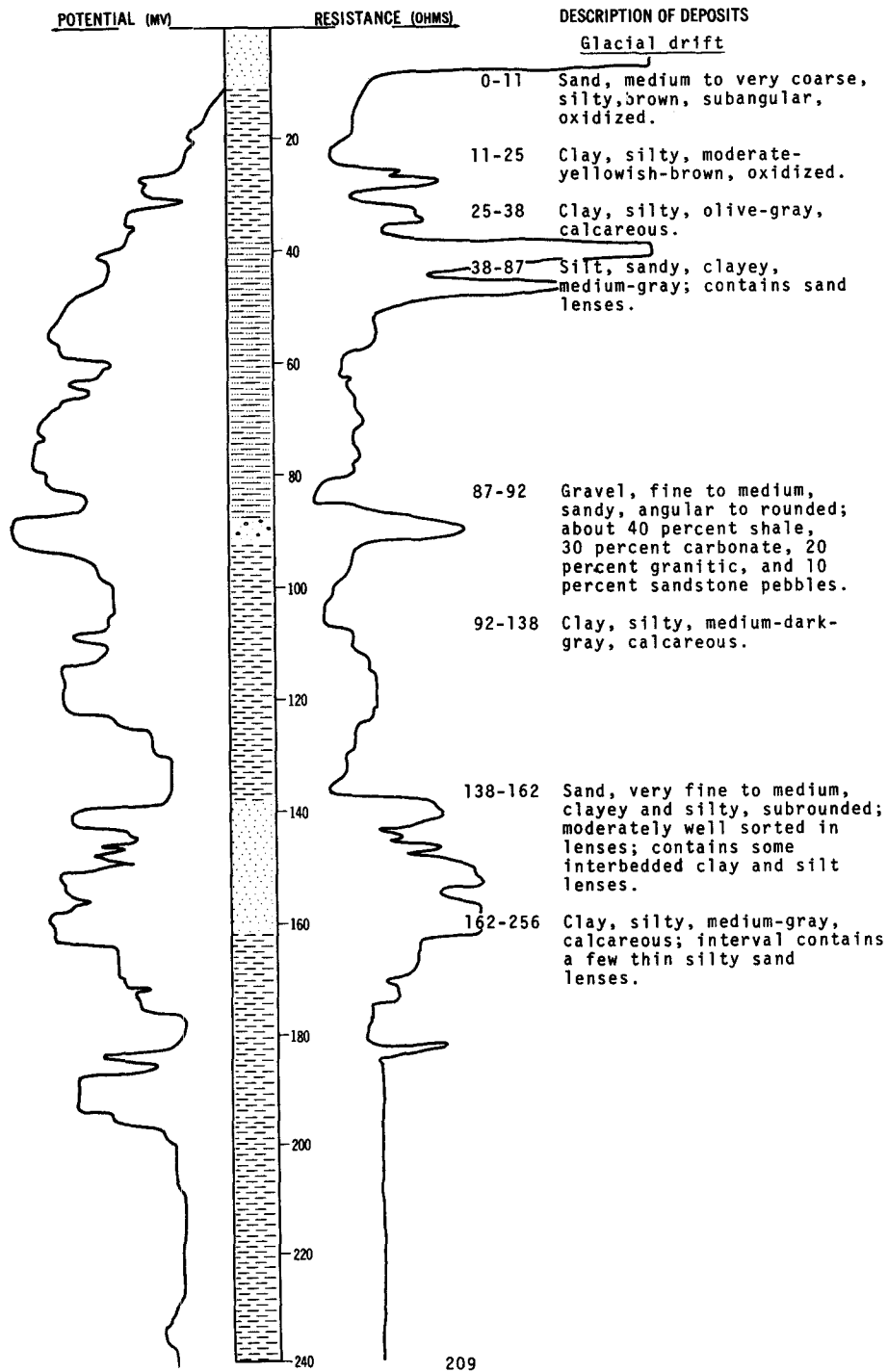


LOCATION: 132-077-20BBB3

DATE DRILLED: November 1972

ALTITUDE: 1720  
(FT, MSL)

DEPTH: 282  
(FT)



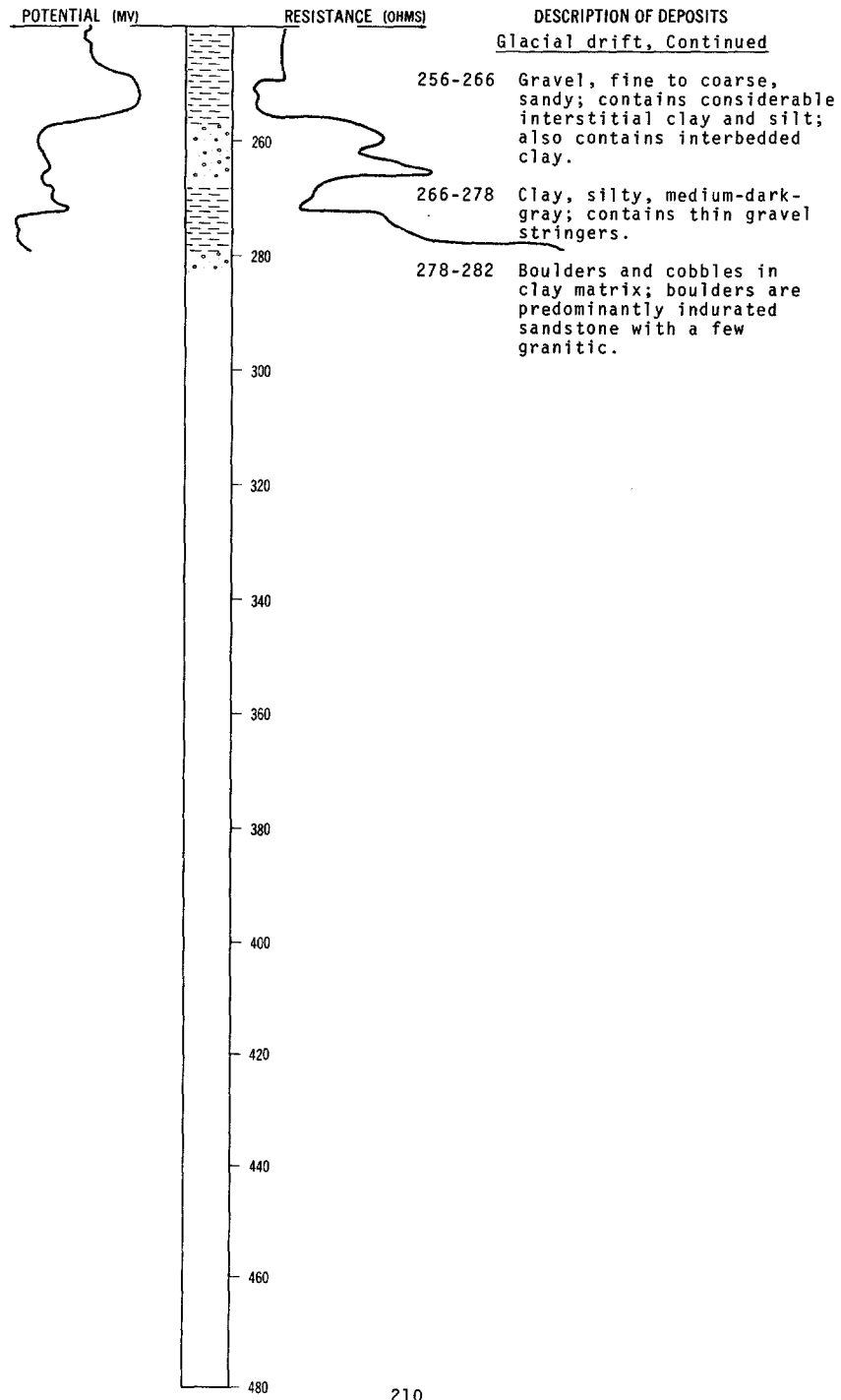
NDSWC 8580, Continued

LOCATION: 132-077-20BBB3

DATE DRILLED: November 1972

ALTITUDE: 1720  
(FT, MSL)

DEPTH: 282  
(FT)

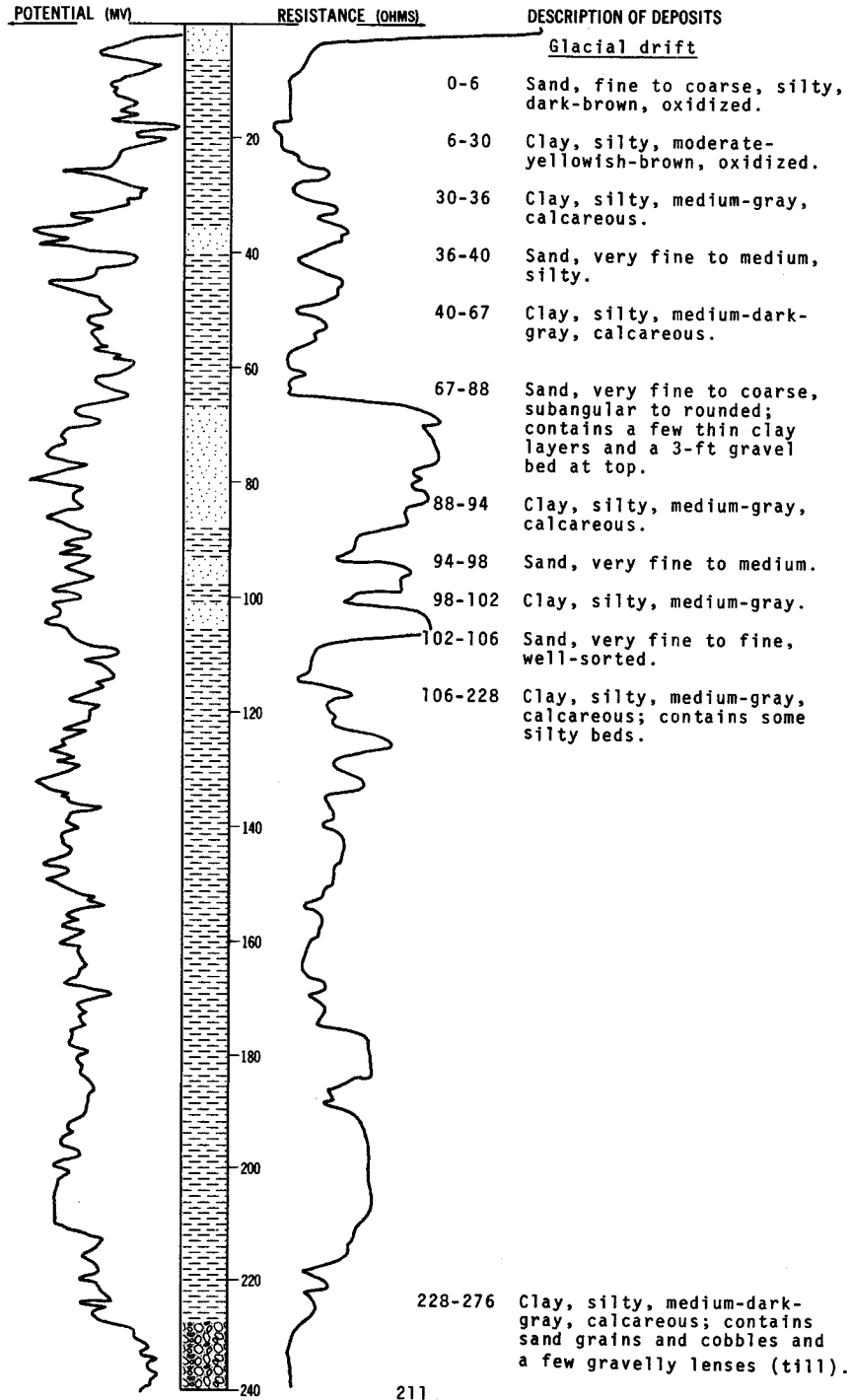


LOCATION: 132-077-20CCC1

DATE DRILLED: November 1972

ALTITUDE: 1713  
(FT, MSL)

DEPTH: 300  
(FT)



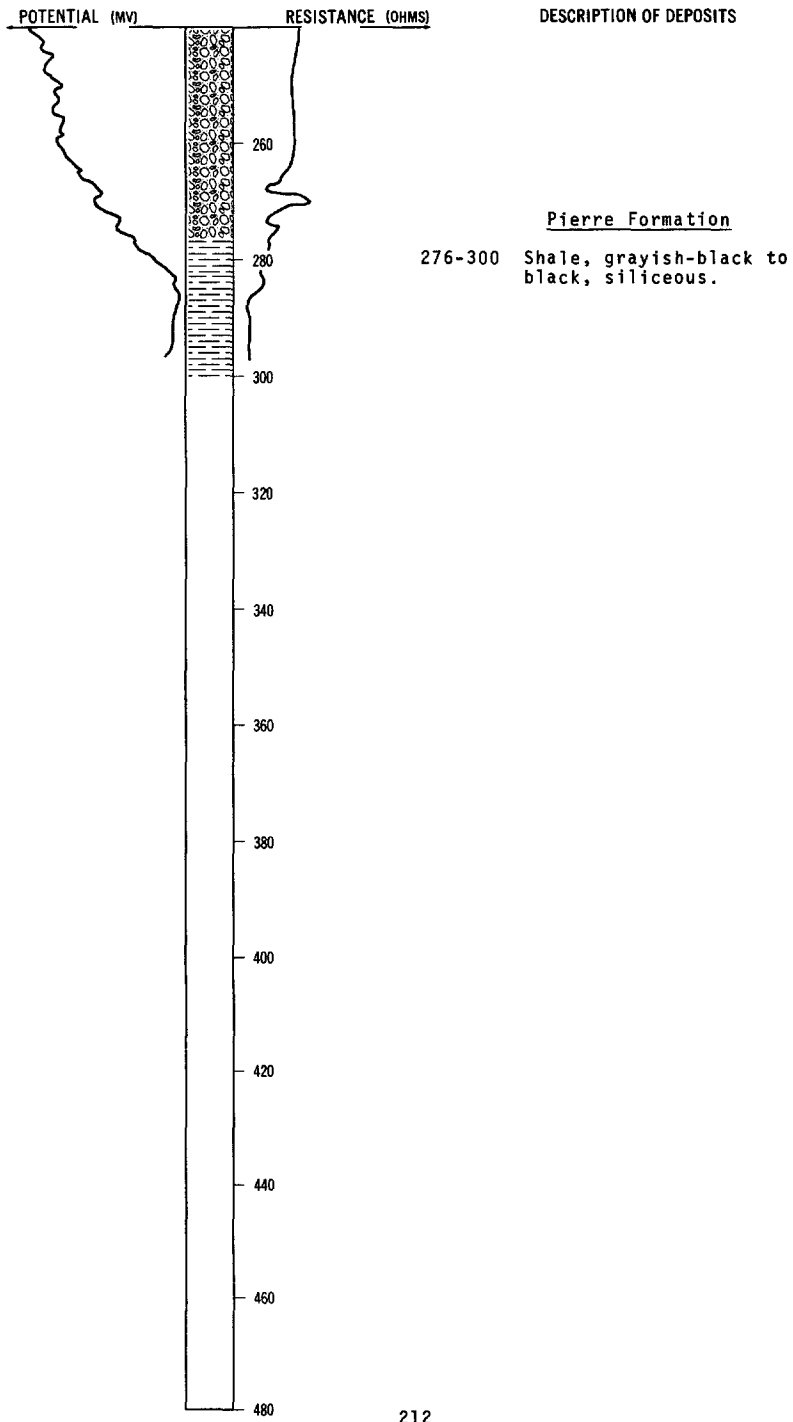
NDSWC 8601, Continued

LOCATION: 132-077-20CCC1

DATE DRILLED: November 1972

ALTITUDE: 1713  
(FT, MSL)

DEPTH: 300  
(FT)

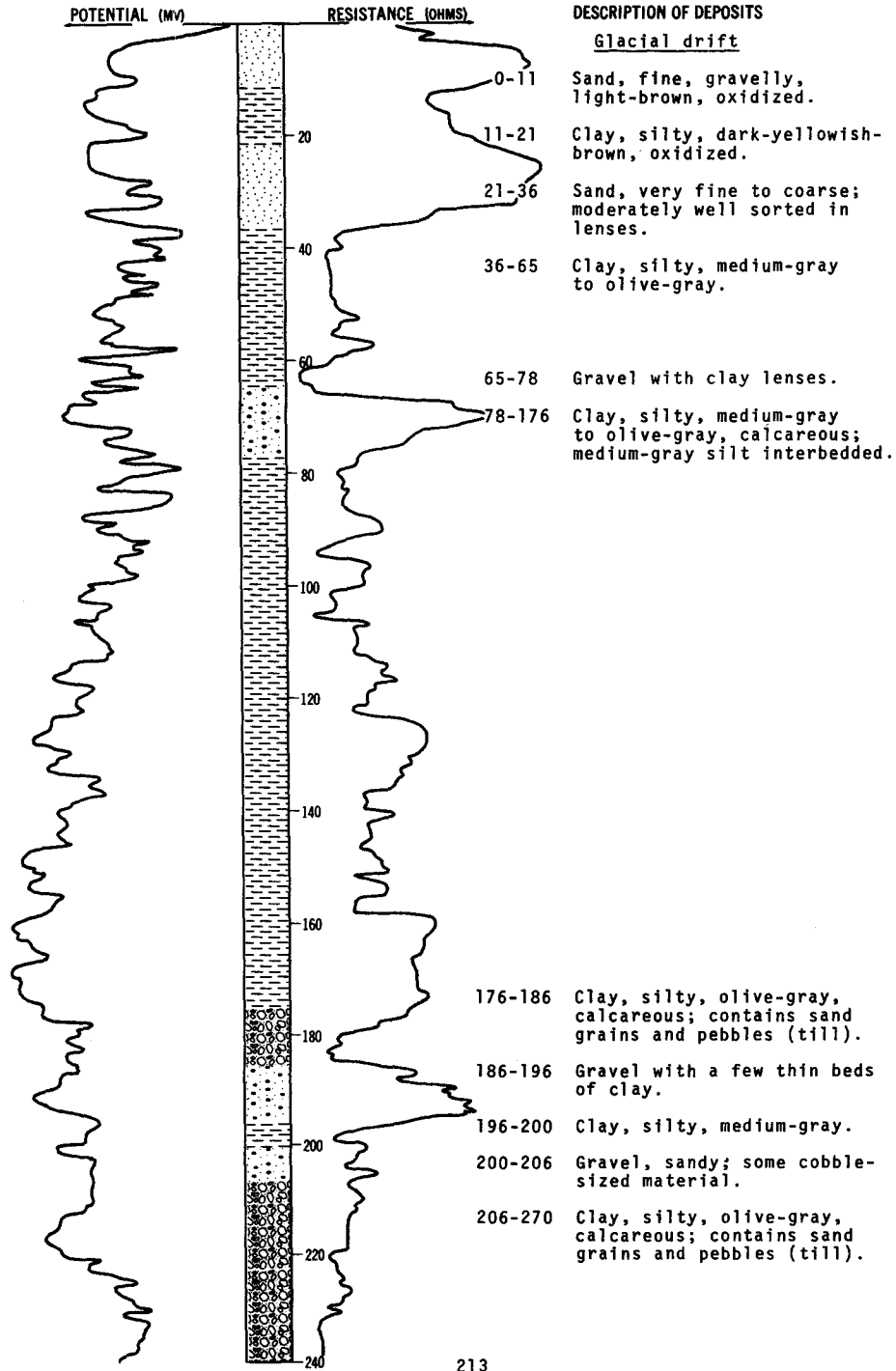


LOCATION: 132-077-24CCC1

DATE DRILLED: November 1972

ALTITUDE: 1685  
(FT, MSL)

DEPTH: 280  
(FT)

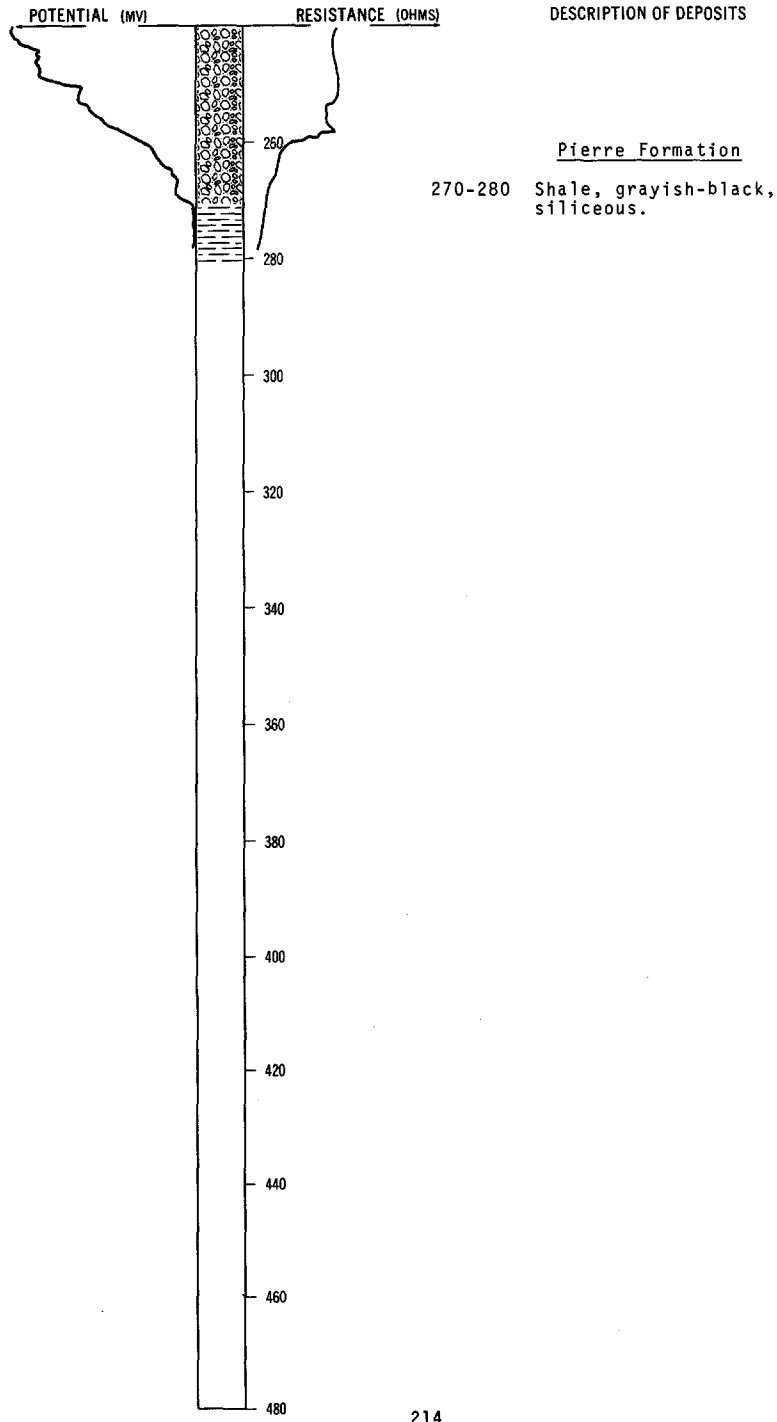


LOCATION: 132-077-24CCC1

DATE DRILLED: November 1972

ALTITUDE: 1685  
(FT, MSL)

DEPTH 280  
(FT)



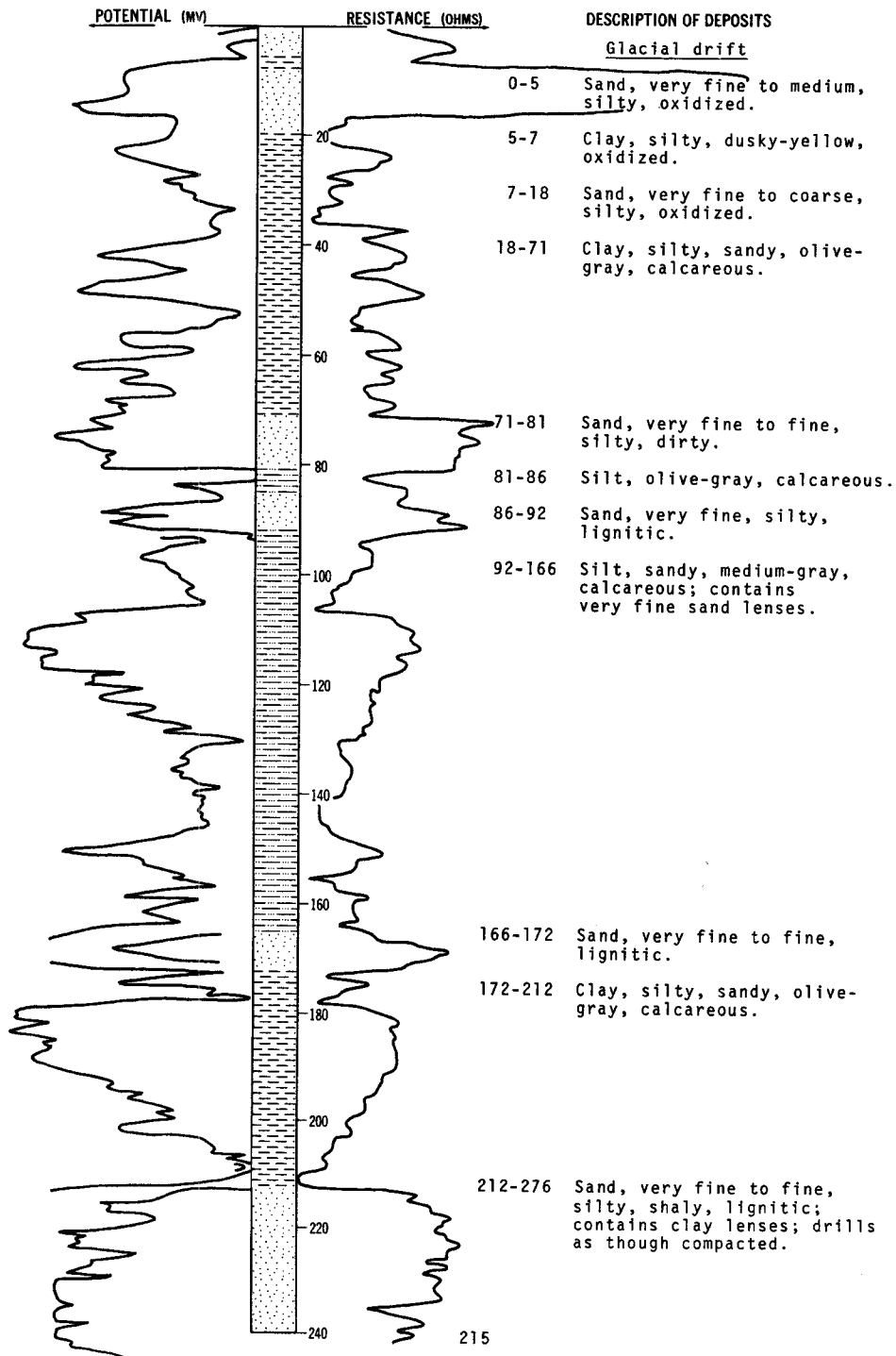


LOCATION: 132-077-26ACC

DATE DRILLED: October 1973

ALTITUDE: 1745  
(FT, MSL)

DEPTH: 360  
(FT)

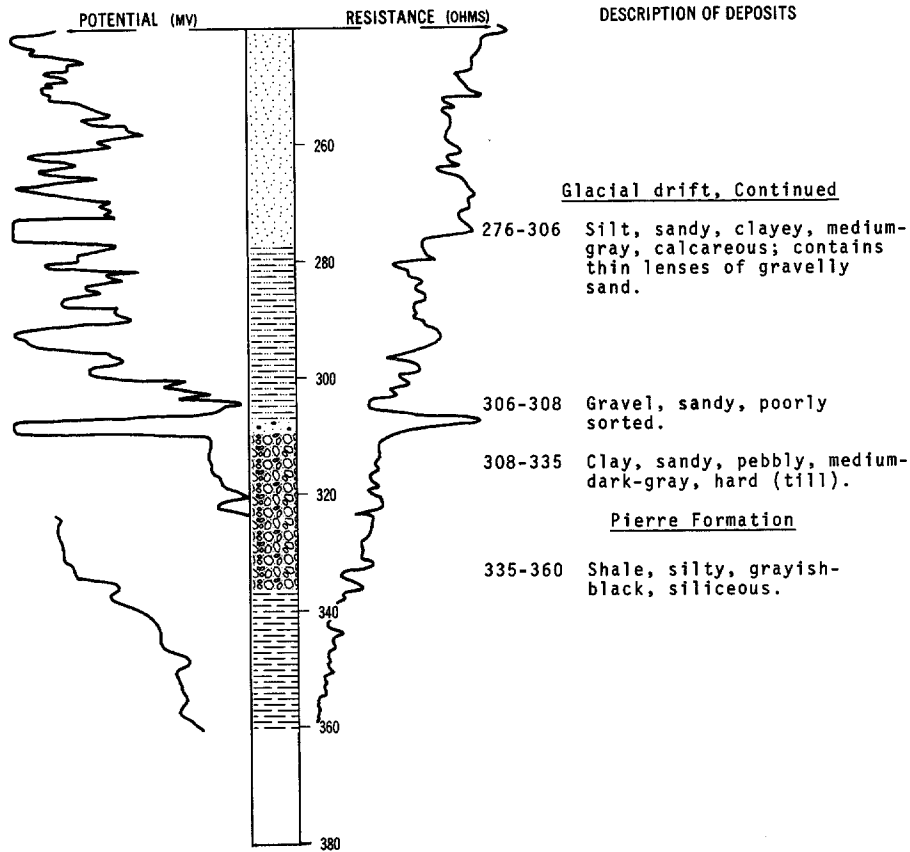


LOCATION: 132-077-26ACC

DATE DRILLED: October 1973

ALTITUDE: 1745  
(FT, MSL)

DEPTH: 360  
(FT)



132-077-26DBB2  
(Log from Witikko Drilling)

Altitude:

Date drilled: October 1972

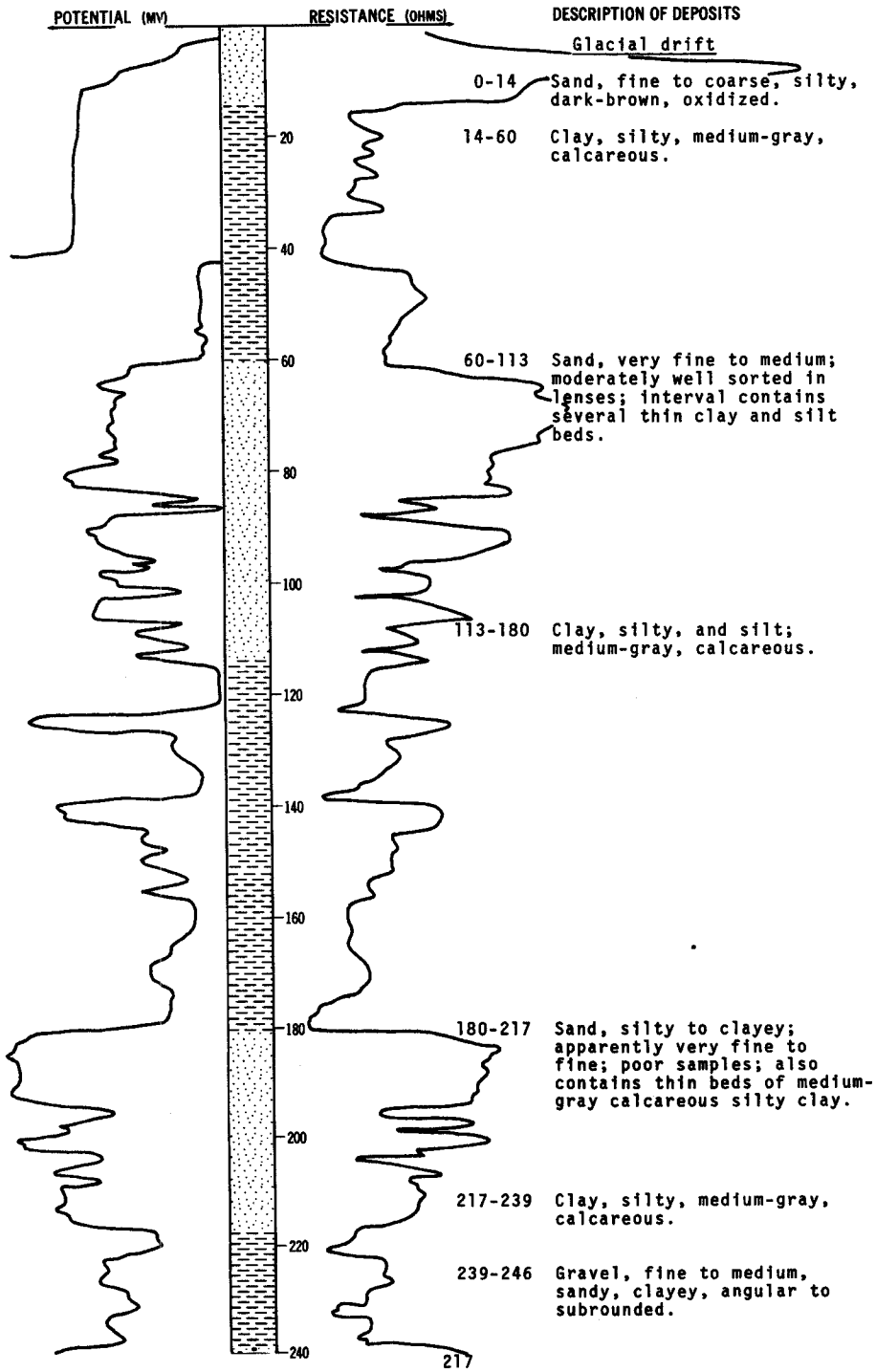
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Soil and sand, brown -----	18	18
	Clay, gray-----	19	37
	Sand, brown -----	3	40
	Clay, gray-----	20	60
	Sand, gray, and clay-----	38	98
	Clay, gray-----	64	162
	Clay, gray, and sand-----	13	175
	Clay, gray-----	40	215
	Sand, gray-----	15	230

LOCATION: 132-077-27DDD1

DATE DRILLED: November 1972

ALTITUDE: 1750  
(FT, MSL)

DEPTH: 360  
(FT)



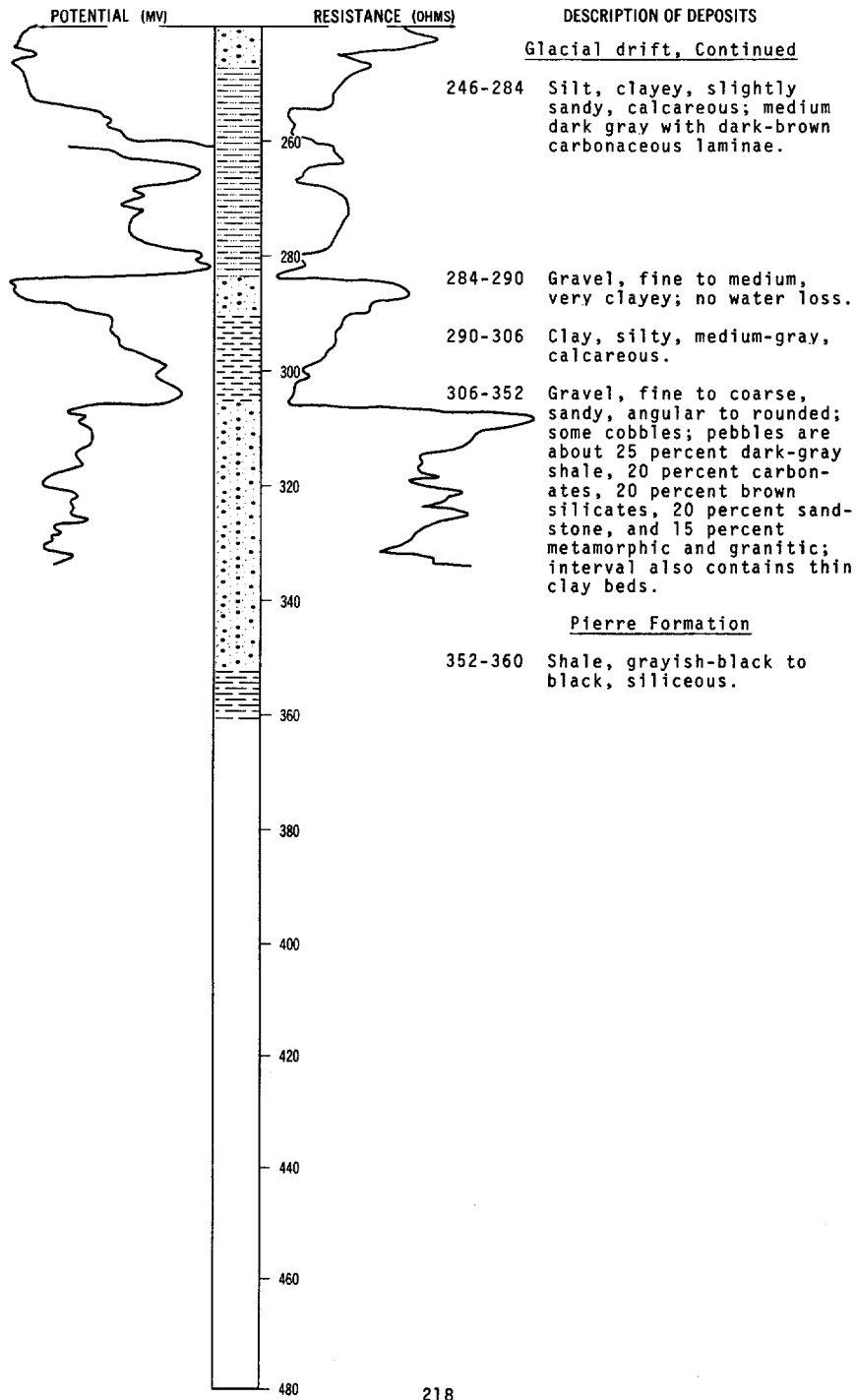
NDSWC 8577, Continued

LOCATION: 132-077-27DDD1

DATE DRILLED: November 1972

ALTITUDE: 1750  
(FT, MSL)

DEPTH: 360  
(FT)

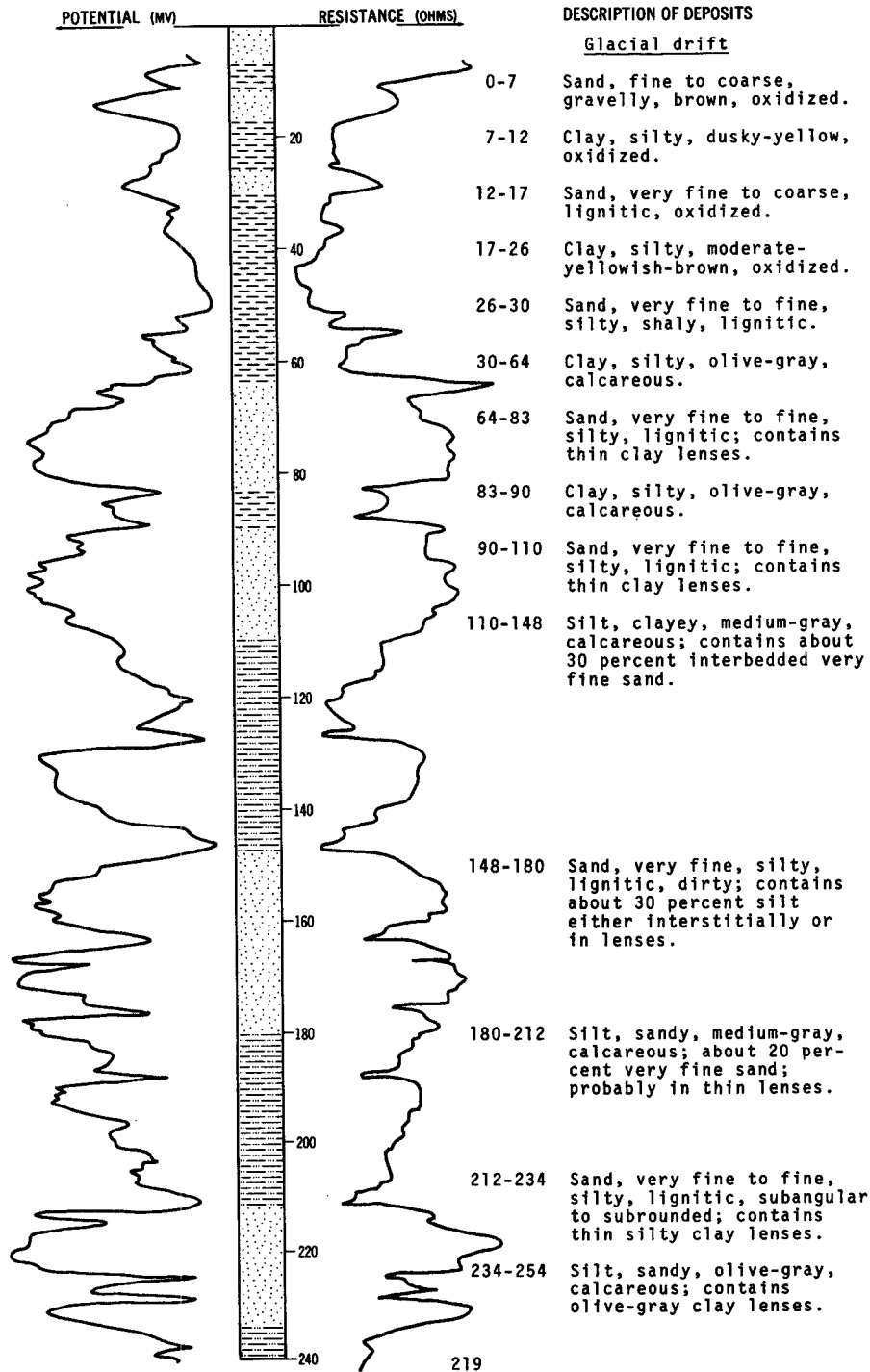


LOCATION: 132-077-28AAA

DATE DRILLED: October 1973

ALTITUDE: 1742  
(FT, MSL)

DEPTH: 400  
(FT)

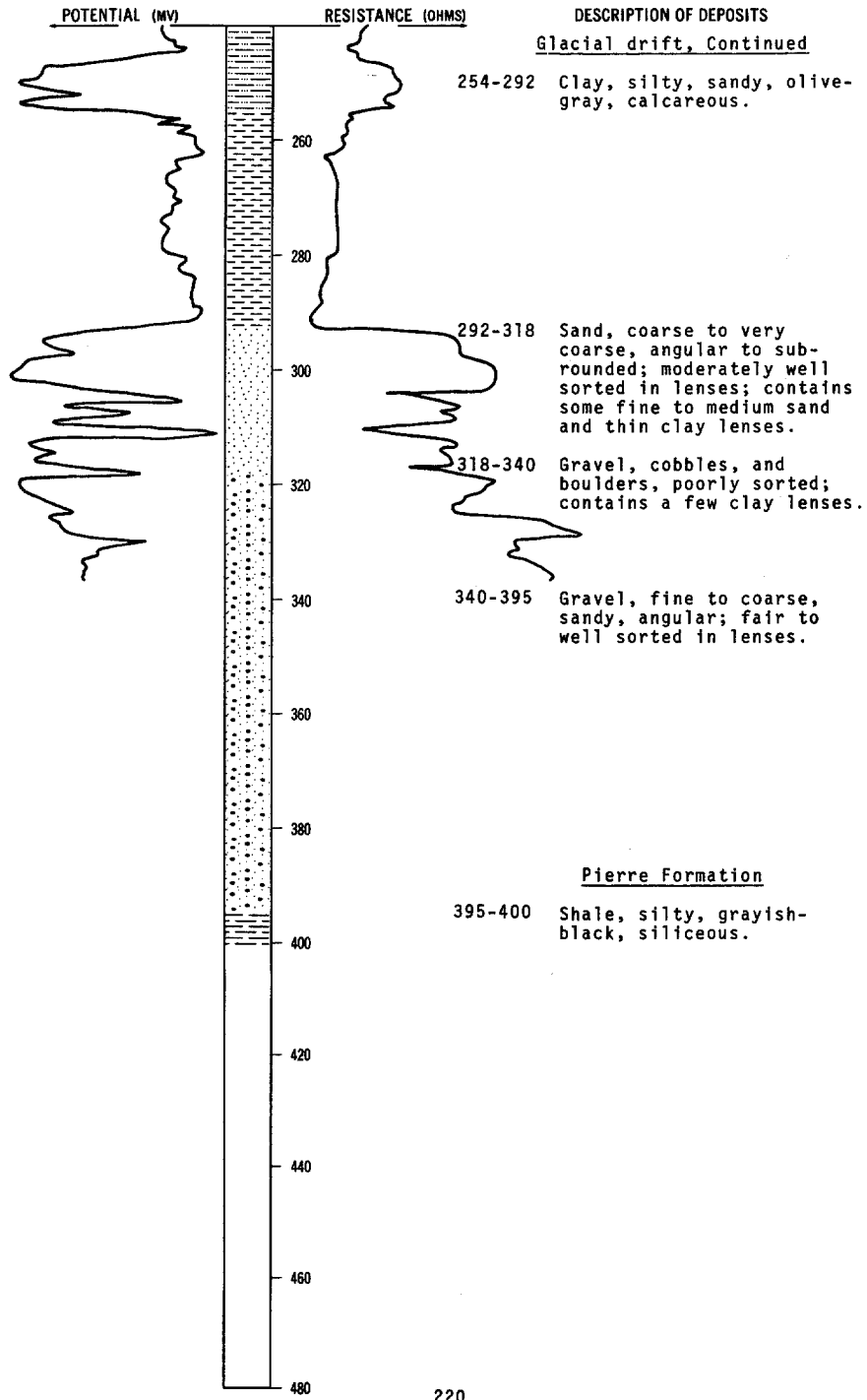


LOCATION: 132-077-28AAA

DATE DRILLED: October 1973

ALTITUDE: 1742  
(FT, MSL)

DEPTH: 400  
(FT)

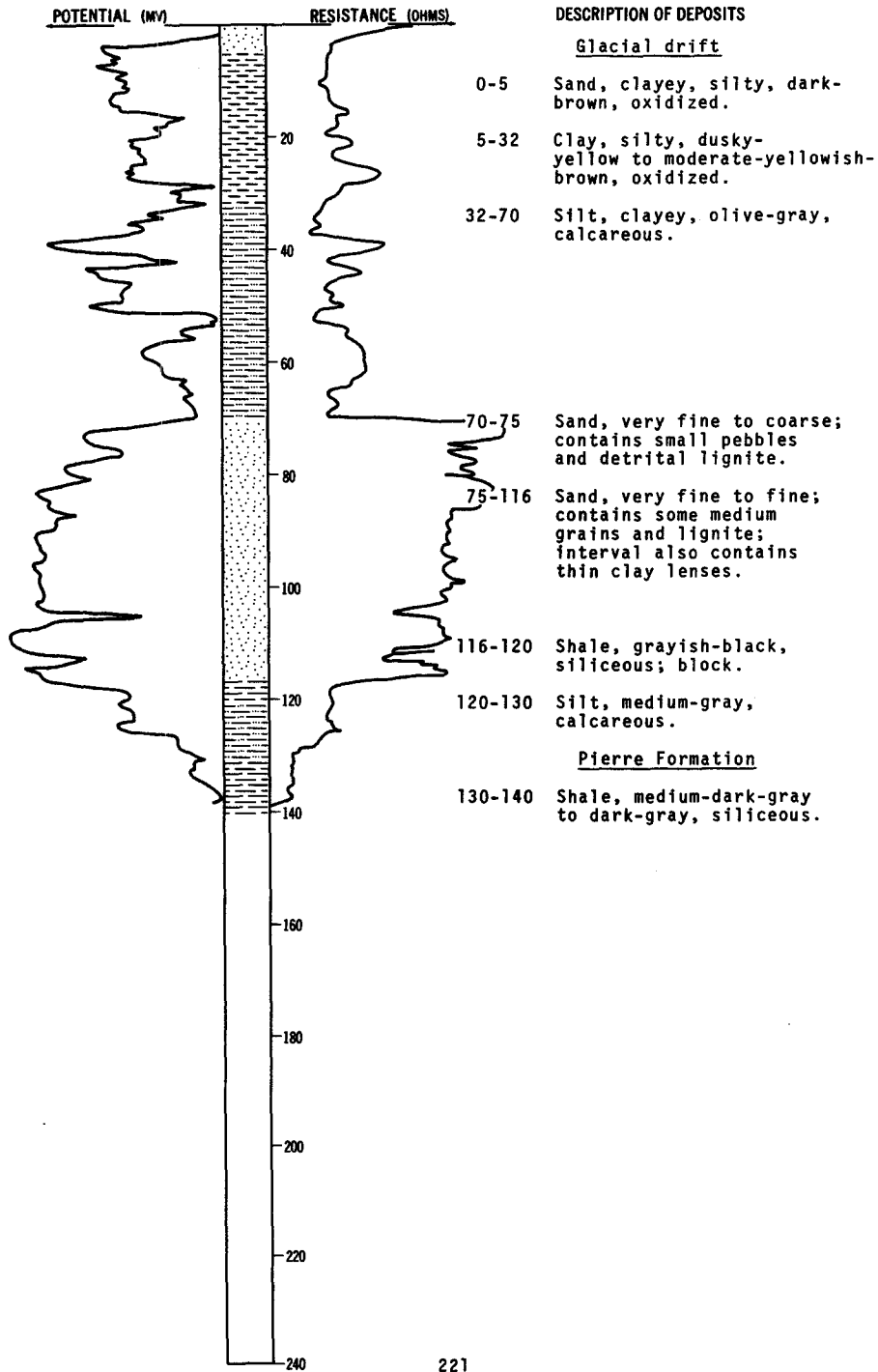


LOCATION: 132-077-288BD

DATE DRILLED: October 1973

ALTITUDE: 1730  
(FT, MSL)

DEPTH: 140  
(FT)



132-077-28DCC  
NDSWC 8589

Altitude: 1790 ft

Date drilled: November 1972

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Soil, silty, sandy, dark-brown-----	1	1
	Silt, sandy, moderate-yellowish-brown, oxidized-----	4	5
Pierre Formation:			
	Shale, moderate-yellowish-brown to dark-yellowish-brown, siliceous, oxidized, and weathered-----	30	35
	Shale, grayish-black, siliceous-----	25	60

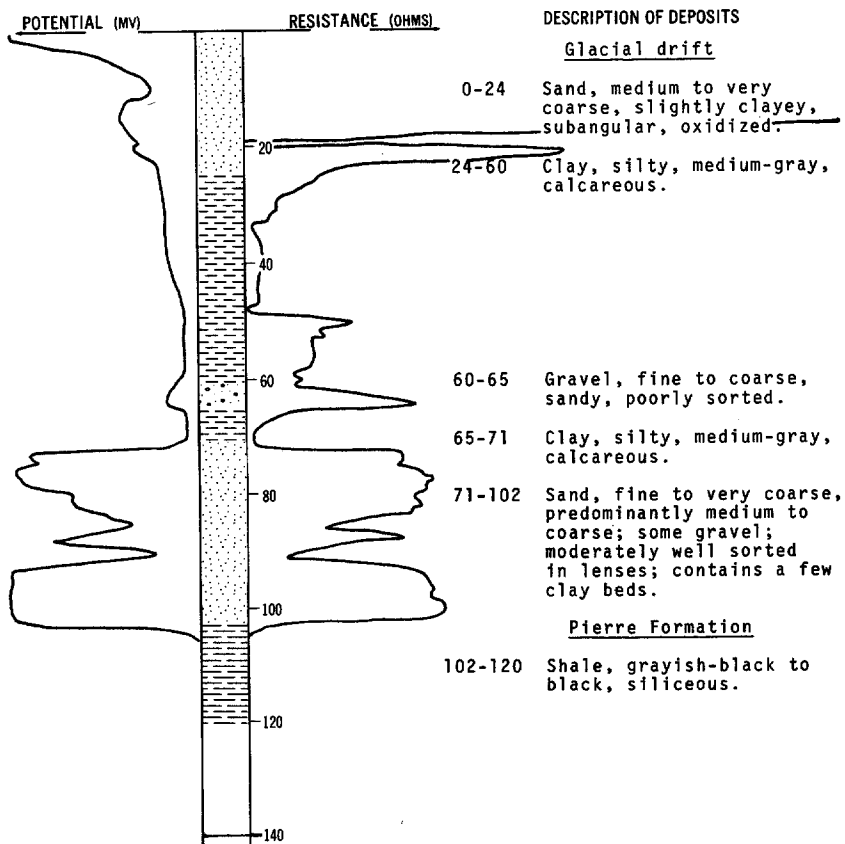
NDSWC 8576

LOCATION: 132-077-28DDD

DATE DRILLED: November 1972

ALTITUDE: 1760  
(FT, MSL)

DEPTH: 120  
(FT)



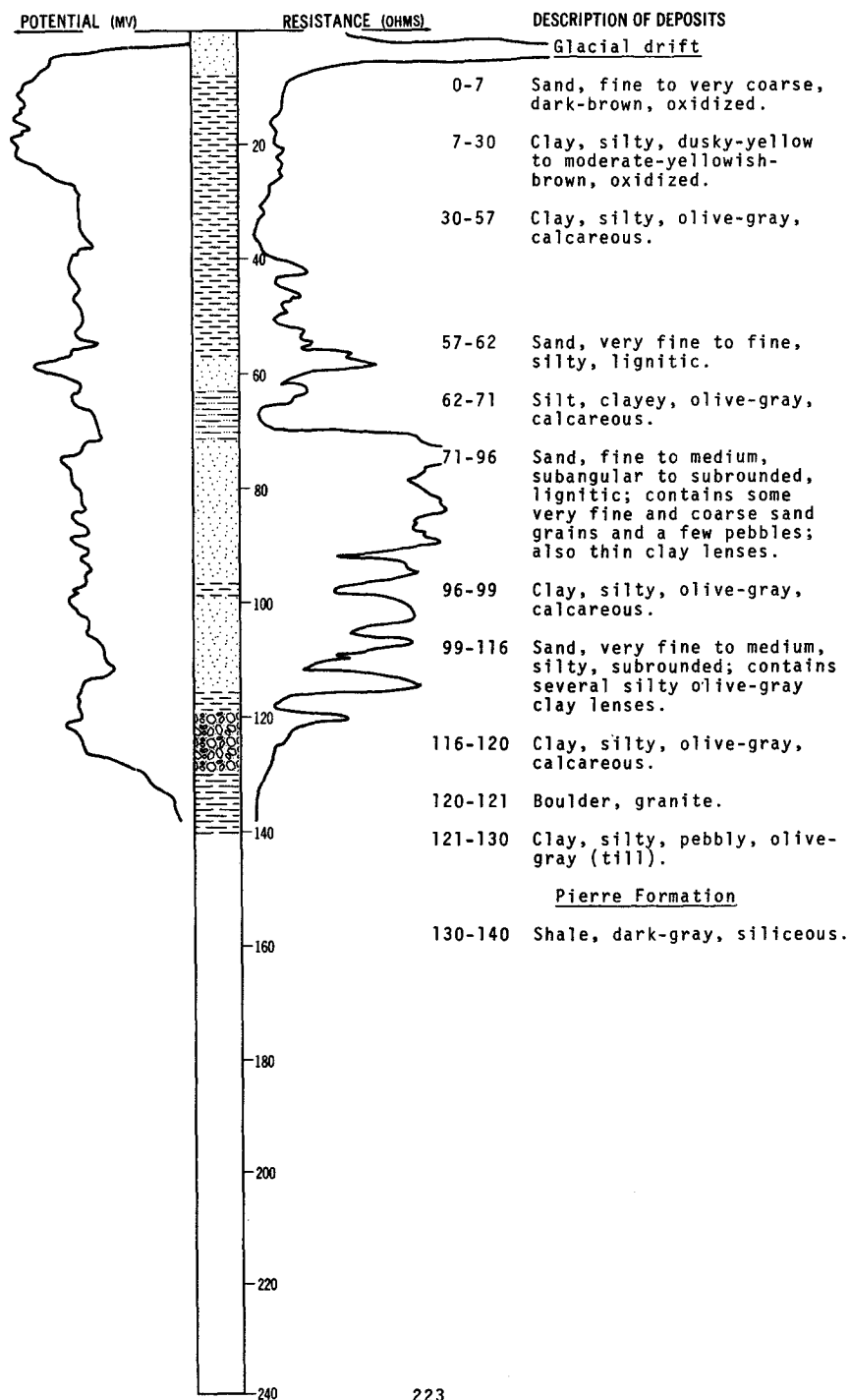


LOCATION: 132-077-29AAD

DATE DRILLED: October 1973

ALTITUDE: 1730  
(FT, MSL)

DEPTH: 140  
(FT)

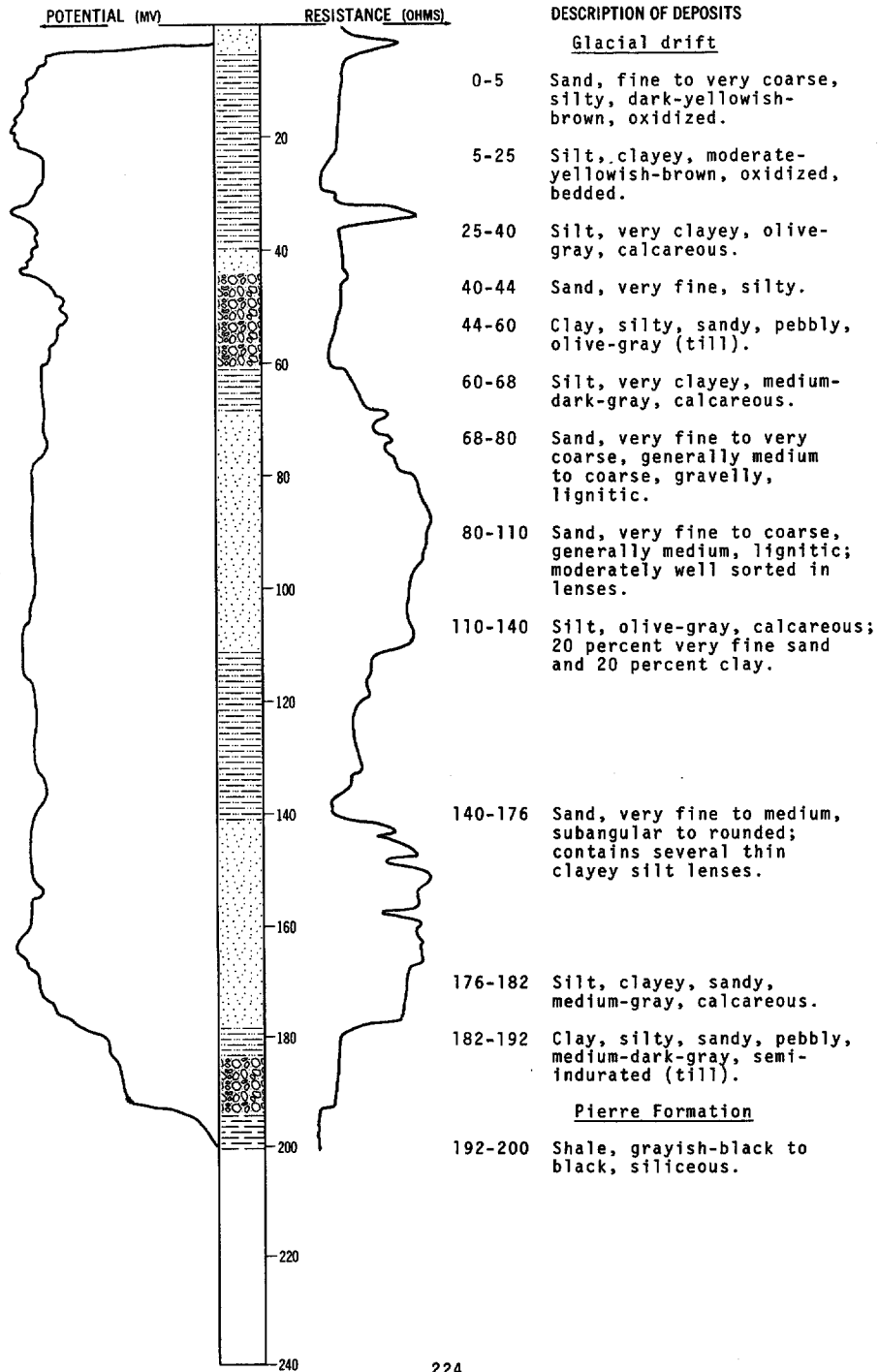


LOCATION: 132-077-29ABB1

DATE DRILLED: May 1973

ALTITUDE: 1720  
(FT, MSL)

DEPTH: 200  
(FT)



132-077-29ABB3  
(Log from Frederickson's, Inc.)

Altitude: Date drilled: September 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Sand, brown-----	10	11
	Clay, brown-----	19	30
	Clay, blue-----	2	32
	Shale, blue-----	41	73
	Clay, soft, sandy, blue-----	5	78
	Sand, fine-----	19	97
	Sand, fine, with coal-----	19	116
	Clay, sandy, soft-----	32	148
	Sand and clay lenses-----	9	157
	Sand, fine-----	4	161
	Clay, sandy-----	2	163
	Sand, silty, fine-----	11	174
	Rock-----	-	174

132-077-29ADB  
(Log from Frederickson's, Inc.)

Altitude: Date drilled: September 1973

	Topsoil, black-----	1	1
	Sand, brown-----	4	5
	Clay, silty, soft, brown-----	25	30
	Clay, silty, soft, blue-----	5	35
	Clay, sandy, soft, blue-----	8	43
	Shale, blue-----	36	79
	Clay, sandy-----	25	104
	Clay, sandy, blue-----	33	137
	Shale and hard clay, black, blue-----	10	147

132-077-29BAA  
(Log from Frederickson's, Inc.)

