

GROUND-WATER BASIC DATA
of
CAVALIER AND PEMBINA COUNTIES

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COUNTY GROUND-WATER STUDIES 20 - PART II
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INTRODUCTION

The purpose of the hydrologic investigation in Cavalier and Pembina Counties, N. Dak. (fig. 1) was to determine the quantity and quality of ground water available for municipal, domestic, livestock, industrial, and irrigation uses. Specifically, the objectives were: (1) determine the location, extent, and nature of the major aquifers; (2) evaluate the occurrence and movement of ground water, including the sources of recharge and discharge; (3) estimate the quantities of water stored in the aquifers; (4) estimate the potential yields to wells tapping the major aquifers; and (5) determine the chemical quality of the ground water.

The investigation was made cooperatively by the U.S. Geological Survey, North Dakota State Water Commission, North Dakota Geological Survey, Cavalier County Water Management District, and Pembina County Board of Commissioners. 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 investigations and functions as a reference for the other reports.

The information in this report was collected chiefly between 1968 and 1971, and consists of the following: (1) Geologic and hydrologic data for 2,286 wells, test holes, and springs; (2) water-level measurements in 125 observation wells; (3) lithologic and geophysical logs of about 886 test holes and wells; (4) chemical analyses of 296 water samples; (5) particle-size analyses of material from various aquifers; and (6) the hydraulic conductivity of materials from various depths and locations.

The data in this report are useful for estimating geologic and ground-water conditions in Cavalier and Pembina Counties. For example; a person

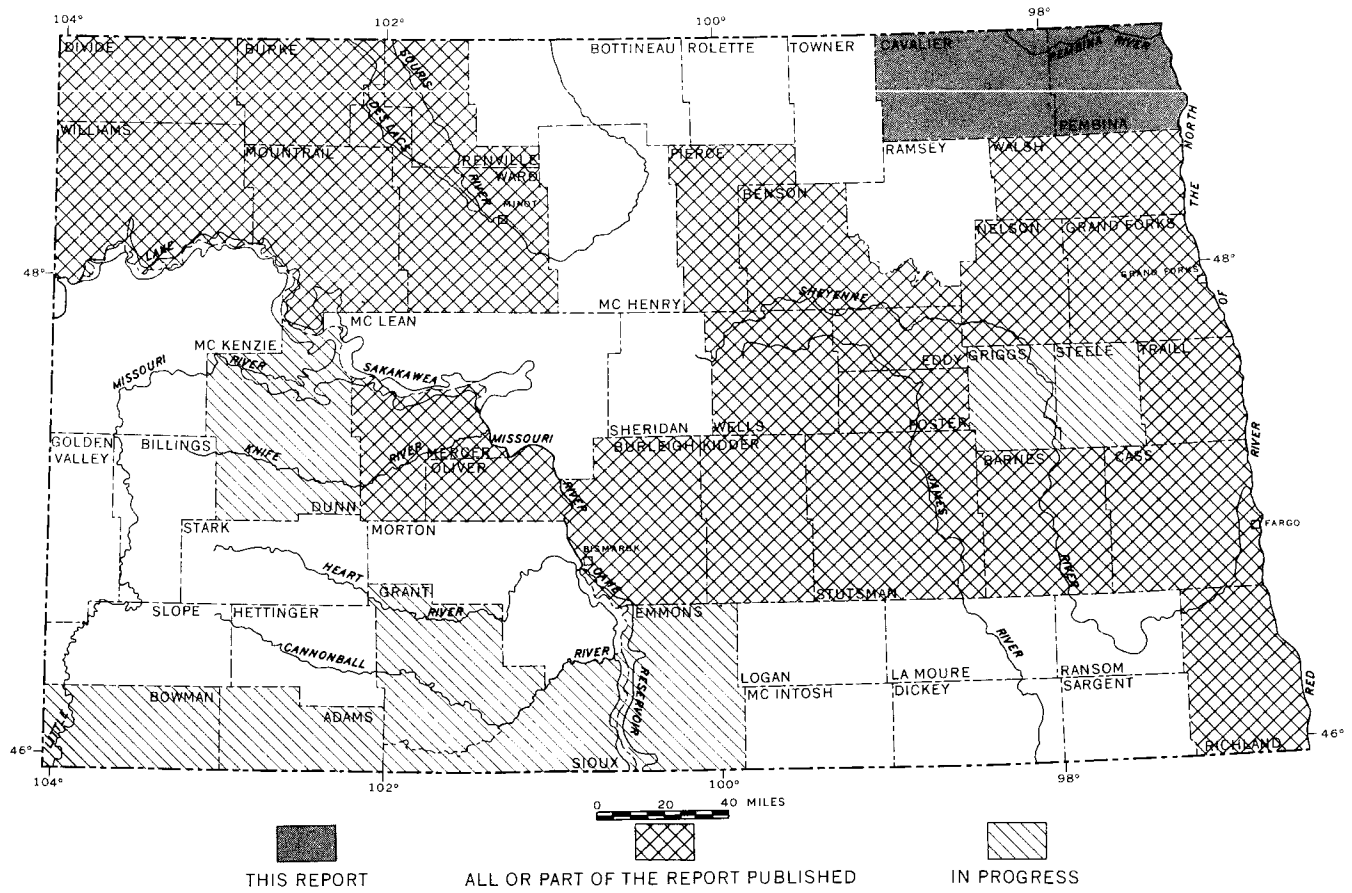


FIGURE 1.—County ground-water studies in North Dakota.

considering the construction of a new well can locate the proposed site on plates 1 and 2 (in pocket). Characteristics of nearby wells may be determined from table 1 and the water-level fluctuations in the area may be determined from table 2. The type of material encountered in nearby wells may be determined from table 3. The chemical quality of the water in adjacent wells and from surface-water sources may be determined from tables 4 and 5. The particle-size distribution and the hydraulic conductivities of selected samples may be ascertained from tables 6 and 7. In general, transfer of the information to different sites should be done with caution because of the irregular distribution of many of the water-yielding rocks.

Well-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. The 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 tract). For example, well 160-64-15DAA2 is in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 160 N., R. 64 W. Consecutive terminal numerals are added if more than one well is recorded within a 10-acre tract. The location of each well and test hole listed in the tables is shown on plates 1 and 2.

Acknowledgments

The author is indebted to the residents and officials of Cavalier and Pembina Counties, who furnished essential information on wells and springs and permitted measurements to be made and samples to be taken. Particular recognition and thanks are due to the following North Dakota State Water Commission personnel: L. L. Froelich and C. E. Naplin for logging of test holes, R. W. Schmid for performing and analyzing aquifer tests, G. O. Muri for chemical analyses of water samples, and M. O. Lindvig for the planning of project activities.

The U.S. Bureau of Reclamation, U.S. Corps of Engineers, U.S. Air Force, North Dakota Geological Survey, North Dakota State Highway Department,

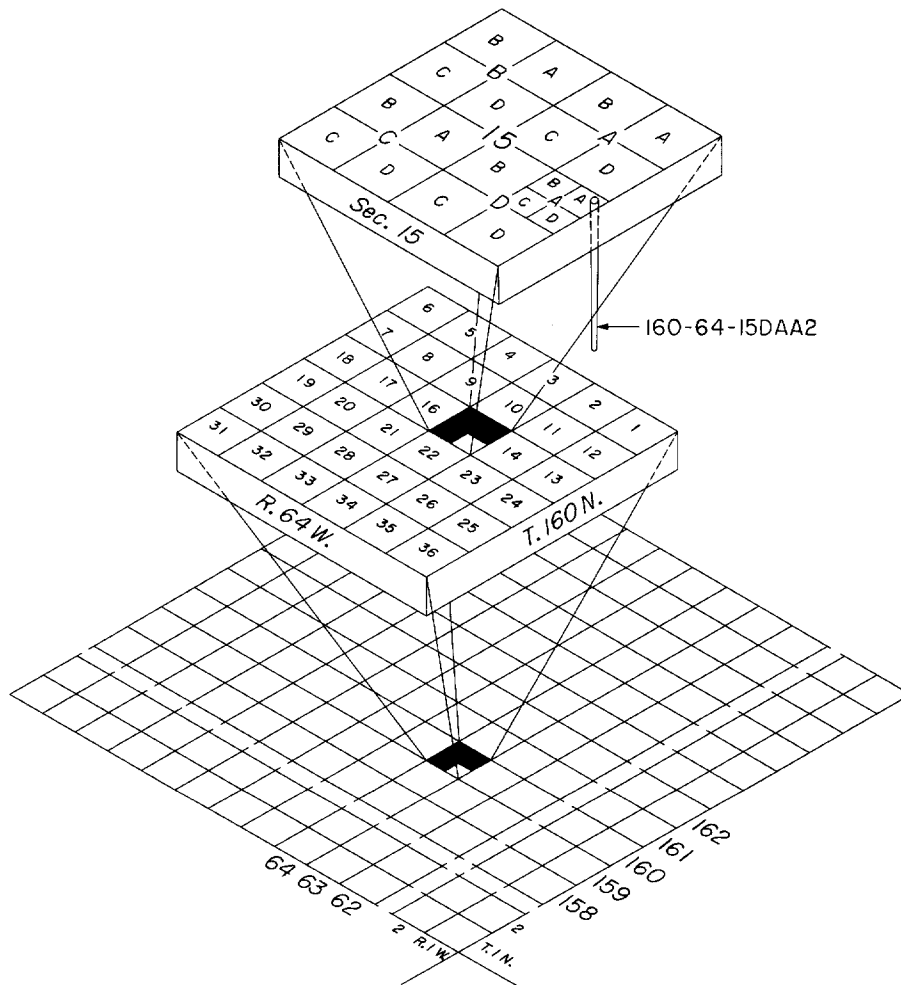


FIGURE 2.— System of numbering wells, test holes, and springs

Frederickson's, Inc., Great Northern Railway Company, L. A. Gjerdevig, Walter Koehmstedt, Layne Minnesota Company, Gary A. Peterson, and Tri-State Drilling and Equipment Company furnished well and test-hole logs, which are gratefully acknowledged.

METHODS OF STUDY

Selected test holes were converted to observation wells for water-level measurements (table 2) and water-quality sampling (table 4). The wells are usually constructed of 1½-inch plastic casing with 18-slot (0.018-inch openings) well screens, or 4-inch plastic casings with well screens. Most of the observation wells were pumped a minimum of 6 hours before water samples were collected for chemical analyses. Water-level measurements were made periodically beginning in the fall of 1968 and extending through December 1971. Eight wells were equipped with continuous water-level recorders. Measurements will continue to be made in many of these wells as part of the statewide observation-well network. The locations of observation wells are shown on plates 1 and 2.

Publications of selected records of ground-water levels in Cavalier and Pembina Counties began in 1937, and these records are not republished in this volume. The following table gives by year the number of the U.S. Geological Survey Water-Supply Papers (WSP) that contain additional water-level data for the study area.

<u>Year</u>	<u>WSP</u>	<u>Year(s)</u>	<u>WSP</u>
1937	840	1948	1128
1938	845	1949	1158
1939	886	1950	1167
1940	908	1951	1193
1941	938	1952	1223
1942	946	1953	1267
1943	988	1954	1323
1944	1018	1955	1406
1945	1025	1956	1456
1946	1073	1957-61	1781
1947	1098	1962-66	1976

Two types of logs are included in table 3--logs of test holes drilled as part of this project and logs collected from other sources. Logs from test holes drilled as part of this project are identified by the letters NDSWC and NDGS. Most of these logs have a graphic log in addition to a description of the materials penetrated. As available, electric and gamma-ray logs are also shown. Logs from other sources, such as well drillers,

other government agencies, and previously published logs, are also shown. Minor changes in word order have been made on most of these logs. Many well-drillers' logs tend to show sand sizes as being coarser than they would be classified under the modified Wentworth (1922) size scale.

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.

WATER-QUALITY DATA

The mineral constituents and physical properties of water reported in the table of analyses (tables 4 and 5) include those that have a practical bearing on the value of the water for most purposes. The analyses generally include determinations of silica, iron, calcium, magnesium, sodium, potassium, carbonate, bicarbonate, sulfate, chloride, fluoride, nitrate, boron, dissolved solids, pH, and specific conductance. The water samples obtained during this study for analysis were collected in polyethylene bottles, and the analyses were made by the North Dakota State Water Commission, Bismarck, N. Dak. Often a period of several weeks elapsed between collection and the date of analysis. This time lapse may influence some of the values shown in tables 4 and 5 for pH, iron, and bicarbonate.

The dissolved mineral constituents in water are usually reported in milligrams per liter (mg/l), micrograms per liter ($\mu\text{g/l}$), parts per million (ppm), or grains per U.S. gallon (gr/gal). A milligram per liter is one-thousandth (0.001) of a gram of dissolved material per liter of solution. A microgram per liter is one-millionth (0.000001) of a gram of dissolved material per liter of solution. A part per million is a unit weight of dissolved material in a million unit weights of solution. A grain per U.S. gallon is 1 grain (unit of weight) of dissolved material per U.S. gallon of solution.

Milligrams per liter is practically equivalent to parts per million for water containing less than 7,000 mg/l dissolved solids. Milligrams per liter can be converted to grains per gallon by dividing milligrams per liter by 17.12. One milligram per liter is equivalent to 8.33 pounds of material per million gallons of water.

Micrograms per liter may be converted to milligrams per liter by dividing micrograms per liter by 1,000.

Equivalents per million (epm) is the unit chemical combining weight of a constituent in a million weights of water. These units are not given in this report, but have been used to calculate percent sodium, the sodium-adsorption ratio (SAR), or to check the accuracy of a chemical analysis.

Mineral Constituents in Solution

Silica (SiO₂)

Silica is dissolved from practically all rocks in Cavalier and Pembina Counties. Some water contained less than 5 mg/l of silica and some contained more than 50 mg/l, but the more common range was from 20 to 30 mg/l. The median value was 26 mg/l. Silica affects the usefulness of water because it contributes to the formation of scale in pipes, water heaters, and boilers.

Iron (Fe)

Iron compounds are common in rocks in Cavalier and Pembina Counties and are easily leached by ground water. On exposure to air, water that contains more than 100 µg/l of iron soon becomes turbid with the reddish-brown ferric oxide produced by oxidation. Surface water seldom contains as much as 1,000 µg/l of dissolved iron, although some acid water carries large quantities of iron in solution. Ground water in the area usually contained less than 10,000 µg/l dissolved iron and had a median value of about 350 µg/l. The U.S. Public Health Service (1962) recommends an upper limit of 300 µg/l of iron in drinking water because in greater concentrations it imparts a metallic taste. It also causes reddish-brown stains on porcelain or enamelware and fixtures and on fabrics washed in the water. In this report, iron concentrations are reported in micrograms per liter (µg/l).

Manganese (Mn)

Manganese resembles iron in its chemical behavior and in its occurrence in natural water, but is generally less abundant than iron. Manganese is especially objectionable in water used for laundry. Concentrations as low as 200 µg/l may cause a dark-brown or black stain on fabrics and porcelain fixtures. Ground water in Cavalier and Pembina Counties usually contained less than 1,000 µg/l dissolved manganese and had a median value of about 120 µg/l. U.S. Public Health Service (1962) recommended

upper limit for manganese in drinking water is 50 µg/l. Nearly two-thirds of the analyses given in table 4 exceeded that standard. Manganese concentrations are reported in micrograms per liter (µg/l) in this report.

Calcium (Ca)

Calcium is a major cause of hardness and forms scale on utensils and on boilers and pipes. The calcium content of ground water may be as high as several hundred milligrams per liter. The median value of the analyses given in table 4 was 59 mg/l.

Magnesium (Mg)

Magnesium can be dissolved from many sources, particularly from dolomitic rocks. The effect of magnesium in water is similar to that of calcium. The magnesium content in soft water may amount to only 1 or 2 mg/l, but hard water may contain more than 900 mg/l of magnesium. The median value in Cavalier and Pembina Counties was 25 mg/l.

Sodium and Potassium (Na and K)

Sodium is the predominant cation in some of the more highly mineralized water found in Cavalier and Pembina Counties, and may exceed 16,000 mg/l in brines. The potassium concentration in water rarely exceeds 100 mg/l because potassium compounds in rocks are less soluble than sodium compounds and because base exchange, adsorption by clays, and formation of new minerals tend to remove potassium from ground water. Moderate quantities of sodium and potassium generally have little effect on the usefulness of water, but water that carries more than about 50 mg/l of the two may require careful operation of steam boilers to prevent foaming. Water that contains a large proportion of sodium salts may be unsatisfactory for irrigation. The presence of several hundred milligrams per liter of sodium in water makes it unsuitable for use in sodium-restricted diets (North Dakota State Department of Health, 1962). The median values for sodium and potassium in Cavalier and Pembina Counties were 280 and 9 mg/l, respectively.

Bicarbonate and Carbonate (HCO₃ and CO₃)

Bicarbonate and carbonate ions are the major cause of alkalinity in most water. Although alkalinity is primarily due to the presence of bicarbonate and carbonate, other ions (such as silicates, phosphates, borates, possibly fluoride, and certain organic anions that occur in colored water) also contribute to alkalinity. 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.

Bicarbonate in ground water in Cavalier and Pembina Counties seldom exceeded concentrations of 800 mg/l and had a median value of 435 mg/l (table 4). Carbonate was 0 mg/l in 91 percent of the samples. Alkalinity can be calculated from the analyses by using the formula:

$$\text{Alkalinity as CaCO}_3 = 0.82(\text{HCO}_3) + 1.34(\text{CO}_3)$$

Alkalinity is different from the commonly used term "alkali," which has a variety of meanings. Alkali usually refers to a water that contains large amounts of dissolved solids, particularly sodium and sulfate.

Sulfate (SO₄)

Sulfate, an oxidation product of sulfur, is not a major constituent of the earth's crust; however, it is widely distributed in various forms in both sedimentary and igneous rocks. Upon weathering, metallic sulfide deposits yield sulfate to ground water. Large quantities of sulfate may also be dissolved from beds of gypsum, sodium-sulfate deposits, and some types of shale.

The sulfate content of water generally is not critical in many industrial processes, but in association with calcium and magnesium, sulfate may form hard scale in steam boilers.

The U.S. Public Health Service recommends 250 mg/l as the upper limit for sulfate in drinking water. Sulfate in samples from the two counties seldom exceeded 3,000 mg/l and had a median value of 390 mg/l.

Chloride (Cl)

Large quantities of chloride may affect the industrial use of water by increasing the corrosiveness of water that contains large quantities of calcium and magnesium. The U.S. Public Health Service recommends an upper limit of 250 mg/l of chloride for drinking water. The chloride content in ground water from Cavalier and Pembina Counties ranged from 0 to 29,000 mg/l, but had a median value of 88 mg/l.

Fluoride (F)

Fluoride concentrations between 0.6 and 1.7 mg/l reportedly have a beneficial effect on the structure and resistance to decay of children's

teeth. Concentrations greater than 1.7 mg/l also protect the teeth from cavities but cause an undesirable black stain (Durfor and Becker, 1964). The U.S. Public Health Service (1962, p. 8) states, "When fluoride is naturally present in drinking water, the concentration should not average more than the appropriate upper limit..." "Presence of fluoride in average concentrations greater than two times the optimum values...shall constitute grounds for rejection of the supply." According to the U.S. Public Health Service, the recommended optimum fluoride concentration in drinking water depends on the annual average of the maximum daily air temperature. For climates having an average daily maximum air temperature below 12°C (53.7°F), such as in Cavalier and Pembina Counties, the optimum fluoride concentration is 1.2 mg/l and the recommended upper limit is 1.7 mg/l. Concentrations higher than the stated upper limit may cause mottled enamel in teeth, endemic cumulative fluorosis, and skeletal defects. Ground water samples from the area showed the fluoride content was mostly below 0.8 mg/l with a median value of 0.3 mg/l.

Nitrate (NO₃)

High nitrate content is of concern in drinking waters when such water is used in the preparation of infant formula. When nitrates are ingested, converted to nitrites, and picked up by the blood stream of infants, they destroy the oxygen-carrying capacity of the blood, a condition known as "methemoglobinemia" (Comley, 1945). This results in a cyanotic condition and the infant appears blue. Investigations conducted so far indicate that waters containing over 45 mg/l nitrates as NO₃ can cause this condition in infants but will have no adverse effect upon adults. High nitrate values may also be indicative of fecal contamination as nitrate is present in most human and animal wastes. Barnyards, feedlots, manure piles, septic-tank fields, silage juices, and decomposing plant and animal tissue are all common sources of nitrate in rural areas.

About 10 percent of the ground-water samples from the area contained nitrate concentrations over 45 mg/l. The median value, however, was 1.6 mg/l.

Boron (B)

Boron in small quantities is essential for plant growth, but irrigation water containing more than 1,000 µg/l boron is detrimental to boron-

sensitive crops. In this report boron concentrations are reported in micrograms per liter ($\mu\text{g}/\text{l}$). Boron concentrations ranged from 0 to 9,200 $\mu\text{g}/\text{l}$, with a median value of 930 $\mu\text{g}/\text{l}$.

Dissolved solids

The reported quantity of dissolved solids, the residue on evaporation at 180°C , consists mainly of the dissolved mineral constituents in the water. It may also include some organic matter and water of crystallization. Water with less than 500 mg/l of dissolved solids usually is satisfactory for domestic and some industrial uses. Water containing several thousand milligrams per liter dissolved solids is sometimes successfully used for irrigation where practices permit the removal of soluble salts through the application of large volumes of water on well-drained lands, but generally water containing more than about 2,000 mg/l is considered to be unsuitable for long-term irrigation under average conditions. Most ground water in the area contained less than 3,000 mg/l dissolved solids, but may contain as much as 53,800 mg/l. The median value was 1,660 mg/l.

Properties and Characteristics of Water

Temperature

Temperature is an important factor in properly 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 indirect influence upon concentrations of dissolved gases and mineral matter in ground water. Temperature in this report (tables 1, 4, and 5) are expressed in degrees Celsius (Centigrade). Degrees Celsius and the equivalent temperature in degrees Fahrenheit are given in the following table.

<u>Degrees Celsius</u>	<u>Degrees Fahrenheit</u>	<u>Degrees Celsius</u>	<u>Degrees Fahrenheit</u>	<u>Degrees Celsius</u>	<u>Degrees Fahrenheit</u>
2.0	36	10.5	51	19.0	66
2.5	37	11.0	52	19.5	67
3.0	38	11.5	53	20.0	68
4.0	39	12.0	54	20.5	69
4.5	40	12.5	55	21.0	70
5.0	41	13.5	56	21.5	71
5.5	42	14.0	57	22.0	72
6.0	43	14.5	58	22.5	73
6.5	44	15.0	59	23.5	74
7.0	45	15.5	60	24.0	75
7.5	46	16.0	61	24.5	76
8.5	47	16.5	62	25.0	77
9.0	48	17.0	63	25.5	78
9.5	49	17.5	64	26.0	79
10.0	50	18.5	65	26.5	80

The temperature of ground water within 60 feet (18.3 meters) of the surface approximates the mean annual air temperature and probably increases about 0.56°C (1°F) for each 60 to 100 feet (18.3 to 30.5 meters) of increase in depth. Most of the ground-water temperature measurements were between 5.0 and 10.0°C in Cavalier and Pembina Counties. The median value was nearly 6.0°C.

Hardness

Hardness is the characteristic of water that receives the most attention in industrial and domestic use. As hardness increases, so does the quantity of soap required to produce lather. Hard water is also objectionable because it contributes to the formation of scale in boilers, water heaters, radiators, and pipes, with a resultant decrease in rate of heat transfer and possibility of water-heater or boiler failure.

Hardness is caused almost entirely by compounds of calcium and magnesium. Other constituents--such as iron, manganese, aluminum, barium, strontium, and free acid--also cause hardness, although they usually are not present in quantities large enough to have any appreciable effect.

Generally bicarbonate and carbonate ions determine the proportions of "carbonate" hardness of water. Carbonate hardness is the amount of hardness chemically equivalent to the amount of bicarbonate and carbonate in solution. Carbonate hardness is approximately equal to the amount of hardness that is removed from water by boiling and is termed temporary hardness.

Noncarbonate hardness is the difference between the hardness calculated from the total amount of calcium and magnesium in solution and the carbonate hardness. If the carbonate hardness (expressed as calcium carbonate) equals the amount of calcium and magnesium hardness (also expressed as calcium carbonate) there is no noncarbonate hardness. Noncarbonate hardness is about equal to the amount of hardness remaining after water is boiled. The scale formed at high temperatures by the evaporation of water containing noncarbonate hardness commonly is tough, heat resistant, and difficult to remove.

Although many people talk about soft water and hard water, there has been no firm line of demarcation. Water that seems hard to some people may seem soft to others. As a general reference, the U.S. Geological Survey uses the following classification of water hardness.

<u>Calcium and magnesium hardness, as CaCO₃ (milligrams per liter)</u>	<u>Hardness description</u>
0-60	Soft
61-120	Moderately hard
121-180	Hard
More than 180	Very hard

Water ranging in hardness from 0 to 60 mg/l generally is suitable for public or domestic use without softening. Water with hardness greater than 60 mg/l is improved by softening to reduce soap consumption and accumulation of scum on water fixtures.

Ground-water analyses from table 4 show that the hardness ranged from 15 to 7,670 mg/l and had a median value of 334 mg/l. Noncarbonate hardness ranged from 0 to 7,600 mg/l and had a median value of 10 mg/l.

Specific conductance (micromhos per centimeter at 25°C)

Specific conductance is used to estimate the amount of dissolved solids in water. Commonly in Cavalier and Pembina Counties the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos).

Sodium-adsorption ratio (SAR)

The term sodium-adsorption ratio (SAR) was introduced by the U.S. Salinity Laboratory Staff (1954). It is the ratio expressing the relative activity of sodium ions in exchange reaction with soil and is an index of the sodium or alkali hazard to the 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 liter or equivalents per million.

Water is divided into sixteen classes (U.S. Salinity Laboratory Staff, 1954, p. 80) depending upon the SAR and specific conductance. Water varies in respect to sodium hazard and specific conductance from that which can be used for irrigation on almost all soils to that which is generally unsatisfactory for irrigation.

Hydrogen-ion concentration (pH)

Hydrogen-ion concentration is expressed in terms of pH units. The values of pH often are used as a measure of the solvent power of water or as an indicator of the chemical behavior certain solutions may have toward rock minerals.

The degree of acidity or alkalinity of water, as indicated by the hydrogen-ion concentration, affects the corrosive properties of water, and partly determines the proper treatment that may be necessary at water-treatment plants. A pH of 7.0 indicates that the water is neither acid nor alkaline. Readings progressively lower than 7.0 denote increasing acidity and those progressively higher than 7.0 denote increasing alkalinity. The pH of most ground water in Cavalier and Pembina Counties ranged between 7.0 and 8.5. The median value was 7.8.

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TABLE 1.--Records of wells, test holes, and springs

EXPLANATION

<u>Owner</u>	<u>Water-bearing material</u>
NDGS CAV-69-23, North Dakota Geological Survey, Cavalier County, drilled in 1969, test-hole number 23	Modifiers
NDSHD, North Dakota State Highway Department	1, very fine grained
NDSWC 1613, North Dakota State Water Commission, test-hole number 1613	2, fine grained
NP Railway, Northern Pacific Railway Company	3, medium grained
USAF, U.S. Air Force	4, coarse grained
USBR, U.S. Bureau of Reclamation	6, clayey
USCE, U.S. Corps of Engineers	7, silty
USGS, U.S. Geological Survey	8, sandy
	9, gravelly
	C, calcareous
	D, dense
	I, interbedded
	J, jointed or fractured
	S, soft
	Y, shaly
	Major lithology
	D, dolomite
	F, shale
	G, gravel
	L, limestone
	P, clay
	Q, silt
	R, sand and gravel
	S, sand
	T, till
	V, sandstone
	X, silty sand
	Specific conductance (in micromhos per centimeter at 25°C)
	0, 0-50
	1, 51-150
	2, 151-300
	3, 301-500
	4, 501-1,000
	5, 1,001-2,000
	6, 2,001-5,000
	7, 5,001-10,000
	8, 10,001-20,000
	9, more than 20,000
<u>Water level (feet)</u>	
Water level, in feet below (+ above) land surface	
F, well flows	
<u>Use of water</u>	
C, commercial	
F, fire	
H, domestic	
I, irrigation	
K, domestic and stock	
N, industrial	
P, public supply	
S, stock	
T, institutional	
U, unused	
Z, other	
<u>Major aquifer</u>	
E, Triassic-Jurassic, undifferentiated	
D, Dakota Group	
N, Niobrara Formation	
P, Pierre Formation	
RR, Red River Formation	
SM, Stony Mountain Formation	
SO, Stonewall Formation	
1G, surface sand and gravel deposit	
01, lake deposit	
02, beach deposit	
03, delta deposit	
21, stream alluvium	
41, glacial till	
51, buried-glaciofluvial deposit	
52, buried-channel deposit	

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT.)	CASING DEPTH (FT.)	CASING DIAMETER (IN.)	DATE DRILLED (YEAR)	WATER LEVEL (FT.)	CATF WATER LEVEL MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
159N050W298BA	NDSHD 66-12 B1		125	120	--	1961	F	7-61	U	51	DS	--	--	760
159N051W04ABA	NDGS PEM-70-21		24	--	--	1970	--	--	U	--	--	--	--	802
159N051W08AAA	D.HARLOW		17	--	36	1949	7	8-68	H	01	6Q	4	--	808
159N051W09AAA	J.MORRISON		15	--	30	1890	--	--	H	01	6Q	6	--	803
159N051W09CBB	NDSWC 3833		280	--	--	1969	--	--	U	--	--	--	--	805
159N051W11DCC1	J.JOHNSON		14	0	36	1901	8	10-41	K	01	6Q	--	--	798
159N051W11DCC2	J.JOHNSON		15	0	48	1940	7	10-41	S	01	6Q	--	--	798
159N051W11DCC3	J.JOHNSON		15	0	12	1940	5	10-41	S	01	6Q	--	9.5	798
159N051W14A8B	J.JOHNSON		16	0	36	1911	7	10-41	S	01	6Q	--	--	798
159N051W158CC	A.VANCAMP		15	--	10	--	--	--	U	01	6Q	--	14.0	804
159N051W23CCD	NDSHD IN-013 14		154	45	4	1957	5	--	U	51	Y	--	--	799
159N051W23COC	DRAYTON POTATO		502	--	6	1959	F	--	N	RR	JL	9	10.0	801
159N051W26DBC	DRAYTON CITY		17	0	48	--	--	--	P	01	P	--	--	801
159N051W27ACC	W.HALFPENNY		13	0	24	1931	8	10-41	U	01	6Q	--	8.5	801
159N052W03DDC	J.WEDGE		90	--	2	--	4	--	S	--	--	5	--	810
159N052W05BAA	J.KLINISKE		16	--	--	--	--	--	S	--	--	5	--	823
159N052W09ADD	B.SCHARMER		54	0	36	--	6	9-41	S	--	--	--	6.5	816
159N052W10BCC	N.ROGERS		48	0	36	1919	2	9-41	S	--	--	--	6.5	816
159N052W14BBB	USBR 247A		13	--	4	1968	13	6-68	U	01	7P	--	--	810
159N052W17BBB	USBR 248		8	--	4	1968	12	6-68	U	01	7P	--	--	835
159N052W22DCD	NDSWC 5705		280	--	--	1970	--	--	U	--	--	--	--	814
159N052W23BBA	H.THEXTON		195	--	2	1954	F	--	S	51	ST	--	--	810
159N052W25BAA	C.HOSELTON		10	--	12	--	6	8-68	U	01	7P	4	11.0	808
159N052W28AAA	USBR 384		13	--	4	1968	5	7-68	U	01	7P	--	--	818
159N052W32CCC	USBR 265		18	--	4	1968	5	6-68	U	01	Q	--	--	832
159N052W35CCC	USBR 266		8	--	4	1968	DRY	6-68	U	01	7P	--	--	819
159N053W02C8B	J.DONNER		24	--	48	--	16	--	C	01	Q	--	--	840
159N053W02C8C1	GREAT NORTHERN		322	321	6	1953	0	1-53	C	E	IF	--	--	840
159N053W02C8C2	E.THOMPSON		450	--	4	--	F	--	F	RR	JL	7	9.0	840
159N053W03A	O.ROE		18	0	12	--	10	--	H	01	Q	--	--	839
159N053W07C8B	W.BALDWIN		29	--	--	1936	15	--	S	01	Q	5	--	870
159N053W1188B	KENNELLY CO.		229	--	6	1950	F	--	N	51	S	--	9.0	837
159N053W1388B	NDSWC 3832		240	--	--	1969	--	--	U	--	--	--	--	830
159N053W1488B	USBR 249		23	--	4	1968	5	6-68	U	01	Q	--	--	840
159N053W1788B	USBR 250		13	--	4	1968	4	6-68	U	01	Q	--	--	866
159N053W20ADA	L.CORBIT		20	0	48	1963	--	--	S	01	Q	--	--	861
159N053W25AAA	USBR 383		18	--	4	1968	6	7-68	U	01	7P	--	--	830
159N053W27BBB	USBR 385		24	--	4	1968	6	7-68	U	01	Q	--	--	850
159N053W27DDC	J.MACIBBAN		221	--	2	1936	8	9-41	S	51	S	--	--	843
159N053W32CCC	USBR 263		18	--	4	1968	8	6-68	U	01	Q	--	--	867

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
159N053W358A8	NDSWC 5704		340	--	--	1970	--	--	U	--	--	--	--	841
159N053W35CCC	USBR 264		18	--	4	1968	4	6-68	U	01	Q	--	--	840
159N054W01A88	R. HEUCHERT		21	--	36	--	11	9-69	S	01	7P	7	--	875
159N054W02CCC	C. NIEMANN		--	--	--	--	--	--	S	--	--	5	10.0	883
159N054W03BCC	USBR 470		18	0	4	1968	2	8-68	U	01	Q	--	--	891
159N054W03DAB	E. BEATTIE		28	--	30	--	14	--	S	01	6Q	6	--	884
159N054W12AAA	USBR 469		14	0	4	1968	8	8-68	U	01	Q	--	--	874
159N054W14888	USBR 251		18	0	4	1968	6	6-68	U	01	1S	--	--	880
159N054W16CCC	USBR 472		18	0	4	1968	17	8-68	U	01	Q	--	--	892
159N054W18888	USBR 252		28	0	4	1968	11	6-68	U	01	Q	--	--	909
159N054W21888	A. SCHULTZ		35	--	36	--	16	9-40	S	01	1S	--	--	893
159N054W210CD	C. FOLSON		26	--	24	--	18	9-57	U	01	7P	--	--	885
159N054W22CCC	A. AALAND		36	--	24	1952	8	--	U	01	7P	6	8.5	879
159N054W23888	D. MARKEL		50	--	36	--	13	--	S	01	7P	6	--	878
159N054W2388C	NDSWC 3831		260	--	--	1969	--	--	U	--	--	--	--	875
159N054W25ADD	T. THARALSON		234	--	4	1958	4	--	S	41	8T	8	--	872
159N054W25888	USBR 386		23	0	4	1968	8	7-68	U	01	Q	--	--	975
159N054W27CCC	C. JOHNSON		180	--	36	--	18	--	S	41	8T	7	8.5	875
159N054W2888C1	O. LEE		35	--	48	--	20	--	S	01	S	--	--	890
61 159N054W2888C2	A. MOULTON		15	--	48	--	12	--	K	01	Q	--	--	890
159N054W288CB	NDSHD 18-6 NO.1		156	50	4	1967	--	--	U	41	8T	--	--	889
159N054W29ADA	NDSHD 18-6 NO.2		151	50	4	1967	2	7-67	U	41	8T	--	--	884
159N054W29888	USBR 387		23	0	4	1968	13	7-68	U	01	Q	--	--	900
159N054W33AAA	NDSWC 1616		63	--	--	1959	--	--	U	--	--	--	--	880
159N054W338CC1	P. THARALSON		200	--	2	1950	2	--	S	51	S	7	--	887
159N054W338CC2	J. THARALSON		212	--	2	1940	F	--	K	51	S	--	6.5	886
159N054W330DA	NDSWC 5703		280	--	--	1970	--	--	U	--	--	--	--	879
159N054W330DD	L. FRAZIER		--	0	30	--	12	9-41	U	01	P	--	--	879
159N054W34CCC1	L. FRAZIER		30	0	36	--	13	9-41	S	01	P	--	--	879
159N054W34CCC2	L. FRAZIER		31	0	36	--	24	9-41	S	01	P	--	--	879
159N054W35CCC	USBR 262		18	0	4	1968	10	6-68	U	01	Q	--	--	975
159N055W05ACD	O. OTTO		80	--	24	--	8	--	K	01	7P	6	--	944
159N055W06DAD	E. RAMSEY		33	--	36	--	20	--	K	01	X	5	--	948
159N055W07CCC	USBR 254		18	0	4	1968	14	6-68	U	01	Q	--	--	975
159N055W07CDD1	R. RAMSEY		13	--	24	1928	11	9-41	H	02	X	--	9.0	960
159N055W07CDD2	R. RAMSEY		410	--	3	1920	80	--	S	D	V	8	--	960
159N055W118CC	GILLIES BROS.		22	--	32	--	12	--	S	01	X	8	--	922
159N055W110CC1	NDSHD 66-9 NO.1		121	75	4	1964	8	5-64	U	41	8Q	--	--	912
159N055W110CC2	NDSHD 66-9 NO.2		108	55	4	1964	3	7-64	U	41	8Q	--	--	909
159N055W110CC3	NDSHD 66-9 83		110	80	4	1964	1	8-64	U	41	6Q	--	--	905

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
159N055W11DDC4	NDSHD 66-9 NO.4		109	80	4	1964	1	8-64	U	41	6Q	--	--	905
159N055W12DCD1	NDSWC TB1		31	--	--	1965	--	--	U	--	--	--	--	908
159N055W12DCD2	NDSWC TB2		32	--	--	1965	--	--	U	--	--	--	--	909
159N055W13AAB	O.SCHULTZ		332	302	6	1962	18	7-62	C	D	V	--	--	910
159N055W13AAC1	GREAT NORTHERN		183	145	5	1891	5	4-91	H	41	BT	--	--	911
159N055W13AAC2	CRYSTAL CITY		32	--	96	1935	25	4-35	P	01	P	--	--	911
159N055W13ACD	CRYSTAL SCHOOL		226	218	4	1960	14	1-60	P	D	V	8	--	907
159N055W13ADD	EDEN-HOESLEY	237	231	214	6	1965	20	4-65	C	D	V	--	--	908
159N055W15ADA1	M.O*SULLIVAN		30	--	54	1940	15	9-41	K	02	G	--	8.5	924
159N055W15ADA2	M.O*SULLIVAN		16	0	36	1937	9	9-41	U	02	1S	--	--	924
159N055W16AAA	USBR 253		23	0	4	1968	8	6-68	U	01	X	--	--	930
159N055W19AAD	E.RUSSUM		25	--	48	--	14	--	K	02	S	--	--	964
159N055W19BBA	E.NELSON		12	--	48	--	9	9-59	S	02	S	--	--	972
159N055W21AOD	A.REILLY		29	0	48	--	20	9-59	K	02	S	--	--	928
159N055W22CCC	NDSWC 3829		470	--	--	1969	--	--	U	--	--	--	--	928
159N055W23ADD	D.MATTER		33	--	30	--	18	9-59	K	02	S	--	7.5	915
159N055W25BAA	W.GINDER		244	--	2	1921	15	9-41	U	D	V	--	10.5	912
159N055W28BBD	T.HALVORSON		12	0	36	--	10	9-59	U	02	S	--	--	935
159N055W28DAA	L.GRYLE		18	--	24	--	10	9-54	K	02	S	--	--	926
159N055W29BBB	USBR 388		14	0	4	1968	6	7-68	U	01	Q	--	--	947
159N055W30DAA1	H.MARKHOLT		20	0	36	1900	12	9-41	S	02	S	--	9.0	948
159N055W30DAA2	L.ESTAD		27	--	30	--	15	--	K	02	S	--	--	948
159N055W31AAA	A.AL MEN		18	0	48	--	12	9-59	S	02	S	--	7.5	953
159N055W31CCC	USBR 259		13	--	--	1968	--	--	U	--	--	--	--	1047
159N055W32B8C	L.WINDINGLAND		27	--	48	--	14	--	K	02	S	--	--	949
159N055W32D8A	H.ROLLEFSTAD		17	--	48	--	8	9-59	K	02	S	--	--	936
159N055W33DDD	USBR 260		23	0	4	1968	7	6-68	U	01	Q	--	--	925
159N055W35CCC	B.HARVEY		17	0	48	--	11	9-59	S	01	P	--	--	918
159N055W36CCC	USBR 261		23	--	--	1968	--	--	U	--	--	--	--	909
159N056W01ADA	NDSWC 3826		100	--	--	1969	--	--	U	--	--	--	--	958
159N056W01DDD	USBR 450		23	0	4	1968	4	8-68	U	01	Q	--	--	962
159N056W03CCC	NDGS PEM-70-27		29	--	--	1970	--	--	U	--	--	--	--	1150
159N056W04ACD	D.MYERS		24	--	18	1964	20	--	S	--	--	--	--	1156
159N056W058AB	OLGEIRSON BROS		18	--	48	--	12	--	S	--	--	4	--	1200
159N056W06AAA	NDSWC 4215		80	--	--	1970	--	--	U	--	--	--	--	1210
159N056W07CBD	G.THORDARSON		32	--	36	--	28	--	H	--	--	5	--	--
159N056W10CDC	R.LITTLEJOHN		30	--	--	--	8	7-68	U	--	--	--	--	1145
159N056W14AAA	NDGS PEM-70-28		8	--	--	1970	--	--	U	--	--	--	--	1050
159N056W16AAA	USBR 255		8	0	4	1968	DRY	6-68	U	02	Q	--	--	1150
159N056W16CBC	T.THORLEIFSON		20	--	36	--	17	--	H	02	R	4	--	--

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
159N056W16DAC	R. FLANAGAN		2	--	30	--	1	--	H	02	R	4	--	1155
159N056W18CAA	USBR 256		14	0	4	1968	3	6-68	U	02	Q	--	--	--
159N056W18CCC	USBR 391		13	0	4	1968	8	7-68	U	41	T	--	--	--
159N056W18DDD	NDSWC 4214		60	--	--	1970	--	--	U	--	--	--	--	1220
159N056W19ABC	L. SIGURDSON		13	--	8	--	9	--	H	02	R	4	--	--
159N056W22BBB	NDSWC 3827		160	--	--	1969	--	--	U	--	--	--	--	1155
159N056W22CDD	J. JOHNSON		17	--	50	--	7	--	K	02	S	--	--	1150
159N056W22DDC	J. MYRDAL		16	--	50	--	7	--	K	02	S	--	--	1140
159N056W23CCC	USBR 389		13	0	4	1968	11	7-68	U	01	Q	--	--	1130
159N056W24CCC	J. GUDMUNDSON		11	--	48	--	6	9-59	S	02	G	--	--	1070
159N056W25ABA	J. HALL		450	--	3	--	--	--	U	0	V	--	--	1045
159N056W25DDD	O. OLSON		410	--	3	--	50	--	S	0	V	--	--	1017
159N056W26AAA	J. GUDMUNDSON		13	--	60	--	--	--	K	02	G	--	--	1085
159N056W26BBB	J. MYRDAL		21	--	48	--	8	9-59	S	02	G	--	--	1125
159N056W27AAB	J. MYRDAL		12	--	60	--	5	9-59	K	02	G	--	6.5	1140
159N056W28ACD	M. BJARNASON		20	--	12	--	8	--	H	02	R	4	--	1163
159N056W29CCC	NDSWC 4213	100	40	37	1	1970	8	10-70	U	51	R	4	6.0	1234
159N056W31CCC	USBR 257		8	0	4	1968	DRY	6-68	U	01	Q	--	--	--
159N056W33BDC	B. HALL		20	--	42	--	20	--	H	02	R	4	--	--
159N056W33DDC	USBR 258		8	0	4	1968	3	6-68	U	01	Q	--	--	1151
159N056W34CCC	NDSWC 3828		140	--	--	1969	--	--	U	--	--	--	--	1149
159N056W34DDC	A. RUSTAN		9	0	48	--	7	9-59	U	02	G	--	--	1136
159N056W3588B	NDGS PEM-70-29		29	--	--	1970	--	--	U	--	--	--	--	1134
159N056W35CDB1	USAF 2358	130	100	--	4	1962	15	11-62	U	51	S	--	6.5	1130
159N056W35CDB2	USAF 2358-E	65	41	--	4	1963	17	2-63	U	01	7P	--	4.5	1130
159N056W35DDD	NDSWC 1613		63	--	--	1959	--	--	U	--	--	--	--	1098
159N057W01AAB	USAF 96		130	10	5	1962	58	3-62	U	N	CF	--	5.5	1325
159N057W06AAB1	MILTON CITY		13	--	36	--	5	7-68	P	P	JF	--	--	--
159N057W06AAB2	MILTON CITY		20	--	60	--	12	--	P	P	JF	--	--	--
159N057W08ADD1	C. STABO		30	0	48	--	20	--	H	P	JF	--	--	--
159N057W08ADD2	C. STABO		63	12	24	1963	10	--	K	P	JF	--	--	--
159N057W10AAC	D. MORRISON		21	15	24	1936	--	--	H	51	R	--	--	--
159N057W12BBB	J. JONASON		40	0	24	--	18	7-68	U	P	JF	--	--	--
159N057W13CCC	USBR 390		8	--	4	1968	--	--	U	--	--	--	--	--
159N057W15DDD	J. SEIM		32	32	24	1960	12	--	H	P	JF	5	9.0	--
159N057W20ADD1	L. WILD		50	10	18	1956	6	--	H	P	JF	--	--	--
159N057W20ADD2	L. WILD		95	15	18	1960	30	--	H	P	JF	--	--	--
159N057W21ADD1	W. EAGLESON SR.		26	18	48	1956	9	--	H	P	JF	--	--	--
159N057W21ADD2	W. EAGLESON SR.		70	9	24	1958	6	7-68	S	P	JF	--	--	--
159N057W23DDC	J. AKSEL		35	28	24	--	10	--	H	P	JF	--	--	--

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
159N057W29CBC1	NELSON BROS.		18	12	60	1918	8	--	S	P	JF	--	--	--
159N057W29CBC2	NELSON BROS.		33	12	18	1950	28	--	H	P	JF	5	--	--
159N057W30CCB	O.AXVIG		25	0	48	1918	6	--	U	--	JF	--	--	--
159N057W32BCC	J.SEIM		34	--	36	--	14	7-68	U	--	JF	--	--	--
159N057W33CBC1	O.FOSEIDE		35	20	36	1906	25	--	H	P	JF	--	--	--
159N057W33CBC2	O.FOSEIDE		60	0	24	--	50	--	U	P	JF	--	--	--
159N057W34BAC	G.TWIST		40	20	24	1935	20	--	H	P	JF	--	--	--
159N057W35CDB1	USAF 2069LCC		100	--	3	1963	9	2-63	U	P	JF	--	8.5	1430
159N057W35CDB2	USAF 2069EF		130	--	3	1962	8	11-62	U	P	JF	--	5.5	1430
159N057W35CDB3	USAF 2069WST	80	30	--	4	1963	12	3-63	U	P	JF	--	5.5	1430
159N057W35CDB4	USAF 2069	1002	911	900	7	1963	523	7-63	H	D	YV	--	--	1430
159N057W35CDB5	USAF 69		102	--	7	1962	14	3-62	U	P	JF	--	4.5	1430
159N057W35CDB6	USAF 69-A		40	--	4	1962	20	5-62	U	P	JF	--	5.5	1429
159N057W35CDB7	USAF 69-E		100	--	4	1962	16	5-62	U	P	JF	--	5.5	1429
159N057W36BBB	C.LERUD		22	22	40	1954	6	--	H	P	JF	--	--	--
159N058W01AAA1	E.KENDALL		27	--	24	--	26	--	H	P	JF	6	--	--
159N058W01AAA2	E.KENDALL		42	--	24	--	7	9-68	S	P	JF	6	7.5	--
159N058W01AAA3	E.KENDALL		135	--	--	1967	--	--	K	P	JF	7	--	--
159N058W03DAB1	S.SLAMA		70	--	4	1959	20	--	K	P	JF	5	--	--
159N058W03DAB2	S.SLAMA		81	--	18	1951	18	9-68	S	P	JF	5	--	--
159N058W03DAB3	S.SLAMA		95	--	24	--	35	9-68	S	P	JF	6	--	--
159N058W04BAA	A.GRATTON		24	--	18	--	5	9-68	U	--	JF	--	--	--
159N058W06AAA1	J.GRATTON		90	--	4	1964	15	--	H	P	JF	6	--	--
159N058W06AAA2	J.GRATTON		72	--	24	1954	6	10-68	U	P	JF	--	--	--
159N058W08AAB	H.WARD		38	--	24	1951	16	10-68	H	P	JF	6	--	--
159N058W08AAC	H.WARD		40	0	24	--	24	--	U	P	JF	6	--	--
159N058W09CBA1	USAF 2094	130	60	--	4	1962	8	11-62	U	P	JF	--	5.5	1617
159N058W09CBA2	USAF 2094-E	65	57	--	4	1963	10	2-63	U	P	JF	--	3.0	1617
159N058W09CBB	USAF 94		130	--	4	1962	16	3-62	U	P	JF	--	4.5	1616
159N058W09DDD1	F.SLAMA		45	--	16	1952	15	--	H	P	JF	5	--	--
159N058W09DDD2	F.SLAMA		105	0	24	1940	52	--	S	P	JF	6	7.5	--
159N058W10DAD1	W.GROSS		12	--	24	--	7	10-68	H	--	JF	5	--	--
159N058W10DAD2	W.GROSS		35	0	20	--	20	--	S	P	JF	6	9.0	--
159N058W13CC1	E.ROBB		29	--	24	--	14	9-68	U	P	JF	5	6.5	--
159N058W15ADC1	N.NELSON		29	--	24	--	6	10-68	H	P	JF	4	8.5	1595
159N058W15ADC2	N.NELSON		144	126	4	--	25	--	S	P	JF	7	8.5	1595
159N058W15ADC3	N.NELSON		64	46	2	1966	--	--	S	P	JF	--	--	1595
159N058W17CBB	J.SPENST		165	--	4	1908	33	--	K	P	JF	5	7.5	--
159N058W22DBA	G.FLOM		48	--	18	--	16	10-68	K	P	JF	4	--	--
159N058W23ABA	W.JOHN SON		17	0	24	--	9	--	U	--	JF	--	--	--

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF L.S.D. (FT.)
159N058W24AAA	NDSWC 3800		20	--	--	1969	--	--	U	--	--	--	--	1570
159N058W24DDD	NDSWC 4211		140	0	5	1970	13	9-70	U	P	JF	6	--	1576
159N058W26BAA	E.ARMSTRONG		9	0	24	--	6	7-68	U	--	--	3	10.5	--
159N058W26BBC	D.MYRVIK		30	--	24	--	15	10-68	U	--	--	5	7.5	--
159N058W26DDD1	T.LYKKEN		20	--	48	1956	15	--	H	P	JF	5	--	--
159N058W26DDD2	T.LYKKEN		33	--	24	1953	24	--	S	P	JF	5	6.0	--
159N058W27DDD	E.LUND		7	0	48	--	6	7-68	U	--	--	4	9.5	--
159N058W28ABC1	H.WATT		138	111	4	1966	25	--	H	P	JF	7	--	1596
159N058W28ABC2	H.WATT		65	--	18	1953	35	--	S	P	JF	6	6.5	1596
159N058W28BBB	D.ROBB		--	--	--	--	12	7-68	U	--	--	6	9.0	--
159N058W29BCC1	A.NELSON		24	--	15	--	15	10-68	H	--	--	4	6.0	--
159N058W29BCC2	A.NELSON		60	--	24	1948	40	--	S	P	JF	6	6.0	--
159N058W31AAA	NDSWC 2957	180	156	152	1	1968	12	5-69	U	P	JF	6	--	1604
159N058W31DDA1	M.FRENCH		63	--	24	1946	27	10-68	K	P	JF	6	7.5	--
159N058W31DDA2	M.FRENCH		54	--	24	1950	12	10-68	U	P	JF	6	6.0	--
159N058W32ADD	NDSWC 4212		100	--	--	1970	--	--	U	--	--	--	--	1610
159N058W33ACC1	R.WATT		48	--	24	1959	28	10-68	H	P	JF	6	--	--
159N058W33ACC2	R.WATT		35	--	18	1947	13	10-68	S	P	JF	6	--	--
159N058W35DAD	G.MAGOON		85	--	30	1955	50	--	K	P	JF	5	--	--
159N058W36ACC	H.AXVIG		41	--	36	--	23	10-68	H	P	JF	4	--	--
159N058W36CDB1	USAF 2070		130	--	3	1962	38	11-62	U	P	JF	--	5.5	1588
159N058W36CDB2	USAF 2070-E		65	--	3	1963	14	2-63	U	P	JF	--	5.0	1588
159N058W36CDC	USAF 70	130	125	--	4	1962	38	3-62	U	P	JF	--	4.5	1588
159N059W01AAA	NDSWC 4210		180	--	--	1970	--	--	U	--	--	--	--	1630
159N059W02DAA	OTTO BROS		48	--	23	1950	30	--	H	P	JF	5	--	--
159N059W02DAB	OTTO BROS		62	--	23	1958	12	10-68	S	P	JF	5	--	--
159N059W03BAA1	J.WILD		40	--	24	1957	14	10-68	H	P	JF	6	--	--
159N059W03BAA2	J.WILD		45	--	24	--	10	10-68	U	P	JF	6	--	--
159N059W04BCB	USAF 89	130	110	--	4	1962	20	3-62	U	P	JF	--	4.5	1642
159N059W05CBC1	M.JENSEN		100	--	4	1963	30	--	K	P	JF	5	--	--
159N059W05CBC2	M.JENSEN		130	--	4	1961	30	--	S	P	JF	6	8.5	--
159N059W05DAD1	O.JOHNSON		40	--	24	--	25	--	K	P	JF	6	6.5	--
159N059W05DAD2	O.JOHNSON		100	--	4	1964	--	--	H	P	JF	5	--	--
159N059W07CCB	C.KLEIN		60	--	4	1967	--	--	H	P	JF	6	--	--
159N059W07DDD	NDSWC 5960		40	--	--	1971	--	--	U	--	--	--	--	1659
159N059W08CAC	C.ROPPEL		13	0	--	--	--	7-68	U	--	--	5	10.5	--
159N059W11CBB	K.ANDERSON		24	--	--	--	--	7-68	U	--	--	6	7.5	--
159N059W11DDC	E.ERICKSON		82	--	18	1953	14	--	K	P	JF	6	--	--
159N059W12DAA	R.NELSON		48	0	24	1908	20	--	H	P	JF	4	9.0	--
159N059W15CCD	R.SUNDERLAND		140	--	4	1963	25	--	H	P	JF	6	--	--

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
159N059W168CD1	USAF 2326		130	--	3	1962	10	11-62	U	P	JF	--	5.5	1664
159N059W168CD2	USAF 2326-E		60	--	3	1963	14	2-63	U	P	JF	--	5.5	1664
159N059W178CA	W. GRONHOVD		135	--	4	1961	30	--	K	P	JF	6	--	--
159N059W198AA	W. FLOM		70	--	4	1967	12	--	H	P	JF	4	--	--
159N059W218BA	K. ANDERSON		80	--	4	1959	20	--	H	P	JF	4	--	--
159N059W22CDC	F. SUNDERLAND		140	--	4	--	15	--	H	P	JF	5	--	--
159N059W23CDC1	L. GRMISTON		115	--	4	1916	10	--	H	P	JF	5	--	--
159N059W23CDC2	L. GRMISTON		121	--	4	1916	10	10-68	K	P	JF	5	6.0	--
159N059W24ADD	T. THRONSEDT		47	--	24	1957	17	--	H	P	JF	5	--	--
159N059W248BB	NDSWC 3799		40	--	--	1969	--	--	U	--	--	--	--	1649
159N059W25BDA	W. VERKE		140	--	4	1965	30	--	H	P	JF	6	--	--
159N059W26CCC	F. ROBB		120	--	4	--	35	--	H	P	JF	6	--	--
159N059W27DDC	NDSWC 2958	160	140	137	1	1968	10	5-69	U	P	JF	6	--	1637
159N059W29BCD1	F. BEASLEY		--	--	4	--	--	--	H	--	--	4	--	--
159N059W29BCD2	F. BEASLEY		60	--	5	--	--	--	U	P	JF	5	--	--
159N059W30CCD1	K. KVAAL		21	--	24	--	10	--	H	--	--	5	7.5	--
159N059W30CCD2	K. KVAAL		180	--	3	1948	11	--	S	P	JF	6	7.5	--
159N059W30DDD	NDSWC 2959	160	135	132	1	1968	4	5-69	U	P	JF	6	6.0	1649
159N059W31CDD1	G. VERKE		80	42	4	1964	30	--	H	P	JF	6	--	--
159N059W31CDD2	G. VERKE		110	--	4	--	--	--	S	P	JF	4	9.0	--
159N059W34AAD	USAF 71		130	0	5	1962	14	3-62	U	P	JF	--	4.0	1639
159N060W01DAB1	J. MOOS		60	--	14	--	15	--	H	P	JF	4	--	--
159N060W01DAB2	J. MOOS		120	--	4	1958	20	--	U	P	JF	6	7.5	--
159N060W01DAB3	J. MOOS		81	0	24	--	12	10-68	U	P	JF	--	--	--
159N060W02BCC1	O. JOHNSON		132	--	--	--	20	--	H	P	JF	6	--	--
159N060W02BCC2	O. JOHNSON		56	--	18	--	11	10-68	S	P	JF	6	6.0	--
159N060W04BAB	NDSWC 4190		40	--	--	1970	--	--	U	--	--	--	--	1614
159N060W08DDD	NDGS CAV-69-10		8	--	--	1969	--	--	U	--	--	--	--	1607
159N060W10BAA	R. LEBRUN		40	--	18	--	25	--	H	P	JF	5	--	--
159N060W10DDD	NDSWC 4191		80	60	1	1970	7	10-70	U	P	JF	6	5.5	1632
159N060W11DCD	W. KLEINSCHMIDT		40	--	24	--	14	--	K	P	JF	4	--	--
159N060W13CCC1	H. MEDALEN		165	--	4	1946	30	--	H	P	JF	5	--	--
159N060W13CCC2	H. MEDALEN		217	--	4	1963	20	--	S	P	JF	--	--	--
159N060W14BDD	I. HEFTA		62	0	24	--	12	10-68	U	P	JF	--	--	--
159N060W15ACC	NDGS CAV-69-11		8	--	--	1969	--	--	U	--	--	--	--	1624
159N060W15BCC	B. MANN		42	0	18	--	10	10-68	H	P	JF	--	--	--
159N060W21DDD	S. GJESDAL		200	--	4	1963	30	--	H	P	JF	5	--	--
159N060W22DBC	NEKOMA CITY		43	--	78	1936	--	--	P	P	JF	6	9.0	--
159N060W23CDD	H. HEFTA		49	--	18	--	14	10-68	H	P	JF	4	--	--
159N060W24AAA1	E. GRONHOVD		140	--	4	1954	20	--	H	P	JF	5	--	--

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
159N060W24AAA2	NDSWC 3798		40	--	--	1969	--	--	U	--	--	--	--	1662
159N060W24AAD	E.GRONHOVD		160	--	3	1912	15	--	S	P	JF	5	7.5	--
159N060W25BAA	NDGS CAV-69-43		8	--	--	1969	--	--	U	--	--	--	--	1665
159N060W26ABB	D.HEFTA		90	63	4	1965	--	--	S	P	JF	7	--	1633
159N060W28CBC	L.DENNULT		30	0	18	--	16	10-68	S	P	JF	5	6.5	--
159N060W29CCC	NDSWC 2954	120	97	67	1	1968	11	11-68	U	P	JF	--	--	1590
159N060W30ABB	B.SPERLING		48	--	24	--	--	7-68	U	P	JF	5	5.5	--
159N060W31ABB	J.DOBBIIE		135	--	4	1967	50	--	S	P	JF	6	7.5	--
159N060W33ADA	USAF 72		130	--	3	1962	12	3-62	U	P	JF	--	4.5	1592
159N060W33CDD	A.MOEN		--	--	4	--	--	--	S	--	--	6	6.0	--
159N060W34BCA1	USAF 2072LCC		100	--	3	1963	15	2-63	U	P	JF	--	4.5	1588
159N060W34BCA2	USAF 2072EF		130	--	3	1962	11	11-62	U	P	JF	--	6.0	1588
159N060W34BCA3	USAF 2072WST	80	70	--	4	1963	16	3-63	U	P	JF	--	5.5	1588
159N060W34BCA4	USAF 2072	1271	1243	1225	7	1963	628	7-63	H	D	V	7	--	1590
159N060W35CAA	O.GRONHOVD		--	--	4	--	--	--	U	--	--	5	5.5	--
159N060W36CBB1	P.BACHEL		50	--	20	1956	25	--	H	P	JF	4	7.5	--
159N060W36CBB2	P.BACHEL		50	--	18	--	25	--	U	P	JF	5	--	--
159N061W01ABB	C.PADDEN		60	--	4	--	20	--	H	P	JF	6	--	--
159N061W01ABC	C.PADDEN		90	--	4	1945	20	--	S	P	JF	6	6.0	--
159N061W01DCB	M.HOLO		90	--	6	--	12	--	K	P	JF	6	7.5	--
159N061W02A8D	J.DOBROVOLNY		135	--	4	--	19	8-68	H	P	JF	6	--	--
159N061W02DDB1	USAF 2246		130	--	4	1962	20	11-62	U	P	JF	--	5.5	1589
159N061W02DDB2	USAF 2246-E		65	--	3	1962	18	2-63	U	P	JF	--	--	1589
159N061W02DDB3	USAF 246		100	0	5	1962	22	3-62	U	P	JF	--	4.0	1595
159N061W02DDB4	USAF 246-E		100	--	4	1962	22	5-62	U	P	JF	--	5.5	1593
159N061W02DDB5	USAF 246-A		40	--	4	1962	21	5-62	U	P	JF	--	5.5	1595
159N061W03B8C	F.STAMM JR		--	--	4	--	--	--	S	--	--	7	--	1565
159N061W04ABC	M.DAHL		96	--	5	1957	60	--	H	P	JF	7	8.5	1586
159N061W04ABD	M.DAHL		96	--	6	--	60	--	Z	P	JF	7	7.5	1586
159N061W05AAA1	L.SMITH		22	0	18	--	12	8-68	H	--	--	5	7.5	1569
159N061W05AAA2	L.SMITH		20	--	18	--	8	8-68	U	--	--	--	--	1569
159N061W05CCD	B.HARRINGTON		100	--	6	--	30	--	K	P	JF	6	--	1577
159N061W07CCD	USAF 81		129	0	5	1962	20	3-62	U	P	JF	--	4.5	1576
159N061W09AAA1	T.LUNDQUIST		90	--	6	1963	26	--	H	P	JF	6	--	1572
159N061W09AAA2	T.LUNDQUIST		65	0	18	--	15	8-68	S	P	JF	--	6.0	1572
159N061W09AAA3	NDSWC 5962		40	--	--	1971	--	--	U	--	--	--	--	1565
159N061W10DDD	NDSWC 5961		40	--	--	1971	--	--	U	--	--	--	--	1565
159N061W11CCC	S.THOMPSON		56	--	4	1966	15	--	H	P	JF	5	--	--
159N061W12BCB	R.SPENST		135	--	4	--	--	--	K	P	JF	6	--	--
159N061W13ABA1	M.GJESDAL		69	--	4	1947	20	--	H	P	JF	6	--	--

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
159N061W13ABA2	M.GJESDAL		10	--	15	--	4	9-68	S	--	--	--	--	--
159N061W15DCD	SKJERVHEIM BROS		85	--	4	1961	--	--	H	P	JF	6	--	1575
159N061W16BCA	L.MELLAND		75	--	6	1963	--	--	H	P	JF	6	9.0	1570
159N061W17BBB	A.HERMANSON		39	--	--	--	6	8-68	U	P	JF	--	--	1565
159N061W18ABB1	A.HARPESTAD		110	--	6	--	--	--	H	P	JF	6	--	1574
159N061W18ABB2	A.HARPESTAD		--	--	4	--	17	8-68	S	--	--	6	9.0	1573
159N061W19BBB	G.STORLIE		108	--	4	--	15	--	K	P	JF	6	--	1565
159N061W20BAB	A.FOSSUM		140	--	6	--	30	--	H	P	JF	6	6.0	1574
159N061W21DCD	A.BERGREN		90	63	4	1965	--	--	S	P	JF	--	--	1562
159N061W22BBB	NDSWC 3797		40	--	--	1969	--	--	U	--	--	--	--	1561
159N061W23AAA	A.HAUGEN		--	--	5	--	--	--	U	--	--	7	6.5	--
159N061W26AAD	L.HARASETH		21	0	24	--	15	9-68	U	--	--	6	5.5	--
159N061W26DDD	O.LEE		18	--	10	1965	--	--	H	--	--	5	7.5	--
159N061W28AAD1	A.BERGREN		45	--	18	1949	16	--	H	P	JF	6	--	1565
159N061W28AAD2	A.BERGREN		129	--	6	--	20	--	S	P	JF	6	--	1565
159N061W30DCD	E.HAUGLAND		98	--	4	--	30	--	H	P	JF	6	--	1570
159N061W31DCC	H.BORACHER		--	--	--	--	--	--	K	--	--	6	--	1561
159N061W33BBB	NDSWC 4131		60	--	--	1970	--	--	U	--	--	--	--	1560
159N061W34BAA	O.DAHL		45	0	24	--	--	--	S	P	JF	6	9.0	1564
159N061W34CBA1	USAF 2073		130	--	4	1962	15	11-62	U	P	JF	--	5.5	1561
159N061W34CBA2	USAF 2073-E		65	--	4	1963	13	2-63	U	P	JF	--	5.0	1561
159N061W34CBC	USAF 73		128	0	5	1962	12	3-62	U	P	--	--	6.0	1555
159N061W35ADA	M.OBBIE		29	--	18	--	13	9-68	U	--	--	6	6.5	--
159N062W01ADC1	M.WATNE		94	--	6	1957	26	--	H	P	JF	6	--	1581
159N062W01ADC2	M.WATNE		92	--	6	1960	25	--	S	P	JF	6	--	1580
159N062W02BCB	N.SKJERVA		82	--	--	1958	--	--	H	P	JF	6	--	1571
159N062W02DAA	J.SKJERVA		--	--	--	--	--	--	K	--	--	6	--	1580
159N062W06CBC	J.ROSLAND		--	--	4	--	--	--	K	--	--	5	--	1586
159N062W06CCC	NDGS CAV-69-22		54	--	--	1969	--	--	U	--	--	--	--	1580
159N062W07DAA	S.IVERSON		180	--	4	--	--	--	K	P	JF	6	--	1585
159N062W08AAD	S.SEVERSON		--	--	--	--	--	--	K	--	--	6	--	1580
159N062W10BBB	NDSWC 5963		40	--	--	1971	--	--	U	--	--	--	--	1568
159N062W12DAA	M.LYKKEN		--	0	48	--	--	--	U	--	--	6	9.5	1570
159N062W13CBC	A.DAHL		140	--	6	1910	30	--	H	P	JF	6	--	1575
159N062W16CDA	E.SPENST		140	--	4	--	50	--	K	P	JF	6	--	1580
159N062W19AAB	R.IVERSON		--	--	--	--	--	--	K	--	--	6	--	1575
159N062W19BBB	NDSWC 4128		100	--	--	1970	--	--	U	--	--	--	--	1580
159N062W20DCC	O.MORSTAD		110	--	4	1952	40	--	K	P	JF	6	--	1587
159N062W21AAA1	NDSWC 3796	60	57	37	1	1969	9	10-69	U	P	JF	6	--	1573
159N062W21AAA2	NDSWC 5715-C		20	15	4	1970	5	7-70	U	41	6T	--	--	1573

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
159N062W21AAA3	NDSWC 5715-B		100	97	1	1970	16	7-70	U	P	JF	6	--	1573
159N062W21AAA4	NDSWC 5715-A		150	147	1	1970	17	7-70	U	P	JF	7	--	1573
159N062W21AAA5	NDSWC 5715		200	194	1	1970	17	7-70	U	P	JF	8	--	1573
159N062W228DA	M.LARSON		105	--	4	--	14	--	K	P	JF	6	--	1580
159N062W23DCC	F.DAMSCHEM		--	--	--	--	--	--	H	--	--	6	--	1570
159N062W24DCC	NDGS CAV-69-24		29	--	--	1969	--	--	U	--	--	--	--	1558
159N062W25DCC	D.DAHL		60	--	--	--	--	--	K	P	JF	6	--	1561
159N062W26DDD	NDSWC 4130		40	--	--	1970	--	--	U	--	--	--	--	1559
159N062W27CCC	J.THORSON		11	--	48	--	6	9-68	U	--	--	--	--	1571
159N062W28DCA1	USAF 2061		130	--	3	1962	12	11-62	U	P	JF	--	6.0	1577
159N062W28DCA2	USAF 2061-E		65	--	3	1963	14	2-63	U	51	8T	--	4.5	1577
159N062W28DDD	L.MORSTAD		16	--	60	--	9	7-68	U	--	--	4	10.0	1570
159N062W29DDD	NDGS CAV-69-23		29	--	--	1969	--	--	U	--	--	--	--	1565
159N062W30CCD	M.JOHNSON		136	--	4	1958	35	--	K	P	JF	6	--	1572
159N062W31DDC	I.BOE		--	--	--	--	--	--	U	--	--	6	7.5	1566
159N062W33DDA	A.CLOCK		--	--	4	--	--	--	H	--	--	6	--	1572
159N062W34CCD	USAF 61		130	--	5	1962	23	2-62	U	P	--	--	--	1569
159N063W02DDD	B.KASTNER		200	--	4	1910	30	--	H	P	JF	5	--	1590
159N063W04AAA	NDSWC 4132		80	--	--	1970	--	--	U	--	--	--	--	1585
159N063W06BAB	A.HOFFMAN		90	--	4	--	20	--	K	P	JF	5	--	--
159N063W06CBB	USAF 74		130	--	4	1962	19	4-62	U	P	JF	--	5.5	1582
159N063W07DAD	S.DICK		105	--	4	1963	13	--	K	P	JF	6	--	--
159N063W08AAA	C.JARDIN		110	--	6	1909	30	--	U	P	JF	--	--	--
159N063W09DDD	J.NELSON		130	--	4	--	25	--	K	P	JF	6	--	--
159N063W11DDD	E.KASTNER		180	--	4	--	--	--	K	P	JF	6	--	1591
159N063W13ADA	T.PALLSTAD		138	--	6	--	--	--	K	P	JF	6	--	1585
159N063W14AAA	NDSWC 4127		100	--	--	1970	--	--	U	--	--	--	--	1586
159N063W16DCD	E.WEAVER		96	--	--	1958	--	--	H	P	JF	6	--	--
159N063W18C8D	K.WENGELER		--	--	--	--	17	9-68	U	--	--	--	7.5	--
159N063W19ABA	J.HEPPNER		120	--	4	1968	25	--	K	P	JF	5	--	--
159N063W20AAC	W.JAGOW		135	--	--	1955	25	--	K	P	JF	6	--	--
159N063W20BBC	H.SAELE		96	--	4	1964	23	--	H	P	JF	6	--	--
159N063W22BBB	NDSWC 3795		100	--	--	1969	--	--	U	--	--	--	--	1571
159N063W24BBC1	USAF 80-1		130	--	4	1962	21	4-62	U	P	JF	--	5.0	1584
159N063W24BBC2	USAF 80-2		83	--	--	1962	--	--	U	--	--	--	--	1584
159N063W26AAD	L.EDWARDS		80	--	5	--	12	--	K	P	JF	6	--	1577
159N063W27CCC	F.SCHONAUER		100	--	4	--	25	--	K	P	JF	6	--	--
159N063W31AAA	W.STINKOWAY		70	--	4	--	20	--	K	P	JF	6	--	--
159N063W32C8D	C.STOTTS		100	--	5	--	35	--	K	P	JF	6	--	--
159N063W33CDD1	F.SCOTT		84	--	4	1947	30	--	H	P	JF	5	--	--

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
159N063W33CDD2	F SCOTT		69	--	5	--	29	--	S	P	JF	5	8.5	--
159N063W34DCA1	USAF 2059		130	--	3	1962	18	11-62	U	P	JF	--	5.0	1550
159N063W34DCA2	USAF 2059-E		65	--	3	1963	12	2-63	U	P	JF	--	4.5	1550
159N063W34DCD1	USAF 59-1		130	--	--	1962	--	--	U	--	--	--	--	1555
159N063W34DCD2	USAF 59-2		130	--	4	1962	18	3-62	U	P	JF	--	4.5	1555
159N063W35AAA	NDSWC 4129		80	--	--	1970	--	--	U	--	--	--	--	1568
159N063W35CCD	K.L INDOSETH		180	--	4	--	60	--	H	P	JF	6	--	1556
159N063W36BAA	L.HAMRE		150	--	5	1926	20	--	H	P	JF	6	--	1567
159N064W01BAA	D.HOFFMAN		138	--	4	--	22	--	K	P	JF	6	9.5	--
159N064W01BBB	NDSWC 4125		60	--	--	1970	--	--	U	--	--	--	--	1580
159N064W01CDD	A.ETTZEN		103	--	6	--	12	--	K	P	JF	6	8.5	--
159N064W02AAA	P.SPENST		115	--	4	1957	20	--	K	P	JF	6	9.0	--
159N064W04DDD	NDSWC 4123		60	--	--	1970	--	--	U	--	--	--	--	1567
159N064W05BBB	NDSWC 4122		100	--	--	1970	--	--	U	--	--	--	--	1557
159N064W10BBA	A.KRAEMER		50	--	6	--	28	--	H	P	JF	6	8.5	--
159N064W17AAB	A.WENGLER		100	--	6	--	10	--	H	P	JF	6	8.5	--
159N064W17CCC	M.WEBER		90	--	--	--	20	--	K	P	JF	6	9.0	--
159N064W18DCC	H.JORGENSEN		100	--	6	--	25	--	K	P	JF	6	8.5	--
159N064W19BAA	M.THOM		65	--	6	--	20	--	K	P	JF	6	8.5	--
159N064W20DCC	NDGS CAV-69-33		36	--	--	1969	--	--	U	--	--	--	--	--
159N064W21AAA	NDSWC 3794		80	--	--	1969	--	--	U	--	--	--	--	1550
159N064W24AAA	NDSWC 4126		60	--	--	1970	--	--	U	--	--	--	--	1556
159N064W26BCC	J.NEUSSENFORFER		121	--	6	--	25	--	H	P	JF	6	9.0	--
159N064W26CCC	K.KOCH		95	--	6	--	28	8-68	K	P	JF	5	9.0	--
159N064W26DDA	F.NEUSSENFORFER		115	--	6	--	20	--	H	P	JF	6	9.0	--
159N064W28CCD	C.JORGENSEN		100	--	4	--	30	--	H	P	JF	5	8.5	--
159N064W29CDD	R.ROBERTS		61	--	4	--	23	7-68	U	P	JF	--	--	--
159N064W30DDD	NDSWC 4121		80	--	--	1970	--	--	U	--	--	--	--	1528
159N064W32ACA	R.ROBERTS		118	--	6	--	40	--	H	P	JF	6	--	--
159N064W34BAA	J.WOLF		65	--	4	--	25	--	S	P	JF	6	--	--
159N064W35BCA1	USAF 2058		130	--	3	1962	17	11-62	U	P	JF	--	5.5	1541
159N064W35BCA2	USAF 2058-E		64	--	3	1963	14	2-63	U	P	JF	--	4.5	1541
159N064W35BCB	USAF 58		130	--	4	1962	19	4-62	U	P	JF	--	--	1532
159N064W36AAA	A.SCHRAG		73	--	4	--	16	8-68	H	P	JF	6	9.0	--
159N064W36DDC	NDSWC 4120		60	--	--	1970	--	--	U	--	--	--	--	1545
160N050W06CDD	NDGS PEM-70-20		44	--	--	1970	--	--	U	--	--	--	--	791
160N051W02ABB	A.EVERSON		14	--	60	1919	1	10-41	S	01	P	--	--	793
160N051W09AAD	NDSWC 3834		260	--	5	1969	F	9-69	U	51	R	8	--	797
160N051W10AAA	NDSHD IN-007		151	45	4	1957	2	7-57	U	41	9P	--	--	794
160N051W22CCC	H.MESHEFSKI		18	--	--	--	10	--	H	01	7P	7	--	800

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSO (FT.)
160N051W26ADD1	R.MCCRAE		15	0	46	1939	1	10-41	S	01	P	--	--	794
160N051W26ADD2	R.MCCRAE		15	0	36	--	3	10-41	S	01	P	--	8.5	794
160N051W2988A	J.COX		18	--	--	1950	--	--	U	01	P	--	--	806
160N051W35COC	NOSHO IN-010 12		158	45	4	1957	1	7-57	U	41	8P	--	--	793
160N052W03CAA	B.OLSON		183	--	4	1960	4	--	U	51	R	--	--	807
160N052W04CBC1	J.LITTLEJOHN		85	--	30	1897	7	9-41	K	51	G	--	6.5	812
160N052W04CBC2	W.LITTLEJOHN		80	--	2	1885	6	--	U	51	R	--	--	812
160N052W06CCB	NDSWC 5945		300	--	--	1971	--	--	U	--	--	--	--	821
160N052W07GDD	K.YOUNG		87	0	24	1943	13	--	S	51	R	7	6.0	818
160N052W20BAA	W.LEMBKE		70	--	24	--	--	--	S	51	R	9	--	821
160N052W21CBB	H.ROBINSON		90	--	36	1915	6	8-68	U	51	R	--	--	814
160N052W23AAA	NDSWC 5944		240	--	--	1971	--	--	U	--	--	--	--	808
160N052W27BCB	M.MILLER		100	--	2	--	5	--	U	51	S	--	--	809
160N052W27CCC	M.ROBINSON		90	--	36	--	--	--	S	51	R	6	9.5	812
160N052W280CC	A.ROBINSON		90	--	4	1956	6	8-68	U	51	R	6	--	814
160N052W30CCC	USBR 407		13	--	4	1968	7	8-68	U	01	7P	--	--	829
160N052W31CCD	J.BIGWOOD		100	--	2	1963	12	--	S	51	R	7	--	835
160N053W16DAA	H.HARTJE		200	--	2	--	16	--	S	51	R	6	--	842
160N053W19AAD	C.HEUCHERT		--	--	48	--	--	--	H	--	--	5	--	861
160N053W22AAA	NDSWC 5706		280	--	--	1970	--	--	U	--	--	--	--	840
160N053W22ADD	F.SCHULZ		185	--	2	--	16	10-41	K	51	S	--	--	836
160N053W23BCC	R.LITTLEJOHN		180	170	--	1940	10	8-68	U	51	S	--	--	836
160N053W23CCC	P.HANESALO		200	--	2	1933	12	--	S	51	R	--	9.0	836
160N053W3488B	USBR 408		23	--	4	1968	12	8-68	U	01	7P	--	--	845
160N054W05ACD	M.AULT		20	--	48	1929	14	9-41	H	1G	S	--	--	900
160N054W05ADD1	M.AULT		18	--	48	1901	12	--	S	01	P	--	--	896
160N054W05ADD2	M.AULT		17	0	36	1921	11	9-41	S	01	P	--	--	896
160N054W0888B	USBR 465		18	0	4	1968	12	8-68	U	1G	ZS	--	--	906
160N054W09CCC	USBR 438		13	--	--	1968	--	--	U	--	--	--	--	898
160N054W1188B	USBR 240		18	0	4	1968	9	5-68	U	01	Q	--	--	876
160N054W13AAA	NDSWC 5707	460	263	257	1	1970	8	7-70	U	51	R	9	--	865
160N054W17AAA	NDSWC 3837		40	--	--	1969	--	--	U	--	--	--	--	898
160N054W17CBB	NDSG PEM-70-26		44	--	--	1970	--	--	U	--	--	--	--	907
160N054W18BAA	NDSWC 3568	420	284	278	1	1968	12	8-69	U	D	YV	8	--	915
160N054W22CBD	O.REICHERT		22	--	36	1950	8	--	K	01	X	5	--	894
160N054W22CCC	USBR 471		18	--	4	1968	7	8-68	U	01	1S	--	--	895
160N054W25DDD	USBR 242		13	0	4	1968	6	5-68	U	1G	1S	--	--	872
160N054W26DBC	E.LARSEN		350	--	3	1950	15	--	S	D	V	7	8.5	880
160N054W2788B	NDSWC 3836		360	--	--	1969	--	--	U	--	--	--	--	891
160N054W31CCC	NDSWC 3830		340	334	1	1969	17	10-69	U	D	3V	9	6.5	913

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
160N054W32888	USBR 409		23	0	4	1968	14	8-68	U	01	Q	--	--	905
160N054W320001	O.SCHULZ		240	--	3	1916	--	--	S	0	F	--	--	896
160N054W320002	O.SCHULZ		18	--	9	1933	12	--	H	01	X	--	--	892
160N054W320003	O.SCHULZ		250	--	2	1958	--	--	S	0	V	8	10.0	897
160N054W320004	O.SCHULZ	337	330	322	4	1960	--	--	S	0	V	8	--	897
160N054W35888	USBR 241		14	0	4	1968	12	5-68	U	01	Q	--	--	885
160N055W01ADD	C.ANDERSON		16	0	48	--	10	11-42	S	1G	2S	--	--	919
160N055W03DCD	M.CONLAN		--	0	36	--	8	11-42	H	1G	2S	--	--	957
160N055W04CDB1	A.ASGRIMSON		12	0	48	--	10	11-42	S	1G	2S	--	--	975
160N055W04CDB2	A.ASGRIMSON		16	--	48	1938	12	11-42	K	1G	2S	4	--	975
160N055W040DB	E.MARKEL		11	--	48	--	7	7-68	U	1G	2S	5	--	971
160N055W05AAD	R.GREIGHTON		12	--	48	--	8	11-42	U	1G	2S	--	--	988
160N055W06DDD	NDSWC 3569	440	341	335	1	1968	84	8-69	U	51	S	9	9.0	982
160N055W078CC	F.NESBITT		11	0	48	1942	10	11-42	S	1G	2S	--	--	987
160N055W08CCC	USBR 428		8	0	4	1968	8	8-68	U	1G	2S	--	--	975
160N055W08CCD	T.SKARO		12	0	34	--	11	9-41	K	1G	X	--	10.0	972
160N055W09BCD	O.PETERSON		20	0	48	1939	4	11-42	S	1G	2S	--	--	971
160N055W10DCC1	J.HARTJE		16	0	48	--	10	11-42	S	1G	S	--	--	953
160N055W10DCC2	J.HARTJE		18	--	48	1942	7	11-42	H	1G	2S	--	--	953
160N055W11888	H.EYALFSON		16	--	48	--	8	11-42	S	1G	2S	--	--	950
160N055W11CDD	USBR 437		18	0	4	1968	8	8-68	U	1G	2S	--	--	941
160N055W12888	J.BUSCH		11	0	48	--	8	11-42	S	1G	2S	--	--	934
160N055W12CCD	F.BUSCH		15	0	36	1935	10	9-41	S	1G	1S	--	--	928
160N055W15888	USBR 238		23	0	4	1968	5	5-68	U	1G	1S	--	--	958
160N055W17AAA	USBR 429		18	0	4	1968	10	8-68	U	1G	1S	--	--	967
160N055W18888	USBR 237		23	0	4	1968	10	5-68	U	1G	1S	--	--	979
160N055W18DDD	NDGS PEM-70-34		44	--	--	1970	--	--	U	--	--	--	--	964
160N055W20CCC	USBR 410		23	0	4	1968	9	8-68	U	1G	X	--	--	955
160N055W21AAA	NDSWC 3840		300	--	--	1969	--	--	U	--	--	--	--	953
160N055W2188C	R.BECKER		21	--	48	--	--	--	S	1G	X	6	--	957
160N055W27CCC	USBR 243		13	0	4	1968	6	5-68	U	01	X	--	--	942
160N055W28DAD	C.SHEPHARD		15	--	48	--	--	--	H	01	X	5	--	943
160N055W29CCD	J.FAY		25	0	24	1914	15	9-41	S	01	7P	--	9.0	952
160N055W30CCC	USBR 244		18	0	4	1968	4	5-68	U	01	7P	--	--	963
160N055W33ADA	R.CHAMBERS		18	--	48	--	12	--	H	01	7P	4	--	942
160N055W35888	P.MARKEL		15	--	36	--	8	--	H	01	7P	6	--	929
160N055W35DDC1	F.DINKLE		19	0	48	1880	12	9-41	K	01	7P	--	9.0	924
160N055W35DDC2	D.DINKLE		20	0	32	1955	8	--	H	01	7P	6	--	924
160N056W02AAA	NDSWC 3841		380	--	--	1969	--	--	U	--	--	--	--	1004
160N056W02ACB1	J.COX		14	0	--	1928	7	11-42	U	1G	2S	--	--	1009

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTI-TUDE OF L.S.D (FT.)
160N056W02ACB2	J.COX		14	0	--	1928	6	11-42	U	1G	2S	--	--	1009
160N056W02BDA	J.COX		14	0	--	1928	9	11-42	U	1G	2S	--	--	1010
160N056W03DCA	S.HALL VOR SON		11	--	36	--	4	11-41	H	--	--	--	--	1016
160N056W07CDD	USBR 235		23	0	4	1968	19	5-68	U	02	X	--	--	1210
160N056W08BBB	NDGS PEM-70-13		14	--	--	1970	--	--	U	--	--	--	--	1177
160N056W08DCA	P.OLAFSON		10	--	48	1915	2	8-45	K	02	S	--	--	1144
160N056W09CCB	J.ENIS		8	--	48	1939	4	7-45	K	02	S	--	--	1126
160N056W09DCC	J.ANDERSON		18	--	42	1930	5	7-45	K	02	S	--	--	1083
160N056W09DDA	T.GUDMUNDSON		20	--	48	1930	14	7-45	K	41	P	--	--	1063
160N056W10DDD	USBR 236		13	0	4	1968	4	5-68	U	01	7P	--	--	1010
160N056W12AAA	NDGS PEM-70-12		19	--	--	1970	--	--	U	--	--	--	--	998
160N056W12CCC	USBR 427		8	0	4	1968	6	8-68	U	1G	2S	--	--	990
160N056W12CCD	P.BROWN		11	0	48	--	8	11-42	H	02	2S	--	--	983
160N056W13BBD	R.HANNESSONN		16	--	48	--	15	--	S	--	--	6	--	986
160N056W15DAD	MELSTAD BROS		30	--	72	--	20	--	H	--	--	6	--	1008
160N056W16AAA1	D.BYRON		15	--	48	--	10	7-45	K	--	--	--	--	1038
160N056W16AAA2	S.HANSON		12	--	--	1941	7	7-45	H	--	--	--	9.0	1035
160N056W16AAA3	G.THORSTENSON		26	--	--	--	22	7-45	H	--	--	--	--	1068
160N056W16AAA4	NDSWC 3825	620	426	417	2	1969	129	10-69	U	D	4V	--	--	1032
160N056W16AAB1	S.HALLGRINSON		22	--	280	1919	9	7-45	H	02	S	--	--	1073
160N056W16AAB2	H.HJALTALIN		16	--	60	--	9	7-45	H	02	S	--	--	1073
160N056W16AAB3	H.HALLGRINSON		19	--	36	--	8	7-45	H	02	S	--	--	1072
160N056W16AAC	MOUNTAIN SCHOOL		17	--	48	1930	7	7-45	H	02	S	--	--	1075
160N056W16ACA	O.BYRON		21	0	20	1936	10	7-45	K	02	S	--	--	1038
160N056W16ACC	H.OLAFSON		12	0	72	1940	5	7-45	K	02	S	--	--	1086
160N056W16ADB	H.OLAFSON		18	--	4	1940	8	7-45	K	02	S	--	--	1074
160N056W16BDA	H.HJALTALIN		16	--	48	1941	6	7-45	K	1G	S	--	10.0	1099
160N056W17CCC	NDSWC 4217		60	--	--	1970	--	--	U	--	--	--	--	1180
160N056W20DDD	NDSWC 3570		80	--	--	1968	--	--	U	--	--	--	--	1162
160N056W22DDD	USBR 411		23	0	4	1968	5	8-68	U	51	S	--	--	995
160N056W24AAA	NDSWC 4220		200	--	--	1970	--	--	U	--	--	--	--	970
160N056W26BCU	S.KRISTJANSON		30	--	42	--	14	--	S	1G	S	6	--	1002
160N056W28DD8	C.GEIR		16	--	24	--	8	--	H	02	S	4	--	1095
160N056W29DDD	NDGS PEM-70-16		18	--	--	1970	--	--	U	--	--	--	--	1160
160N056W30CCC	USBR 246		8	0	4	1968	DRY	5-68	U	41	6T	--	--	1320
160N056W30CDD	NDGS PEM-70-33		42	--	--	1970	--	--	U	--	--	--	--	1245
160N056W30DDC	USBR 247		23	0	4	1968	15	5-68	U	1G	S	--	--	1210
160N056W31ABB	NDGS PEM-70-17		29	--	--	1970	--	--	U	--	--	--	--	1230
160N056W33AAA	USBR 245		23	0	4	1968	6	5-68	U	01	7P	--	--	1090
160N056W33DDD	NDGS PEM-70-32		44	--	--	1970	--	--	U	--	--	--	--	1110

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
160N056W34BAB	NDGS PEM-70-14		24	--	--	1970	--	--	U	--	--	--	--	1075
160N056W34CCC	NDSWC 4216		120	--	--	1970	--	--	U	--	--	--	--	1110
160N056W34CDA	V.OLAFSON		575	--	3	1918	132	10-41	S	D	V	--	--	1085
160N056W36ABB	NDGS PEM-70-15		24	--	--	1970	--	--	U	--	--	--	--	970
160N057W03BCB1	G.GOODMAN		32	32	36	1959	12	--	S	P	JF	--	--	1552
160N057W03BCB2	G.GOODMAN		22	12	24	1956	8	--	U	P	JF	4	--	1550
160N057W05ADA1	D.MCKAY		85	5	24	1930	15	--	S	P	JF	6	9.5	--
160N057W05ADA2	D.MCKAY		113	0	24	1949	12	--	S	P	JF	--	9.0	--
160N057W05DDA	USAF 98		130	--	6	1962	20	3-62	U	P	JF	--	4.5	1585
160N057W07AAB1	G.LINDTWED		70	70	18	--	--	--	K	P	JF	6	--	--
160N057W07AAB2	G.LINDTWED		40	40	18	1950	15	--	H	P	JF	4	--	--
160N057W110DA	W.SWANSON		21	0	36	--	15	--	K	P	JF	4	5.5	1501
160N057W12AAA	NDGS CAV-70-3		37	--	--	1970	--	--	U	--	--	--	--	1240
160N057W15DDC	C.STABO		75	0	18	--	40	--	H	P	JF	--	--	1521
160N057W16CCC	NDSWC 4206		100	--	--	1970	--	--	U	--	--	--	--	1587
160N057W16DBD	J.TORRANCE		60	0	24	1945	30	--	K	P	JF	6	--	1570
160N057W17COC	I.BJORNSON		90	0	36	1925	30	--	S	P	JF	6	9.5	--
160N057W18BAA1	F.GREMSIN		30	--	24	1930	22	--	H	P	JF	5	--	--
160N057W18BAA2	F.GREMSIN		64	0	24	1944	22	--	S	P	JF	7	5.5	--
160N057W18CBC	NDSWC 4205		40	--	--	1970	--	--	U	--	--	--	--	1588
160N057W19DDO	D.BJORNSON		21	--	25	--	7	7-68	U	P	JF	--	--	--
160N057W21CCC	S.GOODMAN		30	--	24	--	25	--	H	P	JF	6	9.0	--
160N057W21CCD	S.GOODMAN		165	--	4	--	140	--	U	P	JF	--	--	--
160N057W22DAD	W.MACLEOD		60	0	18	--	30	--	H	P	JF	--	--	1525
160N057W25C8A	K.JOHNSON EST		16	0	48	1920	--	--	U	P	JF	--	10.0	1420
160N057W26ABA	J.JOHNSON		21	--	24	--	2	--	U	P	JF	--	--	1471
160N057W26ABD	J.JOHNSON		78	0	18	--	13	--	U	P	JF	--	--	1465
160N057W2708D1	D.MCKAY EST		16	16	18	1900	6	--	H	P	JF	5	8.5	1535
160N057W2708D2	D.MCKAY EST		35	30	48	--	6	--	U	P	JF	--	--	1535
160N057W29BCA1	USAF 2095		130	--	4	1962	14	11-63	U	P	JF	--	6.0	1585
160N057W29BCA2	USAF 2095-E		65	--	3	1963	17	2-63	U	P	JF	--	5.0	1585
160N057W31CCD	D.BJORNSON		21	--	24	--	7	7-68	S	--	--	--	--	--
160N057W310DB	USAF 95		130	--	5	1962	18	3-62	U	P	JF	--	4.5	1582
160N057W33CCD	G.GOODMAN		15	0	72	1922	5	--	H	P	JF	5	--	--
160N057W34CCB	D.RUSTEN		35	0	24	--	9	7-68	U	P	JF	4	5.5	1584
160N057W35DCD	W.MAGNUSSON		60	0	24	--	55	--	U	P	JF	4	8.5	1445
160N057W36DAC	L.SONDELAND		33	24	24	1953	8	--	S	P	JF	5	10.5	1280
160N058W01ACB	C.VOLLUM		65	0	24	--	20	--	K	P	JF	6	9.0	--
160N058W03BAA1	C.FLINK		70	--	4	1965	55	--	K	P	JF	6	--	1606
160N058W03BAA2	C.FLINK		45	0	24	--	11	9-68	I	P	JF	--	--	1606

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160N058W05DDD	H.RODER		88	--	6	1961	9	--	H	P	JF	6	--	--
160N058W06AAC1	O.SITZER		70	--	4	1962	--	--	H	--	--	5	--	--
160N058W06AAC2	O.SITZER		39	0	24	--	8	9-68	I	--	--	6	6.0	--
160N058W07CDB1	E.NELSON		32	--	18	1948	15	--	H	--	--	--	--	--
160N058W07CDB2	E.NELSON		31	--	24	--	13	--	U	--	--	4	6.5	--
160N058W09BCB	USAF 93		130	--	5	1962	11	2-62	U	P	JF	--	4.5	1603
160N058W09BCD1	USAF 2093	132	120	--	3	1962	8	11-62	U	P	JF	--	8.5	1606
160N058W09BCD2	USAF 2093-E		65	--	3	1963	8	2-63	U	P	JF	--	4.0	1606
160N058W09DDA	W.REGNER		31	--	24	--	9	9-68	U	--	--	5	6.0	--
160N058W12AAC	C.PETERSON		64	0	24	1910	20	--	H	P	JF	6	6.0	--
160N058W12DDD	NDSWC 5949		40	--	--	1971	--	--	U	--	--	--	--	1584
160N058W15DDC	F.OTTEM		120	0	24	1920	30	9-68	H	P	JF	6	--	--
160N058W16DAC	C.EVENSON		85	0	18	--	25	--	U	P	JF	5	7.5	--
160N058W16DDD	NDSWC 3801		160	--	--	1969	--	--	U	--	--	--	--	1604
160N058W19DAD	C.LUNDEBY		33	--	24	--	10	9-68	U	P	JF	--	--	--
160N058W20ABB1	OSNABROCK 1		60	--	36	1968	30	--	H	P	JF	5	--	--
160N058W20ABB2	OSNABROCK 2		90	--	42	1969	30	--	H	P	JF	5	--	--
160N058W20ABB3	OSNABROCK CITY		30	--	24	1923	20	--	U	P	JF	--	--	--
160N058W20ADB	S.MCGAUVRAIN		29	--	24	1911	15	--	H	51	G	--	--	--
160N058W20ADB	A.BREZINA		40	--	24	--	25	--	H	P	JF	--	--	--
160N058W20BCC	NDSWC 4208		40	--	--	1970	--	--	U	--	--	--	--	1617
160N058W20BDA	T.BARRY ESTATE		35	--	48	--	20	--	K	P	JF	--	--	--
160N058W20DAD	C.OLSON		112	--	24	--	6	9-68	S	P	JF	6	7.5	--
160N058W20DDD	NDSWC 4207		100	--	--	1970	--	--	U	--	--	--	--	1621
160N058W218CB	M.RASMUSSEN		42	--	24	1896	25	--	H	P	JF	--	--	--
160N058W218CC1	A.BERGER		60	--	24	--	40	--	H	P	JF	--	--	--
160N058W218CC2	F.BERG		30	--	20	1916	10	--	H	41	YT	--	--	--
160N058W218CC3	J.KOCH		42	--	24	1900	30	--	H	P	JF	--	--	--
160N058W22DAD	A.MORKEN		17	--	18	--	10	9-68	U	--	--	5	6.0	--
160N058W24BCB	E.BERGER		34	--	24	1956	7	9-68	H	P	JF	4	7.5	--
160N058W25BAC	H.DAHL		29	--	30	--	24	9-68	H	P	JF	5	--	--
160N058W27ADA	R.HAAVEN		14	0	24	--	9	7-68	U	--	--	4	5.5	--
160N058W29BDA	O.TOLLEFSON		122	--	4	1968	35	--	H	P	JF	6	--	--
160N058W31BCC	USAF 326		130	--	4	1962	20	5-62	U	P	JF	--	4.5	1672
160N058W32ABA	A.JOHNSON		49	--	18	--	9	9-68	U	P	JF	6	7.5	--
160N058W33DDD1	R.SANDERS		17	--	18	--	11	9-68	H	--	--	5	8.5	--
160N058W33DDD2	R.SANDERS		83	63	4	1964	20	--	K	P	JF	6	--	1613
160N058W3588B	NDSWC 5950		40	--	--	1971	--	--	U	--	--	--	--	1599
160N058W36DAA	NDSWC 5948		40	--	--	1971	--	--	U	--	--	--	--	1582
160N059W02ACB1	E.JOHNSTON		60	--	24	1942	18	--	H	--	--	6	7.5	--

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160N059W02ACB2	E. JOHNSTON		30	--	18	1942	8	10-68	U	--	--	5	6.5	--
160N059W02ACB3	E. JOHNSTON		61	--	30	1929	8	10-68	U	--	--	--	--	--
160N059W03CCC	D. RODER		105	--	4	1958	20	--	H	P	JF	6	--	--
160N059W06DDA1	C. CLARK		30	--	12	1956	17	--	H	P	JF	5	--	--
160N059W06DDA2	C. CLARK		33	--	16	--	12	10-68	I	P	JF	4	7.5	--
160N059W07BDD1	C. STREMICH		32	--	24	--	12	--	H	P	JF	5	--	--
160N059W07BDD2	C. STREMICH		60	--	18	--	7	10-68	S	P	JF	6	5.5	--
160N059W08AAB	L. KNUTSON		100	--	18	--	40	--	K	P	JF	5	7.5	--
160N059W10BBC	USAF 90		130	--	5	1962	17	3-62	U	P	JF	--	4.5	1651
160N059W10CAC	C. ROURKE		50	--	18	--	40	--	H	P	JF	5	--	--
160N059W11DCD1	T. VLECK		122	--	4	1968	25	--	K	P	JF	6	--	--
160N059W11DCD2	T. VLECK		70	--	18	1951	10	--	H	P	JF	5	--	--
160N059W13AAA	NDSWC 42C9		200	--	--	1970	--	--	U	--	--	--	--	1621
160N059W15CCC	NDSWC 380Z		120	--	--	1969	--	--	U	--	--	--	--	1626
160N059W16AAC1	USAF 2090		130	--	3	1962	6	11-62	U	P	JF	--	7.5	1639
160N059W16AAC2	USAF 2090-E		65	--	3	1963	7	2-63	U	P	JF	--	5.5	1639
160N059W16BBC	W. DELVO		83	--	18	1965	24	10-68	H	P	JF	7	--	--
160N059W19BAB	E. LORENZ		35	--	18	1948	22	--	H	P	JF	6	--	--
160N059W20DDC1	A. HEINZORTH		40	--	18	--	17	10-68	H	P	JF	5	--	--
160N059W20DDC2	A. HEINZORTH		60	--	18	--	20	--	S	P	JF	5	7.5	--
160N059W22CCD1	KRAM BROS		55	--	24	--	15	--	H	P	JF	5	6.0	--
160N059W22CCD2	KRAM BROS		75	--	24	--	13	10-68	K	P	JF	4	--	--
160N059W24DDC	L. GRAN		68	--	4	1960	--	--	H	P	JF	5	--	--
160N059W25CDD1	A. JOHNSON		22	--	18	--	8	10-68	H	--	--	5	--	--
160N059W25CDD2	A. JOHNSON		65	--	18	1934	20	--	S	P	JF	6	6.0	--
160N059W26ABA1	L. ROURKE		49	--	15	1945	19	10-68	H	P	JF	6	--	--
160N059W26ABA2	L. ROURKE		95	--	15	1951	8	--	U	P	JF	6	6.0	--
160N059W29ADD	N. MCKITTRICK		30	--	15	--	10	10-68	H	--	--	4	8.5	--
160N059W30ACA	R. STREMICH		100	--	4	1948	25	--	H	P	JF	6	--	--
160N059W31CCC	NDSWC 4192		40	--	--	1970	--	--	U	--	--	--	--	1647
160N059W32BAC	F. LORENZ		170	--	4	--	20	--	H	P	JF	6	--	--
160N059W33CCD	J. WILD		35	--	4	1927	20	--	U	--	--	5	6.0	--
160N060W01CCC	NDGS CAV-69-9		11	--	--	1969	--	--	U	P	JF	--	--	1630
160N060W01DDD	J. DELVO		31	--	16	1926	16	--	H	P	JF	6	--	--
160N060W02CBB	USAF 316		130	--	4	1962	12	4-62	U	P	JF	--	4.5	1616
160N060W02CBD1	USAF 2316		130	--	4	1962	10	10-62	U	P	JF	--	8.5	1617
160N060W02CBD2	USAF 2316-E		65	--	3	1963	9	2-63	U	P	JF	--	4.5	1617
160N060W03AAD	G. LORENZ		94	--	4	--	--	--	H	P	JF	7	--	--
160N060W03ADB	USAF 87		130	--	4	1962	9	3-62	U	P	JF	--	4.0	1612
160N060W03CDC	NDSWC 4195		80	--	--	1970	--	--	U	--	--	--	--	1614

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160N060W03CDD	NDGS CAV-69-39		49	--	--	1969	--	--	U	--	--	--	--	1609
160N060W04DCC	H.REINHARDT		34	22	--	--	16	--	H	P	JF	7	--	--
160N060W07B8B	NDGS CAV-69-38		21	--	--	1969	--	--	U	--	--	--	--	1626
160N060W08DDD	D.BORHO		20	--	18	1909	--	--	H	--	--	6	--	--
160N060W11DAA	E.LORENZ		128	--	6	1965	28	--	H	P	JF	6	--	--
160N060W13B8B	J.LORENZ		62	--	4	1952	20	--	H	P	JF	6	--	--
160N060W15CCB	A.DETTLER		70	--	15	1939	35	--	H	P	JF	6	--	--
160N060W18BAA	F.NELSON		56	40	6	1949	25	--	H	P	JF	7	--	--
160N060W19AAA	E.WALTZ		91	--	6	1964	--	--	H	P	JF	7	8.0	--
160N060W2288B	NDSWC 3805		40	--	--	1969	--	--	U	--	--	--	--	1615
160N060W238BA	K.WALTZ		47	0	24	--	9	7-68	U	P	JF	5	8.5	--
160N060W23DDD	M.GELLNER		80	--	6	1953	17	--	S	P	JF	6	--	--
160N060W25AAA	NDSWC 4193		40	--	--	1970	--	--	U	--	--	--	--	1632
160N060W2688B	NDSWC 4194		60	45	1	1970	11	--	U	P	JF	6	--	1632
160N060W26DDA	NDGS CAV-69-42		16	--	--	1969	--	--	U	--	--	--	--	1642
160N060W28BAA	E.HECK		85	--	6	1962	30	--	H	P	JF	6	--	--
160N060W29DAD	E.WALTZ		42	--	24	--	11	7-68	U	P	JF	5	6.0	--
160N060W3088B	NDGS CAV-69-41		11	--	--	1969	--	--	U	--	--	--	--	1570
160N060W34AAD	W.POMER		93	--	6	1923	20	--	H	P	JF	6	--	--
5 160N060W35C8C	USAF 88		130	--	4	1962	10	3-62	U	P	JF	--	4.0	1635
160N060W35C8D1	USAF 2088		130	--	4	1962	9	11-62	U	P	JF	--	4.5	1634
160N060W35C8D2	USAF 2088-E		65	--	3	1963	8	2-63	U	P	JF	--	4.5	1634
160N061W01DCC	B.HARRINGTON		90	--	4	1968	80	--	K	P	JF	6	6.5	--
160N061W02AAA	R.WELLS		85	--	6	--	30	--	H	P	JF	6	--	--
160N061W02CCC	NDGS CAV-69-12		8	--	--	1969	--	--	U	--	--	--	--	1578
160N061W03CCA1	H.DIETZ		30	--	24	--	7	--	H	P	JF	5	--	1573
160N061W03CCA2	H.DIETZ		23	--	39	--	7	8-68	S	P	JF	5	7.5	1573
160N061W03CDD	NDGS CAV-69-17		4	--	--	1969	--	--	U	--	--	--	--	1568
160N061W0588B1	W.LUHMAN		78	63	4	1964	--	--	H	P	JF	7	--	1580
160N061W0588B2	W.LUHMAN		80	--	4	--	30	--	S	P	JF	7	6.0	1578
160N061W05DDA1	G.BALLWAY		110	--	6	1952	25	--	H	P	JF	7	--	1583
160N061W05DDA2	G.BALLWAY		110	--	6	1948	25	--	S	P	JF	6	5.5	1583
160N061W0688B1	H.CHEATLEY		30	0	8	--	18	--	H	--	--	4	--	1573
160N061W0688B2	H.CHEATLEY		50	0	24	--	20	--	Z	--	--	5	9.5	1573
160N061W08DAA1	A.LILL		90	--	6	1952	22	--	H	P	JF	6	--	1587
160N061W08DAA2	A.LILL		38	--	15	--	22	8-68	S	P	JF	6	7.5	1587
160N061W09AAA1	K.LILL		70	--	6	1958	30	--	H	P	JF	6	--	1581
160N061W09AAA2	K.LILL		150	--	6	--	20	--	Z	P	JF	7	9.0	1579
160N061W10B8B	NDGS CAV-69-18		6	--	--	1969	--	--	U	--	--	--	--	1567
160N061W10C8B	USAF 328		130	--	4	1962	21	5-62	U	P	JF	--	5.5	1586

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
160N061W10CBD1	USAF 2328		130	--	3	1962	13	11-62	U	P	JF	--	5.0	1582
160N061W10CBD2	USAF 2328-E		65	--	3	1963	12	2-63	U	P	JF	--	2.5	1582
160N061W10CC1	J.DIETZ		23	--	24	1925	14	8-68	H	P	JF	6	--	1583
160N061W10CC2	J.DIETZ		56	--	24	1932	113	8-68	S	P	JF	5	5.5	1583
160N061W11AAA	D.KELLAND		62	--	18	--	8	8-68	U	P	JF	6	6.0	--
160N061W11BAB	L.CHAPUT		20	--	24	--	13	8-68	U	P	JF	--	--	--
160N061W11DAA	USAF 102		130	--	5	1962	18	3-62	U	P	JF	--	4.0	--
160N061W11DDD1	S.WILHELMI		35	--	6	--	25	--	H	P	JF	5	--	--
160N061W11DDD2	S.WILHELMI		29	0	36	--	20	--	Z	P	JF	4	5.5	--
160N061W12C8C1	H.WASLASKI		26	--	24	--	16	8-68	H	P	JF	5	--	--
160N061W12C8C2	H.WASLASKI		22	--	24	--	15	8-68	U	P	JF	5	6.5	--
160N061W13BAB	S.WASLASKI		16	--	18	--	7	8-68	U	P	JF	--	--	--
160N061W16DAD	J.LILL		70	--	4	--	20	--	K	P	JF	6	--	1582
160N061W17AAA1	J.DIETZ		120	--	5	1918	20	--	H	P	JF	6	--	1582
160N061W17AAA2	J.DIETZ		68	--	18	1965	18	8-68	S	P	JF	6	5.5	1582
160N061W170DD	P.SULLIVAN		--	--	5	--	17	8-68	U	--	--	--	--	1581
160N061W20DAA	L.HARRINGTON		15	--	--	--	9	8-68	U	--	--	--	--	1580
160N061W21AAA	NDSWC 3803		40	--	--	1969	--	--	U	--	--	--	--	1583
160N061W218CC	E.SEBERT		50	--	--	--	12	8-68	U	P	JF	--	--	1583
160N061W21C0C	NDGS CAV-69-13		17	--	--	1969	--	--	U	--	--	--	--	1590
160N061W21DCC1	L.KJOS		80	--	6	--	15	--	S	P	JF	6	6.0	1576
160N061W21DCC2	L.KJOS		80	--	6	--	15	--	H	P	JF	7	6.5	1576
160N061W22AAB	A.LILL		--	--	--	--	10	--	U	P	JF	--	--	--
160N061W23BBA1	E.LILL		23	--	36	--	20	--	H	P	JF	4	--	--
160N061W23BBA2	E.LILL		16	--	18	--	11	--	S	P	JF	5	--	--
160N061W24DDD	O.SUNDBERG		30	--	24	--	20	--	U	P	JF	4	5.5	--
160N061W26AAA	J.TOKHEIM		30	--	28	--	12	8-68	H	P	JF	4	--	--
160N061W26ABA	NDSWC 4189		40	--	--	1970	--	--	U	--	--	--	--	1574
160N061W27CCD	STURM & HECLIN		--	--	4	--	--	--	U	--	--	6	7.5	1585
160N061W290DD	M.JAGLOWSKI		100	--	6	--	--	--	K	P	JF	6	9.5	1584
160N061W30CCB	R.WILHELMI		140	--	6	--	--	--	S	P	JF	7	10.5	1581
160N061W32ADC	W.FICKERT		94	--	6	--	35	--	K	P	JF	7	--	1580
160N061W32CCB1	J.FICHERT		68	--	5	--	30	--	H	P	JF	6	9.5	1579
160N061W32CCB2	J.FICHERT		33	--	24	--	14	8-68	S	P	JF	6	9.0	1577
160N061W33CCA1	M.KJOIS		135	--	6	1964	30	--	H	P	JF	7	--	1580
160N061W33CCA2	M.KJOIS		--	--	--	--	--	--	U	--	--	6	9.5	1580
160N061W33CCA3	E.WALTZ		50	--	4	--	48	--	H	P	JF	6	--	1580
160N061W33CCA4	LOMA WELL 1		25	--	48	--	--	--	H	P	JF	--	--	1575
160N061W33CCD	SOD LINE RR		26	--	36	--	24	--	H	P	JF	--	--	1570
160N061W33CDB	LOMA WELL 2		35	--	24	--	--	--	H	P	JF	--	--	1580

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 MEAS.	USE OF WATER	MAJOR AQUIFFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF L.S.D. (FT.)
160N061W33CDD1	T.MANN		40	--	24	--	30	--	K	P	JF	5	10.5	1574
160N061W33CDD2	T.MANN		75	0	18	--	9	8-68	U	P	JF	--	--	1574
160N061W34CCB	E.STEIN		26	--	18	1945	12	--	H	--	--	4	10.5	1575
160N061W35CBB	NDGS CAV-69-14		19	--	--	1969	--	--	U	--	--	--	--	1589
160N061W36DCC1	F.DOBROVOLNY		92	--	4	--	15	--	H	P	JF	6	--	--
160N061W36DCC2	F.DOBROVOLNY		26	--	18	--	12	8-68	Z	P	JF	7	5.5	--
160N062W01AAD1	E.CHEATLEY		50	--	18	1967	16	--	H	P	JF	5	--	1576
160N062W01AAD2	E.CHEATLEY		209	--	6	--	10	--	S	P	JF	6	9.5	1575
160N062W01BCB	E.CHEATLEY		111	--	6	--	20	--	H	P	JF	5	--	1586
160N062W02AAD	L.SCHANTZ		58	--	18	--	14	7-68	U	P	JF	6	9.0	1583
160N062W02BAB	J.SCHANTZ		100	--	4	1960	40	--	K	P	JF	6	--	1576
160N062W05BBA1	G.KLEIN		--	--	--	--	--	--	K	--	--	6	--	1579
160N062W05BBA2	NDSWC 4135		40	--	--	1970	--	--	U	--	--	--	--	1576
160N062W07BCB	N.FADENRECHT		45	--	5	--	7	--	H	P	JF	5	--	1585
160N062W09AAA	A.LOEWEN		80	--	6	--	20	--	K	P	JF	6	--	1581
160N062W11BCD	L.LOEWEN		52	--	18	--	12	--	S	P	JF	--	--	1585
160N062W12CBD	A.LOEWEN		80	--	--	--	--	--	H	P	JF	5	--	1585
160N062W12CCC	NDGS CAV-69-25		26	--	--	1969	--	--	U	--	--	--	--	1575
160N062W14BDA1	H.ANDERSON		100	--	6	1918	30	--	S	P	JF	6	9.5	1580
160N062W14BDA2	H.ANDERSON		105	91	4	1964	--	--	H	P	JF	--	--	1580
160N062W15AAA	NDGS CAV-69-59		26	--	--	1969	--	--	U	--	--	--	--	1579
160N062W17AAB	M.SCHMEISS		130	--	4	1917	20	--	H	P	JF	6	--	1590
160N062W18BAA	NDGS CAV-69-61		25	--	--	1969	--	--	U	--	--	--	--	1584
160N062W18DDD	NDGS CAV-69-26		29	--	--	1969	--	--	U	--	--	--	--	1579
160N062W19BCC	L.ALBRECHT		90	--	4	--	24	--	K	--	--	--	--	1587
160N062W20BBA	C.KLEIN		60	--	4	--	16	--	K	P	JF	6	--	1580
160N062W21AAA	R.ALBRECHT		80	--	4	1963	15	--	H	P	JF	6	--	1580
160N062W22BAA	NDSWC 3804		60	--	--	1969	--	--	U	--	--	--	--	1572
160N062W22BCC	NDGS CAV-69-62		22	--	--	1969	--	--	U	--	--	--	--	1578
160N062W22CDA	R.MOORE		80	80	4	1968	24	8-68	H	P	JF	6	--	1581
160N062W24BAB	J.PFEIFER		43	--	24	--	15	9-68	U	P	JF	7	8.5	1580
160N062W25BCB	W.LUNOQUIST		160	--	6	1946	21	--	K	P	JF	6	--	1576
160N062W250DB1	E.DEASE		145	--	6	1963	80	--	H	P	JF	6	--	1576
160N062W250DB2	E.DEASE		155	--	6	1958	60	--	S	P	JF	7	9.5	1575
160N062W28ADA	KREKLAU EST		95	--	4	--	20	--	H	P	JF	6	--	1580
160N062W30CCC	H.ROPPEL		90	--	5	--	45	--	H	P	JF	6	--	1591
160N062W31CCC	NDSWC 4133		180	--	--	1970	--	--	U	--	--	--	--	1580
160N062W31OCB	F.FEIL		--	--	4	--	22	--	K	--	--	6	--	1582
160N062W32BAA	E.FOHR		60	--	4	--	25	--	K	P	JF	6	--	1576
160N062W34AAD	A.SOLBERG		69	--	4	1944	45	--	H	P	JF	6	--	1576

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
160N062W34ABB	NDGS CAV-69-60		21	--	--	1969	--	--	U	--	--	--	--	1571
160N062W36CCA1	USAF 2081	130	127	--	3	1962	10	11-62	U	P	JF	--	6.0	1576
160N062W36CCA2	USAF 2081-E		65	--	3	1963	10	2-63	U	P	JF	--	2.5	1576
160N063W01CDD	J.FADENRECHT		65	--	4	--	18	--	K	P	JF	6	--	1581
160N063W01CDC	NDSWC 5964		60	--	--	1971	--	--	U	--	--	--	--	1580
160N063W028BA	E.FADENRECHT		186	--	5	--	20	--	K	P	JF	6	--	1593
160N063W038BB	NDSWC 5965		80	--	--	1971	--	--	U	--	--	--	--	1602
160N063W048BC	NDSWC 4136		80	--	--	1970	--	--	U	--	--	--	--	1600
160N063W05CBC	L.HALL		132	--	4	1948	13	--	H	P	JF	5	--	--
160N063W05CCC	L.HALL		30	--	4	--	20	9-68	U	--	--	5	9.5	--
160N063W06AAA	NDGS CAV-69-27		49	--	--	1969	--	--	U	--	--	--	--	1606
160N063W07BBC	USAF 76	120	100	--	4	1962	20	5-62	U	51	2S	--	5.5	1604
160N063W08CCC	NDSWC 4138		60	--	--	1970	--	--	U	--	--	--	--	1610
160N063W09BCB	M.DEVANEY		49	--	4	--	14	9-68	U	--	--	5	7.5	--
160N063W10DDB	D.GOSSETT		160	--	5	--	20	--	H	P	JF	6	--	1607
160N063W12CDB	R.HODGE		140	--	4	--	22	--	H	P	JF	5	--	1590
160N063W13CBA	J.PEDERSON		--	--	--	--	--	--	S	--	--	5	6.5	1590
160N063W150CC	L.DICK		134	--	4	1968	--	--	K	P	JF	6	--	--
160N063W160DD	NDSWC 3793		80	--	--	1969	--	--	U	--	--	--	--	1606
160N063W17DCD	E.WEINS		110	--	--	1968	30	--	H	P	JF	5	--	--
160N063W18AAC	J.JANZEN		170	--	4	1955	--	--	H	P	JF	5	--	--
160N063W19BBA	GREAT NORTHERN		165	126	6	1919	19	12-19	C	P	JF	--	--	--
160N063W19BCD	D.HOFFMAN		80	80	4	1968	21	9-68	H	P	JF	6	--	1609
160N063W19DCC	B.COHEN		115	--	3	--	25	--	K	P	JF	--	--	--
160N063W20BCC	NDSWC 5966		40	--	--	1971	--	--	U	--	--	--	--	1596
160N063W20CDA	D.DICK		140	--	5	--	13	--	H	P	JF	5	--	--
160N063W21A0B	J.PEDERSON		41	--	4	--	18	9-68	U	--	--	5	6.0	--
160N063W210CC	H.DICK		120	--	4	1967	20	--	K	P	JF	5	--	--
160N063W24AAA	NDSWC 4134	160	100	97	1	1970	22	9-70	U	51	3R	6	6.0	1595
160N063W25C8D	A.HEPPNER		90	--	4	--	20	--	K	--	--	5	--	1586
160N063W268BA	M.DICK		120	--	4	1967	20	--	K	P	JF	5	--	1592
160N063W318CC	H.HOFFMAN		110	--	4	1963	15	--	K	P	JF	5	--	--
160N063W32AAB	M.DICK		145	--	4	1957	--	--	H	P	JF	5	7.5	--
160N063W32BAB	A.DICK		110	--	4	1950	12	--	H	P	JF	6	--	--
160N063W32CCB	D.HOFFMAN		76	--	12	--	19	7-68	U	P	JF	6	--	--
160N063W33ADD	A.LINSETH		137	--	4	1954	15	--	K	P	JF	5	--	--
160N063W35DAA	NEUENSCHWANDER		--	--	4	--	--	--	H	--	--	6	--	1601
160N064W01AAB	NDSWC 4137		140	--	--	1970	--	--	U	--	--	--	--	1630
160N064W01CCC	NDSWC 4262	100	75	72	1	1970	16	10-70	U	51	R	6	5.0	1607
160N064W06DDA	C.BUKOWSKI		236	--	4	--	--	--	H	P	JF	6	--	--

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF L.S.D (FT.)
160N064W07DBA	N.HETTWER		173	173	4	1968	20	8-68	S	P	JF	6	5.0	1600
160N064W08AAA	NDSWC 5971		40	--	--	1971	--	--	U	--	--	--	--	1596
160N064W09A88	J.GOESER		--	--	6	--	--	--	K	--	--	5	--	--
160N064W10CDD	A.HOFFMANN		225	--	6	--	18	--	H	P	JF	6	--	--
160N064W11BCC	NDGS CAV-69-29		37	--	--	1969	--	--	U	--	--	--	--	1599
160N064W11CDA	O.BERG		190	--	6	--	20	--	K	P	JF	5	--	--
160N064W11DDD	NDSWC 4139	140	100	97	1	1970	10	9-70	U	51	--	6	6.0	1600
160N064W12ADA	H.ROUSE		140	--	6	1964	15	--	K	P	JF	6	--	--
160N064W15C88	NDSWC 8039-E	100	83	77	1	1971	4	8-71	U	51	R	6	6.0	1588
160N064W15CCC	NDSWC 3792	160	120	117	1	1969	+2	5-70	U	51	YR	6	--	1585
160N064W15CCD	NDSWC 8039-B	100	78	72	1	1971	4	8-71	U	51	R	6	6.0	1588
160N064W15DAA1	NDSWC 8039-F		180	--	--	1971	--	--	U	--	--	--	--	1603
160N064W15DAA2	NDSWC 8039-G	80	73	67	1	1971	17	9-71	U	51	S	5	6.0	1603
160N064W16AAA	NDSWC 5969		80	--	--	1971	--	--	U	--	--	--	--	1594
160N064W16ADD	NDSWC 5970		100	--	--	1971	--	--	U	--	--	--	--	1590
160N064W16CBB	C.HETTWER		105	--	6	--	20	--	K	P	JF	6	9.0	--
160N064W17AAA	NDSWC 4142		80	--	--	1970	--	--	U	--	--	--	--	1601
160N064W20AAB	NDSWC 5982	80	56	50	1	1971	19	9-71	U	51	6R	5	--	1587
160N064W20CBA	R.METZGER		--	--	4	--	12	--	H	P	JF	--	--	--
160N064W21AAB1	NDSWC 8039-C	300	243	237	1	1971	4	8-71	U	51	YR	6	6.0	1587
160N064W21AAB2	NDSWC 8039-D	120	113	107	1	1971	4	8-71	U	51	YR	6	6.0	1587
160N064W22ADD	NDSWC 4264		100	--	--	1970	--	--	U	--	--	--	--	1598
160N064W22B8B	NDSWC 4263	100	81	78	1	1970	1	10-70	U	51	YR	6	5.5	1588
160N064W22B8A1	NDSWC 8039	120	83	77	1	1971	3	8-71	U	51	YR	6	6.0	1587
160N064W22B8A2	NDSWC 8039-A	100	83	77	1	1971	2	8-71	U	51	YR	6	6.0	1586
160N064W22B8A3	NDSWC PW	96	90	50	--	1971	5	8-71	Z	51	YR	6	5.0	1589
160N064W23DAA	NDGS CAV-69-31		46	--	--	1969	--	--	U	--	--	--	--	1592
160N064W24ADA	V.WIRTH		--	--	--	--	--	--	H	--	--	6	--	--
160N064W24DDA	A.SCHOMMER		96	--	6	1956	15	8-69	H	P	JF	6	--	--
160N064W27AAA	NDSWC 4140		80	--	--	1970	--	--	U	--	--	--	--	1584
160N064W28BBB	NDSWC 4141	60	38	32	1	1970	4	9-70	U	51	YR	4	--	1573
160N064W28DAA	P.LATURNUS		145	--	5	--	--	--	H	P	JF	6	--	--
160N064W29ABA	R.BECK		69	--	4	--	19	--	U	P	JF	--	--	--
160N064W30AAA	NDSWC 5968		60	--	--	1971	--	--	U	--	--	--	--	1563
160N064W31CCD	L.RDLES		200	--	6	--	50	--	H	P	JF	6	8.5	--
160N064W3288D	M.JANDWSKI		250	--	6	--	40	--	K	P	JF	5	8.5	--
160N064W32DCD1	H.BERG		160	--	6	--	10	--	H	P	JF	6	9.0	--
160N064W32DCD2	E.MUELLER		165	--	6	--	20	--	H	P	JF	6	8.5	--
160N064W32DCD3	M.HERTL		200	--	6	--	50	--	H	P	JF	6	9.0	--
160N064W32DCD4	A.PUNG		96	--	4	--	40	--	H	P	JF	--	--	--

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
160N064W320CD5	N.MILLER		125	--	3	--	--	--	H	P	JF	--	--	--
160N064W320DD	NDGS CAV-69-32		14	--	--	1969	--	--	U	--	--	--	--	1552
160N064W33AAA	NDSWC 4124		60	--	--	1970	--	--	U	--	--	--	--	1580
160N064W35AAA	NDSWC 5967		60	--	--	1971	--	--	U	--	--	--	--	1584
161N050W078AA	MINN HIGHWAY T2		168	--	4	1964	--	--	U	41	6T	--	--	768
161N050W078BA	MINN HIGHWAY T6		275	--	4	1965	--	--	U	SM	JL	--	--	768
161N050W078BB	MINN HIGHWAY T2		164	--	4	1964	--	--	U	41	6T	--	--	789
161N051W22AAB	A.DUNCKLEE		18	0	70	--	2	10-41	S	01	Q	--	9.0	795
161N051W22CAA	M.JUHL		--	--	--	--	1	8-68	S	--	--	6	--	796
161N051W24CCC	T.PASSA		110	--	3	1948	F	--	U	41	9T	9	9.0	792
161N052W01ACB	M.SHARP		--	--	--	--	--	--	H	--	--	4	--	805
161N052W05BAB	S.FAGNER		144	90	3	1937	2	9-41	S	51	S	--	--	812
161N052W078BB	C.STAPLES		86	--	--	1900	--	--	H	51	S	--	--	821
161N052W070DD	NDSWC 5939		280	--	--	1971	--	--	U	--	--	--	--	815
161N052W128BB	H.SHARP		20	0	60	--	4	9-41	S	01	Q	--	--	806
161N052W13ABB	E.NORDSTROM		20	0	48	1910	7	8-68	U	01	Q	4	--	806
161N052W17ADD	F.PAGE		100	--	4	1909	2	9-41	S	41	9T	--	--	812
161N052W180DD	S.FLEMMING		85	--	--	1926	0	--	S	51	R	6	--	817
161N052W20ABA	R.SWITZER		82	--	4	1964	2	--	S	51	R	6	7.0	816
161N052W240AD	NDSWC 5943		280	--	--	1971	+1	--	U	SM	JL	9	--	803
161N052W26AAA	L.HANSEN		15	0	48	--	12	9-41	S	01	Q	--	--	810
161N052W26CDD	E.BOETTGER		135	--	2	--	--	--	K	51	R	--	--	806
161N052W308BB	R.MURRAY		97	--	2	1960	20	--	S	51	S	7	6.0	823
161N052W31ABA	D.COLLINS		108	--	4	1949	2	--	U	51	S	4	--	821
161N052W338BB	H.LONG		46	0	30	1911	6	9-41	S	01	P	--	--	817
161N053W02AAA	NDSWC 3858	260	140	138	1	1969	+2	--	U	51	X	9	6.0	821
161N053W02CDA	A.PRYOR		96	96	2	--	4	9-41	S	51	S	--	--	827
161N053W068BB	NDSWC 4232		280	--	--	1970	--	--	U	--	--	--	--	856
161N053W15CCC	NDSWC 5941		260	--	--	1971	--	--	U	--	--	--	--	840
161N053W20AAD	P.DIETRICH		12	0	48	1936	7	9-41	H	02	S	--	--	848
161N053W220DD	N.BACHMAN		157	--	--	1935	14	--	S	51	R	--	--	837
161N053W230DD	T.STEPHENSON		14	0	60	--	7	9-41	S	01	7P	--	10.5	830
161N053W258BA	NDSWC 5940		280	--	--	1971	--	--	U	--	--	--	--	825
161N053W250CC	G.HINKLE		10	--	48	--	5	7-68	U	01	7P	4	--	827
161N053W268AB	R.CULL		140	--	2	1908	14	--	S	51	R	6	10.0	835
161N053W31CB	B.HENCHERT		16	--	60	1926	10	9-41	S	01	7P	--	--	868
161N053W330DD1	R.ARMSTRONG		18	--	48	1925	7	9-41	H	01	7P	--	--	845
161N053W330DD2	NDSWC 5946		280	--	--	1971	--	--	U	--	--	--	--	844
161N053W36CCC	NDSWC 3835		280	--	--	1969	--	--	U	--	--	--	--	831
161N053W05CDD	L.EDDINGTON		7	0	36	--	3	7-68	U	01	7P	3	--	847

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
161N054W04ADC1	CAVALIER WELL 1		30	--	180	--	--	--	P	1G	X	--	--	885
161N054W04ADC2	CAVALIER WELL 2		30	--	180	--	--	--	P	1G	X	--	--	883
161N054W05BCC	USBR 462		13	0	4	1968	6	8-68	U	1G	2S	--	--	905
161N054W07AAD1	H.MORITZ		16	--	30	--	--	--	H	1G	S	--	--	907
161N054W07AAD2	H.MORITZ		20	--	54	--	13	9-41	S	1G	S	--	9.0	907
161N054W09DDA1	C.GEIGER		20	--	36	--	7	11-42	H	1G	R	--	--	885
161N054W09DDA2	C.GEIGER		25	--	48	--	8	11-42	S	1G	R	--	--	885
161N054W10DDD	USBR 227		18	0	4	1968	6	5-68	U	01	Q	--	--	878
161N054W12DCC	B.SHINBORN		12	0	48	--	8	11-42	S	01	X	--	--	865
161N054W12DDD	USBR 228		23	0	4	1968	6	5-68	U	01	Q	--	--	859
161N054W15BCB	R.MORDEN		20	--	48	1922	7	11-42	H	1G	S	--	--	884
161N054W16DCA	W.LUDEN		14	--	48	--	7	11-42	S	1G	2S	--	--	892
161N054W18AAA	USBR 226		18	0	4	1968	5	5-68	U	1G	X	--	--	913
161N054W18CBB	A.MAR SHEK		--	--	4	--	8	11-42	K	1G	S	--	--	925
161N054W18DDA	W.SIGURDSON		13	--	72	--	8	11-42	K	1G	2S	--	--	915
161N054W19CBB	A.SIGURDSON		16	--	48	--	7	11-42	K	1G	2S	--	--	930
161N054W19CCC	USBR 464		18	0	4	1968	6	8-68	U	1G	2S	--	--	934
161N054W20AAA	USBR 463		18	0	4	1968	4	8-68	U	01	X	--	--	900
161N054W21AAA	NDSWC 3845		460	--	--	1969	--	--	U	--	--	--	--	890
161N054W21AAD	H.MIDBOE		--	--	48	--	10	11-42	U	1G	S	--	--	890
41														
161N054W21DAA1	G.SKEIN		20	0	36	--	8	11-42	S	1G	2S	--	--	886
161N054W21DAA2	G.SKEIN		16	0	36	--	7	11-42	U	1G	2S	--	--	886
161N054W22CAC	E.KEMNITZ		21	0	60	1942	12	11-42	K	01	7P	--	--	886
161N054W23ABB1	HARRIS-ROBBIE		18	0	72	1938	12	9-41	U	01	7P	--	--	875
161N054W23ABB2	HARRIS-ROBBIE		19	0	60	--	10	9-41	U	01	7P	--	--	875
161N054W23BAA	HARRIS-ROBBIE		20	--	60	--	DRY	--	U	01	7P	--	--	875
161N054W24DAA	J.SCHROEDER		--	--	--	--	--	--	H	01	7P	5	--	868
161N054W24DDD	NDSWC 5947		320	--	--	1971	--	--	U	--	--	--	--	858
161N054W26AAA	J.HEUCHERT		18	--	60	--	13	--	K	01	7P	--	--	873
161N054W27CBB	A.AULT		23	--	48	--	10	11-42	K	01	7P	--	--	895
161N054W27DDD	USBR 229		13	0	4	1968	6	5-68	U	01	Q	--	--	881
161N054W29CBD	H.SOTT		16	--	60	1938	12	11-42	S	01	7P	--	--	919
161N054W31AAA	USBR 230		18	0	4	1968	9	5-68	U	1G	X	--	--	918
161N054W31CDB	J.ROBINSON		13	--	48	1942	9	11-42	S	1G	2S	--	--	930
161N054W32CCC1	NDSWC 3838	420	284	278	1	1969	20	10-69	U	51	3S	8	6.5	919
161N054W32CCC2	NDSWC 3839		40	--	1	1969	7	10-69	U	1G	2S	4	7.0	919
161N054W35BCB	C.BJERKE		18	--	4	1967	12	--	S	01	X	6	--	885
161N055W02AAA1	L.GREGOIRE		--	0	36	1929	10	9-47	S	1G	2S	--	--	938
161N055W02AAA2	L.GREGOIRE		13	--	48	1939	10	9-41	H	1G	S	--	--	938
161N055W03DDD	NDSWC 5932	100	33	28	1	1971	5	6-71	U	1G	X	--	--	967

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
161N055W04ADD	USBR 454		15	0	4	1968	6	8-68	U	1G	X	--	--	996
161N055W04BAA	NDSWC 5933	80	33	13	1	1971	6	8-71	U	1G	X	--	--	1004
161N055W04CCC	NDSWC 5930	100	58	55	1	1971	29	6-71	U	1G	S	--	--	1028
161N055W04DDD	NDSWC 5931	100	47	44	1	1971	10	6-71	U	1G	S	3	--	1000
161N055W12DDD	NDSWC 5710		260	--	--	1970	--	--	U	--	--	--	--	928
161N055W13ABB	W.GUGNNLAUGH		12	--	48	--	7	11-42	K	1G	S	--	--	936
161N055W13CCC	NDSWC 5923		280	--	--	1971	--	--	U	--	--	--	--	953
161N055W13DAA	R.E IMARSON		16	--	48	1931	--	--	K	1G	S	--	--	925
161N055W14BAB	W.GUNLANGSON		16	--	48	1931	10	11-42	H	1G	2S	--	--	970
161N055W14DAA	A.SIMONSON		7	0	48	--	4	11-42	K	1G	S	--	--	955
161N055W15AAA	USBR 225		23	0	4	1968	12	5-68	U	1G	2S	--	--	972
161N055W15BCB	NDSWC 5942-F	80	65	59	1	1971	24	5-71	U	1G	2S	--	--	1016
161N055W15BCD1	NDSWC 3842		340	331	2	1969	103	10-69	U	D	V	7	8.5	1008
161N055W15BCD2	NDSWC 3843		60	54	1	1969	13	10-69	U	1G	2S	3	7.0	1008
161N055W15BCD3	NDSWC 5711	260	244	238	1	1970	32	7-70	U	41	8T	5	--	1006
161N055W15BCD4	NDSWC 5711-A		200	194	1	1970	29	7-70	U	01	7P	5	--	1006
161N055W15BCD5	NDSWC 5711-B		100	94	1	1970	12	7-71	U	01	7P	4	--	1006
161N055W15BCD6	NDSWC 5711-C		20	15	4	1970	11	7-70	U	1G	2S	3	--	1006
161N055W15CCG	NDSWC 5927	100	60	57	1	1971	7	5-71	U	1G	X	3	--	1015
161N055W16ADA1	NDSWC 5942	100	65	59	1	1971	24	5-71	U	1G	X	--	--	1017
161N055W16ADA2	NDSWC 5942-A	80	65	59	1	1971	23	5-71	U	1G	2S	--	--	1016
161N055W16ADA3	NDSWC 5942-B	80	65	59	1	1971	24	5-71	U	1G	2S	--	--	1016
161N055W16ADA4	NDSWC 5942-E	80	65	59	1	1971	31	5-71	U	1G	2S	3	7.0	1018
161N055W16ADD1	NDSWC 5942-C	80	65	59	1	1971	22	5-71	U	1G	2S	--	--	1016
161N055W16ADD2	NDSWC 5942-D	80	65	59	1	1971	21	5-71	U	1G	2S	3	7.0	1016
161N055W17DDD	NDSWC 5928	100	58	55	1	1971	10	5-71	U	1G	X	3	6.0	1020
161N055W18AAA	USBR 224		23	0	4	1968	5	5-68	U	01	6Q	--	--	1004
161N055W18BBB	NDSWC 3566		240	--	--	1968	--	--	U	--	--	--	--	1010
161N055W18DDA	NDSWC 5929		100	--	--	1971	--	--	U	--	--	--	--	1005
161N055W20CAD	D.EASTMAN		8	0	36	--	5	11-42	K	1G	R	--	--	1017
161N055W21DDD	NDSWC 5926	120	40	35	1	1971	5	8-71	U	1G	X	--	--	1014
161N055W22AAD	NDSWC 5924	100	50	47	1	1971	2	5-71	U	1G	X	4	--	985
161N055W22ABC1	NDSWC 5951	100	70	64	1	1971	5	6-71	U	1G	2S	3	--	1002
161N055W22ABC2	NDSWC 5951-A	100	70	64	1	1971	8	6-71	U	1G	X	--	--	1005
161N055W22ABC3	NDSWC 5951-B	100	70	64	1	1971	10	6-71	U	1G	X	--	--	1007
161N055W22ABC4	NDSWC 5951-C	100	70	64	1	1971	4	6-71	U	1G	X	--	--	1002
161N055W22ABC5	NDSWC 5951-D	100	70	64	1	1971	8	6-71	U	1G	X	--	--	1005
161N055W22ABC6	NDSWC 5951-E	100	70	64	1	1971	5	6-71	U	02	8P	--	--	1003
161N055W22ABC7	NDSWC 5951-F	100	70	64	1	1971	9	6-71	U	1G	2S	--	--	1005
161N055W22ABC8	NDSWC PW ND.1		80	60	8	1971	8	6-71	Z	1G	X	--	--	1006

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
161N055W22ABC9	NDSWC PW NO.2		80	60	8	1971	8	7-71	Z	1G	X	3	--	1006
161N055W220BA	G.THORLAKSON		14	--	--	--	6	--	K	1G	S	--	--	1001
161N055W23AAB	NDGS PEM-70-18		49	--	--	1970	--	--	U	--	--	--	--	960
161N055W23CCB	H.ARNA SON		15	--	36	1927	8	11-42	K	1G	R	--	--	988
161N055W24ADA	B.STEFANSON		14	--	24	1941	8	11-42	U	1G	2S	--	--	936
161N055W24ADB	B.STEFANSON		14	--	48	--	8	--	K	1G	2S	--	--	936
161N055W248AA	NDGS PEM-70-19		34	--	--	1970	--	--	U	--	--	--	--	946
161N055W24CCB1	P.HALLDEORSON		--	--	48	--	9	11-42	S	1G	S	--	--	955
161N055W24CCB2	P.HALLDEORSON		--	--	48	--	8	11-42	H	1G	S	--	--	955
161N055W270DD	USBR 231		23	0	4	1968	5	5-68	U	1G	2S	--	--	986
161N055W28AAB	E.THORLAKSON		12	--	36	--	6	11-42	U	1G	R	--	--	1017
161N055W28CCC	NDSWC 5925	100	50	47	1	1971	6	-71	U	1G	X	3	--	1012
161N055W29CCC	USBR 232		23	0	4	1968	7	5-68	U	1G	X	--	--	1015
161N055W30DDO1	G.BJORN SON		14	--	48	1928	6	--	H	1G	2S	4	--	1020
161N055W32AAA	NDGS PEM-70-30		44	--	--	1970	--	--	U	--	--	--	--	1010
161N055W32ABB	J.OLSON		12	--	--	1936	6	--	K	1G	S	--	--	1009
161N055W34ADA	T.EINARSON		9	0	36	1935	6	9-41	K	1G	S	--	--	981
161N055W348AA	NDSWC 3567		470	--	--	1968	--	--	U	--	--	--	--	1005
161N055W350BB	S.BJORN SON		13	--	48	--	7	11-42	S	1G	2S	--	--	965
43 161N056W05ABA	J.ARMSTRONG		40	--	24	--	35	--	K	03	S	3	--	1170
161N056W06DDD	NDSWC 3850	60	45	42	1	1969	39	10-69	U	N	JF	4	--	1210
161N056W07BAB	S.MEECE		39	--	48	--	34	8-69	K	03	YS	4	--	1218
161N056W07DDD	USBR 222		23	0	4	1968	DRY	5-68	U	03	S	--	--	1215
161N056W10BAA	NDSWC 3563		180	--	--	1968	--	--	U	--	--	--	--	1084
161N056W10BBB	USBR 455		28	0	4	1968	16	8-68	U	03	2S	--	--	1099
161N056W10DDD	NDSWC 3562		160	--	--	1968	--	--	U	--	--	--	--	1070
161N056W11CAD	J.EINARSON		11	--	36	--	8	--	H	03	2S	4	--	1050
161N056W11CCC	USBR 223		22	0	4	1968	8	5-68	U	03	X	--	--	1064
161N056W13BAA	A.SIMUNSON		22	--	36	--	7	--	H	03	2S	6	--	1015
161N056W14CDC	A.MAGNANSON		14	--	36	1942	6	11-42	K	03	2S	--	--	1045
161N056W15ADB	L.BYRON		9	--	36	--	5	5-68	U	03	S	--	--	871
161N056W17CCC	USBR 456		23	0	4	1968	DRY	--	U	03	S	--	--	1210
161N056W18CCB	B.HEITMANN		21	--	36	--	17	--	H	03	R	3	--	1210
161N056W18DDD	NDGS PEM-70-35		24	--	--	1970	--	--	U	--	--	--	--	1212
161N056W19AAA	NDSWC 4221		120	--	--	1970	--	--	U	--	--	--	--	1210
161N056W20ACA1	A.CREIMAN		18	0	42	1939	12	11-42	S	03	X	--	--	1175
161N056W20ACA2	A.CREIMAN		12	--	42	--	10	11-42	K	03	R	--	--	1175
161N056W21AAA	NDSWC 3824	160	20	17	1	1969	4	11-69	U	03	2S	4	--	1100
161N056W22AAA1	A.BYRON		18	--	48	--	10	--	H	03	1S	4	--	1070
161N056W22AAA2	S.BYRON		7	0	48	1942	5	11-42	K	03	2S	--	--	1070

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
161N056W22BCB	E.LANDERS		14	--	60	1910	12	4-41	K	03	S	--	--	1101
161N056W22DDD	NDSWC 3561		160	--	--	1968	--	--	U	--	--	--	--	1060
161N056W2388B	USBR 452		23	0	4	1968	2	8-68	U	03	X	--	--	1050
161N056W230CC	M.KOTCHMAN		15	--	36	--	8	--	K	01	X	4	--	1044
161N056W25AAA	USBR 453		13	0	4	1968	6	8-68	U	01	7P	--	--	1015
161N056W25BCA	F.CROSBY		14	--	48	--	7	--	H	01	Q	4	--	1033
161N056W27AAD	A.JOHNSON		20	--	42	--	13	--	H	1G	R	4	--	1066
161N056W27DDD	USBR 233		23	0	4	1968	8	5-68	U	01	7P	--	--	1056
161N056W28CCC	NDSWC 4219		80	--	--	1970	--	--	U	--	--	--	--	1170
161N055W29ABB	NDGS PEM-70-31		59	--	--	1970	--	--	U	--	--	--	--	1026
161N056W3288B	USBR 234		13	0	4	1968	13	5-68	U	01	7P	--	--	1210
161N056W3488B	USCE DH68 5		50	--	--	1968	4	--	U	--	--	--	--	1110
161N056W348DB	H.BARNES		12	--	36	1941	4	11-42	K	02	2S	--	--	1089
161N056W35CCC	NDSWC 4218		100	--	--	1970	--	--	U	--	--	--	--	1044
161N056W3688B	USBR 451		18	0	4	1968	6	8-68	U	01	Q	--	--	1031
161N057W01AAC	H.HOFF		65	30	36	1960	35	--	H	P	JF	4	--	1220
161N057W048CC1	L.BEAUCHAMP		35	0	24	1937	15	--	H	--	--	5	--	--
161N057W048CC2	L.BEAUCHAMP		115	--	4	1957	50	--	K	P	JF	6	--	--
161N057W048CD	L.BEAUCHAMP		38	0	24	--	5	7-68	U	--	--	--	--	--
44 161N057W05ADC	W.SIGUAW		28	20	24	--	13	--	H	P	JF	--	--	--
161N057W06DAB	L.BRUSSEAU		45	0	24	1923	12	--	U	P	JF	7	7.5	--
161N057W12DDD	USBR 221		20	--	--	1968	--	5-68	U	--	--	--	--	1219
161N057W13AAA	NDGS CAV-70-6		29	--	--	1970	--	--	U	--	--	--	--	1220
161N057W13BAB	USBR 220		10	--	--	1968	--	--	U	--	--	--	--	1272
161N057W13CCD	H.DNAULT		17	0	24	1941	10	--	K	P	JF	5	9.5	1455
161N057W14DDD	NDSWC 1		105	--	--	1966	--	--	U	--	--	--	--	1475
161N057W17CAB1	J.STEVENS		87	87	6	1949	40	--	S	P	JF	--	--	--
161N057W17CAB2	J.STEVENS		50	50	4	1957	30	--	H	P	JF	4	--	--
161N057W2088B	T.HAUG		90	0	18	1948	60	--	H	P	JF	--	--	--
161N057W20CDD	S.LAXDAL		50	0	24	--	25	--	K	P	JF	5	--	--
161N057W22ADD	A.DUMAS		103	55	24	1966	83	--	H	P	JF	6	--	1510
161N057W238CC	A.DUMAS		45	0	24	1946	15	--	S	P	JF	--	--	1500
161N057W2788C	H.FINNESSON		35	12	24	1938	18	7-68	K	P	JF	4	8.5	--
161N057W28DDD	A.MAGNUSSON		17	--	12	--	6	7-68	U	--	--	4	9.5	--
161N057W32ADC1	J.GOODMAN		72	0	24	--	30	--	K	P	JF	6	--	--
161N057W32ADC2	J.GOODMAN		60	--	24	1948	30	--	S	P	JF	--	--	--
161N057W3288B	NDSWC 4204		60	--	--	1970	--	--	U	--	--	--	--	1600
161N057W34CBC	O.HERSETH		31	--	30	--	--	--	H	P	JF	6	--	--
161N057W3580A1	USAF 2098		130	--	3	1962	9	10-62	U	P	JF	--	8.5	1535
161N057W3580A2	USAF 2098-E		65	--	3	1963	8	2-63	U	P	JF	--	4.5	1535

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF L.S.D (FT.)
161N057W35DDC	E. NELSON		20	--	24	--	8	7-68	U	P	JF	4	7.5	1520
161N058W01DAC	E. CLEARY		80	--	4	1947	--	--	K	P	JF	6	9.0	--
161N058W02ABD	H. GRATTON		80	--	4	1953	--	--	H	P	JF	6	--	--
161N058W03C8B	H. WENZEL		78	0	24	--	15	7-68	S	--	--	--	--	1560
161N058W04ADD	D. LUCY		40	30	18	1953	12	--	H	P	JF	7	--	1575
161N058W05C8B	W. BIENIUS		93	--	4	1958	--	--	H	P	JF	6	--	1621
161N058W05CCC	NDSWC 5955		40	--	--	1971	--	--	U	--	--	--	--	1632
161N058W0688A	E. JOHNSON		49	0	18	--	21	7-68	U	--	--	5	6.0	1631
161N058W07DDD	NDSWC 4201		200	--	--	1970	--	--	U	--	--	--	--	1613
161N058W1088B	NDSWC 4202		140	--	--	1970	--	--	U	--	--	--	--	1573
161N058W11ADB	R. LIVINGOOD		30	0	16	1917	15	--	H	P	JF	6	9.0	--
161N058W13CCD	R. GUSTAFSON		104	0	24	1955	30	--	H	P	JF	6	--	--
161N058W13DCB	E. GUSTAFSON		62	20	24	1965	18	--	H	P	JF	6	--	--
161N058W13DD81	USAF 2097		130	--	3	1962	10	11-62	U	P	JF	--	6.0	1544
161N058W13DD82	USAF 2097-E		65	--	3	1963	9	2-63	U	P	JF	--	4.5	1544
161N058W13DDC	USAF 97		130	--	5	1962	18	2-62	U	P	JF	--	4.5	1568
161N058W14BAB	L. SCHRADER		51	0	24	--	6	7-68	U	P	JF	--	--	--
161N058W14CBD1	O. BALSDON		165	0	24	1920	25	--	U	P	JF	--	--	--
161N058W14CBD2	O. BALSDON		165	110	4	1958	30	--	H	P	JF	6	--	--
161N058W15BCB1	G. KAERCHER		40	0	24	1918	--	--	S	P	JF	6	--	1601
161N058W15BCB2	G. KAERCHER		85	85	4	1961	--	--	H	P	JF	6	--	1601
161N058W16RAD1	L. SCHROEDER		48	0	36	--	12	--	S	P	JF	6	9.5	1610
161N058W16BA02	L. SCHROEDER		85	63	4	1963	10	--	S	P	JF	5	--	1609
161N058W16DDD1	D. WENZEL		45	--	18	--	8	7-68	U	P	JF	--	--	1612
161N058W16DDD2	NDSWC 5953		40	--	--	1971	--	--	U	--	--	--	--	1611
161N058W17AAA	NDSWC 5954		60	--	--	1971	--	--	U	--	--	--	--	1609
161N058W17BAB1	E. VANACKEREN		55	26	12	--	6	--	H	--	--	4	--	1621
161N058W17BAB2	E. VANACKEREN		90	50	6	1960	15	--	S	P	JF	6	9.5	1621
161N058W17DDA	K. GRIMSON		42	0	18	--	7	7-68	U	--	--	--	--	1622
161N058W18DD81	USAF 2092-1 LCC	100	90	--	3	1963	8	2-63	U	51	Q	--	3.0	1611
161N058W18DD82	USAF 2092 EF	133	130	--	4	1962	10	11-62	U	51	2S	--	6.5	1611
161N058W18DD83	USAF 2092 WST		80	--	3	1963	9	3-63	U	51	6S	--	4.5	1611
161N058W18DD84	USAF 2092 1	1083	1058	1040	7	1963	694	7-63	U	0	2V	--	--	1611
161N058W18DD85	USAF 2092 2	775	170	130	7	1963	15	-63	H	P	JF	7	--	1612
161N058W18DDC1	USAF 92-1		130	103	4	1962	14	3-62	U	51	7P	--	4.5	1611
161N058W18DDC2	USAF 92-2		36	--	--	1962	--	--	U	--	--	--	--	1611
161N058W19CDD	A. DALSTAD		50	--	4	1957	20	--	H	--	--	6	--	--
161N058W20AAA	NDSWC 4199	100	58	38	1	1970	3	10-70	U	51	YR	6	5.5	1614
161N058W20CCC	NDSWC 4198		180	--	--	1970	--	--	U	--	--	--	--	1611
161N058W21BDA	A. BALSDON		21	0	24	1915	10	--	H	41	6T	4	9.5	1613

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161N058W25BBA	M.TOLLEFSON		32	--	24	1960	8	--	H	P	JF	6	--	--
161N058W27BBD	A.DUNFORD		90	0	24	--	20	--	H	P	JF	7	5.5	--
161N058W28BBA	J.MCGAUVVRAN		40	30	18	--	20	--	H	--	--	5	5.5	--
161N058W30CDD	J.MCGAUVVRAN		120	96	4	1965	20	--	H	P	JF	6	--	--
161N058W32AAA1	E.MCGAUVVRAN		16	--	12	--	8	7-68	U	--	--	5	6.0	--
161N058W32AAA2	E.MCGAUVVRAN		27	0	30	--	6	7-68	U	--	--	--	--	--
161N058W33DDD	NDSWC 4203		160	--	--	1970	--	--	U	--	--	--	--	1606
161N058W35DDA1	E.RUSTEN		65	0	24	1915	10	--	S	P	JF	--	8.5	--
161N058W35DDA2	E.RUSTEN		38	8	36	1953	6	--	H	P	JF	4	--	--
161N058W36AAB	A.VETREN		40	40	12	1962	6	--	H	P	JF	6	--	--
161N058W36ABA	A.VETREN		150	0	12	1925	75	--	U	P	JF	--	--	--
161N059W03AAA	NDSWC 5957		40	--	--	1971	--	--	U	--	--	--	--	1650
161N059W03DAD	R.EBERT		80	--	5	--	--	--	H	P	JF	6	--	1649
161N059W05DCD	M.PADDEN		18	--	4	1954	12	--	H	P	JF	5	--	1651
161N059W07BCC	A.GRATTON		73	40	6	1960	--	--	S	P	JF	4	--	1643
161N059W08ABA	M.PADDEN		18	14	48	1899	--	--	H	P	JF	--	--	1643
161N059W08DDB1	USAF 2091-1		130	--	4	1962	13	12-62	U	P	JF	--	6.0	1642
161N059W08DDB2	USAF 2091-2		84	--	--	1962	--	--	U	--	--	--	--	1642
161N059W08DDB3	USAF 2091-E		65	--	3	1963	13	2-63	U	P	JF	--	5.0	1642
161N059W12AAD	T.JORDAN		120	--	4	1920	--	--	K	P	JF	7	--	1621
161N059W14AAA	NDSWC 5956		140	--	--	1971	--	--	U	--	--	--	--	1630
161N059W14CCC	R.HAROLD		40	--	4	--	--	--	H	P	JF	--	--	1637
161N059W17AAD	USAF 91		130	5	5	1962	13	3-62	U	P	JF	--	4.5	1643
161N059W18CCC1	E.AGAR JR		50	50	4	1964	--	--	H	P	JF	6	--	1625
161N059W18CCC2	A.TURCOTTE		52	--	--	--	--	--	H	P	JF	--	--	1625
161N059W20AAA	T.RIDLEY		85	--	4	1947	--	--	H	P	JF	5	--	1672
161N059W22AAA	NDSWC 5958		20	--	--	1971	--	--	U	--	--	--	--	1640
161N059W2288B1	NDSWC 5714-D		20	15	4	1970	6	7-70	T	P	JF	4	--	1661
161N059W2288B2	NDSWC 5714-C		60	57	1	1970	20	7-70	T	P	JF	6	--	1660
161N059W2288B3	NDSWC 5714-B		100	97	1	1970	27	7-70	T	P	JF	6	--	1661
161N059W2288B4	NDSWC 5714-A		150	147	1	1970	28	7-70	T	P	JF	7	--	1661
161N059W2288B5	NDSWC 5714		200	197	1	1970	28	7-70	T	P	JF	8	--	1661
161N059W230DD	NDSWC 5959		120	--	--	1971	--	--	U	--	--	--	--	1625
161N059W24AAB	NDSWC 4200		200	--	--	1970	--	--	U	--	--	--	--	1613
161N059W25AAC	G.SYMONS		75	--	4	1963	--	--	H	P	JF	5	--	--
161N059W25DDD	G.SYMONS		101	100	4	1968	15	--	H	P	JF	4	6.5	--
161N059W28CDB	M.WITZEL		64	40	6	1948	33	--	H	P	JF	6	--	--
161N059W30ABC	A.SAVER		100	--	4	1953	--	--	H	P	JF	7	--	--
161N059W32AAA	NDSWC 4196		40	--	--	1970	--	--	U	--	--	--	--	1650
161N059W33DCD	E.ROSE		54	--	4	--	--	--	H	P	JF	6	--	--

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161N059W34DDD	NDSWC 4197		100	--	--	1970	--	--	U	--	--	--	--	1648
161N059W35DAA	J.SYMONS		80	0	24	1937	25	--	S	P	JF	6	--	--
161N060W01CCD	NDGS CAV-69-35		16	--	--	1969	--	--	U	--	--	--	--	1641
161N060W02CDC	J.SCHNITZER		60	--	4	1963	25	--	H	P	JF	5	--	1630
161N060W04BAB	J.ROSE		45	--	4	--	20	--	S	P	JF	5	--	1601
161N060W06DAD	J.WALTZ		18	--	18	--	13	--	H	P	JF	4	--	1592
161N060W07BAB	E.DUBOIS		37	--	15	--	16	--	H	P	JF	4	--	1586
161N060W09ADD	C.BATA		27	--	24	--	8	8-68	U	P	JF	5	--	1606
161N060W10DAC	R.LORENZ		40	--	8	--	20	--	H	P	JF	5	--	1617
161N060W11ADA	KNDK RADIO STAT		110	63	4	1967	18	5-67	H	P	JF	7	--	1620
161N060W1288B	S.CHRISTIANSON		65	26	4	1964	--	--	H	P	JF	--	--	1629
161N060W14CDC	LANGDON NO. 1		43	20	120	1917	38	10-37	P	P	JF	6	6.0	1621
161N060W14DAD	CAVALIER FAIR		28	--	--	--	8	10-37	P	P	JF	--	5.0	1612
161N060W14DCC	LANGDON NO. 2		49	--	250	1920	44	10-37	P	P	JF	--	--	1609
161N060W16ADD	NDGS CAV-69-34		21	--	--	1969	--	--	U	--	--	--	--	1598
161N060W16CDD	W.KOEHMSTEDT		130	40	4	1968	12	7-68	S	P	JF	6	--	1606
161N060W1788B	NDGS CAV-69-8		8	--	--	1969	--	--	U	--	--	--	--	1588
161N060W17CDA1	USAF 2086		130	--	4	1962	9	11-62	U	P	JF	--	6.0	1600
161N060W17CDA2	USAF 2086-E		65	--	3	1963	10	2-63	U	P	JF	--	3.0	1600
161N060W17CDD	USAF 86		130	--	5	1962	18	3-62	U	P	JF	--	4.5	1595
161N060W17DDD	J.BATA		175	--	5	1964	--	--	H	P	JF	6	--	1601
161N060W19ABB	NDGS CAV-69-37		6	--	--	1969	--	--	U	--	--	--	--	1592
161N060W19DAA	H.WEINER		32	--	4	1958	--	--	H	P	JF	4	--	1606
161N060W2188B	NDSWC 3823		40	10	4	1969	10	11-69	U	P	JF	4	6.0	1603
161N060W21CDD	NDGS CAV-69-7		9	--	--	1969	--	--	U	--	--	--	--	1602
161N060W23ACA	LANGDON NO.3		52	--	120	1934	47	10-37	P	P	JF	--	5.5	1609
161N060W25ABB	E.LORENZ		20	--	18	--	5	--	H	--	--	5	--	--
161N060W27DAB1	E.BALDWIN		38	--	24	1968	12	--	S	P	JF	5	--	--
161N060W27DAB2	E.BALDWIN		74	--	--	--	--	--	H	P	JF	6	--	--
161N060W28CCC	H.NUELLE		67	--	4	1961	--	--	H	P	JF	6	--	--
161N060W29ABA	B.NUELLE		30	--	36	--	10	--	H	P	JF	5	--	--
161N060W30DBA	J.FRIESEN		100	--	5	--	80	--	H	P	JF	6	--	--
161N060W32DDA	A.DELVO		30	--	3	--	19	7-68	U	P	JF	--	--	--
161N060W35CDC	H.MCGAUVAN		64	--	6	--	50	--	H	P	JF	6	--	--
161N060W36ABB	T.LORENZ		140	--	5	--	75	--	H	P	JF	6	--	--
161N060W36DCD	NDGS CAV-69-40		15	--	--	1969	--	--	U	--	--	--	--	1610
161N061W01AAA	J.GELSEN		94	--	6	1940	42	--	K	P	JF	5	--	1585
161N061W01DDD	NDSWC 4258		40	--	--	1970	--	--	U	--	--	--	--	1584
161N061W02AAC	C.MACHACEK		40	--	24	--	--	--	U	P	JF	6	--	1584
161N061W03DCC1	NDGS CAV-69-19		7	--	--	1969	--	--	U	--	--	--	--	1570

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161N061W03DCC2	NDGS CAV-69-20		19	--	--	1969	--	--	U	--	--	--	--	1570
161N061W04BAA	H.RING		85	--	6	--	12	--	S	P	JF	5	--	1582
161N061W05CCC	NDSWC 4259		120	--	--	1970	--	--	U	--	--	--	--	1576
161N061W06CBC	NDSWC 4261		40	--	--	1970	--	--	U	--	--	--	--	1563
161N061W07ABB	V.SPURLING		60	--	4	1962	10	--	K	P	JF	6	--	1583
161N061W09ADA	H.KRUEGER		85	--	6	--	20	--	H	P	JF	6	--	1583
161N061W11AAD	R.BATA		100	--	4	1966	40	--	H	P	JF	5	--	1586
161N061W11BBB	NDGS CAV-69-21		22	--	--	1969	--	--	U	--	--	--	--	1583
162N061W14BAB	R.KITCHIN		100	0	18	--	9	7-68	U	P	JF	--	6.5	1558
161N061W16BAD	C.ULMANSON		58	--	18	1958	12	--	K	--	--	5	--	1586
161N061W17ABA	M.ARENS		120	105	4	1965	10	4-65	H	P	JF	6	--	1575
161N061W18DDC	A.KRAHN		38	--	18	1963	10	--	K	P	JF	6	--	1573
161N061W21ADB	E.HILTNER		45	--	2	--	4	--	K	51	7S	6	--	1576
161N061W21BBA	USAF 85		130	55	5	1962	15	3-62	U	P	JF	--	4.5	1570
161N061W21BBD1	USAF 2085		130	--	3	1962	12	11-62	U	P	JF	--	6.0	1573
161N061W21BBD2	USAF 2085-E		65	--	3	1963	9	2-63	U	51	2S	--	4.0	1573
161N061W21DCC	NDGS CAV-69-16		61	--	--	1969	--	--	U	--	--	--	--	1565
161N061W23AAA	M.GILES		65	--	6	1964	15	--	H	P	JF	6	--	1586
161N061W25ABB	D.GROOM		94	--	4	1965	32	--	H	P	JF	6	--	1586
48 161N061W27CCC	NDGS CAV-69-15		18	--	--	1969	--	--	U	--	--	--	--	1569
161N061W28ADC	I.GILES		36	--	24	--	10	--	H	--	--	6	--	1567
161N061W29AAA	NDSWC 4188		140	--	--	1970	--	--	U	--	--	--	--	1565
161N061W29DBA1	J.VEER		138	--	4	1956	15	--	H	P	JF	7	--	1580
161N061W29DBA2	A.VEER		80	--	4	1912	1	--	K	--	--	6	--	1580
161N061W31BCB	H.SPENST		86	--	4	1964	15	--	H	P	JF	6	--	1578
161N061W34BBB	K.LEIN		116	--	4	--	12	--	U	P	JF	6	--	1570
161N061W35ABC	F.BATA		60	0	24	--	12	8-68	H	P	JF	6	--	1581
161N062W03CAB	E.PETERSON		90	57	6	1918	25	--	H	P	JF	5	--	1594
161N062W05BBB	NDSWC 5980		100	--	--	1971	--	--	U	--	--	--	--	1570
161N062W05DCC	NDSWC 5979		140	--	--	1971	--	--	U	--	--	--	--	1570
161N062W06DDD	NDSWC 4152	170	117	97	1	1970	7	10-70	U	51	YG	6	6.0	1578
161N062W07AAA	G.AMOTH		135	--	6	1961	--	--	H	P	JF	6	--	1585
161N062W08CCC	NDSWC 5977		40	--	--	1971	--	--	U	--	--	--	--	1581
161N062W10BAA	NDGS CAV-69-57		16	--	--	1969	--	--	U	--	--	--	--	1585
161N062W12BBA	C.HART		84	--	6	1959	30	--	H	P	JF	6	--	1578
161N062W13DCD	A.TOWNS		30	--	5	1948	--	--	H	--	--	5	--	1590
161N062W15DCD	USAF 82		130	6	5	1962	20	3-62	U	P	JF	--	4.5	1578
161N062W15DAD	V.ALBRECHT		50	35	6	1965	15	--	H	P	JF	5	--	1580
161N062W18DDA	D.PEDERSUN		56	--	6	--	18	--	H	--	--	6	--	1577
161N062W19AAB1	NDSWC 3821	80	65	45	1	1969	12	12-69	U	51	YG	5	--	1579

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
161N062W19AAB2	NDSWC 3821-A		100	--	--	1969	--	--	U	--	--	--	--	1579
161N062W20DAC	M.MCLEAN		107	--	5	1958	--	--	K	P	JF	6	--	1595
161N062W2188B	NDSWC 4151		60	--	--	1970	--	--	U	--	--	--	--	1585
161N062W24AAA	NDSWC 3822		60	--	--	1969	--	--	U	--	--	--	--	1584
161N062W24BAA	NDGS CAV-69-58		29	--	--	1969	--	--	U	--	--	--	--	1570
161N062W26CBD	R.SPENST		130	85	4	1929	13	--	S	P	JF	6	--	1580
161N062W3088A	F.BULLER		63	54	4	1957	10	--	K	--	--	5	--	1586
161N062W30DDD	NDSWC 4150	120	83	77	1	1970	8	10-70	U	51	YG	5	6.0	1580
161N062W31AB8	NDGS CAV-69-56		29	--	--	1969	--	--	U	--	--	--	--	1572
161N062W31ADD	F.WEINES		114	94	5	1961	--	--	H	P	JF	6	--	1582
161N062W31DCD	USAF 244		130	--	4	1962	19	5-62	U	P	JF	--	5.5	1581
161N062W32DAD	G.SCHMIESS		80	--	5	1963	--	--	K	P	JF	6	--	1585
161N062W34CBA	H.ETTERMAN		75	56	5	1968	--	--	H	P	JF	6	--	1585
161N062W36DDD	NDSWC 4187	100	77	67	1	1970	9	12-70	U	P	JF	6	--	1574
161N063W03CCC	NDSWC 4156		40	--	--	1970	--	--	U	--	--	--	--	1600
161N063W04DDD	NDGS CAV-69-53		14	--	--	1969	--	--	U	--	--	--	--	1602
161N063W0788B	NDGS CAV-69-47		49	--	--	1969	--	--	U	--	--	--	--	1615
161N063W0888B	L.MCARTHER		142	--	6	1968	--	--	K	P	JF	5	--	1616
161N063W11AAA	NDGS CAV-69-54		24	--	--	1969	--	--	U	--	--	--	--	1578
49 161N063W12DDC	NDSWC 5978		40	--	--	1971	--	--	U	--	--	--	--	1580
161N063W13CCC	NDSWC 4149		60	--	--	1970	--	--	U	--	--	--	--	1582
161N063W14BCC	NDGS CAV-69-55		9	--	--	1969	--	--	U	--	--	--	--	1599
161N063W14CCB	USAF 78		130	--	4	1962	15	5-62	U	P	JF	--	5.5	1596
161N063W15AAA	R.WESTPHAL		92	60	4	1948	12	--	H	P	JF	5	--	1605
161N063W15BBC	N.RITTER		103	--	4	1948	8	--	H	P	JF	6	--	1602
161N063W15CCC	NDSWC 4148		100	--	--	1970	--	--	U	--	--	--	--	1604
161N063W17CBC	I.DOWNS		137	105	4	1965	--	--	H	P	JF	--	--	1612
161N063W1988A1	W.SCHRADER		65	65	4	--	17	--	K	P	JF	5	--	1626
161N063W1988A2	NDSWC 5975		80	--	--	1971	--	--	U	--	--	--	--	1617
161N063W22CCC	NDSWC 5976		40	--	--	1971	--	--	U	--	--	--	--	1605
161N063W25ABA	F.GOEHTZEN		100	--	6	1949	12	--	K	P	JF	5	--	1591
161N063W25CCB	D.MCLEAN		107	--	5	1956	--	--	K	P	JF	6	--	1592
161N063W27DDC	L.LUGAR		68	--	1	--	16	7-68	U	--	--	--	--	--
161N063W2988A	V.DAWLEY		150	130	6	--	18	--	K	P	JF	6	--	--
161N063W2988B	NDSWC 4147	160	133	113	1	1970	14	9-70	U	51	YR	5	6.0	1619
161N063W31DDC	L.WIRTH		186	160	6	1950	15	--	H	P	JF	6	--	--
161N063W32AAD	C.BUCHWEITZ		130	--	6	1941	20	--	K	P	JF	6	--	--
161N064W05DAD	D.MORRIS		190	--	4	--	20	--	H	P	JF	5	9.0	1627
161N064W0788B	NDSWC 3820		100	--	--	1969	--	--	U	--	--	--	--	1600
161N064W08ADA	J.MORRIS		237	--	4	1967	26	--	H	P	JF	6	8.5	1621

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161N064W09AAA	NDSWC 4161		40	--	--	1970	--	--	U	--	--	--	--	1629
161N064W12AAA	NDSWC 4146		140	--	--	1970	--	--	U	--	--	--	--	1615
161N064W12DDA	J. THOLKES		100	--	5	--	12	--	H	--	--	--	--	1626
161N064W13DDD	L. MCARTHUR		84	--	4	1962	27	--	H	P	JF	6	9.0	1621
161N064W14ADB	GREAT NORTHERN		159	155	6	1931	15	11-31	C	51	4G	--	--	1615
161N064W14DAD	NDSWC 4145		140	--	--	1970	--	--	U	--	--	--	--	1615
161N064W14DBC1	L. PAULSON		280	--	6	1957	--	--	H	P	JF	6	9.5	1616
161N064W14DBC2	E. BATEMAN		71	--	6	--	35	--	H	--	--	5	9.0	1616
161N064W15CCC	NDSWC 3791		40	--	--	1969	--	--	U	--	--	--	--	1615
161N064W17AAD	J. KINGZETT		130	--	4	1943	40	--	H	P	JF	6	9.0	1616
161N064W17CBA	R. LEWIS		216	--	5	--	79	--	H	P	JF	6	9.0	1600
161N064W17CCC	NDGS CAV-69-44		12	--	--	1969	--	--	U	--	--	--	--	1597
161N064W19DCC	L. BITTNER		125	--	5	1913	12	--	H	P	JF	6	8.5	1600
161N064W20AAA	NDGS CAV-69-46		26	--	--	1969	--	--	U	--	--	--	--	1613
161N064W22BAA	W. LAFRENZ		200	--	6	--	25	--	K	P	JF	7	--	1621
161N064W23ADC	W. SCHRADER		90	--	6	--	20	--	H	51	--	--	--	1620
161N064W26CCC1	G. GROSBY		22	--	12	--	13	7-68	U	--	--	--	6.0	--
161N064W26CCC2	NDSWC 4144	100	60	57	1	1970	12	9-70	U	51	YR	6	6.0	1617
161N064W28BBA	J. LAFRENZ		150	--	4	1948	22	--	H	P	JF	6	8.5	--
161N064W30DAD	R. CARNAHAN		190	--	4	1966	--	--	H	P	JF	6	9.0	--
161N064W30DDD	NDGS CAV-69-45		21	--	--	1969	--	--	U	--	--	--	--	1593
161N064W33ABB	NDSWC 5974		40	--	--	1971	--	--	U	--	--	--	--	--
161N064W33CCB	NDSWC 4143		140	--	--	1970	--	--	U	--	--	--	--	1603
161N064W34CDD	NDSWC 5972		100	--	--	1971	--	--	U	--	--	--	--	1601
161N064W35DDD	NDSWC 5973		160	--	--	1971	--	--	U	--	--	--	--	1612
161N064W36DDD	NDGS CAV-69-30		35	--	--	1969	--	--	U	--	--	--	--	1611
162N051W04CDD	L. KEMNITZ		--	--	--	--	--	--	H	--	--	5	--	797
162N051W09AAB	NDSHD IN-005 B		143	45	4	1957	1	6-57	U	41	8T	--	--	793
162N051W09ABB	H. TISDALE		22	--	36	1960	1	8-68	S	01	7P	6	6.0	796
162N051W10C8C	W. CROSELY		144	--	2	1923	F	--	U	41	8T	--	--	797
162N051W16AAA	R. FITZGERALD		13	0	48	--	12	10-41	U	01	6Q	--	6.5	797
162N051W27CCC	NP RAILWAY		14	--	48	1930	8	6-30	C	01	Q	--	--	796
162N051W31AAA	M. SHARP		--	--	--	--	F	11-69	U	RR	JL	9	--	800
162N051W34CCC	NDSWC 3859		230	--	5	1969	F	--	U	SM	JL	--	--	795
162N052W07DBC1	D. DEMAR TH1	207	176	--	--	1960	DRY	--	U	--	--	--	--	807
162N052W07DBC2	D. DEMAR TH2	207	191	--	--	1960	DRY	--	U	--	--	--	--	807
162N052W07DBC3	D. DEMAR TH3	205	191	--	--	1960	DRY	--	U	--	--	--	--	807
162N052W08ADD	NDSWC 5709		220	--	--	1970	--	--	U	--	--	--	--	805
162N052W20AAA	E. WERNER		120	--	2	--	3	9-41	S	41	8T	--	--	807
162N052W20CCD	A. KENNY		--	--	--	--	0	--	U	--	--	6	--	811

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
162N052W288BA	R. VISTAD		7	--	--	--	4	7-68	U	--	--	--	--	806
162N052W32CDC	A. REICHERT		80	--	3	1914	F	9-41	S	--	--	--	--	812
162N052W33CCB	NDSWC 5708		240	--	--	1970	--	--	U	--	--	--	--	808
162N053W04DDD	S. NEVIN		182	--	2	1900	4	9-20	S	51	R	--	--	824
162N053W10BAC1	BROWN-OLSON TH1		330	--	--	1960	--	--	U	--	--	--	--	821
162N053W10BAC2	BROWN-OLSON TH2		217	--	--	1960	--	--	U	--	--	--	--	821
162N053W10BAC3	BROWN-OLSON NO1		153	147	4	1960	F	9-60	K	51	S	6	9.5	821
162N053W14880	R. L. INDENBERGER		--	--	--	--	13	--	U	--	--	5	--	818
162N053W16CCC	B. WATSON		18	0	48	--	18	9-41	S	01	7P	--	8.5	830
162N053W198CC	A. EDDINGTON		--	--	--	--	--	--	U	--	--	5	10.5	846
162N053W190AA	B. WATSON		15	--	--	--	--	--	H	01	7P	4	--	842
162N053W21CDC	L. WATSON		16	16	8	1931	15	9-41	U	01	7P	--	--	834
162N053W24C8D	F. ARNOLD		13	0	40	--	11	7-68	U	01	7P	7	--	818
162N053W26AAA	NDSWC 5938	220	163	157	1	1971	+4	--	U	51	1	8	--	816
162N053W288BB	P. MARTIN		14	--	36	1955	3	--	S	01	7P	5	--	841
162N053W31CCC1	G. SNELL		17	0	48	1911	15	9-41	K	01	7P	--	--	856
162N053W31CCC2	G. SNELL		17	0	48	1941	14	10-41	S	01	2S	--	--	856
162N053W328AB	C. PAPERFUSS		25	--	--	--	--	--	H	01	7P	5	--	841
162N053W35BDC	J. ARGUE		14	--	9	--	--	--	--	01	6Q	--	--	826
162N053W35DAC	HAMILTON WELL		1560	1247	4	1889	0	4-21	F	--	--	--	8.5	824
162N054W01DDO	NDSWC 4231		240	--	--	1970	--	--	U	--	--	--	--	833
162N054W02ABD	C. MORRISON		200	--	--	--	F	--	U	51	S	--	--	841
162N054W03CAD	C. CARIGUN		16	--	--	--	--	--	H	01	7P	--	--	850
162N054W04CCC	USBR 209		8	0	4	1968	8	5-68	U	01	7P	--	--	860
162N054W07AAD	A. MURPHY		50	0	24	--	30	--	K	01	7P	--	--	882
162N054W07CCD	USBR 210		13	0	4	1968	6	5-68	U	01	7P	--	--	880
162N054W12C8B	W. LAGE		20	--	72	--	12	9-41	H	1G	S	--	--	843
162N054W17CCC	USBR 417		13	0	4	1968	14	8-68	U	01	7P	--	--	886
162N054W20B8B	G. BARNETT		251	--	2	1924	F	9-41	S	D	V	--	6.0	881
162N054W228BC	NDSWC 3846		380	--	--	1969	--	--	U	--	--	--	--	866
162N054W22DDC	H. HELGOE		280	--	4	1960	10	--	S	51	R	7	--	862
162N054W28DDO1	L. OLSEN		16	0	72	--	DRY	--	U	01	2S	--	--	873
162N054W28DDO2	USBR 218		23	0	4	1968	11	5-68	U	01	Q	--	--	875
162N054W29DCC	NDGS PEM-70-39		29	--	--	1970	--	--	U	--	--	--	--	890
162N054W36AAA	USBR 219		28	0	4	1968	2	5-68	U	01	Q	--	--	850
162N055W01CDD	NDSWC 3857		320	--	--	1969	--	--	U	--	--	--	--	883
162N055W03DCC	USBR 208		23	0	4	1968	8	5-68	U	1G	X	--	--	904
162N055W03DDC1	A. MCCURDY		17	--	48	1916	9	9-41	U	1G	S	--	9.5	908
162N055W03DDC2	A. MCCURDY		21	--	120	1924	17	9-41	K	1G	S	--	9.5	908
162N055W05CAC	P. HOLMAN		12	--	54	--	12	8-60	K	1G	2S	--	--	935

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
162N055W05DCC	G. COOK		15	--	30	1954	12	8-60	H	1G	2S	--	--	934
162N055W06DAA	R. MCNEIL		15	--	72	--	11	8-60	K	1G	2S	--	9.0	936
162N055W07A881	W. COOK		20	--	36	1940	9	--	S	1G	2S	--	--	943
162N055W07A882	W. COOK		10	--	30	1940	6	--	H	1G	2S	--	--	943
162N055W07A883	USBR 207		23	--	--	1968	--	--	U	--	--	--	--	943
162N055W07A884	NDGS PEM-70-11		34	--	--	1970	--	--	U	--	--	--	--	944
162N055W07CCB	H. THOMPSON		11	--	30	1955	7	8-60	K	1G	R	--	--	957
162N055W08A88	NDSWC 3856		480	--	--	1969	--	--	U	--	--	--	--	933
162N055W08B8B	F. HALL		12	--	36	--	7	--	K	01	P	--	6.5	938
162N055W08D0C	J. HOLEN		14	--	48	1944	10	8-60	K	1G	2S	--	--	938
162N055W11A8B	USBR 211		18	0	4	1968	8	5-68	U	1G	X	--	--	900
162N055W12CDD	NDGS PEM-70-38		19	--	--	1970	--	--	U	--	--	--	--	895
162N055W13CDD	USBR 418		18	--	4	1968	--	--	U	--	--	--	--	901
162N055W14CCC	USBR 416		28	0	4	1968	7	8-68	U	02	X	--	--	931
162N055W15ADD	M. MARQUARDT		14	--	48	--	5	7-68	U	02	2S	4	--	920
162N055W17AAA	USBR 460		28	0	4	1968	15	8-68	U	02	X	--	--	941
162N055W17CCC	USBR 415		28	0	4	1968	6	8-68	U	02	S	--	--	962
162N055W17DDA	W. KOROPATNICKI		13	--	60	1939	9	--	K	1G	2S	--	--	943
162N055W18BCB	B. CARPENTER		18	--	--	1935	6	--	K	02	2S	--	--	993
162N055W18DAD	W. CLIFFORD		16	0	50	1929	11	--	K	02	G	--	--	958
162N055W19BBA	NDSWC 5935		60	--	--	1971	--	--	U	--	--	--	--	1020
162N055W19DDD	R. COOK		14	--	72	--	6	8-60	K	02	G	--	--	912
162N055W20ACD	W. SMITH		17	--	36	1947	10	8-60	K	02	2S	--	6.5	955
162N055W20DAD	B. STURLAUGSON		14	0	36	--	7	8-60	K	1G	2S	--	--	955
162N055W24BDA	L. HUGHES		265	--	2	1920	2	9-41	S	D	V	5	--	902
162N055W28DDA	NDSWC 3847		280	--	--	1969	--	--	U	--	--	--	--	960
162N055W28DDD	USBR 216		18	0	4	1968	2	5-68	U	02	2S	--	--	961
162N055W29B8C	A. DALSTED		11	--	14	1934	8	9-64	K	1G	S	--	--	1022
162N055W29CDD	NDSWC 3565		320	--	--	1968	--	--	U	--	--	--	--	1032
162N055W29D0C	USBR 461		18	0	4	1968	7	8-68	U	1G	2S	--	--	1014
162N055W30AAA	NDSWC 5934		80	--	--	1971	--	--	U	--	--	--	--	1015
162N055W32B8A	NDGS PEM-70-7		34	--	--	1970	--	--	U	--	--	--	--	1025
162N055W33CCD	S. NORRHFIELD		13	0	42	1936	10	9-41	H	1G	G	--	--	1018
162N055W36AAA	USBR 217		23	0	4	1968	8	5-68	U	1G	X	--	--	909
162N055W36DDD	NDSWC 3844		380	--	--	1969	--	--	U	--	--	--	--	915
162N056W01C8B	NDGS PEM-70-10		49	--	--	1970	--	--	U	--	--	--	--	956
162N056W01CCC1	NDSWC 3854		220	--	--	1969	--	--	U	--	--	--	--	988
162N056W01CCC2	NDSWC 3855		40	37	1	1969	8	10-69	U	1G	2S	3	6.5	988
162N056W02CDD	NDSWC 1782		200	--	5	1960	15	7-60	U	1G	2S	--	--	1000
162N056W02DCA	I. VEER		15	--	36	1950	9	8-60	K	02	2S	--	--	995

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
162N056W02DDD	USBR 205		24	--	4	1968	12	5-68	U	03	1S	--	--	986
162N056W03ABA	C.GUDJONSON		36	--	30	--	30	--	K	01	P	--	--	1025
162N056W03B8C	J.MATHISON		190	--	5	1912	164	--	K	03	G	--	4.5	1181
162N056W03CBA	C.WEILER		162	--	6	1955	152	--	K	03	G	--	--	1180
162N056W03CCD	C.WEILER		200	--	4	1953	150	--	K	03	G	--	--	1183
162N056W03DCA	W.WEILER		168	0	24	1933	164	--	K	03	G	--	5.5	1175
162N056W04AAD	J.MATHISON		165	0	18	1912	164	--	K	03	G	--	4.5	1176
162N056W04BCC	J.LETKEMAN		154	0	24	--	149	--	K	03	G	--	--	1185
162N056W04CAB1	W.STRONG		147	0	60	1912	147	4-41	K	03	S	--	--	1185
162N056W04CAB2	W.STRONG		148	0	24	1912	146	--	K	03	G	--	5.5	1185
162N056W04DDD	NDGS PEM-70-8		29	--	--	1970	--	--	U	--	--	--	--	1179
162N056W05CCC	C.HERMAN		157	0	24	1946	147	--	S	03	G	--	--	1195
162N056W05DDD	NDSWC 3852	300	175	172	1	1969	126	11-69	U	41	6T	4	--	1185
162N056W06BDD	R.METELMAN		100	--	4	1955	25	--	H	03	G	--	--	1190
162N056W06CCC	USBR 203		25	--	4	1968	DRY	5-68	U	03	2S	--	--	1217
162N056W06DDD	NDSWC 1777		252	--	--	1960	--	--	U	--	--	--	--	1197
162N056W08BA8	C.HERMAN		142	0	24	1925	122	--	K	03	G	--	--	1190
162N056W08DB8	L.HALL		120	--	24	1920	114	--	K	03	G	--	5.5	1190
162N056W09AAC	H.WEILER		140	0	24	1939	128	--	K	03	G	--	5.5	1185
162N056W09BCC	USBR 457		23	--	4	1968	DRY	8-68	U	03	X	--	--	1197
162N056W10AAA	USBR 204		33	--	4	1968	DRY	5-68	U	03	2S	--	--	1128
162N056W10A881	NDSWC 1776		178	--	--	1960	--	--	U	--	--	--	--	1175
162N056W10A882	NDSWC 3853-A		100	--	--	1969	DRY	10-69	U	03	2S	--	--	1175
162N056W10A883	NDSWC 3853		360	--	--	1969	--	--	U	--	--	--	--	1175
162N056W11AAA	J.CLARK		12	0	36	1950	10	--	K	02	S	--	--	991
162N056W11AAB	NDGS PEM-70-9		34	--	--	1970	--	--	U	--	--	--	--	990
162N056W12AAB	USBR 206		23	--	--	1968	--	--	U	--	--	--	--	950
162N056W12ADA	A.THOMPSON		15	--	--	--	11	8-60	K	03	2S	--	--	956
162N056W13ABA	J.BROWN		14	0	30	1952	--	--	H	03	R	--	--	990
162N056W13CCC	USBR 459		18	--	4	1968	7	8-68	U	03	2S	--	--	1102
162N056W16CBD	E.SYVUP		65	0	48	1915	58	--	K	03	G	--	--	1180
162N056W16DDD	NDSWC 1794		115	--	--	1960	--	--	U	--	--	--	--	1143
162N056W17B8A	J.STRONG		70	0	24	1940	56	--	K	03	R	--	--	1200
162N056W17CCB	S.SMITH		77	0	24	1940	26	8-60	K	03	R	--	--	1180
162N056W18ADA	J.PHILLIPS		118	0	36	1928	100	--	K	01	X	--	--	1205
162N056W19888	USBR 413		23	--	4	1968	DRY	8-68	U	03	X	--	--	1200
162N056W20AAA	NDSWC 3851	280	80	77	1	1969	44	10-69	U	03	3S	3	6.0	1175
162N056W218CB	J.SIMUNSON		59	0	36	1960	53	8-60	K	03	G	--	--	1185
162N056W26CCC	NDSWC 3564		260	--	--	1968	--	--	U	--	--	--	--	1115
162N056W26DDC	NDGS PEM-70-6		39	--	--	1970	--	--	U	--	--	--	--	1090

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (° C)	ALTITUDE OF LSD (FT.)
162N056W27CCC1	USBR 214		18	--	4	1968	8	5-68	U	03	2S	--	--	1131
162N056W27CCC2	NDGS PEM-70-5		39	--	--	1970	--	--	U	--	--	--	--	1133
162N056W30ADD1	NDSWC 5712-C		40	34	1	1970	DRY	6-70	U	03	X	--	--	1210
162N056W30ADD2	NDSWC 5712-B		80	74	1	1970	54	7-70	U	03	X	4	--	1210
162N056W30ADD3	NDSWC 5712-A		100	94	1	1970	54	7-70	U	01	7P	4	--	1210
162N056W30ADD4	NDSWC 5712		200	194	1	1970	--	--	U	N	JF	--	--	1210
162N056W31AAA	NDGS PEM-70-4		54	--	--	1970	--	--	U	--	--	--	--	1209
162N056W31BBB	USBR 212		25	--	4	1968	DRY	5-68	U	03	X	--	--	1222
162N056W3388A	NDSWC 3574		200	--	--	1968	--	--	U	--	--	--	--	1145
162N056W3488A	L. THOMPSON		20	--	30	1967	7	--	H	03	2S	--	--	1131
162N056W36AAA1	NDSWC 3848		400	--	--	1969	--	--	U	--	--	--	--	1062
162N056W36AAA2	NDSWC 3849		40	37	1	1969	8	10-69	U	03	2S	4	7.0	1062
162N056W36AAA3	USBR 215		23	--	4	1968	10	5-68	U	03	X	--	--	1060
162N057W01DAD	JOHNSON BROS		70	0	30	--	8	--	K	--	--	4	--	1210
162N057W02CCC	USBR 201		12	--	4	1968	DRY	5-68	U	03	3S	--	--	1229
162N057W03BCD	P. KOROPATNICKI		20	0	48	1954	18	8-60	K	--	--	--	--	--
162N057W0488A1	R. THOMPSON		42	--	36	--	23	7-68	U	--	--	--	--	--
162N057W0488A2	P. KOROPATNICKI		43	--	24	--	--	7-68	U	--	--	4	--	--
162N057W05CCC	NDSWC 4241		100	--	--	1970	--	--	U	--	--	--	--	1464
162N057W08BCC1	P. BRUSSEAU		22	0	30	--	18	--	H	--	--	4	--	--
162N057W08BCC2	P. BRUSSEAU		74	0	24	1962	8	--	S	P	JF	4	7.5	--
162N057W09CDD	E. RICHOTTE		42	42	6	1958	40	--	U	P	JF	5	9.5	--
162N057W10BBA	USBR 200		13	--	4	1968	DRY	--	U	03	P	--	--	--
162N057W10DAC	S. UHRICH		13	8	36	1949	10	--	H	03	G	4	--	1215
162N057W11AAB1	C. KARTES		64	30	30	1961	56	7-68	K	03	R	4	--	1250
162N057W11AAB2	NDSWC 3572		100	--	--	1968	--	--	U	--	--	--	--	1250
162N057W12BBC	L. HALL		39	0	--	--	36	7-68	U	03	S	--	8.5	1224
162N057W13ADC	H. SYRUP		45	0	48	--	39	--	H	03	S	--	--	1204
162N057W14CCC1	USBR 414		18	--	4	1968	DRY	8-68	U	03	6S	--	--	1207
162N057W14CCC2	NDGS CAV-70-2		24	--	--	1970	--	--	U	--	--	--	--	1210
162N057W14DDD	NDSWC 3571		60	--	--	1968	--	--	U	--	--	--	--	1225
162N057W18DAA	J. CLEARY		90	0	24	--	15	--	K	P	JF	6	--	--
162N057W22DDA	W. KING		48	--	--	1948	39	7-68	H	03	YS	--	--	1230
162N057W25AAD	R. SOEBY		65	0	36	1895	58	--	K	--	--	4	--	1225
162N057W25CCC	NDGS CAV-70-1		39	--	--	1970	--	--	U	--	--	--	--	1220
162N057W26AAC	W. KING		35	0	24	--	33	7-68	H	03	G	--	--	1228
162N057W27CDB1	NDSWC 5713-0		20	15	--	1970	7	7-70	U	P	JF	4	--	1469
162N057W27CDB2	NDSWC 5713-C		60	57	1	1970	--	--	U	P	JF	6	--	1470
162N057W27CDB3	NDSWC 5713-B		100	97	1	1970	--	--	U	P	JF	6	--	1470
162N057W27CDB4	NDSWC 5713-A		150	147	1	1970	--	--	U	P	JF	7	--	1470

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT.)	CASING DEPTH (FT.)	CASING DIAM-ETER (IN.)	DATE DRILLED (YEAR)	WATER LEVEL (FT.)	DATE WATER LEVEL MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPE-CIFIC CON-DUCT ANCE	TEM-PER-ATURE (°C)	ALTI-TUDE OF LSD (FT.)
162N057W27CDB5	NDSWC 5713		200	197	1	1970	DRY	--	U	P	JF	--	--	1470
162N057W27DDD	USBR 213		13	--	4	1968	8	5-68	U	03	Q	--	--	1400
162N057W28CDC	L.CHAPUTE		64	--	18	1967	15	--	H	P	JF	4	--	--
162N057W28DDC	USAF 184		130	--	5	1962	18	3-62	U	N	JF	--	4.5	1494
162N057W29CCC	P.LEPIRE		31	0	24	--	9	7-68	U	P	JF	5	8.5	--
162N057W30BDD1	O.LEPIRE		100	20	18	1925	15	--	S	P	JF	--	--	--
162N057W30BDD2	O.LEPIRE		32	32	18	1936	12	--	H	P	JF	5	--	--
162N057W31DAC	T.BNOIT		28	0	24	1945	12	--	H	51	S	5	--	--
162N057W32DDD	R.BEAUCHAMP		78	63	4	1959	50	--	K	P	JF	5	--	--
162N057W34BAD1	USAF 2184		130	--	3	1962	6	11-62	U	N	JF	--	6.0	1476
162N057W34BAD2	USAF 2184-E		65	--	4	1963	6	2-63	U	P	JF	--	4.5	1476
162N057W34BDC	T.CAMPBELL		70	0	36	--	--	--	S	P	JF	5	5.5	--
162N057W35ABA	W.HARDY		40	40	36	1963	35	--	H	N	JF	5	--	1230
162N057W36AAD	W.HARDY		28	18	36	1895	26	--	K	N	JF	4	--	1220
162N057W36ABA	NDSWC 3573		60	--	--	1968	--	--	U	--	--	--	--	1221
162N057W36DDD	NDSWC 4222	60	36	33	1	1970	33	10-70	U	03	YS	4	--	1220
162N058W0188C	A.SOLI		60	--	18	--	18	--	H	P	JF	--	--	--
162N058W038CC	O.DLSON		70	55	4	1960	16	--	U	P	JF	6	6.0	1550
162N058W040CD1	E.HAUG		62	8	24	1948	25	--	U	P	JF	--	--	1447
162N058W040CD2	E.HAUG		144	66	4	--	78	--	H	P	JF	--	--	1447
162N058W060DA1	H.DLSON		58	30	72	--	30	--	S	P	JF	6	9.5	1558
162N058W060DA2	H.DLSON		128	50	4	1951	38	--	S	P	JF	5	8.5	1558
162N058W08C88	E.GRAVES		133	44	4	1961	--	--	K	P	JF	6	9.5	1552
162N058W10DAD	W.CARSON		80	20	24	--	65	--	S	P	JF	6	--	1540
162N058W11BAA1	H.GENDRON		120	63	4	1961	20	--	H	P	JF	--	--	--
162N058W11BAA2	H.GENDRON		90	37	24	1967	14	--	S	P	JF	--	--	--
162N058W13CB1	E.GENDREAU		110	84	4	1962	25	--	H	P	JF	6	--	--
162N058W13CB2	E.GENDREAU		70	60	36	1968	25	--	S	P	JF	--	--	--
162N058W13DAD	A.GENDREAU		68	0	18	--	5	7-68	U	P	JF	6	--	--
162N058W17C8C	A.GREENE		115	--	4	--	100	--	U	P	JF	6	9.5	1571
162N058W18ADA	A.GREENE		57	--	18	--	6	7-68	U	P	JF	--	--	1564
162N058W18CCC	O.ROMFO		115	40	4	1939	30	--	S	P	JF	6	6.5	1594
162N058W19DDD	NDSWC 4233		40	--	--	1970	--	--	U	--	--	--	--	1609
162N058W210DD	O.RUDE		94	75	4	1961	40	--	H	P	JF	6	--	1545
162N058W22888	NDSWC 3812	120	117	97	1	1969	68	10-69	U	P	JF	6	--	1547
162N058W23DDA1	M.MAGNUS		108	42	4	1959	75	--	U	P	JF	--	--	--
162N058W23DDA2	M.MAGNUS		110	0	24	1918	90	--	S	P	JF	6	--	--
162N058W248881	E.GENDREAU		140	120	4	1960	--	--	H	P	JF	--	--	--
162N058W248882	E.GENDREAU		40	40	30	1968	--	--	H	--	--	6	--	--
162N058W27ACC1	E.RUDE		55	0	24	1915	--	--	U	P	JF	--	--	1546

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
162N058W27ACC2	E. RUDE		90	57	4	1961	30	--	H	P	JF	6	--	1546
162N058W2788C1	USAF 99-E		102	--	4	1962	18	5-62	U	P	JF	--	5.5	1544
162N058W2788C2	USAF 99-A		40	--	4	1962	19	5-62	U	P	JF	--	5.5	1544
162N058W2788D1	USAF 2099		130	--	4	1962	14	11-62	U	P	JF	--	5.5	1549
162N058W2788D2	USAF 2099-E		65	--	4	1963	13	2-63	U	P	JF	--	4.5	1549
162N058W2788D3	USAF 99		100	--	4	1962	11	3-62	U	P	JF	--	4.5	1549
162N058W27DDD	A. PETERSON		100	60	4	1957	20	--	H	P	JF	6	--	1551
162N058W2888C	C. RUDE		92	0	30	--	6	7-68	U	P	JF	5	9.5	1574
162N058W30DDD	C. SHORTRIDGE		100	--	4	1955	30	--	S	P	JF	6	9.0	1617
162N058W32AAD	E. AGAR		44	18	24	1923	18	--	K	P	JF	4	--	1613
162N058W368CD	C. THIELBAR		75	40	18	1950	22	--	H	P	JF	5	--	--
162N059W0188B1	R. JENNINGS		60	0	24	1915	40	--	H	P	JF	5	9.5	1573
162N059W0188B2	R. JENNINGS		175	84	4	1959	--	--	S	P	JF	6	--	1572
162N059W038CC1	D. WITZEL		103	81	4	1966	30	5-66	U	P	JF	6	--	1608
162N059W038CC2	D. WITZEL		125	81	4	1966	21	5-69	U	P	JF	6	--	1608
162N059W038CC3	D. WITZEL		65	--	30	1968	--	--	H	P	JF	6	--	1608
162N059W05DDD	H. MUTCHER EST		46	--	12	--	14	8-68	U	P	JF	5	6.5	1624
162N059W118AB	G. JENNINGS		101	--	4	--	12	8-68	U	P	JF	--	--	1592
162N059W138CA	E. MCDOWELL		110	63	4	1967	40	--	H	P	JF	6	--	1592
162N059W14C8A	E. WELSH		96	30	24	--	--	--	H	P	JF	6	--	1620
162N059W16CCC	R. MCFARLANE		33	--	12	--	5	8-68	U	P	JF	--	--	1624
162N059W16DDD	NDSWC 3811		40	--	--	1969	--	--	U	--	--	--	--	1630
162N059W18CCC	NDSWC 4235		40	--	--	1970	--	--	U	--	--	--	--	1625
162N059W22CCD	R. ULLYOTT		100	63	--	--	--	--	H	P	JF	6	--	1638
162N059W22DDA	USAF 100	130	129	--	4	1962	15	3-62	U	P	JF	--	4.0	1620
162N059W22DDB1	USAF 2100		134	--	4	1962	15	11-62	U	P	JF	--	5.0	1620
162N059W22DDB2	USAF 2100-E		60	--	4	1963	10	2-63	U	P	JF	--	4.0	1620
162N059W24C8B	C. LORETH		45	30	36	--	10	--	H	P	JF	6	6.5	1611
162N059W26DDD1	R. WELSH		90	0	18	1918	30	--	S	P	JF	5	9.5	1650
162N059W26DDD2	R. WELSH		116	100	4	1953	20	--	H	P	JF	5	10.0	1651
162N059W30DBB	R. RUEGER		75	42	4	1966	40	--	H	P	JF	4	--	1647
162N059W32BCD	J. PLUMMER		80	0	36	--	55	--	K	P	JF	4	9.5	1655
162N059W3388B	NDSWC 4234		40	--	--	1970	--	--	U	--	--	--	--	1635
162N059W33CCC	B. ZARN		95	--	6	1964	8	--	H	P	JF	5	--	1695
162N059W3488C	F. SECCOMBE		155	63	4	1963	60	--	H	P	JF	5	--	1682
162N059W34DAD	R. SODERSTROM		41	0	24	1937	10	7-68	S	P	JF	6	7.5	1657
162N059W36AAD	R. HAWKEN		120	40	4	1966	30	--	S	P	JF	5	--	1622
162N059W36ADA	R. HAWKEN		85	20	24	1918	18	--	H	P	JF	5	--	1621
162N060W03DAD	E. DEITZ		66	--	5	1960	60	--	H	P	JF	7	--	1590
162N060W04ADB	O. ZARN		110	--	4	1960	30	--	K	P	JF	7	--	1590

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPE-CIFIC CON-DUCT ANCE	TEMPER-ATURE (°C)	ALTI-TUDE OF LSP (FT.)
162N060W06CCR	G.RHODE		152	--	H	1950	25	--	H	P	JF	6	--	1585
162N060W08CBC	O.GERTH		45	--	24	--	--	--	H	--	--	5	--	1590
162N060W09CBC	F.GERTH		85	--	4	--	65	--	H	P	JF	--	--	1585
162N060W10DDD	R.RUTLEDGE		90	80	6	--	25	--	K	P	JF	7	--	1592
162N060W11DAA	R.IRWIN		200	--	4	1962	--	--	H	P	JF	6	--	1601
162N060W13CDD	E.EVANS		65	--	4	1964	12	--	H	P	JF	6	--	1623
162N060W17DDD	USCE SITE 2		157	32	8	1969	19	11-69	U	P	JF	--	--	1606
162N060W18CBC	A.GERTH		103	--	4	--	65	--	K	--	--	5	--	1596
162N060W19ADA	J.BUCHWEITE		120	--	6	1966	20	--	H	P	JF	5	--	1597
162N060W21AAA	NDSWC 3810		40	--	--	1969	--	--	U	--	--	--	--	1584
162N060W23ADA	O.CROCKETT		25	--	24	--	19	8-68	H	P	JF	4	--	1555
162N060W25ACC	T.FISCHER		80	--	--	1958	--	--	H	P	JF	6	--	1632
162N060W26ADA	USAF 101		130	--	4	1962	23	3-62	U	P	JF	--	4.0	1637
162N060W26ADB1	USAF 2101	130	126	--	3	1962	13	11-62	U	P	JF	--	7.5	1640
162N060W26ADB2	USAF 2101-E	65	55	--	3	1963	12	2-63	U	P	JF	--	4.0	1640
162N060W26DCC	NDGS CAV-69-36		16	--	--	1969	--	--	U	--	--	--	--	1630
162N060W29ADA	W.ARENDES		60	--	5	--	--	--	H	P	JF	6	--	1596
162N060W30CBC	E.RAFFENVEUL		80	--	6	--	--	--	H	P	JF	5	--	1591
162N060W34BCD	H.ARENDES		156	--	4	1956	18	--	H	P	JF	6	--	1633
162N061W02CDD	B.TIMIAN		64	--	3	--	20	7-68	U	P	JF	--	--	1582
162N061W03BAA	E.DOMRES		128	--	6	1958	--	--	H	P	JF	6	--	1570
162N061W05ACB	J.BACHMANN		73	--	4	--	12	--	S	P	JF	5	--	1581
162N061W08DAD	A.KLEIN		60	--	4	1953	--	--	H	P	JF	6	--	1572
162N061W10CBC	A.BREHMER		120	--	6	--	--	--	K	P	JF	6	--	1585
162N061W11DAD	A.TIMIAN		94	--	--	--	47	--	H	--	--	5	--	1592
162N061W12AAA	F.KOEHN		185	135	4	1965	--	--	H	P	JF	6	--	1586
162N061W12DDD	NDSWC 4256		140	--	--	1970	--	--	U	--	--	--	--	1580
162N061W13CDD	E.GERTH		90	--	6	--	--	--	H	--	--	4	--	1596
162N061W14A8B	NDGS CAV-69-2		17	--	--	1969	--	--	U	--	--	--	--	1573
162N061W18CBC1	A.LUNDGREN		56	--	5	1957	--	--	H	P	JF	6	--	1571
162N061W18CBC2	A.LUNDGREN		63	42	4	1964	--	--	S	P	JF	--	--	1571
162N061W20BAA	R.BREYER		66	--	5	1949	--	--	H	P	JF	5	--	1576
162N061W21AAA	NDSWC 3809		40	--	--	1969	--	--	U	--	--	--	--	1578
162N061W21CCD	I.RUEGEUR		70	--	4	--	25	--	K	P	JF	5	--	1585
162N061W24DDA1	USAF 187-1		130	--	5	1962	18	3-62	U	P	JF	--	4.0	1581
162N061W24DDA2	USAF 187-2		130	--	--	1962	--	--	U	--	--	--	--	1581
162N061W25DBA	J.DUBOIS		92	--	4	1961	40	--	K	P	JF	6	--	1590
162N061W25DDD	NDSWC 4257		40	--	--	1970	--	--	U	--	--	--	--	1588
162N061W26CDB1	USAF 2187-LCC		30	--	3	1963	8	2-63	U	P	JF	--	3.0	1575
162N061W26CDB2	USAF 2187-EF		130	--	4	1962	8	11-62	U	P	JF	--	6.5	1575

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT.)	CASING DEPTH (FT.)	CASING DIAM-ETER (IN.)	DATE DRILLED (YEAR)	WATER LEVEL (FT.)	DATE WATER LEVEL MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPE-CIFIC CON-DUCT ANCE	TEM-PER-A-TURE (°C)	ALTI-TUDE-OF LSD (FT.)
162N061W26CDB3	USAF 2187-WST		80	--	4	1963	10	4-63	U	P	JF	--	4.5	1575
162N061W26CDB4	USAF 2187	132	111	65	7	1963	12	6-63	H	P	JF	6	--	1575
162N061W26DDD	W.JAKGUBEK		75	--	5	1965	20	--	H	P	JF	5	--	1586
162N061W27AAB	T.KRAM		165	--	4	1945	--	--	H	P	JF	5	--	1586
162N061W28CBC	NDGS CAV-69-1		30	--	--	1969	--	--	U	--	--	--	--	1583
162N061W29CDA	F.MUHS		72	--	5	--	17	7-68	U	P	JF	5	6.5	1575
162N061W29DAD	G.RHODE		80	--	6	--	12	--	H	P	JF	6	--	1583
162N061W30BBC	USAF 186		130	4	5	1962	16	3-62	U	P	JF	--	5.5	1565
162N061W30CCD	W.MARCHELL		100	--	4	--	20	--	H	P	JF	7	--	1571
162N061W33AAA	J.BIEWER		48	--	6	1927	12	--	K	P	JF	6	--	1575
162N061W33CCA	W.KEMPERT		34	0	--	--	13	7-68	U	--	--	5	6.0	1573
162N061W34DCD	W.RING		65	--	4	1959	10	--	H	P	JF	6	--	1573
162N062W02ABB	A.KRAM		130	--	6	--	--	--	H	P	JF	6	--	1562
162N062W03BAB	NDSWC 4253		160	--	--	1970	--	--	U	--	--	--	--	1557
162N062W07ADD	B.MOWBRAY		80	77	4	1965	--	--	H	51	YG	5	--	1560
162N062W08CAA	T.EICKERBROCK		72	--	4	--	16	--	K	P	JF	6	--	1565
162N062W16DDD	NDSWC 3808		40	--	--	1969	--	--	U	--	--	--	--	1568
162N062W18DDD	NDSWC 4175		160	--	--	1970	--	--	U	--	--	--	--	1562
162N062W19ADD	L.HART		60	--	6	--	--	--	H	--	--	6	--	1569
162N062W21AAB	A.STEINKE		40	--	6	--	25	--	H	P	JF	6	--	1572
162N062W22AAD	V.GREENING		60	--	4	--	12	--	H	P	JF	6	--	1567
162N062W24CCB	P.BLAKE		80	--	6	--	--	--	H	P	JF	6	--	1575
162N062W26AAA	NDSWC 4260		60	--	--	1970	--	--	U	--	--	--	--	1556
162N062W30AAD	F.MCLEAN		87	--	6	--	--	--	H	P	JF	6	--	1570
162N062W30DAD	USAF 185		130	0	5	1962	16	3-62	U	P	JF	--	5.0	1568
162N062W32AAA	W.HART		88	78	4	1960	12	--	H	P	JF	6	--	1578
162N062W32BBB	NDSWC 4153		80	--	--	1970	--	--	U	--	--	--	--	1567
162N062W34ABC	G.GREENING		85	--	6	--	--	--	H	P	JF	5	--	1580
162N063W01BDC	H.ROMFO		110	--	4	--	20	--	S	P	JF	6	--	1577
162N063W02CDC	J.MOORE		29	0	20	--	11	7-68	U	P	JF	6	5.5	1577
162N063W07AAA	NDSWC 4170		200	--	--	1970	--	--	U	--	--	--	--	1580
162N063W08CBB1	A.LARSON		110	--	6	1911	--	--	H	--	--	5	--	1586
162N063W08CBB2	A.LARSON		105	104	7	1949	--	--	H	--	--	4	--	1586
162N063W09BAA	C.SHORTRIDGE		130	--	6	1956	--	--	H	--	--	5	--	1596
162N063W10BBB	NDSWC 4177		240	--	--	1970	--	--	U	--	--	--	--	1580
162N063W10CCC	NDSWC 4176		180	--	--	1970	--	--	U	--	--	--	--	1580
162N063W12BBB	D.MCDONALD		165	--	4	--	8	--	K	P	JF	5	--	1576
162N063W13CDD	NDSWC 4174		200	--	--	1970	--	--	U	--	--	--	--	1572
162N063W15CCC	NDSWC 3807	280	110	107	1	1969	7	12-69	U	51	8G	4	--	1581
162N063W15CDD	H.RENEROW		247	--	4	1955	20	--	H	P	JF	6	--	1575

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
162N063W17AAA	G.LARSON		110	--	4	1911	20	--	H	--	--	4	--	1595
162N063W18COD	H.CROCKETT		87	--	6	--	27	--	H	P	JF	6	--	1582
162N063W20AAA	K.MOORE		105	--	4	--	12	--	K	P	JF	6	--	1592
162N063W20BBB	NDSWC 4171		40	--	--	1970	--	--	U	--	--	--	--	1590
162N063W21BBB	NDSWC 4172	80	40	37	1	1970	--	--	U	51	S	5	5.5	1594
162N063W22AAA	NDSWC 4173		430	--	--	1970	--	--	U	--	--	--	--	1580
162N063W24ACD	T.EICKENBROCK		107	--	4	--	15	--	H	P	JF	6	--	1564
162N063W26DAA	W.GAGE		100	--	4	--	10	--	H	P	JF	5	--	1578
162N063W26DDD	NDSWC 4154		60	--	--	1970	--	--	U	--	--	--	--	1575
162N063W28AAA	NDSWC 4157		60	--	--	1970	--	--	U	--	--	--	--	1580
162N063W29CCC	NDSWC 4158		80	--	--	1970	--	--	U	--	--	--	--	1600
162N063W29DAC	E.OLSEN		178	--	4	--	20	--	H	P	JF	6	--	1604
162N063W30ABB	NDGS CAV-69-52		24	--	--	1969	--	--	U	--	--	--	--	1589
162N063W31AAB	H.BITTNER		90	--	4	--	--	--	K	P	JF	6	--	1601
162N063W33AAD	NDSWC 4155		40	--	--	1970	--	--	U	--	--	--	--	1587
162N063W33ABB	V.HANGGI		170	--	6	--	10	--	H	P	JF	6	--	1590
162N064W04ADD	M.GEBOR		117	--	4	1950	15	--	H	P	JF	5	9.0	1596
162N064W05BBB1	A.FORSETH		144	--	6	1944	22	8-68	H	P	JF	5	9.0	1614
162N064W05BBB2	NDSWC 4164		180	--	--	1970	--	--	U	--	--	--	--	1618
162N064W06CCC	NDGS CAV-69-50		39	--	--	1969	--	--	U	--	--	--	--	1627
162N064W07DDD	NDGS CAV-69-49		19	--	--	1969	--	--	U	--	--	--	--	1627
162N064W09AAA1	A.SILLERS		122	86	6	1966	20	6-66	H	P	JF	5	--	1602
162N064W09AAA2	A.SILLERS		90	--	4	1914	16	--	S	P	JF	7	8.5	1602
162N064W11CCC	NDSWC 3806		180	--	--	1969	--	--	U	--	--	--	--	1600
162N064W13DDD	J.SCHAFE		150	--	6	1948	20	--	H	P	JF	6	9.0	1591
162N064W14AAA	NDGS CAV-69-48		49	--	--	1969	--	--	U	--	--	--	--	1591
162N064W14DCC	G.HENDERSON		167	127	4	1965	25	3-65	H	51	YG	6	--	1604
162N064W15CBC	BORDER CENTRAL		194	--	--	--	--	--	P	P	JF	6	--	1617
162N064W16DAB	I.HENDERSON		191	167	4	1965	30	3-65	H	--	--	--	--	1618
162N064W16DAD	G.MCCONNELL		206	172	4	1965	30	3-65	H	P	JF	--	--	1619
162N064W16DDA	J.HOOVER		180	--	4	1965	18	10-65	H	P	JF	--	--	1615
162N064W17DDC	T.SWENSEN		270	--	6	--	60	--	H	P	JF	5	9.0	1635
162N064W18DDD	D.HENRIKSON		170	--	6	--	20	--	H	P	JF	6	9.0	1626
162N064W19ADA	D.RENFROW		--	--	4	--	--	--	K	--	--	5	9.5	1626
162N064W20BBB	NDSWC 4162		200	--	--	1970	--	--	U	--	--	--	--	1625
162N064W21AAA	M.TRUDEL		195	--	6	1965	--	--	K	P	JF	6	9.0	1620
162N064W21AAB	D.HENDERSON		160	--	6	1964	20	--	K	--	--	6	9.0	1621
162N064W21DDD	P.HERTZELL		210	--	4	--	20	--	K	P	JF	6	9.0	1623
162N064W23DAA	M.THOMPSON		160	--	6	--	20	--	H	P	JF	5	9.0	1606
162N064W24ADA	L.HENDERSON		169	--	6	--	22	8-68	K	P	JF	6	8.5	1597

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
162N064W248AB	W.ROSE		183	--	6	1963	25	--	H	P	JF	6	9.0	1603
162N064W258BB	NDSWC 5981		140	--	--	1971	--	--	U	--	--	--	--	1607
162N064W26CDB	J.GOODWILL		130	--	4	--	--	--	H	P	JF	--	--	1617
162N064W30CCC	NDGS CAV-69-51		14	--	--	1969	--	--	U	--	--	--	--	1608
162N064W31DDA	A.HERTZELL		100	--	4	1967	7	8-68	H	P	JF	6	9.0	1617
162N064W33AAA1	NDSWC 4160		40	--	--	1970	--	--	U	--	--	--	--	1630
162N064W33AAA2	M.DAWSON		23	--	8	--	12	5-69	U	P	JF	--	--	1630
162N064W35BBB	C.MOUNTAIN		113	--	6	--	20	--	H	P	JF	5	9.5	1618
162N064W368BB	NDSWC 4159		40	--	--	1970	--	--	U	--	--	--	--	1619
162N064W36CCC	T.SEAORTH		66	--	6	--	20	--	H	P	JF	5	8.5	1626
163N051W05DBA	NDSHD IN-003 6		139	45	4	1957	2	5-57	U	41	9P	--	--	794
163N051W188BA	R.WILLS		17	--	36	--	7	8-68	U	01	7P	5	--	793
163N051W188CB	J.OHARA		17	--	--	1940	--	--	H	01	7P	4	9.0	791
163N051W278BC	G.HARRIS		15	--	12	1933	8	9-37	U	01	7P	--	6.0	794
163N052W06AAC	D.KELM		14	--	--	--	--	--	S	01	7P	6	6.0	803
163N052W17BDC	J.LEMBKE		15	0	48	--	7	8-68	S	01	7P	6	8.0	799
163N052W20DDD	P.CROTTY		25	--	36	--	2	--	H	01	7P	5	--	799
163N052W248AB	NDSWC 3860		220	--	5	1969	F	10-69	U	SM	JL	--	--	802
163N052W29DDB	J.BERARD		14	--	--	--	6	--	H	01	7P	6	9.5	793
163N052W35AAA	H.PAULSON		16	--	--	--	3	8-69	U	01	7P	5	9.0	795
163N053W01DCC	E.SCHULTZ		25	--	48	1956	14	8-68	U	01	7P	4	7.5	807
163N053W04ABB	L.QUINNELL		30	0	48	1935	12	--	S	01	6Q	3	--	822
163N053W06CBB	USGS 6		52	--	--	1949	--	--	U	--	--	--	--	828
163N053W078BB	NDSWC 4230		220	--	--	1970	--	--	U	--	--	--	--	830
163N053W09ABA	L.AUGER		25	--	--	--	--	--	H	01	6Q	5	--	817
163N053W158DD	L.BONAIME		25	0	--	--	6	--	U	01	7P	4	--	813
163N053W188AB	R.VOSPER		10	0	--	1958	--	--	H	01	6Q	4	--	826
163N053W20CCD	NDGS PEM-70-36		34	--	--	1970	--	--	U	--	--	--	--	830
163N053W21ADC	J.BROWN		229	--	--	1941	F	--	S	E	--	--	--	817
163N053W23CBB	NDSWC 3861		190	--	--	1969	--	--	U	--	--	--	--	813
163N053W23DDA	W.MORRISON		15	--	--	--	5	--	S	01	7P	5	--	811
163N053W298BA	J.BARTON		60	--	--	1918	0	--	S	01	--	7	--	825
163N054W01ABD	R.VOSPER		28	--	48	1940	12	10-48	H	01	7P	--	--	829
163N054W02ABC	C.STEGMAN		27	--	36	1926	16	10-48	H	01	7P	--	--	838
163N054W02BDD	F.MENKE		28	--	36	1937	10	10-48	H	01	7P	--	--	839
163N054W02DDD1	F.TRENBETH		15	--	40	1947	11	10-48	S	01	2S	--	--	835
163N054W02DDD2	F.TRENBETH		16	--	30	--	13	10-48	H	01	S	--	--	835
163N054W12AAA	USGS 7		97	--	--	1949	--	--	U	--	--	--	--	829
163N054W12ADD	USGS 8		37	--	--	1949	--	--	U	--	--	--	--	829
163N054W13AAA	USGS 13		42	--	--	1949	--	--	U	--	--	--	--	829

OR

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
163N054W13AAD	USGS 14		37	--	--	1949	--	--	U	--	--	--	--	829
163N054W13DAA	USGS 15		42	--	--	1949	--	--	U	--	--	--	--	829
163N054W15CC8	O. STEGMAN		16	--	48	1939	7	11-48	H	01	2S	--	--	840
163N054W16BC8	USGS 17		62	--	--	1949	--	--	U	--	--	--	--	855
163N054W16DDD	NDSWC 3862		240	--	--	1969	--	--	U	--	--	--	--	842
163N054W17AAD	USGS 18		42	--	--	1949	--	--	U	--	--	--	--	853
163N054W17ADA	USGS 16		32	--	--	1949	--	--	U	--	--	--	--	856
163N054W17BCC1	NDGS PEM-70-3		34	--	--	1970	--	--	U	--	--	--	--	860
163N054W17BCC2	NDGS PEM-70-2		49	--	--	1970	--	--	U	--	--	--	--	863
163N054W17BCD	M. HUGHES		24	--	48	--	16	11-48	H	52	2S	--	--	861
163N054W18ADD	NDGS PEM-70-1		29	--	--	1970	--	--	U	--	--	--	--	860
163N054W25DAB1	E. THOM		200	--	2	1940	6	--	S	51	R	7	--	827
163N054W25DAB2	E. THOM		125	--	48	--	4	10-41	S	51	R	--	--	828
163N054W27CCC	USBR 419		8	--	4	1968	DRY	8-68	U	01	7P	--	--	848
163N054W30CCC	USBR 420		18	--	4	1968	6	8-68	U	01	7P	--	--	874
163N054W33CDA	A. WISENTHAL		40	--	--	--	11	11-48	H	01	7P	--	--	855
163N054W34AAB	A. SAGORT		12	--	--	--	7	11-48	H	01	2S	--	--	841
163N055W01CCD	NDSWC 3863		280	--	--	1969	--	--	U	--	--	--	--	871
163N055W03CCC	USBR		15	--	--	1963	--	--	U	--	--	--	--	958
163N055W04CBC	USBR DH1		20	--	--	1963	--	--	U	--	--	--	--	890
163N055W04CCC1	NDSWC 1771		388	--	--	1960	--	--	U	--	--	--	--	893
163N055W04CCC2	USBR 435		18	--	--	1968	--	--	U	--	--	--	--	897
163N055W05ABC	A. BEST		12	--	36	--	8	--	H	02	1S	--	--	896
163N055W05COC	D. BEST		22	--	36	--	13	8-60	H	02	S	--	--	906
163N055W05DDD	USBR DH7		20	--	4	1963	8	4-63	U	02	2S	--	--	894
163N055W06AAC	L. DALZELL		13	0	48	1915	12	--	K	02	1S	--	5.5	902
163N055W06BAB1	V. BERG		20	--	36	--	10	--	H	01	1S	--	--	906
163N055W06BAB2	V. BERG		25	--	36	1950	10	--	S	01	S	6	--	906
163N055W06BBB	V. BERG		9	--	24	--	--	--	H	01	1S	5	--	908
163N055W06CCD1	M. BERG		15	--	4	1959	13	--	H	01	7P	--	--	912
163N055W06CCD2	M. BERG		15	--	--	1951	6	--	S	01	S	--	--	912
163N055W06DDD	V. FITZSIMONDS		16	--	62	--	8	8-60	H	01	1S	--	--	913
163N055W07AAA	E. BAILLY		18	--	30	1950	6	--	H	01	1S	--	--	913
163N055W07ADD	USBR DH8		35	--	--	1963	--	--	U	--	--	--	--	911
163N055W08AAA	D. HOLMES		18	--	--	1910	10	--	H	51	R	--	--	895
163N055W08AAB	D. HOLMES		18	--	40	1910	8	--	H	02	S	--	--	895
163N055W08CAD	USBR DH5		30	--	--	1963	--	--	U	--	--	--	--	904
163N055W08DAD	USBR DH3		15	--	4	1963	12	4-63	U	01	Q	--	--	895
163N055W08DCC	USBR DH4		35	--	--	1963	--	--	U	--	--	--	--	909
163N055W08DDD	USBR DH42		25	--	--	1963	--	--	U	--	--	--	--	898

LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT.)	CASING DEPTH (FT.)	CASING DIAM-ETER (IN.)	DATE DRILLED (YEAR)	WATER LEVEL (FT.)	DATE WATER LEVEL MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPE-CIFIC CON-DUCT ANCE	TEM- PER- ATURE (°C)	ALTI- TUDE- OF LSD (FT.)
163N055W09AAA	USBR DH37		13	--	--	1963	--	--	U	--	--	--	--	882
163N055W098BB1	USBR 16		16	--	4	1961	11	11-61	U	01	2S	--	--	893
163N055W098BB2	USBR K53		17	--	--	1963	--	--	U	--	--	--	--	895
163N055W098BC	USBR DH2		20	--	4	1963	10	4-63	U	01	X	--	--	895
163N055W09DAD	NDSWC 3864		60	--	--	1969	--	--	U	--	--	--	--	885
163N055W10ABB	USBR DH38		14	--	--	1963	--	--	U	--	--	--	--	880
163N055W15BBC	NDSWC 3865		60	--	--	1969	--	--	U	--	--	--	--	885
163N055W16DAD	NDSWC 3866		80	--	--	1969	--	--	U	--	--	--	--	886
163N055W16DDD1	NDSWC 1795		63	--	--	1960	--	--	U	--	--	--	--	885
163N055W16DDD2	USBR 436		13	--	4	1968	10	8-68	U	01	Q	--	--	888
163N055W17AAA1	USBR K51		12	10	4	1963	10	4-63	U	01	X	--	--	898
163N055W17AAA2	USBR 14W		17	--	4	1961	9	11-61	U	01	2S	--	--	898
163N055W17AAA3	NDSWC 4228		400	--	--	1970	--	--	U	--	--	--	--	900
163N055W17CCC	USBR DH10		35	--	--	1963	--	--	U	--	--	--	--	900
163N055W17DAA	R.FITZSIMONDS		22	--	36	1940	15	--	S	01	1S	--	--	905
163N055W17CCC	USBR DH6		30	--	--	1963	--	--	U	--	--	--	--	898
163N055W188BB1	NDSWC 3867	120	40	37	1	1969	8	11-69	U	1G	1S	--	--	920
163N055W188BB2	USBR DH9		35	--	--	1963	--	--	U	--	--	--	--	920
163N055W188CC	NDSWC 3868		80	--	--	1969	--	--	U	--	--	--	--	916
163N055W19BAB	E.Q*KEEFE		27	--	--	--	22	--	K	21	YS	--	6.5	904
163N055W20CDC	L.DALZELL		18	--	--	1954	10	--	K	21	7P	--	--	896
163N055W21ADD	NDSWC 3876	60	40	37	1	1969	12	11-69	U	51	YR	5	6.0	887
163N055W21BBB	USBR 15		20	--	4	1961	15	11-61	U	01	X	--	--	890
163N055W228BB	NDSWC 3875	340	240	237	1	1969	+12	12-70	U	51	S	7	--	880
163N055W22CCC1	USBR 422		18	--	4	1968	10	8-68	U	01	Q	--	--	900
163N055W22CCC2	A.LACOSTE		23	--	12	1965	--	--	U	01	Q	5	--	900
163N055W26CCC	USBR 421		18	--	4	1968	9	8-68	U	01	Q	--	--	896
163N055W278BB	NDSWC 1772		52	--	--	1960	--	--	U	--	--	--	--	900
163N055W28ABA1	A.LATRAVERSE		25	--	38	1936	18	9-41	S	01	YS	--	6.5	902
163N055W28ABA2	A.LATRAVERSE		25	--	45	--	20	9-41	U	01	1S	--	8.5	903
163N055W29CBA1	A.VERVILLE		14	--	30	--	5	--	S	01	7P	--	--	922
163N055W29CBA2	A.VERVILLE		20	--	30	--	10	--	H	01	7P	--	--	923
163N055W30ABB	A.DALZELL		32	--	30	--	23	--	H	01	1S	--	--	926
163N055W30CCC	USBR 423		18	--	4	1968	17	8-68	U	01	Q	--	--	930
163N055W31ABC	J.CLIFFORD		15	--	36	--	11	--	H	01	1S	--	--	926
163N055W31CCC	K.WEEKS		24	--	72	1930	5	--	H	01	1S	--	9.0	936
163N055W32BAD	T.SHERLOCK		24	--	36	1948	10	--	H	01	1S	--	--	926
163N055W33BBB	NDGS PEM-70-40		34	--	--	1970	--	--	U	--	--	--	--	920
163N055W36DDD	E.PETERSON		284	--	2	1952	0	--	U	51	R	--	--	880
163N056W028BC1	J.GAPP		17	--	36	1941	8	--	H	02	S	--	--	922

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
163N056W0288C2	J. GAPP		70	--	36	1932	9	--	S	02	S	--	--	923
163N056W03AAD	S. HOFFMAN		110	--	48	--	10	--	K	01	2S	--	--	923
163N056W03BCB	USBR 6		15	--	4	1961	10	11-61	U	02	R	5	--	933
163N056W03C8C	USBR		45	--	4	1963	22	5-63	U	01	2S	--	--	940
163N056W03C8C	C. THOMPSON		23	0	--	--	14	9-37	U	02	S	--	6.0	933
163N056W04DAD	C. TESMER		16	0	24	1950	9	--	H	02	1S	--	--	936
163N056W05AAA	USBR DH40		15	--	--	1963	--	--	U	--	--	--	--	945
163N056W0588B	USBR DH41		15	--	4	1963	6	5-63	U	01	X	--	--	951
163N056W05DDD	B. BELANUS		28	0	48	--	7	8-60	--	01	S	--	--	945
163N056W06BCC	USBR 2A		12	--	4	1961	DRY	11-61	U	01	2S	--	--	961
163N056W07DAA	NDSWC 3877		100	--	--	1969	--	--	U	--	--	--	--	955
163N056W08DCC	USBR DH22		35	--	--	1963	--	--	U	--	--	--	--	955
163N056W09AAA	NDGS PEM-70-24		19	--	--	1970	--	--	U	--	--	--	--	935
163N056W09AAD1	H. TESMER		17	--	36	1920	10	9-41	U	02	G	--	--	936
163N056W09AAD2	P. TESMER		16	--	36	--	10	8-60	H	02	G	--	--	936
163N056W09ADD	USBR DH36		35	--	--	1963	--	--	U	--	--	--	--	936
163N056W09C8B	NDSWC 1769		126	--	--	1960	--	--	U	--	--	--	--	949
163N056W09CCC	USBR DH20		35	--	4	1963	8	4-63	U	01	2S	--	--	950
163N056W09CDD	USBR DH21		35	--	--	1963	--	--	U	--	--	--	--	944
163N056W10AAA	NDGS PEM-70-25		19	--	--	1970	--	--	U	--	--	--	--	930
163N056W10ADD	USBR DH15		35	--	--	1963	--	--	U	--	--	--	--	930
163N056W10BAB	A. GREIDE		19	0	36	--	14	8-60	H	02	1S	--	--	933
163N056W11AAA	USBR 8		20	--	4	1961	9	11-61	U	02	1S	--	--	920
163N056W11AAD1	L. HURLEY		16	--	30	1959	8	--	H	02	1S	--	7.5	921
163N056W11AAD2	L. HURLEY		18	--	30	1913	8	--	S	02	1S	--	6.5	921
163N056W11BAA1	V. HURLEY		22	0	--	--	8	7-68	U	02	1S	6	--	923
163N056W11BAA2	V. HURLEY		22	0	36	--	8	7-60	U	02	1S	--	--	923
163N056W1188B	NDSWC 3872	340	305	299	1	1969	22	11-69	U	D	2V	9	--	927
163N056W11CCA	USBR DH33		35	--	--	1963	--	--	U	--	--	--	--	927
163N056W12CCB1	USBR DH14		35	--	--	1963	--	--	U	--	--	--	--	925
163N056W12CCB2	USBR DH34		35	--	--	1963	--	--	U	--	--	--	--	924
163N056W12DCC	M. HALVERSON		15	--	30	1940	12	--	K	01	1S	--	--	923
163N056W13ADA1	NDSWC 1796		52	--	--	1960	--	--	U	--	--	--	--	920
163N056W13ADA2	USBR 11		20	--	4	1961	10	11-61	U	02	X	--	--	918
163N056W13ADA3	USBR DH35A		30	--	--	1963	--	--	U	--	--	--	--	920
163N056W13ADD	USBR 434		23	--	4	1968	9	8-68	U	21	Q	--	--	910
163N056W13BAC	N. ROSE		22	--	36	1958	14	8-60	K	01	1S	--	--	926
163N056W13BCA	H. LEE		18	--	48	1955	15	--	K	01	1S	--	6.5	926
163N056W14AAA	USBR DH12		35	--	--	1963	--	--	U	--	--	--	--	925
163N056W14AAD	USBR DH16		35	--	4	1963	5	4-63	U	01	YS	--	--	925

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
163N056W148CC	USBR DH13		20	--	4	1963	12	4-63	U	01	7P	--	--	920
163N056W158BB	USBR 7		14	--	4	1961	10	11-61	U	02	R	--	--	938
163N056W158BC	USBR 433		18	--	4	1968	9	8-68	U	1G	7R	--	--	941
163N056W158CC	NDSWC 1786		73	--	--	1960	--	--	U	--	--	--	--	939
163N056W15C8C	A.ANDREWS		22	--	42	1944	20	--	K	02	1S	--	--	940
163N056W15DDC	NDSWC 1797		42	--	--	1960	--	--	U	--	--	--	--	925
163N056W16ACC	USBR DH18		35	--	4	1963	15	4-63	U	01	6Q	--	--	945
163N056W16CCC	USBR DH19		35	--	4	1963	22	4-63	U	51	YS	--	--	953
163N056W16CDA	M.TESMER		26	--	36	1930	20	--	K	51	YS	--	--	947
163N056W17AAD	A.GAUTHIER		17	--	72	--	9	8-60	S	02	S	--	--	950
163N056W178BB	USBR 4		20	--	4	1961	8	11-61	U	02	7S	--	--	956
163N056W17CCC	USBR DH26		35	--	--	1963	--	--	U	--	--	--	--	961
163N056W18BCC	NDSWC 3878		60	--	--	1969	--	--	U	--	--	--	--	975
163N056W19AAA	NDSWC 1780		52	--	--	1960	--	--	U	--	--	--	--	960
163N056W19BBC	USBR 431		18	--	4	1968	10	8-68	U	03	S	--	--	1020
163N056W20ADC	NDSWC 1789		315	--	--	1960	--	--	U	--	--	--	--	958
163N056W20BCC	USBR 430		13	--	4	1968	9	8-68	U	1G	S	--	--	988
163N056W20CCB	NDSWC 1779		52	--	--	1960	--	--	U	--	--	--	--	998
163N056W20CDB	NDSWC 1785		52	--	--	1960	--	--	U	--	--	--	--	981
163N056W20DCD	WALHALLA CITY		28	--	140	1897	18	1-36	P	1G	S	--	--	950
163N056W21ABB	USBR DH17		45	--	4	1963	18	4-63	U	01	8Q	--	--	948
163N056W22DDA	A.HEPBURN		23	0	36	1944	20	--	K	02	1S	--	--	944
163N056W23ABB	J.DALZELL		20	0	48	--	16	--	K	02	2S	--	--	931
163N056W23CBB	A.GENEROUS		33	--	48	1910	28	--	H	02	1S	--	--	941
163N056W23CCC	NDSWC 4227	180	63	56	1	1970	11	10-70	U	1G	2S	4	6.0	943
163N056W23DBD	F.DALZELL		15	--	60	--	11	8-60	K	01	1S	--	--	934
163N056W24AAA1	NDSWC 1773		200	--	--	1960	--	--	U	--	--	--	--	905
163N056W24AAA2	USBR DH11		20	--	--	1963	--	--	U	--	--	--	--	906
163N056W24AAA3	NDSWC 3869		140	--	--	1969	--	--	U	--	--	--	--	905
163N056W24AAA4	NDSWC 3869-A		40	35	4	1969	16	11-69	U	51	2S	4	6.5	905
163N056W24ADA1	NDSWC 3870	300	284	278	1	1969	+1	11-69	U	D	2V	8	6.0	906
163N056W24ADA2	NDSWC 3871		40	37	1	1969	19	11-69	U	51	R	--	--	906
163N056W24BDB1	G.LUCIER		30	--	48	1930	28	--	H	01	1S	--	--	926
163N056W24BDB2	G.LUCIER		30	0	36	1910	28	--	H	01	1S	--	--	910
163N056W24DAD	NDSWC 3873	140	40	37	1	1969	13	11-69	U	51	2S	5	--	905
163N056W24DBD	F.LUCIER		12	--	36	1937	8	--	H	01	7P	--	--	926
163N056W24DDD	NDSWC 3874	80	50	47	1	1969	19	11-69	U	1G	1S	4	--	924
163N056W25ABA	J.DALZELL		19	--	30	1925	15	--	H	01	1S	--	--	929
163N056W25ABB	J.DALZELL		19	--	53	1925	15	9-41	S	01	1S	--	8.5	929
163N056W26BBB	USBR 458		23	--	4	1968	10	8-68	U	1G	2S	--	--	946

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LOCAL WELL NUMBER	OWNER	DRILLED DEPTH (FT)	WELL DEPTH (FT.)	CASING DEPTH (FT.)	CASING DIAM-ETER (IN.)	DATE DRILLED (YEAR)	WATER LEVEL (FT.)	DATE WATER LEVEL MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPE-CIFIC CON-DUCT ANCE	TEM- PER- ATURE (°C)	ALTI- TUDE- OF LSD (FT.)
163N056W268CB	J. HORGAN		20	--	36	--	15	--	K	02	1S	--	6.5	945
163N056W27ADC	H. WENDT		15	--	36	1945	7	--	H	01	1S	--	--	945
163N056W28ADA	R. HEIDMANN		17	0	42	--	14	8-60	H	02	YS	--	--	954
163N056W28CCB	NDSWC 1787		63	--	--	1960	--	--	U	--	--	--	--	--
163N056W28CDD	USBR 426		18	--	4	1968	14	8-68	U	03	3S	--	--	1180
163N056W28DBC	NDSWC 1774		52	--	--	1960	--	--	U	--	--	--	--	988
163N056W29ABA	WALHALLA CITY		42	--	180	1922	20	1-36	P	21	X	--	--	945
163N056W29ABB	WALHALLA NO1		35	30	48	1946	25	7-60	P	21	YR	--	--	948
163N056W29ABD	WALHALLA NO2		25	20	12	1961	23	7-60	P	21	R	4	--	947
163N056W29ADA1	NDSWC 1784		73	--	--	1960	13	7-60	U	1G	7R	--	9.0	945
163N056W29ADA2	USBR DH25		35	--	--	1963	--	--	U	1G	--	--	--	951
163N056W29BAD	NDSWC 1791		52	--	--	1960	--	--	U	--	--	--	--	960
163N056W29BDD	NDSWC 1778		31	--	--	1960	12	7-60	U	1G	R	--	9.0	950
163N056W29CDD1	NDSWC 3881		400	--	--	1969	--	--	U	--	--	--	--	955
163N056W29CDD2	NDSWC 3882	40	25	20	4	1969	5	10-69	U	1G	2G	4	6.0	957
163N056W29DBB	WALHALLA NO3	39	32	22	12	1968	10	1-68	P	21	Y	4	5.5	950
163N056W29DCC	NDSWC 1788		52	--	5	1960	6	7-60	U	51	G	--	9.5	960
163N056W30ABB	NDGS PEM-70-23		49	--	--	1970	--	--	U	--	--	--	--	1137
163N056W30BBB1	NDSWC 1790		147	--	--	1960	--	--	U	--	--	--	--	1143
163N056W30BBB2	USBR 432		18	--	4	1968	18	8-68	U	03	2S	--	--	1143
163N056W31DAA	NDSWC 1792		42	--	--	1960	--	--	U	--	--	--	--	963
163N056W31DAC	NDGS PEM-70-22		26	--	--	1970	--	--	U	--	--	--	--	968
163N056W32ABB	NDSWC 1783		147	--	--	1960	24	7-60	U	--	--	--	--	1020
163N056W34BCB1	O. HALVORSON		16	--	18	1948	13	--	K	1G	YS	--	--	995
163N056W34BCB2	NDSWC 1793		52	--	--	1960	--	--	U	--	--	--	--	980
163N056W34BCD	USBR 425		23	--	4	1968	8	8-68	U	1G	3S	--	--	1010
163N056W34CCC	H. JAMESON		190	0	18	1911	190	--	K	03	S	--	5.5	1171
163N056W34ODD	NDSWC 1775		84	--	5	1960	17	7-60	U	1G	S	--	9.5	983
163N056W34ODC1	USBR 424		23	--	4	1968	14	8-68	U	1G	2S	--	--	1002
163N056W34ODC2	NDSWC 5936	120	55	52	1	1971	14	8-71	U	1G	8S	4	7.0	1010
163N056W36AAA	E. ARNOLD		25	--	36	1953	20	8-60	K	01	1S	--	9.5	931
163N057W01DDD	USBR 3		20	--	4	1961	DRY	--	U	01	P	--	--	965
163N057W02DBB	L. LUCIER		15	--	48	--	12	8-60	U	01	P	--	--	992
163N057W03BDB	C. GASTONQUAY		20	--	36	1930	4	--	K	1G	G	--	--	--
163N057W05CBB	O. ANDERSON		19	12	36	1953	16	7-68	U	--	--	--	--	--
163N057W06ABA	L. VERVILLE		19	--	36	--	3	7-68	U	--	--	--	--	--
163N057W08DDD	W. CARPENTER		22	0	36	--	12	7-68	S	--	--	--	--	--
163N057W10DAC	J. ERMER		14	0	36	1920	9	--	K	1G	S	--	--	--
163N057W13DCD	L. DALZELL		18	0	36	--	--	--	K	1G	S	--	--	1020
163N057W14CBB	L. WILLIAMS		50	--	30	1956	32	--	H	1G	G	4	--	1110

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF L.S. (FT.)
163N057W16AAA	NDSWC 4225		40	--	--	1970	--	--	U	--	--	--	--	1157
163N057W21CCC	NDSWC 4226		100	--	5	1970	DRY	--	U	N	JF	--	--	1258
163N057W22AAA	NDGS CAV-70-4		24	--	--	1970	--	--	U	--	--	--	--	1136
163N057W22BAA	NDGS CAV-70-5		14	--	--	1970	--	--	U	--	--	--	--	1140
163N057W22CDA	G.GAPP		20	0	48	--	5	--	K	--	--	--	--	--
163N057W22DDA	E.RUSSELL		32	--	--	--	29	7-60	U	1G	R	--	--	1200
163N057W24CBB	NDSWC 3879		160	--	--	1969	--	--	U	--	--	--	--	1121
163N057W24DBA	H.URLAUB		30	0	48	1945	25	--	K	--	--	--	--	1125
163N057W25AAA	A.URLAUB		140	0	24	1911	120	--	K	1G	S	--	--	1150
163N057W26CBB	NDSWC 3880		40	--	--	1969	--	--	U	--	--	--	--	1220
163N057W28BBA	WALHALLA CLUB		400	--	5	1970	DRY	9-70	U	1G	JF	--	--	1260
163N057W29BBD	G.HILLER		24	--	24	--	13	7-68	U	--	--	5	9.5	--
163N057W33ADA	NDSWC 4242		440	--	--	1970	--	--	U	--	--	--	--	984
163N057W33CDC	R.THOMPSON		65	--	4	1963	10	--	S	--	--	6	--	--
163N057W33DAC	L.CARPENTER		15	0	48	--	--	--	H	--	--	6	10.0	--
163N057W34ADA	V.KALIS		40	0	24	--	37	8-60	H	--	--	--	--	1212
163N057W35BDB	R.HORNUNG		40	--	48	--	34	--	K	N	JF	--	5.5	1195
163N058W02BBA	B.ANDERSON		23	--	18	1958	11	7-68	H	P	JF	6	--	1495
163N058W07ACB1	O.OLSON		30	30	30	1940	12	--	U	P	JF	--	--	1536
163N058W07ACB2	O.OLSON		92	60	4	1958	--	--	H	P	JF	--	--	1536
163N058W08CCD	E.AMUNDSON		90	60	4	--	30	--	H	P	JF	--	--	1532
163N058W12BCC1	O.LEE		49	36	36	1956	17	--	K	P	JF	--	--	--
163N058W12BCC2	O.LEE		59	19	24	1968	30	--	S	P	JF	--	--	--
163N058W17AAB1	M.BJORNSTAD		206	--	4	1950	75	--	S	P	JF	--	--	1522
163N058W17AAB2	M.BJORNSTAD		135	60	6	1960	100	--	H	P	JF	--	--	1522
163N058W17DDD	NDSWC 3813		40	--	--	1969	--	--	U	--	--	--	--	1531
163N058W18AAD	R.CHRISTIAN		60	--	4	1956	20	--	H	P	JF	--	--	1541
163N058W20ABB	R.ROLLNESS		65	--	4	--	20	--	H	P	JF	--	--	1537
163N058W20CDB	L.PETERSON		70	--	4	1966	25	--	H	P	JF	--	--	1551
163N058W22CDD1	B.STILWELL		75	--	4	1967	--	--	H	P	JF	--	--	1531
163N058W22CDD2	B.STILWELL		20	--	18	1967	--	--	H	5I	R	6	--	1531
163N058W23CBC	G.ROMFO		40	7	24	1963	20	--	H	P	JF	--	--	--
163N058W25DCC	V.BENNETT		90	90	30	1968	45	--	H	P	JF	--	--	--
163N058W26DDC	C.ROMFO		60	--	24	--	30	--	S	P	JF	--	--	--
163N058W27CDB1	USAF 2214-1		130	--	--	1962	6	1-63	U	P	JF	--	4.0	1531
163N058W27CDB2	USAF 2214-2		130	--	--	1963	--	--	U	P	JF	--	--	1531
163N058W27CDB3	USAF 2214-E		65	--	3	1963	6	2-63	U	P	JF	--	3.0	1531
163N058W28DAA1	M.DANIELSON		80	51	4	1959	40	--	H	P	JF	--	--	1532
163N058W28DAA2	M.DANIELSON		48	31	4	1963	20	--	U	P	JF	--	--	1532
163N058W31DAD	H.CHRISTIANSON		60	41	4	1958	35	--	H	P	JF	--	--	1554

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTI-TUDE-OF LSD (FT.)
163N058W32ABA	L.CHRISTIANSON		75	63	4	1959	35	--	S	P	JF	--	--	1558
163N058W32BBB	NDSWC 4240		40	--	--	1970	--	--	U	--	--	--	--	1558
163N058W33A00	G.PETERSON		20	15	48	1930	6	--	H	P	JF	--	--	1541
163N058W33B88	USAF 214		130	--	4	1962	10	3-62	U	P	JF	--	4.5	1550
163N058W33B8A1	L.CHRISTIANSON		34	--	12	--	11	7-68	U	P	JF	--	--	1550
163N058W33B8A2	L.CHRISTIANSON		30	0	36	--	7	7-68	S	P	JF	--	--	1550
163N058W34AAA	G.MOSTAD		19	--	18	1900	6	7-68	U	P	JF	--	--	1531
163N058W34CCD1	O.ROMFO		25	--	24	1940	12	--	H	P	JF	--	--	1550
163N058W34CCD2	O.ROMFO		48	42	4	1961	20	--	S	P	JF	--	--	1550
163N058W35ABC	P.BENNETT		100	--	24	--	60	--	K	P	JF	--	--	--
163N058W35DDB1	H.OLSON		60	0	24	1947	47	--	S	P	JF	--	--	--
163N058W35DDB2	H.OLSON		120	100	6	1950	60	--	H	P	JF	6	--	--
163N058W36CDD	O.JORGENSEN		35	15	48	1919	18	--	H	--	--	--	--	--
163N059W018DC	L.OVERBY		65	--	4	1961	40	--	H	P	JF	5	--	1532
163N059W018DD	L.OVERBY		60	42	4	1959	40	--	S	P	JF	--	--	1531
163N059W02BBB	J.ROBERTSON JR		51	--	4	--	39	7-68	U	P	JF	5	6.0	1544
163N059W03DDD	NDSWC 4239		40	--	--	1970	--	--	U	--	--	--	--	1553
163N059W04ABA	H.OLSON		35	--	16	--	8	7-68	U	P	JF	6	8.5	1555
163N059W04BBB	NDSWC 4238		40	--	--	1970	--	--	U	--	--	--	--	1562
163N059W07CCC	A.HELL		46	--	3	--	31	7-68	U	P	JF	5	9.0	1571
163N059W10DAB1	T.WITZEL		19	0	24	--	6	7-68	U	--	--	--	--	1558
163N059W10DAB2	T.WITZEL		--	--	4	--	10	--	H	--	--	6	--	1559
163N059W13ACB1	H.ERICKSON		145	63	4	1966	--	--	U	P	JF	--	--	1550
163N059W13ACB2	H.ERICKSON		60	60	24	1967	--	--	H	P	JF	4	--	1550
163N059W14BBA	USAF 213	130	129	--	5	1962	17	3-62	U	P	JF	--	4.5	1562
163N059W14BBD1	USAF 2213		130	--	4	1962	14	10-62	U	P	JF	--	7.5	1560
163N059W14BBD2	USAF 2213-E		65	--	4	1963	12	2-63	U	P	JF	--	5.0	1560
163N059W15CCC	NDSWC 3814		40	--	--	1969	--	--	U	--	--	--	--	1579
163N059W16AAA	C.CARLSON		118	90	4	--	60	--	H	P	JF	6	10.0	1575
163N059W18DCC	H.HELL		150	--	4	1918	20	--	H	P	JF	6	6.0	1585
163N059W20AAA	O.HOFFARTH		140	120	4	1946	40	--	K	P	JF	6	--	1560
163N059W23CBB	J.ROBERTSON		80	65	6	1948	25	--	H	P	JF	6	--	1571
163N059W23CCD	A.ROBERTSON		22	--	12	--	4	7-68	U	--	--	--	--	1570
163N059W24CCC	F.LUDWIG		136	90	4	1957	12	--	H	P	JF	6	--	1563
163N059W25DCD	O.ROLLEFSTEAD		100	--	4	1956	80	--	H	P	JF	6	--	1555
163N059W27DAB	A.MURPHY		130	100	4	1957	--	--	H	P	JF	6	--	1564
163N059W29DDA1	A.BACKES		200	120	6	1946	90	--	H	P	JF	6	--	1580
163N059W29DDA2	A.BACKES		200	150	4	1947	90	--	S	P	JF	6	7.5	1579
163N059W31DAD	L.DOMRES		90	90	6	1921	--	--	K	P	JF	7	--	1590
163N059W31DCA1	USAF 2208		130	--	3	1962	15	10-62	U	P	JF	--	6.0	1582