Altitude: Date drilled: September 1973

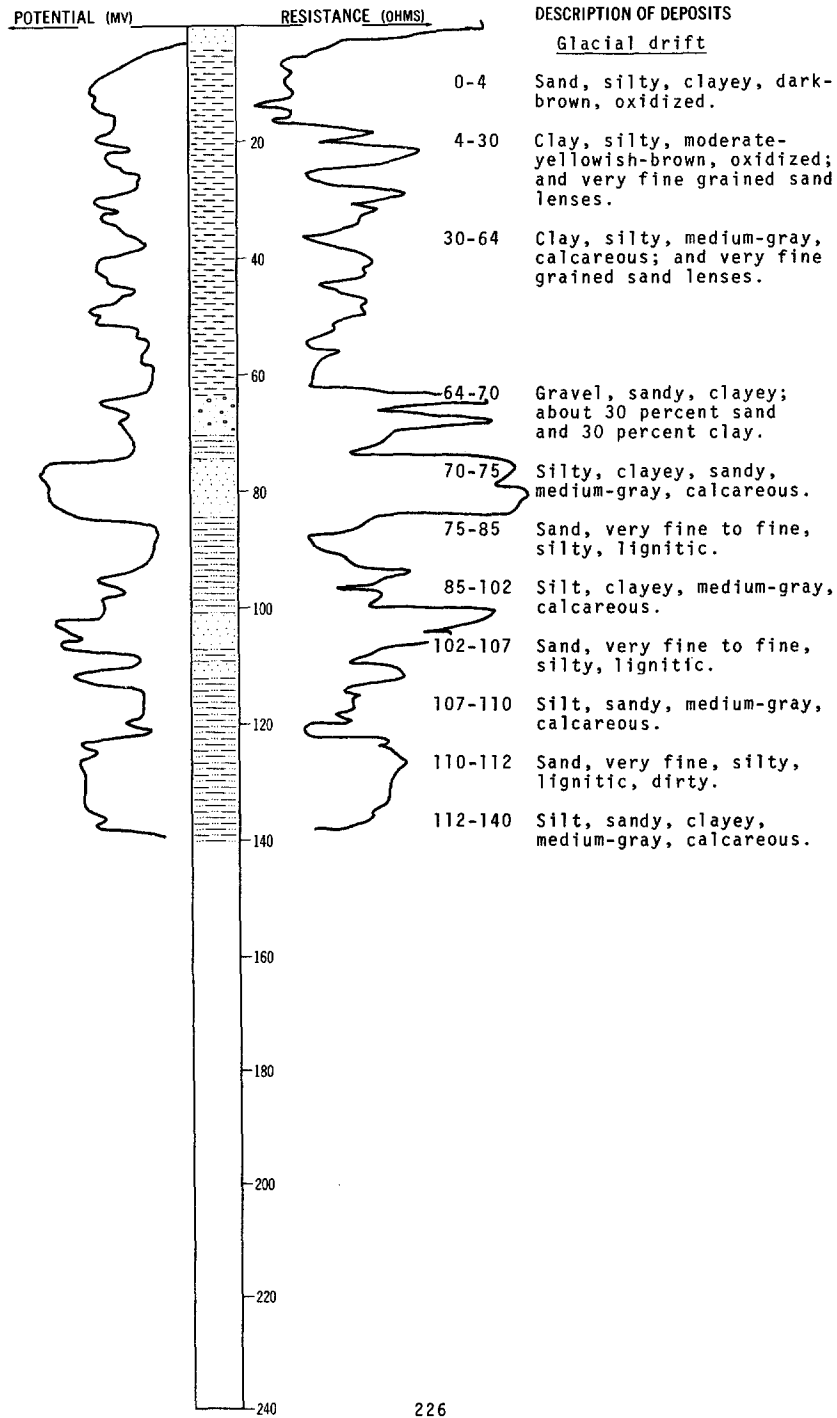
	Topsoil, black-----	1	1
	Sand, brown-----	4	5
	Clay, brown-----	26	31
	Clay, blue-----	5	36
	Shale, blue-----	41	77
	Clay, sandy, soft-----	8	85
	Sand, fine, dirty-----	32	117
	Sand, fine, with coal-----	19	136
	Clay, sandy-----	16	152
	Sand, fine, lensed with clay-----	6	158
	Clay, sandy-----	5	163
	Clay, sandy, with lenses of clay-----	3	166
	Clay, sandy-----	23	189
	Clay and shale, hard, blue, black-----	3	192

LOCATION: 132-077-29BBA

DATE DRILLED: October 1973

ALTITUDE: 1725  
(FT, MSL)

DEPTH: 140  
(FT)

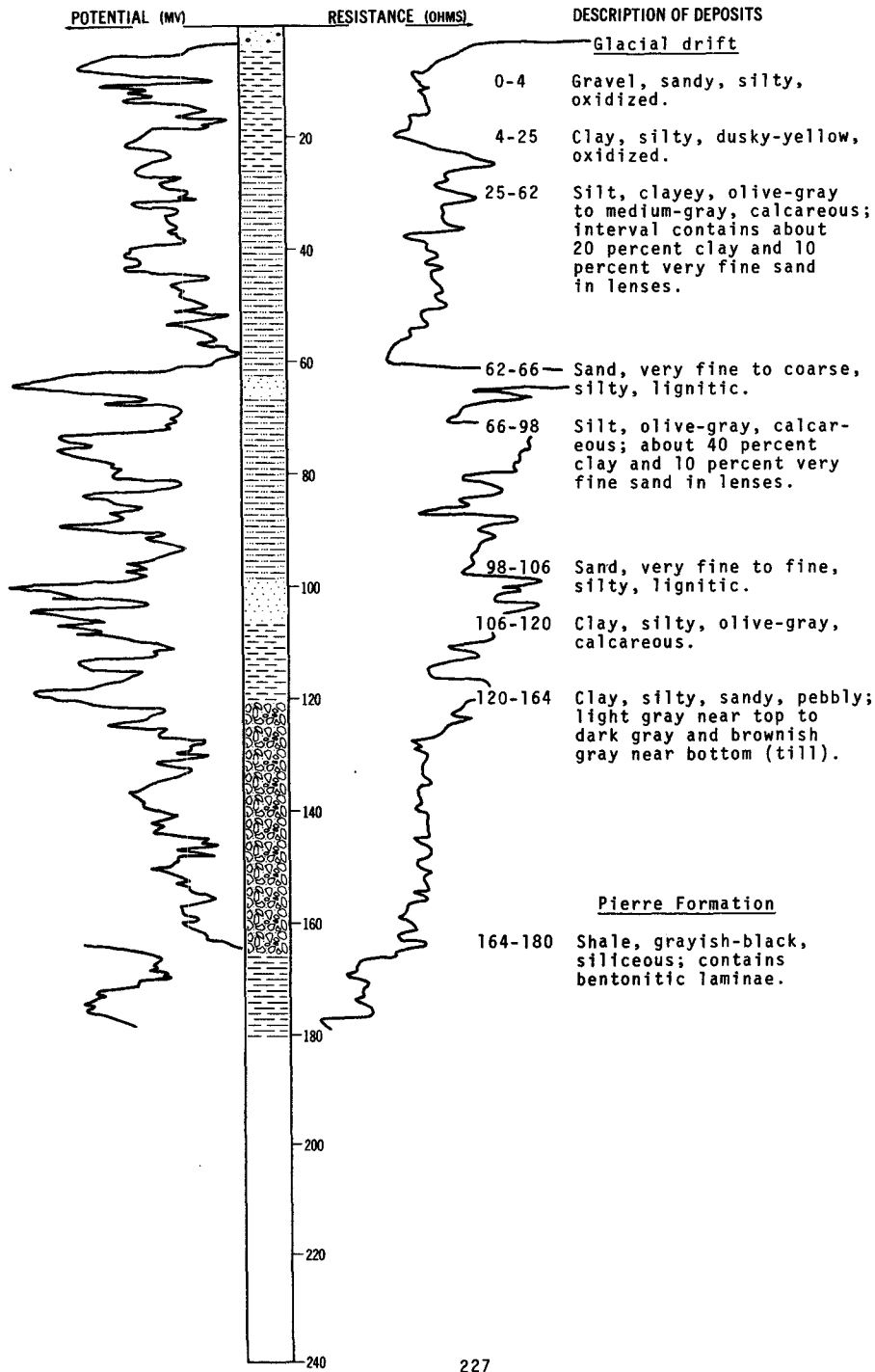


LOCATION: 132-077-29BCA

DATE DRILLED: October 1973

ALTITUDE: 1712  
(FT, MSL)

DEPTH: 180  
(FT)

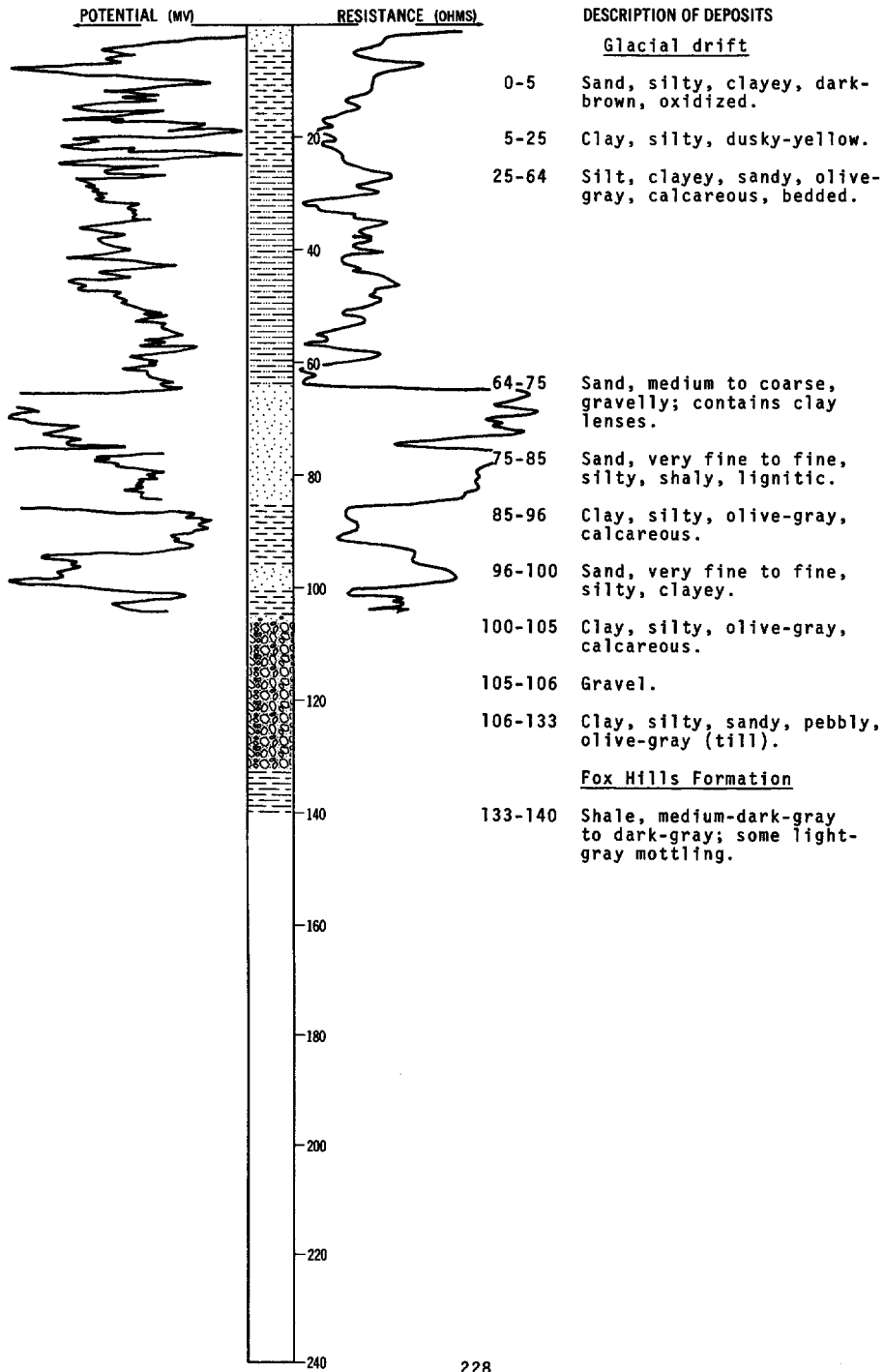


LOCATION: 132-077-29BDA

DATE DRILLED: October 1973

ALTITUDE: 1718  
(FT, MSL)

DEPTH: 140  
(FT)



132-077-29BDC  
(Log from Mann Drilling Co.)

Altitude: Date drilled: October 1973

Geologic source	Material	Thickness (feet)	Depth (feet)
	Clay, silty-----	63	63
	Shale-----	17	80

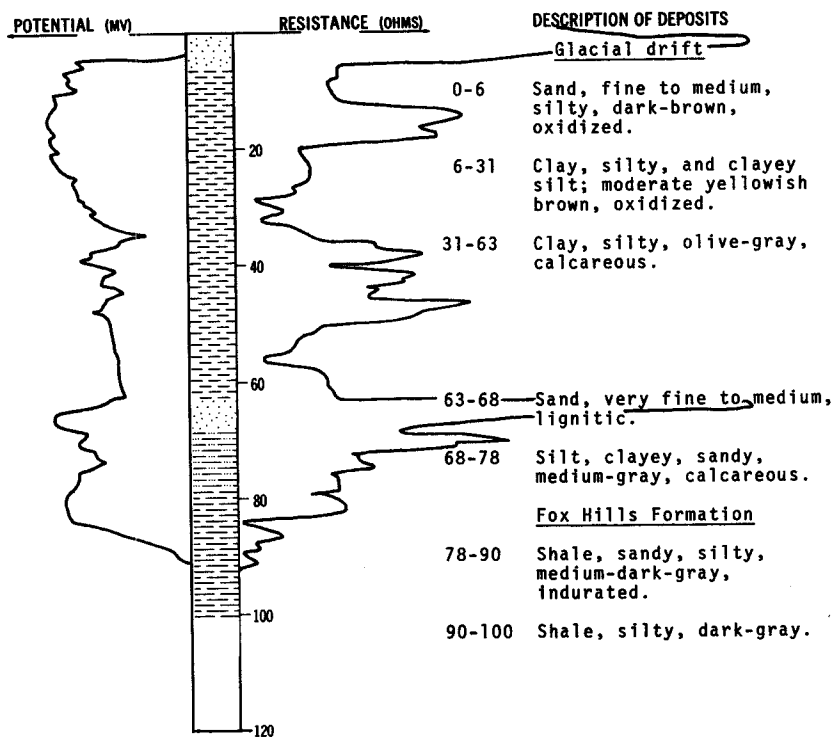
NDSWC 8919

LOCATION: 132-077-29DAA

DATE DRILLED: October 1973

ALTITUDE: 1723  
(FT, MSL)

DEPTH: 100  
(FT)

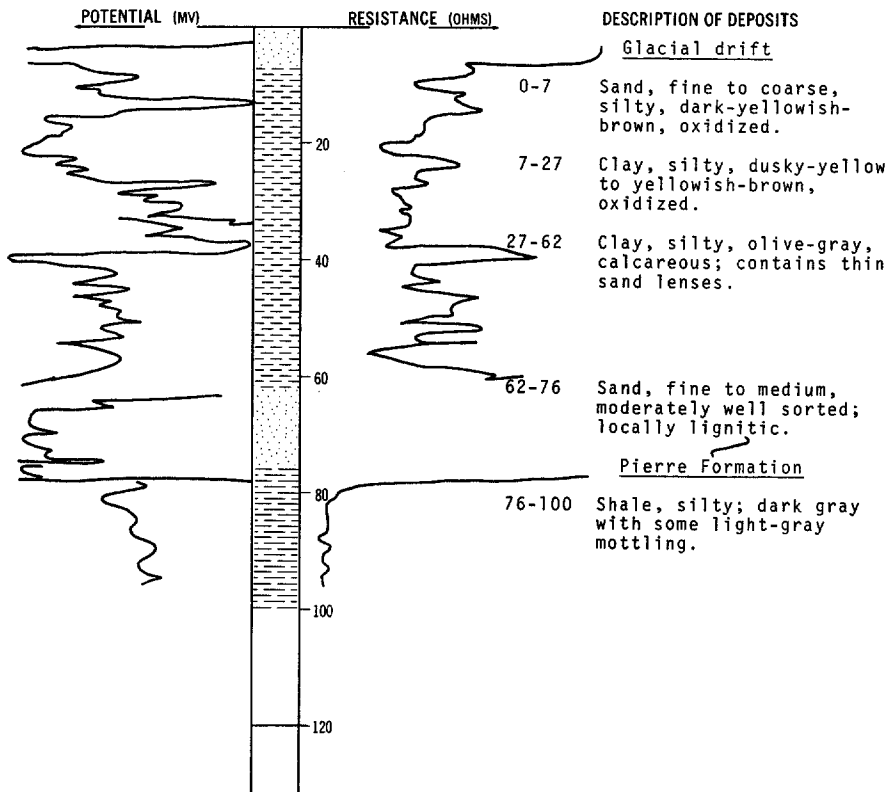


LOCATION: 132-077-29DAB

DATE DRILLED: October 1973

ALTITUDE: 1730  
(FT, MSL)

DEPTH: 100  
(FT)



132-077-29DAC  
(Log from Mann Drilling Co.)

Altitude:

Date drilled: October 1973

Geologic source	Material	Thickness (feet)	Depth (feet)
	Sand, silty-----	50	50
	Sand, medium-----	10	60
	Clay, silty-----	22	82
	Till-----	22	104
	Shale-----	16	120

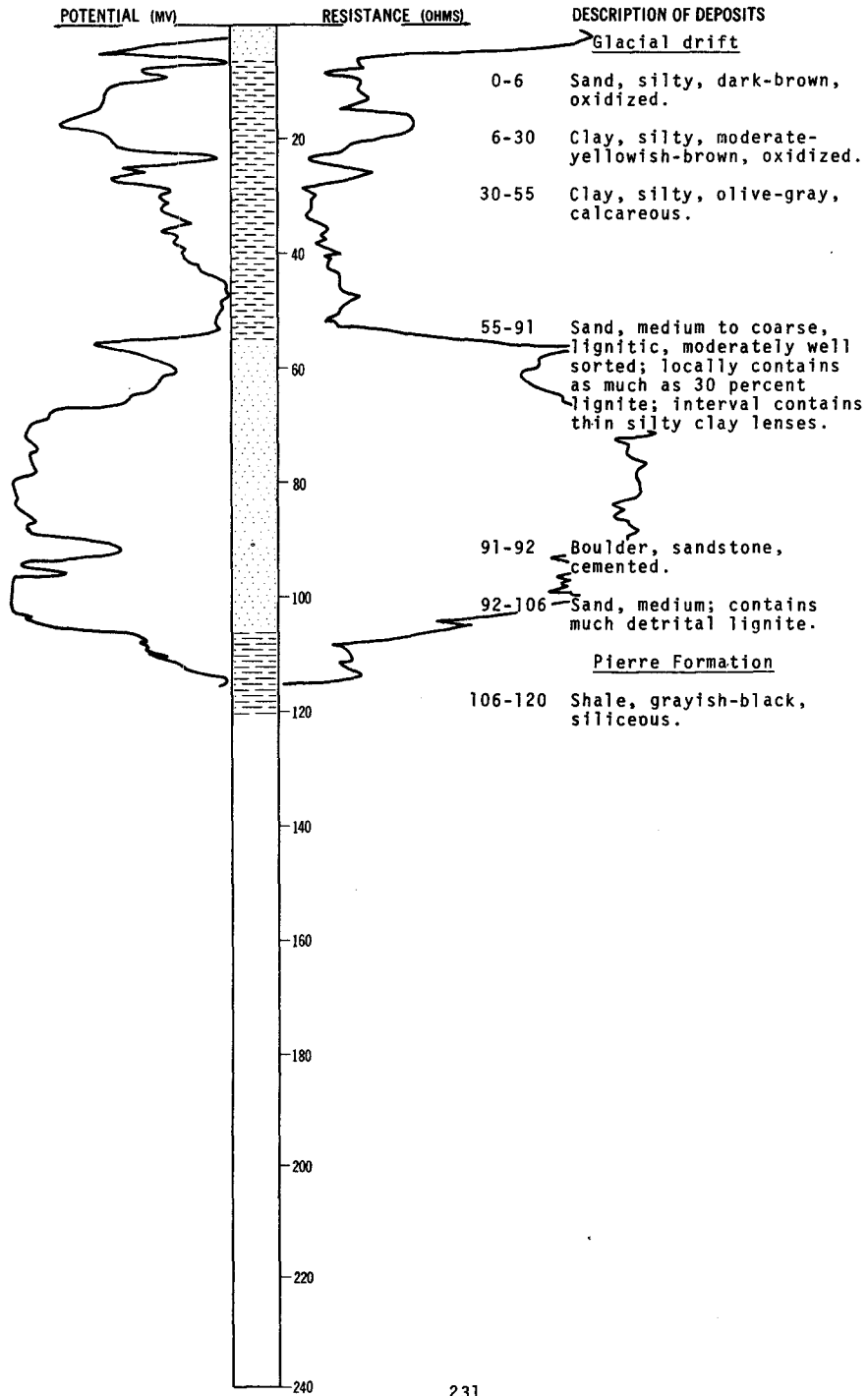


LOCATION: 132-077-29DAD

DATE DRILLED: October 1973

ALTITUDE: 1735  
(FT, MSL)

DEPTH: 120  
(FT)

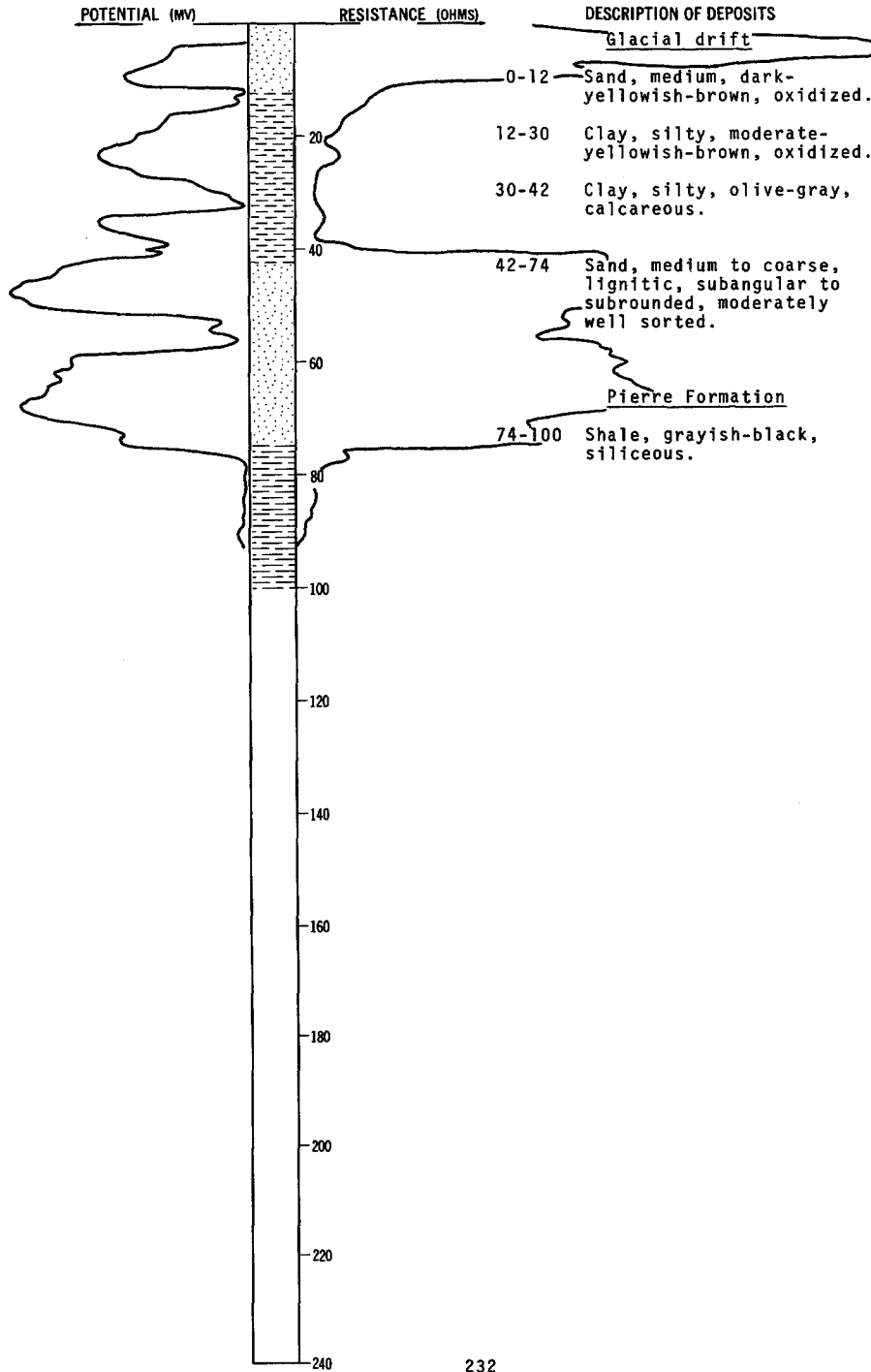


LOCATION: 132-077-29DBD

DATE DRILLED: October 1973

ALTITUDE: 1740  
(FT, MSL)

DEPTH: 100  
(FT)

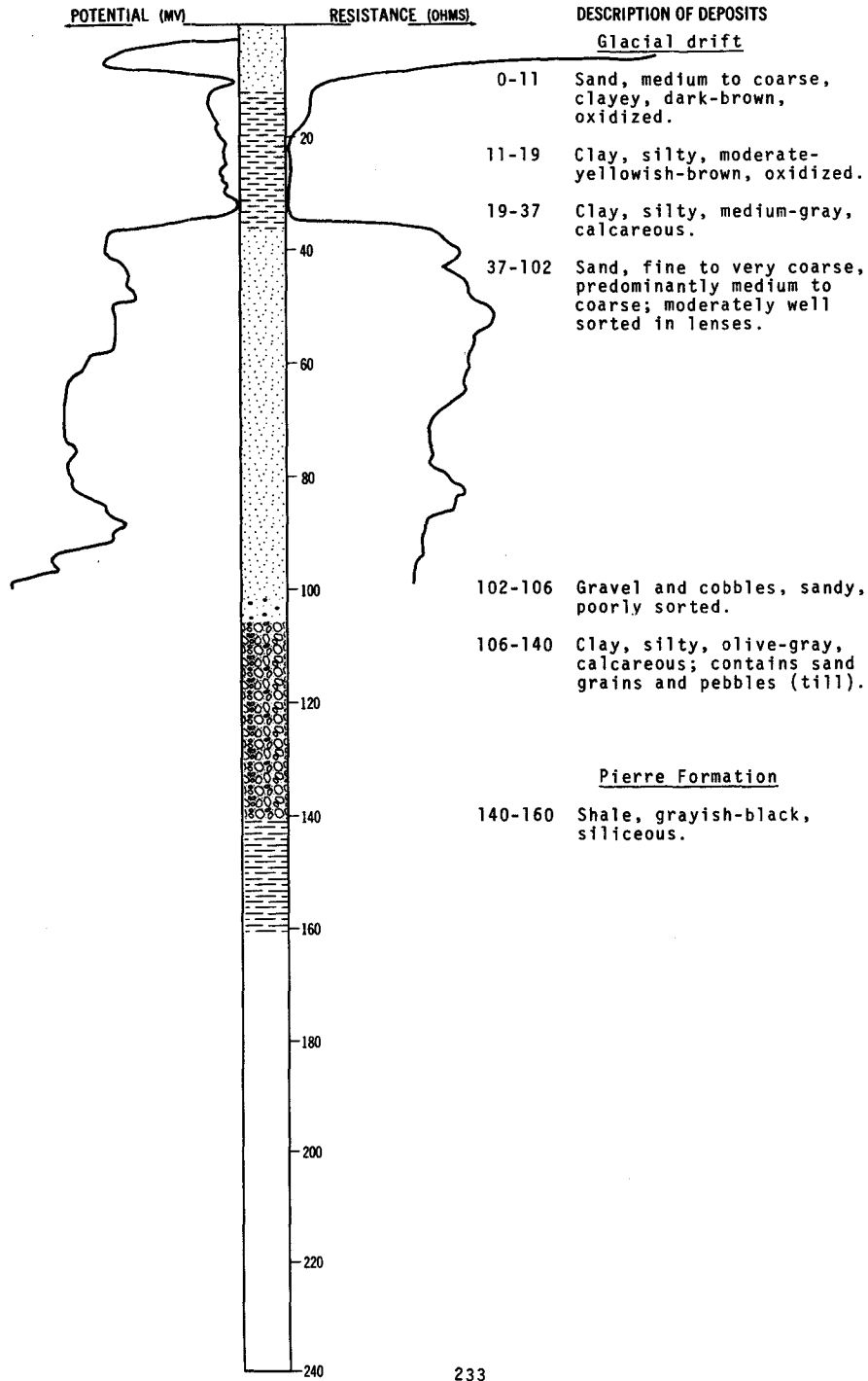


LOCATION: 132-077-29DCC

DATE DRILLED: November 1972

ALTITUDE: 1730  
(FT, MSL)

DEPTH: 160  
(FT)

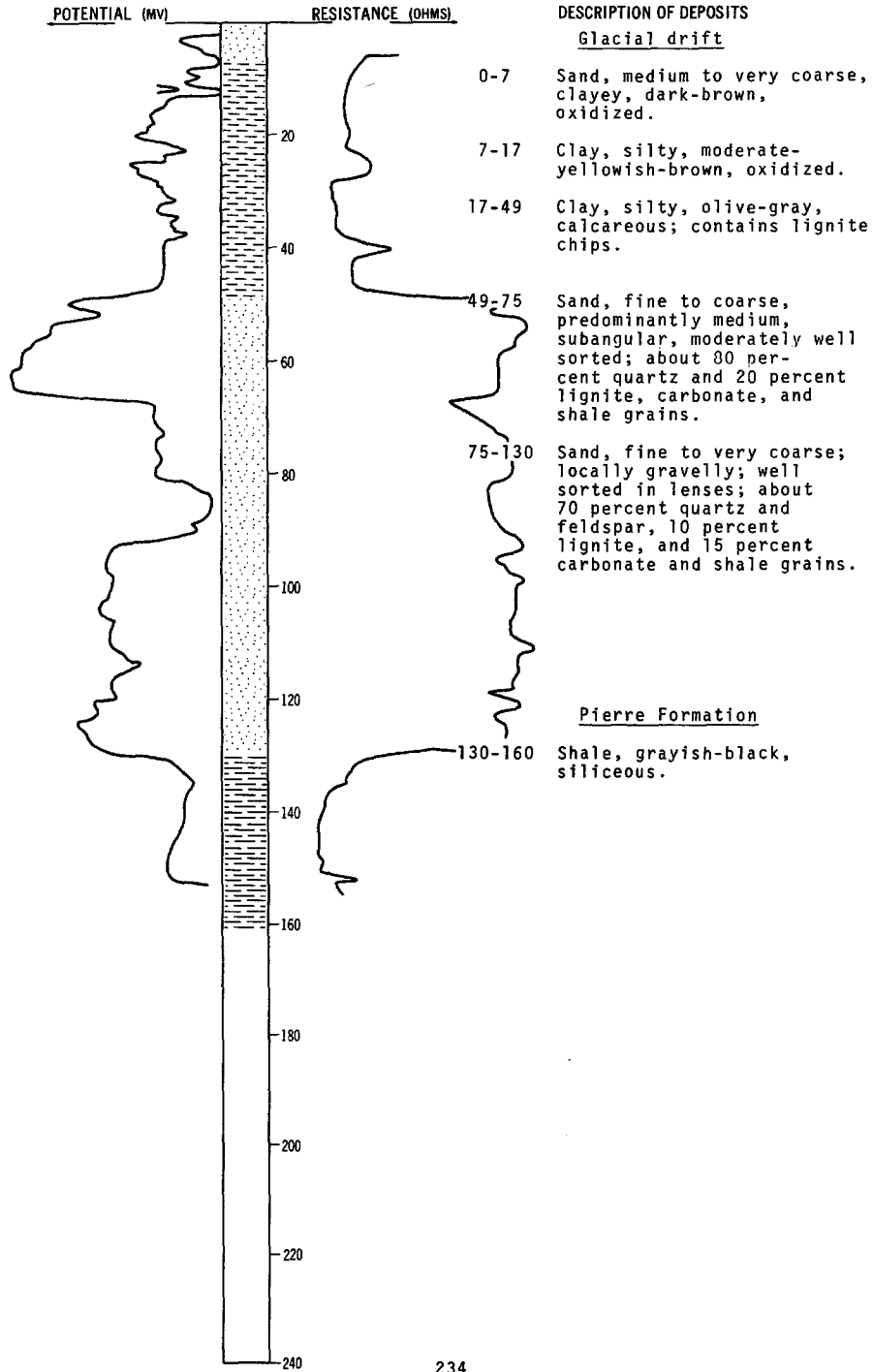


LOCATION: 132-077-29DDD

DATE DRILLED: November 1972

ALTITUDE: 1740  
(FT, MSL)

DEPTH: 160  
(FT)

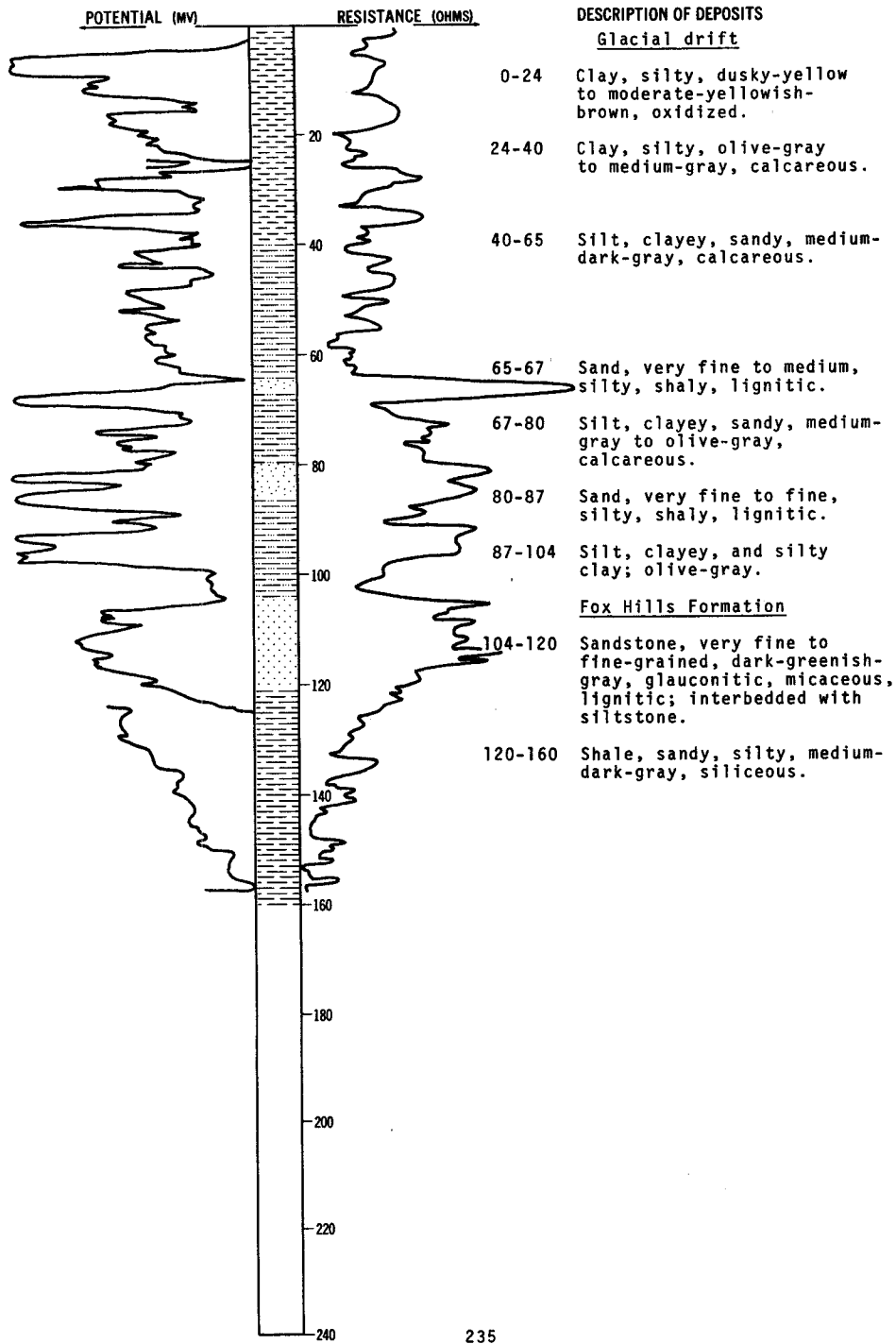


LOCATION: 132-077-30ADA

DATE DRILLED: October 1973

ALTITUDE: 1713  
(FT, MSL)

DEPTH: 160  
(FT)

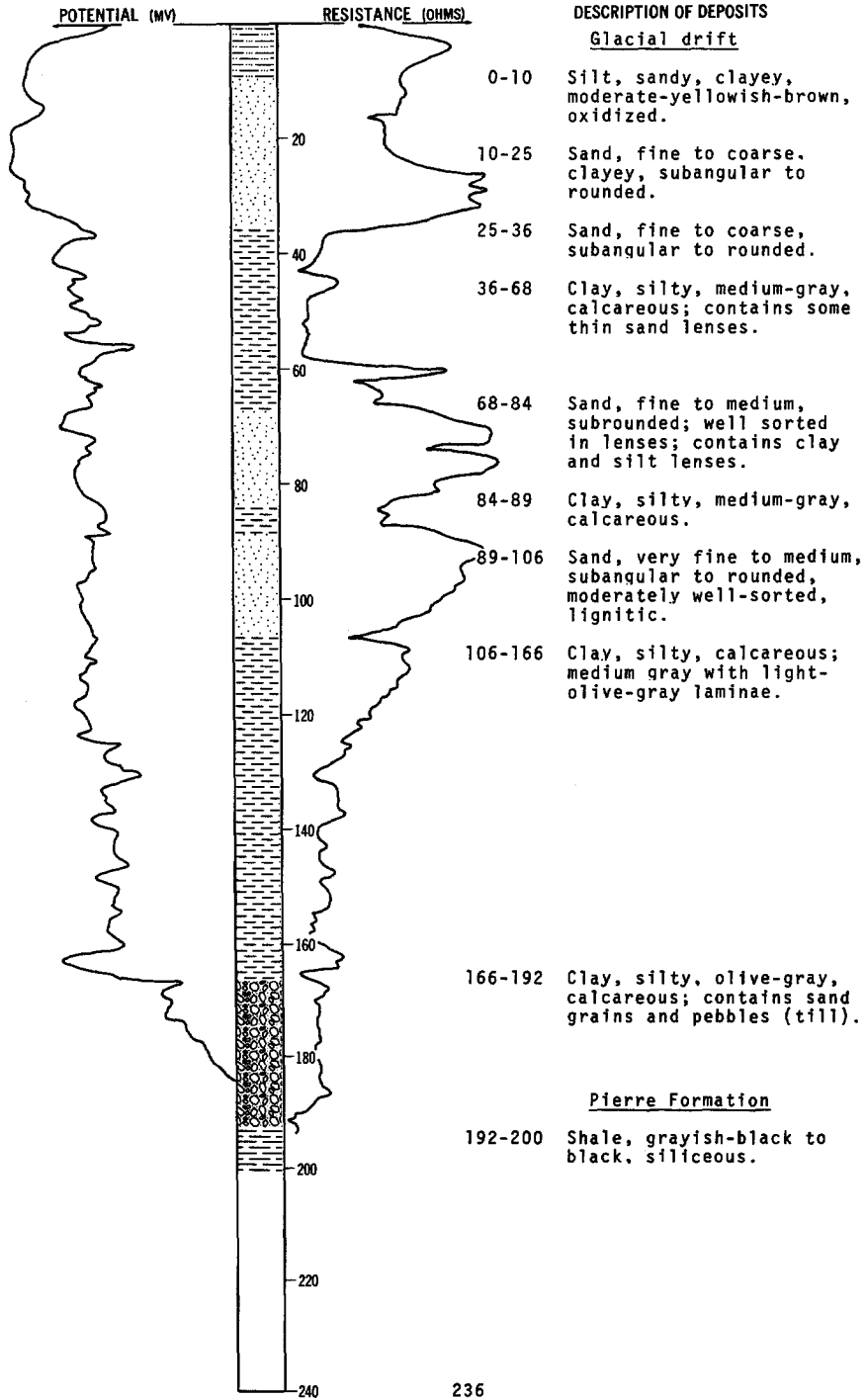


LOCATION: 132-077-33ADD1

DATE DRILLED: November 1972

ALTITUDE: 1750  
(FT. MSL)

DEPTH: 200  
(FT)

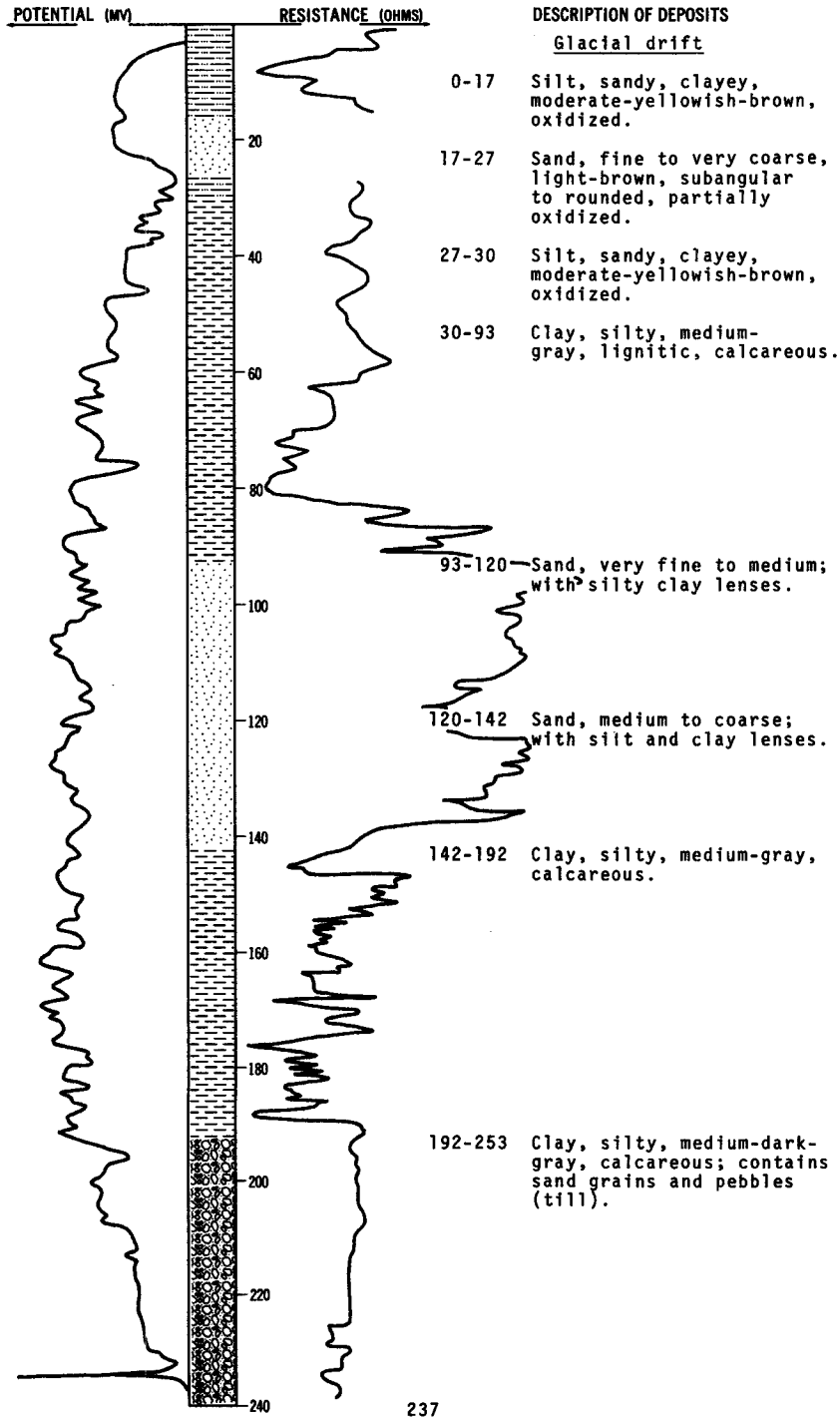


LOCATION: 132-077-33CCC

DATE DRILLED: November 1972

ALTITUDE: 1715  
(FT, MSL)

DEPTH: 260  
(FT)



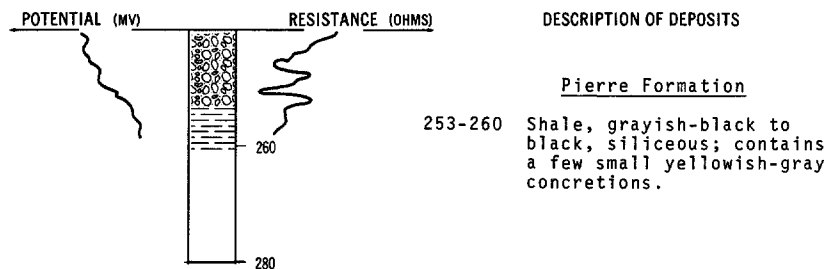
NDSWC 8591, Continued

LOCATION: 132-077-33CCC

DATE DRILLED: November 1972

ALTITUDE: 1715  
(FT, MSL)

DEPTH: 260  
(FT)



132-078-01AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1694 ft

Geologic source	Material	Thickness (feet)	Depth (feet)
	Clay, yellow; sand-----	30	30
	Clay, blue; gravel strips-----	79	109
	Blind (probably shale with crevice at top)---	41	150

132-078-01ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1749 ft

Surface-----	3	3
Clay-----	32	35
Shale-----	115	150

132-078-02AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1775 ft

Sand and gravel-----	3	3
Boulder-----	1	4
Gravel and sandy clay-----	16	20
Clay-----	46	66
Shale-----	84	150

132-078-02BAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1711 ft

Clay-----	10	10
Clay; with cavities-----	25	35
Sand, pack; shale strips-----	115	150



132-078-02BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1688 ft

Geologic source	Material	Thickness (feet)	Depth (feet)
	Clay-----	43	43
	Sand-----	42	85
	Clay-----	65	150

132-078-02CA2  
(Log from Empire Irrigation and Farmers Supply)

Altitude:

Soil-----	2	2
Sand-----	4	6
Clay, yellow-----	15	21
Clay, gray-----	22	43
Sand and coal-----	44	87
Clay-----	18	105
Sand, fine-----	30	135
Clay and sand-----	11	146
Clay-----	5	151
Clay with sand layers-----	23	174
Sand, medium-----	9	183
Clay-----	47	230

132-078-03BAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1692 ft

Clay-----	34	34
Sand-----	66	100
Clay-----	40	140
Sand-----	10	150

132-078-03BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1734 ft

Clay and sand-----	40	40
Shale-----	110	150

132-078-03DDC  
(Log from Witikko Drilling)

Altitude:

Date drilled: October 1972

Soil, black-----	1	1
Clay, brown-----	7	8
Sand, brown-----	16	24
Clay, gray-----	14	38
Sand, brown-----	7	45
Sand, gray-----	13	58

132-078-04DAC  
(Log from Witikko Drilling)

Altitude: Date drilled: October 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Sand, brown-----	28	29
	Clay and sand, brown-----	6	35
	Sand and gravel, brown-----	9	44

132-078-07AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1825 ft

	Clay-----	10	10
	Shale, blue-----	30	40
	Sandstone-----	87	127
	Shale, blue-----	23	150

132-078-07BAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1837 ft

	Surface-----	3	3
	Clay-----	35	38
	Shale-----	46	84
	Sandstone and sandy shale-----	44	128
	Shale-----	32	160

132-078-07BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1791 ft

	Surface-----	3	3
	Clay-----	15	18
	Boulder-----	3	21
	Clay and sand rock layers-----	43	64
	Shale, sandy-----	28	92
	Shale-----	68	160

132-078-08ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1816 ft

	Clay-----	11	11
	Sandstone with very hard ledges-----	92	103
	Shale, blue-----	47	150

132-078-09AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1746 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Surface-----	3	3
	Clay and rocks-----	6	9
	Clay-----	15	24
	Shale-----	126	150

132-078-09ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1807 ft

	Clay-----	10	10
	Sandstone-----	66	76
	Shale, blue-----	74	150

132-078-09BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1831 ft

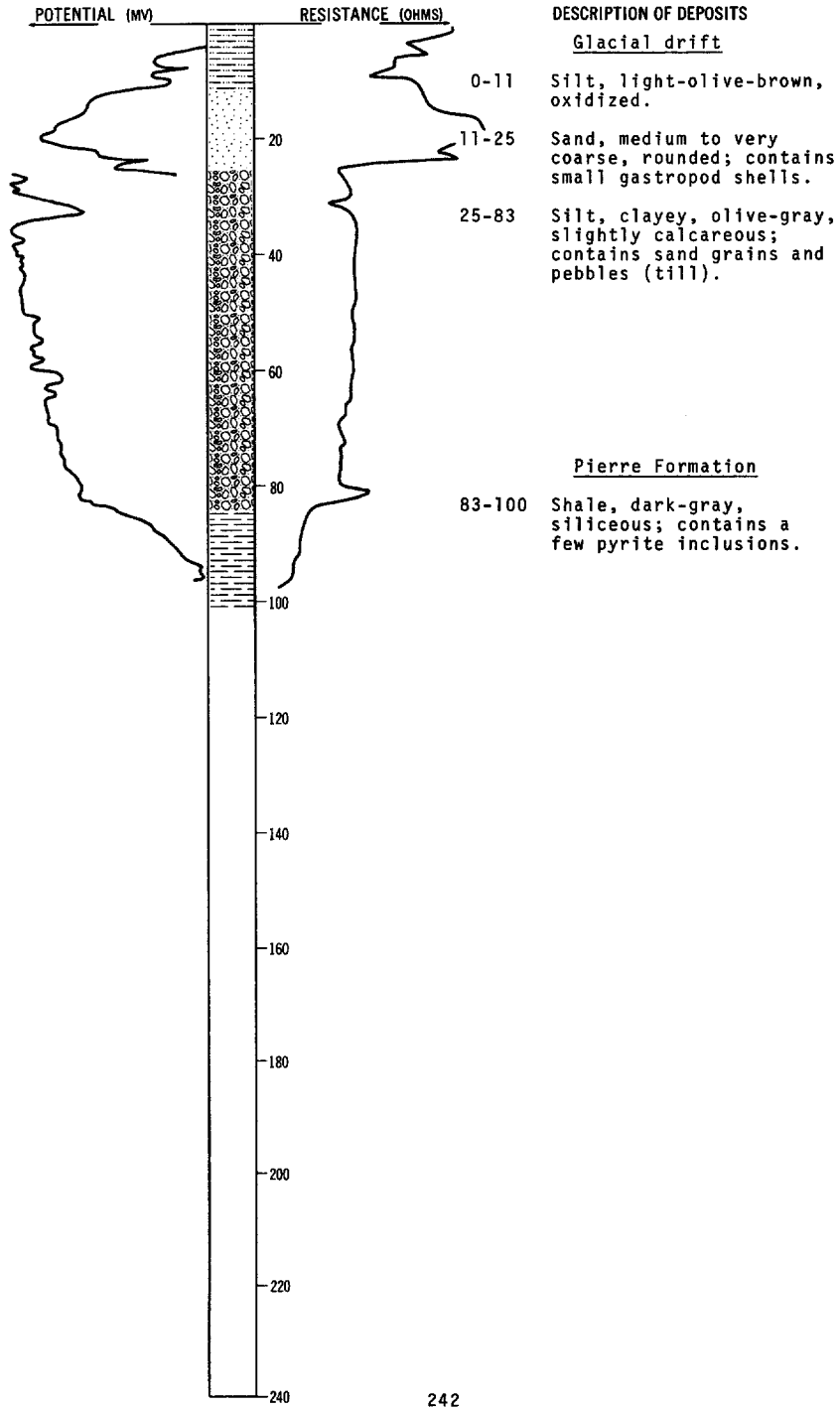
	Surface-----	3	3
	Clay-----	35	38
	Sand rocks and clay-----	22	60
	Shale, sandy-----	52	112
	Shale-----	38	150

LOCATION: 132-078-11DDC

DATE DRILLED: October 1972

ALTITUDE: 1630  
(FT, MSL)

DEPTH: 100  
(FT)

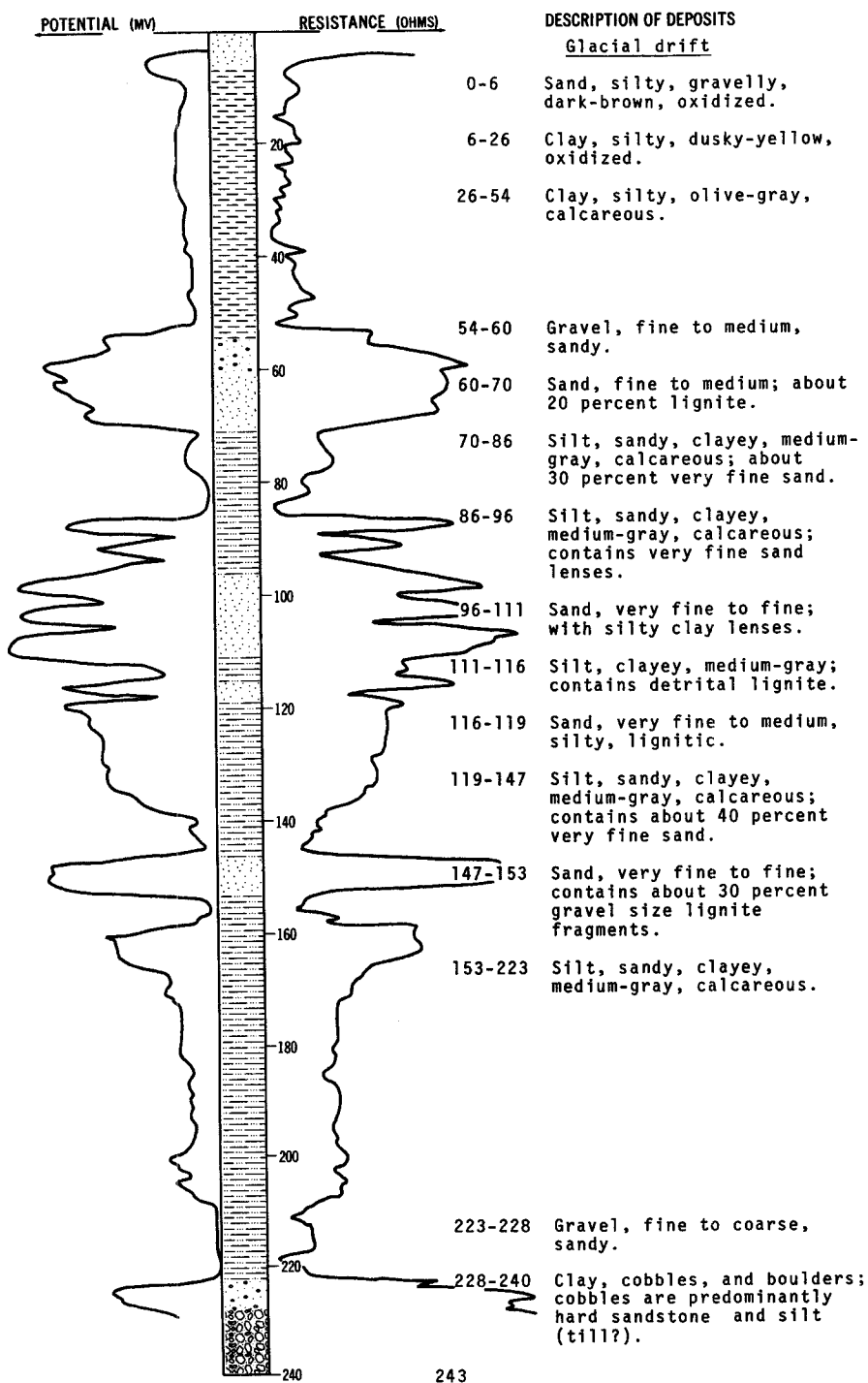


LOCATION: 132-078-13BAA

DATE DRILLED: October 1973

ALTITUDE: 1685  
(FT, MSL)

DEPTH: 240  
(FT)



132-078-13BBB  
(Log from Mann Drilling Co.)

Altitude:		Date drilled: October 1973	
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Clay-----	10	10
	Sand-----	6	16
	Sand, fine to coarse-----	31	47
	Clay, silty-----	16	63
	Shale-----	17	80

132-078-13BBC  
(Log from Mann Drilling Co.)

Altitude:		Date drilled: October 1973	
	Sand, buff-----	17	17
	Sand, fine-----	25	42
	Clay, silty-----	6	48
	Shale-----	12	60

132-078-13CAA  
(Log from Mann Drilling Co.)

Altitude:		Date drilled: October 1973	
	Clay, silty, buff-----	17	17
	Sand, fine-----	20	37
	Gravel-----	3	40
	Sand, medium-----	13	53
	Clay, silty-----	14	67
	Shale-----	13	80

132-078-14AAA  
(Log from Mann Drilling Co.)