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163N059W310CA2	USAF 2208-E		65	--	3	1963	12	2-63	U	P	JF	--	4.5	1582
163N059W310DD	USAF 208		130	--	4	1962	21	3-62	U	P	JF	--	4.5	1598
163N059W33C8C1	A.OLSON		85	35	24	1903	20	--	H	P	JF	5	--	1600
163N059W33C8C2	A.OLSON		140	0	24	1920	30	--	S	P	JF	--	--	1595
163N059W34CCC	E.FIELD		90	--	4	--	50	--	H	P	JF	6	--	1583
163N059W368BD1	NDSHD RAD-8 B1		36	29	4	1964	0	1-64	U	P	JF	--	--	1478
163N059W368BD2	NDSHD RAD-8 B2		34	30	4	1964	--	--	U	P	JF	--	--	1478
163N060W01CCA1	USAF 2317		130	--	3	1962	14	10-62	U	P	JF	--	7.5	1570
163N060W01CCA2	USAF 2317-E		64	--	3	1963	11	2-63	U	P	JF	--	4.5	1570
163N060W01CCB	USAF 317		130	--	4	1962	28	5-62	U	P	JF	--	5.5	1577
163N060W01CCC1	USAF 212		130	--	4	1962	28	3-62	U	P	JF	--	4.0	1580
163N060W01CCC2	M.SCHILL		120	--	4	1967	60	--	S	P	JF	5	--	1572
163N060W028AA	A.RIDLEY		180	--	6	--	20	--	H	P	JF	6	--	1578
163N060W04AAD1	F.KARTES		120	84	4	1965	20	--	H	P	JF	6	--	1562
163N060W04AAD2	F.KARTES		114	--	6	--	--	--	H	P	JF	6	--	1562
163N060W05CDC	B.SAUER		28	0	18	--	17	--	H	--	--	4	--	1570
163N060W07888	USAF 215		130	--	5	1962	22	2-62	U	P	JF	--	4.5	1558
163N060W0788D1	USAF 2215		130	--	3	1962	15	11-62	U	P	JF	--	6.5	1555
163N060W0788D2	USAF 2215-E		65	--	3	1963	19	2-63	U	41	6T	--	4.5	1555
163N060W07C88	NDGS CAV-69-6		28	--	--	1969	--	--	U	--	--	--	--	1555
163N060W070DA	M.MICKELSON		120	--	4	--	20	--	H	P	JF	5	--	1571
163N060W09CCD	W.KARTES		100	--	4	1956	15	--	H	P	JF	4	--	1576
163N060W10CAD	B.METZGER		132	--	4	1956	--	--	H	P	JF	5	--	1570
163N060W118CB	I.HELLM		100	--	5	1954	--	--	H	P	JF	5	--	1565
163N060W11DD0	NDSWC 4236		80	--	5	1970	--	--	U	P	JF	6	--	1567
163N060W12ABB	J.WETZEL		114	--	6	1954	--	--	H	P	JF	6	--	1575
163N060W12CCD	G.HOWATT		120	--	5	1961	--	--	H	P	JF	5	--	1580
163N060W14DAD	E.WITZEL		103	--	2	1945	--	--	K	P	JF	5	--	1560
163N060W15CCC	NDSWC 3815		140	--	--	1969	--	--	U	--	--	--	--	1567
163N060W17COC	M.METZGER		165	--	4	1960	--	--	H	P	JF	5	--	1560
163N060W20DAA	F.ILLERBRUNN		125	--	5	1959	--	--	H	P	JF	6	--	1562
163N060W21AAB	L.GAPP		17	--	36	--	15	--	H	--	--	4	--	1567
163N060W2588B	R.BEAUCHAMP		100	77	6	1967	40	5-67	H	P	JF	6	--	1584
163N060W278CB	P.PERIUS JR		61	--	6	--	1	7-68	U	P	JF	--	--	1556
163N060W27C0B	O.METZGER		113	--	4	1958	--	--	H	P	JF	6	--	1572
163N060W31CCC	NDSWC 4243		40	--	--	1970	--	--	U	--	--	--	--	1568
163N060W32ADC1	USAF 2209	130	92	--	4	1962	13	11-62	U	P	JF	--	6.5	1570
163N060W32ADC2	USAF 2209-E		65	--	4	1963	10	2-63	U	P	JF	--	4.0	1570
163N060W32BAB	J.METGER		180	--	4	1960	--	--	H	P	JF	6	--	1576
163N060W32DAA	USAF 209		130	--	4	1962	25	3-62	U	P	JF	--	4.5	1577

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
163N061W01DCD	C. SAUER		144	--	6	1964	--	--	H	P	JF	5	--	1558
163N061W028BB	NDGS CAV-69-4		10	--	--	1969	--	--	U	--	--	--	--	1549
163N061W04DDD	NDSWC 4246		40	--	--	1970	--	--	U	--	--	--	--	1550
163N061W05AAB	J. SCHILL		90	--	6	--	--	--	K	P	JF	5	--	1552
163N061W06BAB	A. HACH		160	--	6	--	32	--	U	P	JF	5	--	1545
163N061W09BBA	P. FEIL		65	--	6	1943	15	--	H	P	JF	5	--	1565
163N061W10BBB	R. HELL		140	--	4	--	50	--	K	P	JF	6	--	1555
163N061W10DDA	W. FEIL		94	--	6	1960	27	--	H	P	JF	6	--	1557
163N061W138AA	L. SCHIEL		132	--	6	--	--	--	S	P	JF	6	--	1555
163N061W13CCC	NDSWC 4244		120	--	--	1970	--	--	U	--	--	--	--	1561
163N061W15AAA	NDGS CAV-69-3		8	--	--	1969	--	--	U	--	--	--	--	1553
163N061W16DDD	NDSWC 3816		220	--	--	1969	--	--	U	--	--	--	--	1560
163N061W198BA	J. PERIUS		60	--	5	--	--	--	H	P	JF	6	--	1572
163N061W19DDA	J. DEM		58	--	6	1958	--	--	H	P	JF	5	--	1567
163N061W23AAD	L. KARTES		135	--	4	1967	--	--	H	P	JF	6	--	1555
163N061W25DAA	D. IRWIN		180	--	6	1957	--	--	H	P	JF	6	--	1571
163N061W27BBB	A. BACHMAN		122	--	4	1951	12	--	H	P	JF	6	--	1573
163N061W28DCC	T. RESTAD		65	--	4	1959	--	--	H	P	JF	5	--	1570
163N061W29CDC	P. KARTES		236	--	5	1965	--	--	H	P	JF	6	--	1571
69 163N061W31BBC	J. CARPENTER		40	--	4	--	12	--	K	P	JF	6	--	1566
163N061W31CBC	G. DEMARS		73	--	--	--	--	--	H	P	JF	--	--	1565
163N061W31CCB	DRESDEN SCHOOL		--	--	--	--	--	--	H	P	JF	--	--	1566
163N061W31CDA	G. JOHNSTON		63	30	3	1936	--	--	H	P	JF	--	--	1570
163N061W33AAA	NDSWC 4255	60	41	38	1	1970	4	10-70	U	P	JF	6	5.5	1565
163N061W33CDA1	USAF 2210		130	--	3	1962	12	10-62	U	P	JF	--	6.5	1573
163N061W33CDA2	USAF 2210-E		65	--	3	1963	14	2-63	U	P	JF	--	4.5	1573
163N061W33CDD	USAF 210-A		40	--	4	1962	23	5-62	U	P	JF	--	5.5	1573
163N061W33DCB1	USAF 210		100	--	4	1962	28	3-62	U	P	JF	--	3.0	1573
163N061W33DCB2	USAF 210-E		100	--	4	1962	22	5-62	U	P	JF	--	5.5	1573
163N061W36ADD	A. HILTNER		200	170	4	1966	30	--	K	P	JF	6	--	1573
163N062W01CCC	R. BORGAN		90	--	4	--	50	--	H	P	JF	6	--	1558
163N062W01DAD	USAF 216		130	--	5	1962	21	3-62	U	P	JF	--	4.5	1562
163N062W03AAD	S. METZGER		160	--	4	--	--	--	H	P	JF	6	--	1555
163N062W04BDD	GREAT NORTHERN		114	80	6	1922	20	7-22	C	P	JF	--	--	1570
163N062W06AAC1	USAF 2217-1		54	--	--	1962	--	--	U	--	--	--	--	1578
163N062W06AAC2	USAF 2217-2		130	--	9	1962	14	1-63	U	P	JF	--	5.0	1578
163N062W06AAC3	USAF 2217-E		65	--	4	1963	13	2-63	U	P	JF	--	4.5	1578
163N062W06BAB	E. TRELEAVEN		17	--	18	--	13	--	H	--	--	4	--	1575
163N062W07ACC	D. PLUMMER		60	--	4	--	--	--	K	--	--	4	--	1564
163N062W12DCB1	USAF 2216		130	--	3	1962	9	11-62	U	P	JF	--	5.5	1567

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
163N062W12DCB2	USAF 2216-1E		65	--	3	1963	13	2-63	U	P	JF	--	4.5	1567
163N062W12DCB3	USAF 2216-2E		32	--	--	1963	--	--	U	--	--	--	--	1567
163N062W14ADB	L.BAUILEU		92	--	4	--	25	--	H	P	JF	6	--	1566
163N062W15AAC	A.HENDRICKSON		120	--	4	--	--	--	H	P	JF	6	--	1562
163N062W15CDC	E.SCHNEIDER		50	--	4	1950	--	--	H	--	--	6	--	1560
163N062W16BAB	A.GRUNDEN		50	--	4	1947	--	--	H	--	--	6	--	1561
163N062W16DDD	NDSWC 3817	120	105	102	1	1969	7	10-69	U	51	YR	6	--	1559
163N062W17BCA	NDSWC 4251	100	43	40	1	1970	15	10-70	U	51	YS	5	--	1570
163N062W18BCC	W.ROMFNO		80	--	4	1960	--	--	H	P	JF	6	--	1565
163N062W23DCA	E.JORDAN		187	160	4	1956	30	--	H	P	JF	6	--	1568
163N062W24AAD	NDSWC 4247		40	--	--	1970	--	--	U	--	--	--	--	1571
163N062W25ADC	B.ZEIS		60	--	6	1950	30	--	K	P	JF	6	--	1571
163N062W31AAA	NDSWC 4252		40	--	--	1970	--	--	U	--	--	--	--	1560
163N062W34ACC	D.BAKER		50	--	4	--	40	--	U	--	--	6	--	1562
163N062W34DDD	NDSWC 4254		120	--	--	1970	--	--	U	--	--	--	--	1560
163N062W35ABB	D.REDDLEY		100	--	4	--	80	--	H	P	JF	6	--	1566
163N062W36ACD	J.KRAM		50	--	4	1950	18	--	H	P	JF	5	--	1566
163N062W36ADD	NDGS CAV-69-5		30	--	--	1969	--	--	U	--	--	--	--	1564
163N063W01ABB	P.MOFFATT		65	--	6	1964	--	--	H	P	JF	6	--	1576
163N063W03AAA	D.HODGINS		202	--	6	--	30	--	H	P	JF	5	--	1583
163N063W04BBB	A.KING		56	--	6	--	--	--	S	P	JF	5	--	1587
163N063W05DDC	P.BDITRELL		79	--	6	--	--	--	S	P	JF	5	--	1583
163N063W06CDC	C.WOODROW		110	--	6	1955	--	--	H	P	JF	6	--	1566
163N063W08DDD	NDSWC 4184		40	--	--	1970	--	--	U	--	--	--	--	1568
163N063W12ABD	R.SCOEE		257	--	4	1964	30	--	H	P	JF	6	--	1558
163N063W13BBB	NDSWC 4180		100	--	--	1970	--	--	U	--	--	--	--	1570
163N063W15AAA	V.NICKERSON		24	--	48	--	14	7-68	U	--	--	4	6.5	1565
163N063W16DDD	NDSWC 3818	120	87	57	1	1969	10	10-69	U	51	IT	6	--	1568
163N063W21BCC	M.HOWATT		100	--	6	--	75	--	H	P	JF	5	--	1579
163N063W24BBB	V.BROWN		160	--	6	--	--	--	H	P	JF	5	--	1573
163N063W25BBB	NDSWC 4179		220	--	--	1970	--	--	U	--	--	--	--	1572
163N063W26CCB	S.ROSENBERG		80	--	4	1963	40	--	H	P	JF	5	--	1570
163N063W28DDD	NDSWC 4186		60	--	--	1970	--	--	U	--	--	--	--	1572
163N063W29ABA	W.HAY		40	--	6	1965	--	--	H	P	JF	4	--	1592
163N063W29BBB	NDSWC 4185		40	--	--	1970	--	--	U	--	--	--	--	1562
163N063W30BAB	BASSINGTHWAITE		60	--	4	1945	20	--	H	P	JF	5	--	1580
163N063W31ABB	U.LARSON		110	--	6	1919	20	7-69	H	P	JF	5	--	1585
163N063W35DAD	W.ROMFO		60	--	4	--	--	--	H	P	JF	6	--	1573
163N063W35DDD	NDSWC 4178		40	--	--	1970	--	--	U	--	--	--	--	1566
163N064W01CBB	D.AUNE		41	--	12	--	--	7-68	U	P	JF	--	7.5	1568

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
163N064W04AAA	NDSWC 4166		40	--	--	1970	--	--	U	--	--	--	--	1548
163N064W11BCC	D.BASSINGTHWAIT		--	--	4	--	15	--	H	--	--	5	9.0	1572
163N064W12CCC	NDSWC 4168		40	--	--	1970	--	--	U	--	--	--	--	1567
163N064W14CBB1	E.BASSINGTHWAIT		160	--	4	1950	23	--	H	P	JF	6	9.5	1580
163N064W14CBB2	E.BASSINGTHWAIT		164	--	4	--	20	--	S	P	JF	6	8.5	1580
163N064W18BB0	H.SOMDLT		110	84	4	1967	22	5-69	H	P	JF	6	--	1585
163N064W18BCA	AMERICAN LEGION		161	--	4	1968	30	9-68	C	P	JF	--	--	1585
163N064W19CCC	NDSWC 4165		40	--	--	1970	--	--	U	--	--	--	--	1599
163N064W21AAD	NDSWC 3819	40	39	19	1	1969	6	10-69	U	P	JF	6	--	1565
163N064W21DDA	P.MCLEAN		135	--	4	1950	--	--	H	P	JF	4	9.5	1576
163N064W22CBB	L.MCLEAN		130	--	4	1948	--	--	K	P	JF	5	9.0	1573
163N064W24BCC	H.RA SMUSSON		105	--	6	--	--	--	K	P	JF	6	9.5	1582
163N064W27COC	J.HALVORSON		120	--	3	1970	10	11-70	H	P	JF	--	--	1582
163N064W28BC8	H.MCCONNELL		120	--	5	1950	15	--	H	P	JF	5	9.5	1586
163N064W34CCC	NDSWC 4163		120	--	--	1970	--	--	U	--	--	--	--	1593
163N064W36BB8	NDSWC 4169		60	--	--	1970	--	--	U	--	--	--	--	1574
164N051W28DB8	NDGS G-2		231	--	--	1966	--	--	U	--	--	--	--	780
164N051W28DBD1	NDGS P-1		505	0	5	1967	F	11-67	U	RR	JL	9	--	782
164N051W28DBD2	NDGS P-2		266	--	--	1967	--	--	U	--	--	--	--	785
164N051W32B8B	F.GRUBE		17	--	24	--	5	7-68	U	01	Q	--	--	791
164N052W29DD0	NDGS G-5		189	20	2	1966	F	10-66	U	51	2S	9	--	794
164N052W32BDB	K.KELM		--	--	--	--	--	--	S	--	--	6	9.5	801
164N052W36CDD	W.MORRIS		13	--	18	1916	4	10-41	H	01	Q	--	9.0	795
164N053W31ADC1	NECHE SCHOOL		--	--	--	--	12	9-48	H	--	--	--	--	831
164N053W31ADC2	NECHE SCHOOL		28	--	--	--	15	9-48	H	01	Q	--	--	836
164N053W31BCB	A.WINKLER		20	--	33	--	14	10-48	H	01	Q	--	--	833
164N053W31BCC1	GREAT NORTHERN		20	--	36	--	17	9-48	N	01	Q	--	--	833
164N053W31BCC2	NECHE CITY PARK		16	--	14	--	14	--	P	01	Q	--	--	833
164N053W31BCC3	A.TRENBETH		24	--	14	1945	13	10-48	H	01	Q	--	--	834
164N053W31BCD1	N.HADDEN		22	--	--	--	13	10-48	H	01	Q	--	--	832
164N053W31BCD2	A.STEGMAN		20	--	36	--	19	10-48	H	01	Q	--	--	833
164N053W31BCD3	C.KRAUS		24	--	35	1918	11	10-48	H	01	Q	--	--	832
164N053W31BCD4	J.HERZOG		24	--	24	--	15	10-49	H	01	Q	--	--	831
164N053W31CAB	V.SWENSON		23	--	14	--	9	9-48	H	01	Q	--	--	830
164N053W31CAC	H.RISTVEDT		18	--	36	1946	6	9-48	H	01	LS	--	--	829
164N053W31CBB1	L.LEPEUR		22	--	36	--	6	9-48	U	01	Q	--	--	829
164N053W31CBB2	A.POOLE		16	--	24	--	11	10-48	H	01	Q	--	--	830
164N053W31CBC1	R.ERTMAN		19	--	43	--	8	9-48	H	01	Q	--	--	830
164N053W31CBC2	A.WERNER		20	--	36	1938	3	9-48	K	01	S	--	--	828
164N053W31CBC3	USGS 2		47	--	--	1949	--	--	U	--	--	--	--	830

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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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
164N053W31CCB1	G. SLATER		13	--	36	--	7	9-48	K	01	Q	--	--	829
164N053W31CCB2	J. VILLNAP		14	--	60	--	6	9-48	H	01	Q	--	--	827
164N053W31CCC	W. HERZOG		12	--	33	--	7	10-48	H	01	Q	--	--	828
164N053W31CCD1	W. RAEDAL		23	--	8	--	5	10-48	H	01	Q	--	--	828
164N053W31CCD2	W. GLENN		20	--	44	1919	6	9-48	H	01	P	--	--	828
164N053W31CDA1	H. HUGHES		9	--	34	1947	5	9-48	H	01	1S	--	--	830
164N053W31CDA2	C. VOLLRATH		16	--	14	--	5	9-48	H	01	Q	--	--	828
164N053W31COC1	H. COLLISON		13	--	12	--	7	10-48	H	01	Q	--	--	828
164N053W31COC2	W. BROWN		--	--	--	--	7	10-48	H	--	--	--	--	827
164N053W31CDD1	USGS 10		42	--	--	1949	--	--	U	--	--	--	--	828
164N053W31CDD2	USGS 9		32	--	--	1949	--	--	U	--	--	--	--	830
164N053W31DCB	C. SCHUMACHER		20	--	--	--	7	10-49	U	01	Q	--	--	827
164N053W32CBA	J. GYNN		28	0	48	--	8	10-48	S	01	Q	--	--	827
164N053W34888	NDGS G-4		346	--	5	1966	F	10-66	U	S0	JL	9	--	815
164N053W34CCC	S. QUINNEL		23	--	12	--	19	10-48	H	01	Q	--	--	822
164N053W36AAA	NDGS G-1		265	--	--	1966	--	--	U	--	--	--	--	800
164N054W25DAA1	USGS 5		107	--	--	1949	--	--	U	--	--	--	--	830
164N054W25DAA2	NDGS G-3		400	--	--	1966	--	--	U	--	--	--	--	830
164N054W25DDA	USGS 4		52	--	--	1949	--	--	U	--	--	--	--	831
164N054W35ABD	H. HUGHES		21	--	30	1946	13	10-48	K	01	Q	--	--	835
164N054W35CDD	F. MENKE		--	--	42	--	12	10-48	H	--	--	--	--	840
164N054W35DDC	G. HUGHES		25	--	52	1936	9	10-48	K	01	Q	--	--	835
164N054W36AAD1	USGS 12		57	--	--	1949	--	--	U	--	--	--	--	830
164N054W36AAD2	USGS 11		48	--	--	1949	--	--	U	--	--	--	--	822
164N054W36ADA1	E. LEPEUR		24	--	30	--	16	10-48	H	01	Q	--	--	835
164N054W36ADA2	USGS 3		62	--	--	1949	--	--	U	--	--	--	--	830
164N054W36BCD	H. CARMERAN		15	--	20	1947	8	10-48	U	01	Q	--	--	834
164N054W36DDD	USGS 1		112	--	--	1949	--	--	U	--	--	--	--	823
164N055W28CCC	NDSWC 4229		310	--	--	1970	--	--	U	--	--	--	--	883
164N055W29DDD	USBR 12		20	--	4	1961	9	11-61	U	01	X	--	--	884
164N055W30CDC	O. TONGEN		14	--	36	1945	8	--	H	01	S	--	--	902
164N055W31ADD	G. BURT		14	--	36	--	10	--	H	01	S	--	--	894
164N055W31CCC	USBR 10		14	--	4	1961	7	11-61	U	01	X	--	--	907
164N055W31DDC	R. BEST		18	--	36	--	15	--	S	01	S	--	--	900
164N055W31DDD	NDGS PEM-70-37		14	--	--	1970	--	--	U	--	--	--	--	898
164N055W32ADD	C. BURT		14	--	36	--	8	8-60	H	01	2S	--	--	894
164N055W32CDC	C. TONGEN		73	--	--	1928	16	--	S	51	S	6	--	895
164N055W32CDD	O. TONGEN		14	--	36	1956	4	--	H	01	S	--	6.5	895
164N055W32DDD1	F. CARPENTER		17	--	72	1956	8	--	K	01	1S	--	--	888
164N055W32DDD2	F. CARPENTER		17	--	55	1946	8	--	K	01	1S	--	--	888

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSO (FT.)
164N055W33CCC	USBR 13		18	--	4	1961	10	11-61	U	01	X	--	--	888
164N055W33DDD	USBR		15	--	--	1963	--	--	U	--	--	--	--	880
164N056W25DDD	USBR 9		15	--	4	1961	9	11-61	U	1G	X	--	--	903
164N056W26CCC	K.HUFFMAN		22	--	36	1900	17	--	H	1G	X	--	--	918
164N056W27CCC	USBR 5		20	--	4	1961	8	11-61	U	1G	X	--	--	928
164N056W27DDA1	USBR DH29		20	--	--	1963	--	--	U	--	--	--	--	918
164N056W27DDA2	USBR DH39		19	--	--	1963	--	--	U	--	--	--	--	918
164N056W28CDD	T.BELANUS		17	--	--	1950	9	8-60	K	1G	1S	--	--	934
164N056W29ADD1	CUSTOM HOUSE		110	--	--	1964	--	--	H	51	S	--	--	940
164N056W29ADD2	NDSWC 4223		220	--	--	1970	--	--	U	--	--	--	--	938
164N056W29ADD3	NDSWC 5937	120	103	97	1	1971	10	8-71	U	51	2S	6	--	940
164N056W29CCB	W.BELANUS		20	--	36	1952	6	--	K	1G	1S	--	--	945
164N056W29DDD	USBR DH21		20	--	--	1963	--	--	U	--	--	--	--	935
164N056W30DAA	USBR DH27		20	--	--	1963	--	--	U	--	--	--	--	945
164N056W30DDD	W.BELANUS		20	--	36	--	6	--	K	1G	1S	--	--	946
164N056W31AAA	USBR DH24		15	--	4	1963	10	--	U	1G	X	--	--	946
164N056W31DAA	W.BROWN		13	--	--	1949	9	8-60	K	1G	G	--	--	950
164N056W32ADA	USBR DH35		17	--	4	1963	10	--	U	1G	X	--	--	940
164N056W32DDC	H.OLSON		16	--	36	1940	5	--	K	1G	S	--	--	945
164N056W33ABA	R.BELANUS		18	--	36	--	10	--	K	1G	1S	--	10.5	934
164N056W33BBB	NDSWC 1770		105	--	--	1960	--	--	U	--	--	--	--	935
164N056W33CCC1	L.TESMER		15	--	30	1948	10	--	K	1G	1S	--	9.5	942
164N056W33CCC2	L.TESMER		16	--	30	1952	11	--	K	1G	1S	--	9.5	943
164N056W34AAA	J.HOFFMAN		17	--	--	--	10	8-60	K	1G	G	--	--	919
164N056W34ADD	USBR DH30		35	--	4	1963	10	--	U	1G	X	--	--	920
164N056W34CBB	USBR DH28		15	--	--	1963	--	--	U	--	--	--	--	930
164N056W35AAA	USBR DH32		35	--	4	1963	13	--	U	1G	X	--	--	910
164N056W36BCC	USBR DH31		25	--	--	1963	--	--	U	1G	X	--	--	913
164N057W26DDD	USBR 1		13	13	4	1961	7	11-61	U	01	7P	--	--	967
164N057W27CCC	E.VONDAL		9	--	30	--	5	7-68	I	02	S	5	10.5	--
164N057W27DDC	L.KEELING		16	8	33	1900	11	--	S	02	R	4	7.5	992
164N057W27DDD	L.KEELING		16	10	40	1940	8	--	H	02	R	4	--	992
164N057W31BCB	K.LONGTINE		34	--	36	1948	20	--	U	P	JF	6	10.5	--
164N057W32CBC	NDGS CAV-69-67		25	--	--	1969	--	--	U	--	--	--	--	1303
164N057W32CCA	NDGS CAV-69-66		14	--	--	1969	--	--	U	--	--	--	--	1307
164N057W32CCB	NDGS CAV-69-65		24	--	--	1969	--	--	U	--	--	--	--	1312
164N057W32DAC	W.GENDRON		35	20	24	1967	20	--	K	N	JF	6	7.0	--
164N057W32DBB1	NDGS CAV-69-70		20	--	--	1969	--	--	U	--	--	--	--	1301
164N057W32DBB2	NDGS CAV-69-71		20	--	--	1969	--	--	U	--	--	--	--	1300
164N057W32DCA	NDGS CAV-69-63		9	--	--	1969	--	--	U	--	--	--	--	1299

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPE-CIFIC CONDUCT ANCE	TEMPERATURE (°C)	ALTI-TUDE-OF (LSD) (FT.)
164N057W32DCB1	NDGS CAV-69-68		4	--	--	1969	--	--	U	--	--	--	--	1308
164N057W32DCB2	NDGS CAV-69-69		4	--	--	1969	--	--	U	--	--	--	--	1305
164N057W32DCC	NDGS CAV-69-72		16	--	--	1969	--	--	U	--	--	--	--	1304
164N057W32DDB	NDGS CAV-69-64		14	--	--	1969	--	--	U	--	--	--	--	1282
164N057W34ADD	NDSWC 1781		32	--	5	1960	--	--	U	--	--	--	--	992
164N057W34CDA	A.GAPP		16	--	48	1909	10	7-68	K	02	R	5	--	--
164N057W35DDD	USBR 2		20	--	4	1961	DRY	--	U	01	7P	--	--	972
164N057W36DDD	NDSWC 4224		80	--	--	1970	--	--	U	--	--	--	--	960
164N058W27CDC	C.AMOTH		38	--	30	--	17	7-68	U	P	JF	--	--	1502
164N058W28DAD	N.FULSAAS		40	15	36	1962	10	--	S	P	JF	--	--	1513
164N058W33DDB	D.THOMPSON		40	16	36	1938	10	--	H	P	JF	4	--	1514
164N058W34DCC	C.FROGNE		22	22	5	1945	19	--	H	P	JF	--	--	1511
164N059W27CAB1	A.R IDLEY		157	157	4	1950	100	--	H	P	JF	6	--	1533
164N059W27CAB2	A.R IDLEY		150	100	4	1963	70	--	S	P	JF	--	--	1533
164N059W29DCD	E.R IDLEY		115	--	6	1953	35	--	H	P	JF	6	--	1565
164N059W31DCC	L.HOWATT		110	--	4	1959	--	--	K	P	JF	6	--	1565
164N059W32DAD	H.COYLE		167	151	4	1959	30	--	K	P	JF	6	--	1560
164N059W34DAD	V.OLSON		140	84	4	1963	30	--	H	P	JF	5	--	1538
164N060W26DAA1	US CUSTOMS		105	--	4	1961	78	--	H	P	JF	5	--	1558
164N060W26DAA2	NDSWC 4237		100	--	--	1970	--	--	U	--	--	5	--	1557
164N060W26DCC	A.BLAIR		118	--	4	1960	50	--	K	P	JF	5	--	1563
164N060W29CCD	S.SCHILL		200	--	5	1939	--	--	K	P	JF	6	--	1591
164N060W34ADA	R.HOFFARTH		120	--	4	--	25	--	K	P	JF	5	--	1565
164N060W36DDD	V.HOWATT		115	--	5	1957	--	--	H	P	JF	5	--	1560
164N061W25DCC	L.ZERR		--	--	--	1965	--	--	K	--	--	6	--	1546
164N061W29DDC	S.ZIMNIAK		90	--	6	1965	14	--	H	P	JF	6	--	1546
164N061W31CCC	NDSWC 4248		140	--	--	1970	--	--	U	--	--	--	--	1544
164N061W32CCC	D.CAMPBELL		165	163	5	1956	--	--	H	P	JF	6	--	1540
164N061W36DAD	NDSWC 4245		60	--	--	1970	--	--	U	--	--	--	--	1550
164N061W36DDC	P.ZEER		105	--	5	1953	--	--	K	P	JF	5	--	1551
164N062W26CCC	A.HOWATT		187	--	4	1967	20	--	H	P	JF	6	--	1556
164N062W29DAA1	US CUSTOMS		113	105	4	1965	12	9-65	H	P	JF	6	--	1568
164N062W29DAA2	NDSWC 4250		80	--	--	1970	--	--	U	--	--	--	--	1566
164N062W31ADA	N.EVANS		35	--	4	--	--	--	K	--	--	5	--	1575
164N062W32DDD	W.TRELEAVENN		35	--	4	1963	6	--	H	--	--	5	--	1561
164N062W33DDD	NDSWC 4249		100	--	--	1970	--	--	U	--	--	--	--	1561
164N062W34CCC	T.MILLER		90	--	4	1958	40	--	H	P	JF	6	--	1561
164N063W32DDD	NDSWC 4182		40	--	--	1970	--	--	U	--	--	--	--	1584
164N063W36CCC	NDSWC 4181		40	--	--	1970	--	--	U	--	--	--	--	1562
164N064W28DAA1	US CUSTOMS		187	95	4	1964	--	--	H	P	JF	6	--	1548

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 MEAS.	USE OF WATER	MAJOR AQUIFER	WATER BEARING MATERIAL	SPECIFIC CONDUCTANCE	TEMPERATURE (°C)	ALTITUDE OF LSD (FT.)
164N064W20DAA2	NDSWC 4167		100	--	--	1970	--	--	U	P	JF	6	--	1545
164N064W36DDD	NDSWC 4183		40	--	--	1970	--	--	U	--	--	--	--	1564
<u>LOCATION OF SPRINGS</u>														
160N056W04CAD	J. BJORSON		--	--	--	--	F	--	C	02	--	3	--	1057
161N056W20DAA	STATE		--	--	--	--	F	--	U	02	--	4	--	1130
162N057W10CCD	E. LORENZ		--	--	--	--	F	--	U	N	--	4	--	--
162N057W13CCD	H. DHAULT		--	--	--	--	F	--	S	P	--	--	--	1440
162N057W22DDA	W. KING		--	--	--	--	F	--	S	03	--	--	--	1210

TABLE 2.--Water-levels in selected wells
 Water level, in feet below or (+) above land surface

159-56-29CCC					
Date	Water level	Date	Water level	Date	Water level
Oct. 31, 1970..	8.34	Apr. 17.....	6.38	Aug. 18.....	8.11
Dec. 3.....	8.25	May 24.....	6.38	Oct. 6.....	8.52
Jan. 6, 1971..	8.30	June 14.....	7.17	Nov. 6.....	8.58
Feb. 20.....	8.33	July 10.....	7.72	Dec. 7.....	8.65
Mar. 26.....	8.26	July 15.....	7.42		

159-58-31AAA					
May 2, 1969..	12.18	July 9.....	12.95	Apr. 29.....	12.79
May 28.....	12.29	Aug. 20.....	13.11	May 17.....	13.10
July 31.....	12.43	Oct. 14.....	12.92	June 10.....	13.14
Sept. 5.....	12.53	Nov. 6.....	12.70	July 13.....	13.10
Oct. 23.....	12.50	Dec. 1.....	12.62	Aug. 17.....	13.15
Dec. 18.....	12.44	Jan. 5, 1971..	12.61	Sept. 29.....	13.20
Mar. 18, 1970..	12.53	Feb. 25.....	12.59	Nov. 18.....	12.98
May 7.....	12.71	Mar. 25.....	12.61	Dec. 7.....	13.00
May 30.....	12.78	Apr. 16.....	12.91		

159-59-27DDC					
May 1, 1969..	9.57	May 30.....	9.75	Apr. 16.....	11.76
May 28.....	9.74	July 8.....	9.78	Apr. 29.....	11.77
July 8.....	9.50	Aug. 20.....	9.18	May 17.....	11.48
July 31.....	9.52	Oct. 14.....	9.14	June 10.....	11.21
Sept. 5.....	9.54	Nov. 6.....	9.18	July 13.....	10.15
Oct. 23.....	9.46	Dec. 1.....	9.21	Aug. 17.....	9.30
Dec. 18.....	9.53	Jan. 5, 1971..	9.53	Sept. 29.....	9.49
Mar. 18, 1970..	9.62	Feb. 25.....	10.73	Dec. 7.....	9.60
May 7.....	9.71	Mar. 25.....	11.33		

159-59-30DDD					
May 2, 1969..	3.96	May 30.....	4.63	Apr. 16.....	4.99
May 28.....	4.08	July 8.....	4.48	Apr. 29.....	5.00
July 8.....	3.92	Aug. 20.....	4.52	May 17.....	5.12
July 31.....	3.99	Oct. 14.....	4.27	June 10.....	5.11
Oct. 23.....	4.26	Nov. 6.....	4.16	July 13.....	4.81
Dec. 18.....	4.41	Dec. 1.....	4.06	Aug. 17.....	4.59
Feb. 6, 1970..	4.49	Jan. 5, 1971..	4.15	Sept. 29.....	4.53
Mar. 18.....	4.58	Feb. 25.....	4.43	Nov. 18.....	4.14
May 7.....	4.74	Mar. 25.....	4.61	Dec. 7.....	4.05

Water level, in feet below or (+) above land surface

159-60-10DDD

Date	Water level	Date	Water level	Date	Water level
Oct. 14, 1970..	6.64	Apr. 16.....	7.69	Aug. 17.....	6.94
Dec. 1.....	6.15	29.....	7.76	Sept. 29.....	6.70
Jan. 5, 1971..	6.19	May 17.....	7.86	Nov. 12.....	6.27
Feb. 25.....	6.58	June 10.....	8.01	Dec. 8.....	6.10
Mar. 25.....	7.02	July 13.....	7.67		

159-60-29CCC

Nov. 29, 1968..	10.80	May 1, 1969..	10.71	May 28.....	7.02
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159-62-21AAA1

Oct. 23, 1969..	8.98	July 27.....	14.16	Apr. 29.....	13.31
Dec. 17.....	9.51	Sept. 8.....	13.98	May 17.....	13.00
Feb. 6, 1970..	10.28	Oct. 14.....	14.04	June 9.....	12.84
Mar. 18.....	11.10	Nov. 6.....	13.96	July 13.....	12.15
May 7.....	10.43	Dec. 1.....	13.87	Sept. 29.....	14.08
30.....	8.97	Jan. 4, 1971..	13.83	Nov. 12.....	13.10
June 14.....	7.52	Feb. 25.....	13.53	Dec. 8.....	12.95
July 8.....	6.67	Mar. 25.....	13.34		
21.....	14.14	Apr. 16.....	13.42		

159-62-21AAA2

July 27, 1970..	5.69	Feb. 15.....	9.68	July 15.....	5.17
31.....	5.86	20.....	10.08	20.....	5.57
Aug. 5.....	6.09	25.....	9.80	25.....	5.57
10.....	6.45	28.....	10.19	31.....	6.00
15.....	6.74	Mar. 5.....	10.05	Aug. 5.....	6.33
20.....	7.15	10.....	10.17	10.....	6.51
25.....	7.31	15.....	10.19	15.....	6.99
31.....	7.75	20.....	10.37	20.....	a/7.30
Sept. 5.....	a/7.64	25.....	10.34	25.....	a/7.55
10.....	7.84	31.....	10.20	31.....	a/7.80
15.....	7.50	Apr. 10.....	9.85	Sept. 5.....	a/8.00
20.....	7.30	15.....	a/8.90	10.....	a/8.20
25.....	7.10	20.....	8.73	15.....	8.30
Oct. 15.....	7.49	25.....	8.14	20.....	8.45
20.....	7.28	30.....	7.52	25.....	8.50
25.....	7.27	May 5.....	6.56	30.....	8.65
31.....	7.47	10.....	5.95	Oct. 5.....	8.80
Nov. 5.....	7.25	15.....	5.37	10.....	8.35
Dec. 1.....	7.13	20.....	5.55	15.....	8.15
20.....	8.00	25.....	5.67	20.....	8.10
25.....	7.97	31.....	5.88	31.....	7.27
31.....	8.10	June 5.....	5.92	Nov. 5.....	7.10
Jan. 5, 1971..	8.51	10.....	5.73	10.....	7.15
10.....	8.55	15.....	5.93	15.....	7.15
15.....	8.93	20.....	5.80	20.....	6.85
20.....	8.70	25.....	5.79	25.....	6.80
25.....	9.12	30.....	5.55	30.....	6.85
Feb. 5.....	a/9.40	July 5.....	5.17	Dec. 5.....	6.80
10.....	9.45	10.....	4.99		

a/ Estimated

Water level, in feet below or (+) above land surface

159-62-21AAA3

Date	Water level	Date	Water level	Date	Water level
July 14, 1970..	16.01	Dec. 1.....	15.85	May 17.....	15.62
21.....	16.19	Jan. 4, 1971..	15.80	June 9.....	15.70
27.....	15.99	Feb. 25.....	15.56	July 13.....	15.73
Sept. 8.....	16.10	Mar. 25.....	15.60	Sept. 29.....	16.06
Oct. 14.....	16.11	Apr. 16.....	15.56	Nov. 12.....	15.77
Nov. 6.....	15.97	29.....	15.62	Dec. 8.....	15.75

159-62-21AAA4

July 14, 1970..	16.82	Dec. 1.....	16.73	May 17.....	16.55
21.....	16.99	Jan. 4, 1971..	16.70	June 9.....	16.62
27.....	16.87	Feb. 25.....	16.53	July 13.....	16.61
Sept. 8.....	16.89	Mar. 25.....	16.49	Sept. 29.....	16.88
Oct. 14.....	16.96	Apr. 16.....	16.47	Nov. 12.....	16.60
Nov. 6.....	16.86	29.....	17.17	Dec. 8.....	16.51

159-62-21AAA5

July 14, 1970..	17.13	Dec. 1.....	17.15	May 17.....	17.19
21.....	17.35	Jan. 4, 1971..	17.28	June 9.....	17.28
27.....	17.20	Feb. 25.....	17.10	July 13.....	17.19
Sept. 8.....	17.30	Mar. 25.....	17.09	Sept. 29.....	17.41
Oct. 14.....	17.43	Apr. 16.....	17.09	Nov. 12.....	17.17
Nov. 6.....	17.34	29.....	17.17	Dec. 8.....	17.20

160-54-13AAA

July 22, 1970..	8.10	Feb. 20.....	8.46	Aug. 16.....	8.53
Aug. 21.....	8.21	Mar. 26.....	8.34	Oct. 12.....	8.37
Oct. 31.....	8.18	Apr. 10.....	8.33	Nov. 6.....	8.58
Dec. 3.....	8.20	May 14.....	8.47	Dec. 7.....	8.30
Jan. 6, 1971..	8.36	July 15.....	8.47		

160-54-18BAA

Aug. 5, 1969..	11.78	July 15.....	11.59	Apr. 24.....	11.69
Oct. 23.....	11.68	Aug. 5.....	11.78	May 14.....	11.66
Nov. 22.....	11.79	18.....	11.64	June 10.....	11.78
Dec. 18.....	11.85	Oct. 3.....	11.67	July 15.....	11.66
Jan. 24, 1970..	11.60	Dec. 3.....	11.61	Aug. 16.....	11.77
Apr. 25.....	11.56	Jan. 6, 1971..	11.69	Oct. 12.....	11.64
May 8.....	11.61	Feb. 20.....	11.78	Nov. 6.....	11.70
21.....	11.61	Mar. 26.....	11.54	Dec. 7.....	11.75
June 19.....	11.52	Apr. 17.....	11.68		

Water level, in feet below or (+) above land surface

160-54-31CCC

Date	Water level	Date	Water level	Date	Water level
Oct. 23, 1969..	16.98	June 19.....	16.63	Apr. 17.....	17.09
Nov. 22.....	17.17	July 15.....	16.69	24.....	17.12
Dec. 18.....	17.17	Aug. 18.....	16.70	June 10.....	16.95
Jan. 24, 1970..	16.90	Oct. 3.....	16.74	July 15.....	16.70
Feb. 28.....	17.15	Dec. 3.....	16.83	Aug. 16.....	16.79
Mar. 24.....	17.09	Jan. 6, 1971..	16.91	Oct. 12.....	16.63
Apr. 25.....	17.00	Feb. 20.....	17.06	Nov. 6.....	16.95
May 8.....	16.96	Mar. 26.....	16.88	Dec. 7.....	16.98

160-55-6DDD

Aug. 5, 1969..	83.12	June 19.....	82.42	Mar. 26.....	82.10
Oct. 23.....	84.25	July 15.....	82.19	Apr. 17.....	82.05
Nov. 22.....	84.42	Aug. 5.....	80.82	June 10.....	82.10
Dec. 18.....	84.30	18.....	80.87	July 15.....	81.71
Feb. 28, 1970..	84.22	Oct. 3.....	82.30	Aug. 16.....	81.99
Mar. 24.....	84.02	Dec. 3.....	82.20	Oct. 12.....	81.85
Apr. 25.....	83.77	Jan. 6, 1971..	82.30	Nov. 6.....	81.93
May 8.....	83.95	Feb. 20.....	82.32	Dec. 7.....	81.95

160-56-16AAA4

Oct. 23, 1969..	128.88	May 8.....	129.05	Feb. 20.....	128.92
Nov. 22.....	128.00	June 17.....	129.02	Mar. 26.....	128.90
Dec. 18.....	129.02	July 15.....	128.96	Apr. 17.....	128.90
Jan. 24, 1970..	129.06	Aug. 18.....	129.00	June 10.....	128.84
Feb. 28.....	129.07	Oct. 3.....	129.58	July 15.....	128.75
Mar. 24.....	129.08	Dec. 3.....	128.95	Oct. 12.....	128.92
Apr. 25.....	129.09	Jan. 6, 1971..	128.96	Dec. 7.....	128.98

160-60-26BBB

Oct. 9, 1970..	10.91	Apr. 16.....	9.93	Sept. 29.....	10.38
Dec. 1.....	10.40	29.....	10.49	Nov. 12.....	8.29
Jan. 5, 1971..	10.83	May 17.....	9.93	Dec. 8.....	7.90
Feb. 26.....	9.94	July 13.....	10.44		
Mar. 25.....	10.33	Aug. 17.....	10.25		

160-63-24AAA

Sept. 10, 1970..	21.97	Mar. 25.....	21.49	Aug. 13.....	21.88
Oct. 7.....	22.02	Apr. 16.....	21.48	Sept. 29.....	21.92
Nov. 6.....	21.91	29.....	21.55	Nov. 12.....	21.61
Dec. 1.....	21.78	May 17.....	21.65	Dec. 8.....	21.44
Jan. 4, 1971..	21.70	June 9.....	21.72		
Feb. 25.....	21.52	July 13.....	21.72		

Water level, in feet below or (+) above land surface

160-64-1CCC

Date	Water level	Date	Water level	Date	Water level
Oct. 14, 1970..	15.70	Jan. 4, 1971..	15.37	Apr. 16.....	16.45
Nov. 6.....	15.50	Feb. 25.....	15.74	Apr. 29.....	16.69
Dec. 1.....	15.34	Mar. 25.....	16.08		

160-64-11DDD

Sept. 9, 1970..	10.40	Feb. 25.....	10.07	June 9.....	11.43
Oct. 14.....	10.03	Mar. 25.....	10.42	July 13.....	11.39
Nov. 6.....	9.82	Apr. 16.....	10.78	Sept. 27.....	11.49
Dec. 1.....	9.67	Apr. 29.....	11.02	Nov. 12.....	10.98
Jan. 4, 1971..	9.69	May 17.....	11.23	Dec. 8.....	10.78

160-64-15CBB

Aug. 13, 1971..	3.84	Sept. 2.....	3.48		
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160-64-15CCC

May 7, 1970..	+1.30	Nov. 6.....	+2.18	June 9.....	+0.88
May 30.....	+1.33	Dec. 1.....	+2.51	July 13.....	+ .94
July 14.....	+1.35	Jan. 4, 1971..	+2.50	Aug. 13.....	.73
Aug. 21.....	+1.50	Apr. 16.....	+1.40	Sept. 27.....	.20
Sept. 9.....	+1.78	Apr. 29.....	+1.20	Nov. 12.....	+ .80
Oct. 14.....	+1.97	May 17.....	+1.05	Dec. 8.....	+1.05

160-64-15CCD

Aug. 13, 1971..	4.09	Sept. 2.....	3.57		
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160-64-15DAA2

Aug. 13, 1971..	16.02	Sept. 2.....	16.72		
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160-64-20AAB

July 22, 1971..	18.77	Aug. 13.....	18.75	Sept. 2.....	18.95
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160-64-21AAB1

Aug. 13, 1971..	3.82	Sept. 2.....	4.52		
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Water level, in feet below or (+) above land surface

160-64-21AAB2

Date	Water level	Date	Water level	Date	Water level
Aug. 13, 1971..	3.77	Sept. 2.....	4.51		

160-64-22BAB

Oct. 14, 1970..	1.46	Mar. 25.....	1.82	July 13.....	2.72
Nov. 6.....	1.30	Apr. 16.....	2.44	Aug. 13.....	4.32
Dec. 1.....	1.20	29.....	2.65	Sept. 27.....	3.79
Jan. 4, 1971..	1.22	May 17.....	2.87	Nov. 12.....	2.77
Feb. 25.....	1.48	June 9.....	3.02	Dec. 8.....	2.54

160-64-22BBA1

Aug. 13, 1971..	3.06	Sept. 2.....	2.53
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160-64-22BBA2

Aug. 13, 1971..	2.02	Sept. 2.....	1.38
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160-64-28BBB

Sept. 9, 1970..	4.45	Feb. 25.....	5.77	Aug. 13.....	5.98
Oct. 14.....	5.56	Mar. 25.....	6.20	Sept. 27.....	6.42
Nov. 6.....	5.33	May 17.....	3.13	Nov. 12.....	5.66
Dec. 1.....	5.04	June 9.....	3.96	Dec. 8.....	5.52
Jan. 4, 1971..	5.33	July 13.....	4.17		

161-54-32CCC1

Oct. 31, 1969..	20.22	June 19.....	18.32	Apr. 24.....	18.32
Nov. 22.....	19.62	July 15.....	18.34	May 14.....	18.30
Dec. 18.....	19.19	Aug. 18.....	18.54	June 10.....	18.35
Jan. 24, 1970..	18.68	Oct. 3.....	18.78	July 15.....	18.40
Feb. 28.....	18.67	Dec. 3.....	18.40	Aug. 16.....	18.58
Mar. 24.....	18.36	Jan. 6, 1971..	18.43	Oct. 12.....	18.52
Apr. 25.....	18.29	Feb. 20.....	18.39	Nov. 6.....	18.44
May 8.....	18.35	Mar. 26.....	18.15	Dec. 7.....	18.51
21.....	18.29	Apr. 17.....	18.34		

Water level, in feet below or (+) above land surface

161-54-32CCC2

Date	Water level	Date	Water level	Date	Water level
Oct. 21, 1969..	6.69	June 19.....	2.82	Apr. 24.....	5.99
Nov. 22.....	6.71	July 15.....	4.71	May 14.....	6.05
Dec. 18.....	6.99	Aug. 18.....	6.69	June 10.....	6.00
Jan. 24, 1970..	7.73	Oct. 3.....	6.92	July 15.....	5.83
Feb. 28.....	8.35	Dec. 3.....	6.97	Aug. 16.....	7.72
Mar. 24.....	8.58	Jan. 6, 1971..	8.03	Oct. 12.....	7.75
Apr. 25.....	4.67	Feb. 20.....	9.09	Nov. 6.....	7.46
May 8.....	3.97	Mar. 26.....	8.90	Dec. 7.....	7.86
21.....	2.29	Apr. 17.....	6.46		

161-55-3DDD

June 3, 1971..	5.20	Aug. 17.....	5.73
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161-55-4BAA

June 3, 1971..	5.02	Aug. 17.....	5.50
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161-55-4DDD

June 3, 1971..	10.29	Aug. 17.....	9.83
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161-55-15BCB

May 26, 1971..	23.62	Aug. 16.....	23.44
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161-55-15BCD1

Oct. 21, 1969..	102.69	June 30.....	102.23	Sept. 25.....	102.62
Nov. 22.....	102.63	July 5.....	102.35	30.....	102.56
Dec. 18.....	102.67	10.....	102.40	Oct. 5.....	102.42
Jan. 24, 1970..	102.35	15.....	102.43	10.....	102.56
Feb. 28.....	102.58	20.....	102.53	15.....	102.65
Mar. 20.....	102.39	25.....	102.45	20.....	102.54
25.....	102.40	30.....	102.41	25.....	102.25
Apr. 25.....	102.09	Aug. 5.....	102.53	31.....	102.54
30.....	102.04	10.....	102.58	Nov. 5.....	102.45
May 5.....	102.36	15.....	102.57	10.....	102.47
10.....	102.16	20.....	102.62	15.....	102.60
15.....	102.21	25.....	102.62	20.....	102.40
20.....	102.23	30.....	102.65	25.....	102.24
25.....	102.08	Sept. 5.....	102.48	30.....	102.44
June 17.....	102.18	10.....	102.58	Dec. 5.....	102.57
20.....	102.27	15.....	102.59	10.....	102.60
25.....	102.24	20.....	102.44	15.....	102.44

Water level, in feet below or (+) above land surface

161-55-15BCD1, Continued

Date	Water Level	Date	Water Level	Date	Water Level
Dec. 20.....	102.51	Mar. 25.....	102.25	June 5.....	102.44
25.....	102.40	31.....	102.14	10.....	102.48
31.....	102.36	Apr. 5.....	102.39	30.....	102.33
Jan. 5, 1971..	102.52	10.....	101.98	July 14.....	102.52
10.....	102.44	15.....	102.11	19.....	102.97
15.....	102.54	20.....	102.30	Aug. 16.....	103.04
20.....	102.29	25.....	102.37	Sept. 10.....	102.99
25.....	102.42	30.....	102.33	Oct. 12.....	102.78
31.....	102.43	May 5.....	a/ 102.35	Nov. 6.....	102.72
Feb. 5.....	102.43	10.....	a/ 102.30	Dec. 7.....	102.73
26.....	102.20	15.....	102.28		
Mar. 13.....	102.36	18.....	102.38		

a/ Estimated

161-55-15BCD2

Oct. 21, 1969..	13.07	July 15.....	11.36	Apr. 16.....	12.10
Nov. 22.....	13.44	27.....	11.31	24.....	12.07
Dec. 18.....	13.35	Aug. 18.....	11.28	May 14.....	11.99
Jan. 24, 1970..	13.45	Sept. 8.....	11.41	June 10.....	12.17
Feb. 28.....	13.76	Oct. 3.....	11.61	July 15.....	11.62
Mar. 20.....	13.82	15.....	11.72	Aug. 16.....	11.65
Apr. 25.....	13.10	Dec. 3.....	12.05	Oct. 12.....	12.11
May 8.....	12.54	Jan. 6, 1971..	12.32	Nov. 6.....	12.61
21.....	12.28	Feb. 20.....	12.72	Dec. 6.....	13.13
June 17.....	11.69	Mar. 26.....	12.96		

161-55-15BCD3

July 15, 1970..	32.40	Dec. 3.....	32.63	May 14.....	32.52
27.....	32.42	Jan. 6, 1971..	33.21	June 10.....	32.65
Aug. 18.....	32.71	Feb. 20.....	33.26	July 15.....	32.58
Sept. 8.....	32.86	Mar. 26.....	33.04	Aug. 16.....	32.82
Oct. 3.....	32.68	Apr. 16.....	32.20	Oct. 12.....	33.10
15.....	32.82	24.....	32.40		

161-55-15BCD4

July 15, 1970..	29.44	Dec. 3.....	29.56	May 14.....	29.70
27.....	29.52	Jan. 6, 1971..	29.60	June 10.....	29.76
Aug. 18.....	29.59	Feb. 20.....	29.75	July 15.....	29.73
Sept. 8.....	29.63	Mar. 26.....	29.59	Aug. 16.....	29.82
Oct. 3.....	29.49	Apr. 16.....	29.64	Oct. 12.....	30.58
15.....	29.65	24.....	29.65	Nov. 6.....	30.19

Water level, in feet below or (+) above land surface

161-55-15BCD5

Date	Water level	Date	Water level	Date	Water level
July 15, 1970..	11.54	Dec. 3.....	12.42	May 14.....	12.65
27.....	11.50	Jan. 6, 1971..	12.74	June 10.....	12.87
Aug. 18.....	11.54	Feb. 20.....	13.19	July 15.....	12.22
Sept. 8.....	11.70	Mar. 26.....	13.35	Aug. 16.....	12.30
Oct. 3.....	11.91	Apr. 16.....	12.69	Nov. 6.....	12.80
15.....	12.06	24.....	12.67	Dec. 7.....	12.95

161-55-15BCD6

July 15, 1970..	11.19	Jan. 15.....	12.20	June 20.....	11.62
27.....	11.13	20.....	12.11	25.....	11.52
Aug. 20.....	11.16	25.....	12.24	30.....	11.46
25.....	11.18	31.....	12.27	July 5.....	11.43
31.....	11.24	Feb. 5.....	12.30	10.....	11.42
Sept. 5.....	11.19	10.....	12.30	15.....	11.36
10.....	11.26	15.....	12.33	20.....	11.33
15.....	11.29	20.....	12.44	25.....	11.32
20.....	11.24	25.....	12.40	31.....	11.30
25.....	11.38	28.....	12.48	Aug. 5.....	11.35
30.....	11.34	Mar. 5.....	12.50	10.....	11.34
Oct. 5.....	11.34	10.....	12.52	15.....	11.34
10.....	11.47	15.....	12.56	20.....	11.37
15.....	11.54	20.....	12.59	25.....	11.41
20.....	11.52	25.....	12.63	31.....	11.49
25.....	11.54	31.....	12.63	Sept. 5.....	11.47
31.....	11.65	Apr. 5.....	12.71	10.....	11.59
Nov. 5.....	11.65	10.....	12.12	15.....	11.62
10.....	11.67	15.....	11.89	20.....	11.66
15.....	11.74	20.....	11.87	25.....	11.75
20.....	11.74	25.....	11.84	30.....	11.81
25.....	11.63	30.....	11.82	Oct. 5.....	11.83
30.....	11.85	May 5.....	11.79	10.....	11.90
Dec. 5.....	11.94	10.....	11.85	12.....	11.91
10.....	11.96	15.....	11.84	Nov. 5.....	11.88
15.....	11.92	20.....	11.89	10.....	11.85
20.....	12.00	25.....	11.90	15.....	11.93
25.....	12.00	31.....	11.92	20.....	11.96
31.....	12.01	June 5.....	11.90	25.....	11.97
Jan. 5, 1971..	12.10	10.....	11.95	Dec. 7.....	12.40
10.....	12.14	15.....	11.77		

161-55-15CCC

May 26, 1971..	7.47	Aug. 16.....	7.27
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161-55-16ADA1

May 26, 1971..	24.06	Aug. 16.....	24.02
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Water level, in feet below or (+) above land surface

161-55-16ADA2					
Date	Water level	Date	Water level	Date	Water level
May 26, 1971..	22.71	Aug. 16.....	22.54		
161-55-16ADA3					
May 26, 1971..	23.67	Aug. 16.....	23.37		
161-55-16ADA4					
May 26, 1971..	31.00	Aug. 16.....	30.85		
161-55-16ADD1					
May 26, 1971..	22.19	Aug. 16.....	21.83		
161-55-16ADD2					
May 26, 1971..	20.51	Aug. 16.....	20.21		
161-55-17DDD					
May 26, 1971..	10.02	Aug. 16.....	10.02		
161-55-21DDD					
May 26, 1971..	4.17	Aug. 16.....	4.95		
161-55-22AAD					
May 26, 1971..	1.77	Aug. 16.....	4.45		
161-55-22ABC1					
July 15, 1971..	4.77	Aug. 16.....	5.70		

Water level, in feet below or (+) above land surface

161-55-22ABC2					
Date	Water level	Date	Water level	Date	Water level
July 15, 1971..	8.23	Aug. 16.....	9.10		
161-55-22ABC3					
July 15, 1971..	9.78	Aug. 16.....	10.64		
161-55-22ABC4					
July 15, 1971..	3.72	Aug. 16.....	4.66		
161-55-22ABC5					
July 15, 1971..	7.99	Aug. 16.....	8.89		
161-55-22ABC6					
July 15, 1971..	5.11	Aug. 16.....	5.86		
161-55-22ABC7					
July 15, 1971..	9.02	Aug. 16.....	9.86		
161-55-28CCC					
May 26, 1971..	5.33	Aug. 16.....	5.81		
161-56-6DDD					
Oct. 21, 1969..	38.87	June 19.....	38.90	Apr. 16.....	38.13
Nov. 22.....	38.88	July 15.....	38.80	Apr. 24.....	38.13
Dec. 18.....	38.98	Aug. 18.....	38.68	May 14.....	38.12
Jan. 24, 1970..	39.05	Oct. 3.....	38.54	June 10.....	38.10
Feb. 28.....	39.10	15.....	38.51	July 15.....	38.04
Mar. 24.....	39.18	Dec. 3.....	38.39	Aug. 17.....	37.92
Apr. 25.....	39.09	Jan. 6, 1971..	38.29	Oct. 12.....	37.79
May 8.....	38.80	Feb. 20.....	38.32	Nov. 6.....	37.85
May 21.....	38.96	Mar. 26.....	38.23	Dec. 7.....	37.82

Water level, in feet below or (+) above land surface

161-56-21AAA

Date	Water Level	Date	Water Level	Date	Water Level
Nov. 22, 1969..	3.89	July 15,	2.40	May 14,	1.94
Dec. 18,	4.02	Aug. 18,	3.54	June 10,	2.50
Jan. 24, 1970..	4.36	Oct. 3,	3.32	July 15,	2.13
Feb. 28,	4.55	3,	3.21	Aug. 17,	3.16
Mar. 24,	4.57	6, 1971..	3.99	Oct. 12,	3.23
Apr. 25,	4.59	Feb. 20,	4.85	Nov. 6,	3.12
May 8,	1.40	Mar. 26,	4.45	Dec. 7,	3.09
June 21,	1.14	Apr. 16,	1.38		
June 17,	1.82	24,	1.60		

161-56-22BCB

Jan 8, 1966..	6.90	Jan. 7, 1967..	8.25	Nov. 25,	9.58
15,	7.04	14,	8.25	Dec. 2,	9.49
22,	7.11	21,	8.27	9,	9.51
29,	7.16	28,	8.30	16,	9.52
Feb. 5,	7.23	4,	8.30	23,	9.53
12,	7.30	11,	8.33	30,	9.56
19,	7.39	18,	8.37	6, 1968..	9.59
26,	7.42	25,	8.43	13,	9.70
Mar. 5,	4.50	4,	8.46	20,	9.75
12,	4.46	11,	8.60	27,	9.83
19,	4.94	18,	8.90	3,	9.75
25,	5.47	25,	8.30	10,	9.77
May 7,	3.58	8,	8.50	17,	9.79
14,	3.63	15,	7.60	24,	9.81
21,	3.85	22,	6.80	31,	9.83
June 4,	4.32	29,	5.75	6,	9.81
11,	4.48	6,	4.60	13,	9.78
18,	4.72	13,	4.49	20,	9.65
25,	4.93	20,	4.40	27,	9.53
July 2,	4.52	27,	4.67	3,	9.23
9,	4.63	3,	4.95	10,	8.96
16,	4.75	10,	5.40	17,	8.77
23,	5.25	17,	5.54	24,	8.60
30,	5.45	24,	5.76	31,	8.28
Aug. 5,	5.66	1,	6.10	7,	7.90
12,	5.66	8,	6.48	14,	6.84
19,	6.03	15,	6.83	21,	6.50
Sept. 3,	6.62	22,	7.15	28,	6.30
10,	6.89	29,	7.43	5,	6.25
17,	7.14	5,	7.72	12,	6.15
24,	7.40	12,	7.92	19,	6.45
Oct. 1,	7.58	19,	8.18	26,	6.70
8,	7.71	26,	8.45	3,	6.99
15,	7.84	2,	8.65	10,	6.90
22,	7.92	9,	8.83	17,	7.06
Nov. 5,	7.89	16,	8.98	24,	7.35
12,	7.93	23,	9.10	31,	7.28
19,	7.99	30,	9.22	6,	7.48
26,	8.03	7,	9.35	13,	7.59
Dec. 3,	7.89	14,	9.37	20,	7.78
10,	7.99	21,	9.41	27,	7.75
17,	8.13	28,	9.46	4,	7.78
24,	8.16	4,	9.48	11,	7.81
31,	8.18	18,	9.56	18,	7.93

Water level, in feet below or (+) above land surface

161-56-22BCB, Continued

Date	Water level	Date	Water level	Date	Water level
Oct. 5.....	7.95	Aug. 9.....	8.07	May 23.....	5.71
12.....	8.17	16.....	8.23	30.....	5.19
19.....	8.23	23.....	8.35	June 6.....	5.37
26.....	8.48	30.....	8.54	13.....	5.56
Nov. 2.....	8.08	Sept. 6.....	8.69	20.....	5.64
9.....	8.12	13.....	8.87	27.....	5.79
16.....	8.12	20.....	8.98	July 4.....	6.10
23.....	8.14	25.....	9.10	11.....	6.40
30.....	8.17	27.....	9.15	18.....	5.36
Dec. 7.....	8.15	Oct. 4.....	9.43	25.....	5.10
14.....	8.15	11.....	9.30	Aug. 1.....	7.23
21.....	8.17	18.....	9.32	8.....	7.53
28.....	8.20	25.....	9.49	15.....	7.80
Jan. 4, 1969..	8.21	30.....	9.48	22.....	9.08
11.....	8.29	Nov. 1.....	8.53	22.....	8.20
18.....	8.32	8.....	8.58	29.....	8.34
25.....	8.39	15.....	8.68	Sept. 5.....	8.90
Feb. 1.....	8.41	22.....	9.13	12.....	8.66
8.....	8.45	29.....	9.70	19.....	8.70
15.....	8.47	Dec. 6.....	9.68	26.....	8.88
22.....	8.50	13.....	9.60	Oct. 3.....	9.20
Mar. 1.....	8.59	20.....	9.60	10.....	9.04
8.....	8.57	27.....	9.62	17.....	9.01
15.....	8.56	Jan. 3, 1970..	9.67	24.....	9.17
22.....	8.53	10.....	9.66	30.....	9.17
29.....	8.58	13.....	9.74	Nov. 7.....	9.17
Apr. 5.....	7.66	17.....	9.67	14.....	8.96
12.....	7.30	24.....	9.67	21.....	8.97
19.....	7.09	31.....	9.67	28.....	9.16
26.....	6.62	Feb. 7.....	9.71	Dec. 3.....	9.28
May 3.....	6.30	14.....	9.75	5.....	9.10
10.....	6.27	21.....	9.88	12.....	8.92
17.....	6.20	28.....	10.09	19.....	9.08
24.....	6.32	Mar. 7.....	9.80	26.....	9.12
31.....	6.52	14.....	9.73	Jan. 2, 1971..	9.12
June 7.....	6.57	21.....	10.06	9.....	9.35
14.....	6.70	28.....	10.02	16.....	9.30
21.....	6.90	Apr. 4.....	9.83	23.....	9.34
28.....	6.98	11.....	9.49	30.....	9.40
July 5.....	6.96	18.....	9.04	Feb. 6.....	9.24
12.....	6.94	25.....	8.36	13.....	9.66
19.....	7.34	May 2.....	7.00	20.....	9.50
26.....	7.49	9.....	6.35	26.....	9.40
Aug. 2.....	7.72	16.....	6.04		

161-58-20AAA

Oct. 15, 1970..	3.22	Apr. 10.....	7.37	July 13.....	2.17
Nov. 6.....	2.72	16.....	6.82	Aug. 17.....	3.93
Dec. 1.....	3.03	29.....	4.97	Sept. 29.....	5.13
Jan. 6, 1971..	4.84	May 14.....	4.50	Nov. 18.....	4.14
Mar. 25.....	7.16	June 10.....	4.93	Dec. 7.....	4.61

Water Level, in feet below or (+) above land surface

161-59-228BB1

Date	Water Level	Date	Water Level	Date	Water Level
July 22, 1970..	6.24	Jan. 10.....	8.55	June 30.....	8.40
25.....	6.38	15.....	8.73	July 5.....	7.96
31.....	6.56	20.....	8.76	10.....	7.60
Aug. 5.....	6.74	25.....	8.95	15.....	7.25
10.....	6.93	31.....	9.17	20.....	7.03
15.....	7.06	5.....	9.33	25.....	6.85
20.....	7.23	10.....	9.57	31.....	6.75
25.....	7.31	15.....	9.70	Aug. 5.....	6.70
Sept. 31.....	7.45	20.....	10.00	10.....	6.70
5.....	7.44	25.....	10.25	15.....	6.70
10.....	7.47	28.....	10.33	20.....	6.60
15.....	7.41	5.....	10.59	25.....	6.75
20.....	7.15	10.....	10.81	31.....	6.80
25.....	7.25	15.....	10.73	Sept. 5.....	6.73
Oct. 30.....	7.11	20.....	10.92	10.....	6.85
5.....	7.07	25.....	11.08	15.....	6.80
10.....	7.16	31.....	11.15	20.....	6.85
15.....	7.28	5.....	11.30	25.....	6.85
20.....	7.23	10.....	11.52	30.....	6.90
25.....	7.22	15.....	11.71	Oct. 5.....	6.95
Nov. 10.....	7.37	20.....	11.65	10.....	6.65
15.....	7.39	25.....	11.67	15.....	6.65
20.....	7.32	30.....	11.59	20.....	6.55
25.....	7.33	5.....	11.55	25.....	6.25
Dec. 10.....	7.28	10.....	11.50	31.....	6.25
15.....	7.35	15.....	11.33	Nov. 5.....	6.60
20.....	7.25	20.....	11.20	10.....	6.25
25.....	7.35	25.....	11.03	15.....	6.25
Jan. 5, 1971..	8.15	31.....	10.86	20.....	6.05
	8.43	June 5.....	10.59	25.....	6.25
		10.....	10.34	30.....	6.45
		15.....	9.93	Dec. 5.....	6.50
		20.....	9.33	8.....	6.70
		25.....	8.81		

161-59-228BB2

July 10, 1970..	20.22	Jan. 6, 1971..	20.20	July 13.....	21.28
20.....	20.92	25.....	20.17	Aug. 17.....	21.27
22.....	20.50	29.....	20.25	Sept. 29.....	21.13
Sept. 9.....	20.62	Mar. 16.....	20.58	Nov. 18.....	20.60
15.....	20.69	29.....	20.75	Dec. 8.....	20.80
Nov. 4.....	20.54	May 14.....	20.90		
Dec. 2.....	20.34	10.....	21.13		

161-59-228BB3

July 10, 1970..	24.68	Jan. 6, 1971..	23.77	July 13.....	24.65
20.....	24.64	26.....	23.65	Aug. 17.....	24.88
22.....	24.55	29.....	23.57	Sept. 29.....	24.96
Sept. 9.....	22.94	Mar. 16.....	23.86	Nov. 18.....	24.79
15.....	24.19	29.....	24.01	Dec. 8.....	25.03
Oct. 15.....	24.19	May 14.....	24.14		
Nov. 4.....	24.06	10.....	24.47		
Dec. 2.....	23.91	June 10.....	24.47		

Water level, in feet below or (+) above land surface

161-59-22BBB4

Date	Water level	Date	Water level	Date	Water level
July 10, 1970..	25.86	Jan. 6, 1971..	27.45	July 13.....	27.42
20.....	27.86	Feb. 26.....	27.23	Aug. 15.....	27.50
22.....	27.64	Mar. 24.....	27.11	Sept. 29.....	27.49
Sept. 9.....	23.69	Apr. 16.....	27.26	Nov. 18.....	27.26
Oct. 15.....	27.66	29.....	27.35	Dec. 8.....	27.70
Nov. 4.....	27.59	May 14.....	27.39		
Dec. 2.....	27.49	June 10.....	27.41		

161-59-22BBB5

July 10, 1970..	28.00	Jan. 6, 1971..	27.82	July 13.....	27.80
20.....	28.27	Feb. 26.....	27.63	Aug. 17.....	27.85
22.....	28.11	Mar. 24.....	27.50	Sept. 29.....	27.87
Sept. 9.....	27.96	Apr. 16.....	27.69	Nov. 18.....	27.46
Oct. 15.....	28.08	29.....	27.74	Dec. 8.....	27.72
Nov. 4.....	28.00	May 14.....	27.74		
Dec. 2.....	27.87	June 10.....	27.87		

161-60-21BBB

Nov. 15, 1969..	10.04	Sept. 5.....	9.12	Feb. 25.....	9.69
20.....	10.06	10.....	9.01	28.....	9.75
25.....	10.10	15.....	8.82	Mar. 5.....	9.80
30.....	10.12	20.....	8.67	10.....	9.85
Dec. 5.....	10.14	25.....	8.61	15.....	9.90
16.....	10.18	30.....	8.54	20.....	9.94
Feb. 5, 1970..	10.43	Oct. 5.....	8.48	25.....	10.00
10.....	10.46	10.....	8.49	31.....	10.03
15.....	10.49	15.....	8.53	Apr. 5.....	10.08
20.....	10.53	20.....	8.50	10.....	10.10
25.....	10.56	25.....	8.50	15.....	9.97
Mar. 20.....	10.62	31.....	8.53	20.....	9.43
25.....	10.64	Nov. 5.....	8.52	25.....	9.23
31.....	10.67	10.....	8.50	30.....	9.30
Apr. 5.....	10.69	15.....	8.49	May 5.....	9.26
9.....	10.68	20.....	8.49	10.....	9.30
May 10.....	9.61	25.....	8.48	15.....	9.30
15.....	9.42	30.....	8.50	20.....	9.34
20.....	9.18	Dec. 5.....	8.59	25.....	9.37
25.....	9.21	15.....	8.65	31.....	9.40
30.....	9.30	20.....	8.74	June 5.....	9.41
June 17.....	8.52	25.....	8.77	10.....	9.41
July 9.....	8.32	31.....	8.86	15.....	9.38
17.....	7.83	Jan. 5, 1971..	8.97	20.....	9.31
21.....	7.85	10.....	9.04	25.....	9.17
27.....	8.66	15.....	9.14	30.....	8.99
31.....	8.70	20.....	9.19	July 5.....	8.69
Aug. 5.....	8.75	25.....	9.28	10.....	8.45
10.....	8.83	31.....	9.36	15.....	8.25
15.....	8.90	Feb. 5.....	9.42	20.....	8.21
20.....	8.98	10.....	9.44	25.....	8.04
25.....	9.04	15.....	9.56	31.....	7.96
31.....	9.12	20.....	9.65	Aug. 5.....	7.99

Water level, in feet below or (+) above land surface

161-60-21BBB, Continued

Date	Water Level	Date	Water Level	Date	Water Level
Aug. 10, 1971..	8.02	Sept. 20.....	8.55	Oct. 31.....	7.87
15.....	8.09	25.....	8.58	Nov. 5.....	7.87
20.....	8.16	30.....	8.62	15.....	7.94
25.....	8.25	Oct. 5.....	8.62	20.....	7.87
31.....	8.33	10.....	8.26	25.....	7.92
Sept. 5.....	8.36	15.....	8.19	30.....	8.01
10.....	8.46	20.....	8.15	Dec. 5.....	8.07
15.....	8.48	25.....	7.90		

161-62-6DDD

Oct. 8, 1970..	7.04	Mar. 25.....	7.57	July 13.....	7.99
Nov. 5.....	6.69	Apr. 16.....	7.99	Aug. 17.....	7.48
Dec. 1.....	6.53	29.....	8.24	Sept. 29.....	7.03
Jan. 5, 1971..	6.51	May 17.....	8.42	Nov. 12.....	6.24
Feb. 26.....	7.18	June 9.....	8.55	Dec. 8.....	6.05

161-62-19AAB1

Dec. 16, 1969..	12.39	Oct. 14.....	11.33	June 9.....	12.80
Feb. 6, 1970..	12.59	Nov. 5.....	11.06	July 13.....	12.20
Mar. 18.....	13.04	Dec. 1.....	10.83	Aug. 18.....	11.75
May 7.....	13.58	Jan. 5, 1971..	10.93	Sept. 29.....	11.39
July 14.....	12.61	Apr. 16.....	12.29	Nov. 12.....	10.62
Aug. 21.....	12.04	29.....	12.52	Dec. 8.....	10.44
Sept. 9.....	11.69	May 17.....	12.73		

161-62-30DDD

Oct. 7, 1970..	8.00	Mar. 25.....	7.95	July 13.....	8.50
Nov. 6.....	7.64	Apr. 16.....	7.96	Aug. 17.....	8.10
Dec. 2.....	7.43	29.....	8.30	Sept. 29.....	8.04
Jan. 5, 1971..	7.43	May 17.....	8.53	Nov. 12.....	7.50
Feb. 25.....	7.73	June 9.....	8.74	Dec. 8.....	7.32

161-62-36DDD

Dec. 1, 1970..	9.38	Apr. 29.....	8.73	Sept. 29.....	8.70
Jan. 5, 1971..	8.78	May 17.....	8.81	Nov. 12.....	8.43
Feb. 25.....	8.54	June 9.....	8.77	Dec. 8.....	8.40
Mar. 25.....	8.46	July 13.....	8.58		
Apr. 10.....	8.59	Aug. 17.....	8.62		

Water level, in feet below or (+) above land surface

161-63-29BBB

Date	Water level	Date	Water level	Date	Water level
Sept. 9, 1970..	13.54	Jan. 5, 1971..	14.47	June 9.....	17.45
Oct. 23.....	13.51	Feb. 25.....	15.96	July 13.....	16.01
Oct. 6.....	13.49	Mar. 25.....	16.64	Aug. 13.....	15.18
Oct. 14.....	13.56	Apr. 16.....	17.25	Sept. 28.....	15.09
Nov. 6.....	13.60	May 29.....	17.48	Nov. 12.....	14.68
Dec. 1.....	13.70	May 17.....	17.56	Dec. 8.....	14.59

161-64-26CCC2

Sept. 9, 1970..	12.04	Mar. 25.....	13.56	Aug. 18.....	13.68
Oct. 14.....	11.80	Apr. 16.....	14.10	Sept. 28.....	13.54
Nov. 6.....	11.72	May 29.....	14.32	Nov. 12.....	13.25
Dec. 1.....	11.65	May 17.....	14.50	Dec. 8.....	13.15
Jan. 4, 1971..	11.98	June 9.....	14.59		
Feb. 25.....	12.96	July 13.....	14.00		

162-56-1CCC2

Oct. 22, 1969..	7.88	July 10.....	5.44	May 14.....	5.67
Oct. 22.....	7.87	Aug. 18.....	7.14	June 10.....	6.28
Dec. 18.....	7.71	Oct. 3.....	7.60	July 15.....	6.78
Jan. 24, 1970..	7.80	Dec. 3.....	7.15	Aug. 17.....	7.62
Feb. 28.....	7.77	Jan. 6, 1971..	7.40	Oct. 12.....	7.82
Mar. 24.....	7.62	Feb. 20.....	7.49	Nov. 18.....	7.48
Apr. 25.....	5.40	Mar. 26.....	7.15	Dec. 7.....	7.20
May 8.....	5.10	Apr. 16.....	5.72		
May 21.....	4.65	Apr. 24.....	5.60		

162-56-5DDD

Nov. 14, 1969..	126.13	May 21.....	125.86	Apr. 16.....	125.06
Nov. 22.....	125.69	July 10.....	125.70	June 10.....	124.66
Dec. 18.....	126.20	Aug. 18.....	125.55	July 15.....	124.69
Jan. 24, 1970..	127.11	Oct. 3.....	125.49	Aug. 17.....	124.65
Feb. 28.....	126.28	Dec. 3.....	125.35	Oct. 12.....	124.49
Mar. 24.....	126.17	Jan. 6, 1971..	125.27	Dec. 7.....	124.54
Apr. 25.....	126.10	Feb. 20.....	125.21		
May 8.....	125.90	Mar. 26.....	125.10		

162-56-20AAA

Oct. 22, 1969..	44.14	June 19.....	43.29	Apr. 24.....	42.05
Nov. 22.....	44.24	July 10.....	43.16	May 14.....	41.80
Dec. 18.....	44.13	Aug. 18.....	42.91	June 10.....	41.35
Feb. 28, 1970..	43.33	Oct. 3.....	42.79	July 15.....	40.94
Mar. 24.....	43.76	Dec. 3.....	42.65	Aug. 17.....	40.89
Apr. 25.....	43.63	Jan. 6, 1971..	42.63	Oct. 12.....	40.94
May 8.....	43.48	Feb. 20.....	42.62	Nov. 18.....	40.57
May 21.....	43.52	Apr. 16.....	41.90	Dec. 7.....	41.10

Water level, in feet below or (+) above land surface

162-56-30ADD1

Date	Water level	Date	Water level	Date	Water level
July 15, 1970 to Dec. 7, 1971 Dry					

162-56-30ADD2

July 15, 1970..	53.96	Feb. 20.....	53.71	Aug. 17.....	53.46
Aug. 18.....	53.84	Mar. 26.....	53.78	Oct. 12.....	53.22
Oct. 3.....	53.72	Apr. 16.....	53.56	Nov. 18.....	53.25
15.....	53.86	24.....	53.51	Dec. 7.....	53.32
Dec. 3.....	53.72	June 10.....	53.23		
Jan. 6, 1971..	53.50	July 15.....	53.28		

162-56-30ADD3

July 15, 1970..	54.16	Feb. 20.....	53.91	Aug. 17.....	53.25
Aug. 18.....	54.04	Mar. 26.....	53.59	Oct. 12.....	53.41
Oct. 3.....	54.01	Apr. 16.....	53.93	Nov. 18.....	53.46
15.....	54.05	24.....	53.70	Dec. 7.....	53.53
Dec. 3.....	53.90	June 10.....	52.99		
Jan. 6, 1971..	53.92	July 15.....	53.48		

162-56-36AAA2

Oct. 22, 1969..	7.57	July 15.....	4.60	June 10.....	5.72
Nov. 22.....	7.63	Aug. 21.....	6.69	July 15.....	6.95
Dec. 18.....	7.59	Oct. 3.....	7.35	Aug. 17.....	7.28
Apr. 25, 1970..	5.60	Dec. 3.....	6.86	Oct. 12.....	7.68
May 8.....	4.29	Apr. 17, 1971..	5.56	Nov. 6.....	7.43
21.....	3.82	24.....	5.15	Dec. 7.....	7.60
June 19.....	3.47	May 14.....	5.02		

162-57-27CDB1

July 22, 1970..	7.04	Jan. 20.....	13.08	Apr. 10.....	11.28
25.....	7.28	25.....	13.19	15.....	9.61
Aug. 27.....	7.52	31.....	13.27	20.....	9.47
20.....	9.38	Feb. 5.....	13.33	25.....	9.47
Sept. 10.....	10.63	10.....	13.33	30.....	9.75
Oct. 15.....	11.80	15.....	13.43	May 5.....	9.87
Nov. 6.....	12.14	20.....	13.53	10.....	10.20
Dec. 5.....	12.68	25..... ^a	13.51	15.....	10.45
10.....	12.74	28.....	13.57	20.....	10.79
15.....	12.72	Mar. 5.....	13.57	25.....	11.05
20.....	12.84	10.....	13.62	31.....	11.32
25.....	12.82	15.....	13.57	June 5.....	11.43
31.....	12.84	20.....	13.52	10.....	11.65
Jan. 5, 1971.. ^a	13.02	25.....	13.50	15.....	9.80
10.....	13.05	31.....	13.63	20.....	9.47
15.....	13.17	Apr. 5.....	13.52	25.....	9.53

Water level, in feet below or (+) above land surface

162-57-27CDB1, Continued

Date	Water level	Date	Water level	Date	Water level
June 30.....	9.75	Aug. 25.....	11.80	Aug. 20.....	11.65
July 5.....	9.83	31.....	11.95	25.....	a/11.15
10.....	10.12	Sept. 5.....	11.95	31.....	10.85
15.....	10.29	10.....	12.15	Nov. 5.....	10.65
20.....	10.59	15.....	12.30	10.....	10.70
25.....	10.70	20.....	12.25	15.....	10.70
31.....	11.01	25.....	12.25	20.....	10.45
Aug. 5.....	11.28	30.....	12.30	25.....	10.25
10.....	11.38	Oct. 5.....	12.45	30.....	10.30
15.....	a/11.50	10.....	12.10	Dec. 5.....	10.25
20.....	11.65	15.....	11.90		

a/ Estimated.

162-57-27CDB2

July 14, 1970..	15.80	Jan. 6, 1971..	17.08	June 10.....	17.30
20.....	15.89	Feb. 26.....	17.07	July 15.....	17.29
Sept. 9.....	16.14	Mar. 26.....	16.98	Aug. 17.....	17.79
Oct. 14.....	16.70	Apr. 16.....	16.75	Sept. 29.....	18.18
Nov. 6.....	16.65	24.....	16.53	Nov. 18.....	17.87
Dec. 2.....	16.97	May 14.....	16.70	Dec. 7.....	17.77

162-57-27CDB3

July 14, 1970..	21.73	Jan. 6, 1971..	21.54	June 10.....	21.68
20.....	21.55	Feb. 26.....	21.46	July 15.....	21.69
Sept. 9.....	21.63	Mar. 26.....	21.33	Aug. 17.....	21.77
Oct. 14.....	21.70	Apr. 16.....	21.42	Sept. 29.....	21.90
Nov. 6.....	21.73	24.....	21.50	Nov. 18.....	21.92
Dec. 2.....	21.66	May 14.....	21.56	Dec. 7.....	21.45

162-57-27CDB4

July 20, 1970..	40.88	Jan. 6, 1971..	43.78	June 10.....	44.28
Sept. 9.....	42.88	Feb. 26.....	44.08	July 15.....	44.40
Oct. 14.....	42.68	Mar. 26.....	44.09	Aug. 17.....	44.53
Nov. 6.....	43.04	Apr. 16.....	44.19		
Dec. 2.....	43.38	May 14.....	44.12		

162-57-27CDB5

July 20, 1970 to Dec. 7, 1971 Dry

Water level, in feet below or (+) above land surface

162-58-22BBB

Date	Water level	Date	Water level	Date	Water level
Dec. 18, 1969..	71.00	Nov. 5.....	70.32	June 10.....	70.08
Feb. 5, 1970..	70.83	Dec. 2.....	70.43	July 15.....	70.13
Mar. 18.....	70.80	Jan. 6, 1971..	70.47	Aug. 17.....	70.23
May 7.....	70.79	Feb. 26.....	70.19	Sept. 29.....	70.31
30.....	70.66	Mar. 26.....	70.32	Nov. 18.....	70.32
July 14.....	70.32	Apr. 16.....	70.33	Dec. 7.....	70.32
Aug. 21.....	70.02	29.....	70.32		
Oct. 9.....	70.04	May 14.....	70.02		

162-63-15CCC

Dec. 16, 1969..	7.29	Oct. 8.....	5.77	May 17.....	7.10
Feb. 6, 1970..	9.42	Nov. 5.....	5.72	June 9.....	5.61
Mar. 18.....	10.37	Dec. 2.....	6.85	July 13.....	3.63
May 7.....	6.23	Jan. 5, 1971..	8.73	Aug. 17.....	6.57
30.....	4.71	Feb. 26.....	10.43	Sept. 28.....	6.58
July 14.....	3.60	Mar. 25.....	10.76	Nov. 12.....	5.39
Aug. 21.....	5.25	Apr. 16.....	10.71	Dec. 8.....	5.90
Sept. 10.....	5.09	29.....	7.39		

162-63-21BBB

Oct. 8, 1970..	9.78	Mar. 25.....	13.05	July 13.....	7.53
Nov. 5.....	9.87	Apr. 16.....	11.74	Aug. 17.....	10.35
Dec. 2.....	10.65	29.....	10.47	Sept. 28.....	10.87
Jan. 5, 1971..	11.82	May 17.....	10.11	Nov. 12.....	9.44
Feb. 26.....	12.90	June 9.....	9.62	Dec. 8.....	9.98

162-64-33AAA2

May 28, 1969..	12.35	Aug. 21.....	10.78	May 17.....	15.03
July 29.....	9.52	Sept. 9.....	12.07	June 9.....	15.12
Sept. 3.....	10.70	Oct. 7.....	11.57	July 13.....	14.05
Dec. 16.....	12.27	Nov. 5.....	11.90	Aug. 17.....	9.41
Feb. 6, 1970..	13.65	Dec. 2.....	13.03	Sept. 28.....	10.59
Mar. 18.....	13.05	Jan. 5, 1971..	13.40	Nov. 12.....	8.76
May 7.....	11.17	Feb. 26.....	13.90	Dec. 8.....	10.62
30.....	14.24	Apr. 16.....	14.72		
July 14.....	9.43	29.....	14.92		

Water level, in feet below or (+) above land surface

163-55-9BBB1
(1961-65 measurements by the U.S. Bureau of Reclamation)

Date	Water level	Date	Water level	Date	Water level
Nov. 8, 1961..	8.9	Feb. 12.....	8.6	Apr. 8.....	5.3
Dec. 6.....	9.1	Mar. 18.....	9.5	May 1.....	4.4
Apr. 24, 1962..	4.2	Apr. 22.....	6.6	June 16.....	4.4
May 21.....	3.5	June 4.....	4.5	July 28.....	5.0
June 22.....	3.4	July 9.....	5.3	Sept. 9.....	4.3
July 21.....	4.2	Aug. 7.....	4.1	Oct. 15.....	4.0
Aug. 31.....	5.2	Sept. 5.....	5.2	Nov. 24.....	4.8
Sept. 21.....	5.6	Oct. 4.....	5.9	Jan. 14, 1965..	6.2
Nov. 3.....	5.9	Oct. 30.....	6.6	Mar. 10.....	6.4
Dec. 14.....	6.1	Dec. 26.....	7.0	Apr. 20.....	3.0
Jan. 2, 1963..	6.6	Feb. 27, 1964..	8.5	Nov. 13, 1969..	7.80

163-55-17AAA2
(1961-65 measurements by the U.S. Bureau of Reclamation)

Nov. 8, 1961..	9.4	Feb. 12.....	9.6	Apr. 8.....	8.6
Dec. 6.....	9.4	Mar. 18.....	10.4	May 1.....	6.9
Apr. 24, 1962..	9.4	Apr. 22.....	9.8	June 16.....	4.5
May 21.....	6.2	June 4.....	6.9	July 28.....	6.1
June 22.....	4.0	July 9.....	6.6	Sept. 9.....	6.7
July 21.....	5.9	Aug. 7.....	5.6	Oct. 15.....	4.9
Aug. 31.....	6.9	Sept. 5.....	6.2	Nov. 24.....	5.5
Sept. 21.....	7.3	Oct. 4.....	6.6	Jan. 14, 1965..	7.8
Nov. 3.....	7.5	Oct. 30.....	6.6	Mar. 10.....	9.4
Dec. 14.....	7.2	Dec. 26.....	7.5	Apr. 20.....	9.7
Jan. 2, 1963..	8.1	Feb. 27, 1964..	9.1	Nov. 13, 1969..	8.86

163-55-18BBB1

Nov. 13, 1969..	7.74	Aug. 18.....	5.15	May 28.....	6.45
22.....	7.72	Oct. 3.....	5.59	June 10.....	6.42
Dec. 18.....	7.79	Dec. 3.....	5.79	July 15.....	6.16
Jan. 24, 1970..	8.00	Jan. 6, 1971..	6.16	Aug. 17.....	6.89
Mar. 20.....	8.57	Feb. 20.....	7.23	Oct. 12.....	7.74
Apr. 25.....	7.44	Mar. 26.....	7.79	Nov. 18.....	7.23
May 8.....	5.93	Apr. 16.....	7.88	Dec. 7.....	7.28
21.....	4.75	24.....	7.74		
July 9.....	3.80	May 14.....	6.69		

163-55-21ADD

Nov. 13, 1969..	11.73	July 10.....	7.67	May 14.....	8.77
22.....	12.12	Aug. 18.....	9.50	28.....	9.08
Dec. 18.....	12.16	Oct. 3.....	11.13	June 10.....	9.50
Jan. 24, 1970..	12.48	Dec. 2.....	12.10	July 15.....	10.38
Feb. 28.....	12.72	Jan. 6, 1971..	12.36	Aug. 17.....	11.10
Mar. 24.....	12.81	Feb. 20.....	12.70	Oct. 12.....	12.30
Apr. 25.....	10.75	Mar. 26.....	12.83	Nov. 18.....	12.81
May 8.....	8.15	Apr. 10.....	10.73	Dec. 7.....	12.87
21.....	7.45	24.....	8.99		

Water level, in feet below or (+) above land surface

163-55-21BBB
(1961-65 measurements by the U.S. Bureau of Reclamation)

Date	Water level	Date	Water level	Date	Water level
Nov. 8, 1961..	15.1	Feb. 12.....	13.0	Apr. 8.....	10.2
Dec. 6.....	14.7	Mar. 18.....	13.2	May 1.....	12.1
Apr. 24, 1962..	11.4	Apr. 22.....	13.2	June 16.....	11.9
May 21.....	11.2	June 4.....	9.8	July 28.....	10.5
June 22.....	8.6	July 9.....	9.3	Sept. 9.....	12.0
July 21.....	8.0	Aug. 7.....	8.4	Oct. 15.....	12.6
Aug. 31.....	9.1	Sept. 5.....	9.6	Nov. 24.....	13.4
Sept. 21.....	9.8	Oct. 4.....	11.1	Jan. 14, 1965..	13.9
Nov. 3.....	11.1	Oct. 30.....	12.0	Mar. 10.....	13.8
Dec. 14.....	12.2	Dec. 26.....	13.3	Apr. 20.....	12.4
Jan. 2, 1963..	12.6	Feb. 27, 1964..	13.7	Nov. 13, 1969..	13.03

163-55-22BBB

Nov. 13, 1969..	Flowing	Nov. 22.....	Flowing	Dec. 3, 1970..	+11.95
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163-56-3BCB
(1962-63 measurements by the U.S. Bureau of Reclamation)

May 21, 1962..	5.4	Sept. 5, 1963..	7.2	Oct. 30.....	7.9
June 22.....	4.6	Oct. 4.....	7.6	Nov. 13, 1969..	7.71

163-56-11AAA
(1961-65 measurements by the U.S. Bureau of Reclamation)

Nov. 9, 1961..	9.3	Feb. 12.....	8.7	Apr. 8.....	7.7
Dec. 6.....	9.4	Mar. 18.....	9.5	May 1.....	6.3
Apr. 24, 1962..	9.0	Apr. 22.....	8.6	June 16.....	6.1
May 21.....	6.0	June 4.....	7.0	July 28.....	6.7
June 22.....	3.4	July 9.....	6.3	Sept. 9.....	6.9
July 21.....	5.6	Aug. 7.....	4.4	Oct. 15.....	5.9
Aug. 31.....	6.3	Sept. 5.....	5.9	Nov. 24.....	6.1
Sept. 22.....	6.9	Oct. 4.....	6.8	Jan. 14, 1965..	7.1
Nov. 3.....	7.3	Oct. 30.....	7.1	Mar. 10.....	8.3
Dec. 14.....	7.4	Dec. 26.....	7.6	Apr. 20.....	7.1
Jan. 3, 1963..	7.7	Feb. 27, 1964..	8.5	Nov. 13, 1969..	7.90

163-56-11BBB

Nov. 13, 1969..	21.70	May 21.....	21.45	Apr. 16.....	21.39
22.....	21.82	July 9.....	21.48	24.....	21.55
Dec. 18.....	21.83	Aug. 18.....	21.75	June 10.....	21.65
Jan. 24, 1970..	21.73	Oct. 3.....	21.81	July 15.....	21.78
Feb. 28.....	21.66	Dec. 3.....	21.79	Aug. 17.....	22.03
Mar. 24.....	21.68	Jan. 6, 1971..	21.75	Oct. 12.....	21.97
Apr. 25.....	21.39	Feb. 20.....	21.73	Nov. 18.....	21.87
May 8.....	21.43	Mar. 26.....	21.46	Dec. 7.....	21.98

Water level, in feet below or (+) above land surface

163-56-13ADA2
(1961-65 measurements by the U.S. Bureau of Reclamation)

Date	Water level	Date	Water level	Date	Water level
Nov. 9, 1961..	10.0	Feb. 12.....	9.5	Apr. 8.....	10.4
Dec. 6.....	10.2	Mar. 18.....	10.9	May 1.....	8.9
Apr. 24, 1962..	9.3	Apr. 22.....	11.3	June 16.....	10.3
May 21.....	6.5	June 4.....	7.9	July 28.....	7.1
June 22.....	5.5	July 9.....	7.1	Sept. 9.....	6.8
July 21.....	6.4	Aug. 7.....	5.9	Oct. 15.....	6.2
Aug. 31.....	7.0	Sept. 5.....	6.8	Nov. 24.....	6.6
Sept. 21.....	7.3	Oct. 4.....	7.3	Jan. 14, 1965..	8.2
Nov. 3.....	7.7	30.....	7.8	Mar. 10.....	9.6
Dec. 14.....	8.0	Dec. 26.....	8.4	Apr. 20.....	7.1
Jan. 2, 1963..	8.3	Feb. 27, 1964..	9.4	Nov. 13, 1969..	8.40

163-56-15BBB
(Measurements by the U.S. Bureau of Reclamation)

Nov. 7, 1961..	9.8	Mar. 18.....	9.0	May 1.....	7.8
Apr. 24, 1962..	7.7	Apr. 22.....	8.9	June 16.....	7.7
May 21.....	7.2	June 4.....	7.1	July 28.....	8.3
June 22.....	7.3	July 9.....	8.4	Sept. 9.....	8.0
July 21.....	8.2	Aug. 7.....	7.7	Oct. 15.....	7.6
Aug. 31.....	8.6	Sept. 5.....	8.4	Nov. 24.....	8.1
Sept. 21.....	8.7	Oct. 4.....	8.7	Jan. 14, 1965..	8.7
Nov. 3.....	8.8	Oct. 30.....	8.9	Mar. 10.....	9.0
Dec. 14.....	8.9	Dec. 26.....	9.1	Apr. 20.....	7.9
Jan. 3, 1963..	8.1	Feb. 27, 1964..	9.3		
Feb. 12.....	9.1	Apr. 8.....	8.7		

163-56-17BBB
(1961-65 measurements by the U.S. Bureau of Reclamation)

Nov. 6, 1961..	8.2	Feb. 12.....	8.0	Apr. 8.....	3.5
Dec. 5.....	8.5	Mar. 18.....	8.3	May 1.....	4.4
Apr. 24, 1962..	2.3	Apr. 22.....	6.3	June 16.....	4.9
May 21.....	3.0	June 4.....	8.8	July 28.....	6.6
June 22.....	4.8	July 9.....	6.1	Sept. 9.....	5.8
July 21.....	6.4	Aug. 7.....	5.7	Oct. 15.....	5.4
Aug. 31.....	7.4	Sept. 5.....	7.2	Nov. 24.....	5.7
Sept. 24.....	7.7	Oct. 4.....	7.8	Jan. 14, 1965..	6.8
Nov. 3.....	7.6	Oct. 30.....	7.9	Mar. 10.....	7.6
Dec. 14.....	6.9	Dec. 26.....	7.9	Apr. 20.....	5.0
Jan. 2, 1963..	7.4	Feb. 27, 1964..	8.2	Nov. 13, 1969..	6.33

163-56-23CCC

Oct. 15, 1970..	11.08	Apr. 10.....	11.82	July 15.....	11.10
31.....	11.15	16.....	11.49	Aug. 17.....	11.82
Dec. 2.....	11.36	24.....	11.25	Oct. 12.....	12.40
Jan. 6, 1971..	11.50	May 14.....	10.98	Nov. 18.....	12.34
Feb. 20.....	11.94	28.....	10.90	Dec. 9.....	12.26
Mar. 26.....	12.01	June 10.....	11.00		

Water level, in feet below or (+) above land surface

163-56-24AAA4

Date	Water level	Date	Water level	Date	Water level
Nov. 10, 1969..	16.32	July 15.....	11.24	Mar. 25.....	a/15.21
15.....	16.36	20.....	11.47	31.....	15.15
20.....	16.39	25.....	11.58	Apr. 5.....	a/15.21
25.....	16.39	31.....	11.80	10.....	a/14.10
30.....	16.40	Aug. 5.....	11.98	15.....	13.15
Dec. 5.....	16.43	10.....	12.18	20.....	12.77
10.....	16.43	15.....	12.37	25.....	12.55
15.....	16.44	20.....	12.58	30.....	12.30
20.....	16.44	25.....	12.75	May 5.....	12.09
25.....	16.44	31.....	12.98	10.....	12.06
31.....	16.44	Sept. 5.....	13.08	15.....	11.97
Jan. 5, 1970..	16.44	10.....	13.42	20.....	12.08
10.....	16.44	15.....	13.50	25.....	12.16
15.....	16.46	20.....	13.65	31.....	12.30
20.....	16.47	25.....	13.70	June 5.....	12.37
25.....	16.47	30.....	13.84	10.....	12.53
Feb. 5.....	16.47	Oct. 5.....	13.95	15.....	12.69
10.....	16.45	10.....	13.97	20.....	12.84
15.....	16.44	15.....	14.06	25.....	12.93
20.....	16.43	20.....	14.13	30.....	13.08
25.....	16.40	25.....	14.22	July 5.....	13.19
28.....	16.41	31.....	14.32	10.....	13.18
Mar. 5.....	16.39	Nov. 5.....	14.33	15.....	13.13
10.....	16.40	10.....	14.43	20.....	13.17
15.....	16.40	15.....	14.53	25.....	13.08
20.....	16.47	20.....	14.56	31.....	13.09
25.....	16.47	25.....	14.53	Aug. 5.....	a/13.30
31.....	16.49	30.....	14.65	10.....	a/13.57
Apr. 5.....	16.49	Dec. 3.....	14.75	15.....	a/13.85
10.....	16.49	20.....	14.85	20.....	13.97
15.....	16.28	25.....	14.81	25.....	14.08
20.....	15.67	31.....	14.83	31.....	14.12
25.....	14.90	Jan. 5, 1971..	14.91	Sept. 5.....	14.20
30.....	14.36	10.....	14.94	10.....	14.45
May 5.....	13.83	15.....	14.97	15.....	14.54
10.....	12.42	20.....	14.90	20.....	14.61
15.....	12.26	25.....	a/15.03	25.....	14.66
20.....	12.00	31.....	a/15.04	30.....	14.72
25.....	11.80	Feb. 5.....	15.04	Oct. 5.....	14.81
31.....	11.75	10.....	14.99	10.....	14.84
June 5.....	11.71	15.....	15.04	15.....	14.89
10.....	11.70	20.....	a/15.06	20.....	14.91
15.....	10.68	25.....	15.09	25.....	14.93
20.....	10.75	28.....	15.17	31.....	14.99
25.....	10.79	Mar. 5.....	15.17	Nov. 5.....	14.98
30.....	10.96	10.....	a/15.17	10.....	15.07
July 5.....	a/11.10	15.....	15.23	18.....	15.25
10.....	11.27	20.....	15.21	Dec. 7.....	15.36

a/ Estimated

163-56-24ADA1

Nov. 28, 1969..	+0.94	Aug. 18.....	+0.94	Oct. 12.....	+0.51
May 8, 1970..	+1.29	Oct. 3.....	+ .84	Nov. 18.....	+ .36
21.....	+1.31	May 14, 1971..	+ .95		
July 9.....	+1.23	28.....	+ .86		

Water level, in feet below or (+) above land surface

163-56-24ADA2

Date	Water level	Date	Water level	Date	Water level
Nov. 13, 1969..	18.68	July 9.....	7.82	May 14.....	8.24
Nov. 22.....	18.15	Aug. 18.....	8.98	May 28.....	9.92
Dec. 18.....	17.63	Oct. 3.....	10.11	June 10.....	10.27
Jan. 24, 1970..	17.64	Dec. 2.....	11.89	July 15.....	11.06
Feb. 28.....	17.32	Jan. 6, 1971..	12.56	Aug. 17.....	11.66
Mar. 24.....	17.10	Feb. 20.....	13.35	Oct. 12.....	16.35
Apr. 25.....	11.49	Mar. 26.....	13.68	Dec. 7.....	16.40
May 8.....	6.30	Apr. 16.....	9.52		
May 21.....	6.63	Apr. 24.....	8.50		

163-56-24DAD

Nov. 13, 1969..	13.32	July 9.....	7.87	May 14.....	6.87
Nov. 22.....	13.46	Aug. 18.....	10.21	May 28.....	7.98
Dec. 18.....	13.35	Oct. 3.....	11.62	June 10.....	8.89
Jan. 24, 1970..	13.42	Dec. 2.....	12.28	July 15.....	11.29
Feb. 28.....	12.38	Jan. 6, 1971..	12.26	Aug. 17.....	11.08
Mar. 24.....	12.32	Feb. 20.....	12.40	Oct. 12.....	11.96
Apr. 25.....	8.50	Mar. 26.....	12.31	Nov. 18.....	12.55
May 8.....	4.30	Apr. 16.....	5.97	Dec. 7.....	12.50
May 21.....	5.78	Apr. 24.....	5.63		

163-56-24DDD

Nov. 13, 1969..	19.25	July 9.....	16.79	Apr. 24.....	16.59
Nov. 22.....	19.45	Aug. 18.....	16.08	May 14.....	16.59
Dec. 18.....	19.62	Oct. 3.....	16.87	May 28.....	16.67
Jan. 24, 1970..	19.79	Dec. 2.....	17.40	June 10.....	16.72
Feb. 28.....	18.98	Jan. 6, 1971..	17.74	July 15.....	16.97
Mar. 24.....	18.82	Feb. 20.....	18.29	Aug. 17.....	22.29
Apr. 25.....	18.60	Mar. 26.....	18.43	Oct. 12.....	17.93
May 8.....	18.08	Apr. 10.....	18.00	Nov. 18.....	18.21
May 21.....	17.81	Apr. 16.....	16.73	Dec. 7.....	18.57

163-56-29CDD2

Oct. 29, 1969..	5.38	Jan. 15.....	a/5.52	Apr. 5.....	5.00
Oct. 31.....	5.37	Jan. 20.....	a/5.58	Apr. 10.....	3.46
Nov. 5.....	5.34	Jan. 25.....	a/5.65	May 7.....	3.70
Nov. 10.....	5.31	Jan. 31.....	a/5.72	May 10.....	2.95
Nov. 15.....	5.30	Feb. 5.....	5.71	May 15.....	2.56
Nov. 20.....	5.34	Feb. 10.....	5.71	May 20.....	3.53
Nov. 25.....	5.39	Feb. 15.....	5.65	May 25.....	3.90
Nov. 30.....	5.37	Feb. 20.....	5.62	May 31.....	3.54
Dec. 5.....	a/5.35	Feb. 25.....	5.57	June 25.....	4.07
Dec. 10.....	a/5.34	Feb. 28.....	5.48	June 30.....	4.53
Dec. 15.....	a/5.34	Mar. 5.....	a/5.48	July 5.....	4.87
Dec. 20.....	5.33	Mar. 10.....	a/5.44	July 10.....	5.17
Dec. 25.....	a/5.34	Mar. 15.....	a/5.41	July 15.....	5.25
Dec. 31.....	a/5.33	Mar. 20.....	5.35	July 20.....	5.37
Jan. 5, 1970..	a/5.38	Mar. 25.....	5.17	July 25.....	5.50
Jan. 10.....	a/5.45	Mar. 31.....	5.07	July 31.....	5.62

Water level, in feet below or (+) above land surface

163-56-29CDD2, Continued

Date	Water level	Date	Water level	Date	Water level
Aug. 5.....	5.75	Feb. 5.....	4.33	July 10.....	5.02
10.....	5.89	10.....	4.33	15.....	5.32
15.....	6.02	15.....	4.36	20.....	5.55
20.....	6.16	20.....	4.38	25.....	5.72
25.....	6.19	25.....	4.35	31.....	5.84
31.....	6.18	28.....	4.34	Aug. 5.....	5.95
Sept. 5.....	5.81	Mar. 5.....	4.37	10.....	6.13
10.....	5.55	10.....	4.42	15.....	a/6.33
15.....	5.40	15.....	4.10	20.....	6.48
20.....	5.33	20.....	4.19	25.....	6.60
25.....	5.18	25.....	4.21	31.....	6.74
Oct. 15.....	5.41	31.....	4.05	Sept. 5.....	6.80
20.....	a/5.39	Apr. 5.....	4.04	10.....	6.80
Nov. 5.....	4.82	10.....	2.38	15.....	6.83
10.....	4.84	15.....	3.08	20.....	6.85
15.....	4.88	20.....	3.11	25.....	6.86
20.....	4.92	25.....	3.63	30.....	6.87
25.....	5.05	30.....	3.61	Oct. 5.....	6.55
30.....	a/5.23	May 5.....	3.91	10.....	6.15
Dec. 5.....	5.35	10.....	4.04	15.....	5.87
10.....	5.47	15.....	4.17	20.....	5.57
15.....	5.32	20.....	4.36	25.....	5.40
20.....	5.13	25.....	4.27	31.....	5.30
25.....	4.87	31.....	4.62	Nov. 5.....	5.21
31.....	4.67	June 5.....	4.76	10.....	5.18
Jan. 5, 1971..	4.62	10.....	4.90	15.....	5.02
10.....	4.47	15.....	4.24	20.....	4.85
15.....	4.42	20.....	4.52	23.....	4.87
20.....	4.32	25.....	4.75	Dec. 7.....	5.25
25.....	4.27	30.....	4.74		
31.....	4.36	July 5.....	4.85		

a/ Estimated

163-56-34DDC2

Aug. 16, 1971..	14.27	Aug. 17.....	14.28
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163-61-33AAA

Oct. 14, 1970..	4.11	Apr. 16.....	8.00	Aug. 17.....	7.28
Nov. 5.....	4.25	29.....	7.59	Sept. 28.....	7.67
Dec. 2.....	4.48	May 17.....	7.43	Nov. 12.....	7.05
Jan. 5, 1971..	5.59	June 9.....	7.19	Dec. 8.....	7.15
Feb. 26.....	7.12	July 13.....	6.08		

Water level, in feet below or (+) above land surface

163-62-16DDD

Date	Water level	Date	Water level	Date	Water level
Oct. 24, 1969..	7.33	Sept. 10.....	7.28	Apr. 29.....	7.22
Dec. 17.....	7.35	Oct. 14.....	7.28	May 17.....	7.75
Feb. 6, 1970..	7.39	Nov. 5.....	7.16	June 9.....	7.99
Mar. 18.....	7.54	Dec. 2.....	7.09	July 13.....	7.92
May 7.....	7.64	Jan. 5, 1971..	7.10	Aug. 17.....	7.79
30.....	7.73	Feb. 26.....	7.34	Sept. 28.....	7.72
July 14.....	7.30	Mar. 25.....	7.36	Nov. 12.....	7.44
Aug. 21.....	7.32	Apr. 16.....	7.47	Dec. 8.....	7.55

163-62-17BCA

Oct. 14, 1970..	15.12	Feb. 26.....	13.10	June 9.....	9.70
Nov. 5.....	11.62	Mar. 25.....	13.33	Sept. 28.....	10.80
Dec. 2.....	11.64	Apr. 16.....	12.58	Nov. 12.....	11.63
Jan. 5, 1971..	12.22	29.....	10.67	Dec. 8.....	11.95

163-63-16DDD

Oct. 24, 1969..	9.76	July 14.....	7.09	Dec. 2.....	9.42
Dec. 17.....	10.52	Aug. 21.....	8.51	Apr. 16, 1971..	11.25
Feb. 6, 1970..	11.32	Sept. 10.....	8.51	29.....	9.28
May 7.....	9.71	Oct. 14.....	9.03	June 9.....	6.77
30.....	7.89	Nov. 5.....	8.72	Sept. 28.....	9.13

163-64-21AAD

Oct. 24, 1969..	6.40	Sept. 9.....	6.79	Apr. 29.....	9.28
Dec. 16.....	7.74	Oct. 7.....	6.75	May 17.....	6.97
Feb. 6, 1970..	9.37	Nov. 5.....	7.29	June 9.....	6.00
Mar. 18.....	10.72	Dec. 2.....	7.40	July 13.....	4.67
May 7.....	8.20	Jan. 5, 1971..	8.49	Aug. 17.....	6.16
30.....	5.65	Feb. 26.....	10.50	Sept. 28.....	7.62
July 14.....	3.98	Mar. 25.....	10.52	Nov. 12.....	6.75
Aug. 21.....	6.04	Apr. 16.....	9.59	Dec. 8.....	8.73

164-55-29DDD

(Measurements by the U.S. Bureau of Reclamation)

Nov. 9, 1961..	9.0	Feb. 12.....	9.0	May 1.....	5.8
Dec. 6.....	9.1	Mar. 18.....	9.4	June 16.....	5.8
Apr. 24, 1962..	8.0	Apr. 22.....	8.4	July 28.....	6.9
May 21.....	6.5	June 4.....	7.8	Sept. 9.....	6.0
June 22.....	6.1	July 9.....	7.6	Oct. 15.....	5.9
July 21.....	7.3	Aug. 7.....	6.3	Nov. 24.....	6.6
Aug. 31.....	7.8	Sept. 5.....	7.1	Jan. 14, 1965..	7.9
Sept. 22.....	8.0	Oct. 4.....	7.5	Mar. 10.....	8.6
Nov. 3.....	8.2	30.....	7.7	Apr. 20.....	5.4
Dec. 14.....	8.1	Feb. 27, 1964..	8.6		
Jan. 2, 1963..	8.4	Apr. 8.....	7.2		

Water level, in feet below or (+) above land surface

164-55-31CCC
(1961-65 measurements by the U.S. Bureau of Reclamation)

Date	Water level	Date	Water level	Date	Water level
Nov. 9, 1961..	8.2	Jan. 2, 1963..	7.3	May 1.....	7.8
Dec. 6.....	8.4	Feb. 12.....	8.7	June 16.....	6.4
Apr. 24, 1962..	6.6	Mar. 18.....	9.4	July 28.....	6.6
May 21.....	4.4	Aug. 8.....	6.1	Sept. 9.....	6.0
June 22.....	4.5	Sept. 5.....	6.9	Oct. 15.....	5.9
July 21.....	5.8	Oct. 4.....	7.5	Nov. 24.....	6.6
Aug. 31.....	6.0	30.....	7.8	Jan. 14, 1965..	8.0
Sept. 22.....	6.3	Dec. 26.....	8.3	Mar. 10.....	9.1
Nov. 3.....	6.6	Feb. 27, 1964..	9.2	Apr. 20.....	8.2
Dec. 10.....	6.8	Apr. 8.....	9.0	Nov. 13, 1969..	6.70

164-55-33CCC
(Measurements by the U.S. Bureau of Reclamation)

Nov. 8, 1961..	10.0	Feb. 12.....	9.9	May 1.....	7.6
Dec. 6.....	10.2	Mar. 18.....	10.2	June 16.....	6.6
Apr. 24, 1962..	7.5	Apr. 22.....	10.3	July 28.....	7.7
May 21.....	7.1	June 4.....	9.4	Sept. 9.....	8.3
June 22.....	5.2	July 9.....	8.4	Oct. 15.....	7.6
July 21.....	6.7	Aug. 7.....	7.3	Nov. 24.....	7.8
Aug. 31.....	8.5	Sept. 5.....	8.4	Jan. 14, 1965..	8.8
Sept. 22.....	8.9	Oct. 4.....	8.9	Mar. 10.....	9.7
Nov. 3.....	9.2	30.....	9.1	Apr. 20.....	8.2
Dec. 14.....	9.2	Feb. 27, 1964..	9.8		
Jan. 2, 1963..	9.4	Apr. 8.....	9.2		

164-56-25DDD
(1961-65 measurements by the U.S. Bureau of Reclamation)

Nov. 9, 1961..	9.4	Feb. 12.....	8.4	Apr. 8.....	7.1
Dec. 6.....	9.7	Mar. 18.....	8.6	May 1.....	6.8
Apr. 24, 1962..	3.5	Apr. 22.....	7.8	June 16.....	7.0
May 21.....	5.1	June 4.....	7.4	July 28.....	7.4
June 22.....	5.3	July 9.....	7.6	Sept. 9.....	7.5
July 21.....	6.6	Aug. 7.....	6.8	Oct. 15.....	7.4
Aug. 31.....	7.2	Sept. 5.....	7.4	Nov. 24.....	7.5
Sept. 20.....	7.4	Oct. 4.....	7.8	Jan. 14, 1965..	8.1
Nov. 3.....	7.7	30.....	8.0	Mar. 10.....	8.6
Dec. 14.....	7.8	Dec. 26.....	8.3	Apr. 20.....	5.8
Jan. 2, 1963..	7.8	Feb. 27, 1964..	8.8	Nov. 13, 1969..	8.22

Water level, in feet below or (+) above land surface

164-56-27CCC
(Measurements by the U.S. Bureau of Reclamation)

Date	Water level	Date	Water level	Date	Water level
Nov. 9, 1961..	7.9	Dec. 14.....	8.0	May 1, 1964..	5.2
Dec. 6.....	8.2	Jan. 2, 1963..	8.2	June 16.....	4.9
Apr. 24, 1962..	3.9	Feb. 12.....	9.4	July 28.....	6.0
May 21.....	3.0	Mar. 18.....	9.8	Sept. 9.....	5.1
June 22.....	4.4	Apr. 22.....	8.6	Oct. 15.....	5.5
July 21.....	6.2	June 4.....	7.1	Nov. 24.....	6.4
Aug. 31.....	7.2	July 9.....	6.7	Jan. 14, 1965..	7.3
Sept. 22.....	7.6	Aug. 7.....	6.1	Mar. 10.....	7.8
Nov. 3.....	8.0	Sept. 5.....	7.1	Apr. 20.....	4.6

164-56-29ADD3

Aug. 16, 1971..	9.82	Oct. 12.....	10.58
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164-57-26DDD
(Measurements by the U.S. Bureau of Reclamation)

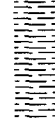
Nov. 6, 1961..	6.9	Nov. 3.....	5.5	Aug. 7.....	4.1
Dec. 5.....	7.1	Dec. 14.....	5.5	Sept. 5.....	5.2
May 21, 1962..	1.4	Jan. 2, 1963..	5.7	Oct. 4.....	5.8
June 22.....	3.1	Feb. 12.....	7.1	30.....	5.9
July 21.....	4.5	Mar. 18.....	7.5	Dec. 26.....	6.1
Aug. 31.....	5.2	June 4.....	1.6		
Sept. 22.....	5.4	July 9.....	3.7		

TABLE 3.--Logs of wells and test holes

EXPLANATION



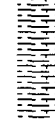
Till



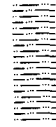
Shale



Clay



Calcareous shale



Silt



Limestone



Gravel



Dolomite



Sand or sandstone

159-50-298BA
(Log from North Dakota State Highway Department)

Altitude: 760 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, dark-brown, very soft-----	4	4
	Clay, gray, pliable-----	23	27
	Clay, silty, brown-----	5	32
	Clay, silty, light-brown-----	15.5	47.5
	Clay, gray, very soft, pliable-----	74	121.5
	Sand, gray, water-bearing-----	3	124.5

159-51-4ABA
NDGS Pem-70-21

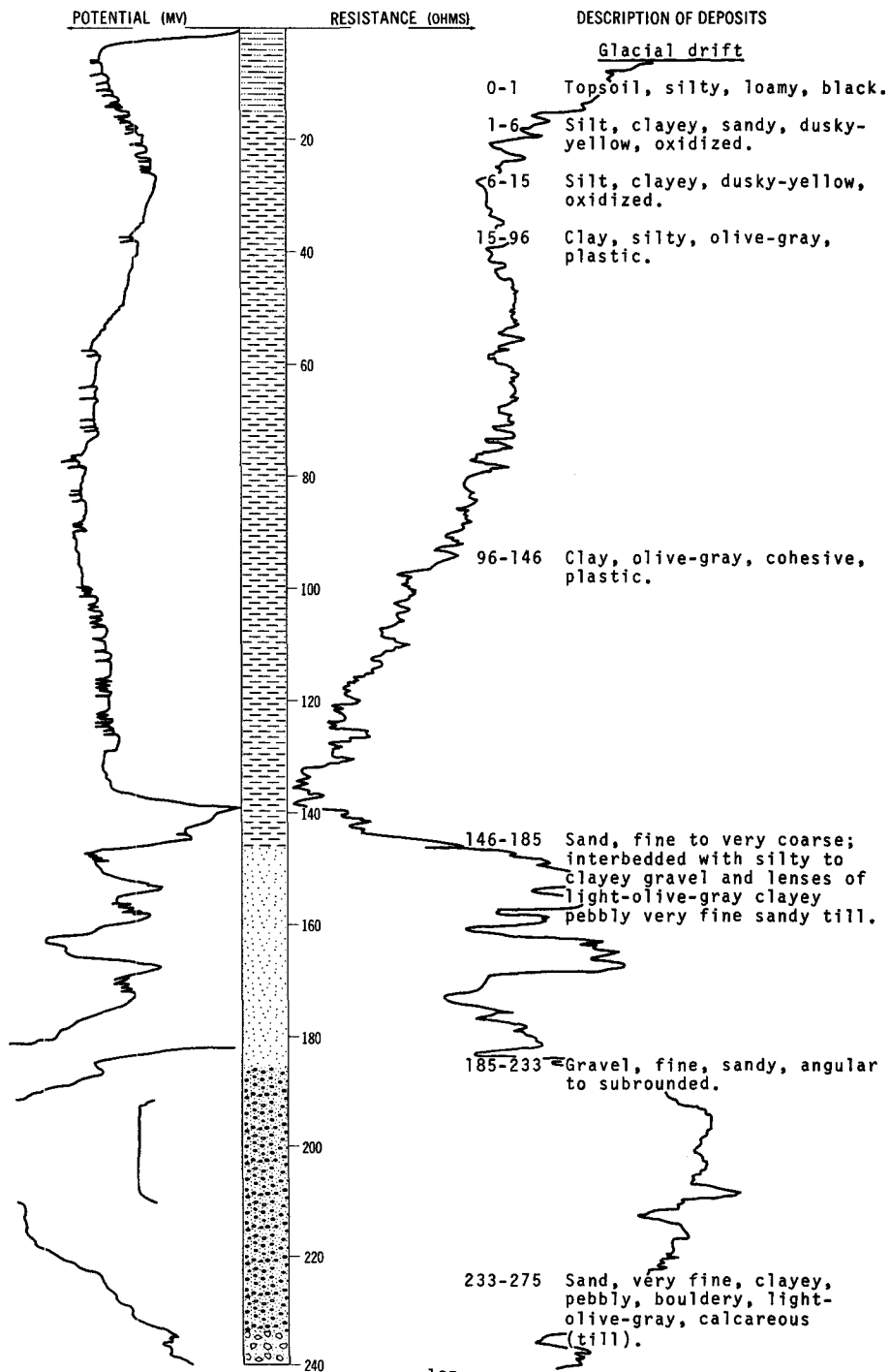
Altitude: 802 feet

Glacial drift:			
	Topsoil-----	2	2
	Clay, silty, yellowish-brown, well-sorted---	20	22
	Clay, gray, very plastic, dense, saturated---	2	24

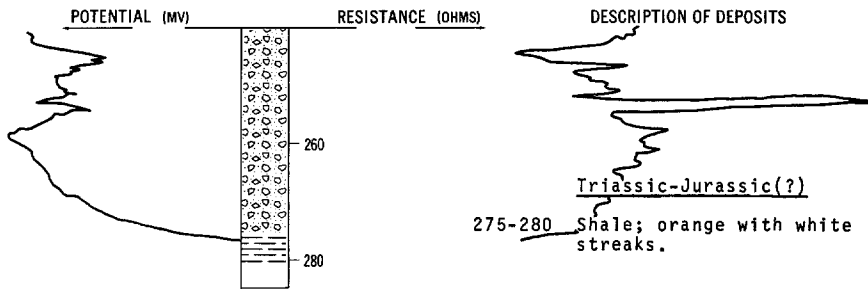
LOCATION: 159-51-9CBB
ALTITUDE: 805
(FT, MSL)

NDSWC 3833

DATE DRILLED: September 1969
DEPTH: 280
(FT)



NDSWC 3833, Continued
 LOCATION: 159-51-9CBB DATE DRILLED: September 1969
 ALTITUDE: 805 DEPTH: 280
 (FT, MSL) (FT)



159-51-23CCD
 (Log from North Dakota State Highway Department)

Altitude: 799 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, black (topsoil)-----	2	2
	Clay, silty, light-brown-----	14	16
	Clay, silty, dark-gray, plastic-----	15	31
	Clay, dark-gray, plastic, sticky-----	121	152
	Clay, gravelly, dark-gray, very firm to hard (till)-----	2	154

159-52-14BBB
 USBR 247A

Altitude:

Glacial drift:			
	Loam, silty, clayey-----	2	2
	Loam, silty-----	1	3
	Loam, silty, clayey-----	3	6
	Loam, silty-----	2	8
	Loam, clayey-----	2	10
	Loam, silty, clayey-----	3	13

159-52-17BBB
 USBR 248

Altitude:

Glacial drift:			
	Loam, silty-----	2	2
	Loam, silty, clayey-----	1	3
	Loam, silty-----	1	4
	Loam, silty, clayey-----	1	5
	Loam, clayey-----	1	6
	Loam, silty, clayey-----	2	8

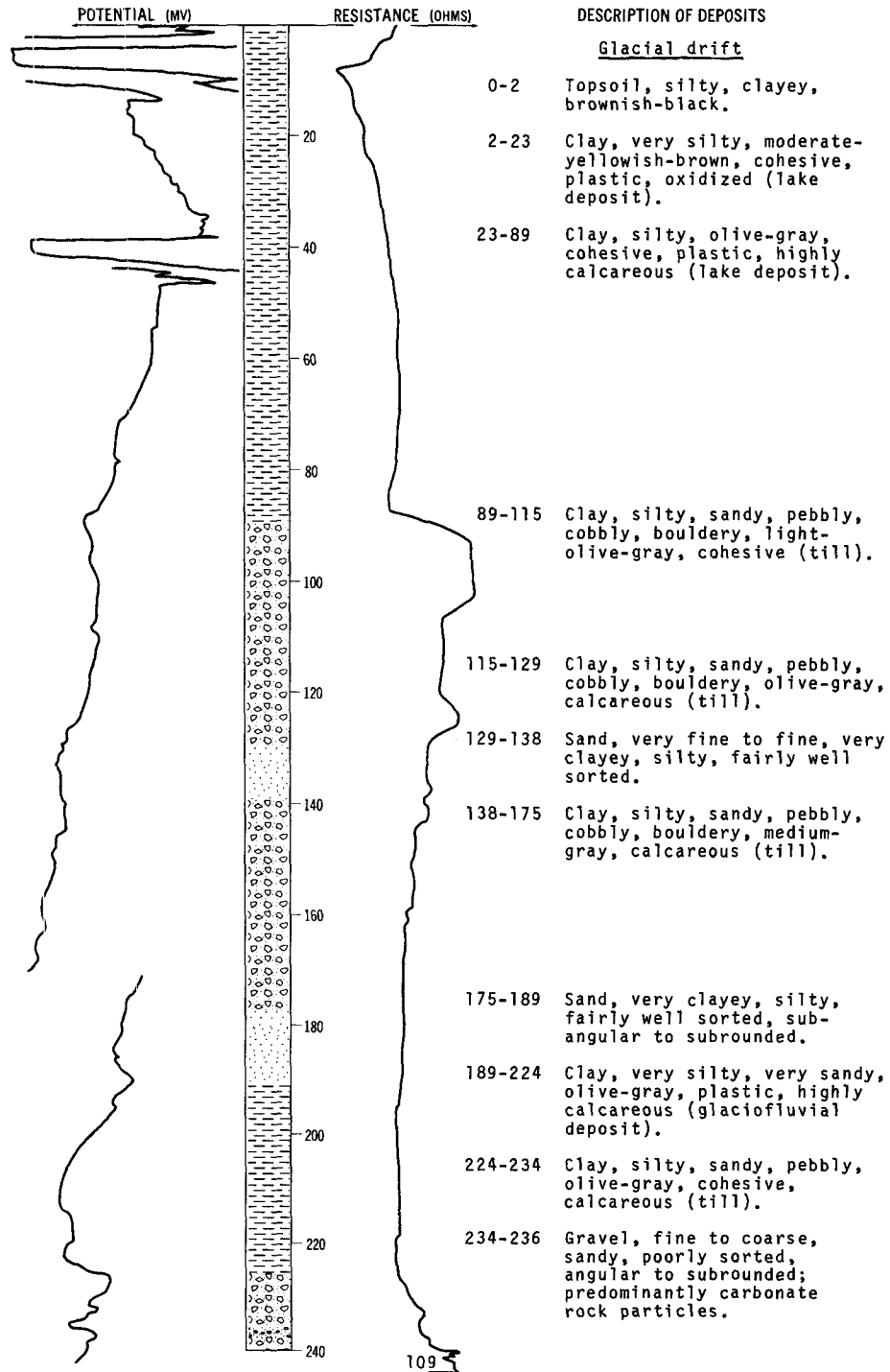
LOCATION: 159-52-22DCD

NDSWC 5705

DATE DRILLED: June 1970

ALTITUDE: 814
(FT, MSL)