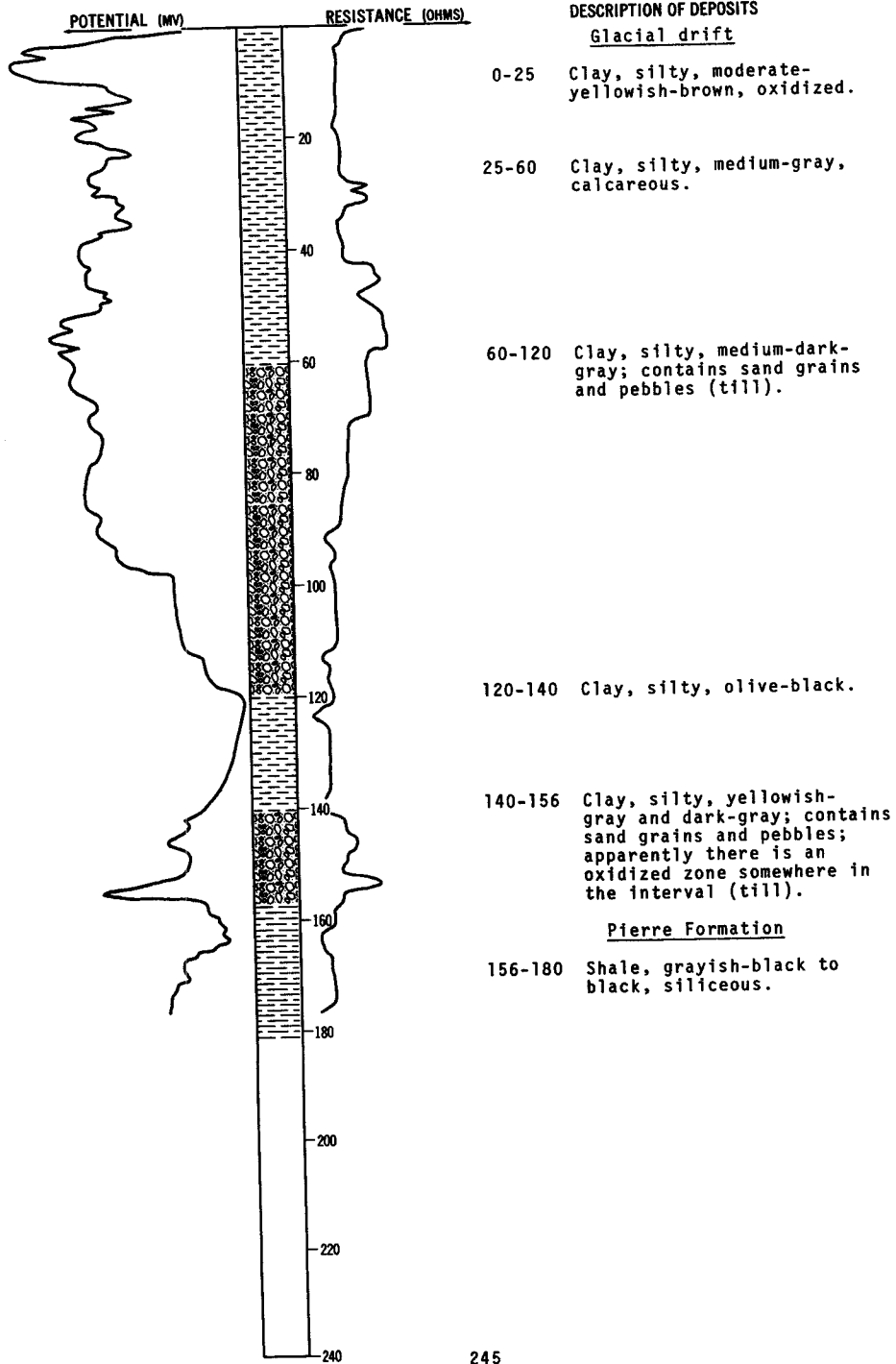
Altitude:		Date drilled: October 1973	
	Clay, white-----	6	6
	Sand-----	6	12
	Clay-----	7	19
	Sand, fine-----	4	23
	Gravel-----	3	26
	Sand, silty-----	18	44
	Clay, silty-----	19	63
	Till-----	29	92
	Shale-----	8	100

LOCATION: 132-078-25AAA

ALTITUDE: 1685  
(FT, MSL)

DATE DRILLED: November 1972

DEPTH: 180  
(FT)



132-079-03CDD  
(Log from Witikko Drilling)

Altitude: Date drilled: November 1972

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Soil, black-----	1	1
	Sand, brown-----	15	16
	Clay, brown-----	11	27
	Rocks and gravel-----	13	40
	Clay, gray-----	24	64
	Sand, brown, and rocks-----	14	78
	Clay, gray-----	20	98
	Gravel and rocks-----	7	105

132-079-09AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1611 ft

	Clay-----	36	36
	Sand-----	34	70
	Shale, blue-----	80	150

132-079-09BAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1594 ft

	Sand-----	105	105
	Gravel-----	25	130

132-079-10BAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1725 ft

	Sand-----	10	10
	Sandstone; hard sandstone layers-----	80	90
	Shale and sandstone-----	60	150

132-079-11AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1826 ft

	Clay-----	8	8
	Shale, blue-----	63	71
	Sandstone; hard ledges-----	52	123
	Shale, blue-----	27	150



132-079-11BAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1808 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Shale-----	40	40
	Sandstone; hard sandstone layers at 40, 85, 105, and 115 ft-----	105	145

132-079-11BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1794 ft

	Clay-----	25	25
	Sandstone-----	81	106
	Shale, blue-----	44	150

132-079-12BAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1781 ft

	Clay-----	21	21
	Sandstone-----	71	92
	Shale, blue-----	58	150

133-074-03CCC  
NDSWC 8123

Altitude: 2090 ft

Date drilled: September 1971

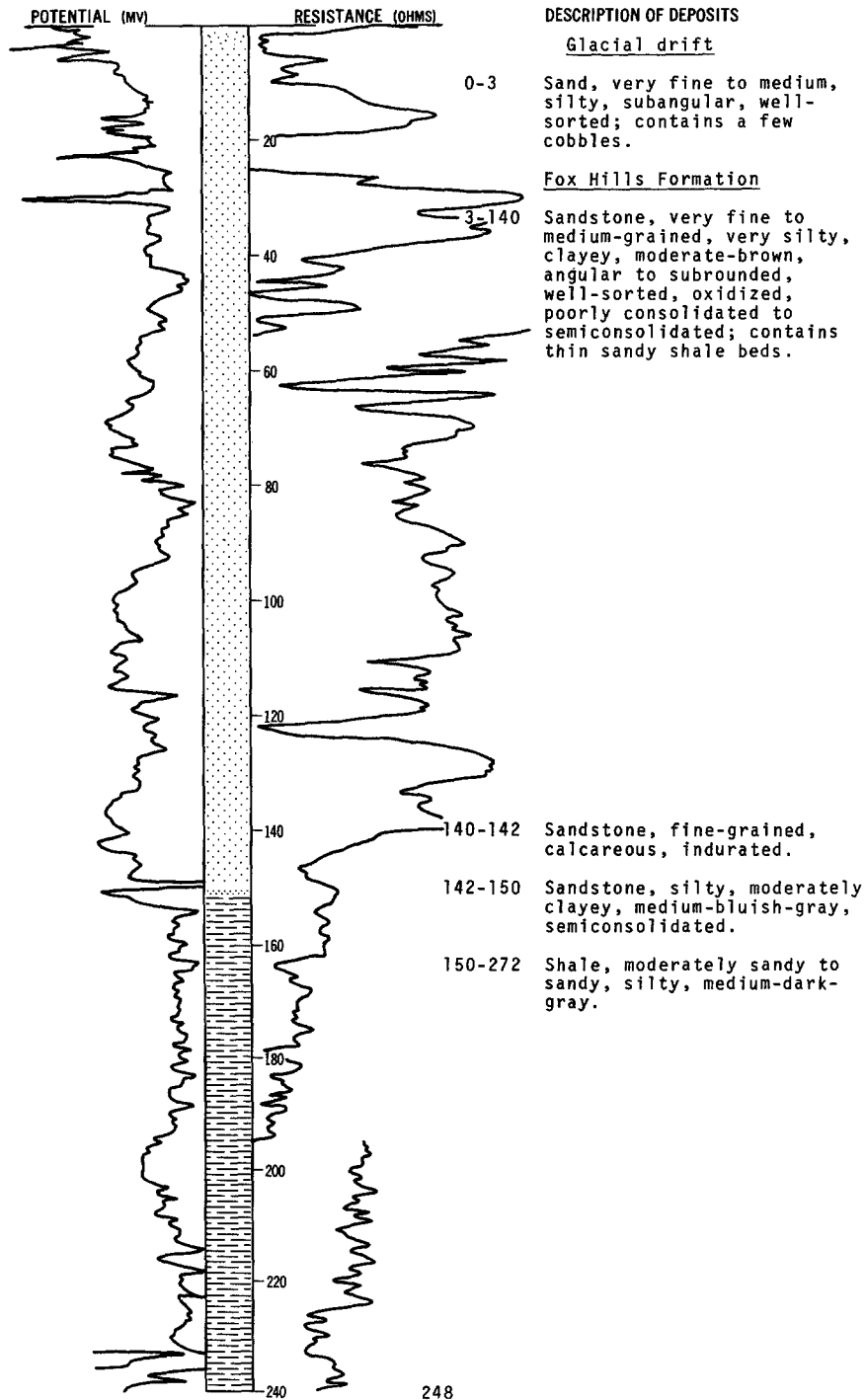
Glacial drift:			
	Soil, silty, sandy, clayey, grayish-black---	2	2
	Clay, silty, sandy, pebbly, moderate-yellowish-brown, calcareous, oxidized (till)-----	7	9
	Gravel, sandy, fine to coarse, angular to subrounded-----	10	19
Fox Hills Formation:			
	Shale, sandy, silty, moderate-yellowish-brown, oxidized-----	41	60

LOCATION: 133-074-10BBB

DATE DRILLED: September 1971

ALTITUDE: 2105  
(FT, MSL)

DEPTH: 360  
(FT)

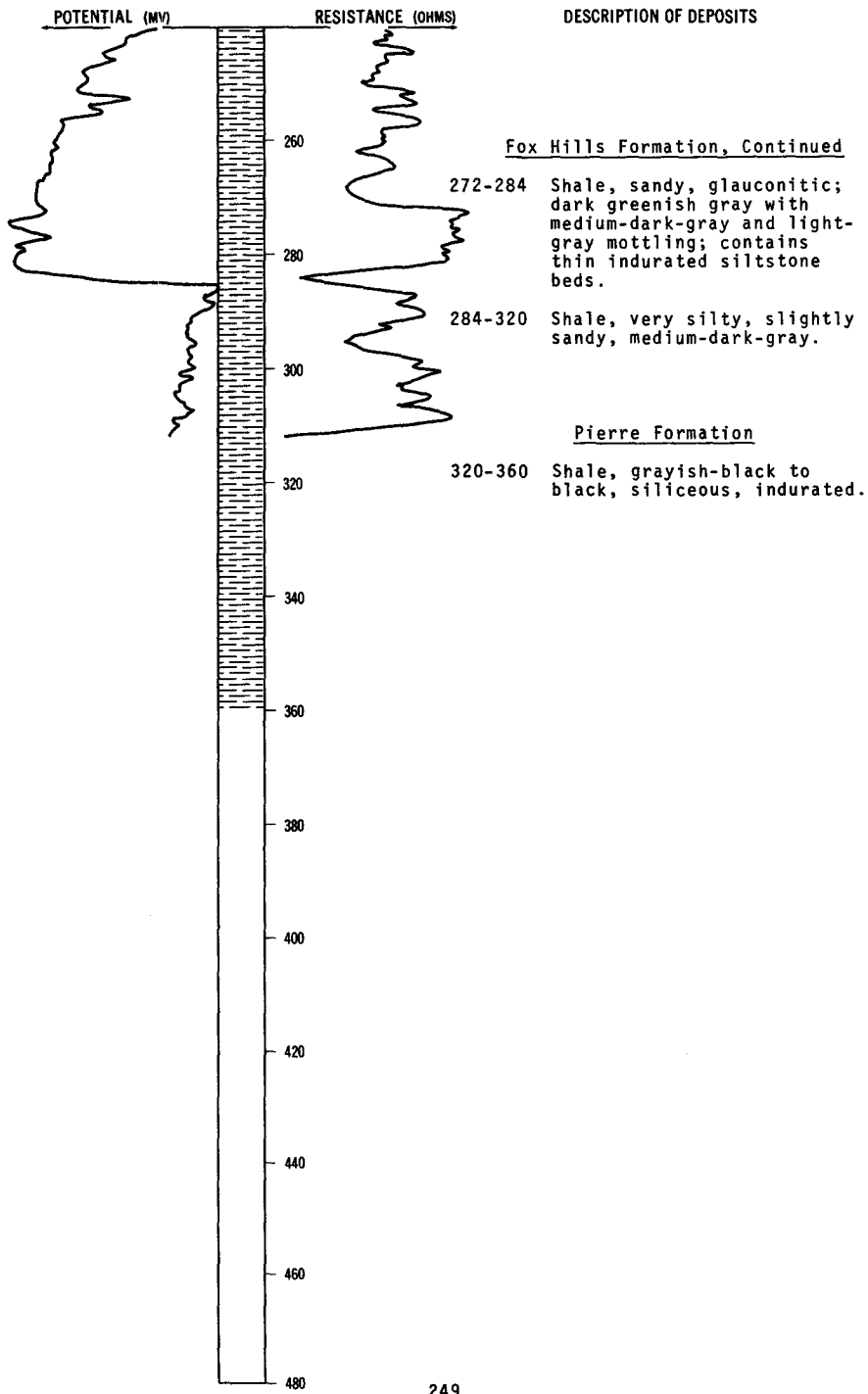


LOCATION: 133-074-10BBB

DATE DRILLED: September 1971

ALTITUDE: 2105  
(FT, MSL)

DEPTH: 360  
(FT)

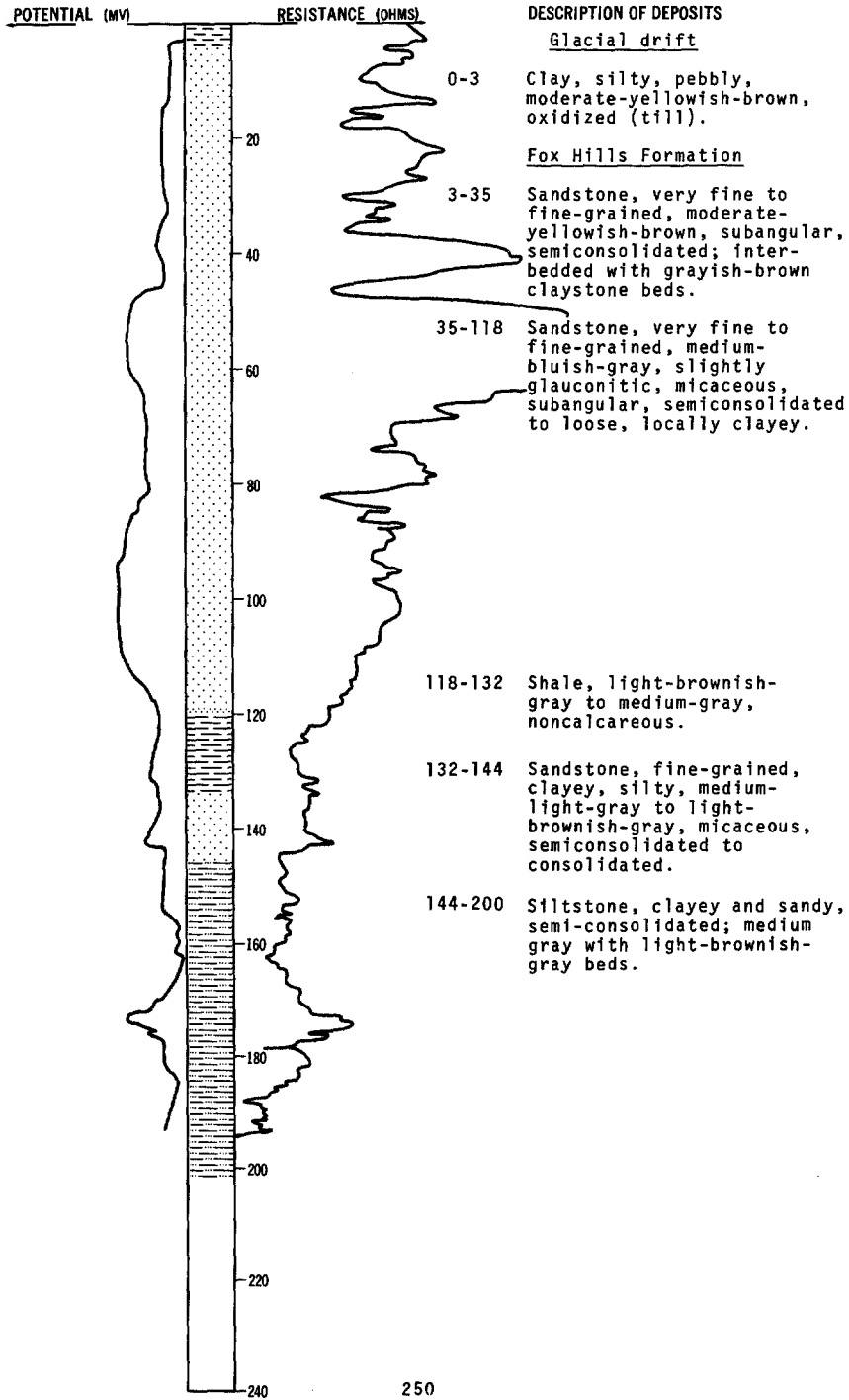


LOCATION: 133-075-07CDD

DATE DRILLED: November 1972

ALTITUDE: 2025  
(FT, MSL)

DEPTH: 200  
(FT)



133-075-13CBB  
(Log from Baumgartner Drilling Co.)

Altitude: Date drilled: August 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Clay, brown-----	40	40
	Sandstone, soft-----	90	130
	Fox Hills-----	70	200
	Shale-----	5	205

133-075-20BCA  
(Log from Witikko Drilling)

Altitude: Date drilled: March 1973

	Topsoil, black-----	1	1
	Sand, brown-----	31	32
	Sand and clay, brown-----	38	70
	Clay, gray-----	50	120
	Clay and sand, gray-----	20	140

133-075-22DDD  
(Log from Witikko Drilling)

Altitude: Date drilled: September 1973

	Topsoil, black-----	1	1
	Rocks-----	2	3
	Clay, sandy, brown-----	13	16
	Clay, brown-----	22	38
	Clay, gray-----	4	42
	Sand, blue, and soft gray rock-----	12	54

133-076-05AAB  
(Log from Witikko Drilling)

Altitude: Date drilled: August 1973

	Topsoil, black-----	2	2
	Sand, brown-----	16	18
	Clay, gray-----	50	68
	Clay, silty, light-gray-----	8	76
	Clay, dark-gray-----	51	127
	Sand and clay, blue-----	33	160

133-076-09BCC  
(Log from Witikko Drilling)

Altitude: Date drilled: September 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Clay, brown-----	11	12
	Clay, gray-----	9	21
	Sand, brown-----	9	30
	Clay and sand, brown-----	26	56
	Clay, gray-----	29	85
	Clay and sand, blue-----	2	87
	Clay, gray-----	28	115
	Clay and sand, green-----	2	117
	Clay, gray-----	73	190
	Clay and sand, blue-----	35	225

133-076-15BBB  
Test hole 1239  
(Randich, 1963)

Altitude: Date drilled: October 1957

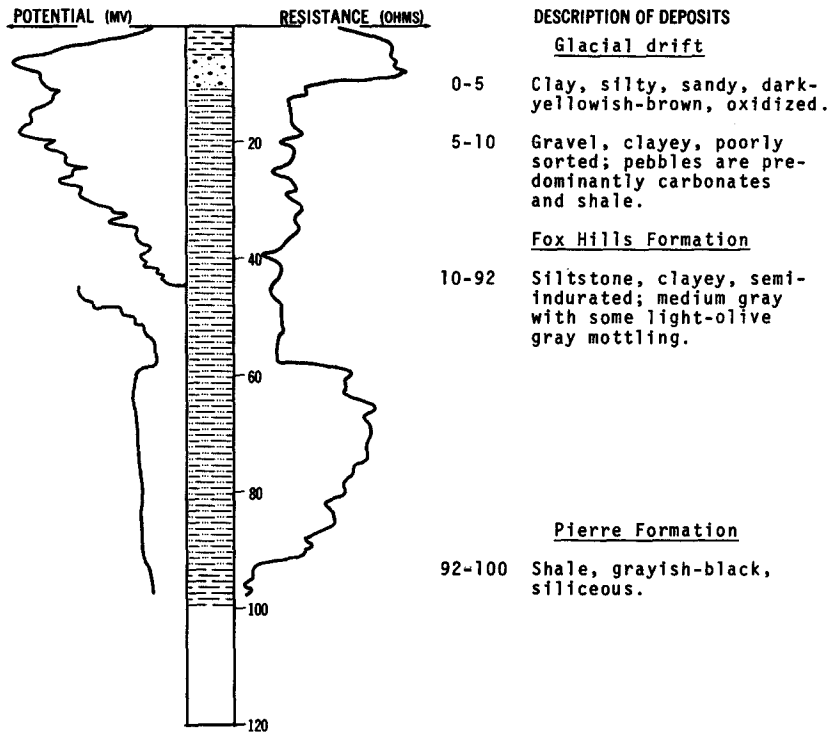
<b>Glacial drift:</b>			
	Topsoil, black-----	2	2
	Clay, sandy, dark-brown, and fine gravel (till)-----	9	11
	Clay, sandy, light-brown, and fine gravel (till)-----	15	26
<b>Fox Hills Formation:</b>			
	Clay, sandy, light-gray-----	5	31

LOCATION: 133-076-22BAB

DATE DRILLED: November 1972

ALTITUDE: 1847  
(FT, MSL)

DEPTH: 100  
(FT)



133-076-28AAA  
Test hole 1238  
(Randich, 1963)

Altitude: 1813 ft

Date drilled: October 1957

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Alluvium and colluvium:</u>			
	Topsoil, black-----	1	1
	Clay, sandy and silty, light-brown-----	11	12
<u>Pierre Formation:</u>			
	Shale, gray-----	9	21

133-076-31CCC  
 Test hole 1240  
 (Randich, 1963)

Altitude: Date drilled: October 1957

Geologic source	Material	Thickness (feet)	Depth (feet)
Fox Hills Formation:			
	Topsoil, black-----	3	3
	Clay, sandy, light-brown-----	24	27
	Clay, sandy, light-gray-----	4	31

133-076-33CBD  
 Test hole 1244  
 (Randich, 1963)

Altitude: 1748 ft Date drilled: October 1957

Alluvium and colluvium:			
	Topsoil, black-----	2	2
	Clay, sandy and silty, light-brown-----	4	6
Glacial drift:			
	Gravel, fine to coarse (outwash)-----	5	11
	Sand, fine to coarse, silty, and cobbles (outwash)-----	10	21
	Sand, fine to coarse, silty (outwash)-----	9	30
	Clay, sandy, light-gray-----	9	39
	Sand, medium to coarse-----	13	52

133-076-33CCD  
 Test hole 1237  
 (Randich, 1963)

Altitude: 1741 ft Date drilled: October 1957

Alluvium and colluvium:			
	Topsoil, black-----	1	1
	Clay, sandy and silty, light-brown-----	10	11
Glacial drift:			
	Gravel, fine to coarse, clayey (outwash)----	21	32
	Clay, sandy, light-gray (outwash)-----	47	79
Pierre Formation:			
	Shale, gray-----	5	84

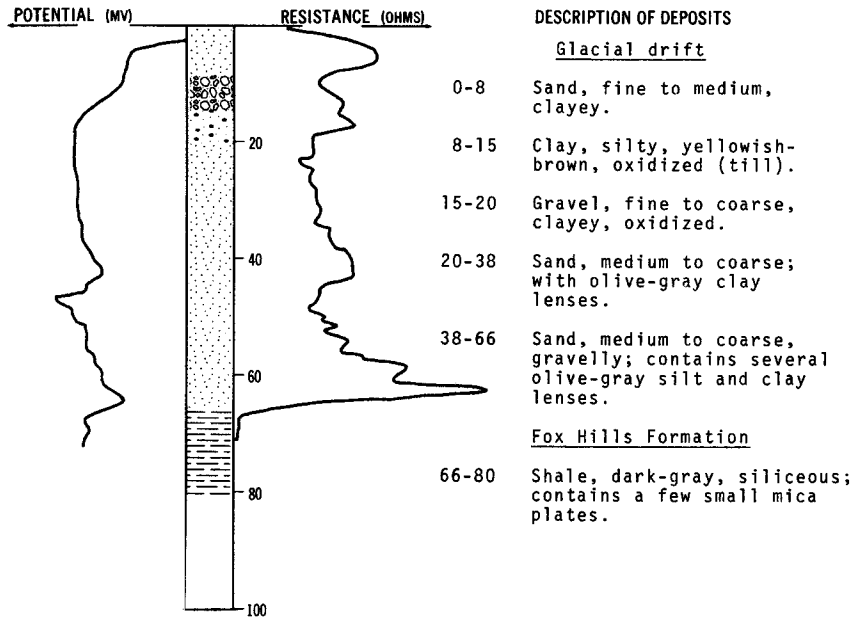


LOCATION: 133-077-15BAA

DATE DRILLED: October 1972

ALTITUDE: 1760  
(FT, MSL)

DEPTH: 80  
(FT)



133-077-16DDD  
Test hole 1243  
(Randich, 1963)

Altitude: 1732 ft

Date drilled: October 1957

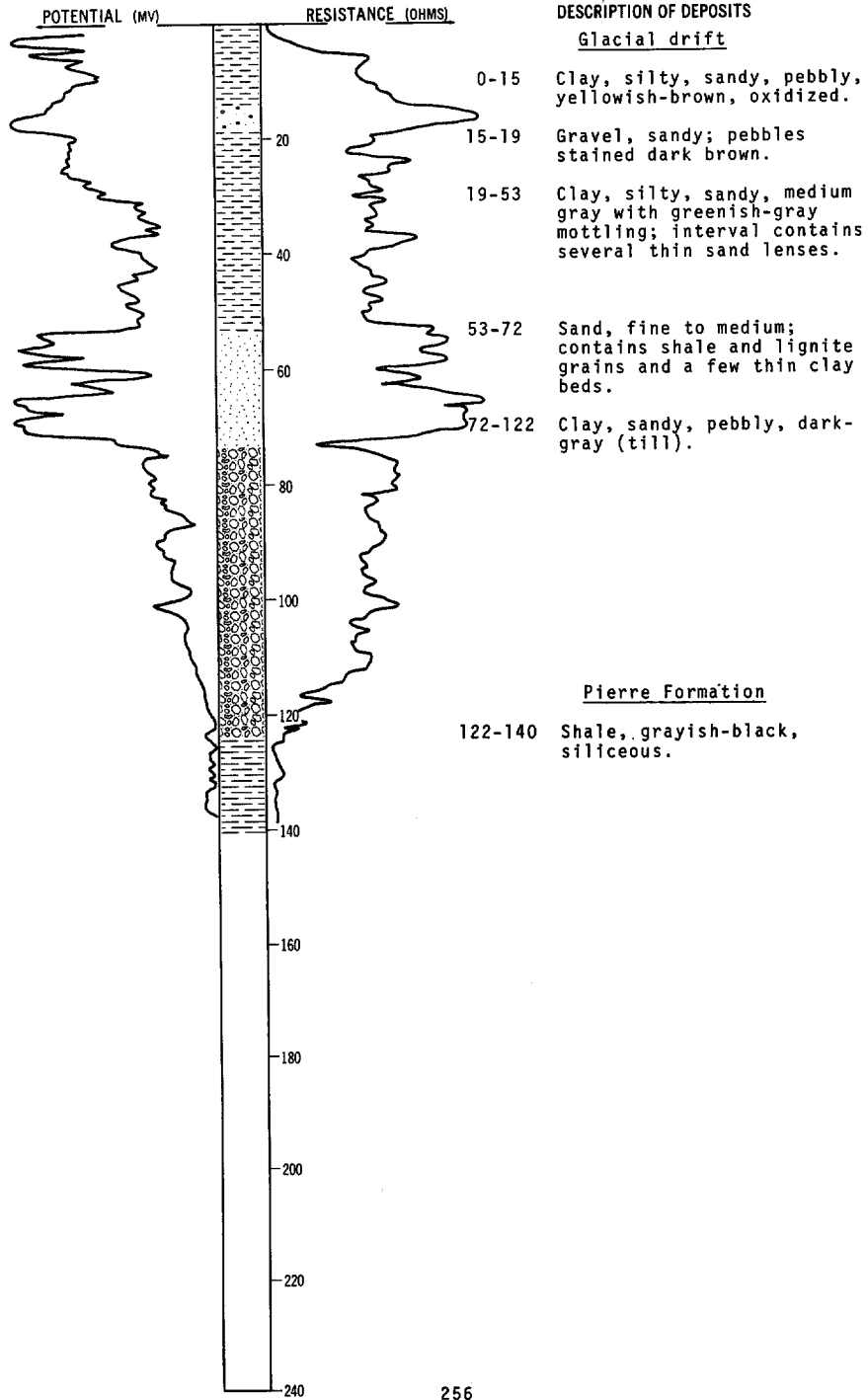
Geologic source	Material	Thickness (feet)	Depth (feet)
Alluvium and colluvium:			
	Topsoil, black-----	2	2
	Clay, sandy and silty, light-brown-----	12	14
Glacial drift:			
	Gravel, fine to coarse, clayey, and shale pebbles (outwash)-----	19	33
	Sand, fine, and shale pebbles (outwash)-----	9	42

LOCATION: 133-077-21CCC

DATE DRILLED: October 1973

ALTITUDE: 1690  
(FT, MSL)

DEPTH: 140  
(FT)



133-077-26CC  
 Test hole 1241  
 (Randich, 1963)

Altitude: . Date drilled: October 1957

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Alluvium and colluvium:			
	Topsoil, black-----	1	1
	Clay, sandy and silty, brown-----	4	5
Glacial drift:			
	Clay, very sandy, gray (outwash)-----	5	10

133-077-28BAA  
 Test hole 1242  
 (Randich, 1963)

Altitude: 1702 ft Date drilled: October 1957

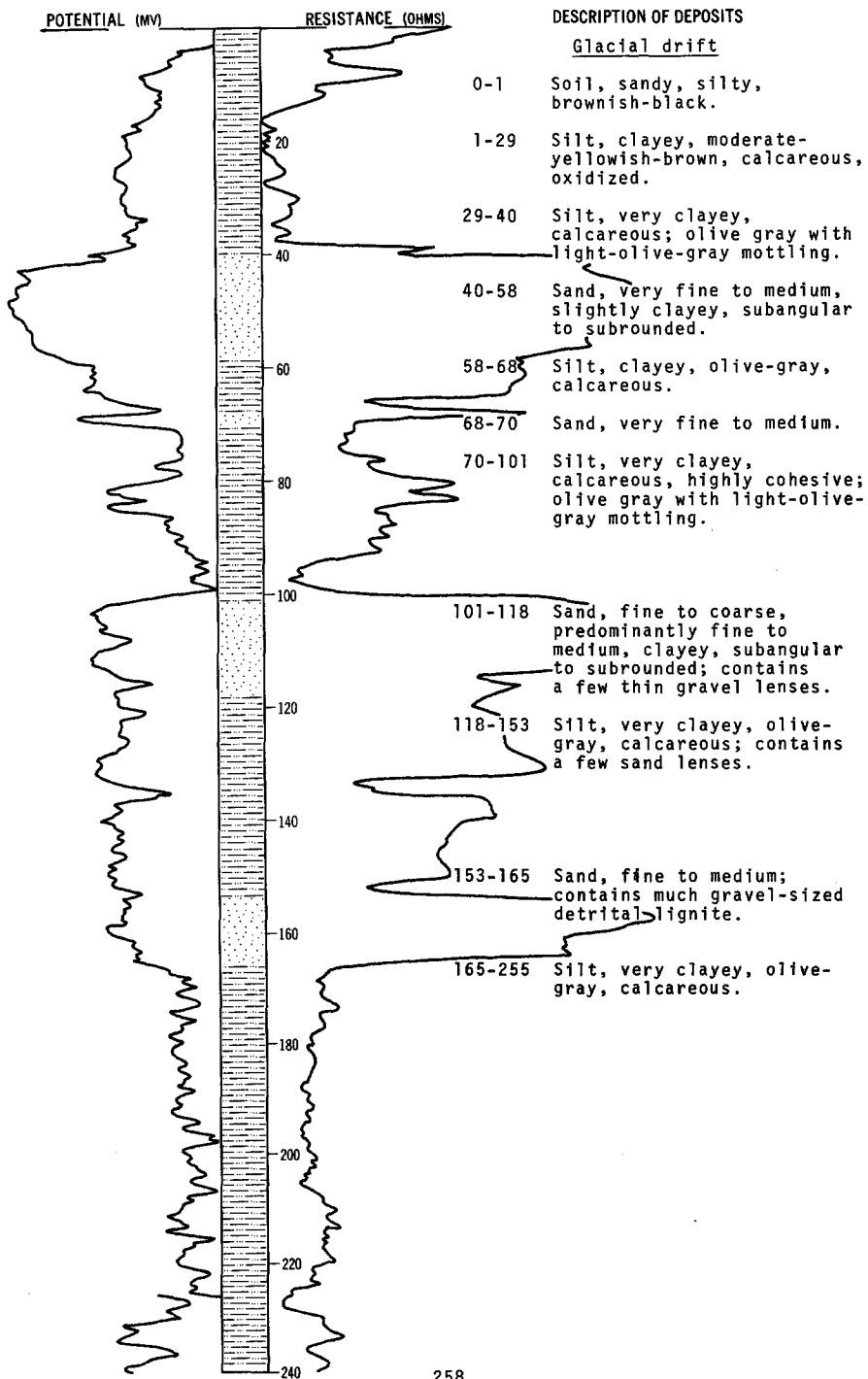
Alluvium and colluvium:			
	Topsoil, black-----	3	3
	Clay, sandy and silty, dark-brown-----	21	24
Glacial drift:			
	Clay, very sandy, dark-gray (outwash)-----	7	31

LOCATION: 133-077-31CCC

DATE DRILLED: September 1971

ALTITUDE: 1695  
(FT, MSL)

DEPTH: 280  
(FT)



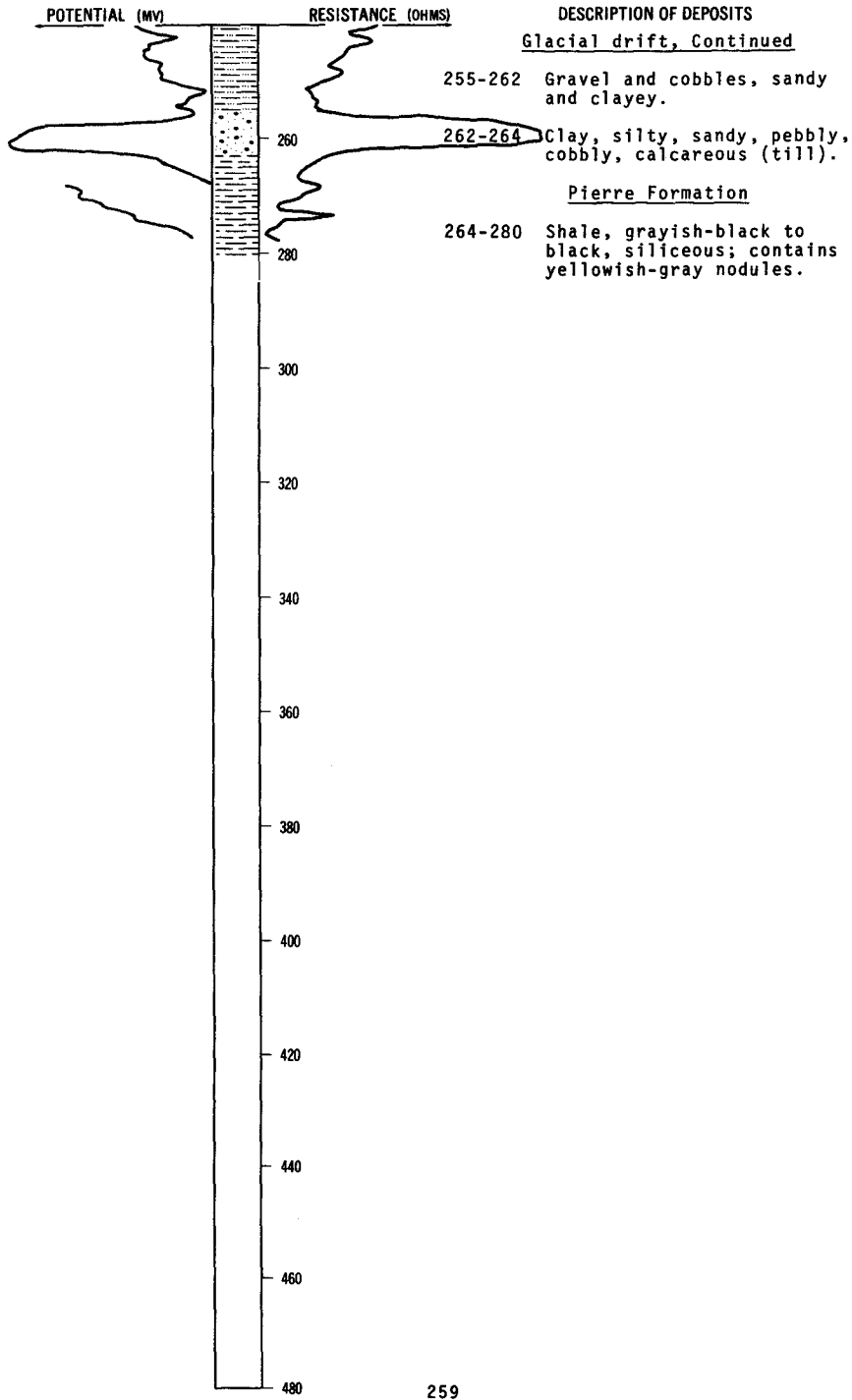
NDSWC 8119, Continued

LOCATION: 133-077-31CCC

DATE DRILLED: September 1971

ALTITUDE: 1695  
(FT, MSL)

DEPTH: 280  
(FT)

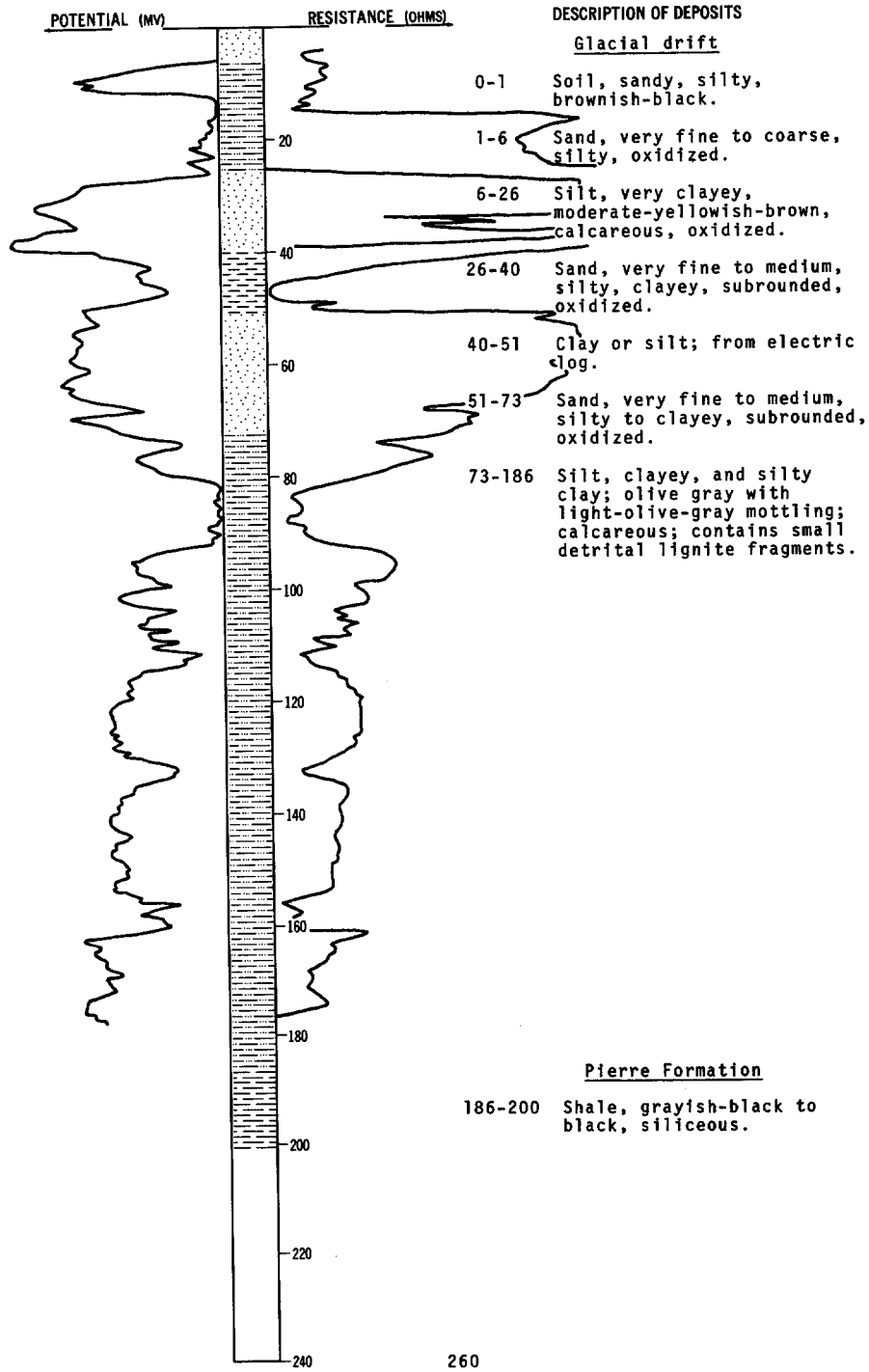


LOCATION: 133-077-31CDD

DATE DRILLED: September 1971

ALTITUDE: 1710  
(FT, MSL)

DEPTH: 200  
(FT)

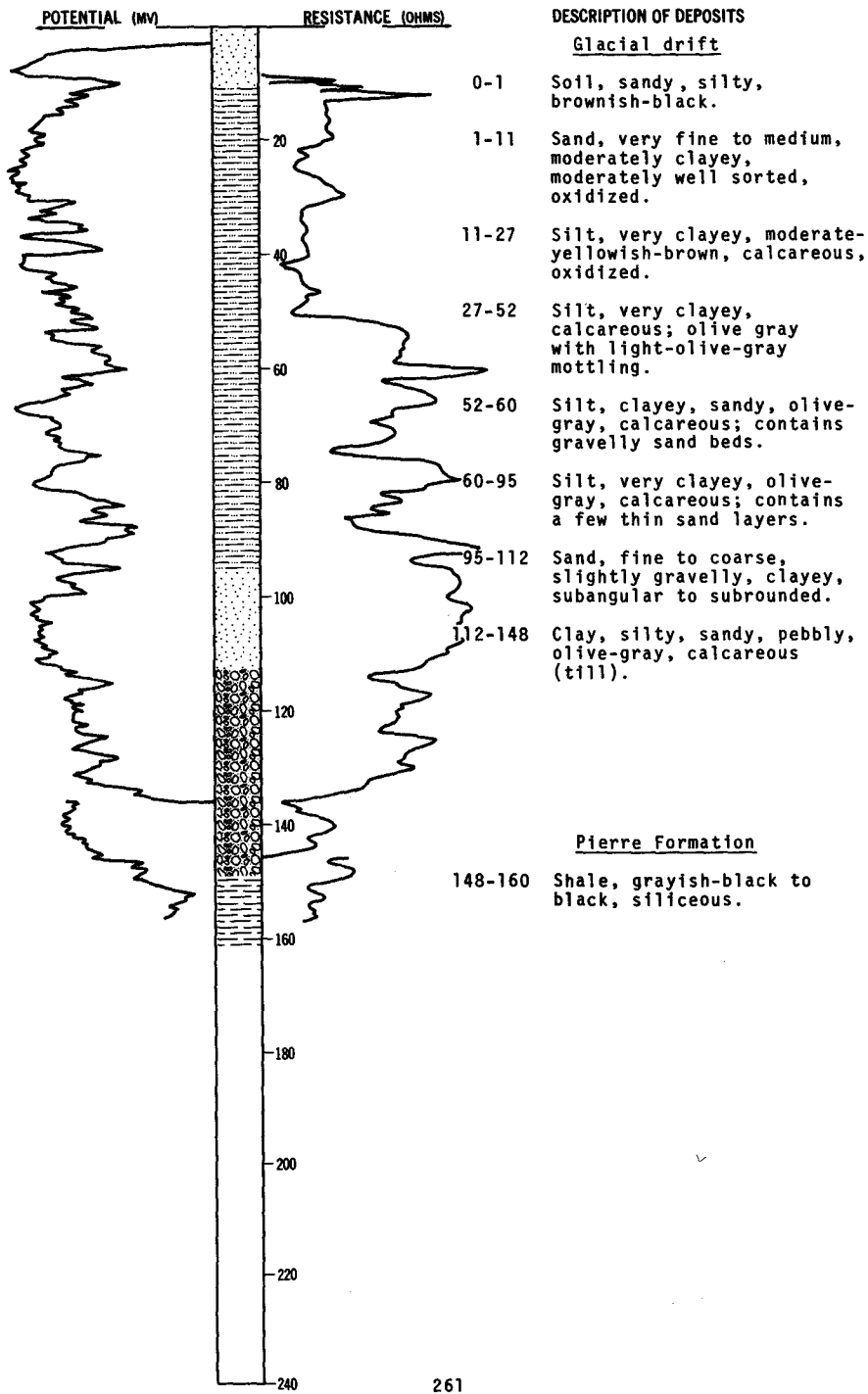


LOCATION: 133-077-31DCD

DATE DRILLED: September 1971

ALTITUDE: 1720  
(FT, MSL)

DEPTH: 160  
(FT)



133-078-04ACD1  
(Log from Witikko Drilling)

Altitude:

Date drilled: October 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Clay, sandy, brown-----	15	16
	Clay, gray-----	21	37
	Clay, silty, gray-----	5	42
	Sand, silty, blue-----	5	47

133-078-04ACD2  
(Log from Witikko Drilling)

Altitude:

Date drilled: October 1973

	Topsoil, black-----	1	1
	Clay, sandy, brown-----	6	7
	Clay, yellow-----	15	22
	Clay, silty, gray-----	40	62
	Sand, silty, gray-----	5	67

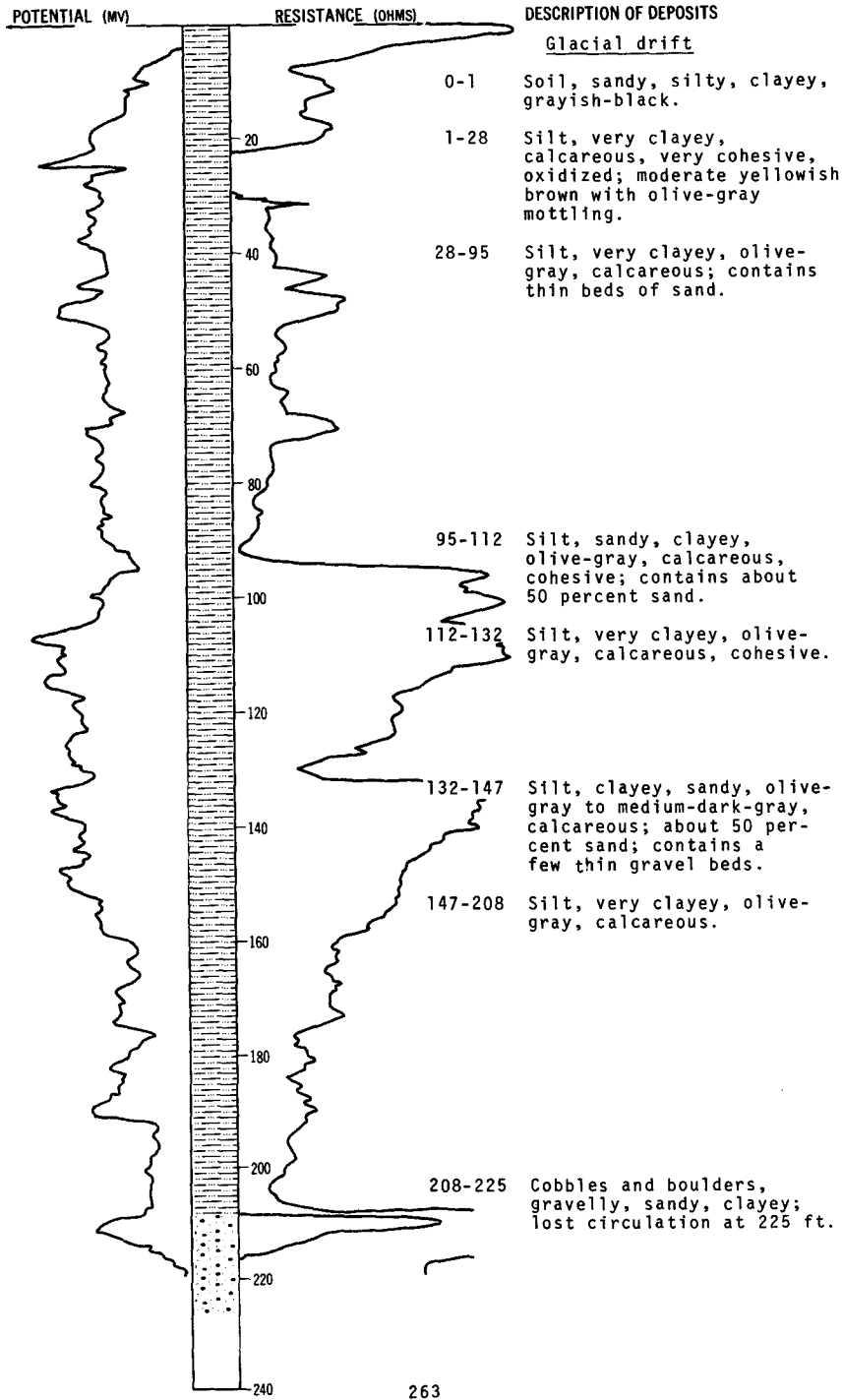


LOCATION: 133-078-04CBC

DATE DRILLED: September 1971

ALTITUDE: 1675  
(FT, MSL)

DEPTH: 225  
(FT)



133-078-05ADD  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1663 ft

Geologic source	Material	Thickness (feet)	Depth (feet)
	Surface-----	3	3
	Clay-----	15	18
	Clay, blue-----	88	106
	Clay, sandy, and gravel-----	11	117
	Clay-----	16	133
	Shale, soft-----	27	160

133-078-05BAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1665 ft

	Clay and sand-----	30	30
	Sandstone, soft; gravel strips-----	120	150

133-078-05BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1643 ft

	Clay-----	70	70
	Sand and gravel-----	34	104
	Sand with streaks of clay-----	46	150

133-078-05BBD  
(Empire Irrigation and Farmers Supply)

Altitude: Date drilled: 1965

	Soil-----	2	2
	Sand-----	23	25
	Clay-----	29	54
	Sand, fine-----	32	86
	Clay-----	6	92
	Sand-----	17	109
	Clay-----	58	167
	Gravel-----	3	170
	Sandstone-----	5	175

133-078-05DAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1670 ft

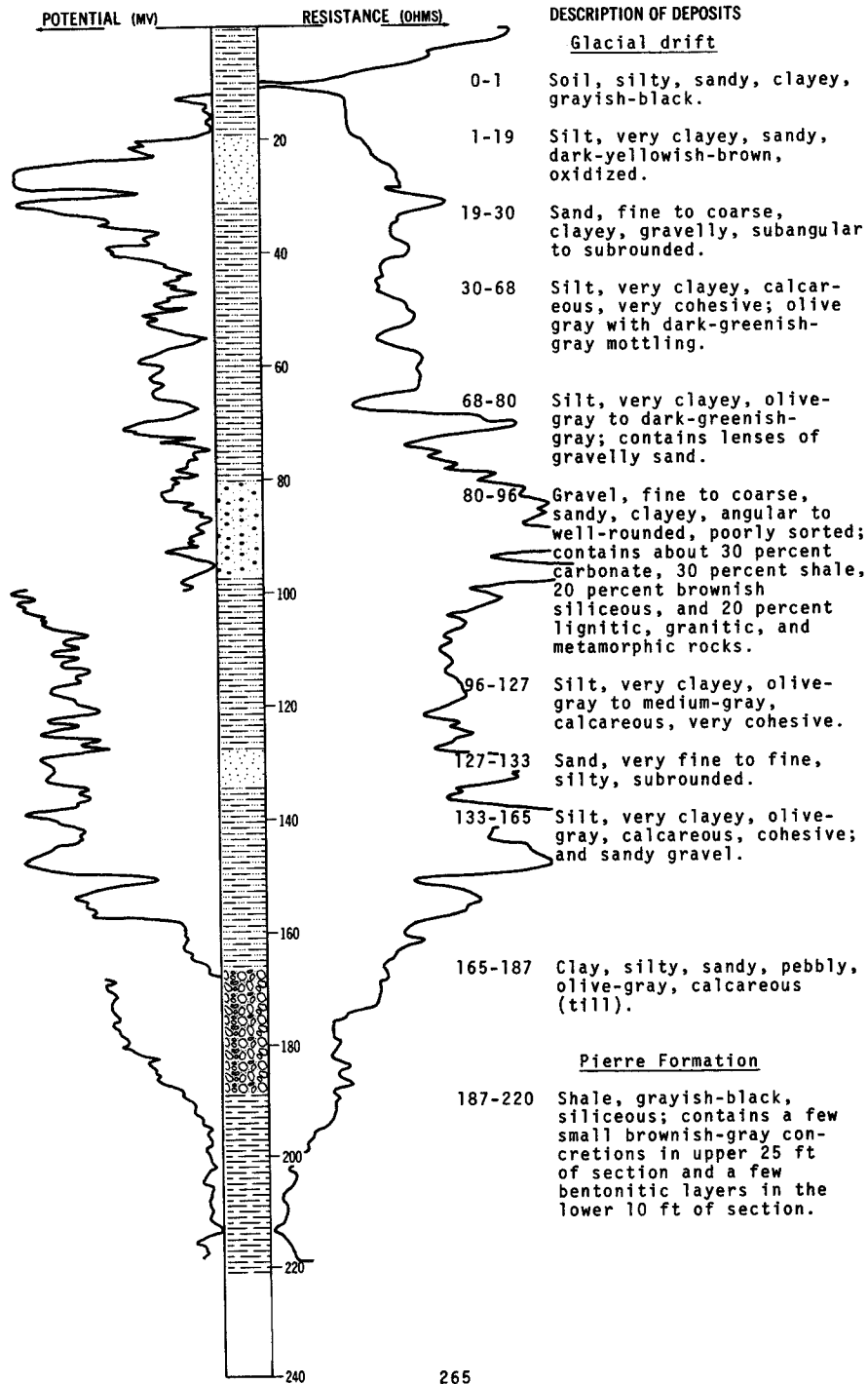
	Clay-----	103	103
	Sand and gravel-----	47	150

LOCATION: 133-078-06AAA

DATE DRILLED: September 1971

ALTITUDE: 1645  
(FT, MSL)

DEPTH: 220  
(FT)



133-078-06AAD  
(Log from Empire Irrigation and Farmers Supply)

Altitude: \_\_\_\_\_ Date drilled: October 1965

<u>Geologic Source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Soil-----	2	2
	Till, yellow-----	36	38
	Clay, gray-----	71	109
	Sand and gravel; with clay layers-----	14	123
	Clay-----	2	125
	Sand-----	5	130
	Clay, hard-----	68	198
	Clay; with boulders-----	11	209
	Shale; bedrock-----	1	210

133-078-06ADA  
(Log from Empire Irrigation and Farmers Supply)

Altitude: \_\_\_\_\_ Date drilled: October 1965

	Soil-----	2	2
	Till, yellow-----	22	24
	Clay, gray, soft-----	89	113
	Sand and gravel; with clay-----	27	140
	Sand-----	14	154
	Clay, hard-----	48	202
	Gravel; with lignite-----	21	223

133-078-06BBA  
(Log from Schnell, Inc.)

Altitude: \_\_\_\_\_ Date drilled: 1964

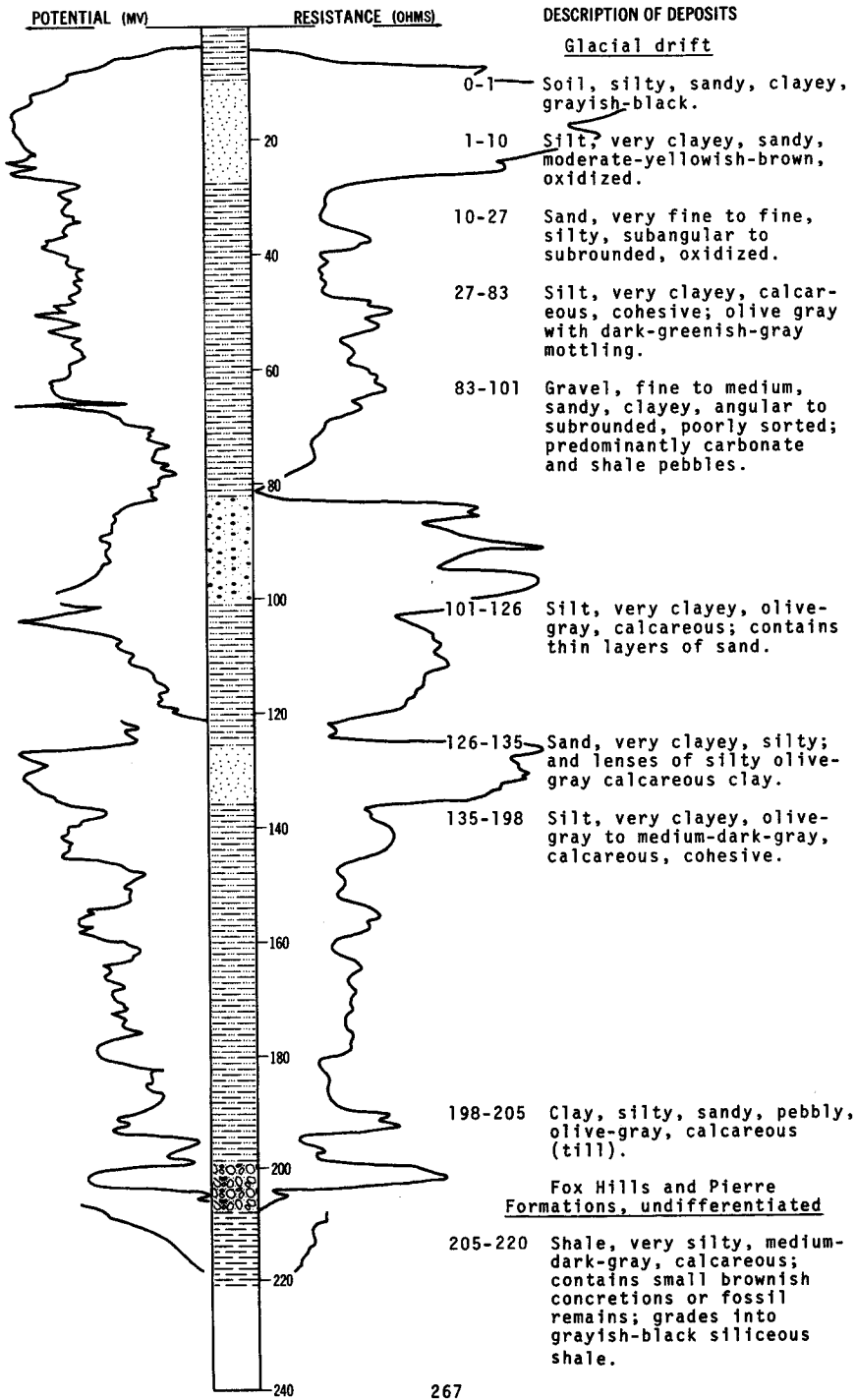
	Clay, sandy-----	6	6
	Sand and gravel-----	29	35
	Till, oxidized-----	6	41
	Clay, gray-----	69	110
	Sand; with clay layers-----	8	118
	Clay, gray-----	83	201
	Gravel, coarse; with lignite-----	24	225

LOCATION: 133-078-06DAA

DATE DRILLED: September 1971

ALTITUDE: 1660  
(FT, MSL)

DEPTH: 220  
(FT)



133-078-08AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1673 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Surface-----	3	3
	Clay-----	108	111
	Sand and gravel-----	7	118
	Clay-----	9	127
	Rock-----	-	127

133-078-09BCC  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1718 ft

	Clay-----	55	55
	Sandstone-----	32	87
	Shale, blue-----	63	150

133-078-09CCC  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1805 ft

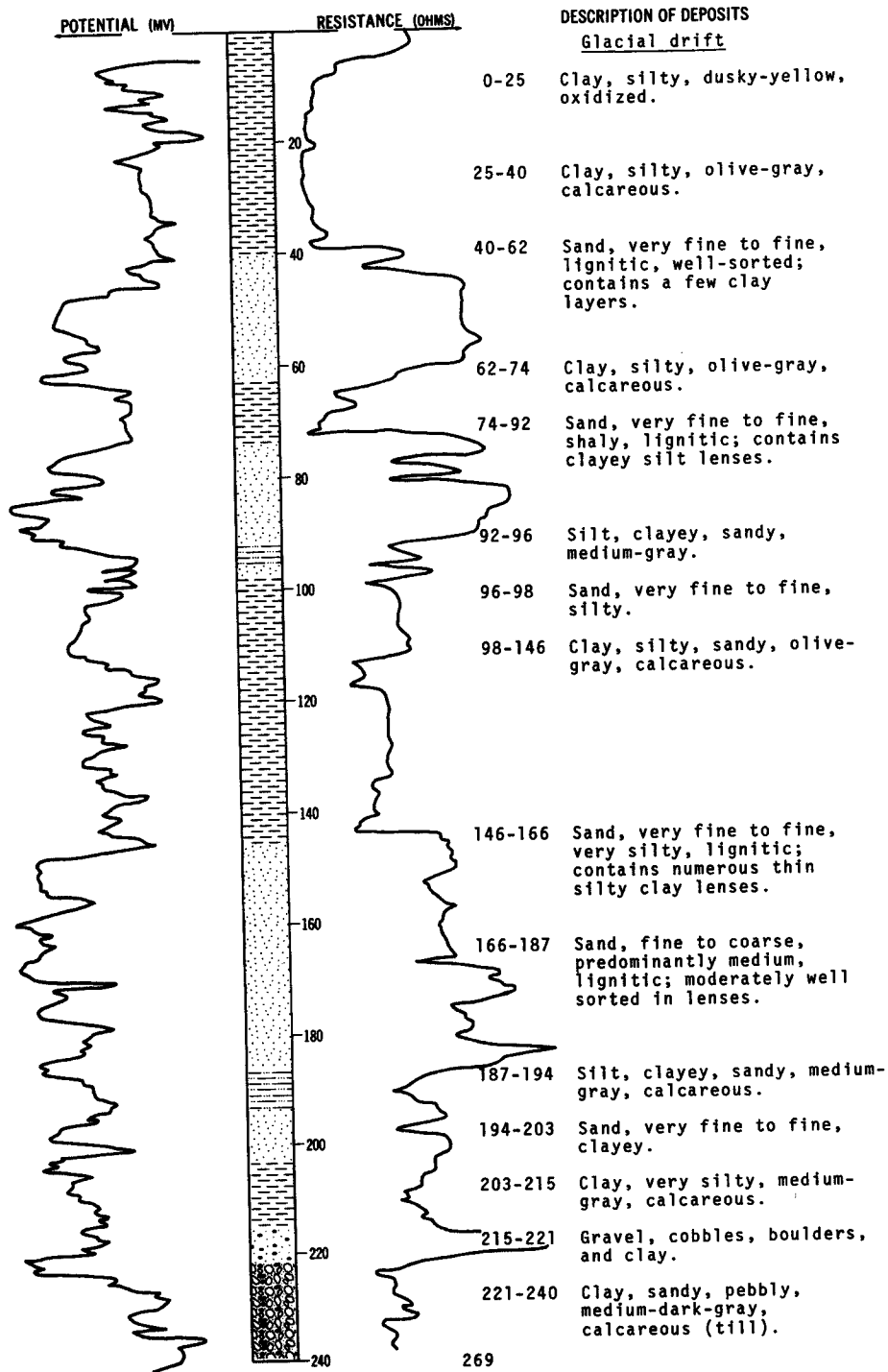
	Clay-----	6	6
	Shale, blue-----	7	13
	Sandstone-----	128	141
	Shale, blue-----	9	150

LOCATION: 133-078-14BCC

DATE DRILLED: October 1973

ALTITUDE: 1693  
(FT, MSL)

DEPTH: 280  
(FT)



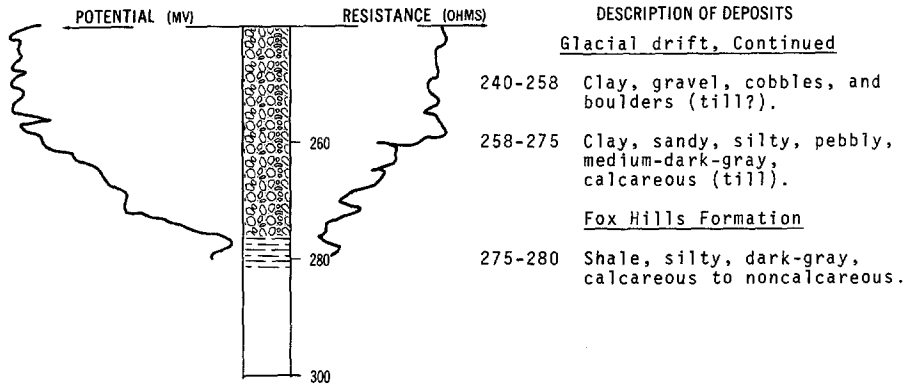
NDSWC 8922, Continued

LOCATION: 133-078-14BCC

DATE DRILLED: October 1973

ALTITUDE: 1693  
(FT, MSL)

DEPTH: 280  
(FT)



133-078-16 CBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1783 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Surface-----	3	3
	Clay-----	5	8
	Rock-----	2	10
	Sandstone and hard rock layers-----	102	112
	Shale, sandy-----	21	133
	Shale-----	17	150

133-078-16 CCC  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1830 ft

	Clay and sand-----	25	25
	Shale and sandstone-----	25	50
	Sandstone-----	50	100



133-078-21BCC  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1821 ft

Geologic source	Material	Thickness (feet)	Depth (feet)
	Clay and sand-----	18	18
	Shale-----	32	50
	Sandstone; hard sandstone strips-----	100	150

133-078-28BBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1824 ft

	Clay-----	14	14
	Shale, blue-----	31	45
	Sandstone; very hard ledges-----	105	150

133-078-29DAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1816 ft

	Surface-----	3	3
	Clay-----	15	18
	Sandstone-----	53	71
	Shale, sandy-----	12	83
	Rock, hard-----	4	87
	Shale and sandstone layers-----	73	160

133-078-32AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1852 ft

	Clay and sand-----	18	18
	Shale-----	72	90
	Shale and sandstone; hard sandstone strips-----	60	150

133-078-32DAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1872 ft

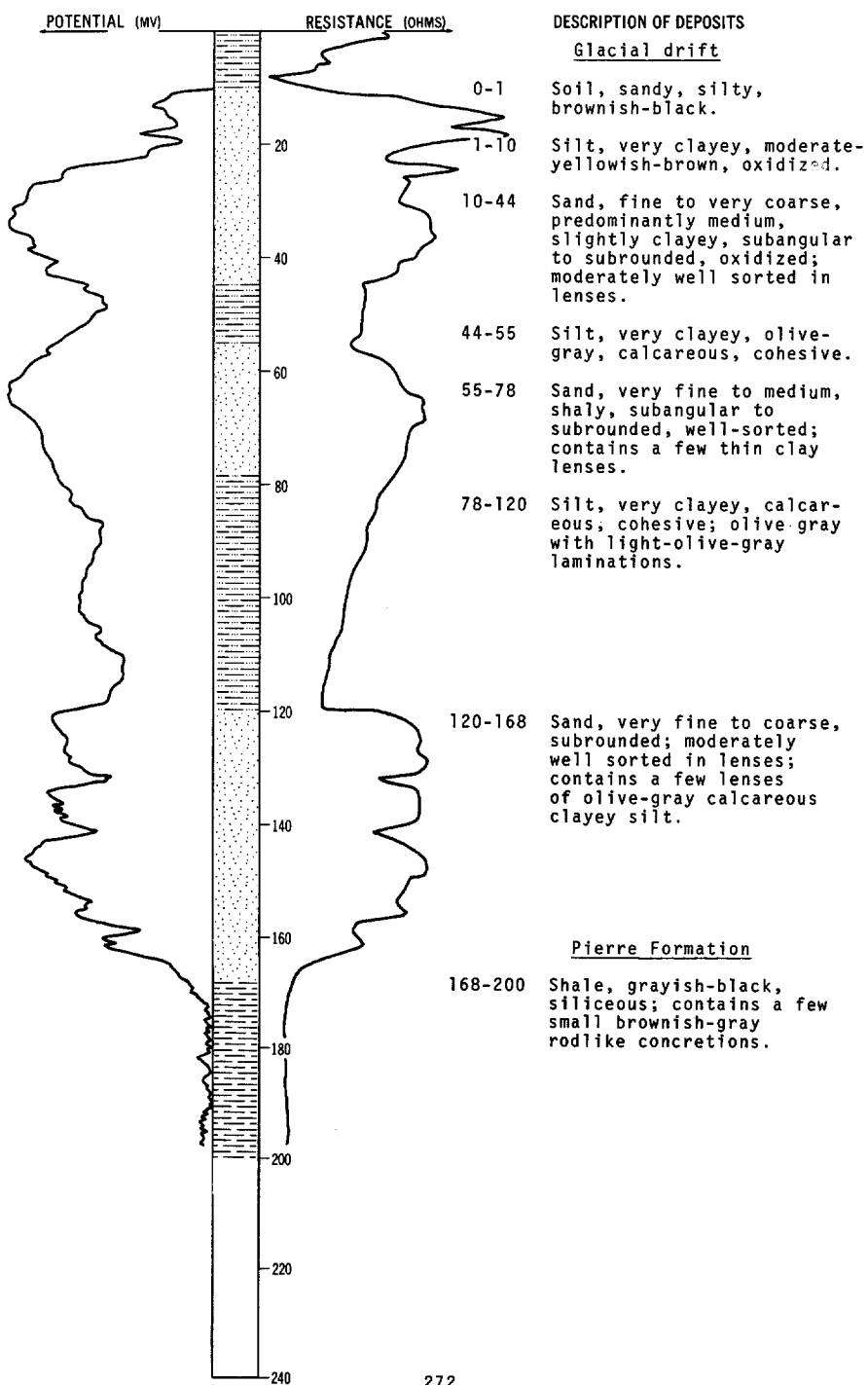
	Clay-----	26	26
	Shale, blue-----	66	92
	Sandstone-----	58	150

LOCATION: 133-078-36DCC

DATE DRILLED: September 1971

ALTITUDE: 1703  
(FT, MSL)

DEPTH: 200  
(FT)

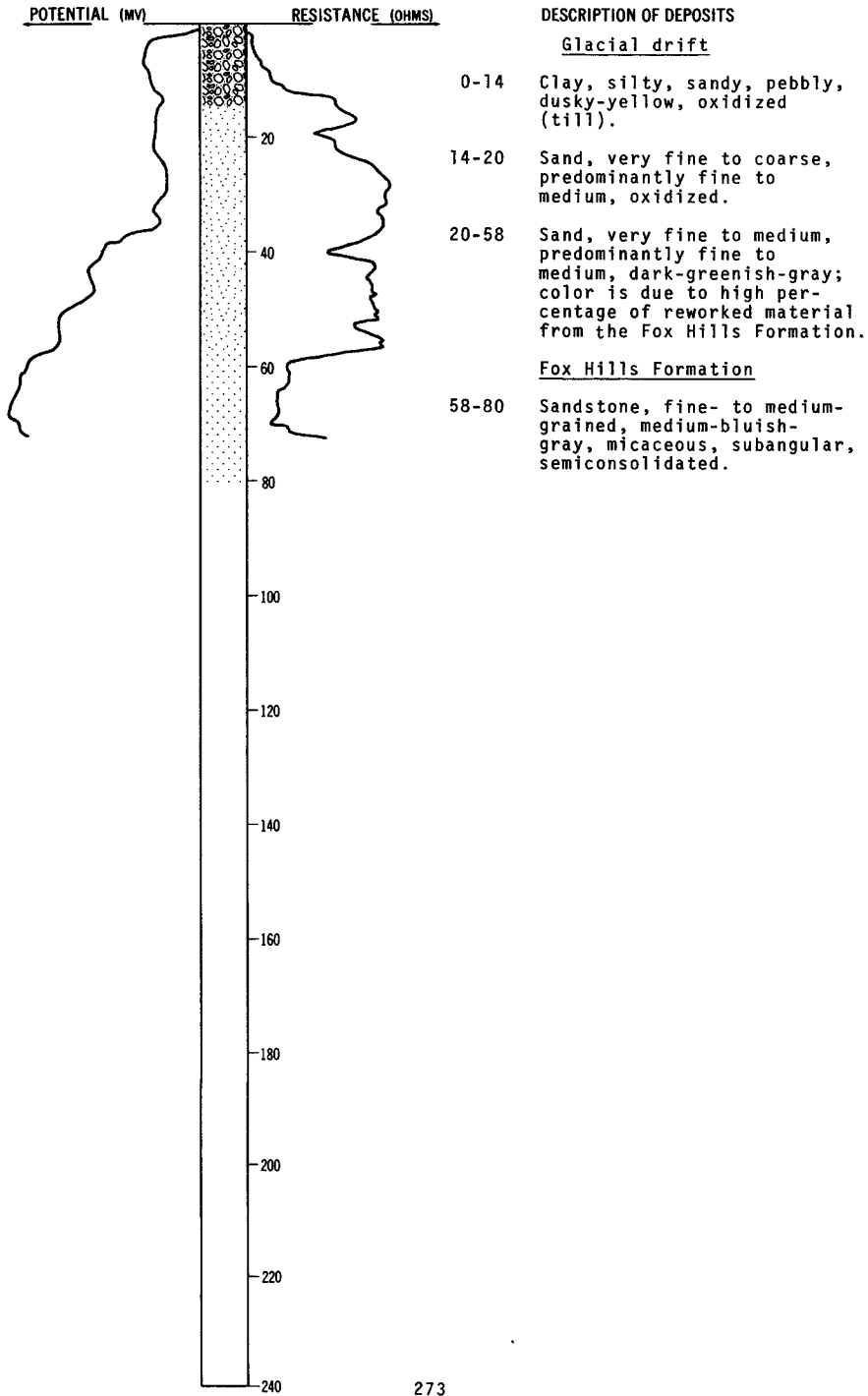


LOCATION: 134-074-10CCC

DATE DRILLED: May 1973

ALTITUDE: 1955  
(FT, MSL)

DEPTH: 80  
(FT)



134-074-15CBB  
NDSWC 8550

Altitude:	1975 ft	Date drilled:	October 1972
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Sand, silty, clayey, fine to medium, yellowish-brown, oxidized-----	3	3
Fox Hills Formation:			
	Sandstone, very fine to fine, yellowish-brown to dark-yellowish-brown, glauconitic, subangular to subrounded, semiconsolidated to loose, oxidized-----	47	50
	Sandstone, very fine to fine, medium-bluish-gray to dark-greenish-gray, glauconitic, micaceous, subangular to subrounded, semiconsolidated to loose; contains some interstitial silt and clay in lower part of interval-----	88	138
	Siltstone, clayey, sandy, medium-gray to medium-light-gray-----	22	160

134-074-18DCD  
(Log from Witikko Drilling)

Altitude:		Date drilled:	June 1972
	Soil, black-----	1	1
	Sand, brown-----	11	12
	Sand, brown, and clay-----	18	30
	Sand, brown-----	50	80
	Clay, blue-----	8	88
	Clay, blue, and sand-----	8	96
	Sand, blue-----	15	111

134-075-09DAD  
(Log from Witikko Drilling)

Altitude:		Date drilled:	September 1973
	Topsoil, black-----	1	1
	Sand, brown-----	19	20
	Clay, brown-----	22	42
	Clay and sand, blue-----	78	120

134-075-12CDD2  
(Log from Witikko Drilling)

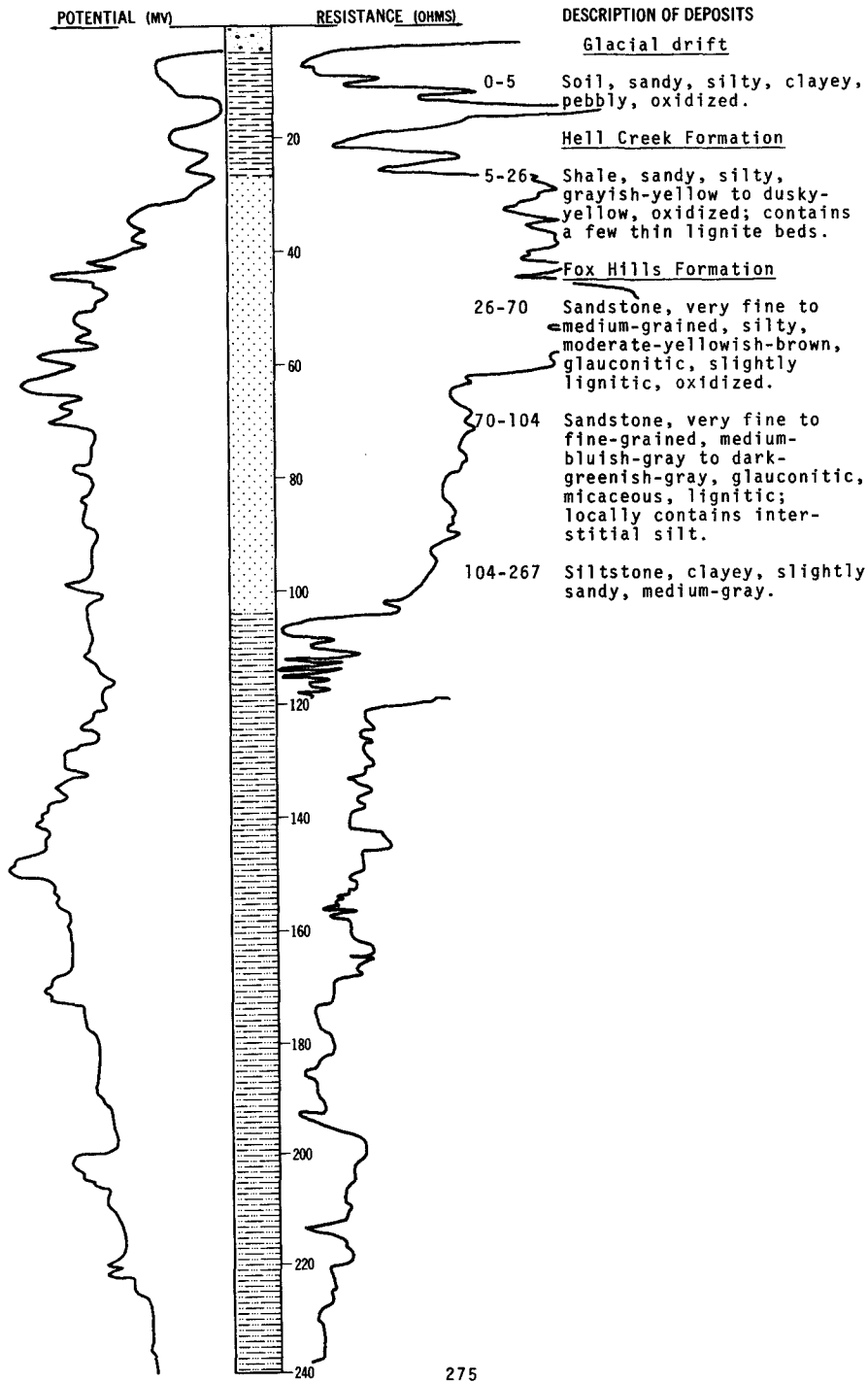
Altitude:		Date drilled:	July 1973
	Topsoil, black-----	1	1
	Sand, brown-----	38	39
	Sand rock, brown-----	3	42
	Sand, brown-----	26	68
	Sand, brown, and clay-----	26	84
	Sand, blue-----	18	102

LOCATION: 134-075-15BBB

DATE DRILLED: October 1972

ALTITUDE: 2010  
(FT, MSL)

DEPTH: 280  
(FT)



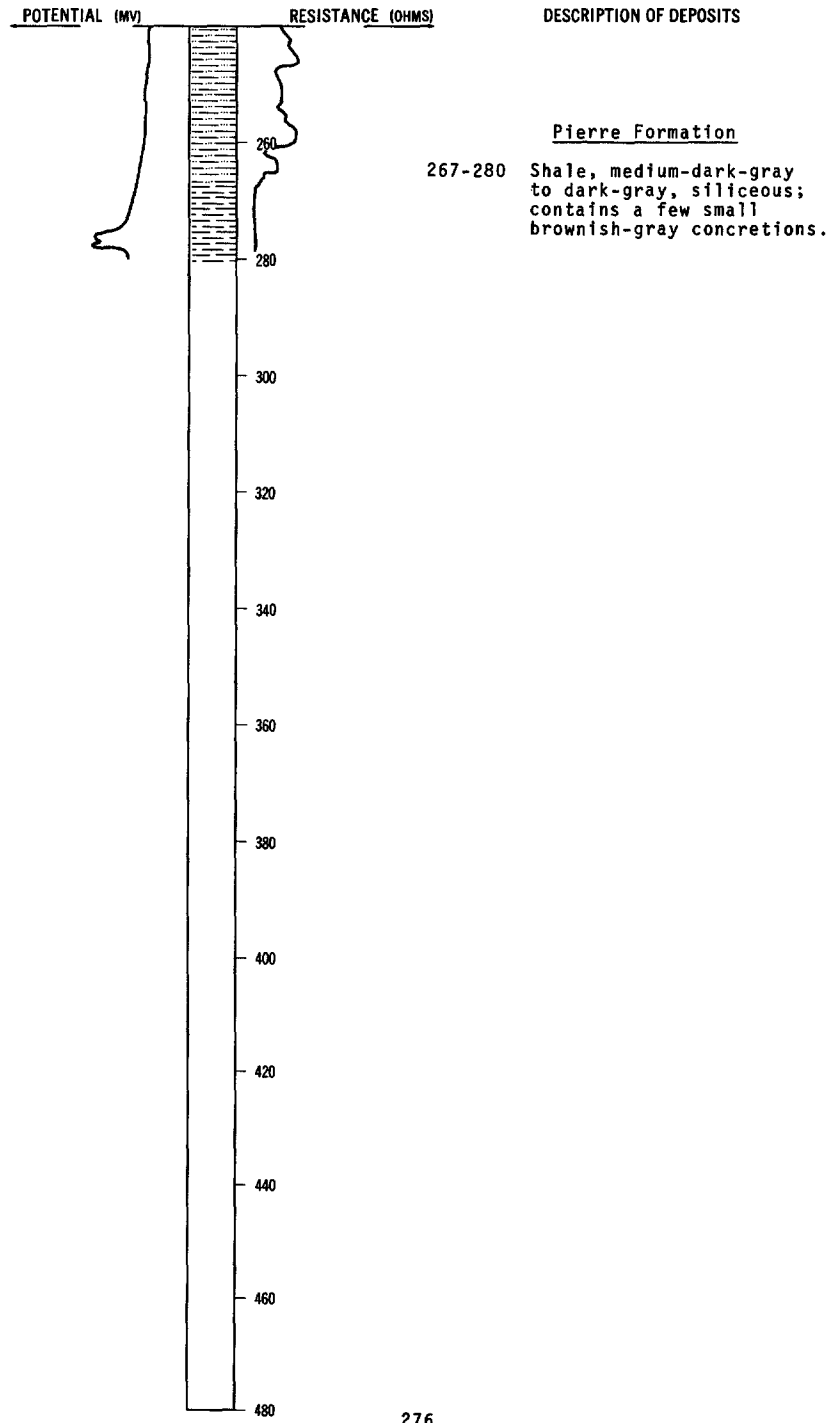
NDSWC 8551, Continued

LOCATION: 134-075-15BBB

DATE DRILLED: October 1972

ALTITUDE: 2010  
(FT, MSL)

DEPTH: 280  
(FT)



134-076-04ABC  
(Log from Witikko Drilling)

Altitude: Date drilled: September 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Sand, brown-----	4	5
	Clay, gray-----	6	11
	Clay and sand, gray-----	8	19
	Clay, brown-----	11	30
	Coal-----	1	31
	Clay, blue-----	27	58
	Clay, gray-----	29	87
	Rock-----	1	88
	Clay, gray-----	8	96
	Sand, blue-----	22	118
	Clay, gray-----	22	140

134-076-07CCC  
NDSWC 8682

Altitude: 1996 ft Date drilled: May 1973

Glacial drift:			
	Silt, very sandy, clayey, moderate yellowish-brown, oxidized-----	5	5
Fox Hills Formation:			
	Sandstone, very fine to medium-grained, micaceous, subangular, semiconsolidated, fractured; lost circulation at 40 ft-----	75	80

134-076-08BBD  
(Log from Witikko Drilling)

Altitude: Date drilled: October 1972

	Soil, black-----	1	1
	Sand, brown-----	10	11
	Clay, brown-----	16	27
	Clay, silty, dark-----	8	35
	Clay, brown-----	11	46
	Clay, gray-----	16	62
	Clay, blue, and sand-----	8	70
	Clay, gray-----	90	160
	Clay, blue, and sand-----	7	167
	Clay, gray-----	83	250
	Sand, blue, and rocks-----	100	350

134-076-10ADD3  
(Log from Witikko Drilling)

Altitude:

Date drilled: September 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Clay and sand, blue-----	5	6
	Sand, brown-----	6	12
	Clay and sand, brown-----	18	30
	Clay and sand, blue-----	70	100

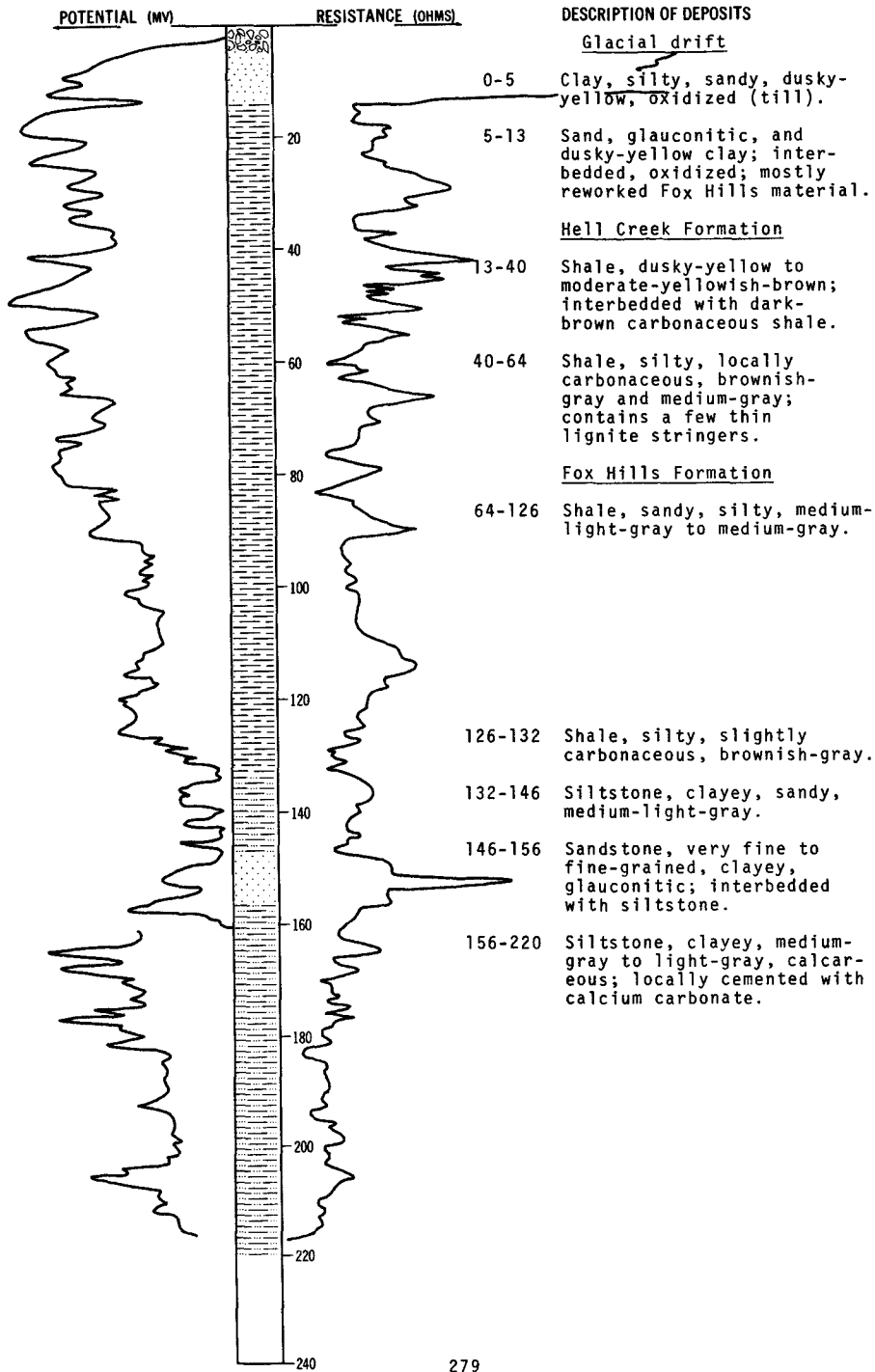


LOCATION: 134-076-08DDD

DATE DRILLED: October 1972

ALTITUDE: 2045  
(FT, MSL)

DEPTH: 220  
(FT)

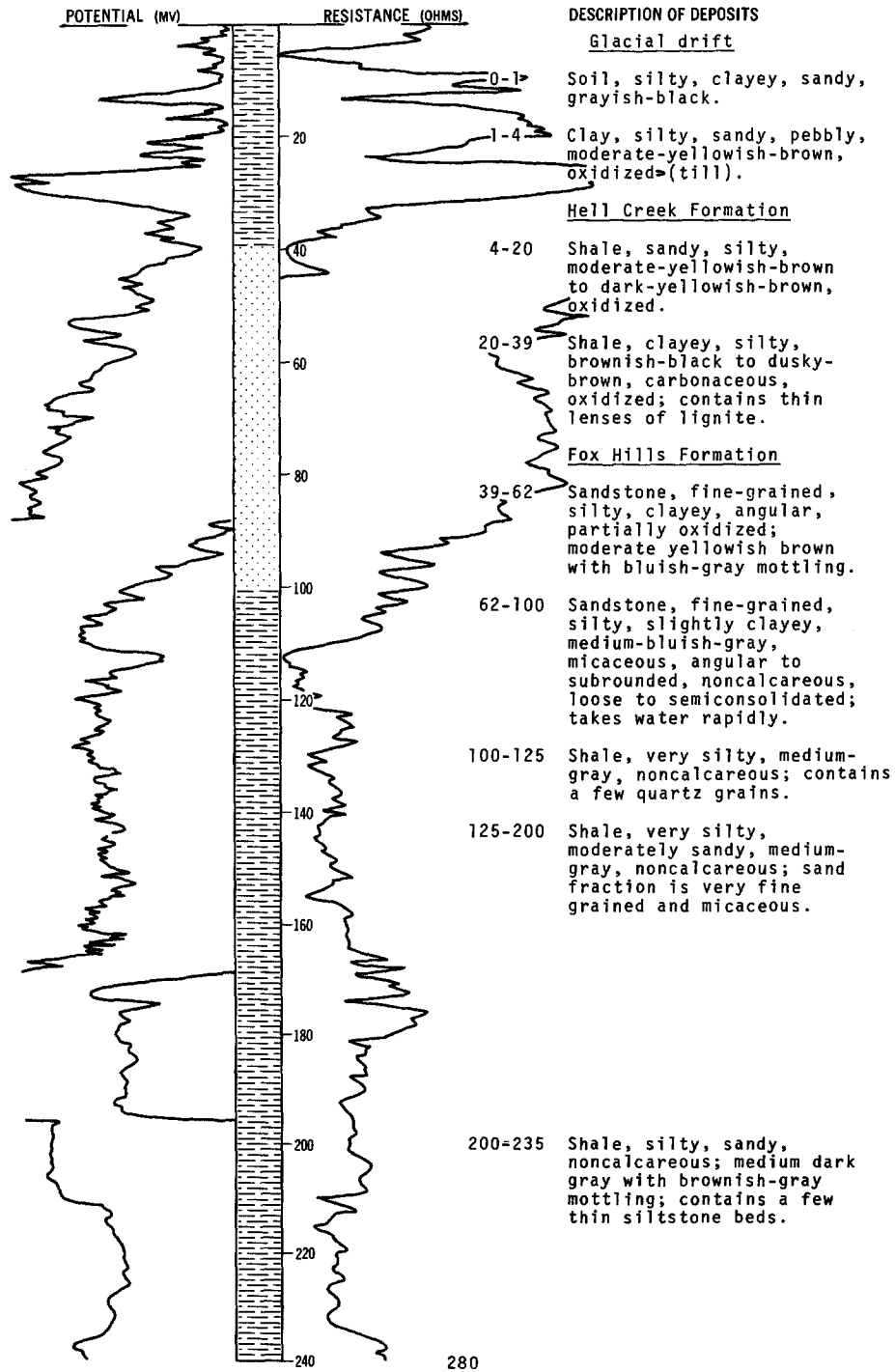


LOCATION: 134-076-12DD01

DATE DRILLED: September 1971

ALTITUDE: 1995  
(FT. MSL)

DEPTH: 320  
(FT)



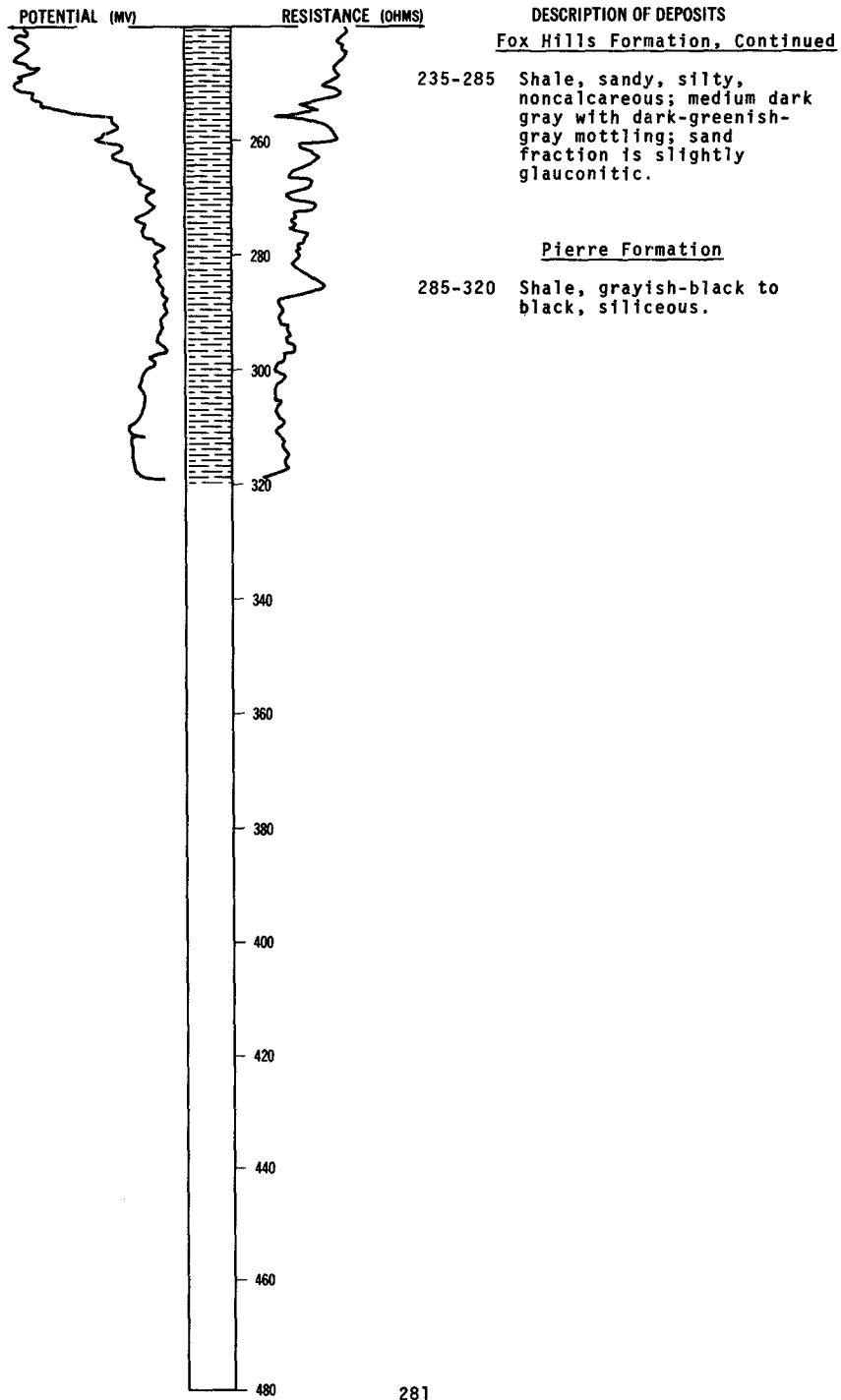
LOCATION: 134-076-12DDD1

NDSWC 8126, Continued

DATE DRILLED: September 1971

ALTITUDE: 1995  
(FT, MSL)

DEPTH: 320  
(FT)



134-076-28ABB1  
(Log from Witikko Drilling)

Altitude: Date drilled: September 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Sand, brown-----	6	7
	Sand and clay, brown-----	13	20
	Clay, brown-----	9	29
	Clay, gray-----	51	80

134-076-28ABB2  
(Log from Witikko Drilling)

Altitude: Date drilled: September 1973

	Topsoil, black-----	1	1
	Sand, brown-----	5	6
	Sand and clay, brown-----	12	18
	Gravel and clay-----	10	28
	Clay, gray-----	14	42
	Clay and sand, gray-----	38	80

134-076-30ADC2  
(Log from Witikko Drilling)

Altitude: Date drilled: November 1972

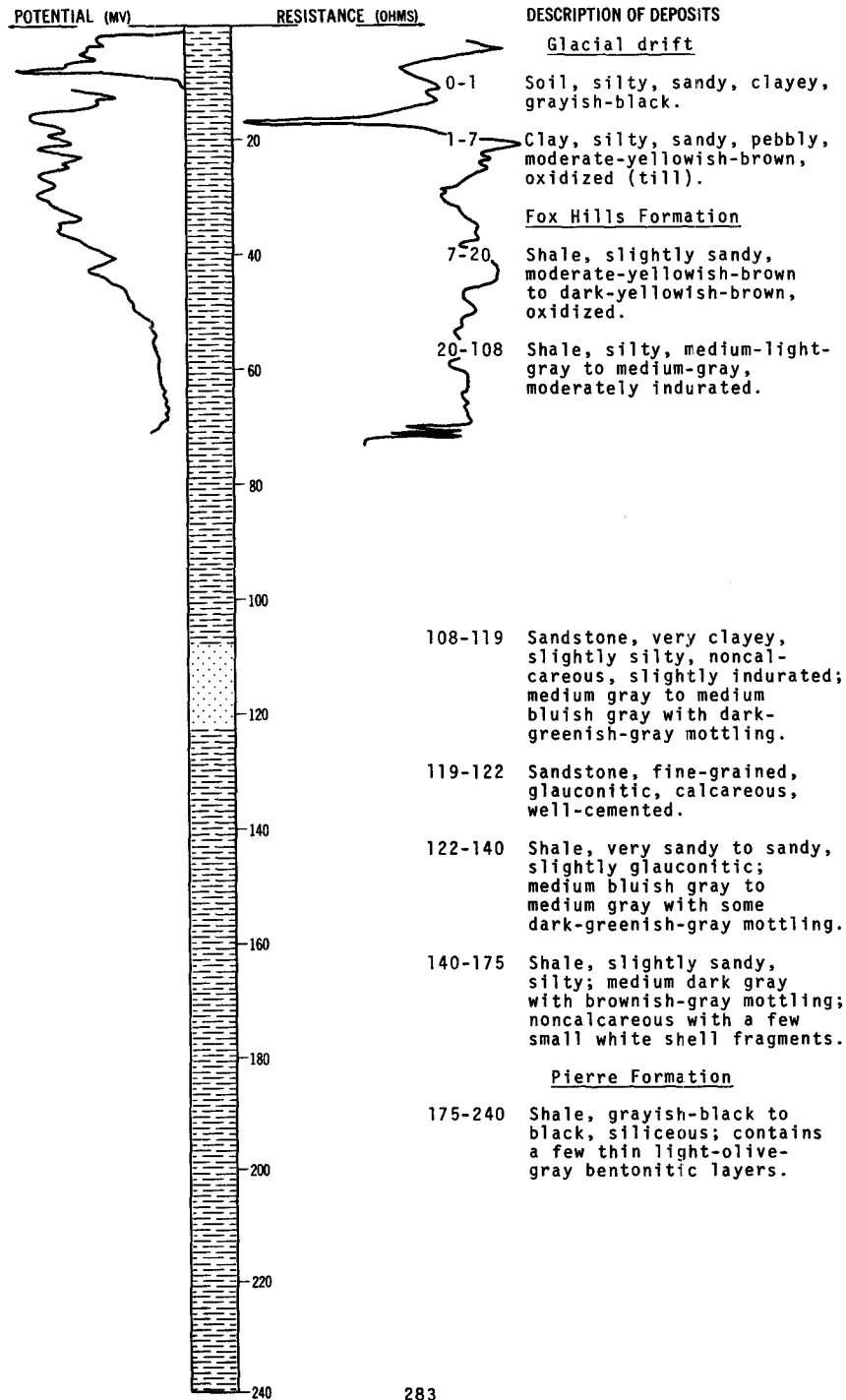
	Soil-----	1	1
	Clay, light-brown-----	2	3
	Sand, brown-----	4	7
	Clay, brown, and sand-----	35	42
	Clay, gray-----	22	64
	Sand, gray, and rock-----	14	78
	Clay, gray-----	106	184
	Clay, blue, and sand-----	36	220

LOCATION: 134-076-32DDD

DATE DRILLED: September 1971

ALTITUDE: 1955  
(FT, MSL)

DEPTH: 240  
(FT)



134-076-35DDD  
NDSWC 8584

Altitude: 2013 ft

Date drilled: November 1972

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, carbonaceous, grayish-black----	1	1
	Clay, pebbly, silty, moderate-yellowish-brown, oxidized, leached; contains sand grains and cobbles (till?)-----	2	3
Fox Hills Formation:			
	Sandstone, clayey, fine to medium, moderate-yellowish-brown to reddish-orange, micaceous, oxidized, semiconsolidated to indurated; increasing quantity of limonite stain from 75 to 86 ft-----	83	86
	Sandstone, silty, very fine to fine, medium-bluish-gray, micaceous, semiconsolidated--	40	126
	Siltstone, clayey and slightly sandy, medium-gray; semiconsolidated; contains a few thin indurated beds-----	27	153
	Ash (volcanic), light-gray (dries grayish-white), siliceous; no crystalline structure visible with 14-power magnification--	22	175
	Siltstone, clayey, medium-gray, semi-indurated-----	75	250
Pierre Formation:			
	Shale, grayish-black, siliceous-----	10	260

134-077-13DDD  
NDSWC 8683

Altitude: 2025 ft

Date drilled: May 1973

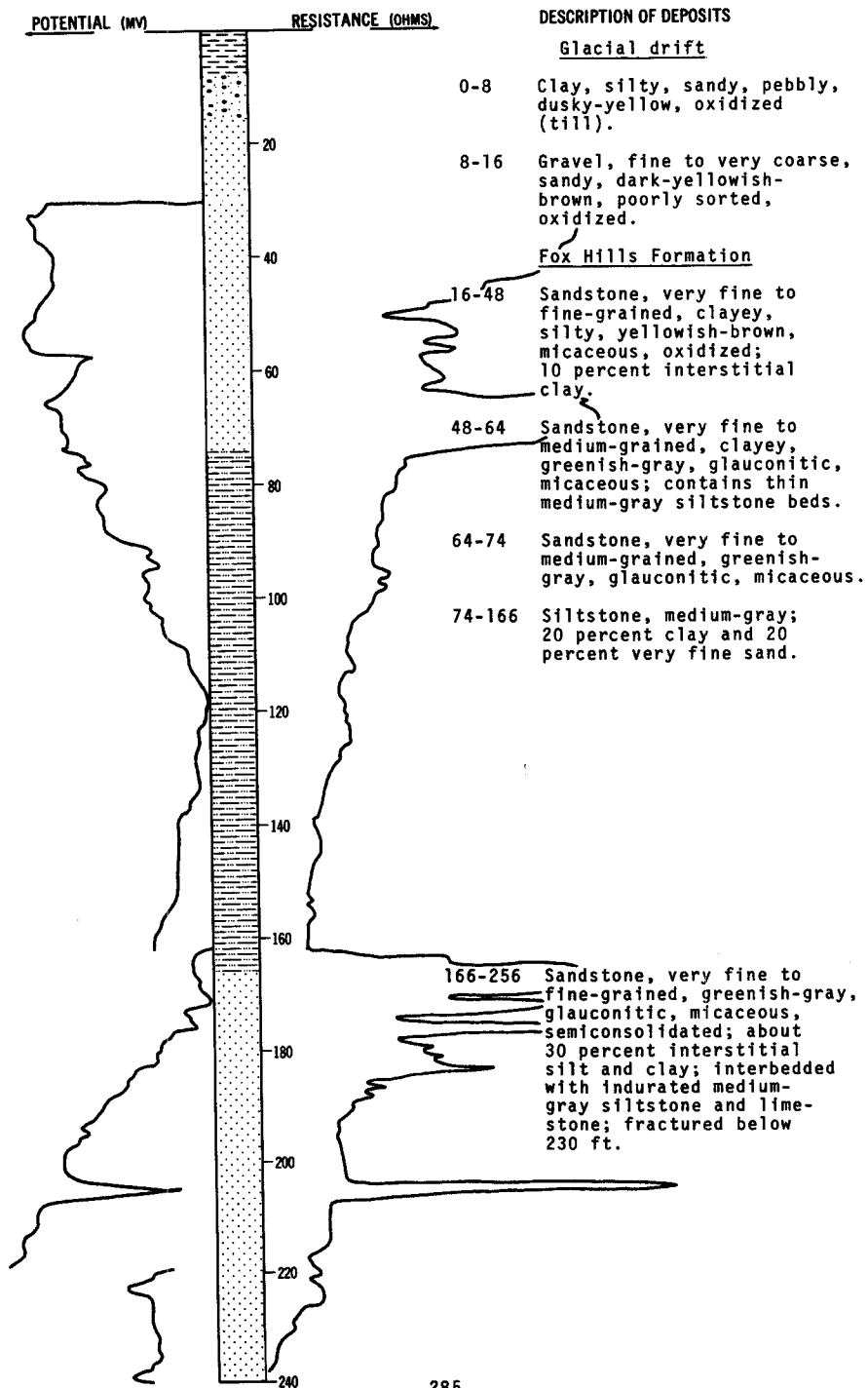
Glacial drift:			
	Clay, sandy, silty, pebbly, dusky-yellow to moderate-yellowish-brown, oxidized (till)-	27	27
Fox Hills Formation:			
	Sandstone, very fine to fine, dark-yellowish-brown, oxidized, fractures; poor samples due to partial return of drilling fluid; lost circulation near 40 ft-----	13	40

LOCATION: 134-077-14DDD

DATE DRILLED: May 1973

ALTITUDE: 1975  
(FT, MSL)

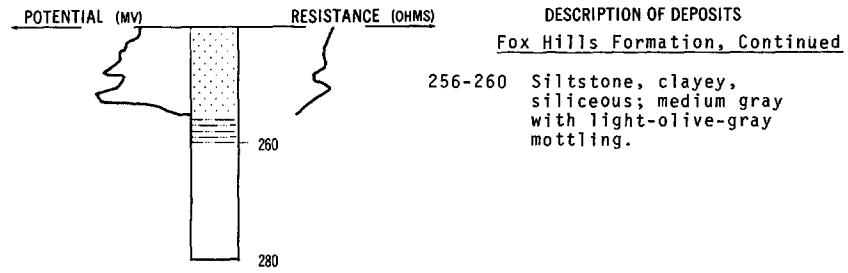
DEPTH: 260  
(FT)



NDSWC 8684, Continued

LOCATION: 134-077-14DDD  
 ALTITUDE: 1975  
 (FT, MSL)

DATE DRILLED: May 1973  
 DEPTH: 260  
 (FT)



134-077-18CCB2  
 (Log from Witikko Drilling)

Altitude:

Date drilled: November 1972

Geologic source	Material	Thickness (feet)	Depth (feet)
	Soil, black-----	1	1
	Clay, brown-----	26	27
	Clay, gray-----	65	92
	Sand, brown-----	64	156
	Sand, blue-----	44	200
	Clay, dark-gray-----	20	220

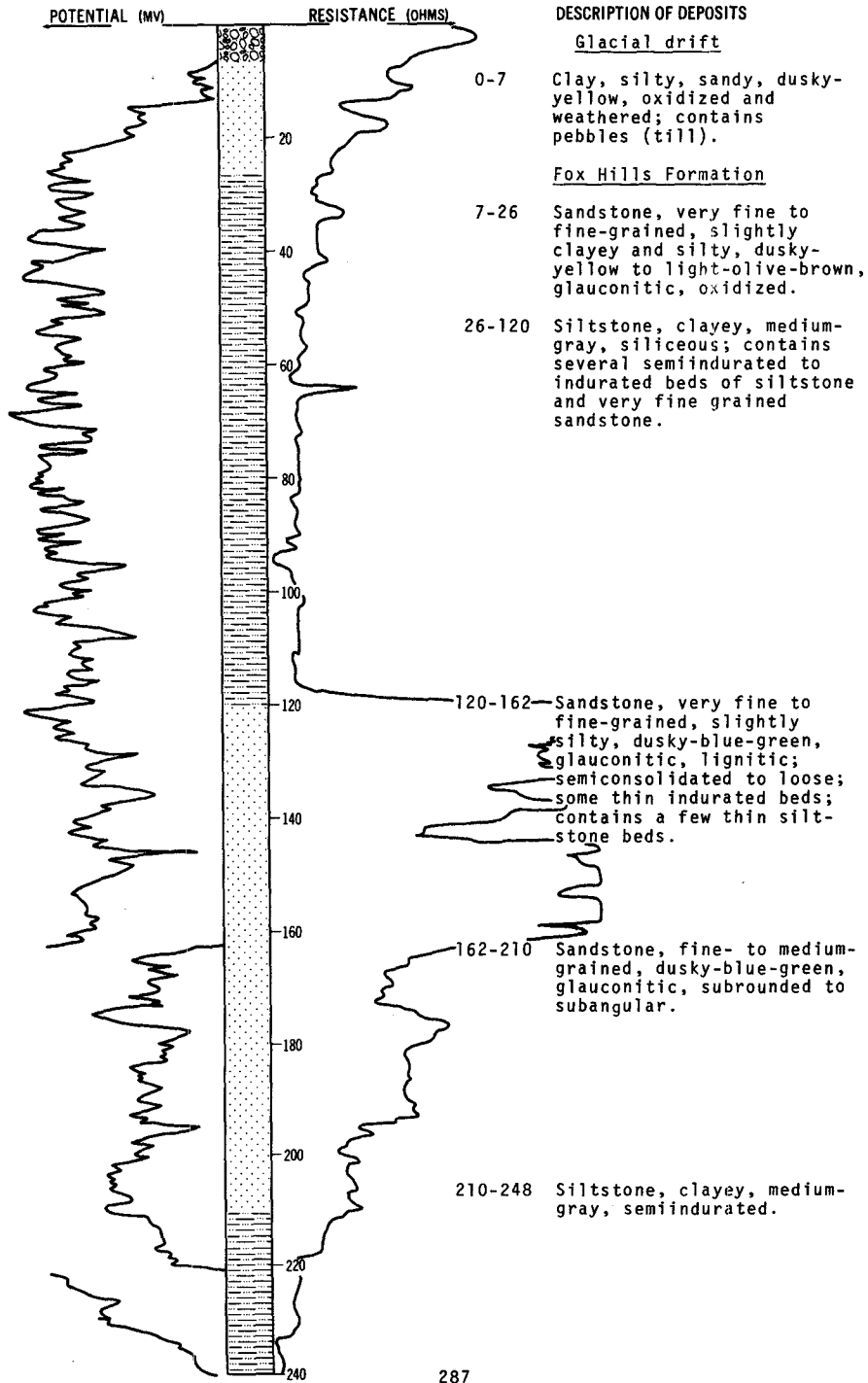


LOCATION: 134-077-228BB

DATE DRILLED: October 1972

ALTITUDE: 1920  
(FT, MSL)

DEPTH: 280  
(FT)



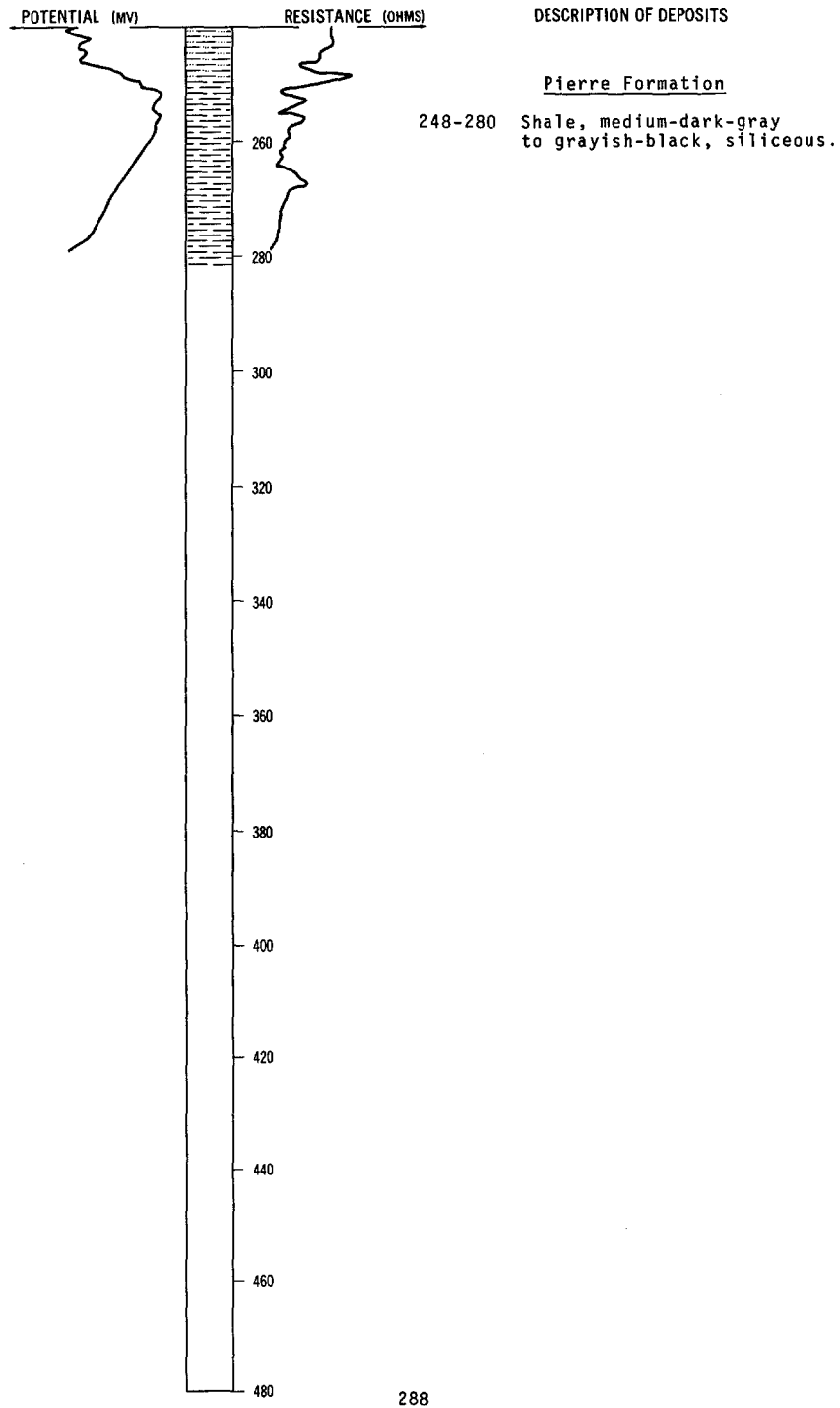
NDSWC 8559, Continued

LOCATION: 134-077-22BBB

DATE DRILLED: October 1972

ALTITUDE: 1920  
(FT, MSL)

DEPTH: 280  
(FT)

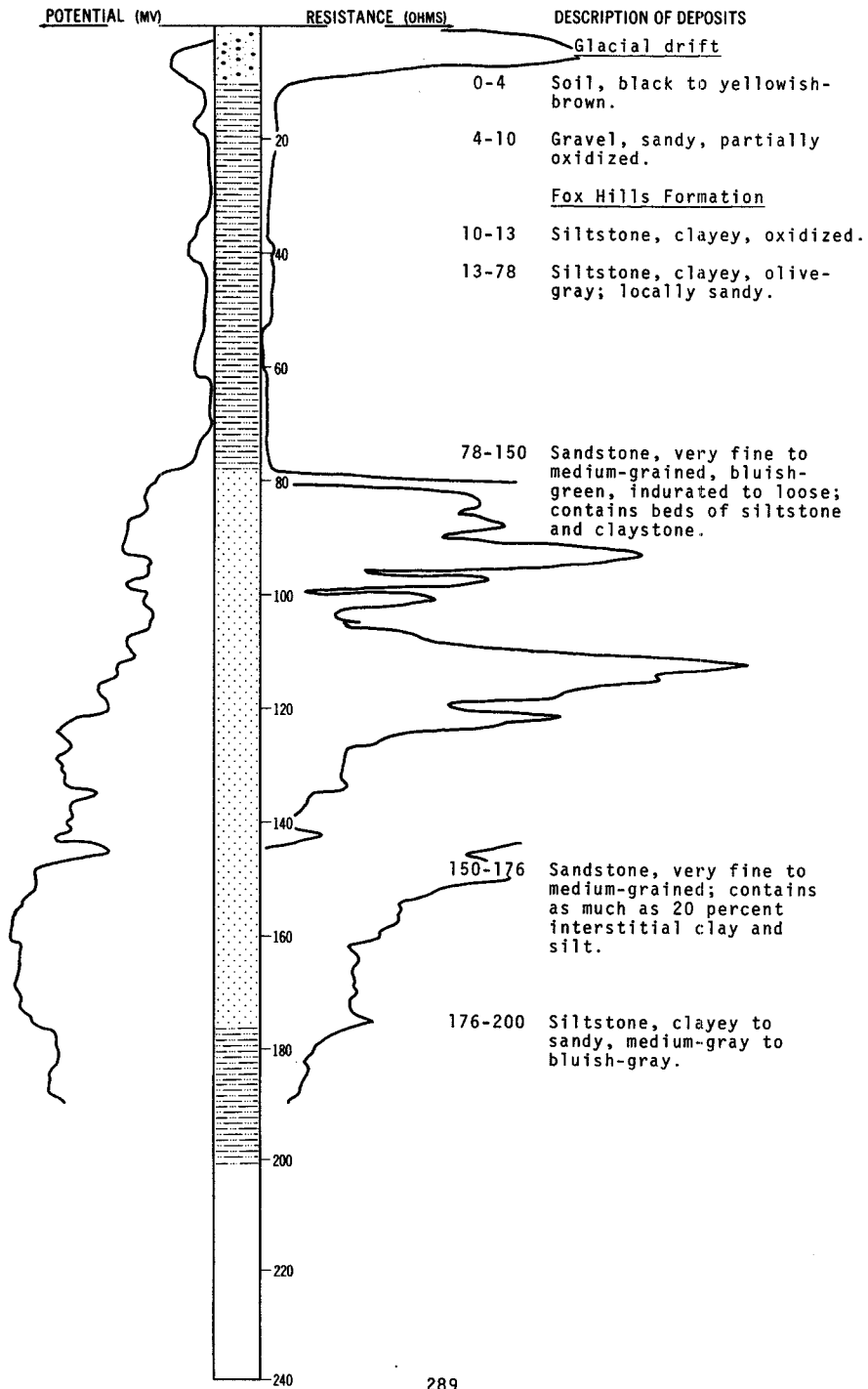


LOCATION: 134-077-22CCB1

DATE DRILLED: June 1973

ALTITUDE: 1905  
(FT, MSL)

DEPTH: 200  
(FT)



134-077-22CCB2  
NDSWC 8686

Altitude: 1915 ft

Date drilled: June 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, silty, black-----	1	1
	Clay, sandy, silty, yellowish-brown, oxidized-----	3	4
	Gravel, fine to coarse; 40 percent sand, some clay, and several rocks-----	17	21
Fox Hills Formation:			
	Shale, sandy, silty, yellowish-brown-----	9	30
	Shale, silty, olive-gray-----	61	91
	Sand, fine to medium, bluish-gray to medium-gray; 10 percent interstitial clay-	9	100

134-078-11CAA  
(Log from Witikko Drilling)

Altitude:

Date drilled: October 1972

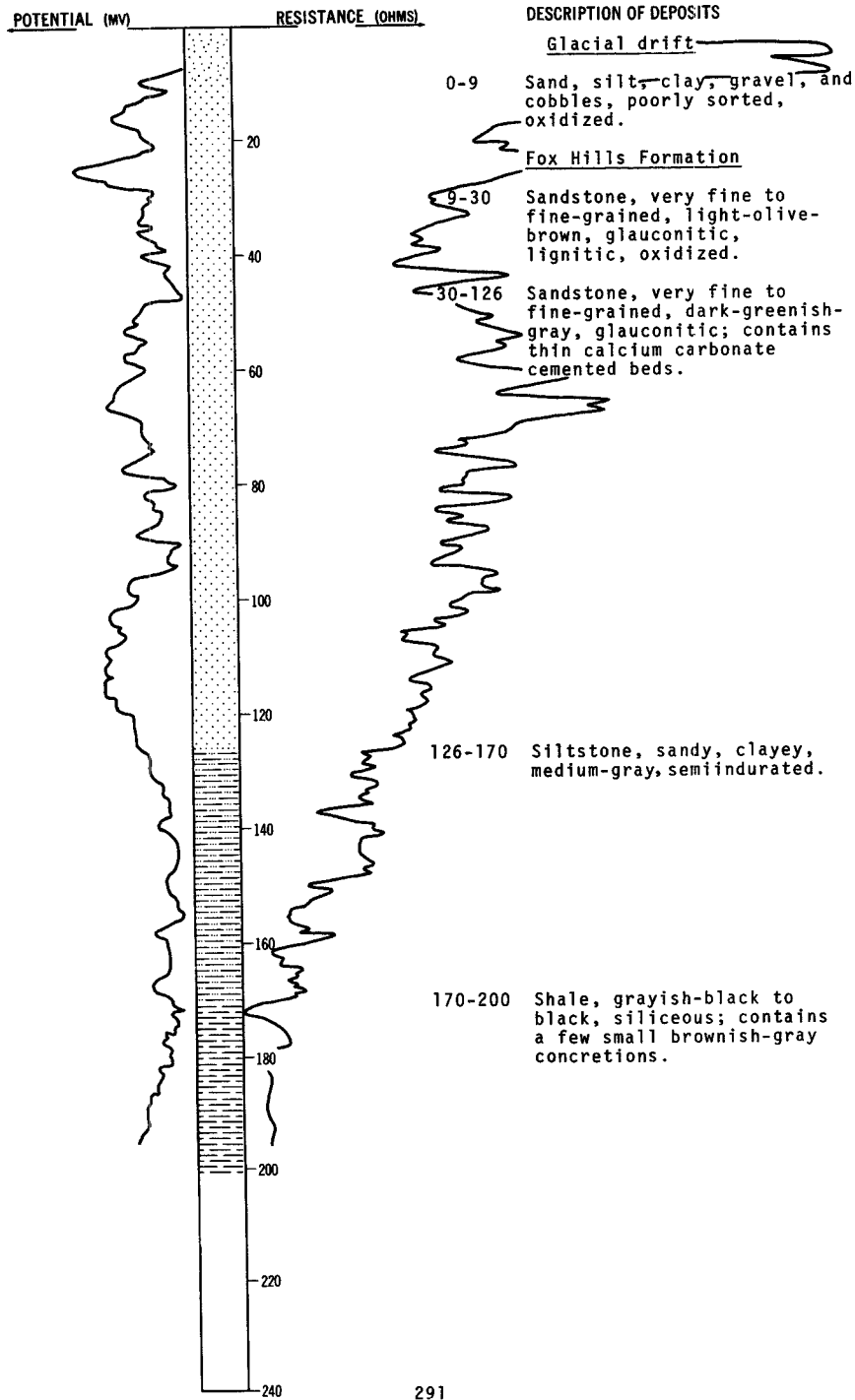
Soil, black-----	1	1
Clay, brown-----	28	29
Clay, gray-----	47	76
Sand, blue-----	104	180

LOCATION: 134-078-15DDD

DATE DRILLED: October 1972

ALTITUDE: 1775  
(FT, MSL)

DEPTH: 200  
(FT)



134-078-19AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1885 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Clay-----	14	14
	Shale, blue-----	22	36
	Sandstone-----	68	104
	Shale, blue-----	46	150

134-078-19BAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1779 ft

	Clay-----	21	21
	Shale, blue-----	22	43
	Sandstone-----	73	116
	Shale, blue-----	34	150

134-078-20BCC  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1912 ft

	Clay-----	16	16
	Shale, blue-----	134	150

134-078-20CCC  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1824 ft

	Clay sand-----	10	10
	Shale-----	70	80
	Sandstone; hard layers-----	80	160

134-078-22BAD  
(Log from Witikko Drilling)

Altitude:

Date drilled: June 1972

	Soil, black-----	1	1
	Clay, brown, and sand-----	5	6
	Sand, brown-----	6	12
	Clay, gray-----	10	22
	Clay, brown, and sand-----	16	38
	Clay, dark-gray-----	34	72
	Clay, blue-----	11	83
	Sand, blue-----	17	100

134-078-29CBB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1765 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Clay-----	12	12
	Shale, blue-----	19	31
	Sandstone-----	81	112
	Shale, blue-----	38	150

134-078-31AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1803 ft

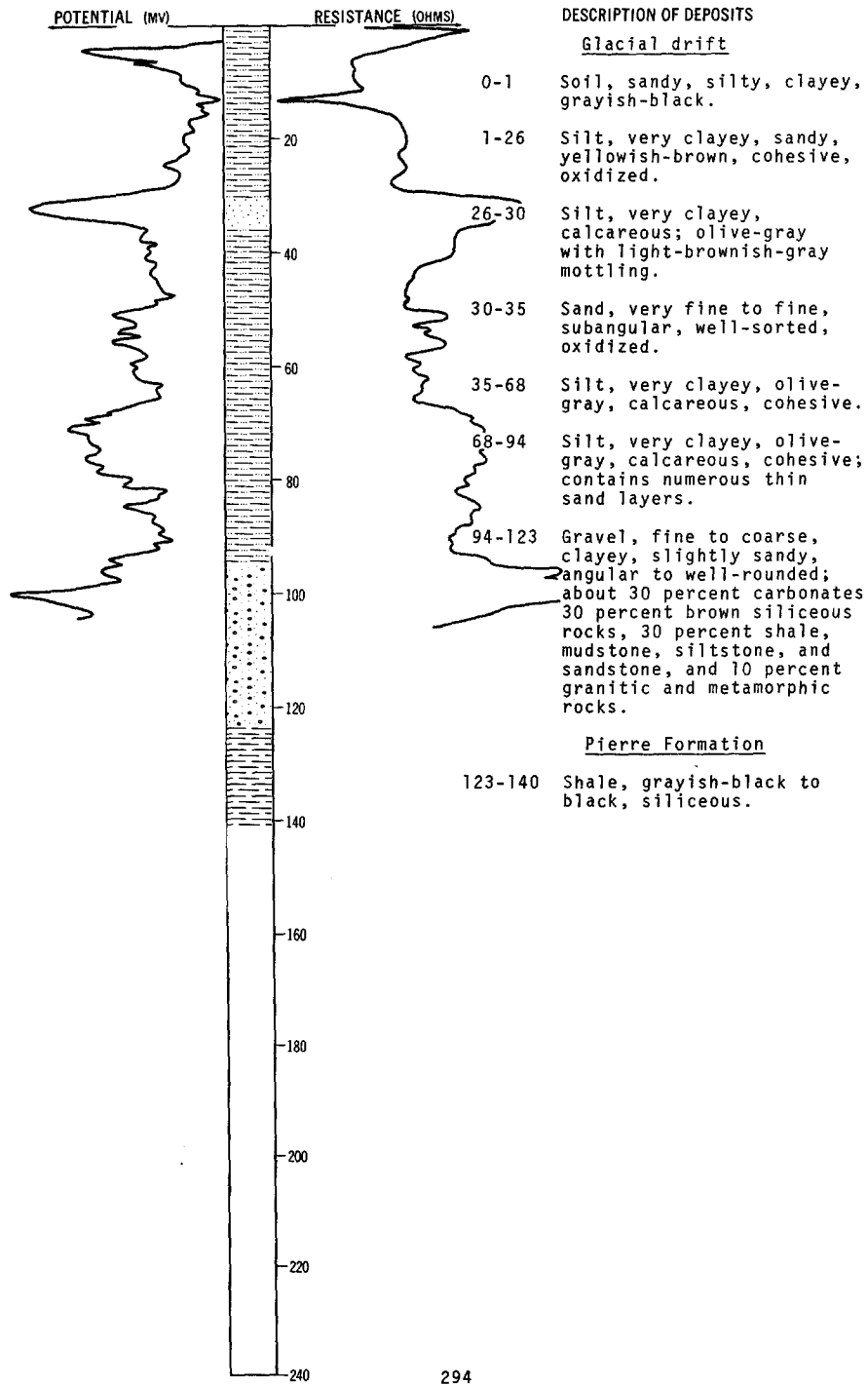
	Shale-----	60	60
	Sandstone; hard sandstone strips-----	90	150

LOCATION: 134-078-31DAA

DATE DRILLED: September 1971

ALTITUDE: 1710  
(FT, MSL)

DEPTH: 140  
(FT)





134-078-32BCC  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1712 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Surface-----	3	3
	Clay-----	12	15
	Sandstone and hard rock layers-----	33	48
	Shale, sandy-----	18	66
	Shale-----	54	120
	Sandstone break; hole went blind-----	3	123
	Shale-----	6	129

134-079-02CCC  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1604 ft

	Clay-----	12	12
	Sand and gravel-----	93	105

134-079-02CDD  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1607 ft

	Clay, sand; lignite strips-----	75	75
	Gravel and sand-----	40	115
	Shale, gray; soft-----	35	150

134-079-02DDD  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1718 ft

	Clay-----	18	18
	Sandstone-----	32	150

134-079-12BCC  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1673 ft

	Clay and sand-----	10	10
	Sandstone-----	60	70
	Blind-----	50	120

134-079-12CCC  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1608 ft

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Clay-----	29	29
	Sand and gravel-----	3	32
	Shale-----	118	150

134-079-13CAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1619 ft

	Clay and sand-----	35	35
	Sandstone, soft-----	25	60
	Shale, gray, and sandstone-----	90	150

134-079-24AAA  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1748 ft

	Clay and sand-----	10	10
	Sandstone (soft) with hard sandstone layers-----	130	140
	Sandstone and shale-----	20	160

134-079-24ABB  
Seismograph hole  
(Log from Shell Oil Co.)

Altitude: 1741 ft

	Sandstone-----	134	134
	Shale, blue-----	16	150

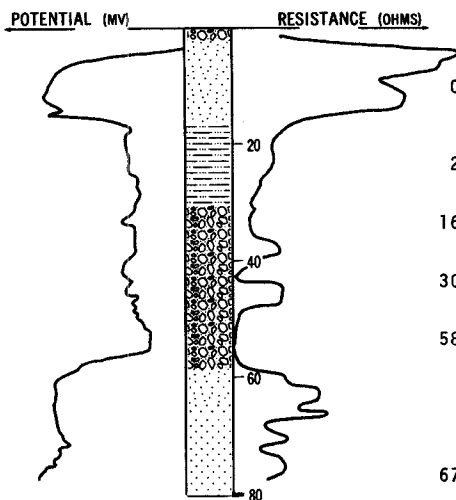
NDSWC 8662

LOCATION: 135-074-06AAC

DATE DRILLED: May 1973

ALTITUDE: 1871  
(FT, MSL)

DEPTH: 80  
(FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-2 Clay, sandy, silty, gravelly, light-olive-gray, calcareous (till).
- 2-16 Sand, fine to coarse, light-brown, oxidized.
- 16-30 Silt, clayey, olive-gray, calcareous, bedded.
- 30-58 Clay, silty, sandy, pebbly, olive-gray (till).
- 58-67 Sand, fine to very coarse, lignitic; moderately well sorted in lenses; contains shell fragments.

Fox Hills Formation

- 67-80 Sandstone, medium-bluish-gray, micaceous; 15 percent interstitial clay and silt.

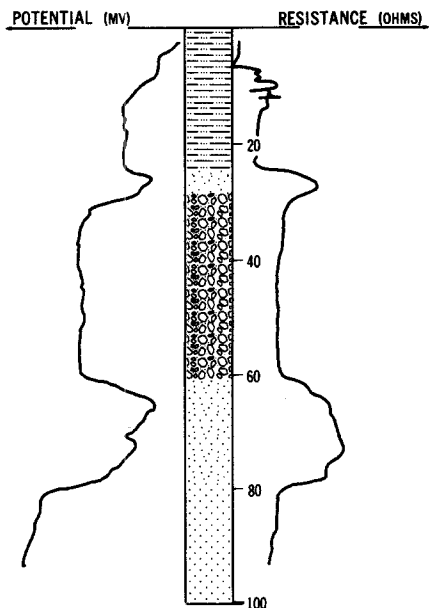
NDSWC 8663

LOCATION: 135-074-06ADD

DATE DRILLED: May 1973

ALTITUDE: 1876  
(FT, MSL)

DEPTH: 100  
(FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-17 Silt, clayey, dusky-yellow, oxidized.
- 17-24 Silt, clayey, olive-gray.
- 24-28 Sand, fine to very coarse, medium-dark-gray.
- 28-60 Clay, silty, sandy, pebbly, olive-gray, calcareous, fractured(?); partially lost circulation (till).
- 60-78 Sand, fine to coarse, subrounded.