DEPTH: 280
(FT)

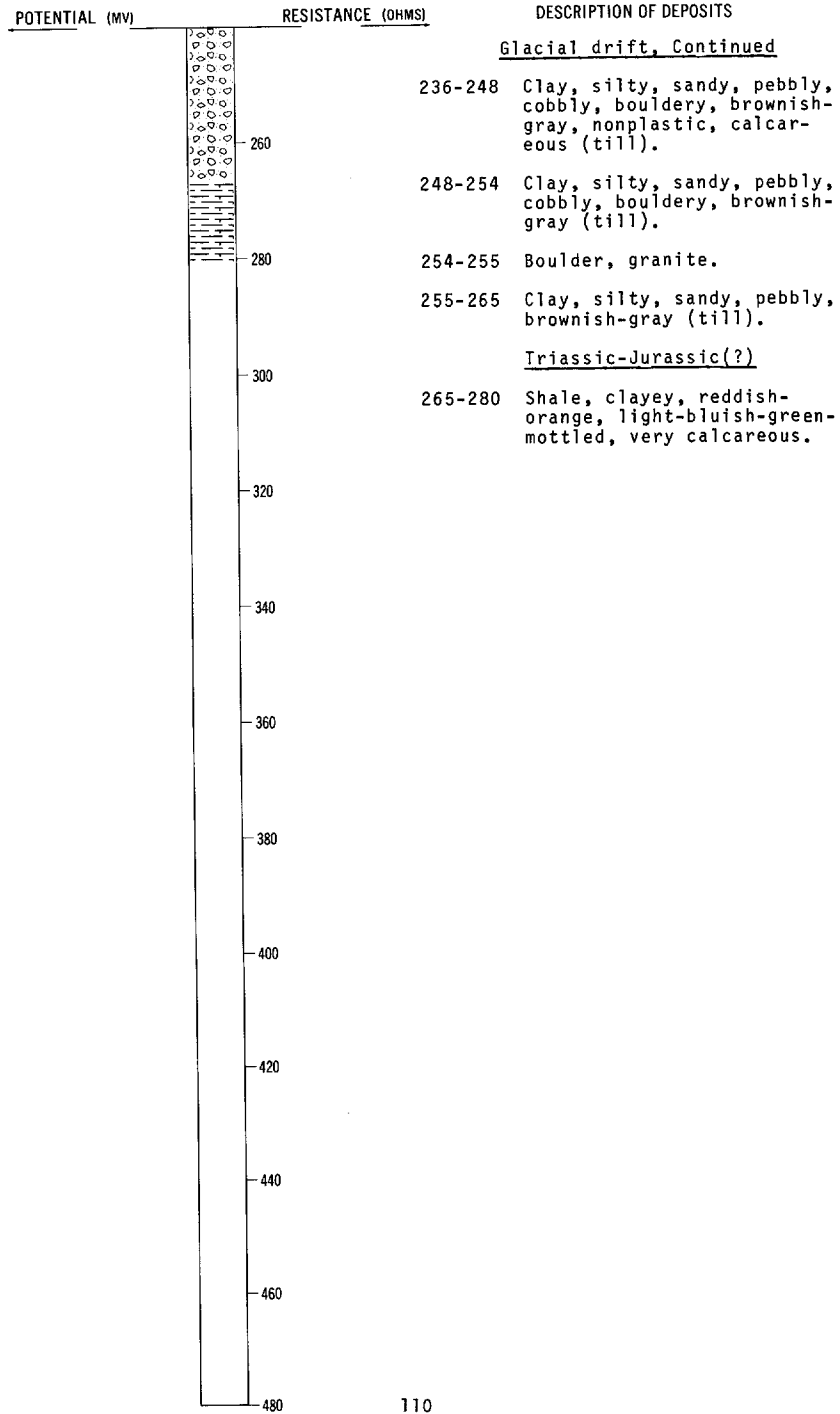


LOCATION: 159-52-22DCD

DATE DRILLED: June 1970

ALTITUDE: 814
(FT, MSL)

DEPTH: 280
(FT)



159-52-28AAA
USBR 384

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, silty, clayey-----	5	5
	Clay-----	3	8
	Clay, silty-----	5	13

159-52-32CCC
USBR 265

Altitude:

Glacial drift:			
	Loam, silty-----	4	4
	Loam, very fine, sandy-----	1	5
	Loam, silty-----	8	13
	Silt-----	5	18

159-52-35CCC
USBR 266

Altitude:

Glacial drift:			
	Loam, silty, clayey-----	5	5
	Clay-----	3	8

159-53-2CBC1
(Log from Great Northern Railway Company)

Altitude: 840 feet

Glacial drift:			
	Clay-----	12	12
	Clay, blue-----	8	20
	Silt, blue; clay-----	80	100
	Shale, blue-----	51	151
	Clay, blue (water)-----	4	155
	Clay, blue-----	46	201
	Very hard formation-----	3	204
	Clay, blue; some sand-----	21	225
	Clay, blue-----	35	260
	Clay, red-----	41	301
	Clay, blue-----	18	319
Cretaceous, undifferentiated(?):			
	Hard formation-----	1	320
	Shale and water-----	1	321
	Hard formation-----	1	322

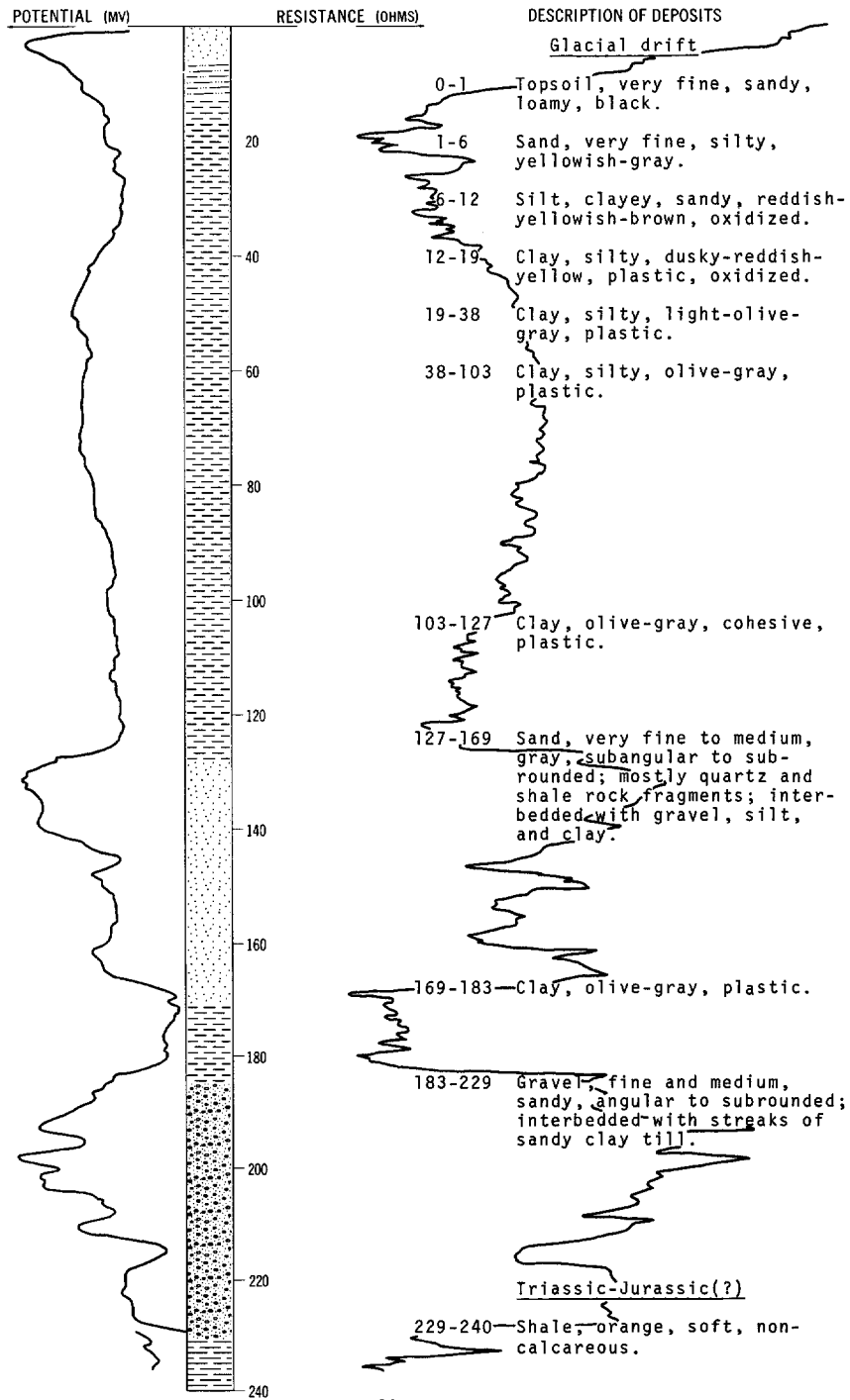
LOCATION: 159-53-13BBB

NDSWC 3832

DATE DRILLED: September 1969

ALTITUDE: 830
(FT, MSL)

DEPTH: 240
(FT)



159-53-14BBB
USBR 249

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, silty-----	12	12
	Silt-----	11	23

159-53-17BBB
USBR 250

Altitude:

Glacial drift:			
	Loam, silty-----	2	2
	Silt-----	11	13

159-53-25AAA
USBR 383

Altitude:

Glacial drift:			
	Loam, silty-----	2	2
	Loam, clayey, silty-----	1	3
	Loam, silty-----	2	5
	Loam, clayey, silty-----	5	10
	Loam, clayey-----	8	18

159-53-27BBB
USBR 385

Altitude:

Glacial drift:			
	Silt-----	24	24

159-53-32CCC
USBR 263

Altitude:

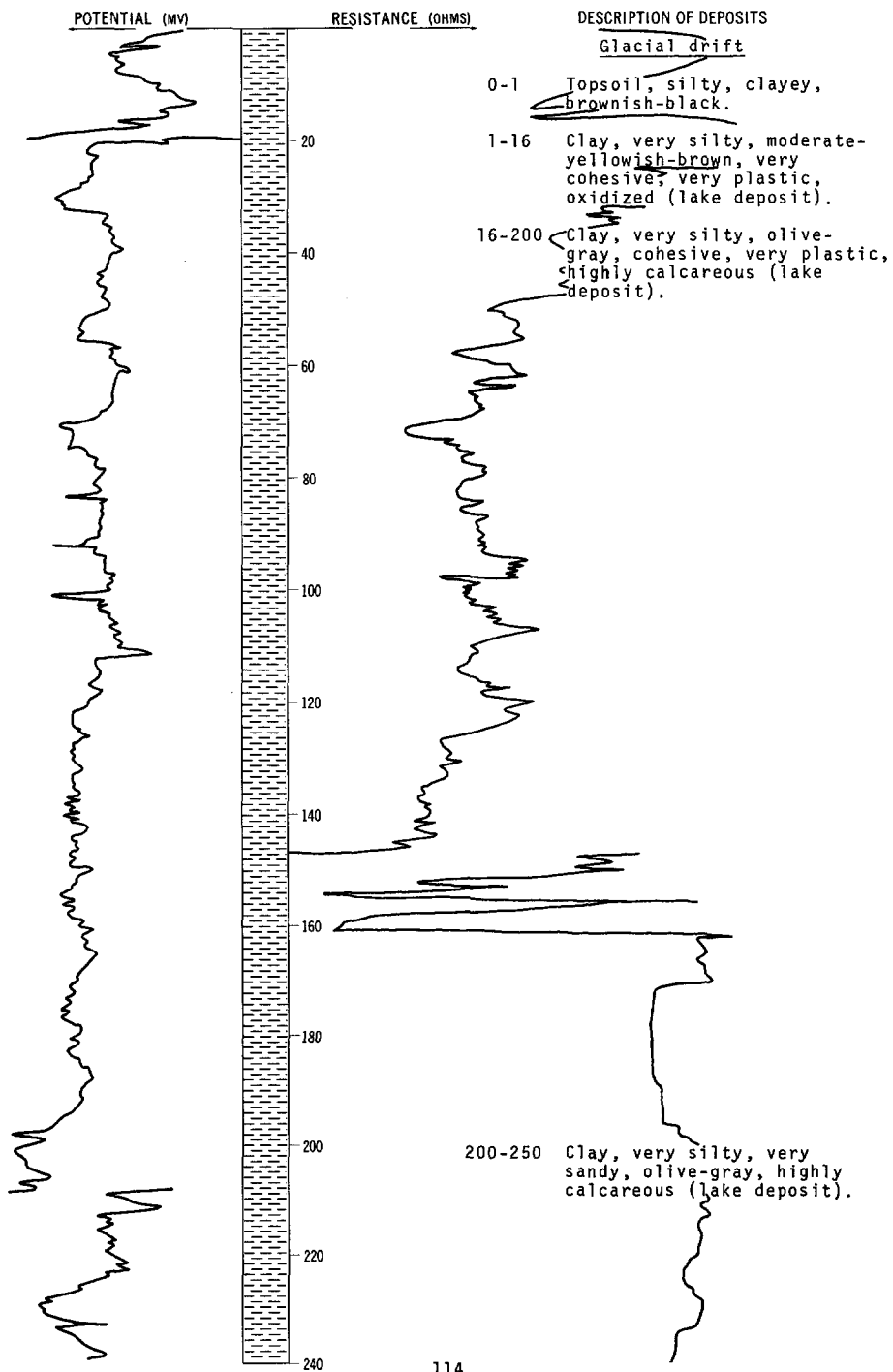
Glacial drift:			
	Loam, silty-----	12	12
	Silt-----	6	18

LOCATION: 159-53-35BAB

DATE DRILLED: June 1970

ALTITUDE: 841
(FT, MSL)

DEPTH: 340
(FT)



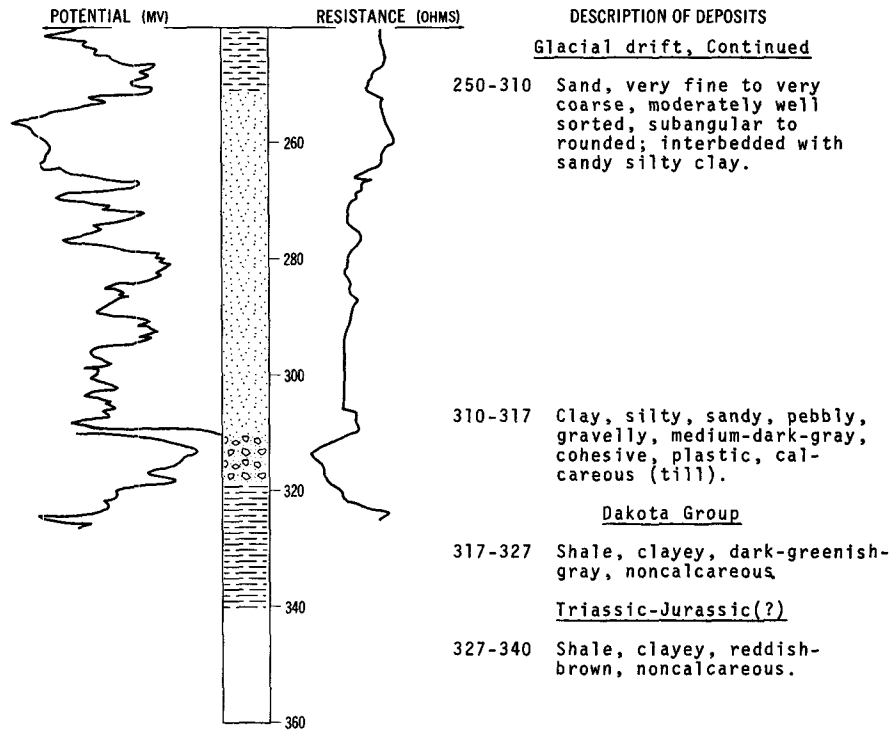
LOCATION: 159-53-35BAB

NDSWC 5704, Continued

DATE DRILLED: June 1970

ALTITUDE: 841
(FT, MSL)

DEPTH: 340
(FT)



159-53-35CCC
USBR 264

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, silty-----	3	3
	Loam, very fine, sandy-----	1	4
	Loam, silty-----	10	14
	Silt-----	4	18

159-54-38CC
USBR 470

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	3	3
	Sand, very fine, loamy-----	3	6
	Sand, fine, loamy-----	2	8
	Loam, silty-----	2	10
	Silt-----	8	18

159-54-12AAA
USBR 469

Altitude:

Glacial drift:			
	Loam-----	1	1
	Loam, very fine, sandy-----	5	6
	Loam, silty-----	6	12
	Silt-----	2	14

159-54-14BBB
USBR 251

Altitude:

Glacial drift:			
	Loam, silty-----	2	2
	Loam, very fine, sandy-----	1	3
	Sand, very fine, loamy-----	15	18

159-54-16CCC
USBR 472

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, very fine, loamy-----	5	8
	Silt-----	10	18

159-54-18BBB
USBR 252

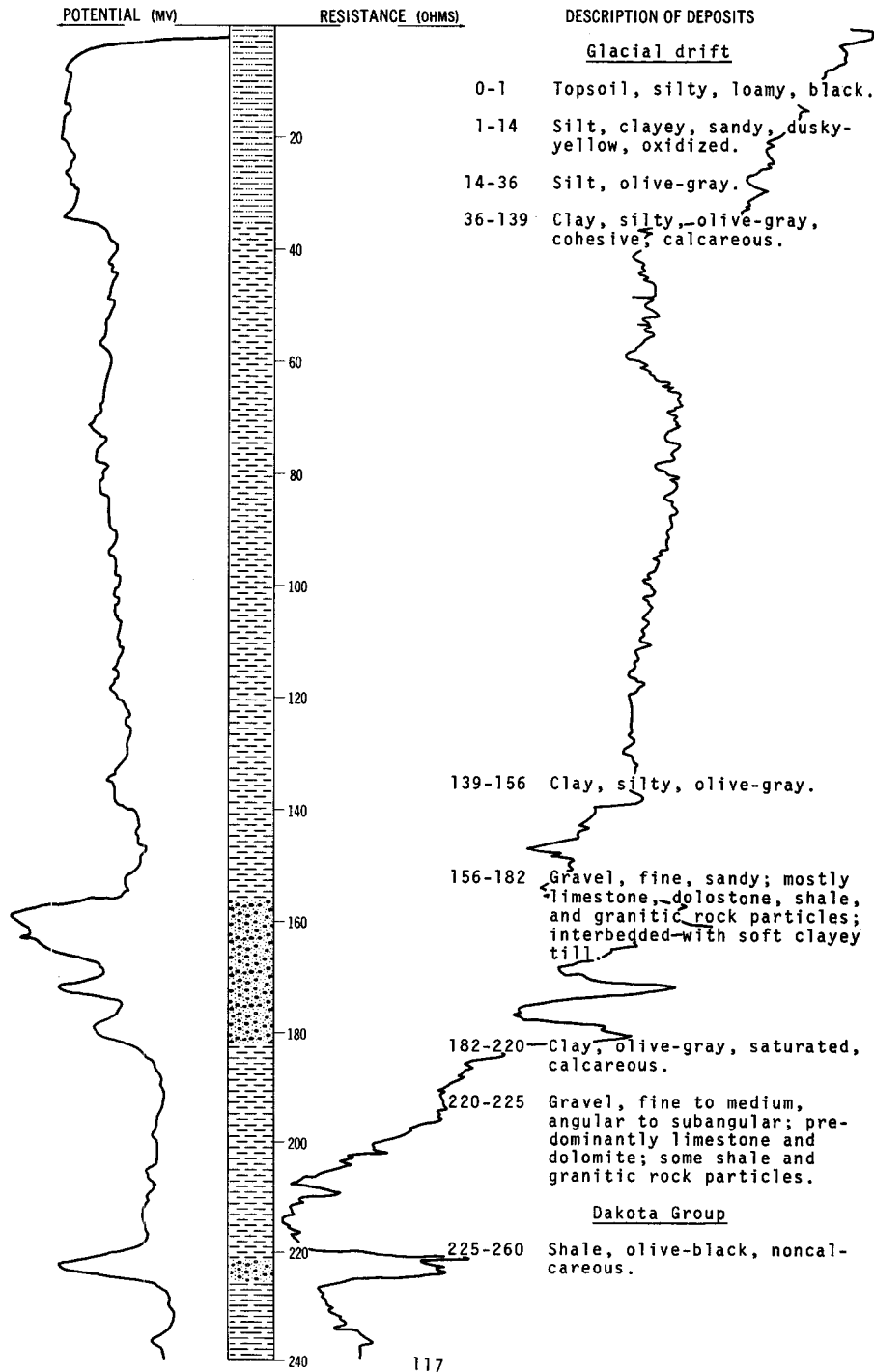
Altitude:

Glacial drift:			
	Loam, silty-----	15	15
	Silt-----	13	28

LOCATION: 159-54-23BBC
ALTITUDE: 875
(FT, MSL)

NDSWC 3831

DATE DRILLED: September 1969
DEPTH: 260
(FT)



LOCATION: 159-54-23BBC

NDSWC 3831, Continued

DATE DRILLED: September 1969

ALTITUDE: 875
(FT, MSL)

DEPTH: 260
(FT)



159-54-25BBB
USBR 386

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, silty-----	1	1
	Silt-----	16	17
	Clay, silty-----	2	19
	Silt-----	4	23

159-54-28BCB
(Log from North Dakota State Highway Department)

Altitude: 889 feet

Glacial drift:			
	Silt, brown and black-----	7	7
	Silt, clayey, grayish-brown, mottled, varved-	12	19
	Clay, silty, gray, soft; a few sand lenses		
	near bottom-----	16	35
	Clay, gray, pliable-----	103	138
	Loam, sandy, gravelly, gray, very dense-----	18	156

159-54-29ADA
(Log from North Dakota State Highway Department)

Altitude: 884 feet

Glacial drift:			
	Silt, black and brown, soft-----	1	1
	Silt, clayey, sandy, grayish-brown, mottled--	12	13
	Clay, silty, gray, varved-----	19	32
	Clay, gray, pliable-----	102	134
	Loam, sandy, gravelly, clayey, gray, very		
	dense-----	12	146
	Sand, fine-----	5	151

159-54-29BBB
USBR 387

Altitude:

Glacial drift:			
	Loam-----	3	3
	Silt, very fine, loamy-----	4	7
	Silt-----	14	21
	Clay, silty-----	2	23

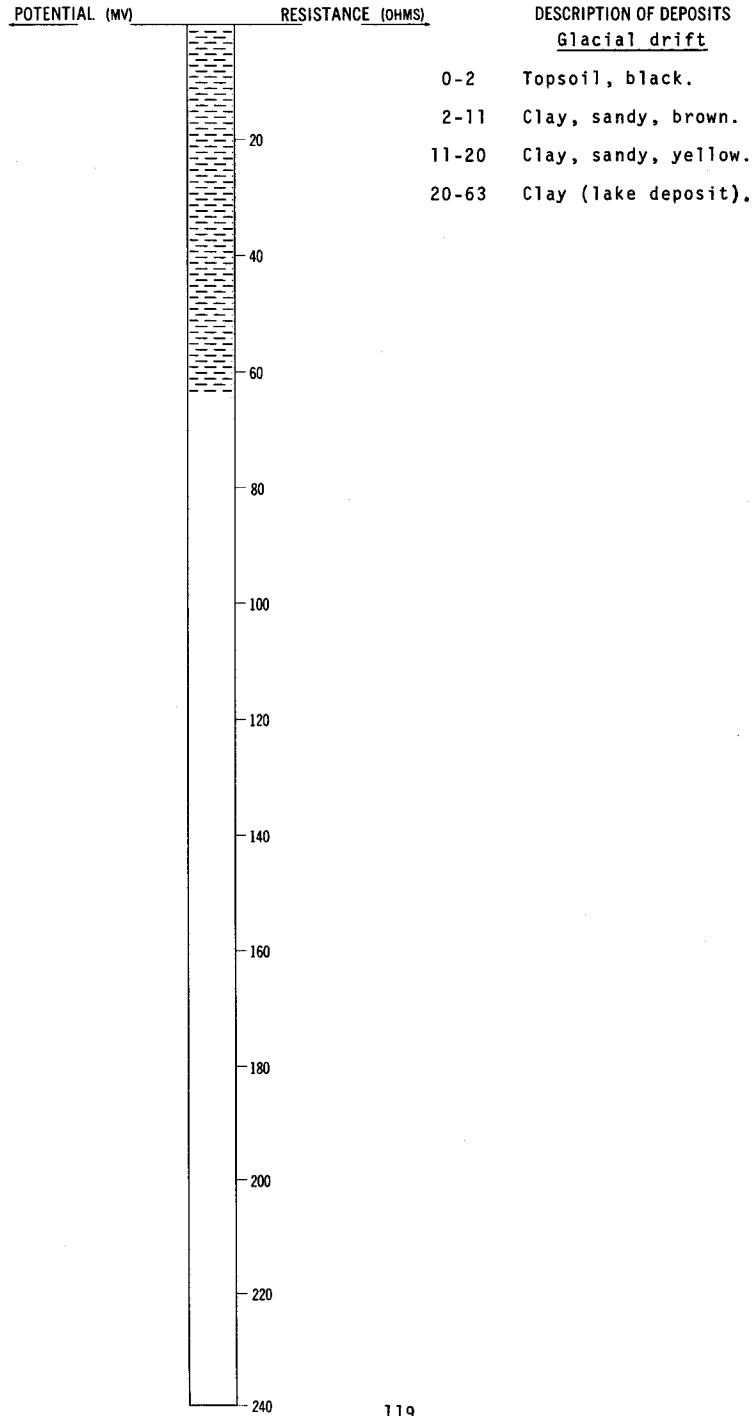
LOCATION: 159-54-33AAA

NDSWC 1616

DATE DRILLED: September 1959

ALTITUDE: 880
(FT, MSL)

DEPTH: 63
(FT)



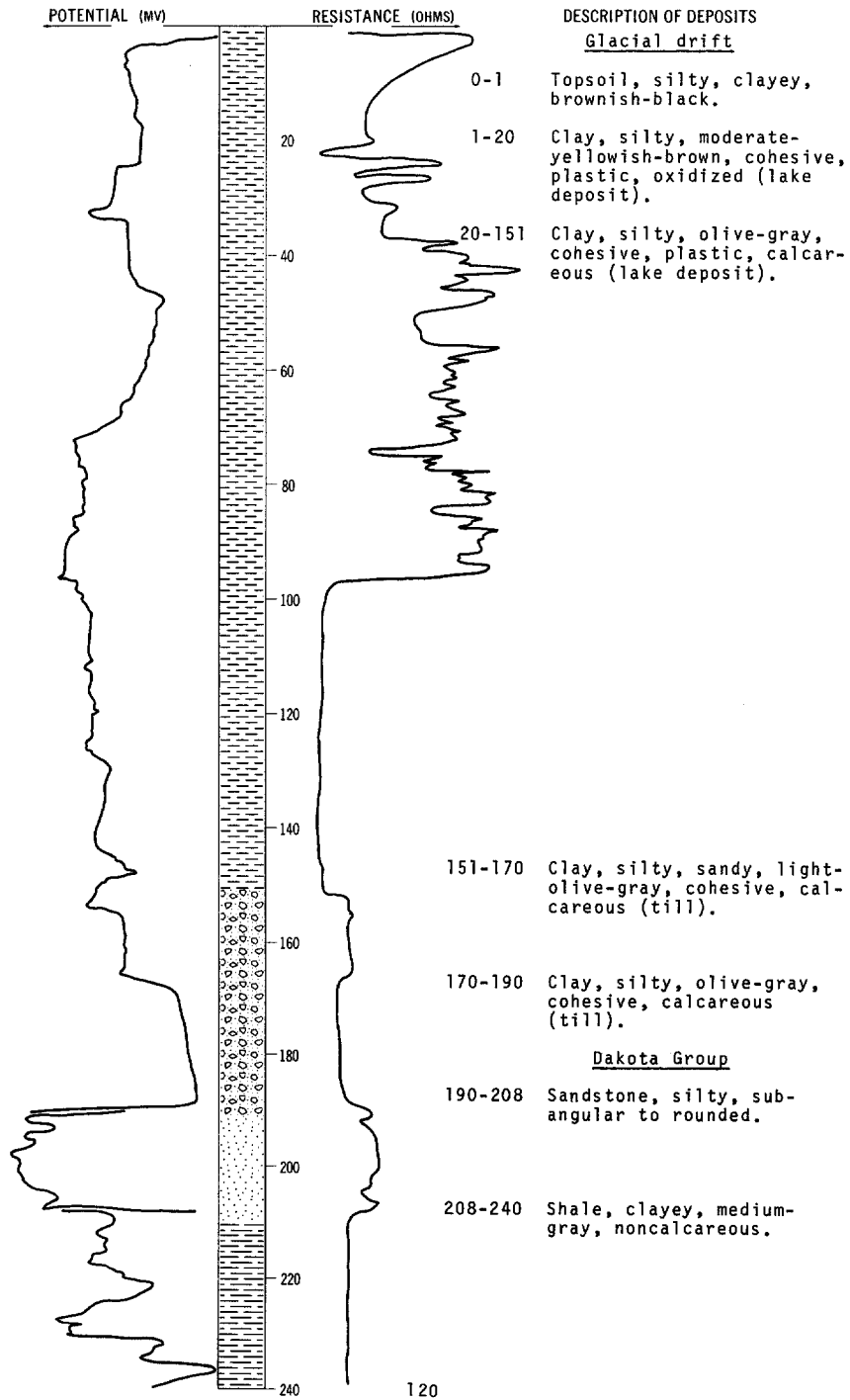
LOCATION: 159-54-33DDA

NDSWC 5703

DATE DRILLED: June 1970

ALTITUDE: 879
(FT. MSL)

DEPTH: 280
(FT)



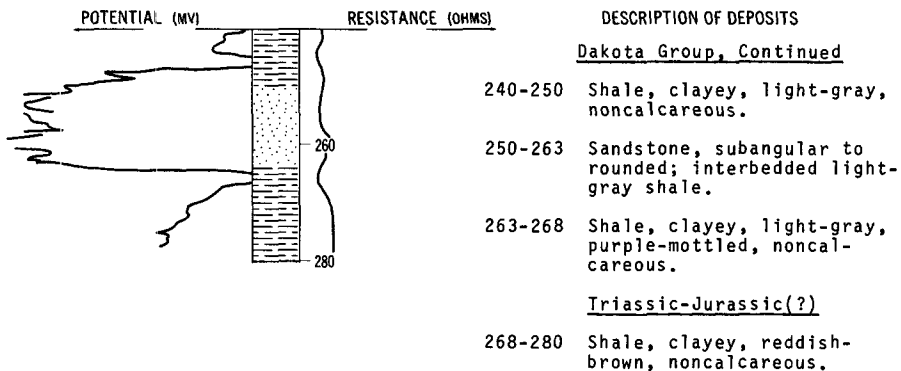
NDSWC 5703, Continued

LOCATION: 159-54-33DDA

DATE DRILLED: June 1970

ALTITUDE: 879
(FT, MSL)

DEPTH: 280
(FT)



159-54-35CCC
USBR 262

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, silty-----	2	2
	Loam-----	2	4
	Loam, silty-----	9	13
	Silt-----	5	18

159-55-7CCC
USBR 254

Altitude:

Glacial drift:			
	Loam, silty-----	2	2
	Loam-----	1	3
	Loam, silty-----	13	16
	Till-----	2	18

159-55-11DDC1
(Log from North Dakota State Highway Department)

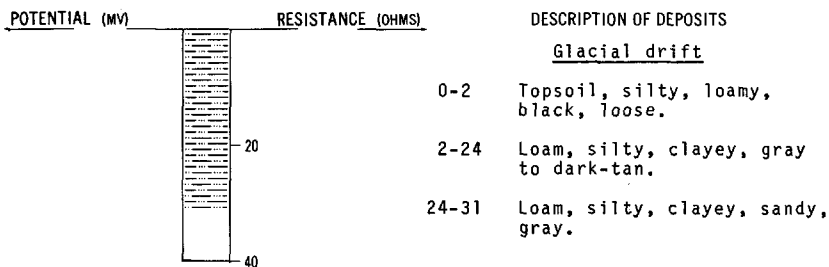
Altitude: 912 feet

Glacial drift:			
	Silt, black, soft-----	6	6
	Clay, silty, tan-----	6	12
	Silt, gray-----	16	28
	Clay, gray-----	72	100
	Silt, gray-----	11	111
	Loam, sandy, gravelly, gray, very dense-----	10	121

LOCATION: 159-55-12DCD1
 ALTITUDE: 908
 (FT, MSL)

NDSWC TB1

DATE DRILLED: July 1965
 DEPTH: 31
 (FT)



159-55-13AAC1
 (Log from Great Northern Railway Company)

Altitude: 911 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, black-----	3	3
	Clay, yellow-----	10	13
	Quicksand-----	20	33
	Clay, blue-----	80	113
	Clay; quicksand-----	8	121
	Slate-----	3	124
	Hardpan-----	3	127
	Quicksand-----	4	131
	Slate-----	10	141
	Quicksand-----	4	145
	Cement rock; interbedded with small veins of sand and gravel-----	36	181
	Sand, coarse-----	2	183

159-55-13ACD
 (Log from Frederickson's, Inc.)

Altitude: 907 feet

Glacial drift:			
	Topsoil, black-----	1	1
	Clay, yellow-----	16	17
	Clay, blue-----	12	29
	Shale, blue, sticky-----	83	112
	Clay, sandy, blue-----	23	135
	Sand, gravelly, white-----	2	137
	Clay, sandy, blue, hard-----	26	163
	Clay, sandy, blue, soft-----	44	208
Dakota Group:			
	Sand, fine, white, dirty-----	5	213
	Sandstone, white, clean-----	11	224
	Clay, blue-----	2	226

159-55-13ADD
(Log from Frederickson's, Inc.)

Altitude: 908 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	Fill-----	2	2
Glacial drift:			
	Clay, sandy, yellow-----	20	22
	Clay, silty, sandy, blue-----	14	36
	Clay, blue-----	85	121
	Clay, sandy, blue, hard-----	7	128
	Sand-----	5	133
	Sand, blue-----	8	141
	Clay, sandy, blue-----	2	143
	Sand-----	4	147
	Clay, sandy, bouldery, blue, hard-----	25	172
	Clay, sandy, blue, hard-----	22	194
	Boulder, granite, red-----	1	195
	Clay, sandy, blue, hard-----	16	211
Dakota Group:			
	Sand, white-----	20	231
	Clay, sandy, blue-----	6	237

159-55-16AAA
USBR 253

Altitude:

Glacial drift:			
	Loam, silty, sandy-----	2	2
	Loam, silty-----	11	13
	Sand, very fine, loamy-----	10	23

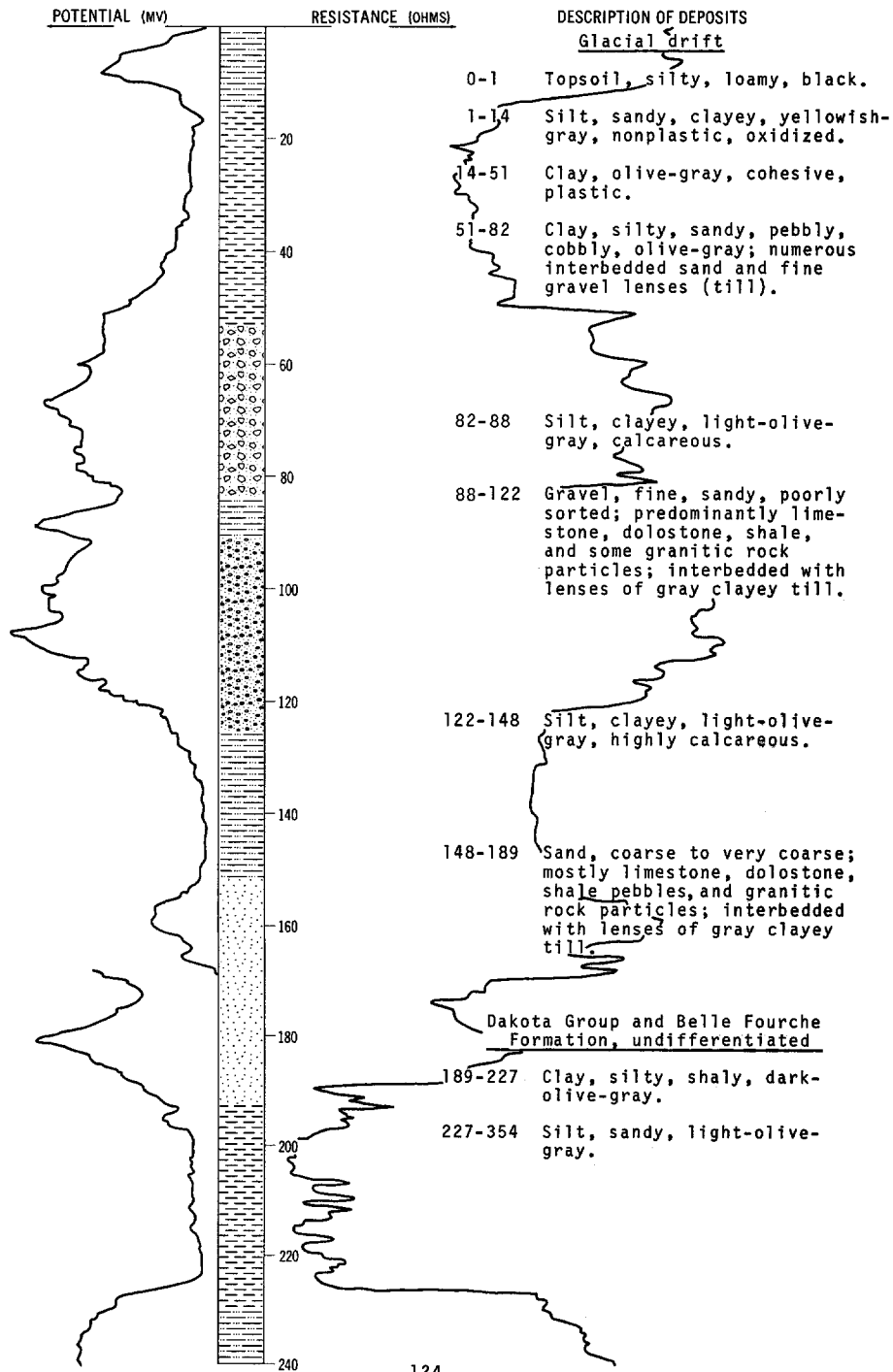
LOCATION: 159-55-22CCC

NDSWC 3829

DATE DRILLED: September 1969

ALTITUDE: 928
(FT, MSL)

DEPTH: 470
(FT)



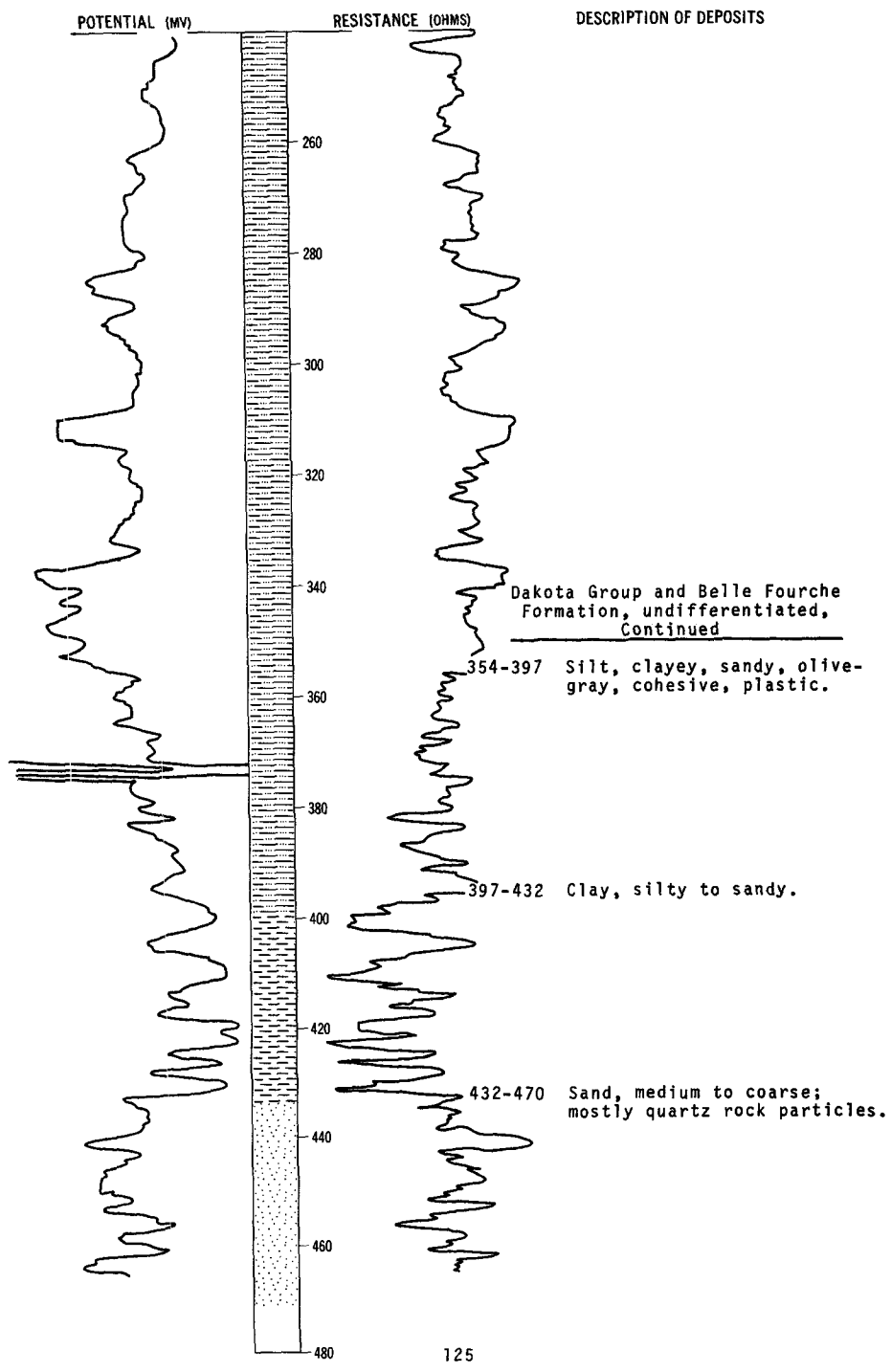
LOCATION: 159-55-22CCC

NDSWC 3829, Continued

DATE DRILLED: September 1969

ALTITUDE: 928
(FT, MSL)

DEPTH: 470
(FT)



159-55-29BBB
USBR 388

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, clayey, sandy-----	5	5
	Loam, silty-----	7	12
	Loam, clayey, silty-----	1	13
	Till-----	1	14

159-55-31CCC
USBR 259

Altitude:

Glacial drift:			
	Loam, clayey, silty-----	1	1
	Loam, silty-----	1	2
	Loam, clayey, silty-----	1	3
	Loam, fine, silty-----	1	4
	Loam-----	2	6
	Sand, very fine-----	1	7
	Loam, sandy-----	6	13

159-55-33DDD
USBR 260

Altitude:

Glacial drift:			
	Loam, silty-----	3	3
	Loam-----	3	6
	Silt-----	17	23

159-55-36CCC
USBR 261

Altitude:

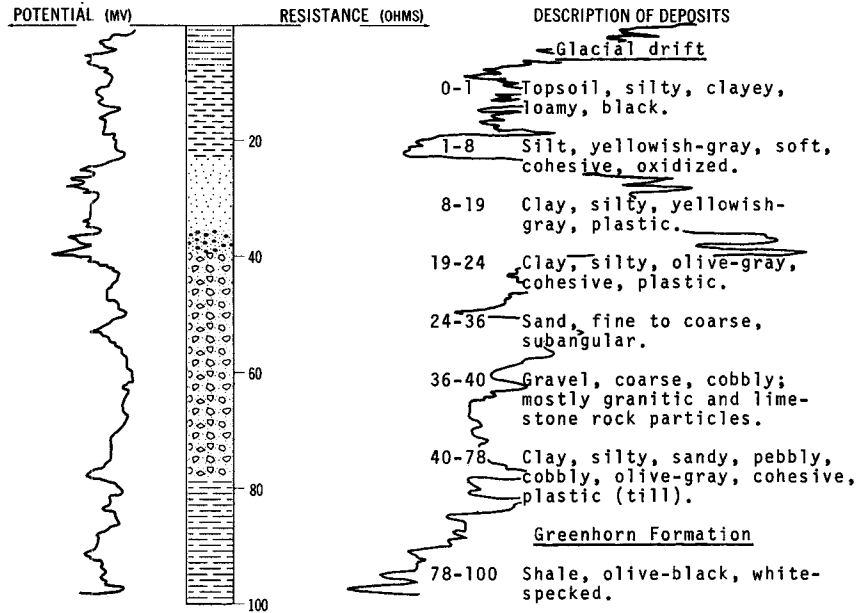
Glacial drift:			
	Loam, silty-----	3	3
	Silt-----	20	23

LOCATION: 159-56-1ADA
 ALTITUDE: 958
 (FT, MSL)

NDSWC 3826

DATE DRILLED: September 1969

DEPTH: 100
 (FT)



159-56-1DDD
 USBR 450

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, silty-----	5	5
	Silt-----	18	23

159-56-3CCC
 NDGS Pem-70-27

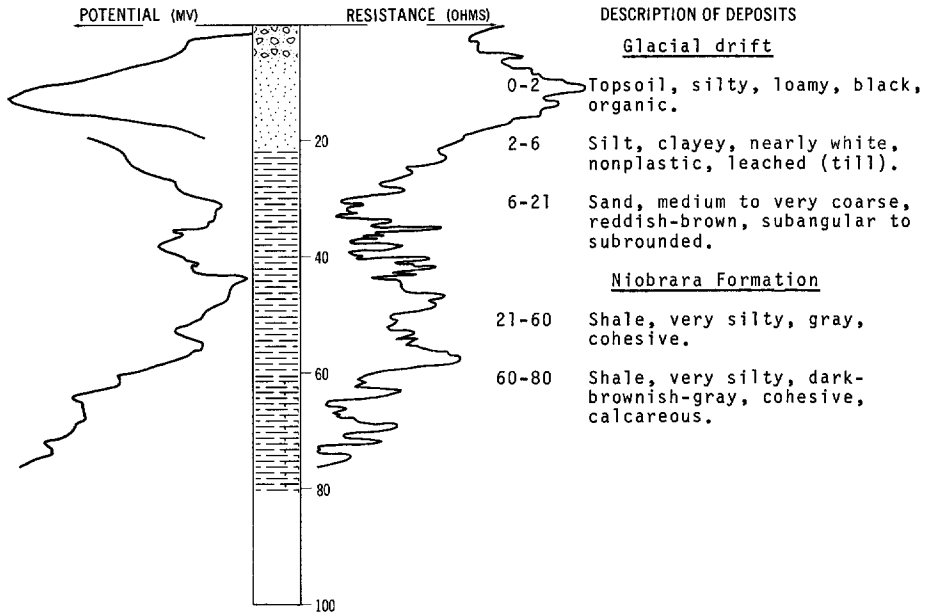
Altitude: 1150 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	1	1
	Sand, coarse, gravelly, pebbly; pebbles sub-angular to subrounded-----	5	6
	Till, clayey, very pebbly, yellowish-brown; about 75 percent shale particles; becomes more clayey and dense at 11 feet-----	11	17
	Till, clayey, pebbly, silty, sandy, gray to yellowish-black, saturated-----	3	20
	Till; as above but with fewer pebbles, saturated-----	5	25
	Till, sandy, saturated-----	4	29

LOCATION: 159-56-6AAA
 ALTITUDE: 1210
 (FT, MSL)

NDSWC 4215

DATE DRILLED: September 1970
 DEPTH: 80
 (FT)



159-56-14AAA
 NDGS Pem-70-28

Altitude: 1050 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Roadfill-----	2	2
	Till, clayey, silty, pebbly, bouldery, pale-yellowish-brown, oxidized; pebbles subangular to subrounded-----	6.5	8.5

159-56-16AAA
 USBR 255

Altitude:

Glacial drift:			
	Loam, clayey, silty-----	1	1
	Loam-----	4	5
	Loam, clayey, silty-----	3	8

159-56-18CAA
USBR 256

Altitude:

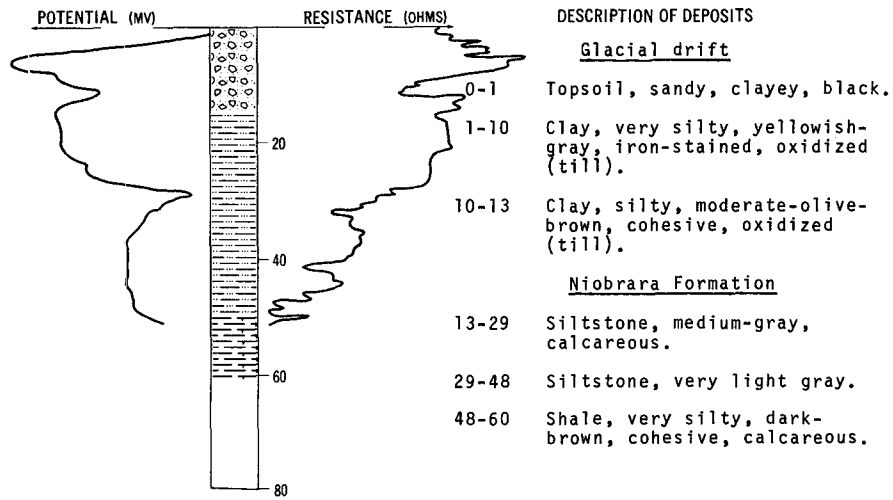
Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, silty-----	12	12
	Loam-----	2	14

159-56-18CCC
USBR 391

Altitude:

Glacial drift:			
	Loam, silty-----	5	5
	Loam-----	2	7
	Loam, clayey-----	2	9
	Till-----	4	13

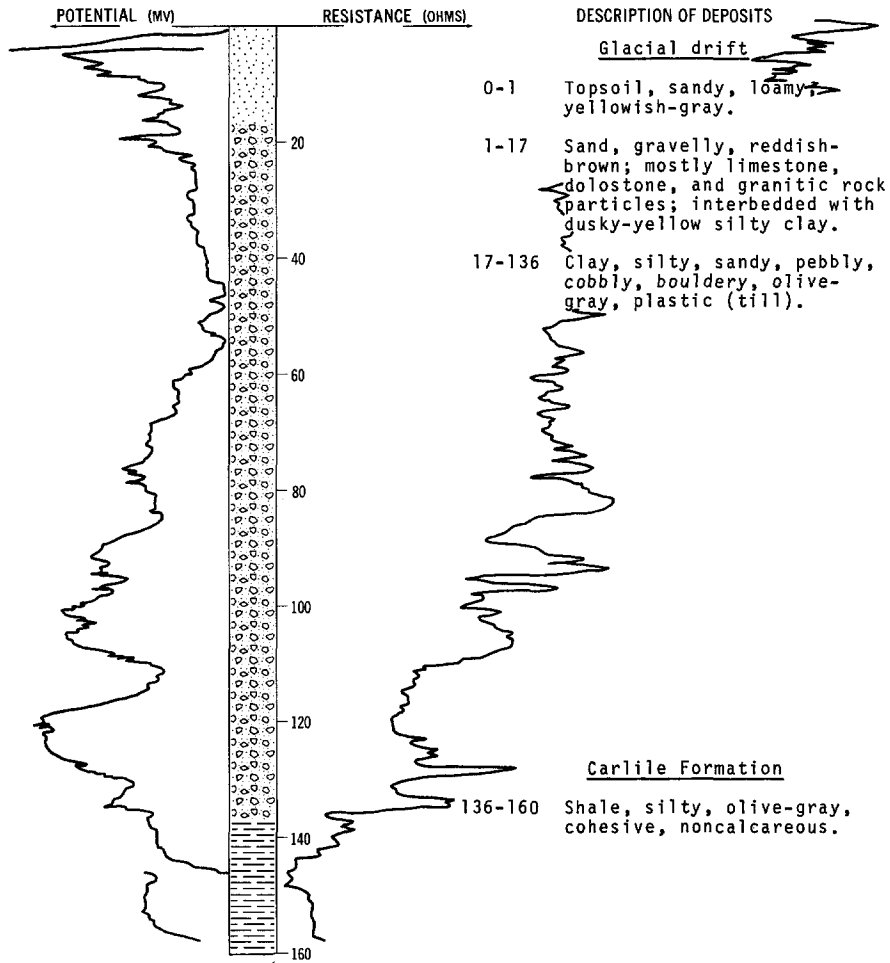
LOCATION: 159-56-18DDD NDSWC 4214 DATE DRILLED: September 1970
 ALTITUDE: 1220 DEPTH: 60
 (FT, MSL) (FT)



LOCATION: 159-56-22BBB
 ALTITUDE: 1155
 (FT, MSL)

NDSWC 3827

DATE DRILLED: September 1969
 DEPTH: 160
 (FT)



159-56-23CCC
 USBR 389

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, clayey, silty-----	2	2
	Loam, clayey, sandy-----	1	3
	Loam, clayey, silty-----	3	6
	Loam-----	5	11
	Loam, clayey-----	1	12
	Till-----	1	13

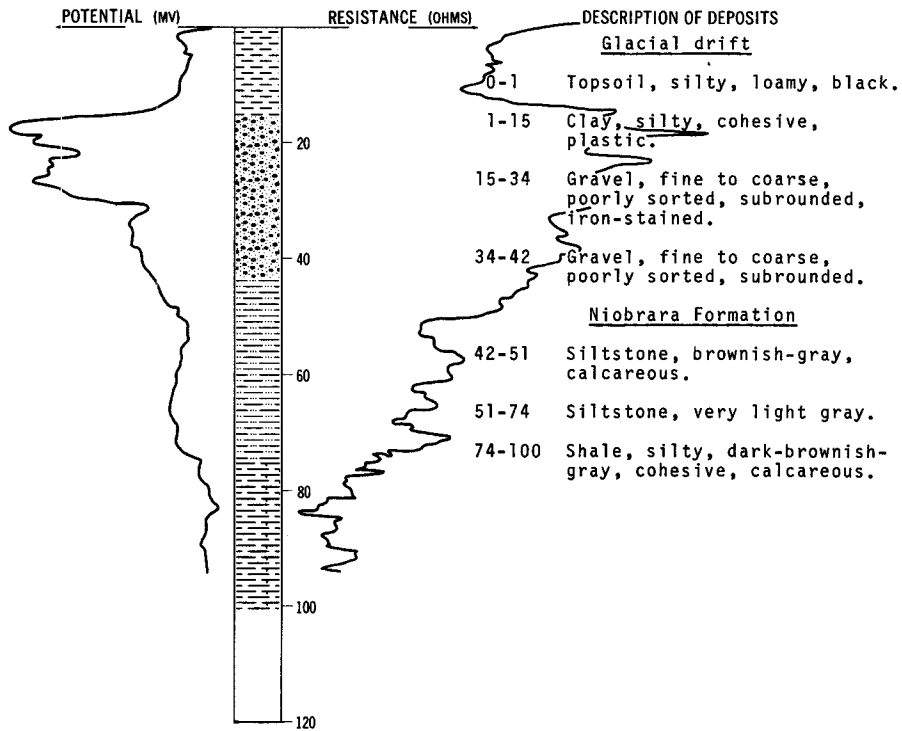
LOCATION: 159-56-29CCC

NDSWC 4213

DATE DRILLED: September 1970

ALTITUDE: 1234
(FT, MSL)

DEPTH: 100
(FT)



159-56-31CCC
USBR 257

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, clayey, silty-----	2	2
	Loam, clayey, sandy-----	3	5
	Loam-----	3	8

159-56-33DDC
USBR 258

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam-----	1	1
	Loam, silty-----	1	2
	Loam, fine, sandy-----	2	4
	Loam, silty-----	2	6
	Loam-----	2	8

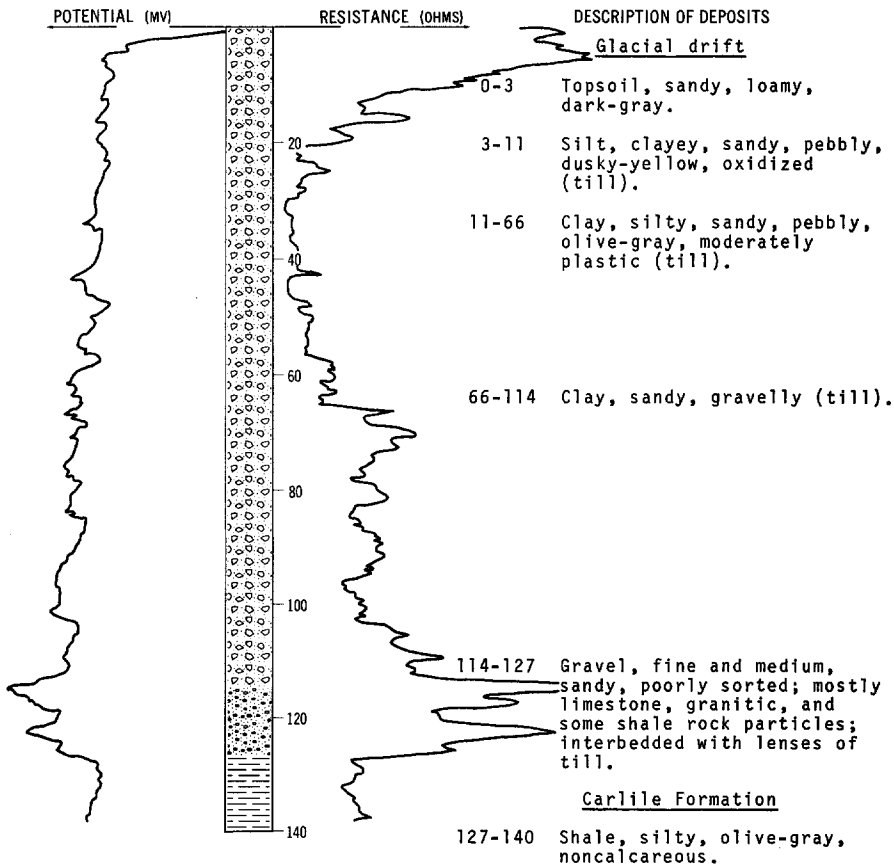
LOCATION: 159-56-34CCC

NDSWC 3828

DATE DRILLED: September 1969

ALTITUDE: 1149
(FT, MSL)

DEPTH: 140
(FT)



159-56-35888
 NDGS Pem-70-29

Altitude: 1134 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Roadfill-----	5	5
	Gravel, clayey, subrounded to subangular-----	2	7
	Gravel, clayey, saturated; gravel finer than above-----	2	9
	Sand, coarse, gravelly, saturated-----	3	12
	Clay, silty, pebbly, gray to gray-black, dense, saturated-----	17	29

159-56-35CDB1
 (Log from U.S. Air Force)

Altitude: 1130 feet

Glacial drift:			
	Sand, fine to medium, clayey, dark-gray-----	2	2
	Sand, medium to coarse, gravelly, silty, cobbly, bouldery, grayish-brown-----	18.5	20.5
	Silt, clayey, sandy, gray-----	2.5	23
	Clay, silty, sandy, shaly, gray-----	3.5	26.5
	Silt, clayey, sandy, shaly, gray-----	7.5	34
	Clay, silty, sandy, gravelly, gray-----	3.5	37.5
	Silt, clayey, sandy, light- to dark-gray-----	5.5	43
	Clay, silty, sandy, gravelly, gray-----	51	94
	Sand, medium to coarse, clayey, gravelly, shaly, dark-gray-----	4	98
	Clay, silty, sandy, gravelly, cobbly, gray---	13.5	111.5
	Sand, fine to medium, clayey, gray-----	4.5	116
	Clay, silty, sandy, gravelly, cobbly, gray---	14	130

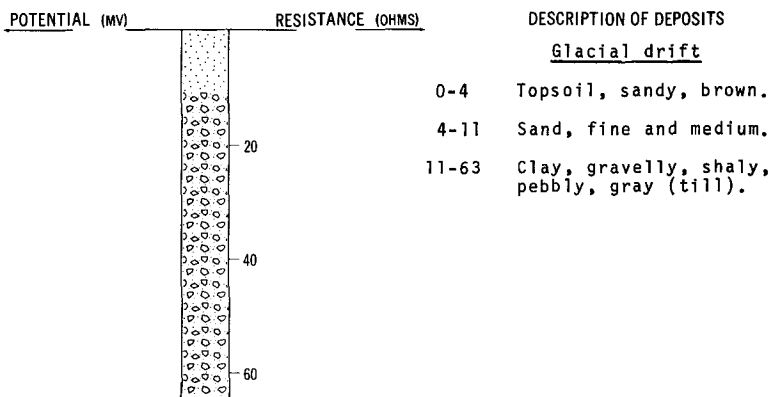
NDSWC 1613

LOCATION: 159-56-35DDD

DATE DRILLED: September 1959

ALTITUDE: 1098
 (FT, MSL)

DEPTH: 63
 (FT)



159-57-1AAB
(Log from U.S. Air Force)

Altitude: 1325 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, sandy-----	9	9
	Sand, clayey, silty-----	4	13
	Silt, clayey, sandy-----	5	18
	Clay, silty-----	9	27
Pierre Formation:			
	Shale-----	27	54
	Shale-----	76	130

159-57-13CCC
USBR 390

Altitude:

Glacial drift:			
	Loam, clayey, silty-----	1	1
	Loam, clayey-----	2	3
	Loam, clayey, sandy-----	5	8

159-57-35CDB1
(Log from U.S. Air Force)

Altitude: 1430 feet

Glacial drift:			
	Sand, silty, clayey-----	2	2
	Silt, clayey, sandy-----	9	11
Pierre Formation:			
	Shale-----	89	100

159-57-35CDB2
(Log from U.S. Air Force)

Altitude: 1430 feet

Glacial drift:			
	Sand, silty, clayey-----	3	3
	Silt, clayey-----	6	9
Pierre Formation:			
	Shale-----	121	130

159-57-35CDB4
(Log from U.S. Air Force)

Altitude: 1430 feet

Glacial drift:			
	Gravel, silty, clayey, sandy-----	18	18
Cretaceous, undifferentiated:			
	Shale-----	194	212
	Shale-----	286	498
	Siltstone; shale-----	372	870
	Sandstone; shale-----	132	1002

159-58-9CBA1
(Log from U.S. Air Force)

Altitude: 1617 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, sandy-----	2	2
	Clay, sandy, silty-----	2.5	4.5
	Sand, clayey-----	2.5	7
	Silt; clayey shale-----	11	18
	Clay, sandy, silty-----	6	24
Pierre Formation:			
	Shale-----	11.5	35.5
	Shale; clay-----	9.5	45
	Shale-----	4	49
	Clay-----	9	58
	Shale; silt-----	20	78
	Shale-----	25	103
	Silt; shale-----	25	128
	Shale-----	2	130

159-58-9CBB
(Log from U.S. Air Force)

Altitude: 1616 feet

Glacial drift:			
	Clay, silty, sandy-----	14	14
	Silt, clayey-----	10	24
Pierre Formation:			
	Shale; clayey sandy silt-----	13	37
	Shale, silty-----	33	70
	Shale; silt-----	25	95
	Silt, clayey, sandy-----	32	127
	Shale-----	3.5	130.5

159-58-15ADC3
(Log from Peterson Well Company)

Altitude: 1595 feet

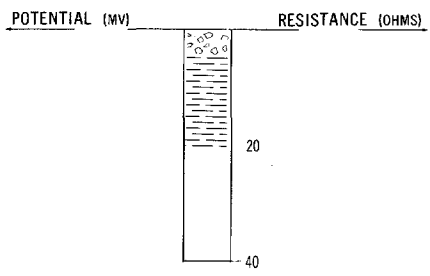
Glacial drift:			
	Black dirt-----	1	1
	Clay, yellow-----	9	10
	Clay, yellow; gravel-----	10	20
Pierre Formation:			
	Shale-----	44	64

LOCATION: 159-58-24AAA
 ALTITUDE: 1570
 (FT, MSL)

NDSWC 3800

DATE DRILLED: September 1969

DEPTH: 20
 (FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-1 Topsoil, loamy, pebbly, clayey, black.
- 1-4 Clay, silty, sandy, pebbly, olive-brown, oxidized (till).

Pierre Formation

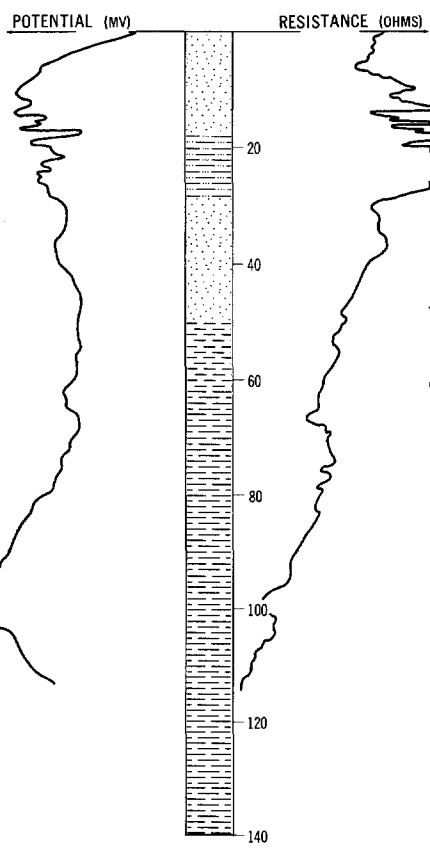
- 4-20 Shale, gray.

LOCATION: 159-58-24DDD
 ALTITUDE: 1576
 (FT, MSL)

NDSWC 4211

DATE DRILLED: September 1970

DEPTH: 140
 (FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-1 Topsoil, loamy, sandy, black.
- 1-17 Sand, fine to coarse, clayey, yellowish-gray, iron-stained, oxidized (till).
- 17-28 Silt, light-olive-gray.
- 28-49 Sand, very fine to medium, gray; sorted in layers.
- 49-61 Clay, very silty, olive-gray.

Pierre Formation

- 61-140 Shale, black, siliceous, fractured.

159-58-28ABC1
(Log from Peterson Well Company)

Altitude: 1596 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Black dirt-----	1	1
	Clay, yellow-----	21	22
Pierre Formation:			
	Shale, blue, crumbly to quite hard-----	116	138

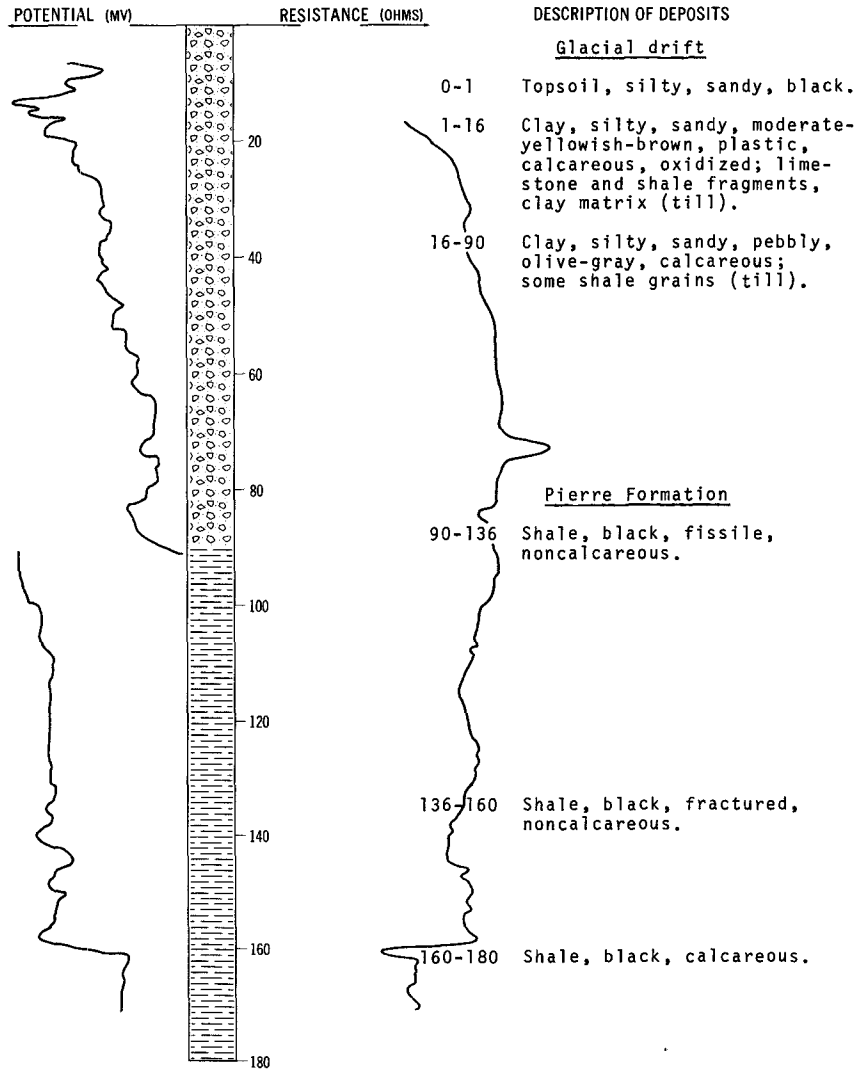
NDSWC 2957

LOCATION: 159-58-31AAA

DATE DRILLED: June 1968

ALTITUDE: 1604
(Ft, MSL)

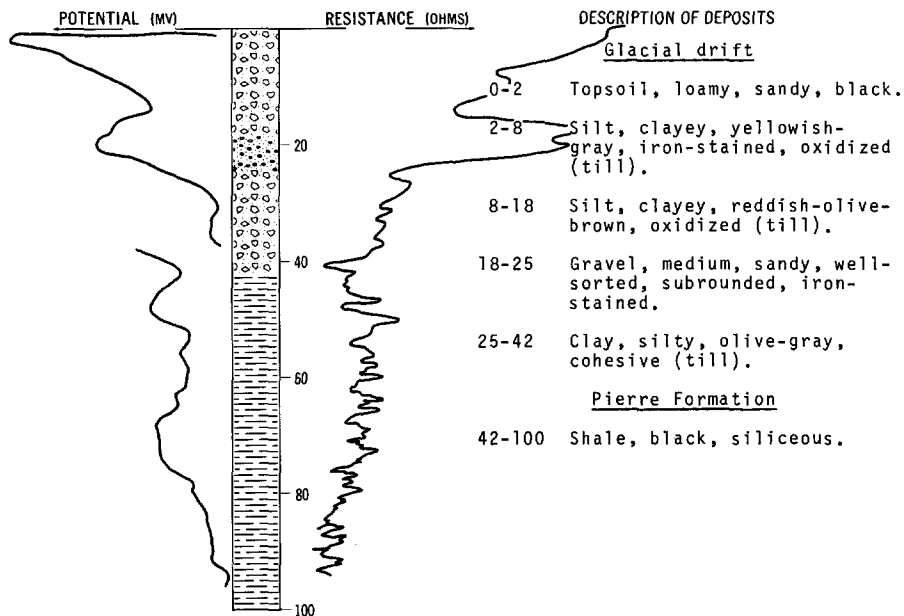
DEPTH: 180
(Ft)



LOCATION: 159-58-32ADD
 ALTITUDE: 1610
 (FT, MSL)

NDSWC 4212

DATE DRILLED: September 1970
 DEPTH: 100
 (FT)



159-58-36CDB1
 (Log from U.S. Air Force)

Altitude: 1588 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, sandy, silty-----	3	3
	Clay, silty-----	5	8
Pierre Formation:			
	Shale-----	122	130

159-58-36CDC
 (Log from U.S. Air Force)

Altitude: 1588 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Silt, clayey, sandy-----	6	6
Pierre Formation:			
	Shale-----	11	17
	Shale; clayey silt-----	31	48
	Shale-----	82	130

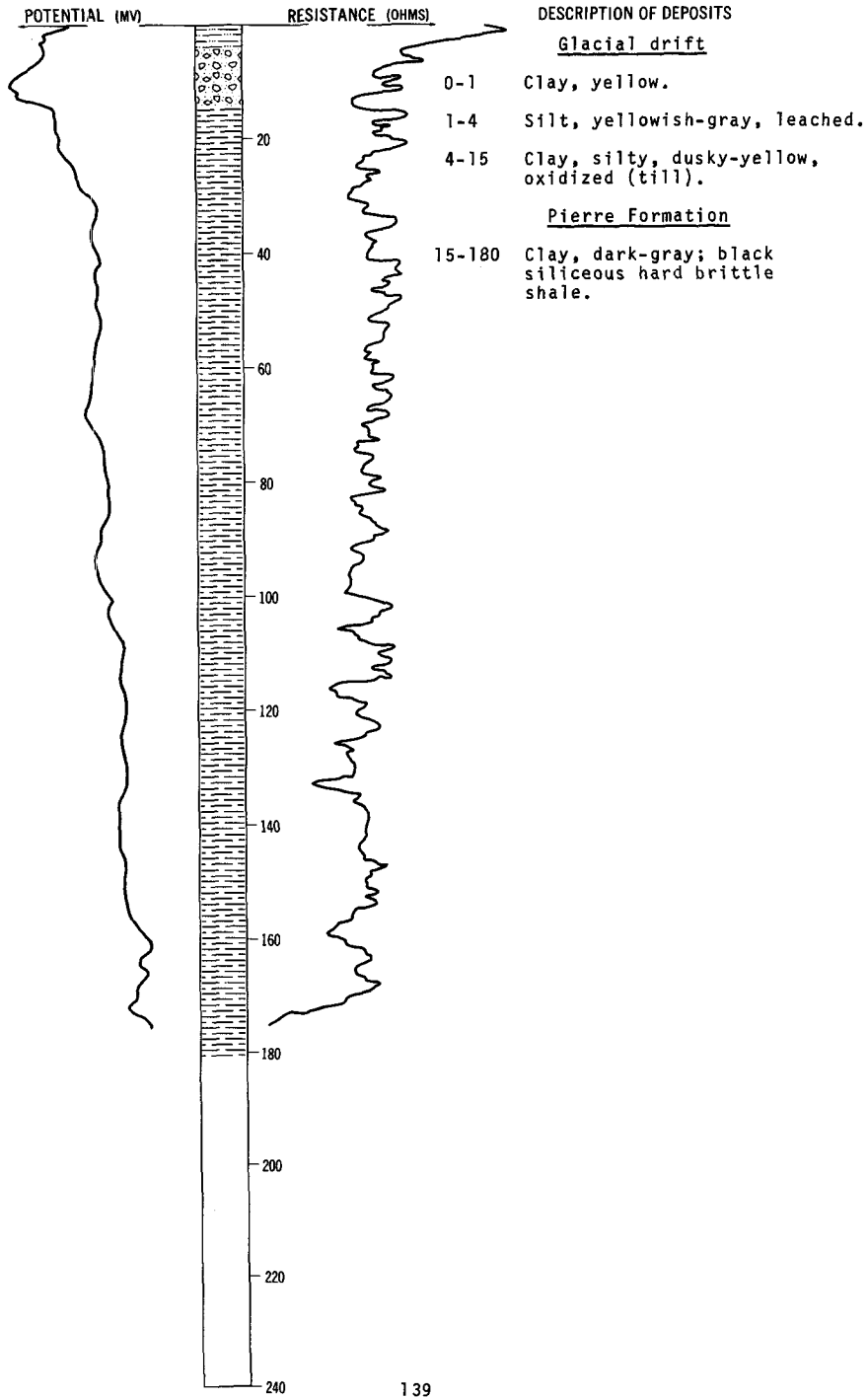
LOCATION: 159-59-1AAA

NDSWC 4210

DATE DRILLED: September 1970

ALTITUDE: 1630
(FT, MSL)

DEPTH: 180
(FT)

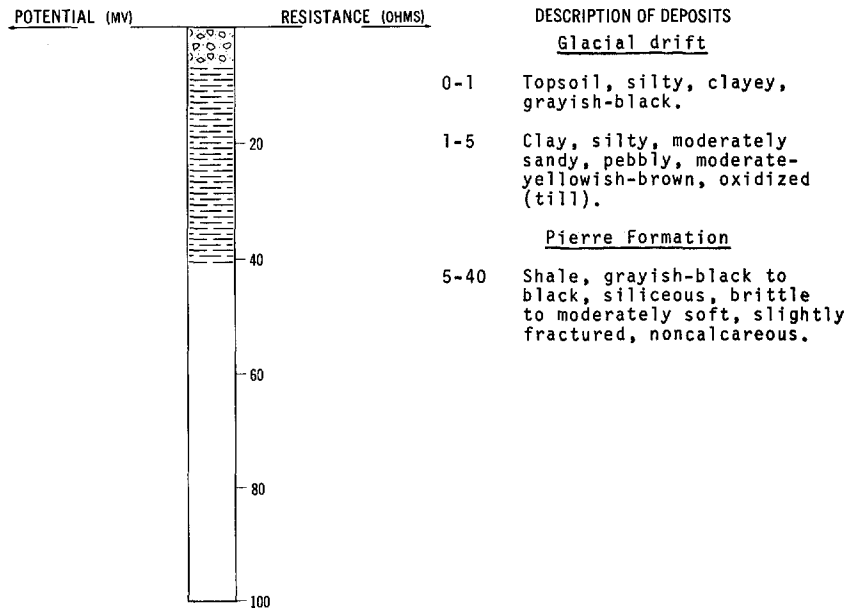


159-59-4BCB
(Log from U.S. Air Force)

Altitude: 1642 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Silt, sandy, clayey-----	15.5	15.5
	Clay, sandy, silty-----	3.5	19
	Silt, clayey-----	8.5	27.5
Pierre Formation:			
	Shale; clayey silt-----	76.5	104
	Clay, silty-----	4	108
	Silt, clayey-----	22	130

LOCATION: 159-59-7DDD NDSWC 5960 DATE DRILLED: June 1971
 ALTITUDE: 1659 DEPTH: 40
 (FT, MSL) (FT)

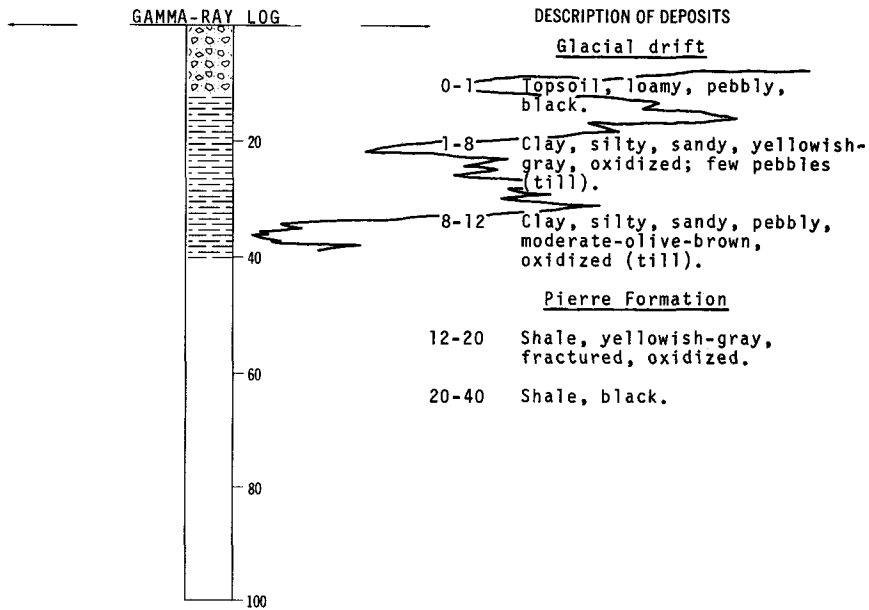


159-59-16BCD1
(Log from U.S. Air Force)

Altitude: 1664 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Silt, sandy, black-----	3	3
	Clay, silty, sandy, brown-----	5	8
	Silt, sandy, clayey, grayish-brown-----	10	18
	Clay, shaly, gray-----	11	29
Pierre Formation:			
	Shale, clayey, dark-gray, highly fractured---	4	33
	Shale, silty, gray to dark-gray-----	10	43
	Shale, clayey, gray to dark-gray-----	81	124
	Shale, dark-gray, moderately fractured-----	6	130

LOCATION: 159-59-24BBB NDSWC 3799 DATE DRILLED: September 1969
 ALTITUDE: 1649 DEPTH: 40
 (FT, MSL) (FT)



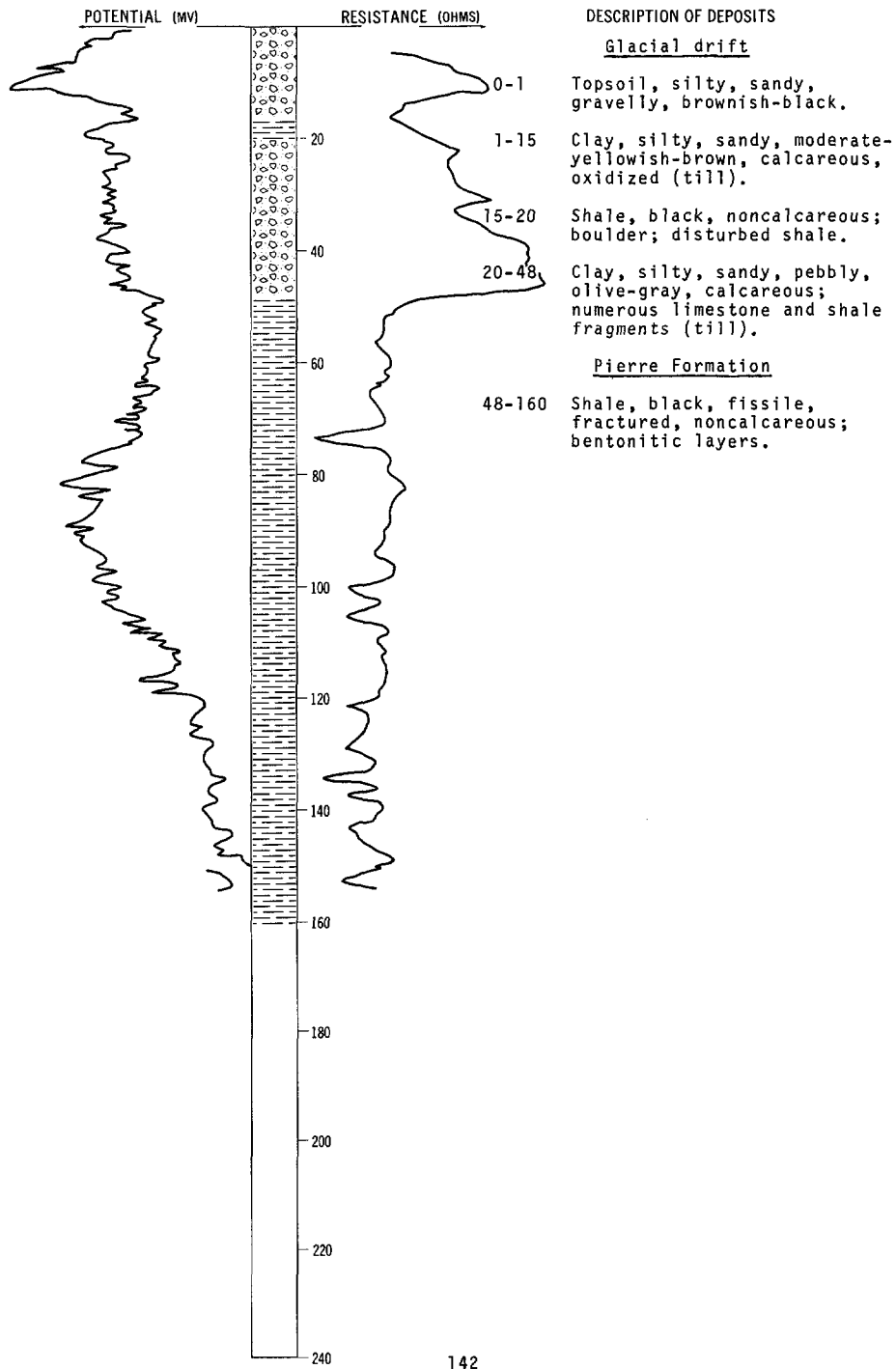
LOCATION: 159-59-27DDC

NDSWC 2958

DATE DRILLED: June 1968

ALTITUDE: 1637
(FT, MSL)

DEPTH: 160
(FT)



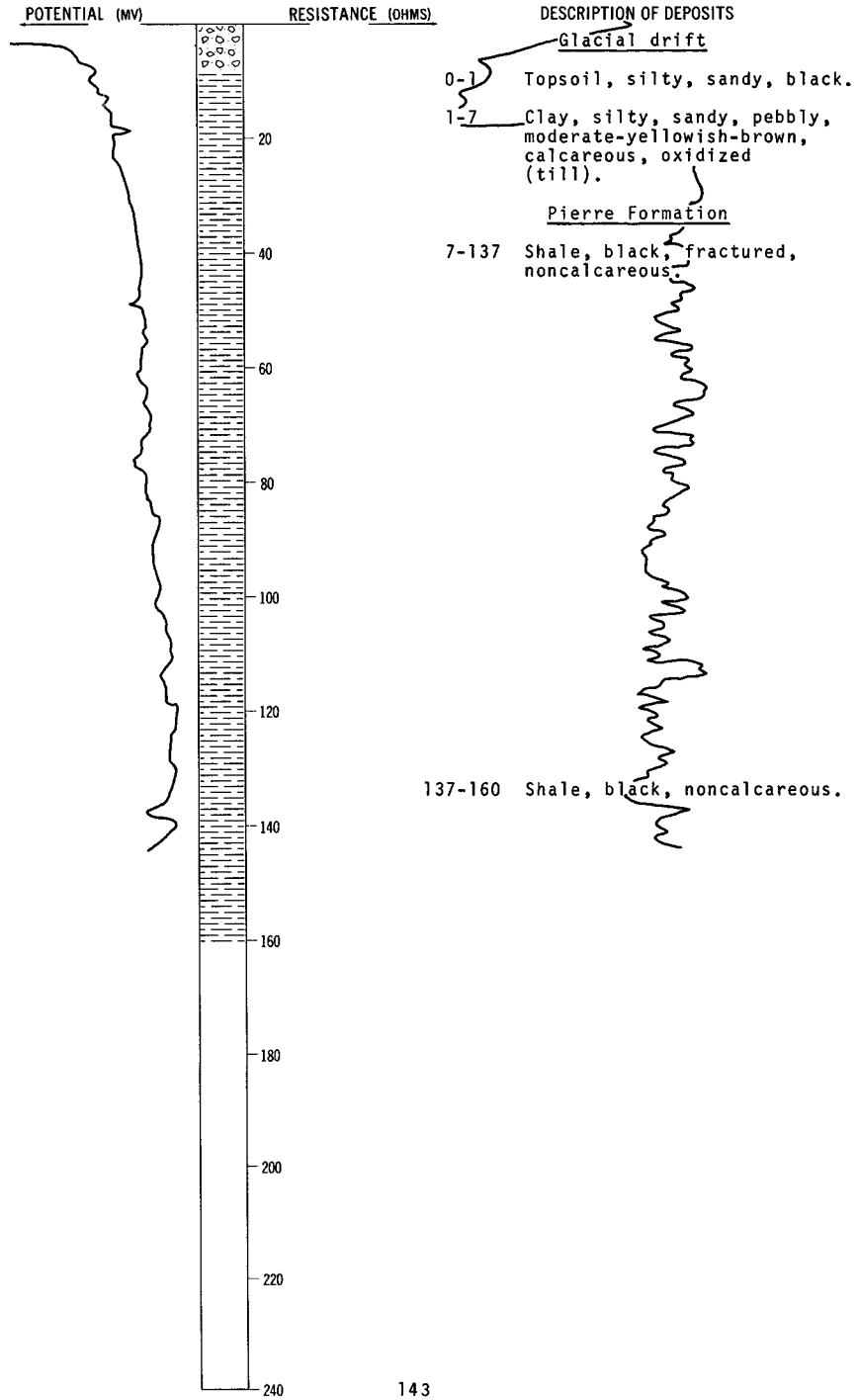
LOCATION: 159-59-30DDD

NDSWC 2959

DATE DRILLED: June 1968

ALTITUDE: 1649
(FT, MSL)

DEPTH: 160
(FT)



159-59-31CDD1
(Log from Walter Koehmstedt)

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, sandy-----	25	25
Pierre Formation:			
	Shale-----	55	80

159-59-34AAD
(Log from U.S. Air Force)

Altitude: 1639 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, black-----	1.5	1.5
	Clay, sandy, silty, shaly, gravelly, brownish-gray-----	7.5	9
Pierre Formation:			
	Shale, silty, dark-gray, highly fractured, oxidized-----	7	16
	Shale, dark-gray, highly fractured, moderately hard-----	114	130

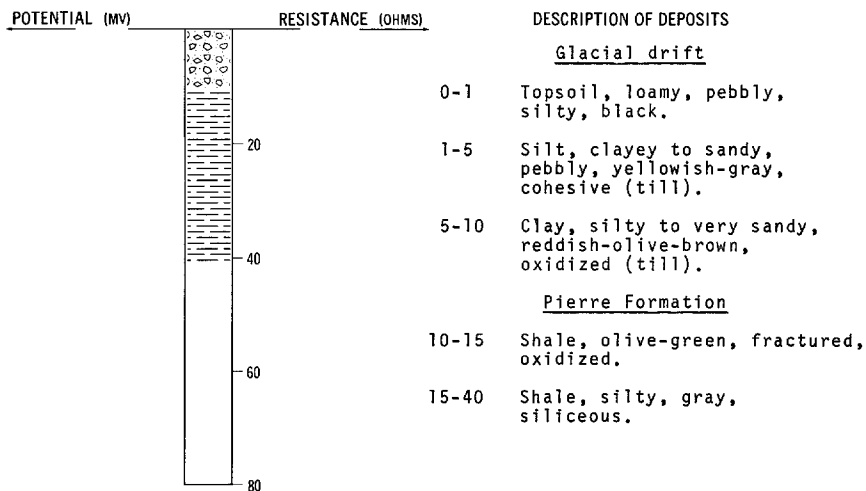
LOCATION: 159-60-4BAB

NDSWC 4190

DATE DRILLED: September 1970

ALTITUDE: 1614
(FT, MSL)

DEPTH: 40
(FT)



159-60-8DDD
NDGS Cav-69-10

Altitude: 1607 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Clay, banded-----	1	3
	Till, very pebbly, shaly, dark-yellowish-brown-----	5	8
Pierre Formation:			
	Shale-----	-	8

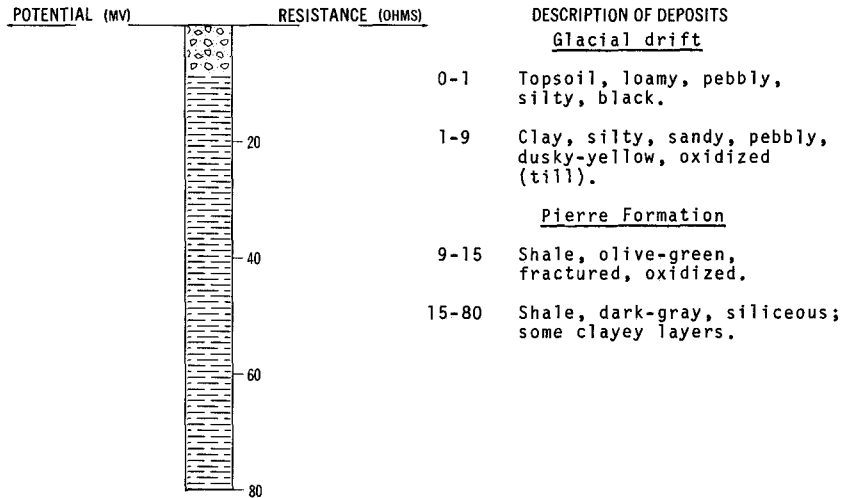
NDSWC 4191

LOCATION: 159-60-10DDD

DATE DRILLED: September 1970

ALTITUDE: 1632
(FT, MSL)

DEPTH: 80
(FT)



159-60-15ACC
NDGS Cav-69-11

Altitude: 1624 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Till, pebbly, shaly, moderate-yellowish-brown	4	6
	Till, shaly; shale particles coraser and more abundant than above-----	2	8
Pierre Formation:			
	Shale-----	-	8

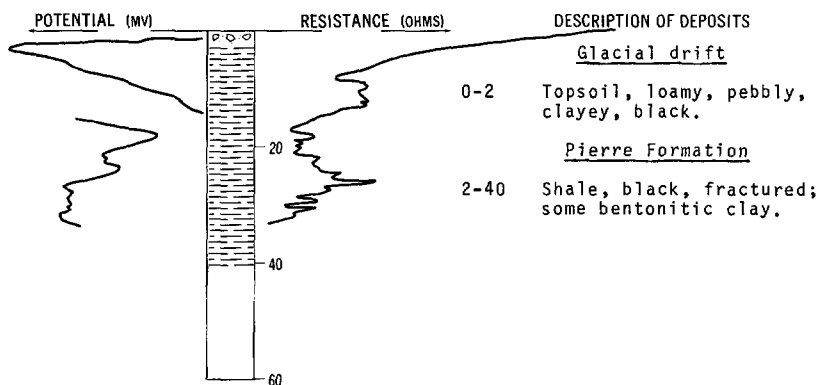
NDSWC 3798

LOCATION: 159-60-24AAA2

DATE DRILLED: September 1969

ALTITUDE: 1662
(FT, MSL)

DEPTH: 40
(FT)



159-60-25BAA
NDGS Cav-69-43

Altitude: 1665 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Gravel; about 80 percent shale particles-----	6	8
Pierre Formation:			
	Shale-----	-	8

159-60-26ABB
(Log from Walter Koehmstedt)

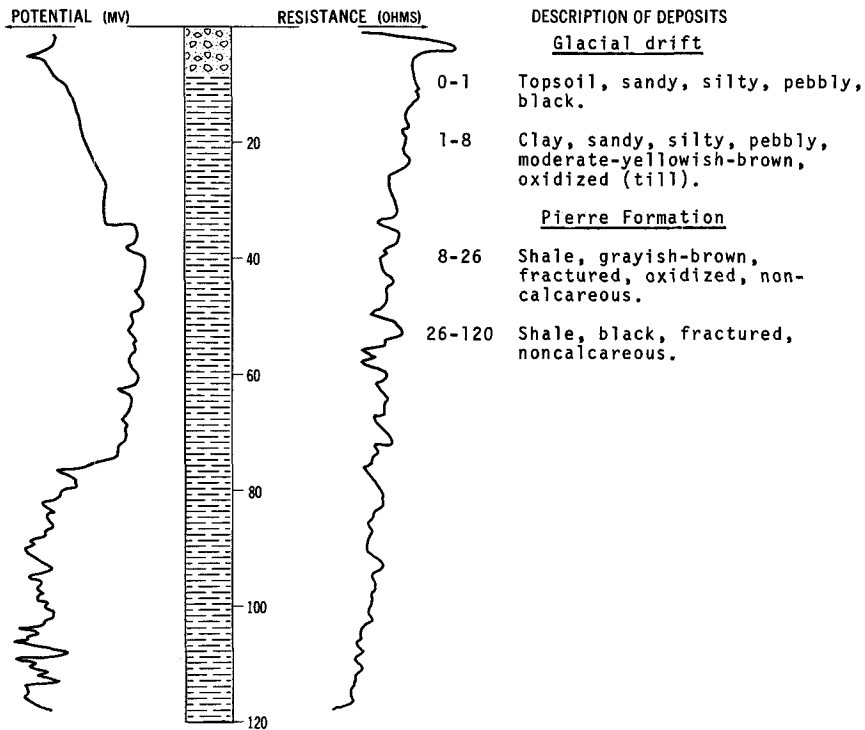
Altitude: 1633 feet

Glacial drift:			
	Clay; gravel-----	20	20
Pierre Formation:			
	Shale-----	70	90

LOCATION: 159-60-29CCC
 ALTITUDE: 1590
 (FT, MSL)

NDSWC 2954

DATE DRILLED: May 1968
 DEPTH: 120
 (FT)



159-60-33ADA
 (Log from U.S. Air Force)

Altitude: 1592 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Silt, sandy, clayey-----	9.5	9.5
	Sand, clayey-----	5	14.5
Pierre Formation:			
	Shale-----	115.5	130

159-60-34BCA2
 (Log from U.S. Air Force)

Altitude: 1588 feet

Glacial drift:			
	Clay, silty, sandy-----	18	18
Pierre Formation:			
	Shale-----	112	130

159-60-34BCA4
(Log from U.S. Air Force)

Altitude: 1590 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, sandy, gravelly, cobbly, brown; partly sandy dark-gray broken and crushed shale-----	25	25
Cretaceous, undifferentiated:			
	Shale, dark-gray, fissile, brittle, hard, bentonitic-----	438	463
	Shale, slightly sandy, gray, speckled, soft--	315	778
	Shale, light-gray, blocky, fractured, pyritic, calcareous; hard to soft; coarsely crystalline to amorphous tan limestone; sandy shaly tan hard siltstone-----	402	1180
	Sandstone, very fine to coarse, silty, gray and white; gray soft shale-----	91	1271

159-61-2DDB1
(Log from U.S. Air Force)

Altitude: 1589 feet

Glacial drift:			
	Clay, sandy, dark-brown-----	1.5	1.5
	Clay, silty, sandy, gravelly, yellowish-brown-----	18.5	20
Pierre Formation:			
	Shale, silty, dark-gray-----	28	48
	Shale, clayey, silty, dark-gray, highly fractured-----	50	98
	Shale, dark-gray, highly fractured-----	32.5	130.5

159-61-2DDB4
(Log from U.S. Air Force)

Altitude: 1593 feet

Glacial drift:			
	Clay, sandy, silty-----	8	8
	Sand, clayey, silty-----	5	13
	Clay, sandy, silty-----	4.5	17.5
	Shale; clay-----	40.5	58
Pierre Formation:			
	Shale-----	42	100

159-61-7CCD
(Log from U.S. Air Force)

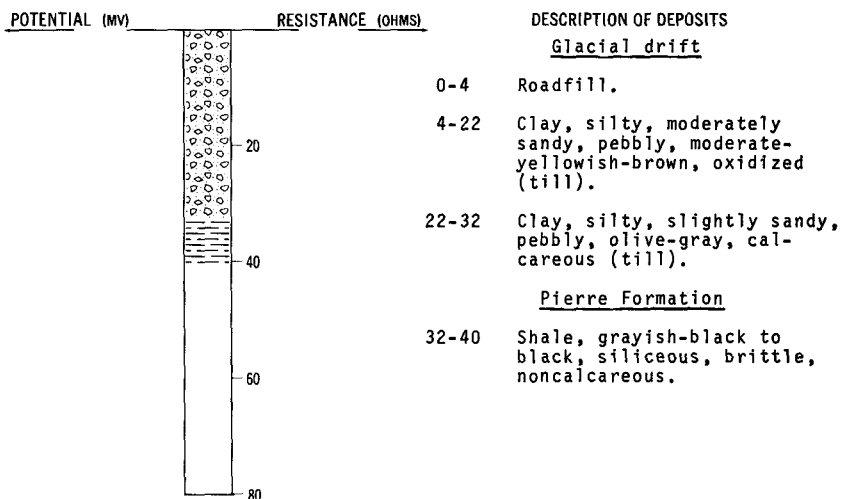
Altitude: 1576 feet

Glacial drift:			
	Clay, silty, sandy-----	31.5	31.5
Pierre Formation:			
	Shale; clay-----	28.5	60
	Shale-----	69	129

LOCATION: 159-61-9AAA3
 ALTITUDE: 1565
 (FT, MSL)

NDSWC 5962

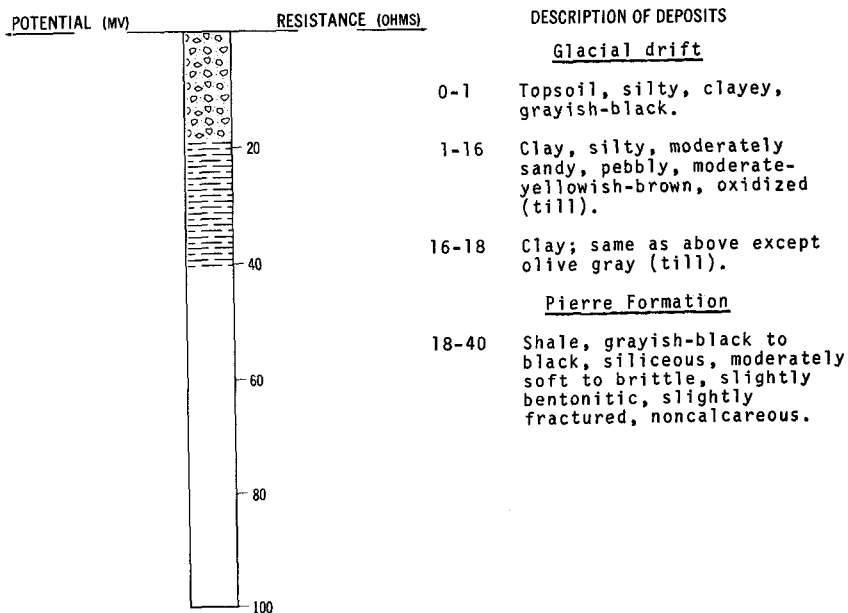
DATE DRILLED: June 1971
 DEPTH: 40
 (FT)



LOCATION: 159-61-10DDD
 ALTITUDE: 1565
 (FT, MSL)

NDSWC 5961

DATE DRILLED: June 1971
 DEPTH: 40
 (FT)



159-61-21DCD
(Log from Walter Koehmstedt)

Altitude: 1562 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay; gravel-----	20	20
Pierre Formation:			
	Shale-----	70	90

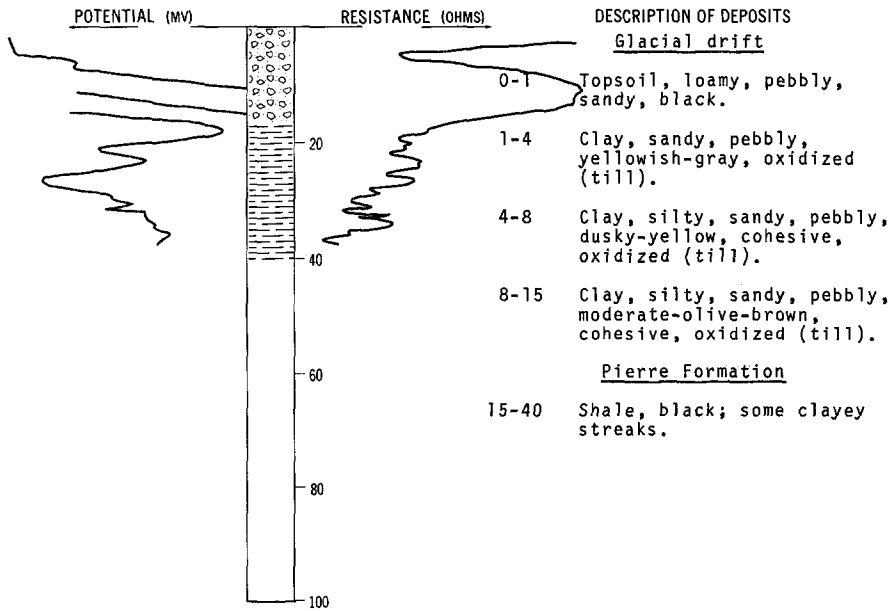
LOCATION: 159-61-22BBB

NDSWC 3797

DATE DRILLED: September 1969

ALTITUDE: 1561
(Ft, MSL)

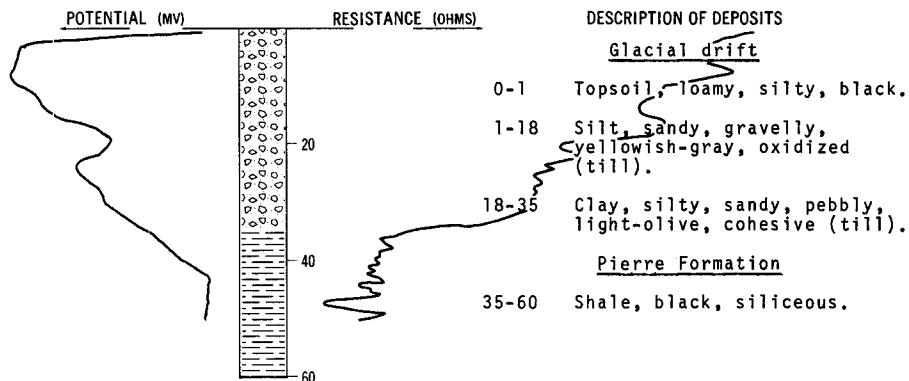
DEPTH: 40
(Ft)



LOCATION: 159-61-33BBB
 ALTITUDE: 1560
 (FT, MSL)

NDSWC 4131

DATE DRILLED: August 1970
 DEPTH: 60
 (FT)



159-61-34CBA1
 (Log from U.S. Air Force)

Altitude: 1561 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, sandy, silty, dark-brown-----	3	3
	Clay, sandy, silty, gravelly, yellowish-brown-----	8	11
	Sand, fine, silty, clayey, yellowish-brown---	3	14
	Clay, silty, sandy, gravelly, yellowish-brown-----	5	19
	Silt, clayey, sandy, gravelly, dark-grayish-brown-----	3	22
	Clay, silty, sandy, gravelly, gray-----	8	30
Pierre Formation:			
	Shale, dark-gray, highly fractured, fissile--	29	59
	Shale, gray to dark-gray, slightly fractured, bentonitic-----	18	77
	Shale, dark-gray, slightly fractured-----	53	130

159-61-34CBC
 (Log from U.S. Air Force)

Altitude: 1555 feet

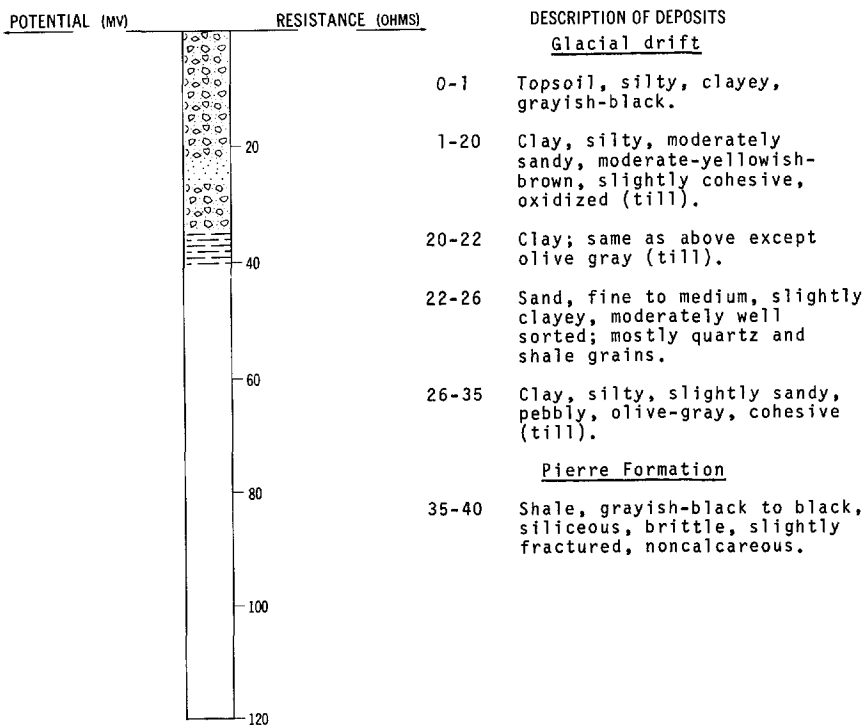
Glacial drift:			
	Clay, silty-----	8	8
	Sand, fine, silty, gravelly-----	11	19
Pierre Formation:			
	Shale-----	109.5	128.5

159-62-6CCC
 NDGS Cav-69-22

Altitude: 1580 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	4	4
	Till, slightly sandy, pebbly, shaly, moderate-yellowish-brown-----	2	6
	Till; same as above except coarser pebbles---	10	16
	Till, shaly, dusky-yellowish-brown; saturated at 29 feet-----	28	44
	Till, gravelly, shaly, moderate-yellowish-brown-----	10	54

LOCATION: 159-62-10BBB NDSWC 5963 DATE DRILLED: June 1971
 ALTITUDE: 1568 DEPTH: 40
 (FT, MSL) (FT)



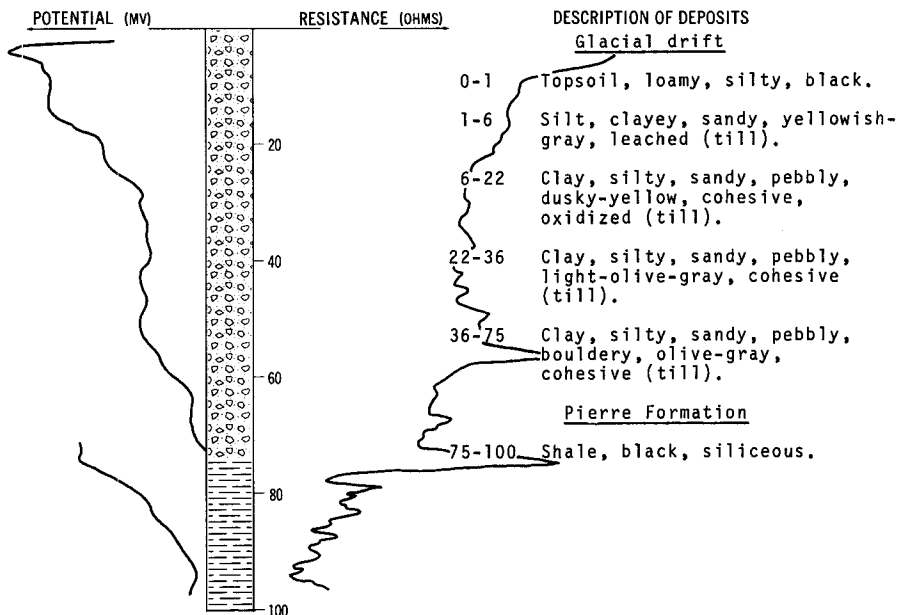
LOCATION: 159-62-19BBB

NDSWC 4128

DATE DRILLED: August 1970

ALTITUDE: 1580
(FT, MSL)

DEPTH: 100
(FT)



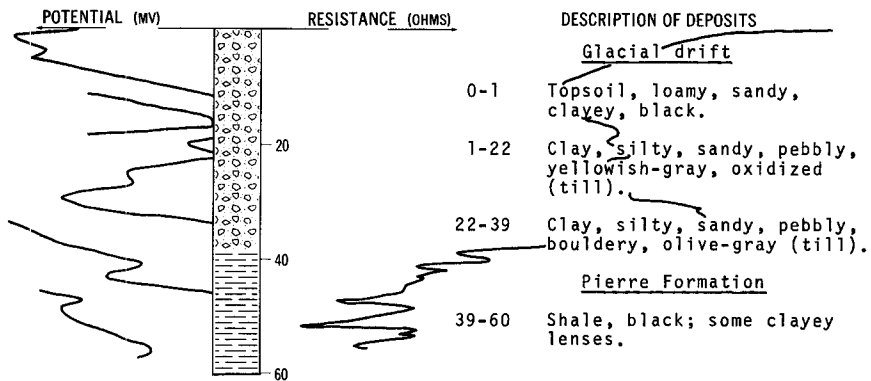
LOCATION: 159-62-21AAA1

NDSWC 3796

DATE DRILLED: September 1969

ALTITUDE: 1575
(FT, MSL)

DEPTH: 60
(FT)



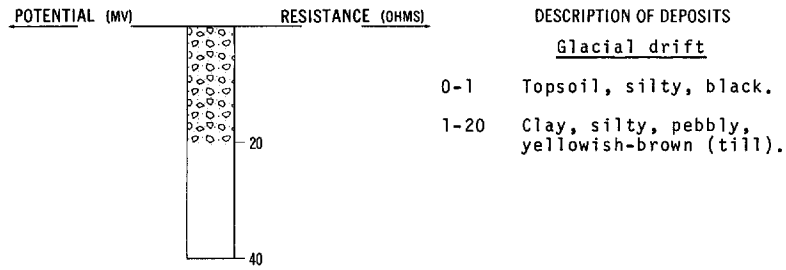
LOCATION: 159-62-21AAA2

NDSWC 5715-C

DATE DRILLED: June 1970

ALTITUDE: 1573
(FT, MSL)

DEPTH: 20
(FT)



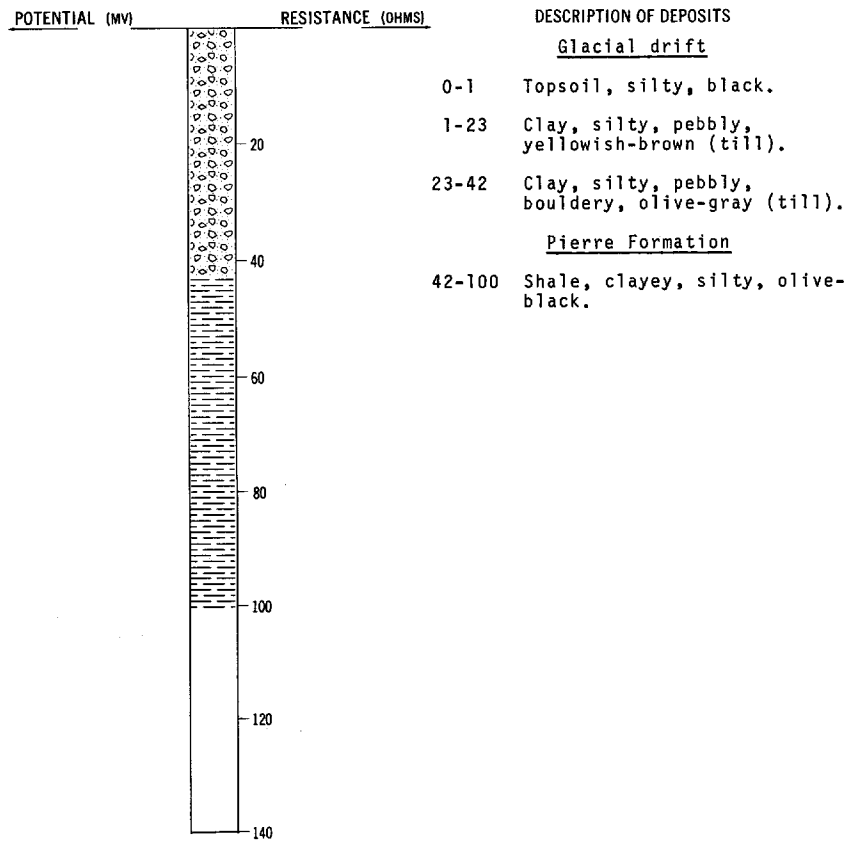
LOCATION: 159-62-21AAA3

NDSWC 5715-B

DATE DRILLED: June 1970

ALTITUDE: 1573
(FT, MSL)

DEPTH: 100
(FT)



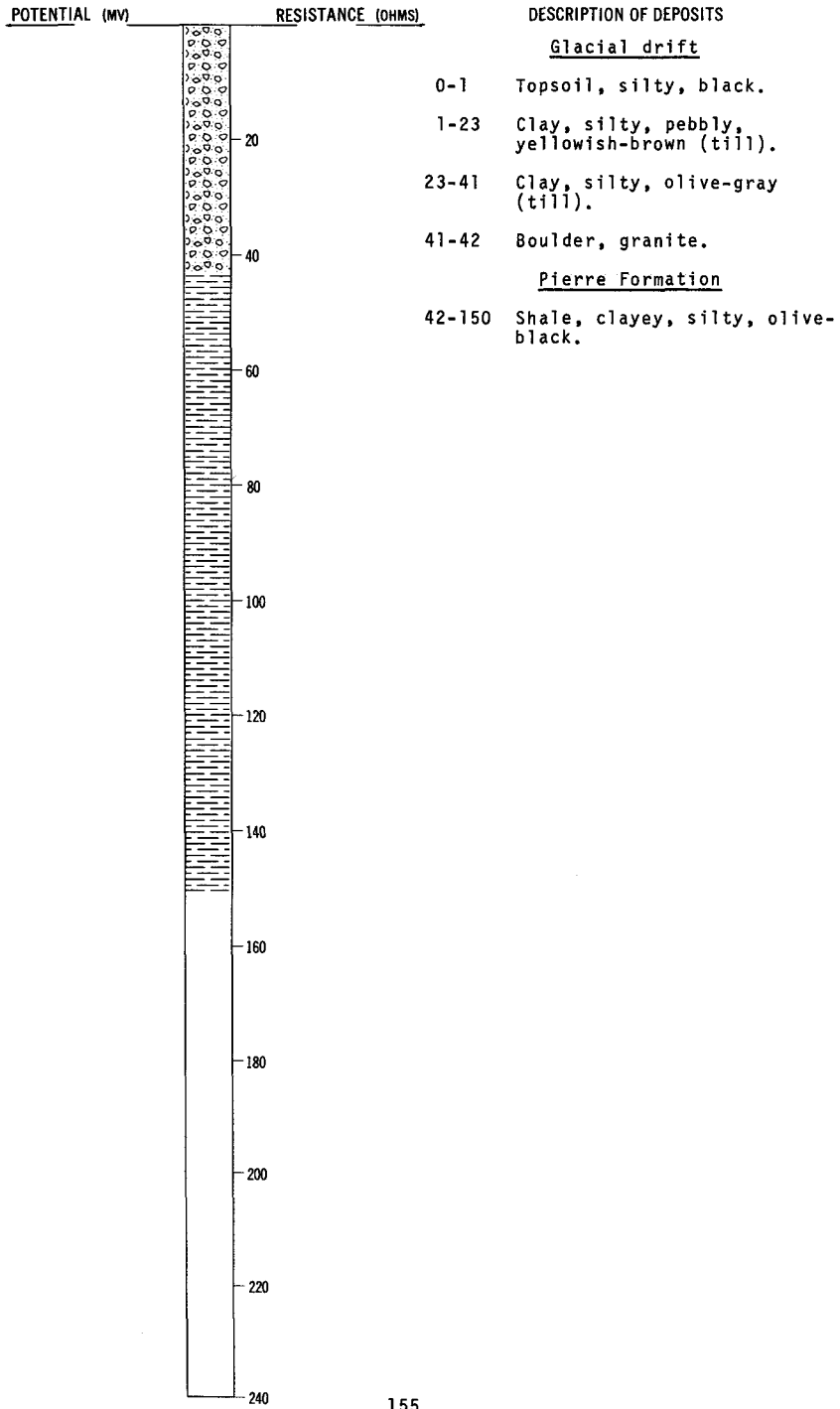
LOCATION: 159-62-21AAA4

NDSWC 5715-A

DATE DRILLED: June 1970

ALTITUDE: 1573
(FT, MSL)

DEPTH: 150
(FT)



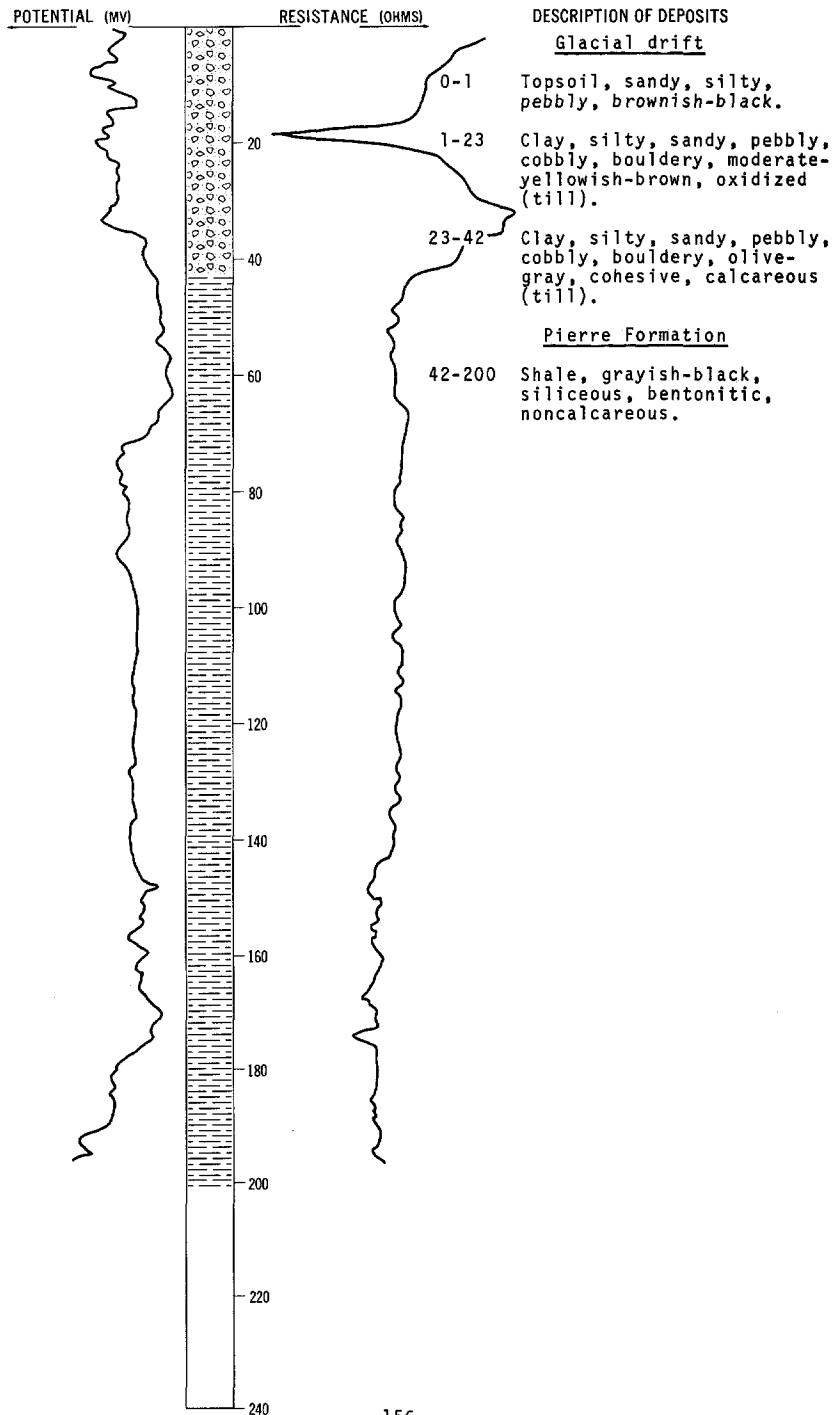
LOCATION: 159-62-21AAA5

NDSWC 5715

DATE DRILLED: June 1970

ALTITUDE: 1573
(FT, MSL)

DEPTH: 200
(FT)