Fox Hills Formation

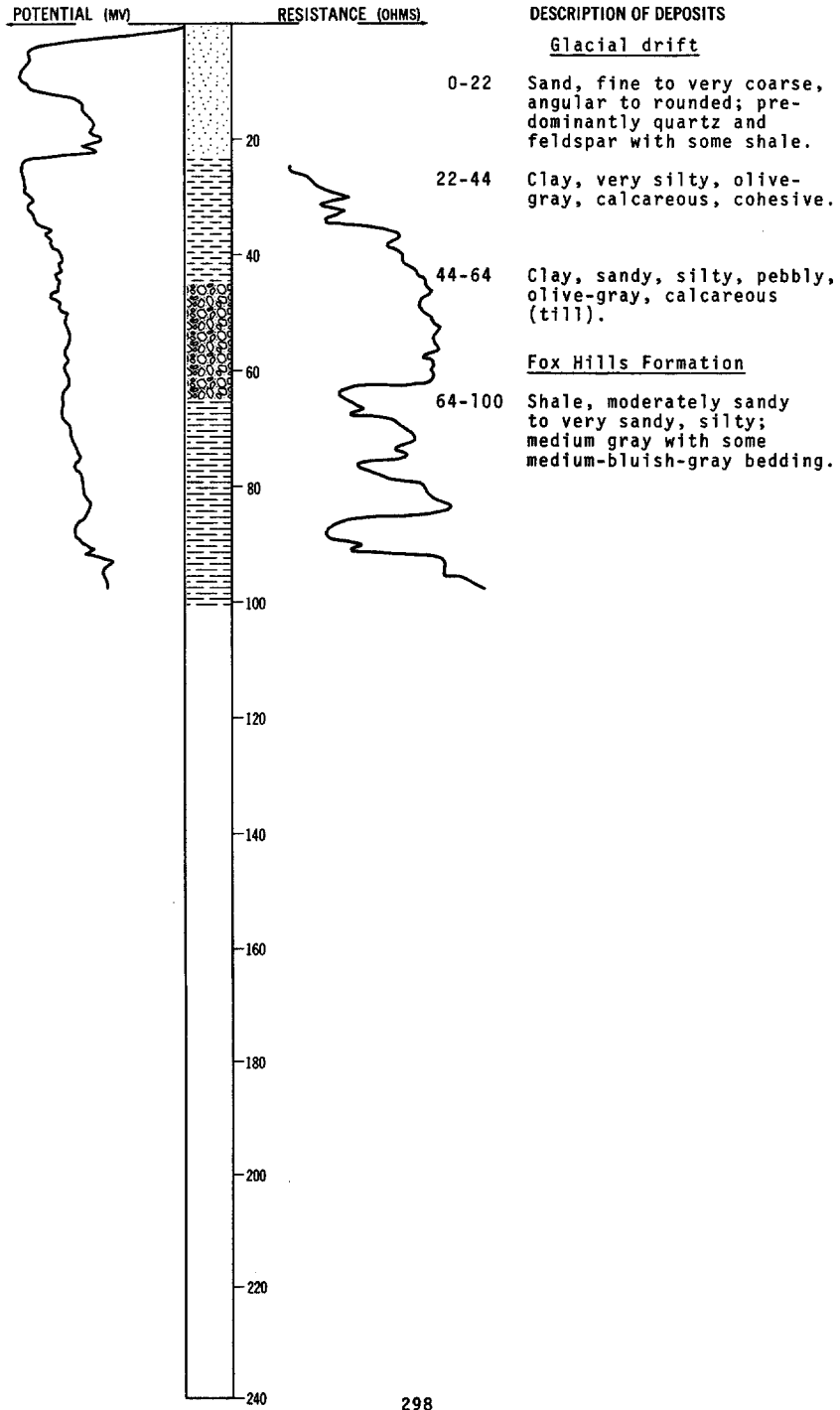
- 78-100 Sandstone, fine- to medium-grained, dark-greenish-gray, glauconitic, micaceous; contains about 20 percent interstitial clay and silt.

LOCATION: 135-074-09CCC

DATE DRILLED: September 1971

ALTITUDE: 1930  
(FT, MSL)

DEPTH: 100  
(FT)

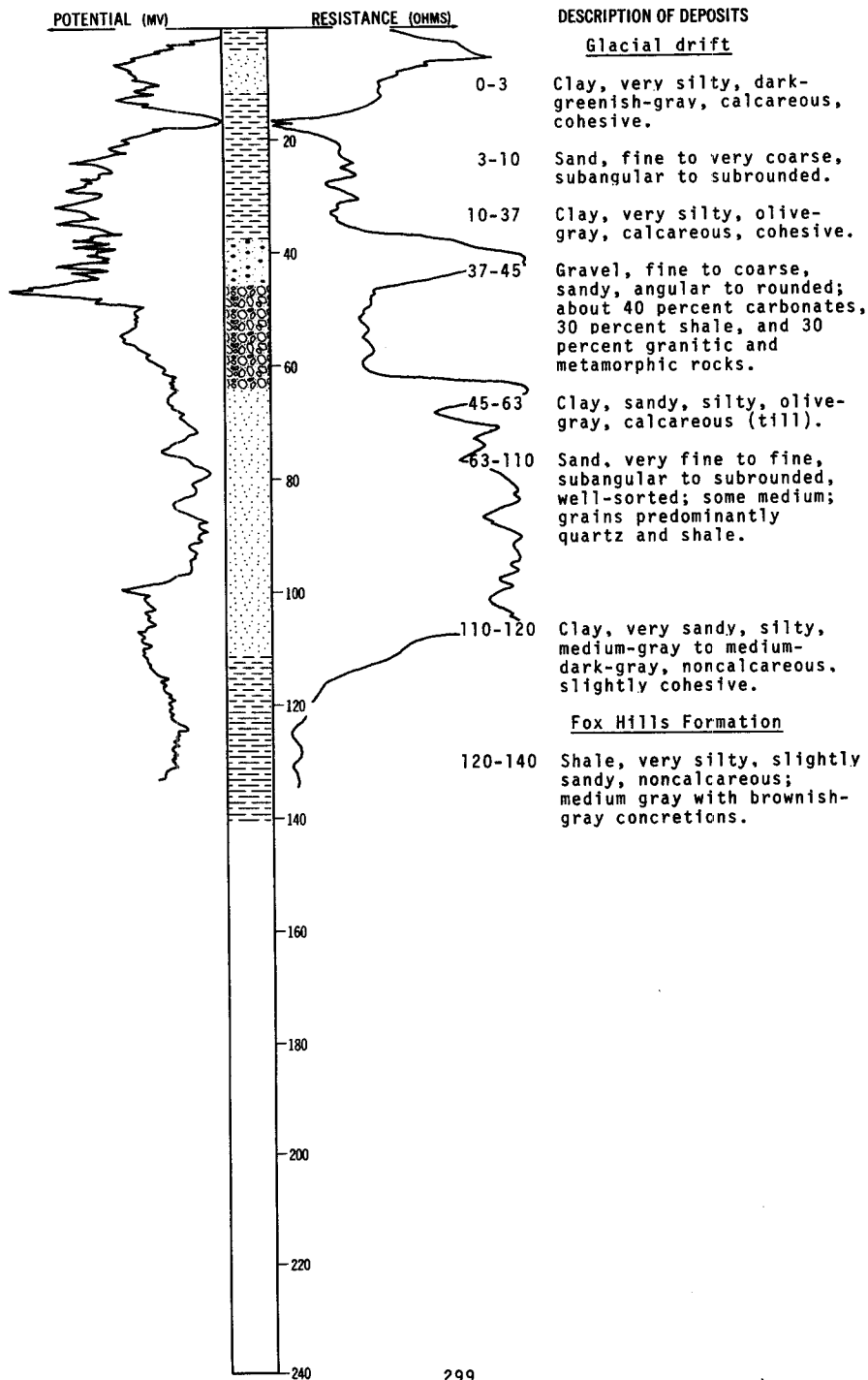


LOCATION: 135-074-10BBB

DATE DRILLED: September 1971

ALTITUDE: 1900  
(FT, MSL)

DEPTH: 140  
(FT)

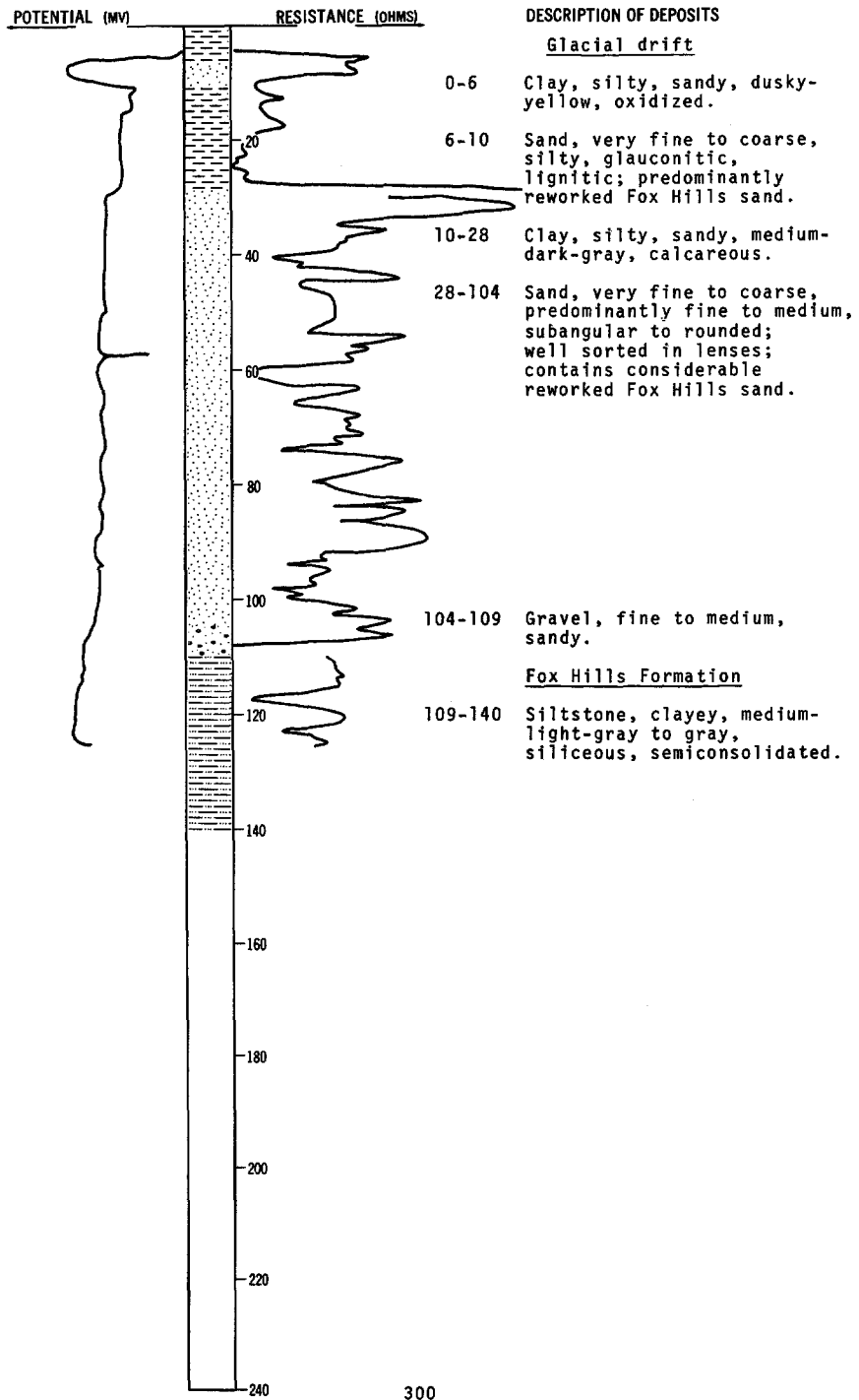


LOCATION: 135-074-20BAA

DATE DRILLED: October 1972

ALTITUDE: 1891  
(FT, MSL)

DEPTH: 140  
(FT)

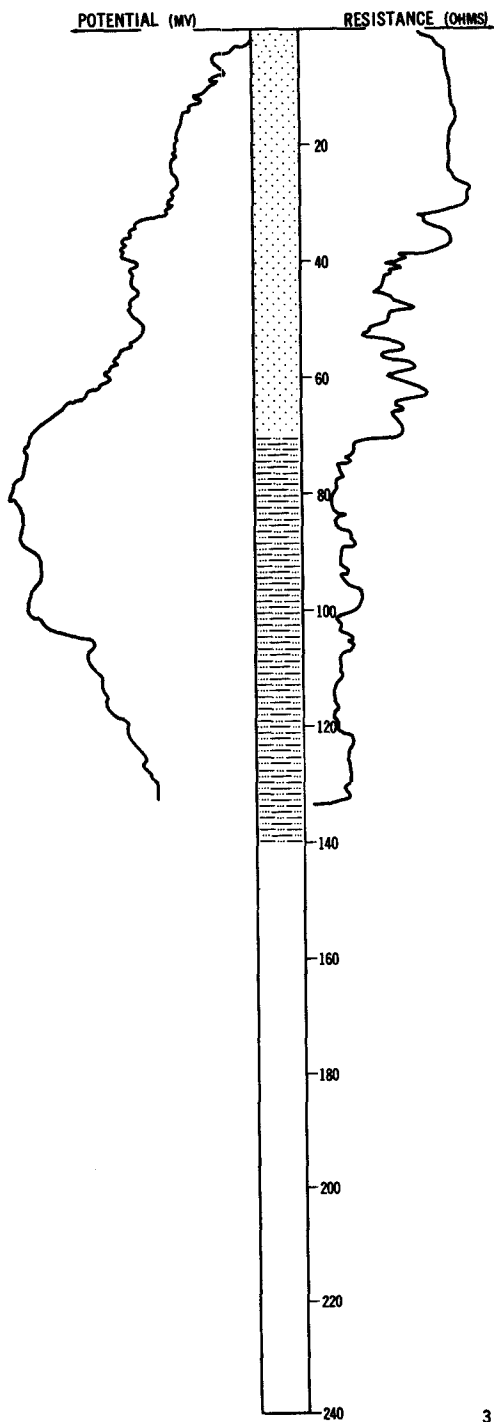


LOCATION: 135-074-32BAA

DATE DRILLED: May 1973

ALTITUDE: 1912  
(FT, MSL)

DEPTH: 140  
(FT)



DESCRIPTION OF DEPOSITS

Glacial drift

0-6 Sand, fine to very coarse, gravelly, clayey, iron-stained; 40 percent gravel and 15 percent clay.

Fox Hills Formation

6-36 Sandstone, fine-grained, glauconitic, micaceous, fractured; dark-greenish-gray with yellowish-brown oxidation zones.

36-70 Sandstone, dark-greenish-gray, glauconitic, micaceous; contains thin dark-gray siltstone beds.

70-140 Siltstone, clayey, sandy, medium-gray to medium-dark-gray; contains thin indurated sandstone or siltstone beds.

Altitude: 1930 ft

Date drilled: May 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, sandy, pebbly, moderate-yellowish-brown, oxidized (till)-----	15	15
	Clay, silty, sandy, pebbly, olive-gray (till)-----	7	22
	Sand, very fine to medium, medium-dark gray, subrounded; contains thin clay lenses; sand grains composed principally of quartz and shale-----	18	40
Fox Hills Formation:			
	Sandstone, clayey, fine- to medium-grained, moderate-yellowish-brown to reddish-brown, oxidized, semiconsolidated to loose, fractured; 40 percent interstitial clay; takes water-----	20	60
	Sandstone, clayey, fine- to medium-grained, medium-bluish-gray, fractured; takes water rapidly-----	20	80

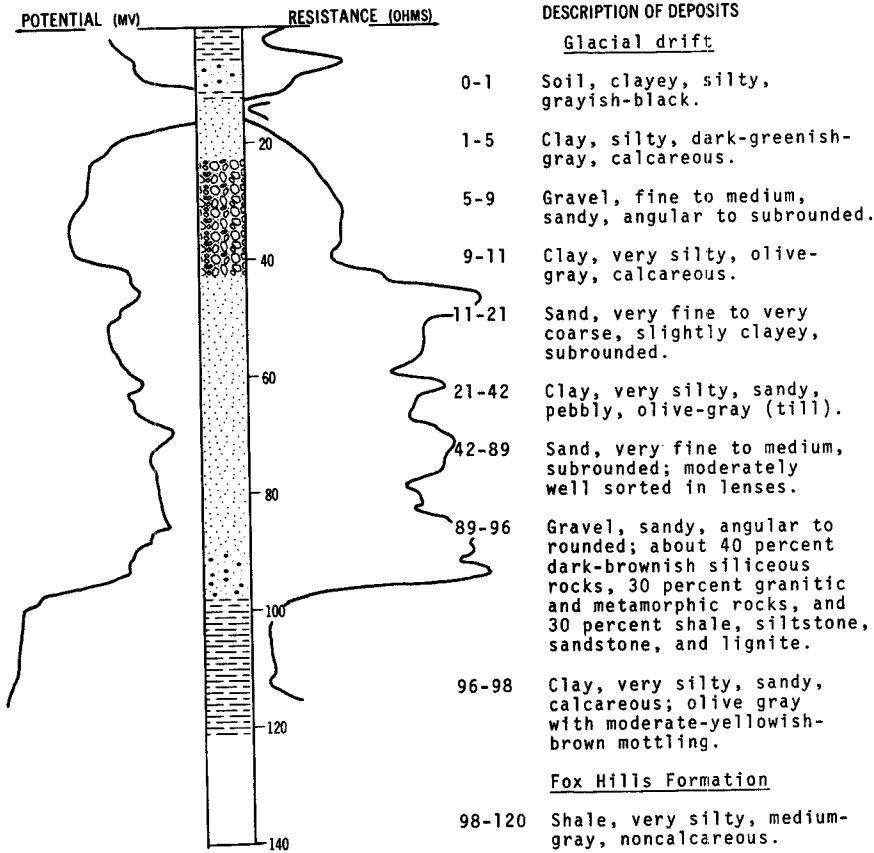


LOCATION: 135-075-010DD

DATE DRILLED: September 1971

ALTITUDE: 1863  
(FT, MSL)

DEPTH: 120  
(FT)



135-075-10ABB  
(Log from Witikko Drilling)

Altitude:

Date drilled: April 1973

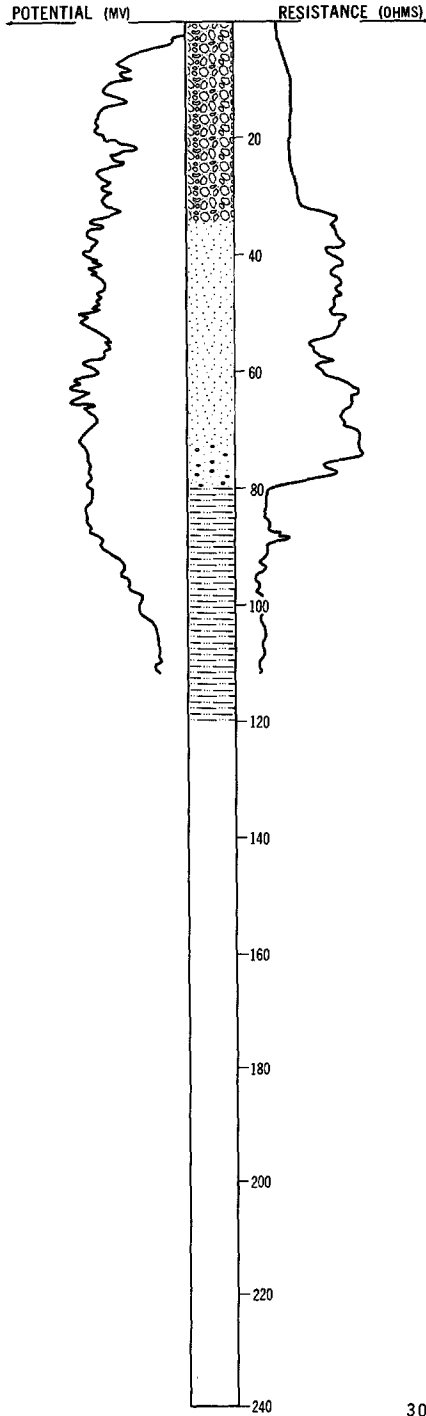
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Clay, sandy, brown-----	17	18
	Clay, gray-----	22	40
	Sand, blue-----	22	62

LOCATION: 135-075-10BCC

ALTITUDE: 1886  
(FT, MSL)

DATE DRILLED: May 1973

DEPTH: 120  
(FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-15 Clay, silty, sandy, pebbly, moderate-yellowish-brown, calcareous (till).
- 15-34 Clay, silty, sandy, pebbly, olive-gray, calcareous (till).
- 34-40 Sand, fine to medium, medium-dark-gray.
- 40-73 Sand, fine to coarse, gravelly; 20 percent gravel including about 2 percent lignite; sand grains and pebbles are about 50 percent quartz and feldspar, 30 percent dark shale, and 20 percent granitic, metamorphic, and carbonate rocks.
- 73-80 Gravel, fine to medium, sandy; 30 percent dark shale pebbles.

Fox Hills Formation

- 80-120 Siltstone, slightly sandy, medium-gray to medium-dark-gray, semiindurated.

LOCATION: 135-075-22ABB

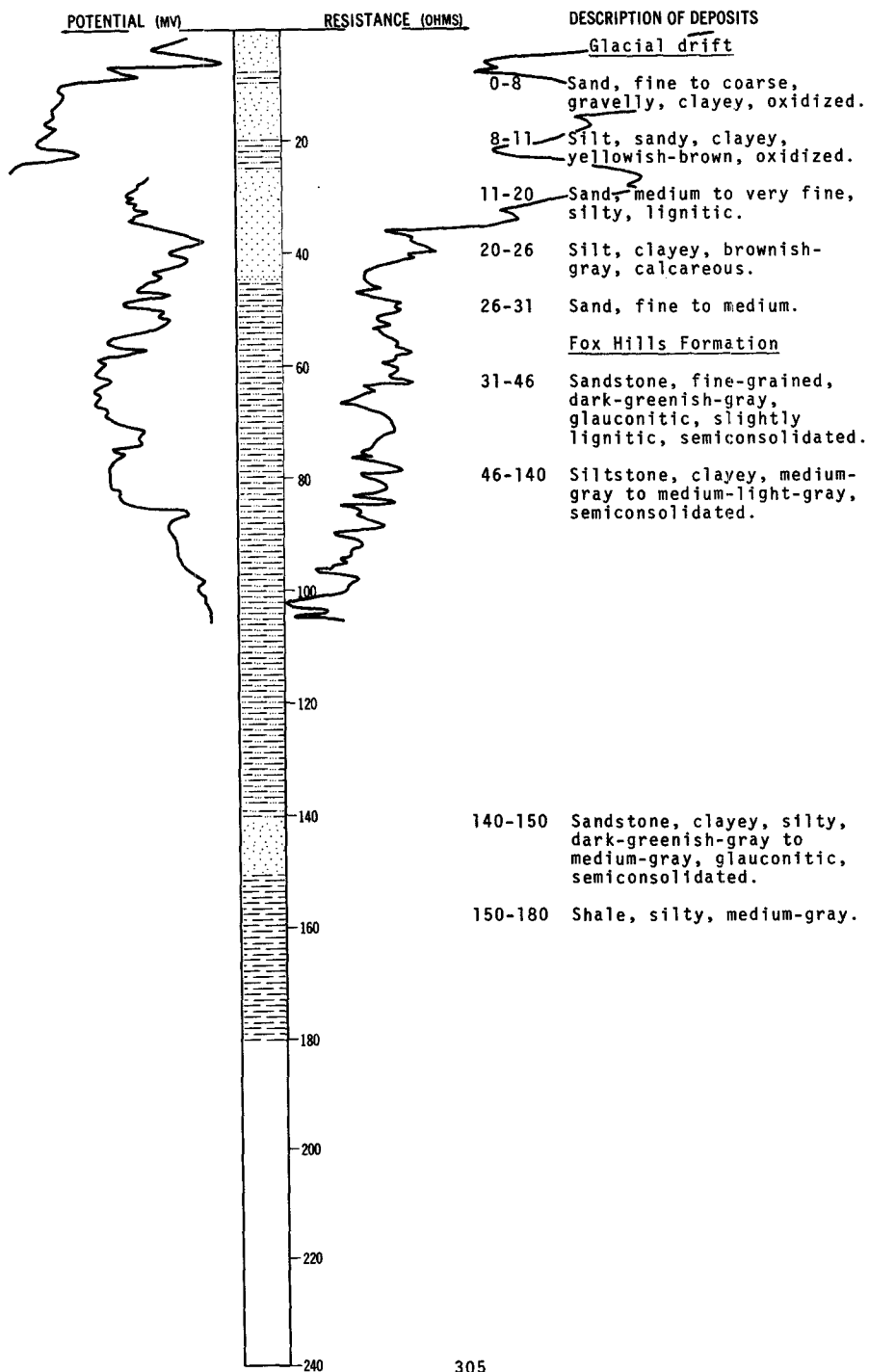
DATE DRILLED: October 1972

ALTITUDE: 1880

DEPTH: 180

(FT, MSL)

(FT)

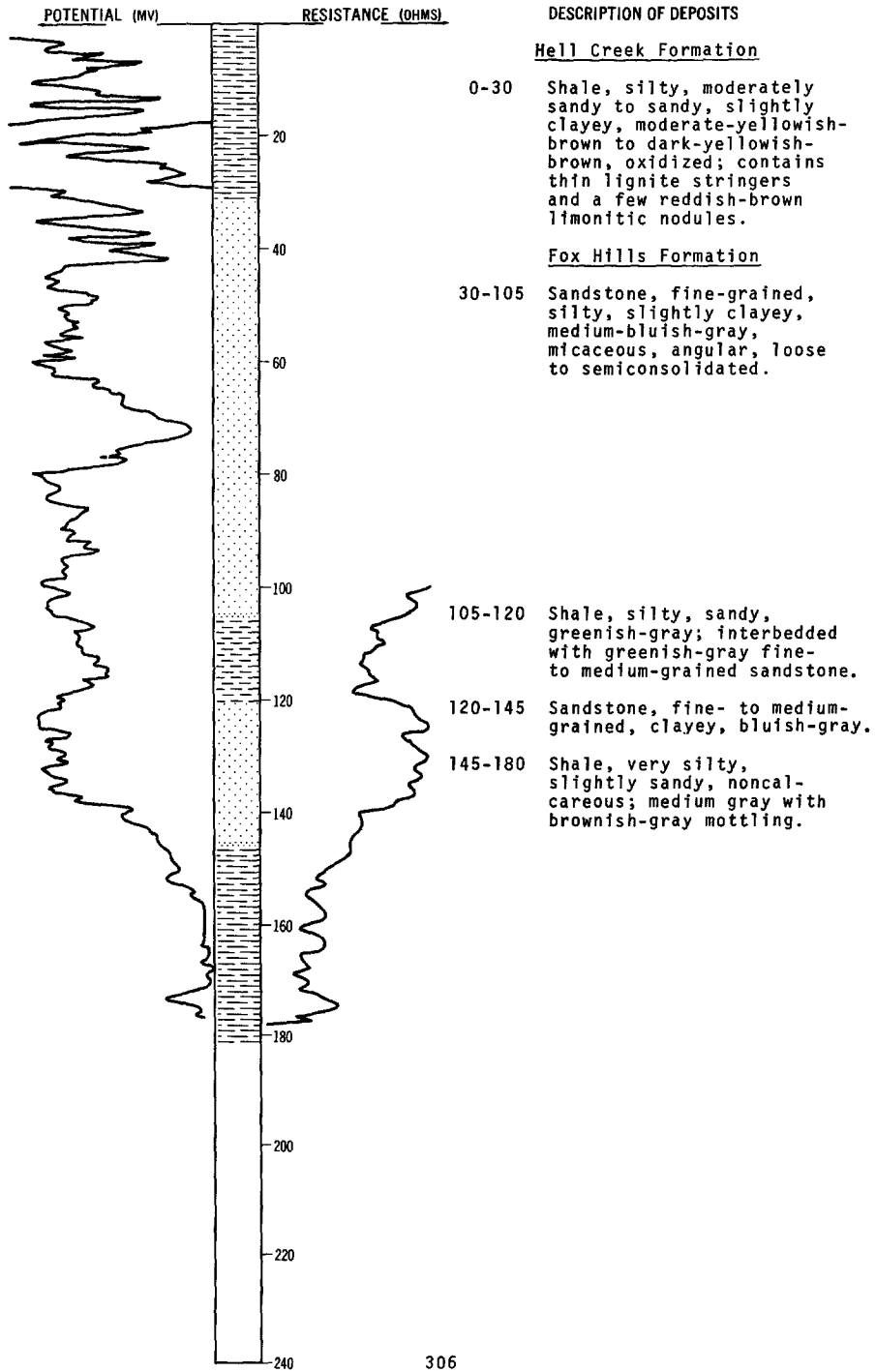


LOCATION: 135-076-19CCC1

DATE DRILLED: September 1971

ALTITUDE: 1975  
(FT. MSL)

DEPTH: 180  
(FT)

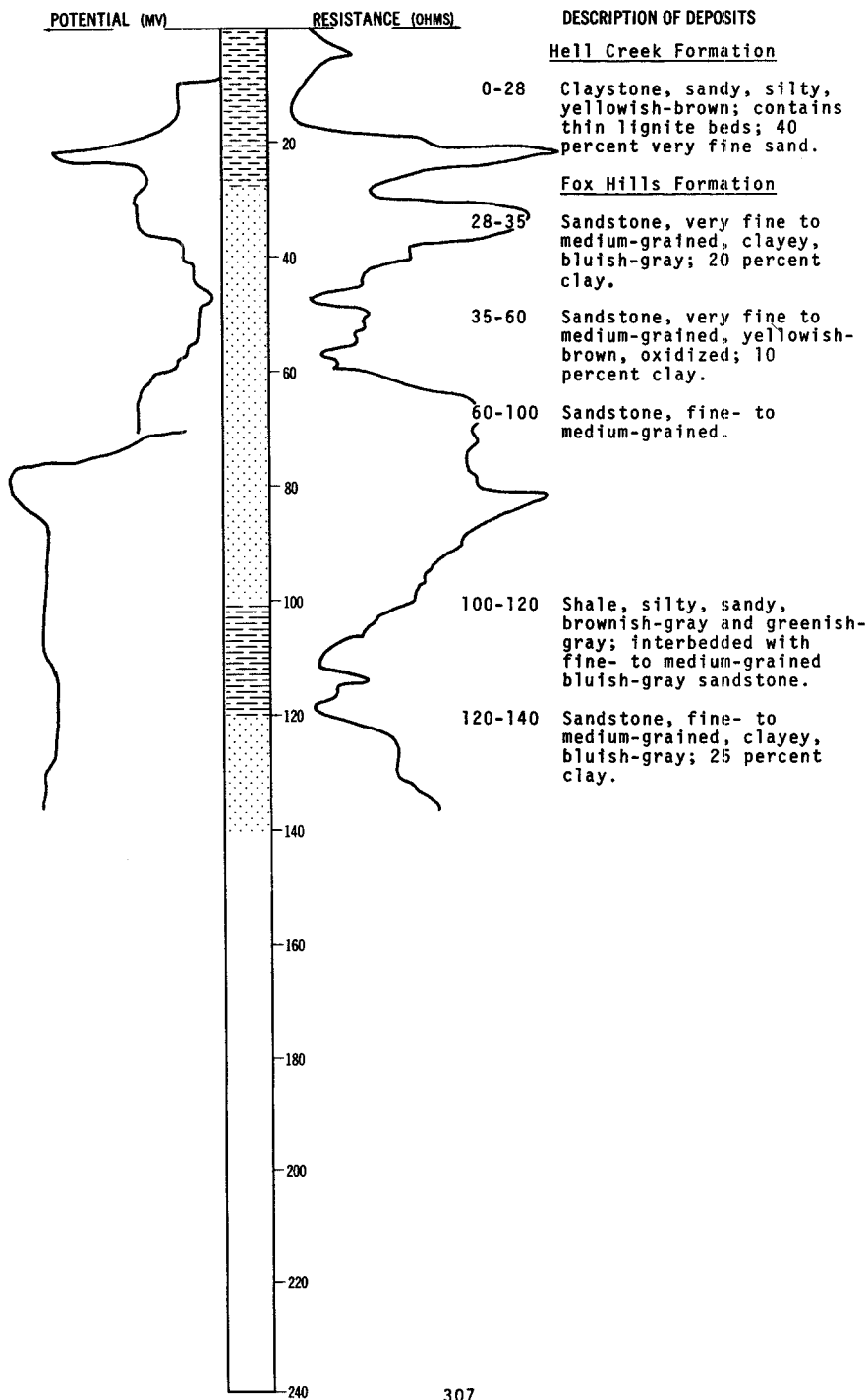


LOCATION: 135-076-19CCC2

DATE DRILLED: June 1973

ALTITUDE: 1978  
(FT, MSL)

DEPTH: 140  
(FT)

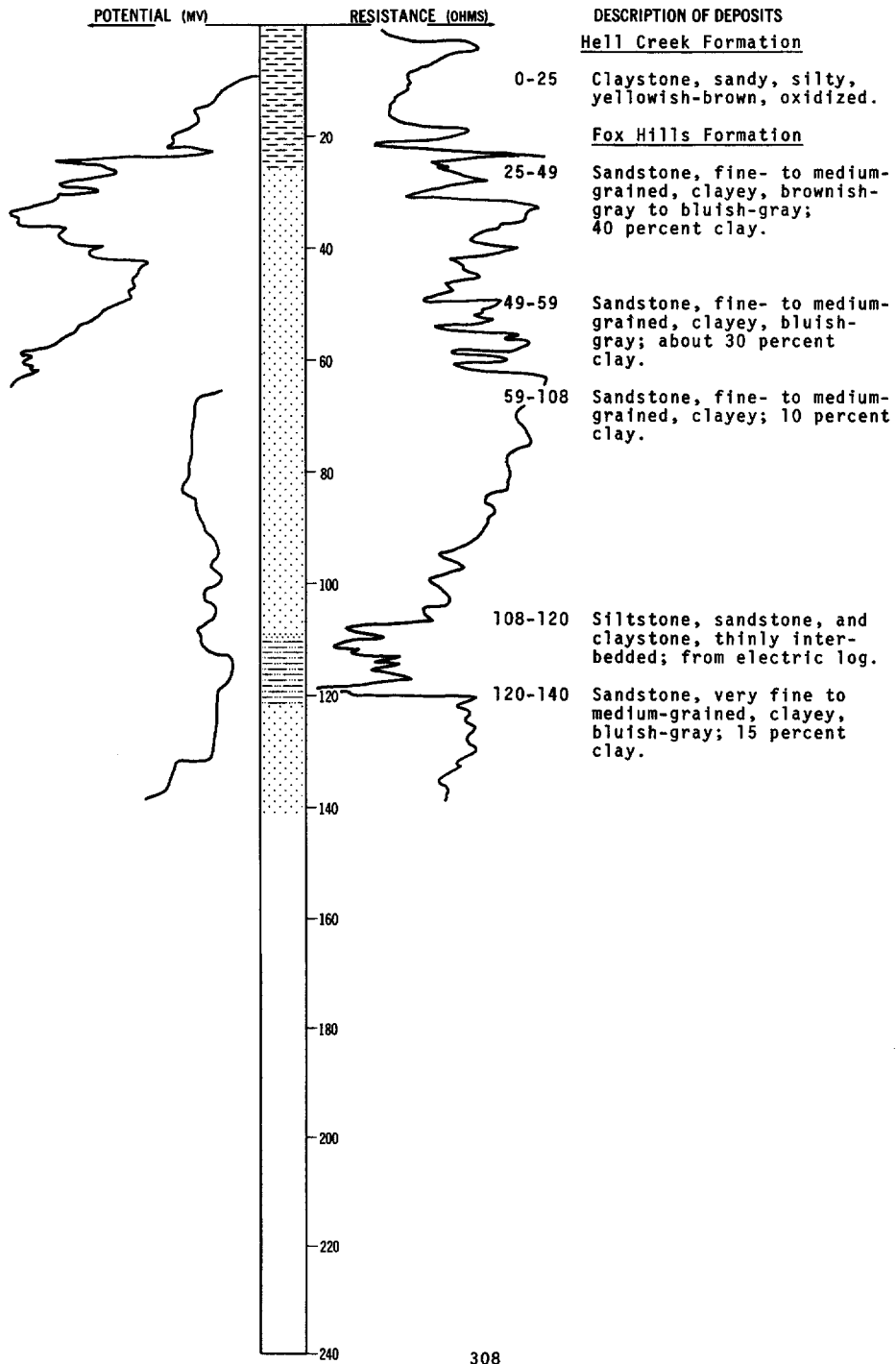


LOCATION: 135-076-19CCC3

DATE DRILLED: June 1973

ALTITUDE: 1978  
(FT, MSL)

DEPTH: 140  
(FT)

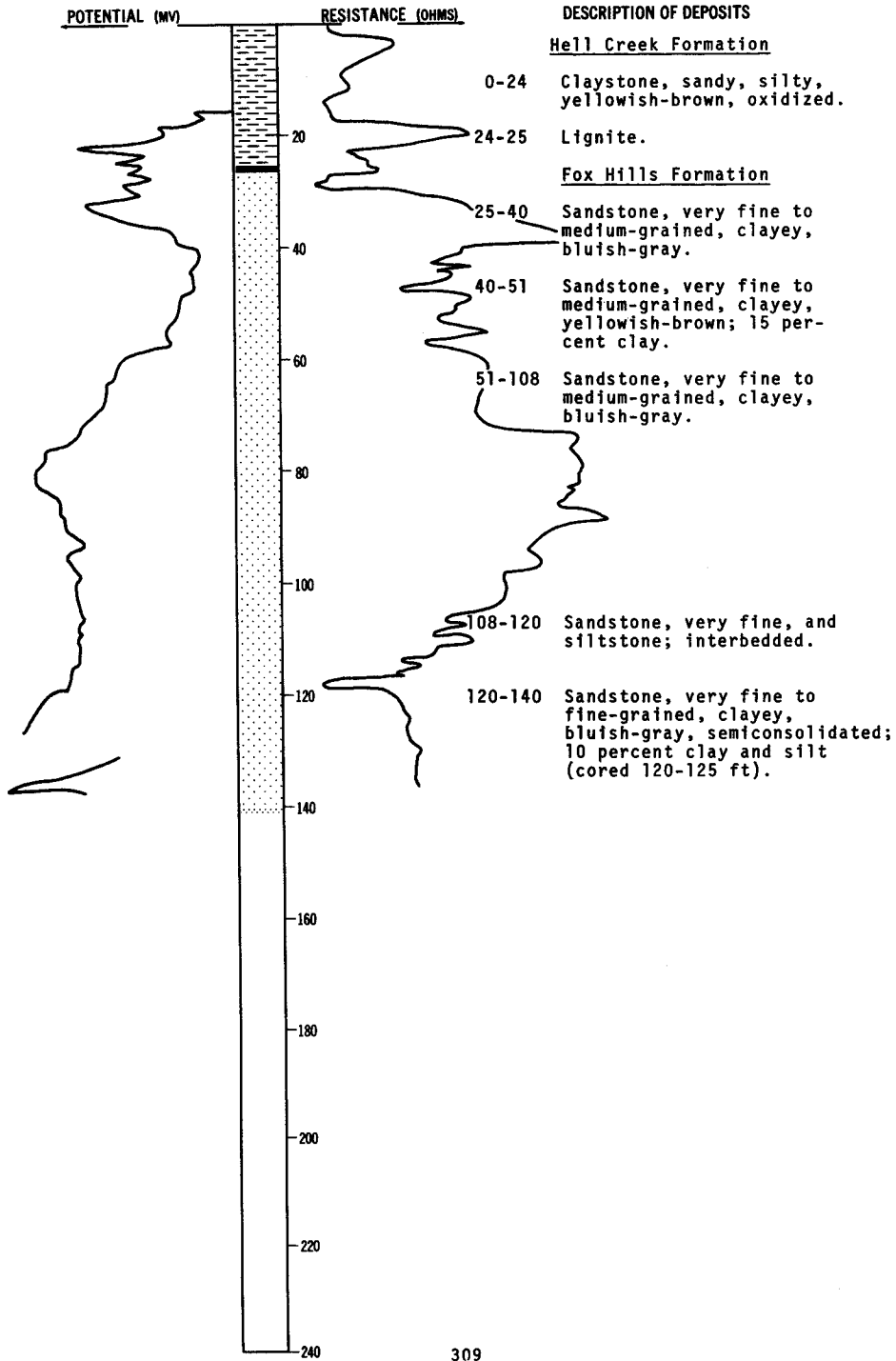


LOCATION: 135-076-19CCC4

DATE DRILLED: June 1973

ALTITUDE: 1979  
(FT, MSL)

DEPTH: 140  
(FT)



135-076-23AAA  
NDSWC 8666

Altitude: 1920 ft

Date drilled: May 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Hell Creek Formation:			
	Soil, silty, clayey, dark-brown-----	2	2
	Siltstone, clayey, sandy, dusky-yellow to moderate-yellowish-brown, slightly calcareous, oxidized-----	13	15
	Shale, clayey, dark-brown, carbonaceous-----	10	25
Fox Hills Formation:			
	Sandstone, clayey, very fine to medium, medium-bluish-gray to greenish-gray, micaceous, glauconitic; 10 percent clay---	15	40

135-076-30DAA1  
NDSWC 8553

Altitude: 2000 ft

Date drilled: October 1972

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, silty, sandy, brownish-black-----	1	1
	Clay, silty, sandy, pebbly, dusky-yellow (till)-----	7	8
Hell Creek Formation:			
	Claystone, dusky-yellow to yellowish-brown; and grayish-brown carbonaceous shale with a few thin lignite stringers-----	22	30
Fox Hills Formation:			
	Siltstone, sandy, medium-gray-----	10	40
	Sandstone, slightly silty and clayey, very fine to fine, medium-bluish-gray, glauconitic, slightly lignitic; semi-consolidated to 60 ft, loose from 60 to 80 ft-----	40	80

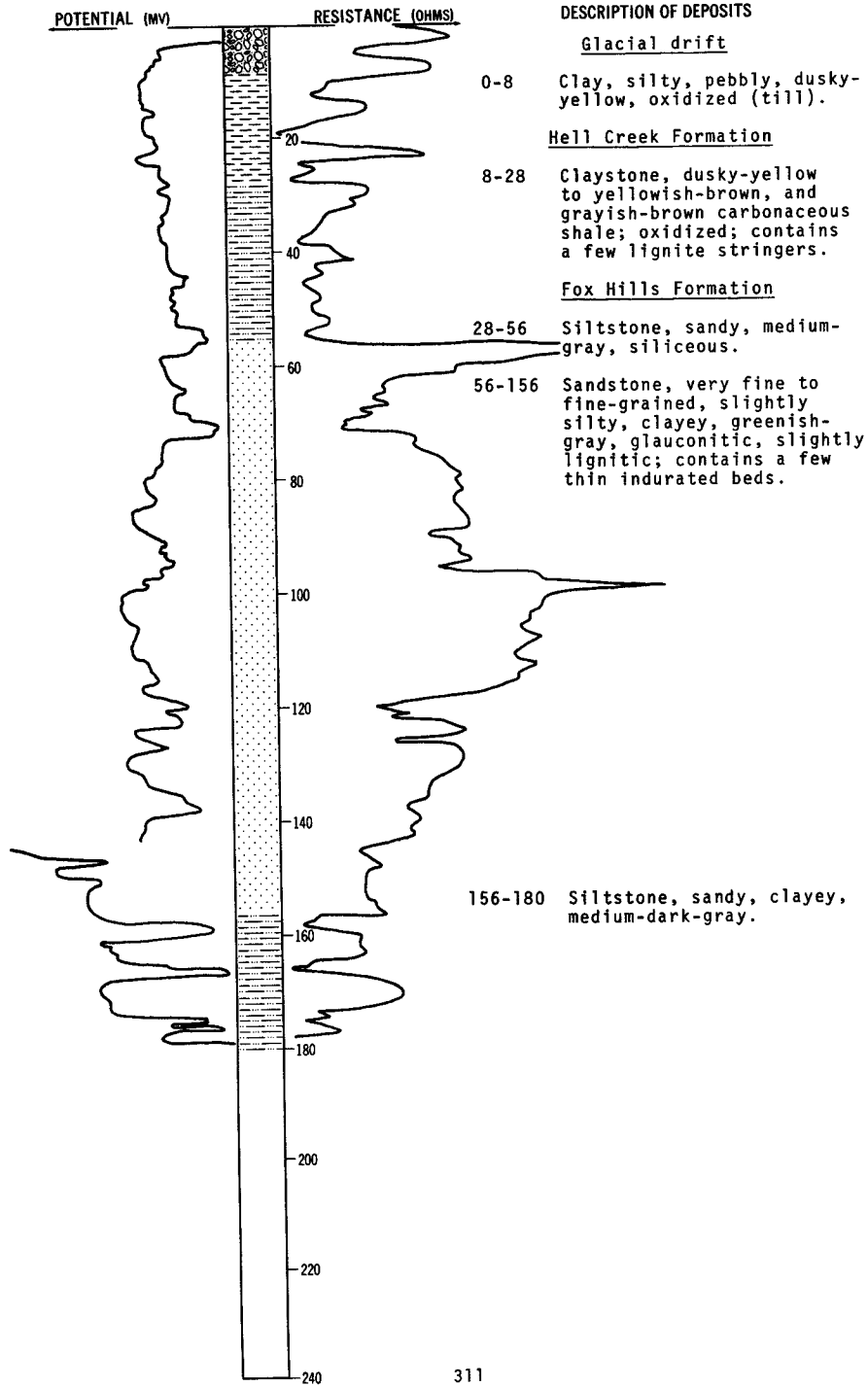


LOCATION: 135-076-30DAA2

DATE DRILLED: October 1972

ALTITUDE: 2000  
(FT, MSL)

DEPTH: 180  
(FT)



135-077-04ACA  
(Log from Witikko Drilling)

Altitude:

Date drilled: August 1973

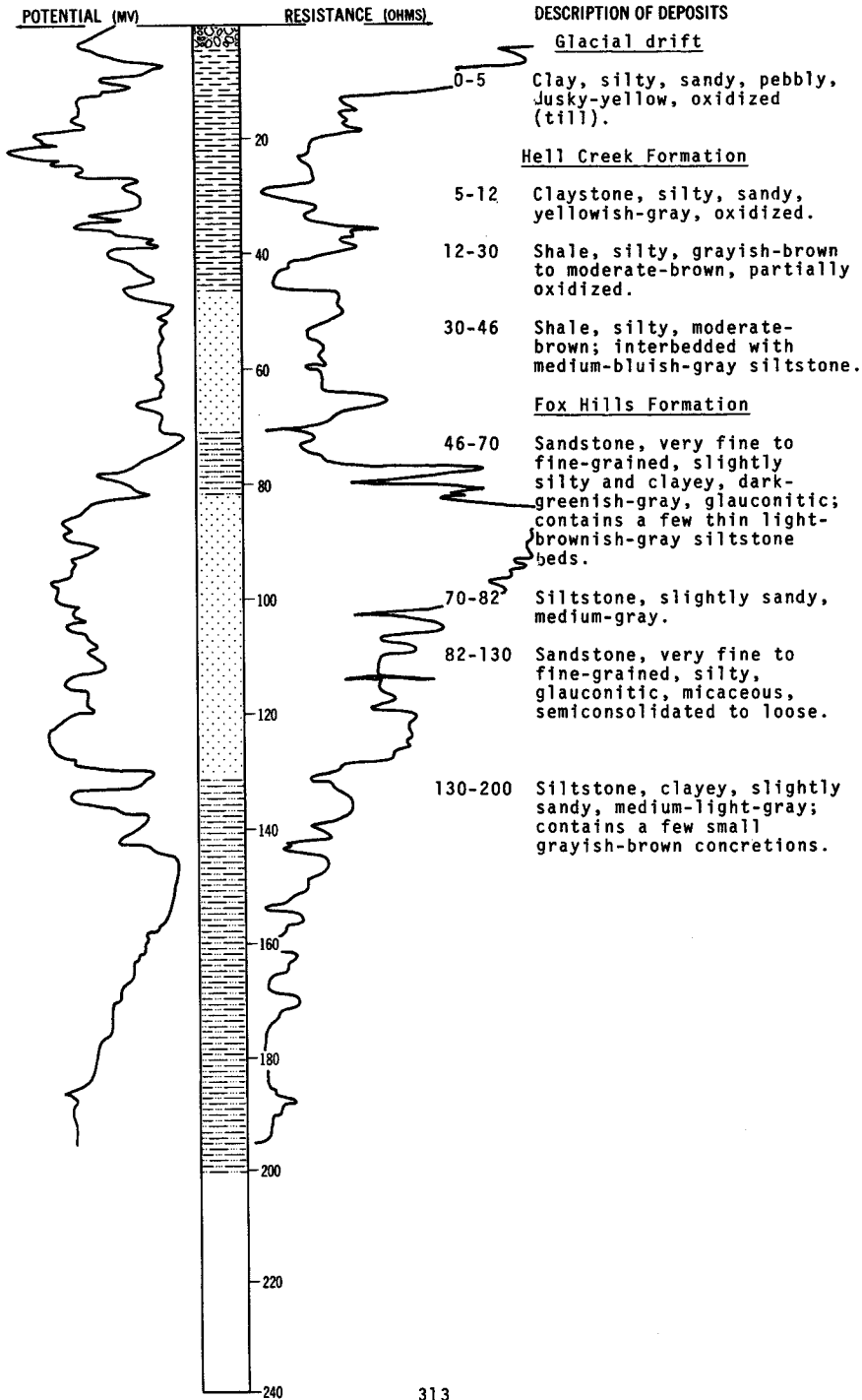
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	2	2
	Sand and clay, brown-----	12	14
	Clay, brown-----	10	24
	Clay, gray-----	2	26
	Clay and sand, blue-----	4	30
	Clay, gray-----	6	36
	Clay, blue-----	99	135
	Sand, blue-----	25	160

LOCATION: 135-077-21CDD

DATE DRILLED: October 1972

ALTITUDE: 2000  
(FT, MSL)

DEPTH: 200  
(FT)



135-077-28BBB  
(Log from Witikko Drilling)

Altitude: \_\_\_\_\_ Date drilled: October 1972

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Soil, black-----	0.5	0.5
	Sand, brown-----	24.5	25
	Clay, gray-----	6	31
	Clay, brown-----	8	39
	Clay, gray-----	3	42
	Sand, broken; and clay-----	14	56
	Clay, blue; and sand-----	18	74
	Clay, dark, broken-----	11	85
	Clay, dark-gray-----	5	90
	Clay, blue; and sand-----	9	99
	Clay, dark-brown-----	2	101
	Clay, blue; and sand-----	9	110
	Clay, gray-----	50	160
	Sand, blue, and clay-----	14	174
	Clay, gray-----	6	180

135-077-32CDD2  
(Log from Witikko Drilling)

Altitude: \_\_\_\_\_ Date drilled: October 1972

	Soil, black-----	1	1
	Clay, brown-----	2	3
	Sand, brown-----	15	18
	Clay, brown-----	19	37
	Clay; and traces of blue sand-----	5	42
	Clay, dark-gray-----	138	180
	Sand, blue-----	60	240
	Clay, dark-----	10	250

135-078-07CCD  
NDSWC 8107

Altitude: 1680 ft

Date drilled: September 1971

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, very sandy, silty, brownish-black-----	1	1
	Clay, very silty, sandy, oxidized; moderate-yellowish-brown to dusky-yellow with olive-gray mottling-----	46	47
Fox Hills Formation:			
	Sandstone, fine grained, medium-bluish-gray, highly calcareous, indurated-----	2	49
	Shale, silty, moderately sandy, medium-gray to medium-bluish-gray, noncalcareous; contains a few small dark-brown rod-like concretions-----	31	80

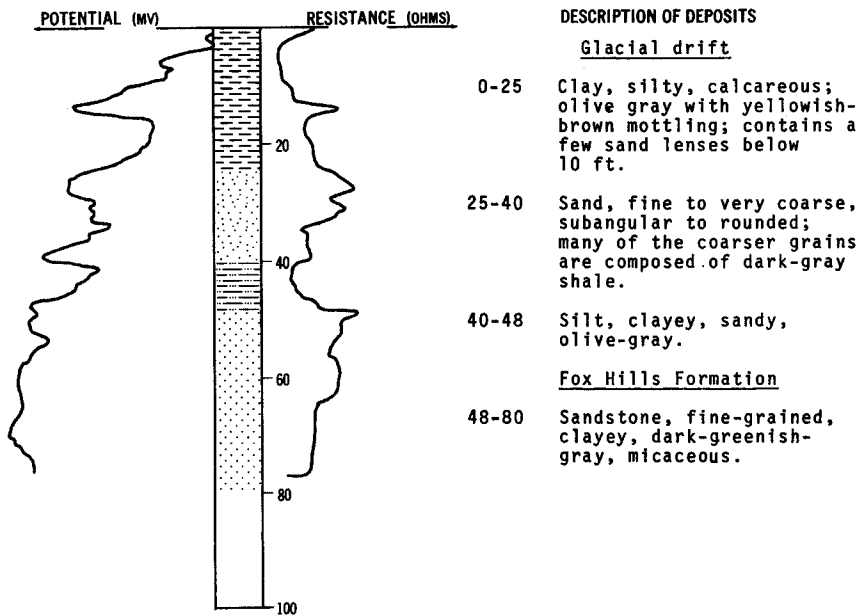
NDSWC 8657

LOCATION: 135-078-11CCD

DATE DRILLED: May 1973

ALTITUDE: 1670  
(FT, MSL)

DEPTH: 80  
(FT)



135-078-14CCC  
NDSWC 8556

Altitude: 1680 ft

Date drilled: October 1972

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Fox Hills Formation:			
	Sandstone, slightly silty, very fine to fine, light-olive-brown, glauconitic, sub-angular to subrounded, loose to semi-consolidated, oxidized-----	34	34
	Siltstone, clayey, slightly sandy, dusky-yellow to yellowish-gray, oxidized-----	26	60

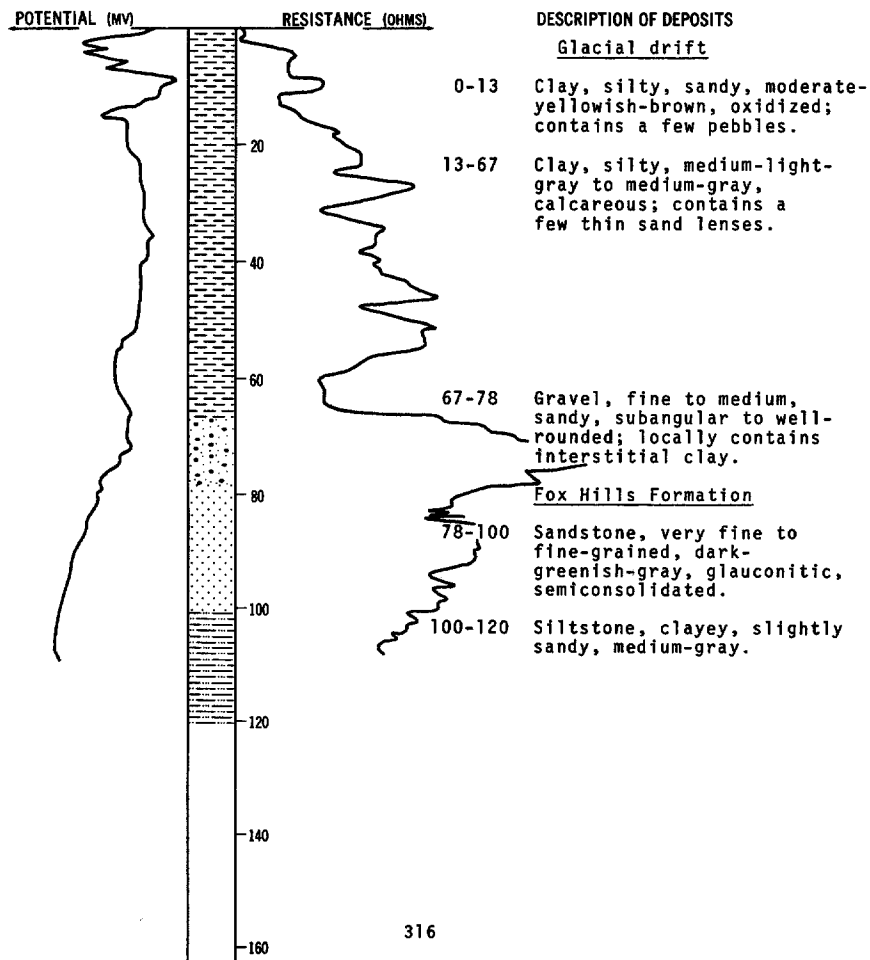
NDSWC 8557

LOCATION: 135-078-14CDC

DATE DRILLED: October 1972

ALTITUDE: 1685  
(FT, MSL)

DEPTH: 120  
(FT)



135-078-15CDB  
(Log from Witikko Drilling)

Altitude: Date drilled: June 1972

Geologic source	Material	Thickness (feet)	Depth (feet)
	Soil, black-----	1	1
	Clay, light-gray-----	11	12
	Clay, brown, and sand-----	9	21
	Sand, brown-----	19	40
	Clay, dark-gray-----	40	80
	Sand, blue-----	20	100

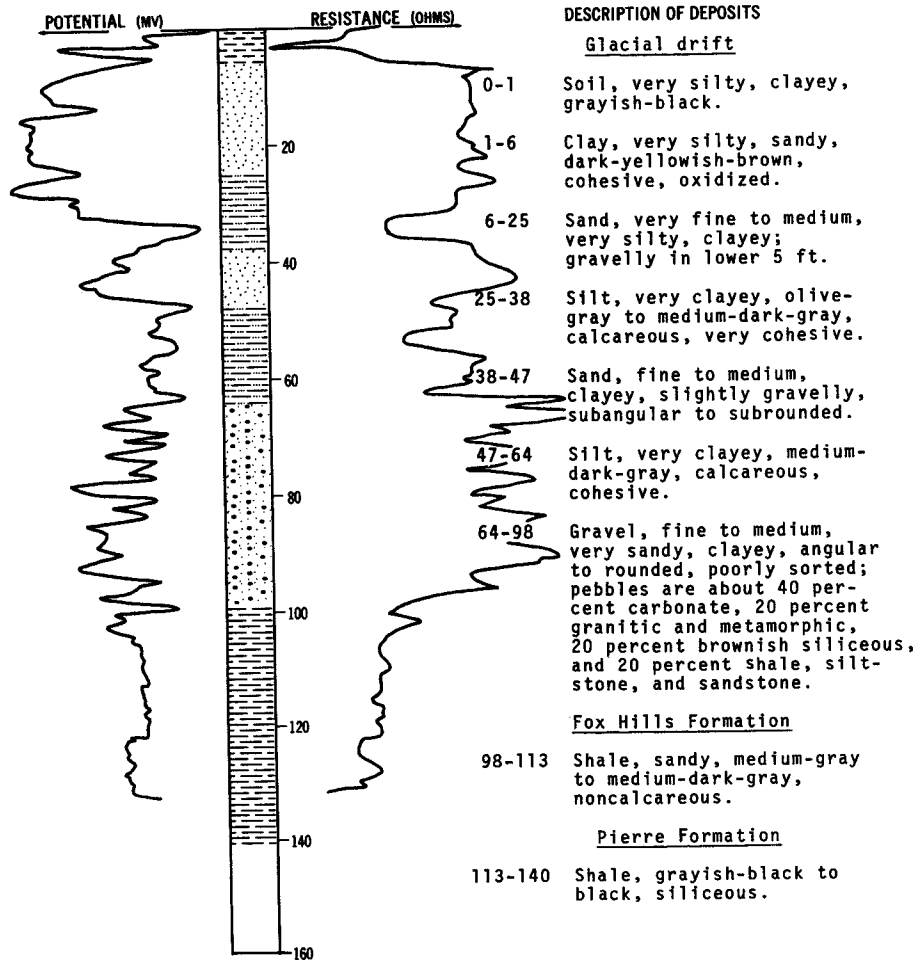
NDSWC 8113

LOCATION: 135-078-20AAD

DATE DRILLED: September 1971

ALTITUDE: 1650  
(FT, MSL)

DEPTH: 140  
(FT)



135-078-20ADD  
NDSWC 8110

Altitude: 1660 ft

Date drilled: September 1971

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, very sandy, silty, clayey, grayish-black-----	1	1
	Silt, very clayey, sandy, moderate-yellowish brown, cohesive, oxidized-----	34	35
	Sand, silty, very fine to fine, subangular, well sorted, oxidized-----	3	38
Fox Hills Formation:			
	Shale, sandy, silty, dark-yellowish-brown to medium-gray, noncalcareous, partially oxidized-----	49	87
	Shale, sandy, silty, medium-bluish-gray, noncalcareous-----	13	100

135-078-20DAD  
NDSWC 8111

Altitude: 1680 ft

Date drilled: September 1971

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, silty, sandy, clayey, grayish-black---	1	1
	Silt, very clayey, sandy, moderate-yellowish-brown, cohesive, oxidized-----	28	29
Fox Hills Formation:			
	Sandstone, fine-grained, highly calcareous, well-cemented, oxidized-----	2	31
	Shale, sandy, silty, dark-yellowish-brown, oxidized, weathered-----	15	46
	Sandstone, fine-grained, highly calcareous, well-cemented, oxidized-----	3	49
	Shale, very sandy, silty, dark-yellowish-brown to medium-bluish-gray, partially oxidized-----	11	60

135-078-28BBB  
NDSWC 8112

Altitude: 1730 ft

Date drilled: September 1971

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift(?):			
	Soil, sandy, clayey, grayish-black-----	1	1
	Silt, very clayey, sandy, moderate-yellowish-brown, cohesive, oxidized-----	4	5
Hell Creek Formation:			
	Shale, very silty, sandy, dusky-yellow to moderate-yellowish-brown, lignitic, calcareous, oxidized-----	35	40

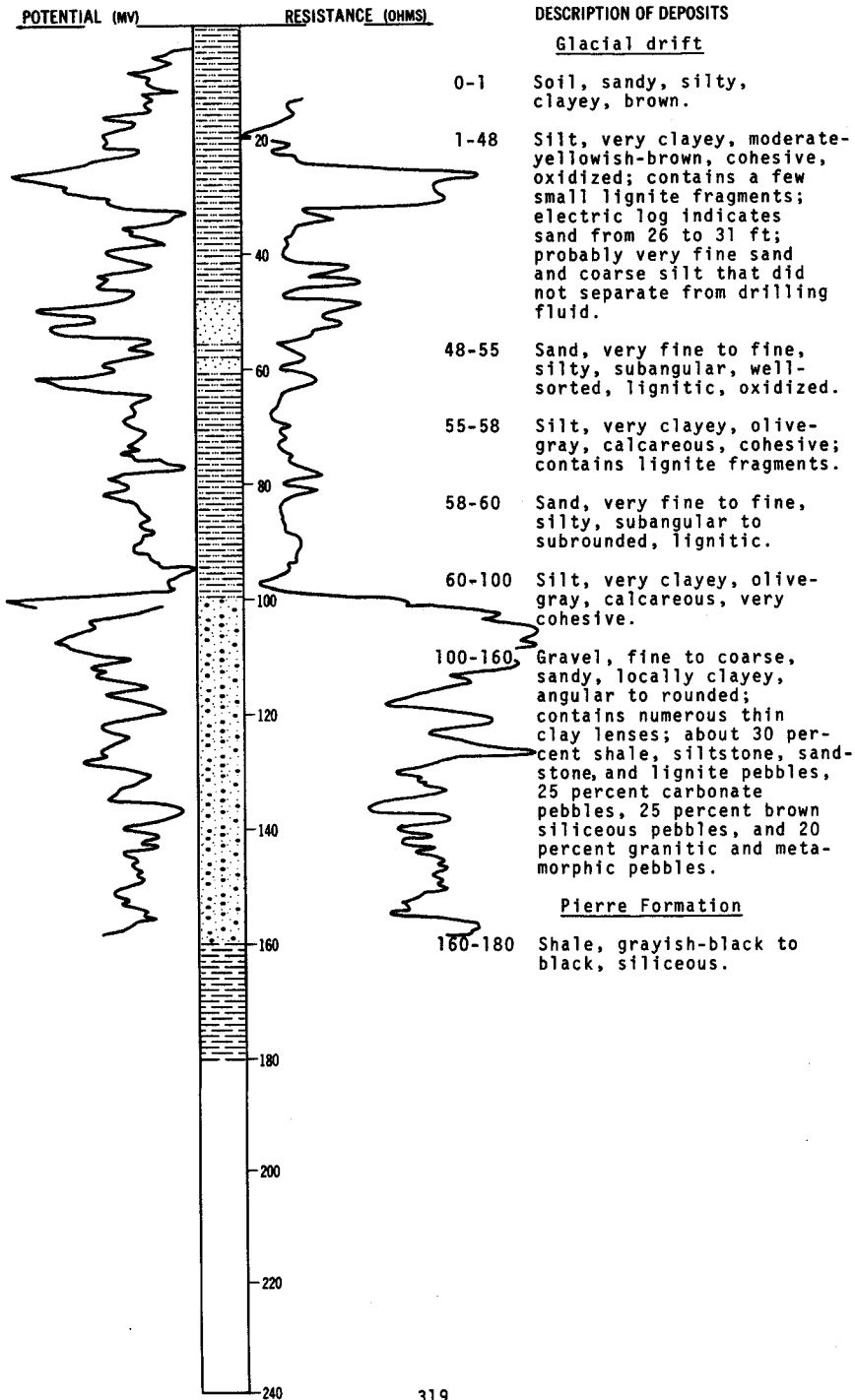


LOCATION: 135-079-24AAA

DATE DRILLED: September 1971

ALTITUDE: 1670  
(FT, MSL)