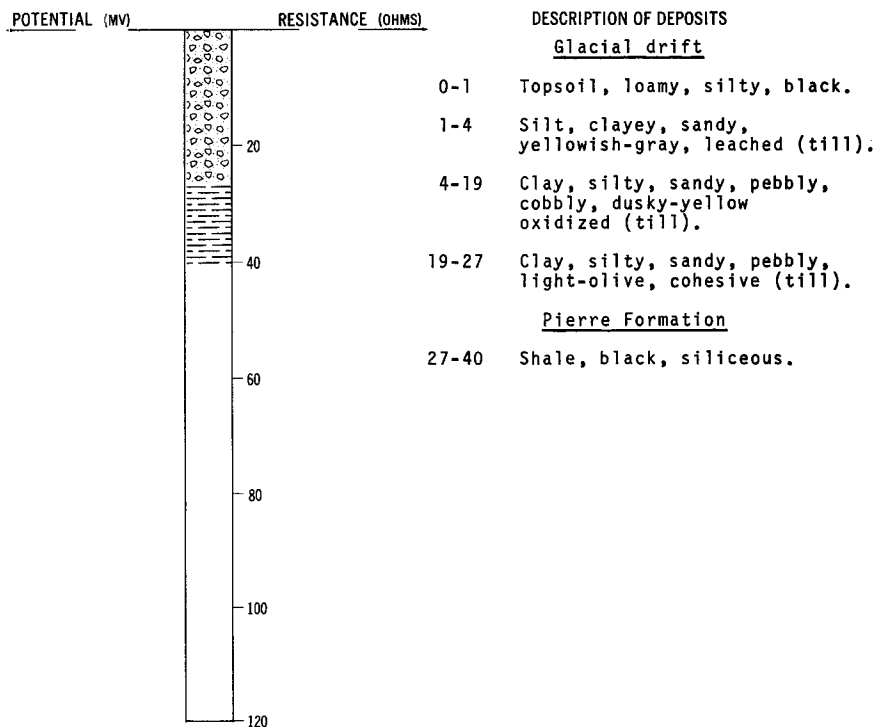


159-62-24DCC
 NDGS Cav-69-24

Altitude: 1558 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Roadfill and topsoil-----	4	4
	Till, shaly, dark-yellowish-brown-----	18	22
	Till, shaly, dusky-yellowish-brown, dense; more than 50 percent shale particles-----	5	27
	Gravel, clayey, pebbly, saturated-----	1	28
	Till, shaly, pebbly, dusky-yellowish-brown; about 50 percent shale particles-----	1	29

LOCATION: 159-62-26DDD NDSWC 4130 DATE DRILLED: August 1970
 ALTITUDE: 1559 DEPTH: 40
 (FT, MSL) (FT)



159-62-28DCA1
(Log from U.S. Air Force)

Altitude: 1577 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, sandy-----	68	68
Pierre Formation:			
	Shale-----	62	130

159-62-29DDD
NDGS Cav-69-23

Altitude: 1565 feet

Glacial drift:			
	Silt-----	3	3
	Till, shaly, dark-yellowish-brown-----	14	17
	Till, shaly, slightly pebbly, dusky- yellowish-brown; more than 50 percent shale particles; saturated at 29 feet-----	12	29

159-62-34CCD
(Log from U.S. Air Force)

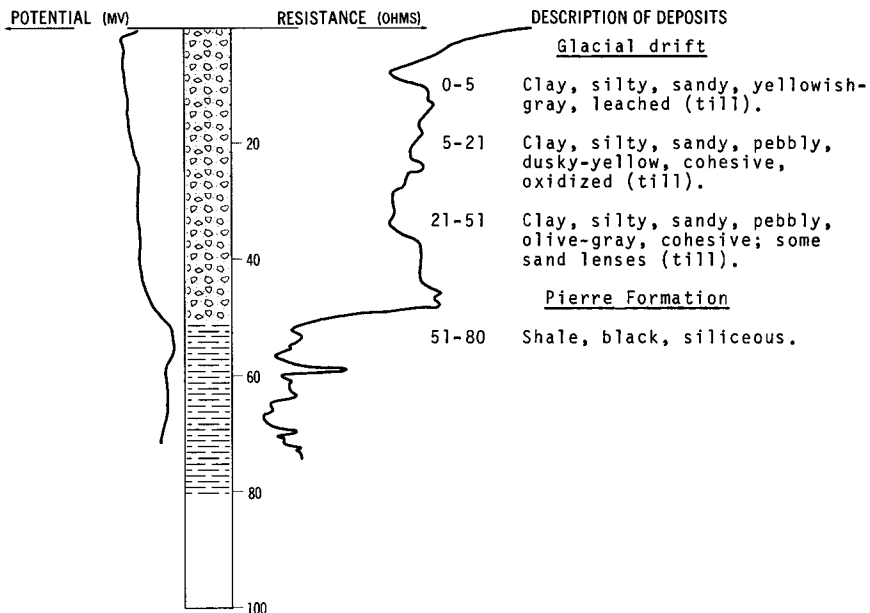
Altitude: 1569 feet

Glacial drift:			
	Silt, clayey, sandy-----	1.5	1.5
	Clay, sandy, silty-----	29.5	31
	Sand, fine to medium, clayey, silty-----	3	34
	Clay, sandy, silty-----	9	43
	Sand, fine, silty-----	2	45
	Clay, sandy, silty-----	8	53
Pierre Formation:			
	Shale; clay-----	44.5	97.5
	Shale-----	32.5	130

LOCATION: 159-63-4AAA
 ALTITUDE: 1585
 (FT, MSL)

NDSWC 4132

DATE DRILLED: August 1970
 DEPTH: 80
 (FT)



159-63-6CBB
 (Log from U.S. Air Force)

Altitude: 1582 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, sandy-----	2.5	2.5
	Silt, clayey, sandy-----	5.5	8
	Clay, sandy, silty-----	16	24
	Silt, clayey, sandy-----	19.5	43.5
Pierre Formation:			
	Shale-----	86.5	130

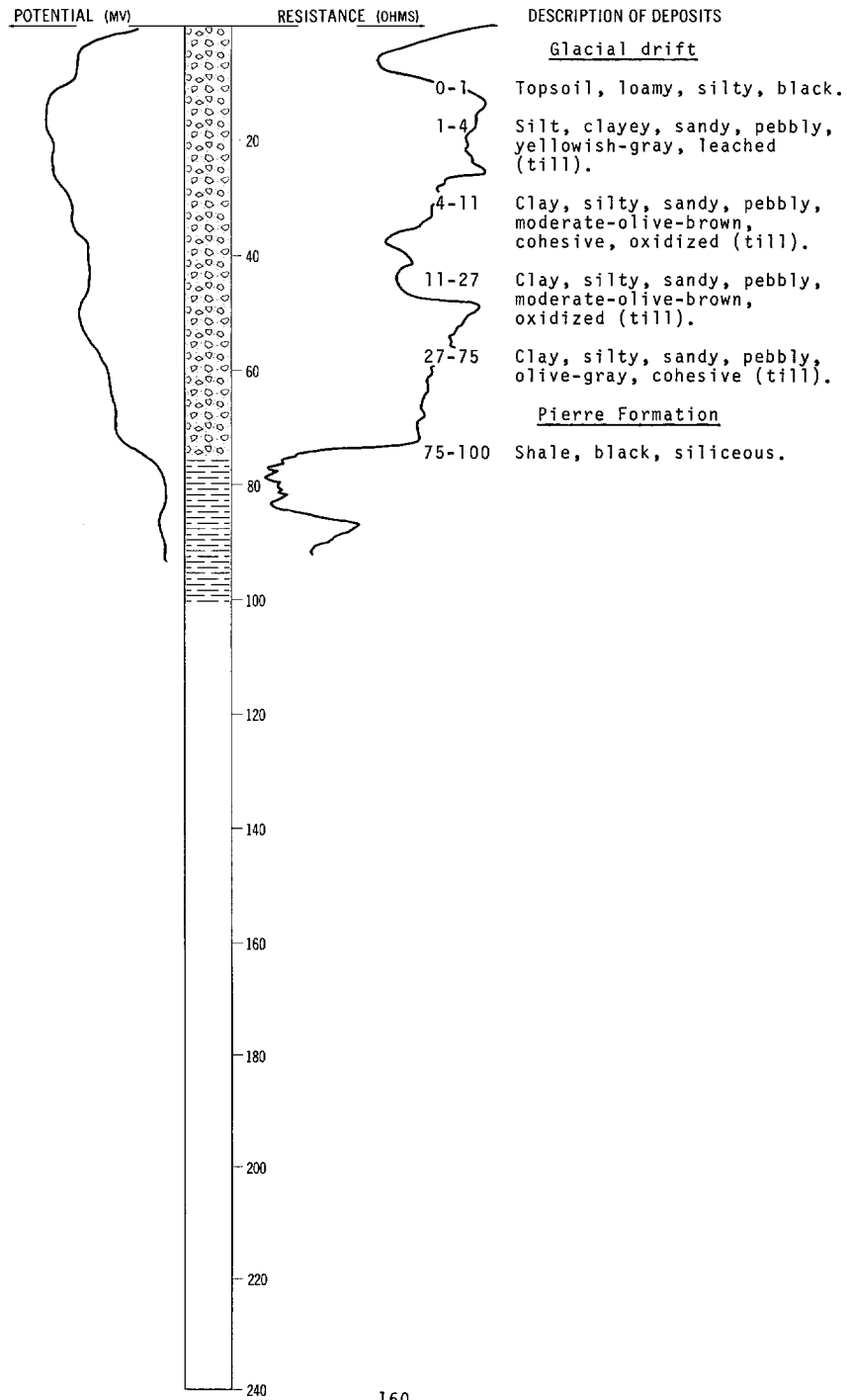
LOCATION: 159-63-14AAA

NDSWC 4127

DATE DRILLED: August 1970

ALTITUDE: 1586
(FT, MSL)

DEPTH: 100
(FT)



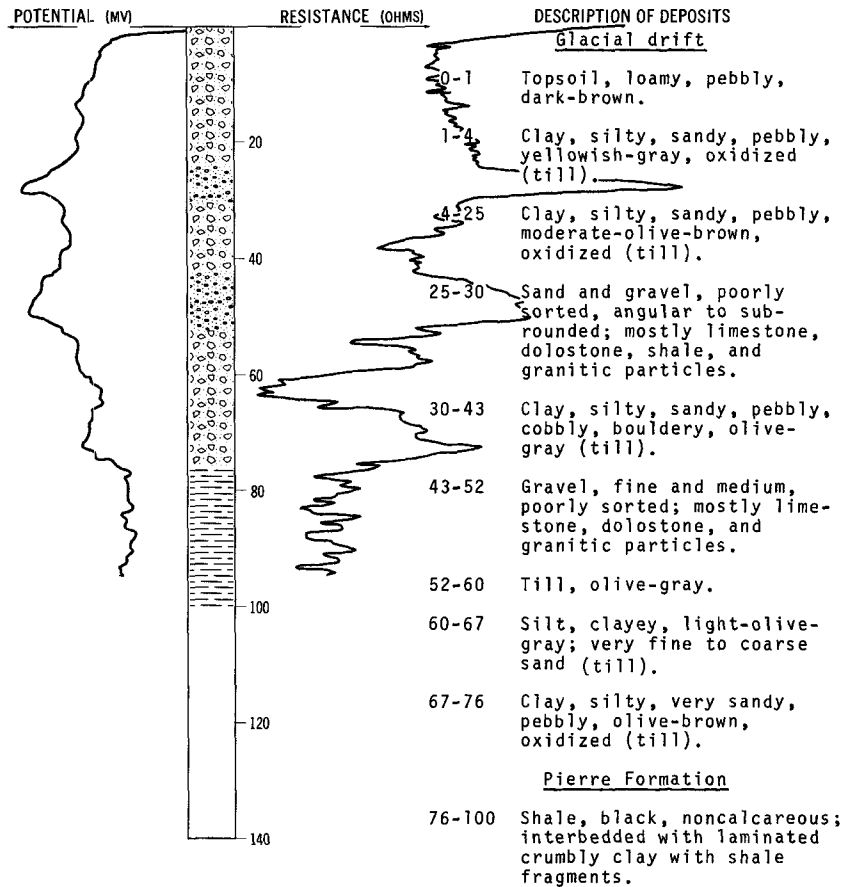
LOCATION: 159-63-22BBB

NDSWC 3795

DATE DRILLED: September 1969

ALTITUDE: 1571
(FT, MSL)

DEPTH: 100
(FT)



159-63-24BBC
(Log from U.S. Air Force)

Altitude: 1584 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, sandy, silty	19	19
	Clay; sandy silt	12.5	31.5
	Clay, sandy, silty	38	69.5
	Shale; silty clay	2.5	72
	Clay, sandy, silty	9	81
Pierre Formation:			
	Shale; clayey silt	8	89
	Shale	41	130

159-63-34DCA1
(Log from U.S. Air Force)

Altitude: 1550 feet

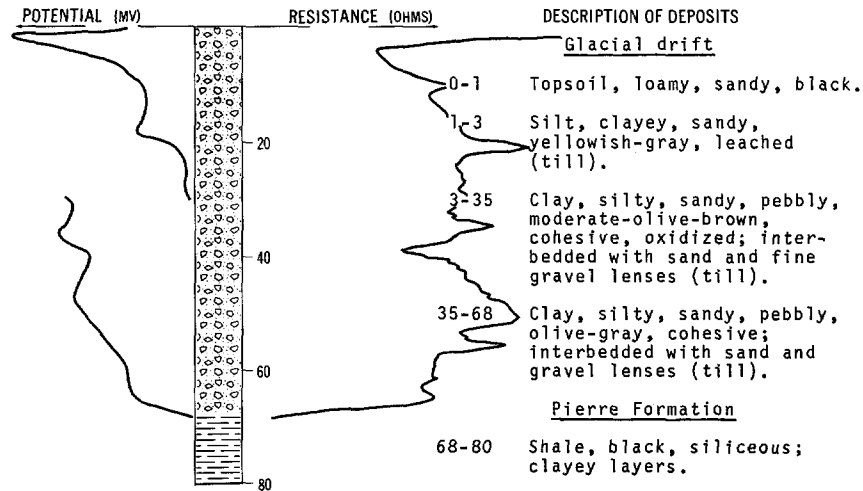
Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, silty, sandy-----	30	30
	Silt, sandy, clayey-----	3	33
	Clay, silty, sandy-----	14	47
Pierre Formation:			
	Shale-----	83	130

159-63-34DCD2
(Log from U.S. Air Force)

Altitude: 1555 feet

Glacial drift:			
	Sand, fine to coarse, clayey-----	2.5	2.5
	Clay, silty, sandy-----	37	39.5
Pierre Formation:			
	Shale, fractured-----	18	57.5
	Shale-----	72.5	130

LOCATION: 159-63-35AAA NDSWC 4129 DATE DRILLED: August 1970
 ALTITUDE: 1568 DEPTH: 80
 (FT, MSL) (FT)



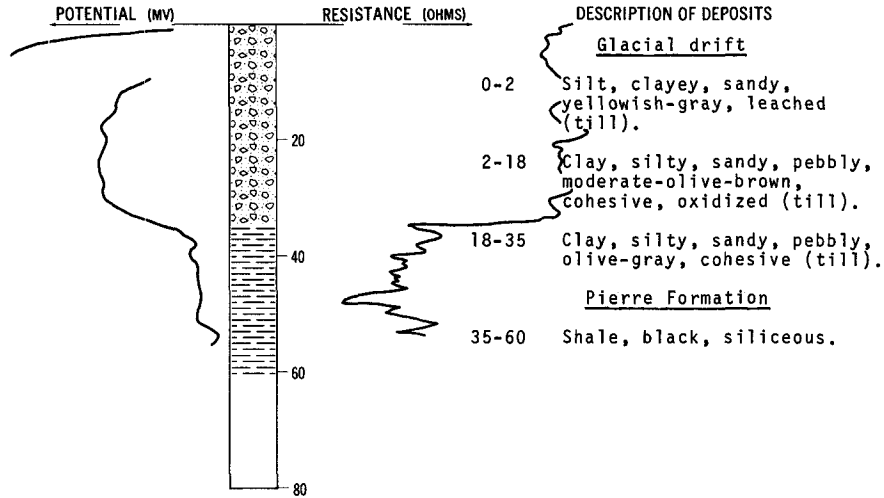
LOCATION: 159-64-1BBB

NDSWC 4125

DATE DRILLED: August 1970

ALTITUDE: 1580
(FT, MSL)

DEPTH: 60
(FT)



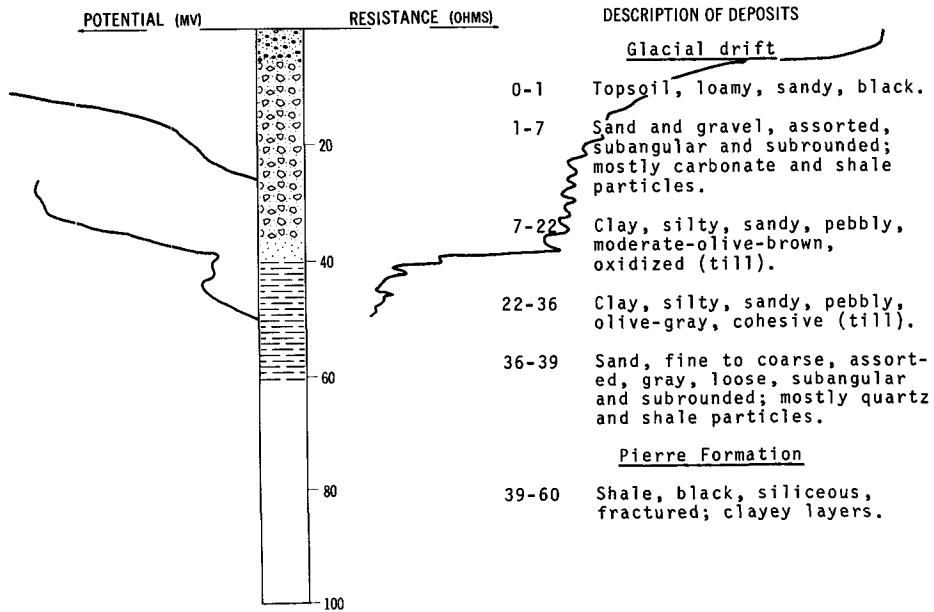
LOCATION: 159-64-4DDD

NDSWC 4123

DATE DRILLED: August 1970

ALTITUDE: 1567
(FT, MSL)

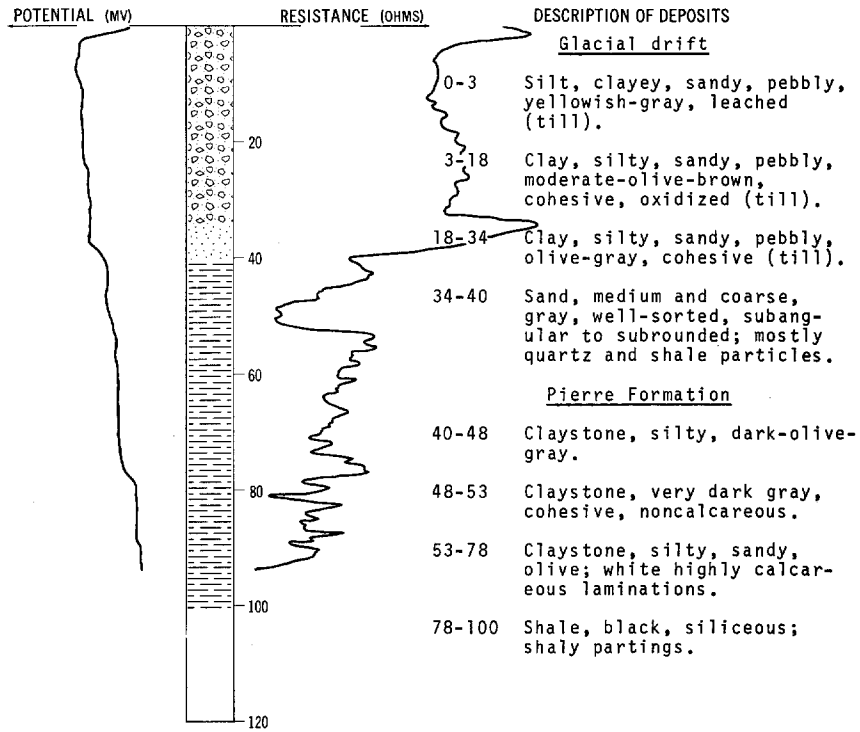
DEPTH: 60
(FT)



LOCATION: 159-64-58BB
 ALTITUDE: 1557
 (FT, MSL)

NDSWC 4122

DATE DRILLED: August 1970
 DEPTH: 100
 (FT)



159-64-20DCC
 NDGS Cav-69-33

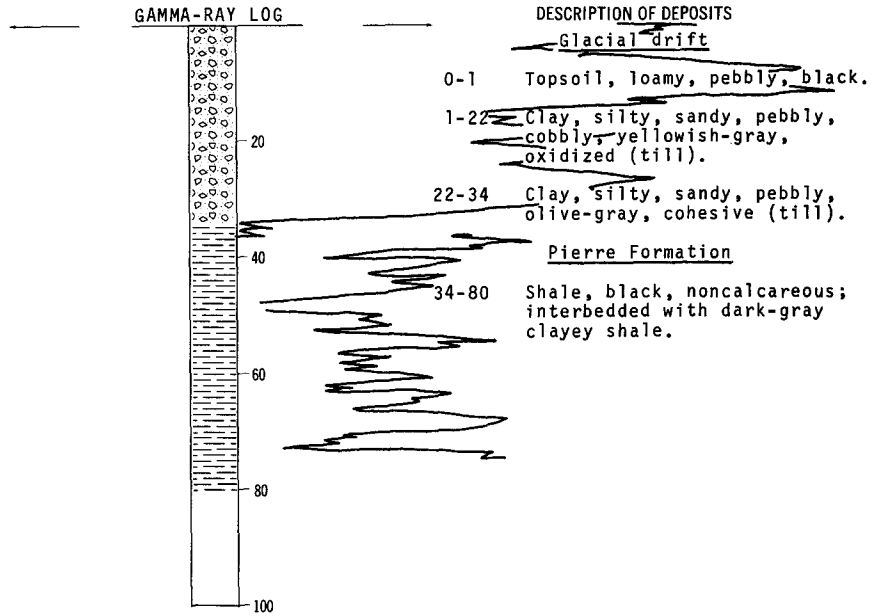
Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	0.5	0.5
	Silt, fine, pale-yellowish-brown-----	8.5	9
	Sand, fine-----	2	11
	Sand, fine, silty, clayey, shaly-----	5	16
	Till, sandy, shaly, pebbly, dark-yellowish-brown; about 30 percent shale particles----	4	20
	Till; same as above except not sandy-----	11	31
	Till, pebbly, dark-gray-----	5	36

LOCATION: 159-64-21AAA
 ALTITUDE: 1550
 (FT, MSL)

NDSWC 3794

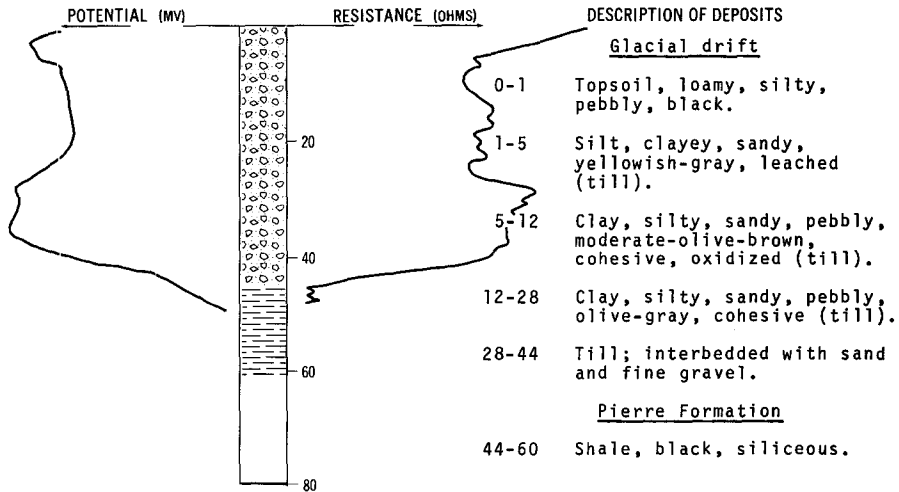
DATE DRILLED: September 1969
 DEPTH: 80
 (FT)



LOCATION: 159-64-24AAA
 ALTITUDE: 1556
 (FT, MSL)

NDSWC 4126

DATE DRILLED: August 1970
 DEPTH: 60
 (FT)



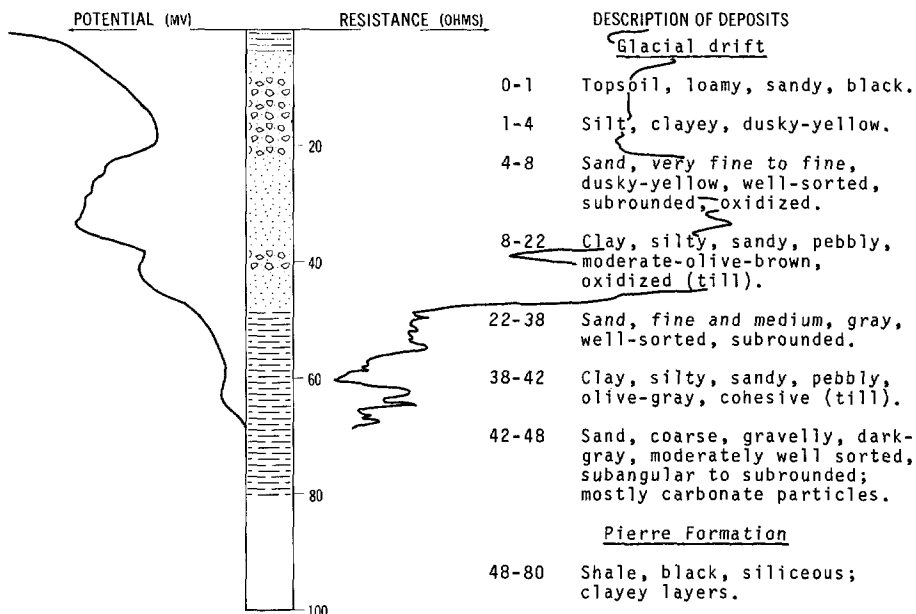
LOCATION: 159-64-30DDD

NDSWC 4121

DATE DRILLED: August 1970

ALTITUDE: 1528
(FT, MSL)

DEPTH: 80
(FT)



159-64-35BCA1
(Log from U.S. Air Force)

Altitude: 1541 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:	Clay, silty, sandy-----	33	33
Pierre Formation:	Shale-----	97	130

159-64-35BCB
(Log from U.S. Air Force)

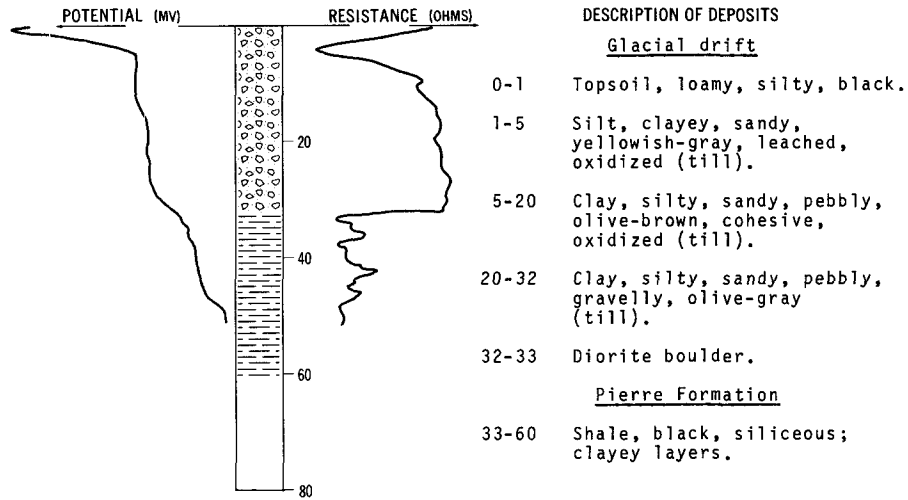
Altitude: 1532 feet

Glacial drift:	Clay, silty, tan, calcareous-----	2	2
	Clay, sandy, silty, gravelly, brown-----	16	18
	Clay, sandy, silty, gravelly, gray-----	13	31
Pierre Formation:	Shale, silty, dark-gray, fractured, fissile to blocky-----	47	78
	Shale, silty, dark-gray, fractured, partly fissile, partly bentonitic-----	10.5	88.5
	Shale, dark-gray, fractured, fissile to blocky-----	41.5	130

LOCATION: 159-64-36DDC
 ALTITUDE: 1545
 (FT, MSL)

NDSWC 4120

DATE DRILLED: August 1970
 DEPTH: 60
 (FT)



160-50-6CDD
 NDGS Pem-70-20

Altitude: 791 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Clay, silty, slightly pebbly, yellowish-brown, banded-----	19	21
	Clay, silty, slightly pebbly, greenish-gray, plastic; pebbles are subrounded-----	8	29
	Clay, silty, gray, banded, plastic-----	15	44

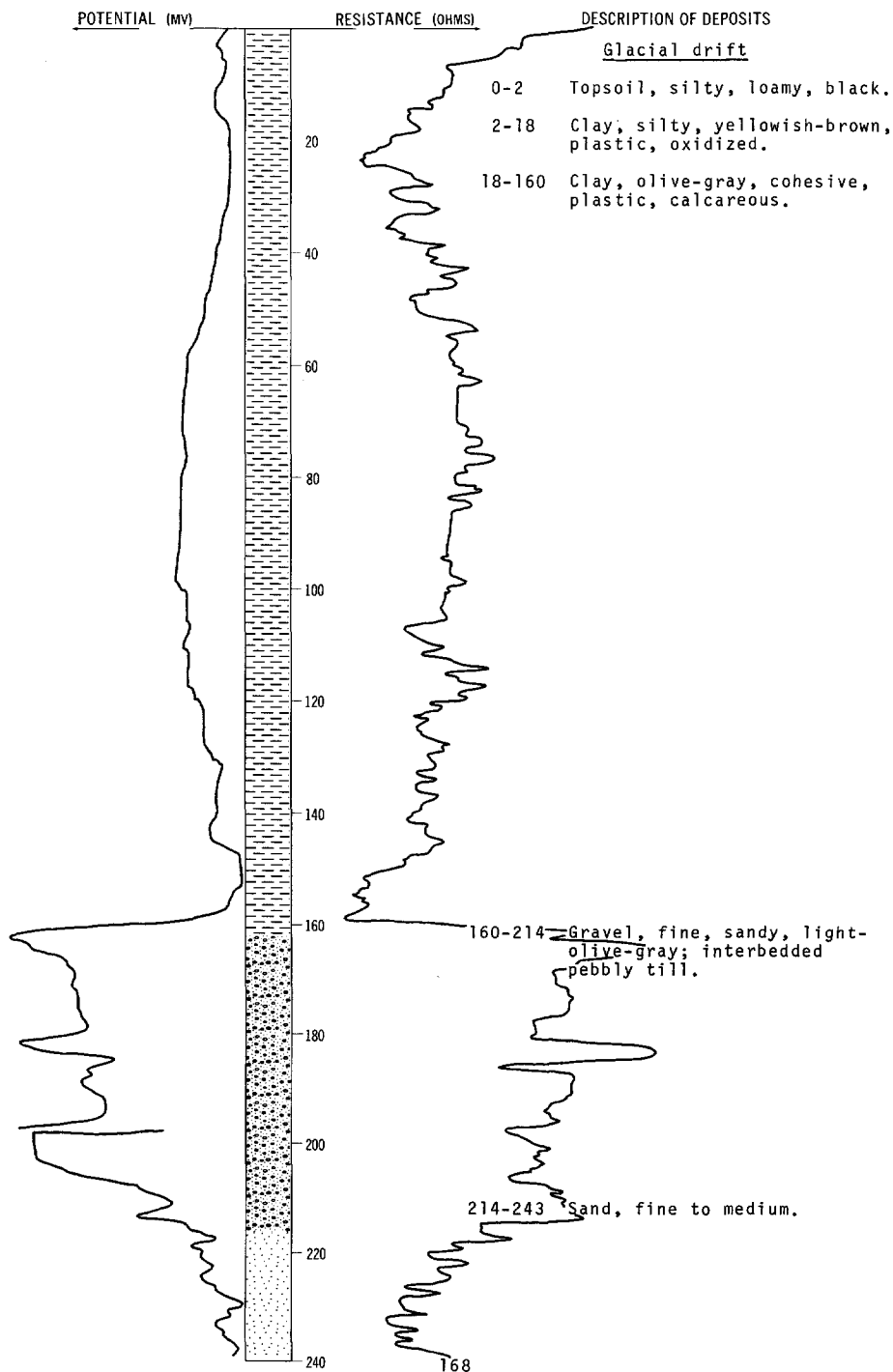
LOCATION: 160-51-9AAD

NDSWC 3834

DATE DRILLED: September 1969

ALTITUDE: 797
(FT, MSL)

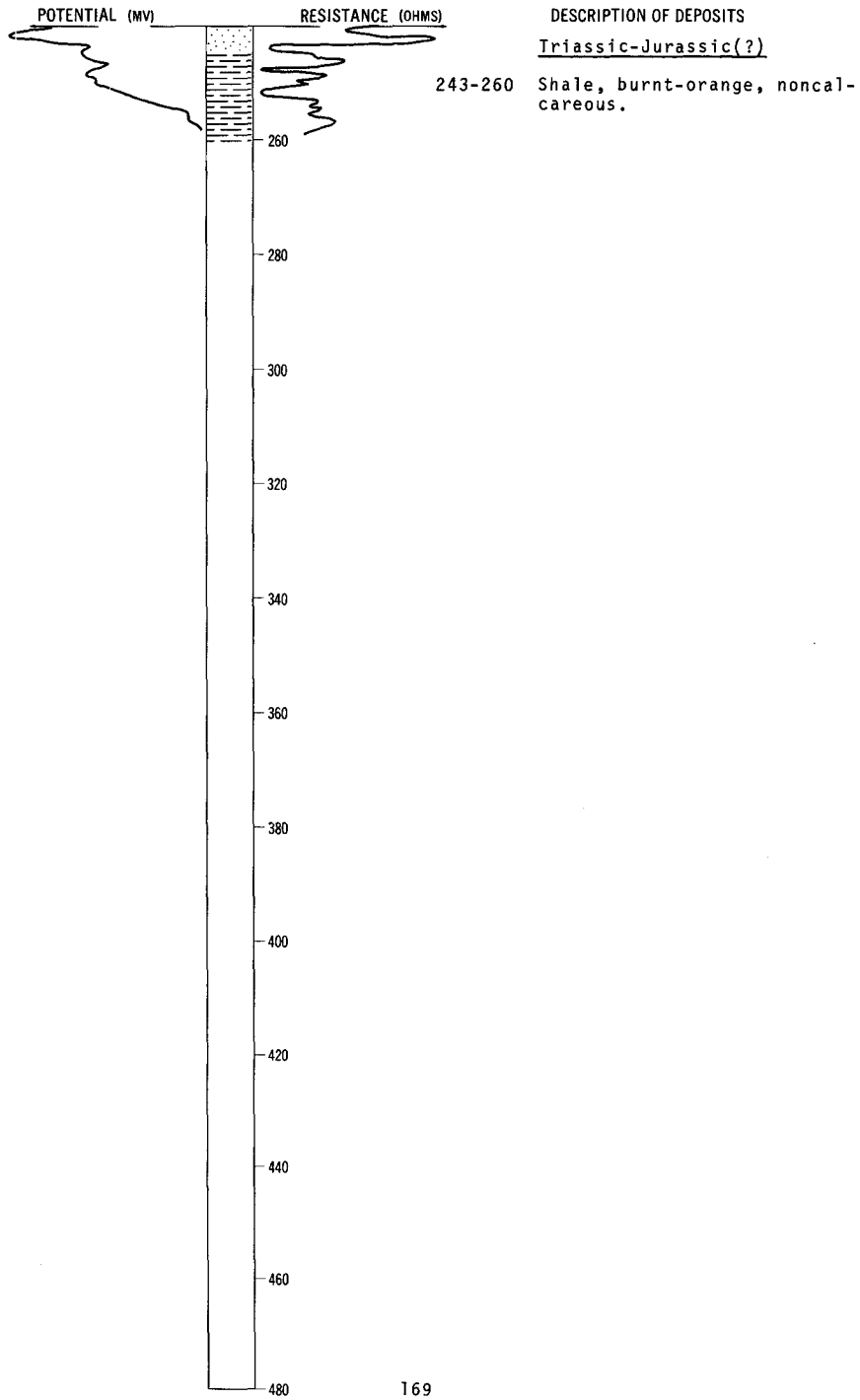
DEPTH: 260
(FT)



LOCATION: 160-51-9AAD
ALTITUDE: 797
(FT, MSL)

NDSWC 3834, Continued

DATE DRILLED: September 1969
DEPTH: 260
(FT)



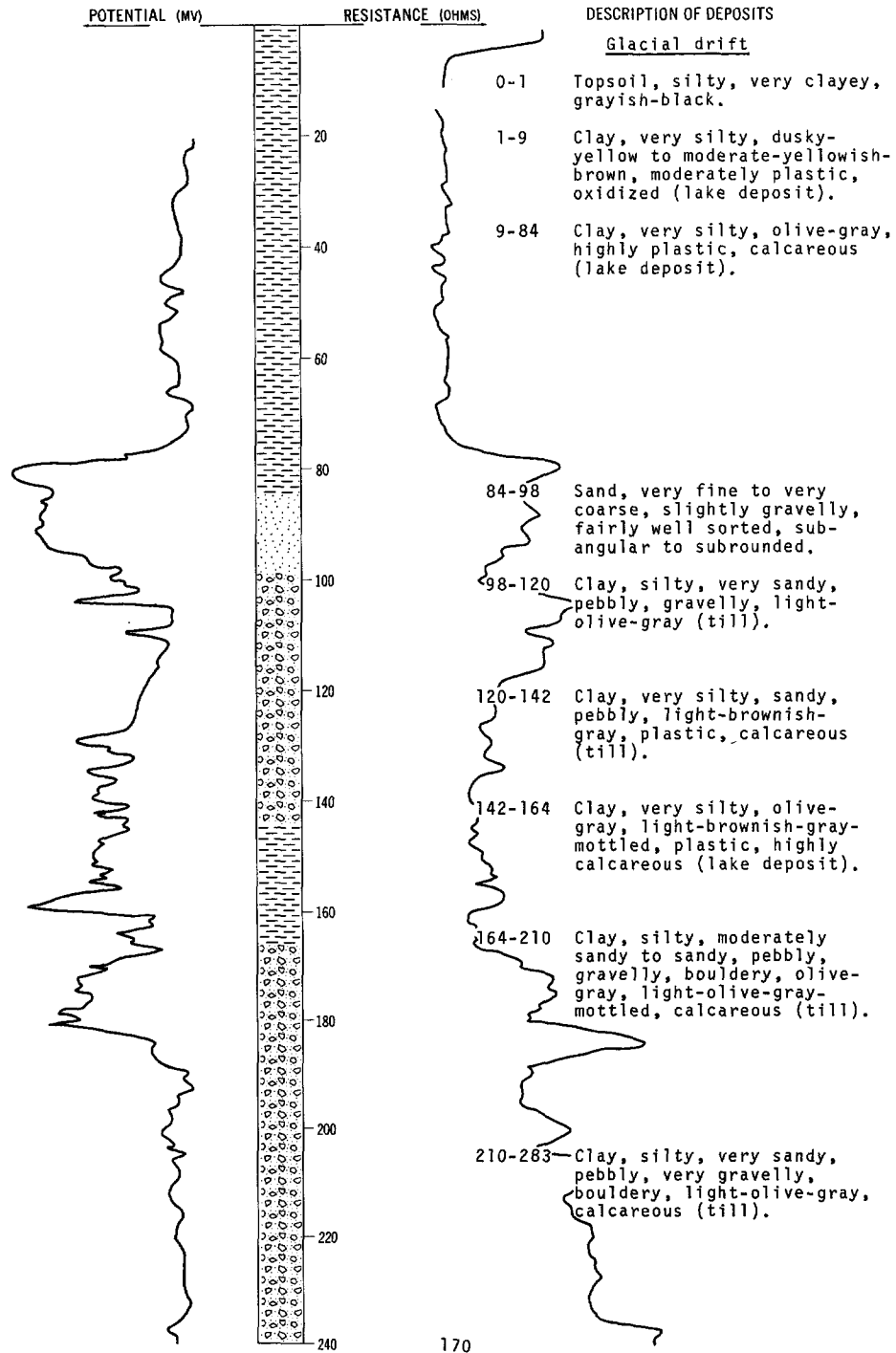
LOCATION: 160-52-6CCB

NDSWC 5945

DATE DRILLED: May 1971

ALTITUDE: 821
(FT, MSL)

DEPTH: 300
(FT)



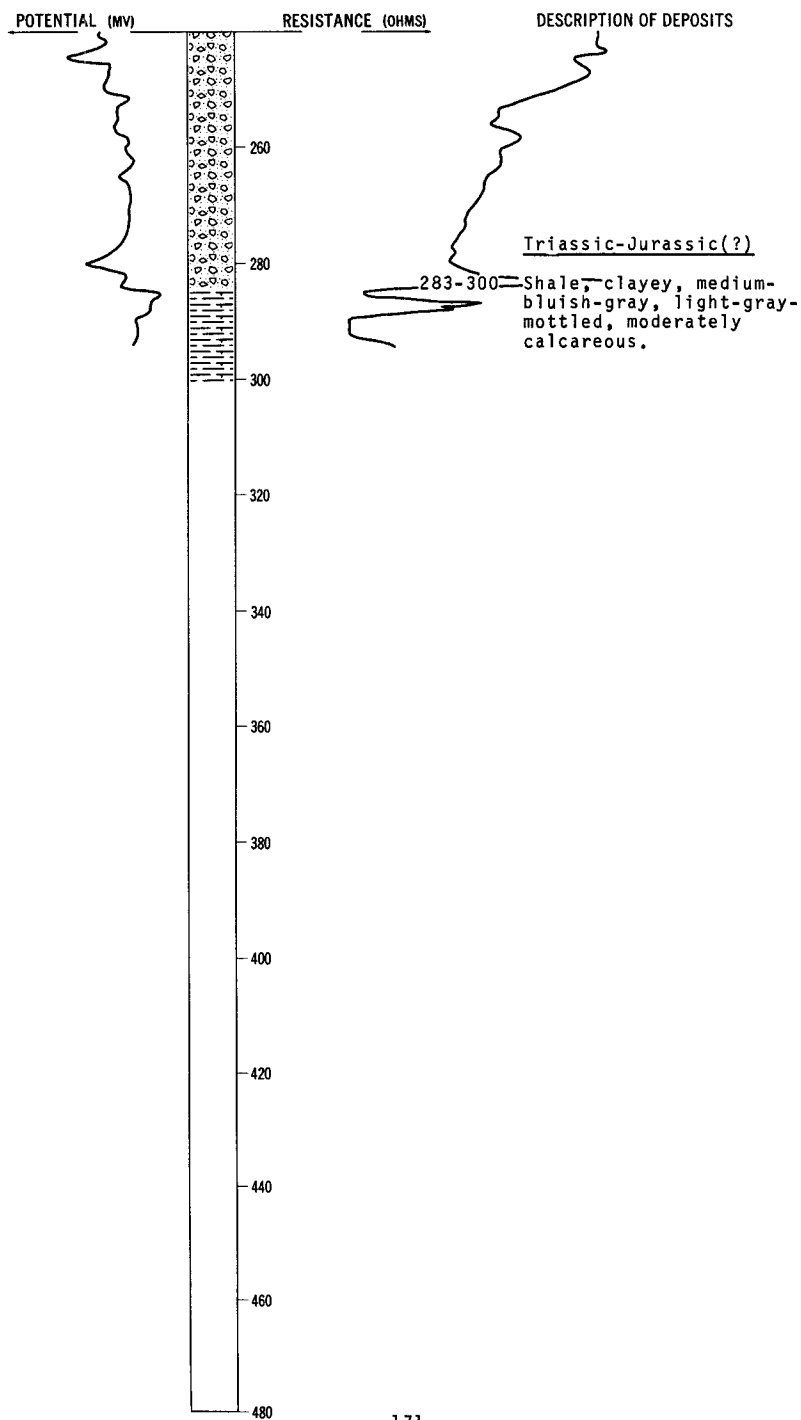
NDSWC 5945, Continued

LOCATION: 160-52-6CCB

DATE DRILLED: May 1971

ALTITUDE: 821
(FT, MSL)

DEPTH: 300
(FT)



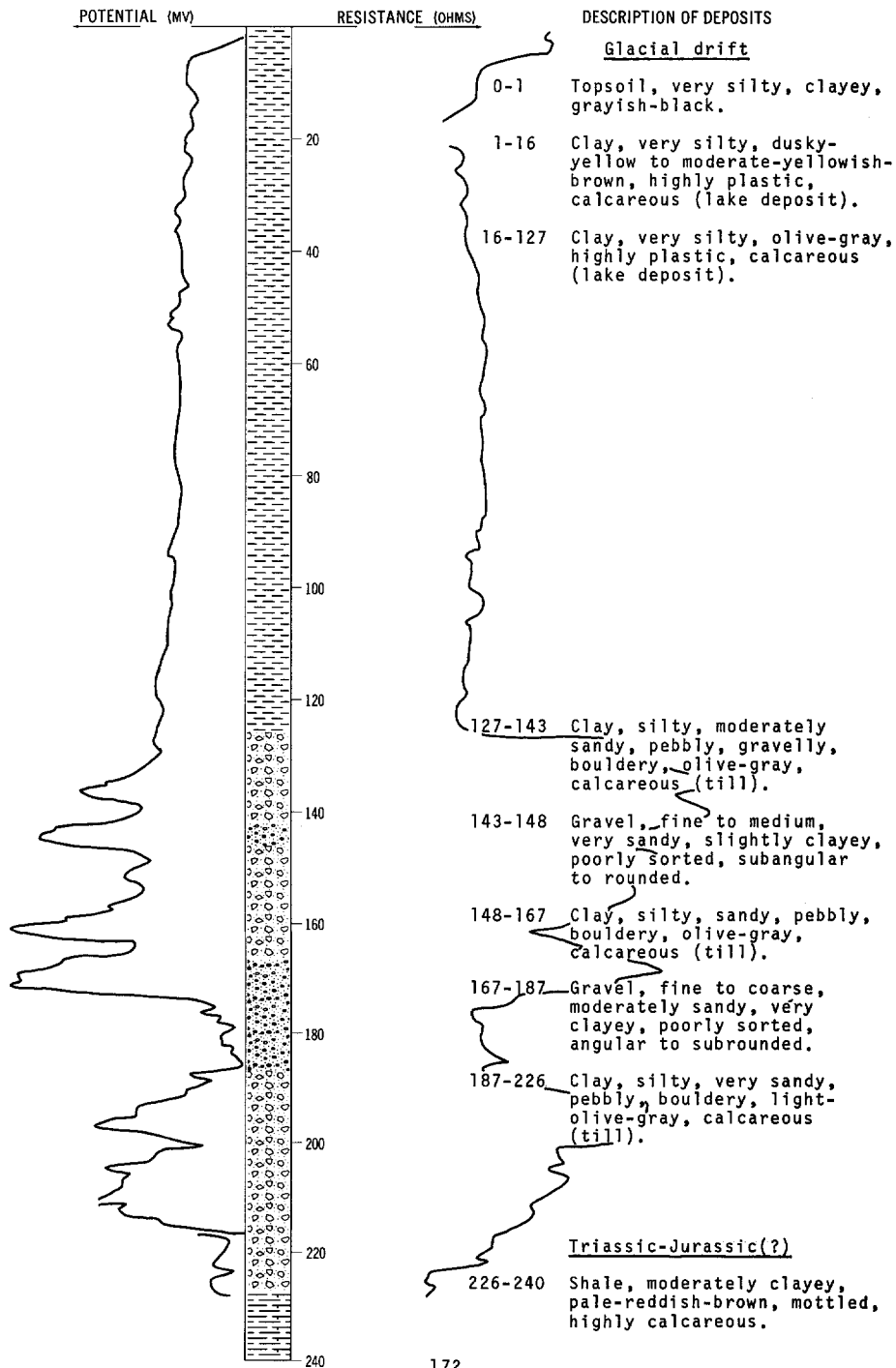
LOCATION: 160-52-23AAA

NDSWC 5944

DATE DRILLED: May 1971

ALTITUDE: 808
(FT, MSL)

DEPTH: 240
(FT)



160-52-30CCC
USBR 407

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, clayey, silty-----	7	7
	Clay, silty-----	6	13

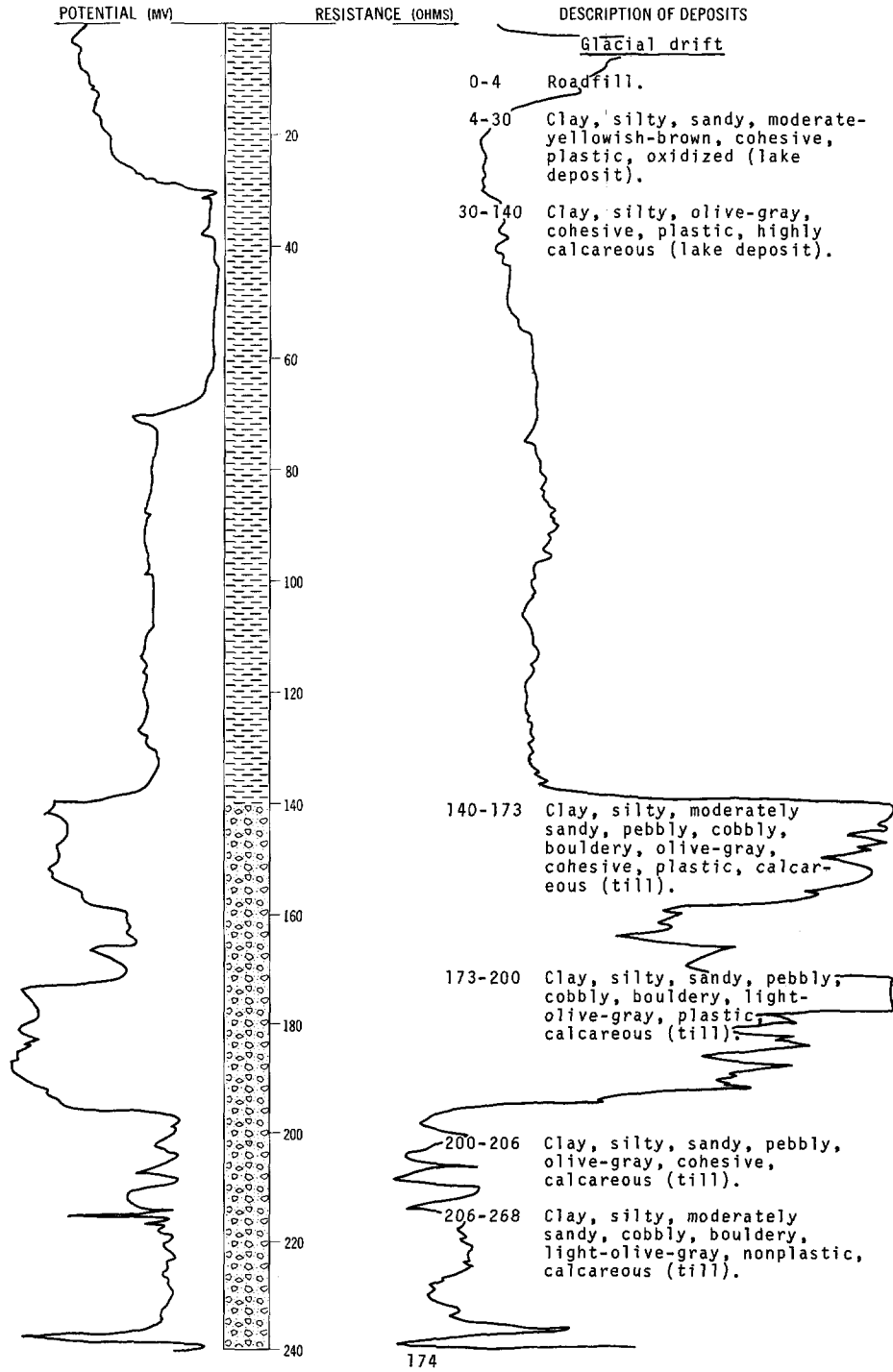
LOCATION: 160-53-22AAA

NDSWC 5706

DATE DRILLED: June 1970

ALTITUDE: 840
(FT, MSL)

DEPTH: 280
(FT)

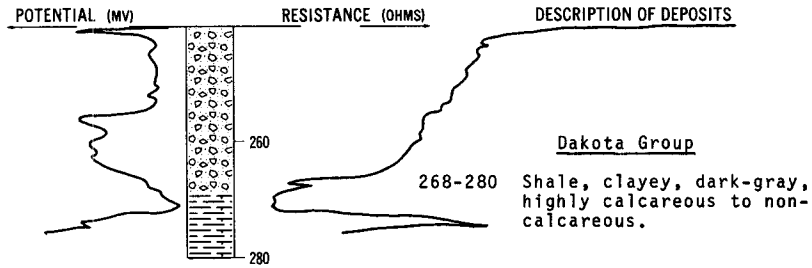


LOCATION: 160-53-22AAA

DATE DRILLED: June 1970

ALTITUDE: 840
(FT, MSL)

DEPTH: 280
(FT)



160-53-34BBB
USBR 408

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, clayey, silty-----	3	3
	Loam, silty-----	6	9
	Loam, clayey, silty-----	8	17
	Silt-----	6	23

160-54-8BBB
USBR 465

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine, loamy-----	9	12
	Silt-----	6	18

160-54-9CCC
USBR 438

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	1	1
	Sand, fine, loamy-----	2	3
	Loam, fine, sandy-----	2	5
	Silt-----	8	13

160-54-11BBB
USBR 240

Altitude:

Glacial drift:			
	Loam, sandy-----	3	3
	Loam, silty-----	12	15
	Silt-----	3	18

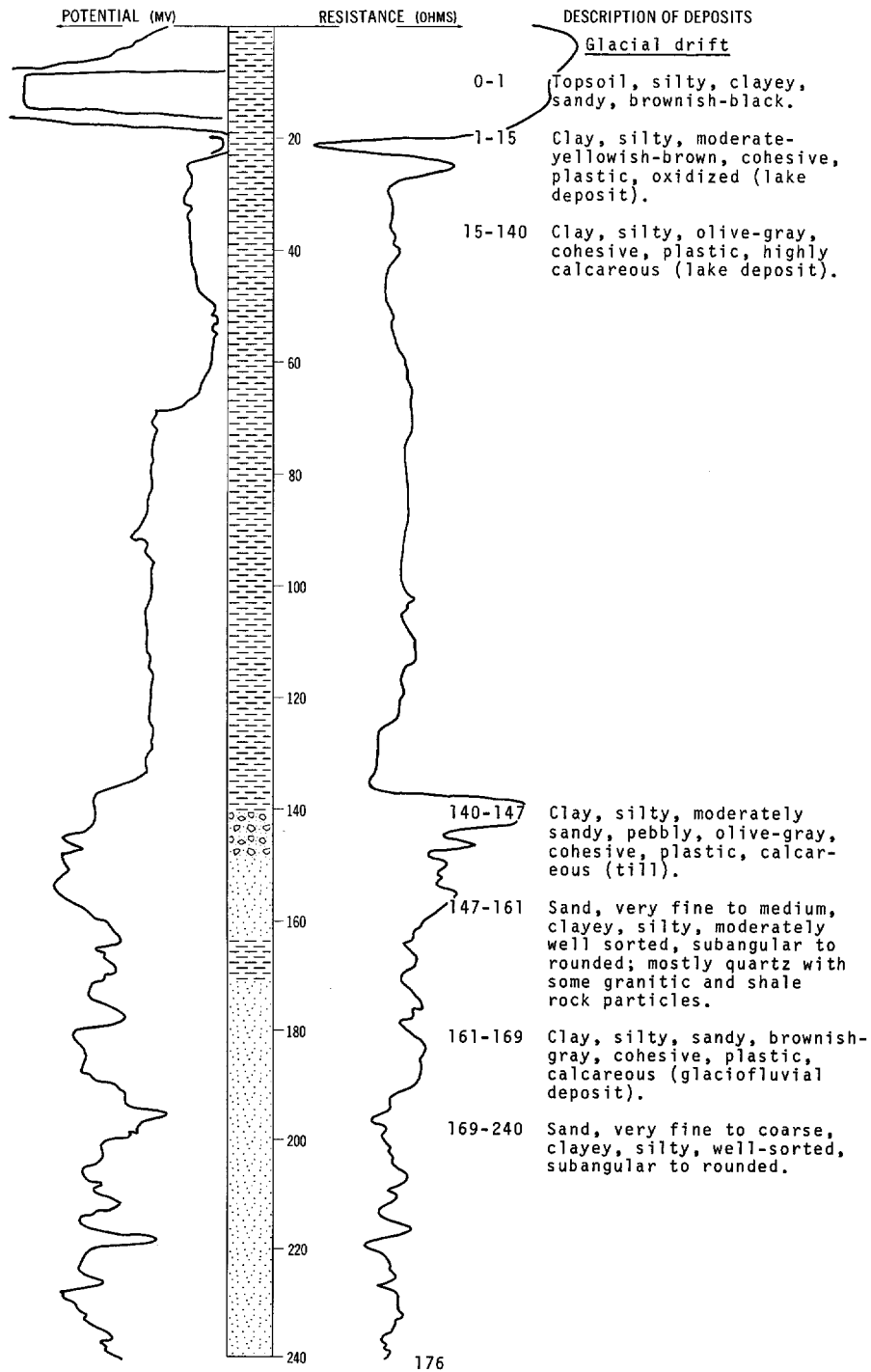
LOCATION: 160-54-13AAA

NDSWC 5707

DATE DRILLED: June 1970

ALTITUDE: 865
(FT, MSL)

DEPTH: 460
(FT)

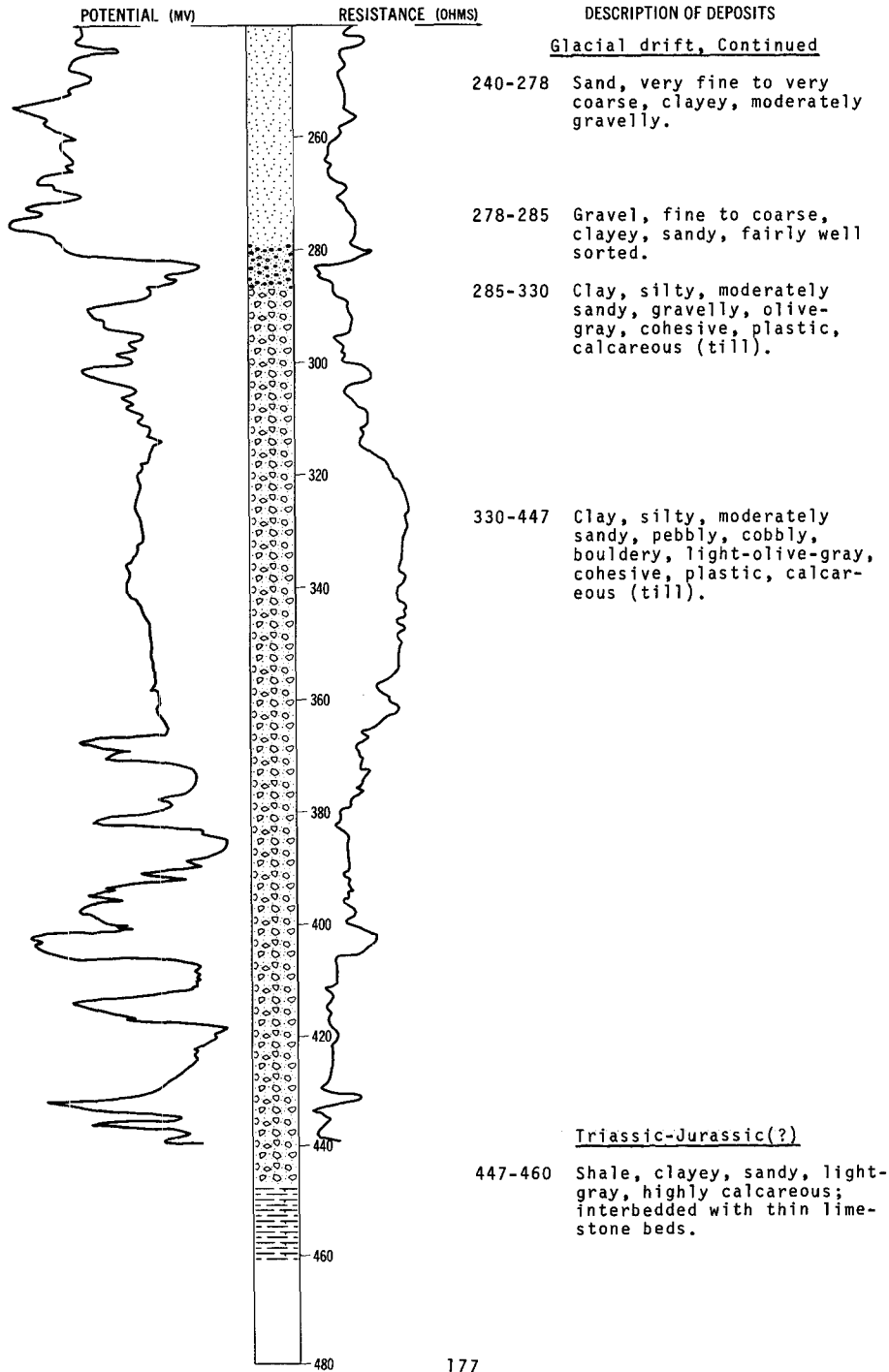


LOCATION: 160-54-13AAA

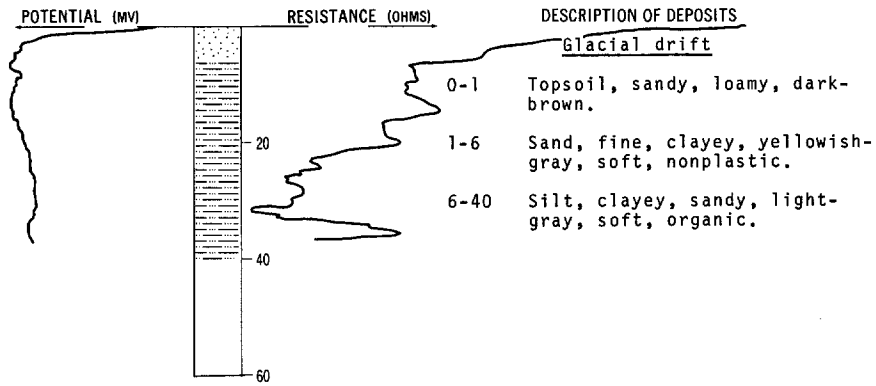
DATE DRILLED: June 1970

ALTITUDE: 865
(FT, MSL)

DEPTH: 460
(FT)



LOCATION: 160-54-17AAA NDSWC 3837 DATE DRILLED: September 1969
 ALTITUDE: 898 DEPTH: 40
 (FT, MSL) (FT)



160-54-17CBB
 NDGS Pem-70-26

Altitude: 907 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	2	2
	Sand, silty, clayey, pale-yellowish-brown, well-sorted; coarser with depth-----	7	9
	Clay, silty, pale-yellowish-brown, well-sorted-----	27	36
	Clay, gray, very plastic-----	8	44

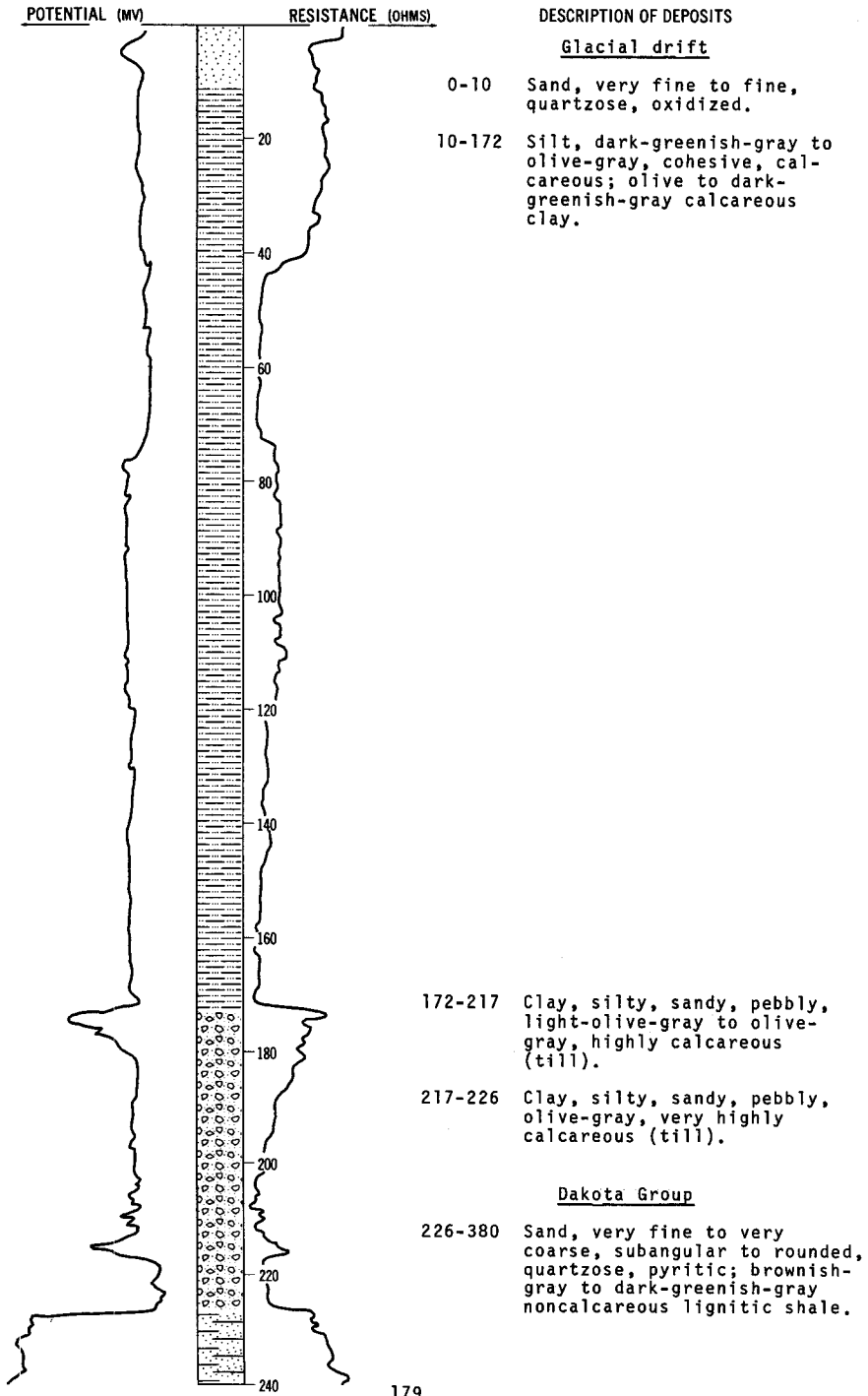
LOCATION: 160-54-18BAA

NDSWC 3568

DATE DRILLED: May 1968

ALTITUDE: 915
(FT, MSL)

DEPTH: 420
(FT)

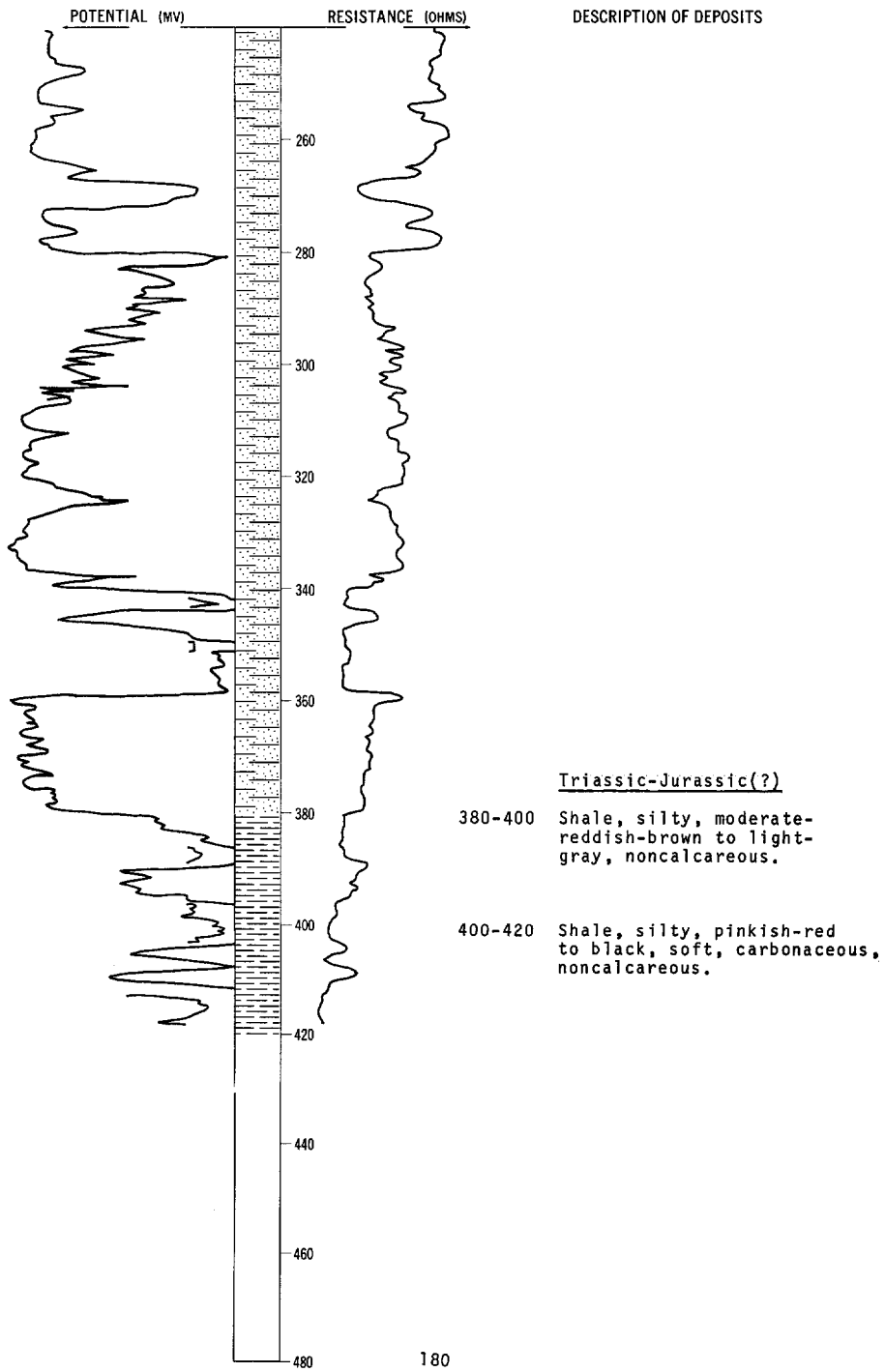


LOCATION: 160-54-18BAA

DATE DRILLED: May 1968

ALTITUDE: 915
(FT, MSL)

DEPTH: 420
(FT)



160-54-22CCC
USB 471

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam-----	1	1
	Loam, very fine, sandy-----	1	2
	Sand, very fine, loamy-----	6	8
	Loam, silty-----	2	10
	Loam, very fine, sandy-----	2	12
	Silt-----	6	18

160-54-25DDD
USB 242

Altitude:

Glacial drift:			
	Loam, silty-----	2	2
	Loam, very fine, sandy-----	1	3
	Sand, very fine, loamy-----	9	12
	Loam, silty-----	1	13

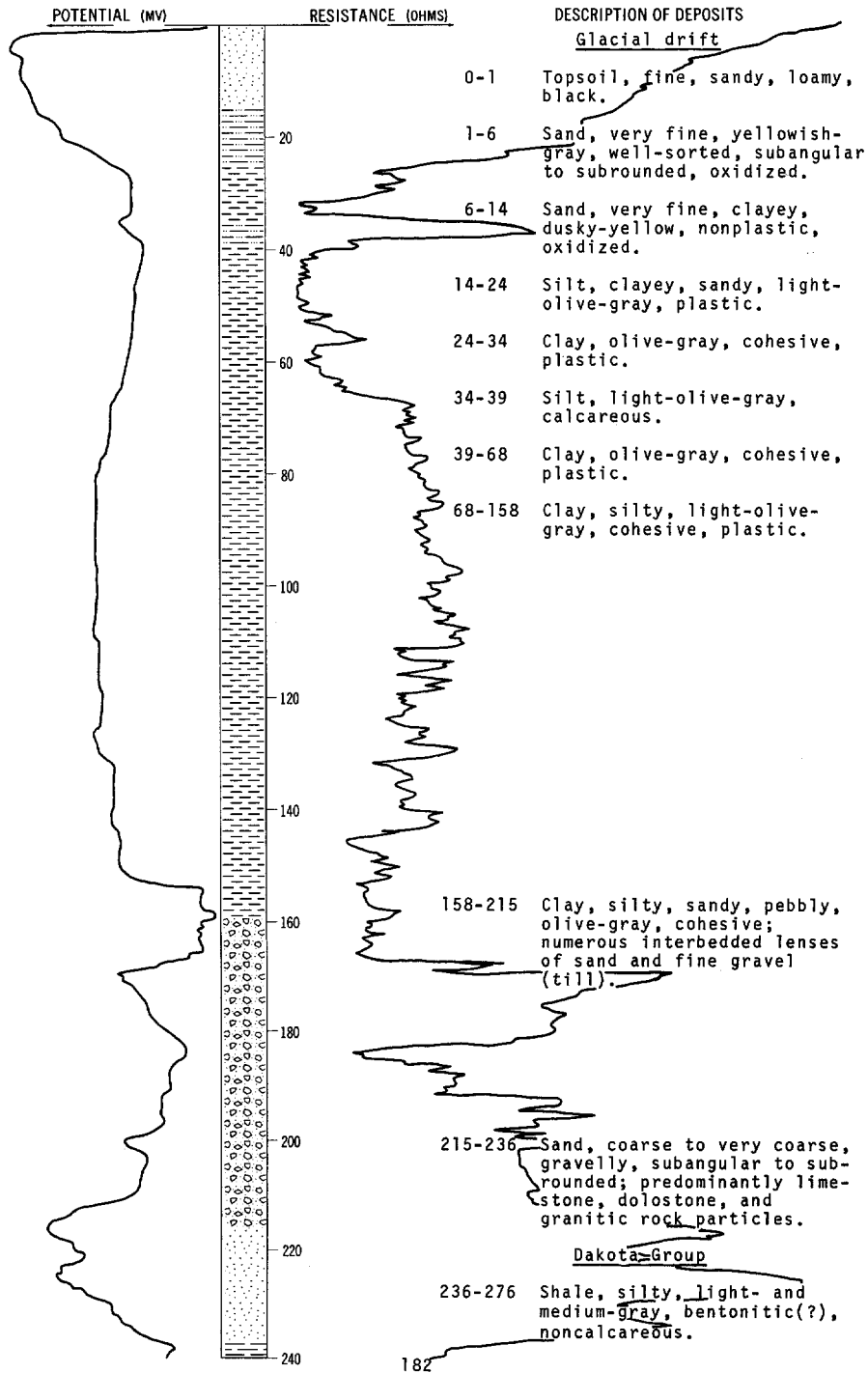
LOCATION: 160-54-27BBB

NDSWC 3836

DATE DRILLED: September 1969

ALTITUDE: 891
(FT, MSL)

DEPTH: 360
(FT)



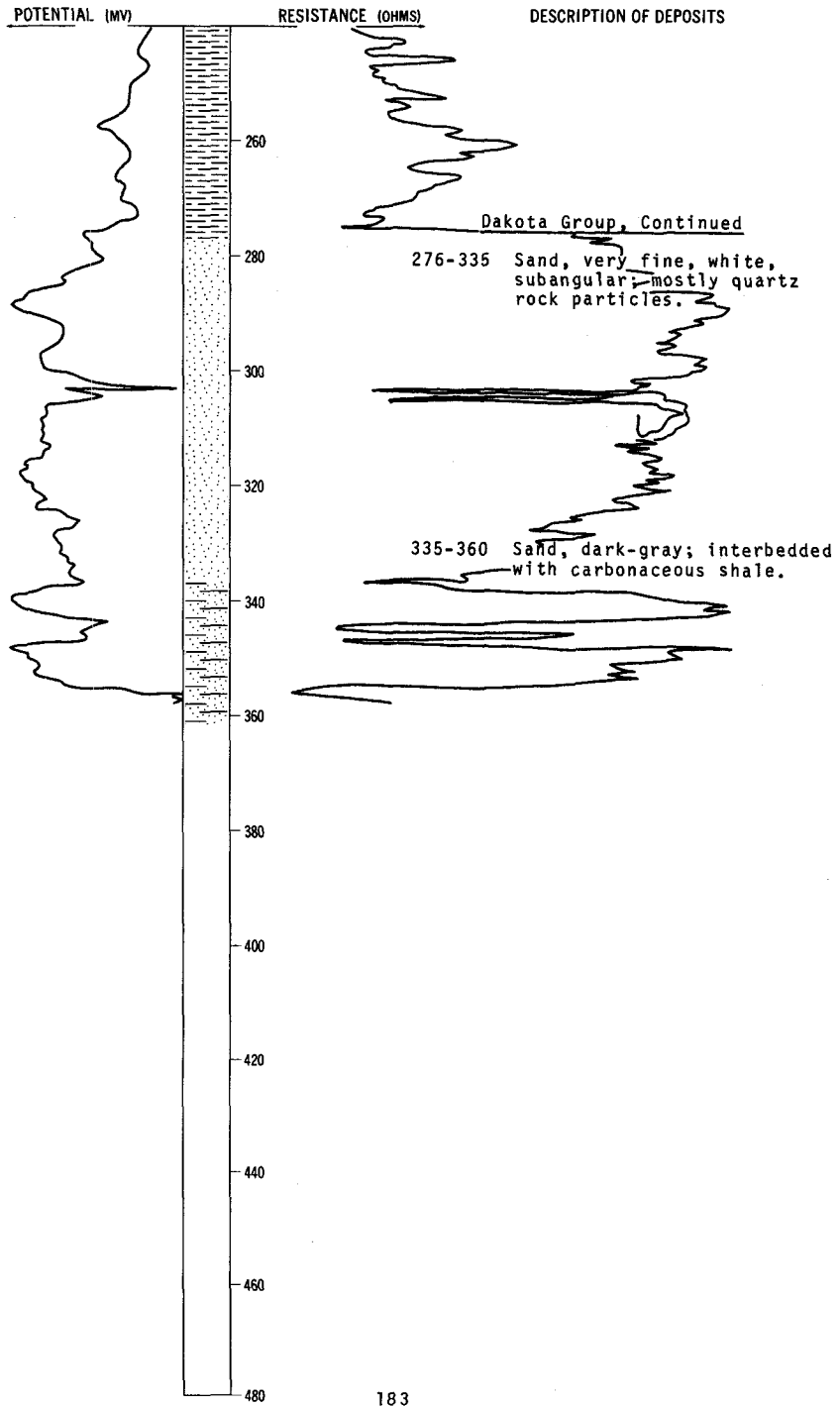
LOCATION: 160-54-27BBB

NDSWC 3836, Continued

DATE DRILLED: September 1969

ALTITUDE: 891
(FT, MSL)

DEPTH: 360
(FT)



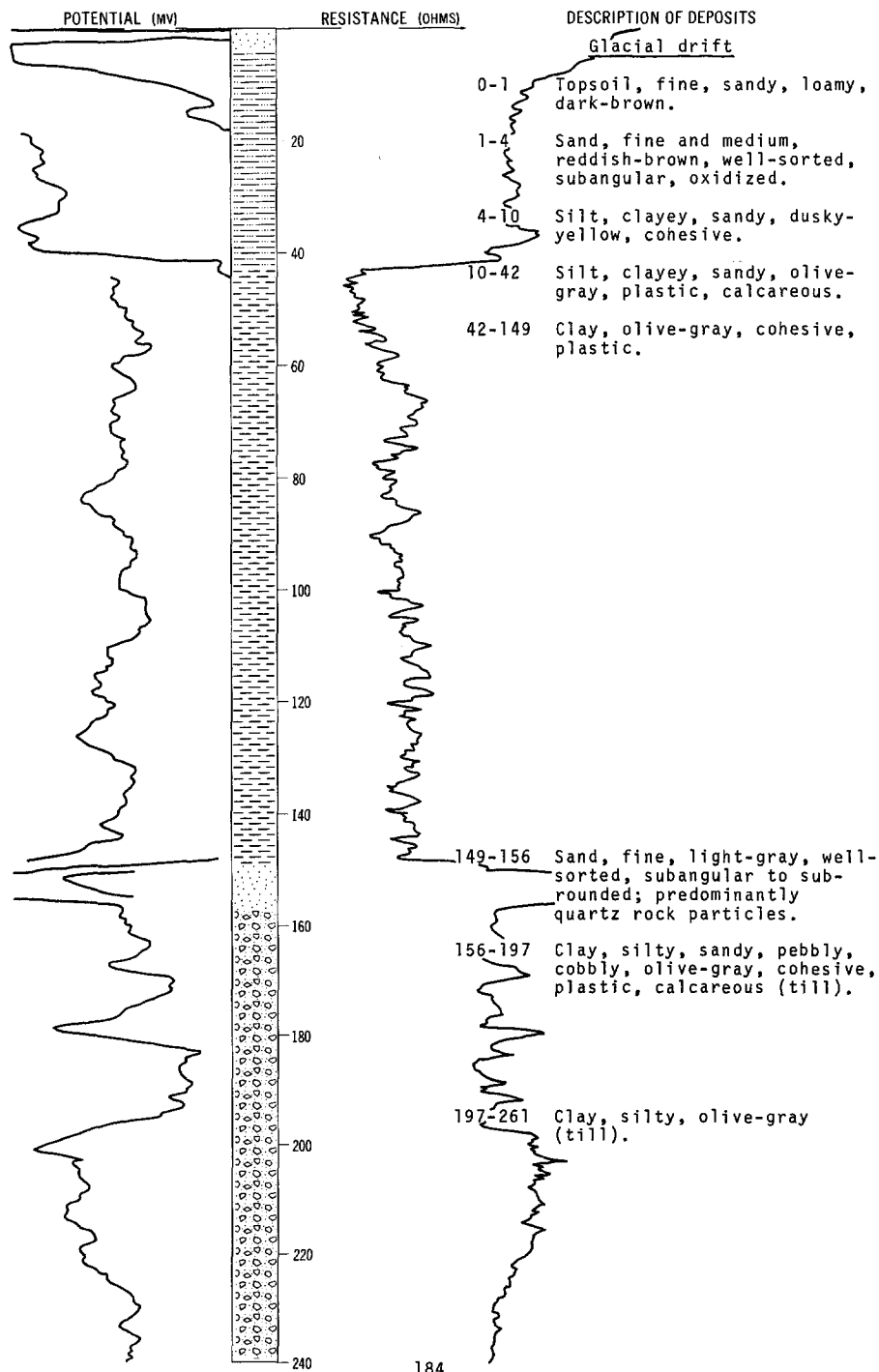
LOCATION: 160-54-31CCC

NDSWC 3830

DATE DRILLED: September 1969

ALTITUDE: 913
(FT, MSL)

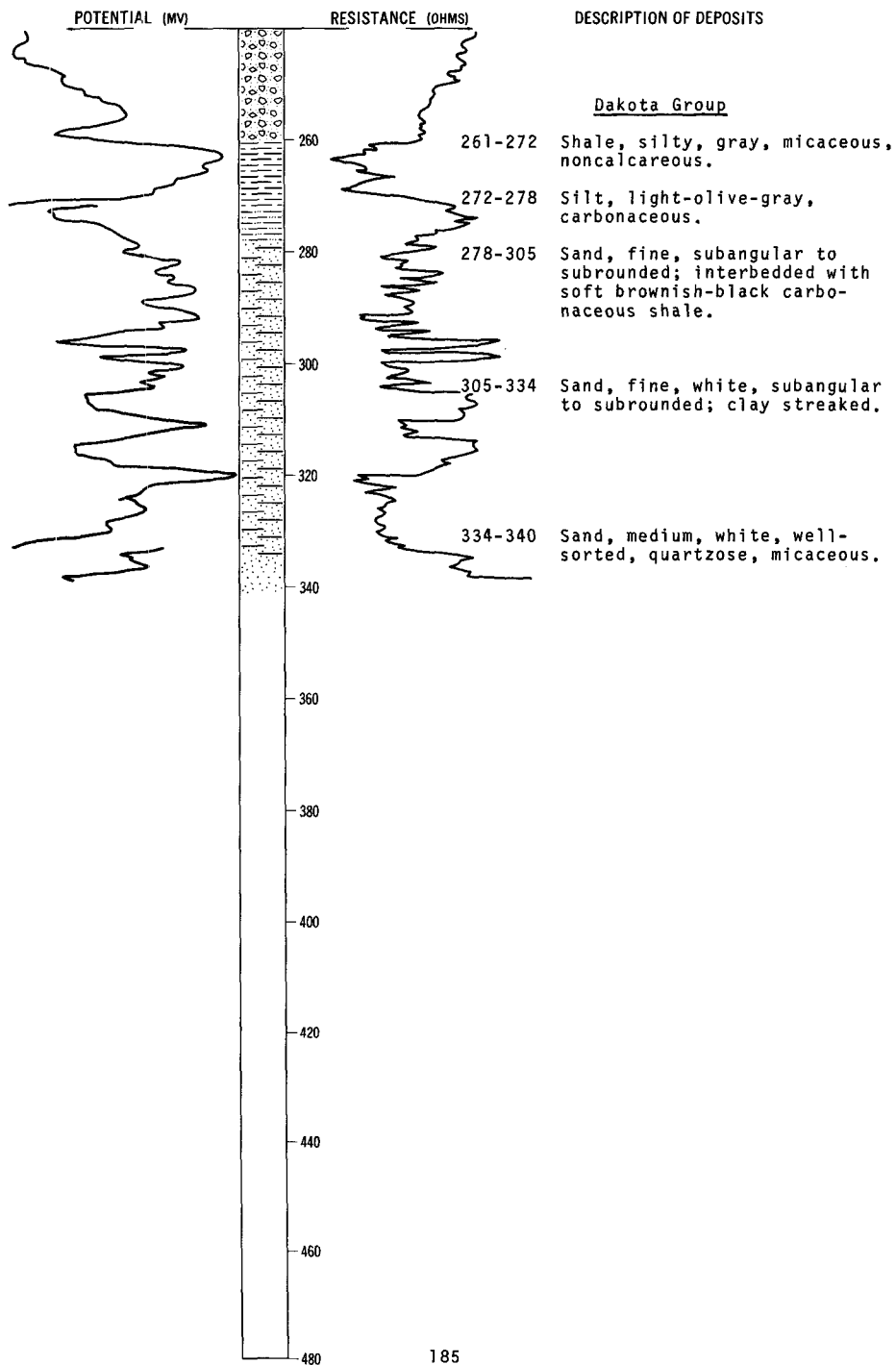
DEPTH: 340
(FT)



LOCATION: 160-54-31CCC
ALTITUDE: 913
(FT, MSL)

NDSWC 3830, Continued

DATE DRILLED: September 1969
DEPTH: 340
(FT)



160-54-32BBB
USBR 409

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine, loamy-----	3	6
	Loam, silty-----	4	10
	Silt-----	13	23

160-54-32DDD4
(Log from Frederickson's, Inc.)

Altitude: 897 feet

Glacial drift:			
	Topsoil, black-----	1	1
	Clay, sandy, yellow-----	12	13
	Clay, blue, soft-----	30	43
	Shale, blue, soft, sticky-----	131	174
	Clay, blue, hard-----	7	181
	Clay, sandy, blue, soft-----	6	187
	Clay, sandy, blue, hard-----	6	193
	Sand, white-----	6	199
	Shale, blue, soft-----	18	217
	Clay, bouldery, blue, hard-----	3	220
	Sandstone, white-----	11	231
	Shale, blue, soft-----	16	247
Dakota Group:			
	Shale, black, hard-----	21	268
	Shale; interbedded with limestone-----	3	271
	Sandstone, white-----	2	273
	Shale, varicolored, hard-----	34	307
	Sandstone, white-----	21	328
	Sandstone, white, dirty-----	9	337

160-54-35BBB
USBR 241

Altitude:

Glacial drift:			
	Loam, sandy-----	3	3
	Loam, silty-----	11	14

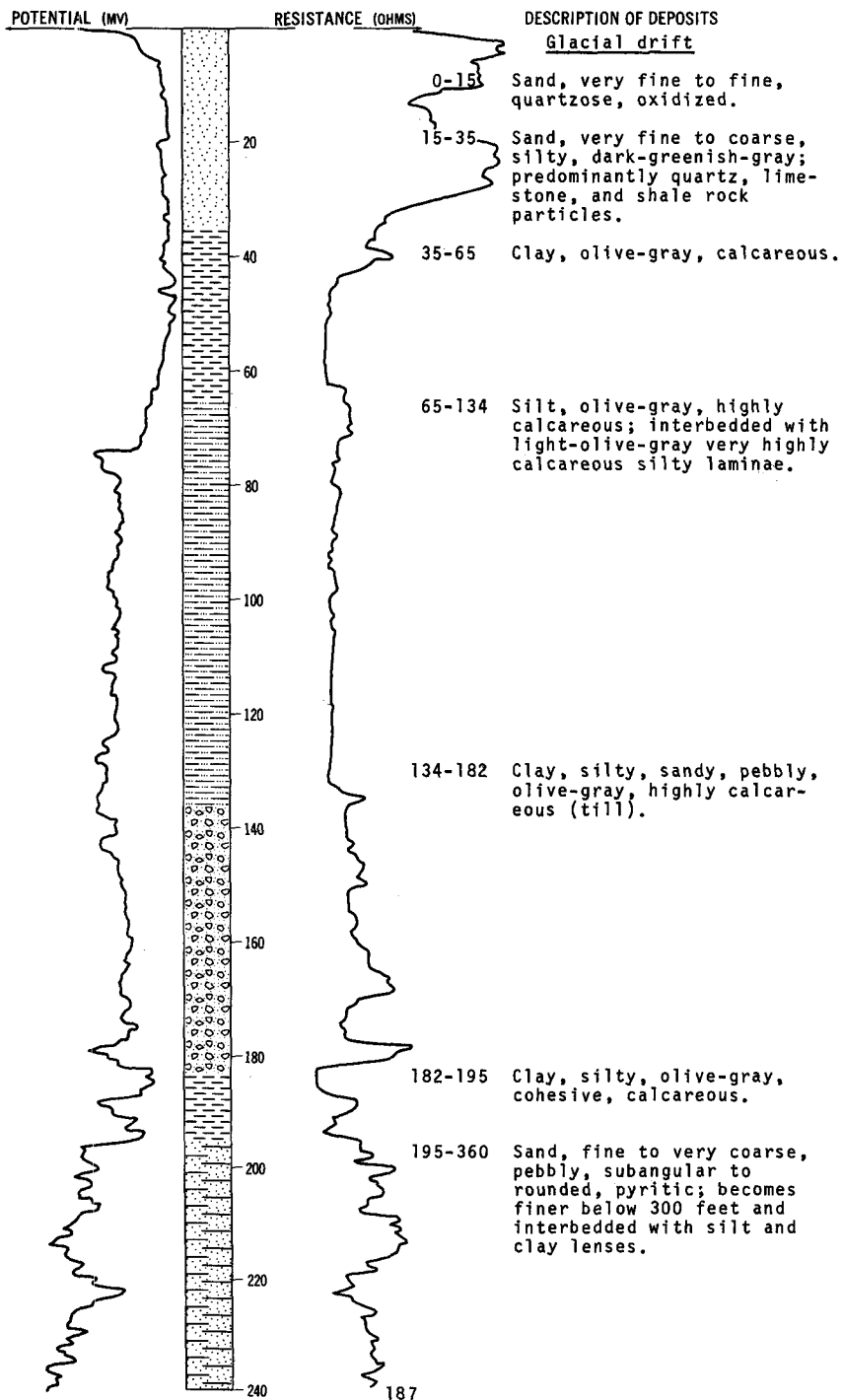
LOCATION: 160-55-6000

NDSWC 3569

DATE DRILLED: May 1968

ALTITUDE: 982
(FT, MSL)

DEPTH: 440
(FT)

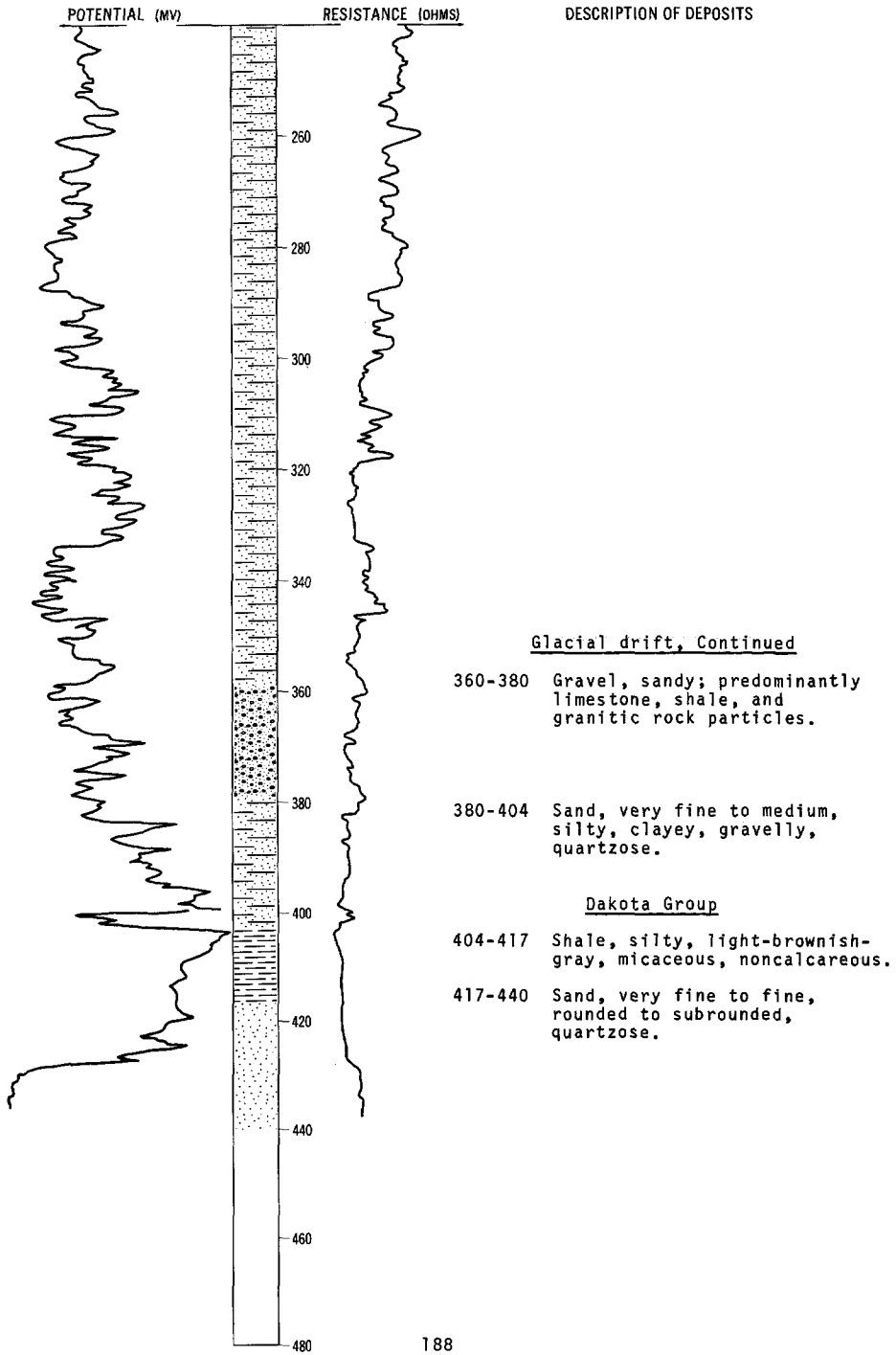


LOCATION: 160-55-6DDD

DATE DRILLED: May 1968

ALTITUDE: 982
(FT, MSL)

DEPTH: 440
(FT)



160-55-8CCC
USBR 428

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, fine, loamy-----	1	3
	Sand, fine-----	4	7
	Sand, very fine-----	1	8

160-55-11CDD
USBR 437

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine, loamy-----	2	5
	Sand, fine-----	4	9
	Silt-----	9	18

160-55-15BBB
USBR 238

Altitude:

Glacial drift:			
	Loam, sandy-----	3	3
	Sand, very fine, loamy-----	8	11
	Loam, silty-----	12	23

160-55-17AAA
USBR 429

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	1	1
	Sand, fine-----	5	6
	Sand, very fine-----	12	18

160-55-18BBB
USBR 237

Altitude:

Glacial drift:			
	Loam, silty-----	1	1
	Loam-----	2	3
	Sand, very fine-----	8	11
	Sand, very fine, loamy-----	1	12
	Sand, very fine-----	11	23

160-55-18DDD
 NDGS Pem-70-34

Altitude: 964 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	1.5	1.5
	Sand, very fine, slightly clayey, reddish-yellow-brown, banded, well-sorted; silt---	14.5	16
	Sand, very fine, gray to greenish-gray, well-sorted, saturated; silt-----	14	30
	Clay, very plastic, dense-----	14	44

160-55-20CCC
 USBR 410

Altitude:

Glacial drift:			
	Loam, silty-----	2	2
	Loam-----	1	3
	Loam, clayey-----	2	5
	Sand, fine, loamy-----	18	23

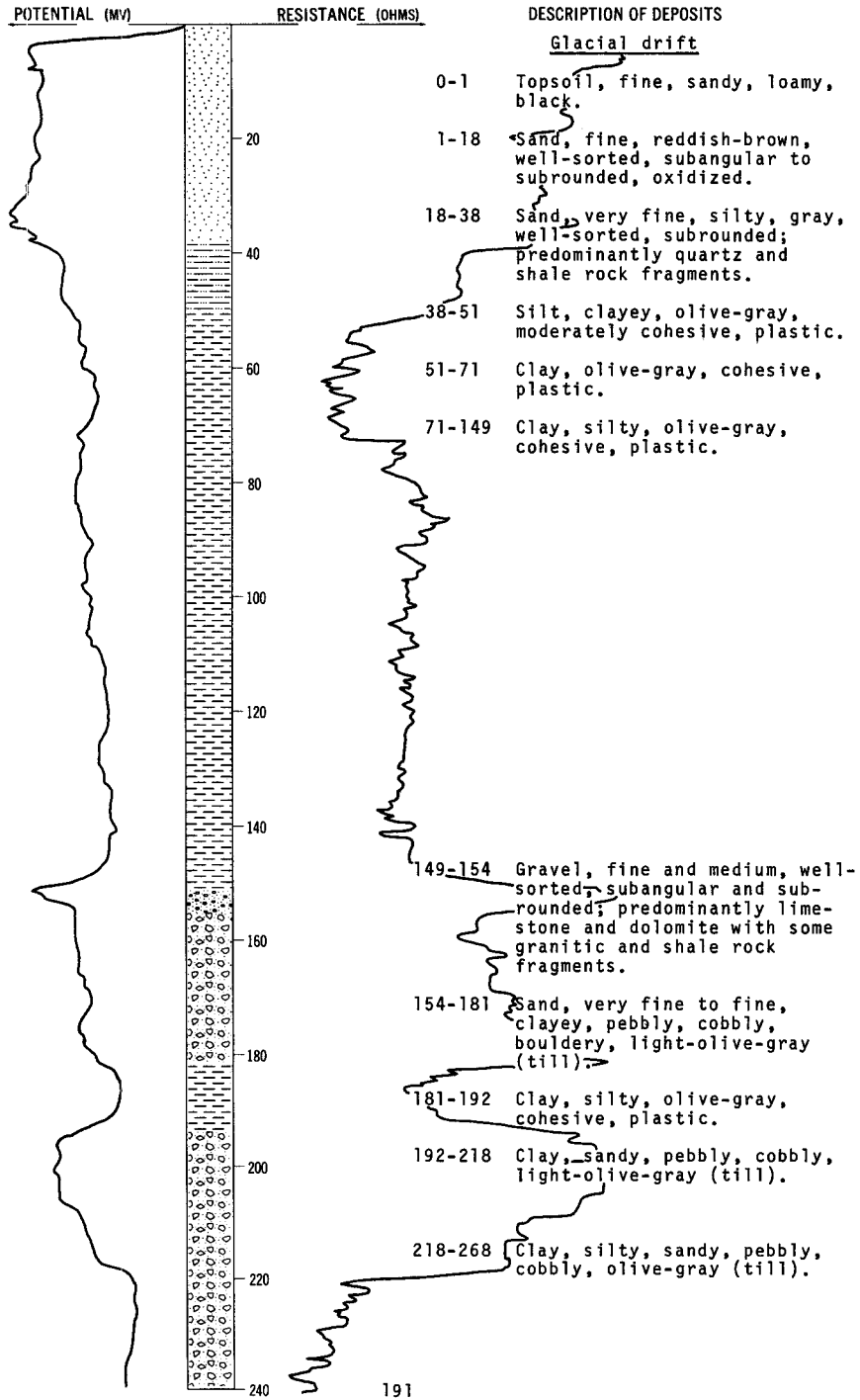
LOCATION: 160-55-21AAA

NDSWC 3840

DATE DRILLED: September 1969

ALTITUDE: 953
(FT, MSL)

DEPTH: 300
(FT)



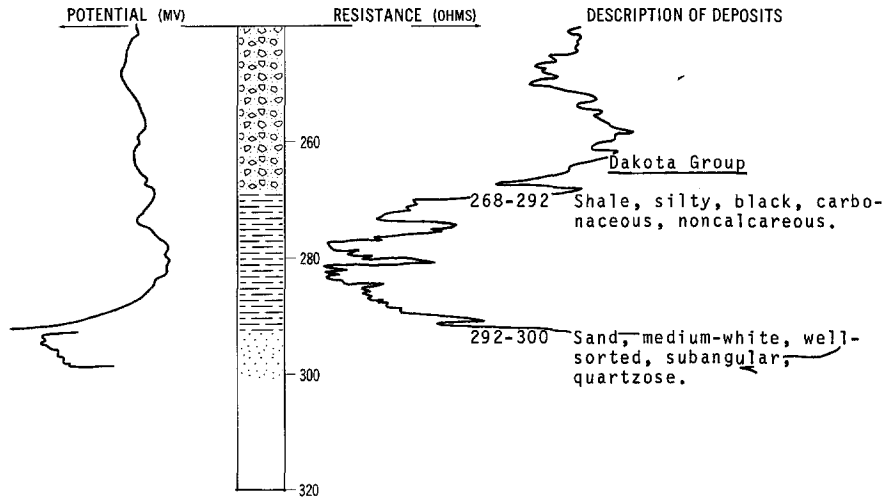
NDSWC 3840, Continued

LOCATION: 160-55-21AAA

DATE DRILLED: September 1969

ALTITUDE: 953
(FT, MSL)

DEPTH: 300
(FT)



160-55-27CCC
USBR 243

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	3	3
	Loam, silty-----	3	6
	Loam, very fine, sandy-----	3	9
	Silt-----	3	12
	Loam, silty-----	1	13

160-55-30CCC
USBR 244

Altitude:

Glacial drift:			
	Loam, clayey, silty-----	9	9
	Loam, silty-----	9	18

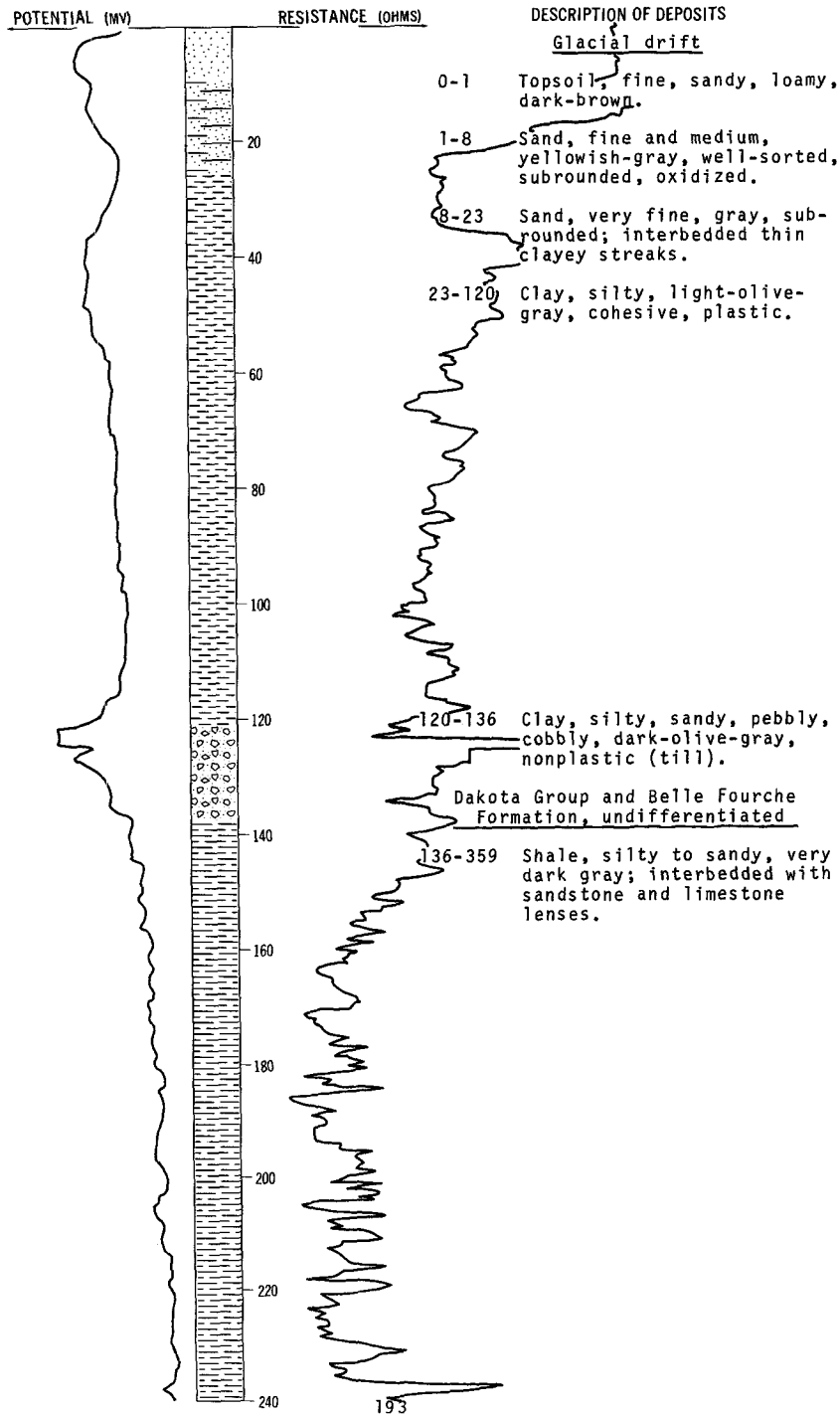
NDSWC 3841

LOCATION: 160-56-2AAA

DATE DRILLED: September 1969

ALTITUDE: 1004
(FT, MSL)

DEPTH: 380
(FT)



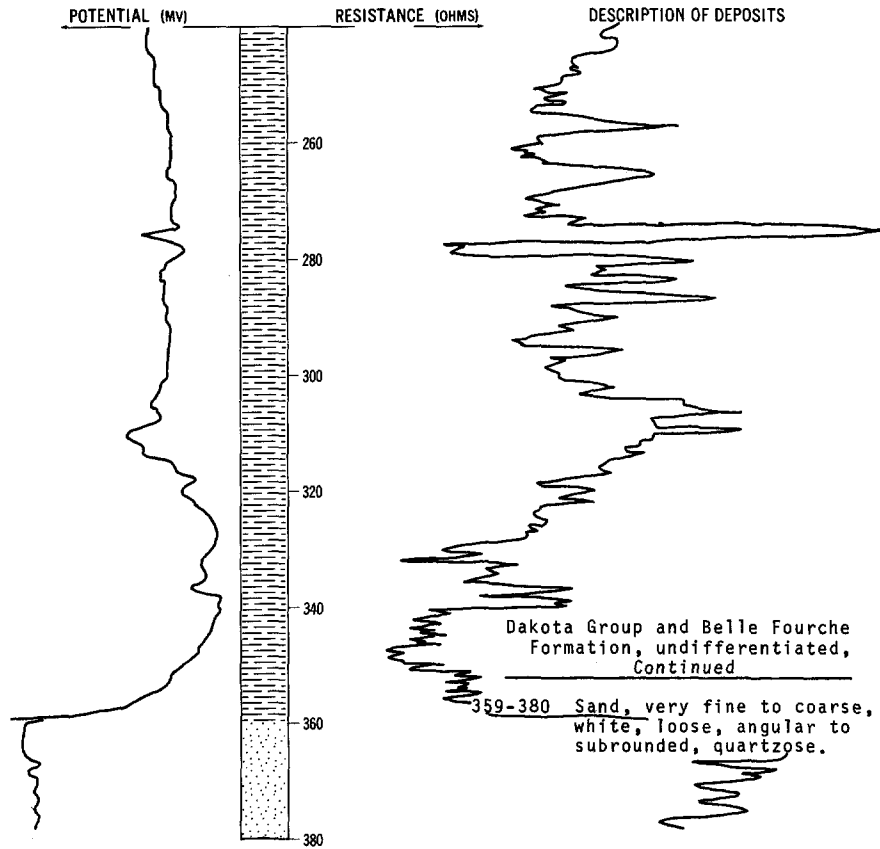
LOCATION: 160-56-2AAA

NDSWC 3841, Continued

DATE DRILLED: September 1969

ALTITUDE: 1004
(FT, MSL)

DEPTH: 380
(FT)



160-56-7CDD
USBR 235

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, silty, clayey-----	4	4
	Loam, silty-----	13	17
	Sand, loamy-----	6	23

160-56-8BBB
NDGS Pem-70-13

Altitude: 1177 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	1.5	1.5
	Sand, coarse, clayey, shaly, poorly to moderately well sorted, subangular to subrounded-----	5.5	7
Niobrara Formation:			
	Shale, gray, plastic, bentonitic, gypsiferous-----	7	14

160-56-10DDD
USB 236

Altitude:

Glacial drift:			
	Loam, clayey, silty-----	13	13

160-56-12AAA
NDGS Pem-70-12

Altitude: 998 feet

Glacial drift:			
	Roadfill-----	4	4
	Sand, fine, slightly clayey, dark-yellowish-brown, well-sorted-----	5	9
	Sand, fine, slightly clayey, dark-yellowish-brown, well-sorted, saturated-----	6	15
	Clay, silty, gray; some very fine sand-----	4	19

160-56-12CCC
USB 427

Altitude:

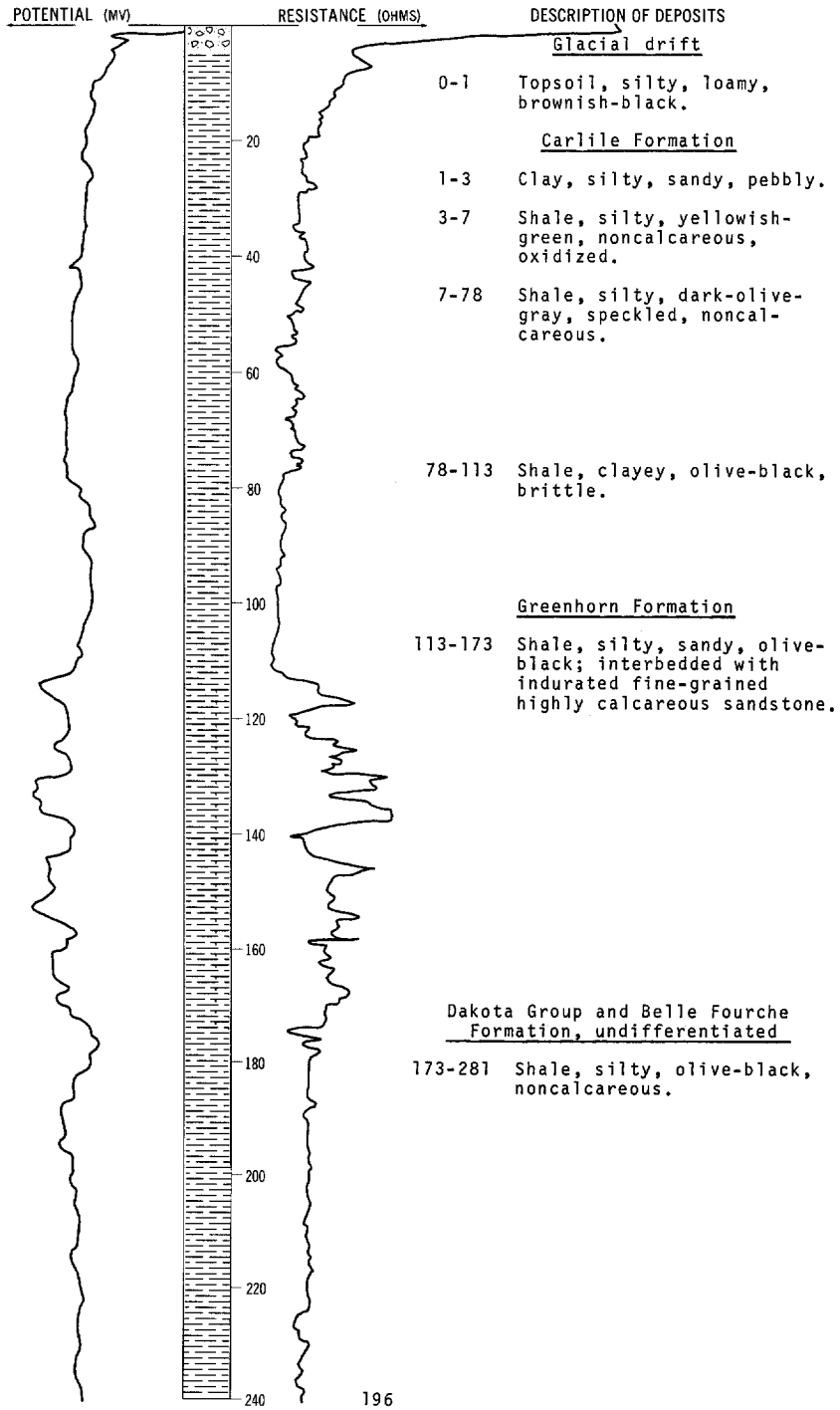
Glacial drift:			
	Loam, clayey, silty-----	1	1
	Loam, fine, sandy-----	1	2
	Sand, fine, loamy-----	1	3
	Sand, fine-----	4	7
	Silt-----	1	8

LOCATION: 160-56-16AAA4

DATE DRILLED: July 1969

ALTITUDE: 1032
(FT, MSL)

DEPTH: 620
(FT)



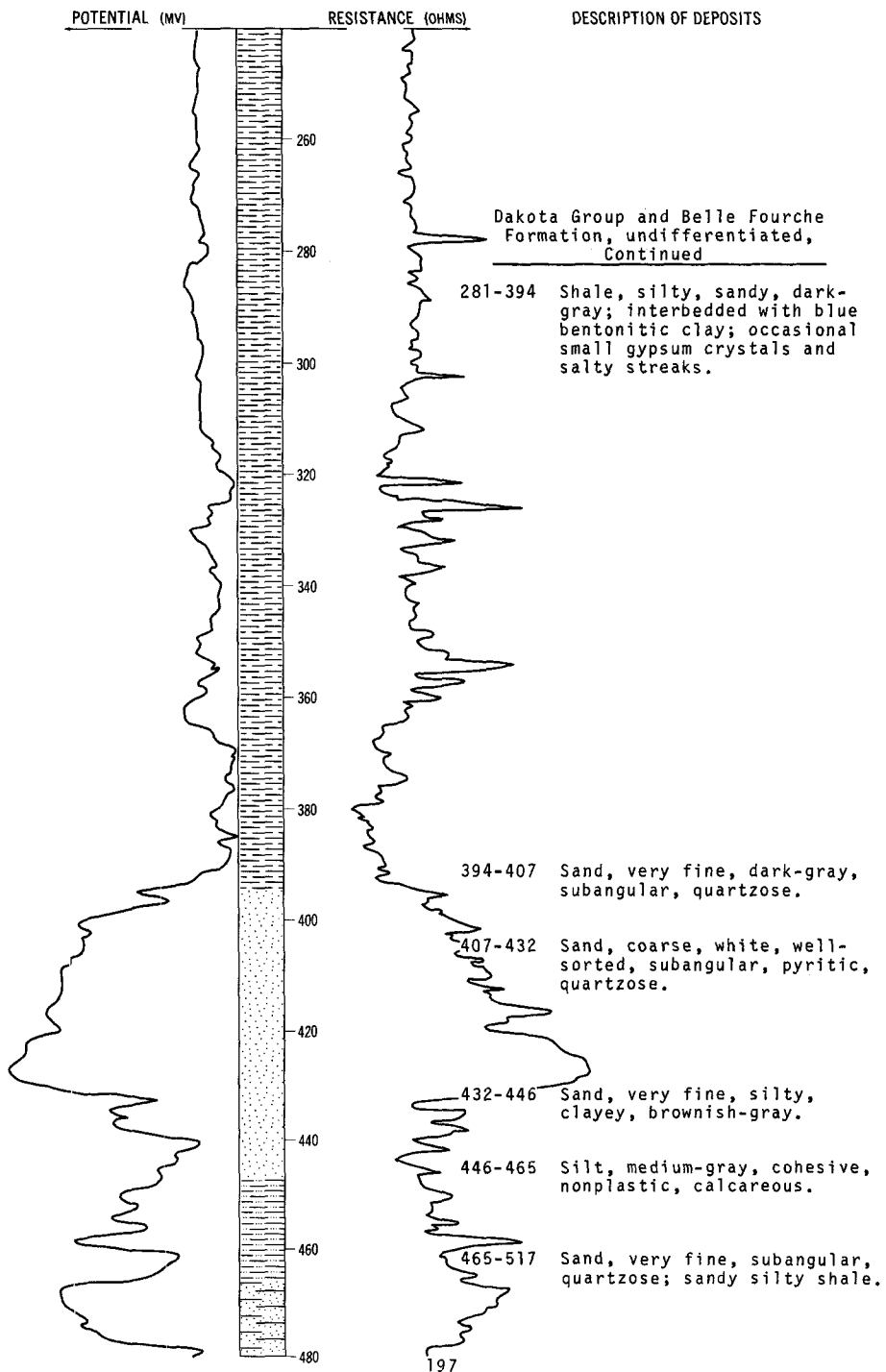
LOCATION: 160-56-16AAA4

NDSWC 3825, Continued

DATE DRILLED: July 1969

ALTITUDE: 1032
(FT, MSL)

DEPTH: 620
(FT)



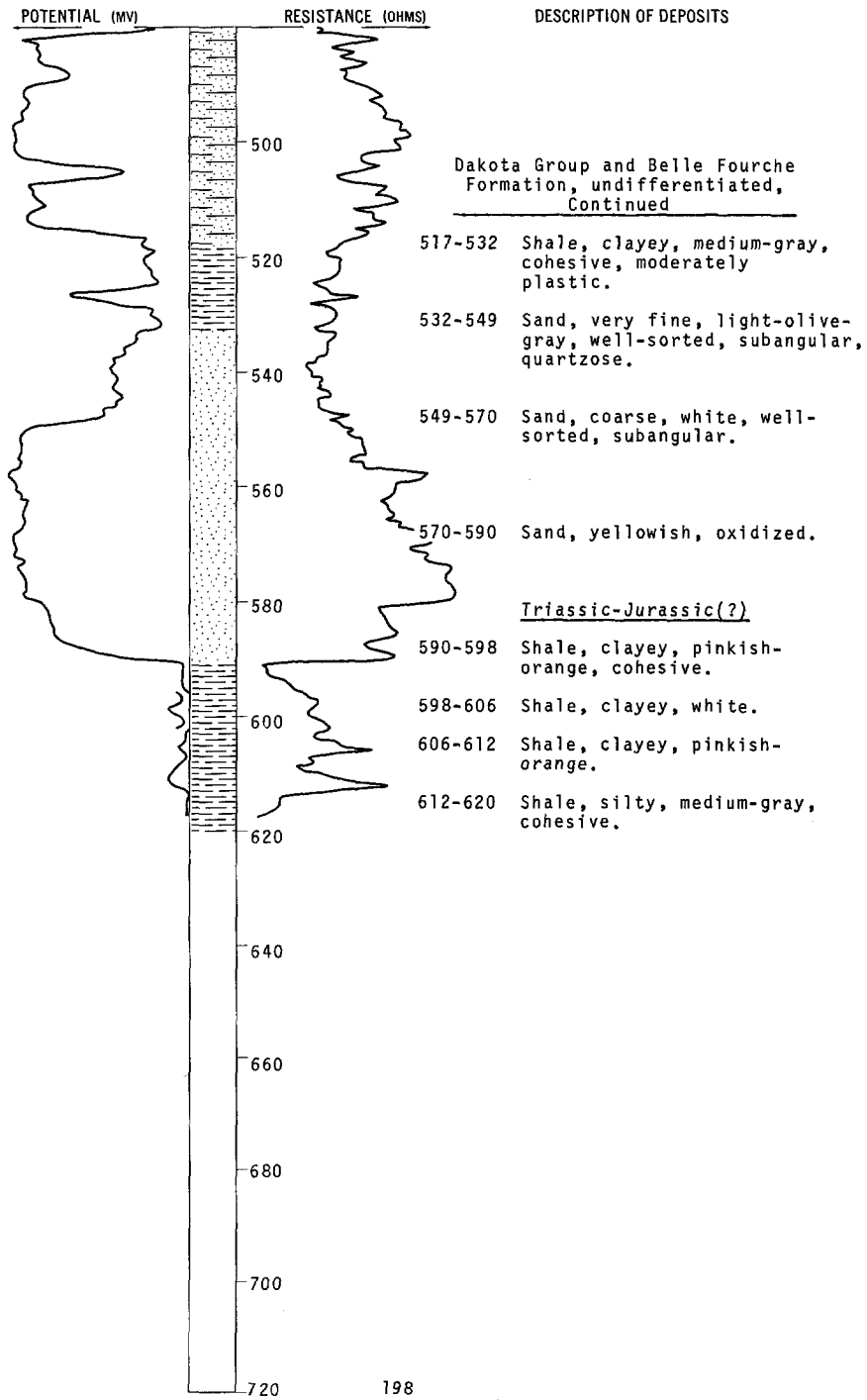
LOCATION: 160-56-16AAA4

NDSWC 3825, Continued

DATE DRILLED: July 1969

ALTITUDE: 1032
(FT, MSL)

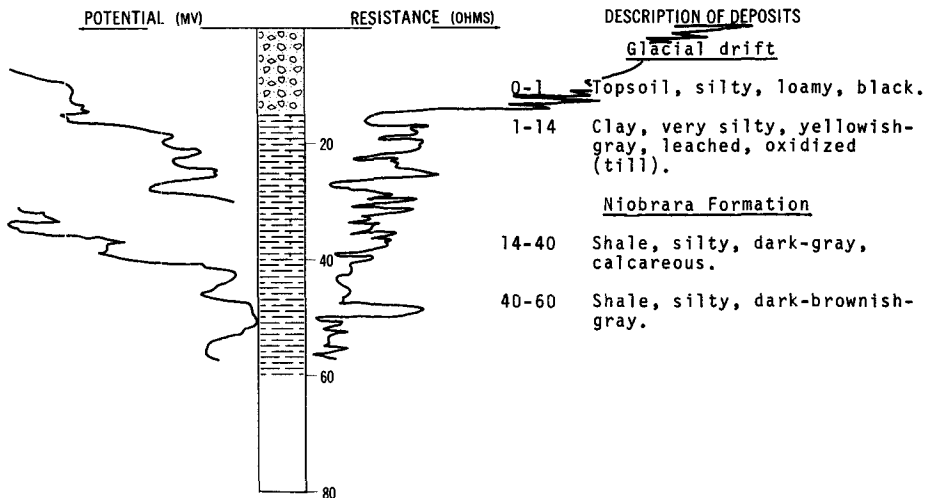
DEPTH: 620
(FT)