DEPTH: 180  
(FT)

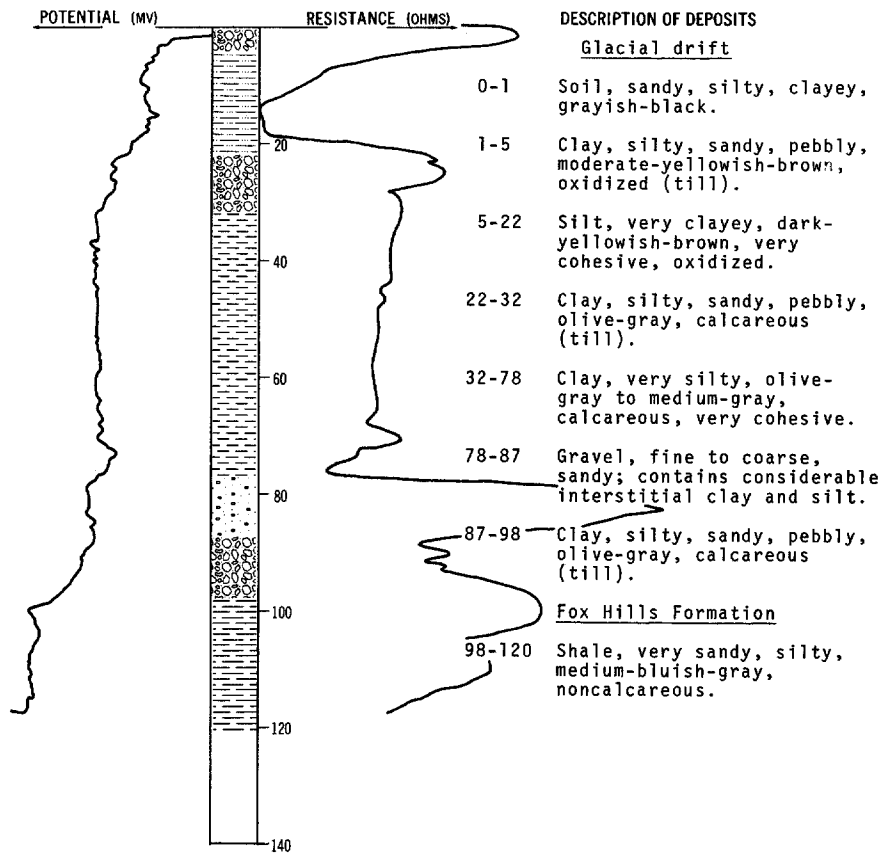


LOCATION: 136-074-08DDD

DATE DRILLED: September 1971

ALTITUDE: 1915  
(FT, MSL)

DEPTH: 120  
(FT)



135-079-24BDD  
NDSWC 8109

Altitude: 1670 ft

Date drilled: September 1971

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Fox Hills Formation:			
	Soil, very sandy, silty, grayish-black-----	1	1
	Shale, very sandy, silty, weathered, oxidized; moderate yellowish brown to Dark yellowish brown-----	8	29
	Sandstone, calcareous, well-cemented, oxidized; moderate yellowish brown with bluish-gray mottling-----	2	31
	Shale, sandy, silty, partially oxidized; dark yellowish brown with bluish-gray mottling-----	29	60

136-074-13AAB  
(Log from Witikko Drilling)

Altitude: Date drilled: June 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Sand and clay, brown-----	16	17
	Clay, yellow-----	19	36
	Sand, silty, gray-----	12	48
	Clay, gray-----	24	72
	Clay, silty, gray, rocks-----	18	90
	Clay, gray-----	90	180
	Gravel; clay, gray-----	10	190

136-074-13DAB  
(Log from Witikko Drilling)

Altitude: Date drilled: June 1973

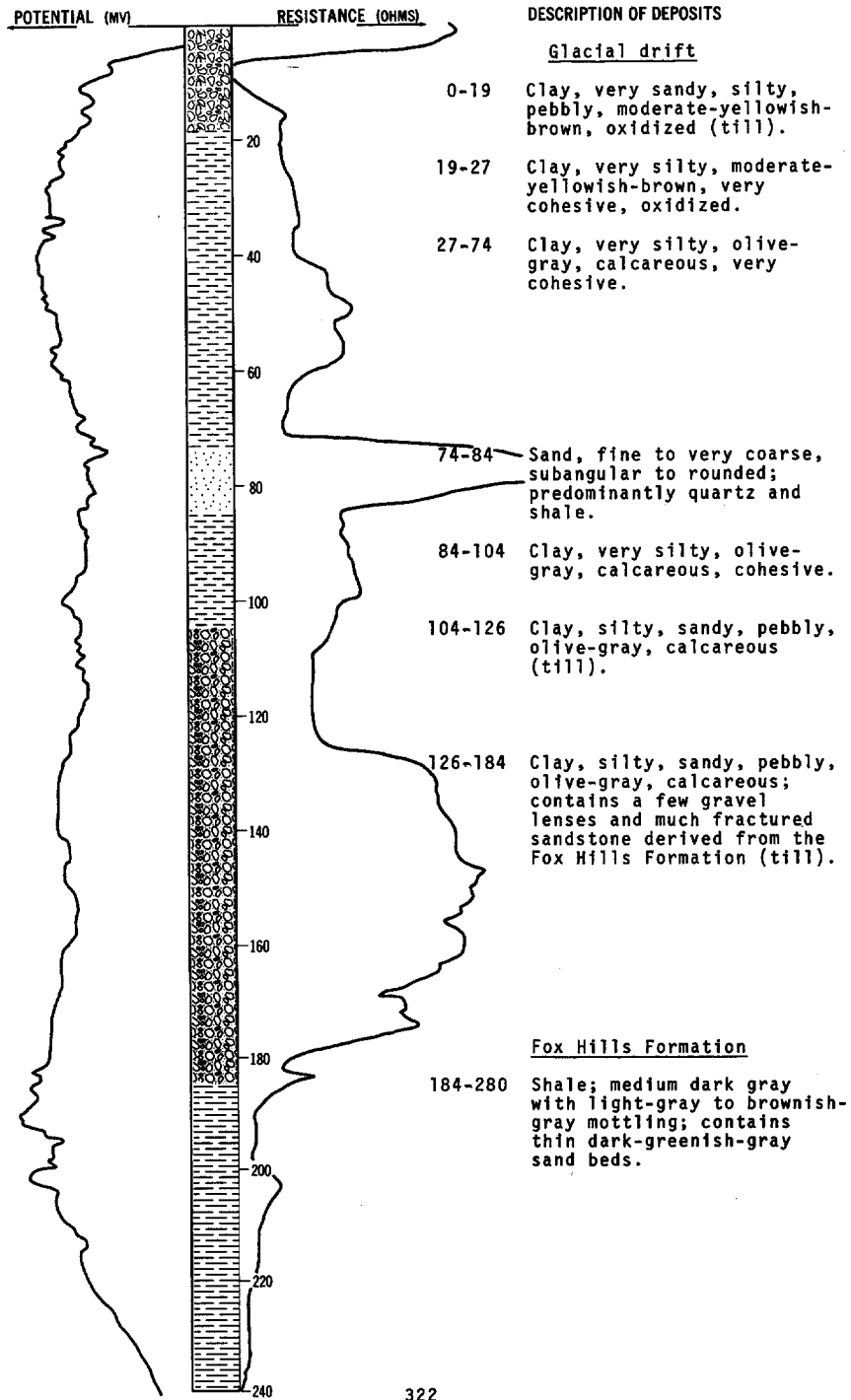
	Topsoil, black-----	1	1
	Sand, silty, dark brown-----	15	16
	Sand, silty, gray-----	11	27
	Clay, gray; gravel-----	12	39
	Clay, gray-----	7	46
	Sand and clay, gray-----	24	70

LOCATION: 136-074-27AAA

DATE DRILLED: September 1971

ALTITUDE: 1900  
(FT, MSL)

DEPTH: 300  
(FT)

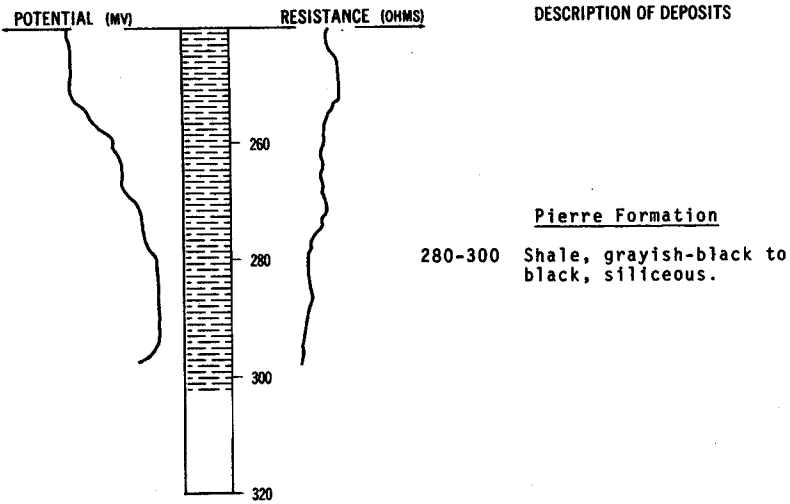


LOCATION: 136-074-27AAA

DATE DRILLED: September 1971

ALTITUDE: 1900  
(FT, MSL)

DEPTH: 300  
(FT)



136-074-30DDB  
(Log from Witikko Drilling)

Altitude:

Date drilled: July 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Clay, yellow-----	13	14
	Clay, gray-----	2	16
	Clay, yellow-----	15	31
	Clay, dark gray-----	7	38
	Sand, brown-----	16	54
	Clay, gray-----	1	55
	Sand, brown-----	13	68
	Sand, blue-----	7	75
	Clay, gray-----	35	110
	Sand, blue-----	10	120
	Clay, gray-----	80	200

136-074-31ACD3  
(Log from Witikko Drilling)

Altitude: Date drilled: September 1972

Geologic source	Material	Thickness (feet)	Depth (feet)
	Soil, black-----	1	1
	Clay, brown, and sand-----	20	21
	Sand, brown-----	6	27
	Sand, brown, and clay-----	3	30
	Sand, brown-----	18	48
	Clay, dark-gray, and rocks-----	2	50
	Sand, blue-----	10	60
	Clay, dark-gray-----	80	140

136-074-31DCC  
NDSWC 8661

Altitude: 1878 ft Date drilled: May 1973

Glacial drift:			
	Clay, silty, sandy, gravelly, light-olive-gray to yellowish-gray, oxidized (till)---	5	5
Fox Hills Formation:			
	Sandstone, fine- to medium-grained, yellowish-brown to reddish-brown, sub-angular, semiconsolidated, oxidized-----	29	34
	Sandstone, fine- to medium-grained, medium-dark-gray to greenish-gray, glauconitic, micaceous-----	6	40

136-074-35CDC  
NDSWC 8145

Altitude: 1895 ft Date drilled: September 1971

Glacial drift:			
	Gravel, sandy, slightly clayey, fine to coarse, angular to rounded, poorly sorted-	9	9
	Clay, silty, sandy, pebbly, olive-gray, calcareous (till)-----	14	23
Fox Hills Formation:			
	Sandstone, silty, slightly clayey, loose to semiconsolidated, oxidized; moderate yellowish brown with dark-yellowish-brown mottling-----	27	50
	Sandstone, slightly to moderately clayey, medium-bluish-gray, micaceous, glauconitic, semiconsolidated; contains thin beds of shale-----	30	80

136-075-04BAB  
(Log from Farmers Supply)

Altitude: Date drilled: August 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil-----	4	4
	Gravel, sandstone-----	12	16
	Clay, sandy, yellow-----	20	36
	Clay, gray-----	15	51
	Sand, green-----	7	58

136-075-04BCA  
(Log from Farmers Supply)

Altitude: Date drilled: August 1973

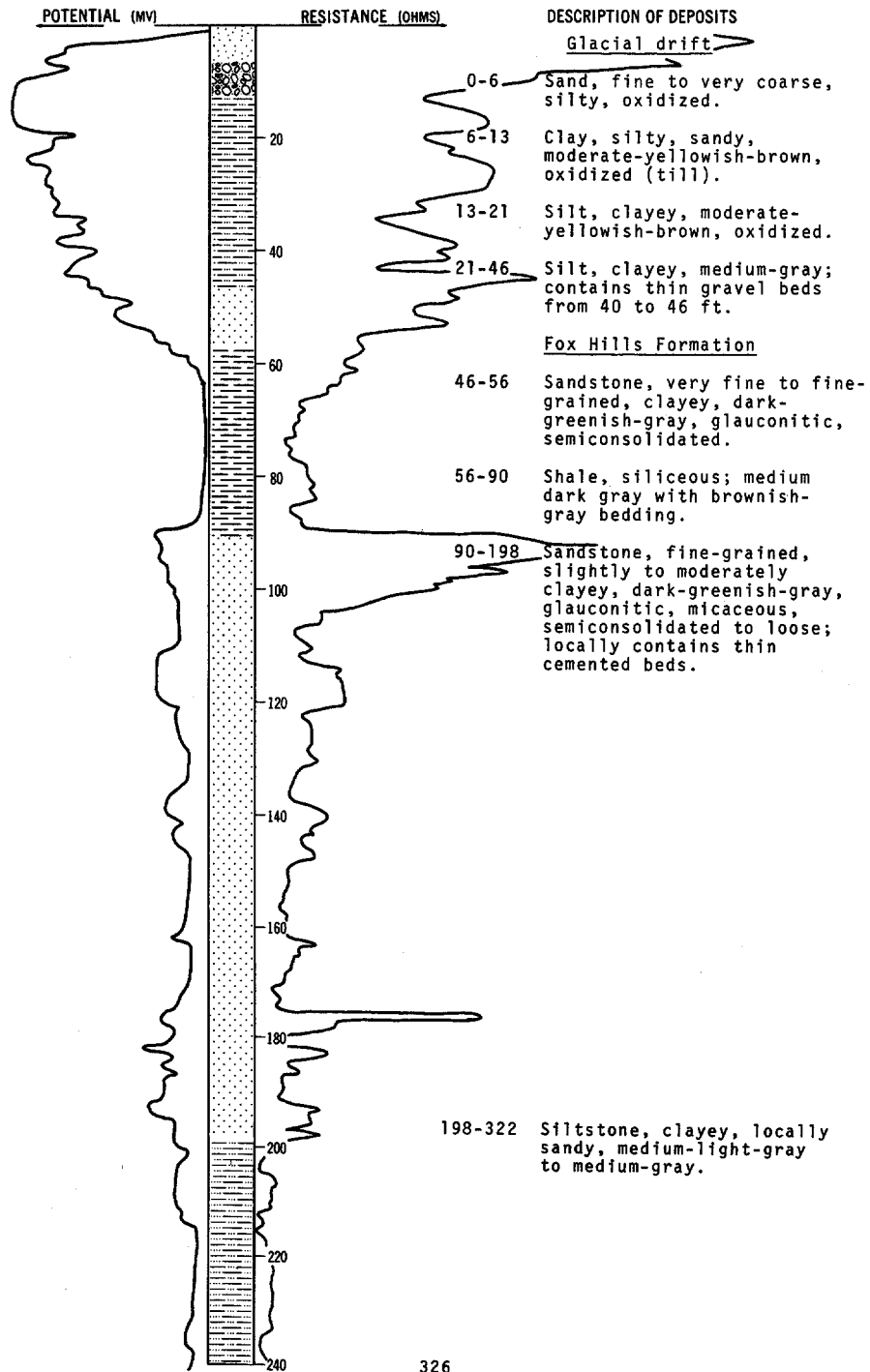
	Topsoil-----	3	3
	Gravel-----	17	20
	Sands-----	8	28
	Sand rock, shale-----	4	32
	Clay, sandy, gray (till)-----	10	42
	Clay, gray, hard (till)-----	118	160

LOCATION: 136-075-06DDD

DATE DRILLED: October 1972

ALTITUDE: 1890  
(FT, MSL)

DEPTH: 340  
(FT)



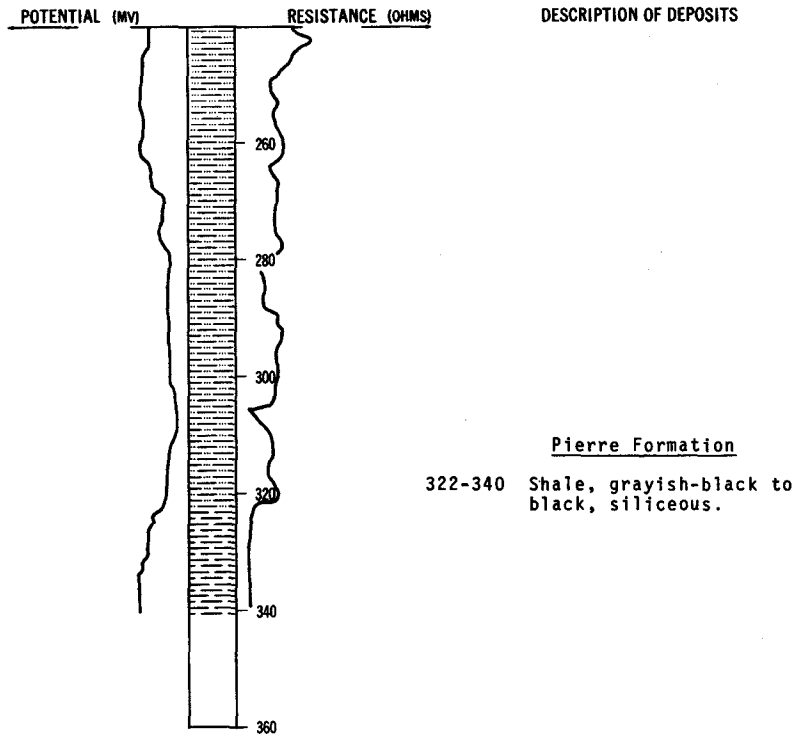


LOCATION: 136-075-06DDD

DATE DRILLED: October 1972

ALTITUDE: 1890  
(FT, MSL)

DEPTH: 340  
(FT)



136-075-10ADA  
(Log from Witikko Drilling)

Altitude:

Date drilled: June 1973

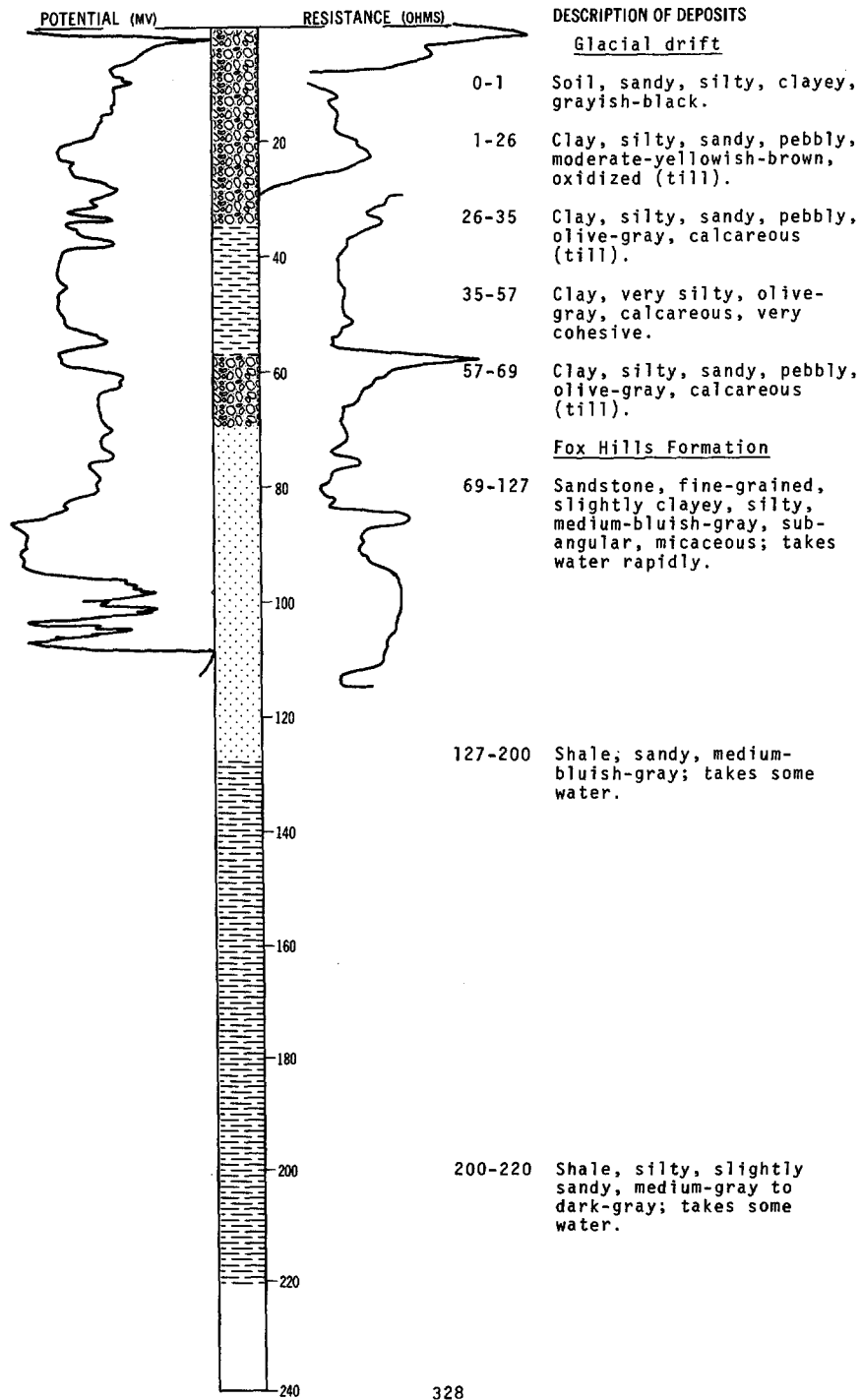
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	2	2
	Sand, brown-----	22	24
	Clay and sand, brown-----	8	32
	Sand, silty, gray-----	7	39
	Clay, gray-----	26	75
	Sand, blue-----	9	84
	Sand and clay, blue-----	18	102

LOCATION: 136-075-14AAA

DATE DRILLED: September 1971

ALTITUDE: 1910  
(FT, MSL)

DEPTH: 220  
(FT)



136-075-20CDC  
NDSWC 8665

Altitude: 1840 ft

Date drilled: May 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Gravel, sandy, fine to coarse, brown, sub-angular, oxidized; many pebbles are iron oxide stained-----	5	5
	Clay, silty, sandy, dusky-yellow to brownish-gray, carbonaceous-----	5	10
Fox Hills Formation:			
	Sandstone, very fine to medium, greenish-gray, micaceous, glauconitic, sub-angular, semiconsolidated to loose-----	20	30
	Siltstone, clayey, medium-dark-gray to dark-brownish-gray, moderately indurated-----	10	40

136-075-26CBC  
NDSWC 8547

Altitude: 1865 ft

Date drilled: October 1972

Glacial drift:			
	Silt, sandy, slightly clayey, moderate-yellowish-brown to dark-yellowish-brown, oxidized; contains a few pebbles-----	11	11
Fox Hills Formation:			
	Sandstone, very fine to fine-grained, glauconitic, micaceous, semiconsolidated--	7	18
	Siltstone, clayey, sandy, medium-light-gray-----	22	40

136-075-30CAA  
(Log from Witikko Drilling)

Altitude:

Date drilled: August 1972

Soil, black-----	2	2
Clay, brown-----	6	8
Sand, brown-----	22	30
Clay, brown-----	18	48
Clay, gray-----	14	62
Clay, gray; and sand-----	16	78
Clay, gray-----	37	115
Sand, blue; and clay-----	25	140

136-075-34CBD  
NDSWC 8660

Altitude: 1860 ft

Date drilled: May 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Glacial drift:</u>			
	Silt, sandy, clayey, moderate-yellowish-brown-----	2	2
<u>Fox Hills Formation:</u>			
	Sandstone, very fine to medium, moderate-yellowish-brown, micaceous, oxidized-----	13	15
	Sandstone, very fine to medium, dark-greenish-gray, micaceous, glauconitic-----	42	57
	Siltstone, clayey, medium-gray-----	3	60

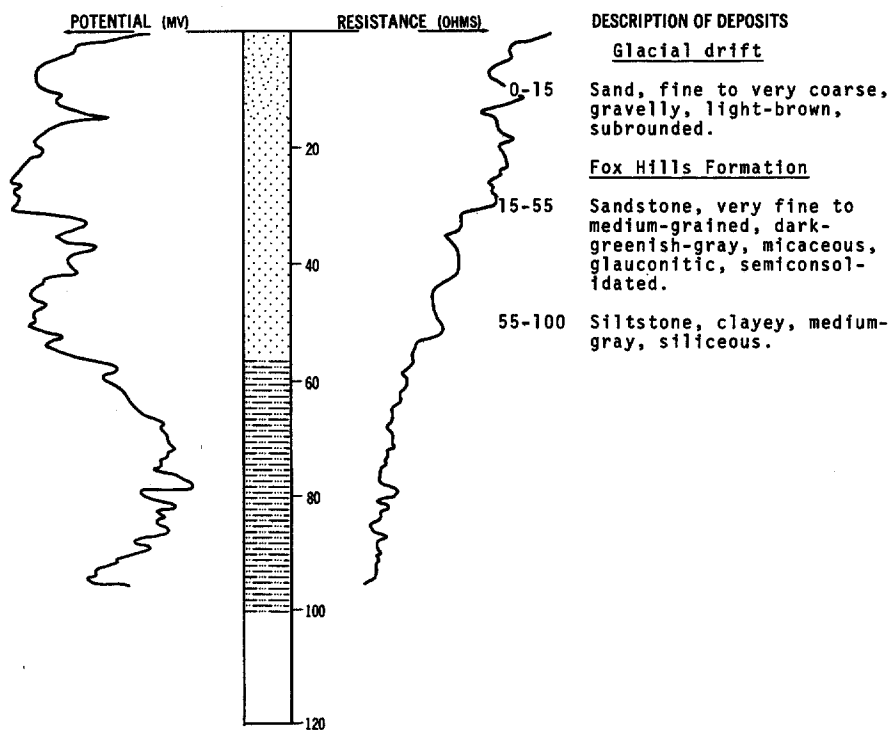
NDSWC 8659

LOCATION: 136-075-34CCC

DATE DRILLED: May 1973

ALTITUDE: 1855  
(FT, MSL)

DEPTH: 100  
(FT)



136-076-01ACA  
(Log from Wetch Drilling Co.)

Altitude:		Date drilled: 1966	
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Sand-----	1	1
	Clay, sandy, brown-----	19	20
	Sand, brown-----	90	110
	Rock, blue-----	1	111
	Clay, blue-----	39	150
	Rock, blue-----	3	153
	Clay, blue-----	37	190
	Rock-----	3	193
	Clay, blue-----	57	250
	Rock-----	1	251
	Sand, green, water-----	19	270
	Clay, blue-----	50	320
	Sand, blue, water-----	10	330

136-076-01BDB  
(Log from Wetch Drilling Co.)

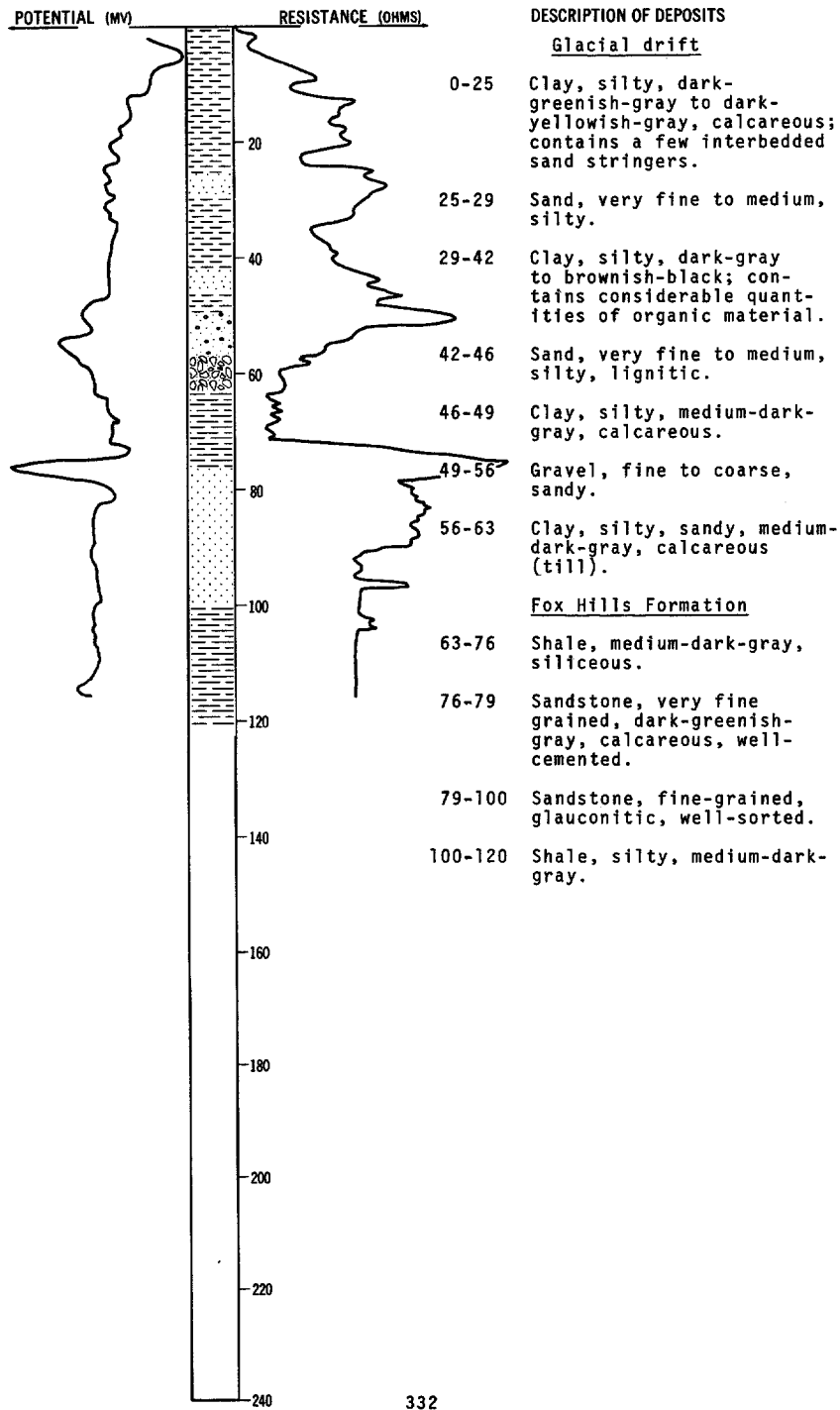
Altitude:		Date drilled: 1966	
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Sand-----	1	1
	Clay, sandy-----	9	10
	Sand, brown-----	80	90
	Clay, blue-----	70	160
	Limestone-----	1	161
	Sand, blue, water-----	19	180
	Clay, blue-----	50	230
	Sand, green, water-----	20	250

LOCATION: 136-076-07BCC

DATE DRILLED: October 1972

ALTITUDE: 1735  
(FT, MSL)

DEPTH: 120  
(FT)

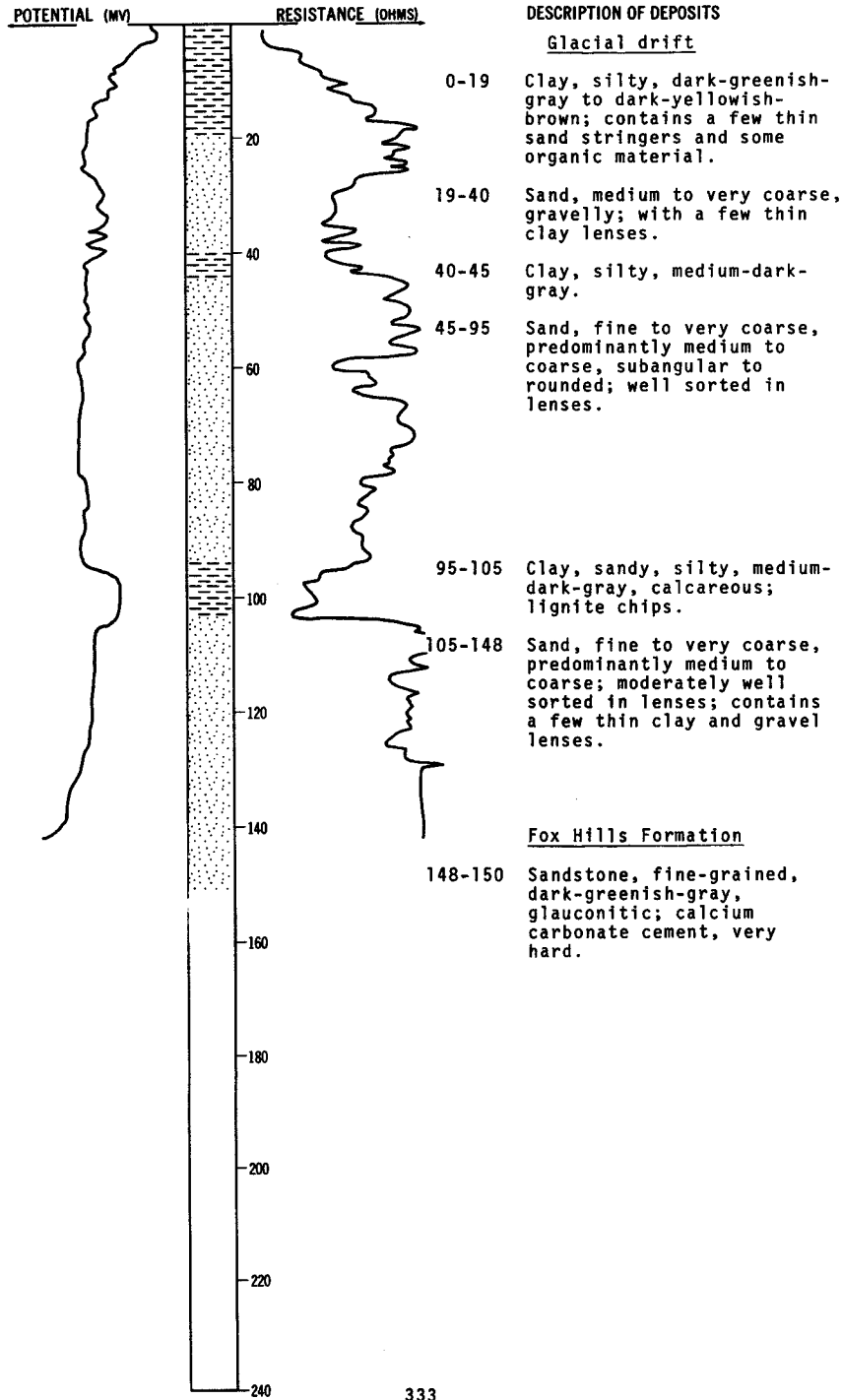


LOCATION: 136-076-07CBC

DATE DRILLED: October 1972

ALTITUDE: 1735  
(FT, MSL)

DEPTH: 150  
(FT)



136-076-13BAA  
(Log from Witikko Drilling)

Altitude: Date drilled: March 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Clay and sand, brown-----	1	2
	Gravel-----	2	4
	Clay, yellow-----	24	28
	Clay, gray-----	12	40
	Sand and clay, blue-----	20	60

136-076-10CAA  
NDSWC 8658

Altitude: 1750 ft Date drilled: May 1973

Glacial drift:			
	Silt, sandy, clayey, dark-yellowish-brown, oxidized-----	18	18
Fox Hills Formation:			
	Siltstone, medium-dark-gray, siliceous, semiindurated-----	22	40

136-077-12DDD  
NDSWC 8141

Altitude: 1750 ft Date drilled: September 1971

Glacial drift:			
	Gravel, clayey, fine to coarse, angular to rounded-----	4	4
Fox Hills Formation:			
	Shale, very silty, oxidized; moderate yellowish brown with medium-gray mottling-----	14	18
	Shale, silty, medium-gray-----	56	74
	Sandstone, fine-grained, highly calcareous, glauconitic, hard-----	2	76
	Shale, sandy, silty, medium-gray, glauconitic-----	4	80



136-077-16AAD  
NDSWC 8544

Altitude: 1745 ft

Date drilled: October 1972

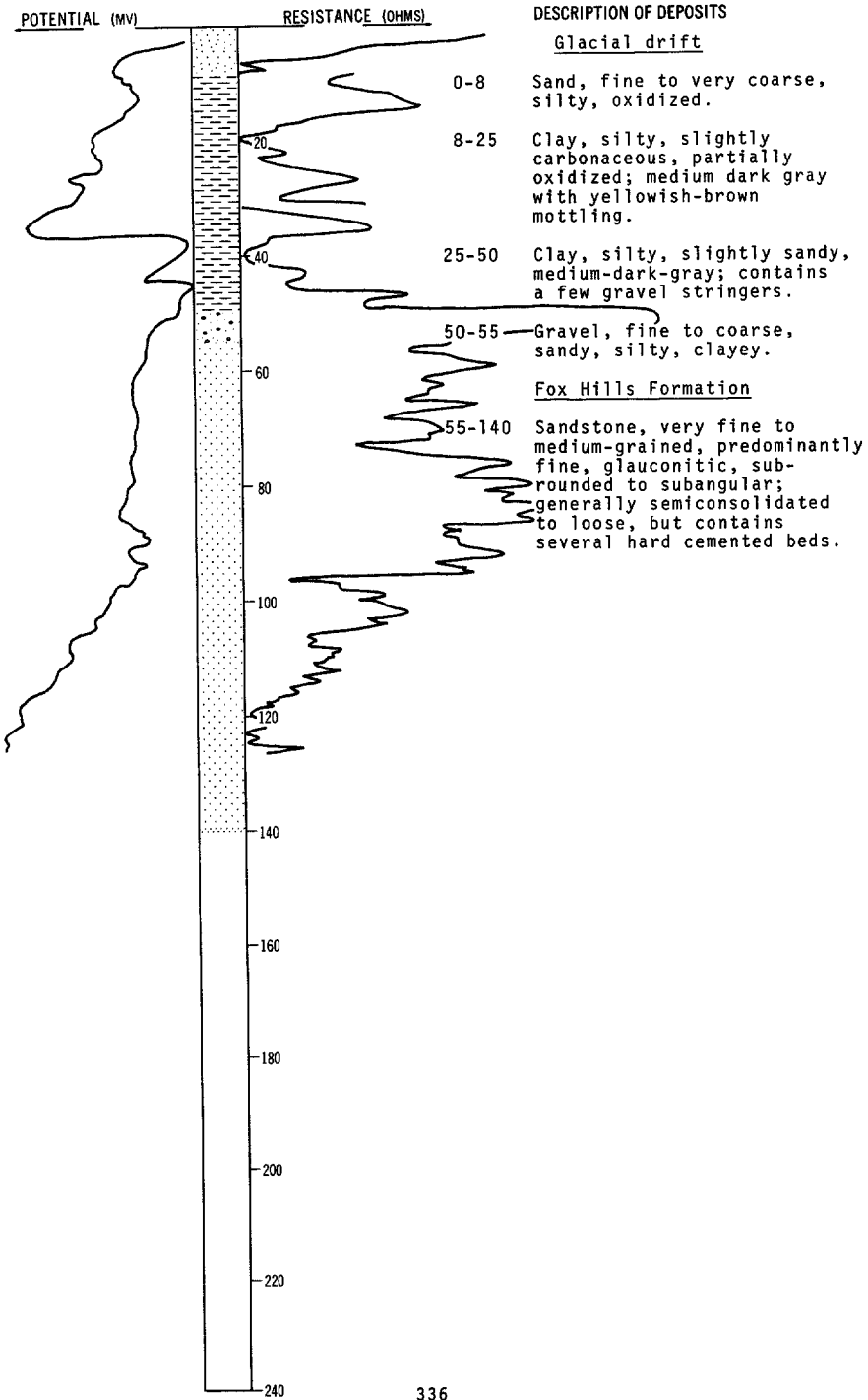
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, clay, sandy, silty, grayish-black----	1	1
	Sand, slightly clayey, fine to coarse (predominantly medium), subangular to subrounded, oxidized-----	5	6
	Clay, silty, slightly sandy, oxidized; dark yellowish brown with olive-gray mottling-----	24	30
	Clay, silty, medium-dark-gray, calcareous---	10	40
	Sand, clayey, very fine to medium, subangular to subrounded, slightly oxidized near top; well sorted in lenses-----	38	78
	Silt, sandy, clayey, olive-gray with light-olive-gray laminae, calcareous-----	47	125
	Clay, silty, olive-gray, calcareous; contains detrital lignite and interbedded gravel stringers-----	41	166
	Sand, gravelly (about 20 percent), clayey, silty, very fine to very coarse, subangular to subrounded; contains several clay lenses-----	74	240
	Sand, gravelly (about 30 percent), fine to very coarse, moderately well sorted in lenses, subangular to rounded; contains interbedded clay lenses-----	30	270
	Gravel, sandy (about 40 percent, fine to coarse, angular to rounded; contains interbedded clay lenses)-----	25	295
Fox Hills Formation:			
	Shale, sandy, medium-light-gray, siliceous--	13	308
Pierre Formation:			
	Shale, grayish-black to black, siliceous----	12	320

LOCATION: 136-077-16ADD

DATE DRILLED: October 1972

ALTITUDE: 1735  
(FT, MSL)

DEPTH: 140  
(FT)

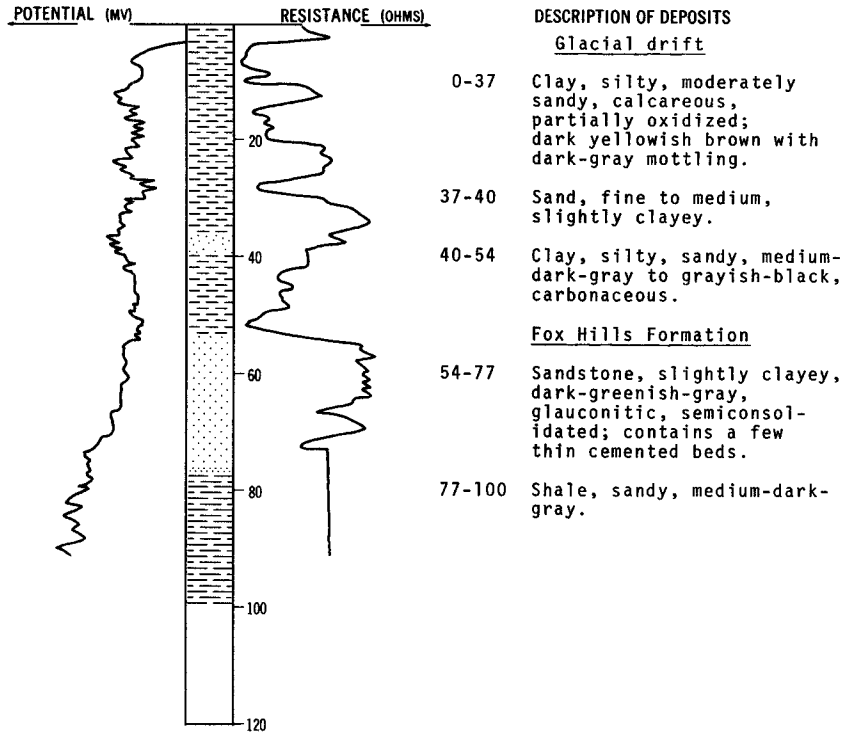


LOCATION: 136-077-16DAD

DATE DRILLED: October 1972

ALTITUDE: 1735  
(FT, MSL)

DEPTH: 100  
(FT)



136-077-24ADD  
NDSWC 8541

Altitude: 1775 ft

Date drilled: October 1972

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<b>Glacial drift:</b>			
	Soil, clayey, silty, sandy, brownish-black--	1	1
	Sand, very clayey, silty, dark-brownish gray, partially oxidized; contains a few pebbles-----	8	9
<b>Fox Hills Formation:</b>			
	Shale, medium-dark-gray, siliceous-----	31	40

136-077-29BBB1  
(Log from Empire Irrigation and Farmers Supply)

Altitude: 1732 ft Date drilled: September 1964

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Soil-----	3	3
	Sand-----	6	9
	Clay, sandy-----	36	45
	Gravel-----	7	52
	Clay-----	15	67
	Sand, fine; with lignite-----	22	89
	Clay-----	30	119
	Sand; with lignite and shale pebbles-----	8	127
	Clay-----	33	160
	Gravel-----	10	170
	Lignite and sand-----	3	173
	Sand-----	6	179
	Gravel-----	4	183
	Gravel; with lignite-----	3	186
	Sand and shale pebbles-----	5	191
	Lignite-----	8	199
	Gravel-----	11	210
	Gravel; with lignite-----	3	213

136-077-29BBB2  
NDSWC

Altitude: 1732 ft Date drilled: September 1964

	Soil, black-----	1	1
	Clay, silty, yellowish-brown, oxidized-----	8	9
	Sand, fine, lignitic; contains some shale grains-----	9	18
	Clay, silty, gray; contains thin sand layers	27	45
	Clay, olive-gray-----	39	84
	Clay, silty to sandy, olive-gray-----	26	110
	Clay, olive-gray-----	9	119
	Sand, fine, clayey, lignitic, dark-gray; well sorted except large grains of lignite	11	130
	Gravel, fine to medium, sandy, poorly sorted	12	142
	Clay, silty, olive-gray-----	12	154
	Gravel, medium to coarse, subangular to subrounded, moderately well sorted; pebbles predominantly limestone and shale-	26	180

136-077-32BAB  
(Log from Witikko Drilling)

Altitude: Date drilled: August 1973

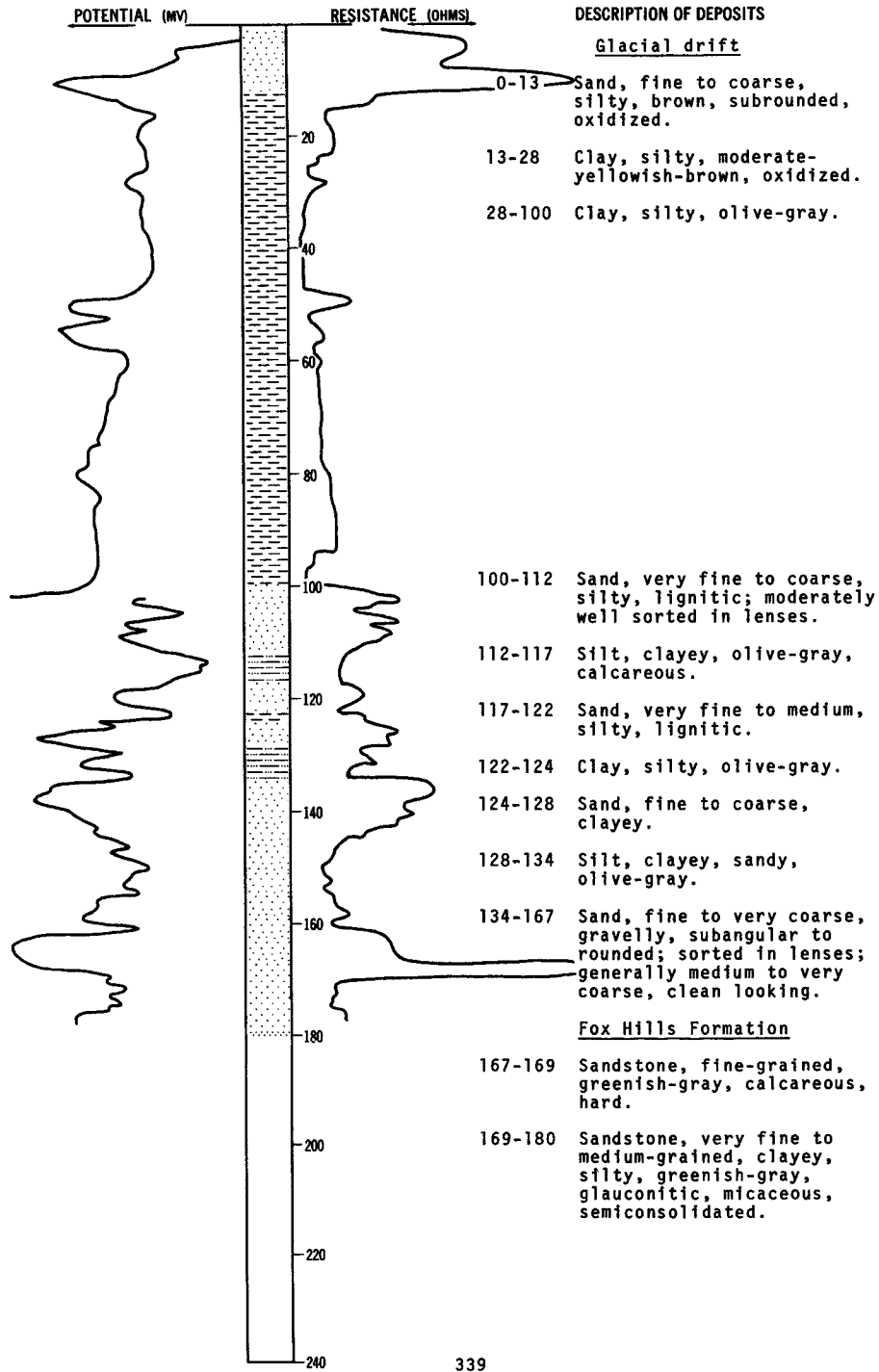
	Topsoil, black-----	1	1
	Sand, brown-----	15	16
	Clay, yellow-----	8	24
	Clay, gray-----	72	96
	Rock-----	2	98
	Sand, blue-----	22	120
	Sand and clay, blue-----	20	140

LOCATION: 136-078-06BCB

DATE DRILLED: May 1973

ALTITUDE: 1670  
(FT, MSL)

DEPTH: 180  
(FT)

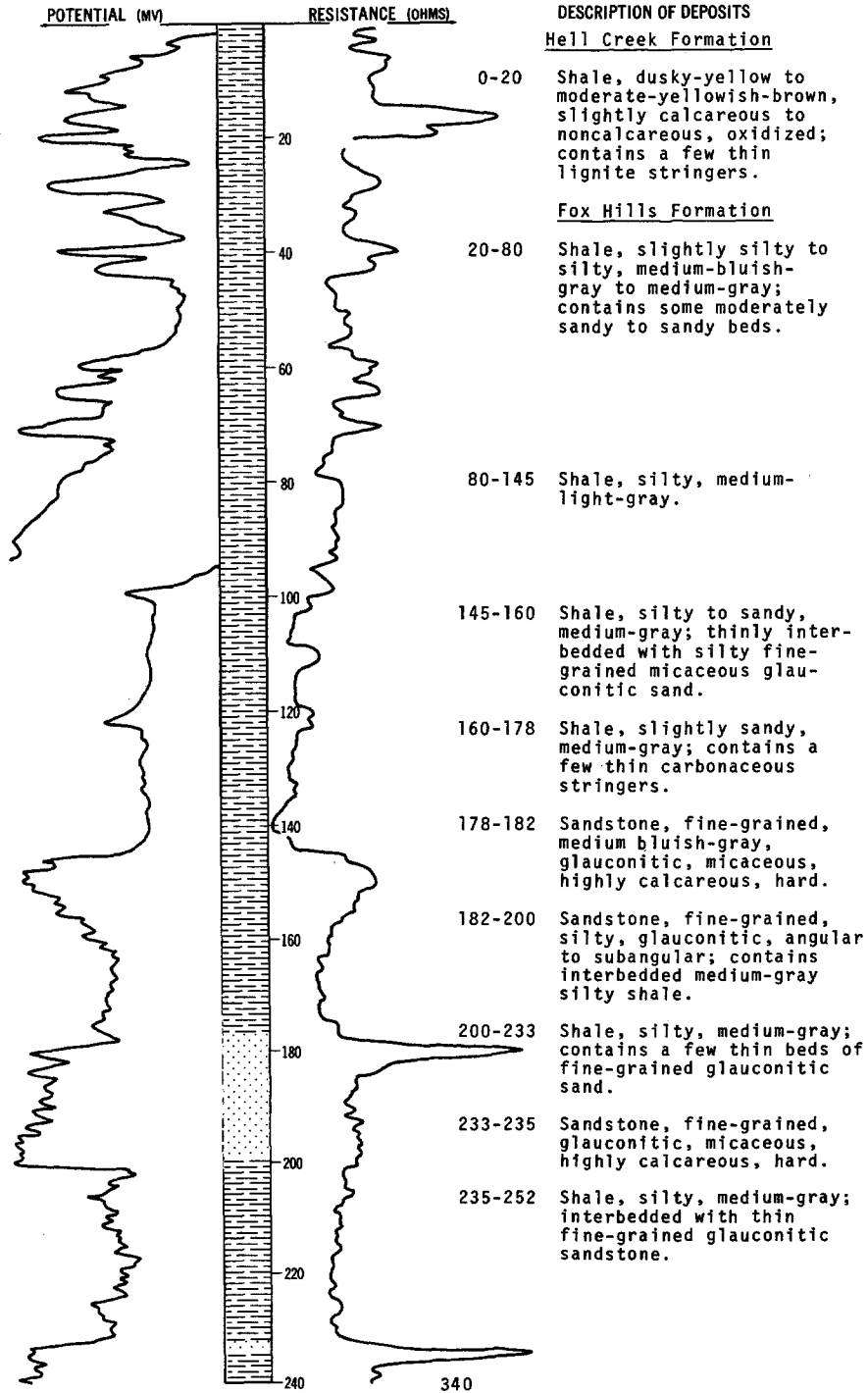


LOCATION: 136-078-07BDB

DATE DRILLED: September 1971

ALTITUDE: 1710  
(FT, MSL)

DEPTH: 260  
(FT)

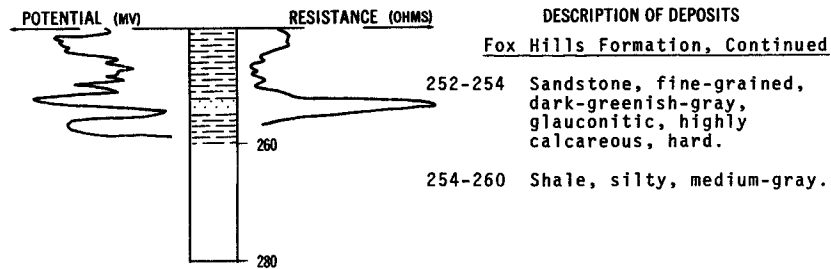


LOCATION: 136-078-07BDB

DATE DRILLED: September 1971

ALTITUDE: 1710  
(FT, MSL)

DEPTH: 260  
(FT)



136-078-19ACD  
(Log from Allen Edwards)

Altitude:

Date drilled: 1963

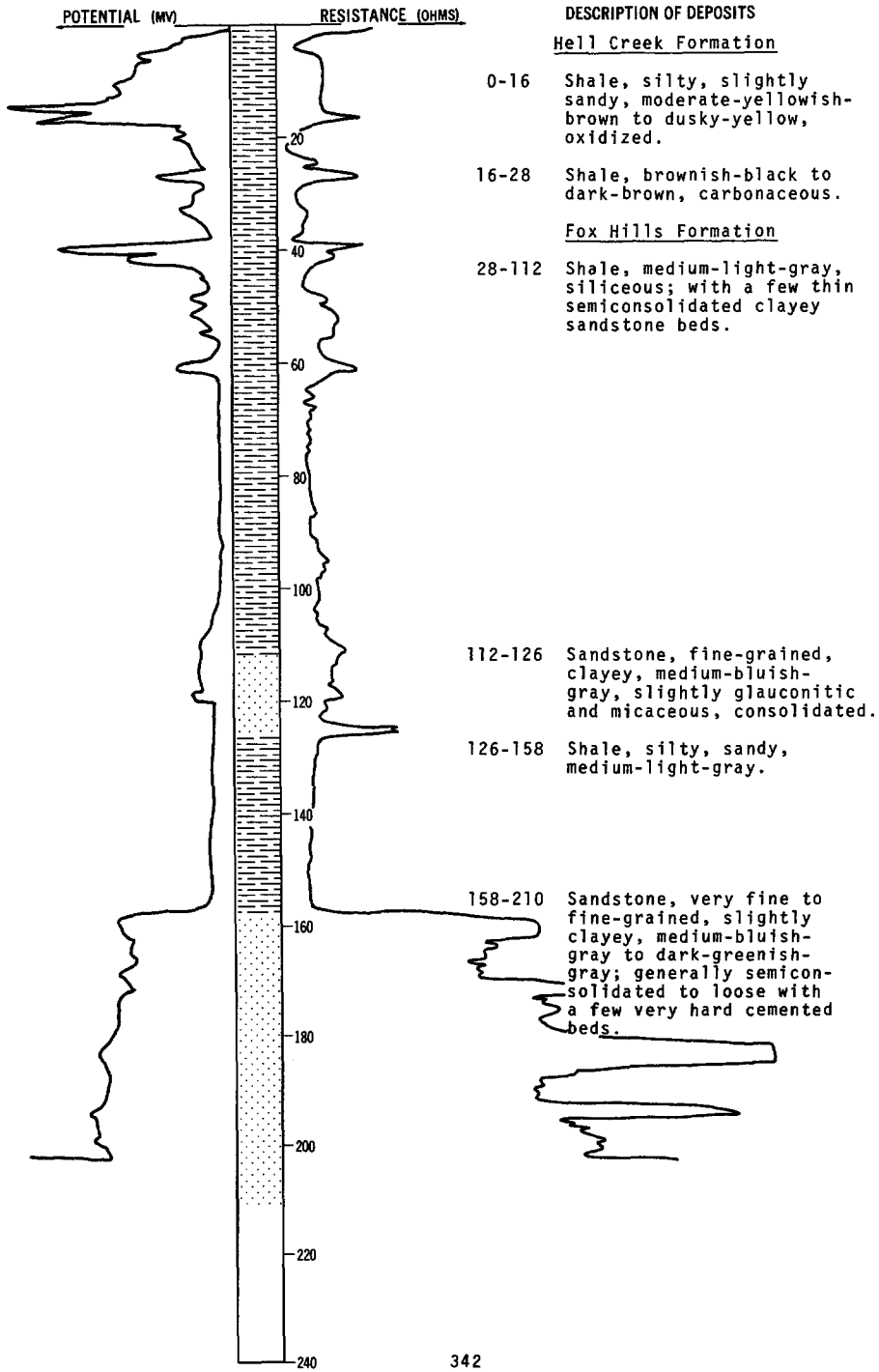
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Sand, brown-----	10	10
	Clay, gray-----	40	50
	Clay, sandy, gray-----	8	58
	Clay, gray-----	52	110
	Sand, gray; some clay-----	10	120

LOCATION: 136-078-24CCC

DATE DRILLED: October 1972

ALTITUDE: 1810  
(FT, MSL)

DEPTH: 210  
(FT)





136-078-34ABC2  
(Log from Witikko Drilling)

Altitude: Date drilled: October 1973

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Topsoil, black-----	1	1
	Sand, brown-----	4	5
	Clay, dark-brown-----	7	12
	Clay, brown-----	28	40
	Coal-----	2	42
	Sand, blue-----	1	43
	Clay, gray-----	27	70
	Clay and sand, blue-----	6	76
	Clay, gray-----	124	200
	Sand, blue-----	20	220

136-079-03DCC  
(Log from Empire Irrigation and Farmers Supply)

Altitude: Date drilled: 1968

	Soil-----	2	2
	Clay, sandy-----	14	16
	Clay-----	14	30
	Sand-----	53	83
	Clay-----	32	115

TABLE 4.--Chemical analyses of ground water

LOCAL WELL NUMBER	GEO-LOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED IRON (UG/L)	DIS-SOLVED MANGANESE (MNI) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED NE-SILIUM (MG/L)	DIS-SOLVED SODIUM (MG/L)	DIS-SOLVED TMS-SIUM (MG/L)	BICARBONATE (MG/L)	CARBONATE (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (MG/L)	DIS-SOLVED DUE AT 180°C (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM RATIO	SODIUM AD-SORPTION ANGLE (UMHOS/CM @25°C)	SPECIFIC CON-DUCTIVITY (UMHOS/CM @25°C)	PH	TEMPERATURE (DEG C)	
129-074-018CB	1128GFV	130	72-07-13	27	90	1700	207	89	147	18	453	0	772	13	4	1.9	360	1690	884	513	26	2.1	1980	7.2	7.0	
129-074-048BD	217DKOT	2476	64-02-10	11	230	--	15	746	746	6.5	259	5	1250	113	5.0	22	490	2330	79	0	95	51	3370	8.3	--	
129-074-058BD	217DKOT	2476	71-07-15	13	840	80	24	3.4	772	3.8	267	0	1260	110	5.0	22	490	2330	79	0	95	51	3370	8.3	7.0	
129-074-290DA	1128GFV	68	71-07-29	25	0	480	321	218	914	27	565	0	2210	482	1.1	66	840	4780	1700	1240	53	9.6	3610	7.7	27.0	
129-074-318CB	1128GFV	38	70-07-29	26	0	30	85	25	8.0	4.5	293	0	92	3.0	--	33	220	373	317	77	5	--	602	7.7	8.0	
129-074-330AD	217DKOT	2468	71-07-29	13	0	160	20	9.7	750	4.3	288	6	1260	137	2.1	22	1800	2250	90	0	94	34	3370	8.4	23.0	
129-075-008BB	1128GFV	244	72-12-19	29	--	--	168	113	290	11	1140	0	974	56	4	11	260	1750	886	0	40	4.2	2460	7.6	8.0	
129-075-058CB	1128BAG	300	73-06-11	28	--	--	193	74	247	11	1240	0	282	95	4	23	250	1550	780	0	40	3.8	2230	7.6	--	
129-075-068AB	1128BAG	80	73-06-07	24	2600	600	156	48	279	13	739	0	594	16	3	1.6	250	1540	590	0	50	5.0	2130	7.4	--	
129-075-090CD	1128GFV	42	73-07-31	27	60	40	550	130	180	21	595	0	1800	8.8	4	56	130	3190	1900	1400	17	1.8	3390	7.3	--	
129-075-100CC	1128GFV	103	72-07-13	27	1200	200	82	21	650	12	1010	0	782	57	2	1.2	1800	2120	290	0	82	1.6	3090	7.6	--	
129-075-20C88	1128BAG	170	72-07-13	25	--	--	129	67	241	14	905	0	342	15	4	4.06	500	1360	597	0	45	4.2	1880	7.6	8.5	
129-075-208BB	1128BAG	284	72-12-20	26	--	--	130	84	247	9.2	934	0	407	25	5	11	260	1750	886	0	40	3.8	2230	7.6	--	
129-076-038AC	217DKOT	2500	72-07-12	12	2100	180	36	41	718	3.6	229	0	1360	165	1.8	22	360	2400	261	73	65	19	3380	8.1	--	
129-076-048BB	1128GFV	150	72-07-12	24	250	350	64	20	451	9.4	856	0	515	17	1	1.3	1400	1540	242	0	79	12	2190	7.5	8.5	
129-076-17ACD	--	--	72-08-10	23	0	240	114	37	671	11	1010	0	1050	23	2	2.9	1700	2430	441	0	29	13	3280	7.4	--	
129-076-208AB	--	--	72-08-10	20	0	870	86	27	487	11	946	0	583	12	5	1.9	890	1750	320	0	75	11	2410	7.5	--	
129-076-21AAC	217DKOT	2629	72-07-12	12	4700	270	208	68	477	20	196	0	1340	243	2.7	22	290	2430	872	0	43	4.1	2070	7.6	7.0	
129-076-030AD	217DKOT	150	72-08-10	15	0	0	16	3.8	550	5.5	1060	0	575	12	6	1.4	1900	1590	56	0	95	32	2280	7.8	--	
129-077-090BC	211FXHL	160	72-07-19	26	2200	80	72	25	722	8.6	1500	0	603	8.9	2	22	1600	2250	284	0	84	1.8	3180	7.4	8.5	
129-077-17ADA	--	120	72-07-19	25	4700	790	293	128	220	15	977	0	825	14	5	5.4	250	2150	1260	458	27	2.6	2650	7.6	8.0	
129-077-21ACC	--	87	72-07-19	30	--	--	298	133	200	12	1130	0	793	24.6	3	2.4	140	2090	1290	353	24	2.4	2560	7.4	8.0	
129-077-23CAC	--	20	72-07-19	31	90	50	181	115	277	8.1	704	0	758	27	3	26	140	1930	927	349	39	3.9	2450	7.6	8.0	
129-078-010AA	211FXHL	100	72-08-10	21	150	1000	187	103	98	9.2	738	0	448	3.0	6	1.6	100	1200	892	286	19	1.4	2590	7.4	--	
129-078-110CC1	211FXHL	70	72-08-10	15	0	250	74	54	299	9.2	763	0	422	20	2	1.72	280	1280	407	0	60	6.4	1870	7.5	--	
129-078-190CD2	--	17	72-08-10	17	0	30	102	45	83	5.4	444	0	272	8.0	4	3.3	100	886	441	77	31	1.9	1130	7.7	--	
130-074-04ACC	1128GFV	105	72-08-16	24	300	10	113	32	382	12	846	0	535	7.0	1	2.4	1200	1550	415	0	65	8.1	2220	7.5	8.0	
130-074-170C1	--	146	72-08-16	24	0	1500	104	51	213	11	508	0	404	7.6	4	1.3	570	1070	386	0	53	4.7	1540	7.4	--	
130-074-240AA	--	100	72-08-16	26	0	2700	231	81	155	16	853	0	751	12	3	2.1	320	1640	919	448	26	2.2	2050	7.3	--	
130-074-26A88	217DKOT	2506	72-07-11	11	1400	140	133	45	575	11	201	0	1270	202	2.9	22	750	2290	517	352	70	11	3300	8.1	26.5	
130-074-28ACD	--	--	60-07-08	--	1800	--	6.0	8.0	752	--	--	--	--	--	--	--	--	--	48	--	--	47	--	--	24.5	--
130-074-290AD	--	130	72-07-11	25	--	--	130	79	227	18	625	0	620	8.3	5	4.5	460	1430	649	137	42	3.8	1970	7.1	--	
130-074-318BC	217DKOT	2506	72-07-11	12	340	60	11	2.6	792	3.3	365	0	1140	167	2.5	25	1000	2360	38	0	97	55	3440	8.2	--	
130-075-07A88	--	227	72-07-12	27	100	50	15	2.6	611	6.9	899	0	611	70	3	24	1800	1790	48	0	95	38	2630	7.8	8.5	
130-075-078DA	--	310	72-07-12	27	290	30	8.0	1.2	529	6.3	1040	0	158	125	4	56	2100	1400	25	0	97	46	2170	7.9	8.5	
130-075-090DC	217DKOT	2488	71-07-28	13	140	60	9.5	11	784	3.1	254	0	1310	110	3.0	29	800	2210	70	0	95	41	3460	8.0	26.5	
130-075-100DD	217DKOT	2500	72-07-13	12	1900	70	15	4.5	834	4.7	353	0	1310	169	3.0	22	1400	2630	56	0	96	48	3750	8.2	--	
130-075-11ADA	--	134	72-07-13	23	--	--	186	66	426	12	992	0	770	51	5	20	1400	2120	731	0	95	7.0	2810	7.3	--	
130-075-208BB	--	2411	72-07-12	13	0	30	10	1.9	757	4.1	247	0	1260	109	2.5	22	610	2310	33	0	97	57	3340	8.1	--	
130-075-20CC1	1128DVL	194	72-12-20	28	2100	920	129	85	340	13	1040	0	466	67	4	22	560	1650	672	0	91	5.7	2410	7.6	8.0	
130-075-24C08	217DKOT	2432	72-07-13	11	1000	80	15	4.3	852	5.5	358	0	1250	205	2.7	15	1100	2640	55	0	96	49	3840	8.0	--	
130-075-278CB	217DKOT	2340	72-07-11	13	0	50	8.1	1.0	748	3.5	308	5	1190	117	2.1	22	710	2290	19	0	98	74	3340	8.4	24.0	
130-075-30C0C	1128BAG	200	73-06-12	24	--	--	159	59	171	9.8	1020	0	160	16	2	23	60	1120	640	0	36	2.9	1880	7.6	7.0	
130-075-30C0D3	1128BAG	153	73-06-14	24	--	--	165	92	169	10	1120	0	168	44	3	23	190	1170	790	0	31	2.6	1800	7.7	7.0	
130-075-30C0D5	1128BAG	184	73-06-15	24	--	--	191	101	132	12	1130	0	233	34	3	23	220	1330	890	0	24	1.9	1960	7.5	7.0	
130-075-30C0D4	1128BAG	218	73-06-07	24	--	--	156	48	279	13	739	0	594	16	3	1.6	250	1540	590	0	50	5.0	2130	7.4	--	
130-075-30C0D6	1128BAG	26	73-06-13	23	--	--	170	86	170	11	1200	0	140	16	3	23	180	1230	780	0	32	2.7	1920	7.5	5.0	
130-075-31A88	1128BAG	500	73-06-12	27	--	--	205	65	168	11	1160	0	173	19	3	23	220	1230	780	0	32	2.6	1900	7.5	8.0	
130-075-31BA1	1128BAG	144	73-06-13	24	--	--	156	95	168	10	927	0	165	18	2	20	160	1020	615	0	37	2.9	1580	7.7	7.0	
130-075-31BA2	1128BAG	152	73-06-13	19	--	--	96	51	196	7.8	753	10	209	12	4	20	380	984	451	0	48	4.0	1460	8.3	7.0	
130-075-31BA3	1128BAG	155	73-06-14	24	--	--	204	80	182	11	1080	0	290	27	2	23	220	1360	840	0	32	2.7	1980	7.7	7.0	
130-075-31BA5A	1128BAG	179	73-09-11	26	--	--	210	89	180	12	1190	0	250	38	5	23	590	1440	890	0	30	2.6	2070	7.4	7.0	
130-075-31BA5A	1128BAG	179	73-09-12	26	--	--	210	89	180	11	1190	0	250	37	5	23	600	1610	89	0	30	2.6	--	7.4	7.5	
130-075-31BA6A	1128BAG	30	73-08-23	26	130	2200	150	64	68	14	470	0	380	17	4	--	0	991	640	240	18	1.2	--	7.5	7.0	
130-075-31BA6A	1128BAG	50	73-08-24	23	--	--	170	74	70	14	470	0	430	24	4	--	40	1090	730	340	17	1.1	--			

LOCAL WELL NUMBER	GEO-LOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED IRON (FE) (MG/L)	DIS-SOLVED MANGANESE (MN) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (MG/L)	DIS-SOLVED FREST-DUE AT 180°C (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORPTION RATIO	SPECIFIC CONDUCTIVITY (UMHOS/CM @ 25°C)	PH	TEMPERATURE (DEG C)	
130-075-31CCC	1125BRG	114	71-09-30	26	--	110	118	54	377	12	825	0	571	39	-.5	-.22	270	1550	516	0	60	7.2	2310	7.6	8.0	
130-075-31DCC1	1125BRG	18	73-06-07	26	80	40	216	131	90	16	362	0	890	12	-.2	-.66	190	1600	1100	780	15	1.2	1920	7.6	--	
130-075-31DCC2	1125BRG	184	72-12-21	24	--	--	56	54	335	13	1040	0	212	33	-.2	-.06	260	1200	363	0	65	7.6	1920	7.7	8.0	
130-075-32DCD1	1125BRG	166	72-12-19	29	--	--	119	98	172	12	1150	0	96	15	-.3	-.22	90	1090	699	0	33	2.8	1790	7.6	8.0	
			72-12-20	27	--	--	140	92	190	11	1020	0	240	38	-.4	-.23	470	1260	730	0	36	3.1	1880	8.0	8.0	
130-076-09CB8	1125BRG	369	73-01-19	31	3000	1900	200	79	270	19	1040	0	420	110	-.1	-.23	940	1600	840	0	41	4.1	2470	7.6	8.0	
130-076-108AA	--	202	72-07-13	24	6000	830	173	78	156	11	870	0	361	2.9	-.4	1.2	320	1270	755	41	30	2.4	1810	7.4	8.5	
130-076-28ADD	--	130	72-07-13	18	290	2200	340	221	482	50	665	0	1580	436	-.5	37	500	3780	1810	1265	35	4.9	4680	7.5	--	
130-076-34DCD	--	2527	69-10-08	--	3900	--	--	--	--	--	169	--	1290	221	--	-.00	--	2630	332	0	0	--	3610	7.9	--	
130-076-34DCD	--	2527	72-07-12	12	3600	200	78	32	469	12	204	0	1240	229	2.1	-.22	540	2490	325	158	80	16	3510	7.8	--	
130-077-01CCC	211FPHL	43	72-12-15	31	290	900	80	64	196	11	545	0	395	9.8	-.2	-.22	640	1020	462	15	47	3.9	1500	7.7	8.0	
130-077-14AAA	211FPHL	84	73-05-29	32	1500	410	141	37	294	11	580	0	624	6.1	-.1	-.23	900	1430	310	21	55	3.7	1980	8.2	8.5	
130-077-23ABC	211FPHL	130	72-07-06	26	0	50	7.9	1.6	403	3.9	691	0	337	-.0	-.1	-.11	610	1170	26	0	96	34	1760	8.0	--	
130-078-20AAD	211FPHL	435	73-07-30	17	140	100	58	55	150	6.7	435	0	290	9.6	-.2	9.0	220	795	370	0	68	3.4	1280	7.7	8.5	
130-078-21AAD1	--	110	72-07-07	27	400	1350	84	24	282	7.6	762	0	277	-.0	-.4	-.22	640	1050	237	0	68	7.6	1570	7.2	--	
130-078-02CDA	--	90	72-07-07	24	900	550	68	27	140	6.3	641	0	68	-.0	-.4	-.79	790	695	282	0	51	3.6	1050	7.2	--	
130-078-03CCC	1125BGP	153	72-11-01	28	1300	780	65	28	87	6.0	523	0	48	3.3	-.2	-.00	40	513	279	0	39	2.2	848	7.8	8.0	
130-078-04AAA	1125BGP	124	72-11-02	35	2800	40	75	47	329	8.0	835	0	379	11	-.4	-.22	990	1280	381	0	66	7.3	1910	7.9	8.0	
130-078-04B88	1125BGP	143	71-10-07	33	1800	30	75	31	364	13	610	0	403	8.3	-.4	-.76	750	1320	317	0	70	8.9	1940	7.7	9.0	
130-078-04BDA	211FPHL	110	73-07-30	16	120	240	42	23	78	5.8	417	0	36	2.5	-.2	-.34	220	354	200	0	45	2.4	685	7.7	9.5	
130-078-13AAA2	1125BVL	54	72-11-04	28	1700	180	74	27	332	7.0	811	0	362	9.7	-.3	1.6	990	1240	296	0	70	8.3	1860	8.0	--	
131-074-03CDC	--	55	72-08-16	21	0	570	225	111	86	16	432	0	800	7.5	-.2	2.4	180	1580	1020	666	15	1.1	1920	7.3	7.0	
131-074-140DD1	--	60	72-08-16	21	0	90	48	17	187	9.1	496	0	180	12	-.2	-.56	720	714	191	0	66	2.9	1130	7.7	--	
131-074-20AAA1	1125BGP	92	72-08-16	19	<10	20	130	57	220	13	610	0	430	2.6	-.1	23	720	1300	560	57	63	4.0	1860	7.5	--	
131-074-34CAC	--	100	72-08-16	19	0	70	78	26	198	6.6	469	0	274	38	-.1	1.9	640	878	300	0	57	4.9	1350	7.6	--	
131-075-07AAA	1125BGP	85	72-08-16	22	90	160	136	63	81	11	505	0	161	74	-.2	27	0	950	601	187	22	1.4	1440	7.6	--	
131-075-09BDA	--	253	73-03-24	28	20	1600	175	68	499	18	1170	0	680	89	-.2	-.09	1400	2080	720	0	39	8.1	2990	8.1	8.5	
131-075-140DD	--	180	72-08-16	26	1400	360	96	31	391	13	818	0	539	11	-.1	2.0	1000	1540	375	0	68	6.7	2250	7.3	--	
131-075-229CD	1125BGP	253	71-09-27	50	70	850	77	20	517	13	1000	0	465	56	-.5	-.56	1600	1680	274	0	79	13	2520	7.4	8.0	
131-075-32CB8	2170KOT	2500	72-07-11	13	140	60	8.5	7.3	800	3.7	334	0	1350	122	2.9	-.22	710	2540	51	0	96	48	3530	8.1	--	
131-076-03CCD2	1125BRG	173	72-12-19	28	5800	640	130	59	310	13	930	0	460	17	-.5	-.95	1000	1470	570	0	54	5.7	2110	7.9	7.0	
131-076-04C85	2170KOT	2482	71-07-30	12	240	30	12	4.6	777	2.7	300	0	1300	114	3.0	-.41	710	2340	49	0	96	48	3460	8.1	25.8	
131-076-09ACC	1125BRG	56	73-07-31	17	80	240	190	100	42	7.5	425	0	360	110	-.2	32	0	1260	890	540	9	-.6	1740	7.9	7.5	
131-076-23AAA	1125BRG	65	73-07-31	19	210	400	140	27	82	9.4	450	0	230	17	-.2	4.5	0	727	460	92	27	1.7	1170	7.9	--	
131-076-250DD	1125BRG	210	72-07-12	26	300	710	184	68	281	15	792	0	517	81	-.4	4.9	610	1720	741	92	44	4.4	2450	7.3	--	
131-076-26C8D	1125BRG	180	58-06-24	36	--	--	133	43	34	7.4	423	0	224	1.0	-.3	1.3	--	680	509	162	12	-.6	1010	7.1	9.0	
131-076-26C8D	1125BRG	--	71-07-15	24	--	--	101	38	24	6.7	403	0	129	2.1	-.4	-.22	30	527	408	77	10	-.5	820	7.3	9.0	
131-076-26CCC2	1125BRG	404	72-08-09	25	0	240	33	22	375	9.5	992	0	159	25	-.3	1.6	640	1160	173	0	81	12	1730	7.9	12.0	
131-076-26CBA	1125BRG	182	71-07-15	29	3000	970	131	42	31	7.0	425	0	211	3.1	-.3	-.56	70	704	382	153	11	-.6	986	7.4	9.5	
131-076-26C8B	--	58	68-06-06	--	4800	--	71	35	48	--	--	--	--	--	--	--	--	--	300	--	--	--	1.3	--	--	--
131-076-26BDD	1125BRG	344	72-12-19	31	2700	640	94	42	370	13	890	0	450	28	-.5	-.23	990	1430	410	0	65	8.0	2110	8.1	8.0	
131-076-28AAA	--	--	59-03-26	--	5500	--	62	47	340	--	--	--	--	--	--	--	--	--	390	--	--	--	7.9	--	--	--
131-076-300DD	1125BRG	223	71-10-28	29	0	20	69	69	461	12	864	0	652	26	-.4	1.5	90	1780	374	0	72	10	2450	7.8	8.5	
131-077-029881	--	37	72-07-06	25	90	170	146	66	33	2.4	287	0	134	92	-.3	60	0	980	638	394	10	-.5	1380	7.6	8.0	
131-077-05381	--	40	72-08-11	21	8000	30	125	56	288	6.0	777	0	489	12	-.5	1.4	610	1420	541	0	52	5.3	2000	7.7	--	
131-077-14AAA	1125BRG	243	72-12-15	29	200	440	162	103	204	12	1090	0	311	19	-.2	-.22	660	1940	828	0	36	3.0	1990	8.0	8.5	
131-077-16AAA	2170KOT	2637	73-09-04	14	1	0	130	46	430	16	203	0	1400	230	1.5	-.00	450	2570	520	350	71	12	3400	7.7	--	
131-077-2656A	--	36	72-07-07	30	220	150	68	25	126	7.7	628	0	208	1.2	-.2	-.09	320	634	273	0	49	5.3	1000	7.6	--	
131-077-21CAD	211FPHL	122	73-07-30	42	120	678	87	37	270	9.5	661	0	430	11	-.2	-.54	300	1200	370	0	61	6.1	1720	8.1	8.5	
131-077-258CD	--	175	72-07-07	32	448	1190	88	30	222	12	764	0	224	7.3	-.2	-.22	750	947	343	0	57	5.2	1500	7.1	--	
131-077-048AA	1125BVL	98	72-11-08	29	1000	40	30	9.2	161	3.4	497	0	47	6.1	-.4	-.20	560	520	113	0	74	6.5	841	8.1	8.0	
131-078-07181	1125BVL	69	72-08-18	19	160	200	84	31	90	4.8	249	0	88	-.0	-.3	-.02	290	568	338	0	36	2.1	962	7.8	--	
131-078-110083	--	24	72-07-07	27	250	340	67	31	283	6.6	737	0	252	12	-.3	-.45	540	1100	296	0	66	7.1	1650	7.4	--	
131-078-238882	--	100	72-08-18	28	0	10	94	34	90	6.4	563	0	57	13	-.2	7.6	70	630	381	0	33	2.0	1030	7.6	--	
131-078-30888	1125BGP	210	72-08-18	8.3	0	30	3.8	1.3	415	2.0	827	0	225	2.5	-.9	-.58	1900	1100	15	0	98	44	1680	7.9	--	
131-078-1288C																										



LOCAL WELL NUMBER	GEO-LOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED INDM (FE) (UG/L)	DIS-SOLVED MAM-GAMESE (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG/L)	DIS-SOLVED TALS-SODIUM (NA) (MG/L)	DIS-SOLVED PO-SIUM (SI) (MG/L)	RECAR-BONATE (MG/L)	CAR-BONATE (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NI) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED OUE AT (RESI-180-C) (MG/L)	HARD-NESS (CA+MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (CMHOS/CM @ 25°C)	PH	TEMPER-ATURE (DEG C)	
133-073-2828A	---	84	71-08-06	13	0	20	18	13	191	3.6	407	0	134	39	.7	2.7	180	595	96	0	80	8.3	991	8.0	9.0	
133-073-34DC	---	133	71-09-10	25	1700	30	29	11	171	4.2	547	0	38	5.8	1.3	.67	750	523	118	0	74	6.8	864	7.9	---	
134-074-048DA	---	70	71-07-27	37	0	10	55	20	40	9.8	264	0	48	13	.5	6.5	220	395	247	24	25	1.1	611	7.4	8.0	
134-074-18CC	1128GFV	50	73-05-23	21	140	2800	48	23	8.2	4.5	311	0	19	3.7	.2	.23	160	269	270	9	5	.2	494	8.1	8.0	
134-074-11CD	---	130	71-07-28	45	70	300	44	14	22	6.4	224	0	33	1.3	.6	.56	220	248	164	0	21	.7	423	7.6	9.0	
134-074-15CB	211FXHL	160	72-11-21	43	290	480	62	24	24	7.2	250	0	110	3.4	.5	.20	130	365	260	41	16	.6	886	7.4	7.5	
134-074-32CD	211FXHL	280	71-07-28	48	500	50	3.2	323	2.3	398	0	388	2.7	.5	.22	310	939	24	0	96	28	1.0	1410	8.0	10.0	
134-075-08CB	---	80	71-07-22	49	6400	630	126	54	37	11	409	0	244	1.9	.2	.40	70	744	538	203	12	.6	1070	7.5	8.0	
134-075-158B	211FXHL	103	72-10-25	48	300	240	45	23	162	9.8	474	0	185	6.7	.3	.54	640	699	205	0	61	4.8	1060	7.7	7.5	
134-075-20CC1	211FXHL	240	71-07-23	45	0	10	10	3.6	300	4.8	653	0	153	5.4	.4	.45	1100	868	40	0	93	20	1280	8.1	9.0	
134-075-34AA	211FXHL	130	71-07-23	41	1200	20	47	23	11	9.2	237	0	57	1.7	.2	.45	170	311	214	20	9	.3	458	7.3	7.0	
134-076-02DD1	211FXHL	200	71-07-20	40	0	20	86	64	440	7.2	816	0	648	69	.8	.63	2200	1670	478	0	66	8.7	2440	7.8	---	
134-076-09CC1	211FXHL	165	72-08-21	49	90	30	44	24	309	6.7	644	0	336	6.0	.1	2.2	730	1090	207	0	75	9.3	1620	7.6	---	
134-076-098B	211FXHL	350	73-07-27	22	40	10	4.6	1.8	360	3.9	674	6	250	2.8	.4	.56	1200	954	19	0	97	36	1500	8.3	9.5	
134-076-28CD	211FXHL	100	71-07-23	38	3100	90	123	49	150	10	457	0	415	5.5	.2	.56	350	1010	508	133	38	2.8	1440	7.9	9.0	
134-077-14CD1	211FXHL	65	71-08-03	20	100	10	33	14	12	3.5	192	0	8	4.5	.4	.22	490	188	142	0	15	.4	303	7.4	---	
134-077-18CB1	211FXHL	230	71-07-16	19	280	10	30	16	243	3.9	494	0	237	3.7	.1	.81	620	793	142	0	78	8.9	1260	7.9	8.5	
134-077-18CC2	211FXHL	220	73-08-01	14	230	110	35	18	250	5.2	541	0	230	41	.3	1.7	120	811	160	0	76	8.6	1310	7.9	10.0	
134-077-22B	211FXHL	183	72-10-31	17	1200	220	46	22	19	4.3	246	0	35	2.4	.2	.22	90	270	207	0	16	.5	476	7.6	7.0	
134-077-34CA	211FXHL	96	71-08-04	22	1300	20	41	17	196	5.5	335	0	158	3.9	.3	1.1	1100	685	174	0	70	6.4	1090	8.0	10.0	
134-078-08AD	211FXHL	360	71-07-15	19	0	10	5.8	2.3	324	2.1	660	0	153	7.5	.3	.56	1200	881	24	0	96	28	1310	8.1	8.5	
134-078-158D	211FXHL	---	73-09-31	7.7	340	80	4.9	2.4	420	4.7	798	22	270	8.9	.9	---	1400	1110	22	0	97	39	---	8.5	---	
135-074-018C	---	70	71-07-01	41	1800	280	62	22	27	7.4	300	0	70	2.5	.3	.45	100	404	246	0	18	.7	581	8.0	---	
135-074-108B	1120TSH	103	71-09-23	32	480	400	52	17	26	7.2	273	0	36	1.8	.4	.67	310	299	198	0	21	.8	483	7.7	7.0	
135-074-13AA	---	137	71-07-01	53	1100	200	69	29	41	8.1	374	0	85	2.4	.3	.56	100	471	290	0	22	1.0	694	8.2	9.0	
135-074-20BA	1128GFV	103	72-10-24	31	360	490	46	16	38	7.1	287	0	37	4.8	.3	.22	210	282	180	0	30	1.2	508	7.9	7.5	
135-074-20BA	---	100	71-07-02	39	340	130	39	13	72	7.3	247	0	101	7.7	.4	1.6	140	362	150	0	49	2.5	624	7.6	10.0	
135-074-32BA	211FXHL	68	73-05-30	38	260	680	49	15	59	9.3	284	0	100	3.2	.2	.05	170	616	180	0	40	1.9	639	7.8	7.0	
135-075-018D	1128GFV	93	71-09-22	30	770	440	31	11	77	6.5	248	0	78	12	.6	.47	490	346	122	0	55	3.0	566	7.6	7.5	
135-075-04CC	---	85	71-07-02	29	3400	710	91	32	94	6.6	359	0	262	11	.3	.90	1000	667	361	67	35	2.1	1030	7.6	10.0	
135-075-108CC	1128GFV	70	73-05-29	37	1700	880	84	33	80	8.5	365	0	234	3.3	.2	.00	90	662	350	46	33	1.9	981	7.9	---	
135-075-120B	---	24	71-07-02	43	0	20	6.6	38	45	6.9	220	0	90	9.1	.3	.13	70	365	174	0	35	1.4	533	8.2	8.0	
135-075-18AD	---	50	71-07-02	32	320	230	58	21	136	6.0	423	0	179	4.6	.2	.56	420	655	230	0	55	3.8	970	7.6	10.0	
135-075-28AA	---	40	71-07-02	45	440	300	49	23	59	7.2	265	0	126	6.9	.2	.56	170	463	216	0	36	1.7	659	7.4	8.0	
135-076-18CC1	211FXHL	137	72-04-20	52	1700	240	95	57	85	6.4	453	0	246	4.0	1.0	1.8	290	767	472	101	27	1.7	1130	8.1	8.0	
135-076-18CC2	211FXHL	---	73-06-07	38	---	---	34	19	212	6.3	535	0	165	2.8	.1	.11	120	717	164	0	73	7.2	1110	8.2	8.0	
135-076-18CC3	211FXHL	140	73-06-07	40	---	---	11	12	249	5.6	567	0	151	2.6	.1	.11	820	739	77	0	47	12	1150	8.2	---	
135-076-18CC4	211FXHL	140	72-06-08	40	---	---	18	6.8	256	5.2	561	6	166	4.6	.1	.09	250	764	73	0	87	13	1170	8.3	---	
135-076-18CC5	211FXHL	145	73-06-10	42	720	160	31	15	230	5.3	543	0	190	3.3	.2	.81	390	796	140	0	77	8.5	1210	7.6	8.5	
135-076-18CC5	211FXHL	145	73-08-11	43	680	140	32	17	230	5.3	567	0	190	3.4	.3	.77	220	821	150	0	76	8.2	1210	8.0	8.5	
135-076-18CC5	211FXHL	145	73-08-12	44	640	140	32	17	230	4.9	570	0	190	3.4	.3	.72	220	818	150	0	74	8.2	1210	7.6	9.0	
135-076-298C	211FXHL	140	71-07-02	47	0	20	11	3.5	337	3.6	554	0	309	2.1	.3	---	1000	1010	42	0	94	22	1450	7.8	7.5	
135-076-308AA2	211FXHL	133	72-11-20	58	640	720	160	91	260	8.6	600	0	750	26	.1	5.0	900	1680	770	270	42	4.1	2210	8.0	7.5	
135-076-32CD	211FXHL	150	69-04-04	---	480	---	---	---	---	---	440	0	314	7.7	---	2.7	---	913	160	---	---	---	---	1310	7.9	---
135-077-18AA	211FXHL	120	71-07-12	41	30	10	3.1	2.6	193	1.1	389	0	104	1.4	.2	.22	420	555	18	0	95	19	812	8.0	8.0	
135-077-21CD	211FXHL	128	72-12-13	36	3700	320	300	164	544	10	502	0	2140	22	.1	.45	730	3640	1440	1030	44	6.2	4120	8.1	7.0	
135-077-288CA	211FXHL	220	71-07-13	33	450	90	33	20	234	5.5	521	0	9	255	2.7	.1	.09	420	909	215	0	69	6.9	1290	8.3	9.0
135-078-11CC	1128DVL	40	73-09-31	20	710	160	18	23	399	5.1	893	0	212	36	1.3	.25	2500	1170	140	0	86	15	1760	8.2	8.0	
135-078-14CC	1128DVL	73	72-12-13	27	1000	120	8.6	2.6	366	3.1	737	0	219	20	1.5	.13	2400	1030	32	0	95	28	1590	8.2	8.0	
1																										

LOCAL WELL NUMBER	GEO-LOGIC UNIT <sup>1</sup>	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NI) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED RESIDUE AT 180°C (CA+MG) (MG/L)	HARDNESS (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (UMMOS/CM @ 25°C)	PH	TEMPERATURE (DEG C)
136-075-14AAA	211FXHL	113	71-09-27	39	1600	130	33	12	129	5.2	380	0	103	1.5	.3	.56	270	476	130	0	66	4.8	764	7.4	9.0
136-075-18AAD	211FXHL	100	71-06-29	22	540	20	21	6.7	313	3.9	558	0	280	3.3	.3	.74	1000	980	80	0	88	15	1380	7.9	8.0
136-075-27BAC2	211FXHL	80	72-08-07	43	80	0	3.4	1.8	397	4.9	428	0	499	1.7	.1	.22	390	1170	16	0	97	4.3	1740	7.3	---
136-075-27BDD1	211FXHL	73	72-08-07	39	0	30	22	6.3	442	5.4	501	0	617	3.5	.1	1.2	460	1420	81	0	91	21	2010	7.4	---
136-075-27BDD2	211FXHL	80	72-08-07	39	0	50	33	11	401	5.2	529	0	549	1.7	.1	.11	790	1300	126	0	86	15	1870	7.4	---
136-075-34CBD	211FXHL	50	73-05-22	41	120	150	23	13	138	6.7	342	0	137	9.9	.5	.14	380	550	110	0	72	5.7	804	8.2	8.0
136-075-39C8D	211FXHL	85	71-06-30	45	3600	270	83	37	113	6.5	303	0	393	6.5	.6	.67	100	795	358	109	39	2.5	1120	7.3	10.0
136-076-01ACA	211FXHL	330	73-08-01	25	3700	500	61	19	100	6.1	394	0	130	10	.2	.56	90	493	230	0	48	2.9	882	7.6	8.5
136-076-02ADB	211FXHL	180	71-07-08	27	7500	200	104	43	157	6.3	581	0	284	1.9	.3	.56	590	940	438	0	42	3.2	1350	7.5	8.5
136-076-07BCC	211FXHL	89	72-10-18	27	1100	160	25	12	106	3.7	388	0	24	2.7	.4	.09	560	355	113	0	66	4.3	614	7.7	8.0
136-076-07CBC	112BDVL	123	72-10-18	27	160	900	38	20	228	5.4	607	0	158	3.2	.5	.22	770	751	176	0	72	7.4	1240	7.8	7.0
136-076-18CCA	211FXHL	150	71-07-06	41	180	25	79	40	182	4.6	526	0	263	7.8	.4	10	70	963	363	0	51	4.1	1330	7.7	8.5
136-076-26CAA	211FXHL	280	71-06-30	34	0	30	28	9.5	609	5.1	958	0	602	4.4	.2	.81	1000	1730	109	0	91	25	2590	8.0	---
136-077-04BAB	211FXHL	185	72-08-08	39	80	0	4.0	.7	379	2.1	773	0	206	.0	.8	.42	3000	1060	13	0	98	45	1580	8.2	---
136-077-10CCD1	211HLCX	0	73-08-11	32	180	190	35	19	170	5.4	387	0	229	1.0	.3	---	60	623	164	0	68	5.7	1020	7.8	---
136-077-12ADD	---	40	71-07-07	20	50	20	82	30	28	4.2	288	0	70	14	.3	18	240	502	327	91	15	.6	744	7.6	7.0
136-077-16AAD	112BDVL	203	72-10-18	28	3500	330	80	33	246	9.2	817	0	211	4.7	.3	.22	640	1010	337	0	60	5.8	1580	7.9	---
136-077-16ADD	211FXHL	83	72-10-19	24	4900	490	33	22	201	4.3	637	0	102	2.0	.4	.22	520	677	174	0	70	6.6	1110	7.9	7.0
136-077-21CCD	211FXHL	190	72-08-18	16	0	20	7.2	2.4	370	2.4	639	0	287	2.1	.4	.79	990	1000	28	0	94	30	1590	7.7	---
136-077-29B8B1	112BDVL	212	64-10-01	26	1200	---	58	29	158	7.8	583	0	135	2.0	.4	.00	0	694	245	0	55	4.2	1120	7.5	9.0
136-077-29B8B1	112BDVL	212	64-10-03	27	1400	---	34	35	178	7.8	603	0	129	2.5	.5	.00	150	722	230	0	61	5.1	1120	7.7	9.0
136-077-29B8B1	112BDVL	212	67-04-10	---	---	---	---	---	188	---	588	0	153	3.0	---	.00	---	700	256	0	---	---	1110	7.8	---
136-077-29B8B1	112BDVL	212	67-07-05	27	1100	---	61	21	175	6.2	588	0	130	3.3	.5	.45	430	707	238	0	60	4.9	1110	7.9	---
136-077-29B8B1	112BDVL	212	70-07-28	28	1100	---	45	22	174	5.3	587	0	136	.5	.9	.00	370	702	254	0	59	4.7	1110	7.6	9.4
136-077-32CDB	211FXHL	160	71-09-12	16	100	60	8.6	3.8	586	2.6	969	0	349	114	1.7	.22	1800	1590	37	0	96	41	2440	8.1	8.5
136-077-08C8D	112BDVL	144	73-05-31	26	710	660	66	29	360	6.6	810	0	342	17	.5	.23	1600	1240	280	0	73	9.3	1820	8.2	9.5
136-078-07BDD	211FXHL	239	71-09-03	15	2900	40	7.0	2.8	500	3.3	922	10	248	76	1.2	.58	3600	1310	29	0	96	40	2100	8.3	---
136-078-14C8C	211FXHL	310	72-08-18	13	90	20	2.4	.0	333	1.4	728	0	134	6.4	.9	.45	2000	844	6	0	98	59	1340	7.9	---
136-078-19ACD	---	120	71-07-09	13	900	20	3.7	1.9	449	1.9	870	10	245	17	1.6	.56	2800	1170	17	0	97	47	1780	8.4	8.5
136-078-34ABC1	211FXHL	240	72-08-18	28	80	30	11	2.4	612	2.7	722	0	767	15	.1	.83	1400	1800	38	0	96	43	2650	7.8	---
136-079-02AAD	---	140	72-08-18	16	0	0	4.1	.5	492	2.3	980	0	217	14	.7	.22	3100	1290	12	0	98	61	1980	7.7	---

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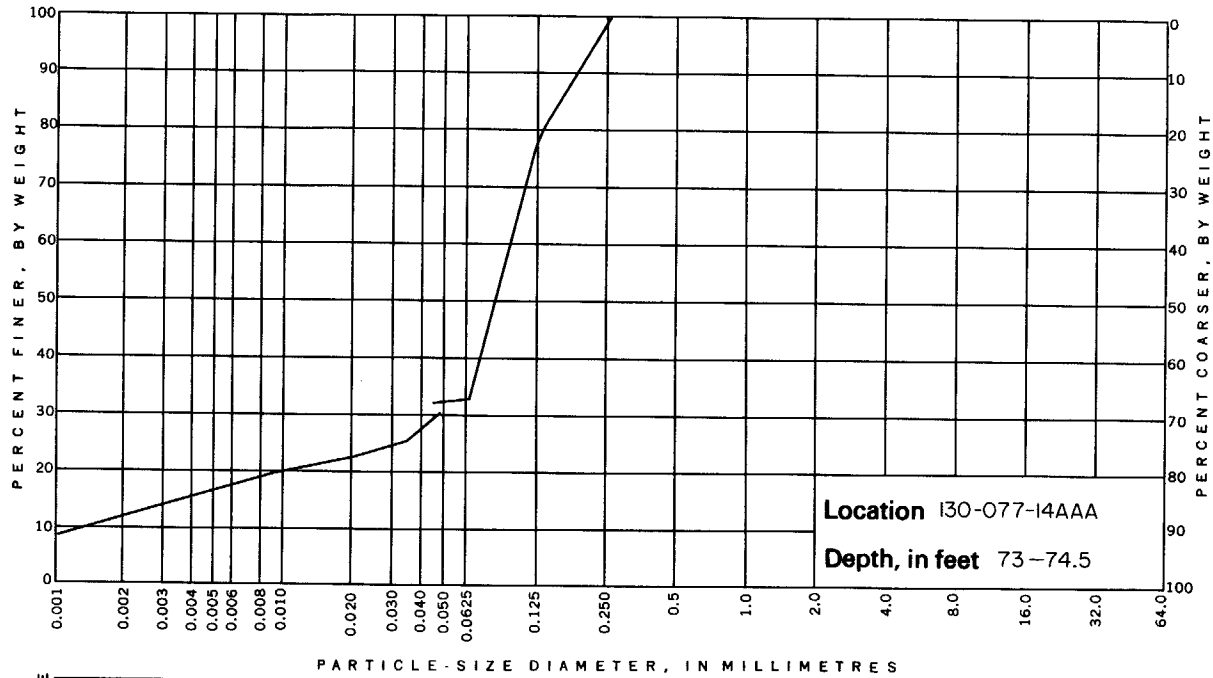
<sup>1</sup>See page 16 for explanation.  
<sup>2</sup>Specific conductance values shown are those measured at the time of analyses.

TABLE 5.--Chemical analyses of water from streams and lakes

Location	Date sampled	Discharge (in ft <sup>3</sup> /s)	Dissolved Silica (SiO <sub>2</sub> ) (mg/l)	Dissolved Iron (Fe) (µg/l)	Dissolved Manganese (Mn) (µg/l)	Dissolved Calcium (Ca) (mg/l)	Dissolved Magnesium (Mg) (mg/l)	Dissolved Sodium (Na) (mg/l)	Dissolved Potassium (K) (mg/l)	Bicarbonate (HCO <sub>3</sub> ) (mg/l)	Carbo-nate (CO <sub>3</sub> ) (mg/l)	Dissolved Sulfate (SO <sub>4</sub> ) (mg/l)	Dissolved Chloride (Cl) (mg/l)	Dissolved Fluoride (F) (mg/l)	Dissolved Nitrate (N) (mg/l)	Dissolved Boron (B) (µg/l)	Dissolved solids (residue at 180°C) (mg/l)	Hardness (Ca, Mg) (mg/l)	Non-carbonate hardness (mg/l)	Sodium adsorp-tion ratio	Specific conductance (µmhos/cm @ 25°C) <sup>1</sup>	
Rice Lake										420	32	76	18	0.1	0.2	30	580	270	0	1.7	892	
130-075-2BACB	6- 7-73	--	12	<10	16	48	37	64	67													
Lower Cattle Creek										530	0	260	5.4	.3	.2	300	837	320	0	4.2	1240	
130-079-11ADA	4-16-73	1.3	7.5	200	240	60	41	170	6.9	490	0	190	4.8	.7	.2	300	630	270	0	3.7	995	
130-079-11ADA	8-23-73	.40	20	80	60	54	33	140	5.3													
Beaver Creek at Linton										300	0	170	4.4	.1	.2	290	495	250	0	2.1	771	
132-076-18ADA	4-17-72	67	2.8	<10	10	52	28	80	11	450	0	230	13	.3	.2	300	728	340	0	2.9	1100	
132-076-18ADA	10-24-72	1.1	20	180	440	70	41	120	14	420	0	280	9.2	.2	.2	640	738	430	89	2.1	1150	
132-076-18ADA	11-20-72	2.9	21	80	280	88	57	120	12	520	0	300	11	.4	.2	130	828	490	69	2.3	1290	
132-076-18ADA	1- 8-73	1.6	25	<10	420	103	57	120	12	500	0	280	13	.5	.2	90	819	470	63	2.2	1220	
132-076-18ADA	2-20-73	2.4	24	40	280	97	56	110	14													
132-076-18ADA	3- 9-73	71	8.6	200	80	23	11	30	11	130	0	58	4.1	.1	.2	170	195	100	0	1.3	351	
132-076-18ADA	3-22-73	42	12	280	120	34	22	85	11	230	0	120	5.9	.1	.2	210	364	170	0	2.1	615	
132-076-18ADA	4-16-73	9.7	7.2	200	50	62	36	84	11	350	0	180	7.8	.2	.2	<10	606	300	0	2.1	855	
132-076-18ADA	5-21-73	2.7	9.8	280	470	77	45	110	12	450	0	220	9.1	.2	.2	258	709	380	10	2.4	1090	
132-076-18ADA	6-18-73	.5	16	80	400	69	48	140	13	490	6	230	8.6	.3	.2	250	770	370	0	3.2	1150	
132-076-18ADA	7-26-73	.01	19	100	1200	80	36	91	8.7	460	0	140	19	.3	.6	170	656	350	0	2.1	1000	
132-076-18ADA	8-22-73	.01	23	80	1700	88	36	89	8.9	480	0	140	18	.7	.2	130	652	370	0	2.0	1020	
132-076-18ADA	9-24-73	.74	6.3	210	70	20	5.8	22	6.0	110	0	42	4.5	<.1	.6	<10	139	74	0	1.1	280	
132-076-18ADA	10-24-73	5.4	7.2	20	80	42	21	86	10	300	0	130	7.7	.2	.5	340	441	190	0	2.7	711	
Lake										260	13	240	9.6	--	--	--	546	--	--	--	1.4	844
132-077-16 <sup>2</sup>	9- 2-70	--	--	--	--	44	54	60	32	380	0	120	8.5	--	--	--	504	--	--	--	1.5	777
Lake										760	0	130	12	.9	.2	170	814	370	0	4.1	1320	
132-077-22 <sup>2</sup>	9- 2-70	--	--	--	--	62	33	58	27	400	0	180	9.6	.2	.2	<10	620	320	0	2.3	935	
Beaver Creek near mouth										760	0	130	12	.9	.2	170	814	370	0	4.1	1320	
132-078-11DDC	4-16-73	14.3	11	40	180	65	38	93	11	400	0	180	9.6	.2	.2	<10	620	320	0	2.3	935	
132-078-11DDC	8-23-73	1.3	25	20	480	80	41	180	11	760	0	130	12	.9	.2	170	814	370	0	4.1	1320	
Goose Lake										1050	170	1010	77	.1	.2	1700	2860	440	0	16	3870	
135-074-05BC	6- 8-73	--	7.5	150	10	13	100	780	112	700	26	320	21	.8	.2	900	1140	150	0	14	1740	
Badger Creek										1070	7	280	29	3.3	.6	2700	1420	97	0	15	2190	
135-078-19AAD	4-16-73	.58	7.5	160	160	30	18	380	6.4													
135-078-19AAD	8-24-73	.25	7.2	770	70	18	13	510	8.6													

<sup>1</sup>Specific conductance values shown are those measured at the time of analyses.  
<sup>2</sup>Analysis obtained from the U.S. Bureau of Reclamation.

TABLE 6.-- Particle-size distribution curves

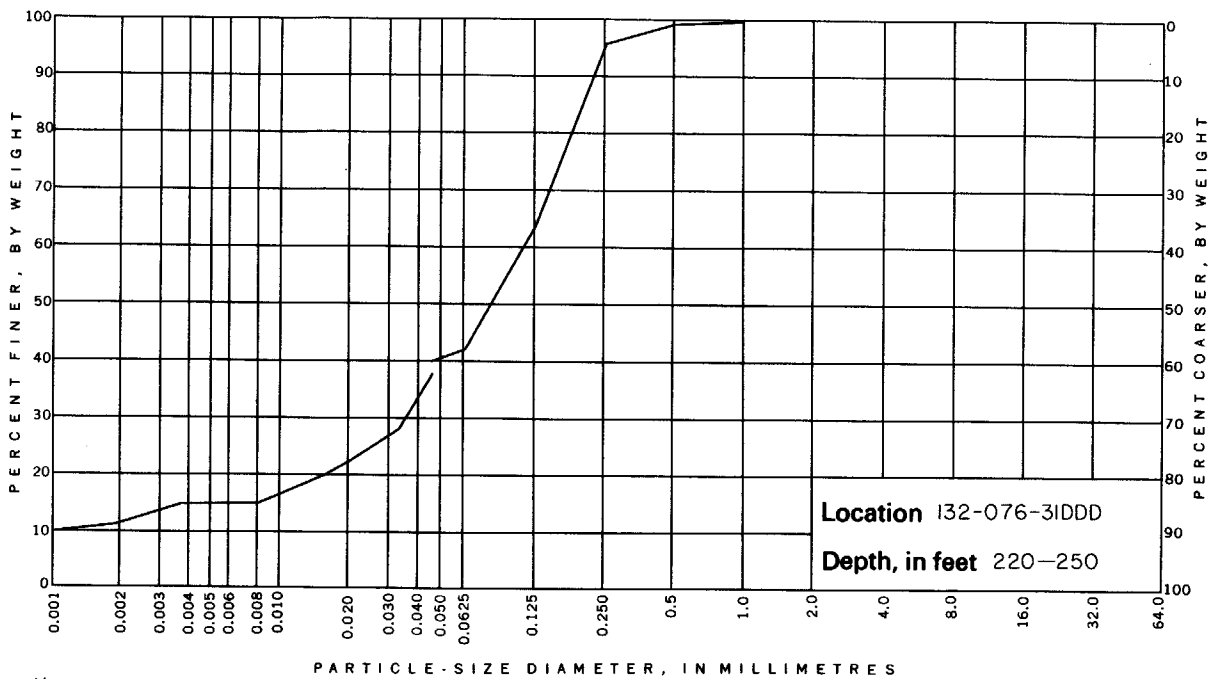


PERCENT OF SIZE	PARTICLE-SIZE DIAMETER, IN MILLIMETRES											
	CLAY SIZES < 0.004 mm	SILT SIZES 0.004-0.0625 mm	SAND SIZES					GRAVEL SIZES				
			V. FINE .0625-.125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32	V. COARSE 32-64
	15	18	47	20	0	0	0	0	0	0	0	0

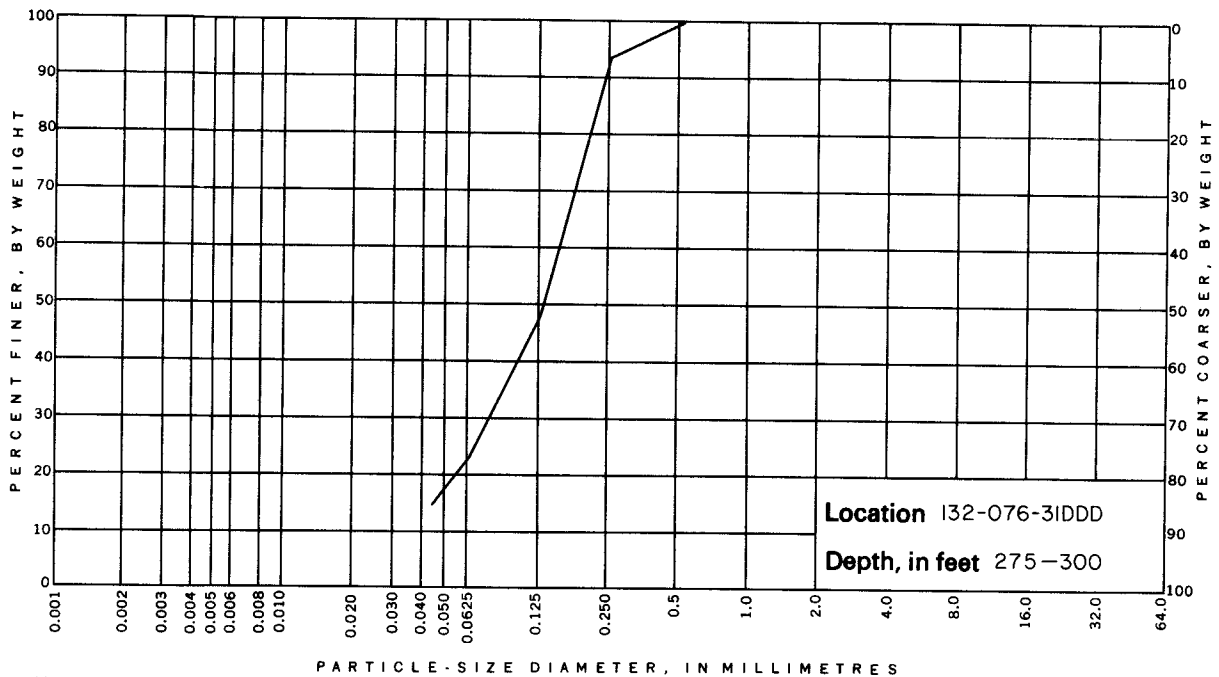
PREPARED BY U.S. GEOLOGICAL SURVEY  
HYDROLOGIC LABORATORY DENVER, COLO.



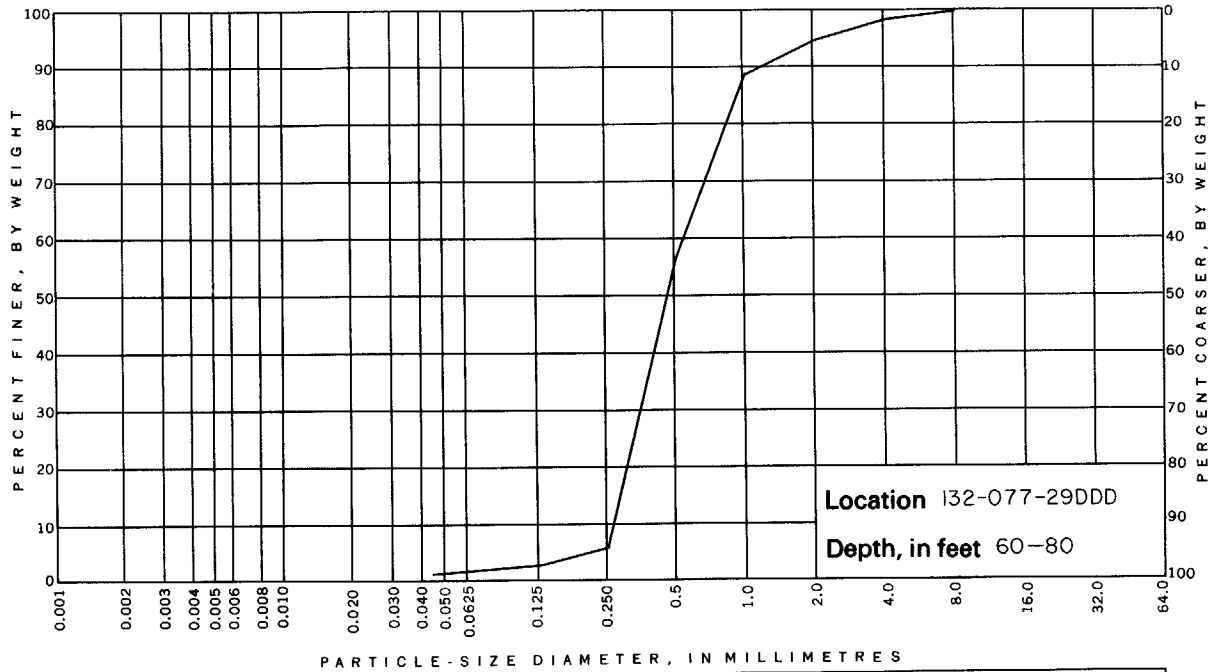




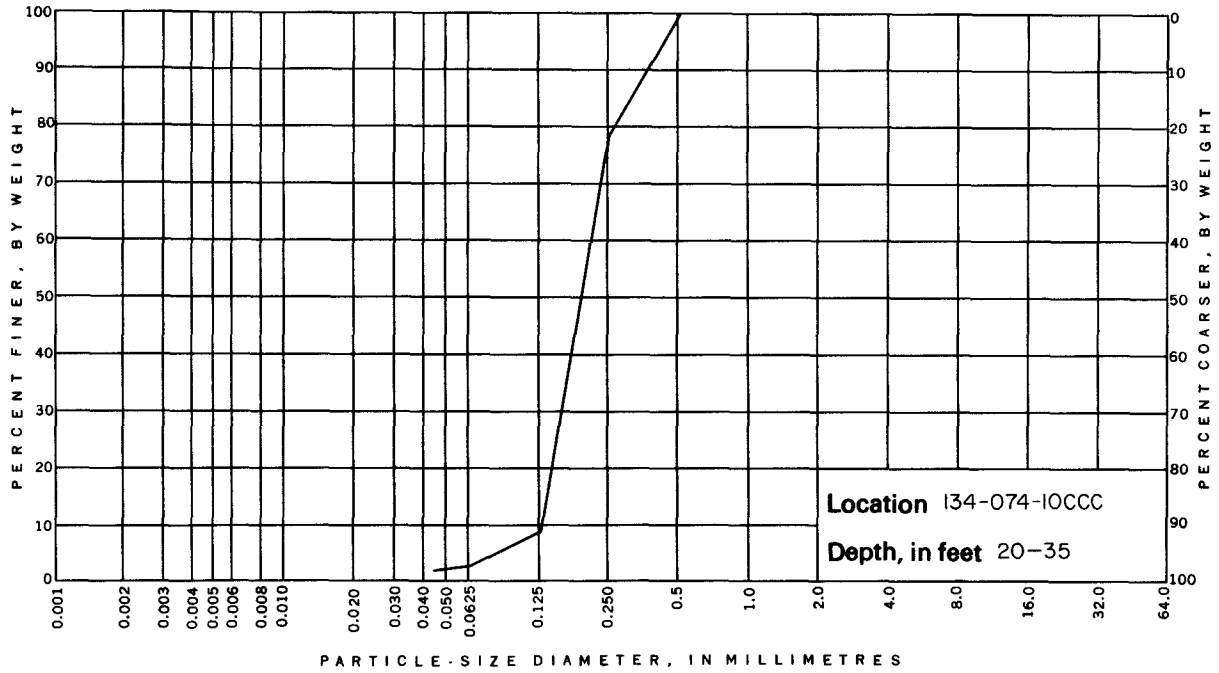
PERCENT OF SIZE	CLAY SIZES < 0.004 mm		SILT SIZES 0.004-0.0625 mm		SAND SIZES					GRAVEL SIZES				
	V. FINE 0.0025-0.00425	FINE .00425-.0075	V. FINE .0075-.015	FINE .015-.03	V. FINE .0625-.125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32	V. COARSE 32-64
	15		27		22	32	3.4	.3	0	0	0	0	0	0



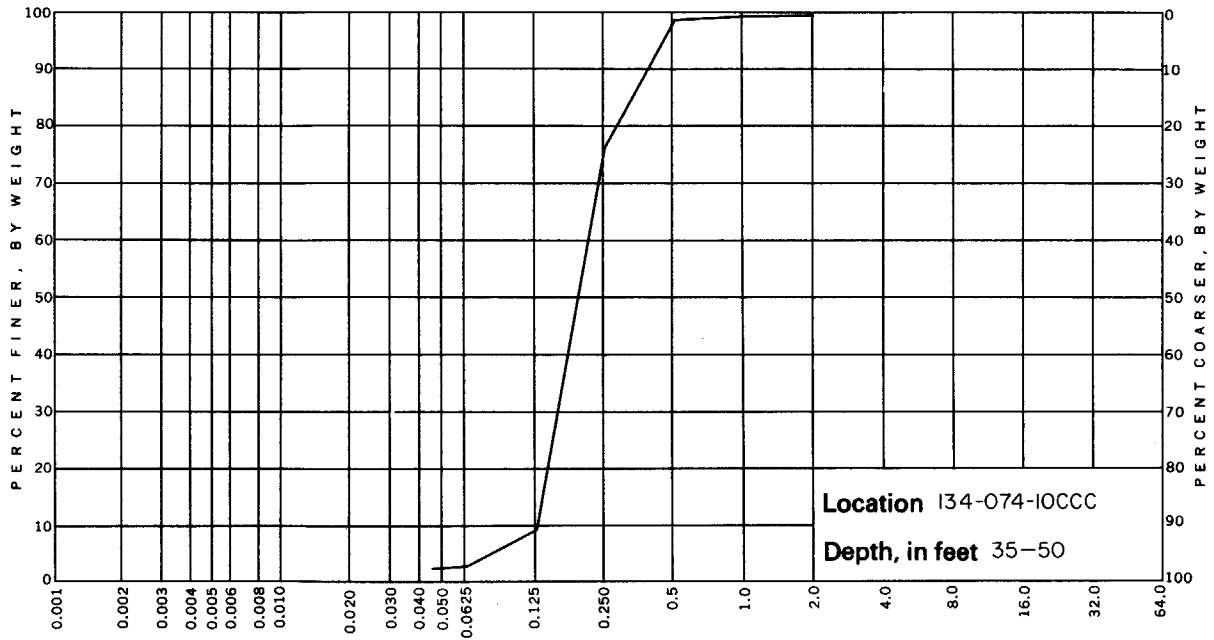
PERCENT OF SIZE	PARTICLE-SIZE DIAMETER, IN MILLIMETRES											
	CLAY SIZES < 0.004 mm	SILT SIZES 0.004-0.0625 mm	SAND SIZES				GRAVEL SIZES					
			V. FINE .0625-.125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32	V. COARSE 32-64
	23		25	46	6.3	0.2	0	0	0	0	0	0



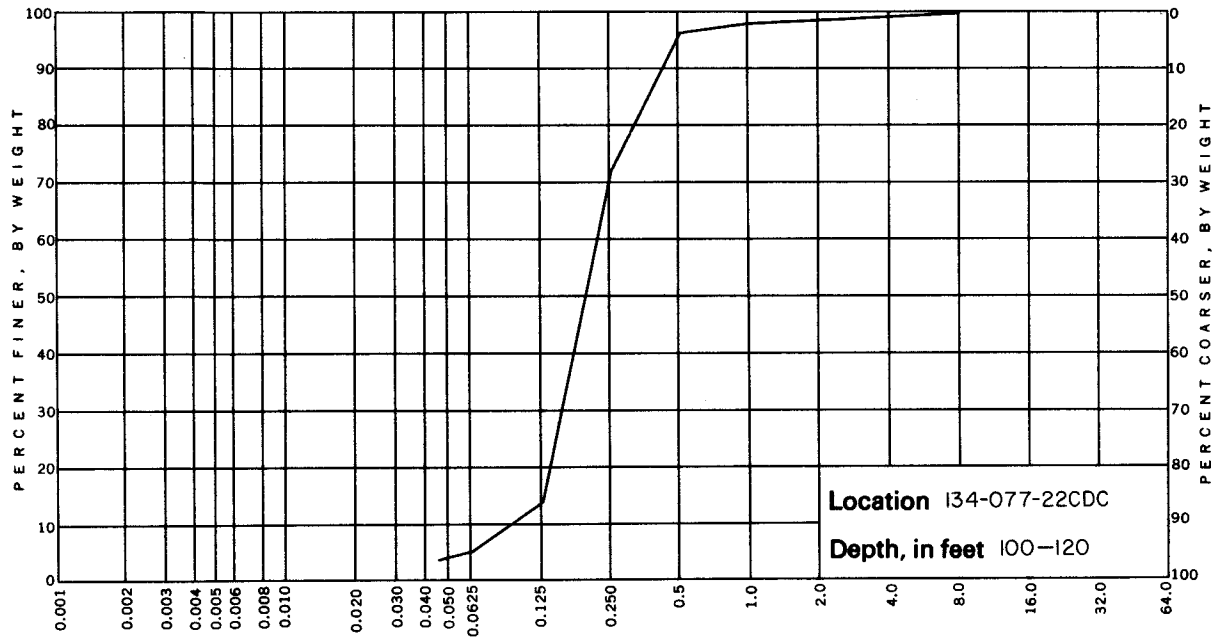
PERCENT OF SIZE	PARTICLE-SIZE DIAMETER, IN MILLIMETRES											
	CLAY SIZES <0.004 mm	SILT SIZES 0.004-0.0625 mm	SAND SIZES					GRAVEL SIZES				
			V. FINE .0625-.125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32	V. COARSE 32-64
	2.1		0.9	3.1	50	32	6.0	3.7	1.2	0.2	0	0



PERCENT OF SIZE	PARTICLE-SIZE DIAMETER, IN MILLIMETRES											
	CLAY SIZES <0.004 mm	SILT SIZES 0.004-0.0625 mm	SAND SIZES					GRAVEL SIZES				
			V. FINE .0625-.125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32	V. COARSE 32-64
	2.9		5.9	70	22	0	0	0	0	0	0	0

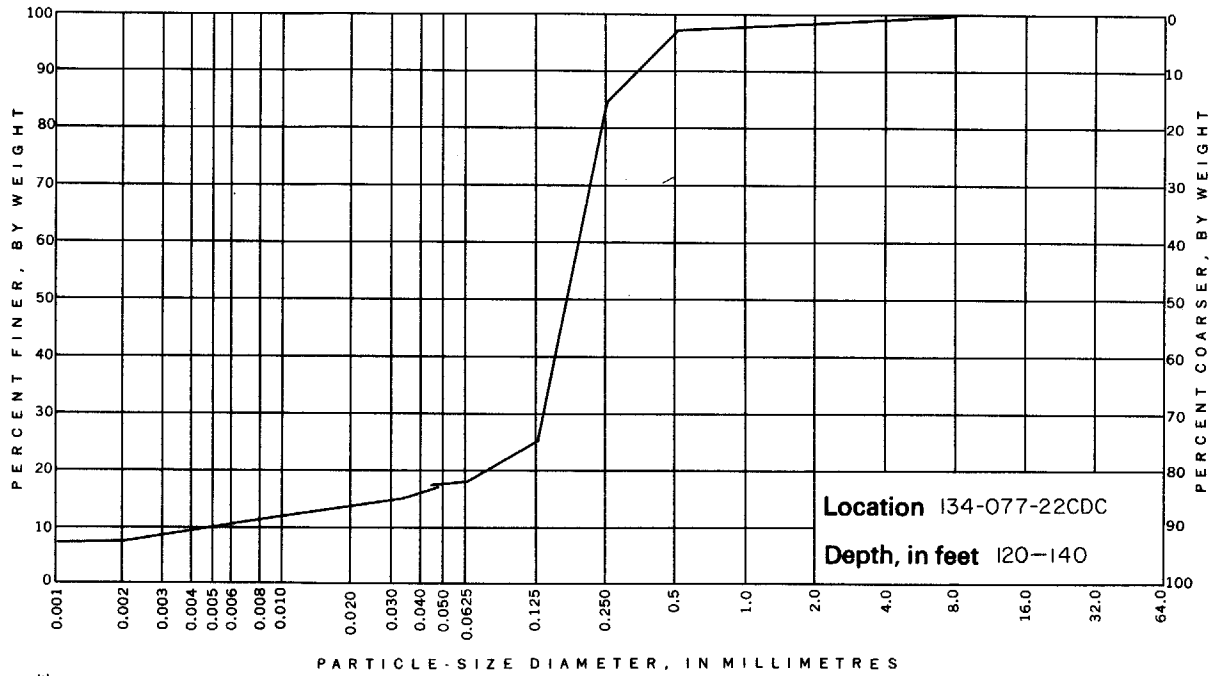


PERCENT OF SIZE	PARTICLE SIZE DIAMETER, IN MILLIMETRES											
	CLAY SIZES <0.004 mm	SILT SIZES 0.004-0.0625 mm	SAND SIZES					GRAVEL SIZES				
			V. FINE .0625-.125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32	V. COARSE 32-64
	2.9		6.1	68	23	0.8	0.2	0	0	0	0	0