LOCATION: 160-56-17CCC
 ALTITUDE: 1180
 (FT, MSL)

NDSWC 4217

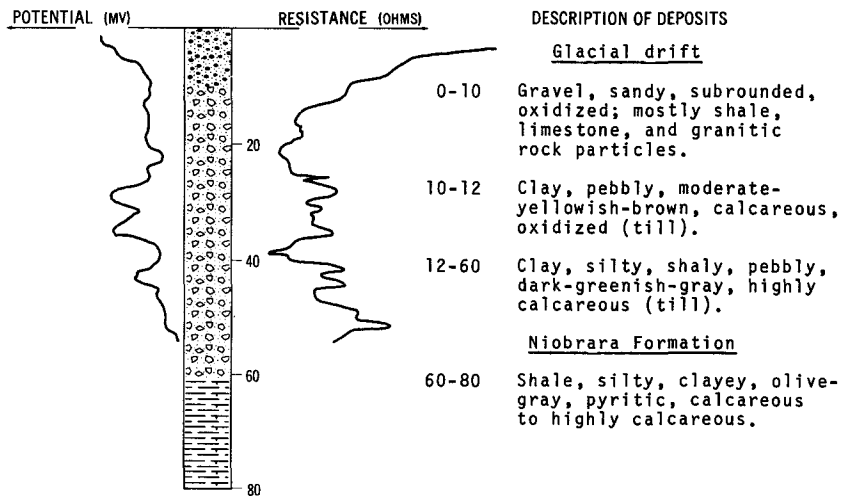
DATE DRILLED: September 1970
 DEPTH: 60
 (FT)



LOCATION: 160-56-20DDD
 ALTITUDE: 1162
 (FT, MSL)

NDSWC 3570

DATE DRILLED: May 1968
 DEPTH: 80
 (FT)



160-56-22DDD
USBR 411

Altitude:

<u>Geologic</u> <u>source</u>	<u>Material</u>	<u>Thickness</u> <u>(feet)</u>	<u>Depth</u> <u>(feet)</u>
Glacial drift:			
	Loam, clayey, silty-----	6	6
	Clay, silty-----	1	7
	Loam, clayey, sandy-----	2	9
	Sand, loamy-----	4	13
	Sand-----	10	23

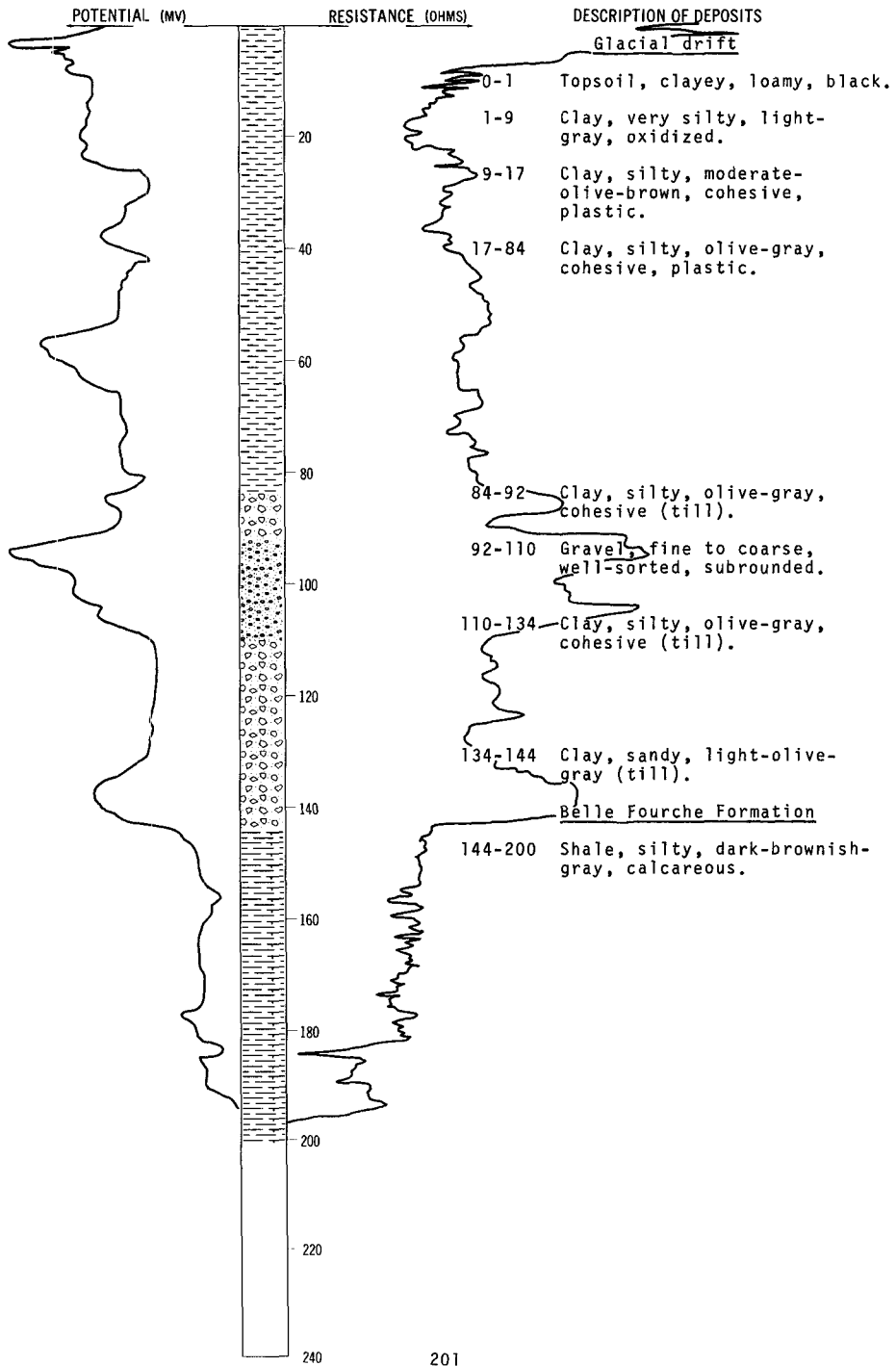
LOCATION: 160-56-24AAA

NDSWC 4220

DATE DRILLED: September 1970

ALTITUDE: 970
(FT, MSL)

DEPTH: 200
(FT)



160-56-29DDD
 NDGS Pem-70-16

Altitude: 1160 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	1	1
	Sand, coarse, shaly, well-sorted, subrounded to subangular-----	5	6
	Till, clayey, gravelly, pebbly, sandy, yellowish-brown; subangular to subrounded pebbles-----	3	9
	Till, clayey, sandy, gravelly, gray; fewer pebbles than above-----	9	18
	Boulder-----	-	18

160-56-30CCC
 USBR 246

Altitude:

Glacial drift:			
	Loam, clayey, sandy-----	2	2
	Loam, clayey, silty-----	1	3
	Till-----	5	8

160-56-30CDC
 NDGS Pem-70-33

Altitude: 1245 feet

Glacial drift:			
	Topsoil-----	1	1
	Till, clayey, silty, pebbly, loose, saturated-----	4	5
	Till, clayey, silty, pebbly, dark-yellow to dark-yellowish-brown, highly oxidized; consists of more than 75 percent shale particles; saturated below 20 feet-----	22	27
	Till; same as above except more pebbly-----	6	33
	Till, clayey, silty, very pebbly, gray, dense-----	9	42
	Boulder-----	-	42

160-56-30DDC
 USBR 247

Altitude:

Glacial drift:			
	Loam, sandy-----	1	1
	Sand-----	22	23

160-56-31ABB
NDGS Pem-70-17

Altitude: 1230 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Roadfill-----	5	5
	Clay, pebbly, silty, grayish-black, plastic--	6	11
	Clay, silty, gritty, pebbly, brownish-gray, saturated; pebbles mostly shale-----	12	23
	Clay, gravelly, pebbly, dense; pebbles angular to subrounded; more than 80 percent of particles are shale-----	6	29

160-56-33AAA
USBR 245

Altitude:

Glacial drift:			
	Loam, sandy-----	2	2
	Loam, silty-----	1	3
	Loam, clayey, silty-----	9	12
	Loam, silty-----	11	23

160-56-33DDD
NDGS Pem-70-32

Altitude: 1110 feet

Glacial drift:			
	Fill-----	1	1
	Till, clayey, pebbly, silty, yellowish-brown, oxidized; pebbles angular to subrounded-----	5	6
	Till, clayey, sandy, pebbly, silty, dark-brown; consists of about 75 percent shale particles-----	6	12
	Till, clayey, silty, slightly pebbly, gray to dark-gray; consists of over 75 percent shale particles-----	14	26
	Sand, fine, clayey, subangular, saturated----	5	31
	Till, clayey, pebbly, gravelly, dense; poor sample return; very hard drilling-----	13	44

160-56-34BAB
NDGS Pem-70-14

Altitude: 1075 feet

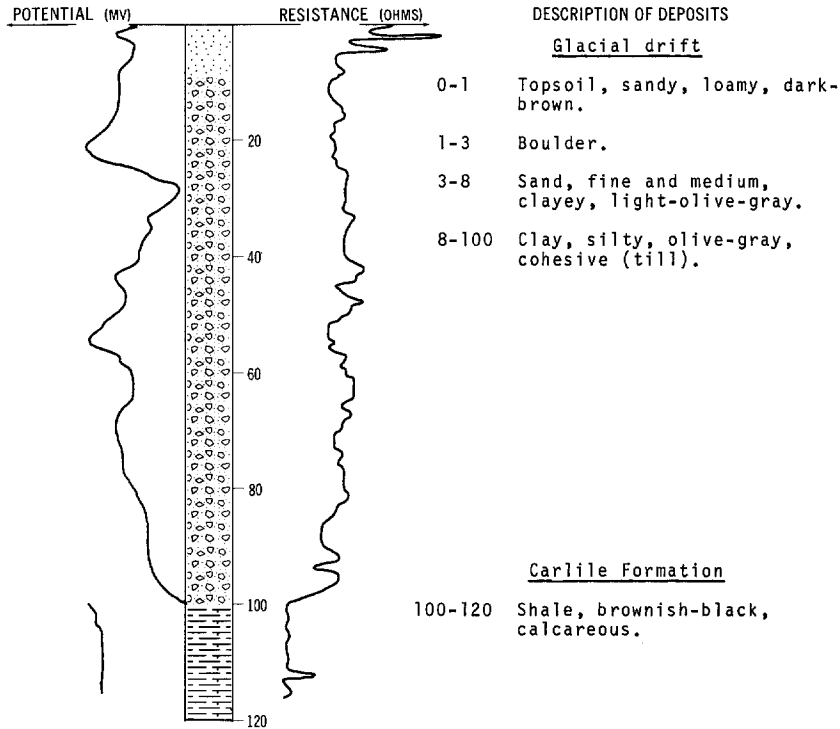
Glacial drift:			
	Roadfill-----	3	3
	Till, clayey, pebbly, yellowish-brown, dense--	5	8
	Till, clayey, sandy, gravelly, sticky-----	1	9
	Sand, medium to coarse, clayey, light-yellowish-brown, subangular, saturated; more than 50 percent shale particles-----	11	20
	Till, clayey, pebbly, gravelly, dark-gray, plastic, dense-----	4	24

LOCATION: 160-56-34CCC
 ALTITUDE: 1110
 (FT, MSL)

NDSWC 4216

DATE DRILLED: September 1970

DEPTH: 120
 (FT)



160-56-36ABB
 NDGS Pem-70-15

Altitude: 970 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Roadfill-----	4	4
	Clay, silty, pebbly, banded, plastic-----	1	5
	Till, silty, clayey, pebbly, yellowish-brown; pebbles are subangular to subrounded-----	4	9
	Till, clayey, silty, slightly pebbly, yellowish-brown, slightly limonitic, plastic-----	15	24

160-57-5DDA
(Log from U.S. Air Force)

Altitude: 1585 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Silt, sandy, clayey-----	12	12
Pierre Formation:			
	Shale-----	103	115
	Clay, sandy, silty-----	12	127
	Shale-----	3	130

160-57-12AAA
NDGS Cav-70-3

Altitude: 1240 feet

Glacial drift:			
	Roadfill and topsoil-----	4	4
	Clay, shaly, silty, dark-yellowish-brown, poorly sorted-----	5	9
	Clay; same as above except more pebbles; pebbles are nearly all shale particles-----	14	23
	Clay, pebbly, slightly sandy to gravelly, saturated; pebbles subrounded to sub-angular-----	14	37
	Boulder-----	-	37

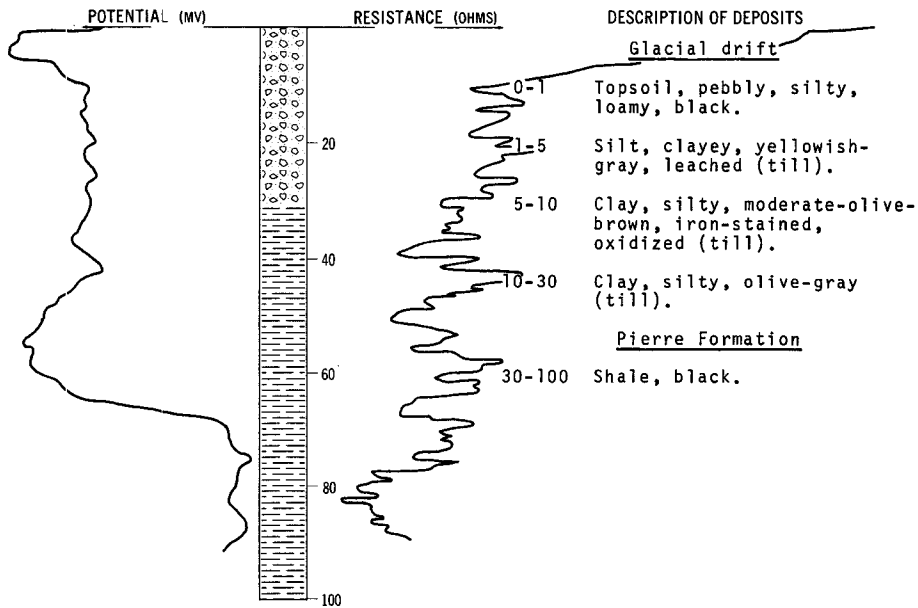
LOCATION: 160-57-16CCC

NDSWC 4206

DATE DRILLED: September 1970

ALTITUDE: 1587
(FT, MSL)

DEPTH: 100
(FT)



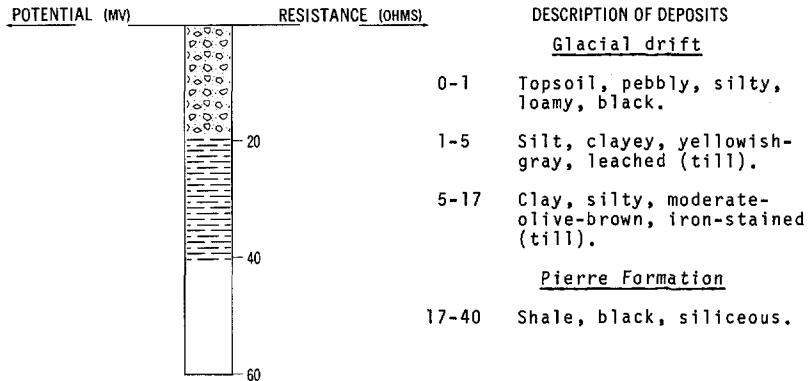
NDSWC 4205

LOCATION: 160-57-18CBC

DATE DRILLED: September 1970

ALTITUDE: 1588
(FT, MSL)

DEPTH: 40
(FT)



160-57-29BCA1
(Log from U.S. Air Force)

Altitude: 1585 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, sandy-----	2	2
	Sand, fine to medium, silty-----	6	8
	Sand, fine; shale fragments-----	5.5	13.5
Pierre Formation:			
	Shale-----	116.5	130

160-57-31DDB
(Log from U.S. Air Force)

Altitude: 1582 feet

Glacial drift:			
	Clay, sandy, silty-----	10	10
Pierre Formation:			
	Shale-----	120	130

160-58-3BAA1
(Log from Peterson Well Company)

Altitude: 1606 feet

Glacial drift:			
	Clay, yellow-----	30	30
	Clay, gray-----	10	40
	Shale, crumbly; gravel-----	5	45
Pierre Formation:			
	Shale, blue-----	10	55
	Shale, crumbly-----	15	70

160-58-9BCB
(Log from U.S. Air Force)

Altitude: 1603 feet

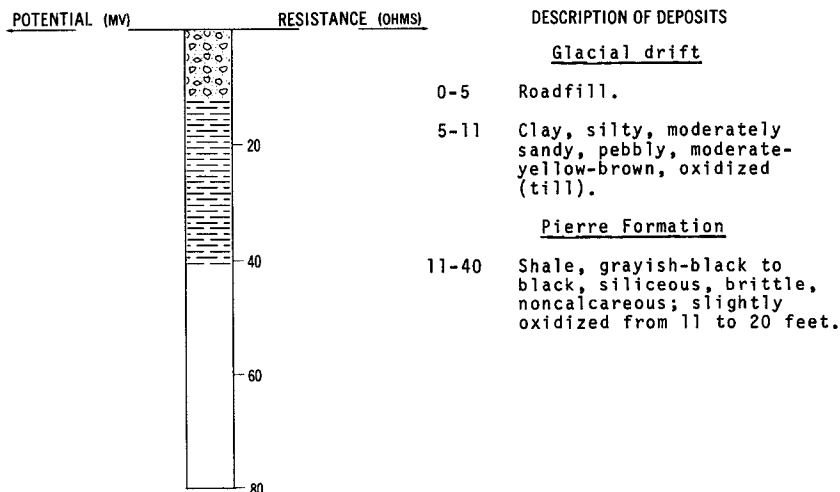
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, sandy-----	9	9
	Silt, clayey, sandy-----	9	18
Pierre Formation:			
	Shale; clayey silt-----	95	113
	Shale-----	17	130

160-58-9BCD1
(Log from U.S. Air Force)

Altitude: 1606 feet

Glacial drift:			
	Clay, silty, sandy-----	15	15
	Clay, silty-----	33	48
Pierre Formation:			
	Shale; clayey silt-----	59	107
	Shale-----	25	132

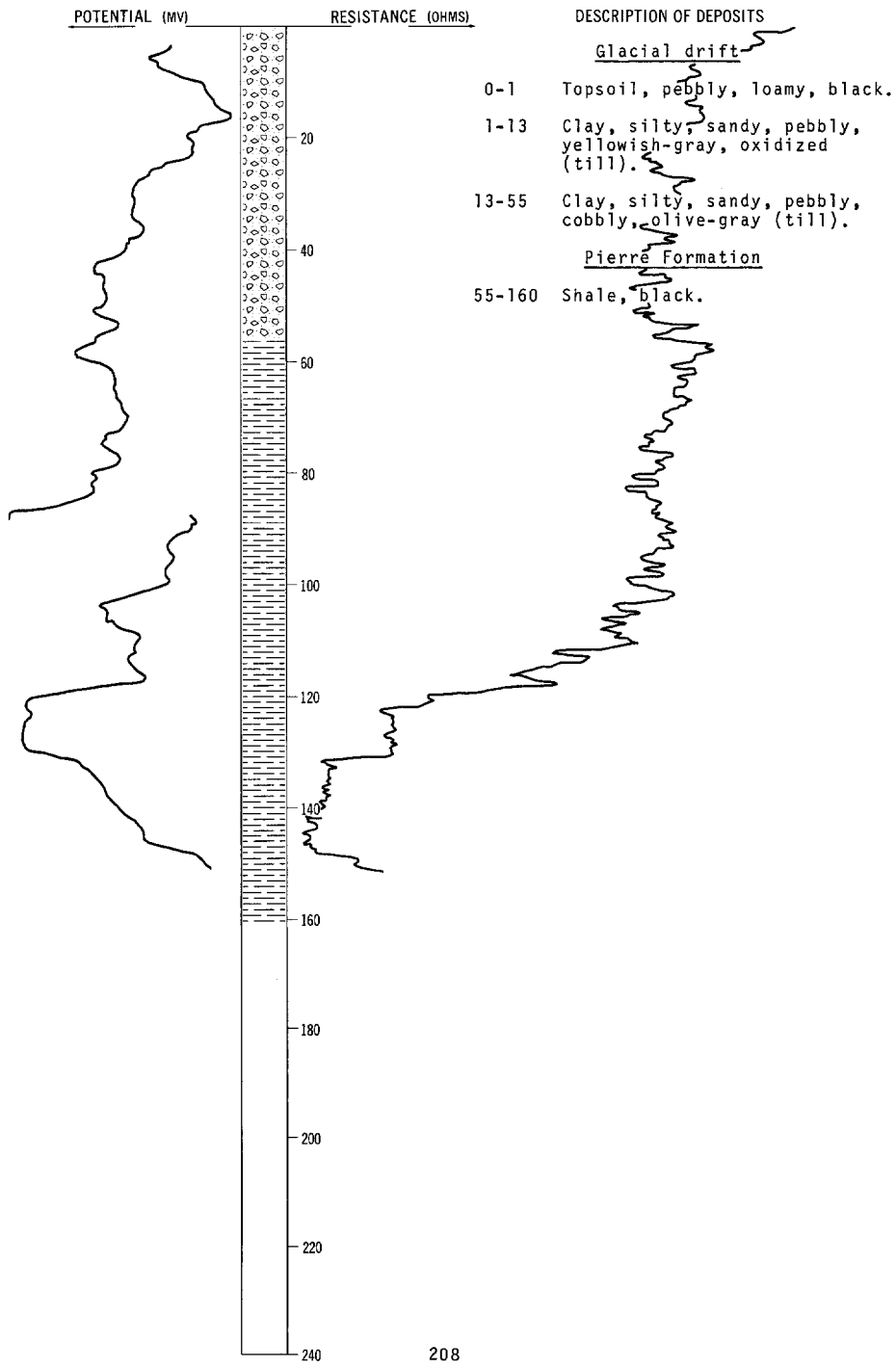
LOCATION: 160-58-12DDD NDSWC 5949 DATE DRILLED: June 1971
 ALTITUDE: 1584 DEPTH: 40
 (FT, MSL) (FT)



LOCATION: 160-58-16DDD
ALTITUDE: 1604
(FT, MSL)

NDSWC 3801

DATE DRILLED: September 1969
DEPTH: 160
(FT)



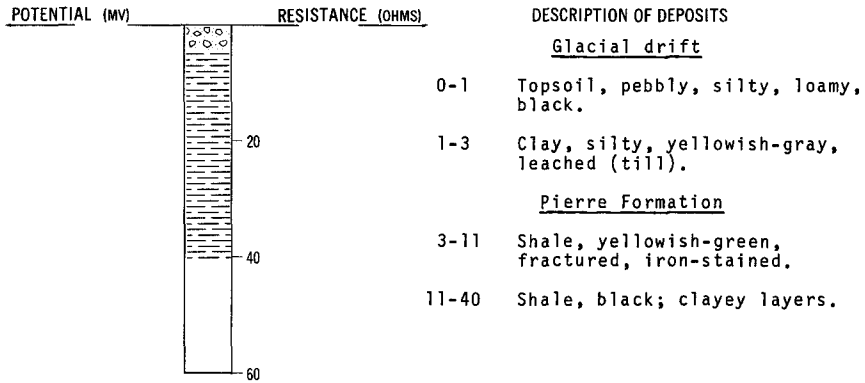
LOCATION: 160-58-20BCC

NDSWC 4208

DATE DRILLED: September 1970

ALTITUDE: 1617
(FT, MSL)

DEPTH: 40
(FT)



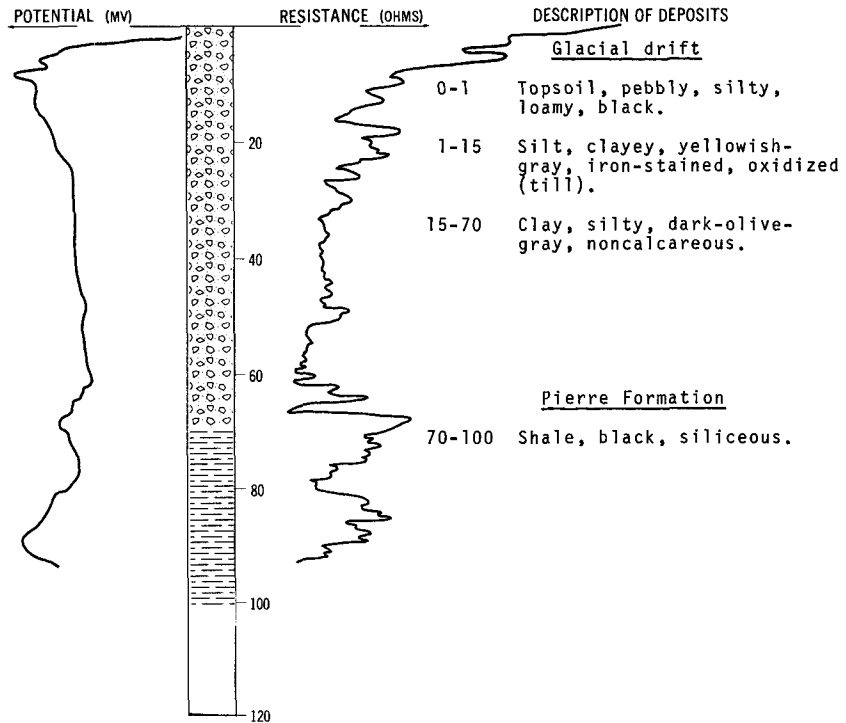
LOCATION: 160-58-20DDD

NDSWC 4207

DATE DRILLED: September 1970

ALTITUDE: 1621
(FT, MSL)

DEPTH: 100
(FT)



160-58-31BCC
(Log from U.S. Air Force)

Altitude: 1672 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, silty-----	3	3
	Clay, sandy, silty-----	5	8
	Sand, fine to coarse, silty-----	11	19
	Sand; silty shale-----	4	23
	Sand, fine, clayey-----	4.5	27.5
	Silt, clayey-----	18.5	46
	Silt, clayey, sandy-----	3	49
Pierre Formation:			
	Shale; silt-----	49	98
	Shale-----	22	120
	Shale; silt-----	10	130

160-58-33DDD2
(Log from Peterson Well Company)

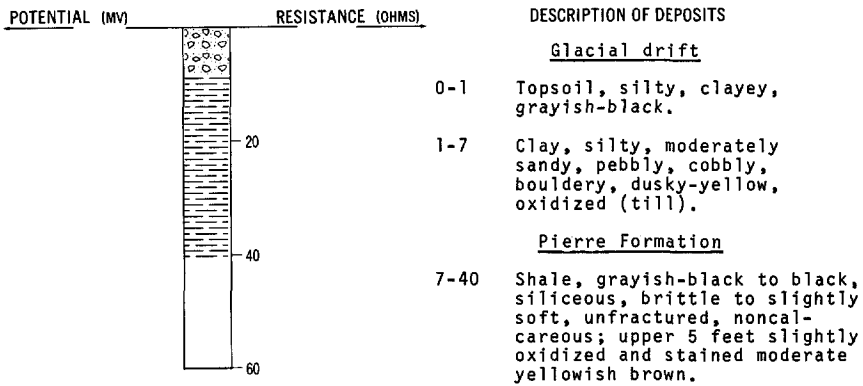
Altitude: 1613 feet

Glacial drift:			
	Black dirt-----	1	1
	Clay, yellow-----	14	15
	Clay, gravelly, gray-----	10	25
	Gravel; clay-----	5	30
Pierre Formation:			
	Shale, crumbly-----	53	83

LOCATION: 160-58-35BBB
ALTITUDE: 1599
(FT, MSL)

NDSWC 5950

DATE DRILLED: June 1971
DEPTH: 40
(FT)



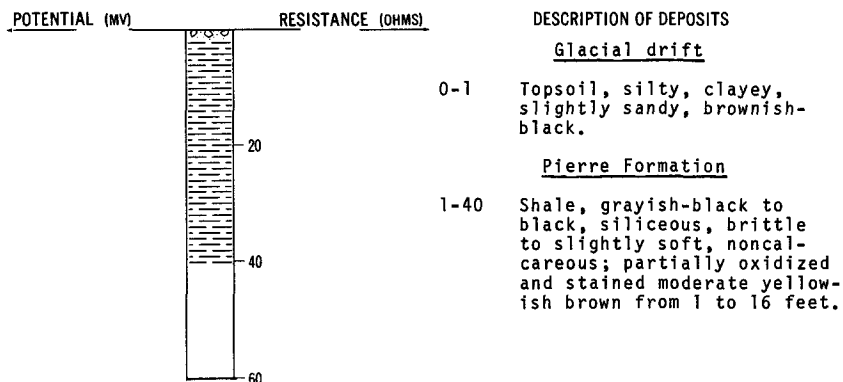
NDSWC 5948

LOCATION: 160-58-36DAA

DATE DRILLED: May 1971

ALTITUDE: 1582
(FT, MSL)

DEPTH: 40
(FT)



160-59-10BBC
(Log from U.S. Air Force)

Altitude: 1651 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:	Silt, clayey, sandy-----	3	3
	Clay, sandy, silty-----	7	10
Pierre Formation:	Shale; clay-----	100	110
	Shale-----	20	130

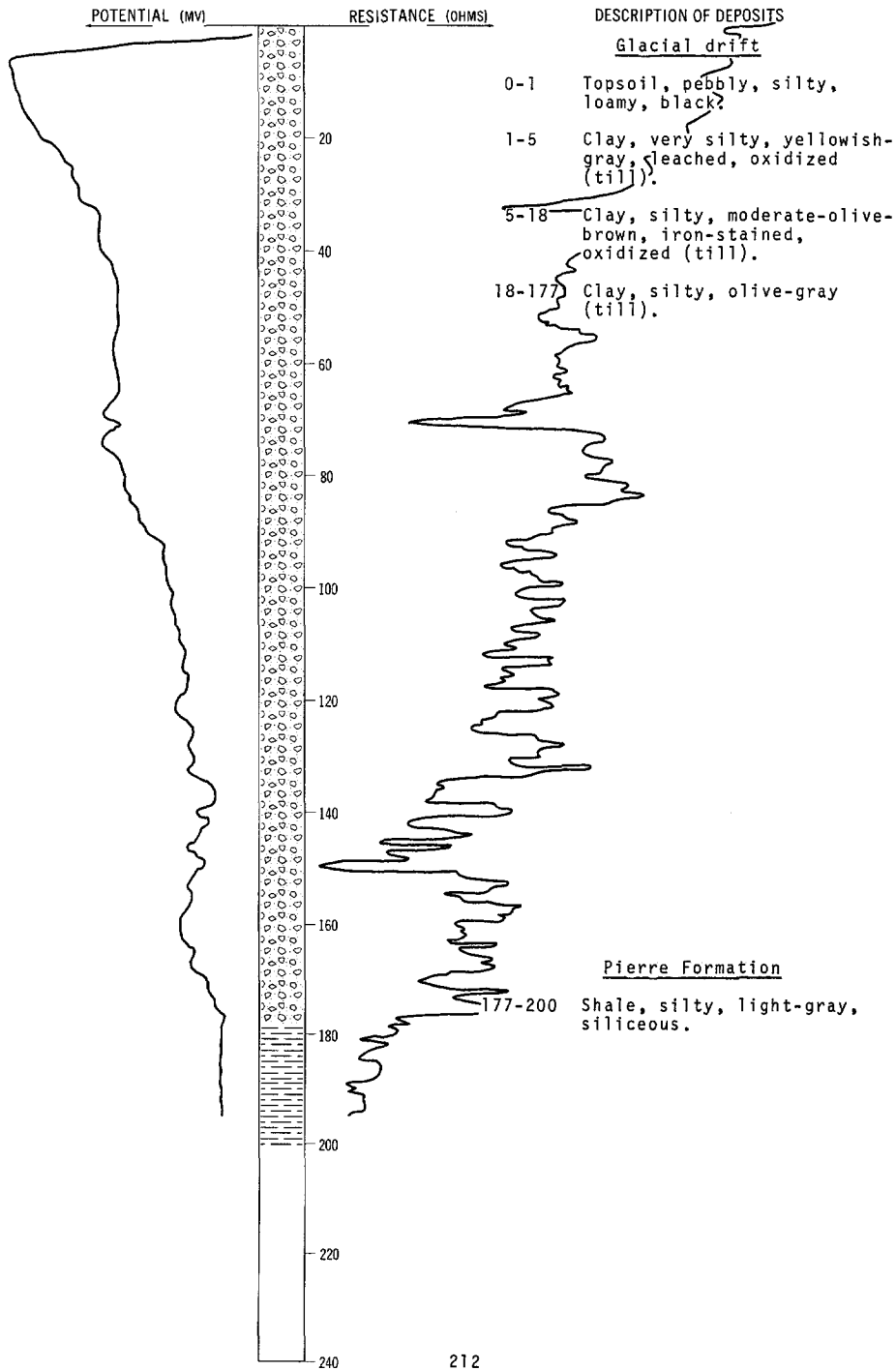
NDSWC 4209

LOCATION: 160-59-13AAA

DATE DRILLED: September 1970

ALTITUDE: 1621
(FT, MSL)

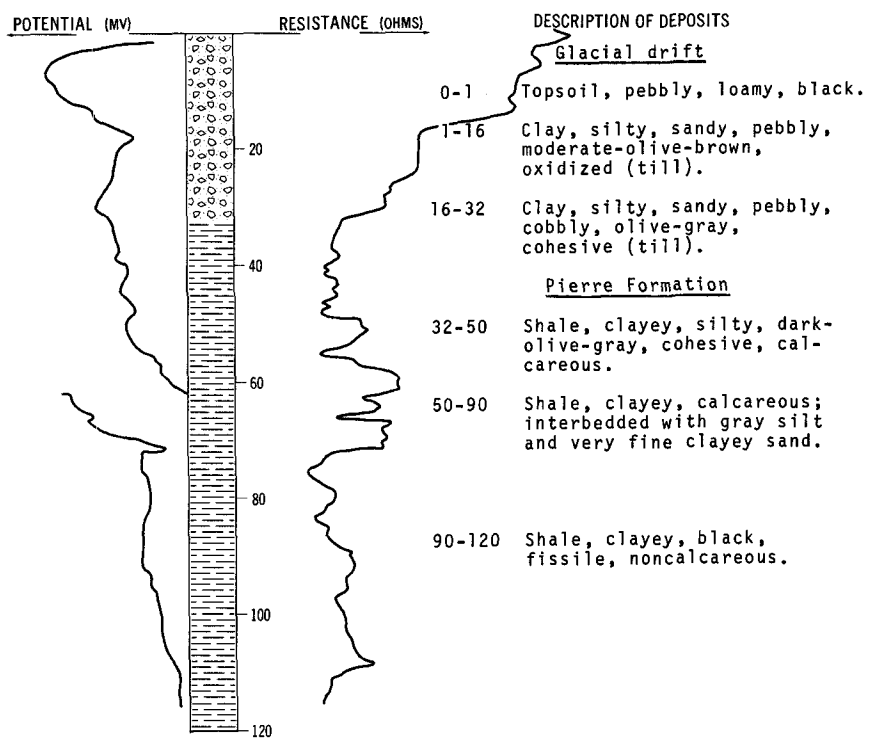
DEPTH: 200
(FT)



LOCATION: 160-59-15CCC
 ALTITUDE: 1626
 (FT, MSL)

NDSWC 3802

DATE DRILLED: September 1969
 DEPTH: 120
 (FT)



160-59-16AAC1
 (Log from U.S. Air Force)

Altitude: 1639 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Silt, clayey-----	4	4
	Sand, fine to medium, silty-----	8	12
	Clay, silty-----	6	18
Pierre Formation:			
	Shale; silt-----	65	83
	Shale; clay-----	5	88
	Shale-----	42	130

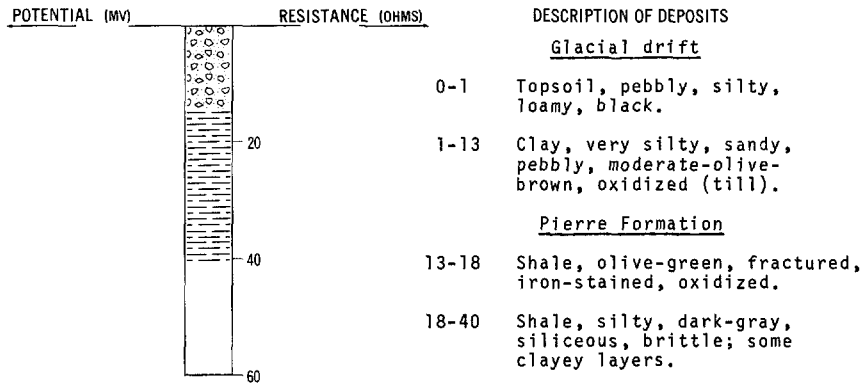
NDSWC 4192

LOCATION: 160-59-31CCC

DATE DRILLED: September 1970

ALTITUDE: 1647
(FT, MSL)

DEPTH: 40
(FT)



160-60-1CCC
NDGS Cav-69-9

Altitude: 1630 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Till, shaly, sandy, pebbly, dark-yellowish-brown; pebbles mostly shale-----	4	6
	Clay, silty, banded-----	1	7
	Till, gravelly, shaly, moderate-brown-----	4	11
Pierre Formation:			
	Shale-----	-	11

160-60-2CBB
(Log from U.S. Air Force)

Altitude: 1616 feet

Glacial drift:			
	Clay, silty-----	2	2
	Silt, clayey-----	9.5	11.5
Pierre Formation:			
	Shale; clayey silt-----	5.5	17
	Shale-----	113	130

160-60-2CBD1
(Log from U.S. Air Force)

Altitude: 1617 feet

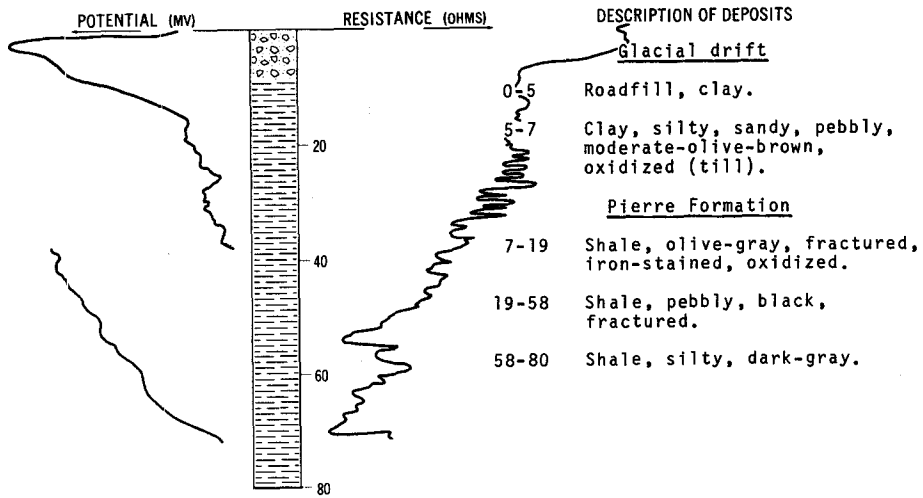
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, sandy, dark-gray-----	3	3
	Clay, silty, sandy, gravelly, brown-----	7	10
Pierre Formation:			
	Shale, dark-gray, highly fractured, fissile--	19	29
	Shale, clayey, dark-gray, crushed-----	33	63
	Shale, dark-gray, moderately fractured, partly fissile-----	68	130

160-60-3ADB
(Log from U.S. Air Force)

Altitude: 1612 feet

Glacial drift:			
	Clay, sandy, silty-----	9	9
	Clay, sandy, silty-----	15	24
	Clay; fine to medium sand-----	13.5	37.5
	Clay, silty, sandy-----	15.5	53
Pierre Formation:			
	Shale-----	77	130

LOCATION: 160-60-3CDC NDSWC 4195 DATE DRILLED: September 1970
 ALTITUDE: 1614 DEPTH: 80
 (FT, MSL) (FT)



160-60-3CDD
 NDGS Cav-69-39

Altitude: 1609 feet

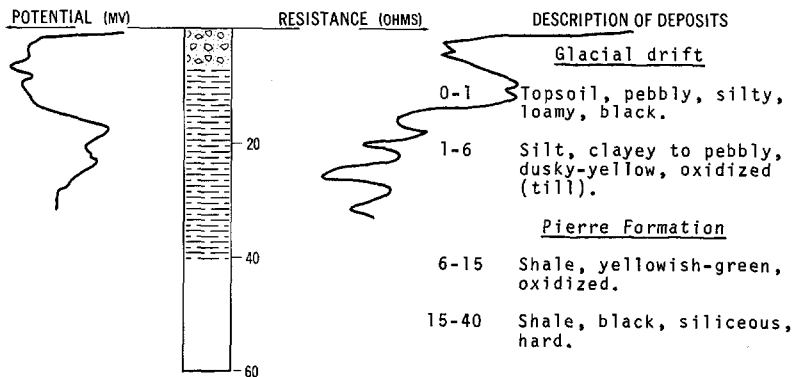
Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	2	2
	Silt, clayey, pebbly-----	3	5
	Till, shaly, sandy, gravelly, pebbly, dark-yellowish-brown; about 70 percent shale particles-----	10	15
	Till, shaly, sandy, pebbly, dark-gray; about 80 percent shale particles-----	34	49

160-60-7BAB
 NDGS Cav-69-38

Altitude: 1626 feet

Glacial drift:			
	Topsoil-----	4.5	4.5
	Till, shaly, pebbly, dark-yellowish-brown; shale content increases with depth-----	14.5	19
Pierre Formation:			
	Shale, weathered-----	2	21
	Shale, solid-----	-	21

LOCATION: 160-60-22BBB NDSWC 3805 DATE DRILLED: September 1969
 ALTITUDE: 1615 DEPTH: 40
 (FT, MSL) (FT)



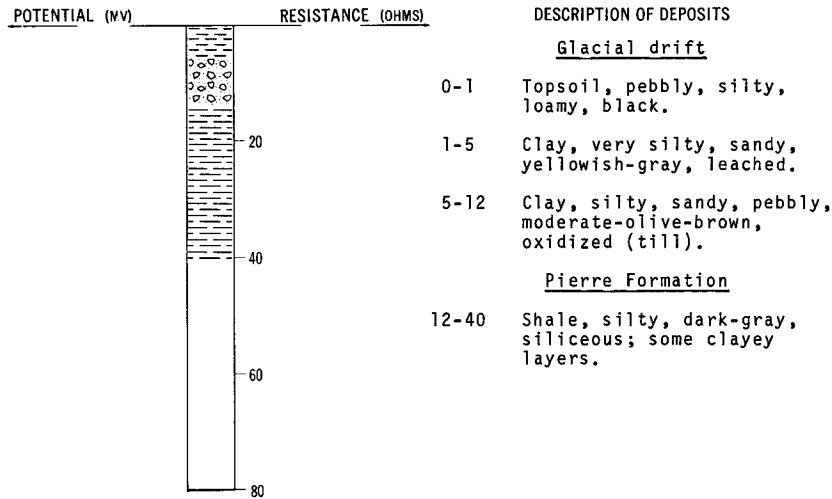
NDSWC 4193

LOCATION: 160-60-25AAA

DATE DRILLED: September 1970

ALTITUDE: 1632
(FT, MSL)

DEPTH: 40
(FT)



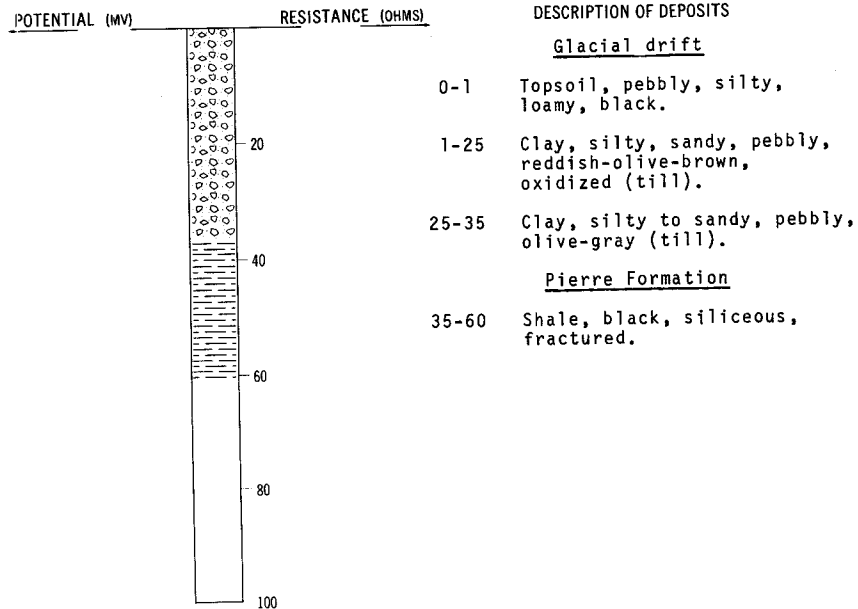
NDSWC 4194

LOCATION: 160-60-26BBB

DATE DRILLED: September 1970

ALTITUDE: 1632
(FT, MSL)

DEPTH: 60
(FT)



160-60-26DDA
NDGS Cav-69-42

Altitude: 1642 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Sand, medium to coarse, shaly, gravelly; about 75 percent shale particles-----	8	10
	Gravel, shaly-----	1	11
	Sand, coarse, gravelly, shaly-----	5	16
Pierre Formation:			
	Shale-----	-	16

160-60-30BBB
NDGS Cav-69-41

Altitude: 1570 feet

Glacial drift:			
	Roadfill-----	3	3
	Clay and silt, pebbly, grayish-brown-----	4	7
	Clay, pebbly-----	.5	7.5
	Silt, clayey, shaly, pebbly, dark-yellowish- brown; about 50 percent shale content-----	3.5	11
Pierre Formation:			
	Shale-----	-	11

160-60-35CBC
(Log from U.S. Air Force)

Altitude: 1635 feet

Glacial drift:			
	Silt, sandy, clayey-----	9	9
Pierre Formation:			
	Shale-----	121	130

160-60-35CBD1
(Log from U.S. Air Force)

Altitude: 1634 feet

Glacial drift:			
	Clay, silty, sandy, dark-brown-----	3	3
	Clay, silty, sandy, gravelly, brown-----	6	9
Pierre Formation:			
	Shale, dark-gray, highly fractured, brittle--	19.5	28.5
	Shale, silty, dark-gray, crushed-----	30.5	59
	Shale, dark-gray, highly fractured, brittle--	25	84
	Shale, clayey, dark-gray, crushed-----	14	98
	Shale, dark-gray, highly fractured, crushed--	10	108
	Shale, dark-gray, slightly fractured, brittle, partly fissile-----	22	130

160-61-2CCC
NDGS Cav-69-12

Altitude: 1578 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	1	1
	Till, sandy, shaly, grayish-brown-----	7	8
Pierre Formation:			
	Shale-----	-	8

160-61-3CDD
NDGS Cav-69-17

Altitude: 1568 feet

Glacial drift:			
	Clay, slightly pebbly, moderate-olive-brown--	4	4
Pierre Formation:			
	Shale-----	-	4

160-61-5BBB1
(Log from Walter Koehmstedt)

Altitude: 1580 feet

Glacial drift:			
	Clay, sandy, rocky-----	40	40
Pierre Formation:			
	Shale-----	38	78

160-61-10BAB
NDGS Cav-69-18

Altitude: 1567 feet

Glacial drift:			
	Clay, slightly pebbly, moderate-olive-brown--	6	6
Pierre Formation:			
	Shale-----	-	6

160-61-10CBB
(Log from U.S. Air Force)

Altitude: 1586 feet

Glacial drift:			
	Silt, clayey, brownish-tan-----	2	2
	Silt, clayey, sandy, partly gravelly, brown--	22	24
Pierre Formation:			
	Shale, silty, dark-gray, fractured-----	8.5	32.5
	Shale, dark-gray, highly fractured-----	15.5	48
	Shale, silty, clayey, dark-gray, fractured---	9	57
	Shale, dark-gray, fractured, thin-bedded, partly calcareous-----	73	130

160-61-10CBD1
(Log from U.S. Air Force)

Altitude: 1582 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:	Clay, silty, sandy-----	10.5	10.5
Pierre Formation:	Shale; clay-----	7.5	18
	Shale-----	111.5	129.5

160-61-11DAA
(Log from U.S. Air Force)

Altitude:

Glacial drift:	Clay, sandy, silty-----	9.5	9.5
Pierre Formation:	Shale; clay-----	21.5	31
	Shale-----	99	130

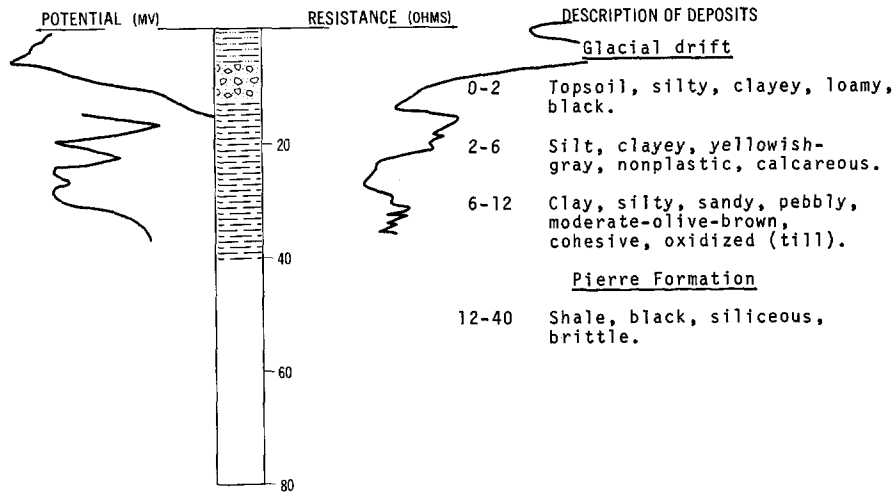
LOCATION: 160-61-21AAA

NDSWC 3803

DATE DRILLED: September 1969

ALTITUDE: 1583
(FT, MSL)

DEPTH: 40
(FT)

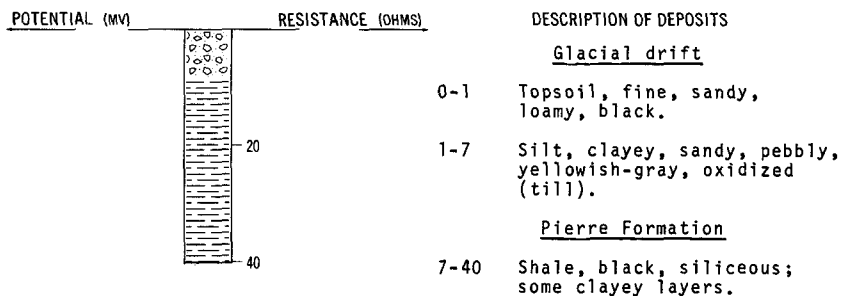


160-61-21CDC
NDGS Cav-69-13

Altitude: 1590 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	3	3
	Silt, clayey, pebbly, dusky-yellowish-brown--	2.5	5.5
	Sand, medium, slightly clayey, shaly, saturated; becomes coarser with depth-----	2	7.5
	Till, shaly, dark-yellowish-brown-----	1.5	9
	Sand, medium, clayey, saturated-----	2	11
	Till, moderate-yellowish-brown-----	2	13
	Sand, medium to coarse, saturated-----	4	17
Pierre Formation:			
	Shale-----	-	17

LOCATION: 160-61-26ABA NDSWC 4189 DATE DRILLED: September 1970
 ALTITUDE: 1574 DEPTH: 40
 (FT, MSL) (FT)



160-61-35CBB
NDGS Cav-69-14

Altitude: 1589 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	1	1
	Silt, clayey-----	5	6
	Till, pebbly, shaly, dark-yellowish-brown-----	13	19
Pierre Formation:			
	Shale-----	-	19

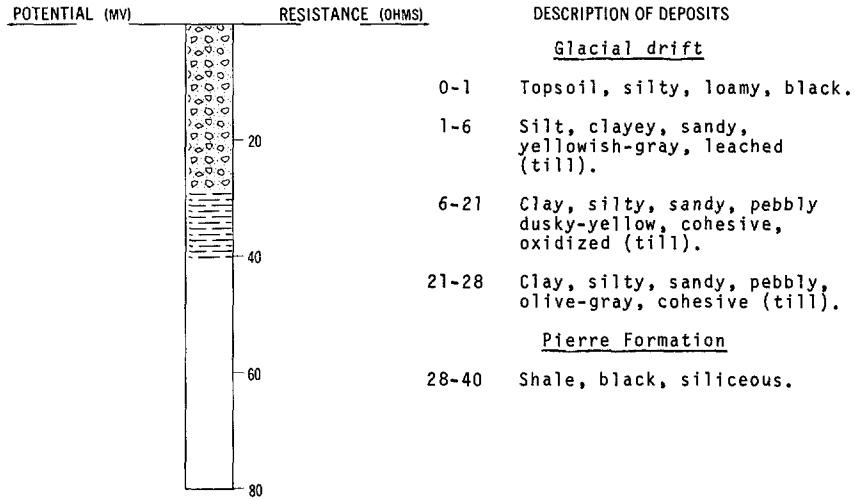
NDSWC 4135

LOCATION: 160-62-5BBA2

DATE DRILLED: August 1970

ALTITUDE: 1576
(FT, MSL)

DEPTH: 40
(FT)



160-62-12CCC
NDGS Cav-69-25

Altitude: 1575 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:	Roadfill and soil-----	9	9
	Till, shaly, pebbly, dark-yellowish-brown; about 50 percent shale particles-----	13	22
	Till, shaly, dusky-yellowish-brown, very dense; more than 75 percent shale particles-----	4	26
Pierre Formation:	Shale-----	-	26

160-62-14BDA2
(Log from Peterson Well Company)

Altitude: 1580 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, yellow-----	25	25
	Clay, shaly, gravelly-----	10	35
Pierre Formation:			
	Shale-----	70	105

160-62-15AAA
NDGS Cav-69-59

Altitude: 1579 feet

Glacial drift:			
	Roadfill and topsoil-----	4	4
	Till, shaly, pebbly, dark-yellowish-brown; about 50 percent shale particles-----	13	17
	Till; same as above except dusky yellowish brown-----	9	26
Pierre Formation:			
	Shale-----	-	26

160-62-18BAA
NDGS Cav-69-61

Altitude: 1584 feet

Glacial drift:			
	Topsoil-----	3	3
	Till, shaly, sandy, pebbly, moderate- yellowish-brown; less than 50 percent shale particles-----	6	9
	Till; as above, except dark yellowish brown--	12	21
	Till, shaly, pebbly, dusky-yellowish-brown; more than 50 percent shale particles-----	4	25
	Boulder-----	-	25

160-62-18DDD
NDGS Cav-69-26

Altitude: 1579 feet

Glacial drift:			
	Roadfill and topsoil-----	5	5
	Till, shaly, pebbly, dark-yellowish-brown; about 50 percent shale particles-----	17	22
	Till, shaly, dusky-yellowish-brown; about 40 percent shale particles-----	3	25
	Gravel, clayey-----	1.5	26.5
	Clay, sandy, saturated-----	2.5	29

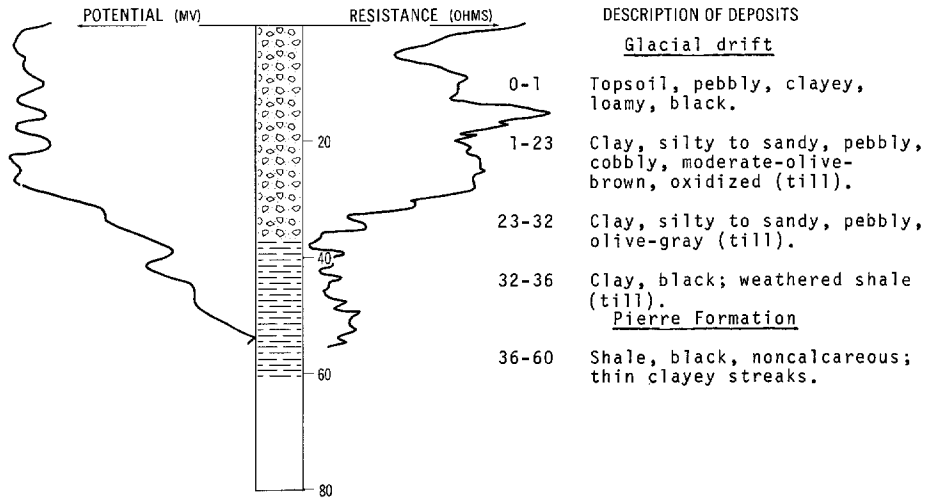
NDSWC 3804

LOCATION: 160-62-22BAA

DATE DRILLED: September 1969

ALTITUDE: 1572
(FT, MSL)

DEPTH: 60
(FT)



160-62-22BCC
NDGS Cav-69-62

Altitude: 1578 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	1	1
	Till, shaly, pebbly, slightly sandy, dark-yellowish-brown; about 50 percent shale particles-----	15	16
	Till; same as above except dusky yellowish brown-----	2	18
	Till, saturated-----	4	22
	Boulder-----	-	22

160-62-22CDA
(Log from L. A. Gjerdevig)

Altitude:

Glacial drift:			
	Topsoil-----	2	2
	Clay, yellow-----	23	25
	Clay, blue-----	40	65
Pierre Formation(?):			
	Some rock-----	8	73
	Clay, blue; shale-----	7	80

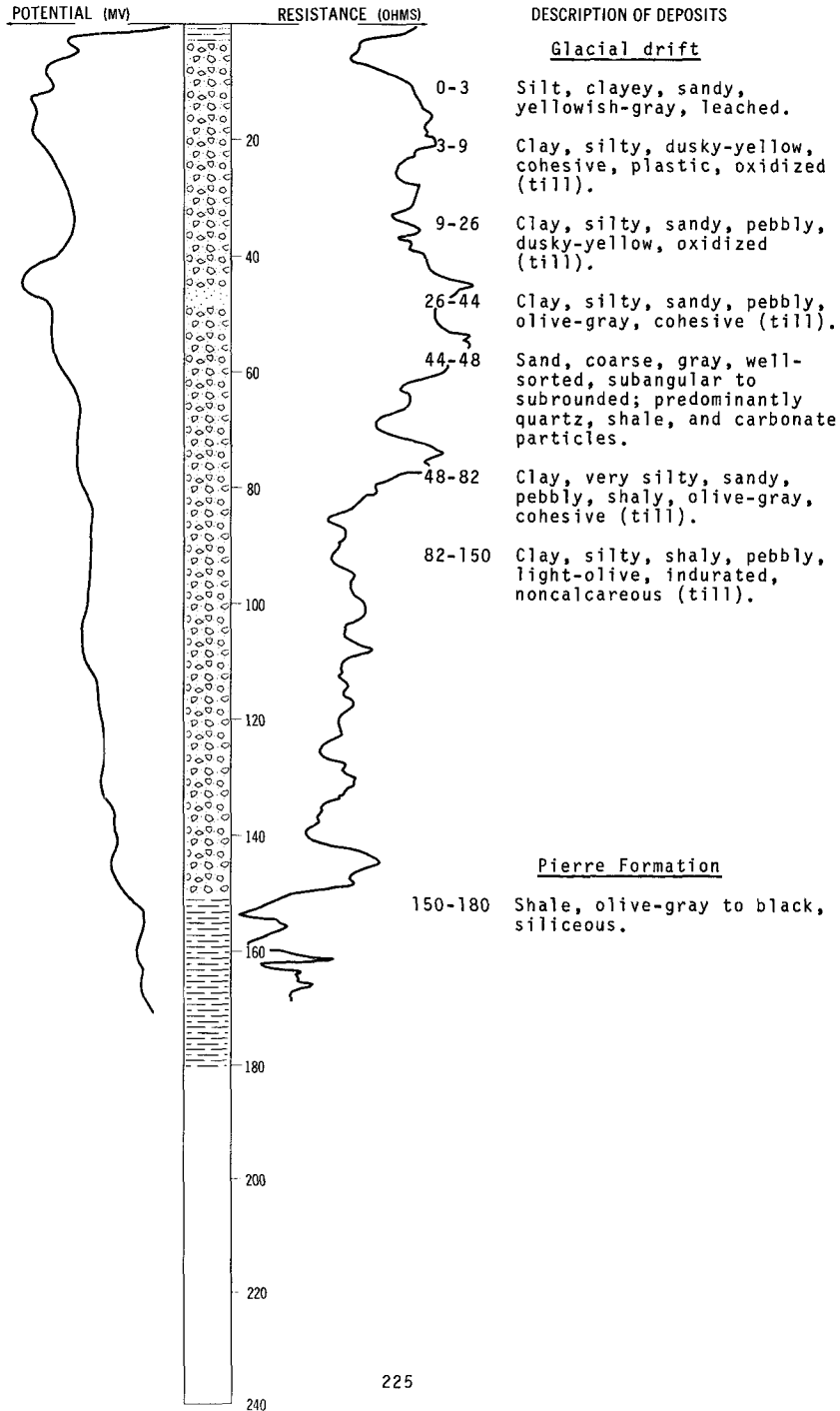
LOCATION: 160-62-31CCC

NDSWC 4133

DATE DRILLED: August 1970

ALTITUDE: 1580
(FT, MSL)

DEPTH: 180
(FT)



160-62-34ABB
 NDGS Cav-69-60

Altitude: 1567 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	3	3
	Till, shaly, slightly sandy, pebbly, dark-yellowish-brown; about 50 percent shale particles-----	12	15
	Till; as above except dusky yellowish brown--	2	17
	Till, slightly sandy, pebbly, dark-gray-----	4	21
Pierre Formation:			
	Shale-----	-	21

160-62-36CCA1
 (Log from U.S. Air Force)

Altitude: 1576 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, silty, black-----	2	2
	Sand, fine, silty, yellowish-tan-----	2	4
	Clay, silty, sandy, brown to yellowish-gray--	6	10
	Sand, medium to coarse, brown-----	1	11
	Gravel, fine to coarse, clayey, sandy, tan to gray-----	2.5	13.5
	Clay, silty, sandy, partly gravelly, gray---	5.5	19
	Silt, sandy, clayey, dark-gray-----	5	24
Pierre Formation:			
	Shale, dark-gray, slightly fractured, partly fissile-----	106	130

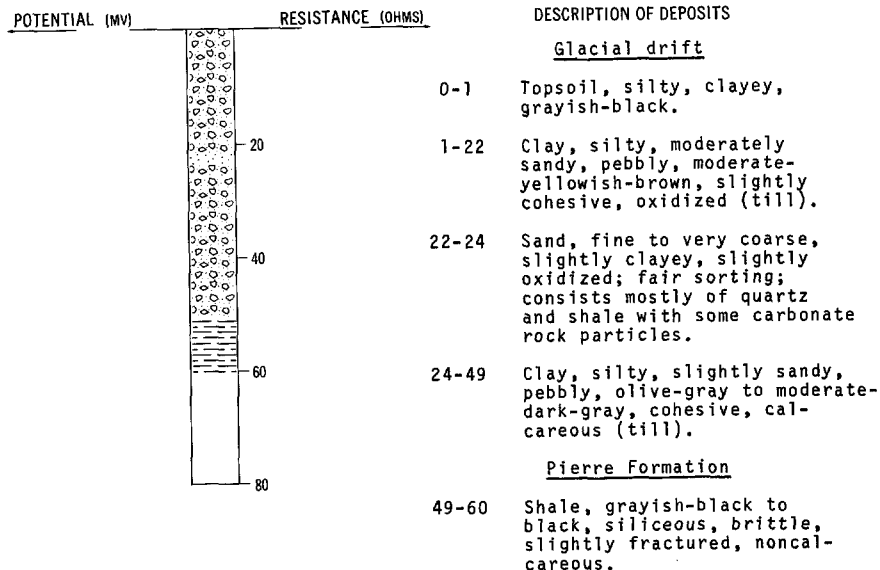
NDSWC 5964

LOCATION: 160-63-1DDC

DATE DRILLED: June 1971

ALTITUDE: 1580
 (FT. MSL)

DEPTH: 60
 (FT)



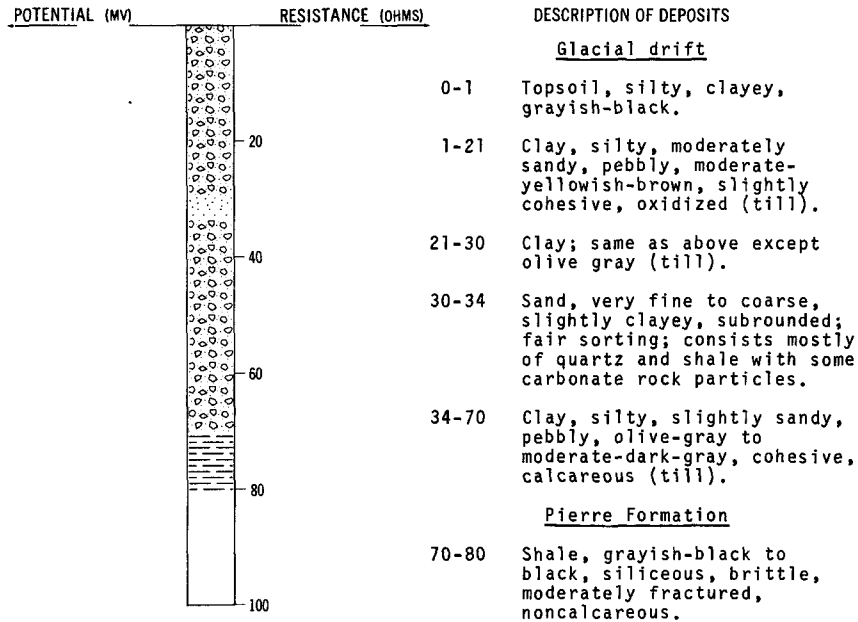
LOCATION: 160-63-3BBB

NDSWC 5965

DATE DRILLED: June 1971

ALTITUDE: 1602
(FT, MSL)

DEPTH: 80
(FT)



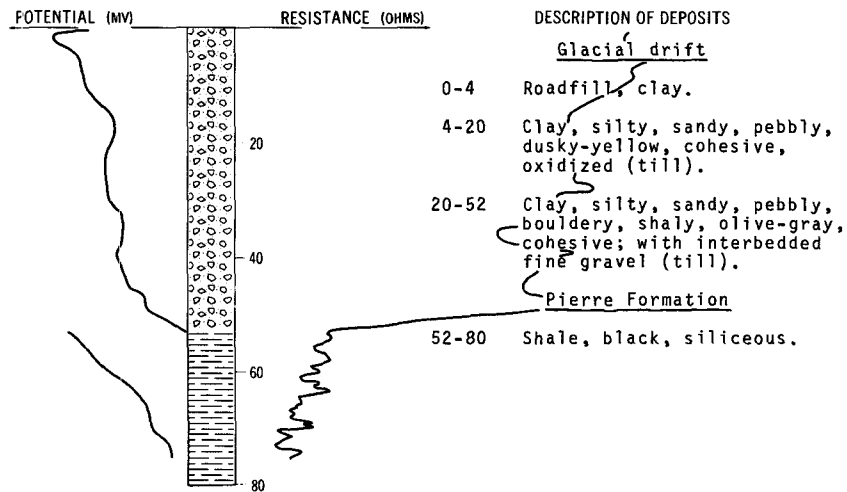
LOCATION: 160-63-4BBC

NDSWC 4136

DATE DRILLED: August 1970

ALTITUDE: 1600
(FT, MSL)

DEPTH: 80
(FT)



160-63-6AAA
NDGS Cav-69-27

Altitude: 1606 feet

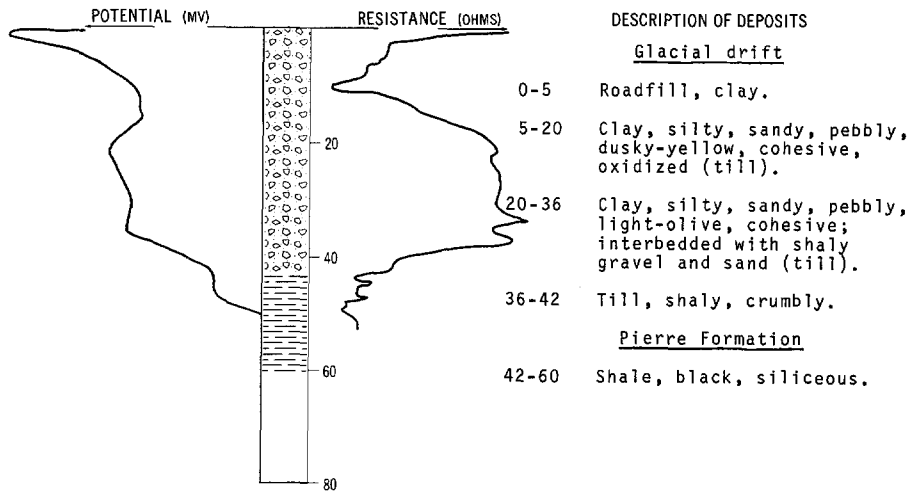
Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	2	2
	Till, sandy, pebbly, dark-yellowish-brown----	3	5
	Till, shaly, pebbly, sandy, dark-yellowish-brown; about 50 percent shale particles----	15	20
	Till, pebbly, dark-gray, dense-----	29	49

160-63-7BBC
(Log from U.S. Air Force)

Altitude: 1604 feet

Glacial drift:			
	Clay, sandy, silty-----	30	30
	Sand, fine to medium, clayey, silty-----	3	33
	Sand, fine, silty, clayey-----	21	54
	Clay, sandy, silty-----	24	78
	Sand, fine, silty-----	21	99
	Clay, silty, sandy-----	28	127
Pierre Formation:			
	Shale-----	3	130

LOCATION: 160-63-8CCC NDSWC 4138 DATE DRILLED: August 1970
 ALTITUDE: 1610 DEPTH: 60
 (FT, MSL) (FT)



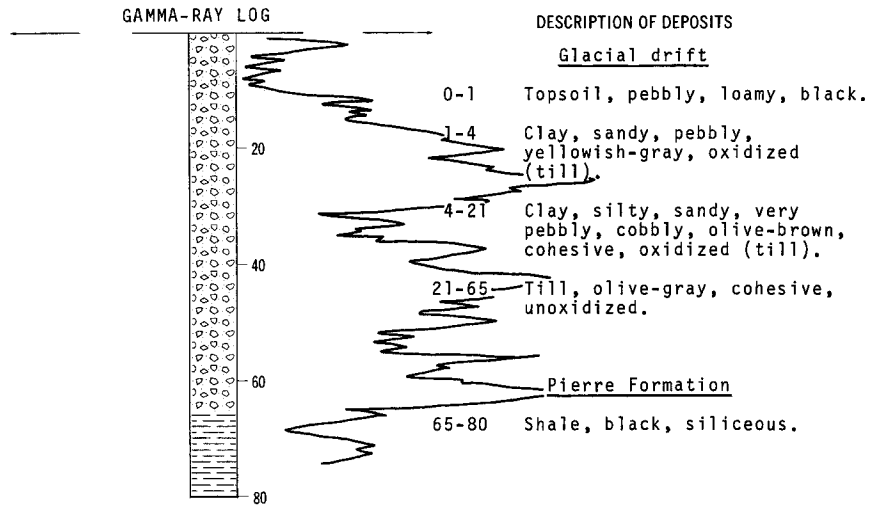
NDSWC 3793

LOCATION: 160-63-16DDD

DATE DRILLED: September 1969

ALTITUDE: 1606
(FT, MSL)

DEPTH: 80
(FT)



160-63-19BBA
(Log from Great Northern Railway Company)

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, yellow, soft-----	10	10
	Clay, bouldery, yellow, hard-----	10	20
	Clay, blue, hard-----	11	31
	Clay, sandy, gravelly, bouldery-----	3	34
Pierre Formation:			
	Shale, blue, hard-----	131	165

160-63-19BCD
(Log from L. A. Gjerdevig)

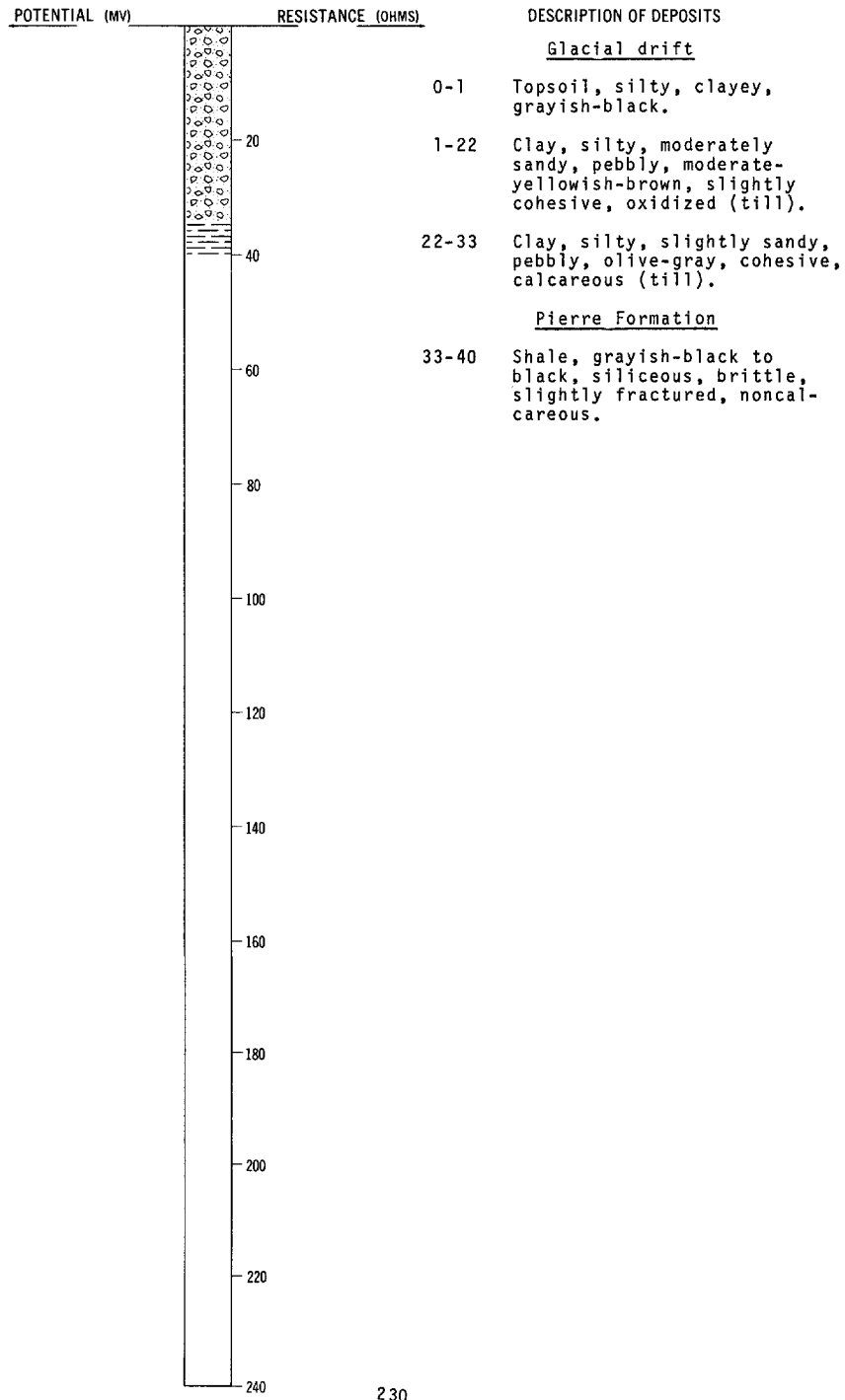
Altitude: 1609 feet

Glacial drift:			
	Topsoil-----	2	2
	Clay, gray-----	6	8
	Clay, sandy, rocky, yellow-----	12	20
	Clay, gray and blue-----	15	35
	Clay, blue, hard-----	9	44
	Sand; gravel-----	2	46
	Clay, blue, soft-----	9	55
	Clay, blue-----	10	65
	Shale, clayey-----	5	70
Pierre Formation:			
	Shale-----	10	80

LOCATION: 160-63-20BCC
ALTITUDE: 1596
(FT, MSL)

NDSWC 5966

DATE DRILLED: June 1971
DEPTH: 40
(FT)



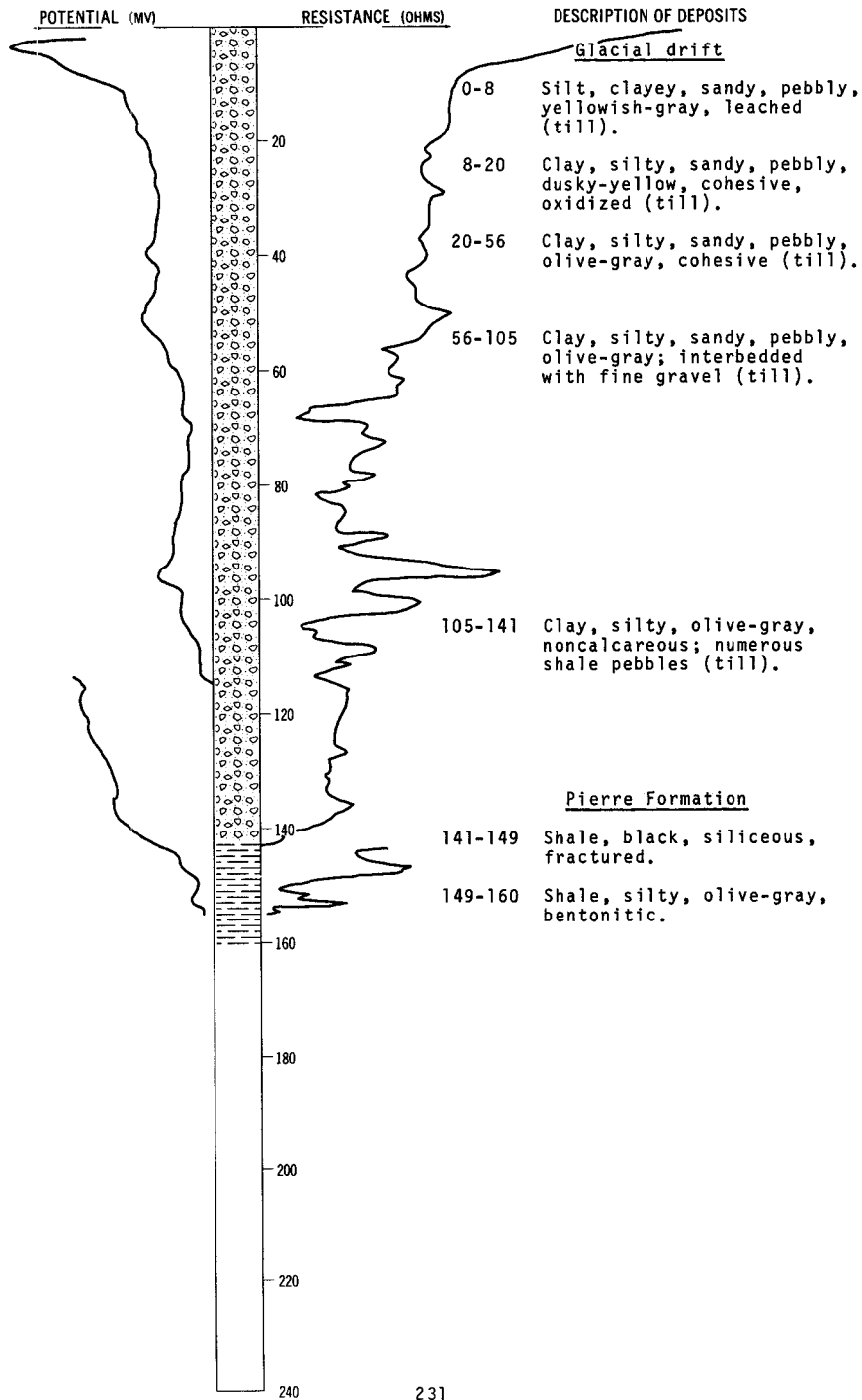
LOCATION: 160-63-24AAA

NDSWC 4134

DATE DRILLED: August 1970

ALTITUDE: 1595
(FT, MSL)

DEPTH: 160
(FT)



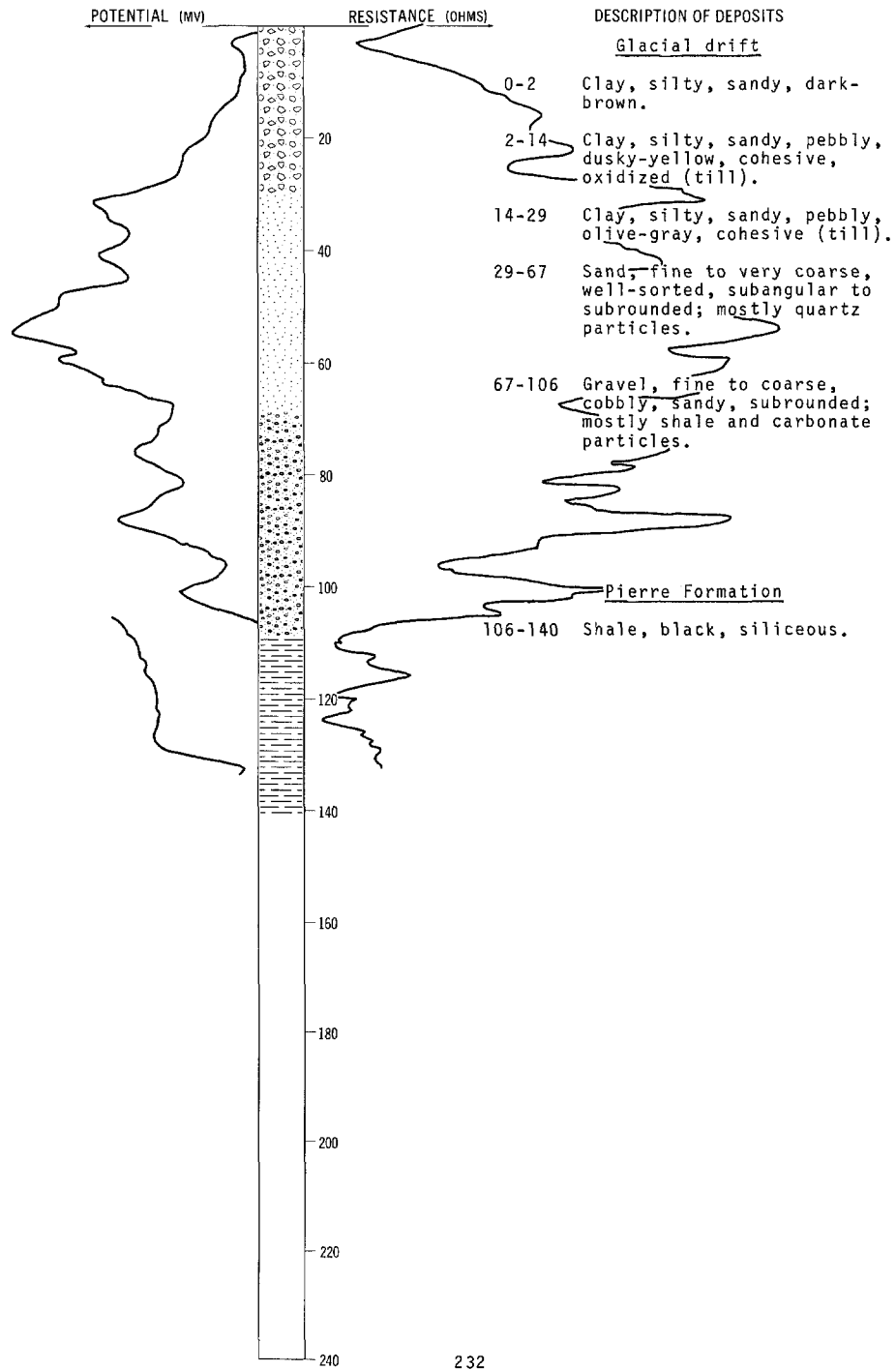
LOCATION: 160-64-1AAB

NDSWC 4137

DATE DRILLED: August 1970

ALTITUDE: 1630
(FT, MSL)

DEPTH: 140
(FT)



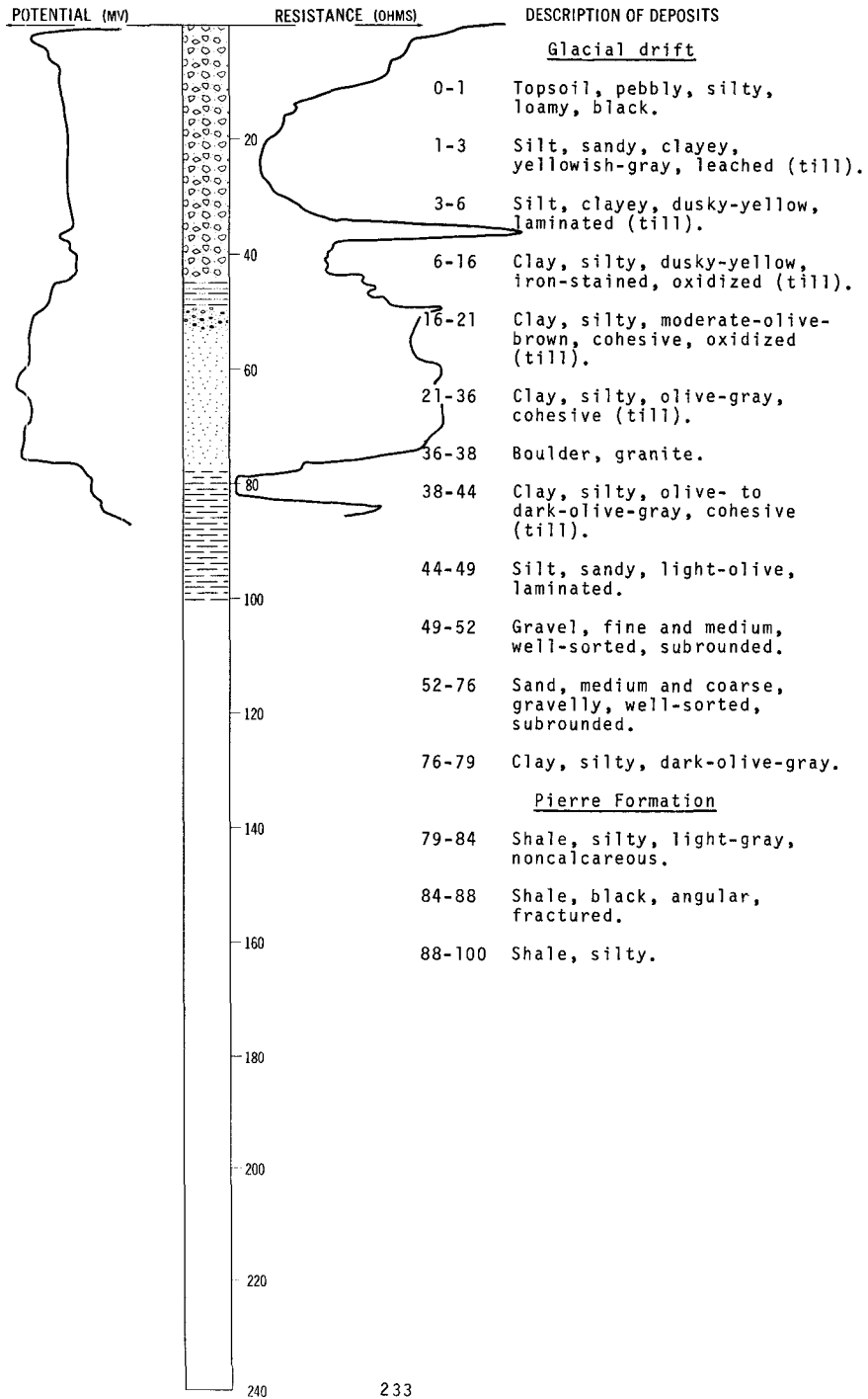
LOCATION: 160-64-1CCC

NDSWC 4262

DATE DRILLED: September 1970

ALTITUDE: 1607
(FT, MSL)

DEPTH: 100
(FT)



160-64-7DBA
(Log from L. A. Gjerdevig)

Altitude: 1600 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	1	1
	Clay, gray and blue-----	4	5
	Clay, yellow-----	21	26
	Clay, blue-----	22	48
	Sand; gravel-----	8	56
	Soapstone-----	24	80
	Sandstone-----	70	150
Pierre Formation:			
	Shale; slate-----	23	173

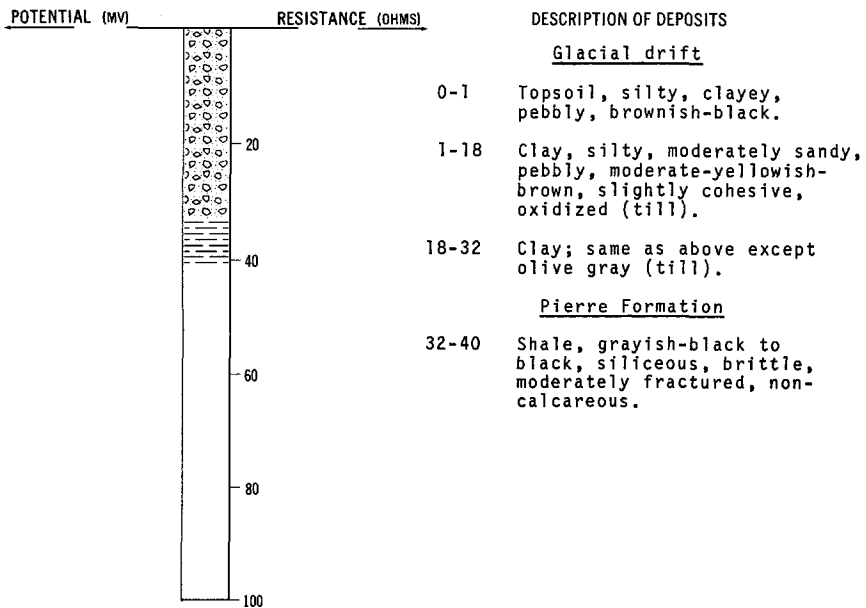
LOCATION: 160-64-8AAA

NDSWC 5971

DATE DRILLED: June 1971

ALTITUDE: 1596
(FT, MSL)

DEPTH: 40
(FT)

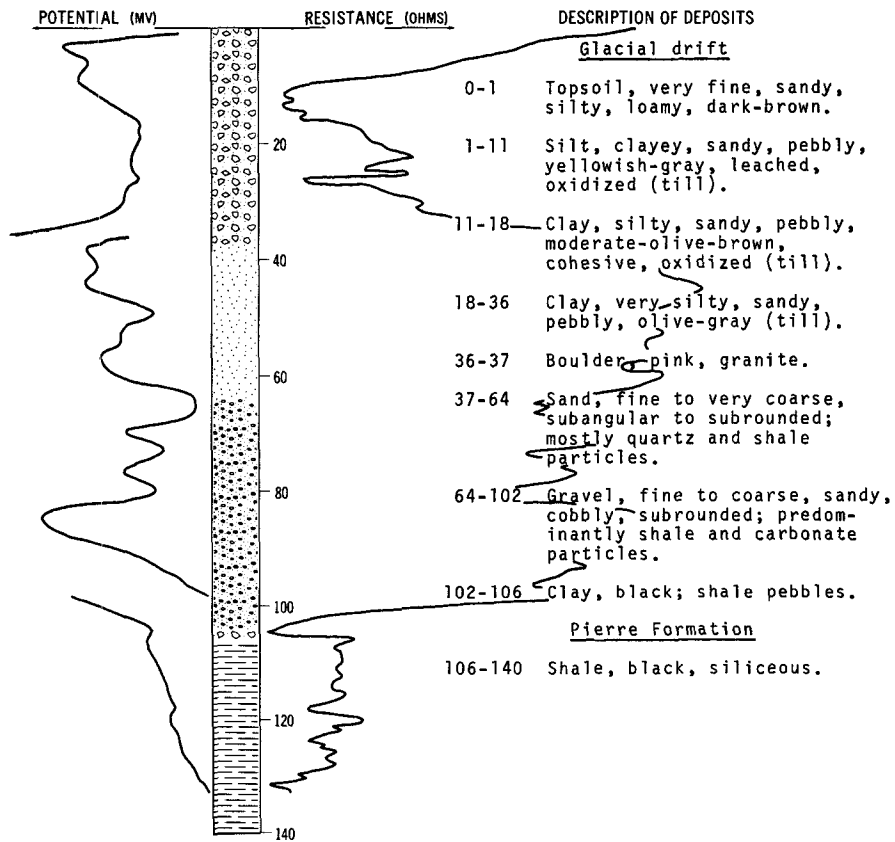


160-64-11BCC
 NDGS Cav-69-29

Altitude: 1599 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	1	1
	Till, pebbly, shaly, moderate-yellowish-brown; about 30 percent shale particles----	19	20
	Till, shaly, slightly sandy, dusky-yellowish-brown; about 50 percent shale particles----	4	24
	Till, pebbly, grayish-black to dark-gray----	13	37
	Boulder-----	-	37

LOCATION: 160-64-11DDD NDSWC 4139 DATE DRILLED: August 1970
 ALTITUDE: 1600 DEPTH: 140
 (FT, MSL) (FT)



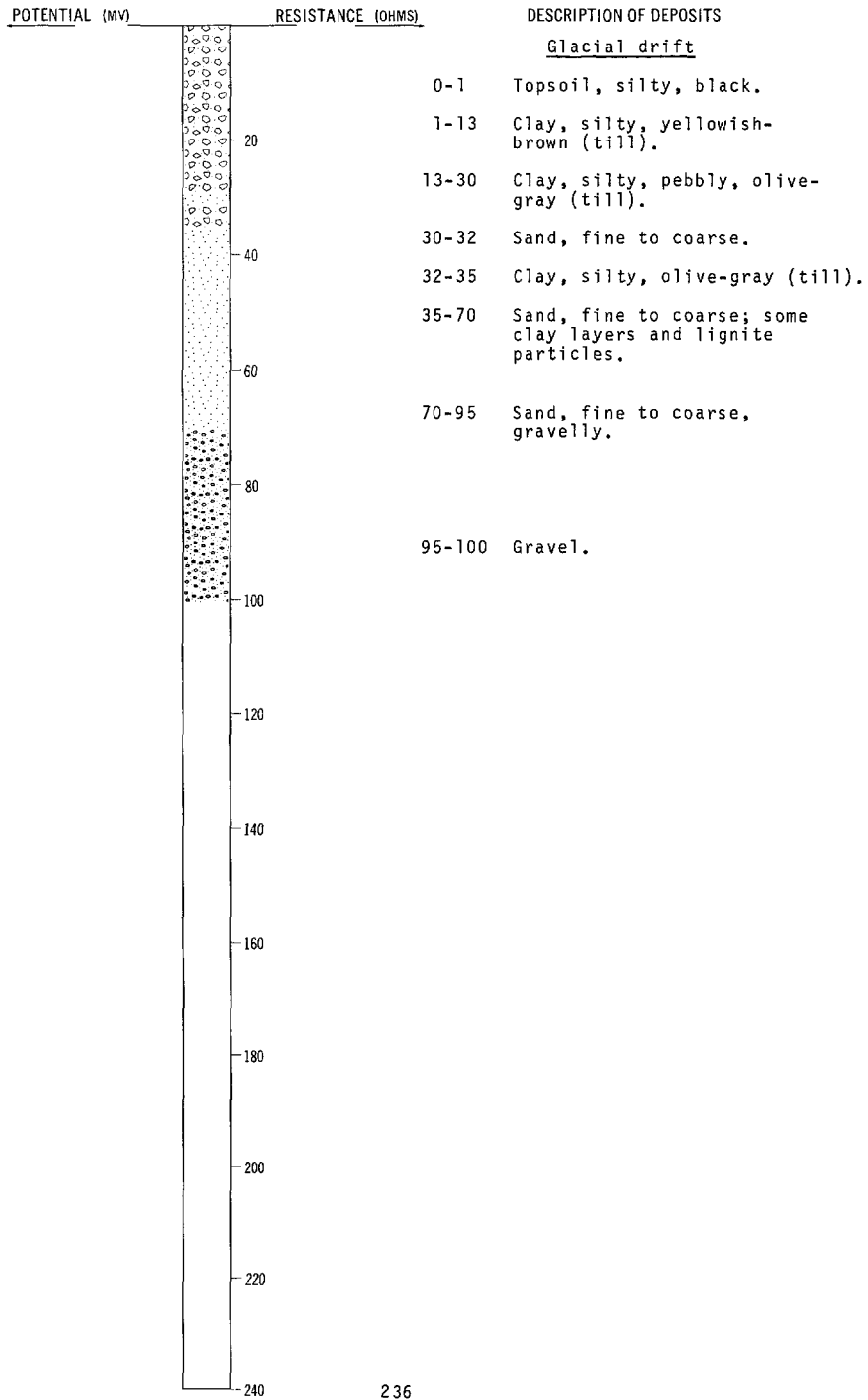
LOCATION: 160-64-15CBB

NDSWC 8039-E

DATE DRILLED: July 1971

ALTITUDE: 1588
(FT, MSL)

DEPTH: 100
(FT)



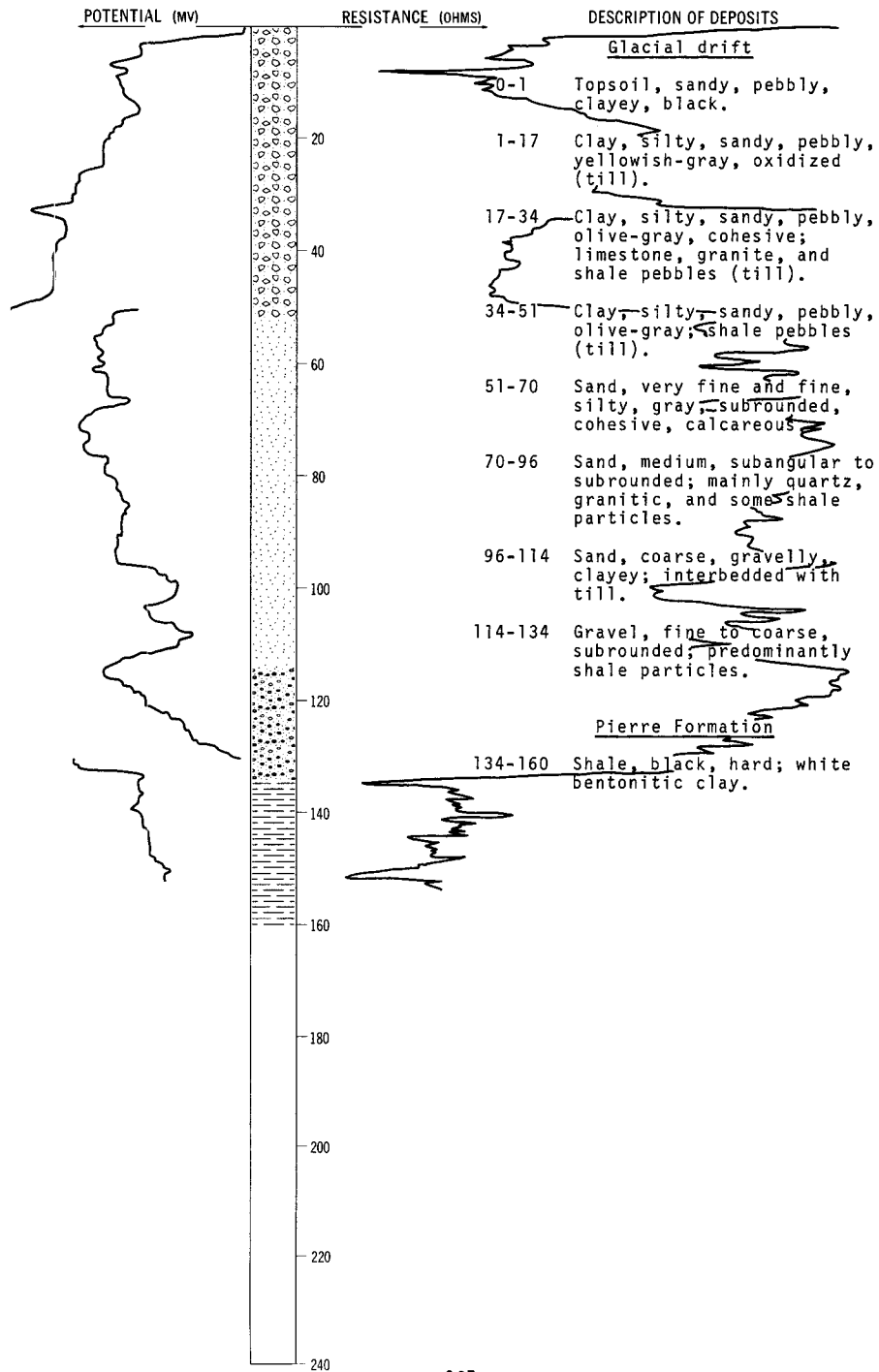
LOCATION: 160-64-15CCC

NDSWC 3792

DATE DRILLED: September 1969

ALTITUDE: 1585
(FT, MSL)

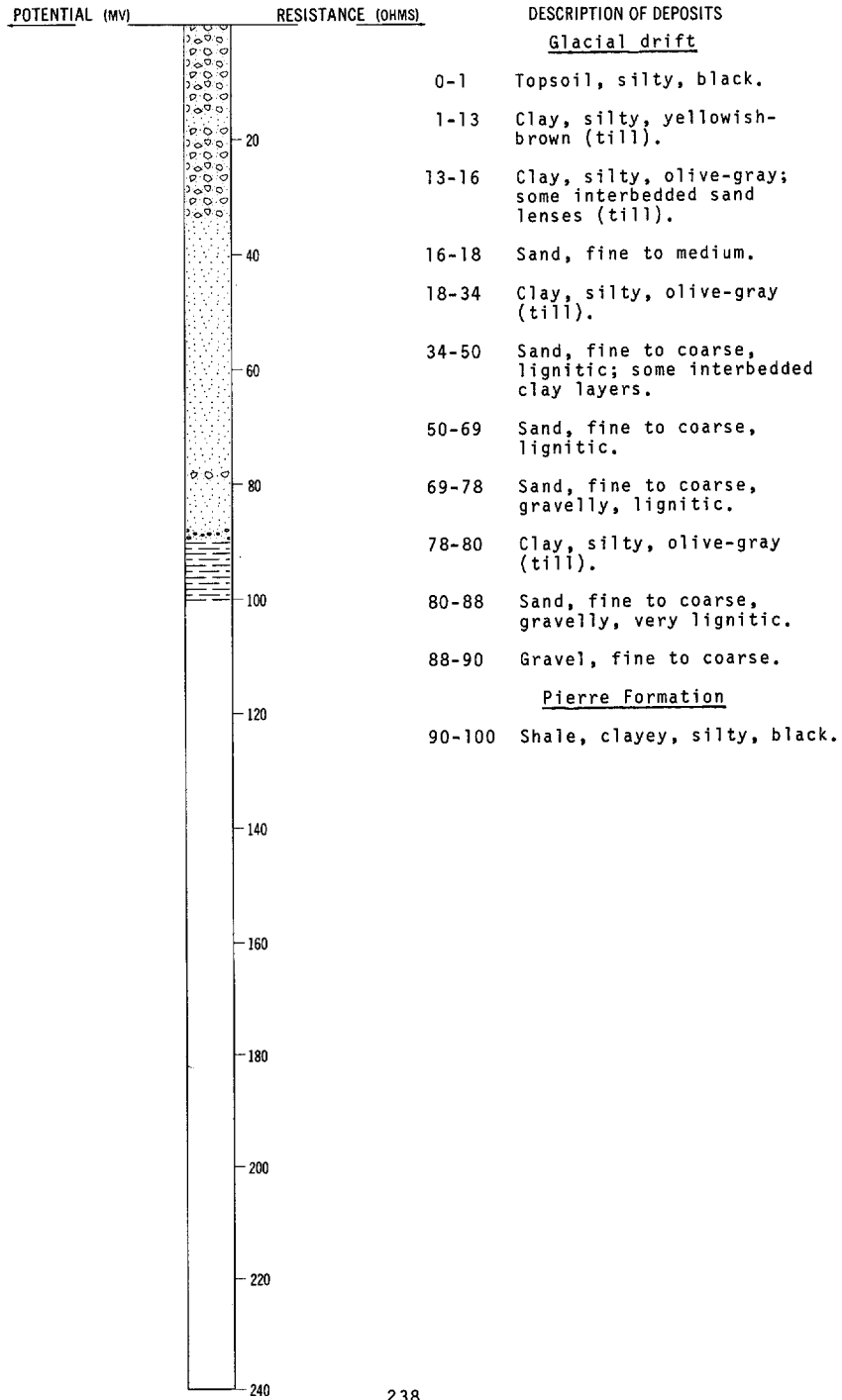
DEPTH: 160
(FT)



LOCATION: 160-64-15CCD
 ALTITUDE: 1588
 (FT, MSL)

NDSWC 8039-B

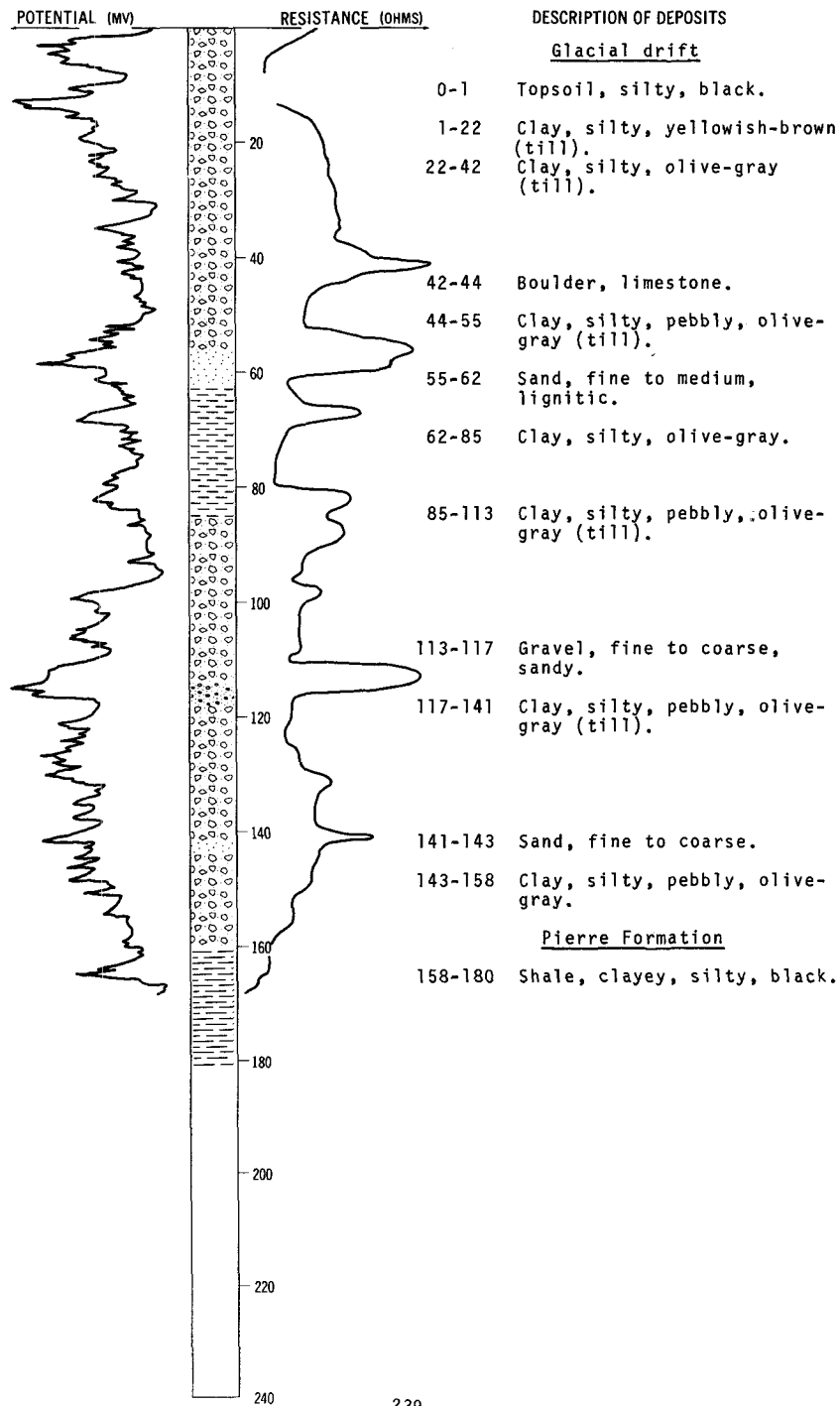
DATE DRILLED: July 1971
 DEPTH: 100
 (FT)



LOCATION: 160-64-15DAA1
ALTITUDE: 1603
(FT, MSL)

NDSWC 8039-F

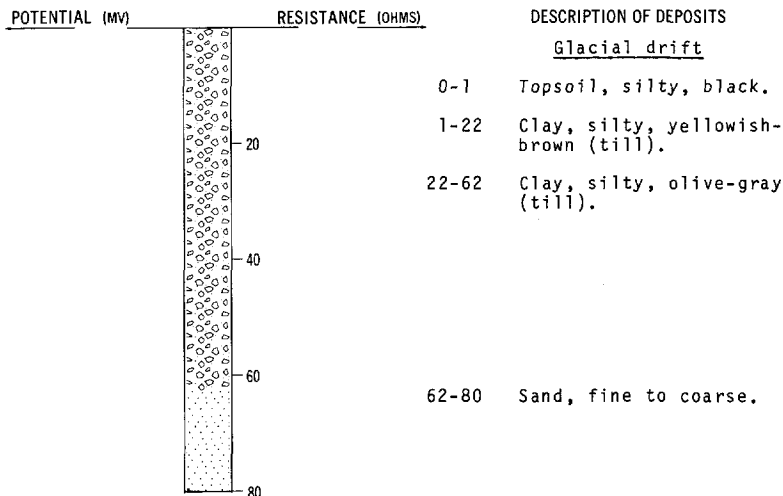
DATE DRILLED: July 1971
DEPTH: 180
(FT)



LOCATION: 160-64-15DAA2
 ALTITUDE: 1603
 (FT, MSL)

NDSWC 8039-G

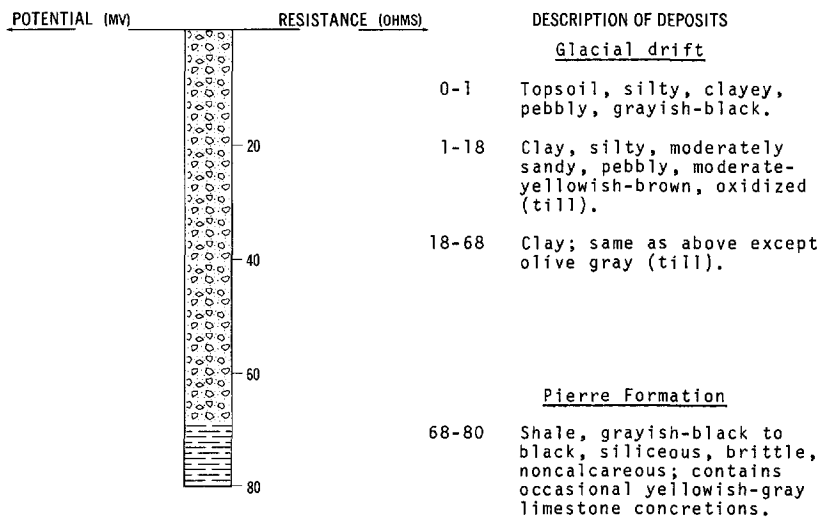
DATE DRILLED: July 1971
 DEPTH: 80
 (FT)



LOCATION: 160-64-16AAA
 ALTITUDE: 1594
 (FT, MSL)

NDSWC 5969

DATE DRILLED: June 1971
 DEPTH: 80
 (FT)



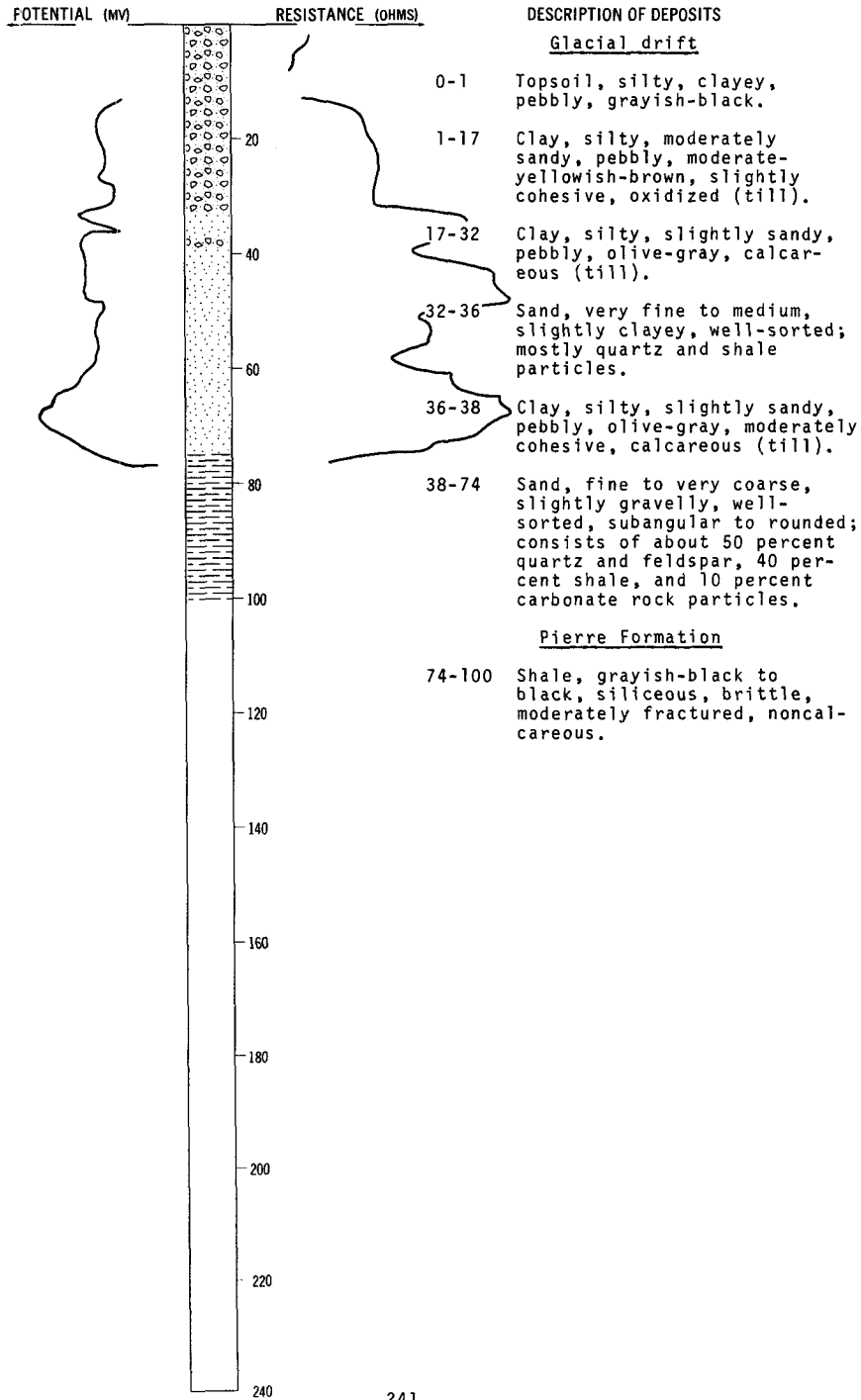
LOCATION: 160-64-16ADD

NDSWC 5970

DATE DRILLED: June 1971

ALTITUDE: 1590
(FT, MSL)

DEPTH: 100
(FT)



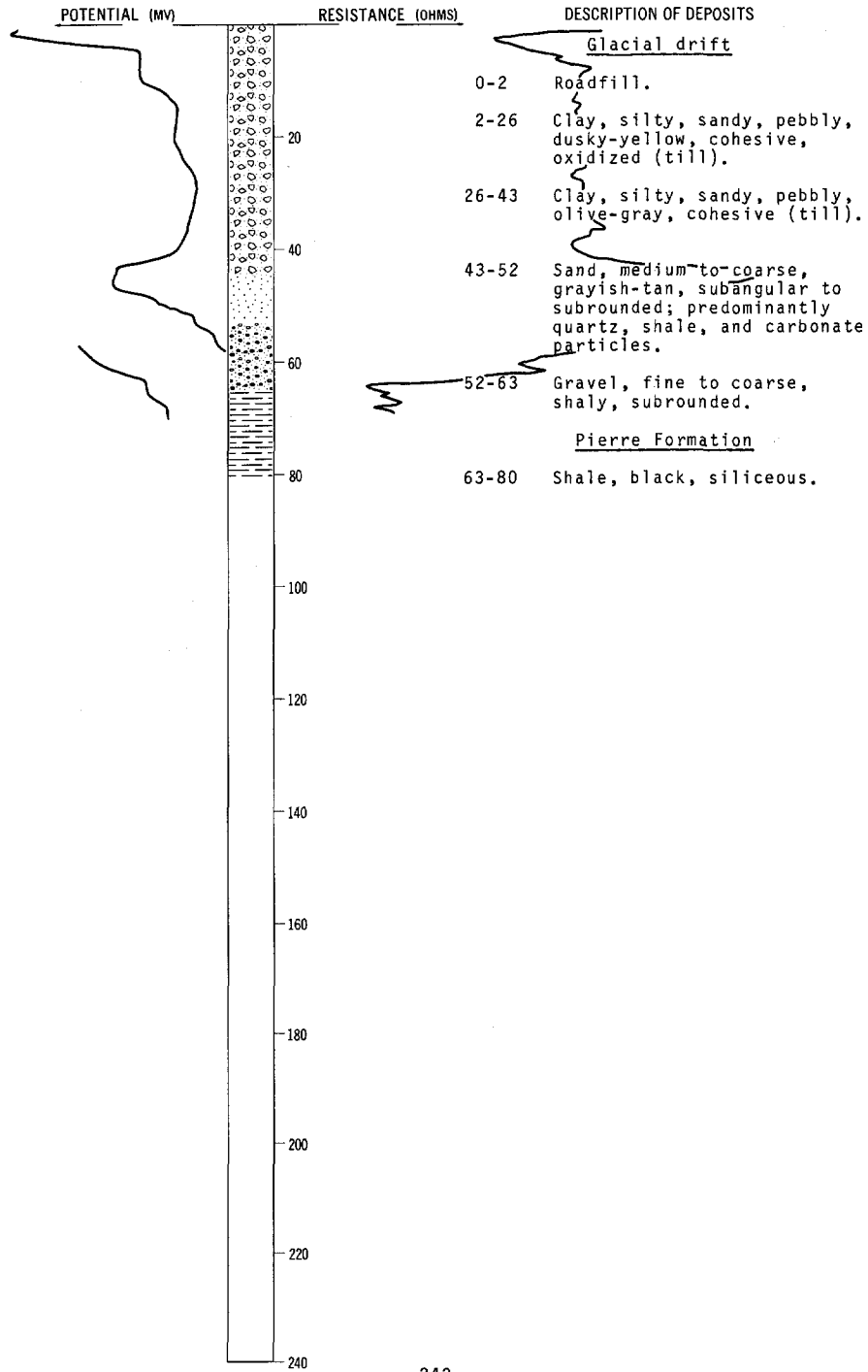
LOCATION: 160-64-17AAA

NDSWC 4142

DATE DRILLED: August 1970

ALTITUDE: 1601
(FT, MSL)

DEPTH: 80
(FT)

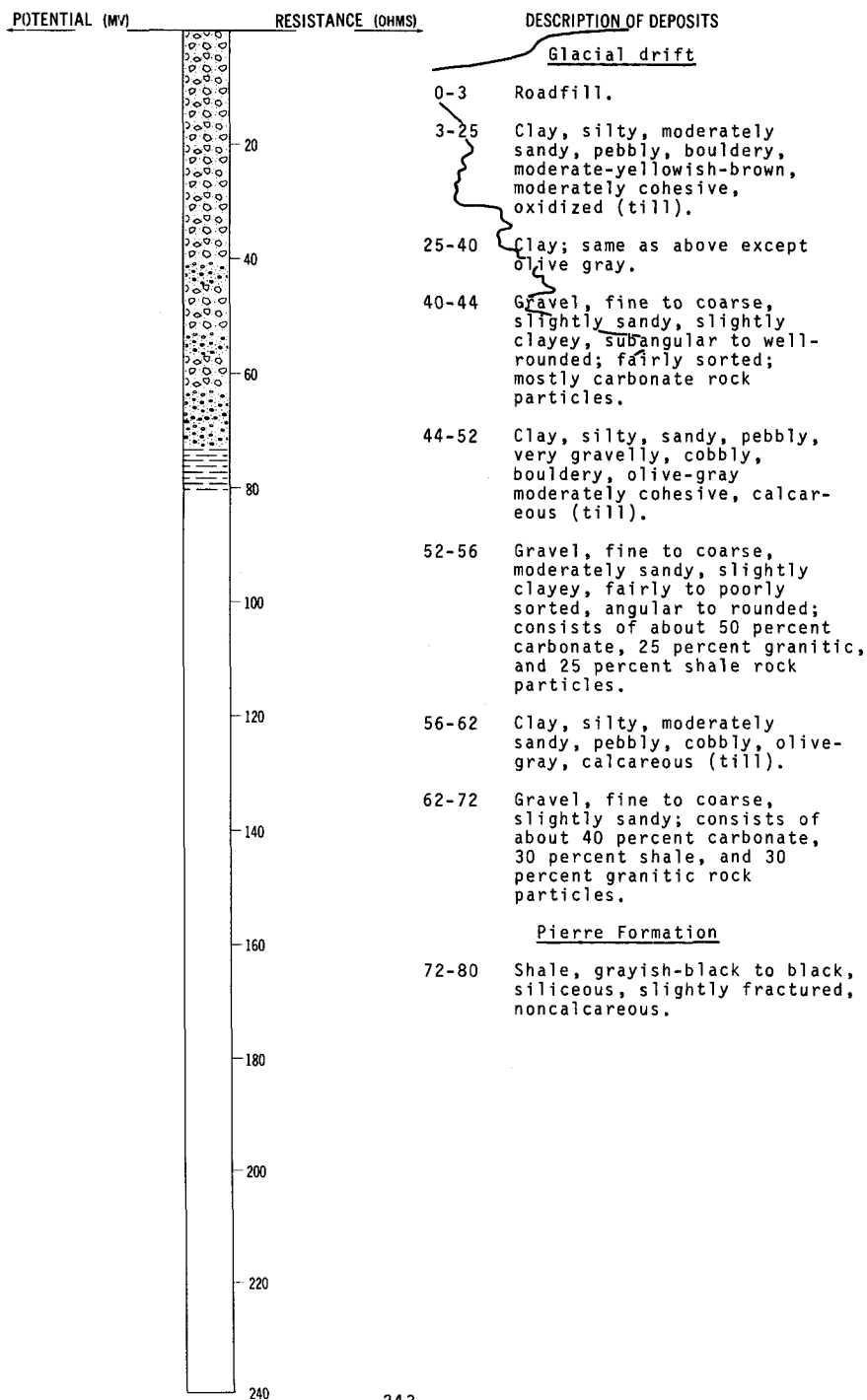


LOCATION: 160-64-20AAB

DATE DRILLED: June 1971

ALTITUDE: 1587
(FT, MSL)

DEPTH: 80
(FT)



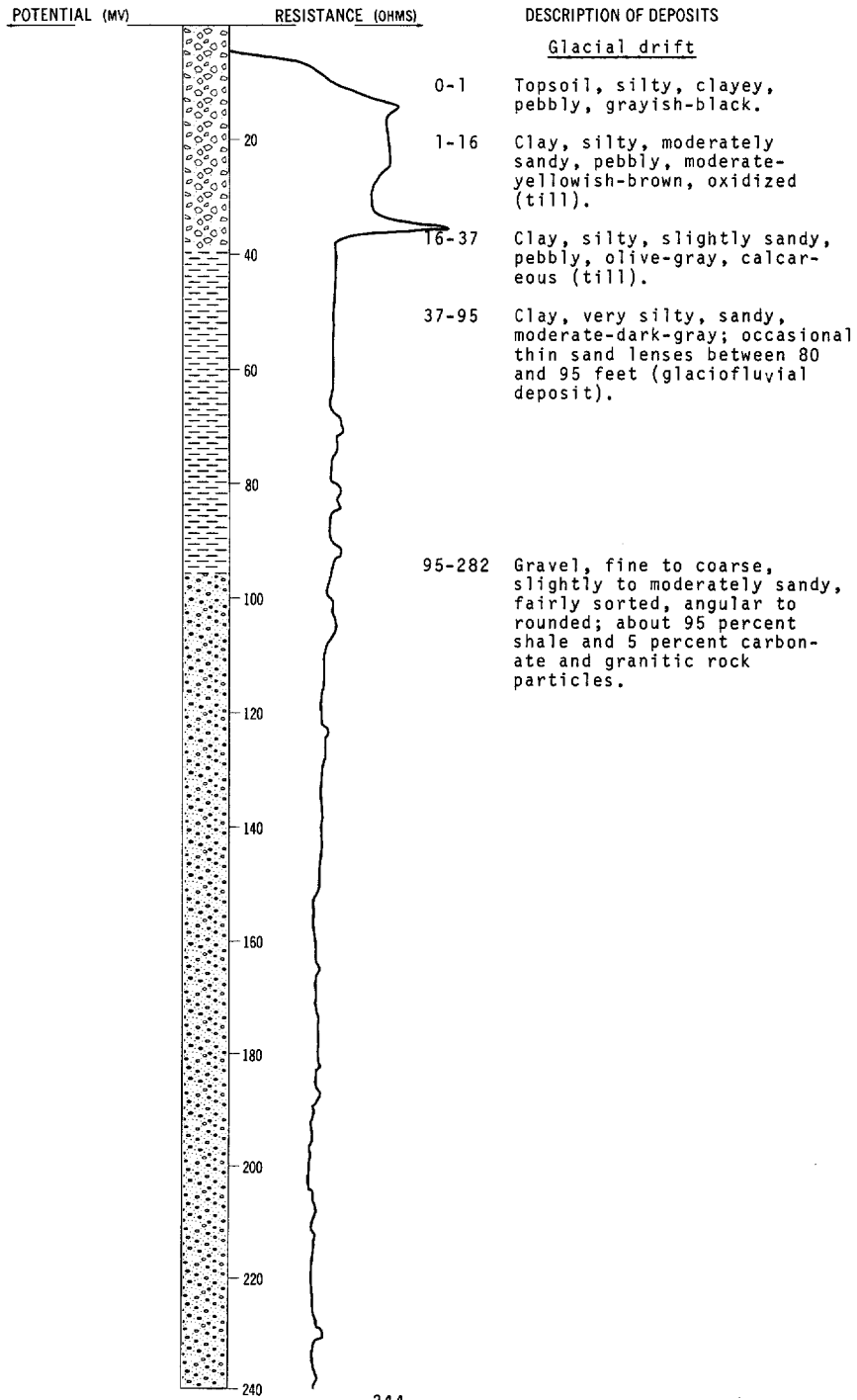
LOCATION: 160-64-21AAB1

NDSWC 8039-C

DATE DRILLED: July 1971

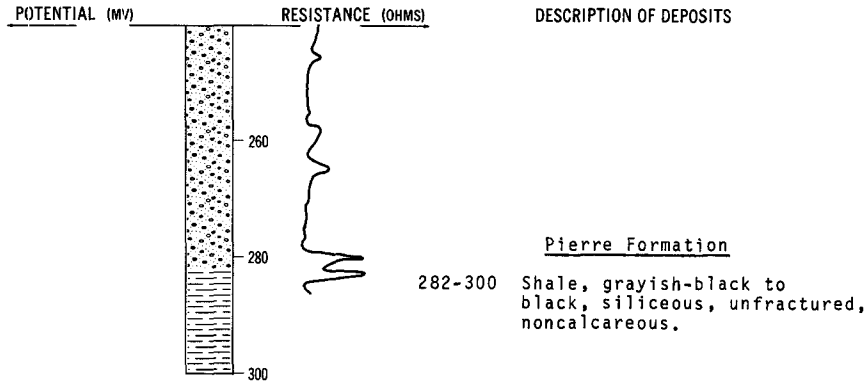
ALTITUDE: 1587
(FT, MSL)

DEPTH: 300
(FT)



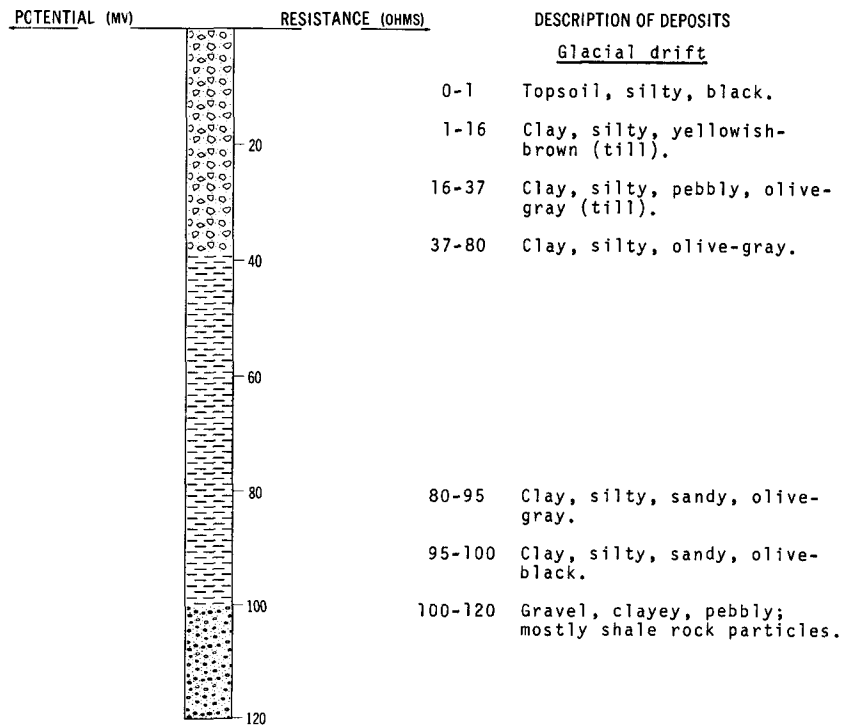
NDSWC 8039-C, Continued
 LOCATION: 160-64-21AAB1
 ALTITUDE: 1587
 (FT, MSL)

DATE DRILLED: July 1971
 DEPTH: 300
 (FT)



NDSWC 8039-D
 LOCATION: 160-64-21AAB2
 ALTITUDE: 1587
 (FT, MSL)

DATE DRILLED: July 1971
 DEPTH: 120
 (FT)



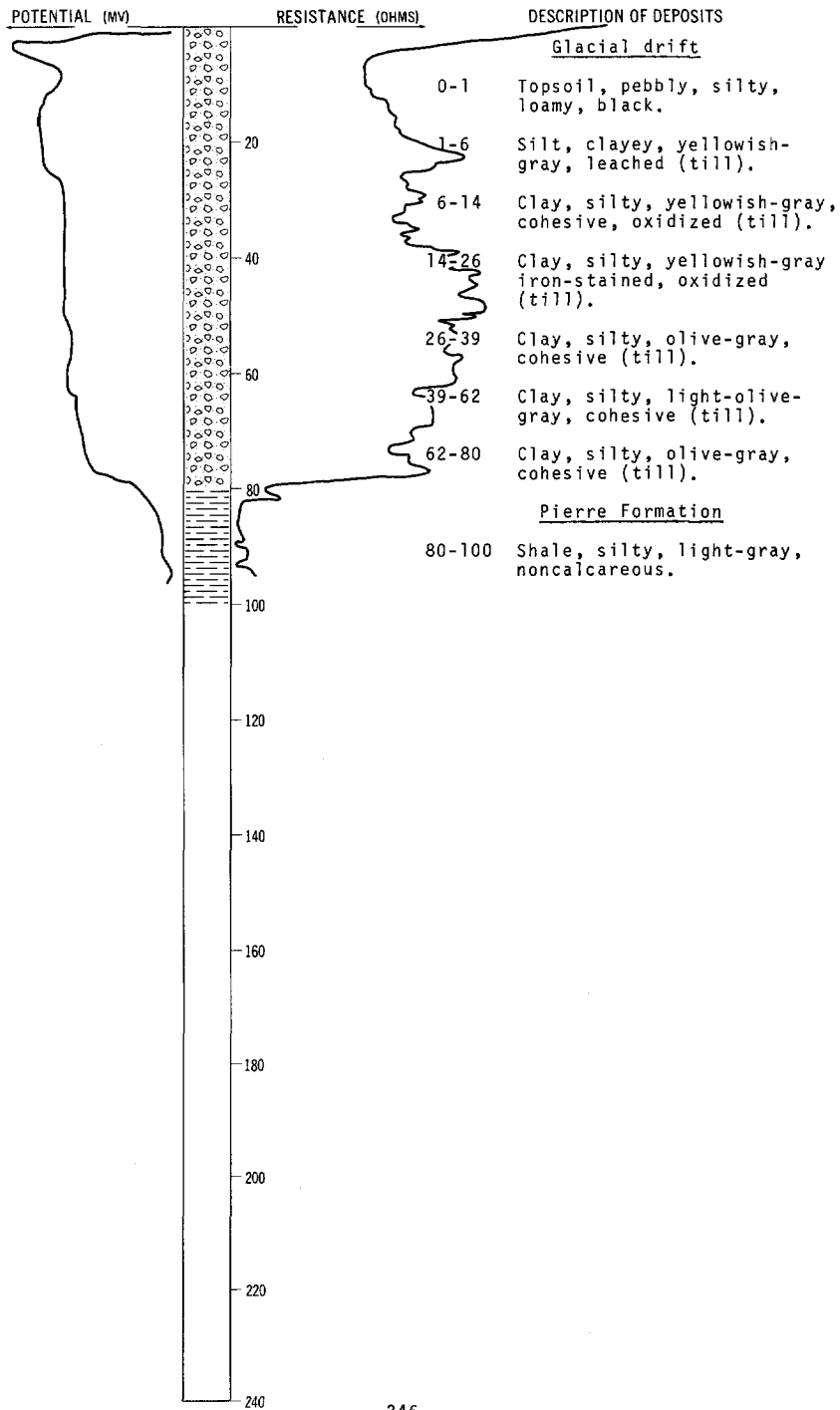
LOCATION: 160-64-22ADD

NDSWC 4264

DATE DRILLED: September 1970

ALTITUDE: 1598
(FT, MSL)

DEPTH: 100
(FT)



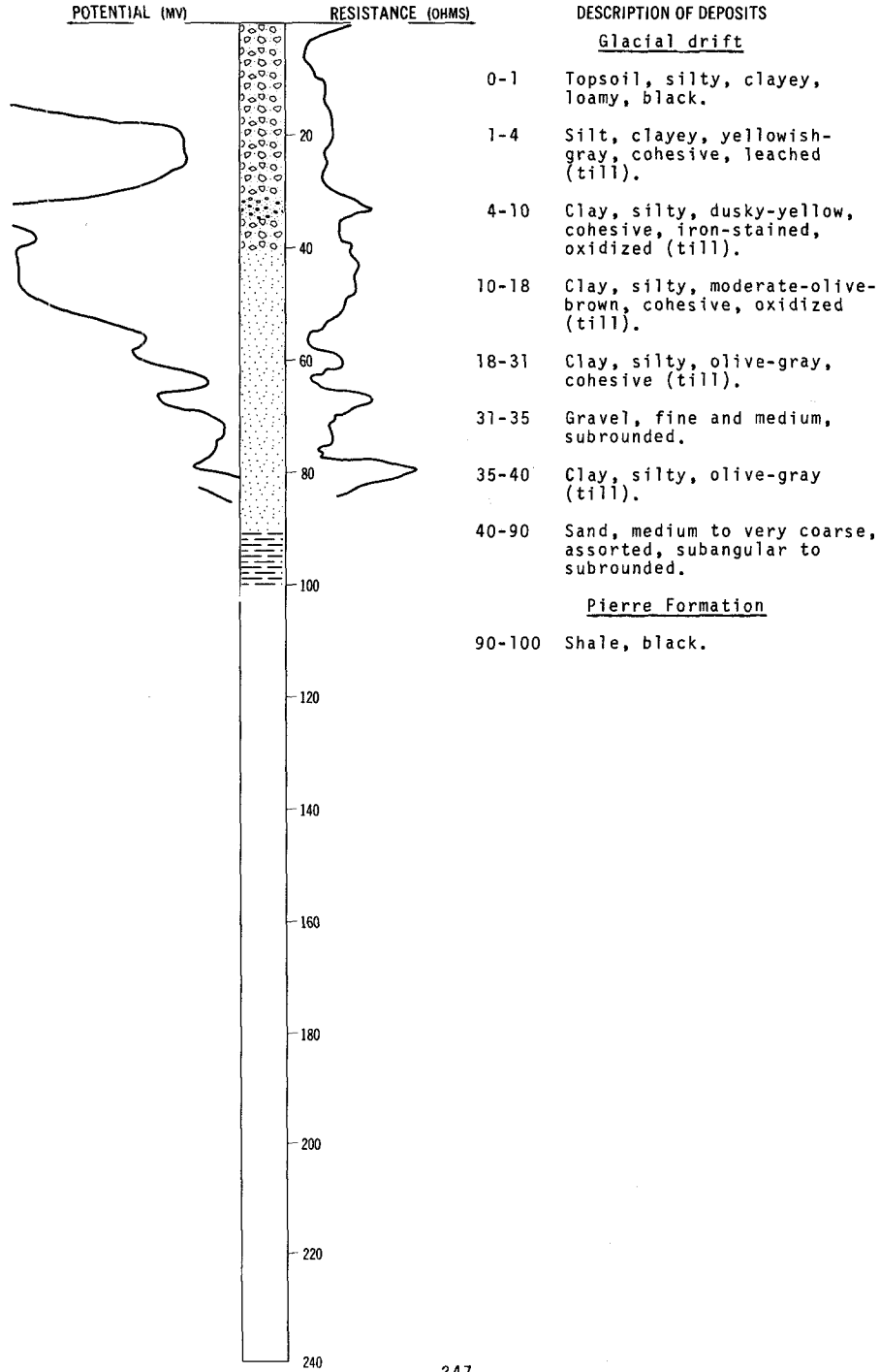
LOCATION: 160-64-22BAB

NDSWC 4263

DATE DRILLED: September 1970

ALTITUDE: 1588
(FT, MSL)

DEPTH: 100
(FT)



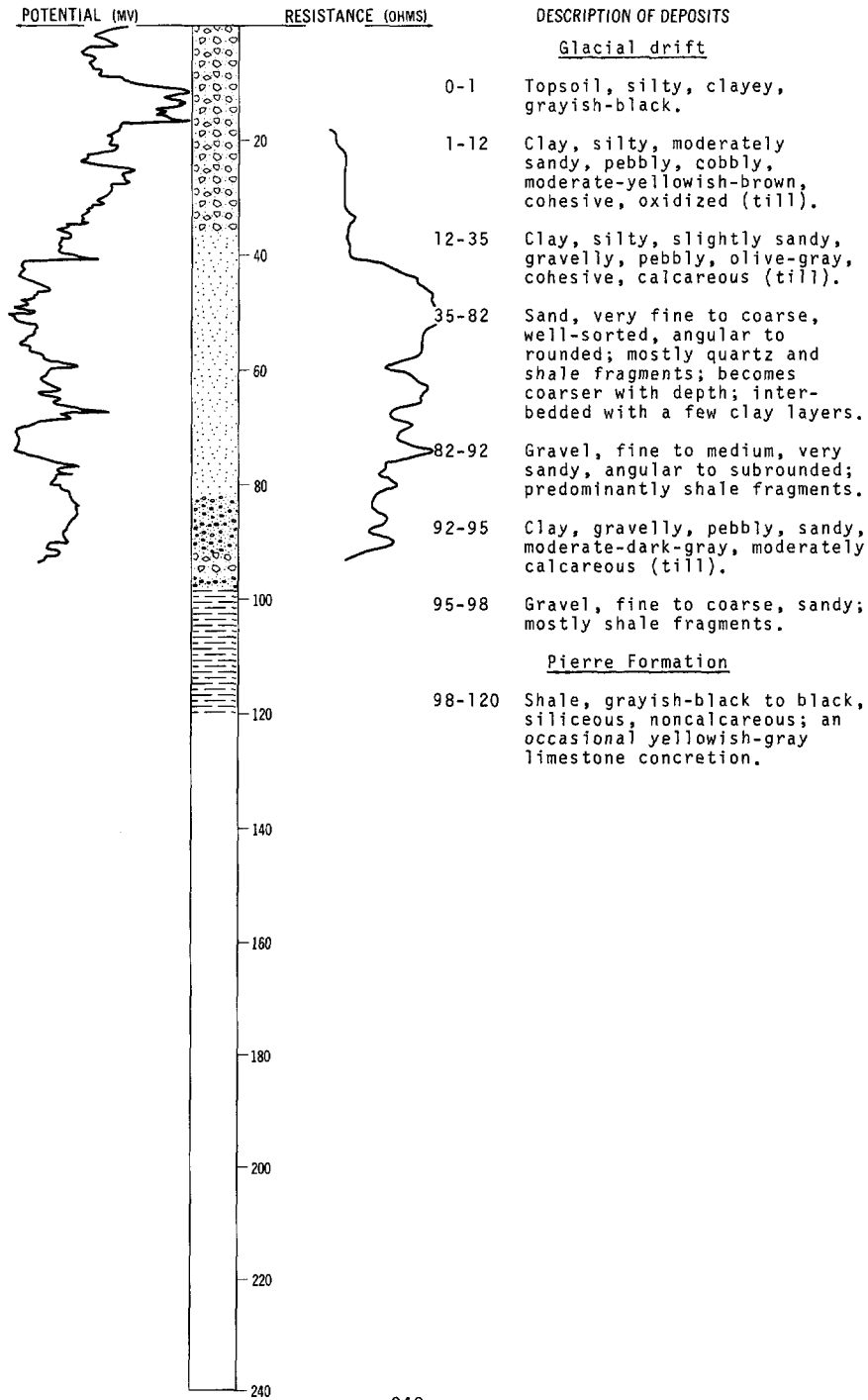
LOCATION: 160-64-22BBA1

NDSWC 8039

DATE DRILLED: July 1971

ALTITUDE: 1587
(FT, MSL)

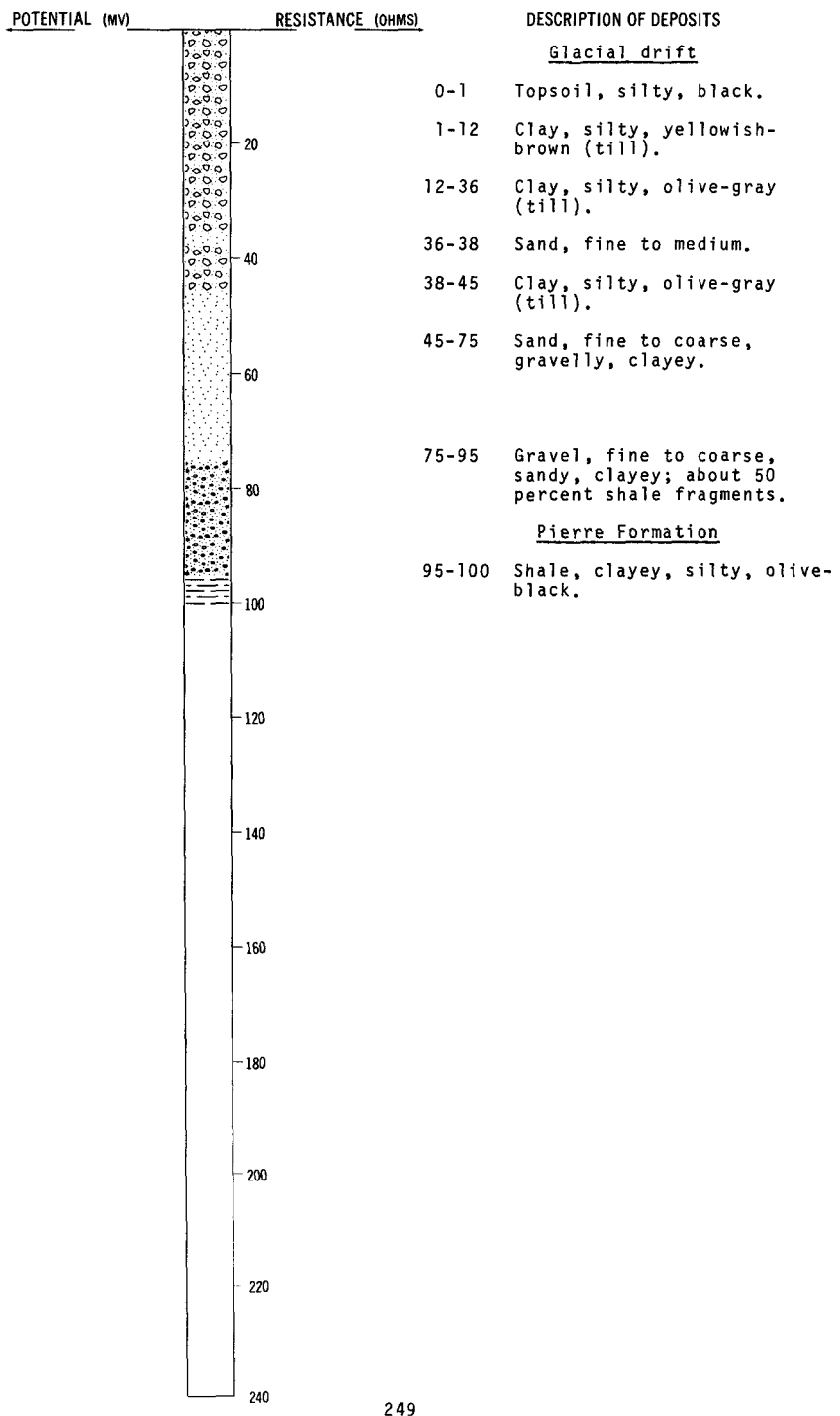
DEPTH: 120
(FT)



LOCATION: 160-64-22BBA2
 ALTITUDE: 1586
 (FT, MSL)

NDSWC 8039-A

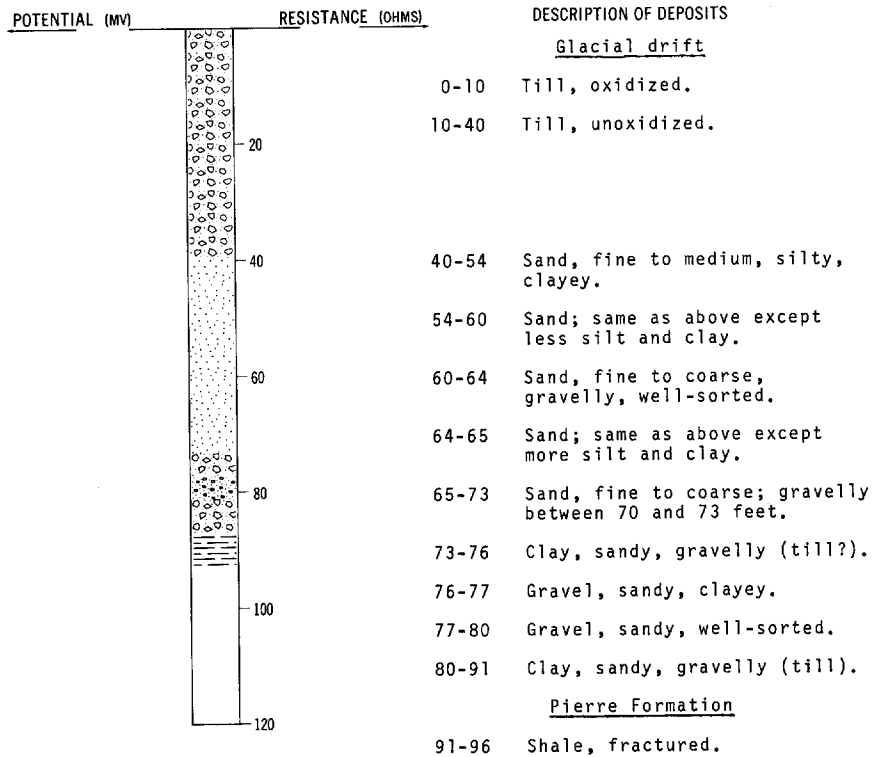
DATE DRILLED: July 1977
 DEPTH: 100
 (FT)



LOCATION: 160-64-22BBA3
 ALTITUDE: 1589
 (FT, MSL)

NDSWC PW

DATE DRILLED: July 1971
 DEPTH: 96
 (FT)



160-64-23DAA
 NDGS Cav-69-31

Altitude: 1592 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	3	3
	Till, shaly, pebbly, dark-yellowish-brown; about 50 percent shale particles-----	19	22
	Till, shaly, dusky-yellowish-brown-----	3	25
	Till, silty, pebbly, dark-gray-----	5	30
	Till, silty, pebbly; mostly granite and limestone pebbles-----	10	40
	Till, silty, clayey, pebbly, dark-gray-----	3	43
	Clay, pebbly, saturated-----	3	46
	Clay, silty, pebbly, black, dense-----	-	46

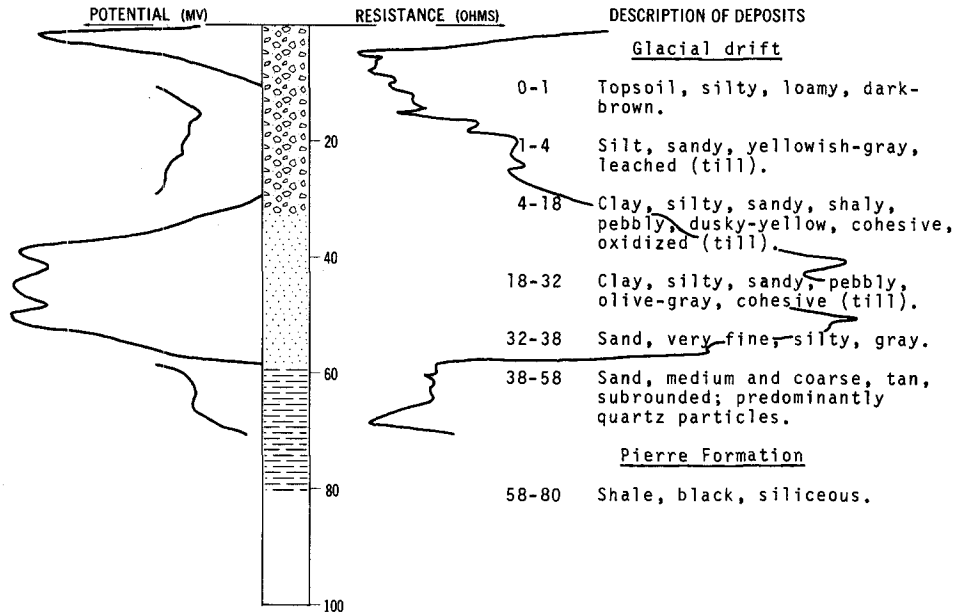
LOCATION: 160-64-27AAA

NDSWC 4140

DATE DRILLED: August 1970

ALTITUDE: 1584
(FT, MSL)

DEPTH: 80
(FT)



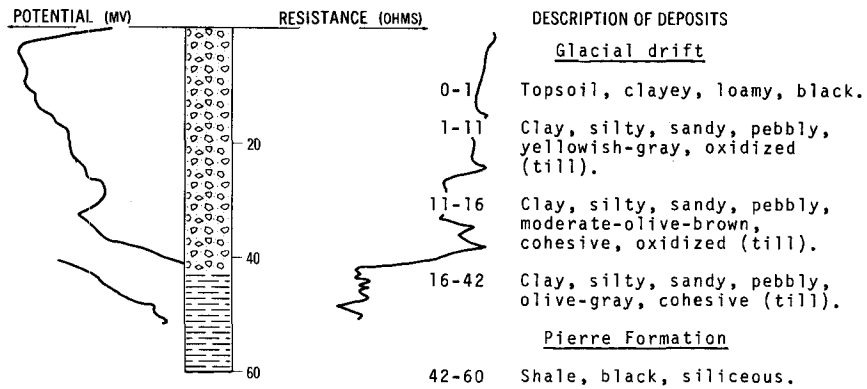
LOCATION: 160-64-28BBB

NDSWC 4141

DATE DRILLED: August 1970

ALTITUDE: 1573
(FT, MSL)

DEPTH: 60
(FT)



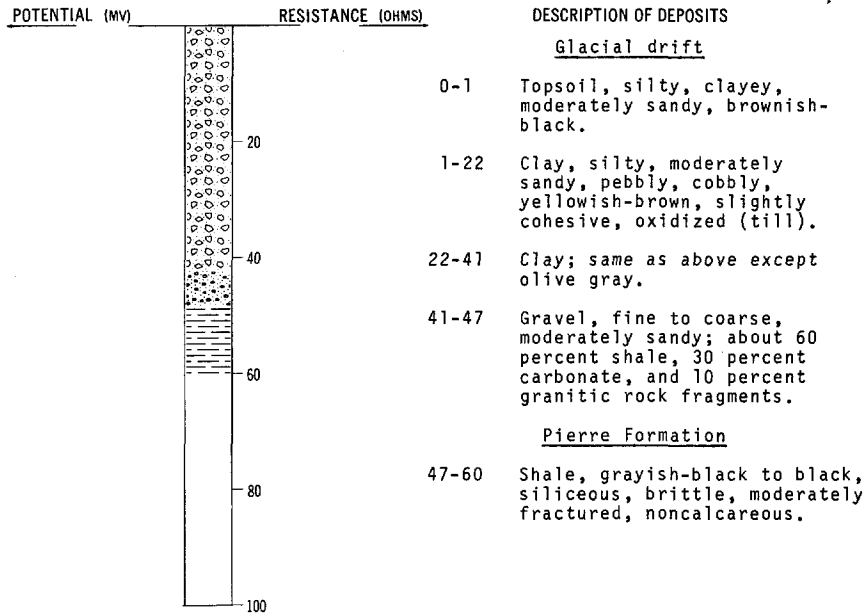
NDSWC 5968

LOCATION: 160-64-30AAA

DATE DRILLED: June 1971

ALTITUDE: 1563
(FT. MSU)

DEPTH: 60
(FT)



160-64-32DDD
NDGS Cav-69-32

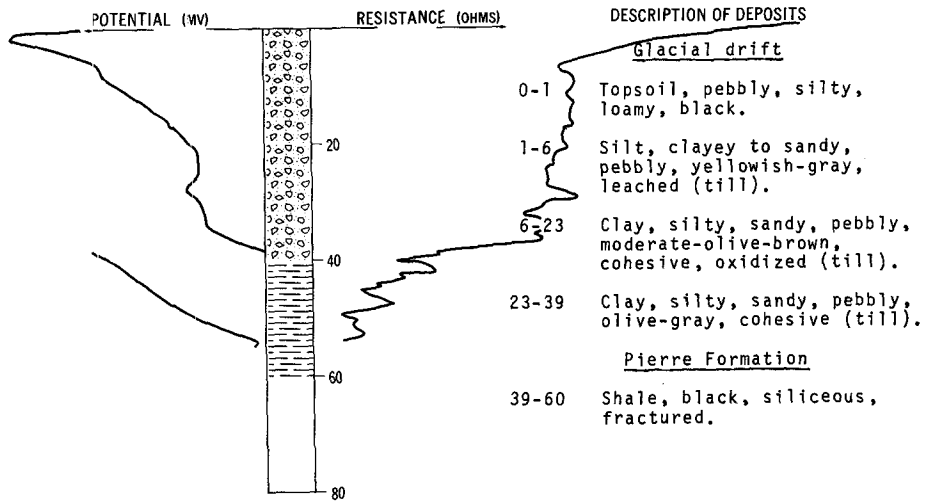
Altitude: 1552 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	1	1
	Till, shaly, pebbly, slightly sandy, dark-yellowish-brown; about 40 percent shale particles-----	10	11
	Sand, gravelly, clayey, saturated-----	2	13
	Till, pebbly, dark-gray-----	1	14

LOCATION: 160-64-33AAA
 ALTITUDE: 1580
 (FT, MSL)

NDSWC 4124

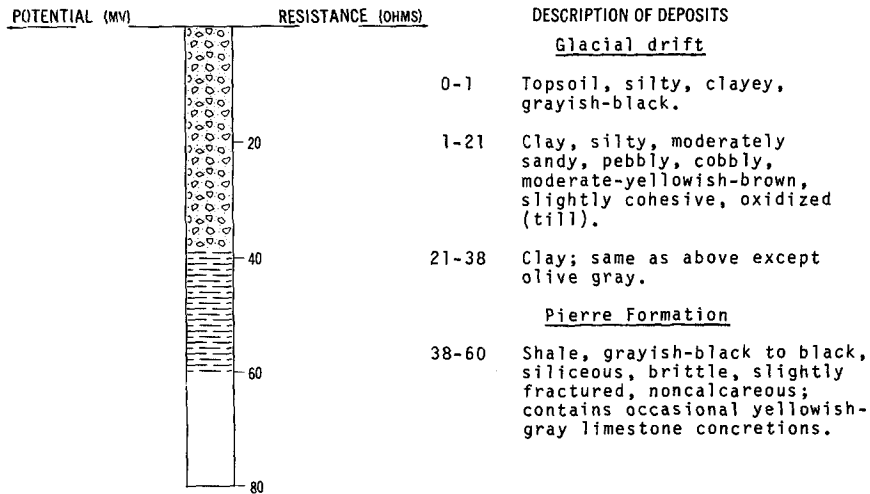
DATE DRILLED: August 1970
 DEPTH: 60
 (FT)



LOCATION: 160-64-35AAA
 ALTITUDE: 1584
 (FT, MSL)

NDSWC 5967

DATE DRILLED: June 1971
 DEPTH: 60
 (FT)



161-50-7BBA
(Log from Minnesota Highway Department)

Altitude: 868 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, brown-----	15	15
	Clay, silty, gray-----	37.5	52.5
	Clay, gray-----	64	116.5
	Loam, clayey, gray (till)-----	17	133.5
	Sand, fine, gravelly, gray to brown-----	6.5	140
	Clay, silty, sandy, gray, very firm (till)---	2.5	142.5
	Sand, fine, clayey, silty, gray, very firm---	5.5	148
	Till, clayey, gravelly, bouldery-----	3	151
	Sand, very fine to coarse, gravelly, clayey, gray-----	2.5	153.5
	Clay, silty, sandy, gravelly, bouldery (till)-----	69.5	223
	Till, sandy-----	12	235
	Shale(?), plastic-----	4	239
	Limestone, white, soft, porous, cherty; becomes harder from 265 to 275-----	36	275

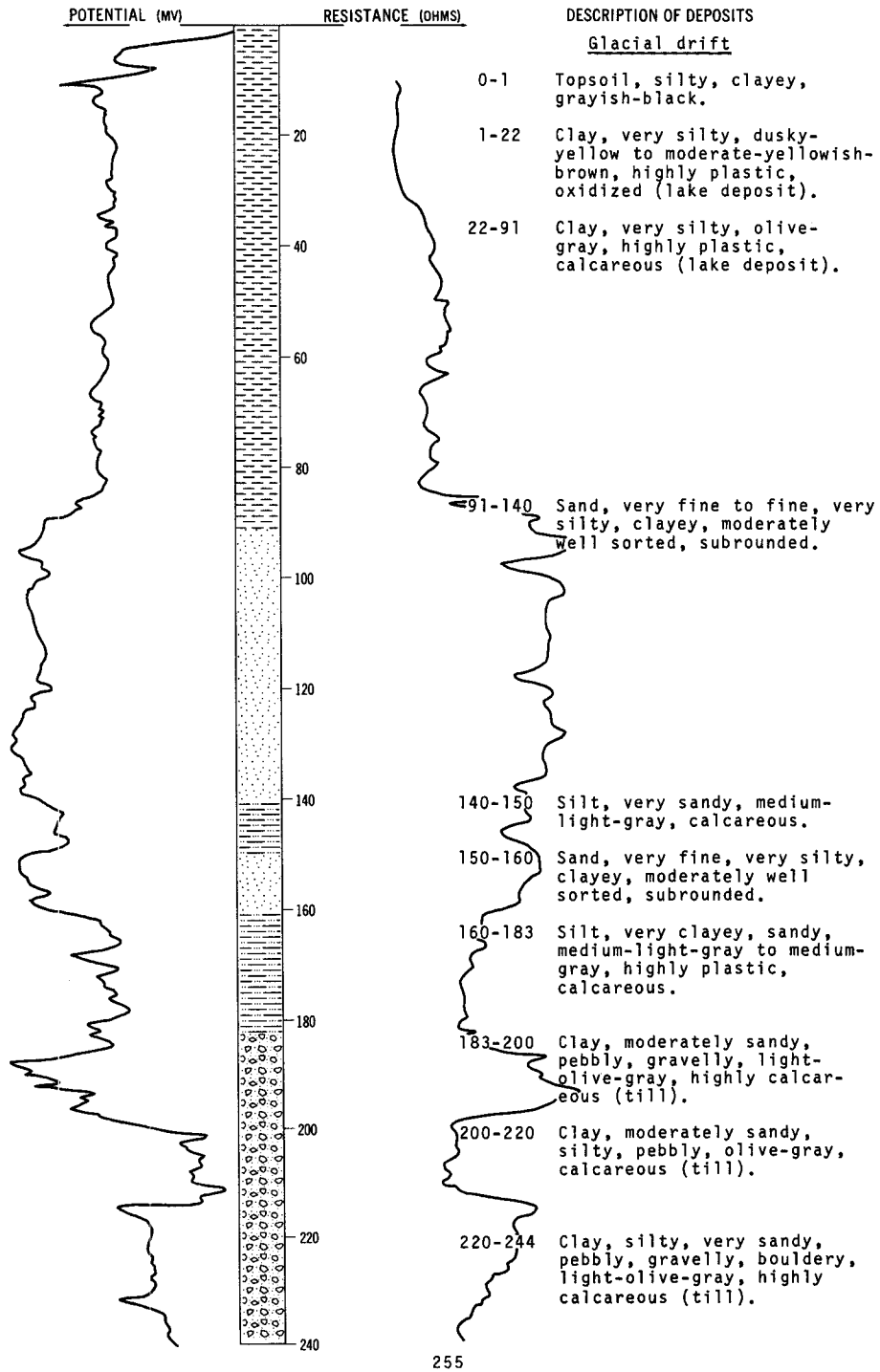
LOCATION: 161-52-7DDD

NDSWC 5939

DATE DRILLED: May 1971

ALTITUDE: 815
(FT, MSL)

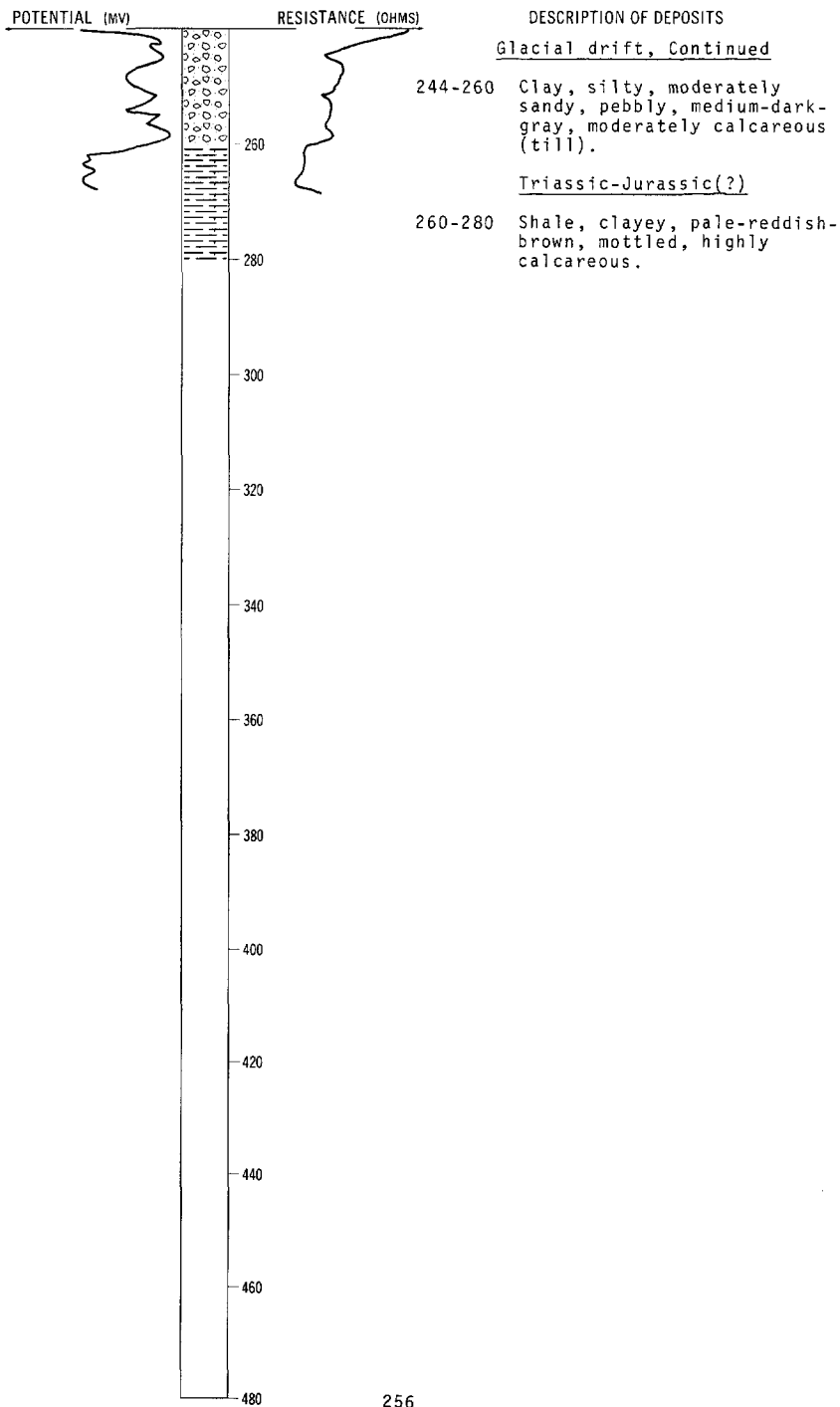
DEPTH: 280
(FT)



LOCATION: 161-52-7DDD
ALTITUDE: 815
(FT, MSL)

NDSWC 5939, Continued

DATE DRILLED: May 1971
DEPTH: 280
(FT)



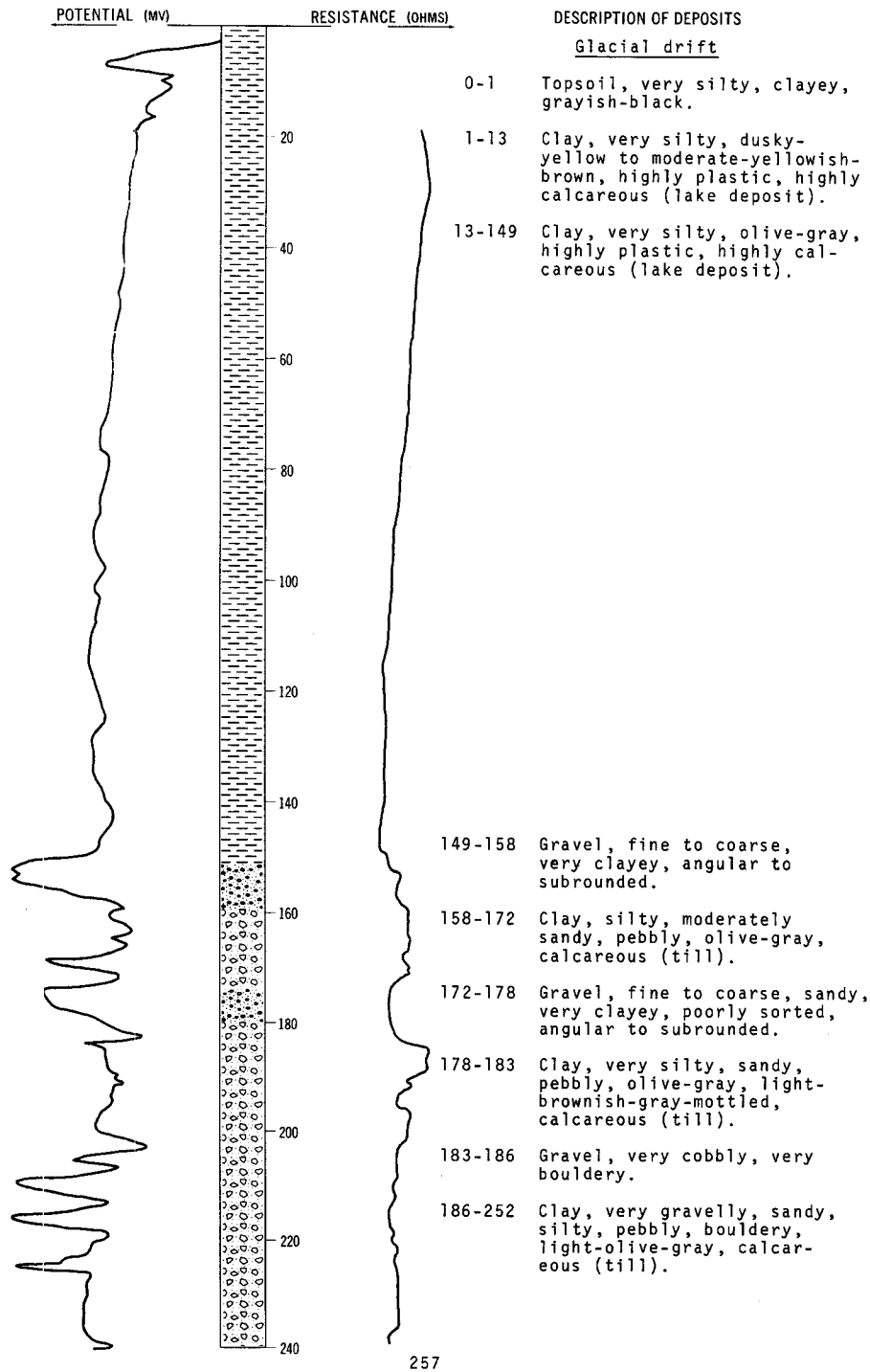
LOCATION: 161-52-24 DAD

NDSWC 5943

DATE DRILLED: May 1971

ALTITUDE: 803
(FT, MSL)

DEPTH: 280
(FT)



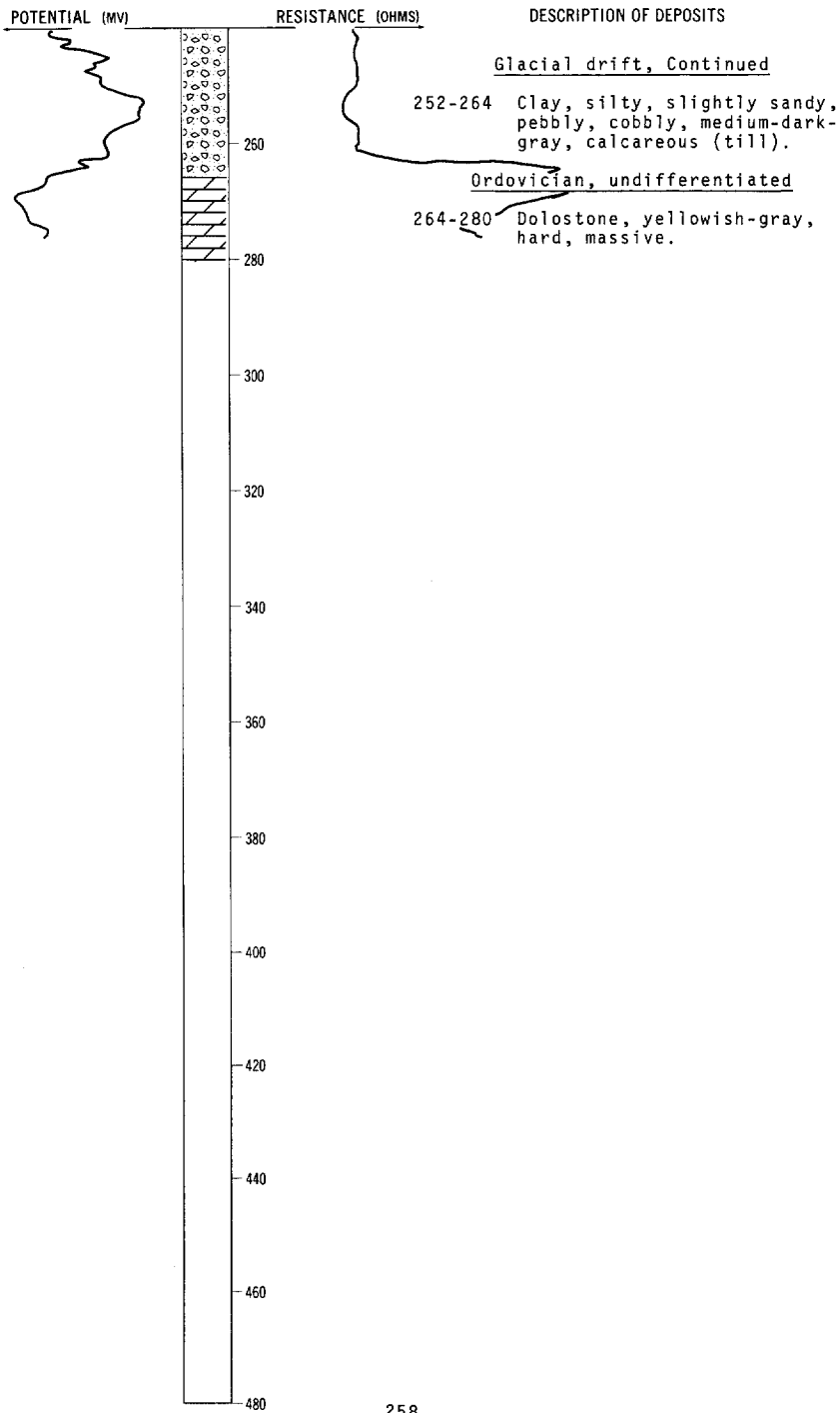
NDSWC 5943, Continued

LOCATION: 161-52-24DAD

DATE DRILLED: May 1971

ALTITUDE: 803
(FT, MSL)

DEPTH: 280
(FT)



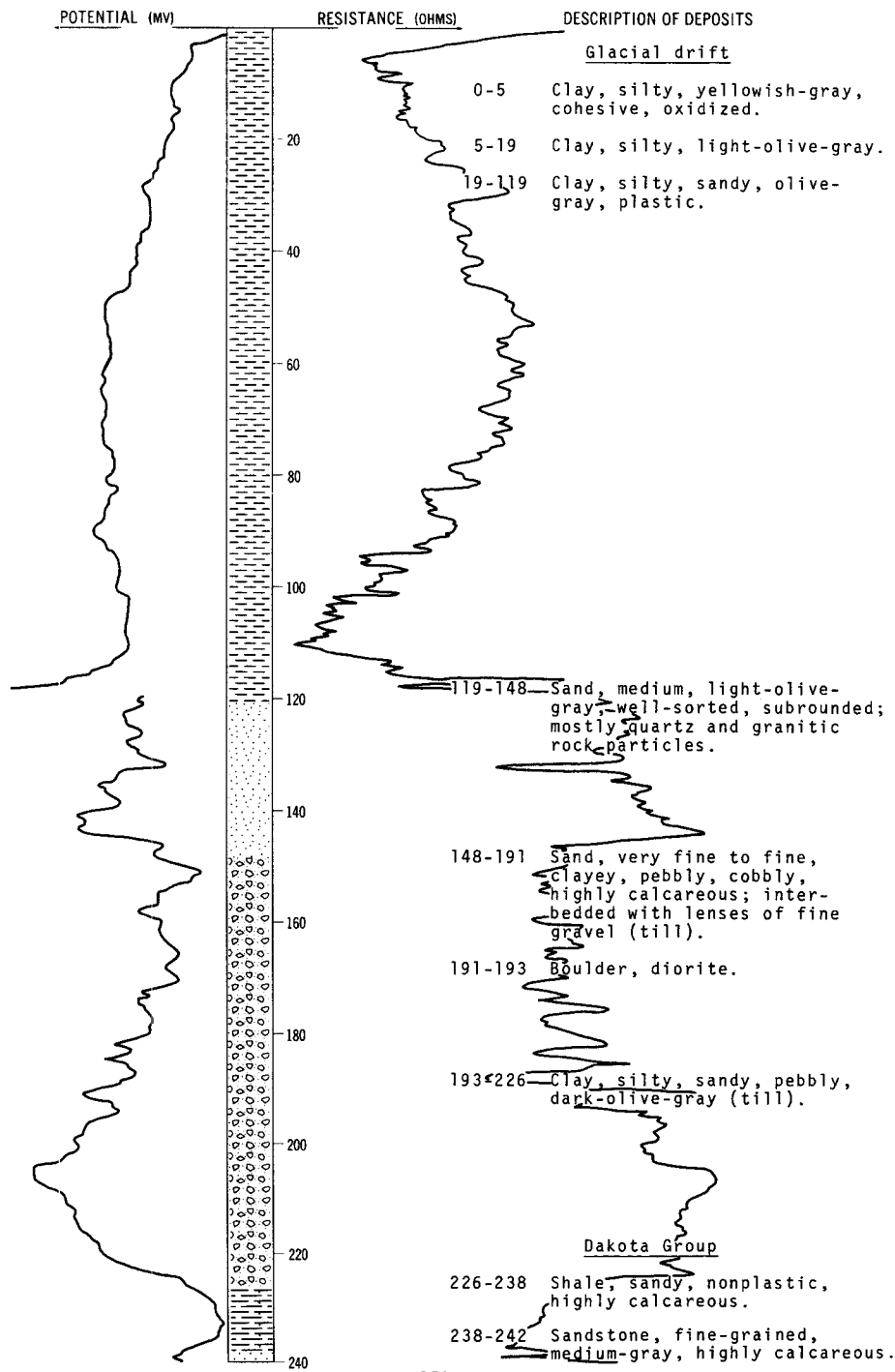
LOCATION: 161-53-2AAA

NDSWC 3858

DATE DRILLED: October 1969

ALTITUDE: 821
(FT, MSL)

DEPTH: 260
(FT)



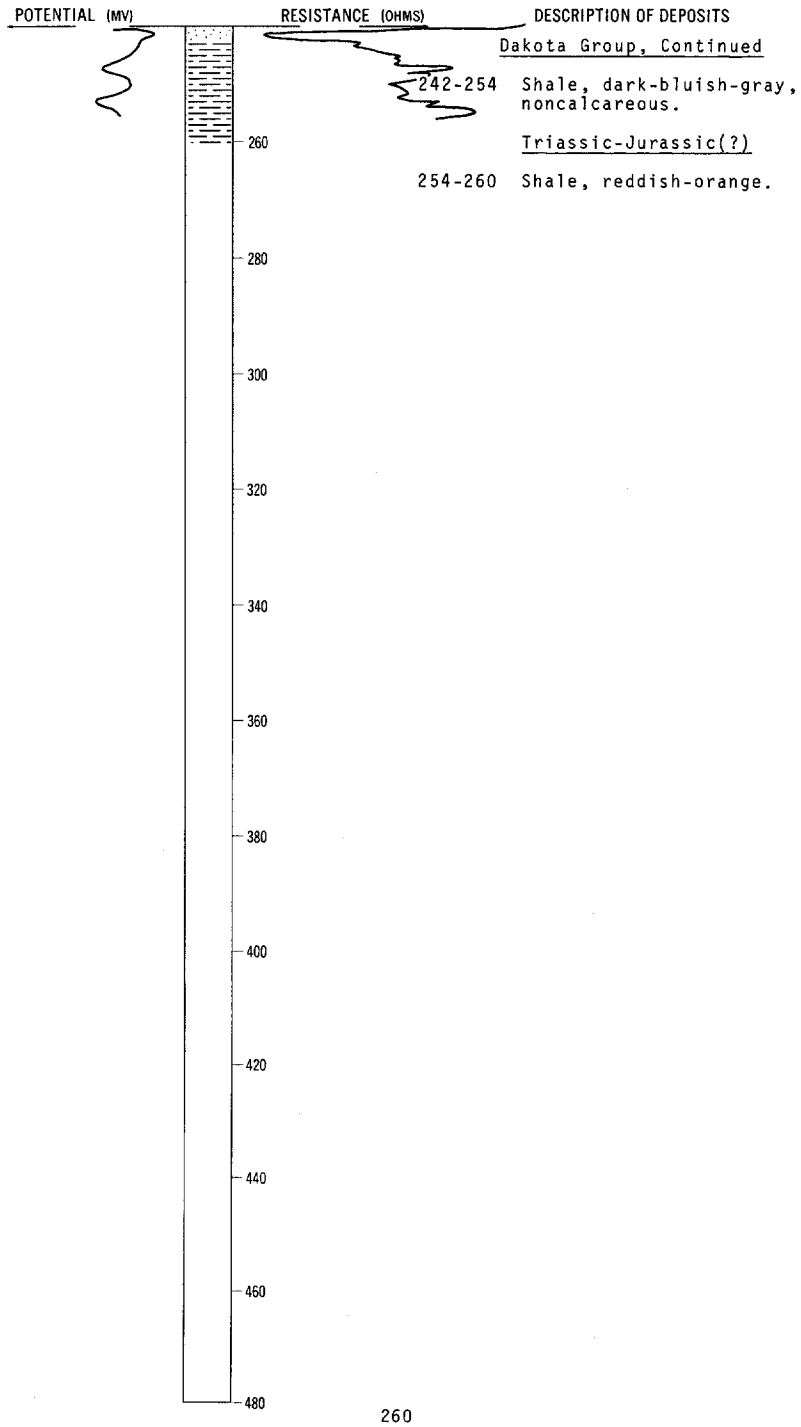
NDSWC 3858, Continued

LOCATION: 161-53-2AAA

DATE DRILLED: October 1969

ALTITUDE: 821
(FT, MSL)

DEPTH: 260
(FT)



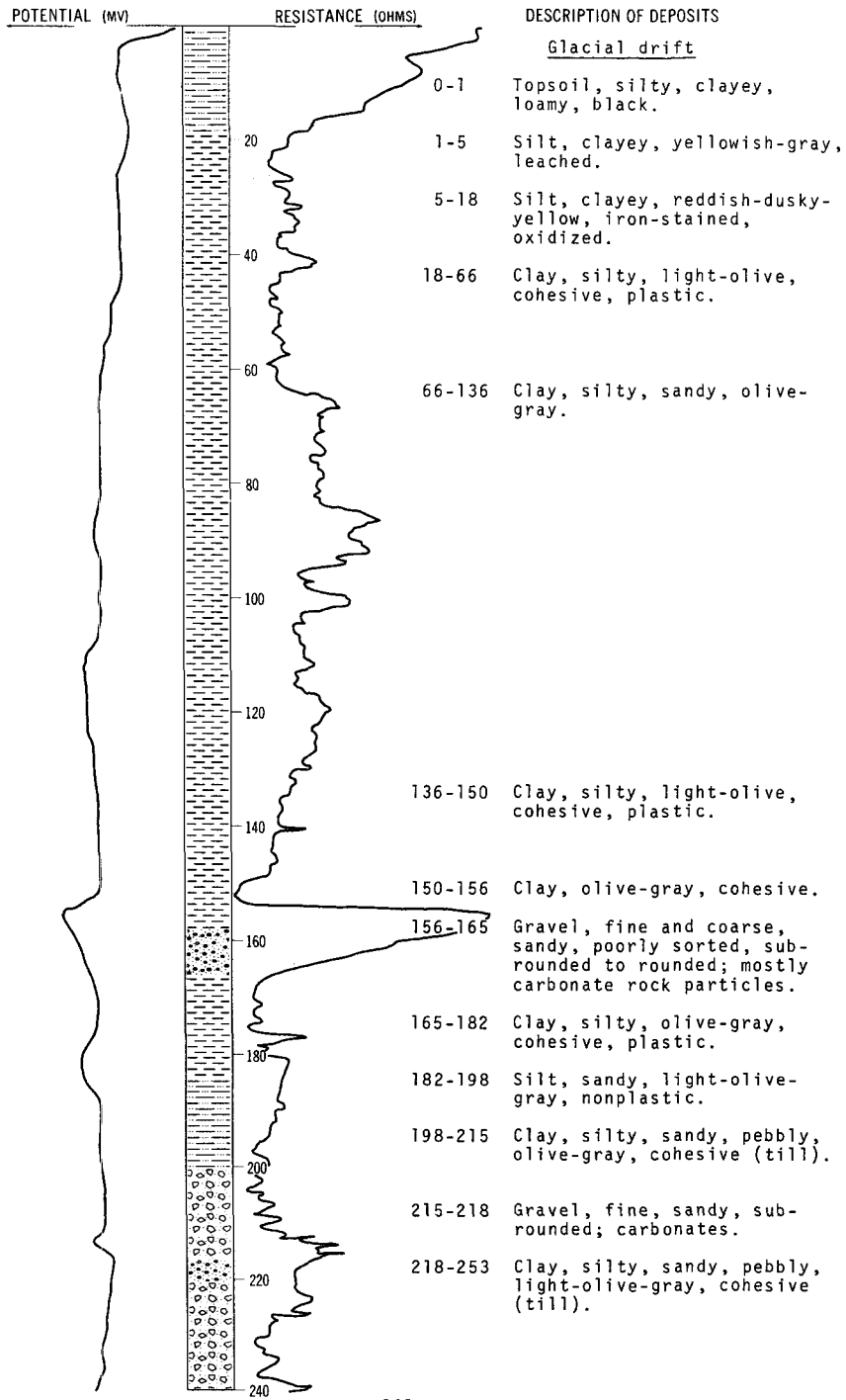
LOCATION: 161-53-6BBB

NDSWC 4232

DATE DRILLED: September 1970

ALTITUDE: 856
(FT, MSL)

DEPTH: 280
(FT)

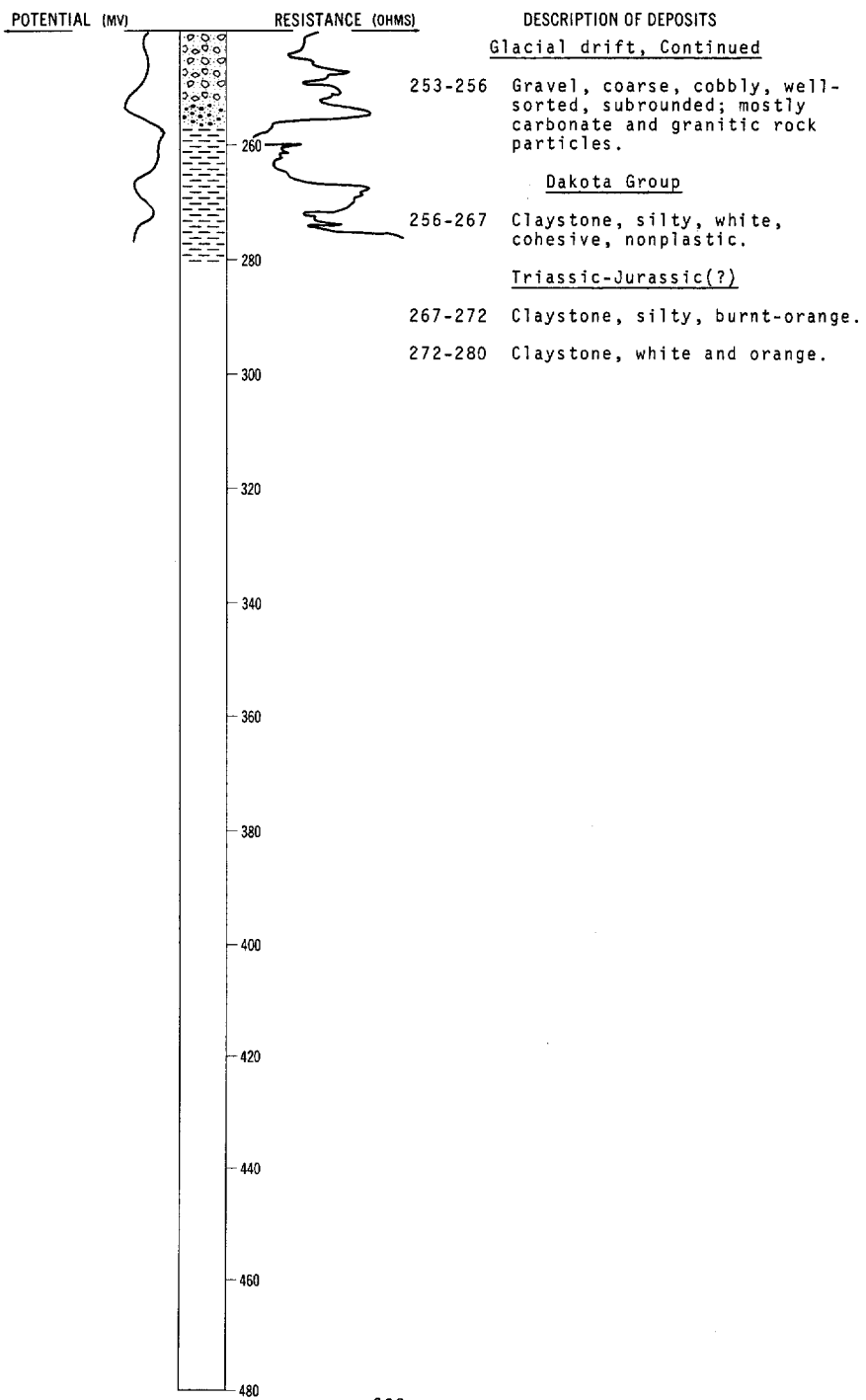


LOCATION: 161-53-6BBB

DATE DRILLED: September 1970

ALTITUDE: 856
(FT, MSL)

DEPTH: 280
(FT)



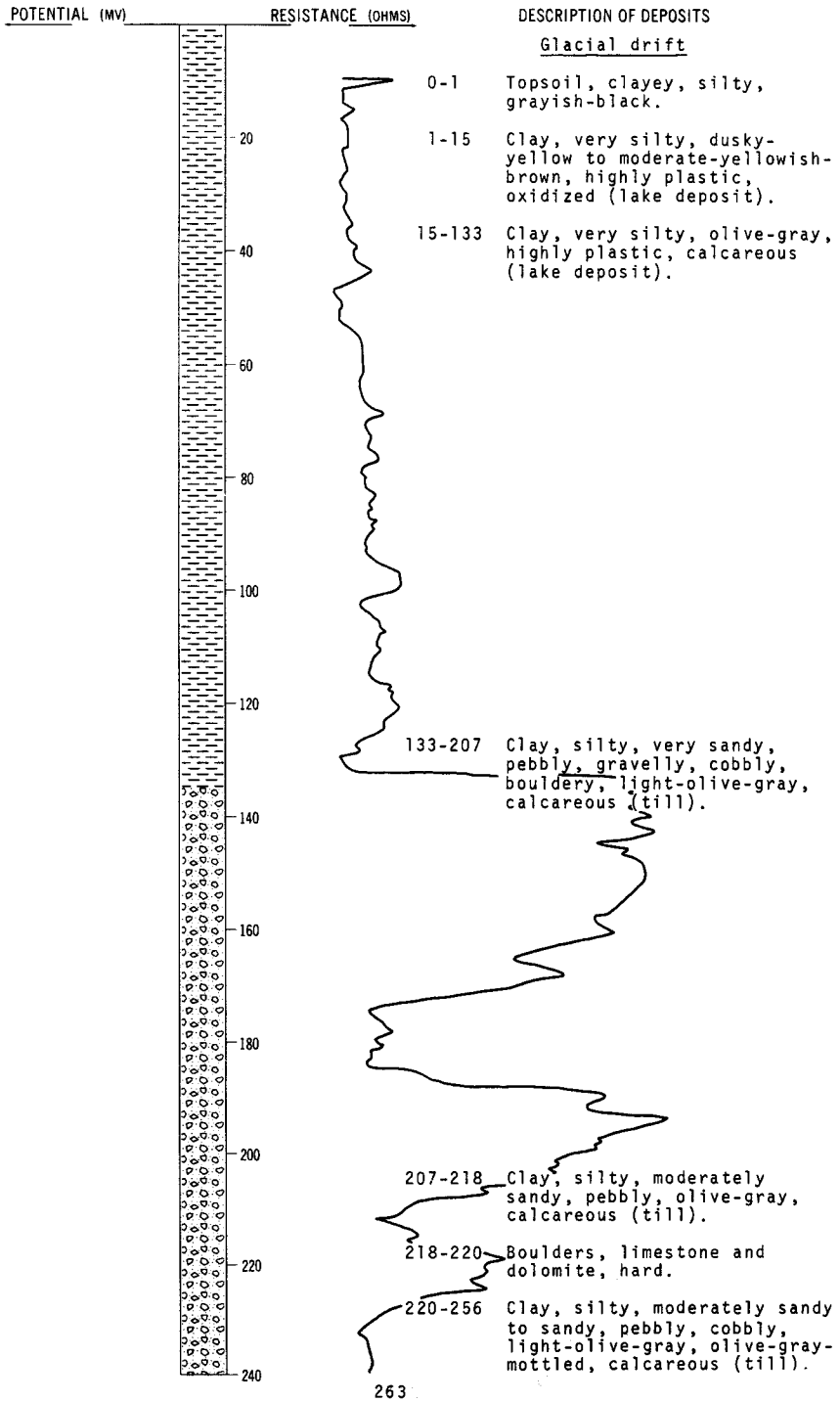
LOCATION: 161-53-15CCC

NDSWC 5941

DATE DRILLED: May 1971

ALTITUDE: 840
(FT, MSL)

DEPTH: 260
(FT)

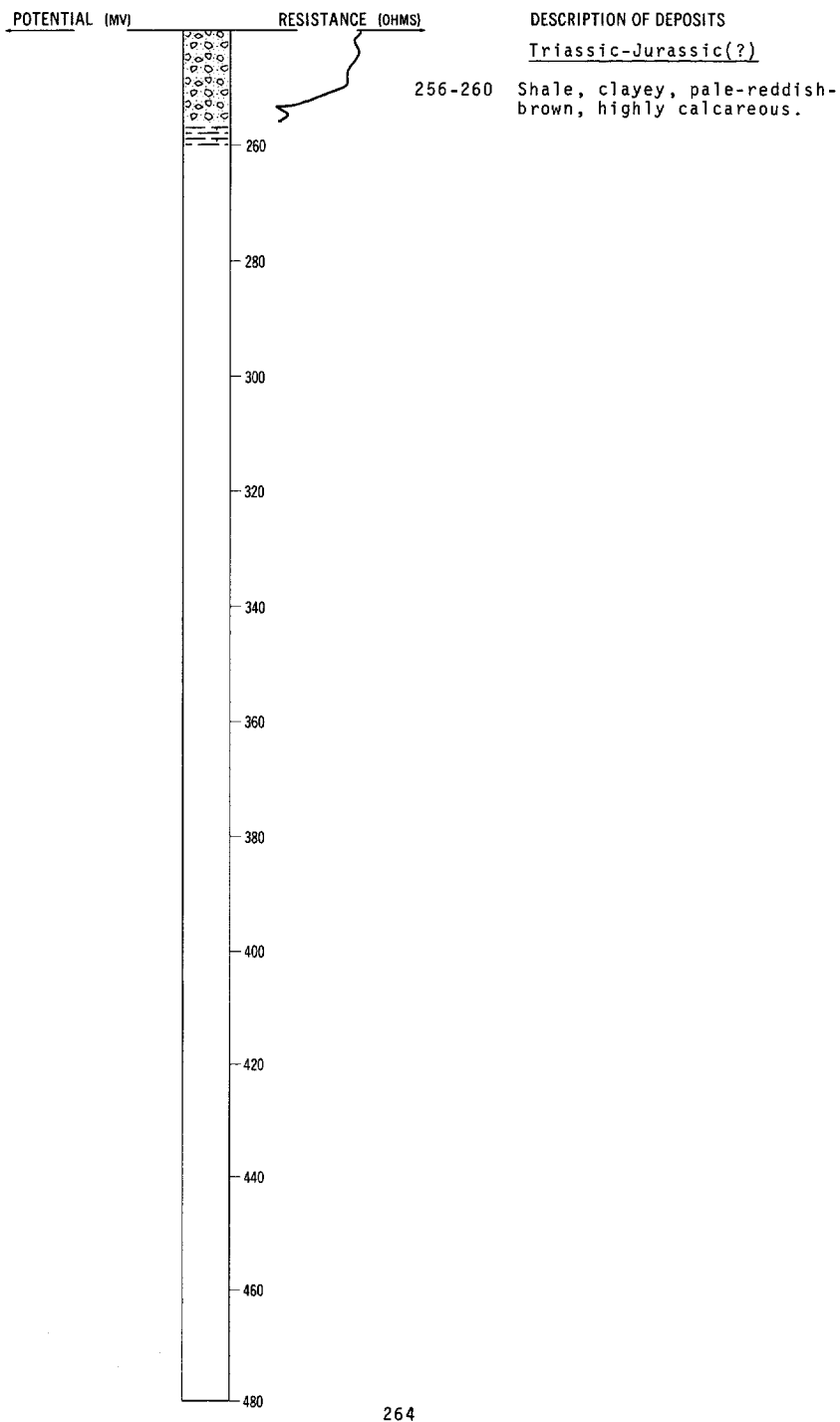


LOCATION: 161-53-15CCC

DATE DRILLED: May 1971

ALTITUDE: 840
(FT, MSL)

DEPTH: 260
(FT)



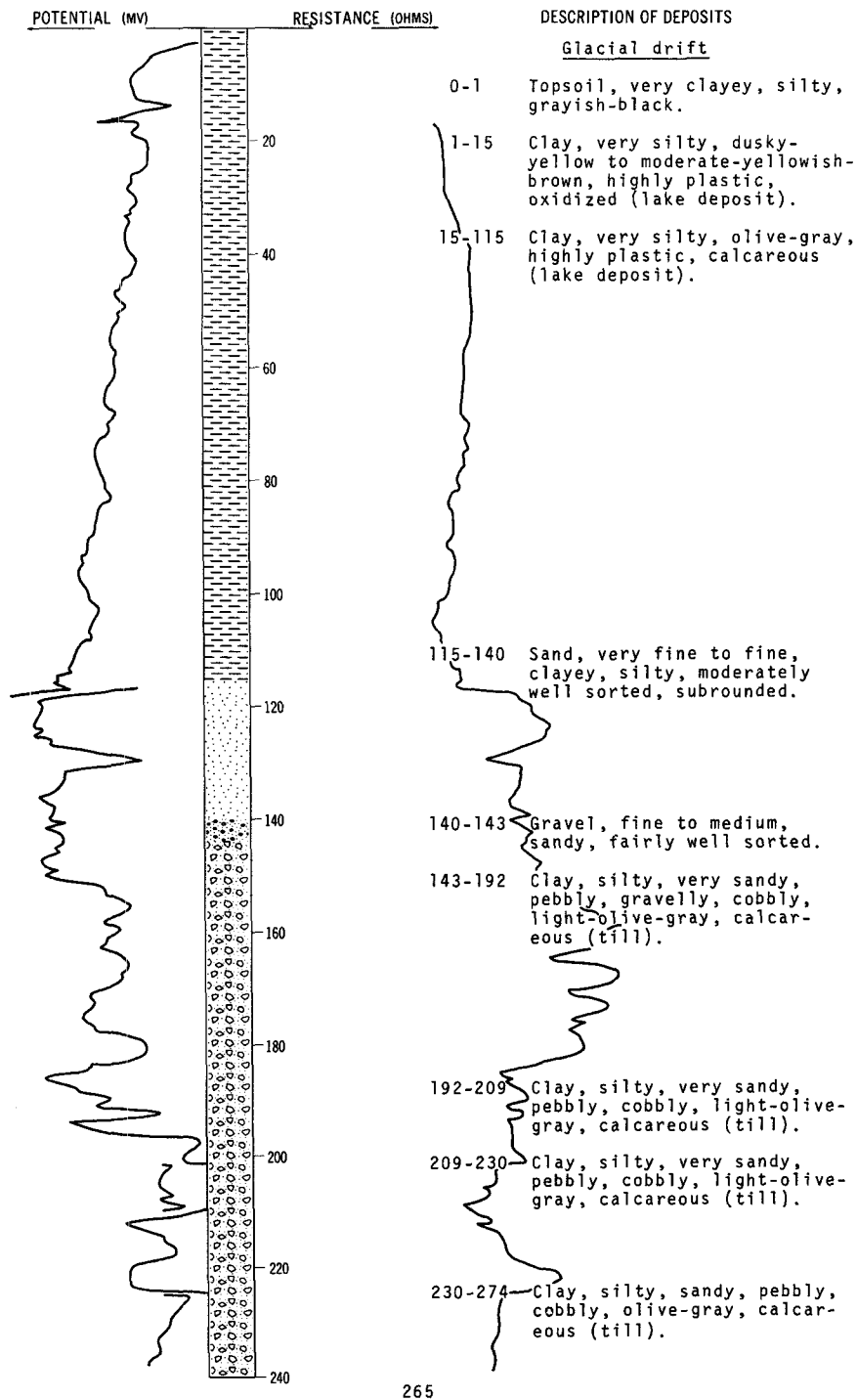
LOCATION: 161-53-25BBA

NDSWC 5940

DATE DRILLED: May 1971

ALTITUDE: 825
(FT. MSL)

DEPTH: 280
(FT)

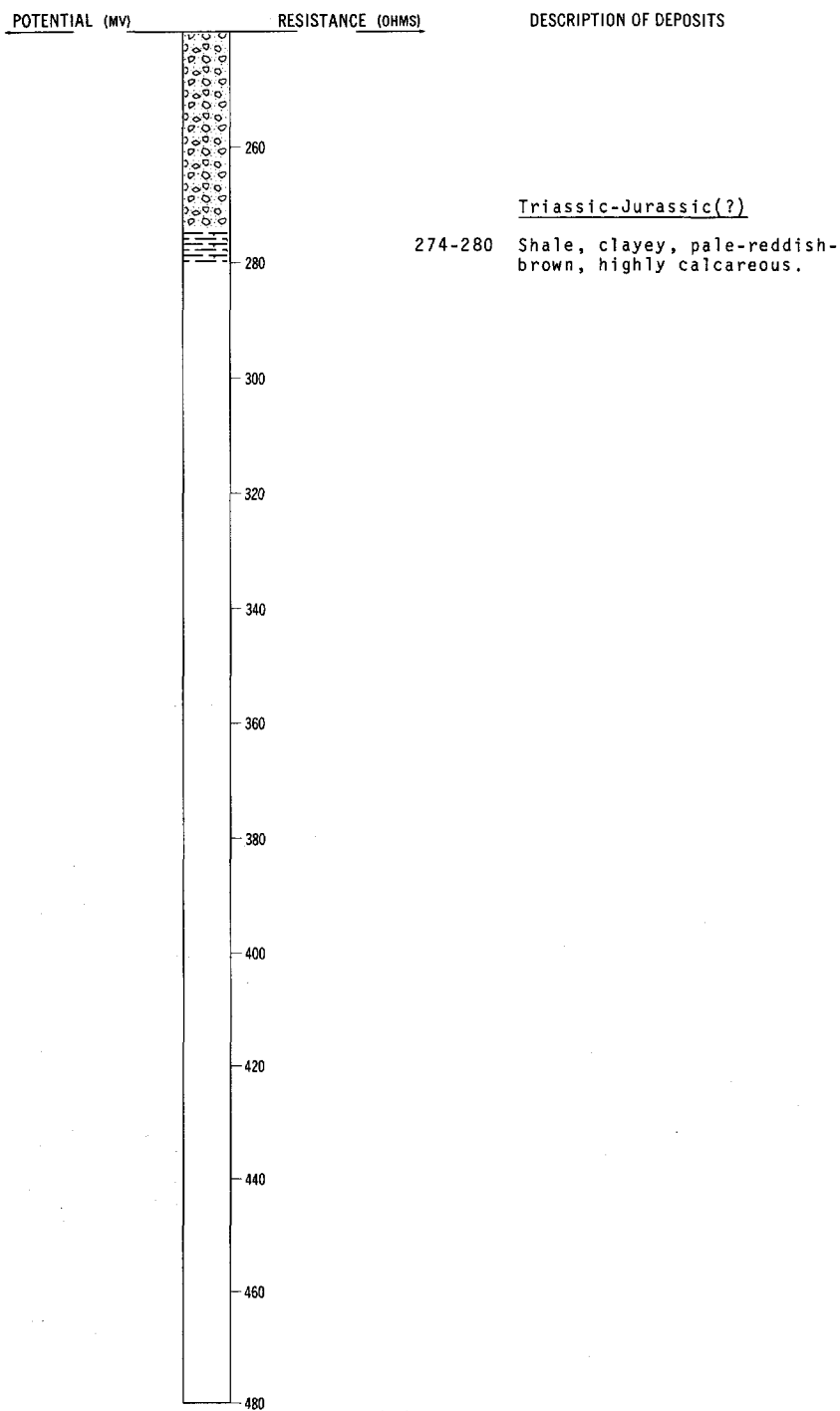


LOCATION: 161-53-25BBA

DATE DRILLED: May 1971

ALTITUDE: 825
(FT, MSL)

DEPTH: 280
(FT)



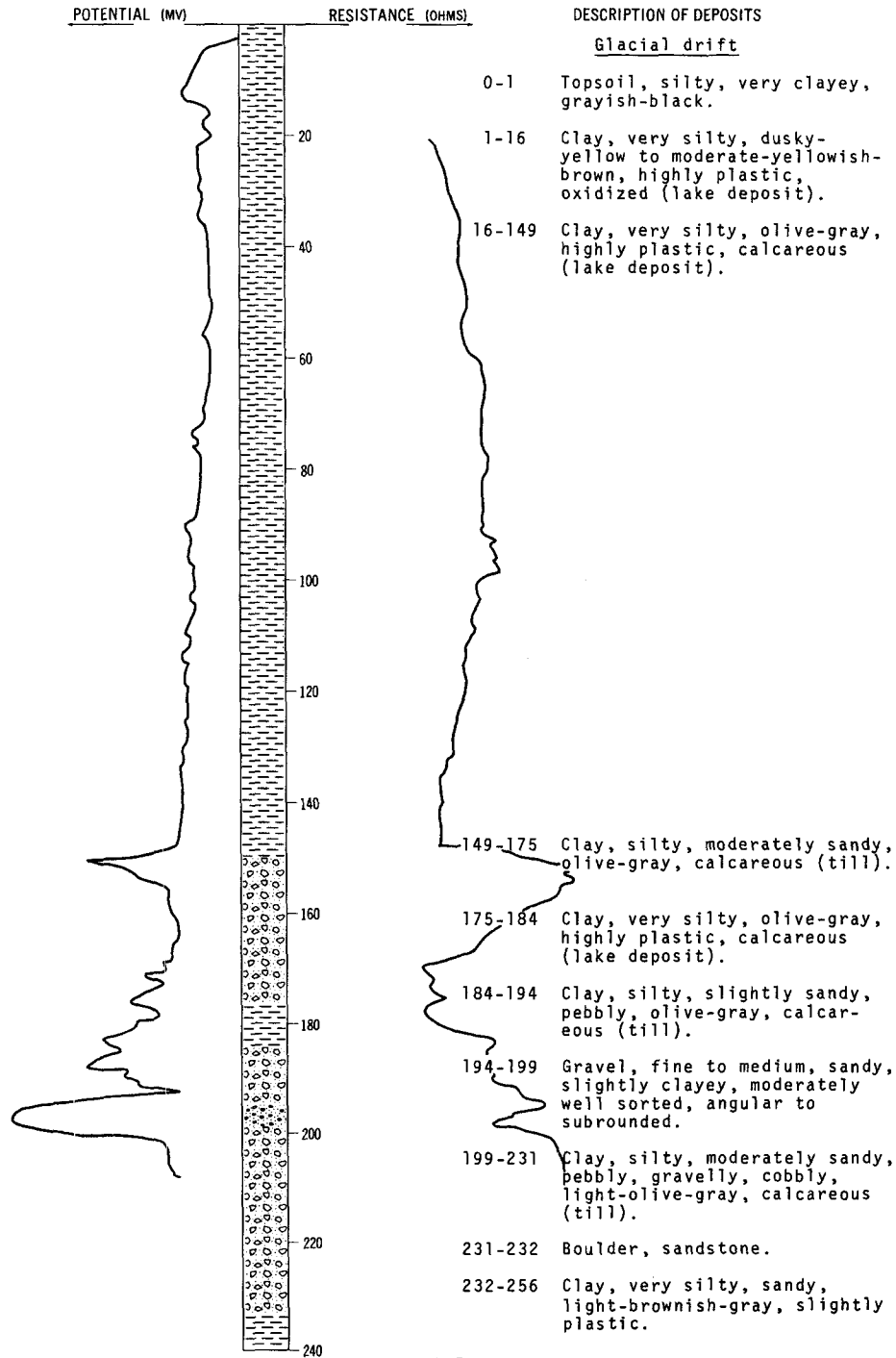
LOCATION: 161-53-33DDD2

NDSWC 5946

DATE DRILLED: May 1971

ALTITUDE: 844
(FT, MSL)

DEPTH: 280
(FT)

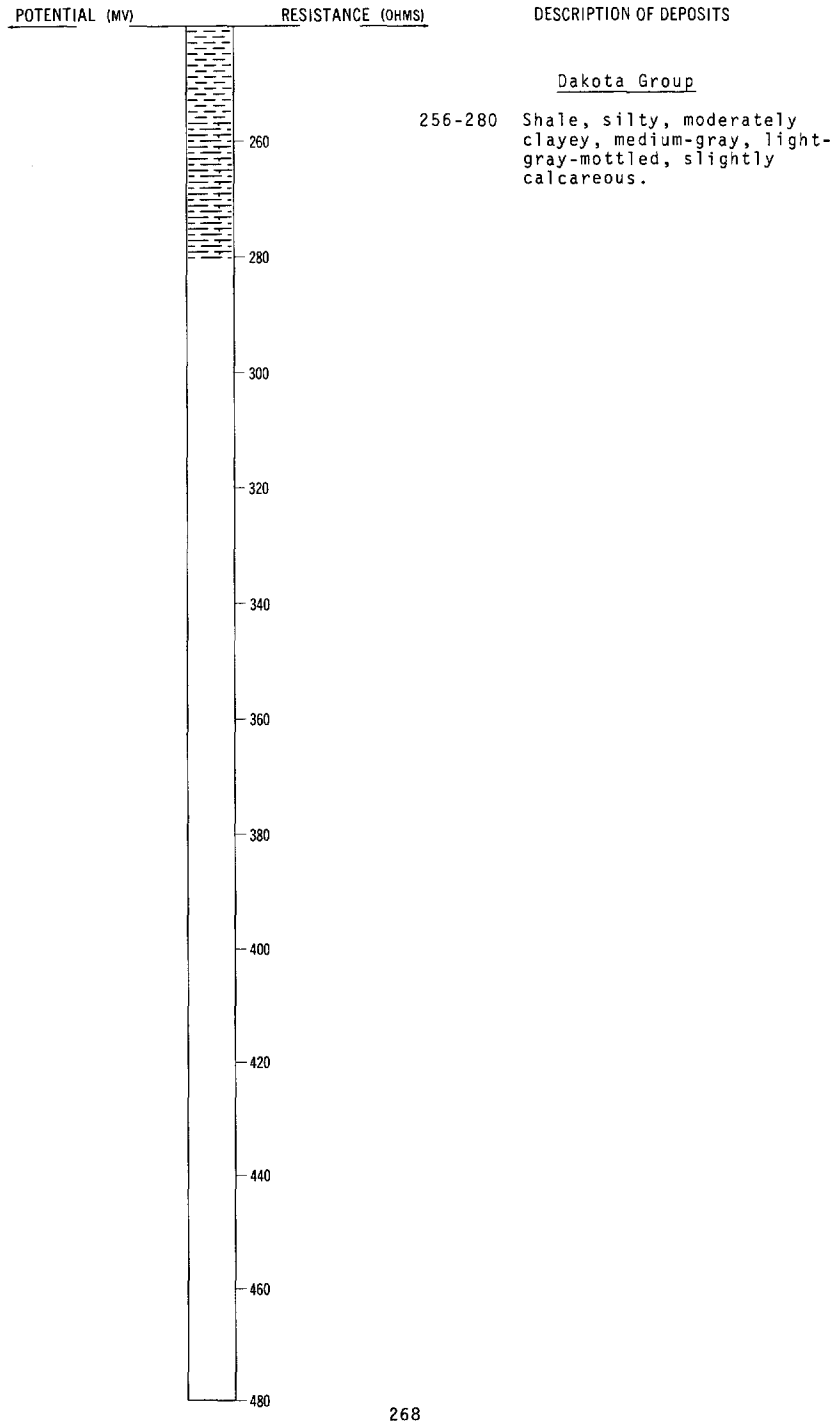


LOCATION: 161-53-33DDD2

DATE DRILLED: May 1971

ALTITUDE: 844
(FT, MSL)

DEPTH: 280
(FT)

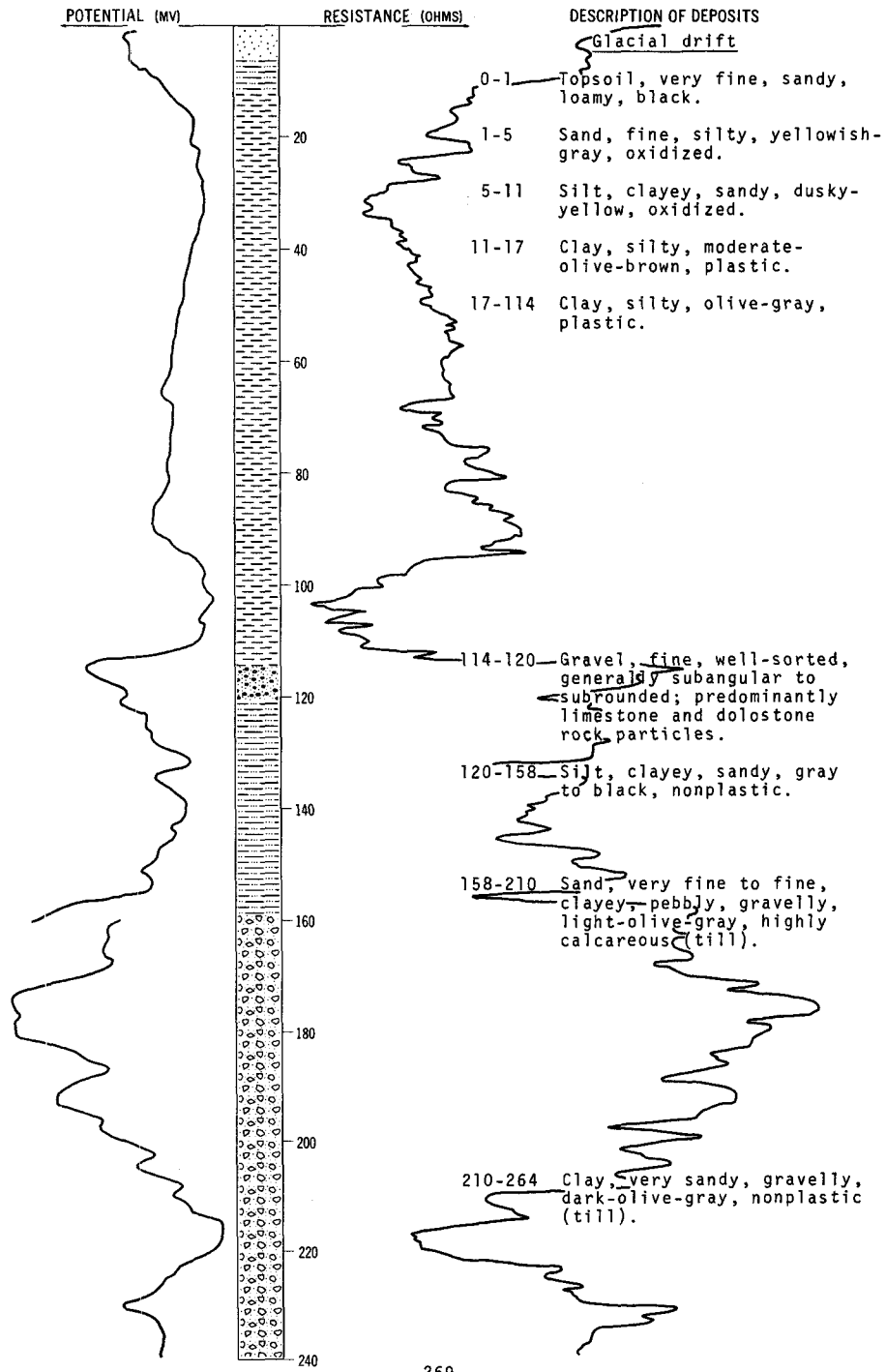


LOCATION: 161-53-36CCC

DATE DRILLED: September 1969

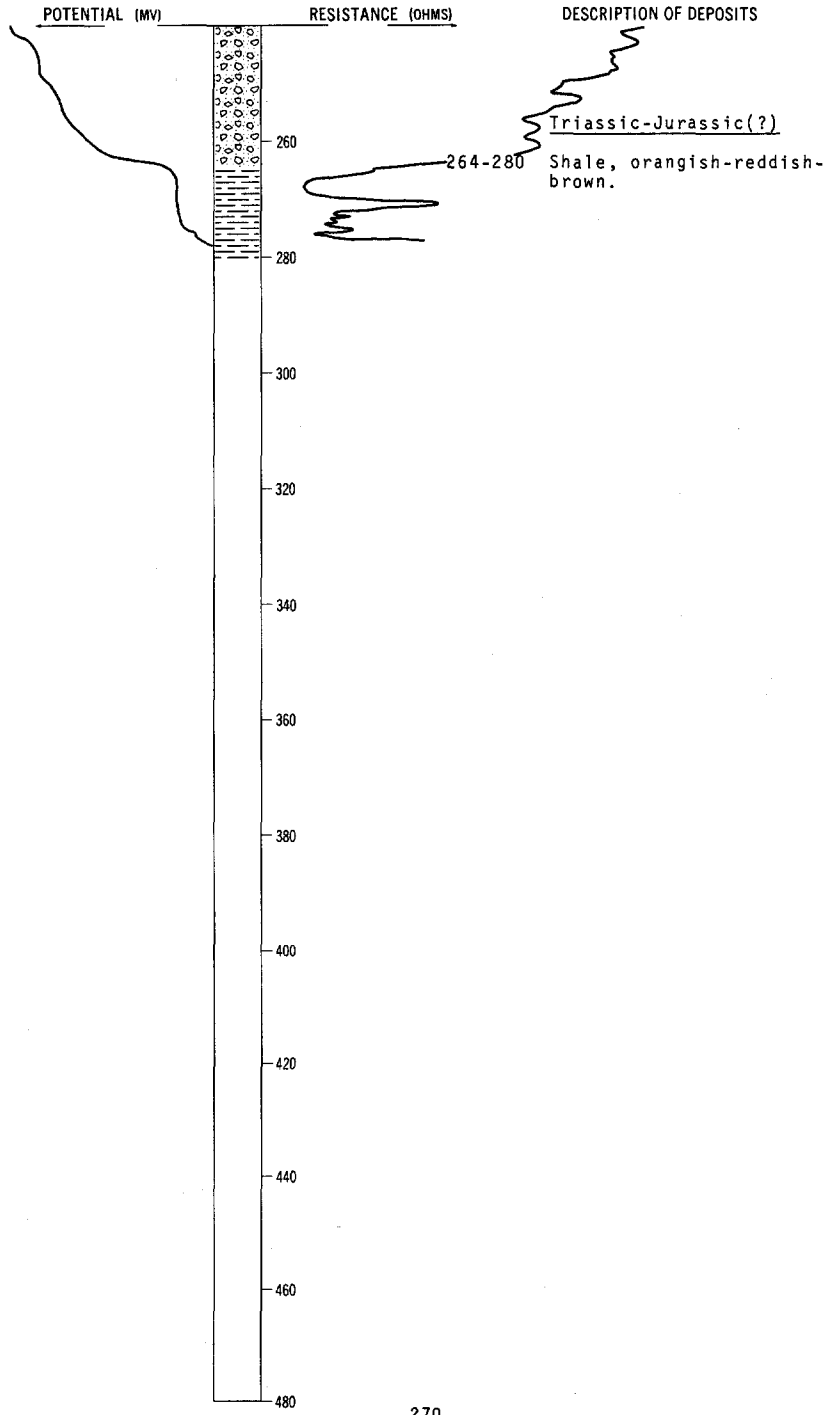
ALTITUDE: 831
(FT, MSL)

DEPTH: 280
(FT)



LOCATION: 161-53-36CCC
ALTITUDE: 831
(FT, MSL)

DATE DRILLED:
DEPTH: 280
(FT)



161-54-5BCC
USBR 462

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, fine, sandy-----	12	12
	Sand, very fine-----	1	13

161-54-10DDD
USBR 227

Altitude:

Glacial drift:			
	Loam, silty-----	2	2
	Loam, very fine, sandy-----	1	3
	Loam, silty-----	15	18

161-54-12DDD
USBR 228

Altitude:

Glacial drift:			
	Loam, silty-----	10	10
	Loam, clayey, silty-----	4	14
	Silt-----	9	23

161-54-18AAA
USBR 226

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, fine, loamy-----	11	13
	Loam, silty-----	5	18

161-54-19CCC
USBR 464

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine-----	5	8
	Silt-----	10	18

161-54-20AAA
USBR 463

Altitude:

Glacial drift:			
	Loam, silty-----	1	1
	Sand, fine-----	4	5
	Silt-----	3	8
	Sand, fine, loamy-----	1	9
	Silt-----	9	18

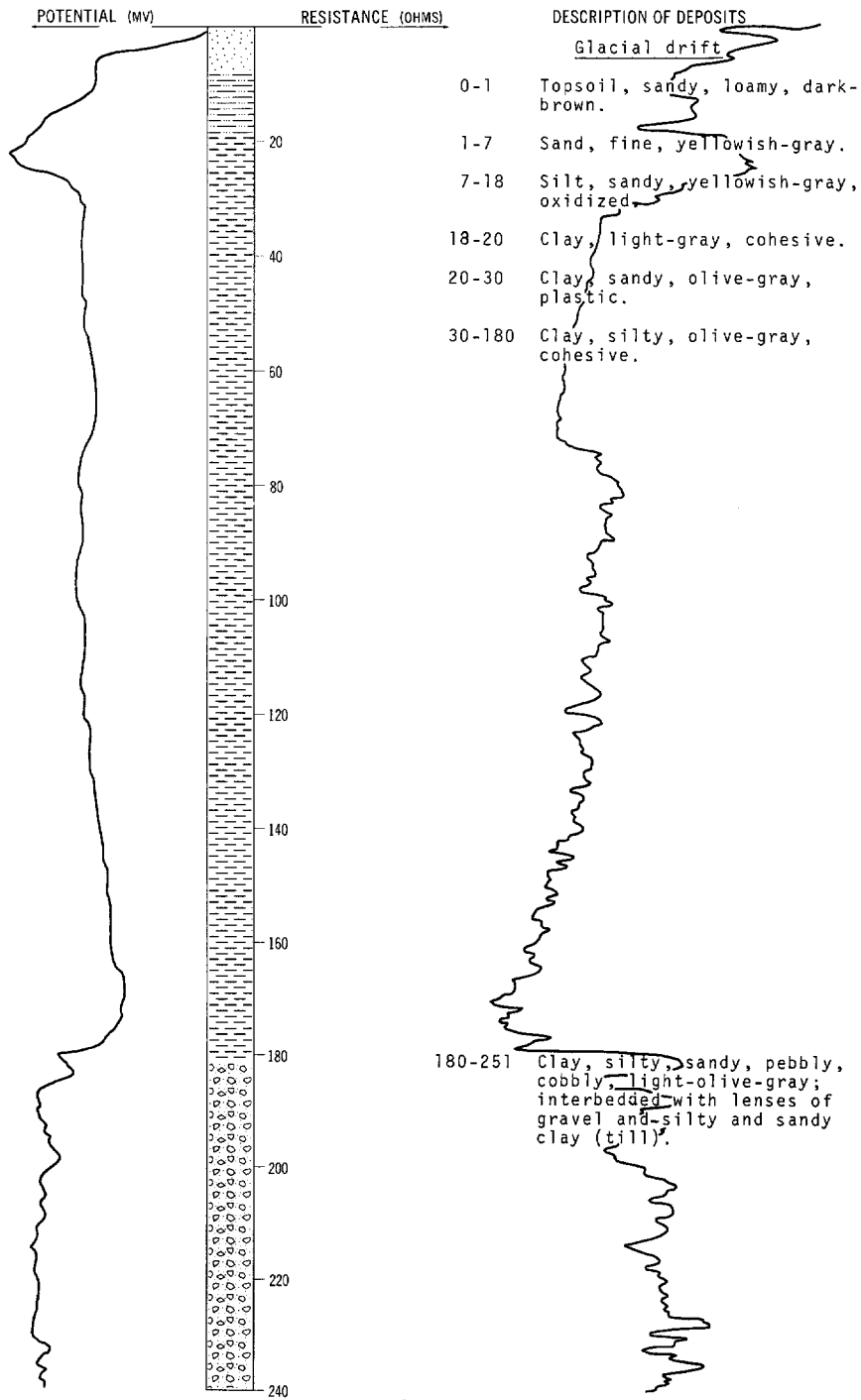
LOCATION: 161-54-21AAA

NDSWC 3845

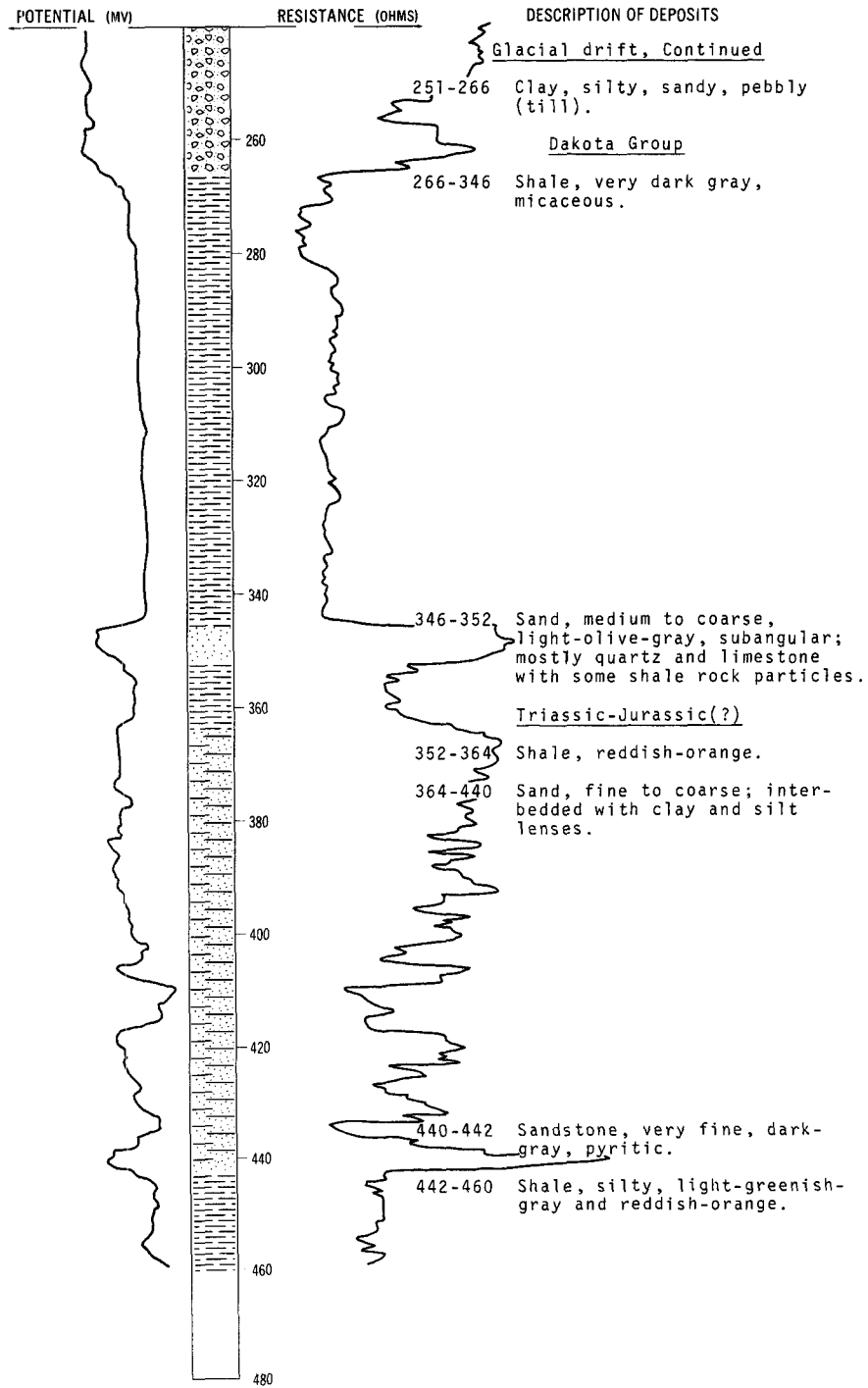
DATE DRILLED: October 1969

ALTITUDE: 890
(FT, MSL)

DEPTH: 460
(FT)



LOCATION: 161-54-21AAA NDSWC 3845, Continued DATE DRILLED: October 1969
 ALTITUDE: 890 DEPTH: 460
 (FT, MSL) (FT)



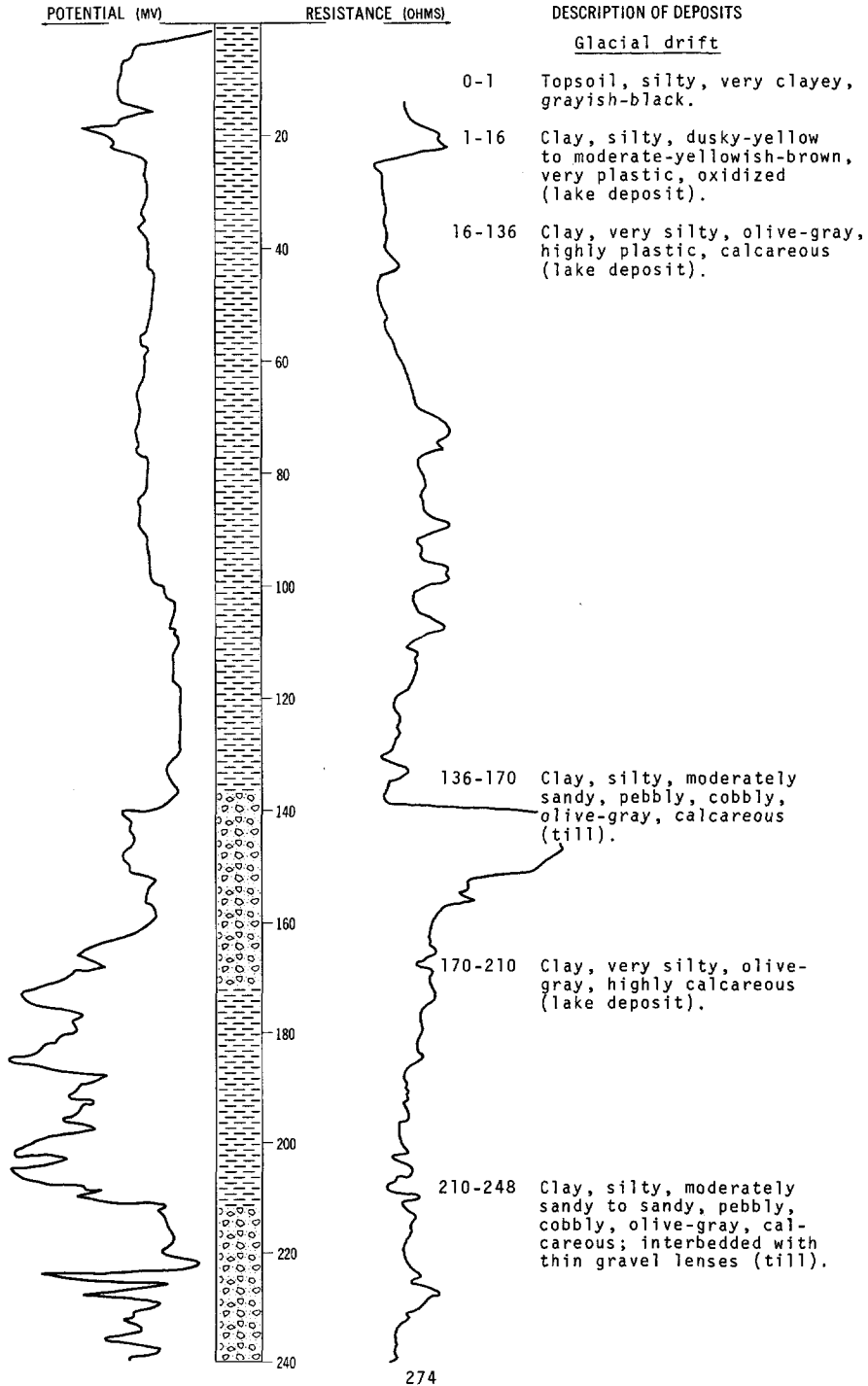
LOCATION: 161-54-24DDD

NDSWC 5947

DATE DRILLED: May 1971

ALTITUDE: 858
(FT, MSL)

DEPTH: 320
(FT)

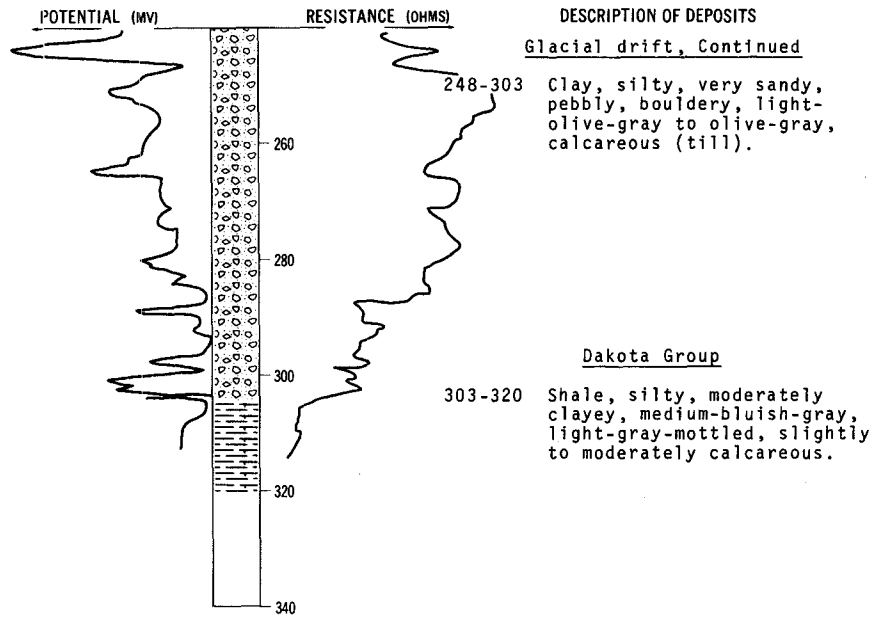


LOCATION: 161-54-24DDD

DATE DRILLED: May 1971

ALTITUDE: 858
(FT, MSL)

DEPTH: 320
(FT)



161-54-27DDD
USBR 229

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, sandy-----	3	3
	Loam, silty-----	2	5
	Loam, very fine, sandy-----	1	6
	Loam, silty-----	7	13

161-54-31AAA
USBR 230

Altitude:

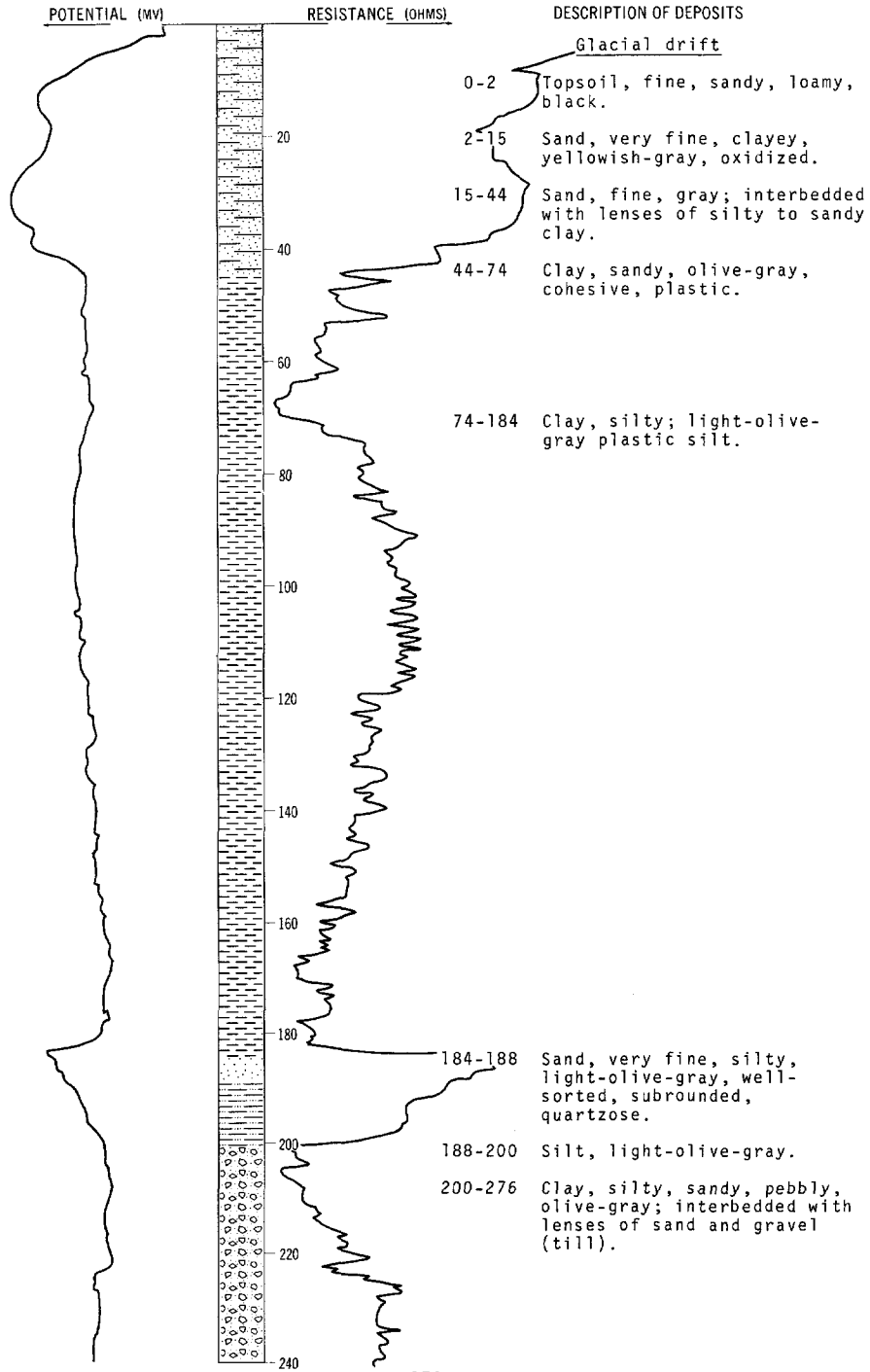
Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine, loamy-----	5	8
	Sand, very fine, loamy-----	6	14
	Loam, silty-----	4	18

LOCATION: 161-54-32CCC1

DATE DRILLED: September 1969

ALTITUDE: 919
(FT, MSL)

DEPTH: 420
(FT)

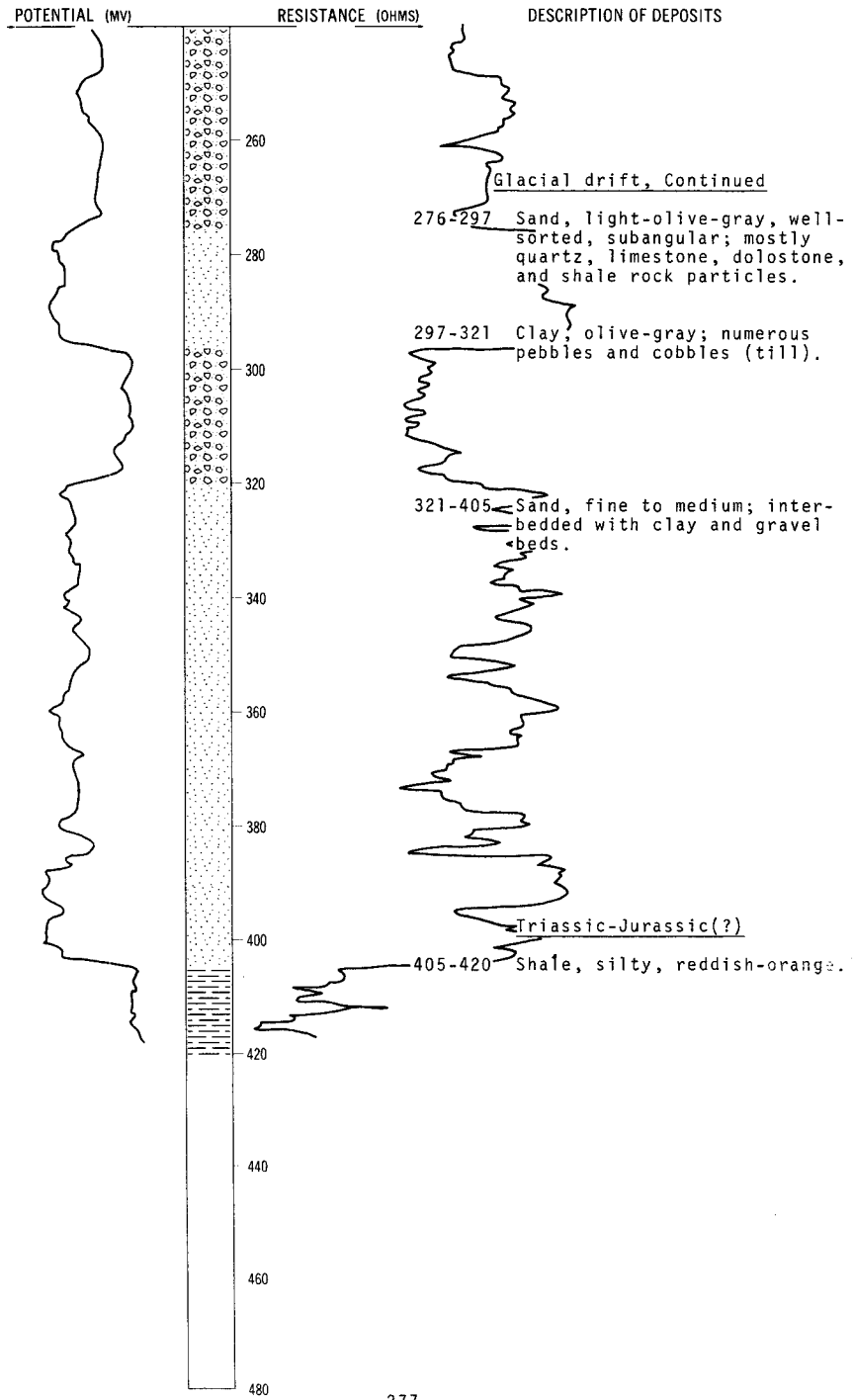


LOCATION: 161-54-32CCC1

DATE DRILLED: September 1969

ALTITUDE: 919
(FT, MSL)

DEPTH: 420
(FT)



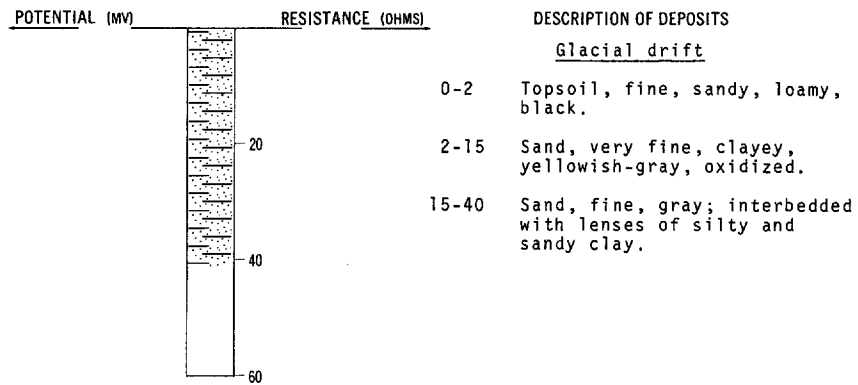
LOCATION: 161-54-32CCC2

NDSWC 3839

DATE DRILLED: September 1969

ALTITUDE: 919
(FT, MSL)

DEPTH: 40
(FT)



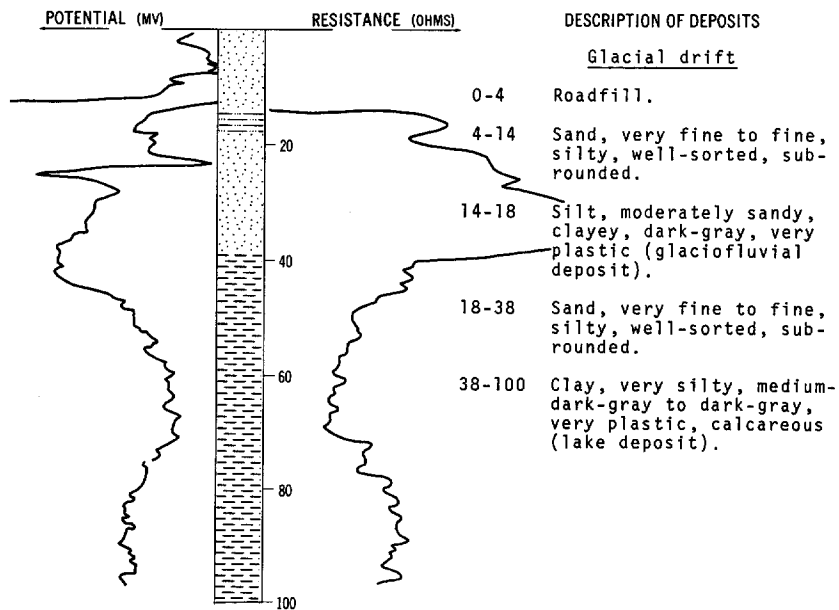
LOCATION: 161-55-3DDD

NDSWC 5932

DATE DRILLED: May 1971

ALTITUDE: 967
(FT, MSL)

DEPTH: 100
(FT)

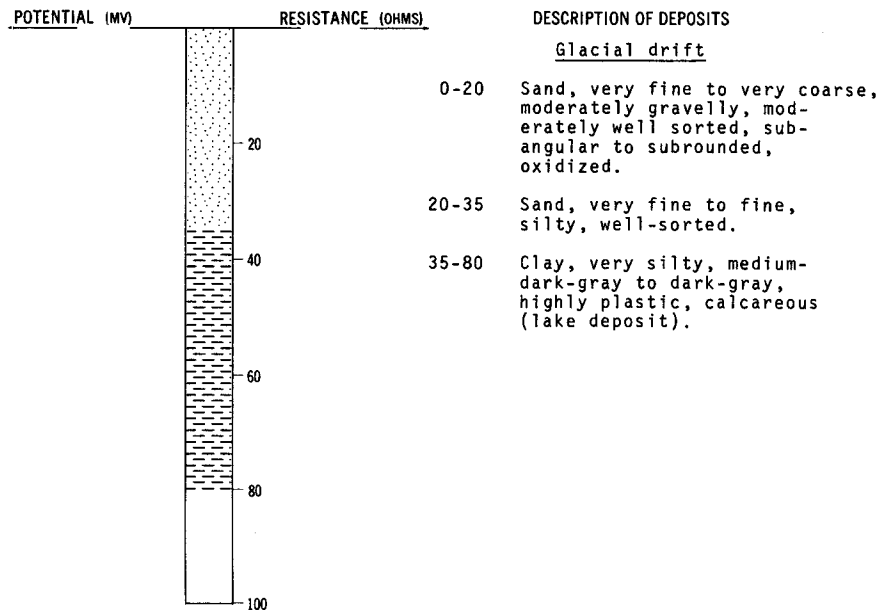


161-55-4ADD
USBR 454

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Sand, fine-----	3	3
	Loam, silty-----	1	4
	Sand, fine, loamy-----	2	6
	Sand, fine-----	6	12
	Sand, fine, loamy-----	3	15