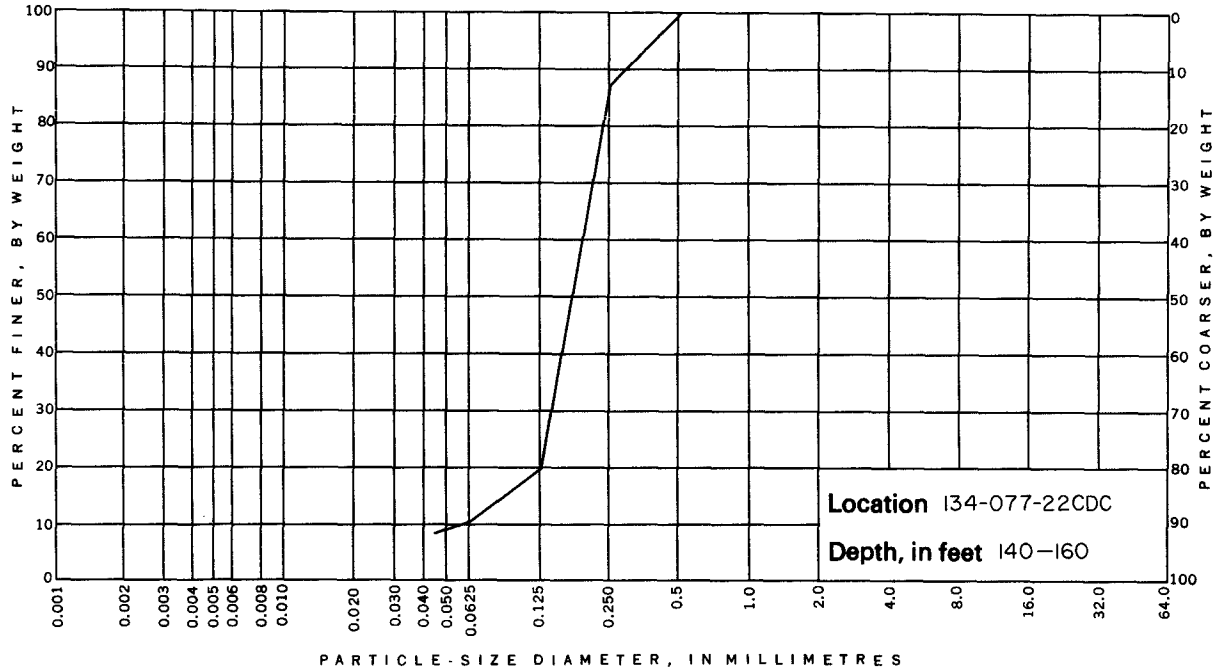
PARTICLE-SIZE DIAMETER, IN MILLIMETRES

PERCENT OF SIZE	CLAY SIZES <0.004 mm	SILT SIZES 0.004-0.0625 mm	SAND SIZES					GRAVEL SIZES				
			V. FINE .0625-.125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32	V. COARSE 32-64
	5.4		8.7	58	24	1.8	0.5	0.4	0.5	0.2	0	0

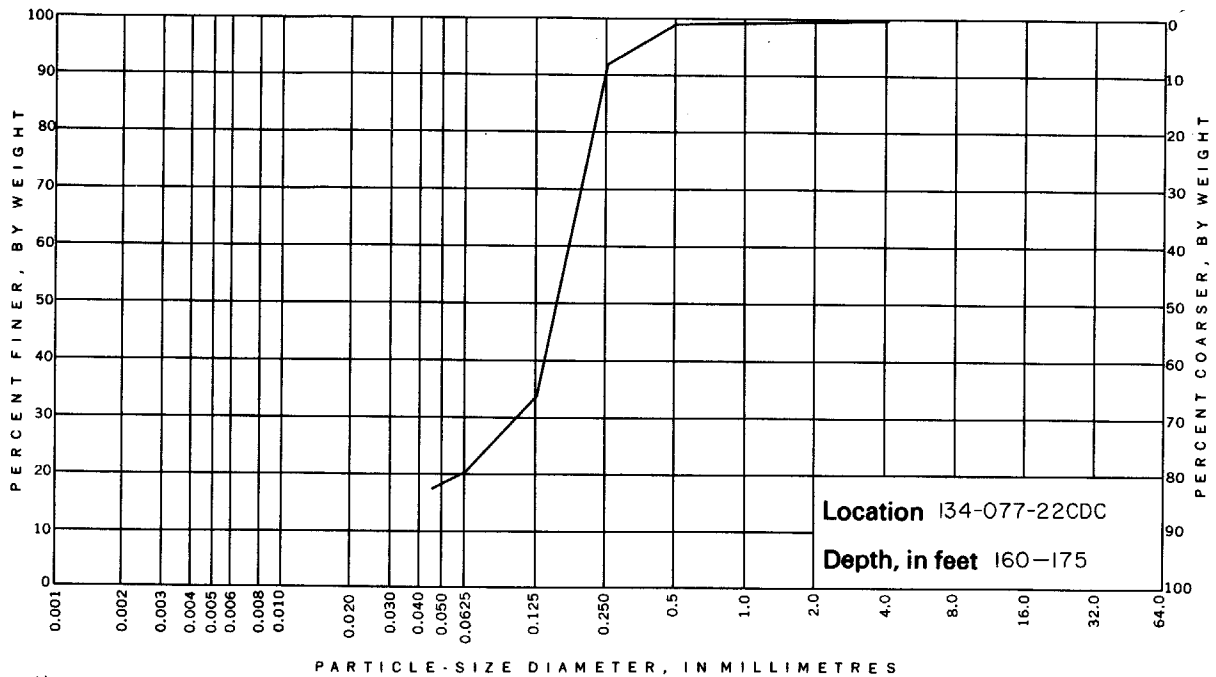


PERCENT OF SIZE	CLAY SIZES < 0.004 mm	SILT SIZES 0.004-0.0625 mm	SAND SIZES					GRAVEL SIZES				
			V. FINE .0625-.125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32	V. COARSE 32-64
	9.6	8.4	7.5	60	13	0.3	0.4	0.6	0.8	0	0	0

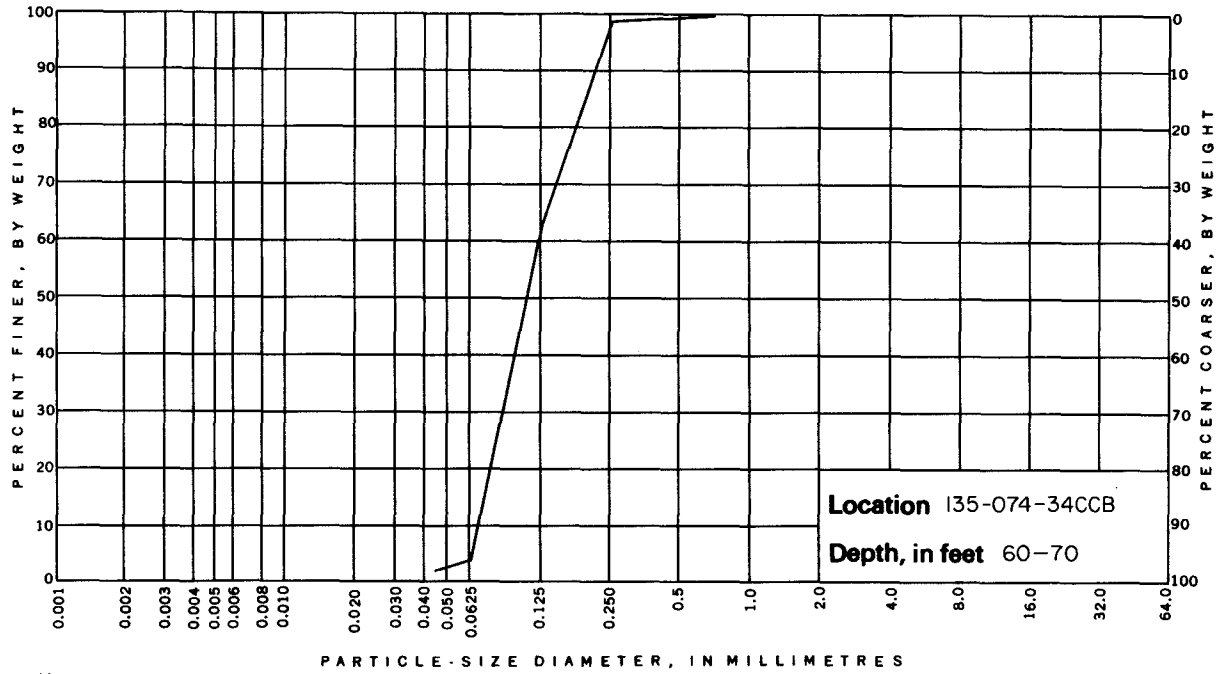




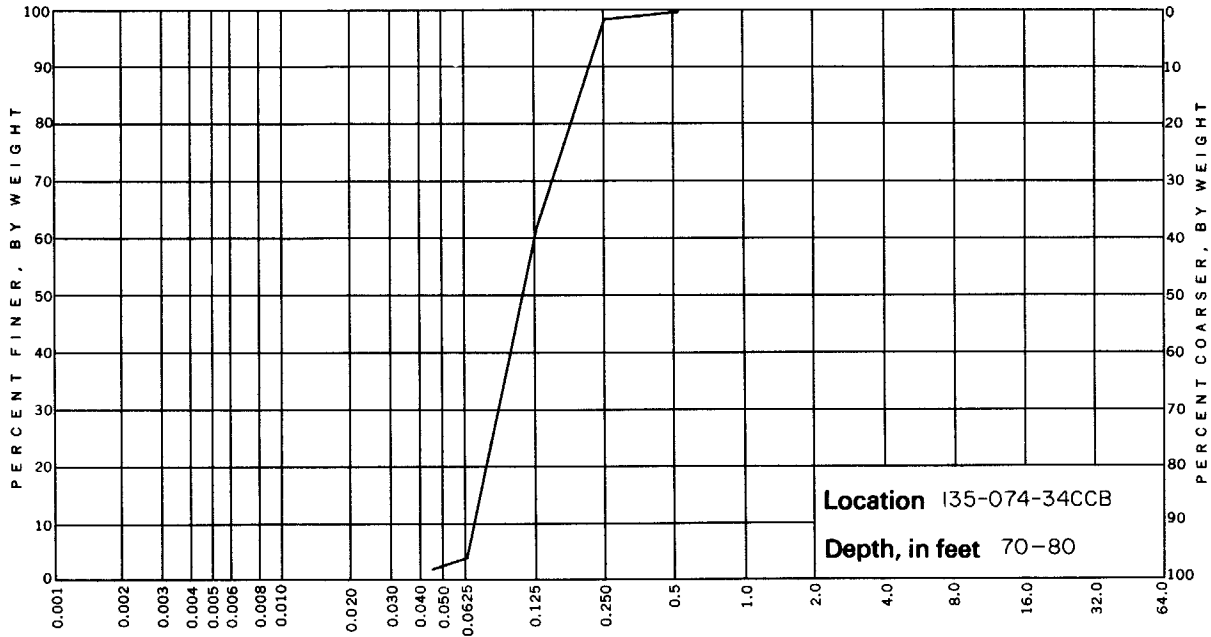
PERCENT OF SIZE	CLAY SIZES < 0.004 mm	SILT SIZES 0.004-0.0625 mm	SAND SIZES				GRAVEL SIZES				
			V. FINE .0625-.125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32
11			9.1	68	12	0	0	0	0	0	0



PERCENT OF SIZE	CLAY SIZES < 0.004 mm	SILT SIZES 0.004-0.0625 mm	SAND SIZES					GRAVEL SIZES				
			V. FINE .0625-125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32	V. COARSE 32-64
21			14	58	7.3	0	0	0	0	0	0	0



PERCENT OF SIZE	PARTICLE-SIZE DIAMETER, IN MILLIMETRES											
	CLAY SIZES <0.004 mm	SILT SIZES 0.004-0.0625 mm	SAND SIZES					GRAVEL SIZES				
			V. FINE .0625-.125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32	V. COARSE 32-64
	4.4		60	35	0.4	0	0	0	0	0	0	0



PERCENT OF SIZE	PARTICLE-SIZE DIAMETER, IN MILLIMETRES											
	CLAY SIZES <0.004 mm	SILT SIZES 0.004-0.0625 mm	SAND SIZES					GRAVEL SIZES				
			V. FINE .0625-.125	FINE .125-.25	MEDIUM .25-.5	COARSE .5-1	V. COARSE 1-2	V. FINE 2-4	FINE 4-8	MEDIUM 8-16	COARSE 16-32	V. COARSE 32-64
	4.7		56	38	1.5	0	0	0	0	0	0	0



TABLE 7.--Heavy mineral determinations  
(Percent heavy minerals, per 300-grain samples)<sup>1</sup>

	Location		
	130-077-14AAA	130-077-14AAA	135-076-19CCC
Sample depth (ft)	73-74.5	76-77	122-124
Percent heavy minerals	1.1	4.2	2.6
Pyrrhotite	--	--	<1
Pyrite	--	--	<1
Spinel	<1	--	--
Magnetite and Ilmenite	24	4	5
Leucoxene	7	2	2
Limonite	2	<1	<1
Carbonates (mostly anhedral)	16	77	7
Monazite	--	--	<1
Apatite	1	--	<1
Chert	<1	<1	--
Muscovite	<1	1	5
Sericite	<1	1	4
Brown Micas (predominantly Biotite)	5	3	5
Chlorite	3	2	3
Amphiboles: (predominantly Hornblende)			
Green	10	2	35
Pale green/colorless	2	<1	3
Brown (mostly Anthrophyllite?)	--	--	9
Pyroxene? (green)	--	--	<1
Tourmaline	1	1	1
Zoisite	1	<1	2
Clinozoisite	3	1	<1
Epidote	6	2	4
Olivine?	--	--	<1
Andalusite?	1	--	1
Topaz?	--	--	<1
Garnets:			
Pink	1	--	--
Yellow	1	--	<1
White	3	<1	1
Zircon	1	--	--
Sphene	5	--	1
Unidentified	7	3	8

<sup>1</sup>From the U.S. Geological Survey Hydrologic Laboratory, Denver, Colorado.

## APPENDIX A

## LOCAL WELL NUMBERS, MISCELLANEOUS SITE NUMBERS, AND CORRESPONDING U.S. GEOLOGICAL SURVEY STATION NUMBERS

LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WFL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WFL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)
		129-075-2888C	455804N1000510.1	129-078-27CCD2	455727N1002614.2
		129-075-29AAA	455811N1000520.1	129-078-30BAA	455814N1002941.1
		129-075-2988B	455811N1000625.1	129-078-30DAD	455741N1002904.1
129-074-018CB	460123N0995353.1	129-076-03ACB	460126N1001047.1	129-078-33BCC	455702N1002739.1
129-074-0588B	460138N0995855.1	129-076-04ABA	460139N1001153.1	130-074-02DAB1	460623N0995413.1
129-074-05DDA	460059N0995750.1	129-076-04ABB	460139N1001202.1	130-074-02DAB2	460623N0995413.2
129-074-0688D	460132N1000001.1	129-076-1088B	460047N1001125.1	130-074-03DD	460608N0995531.1
129-074-06DCB	460059N0995933.1	129-076-138AB	455955N1000836.1	130-074-04ACC	460630N0995702.1
129-074-10CAA	460017N0995557.1	129-076-158CC	455948N1001125.1	130-074-05CBC	460618N0995854.1
129-074-218CC	455842N0995740.1	129-076-208AB	455902N1001336.1	130-074-06CCC	460613N1000008.1
129-074-23DDA	455821N0995405.1	129-076-21AAC	455856N1001144.1	130-074-11ABB1	460557N0995432.1
129-074-28DAD	455733N0995642.1	129-076-23CAD	455830N1000942.1	130-074-11ABB2	460557N0995432.2
129-074-31CBC	455646N1000010.1	129-076-24AAA	455903N1000750.1	130-074-17DCA1	460427N0995807.1
129-074-338CC	455652N0995735.1	129-076-25AAA	455811N1000750.1	130-074-17DCA2	460427N0995807.2
129-074-33DAD	455646N0995643.1	129-076-27CDD	455725N1001057.1	130-074-18ADA	460453N0995904.1
129-075-02DAB1	460113N1000144.1	129-077-01ADA	460126N1001519.1	130-074-19ADA1	460401N0995904.1
129-075-02DAB2	460113N1000144.2	129-077-05DAD	460107N1002018.1	130-074-19ADA2	460401N0995904.2
129-075-03ACA	460126N1000308.1	129-077-078BA1	460049N1002229.1	130-074-20AAA	460414N0995749.1
129-075-04CBB1	460113N1000510.1	129-077-078BA2	460049N1002229.2	130-074-20AAB	460414N0995800.1
129-075-04CBB2	460113N1000510.2	129-077-09D8C	460515N1001931.1	130-074-24DAA	460346N0995249.1
129-075-0588B	460140N1000625.1	129-077-148DB	455942N1001720.1	130-074-250DD	460227N0995249.1
129-075-05CBC	460106N1000625.1	129-077-158AB	455955N1001835.1	130-074-26ABB	460321N0995432.1
129-075-06ADD	460120N1000635.1	129-077-17ADA	455943N1002018.1	130-074-28ACD	460302N0995652.1
129-075-068AB	460140N1000722.1	129-077-17CDD	455910N1002055.1	130-074-29ADD	460302N0995749.1
129-075-0988B1	460047N1000510.1	129-077-21ACC	455844N1001931.1	130-074-31CDD	460144N0995951.1
129-075-0988B2	460047N1000510.2	129-077-2788B	455811N1001854.1	130-074-33B8C	460223N0995739.1
129-075-0988C	460041N1000510.1	129-077-27CAC	455738N1001835.1	130-075-02DCC	460605N1000202.1
129-075-09D8D	460001N1000423.1	129-077-30ACD	455752N1002152.1	130-075-03BAD	460644N1000326.1
129-075-10DCC	460001N1000318.1	129-077-33ACA	455705N1001922.1	130-075-03CDD	460605N1000336.1
129-075-17DDA	455916N1000520.1	129-078-01DAA	460115N1002248.1	130-075-06BBA	460651N1000730.1
129-075-188AC	455949N1000722.1	129-078-01DDO	460055N1002248.1	130-075-07AAB	460559N1000643.1
129-075-188DD	455936N1000712.1	129-078-11DCC1	460003N1002431.1	130-075-07BAD1	460552N1000711.1
129-075-20CAB	455837N1000625.1	129-078-11DCC2	460003N1002431.2	130-075-07BAD2	460552N1000711.2
129-075-21C8C1	455830N1000510.1	129-078-17CCA	455919N1002845.1	130-075-07BDA	460546N1000711.1
129-075-21C8C2	455830N1000510.2	129-078-19D8D1	455820N1002922.1	130-075-07CCC1	460518N1000852.1
129-075-25DDO	455724N1000020.1	129-078-19D8D2	455820N1002922.2	130-075-07CCC2	460518N1000852.2
129-075-26D8C	455738N1000144.1	129-078-22CAD1	455832N1002556.1	130-075-08DDO	460519N1000528.1
129-075-26DDA	455731N1000135.1	129-078-22CAD2	455832N1002556.2	130-075-08DDC	460513N1000528.1
129-075-27CAD	455737N1000327.1	129-078-23CCC	455819N1002509.1	130-075-1088B	460559N1000354.1
129-075-27C8B	455731N1000337.1	129-078-27CCD1	455727N1002614.1	130-075-1088D	460539N1000326.1

LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)
130-075-11ADA	460546N1000134.1	130-075-31DCC1	460144N1000702.1	130-077-11ABB	460601N1001701.1
130-075-11ADC	460539N1000143.1	130-075-31DCC2	460144N1000702.2	130-077-11BBA	460601N1001729.1
130-075-11ADD	460539N1000134.1	130-075-31DCCD	460144N1000652.1	130-077-11CCC	460516N1001739.1
130-075-12CCA	460519N1000115.1	130-075-32RCC	460210N1000624.1	130-077-13BBA	460509N1001614.1
130-075-12CCC	460513N1000124.1	130-075-32DCCD1	460144N1000537.1	130-077-14AAA	460513N1001637.1
130-075-20BBB	460414N1000625.1	130-075-32DCC2	460144N1000537.2	130-077-14DAA1	460443N1001633.1
130-075-20CCC1	460329N1000624.1	130-075-33DDD	460144N1000404.1	130-077-14DAA2	460443N1001633.2
130-075-20CCC2	460329N1000624.2	130-075-35ADD	460210N1000134.1	130-077-15ABB	460510N1001816.1
130-075-21AAB	460414N1000432.1	130-076-03CBB	460626N1001124.1	130-077-15DCB	460431N1001816.1
130-075-22BBD1	460342N1000307.1	130-076-04DCA	460613N1001152.1	130-077-16DCB	460431N1001931.1
130-075-22BBD2	460342N1000307.2	130-076-08BBB	460600N1001353.1	130-077-18AAA	460511N1002134.1
130-075-23AAD	460408N1000134.1	130-076-09ACC	460540N1001201.1	130-077-23ABC	460410N1001701.1
130-075-24CDB	460335N1000106.1	130-076-09DD1	460514N1001133.1	130-077-26CCD	460239N1001729.1
130-075-24DCC	460329N1000047.1	130-076-09DD2	460514N1001133.2	130-077-31CDA	460156N1002211.1
130-075-26ABR1	460322N1000202.1	130-076-10BAA	460559N1001056.1	130-077-33BAA	460234N1001941.1
130-075-26ABR2	460322N1000202.2	130-076-12AAA	460559N1000749.1	130-077-33DCB	460155N1001931.1
130-075-27BCB	460309N1000354.1	130-076-14AAA	460507N1000904.1	130-077-34DDD	460147N1001748.1
130-075-30BBB1	460322N1000739.1	130-076-15AAB	460507N1001028.1	130-078-05CCC	460612N1002854.1
130-075-30BBB2	460322N1000739.2	130-076-18DDA	460429N1001403.1	130-078-10BAB1	460604N1002606.1
130-075-30CDC	460236N1000721.1	130-076-238BB	460415N1001009.1	130-078-10BAB2	460604N1002606.2
130-075-30CDD1	460236N1000711.1	130-076-23DCD	460329N1000922.1	130-078-12ADD	460557N1002249.1
130-075-30CDD2	460236N1000711.2	130-076-26DAB	460256N1000913.1	130-078-12CBB1	460538N1002354.1
130-075-30CDD3	460236N1000711.3	130-076-27ACB	460310N1001046.1	130-078-12CBB2	460538N1002354.2
130-075-30CDD4	460236N1000711.4	130-076-27CCB	460244N1001124.1	130-078-17CBB1	460447N1002854.1
130-075-30CDD5	460236N1000711.5	130-076-28ADD	460304N1001133.1	130-078-17CBB2	460447N1002854.2
130-075-30CDD6	460236N1000711.6	130-076-28BBB	460323N1001239.1	130-078-18BBB	460507N1003009.1
130-075-31AAB	460230N1000702.1	130-076-32CDD	460146N1001335.1	130-078-20AAD	460414N1002749.1
130-075-31BAA1	460230N1000711.1	130-076-34DCD	460147N1000038.1	130-078-20ADC	460401N1002758.1
130-075-31BAA2	460230N1000711.2	130-076-35AAA1	460230N1000904.1	130-078-21AAD	460414N1002634.3
130-075-31BAA3	460230N1000711.3	130-076-35AAA2	460230N1000904.2	130-078-21AAD1	460414N1002634.1
130-075-31BAA4	460230N1000711.4	130-076-35ADC	460211N1000913.1	130-078-21AAD2	460414N1002634.2
130-075-31BAA5	460230N1000711.5	130-076-35DDD	460145N1000904.1	130-078-22BRC	460414N1002624.1
130-075-31BAA6	460230N1000711.6	130-077-01RCC	460634N1001623.1	130-078-26DCD	460242N1002432.1
130-075-31BAA7	460223N1000711.7	130-077-01CCC	460322N1000749.1	130-078-27BCC	460322N1002624.1
130-075-31BAA8	460223N1000711.8	130-077-06AAA01	460649N1002134.1	130-078-28AAA	460328N1002638.1
130-075-31BAA9	460230N1000711.9	130-077-06AAD2	460649N1002134.2	130-078-28DCB	460249N1002702.1
130-075-31BAD	460223N1000711.1	130-077-07CDD	460518N1002221.1	130-078-31ACA	460224N1002922.1
130-075-31CAB	460204N1000721.1	130-077-09CBC	460530N1002009.1	130-078-31DBA	460211N1002922.1
130-075-31CCC	460146N1000746.1	130-077-09DDC	460517N1001913.1	130-078-36DBA1	460209N1002307.1
130-075-31CDD	460144N1000711.1	130-077-10DCC	460516N1001816.1	130-078-36DBA2	460209N1002307.2

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LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)
130-079-02CDA	460625N1003212.1	131-074-32AAA2	460744N0995747.2	131-075-31AAC	460740N1000649.1
130-079-03CCC	460612N1003353.1	131-074-32AAA3	460744N0995747.3	131-075-32RRR1	460743N1000623.1
130-079-03DDC	460612N1003257.1	131-074-34CAC	460710N0995603.1	131-075-32CRB	460716N1000623.1
130-079-04AAA	460658N1003402.1	131-075-05CBB	461138N1000623.1	131-075-32CCA1	460703N1000614.1
130-079-04BRB	460658N1003507.1	131-075-05CCB	461125N1000623.1	131-075-32CCA2	460703N1000614.2
130-079-09DDA	460526N1003402.1	131-075-07AAA	461112N1000633.1	131-075-32CCA3	460703N1000614.3
130-079-10DRB	460539N1003314.1	131-075-07AAB1	461112N1000642.1	131-075-36AAA	460745N1000018.1
130-079-12DDC	460546N1003105.1	131-075-07AAB2	461112N1000642.2	131-076-01RCA	461151N1000843.1
130-079-12DDD	460546N1003056.1	131-075-08AAC	461106N1000527.1	131-076-02DCC1	461119N1000930.1
130-079-13AAA1	460513N1003019.1	131-075-08ADB	461059N1000527.1	131-076-02DCC2	461119N1000930.2
130-079-13AAA2	460513N1003019.2	131-075-09ACA	461100N1000421.1	131-076-02DDC	461119N1000920.1
130-079-14CCC1	460428N1003238.1	131-075-09ACD1	461053N1000421.1	131-076-03CCD1	461119N1001112.1
130-079-14CCC2	460428N1003238.2	131-075-09ACD2	461053N1000421.2	131-076-03CCD2	461119N1001112.2
131-079-20DDD	460850N1003516.1	131-075-09ADA	461100N1000403.1	131-076-03DCC	461119N1001044.1
131-074-02CBB	461652N0995502.1	131-075-13CDA1	460943N1000555.1	131-076-04DNC	461120N1001139.1
131-074-02CBB1	461138N0995507.1	131-075-13CDA2	460943N1000555.2	131-076-05RCB	461153N1001349.1
131-074-02CBB2	461138N0995507.2	131-075-14DDD	460936N1000133.1	131-076-05CBC	461134 1001349.1
131-074-03CDC	461119N0995603.1	131-075-15ACC	461001N1000316.1	131-076-06BAR1	461207N1001445.1
131-074-04CCD1	461119N0995728.1	131-075-17CCC	460934N1000623.1	131-076-06BAR2	461207N1001445.2
131-074-04CCD2	461119N0995728.2	131-075-18DDN	460934N1000633.1	131-076-06BRB	461209N1000502.1
131-074-08ABD1	461107N0995806.1	131-075-19RCB	460914N1000738.1	131-076-08ABD	461107N1001303.1
131-074-08ABD2	461107N0995806.2	131-075-20BCC	460916N1000622.1	131-076-08ACB	461101N1001312.1
131-074-08BA	461112N0995840.1	131-075-21ACB1	460915N1000431.1	131-076-09ACC	461054N1001158.1
131-074-09CRC	461040N0995738.1	131-075-21ACB2	460915N1000431.2	131-076-10CCD1	461027N1001112.1
131-074-10CCC	461027N0995622.1	131-075-22DCD	460843N1000306.1	131-076-11DAA	461046N1000902.1
131-074-14DDD1	460933N0995401.1	131-075-23AAD	460923N1000133.1	131-076-15RRD	461014N1001112.1
131-074-14DDD2	460933N0995401.2	131-075-23DCD	460843N1000151.1	131-076-18AAC	461015N1001408.1
131-074-14DDD3	460933N0995401.3	131-075-23DDN	460843N1000133.1	131-076-19AAA1	460930N1001436.1
131-074-16ADA1	461007N0995632.1	131-075-24RDB	460916N1000105.1	131-076-19AAA2	460930N1001436.2
131-074-16ADA2	461007N0995632.2	131-075-26BCA1	460823N1000229.1	131-076-19AAA3	460930N1001436.3
131-074-20DAA1	460902N0995747.1	131-075-26RCA2	460823N1000229.2	131-076-19BAA4	460930N1001436.4
131-074-20DAA2	460902N0995747.2	131-075-26CC	460754N1000234.1	131-076-20AAC2	460923N1001254.2
131-074-21AA	460930N1001906.1	131-075-27ADA	460823N1000248.1	131-076-22ABA	460928N1001035.1
131-074-22CBA1	460901N0995613.1	131-075-28AAC	460829N1000412.1	131-076-22CDD	460843N1001053.1
131-074-22CBA2	460901N0995613.2	131-075-28BDA	460823N1000440.1	131-076-23AAA	460928N1000902.1
131-074-27BCA	460822N0995613.1	131-075-28RDD9	460822N1000450.1	131-076-23AAB	460928N1000911.1
131-074-27BCC	460816N0995622.1	131-075-29ACD1	460816N1000536.1	131-076-23CCC	460843N1001007.1
131-074-27DRB	460809N0995545.1	131-075-29ACD2	460816N1000536.2	131-076-23CDD	460842N1000939.1
131-074-27DDC	460749N0995526.1	131-075-29ACD3	460816N1000536.3	131-076-23DCC	460842N1000930.1
131-074-32AAA1	460744N0995747.1	131-075-29ADD	460816N1000518.1	131-076-24BAB	460928N1000824.1

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LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)
131-076-24DBC	460855N1000815.1	131-077-08ACA2	461103N1002033.2	131-078-17BPA	461013N1002824.1
131-076-25DDC	460750N1000757.1	131-077-08ACA3	461103N1002033.3	131-078-18DBB1	461000N1002930.1
131-076-25DDD	460749N1000748.1	131-077-08ACA4	461103N1002033.4	131-078-18DBB2	461000N1002930.2
131-076-26ACC	460816N1000930.1	131-077-09AAA	461116N1001859.1	131-078-19DDD	460848N1002901.1
131-076-26BDC	460816N1000948.1	131-077-09DAA1	461050N1001859.1	131-078-20CAA	460855N1002843.1
131-076-26CAA	460810N1000939.1	131-077-09DAA2	461050N1001859.2	131-078-23ARR	460933N1002428.1
131-076-26CAB1	460810N1000948.1	131-077-09DDA	461036N1001859.1	131-078-23BBB1	460933N1002506.1
131-076-26CAB2	460810N1000948.2	131-077-10BCD	461056N1001840.1	131-078-23BBB2	460933N1002506.2
131-076-26CBC	460803N1001007.1	131-077-12CCB	461036N1001619.1	131-078-24BAB	460932N1002332.1
131-076-26CRD	460803N1000958.1	131-077-14AAA	461022N1001628.1	131-078-25ARB	460840N1002313.1
131-076-26CCC	460750N1001007.1	131-077-14DAD	460950N1001628.1	131-078-30DBD	460809N1002920.1
131-076-26CCC2	460750N1001007.2	131-077-18BC1	461008N1002231.1	131-078-31ACA1	460737N1002920.1
131-076-26CDA	460756N1000939.1	131-077-18BC2	461008N1002231.2	131-078-31ACA2	460737N1002920.2
131-076-26DCB	460750N1000937.1	131-077-19AAA	460932N1002129.1	131-079-07DRC	461138N1003200.1
131-076-26DDD	460750N1000902.1	131-077-19BBB	460932N1002235.1	131-079-10DCB	461040N1003314.1
131-076-27CCC	460751N1001121.1	131-077-20AAA	460932N1002014.1	131-079-12BRC	461112N1003122.1
131-076-28ABB	460837N1001158.1	131-077-20BAA	460932N1002052.1	131-079-15ADD	461008N1003246.1
131-076-28BBB	460834N1001230.1	131-077-20BAB	460932N1002101.1	131-079-17AAB	461014N1003525.1
131-076-28DAA	460811N1001130.1	131-077-21CAD	460859N1001936.1	131-079-17CDD	460942N1003553.1
131-076-29AAA	460834N1001249.1	131-077-23DCC	460845N1001637.1	131-079-17DDD	460942N1003516.1
131-076-30RCB	460825N1001503.1	131-077-26ABA1	460839N1001647.1	131-079-24AAB	460935N1003026.1
131-076-30CCC	460752N1001503.1	131-077-26ABA2	460839N1001647.2	131-079-26CFC	460758N1003218.1
131-076-30DDD	460752N1001358.1	131-077-26ABA3	460839N1001647.3	131-079-27ADC1	460824N1003256.1
131-076-31ARB	460746N1001426.1	131-077-26DDD	460753N1001628.1	131-079-27ADC2	460824N1003256.2
131-076-31BAC	460739N1001445.1	131-077-28BCB	460826N1002005.1	131-079-27ADD	460824N1003246.1
131-076-32ARB	460745N1001312.1	131-077-28CCC	460754N1002005.1	131-079-28BCC	460824N1003507.1
131-076-33BBB	460745N1001235.1	131-077-29DPA	460826N1002014.1	131-079-28DDD	460756N1003401.1
131-076-34BBB	460744N1001121.1	131-077-32ABR1	460734N1002023.1	131-079-32AAA	460751N1003516.1
131-076-35ARB	460744N1000930.1	131-077-32ABR2	460734N1002023.2	131-079-33CRR	460725N1003507.1
131-076-35DDD	460658N1000902.1	131-078-03CDB1	461131N1002602.1	131-079-35BBA	460751N1001220.1
131-077-02DBB1	461141N1001656.1	131-078-03CDB2	461131N1002602.2	131-079-35DCD	460705N1003150.1
131-077-02DBB2	461141N1001656.2	131-078-04DAA	461144N1002631.1	131-079-35DDD1	460705N1003132.1
131-077-04AAA	461208N1001859.1	131-078-07AAB1	461118N1002911.1	131-079-35DDD2	460705N1003132.2
131-077-05BBB	461208N1002120.1	131-078-07AAB2	461118N1002911.2	132-074-01CCC	461638N0995337.1
131-077-05CRA1	461142N1002111.1	131-078-10CDD	461032N1002553.1	132-074-02DAC	461645N0995405.1
131-077-05CBA2	461142N1002111.2	131-078-11BBB1	461117N1002506.1	132-074-05DBD1	461646N0995800.1
131-077-05CBB1	461142N1002120.1	131-078-11BBB2	461117N1002506.2	132-074-05DBD2	461646N0995800.2
131-077-05CBB2	461142N1002120.2	131-078-11DBB1	461038N1002409.1	132-074-05DBD3	461646N0995800.3
131-077-06DBB	461142N1002158.1	131-078-11DBB2	461038N1002409.2	132-074-07CDA	461547N0995934.1
131-077-08ACA1	461103N1002033.1	131-078-11DBB3	461038N1002409.3	132-074-08AAA	461626N0995741.1

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132-074-0988B	461626N0995732.1	132-075-18CDD2	461449N1000704.2	132-076-06AA	461717N1001356.1
132-074-1088B	461626N0995617.1	132-075-18CDD3	461449N1000704.3	132-076-06AB	461717N1001415.1
132-074-1088D1	461619N0995607.1	132-075-20AAA	461442N1000512.1	132-076-06CAA	461654N1001429.1
132-074-1088D2	461619N0995607.2	132-075-20CAC	461410N1000559.1	132-076-078CC	461609N1001456.1
132-074-11ADB1	461612N0995405.1	132-075-20C8D	461410N1000608.1	132-076-07CAA	461602N1001429.1
132-074-11ADB2	461612N0995405.2	132-075-21DDC	461356N1000406.1	132-076-07DAB	461602N1001401.1
132-074-14CDD1	461447N0995433.1	132-075-21DDC2	461356N1000406.2	132-076-07DAD	461558N1001400.1
132-074-14CDD2	461447N0995433.2	132-075-24DCC2	461356N1000040.1	132-076-08CCB1	461551N1001355.1
132-074-1500D	461447N0995511.1	132-075-26B8C1	461343N1000232.1	132-076-08CCR2	461551N1001355.2
132-074-18DCC	461448N0995925.1	132-075-26B8C2	461343N1000232.2	132-076-11BCC	461608N1001000.1
132-074-18DCC1	461448N0995915.1	132-075-27AAB	461350N1000242.1	132-076-14BAC	461529N1000942.1
132-074-18DCC2	461448N0995915.2	132-075-27AAB2	461350N1000251.1	132-076-150AA	461509N1001010.1
132-074-21DDA	461401N0995626.1	132-075-27AAB2	461350N1000251.2	132-076-168CC	461516N1001228.1
132-074-258B	461345N0995350.1	132-075-27BAD	461343N1000319.1	132-076-168DD	461516N1001201.1
132-074-28CC1	461302N0995732.1	132-075-30B8C1	461344N1000732.1	132-076-16DD	461453N1001128.1
132-074-28CC2	461302N0995732.2	132-075-30B8C2	461344N1000732.2	132-076-17ACC1	461516N1001305.1
132-074-30AAB	461349N0995906.1	132-075-30BDC	461334N1000721.1	132-076-17ACC2	461516N1001305.2
132-074-32DDA	461217N0995741.1	132-075-31AAC	461251N1000636.1	132-076-1788B	461536N1001342.1
132-074-32DD1	461210N0995741.1	132-075-31CCC1	461212N1000732.1	132-076-1788D	461530N1001341.1
132-074-32DD2	461210N0995741.2	132-075-31CCC2	461212N1000732.2	132-076-17CCB	461457N1001342.1
132-075-02CAD1	461650N1000204.1	132-075-31DC	461215N1000650.1	132-076-17DD	461450N1001238.1
132-075-02CAD2	461650N1000204.2	132-075-31DCB	461219N1000655.1	132-076-19DB1	461411N1001419.1
132-075-04AA	461716N1000401.1	132-075-32DD8	461219N1000521.1	132-076-19DB2	461411N1001419.2
132-075-04AB	461716N1000420.1	132-075-34ACA	461244N1000300.1	132-076-2188A	461443N1001228.1
132-075-048B	461716N1000458.1	132-075-34DAC	461225N1000251.1	132-076-23AAD	461436N1000856.1
132-075-04DCC	461633N1000415.1	132-075-34DDC	461212N1000251.1	132-076-26AAB1	461351N1000905.1
132-075-05AB	461716N1000535.1	132-075-35AAD	461251N1000127.1	132-076-26AAB2	461351N1000905.2
132-075-058B	461716N1000556.1	132-075-358DA1	461244N1000204.1	132-076-28BCC1	461331N1001228.1
132-075-068A	461716N1000709.1	132-075-358DA2	461244N1000204.2	132-076-30ADA1	461338N1001352.1
132-075-08ADA	461614N1000512.1	132-076-01AA	461716N1000766.1	132-076-30ADA2	461338N1001352.2
132-075-09DDA	461548N1000357.1	132-076-01AB	461717N1000805.1	132-076-30ADD	461332N1001352.1
132-075-10DCC	461541N1000310.1	132-076-01BB	461717N1000842.1	132-076-3088B	461351N1001456.1
132-075-128AD	461620N1000049.1	132-076-02AB	461717N1000919.1	132-076-31AAA	461259N1001352.1
132-075-128CB	461612N0995346.1	132-076-03AA	461717N1001014.1	132-076-31CDA	461220N1001429.1
132-075-128CC1	461607N1000117.1	132-076-03AB	461702N1000037.1	132-076-31DDD	461213N1001352.1
132-075-128CC2	461607N1000117.2	132-076-04AA	461717N1001128.1	132-076-34CDA	461219N1001047.1
132-075-128CC3	461607N1000117.3	132-076-04AB	461717N1001147.1	132-076-35ADD	461239N1000856.1
132-075-178CD	461515N1000608.1	132-076-048B	461717N1001224.1	132-077-018A	461718N1001548.1
132-075-18CDD	461449N1000714.1	132-076-05AB	461717N1001301.1	132-077-02AA	461718N1001626.1
132-075-18CDD1	461449N1000704.1	132-076-05CCR	461641N1001342.1	132-077-02AB	461718N1001645.1

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132-077-03AB	461718N1001801.1	132-077-27DD02	461306N1001737.2	132-078-25ADB1	461339N1002249.1
132-077-04AA	461718N1001857.1	132-077-28ADA1	461339N1001853.1	132-078-25ADB2	461339N1002249.2
132-077-04AB	461718N1001916.1	132-077-28DCC	461306N1001921.1	132-078-28CCC1	461307N1002736.1
132-077-05AA	461718N1002013.1	132-077-28DDD	461306N1001853.1	132-078-28CCC2	461307N1002736.2
132-077-05BB	461718N1002110.1	132-077-29ABB1	461353N1002040.1	132-078-31BDA1	461248N1002940.1
132-077-06AB	461718N1002148.1	132-077-29ABB2	461353N1002040.2	132-078-31BDA2	461248N1002940.2
132-077-07AAD	461623N1002124.1	132-077-29BBB	461352N1002115.1	132-078-34AAB	461300N1002522.1
132-077-09ADD1	461609N1001853.1	132-077-29DCC	461306N1002037.1	132-078-34AAB	461300N1002522.2
132-077-09ADD2	461609N1001853.2	132-077-29DDD	461306N1002008.1	132-078-34ARC	461228N1002347.1
132-077-09ADD3	461609N1001853.3	132-077-31DDB1	461221N1002134.1	132-079-01BDC	461656N1003104.1
132-077-10BBB	461629N1001843.1	132-077-33ADD1	461240N1001853.1	132-079-02BA	461719N1002439.1
132-077-12ABD	461622N1001525.1	132-077-33ADD2	461240N1001853.2	132-079-03CRR	461643N1003344.1
132-077-12BBB	461629N1001612.1	132-077-33CCC	461214N1001959.1	132-079-03CDD	461638N1003343.1
132-077-12BCB	461615N1001612.1	132-078-01AA	461718N1002245.1	132-079-03CDD	461638N1003324.1
132-077-15CBC	461504N1001843.1	132-078-01AB	461719N1002304.1	132-079-09AA	461628N1003406.1
132-077-15CCD	461451N1001834.1	132-078-02AA	461719N1002401.1	132-079-09BA	461628N1003444.1
132-077-17DAD	461513N1002012.1	132-078-02BB	461719N1002458.1	132-079-10BA	461628N1003329.1
132-077-18ABA1	461537N1002143.1	132-078-03BA	461719N1002555.1	132-079-11AA	461628N1003137.1
132-077-18ABA2	461537N1002143.2	132-078-03BB	461719N1002614.1	132-079-11BA	461628N1003214.1
132-077-18BBB	461537N1002230.1	132-078-03DCC	461636N1002522.1	132-079-11BB	461628N1003233.1
132-077-19BAC	461438N1002211.1	132-078-07AA	461627N1002906.1	132-079-12BA	461627N1003100.1
132-077-19BBB	461445N1002230.1	132-078-07BA	461627N1002944.1	132-079-12CCA1	461552N1003114.1
132-077-20BBB1	461445N1002115.1	132-078-07BB	461627N1003003.1	132-079-12CCA2	461552N1003114.2
132-077-20BBB2	461445N1002115.2	132-078-08AB	461627N1002809.1	132-079-14ABA	461539N1003151.1
132-077-20BBB3	461445N1002115.3	132-078-08DA	461606N1002808.1	132-079-14ADR	461527N1003142.1
132-077-20CCC1	461359N1002115.1	132-078-09AA	461627N1002634.1	132N077W05AB	461718N1002032.1
132-077-20CCC2	461359N1002115.2	132-078-09AB	461627N1002653.1	133-073-33CBB	461717N1001452.1
132-077-21AAA	461444N1001853.1	132-078-09BB	461627N1002731.1	133-074-02DCC	462123N0995645.1
132-077-21DAA1	461418N1001853.1	132-078-11DCC	461544N1002406.1	133-074-03CCC	462123N0995839.1
132-077-22BBA1	461444N1001834.1	132-078-12DAC1	461557N1002249.1	133-074-04CBB	462136N0995955.1
132-077-22BBA2	461444N1001834.2	132-078-12DAC2	461557N1002249.2	133-074-04DDB	462129N0995858.1
132-077-24CCC1	461358N1001612.1	132-078-14AAA1	461537N1002356.1	133-074-05DAD	462136N1000004.1
132-077-24CCC2	461358N1001612.2	132-078-14AAA2	461537N1002356.2	133-074-09ACB	462103N0995917.1
132-077-25AA	461348N1001510.1	132-078-14ABB1	461537N1002425.1	133-074-10BBB	462116N0995839.1
132-077-25ADB1	461338N1001515.1	132-078-14ABB2	461537N1002425.2	133-074-10CDA	462039N0995809.1
132-077-25ADB2	461338N1001515.2	132-078-18ABA	461538N1002921.1	133-074-14CAA	461957N0995654.1
132-077-26DBA	461325N1001640.1	132-078-22ABD	461439N1002532.1	133-074-15DAB	461957N0995742.1
132-077-26DBB1	461325N1001650.1	132-078-23DDA	461406N1002356.1	133-074-20DDD	461845N1000004.1
132-077-26DBB2	461325N1001650.2	132-078-24CCC2	461359N1002347.2	133-074-22CAC	461858N0995820.1
132-077-27DDD1	461306N1001737.1	132-078-25AAA	461352N1002240.1	133-074-26DNC	461753N0995626.1

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133-074-27ABB	461839N0995801.1	133-076-35DAA	461723N1001126.1	133-078-098C	462104N1003009.1
133-074-29AAD	461832N1000004.1	133-076-36ABA	461748N1001028.1	133-078-09CC	462038N1003009.1
133-074-29BCD	461819N1000101.1	133-076-36ACD	461729N1001028.1	133-078-09CCC	462035N1003014.1
133-074-34ABB	461746N0995757.1	133-077-02DBC	462139N1001927.1	133-078-10ADA	462107N1002751.1
133-074-35DCC	461700N0995645.1	133-077-05ABD	462205N1002305.1	133-078-10BAA	462120N1002829.1
133-075-07CDD	462032N1000931.1	133-077-07CCC	462034N1002508.1	133-078-16CB	461959N1003009.1
133-075-08BBB	462117N1000844.1	133-077-10ABA1	462119N1002033.1	133-078-16CC	461946N1003009.1
133-075-10DCD	462031N1000526.1	133-077-10ABA2	462119N1002033.2	133-078-17CAD	461956N1003102.1
133-075-16BDC	461945N1000709.1	133-077-10CDD	462034N1002052.1	133-078-18ADC	462009N1003150.1
133-075-17CBC	461952N1000844.1	133-077-13DAB	462021N1001821.1	133-078-21BC	461920N1003009.1
133-075-17DDD	461939N1000738.1	133-077-14AAA	462027N1001859.1	133-078-22CAD	461903N1002829.1
133-075-20BBB	461919N1000825.1	133-077-14BBB	462027N1002005.1	133-078-22DDA	461856N1002751.1
133-075-22BDA1	461919N1000544.1	133-077-15BAA	462027N1002052.1	133-078-23CCC	461850N1002741.1
133-075-22BDA2	461919N1000544.2	133-077-16DDD	461941N1002130.1	133-078-27ACA	461830N1002810.1
133-075-28ACD1	461820N1000641.1	133-077-21ACA1	461922N1002149.1	133-078-28BB	461840N1003009.1
133-075-28ACD2	461820N1000641.2	133-077-21ACA2	461922N1002149.2	133-078-29DA	461814N1003029.1
133-075-28CCC1	461754N1000728.1	133-077-21DAA2	461418N1001853.2	133-078-32AA	461788N1003029.1
133-075-28CCC2	461754N1000728.2	133-077-23DAB	461909N1001908.1	133-078-32DA	461722N1003029.1
133-075-34CCC	461708N1000605.1	133-077-24ABA	461935N1001802.1	133-078-32DDD1	461706N1003024.1
133-075-35CB	461718N1000453.1	133-077-25CCC	461757N1001849.1	133-078-32DDD2	461706N1003024.2
133-076-06BBB	462212N1001733.1	133-077-26ABA	461842N1001918.1	133-078-33AAB	461742N1002917.1
133-076-07BBA	462119N1001724.1	133-077-26CCC	461757N1002005.1	133-078-33CDA	461712N1002946.1
133-076-07CAA	462053N1001705.1	133-077-26DCB	461803N1001927.1	133-078-350CC	461705N1002702.1
133-076-09BBC1	462112N1001502.1	133-077-28BAA	461842N1002208.1	133-078-360CC	461704N1002546.1
133-076-09BBC2	462112N1001502.2	133-077-31CCC	461704N1002508.1	134-074-02ADD	462712N0995622.1
133-076-13CCD1	461940N1001105.1	133-077-31CDD	461704N1002433.1	134-074-02CBC	462652N0995722.1
133-076-13CCD2	461940N1001105.2	133-077-31CDD	461704N1002421.1	134-074-06DDA	462645N1000118.1
133-076-15BBB	462026N1001344.1	133-077-34DDA1	461711N1002014.1	134-074-08DBA	462606N1000021.1
133-076-16BBB	462026N1001502.1	133-077-34DDA2	461711N1002014.2	134-074-10CCC	462546N0995837.1
133-076-16BBB	462020N1001452.1	133-077-34DDA3	461711N1002014.3	134-074-11CDD	462546N0995653.1
133-076-17AAA	462026N1001511.1	133-077-35BAC	461744N1001946.1	134-074-13CCB	462501N0995606.1
133-076-18CBC	461954N1001733.1	133-077-35DDD	461704N1001859.1	134-074-14BAB	462024N0995704.1
133-076-18DAA	461959N1000853.1	133-078-04CBC	462140N1003014.1	134-074-15CBB	462513N0995837.1
133-076-21DAA	461908N1001356.1	133-078-05AD	462157N1003029.1	134-074-18DCD	462453N1000137.1
133-076-22BAB	461934N1001327.1	133-078-05BA	462217N1003053.1	134-074-24BAA	462448N0995538.1
133-076-22BRC	461927N1001346.1	133-078-05BR	462210N1003126.1	134-074-31ACC	462243N1000146.1
133-076-25DDC	461758N1001024.1	133-078-05DA	462144N1003029.1	134-074-31ADC	462243N1000128.1
133-076-28AAA	461841N1001356.1	133-078-06AAA	462213N1003140.1	134-074-32CCD	462216N1000059.1
133-076-31CCC	461704N1001733.1	133-078-06DAA	462147N1003140.1	134-075-06BBB	462724N1000957.1
133-076-33CCD	461704N1001452.1	133-078-08AA	462118N1003029.1	134-075-08DCB	462552N1000804.1

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LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)
134-075-12CDD	462546N1000311.1	134-077-04DAA1	462702N1002126.1	134-078-29CB	462327N1003121.1
134-075-15BBA	462539N1000611.1	134-077-10BRC1	462629N1002117.1	134-078-31AA	462300N1003140.1
134-075-20CCC1	462401N1000842.1	134-077-10BRC2	462629N1002117.2	134-078-31DAA	462237N1003136.1
134-075-20CCC2	462401N1000842.2	134-077-13DDD	462500N1001847.1	134-078-32BBB	462304N1003136.1
134-075-28BDB	462341N1000707.1	134-077-14CDD1	462457N1001932.1	134-078-32BC	462246N1003121.1
134-075-29CDD	462309N1000813.1	134-077-14CDD2	462457N1001932.2	134-079-02CC	462644N1003510.1
134-075-30BDD	461827N1000206.1	134-077-14DDD	462500N1002002.1	134-079-02CD	462644N1003451.1
134-075-30DRC1	462322N1000920.1	134-077-17CDD	462511N1002340.1	134-079-02DD	462644N1003413.1
134-075-34BAA	462302N1000542.1	134-077-18CCB1	462504N1002505.1	134-079-12BC	462618N1003354.1
134-075-34DAA	462236N1000505.1	134-077-18CCB2	462504N1002505.2	134-079-12CC	462552N1003354.1
134-076-01BRC1	462718N1001112.1	134-077-190CD	462405N1002418.1	134-079-13CA	462512N1003335.1
134-076-01BRC2	462718N1001112.2	134-077-20BBA1	462451N1002340.1	134-079-24AA	462446N1003257.1
134-076-02DDD1	462639N1001122.1	134-077-20BBA2	462451N1002340.2	134-079-24AB	462446N1003316.1
134-076-02DDD2	462639N1001122.2	134-077-22ADA	462437N1002010.1	135-074-01BCC	463225N0995605.1
134-076-05CRC1	462654N1001613.1	134-077-22BBB	462451N1002117.1	135-074-06AAC	463238N1000124.1
134-076-05CRC2	462654N1001613.2	134-077-22CCB1	462411N1002117.1	135-074-06ADD	463225N1000115.1
134-076-06ABA	462727N1001641.1	134-077-22CCB2	462411N1002117.2	135-074-09CCC	463059N0995953.1
134-076-07BBB	462635N1001728.1	134-077-25ADA	462345N1001738.1	135-074-10BBB	463145N0995837.1
134-076-07CCC	462553N1001728.1	134-077-25BCC	462338N1001844.1	135-074-11BAC	463142N0995702.1
134-076-08BBD	462628N1001604.1	134-077-30ABB	462359N1002427.1	135-074-13ABA	463053N0995518.1
134-076-08BCA	462622N1001604.1	134-077-31DDD	462220N1002359.1	135-074-20BAA	463000N1000040.1
134-076-08DDD	462548N1001507.1	134-077-34CAB	462239N1002058.1	135-074-26ABA	462909N0995634.1
134-076-10ADD1	462613N1001237.1	134-078-02CAR	462702N1002719.1	135-074-30AAA1	462908N1000118.1
134-076-10ADD2	462613N1001237.2	134-078-04ABA	462728N1002922.1	135-074-30AAA2	462908N1000118.2
134-076-11CCC	462547N1001228.1	134-078-04DDD	462642N1002903.1	135-074-30BAA	462908N1000156.1
134-076-12DDD1	462546N1001007.1	134-078-05CCD	462641N1003117.1	135-074-32BAA	46281691000040.1
134-076-12DDD2	462546N1001007.2	134-078-08APD	462615N1003019.1	135-074-34BCC	463142N0995719.1
134-076-18BBB	462543N1001728.1	134-078-08CDD	462602N1003117.1	135-074-34CCB	.1
134-076-19DDD	462404N1001623.1	134-078-10BAA	462635N1002825.1	135-074-35BCB	462804N0995721.1
134-076-20DCD	462404N1001526.1	134-078-10DDD	462549N1002747.1	135-075-01DDD	463151N1000234.1
134-076-21DCB	462410N1001420.1	134-078-11CAA	462609N1002709.1	135-075-03BBB	463231N1000610.1
134-076-23DC	462402N1001209.1	134-078-12BRC	462603N1002543.1	135-075-04CCB	463159N1000726.1
134-076-27BCC	462350N1001343.1	134-078-15DDD	462457N1002747.1	135-075-05AAA	463238N1000735.1
134-076-28CDD	462311N1001439.1	134-078-19AA	462446N1003140.1	135-075-10BCC	463126N1000626.1
134-076-30ADC1	462338N1001632.1	134-078-19BA	462446N1003218.1	135-075-12DBB	463118N1000303.1
134-076-30ADC2	462338N1001632.2	134-078-20BCC	462433N1003121.1	135-075-18ABB	463047N1000919.1
134-076-32DDD	462219N1001507.1	134-078-20CCC	462406N1003121.1	135-075-22ABB	463001N1000533.1
134-076-33BAA	462304N1001430.1	134-078-22BDD	462443N1002825.1	135-075-26CCD	462822N1000446.1
134-076-35CDD	462217N1001159.1	134-078-22DAB	462424N1002757.1	135-075-28ADA	462855N1000620.1
134-076-35DDD	462217N1001122.1	134-078-24BCD	462431N1002612.1	135-075-28CCC	462823N1000726.1

LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)
135-075-33DAA	462750N1000620.1	135-077-33DAA1	462752N1002124.1	136-074-35ACC	463309N0995640.1
135-075-34CBB	462750N1000610.1	135-077-33DAA2	462752N1002174.2	136-074-35BDD	463309N0995649.1
135-075-34DAC	462743N1000514.1	135-078-028DD	463220N1002705.1	136-074-35CAB	463302N0995659.1
135-076-06ADC1	463222N1001632.1	135-078-04DBA1	463213N1002918.1	136-074-35CDB	463243N0995659.1
135-076-06ADC2	463222N1001632.2	135-078-04DBA2	463213N1002918.2	136-075-06DDD	463709N1000845.1
135-076-08CCC	463103N1001613.1	135-078-06ACA	463225N1003151.1	136-075-11BCA	463648N1000442.1
135-076-10CDD	463102N1001314.1	135-078-07CCD	463059N1003230.1	136-075-12ACB	463647N1000259.1
135-076-16DBB	463030N1001420.1	135-078-11CCD	463110N1002723.1	136-075-14AAA	463608N1000346.1
135-076-17BCB	463043N1001613.1	135-078-14CCC	463009N1002733.1	136-075-18AAD	463603N1000845.1
135-076-18BDD	463039N1001657.1	135-078-14CDC	463009N1002714.1	136-075-20CDB	463432N1000817.1
135-076-19CCC	462919N1001728.1	135-078-15ADC	463035N1002752.1	136-075-24BAA1	463516N1000317.1
135-076-19CCC2	462919N1001728.2	135-078-15CDB	463059N1003230.1	136-075-24BAB2	463516N1000317.2
135-076-19CCC3	462919N1001728.3	135-078-1RCRA	463027N1003230.1	136-075-26CBC	463351N1000451.1
135-076-19CCC4	462919N1001728.4	135-078-20AAD	462955N1003016.1	136-075-27DAB1	463358N1000510.1
135-076-19CCC5	462919N1001728.5	135-078-20ADD	462941N1003016.1	136-075-27DAB2	463358N1000510.2
135-076-19CCC6	462919N1001728.6	135-078-20DAD	462928N1003016.1	136-075-27DAC1	463351N1000510.1
135-076-19CCC7	462919N1001728.7	135-078-21BBA	463001N1002957.1	136-075-27DAC2	463351N1000510.2
135-076-22DCC	462917N1001305.1	135-078-21CAB	462935N1002947.1	136-075-27DBA	463358N1000519.1
135-076-23AAA	463002N1001121.1	135-078-22ABA1	463002N1002802.1	136-075-27DBD1	463351N1000519.1
135-076-24BDD	462942N1001043.1	135-078-22ABA2	463002N1002802.2	136-075-27DBD2	463351N1000519.2
135-076-24DBB	462938N1001033.1	135-078-26ADC	462850N1002636.1	136-075-30CAA	463359N1000922.1
135-076-25BCC	462850N1001112.1	135-078-28BBB	462909N1003006.1	136-075-30NDB	463348N1000900.1
135-076-29BCB	462859N1001613.1	135-079-13ADA	463040N1003249.1	136-075-34CRD	463259N1000556.1
135-076-29AAD	462839N1001507.1	135-079-13ADB	463040N1003258.1	136-075-34CCC	463246N1000606.1
135-076-30ABD	462906N1001841.1	135-079-24AAA	463001N1003249.1	136-075-35CBD	463259N1000442.1
135-076-30ADA	462859N1001622.1	135-079-24BDD	462948N1003325.1	136-076-01ACA	463742N1001018.1
135-076-30DAA1	462846N1001622.1	135-079-25DBC	462837N1003317.1	136-076-01BDB	463742N1001046.1
135-076-30DAA2	462846N1001622.2	135-079-26CDA	462830N1003442.1	136-076-02ADB	463742N1001174.1
135-076-32DCC	462733N1001526.1	136-074-08DDD	463614N0995959.1	136-076-07BCC	463645N1001719.1
135-077-04AACD	463221N1002143.1	136-074-10BRC	463653N0995834.1	136-076-07CRC	463632N1001719.1
135-077-04DAA2	462702N1002176.2	136-074-15DAN	463534N0995727.1	136-076-08ABR	463704N1001527.1
135-077-10ADA	463136N1002008.1	136-074-20BBB1	463515N1000105.1	136-076-13BAB	463608N1001044.1
135-077-21CDD	462917N1002201.1	136-074-20BBB2	463515N1000105.2	136-076-15CDB	463525N1001248.1
135-077-22DDD	462917N1002008.1	136-074-20NCC	463428N1000028.1	136-076-17DD	463536N1001513.1
135-077-28BBR	462910N1002230.1	136-074-24DBR	463434N099505.1	136-076-18CAA	463533N1001710.1
135-077-28BCA1	462857N1002220.1	136-074-27AAA	463421N0995727.1	136-076-23DDC	463432N1001124.1
135-077-28BCA2	462857N1002220.2	136-074-31ACD1	463310N1000134.1	136-076-26CAA	463419N1001124.1
135-077-28DCD	462824N1002143.1	136-074-31ACD2	463310N1000134.2	136-076-32ABR	463334N1001527.1
135-077-32CDD1	462732N1002317.1	136-074-31ACD3	463310N1000134.3	136-077-01ADR	463742N1001742.1
135-077-32CDD2	462732N1002317.2	136-074-31DCC	463243N1000143.1	136-077-04BAB	463759N1002202.1

LOCAL WELL NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)	MISCELLANEOUS SITE NUMBER	U.S. GEOLOGICAL SURVEY STATION NUMBER (LAT-LONG)
136-077-06ACD1	463740N1002405.1	130-075-28ACB	460309N1000432.1
136-077-06ACD2	463740N1002405.2	130-079-11ADA	460553N1003133.1
136-077-10BDB	463653N1002047.1	132-076-18ADA	461523N1001352.1
136-077-10DCD1	463620N1002019.1	132-077-16	461514N1001926.1
136-077-10DCD2	463620N1002019.2	132-077-22	461421N1001810.1
136-077-12ADD	463646N1001729.1	132-078-11DDC	461544N1002406.1
136-077-12DDD	463619N1001729.1	135-074-05BC	463221N1000104.1
136-077-16AAD	463607N1002115.1	135-078-19AAD	462954N1003132.1
136-077-16ADD	463554N1002115.1		
136-077-16DAD	463541N1002115.1		
136-077-18DNC	463529N1002356.1		
136-077-21DCD	463435N1002134.1		
136-077-22ACC	463501N1002028.1		
136-077-24ADD	463501N1001729.1		
136-077-29BBB1	463429N1002337.1		
136-077-29BBB2	463429N1002337.2		
136-077-29BBB3	463429N1002337.3		
136-077-32CDB	463257N1002318.1		
136-077-34AAC	463329N1002009.1		
136-078-06BCB	463748N1003230.1		
136-078-07BDB	463655N1003211.1		
136-078-14CDC	463529N1002706.1		
136-078-19ACD	463503N1003143.1		
136-078-24CCC	463436N1002609.1		
136-078-24DCD	463435N1002550.1		
136-078-32BAB	463338N1003055.1		
136-078-34ABC	463331N1002803.1		
136-079-02AAD	463754N1003356.1		
138N079W18CCA1	464605N1004216.1		



APPENDIX B

Temperature Conversion Table

Degrees Celsius (°C)	Degrees Fahrenheit (°F)	Degrees Celsius (°C)	Degrees Fahrenheit (°F)	Degrees Celsius (°C)	Degrees Fahrenheit (°F)
3.5	38	12.5	54	21.5	71
4.0	39	13.0	55	22.0	72
4.5	40	13.5	56	22.5	72
5.0	41	14.0	57	23.0	73
5.5	42	14.5	58	23.5	74
6.0	43	15.0	59	24.0	75
6.5	44	15.5	60	24.5	76
7.0	45	16.0	61	25.0	77
7.5	46	16.5	62	25.5	78
8.0	47	17.0	63	26.0	79
8.5	48	17.5	64	26.5	80
9.0	49	18.0	65	27.0	81
9.5	50	18.5	66	27.5	81
10.0	51	19.0	67	28.0	82
10.5	52	19.5	68	28.5	83
11.0	53	20.0	68	29.0	84
12.0	54	21.0	70	29.5	85