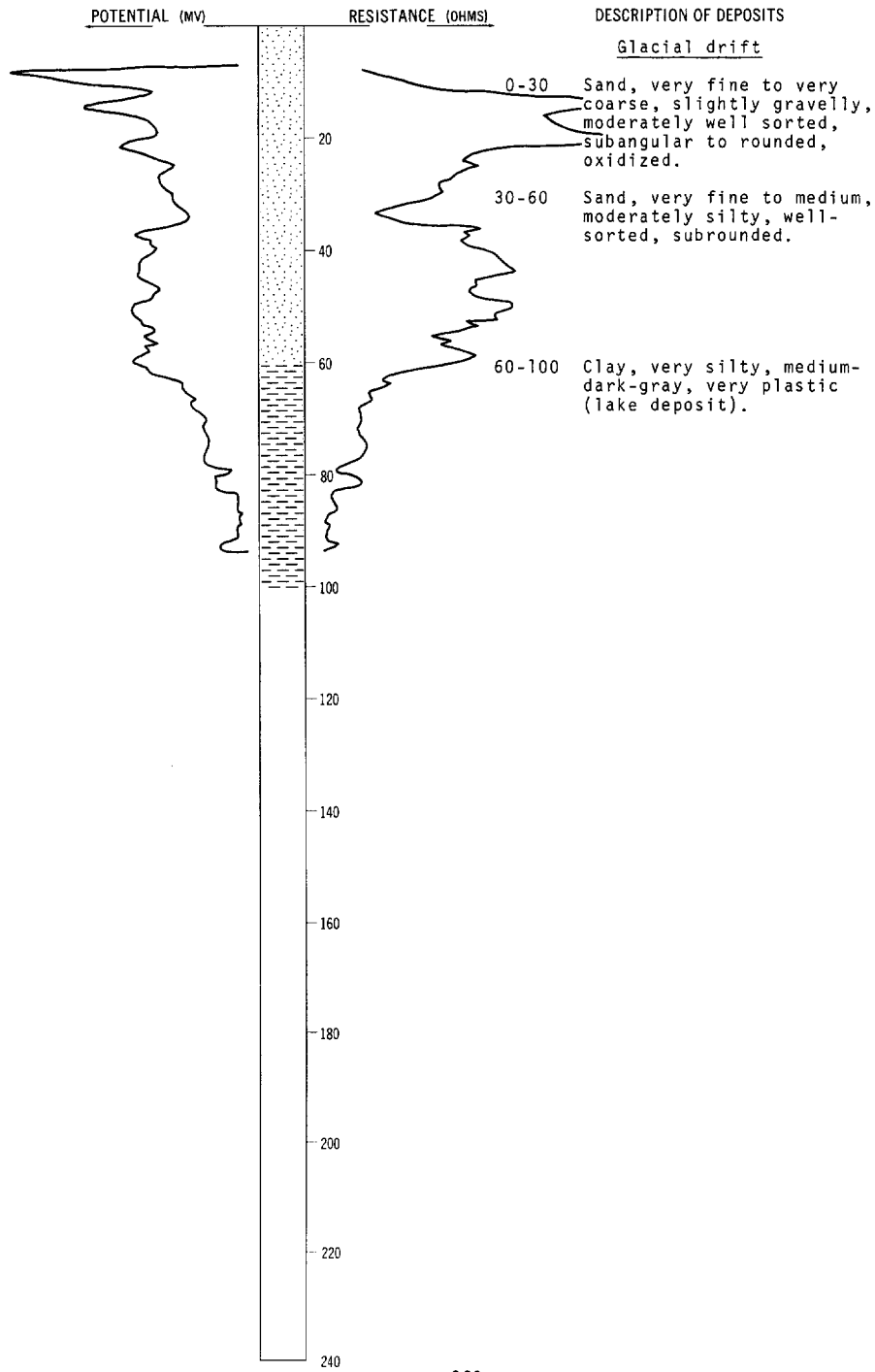
LOCATION: 161-55-4BAA NDSWC 5933 DATE DRILLED: May 1971
 ALTITUDE: 1004 DEPTH: 80
 (FT, MSL) (FT)



LOCATION: 161-55-4CCC
ALTITUDE: 1028
(FT, MSL)

NDSWC 5930

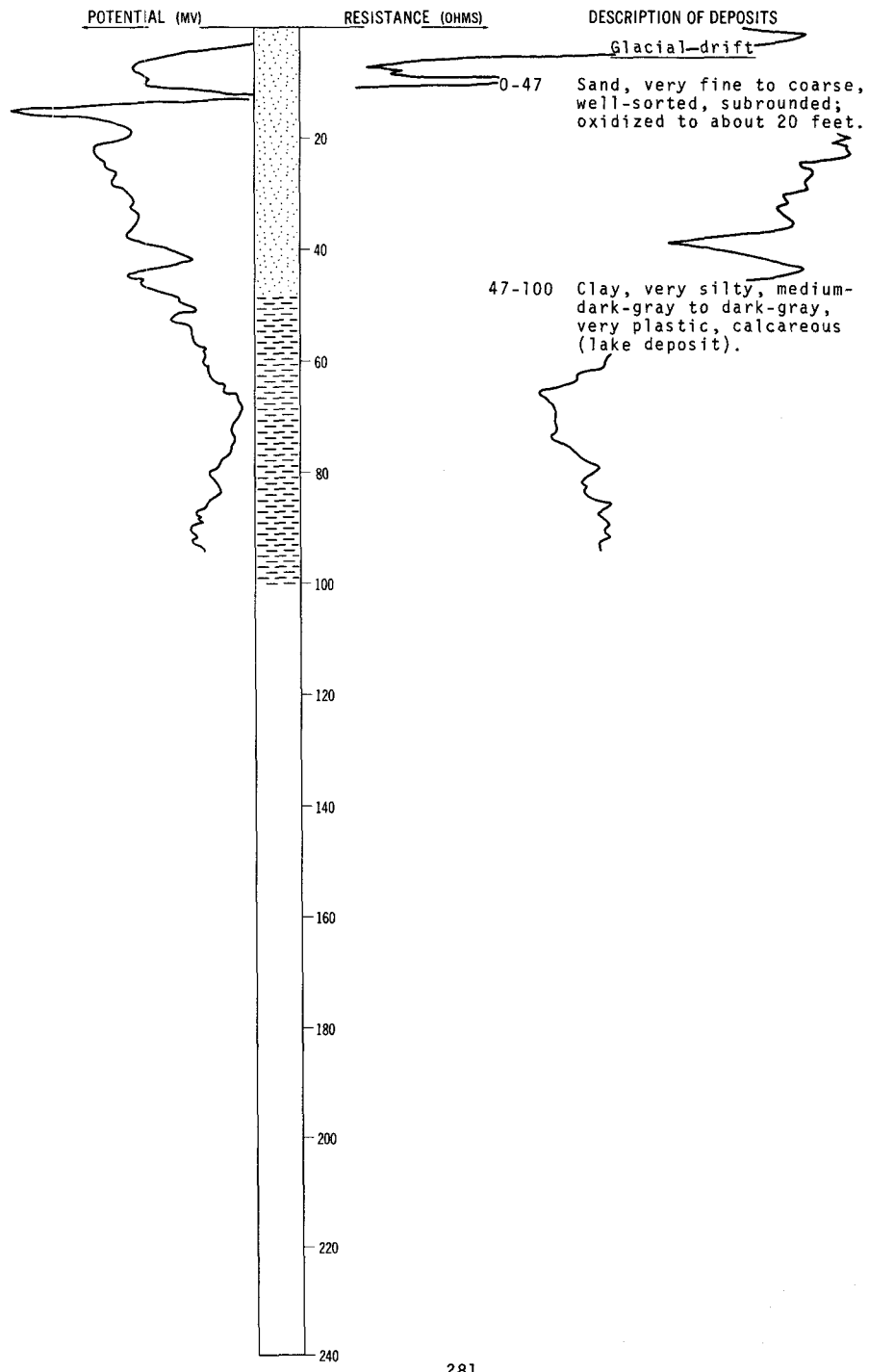
DATE DRILLED: May 1971
DEPTH: 100
(FT)



LOCATION: 161-55-4DDD
ALTITUDE: 1000
(FT, MSL)

NDSWC 5931

DATE DRILLED: May 1971
DEPTH: 100
(FT)



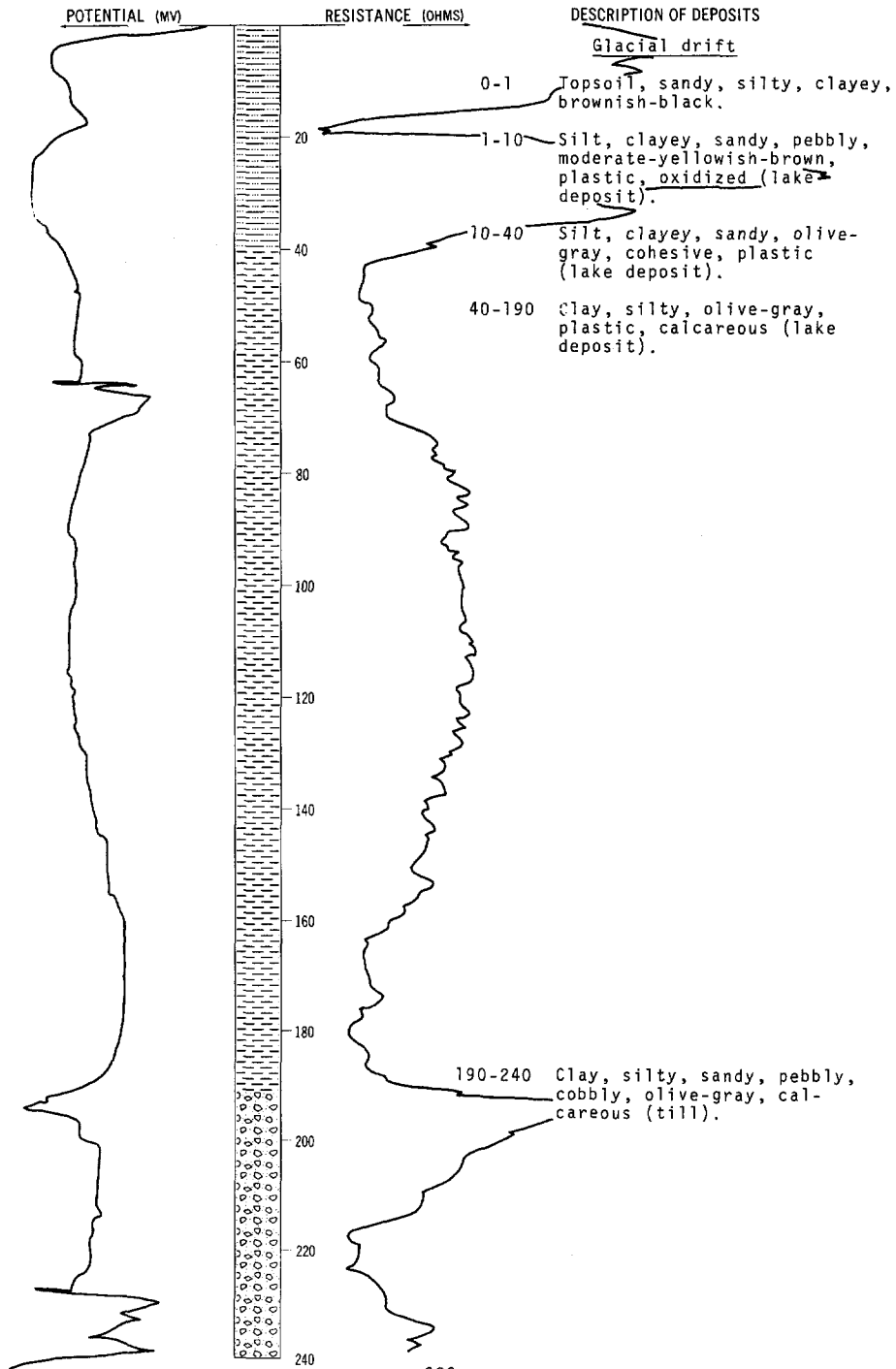
LOCATION: 161-55-12DDD

NDSWC 5710

DATE DRILLED: June 1970

ALTITUDE: 928
(FT, MSL)

DEPTH: 260
(FT)

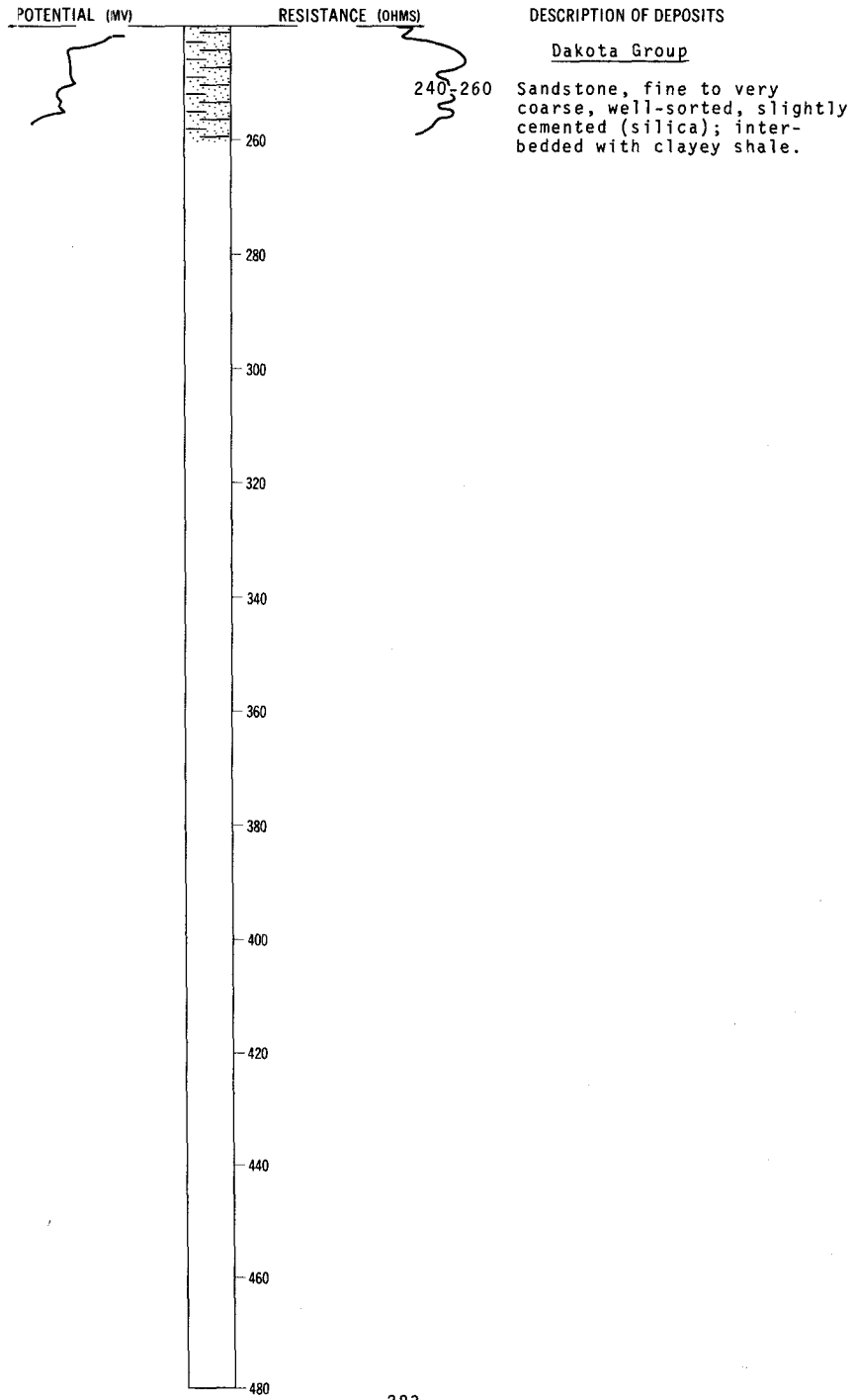


LOCATION: 161-55-12DDD
ALTITUDE: 928
(FT, MSL)

NDSWC 5710, Continued

DATE DRILLED: June 1970

DEPTH: 260
(FT)



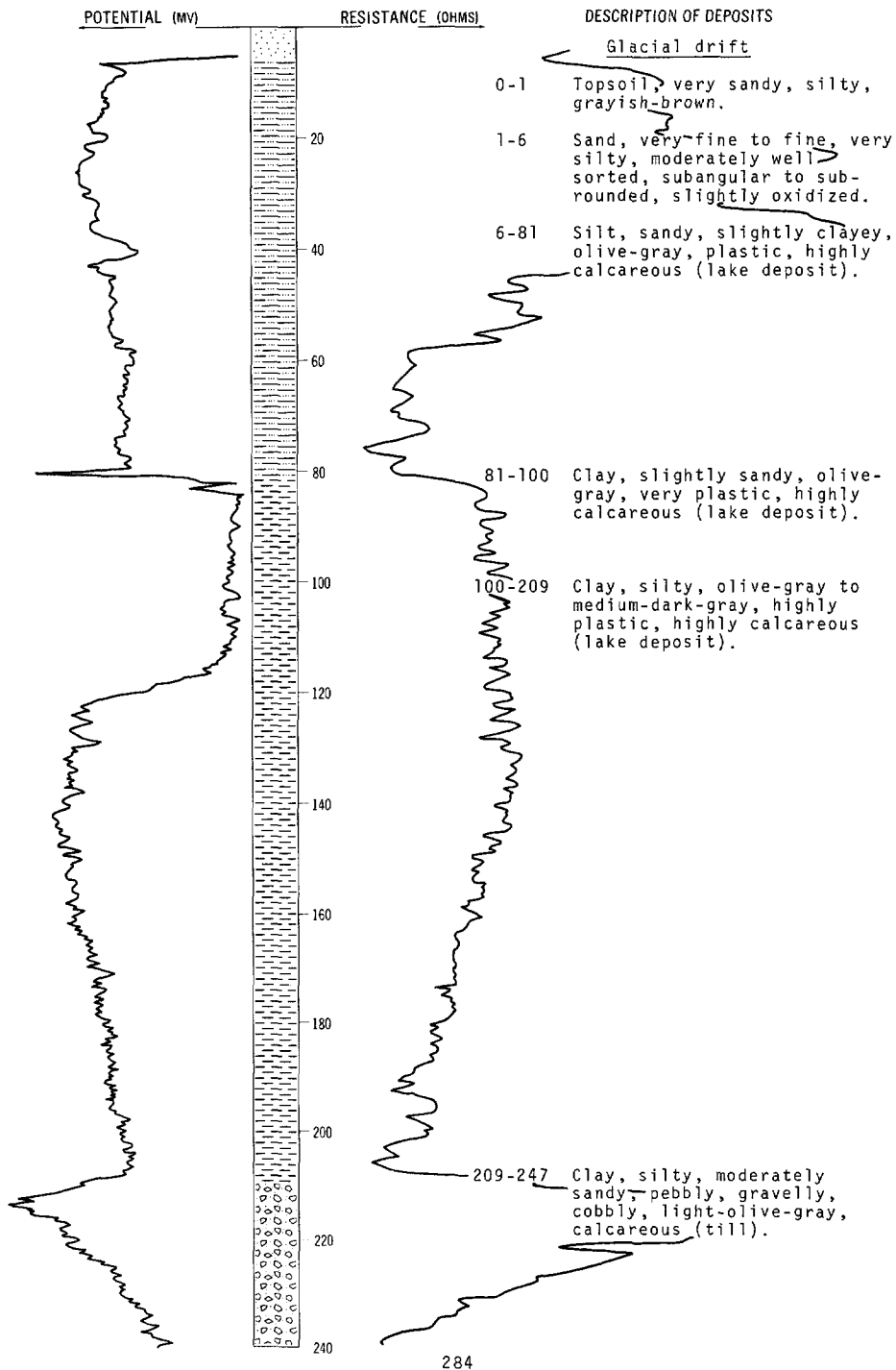
LOCATION: 161-55-13CCC

NDSWC 5923

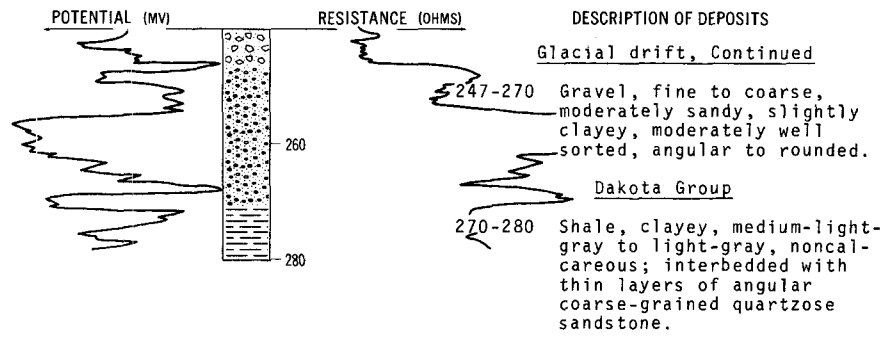
DATE DRILLED: May 1971

ALTITUDE: 953
(FT, MSL)

DEPTH: 280
(FT)



NDSWC 5923, Continued
 LOCATION: 161-55-13CCC DATE DRILLED: May 1971
 ALTITUDE: 953 (FT, MSL) DEPTH: 280 (FT)

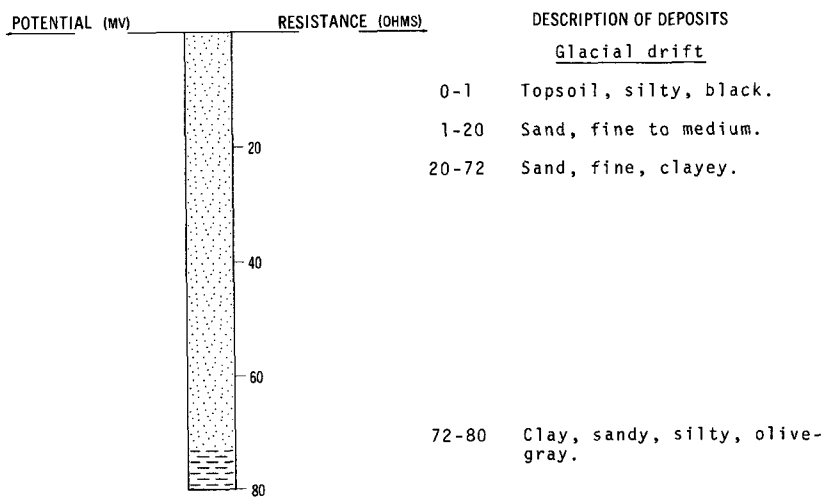


161-55-15AAA
 USBR 225

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Sand, fine, loamy-----	3	3
	Sand, fine-----	20	23

NDSWC 5942-F
 LOCATION: 161-55-15BCB DATE DRILLED: May 1971
 ALTITUDE: 1016 (FT, MSL) DEPTH: 80 (FT)



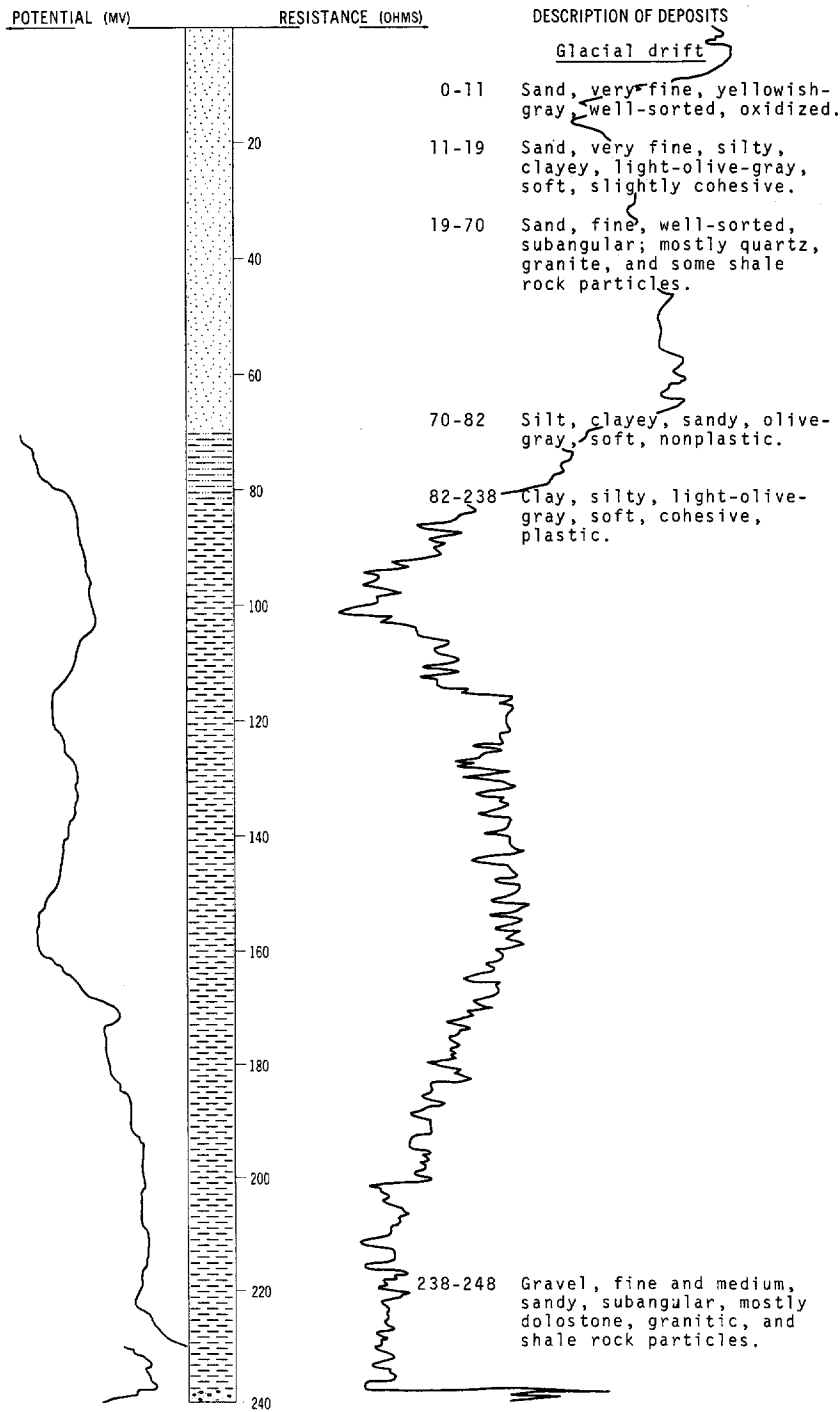
LOCATION: 161-55-158CD1

NDSWC 3842

DATE DRILLED: October 1969

ALTITUDE: 1008
(FT, MSL)

DEPTH: 340
(FT)



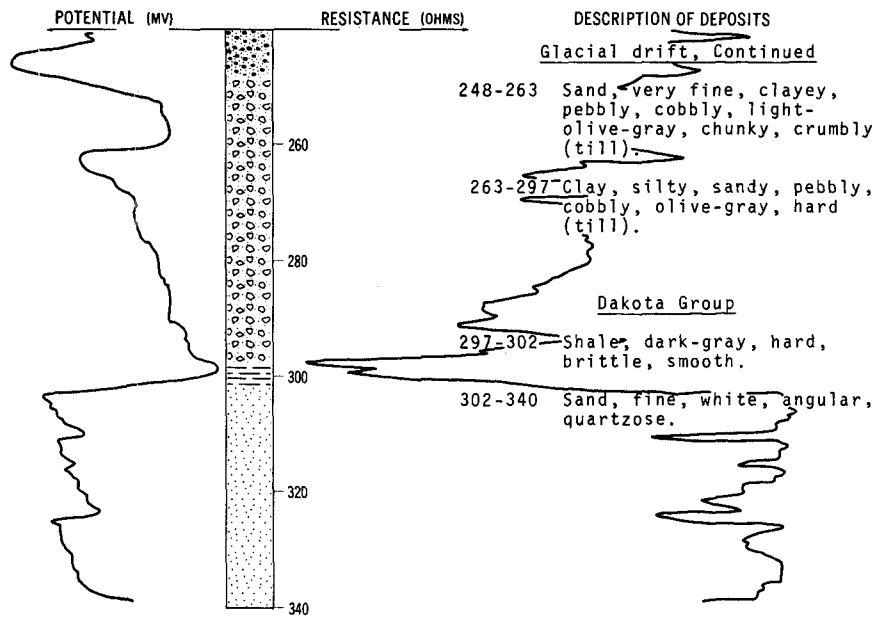
NDSWC 3842, Continued

LOCATION: 161-55-15BCD1

DATE DRILLED: October 1969

ALTITUDE: 1008
(FT, MSL)

DEPTH: 340
(FT)



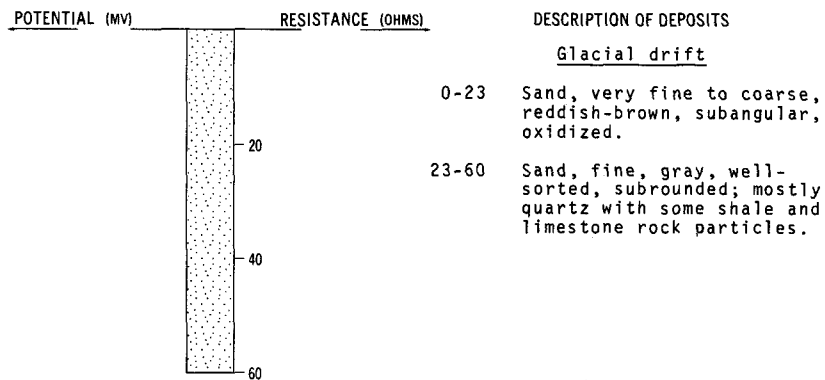
NDSWC 3843

LOCATION: 161-55-15BCD2

DATE DRILLED: October 1969

ALTITUDE: 1008
(FT, MSL)

DEPTH: 60
(FT)

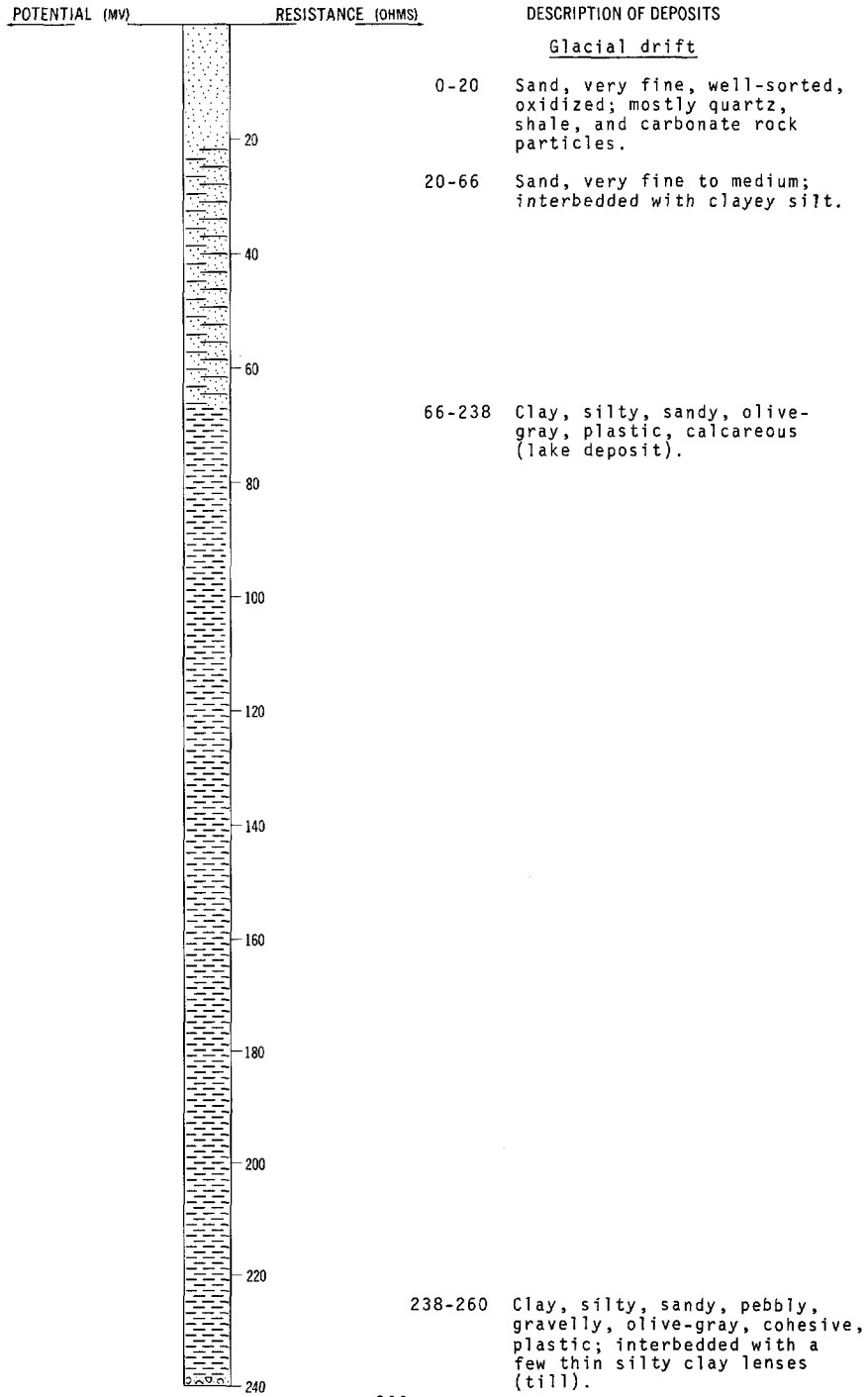


LOCATION: 161-55-15BCD3
ALTITUDE: 1006
(FT, MSL)

NDSWC 5711

DATE DRILLED: June 1970

DEPTH: 260
(FT)



NDSWC 5711, Continued

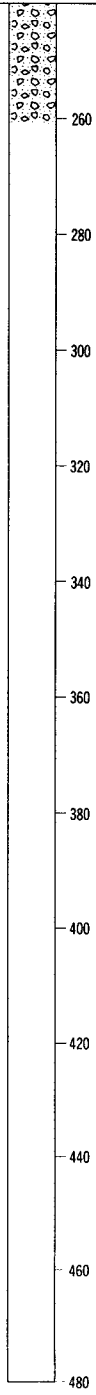
LOCATION: 161-55-15BCD3

DATE DRILLED: June 1970

ALTITUDE: 1006
(FT, MSL)

DEPTH: 260
(FT)

POTENTIAL (MV) RESISTANCE (OHMS) DESCRIPTION OF DEPOSITS



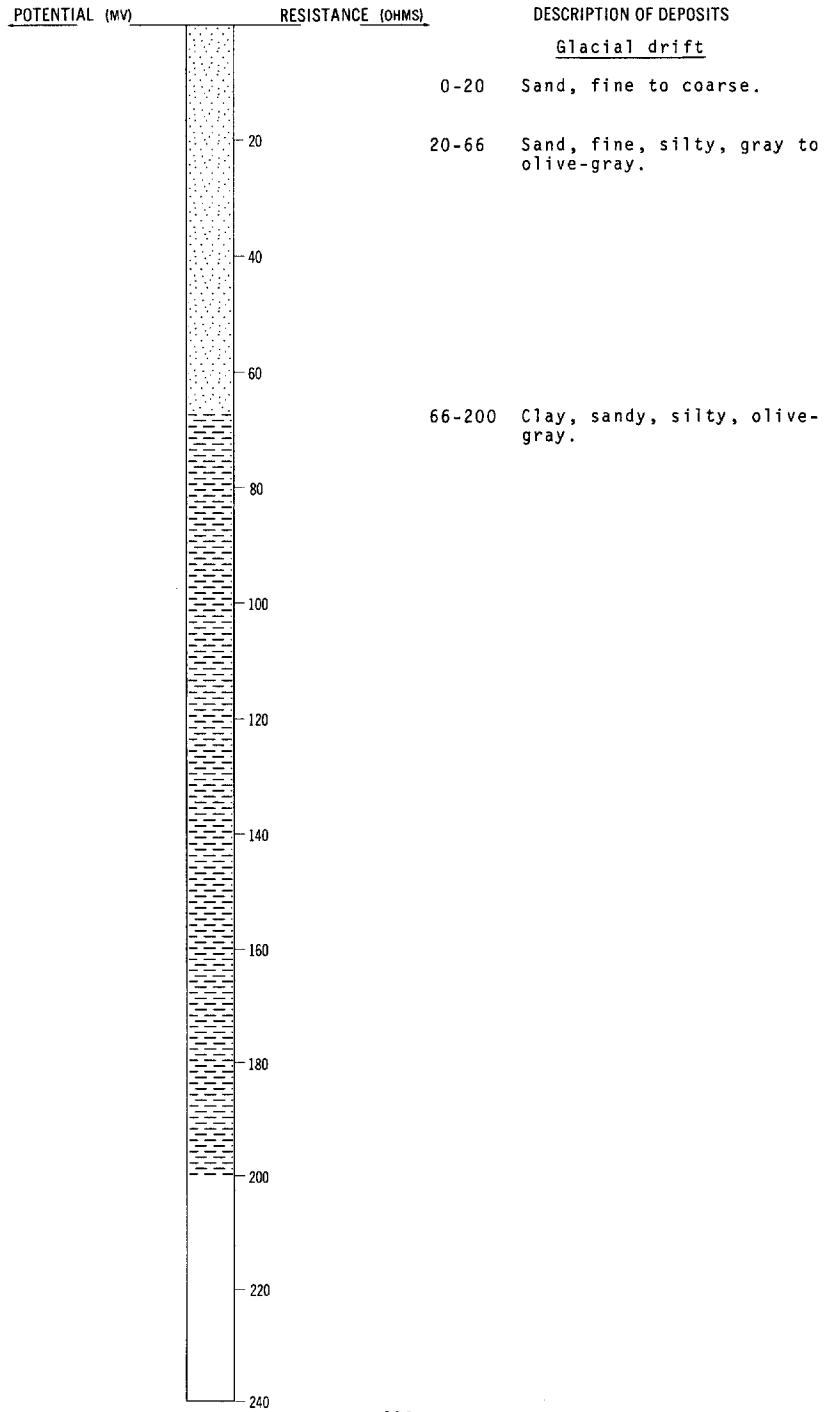
LOCATION: 161-55-158CD4

NDSWC 5711-A

DATE DRILLED: June 1970

ALTITUDE: 1006
(FT. MSL)

DEPTH: 200
(FT)



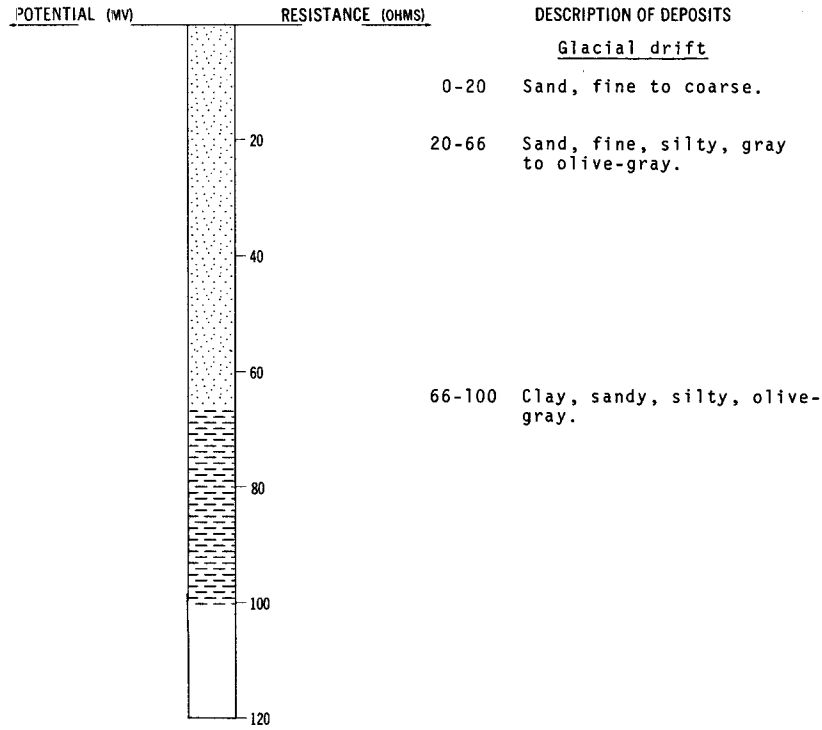
LOCATION: 161-55-15BCD5

NDSWC 5711-B

DATE DRILLED: June 1970

ALTITUDE: 1006
(FT, MSL)

DEPTH: 100
(FT)



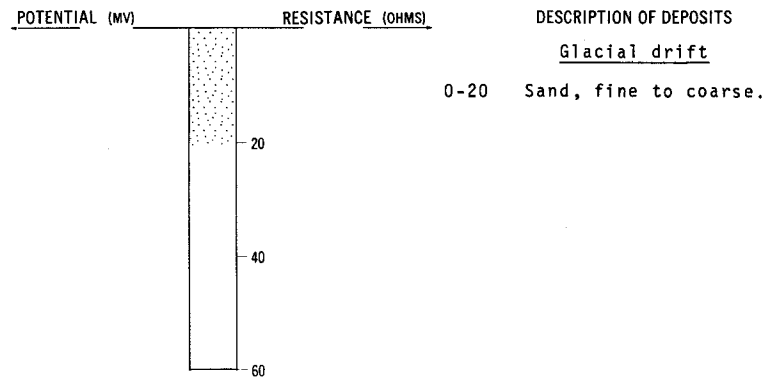
LOCATION: 161-55-15BCD6

NDSWC 5711-C

DATE DRILLED: June 1970

ALTITUDE: 1006
(FT, MSL)

DEPTH: 20
(FT)

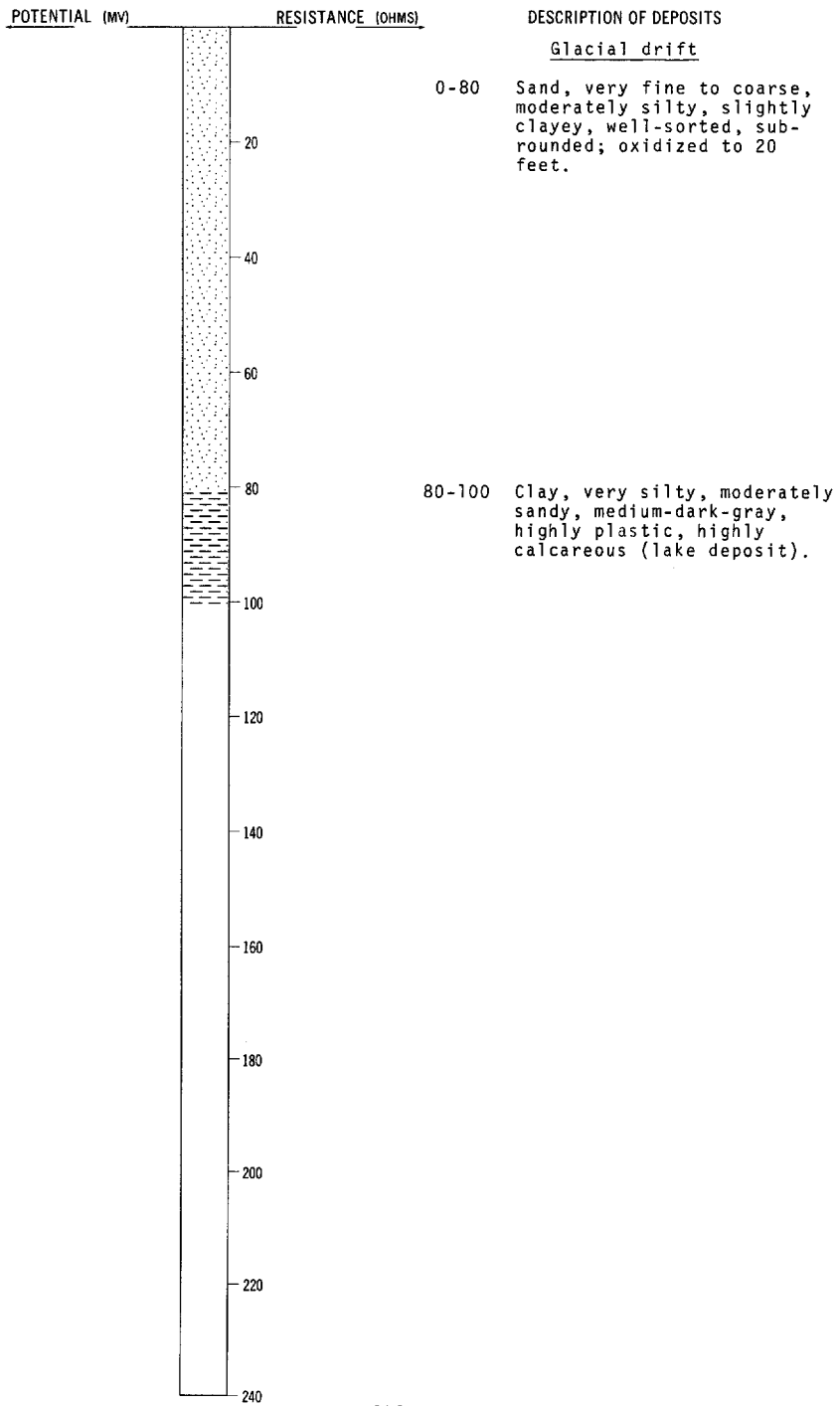


LOCATION: 161-55-15CCC

DATE DRILLED: May 1971

ALTITUDE: 1015
(FT, MSL)

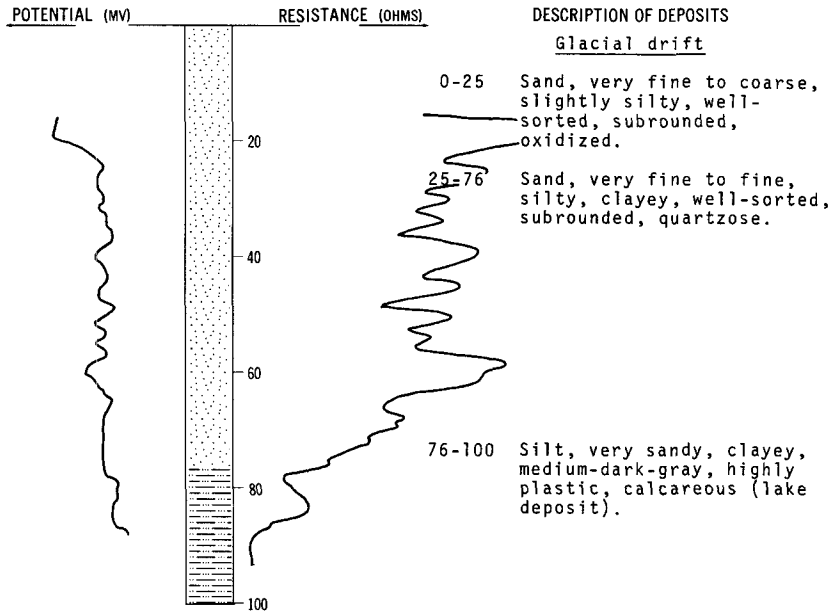
DEPTH: 100
(FT)



LOCATION: 161-55-16ADA1
 ALTITUDE: 1018
 (FT, MSL)

NDSWC 5942

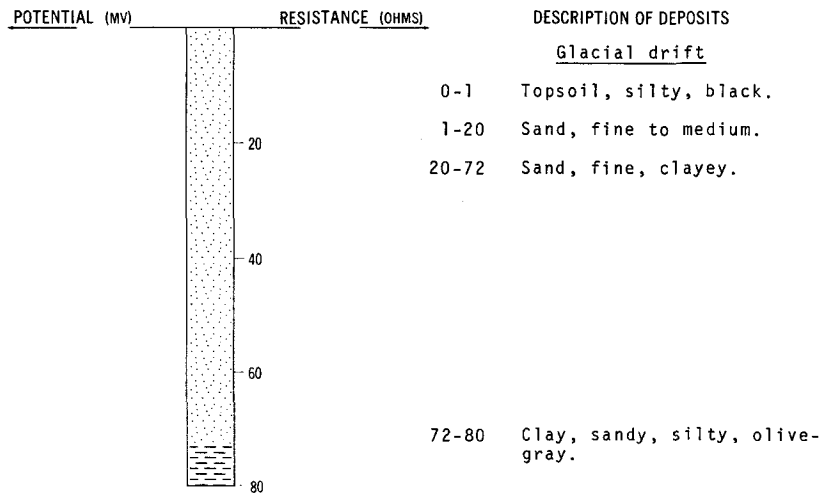
DATE DRILLED: May 1971
 DEPTH: 100
 (FT)



LOCATION: 161-55-16ADA2
 ALTITUDE: 1016
 (FT, MSL)

NDSWC 5942-A

DATE DRILLED: May 1971
 DEPTH: 80
 (FT)



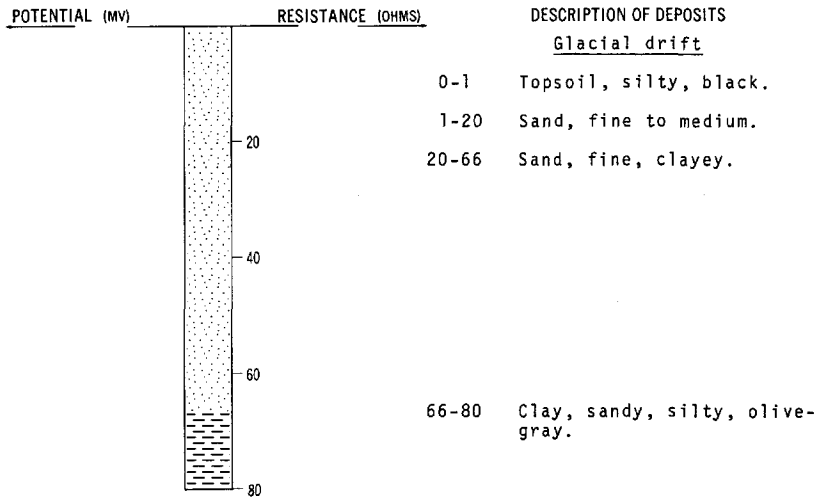
NDSWC 5942-B

LOCATION: 161-55-16ADA3

DATE DRILLED: May 1971

ALTITUDE: 1016
(FT, MSL)

DEPTH: 80
(FT)



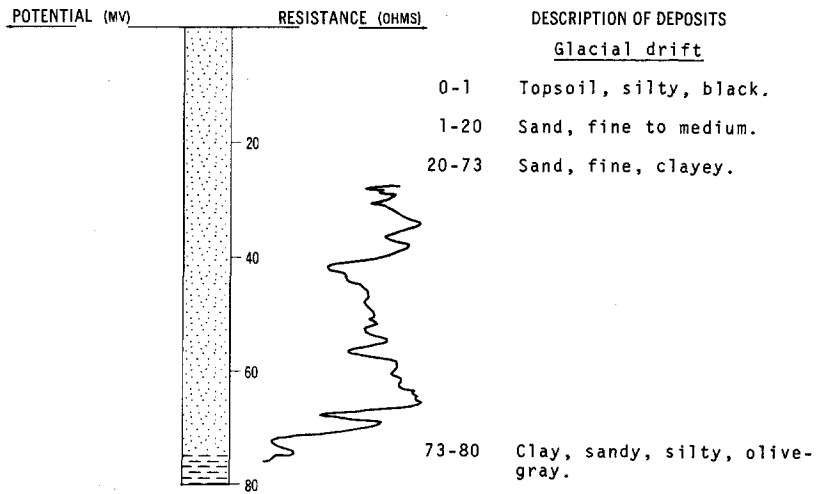
NDSWC 5942-E

LOCATION: 161-55-16ADA4

DATE DRILLED: May 1971

ALTITUDE: 1018
(FT, MSL)

DEPTH: 80
(FT)



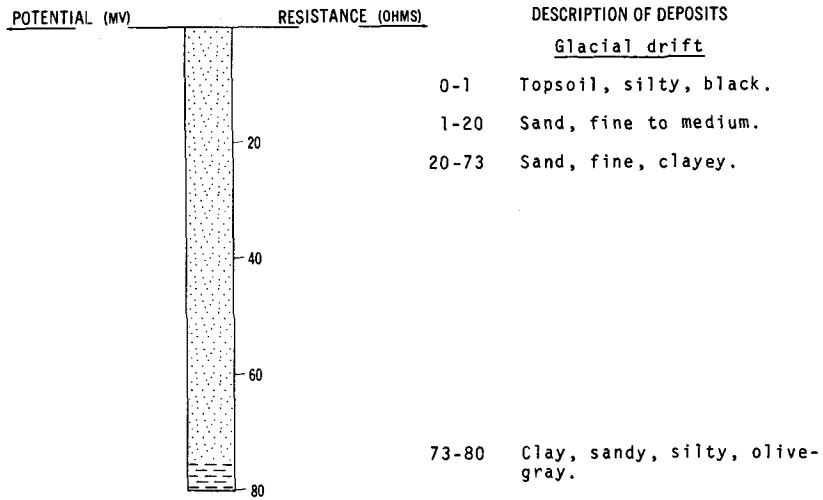
LOCATION: 161-55-16ADD1

NDSWC 5942-C

DATE DRILLED: May 1971

ALTITUDE: 1016
(FT, MSL)

DEPTH: 80
(FT)



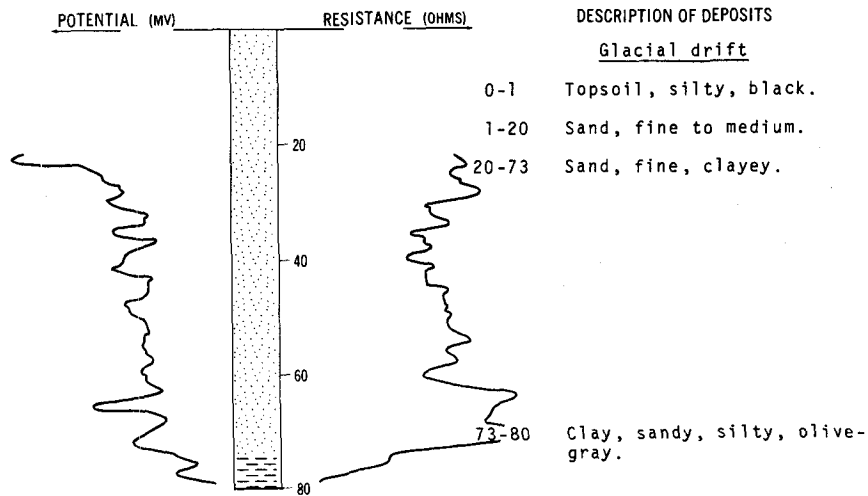
LOCATION: 161-55-16ADD2

NDSWC 5942-D

DATE DRILLED: May 1971

ALTITUDE: 1016
(FT, MSL)

DEPTH: 80
(FT)



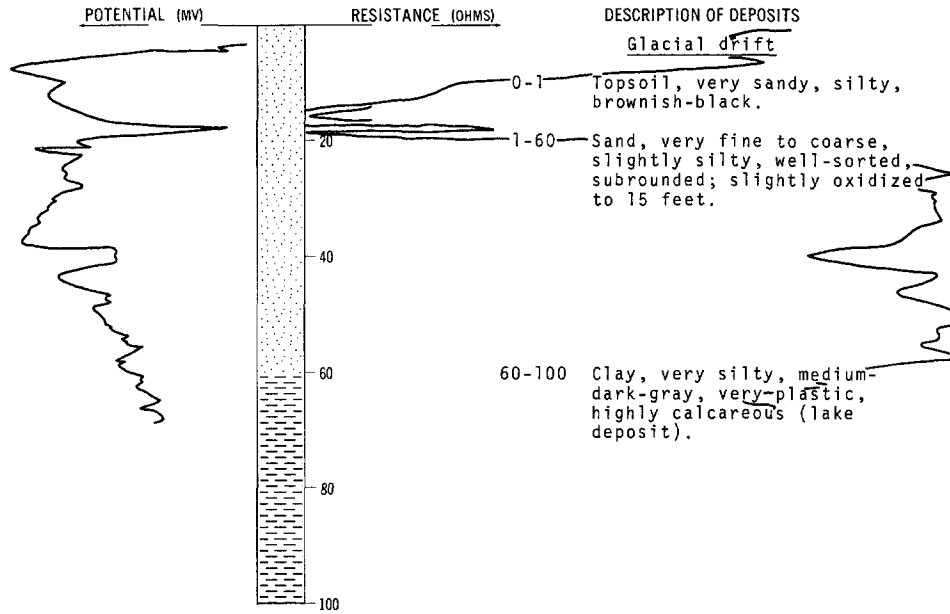
NDSWC 5928

LOCATION: 161-55-17DDD

DATE DRILLED: May 1971

ALTITUDE: 1020
(FT. MSL)

DEPTH: 100
(FT)



161-55-18AAA
USBR 224

Altitude:

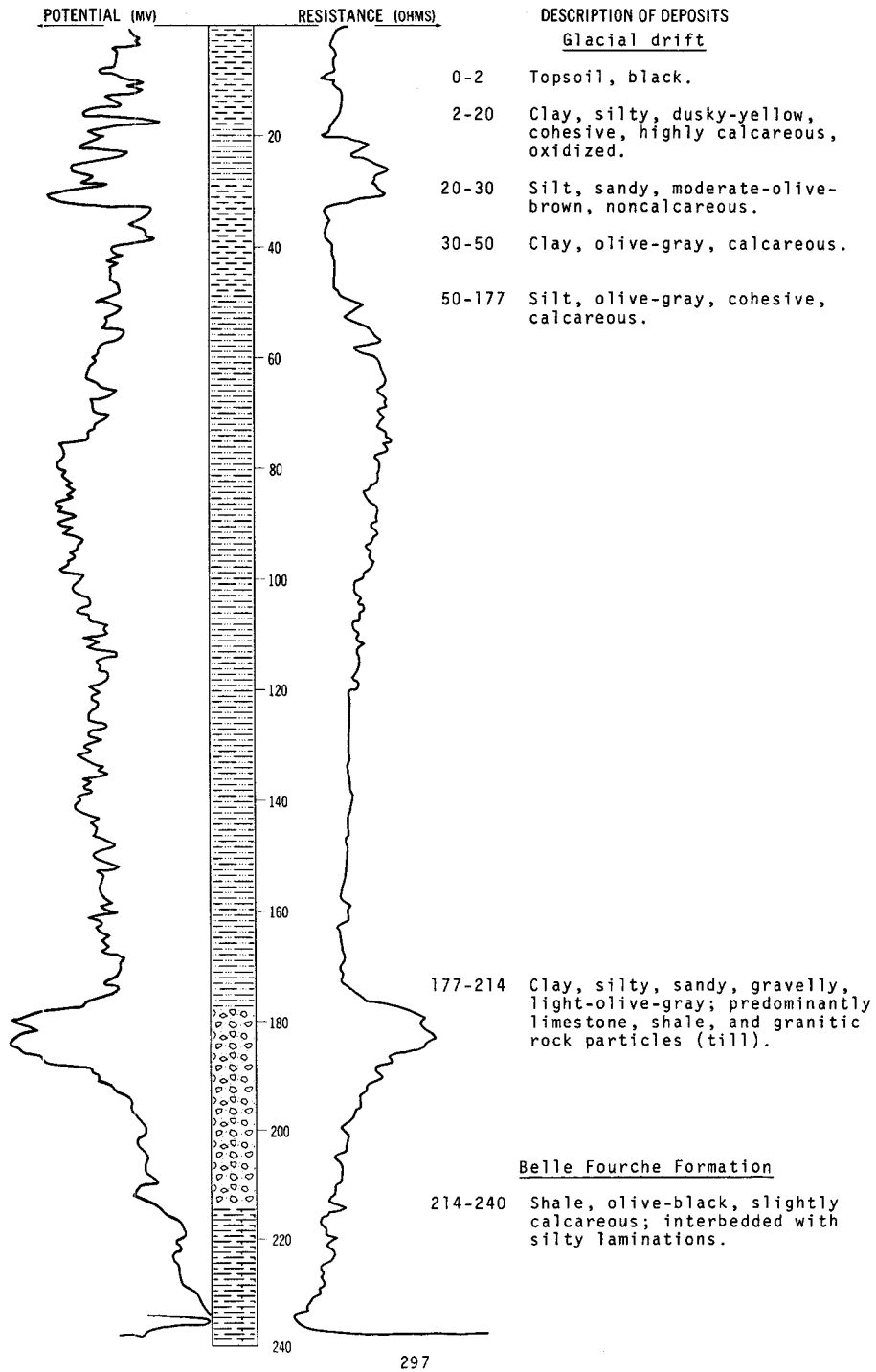
Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, clayey, silty-----	2	2
	Loam, clayey-----	21	23

LOCATION: 161-55-18BBB

DATE DRILLED: May 1968

ALTITUDE: 1010
(FT, MSL)

DEPTH: 240
(FT)



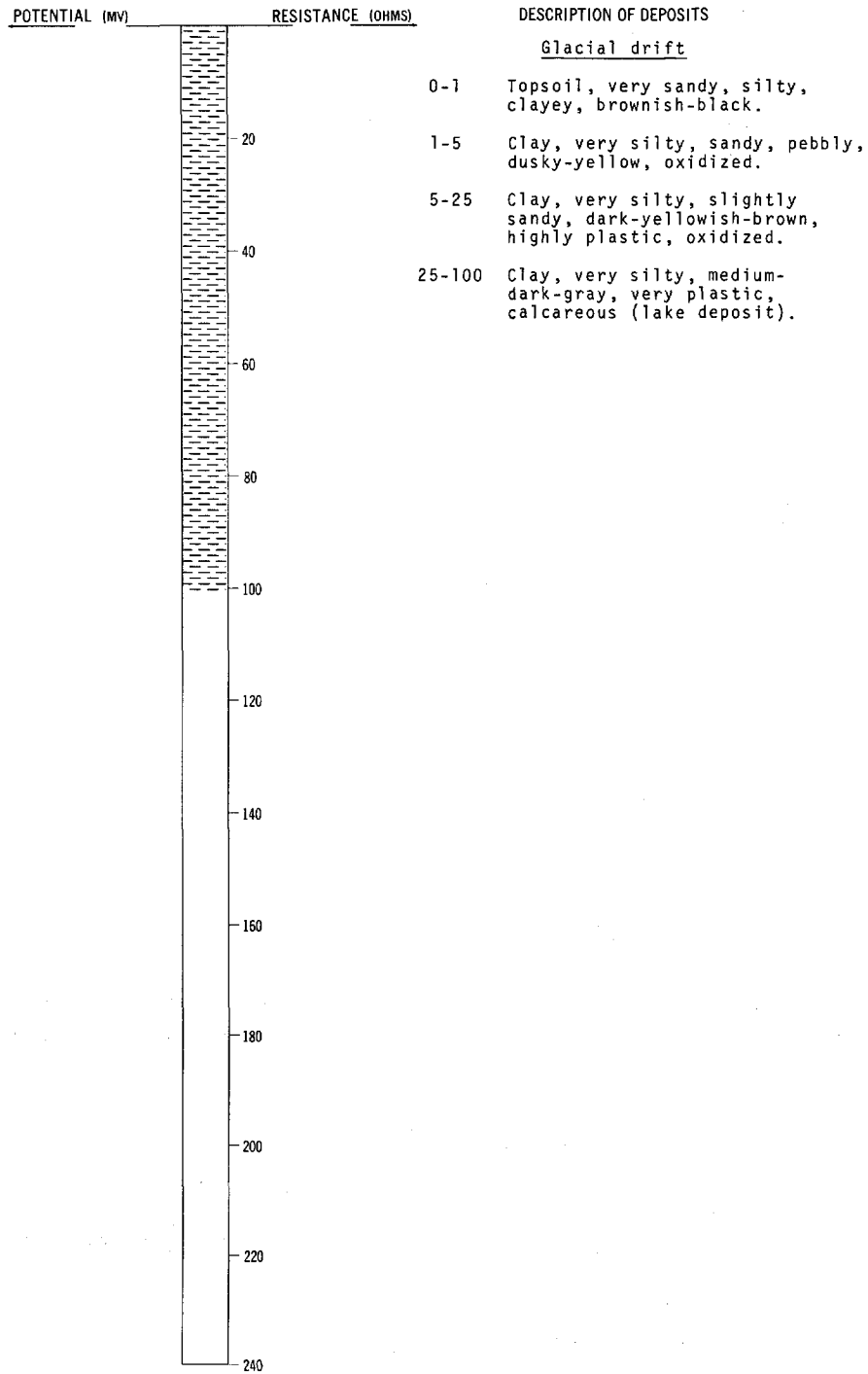
LOCATION: 161-55-18DDA

NDSWC 5929

DATE DRILLED: May 1971

ALTITUDE: 1005
(FT, MSL)

DEPTH: 100
(FT)

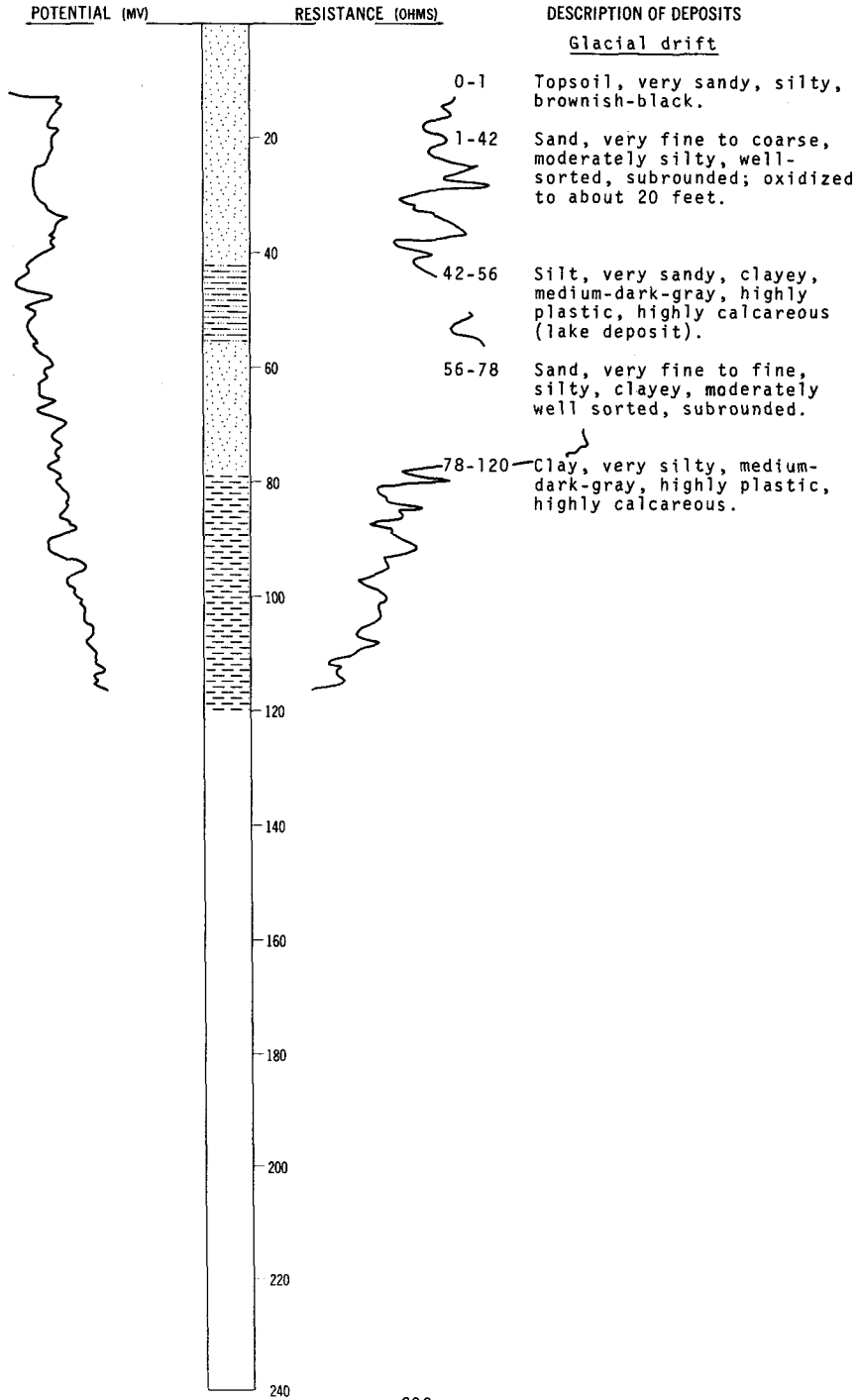


LOCATION: 161-55-210DD
ALTITUDE: 1014
(FT, MSL)

NDSWC 5926

DATE DRILLED: May 1971

DEPTH: 120
(FT)



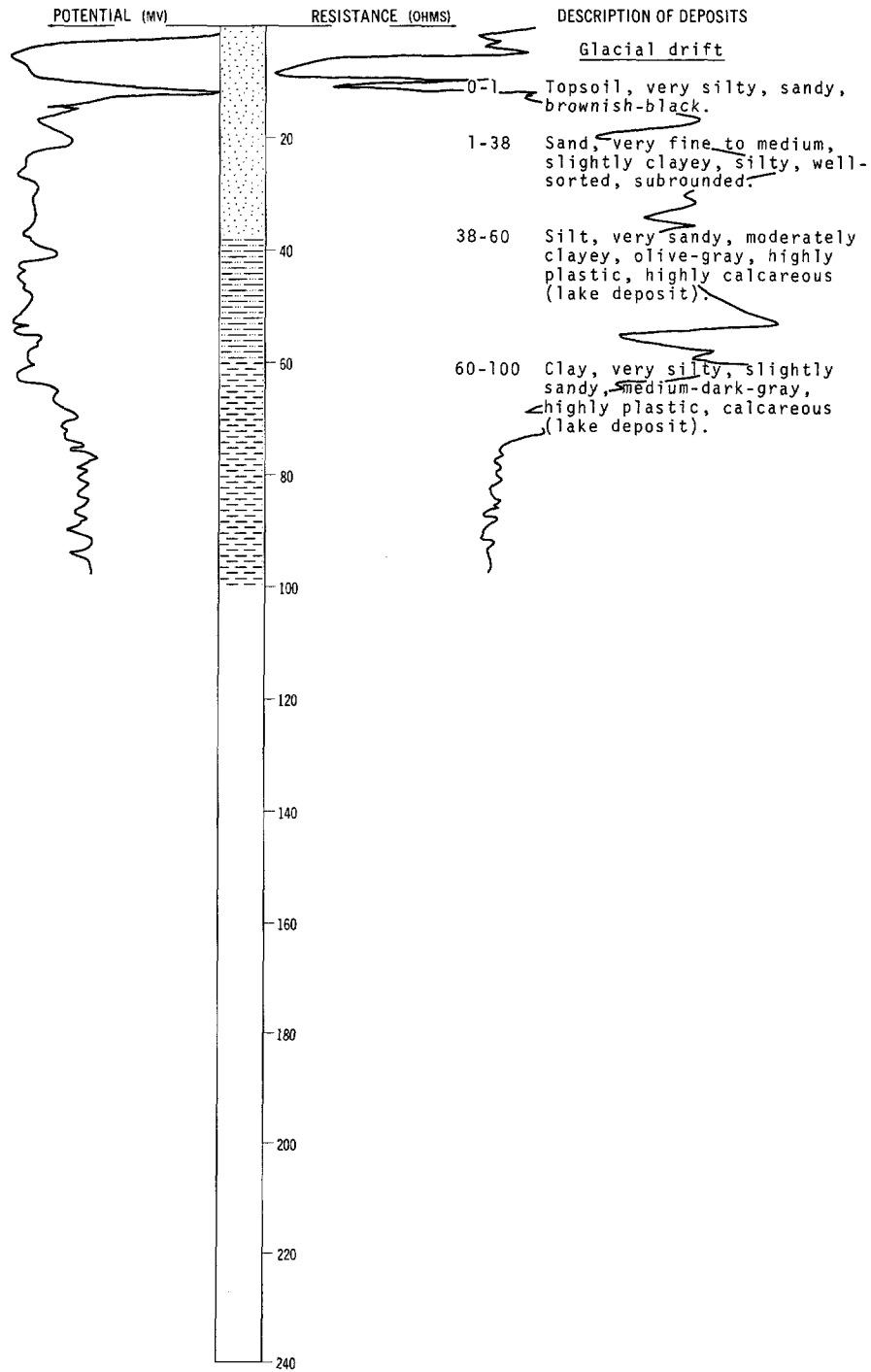
LOCATION: 161-55-22AAD

NDSWC 5924

DATE DRILLED: May 1971

ALTITUDE: 985
(FT, MSL)

DEPTH: 100
(FT)



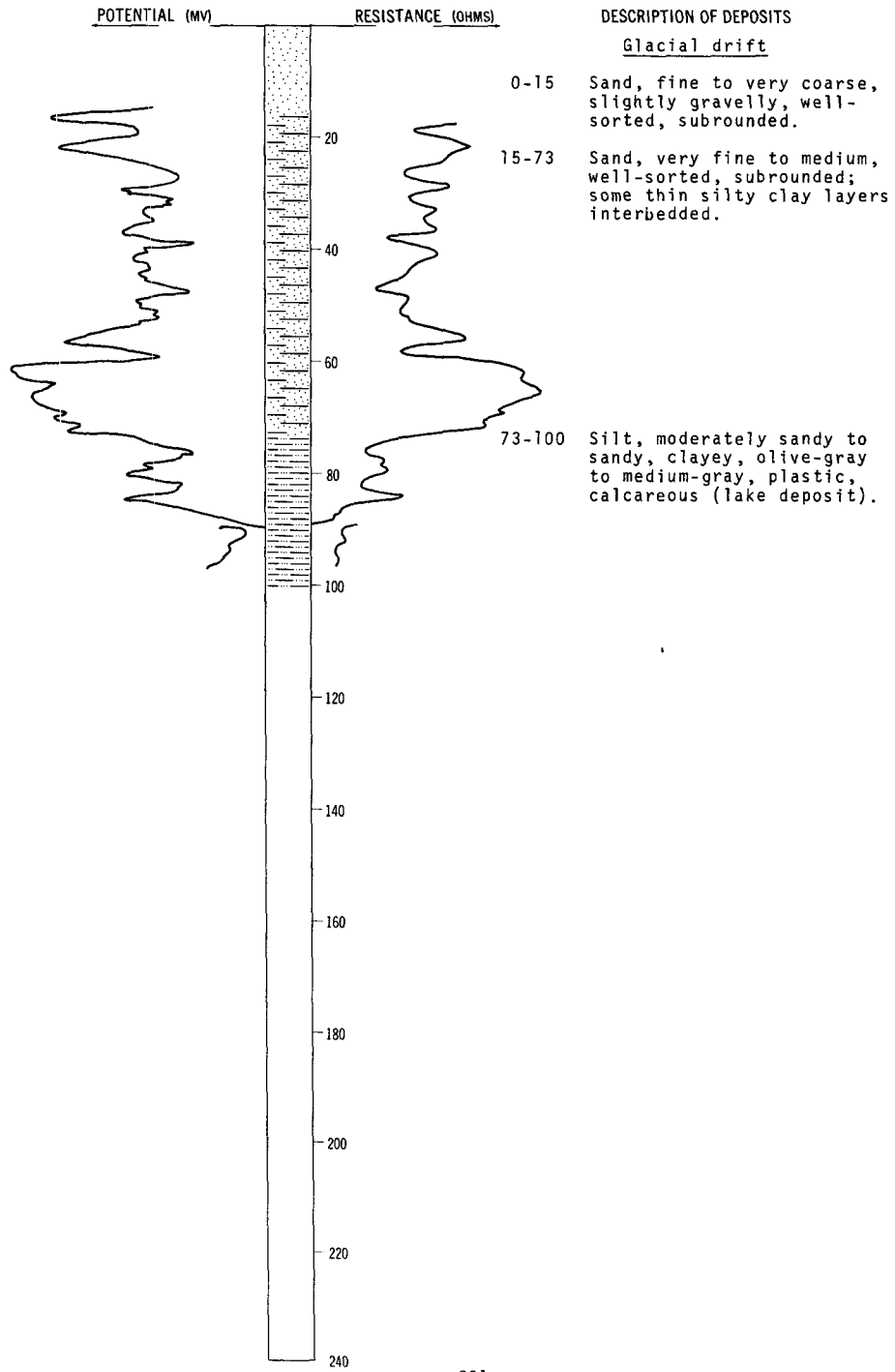
LOCATION: 161-55-22ABC1

NDSWC 5951

DATE DRILLED: June 1971

ALTITUDE: 1002
(FT, MSL)

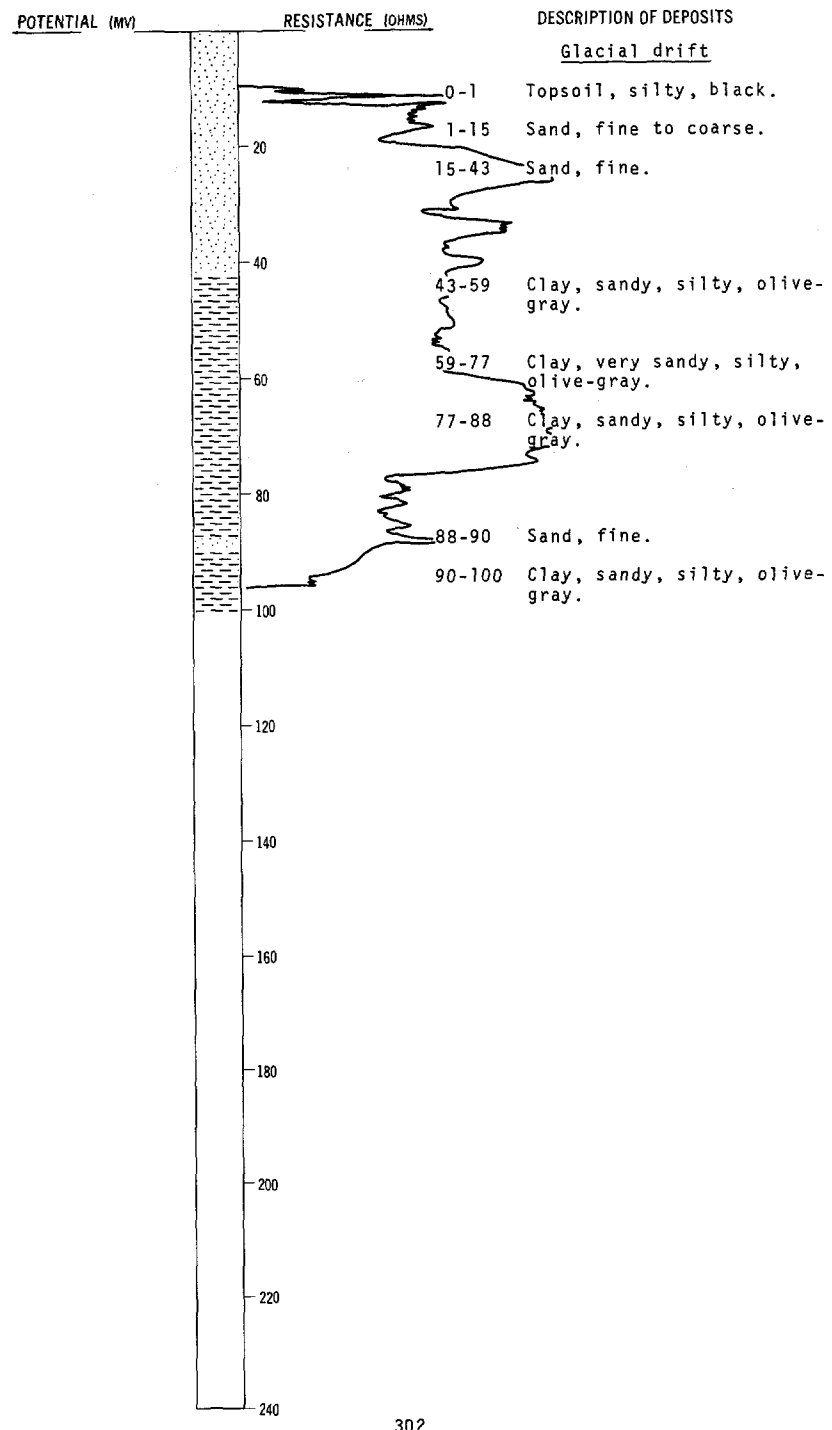
DEPTH: 100
(FT)



LOCATION: 161-55-22ABC2
ALTITUDE: 1005
(FT, MSL)

NDSWC 5951-A

DATE DRILLED: June 1971
DEPTH: 100
(FT)

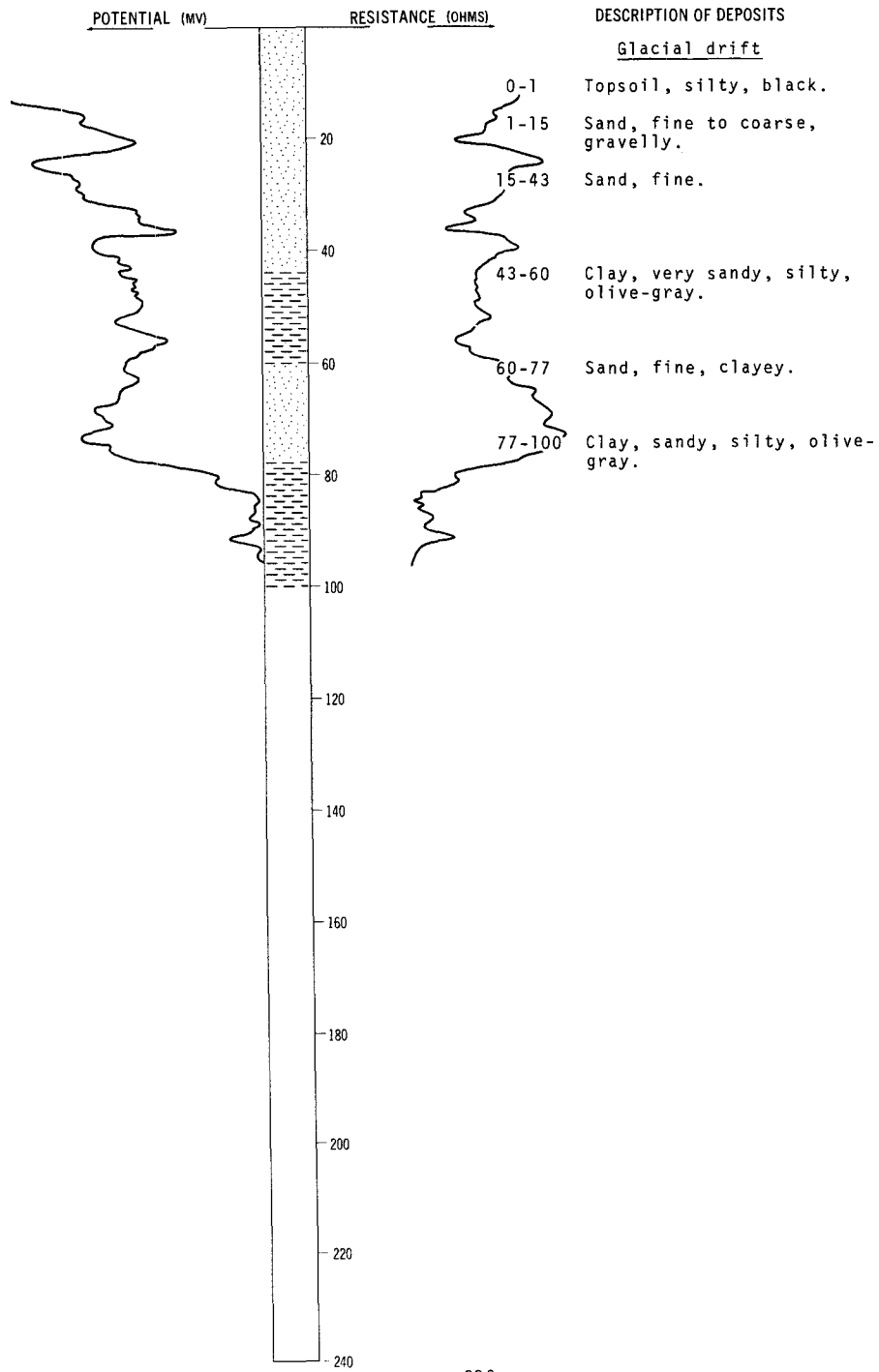


LOCATION: 161-55-22ABC3
ALTITUDE: 1007
(FT, MSL)

NDSWC 5951-B

DATE DRILLED: June 1971

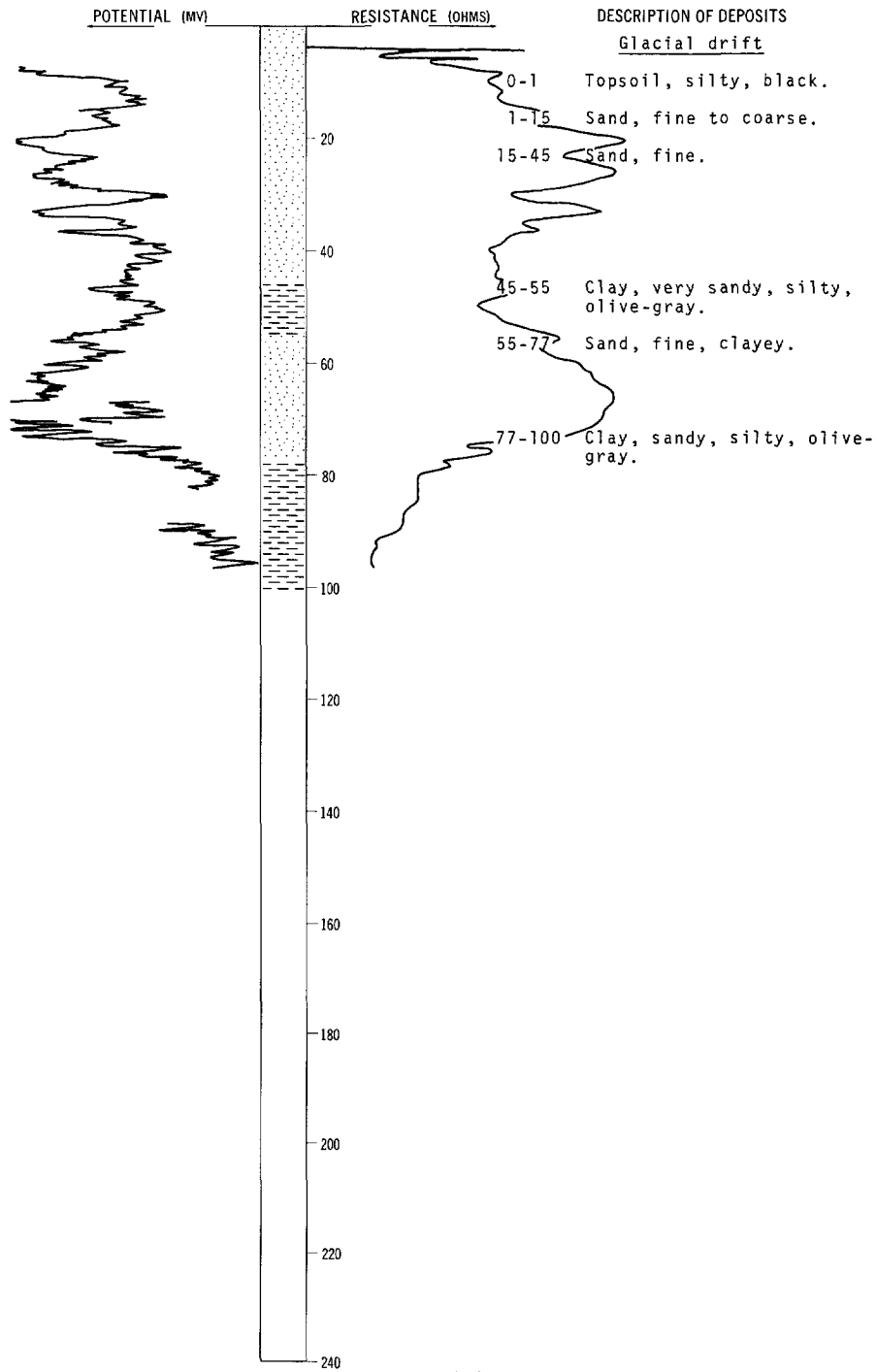
DEPTH: 100
(FT)



LOCATION: 161-55-22ABC4
ALTITUDE: 1002
(FT, MSL)

NDSWC 5951-C

DATE DRILLED: June 1971
DEPTH: 100
(FT)



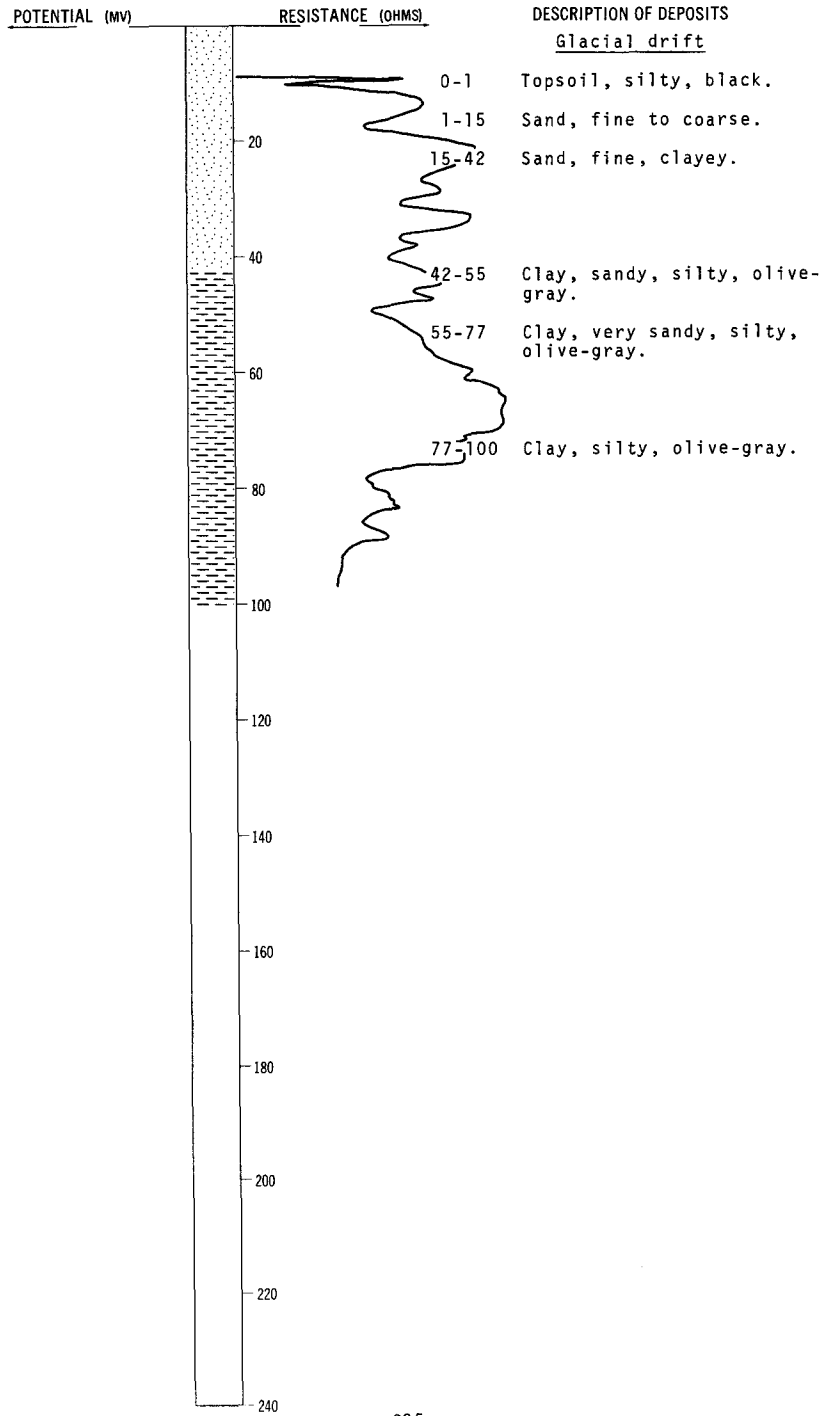
NDSWC 5951-D

LOCATION: 161-55-22ABC5

DATE DRILLED: June 1971

ALTITUDE: 1005
(FT, MSL)

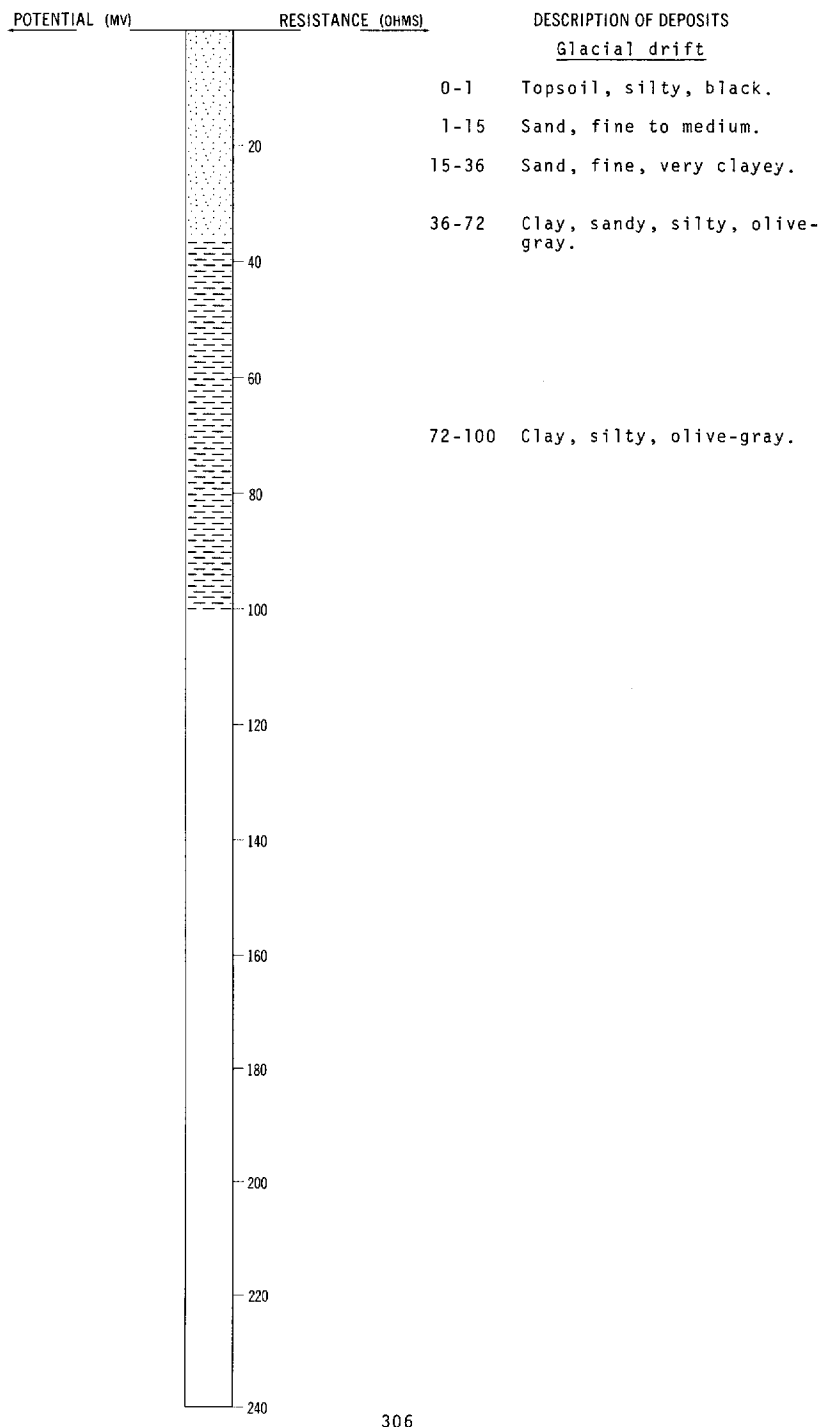
DEPTH: 100
(FT)



LOCATION: 161-55-22ABC6
ALTITUDE: 1003
(FT, MSL)

NDSWC 5951-E

DATE DRILLED: June 1971
DEPTH: 100
(FT)



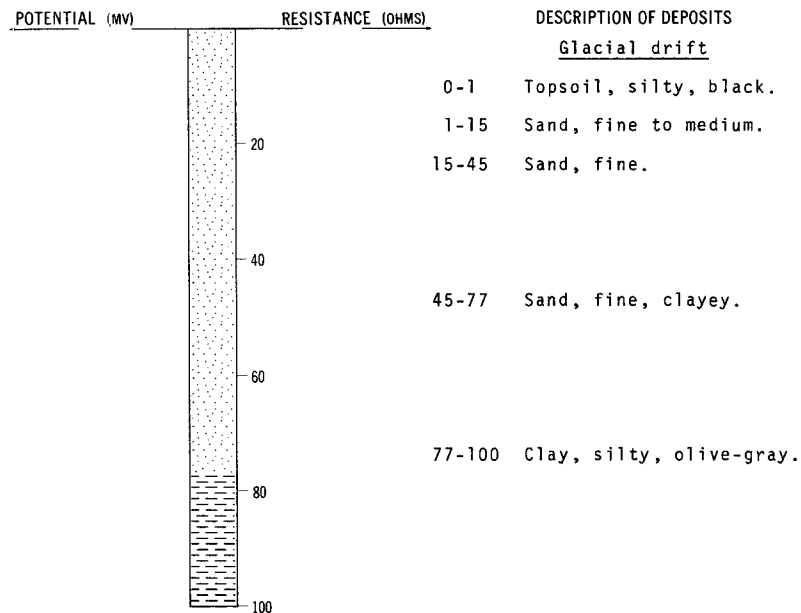
LOCATION: 161-55-22ABC7

NDSWC 5951-F

DATE DRILLED: June 1971

ALTITUDE: 1005
(FT, MSL)

DEPTH: 100
(FT)



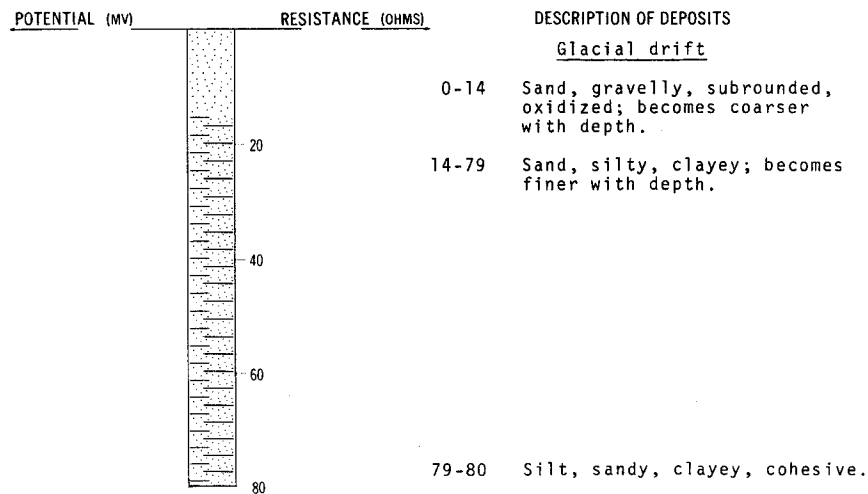
LOCATION: 161-55-22ABC8

NDSWC PW No. 1

DATE DRILLED: June 1971

ALTITUDE: 1006
(FT, MSL)

DEPTH: 80
(FT)



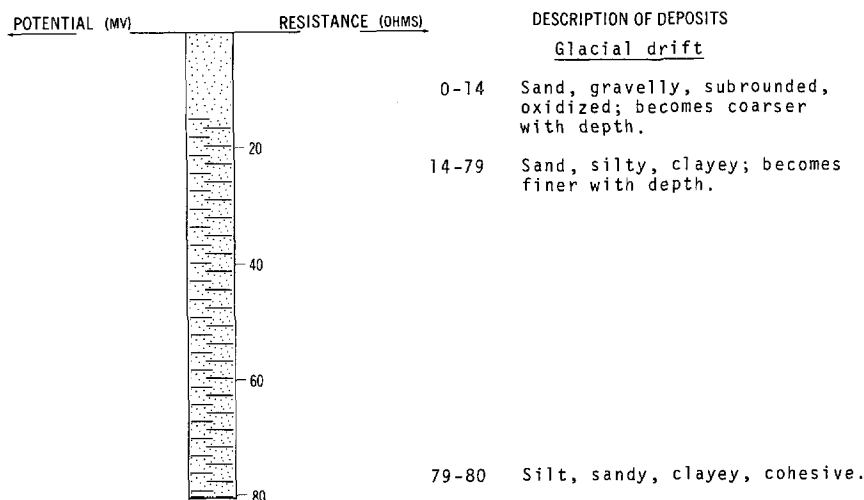
LOCATION: 161-55-22ABC9

NDSWC PW No. 2

DATE DRILLED: August 1971

ALTITUDE: 1006
(FT, MSL)

DEPTH: 80
(FT)



161-55-23AAB
NDGS Pem-70-18

Altitude: 960 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Roadfill-----	4	4
	Sand, fine to medium, yellowish-brown, well-sorted-----	1	5
	Sand, fine, yellowish-brown, saturated-----	2	7
	Sand, very fine, silty, greenish-yellow-brown	7	14
	Sand and silt, slightly clayey, greenish-gray, well-sorted; sand very fine-----	10	24
	Sand; same as above except more clayey-----	23	47
	Clay, gray, plastic, very sticky-----	2	49

161-55-24BAA
NDGS Pem-70-19

Altitude: 946 feet

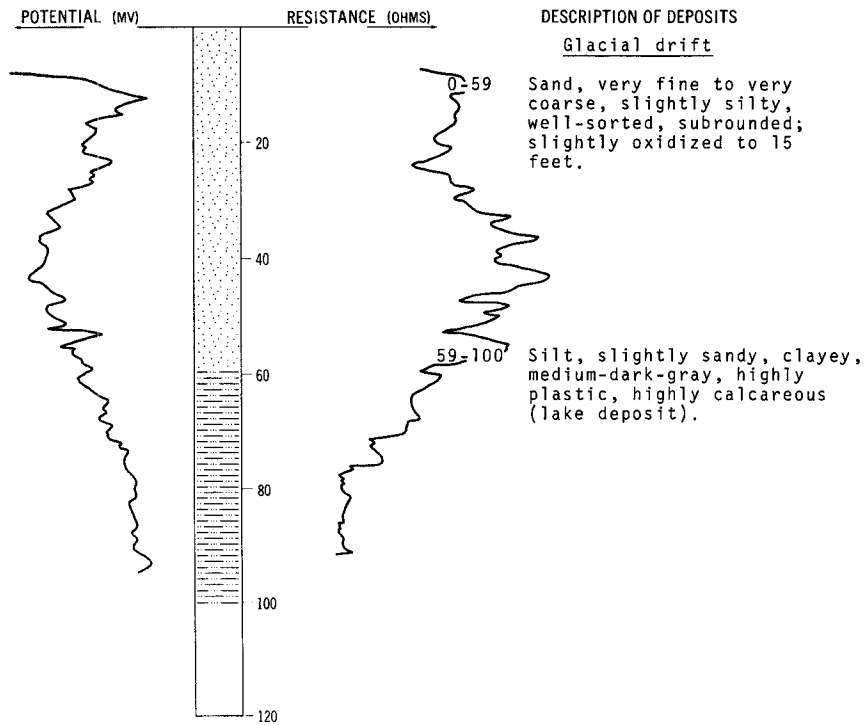
Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Roadfill-----	2	2
	Sand, coarse, slightly gravelly, moderately well to poorly sorted, subrounded-----	5	7
	Sand, coarse, slightly gravelly, moderately well to poorly sorted, subrounded, saturated	3	10
	Sand, medium, slightly gravelly-----	14	24
	Sand, very fine to fine, well-sorted, saturated-----	10	34

161-55-27DDD
 USBR 231

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand-----	2	4
	Sand, fine, loamy-----	9	13
	Sand, fine-----	4	17
	Sand, very fine-----	6	23

LOCATION: 161-55-28CCC NDSWC 5925 DATE DRILLED: May 1971
 ALTITUDE: 1012 DEPTH: 100
 (FT, MSL) (FT)



161-55-29ABB
NDGS Pem-70-31

Altitude: 1026 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Roadfill and topsoil-----	3	3
	Sand, medium to coarse, well-sorted, sub- angular to subrounded-----	9	12
	Sand, fine, gray, saturated; grades downward to very fine sand-----	37	49
	Clay, slightly silty, slightly pebbly, gray, very plastic-----	10	59

161-55-29CCC
USBR 232

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	7	7
	Sand, fine, loamy-----	16	23

161-55-32AAA
NDGS Pem-70-30

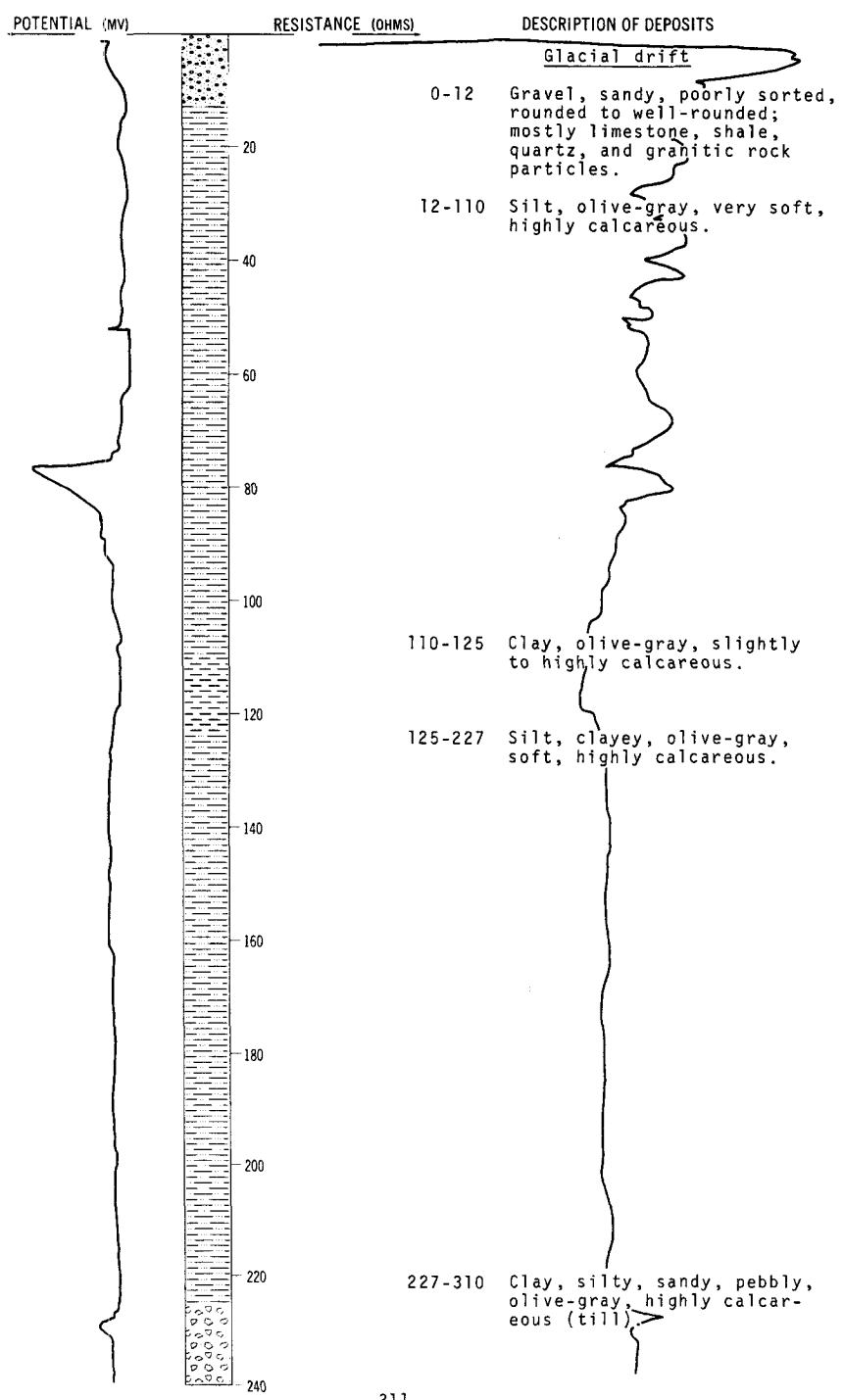
Altitude: 1010 feet

Glacial drift:			
	Topsoil-----	2	2
	Sand, medium to coarse, well-sorted, subrounded-----	3	5
	Sand; same as above except coarser-----	2	7
	Sand, fine to medium, yellowish-brown, well-sorted, saturated-----	10	17
	Sand, fine to medium, grayish-brown, well- sorted, saturated-----	8	25
	Sand, silty, fine, well-sorted, saturated---	14	39
	Clay, dark-gray, dense; poor sample return-----	5	44

LOCATION: 161-55-34BAA
ALTITUDE: 1005
(FT, MSL)

NDSWC 3567

DATE DRILLED: May 1968
DEPTH: 470
(FT)



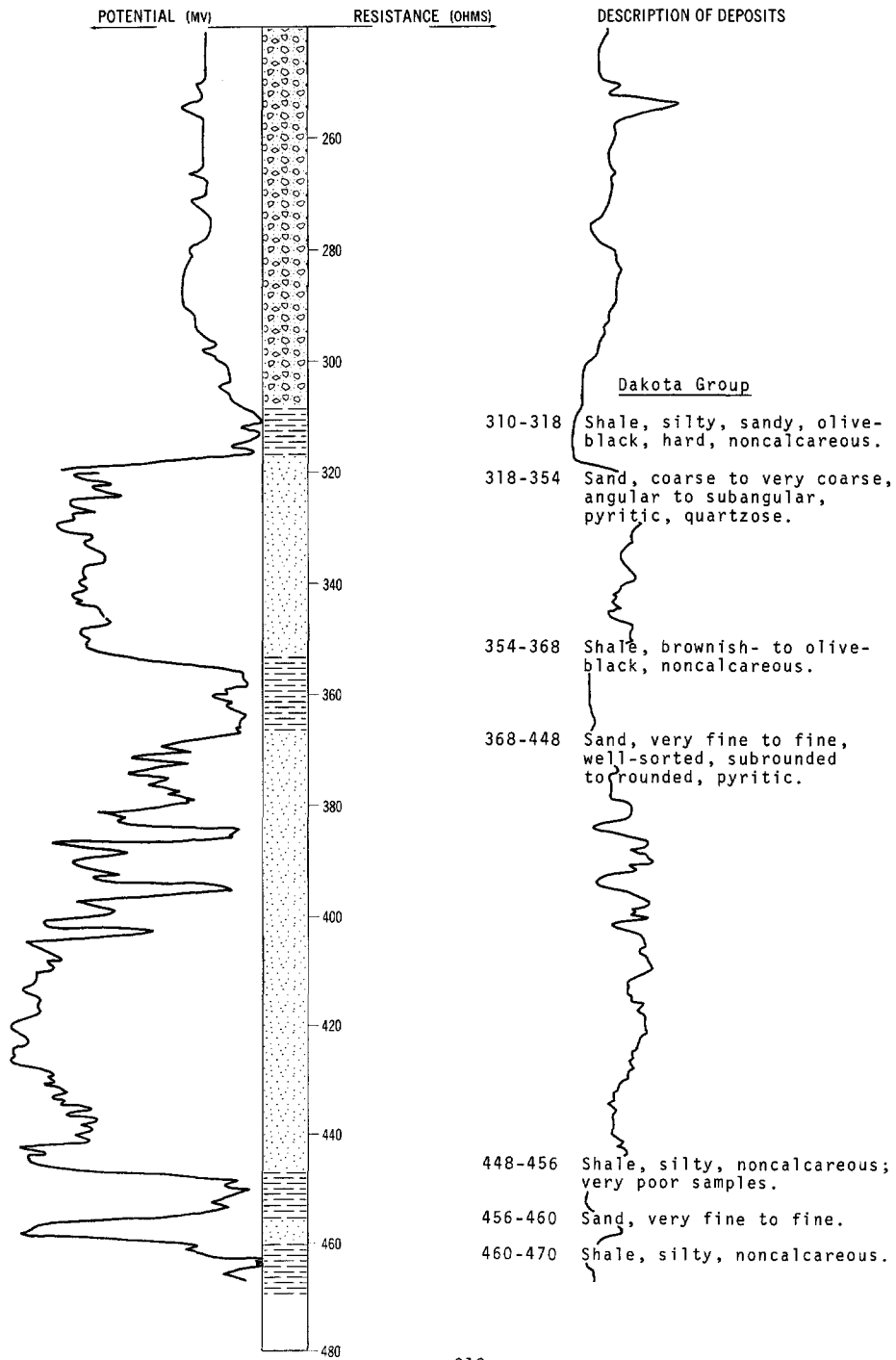
LOCATION: 161-55-34BAA

NDSWC 3567, Continued

DATE DRILLED: May 1968

ALTITUDE: 1005
(FT, MSL)

DEPTH: 470
(FT)

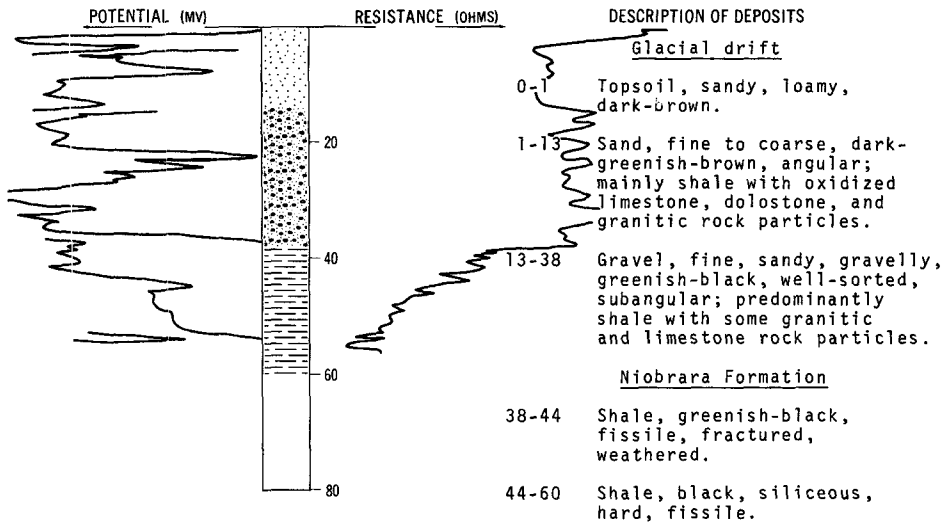


LOCATION: 161-56-6DDD

DATE DRILLED: October 1969

ALTITUDE: 1210
(FT. MSL)

DEPTH: 60
(FT)

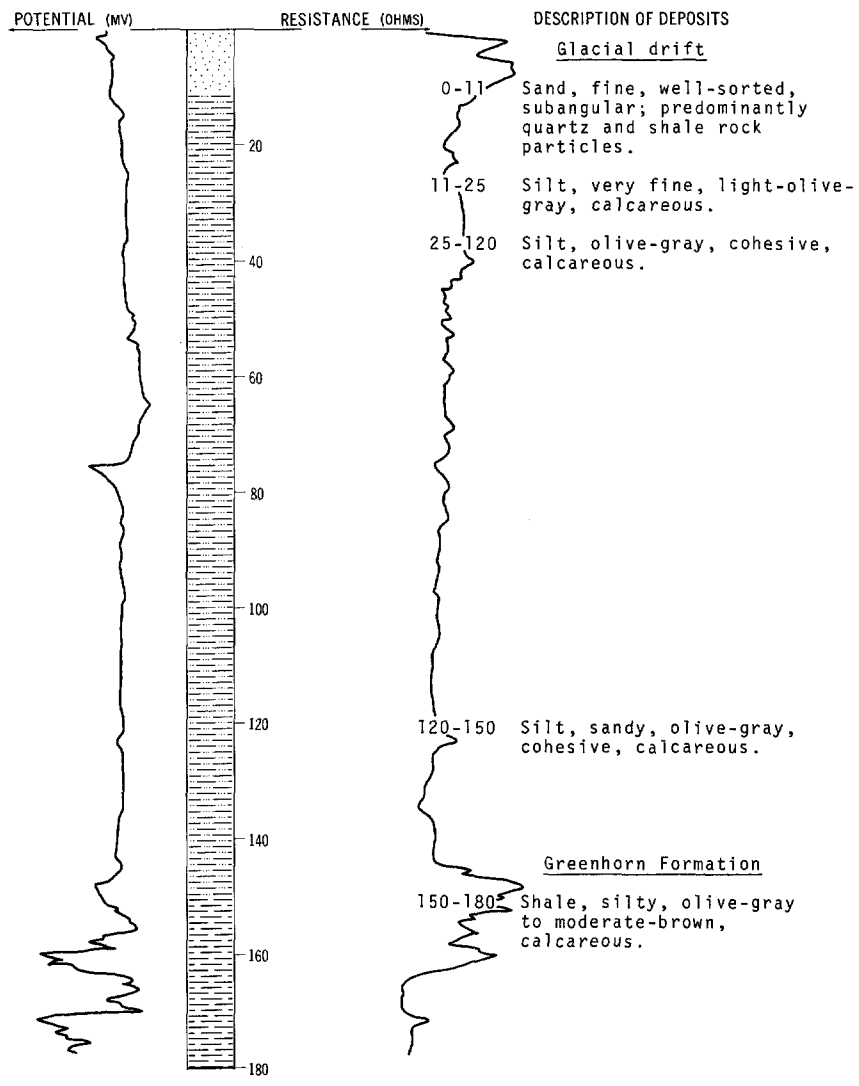


161-56-7DDD
USBR 222

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Glacial drift:</u>			
	Loam, silty-----	4	4
	Sand, fine, loamy-----	4	8
	Sand-----	3	11
	Sand, loamy-----	12	23

LOCATION: 161-56-10BAA NDSWC 3563 DATE DRILLED: May 1968
 ALTITUDE: 1083 DEPTH: 180
 (FT, MSL) (FT)



161-56-10BBB
 USBR 455

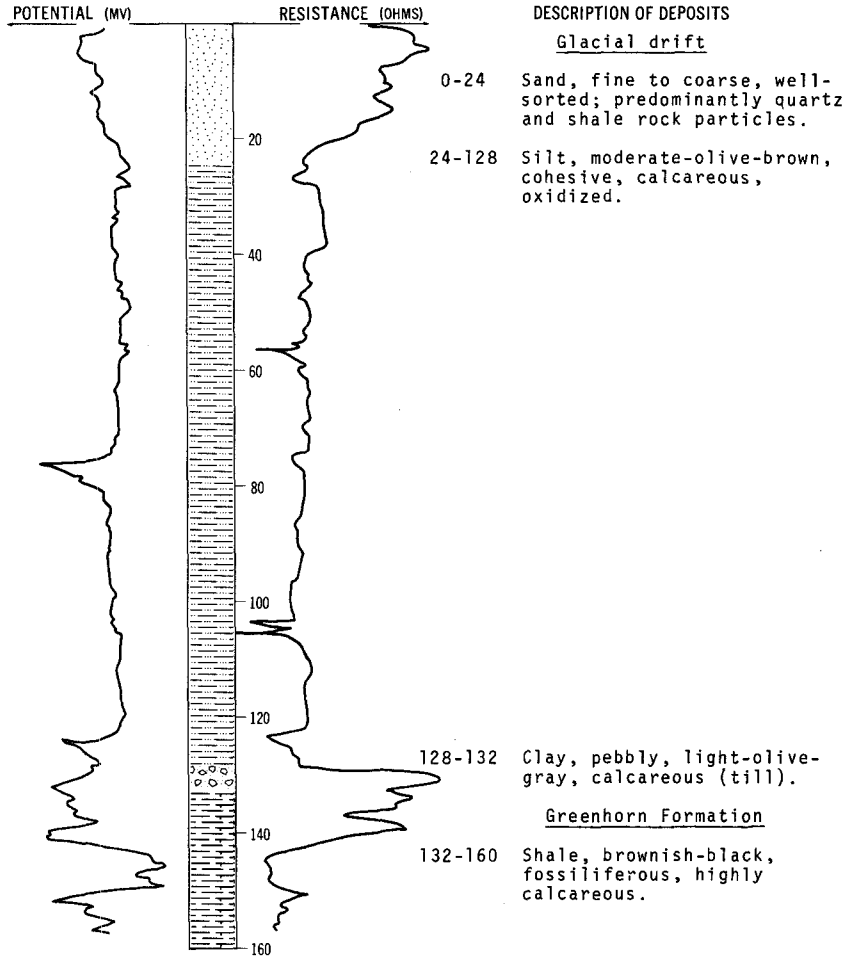
Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, sandy-----	1	1
	Sand, fine-----	27	28

LOCATION: 161-56-10DDD
 ALTITUDE: 1070
 (FT, MSL)

NDSWC 3562

DATE DRILLED: May 1968
 DEPTH: 160
 (FT)



161-56-11CCC
 USBR 223

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Sand, fine, loamy-----	13	13
	Loam, silty-----	9	22

161-56-17CCC
USBR 456

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, silty-----	13	13
	Sand-----	10	23

161-56-18DDD
NDGS Pem-70-35

Altitude: 1212 feet

Glacial drift:			
	Roadfill-----	4	4
	Clay, silty, yellowish-brown, limonite stained-----	5	9
	Clay, silty; same as above except more clayey and a few small pebbles-----	6	15
	Till, clayey, slightly silty, slightly pebbly, oxidized-----	5	20
	Sand, coarse, clayey, subangular to sub-rounded, saturated-----	4	24

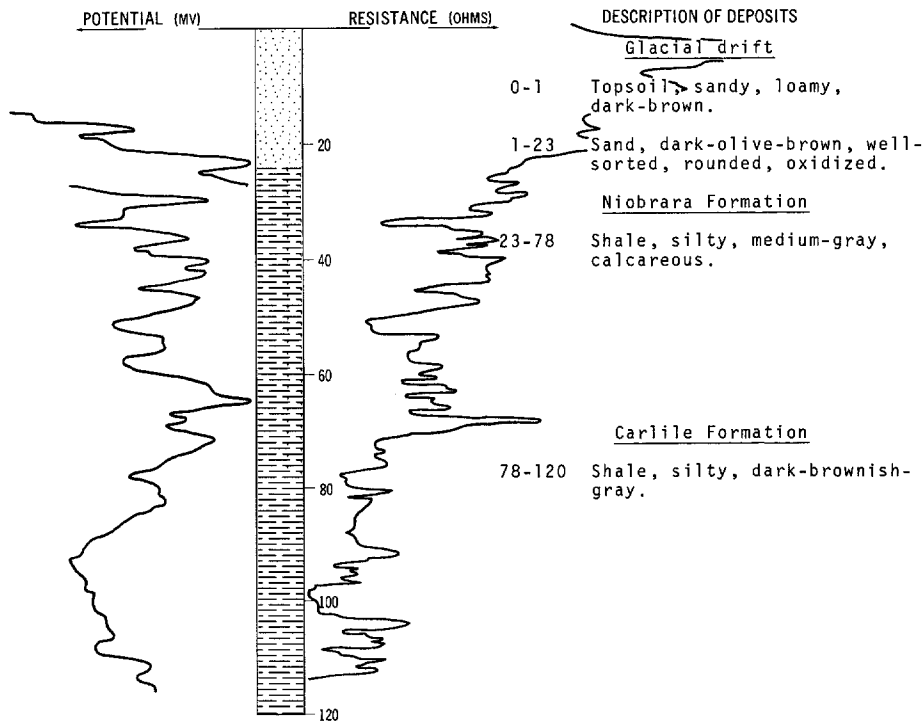
LOCATION: 161-56-19AAA

NDSWC 4221

DATE DRILLED: September 1970

ALTITUDE: 1210
(FT, MSL)

DEPTH: 120
(FT)

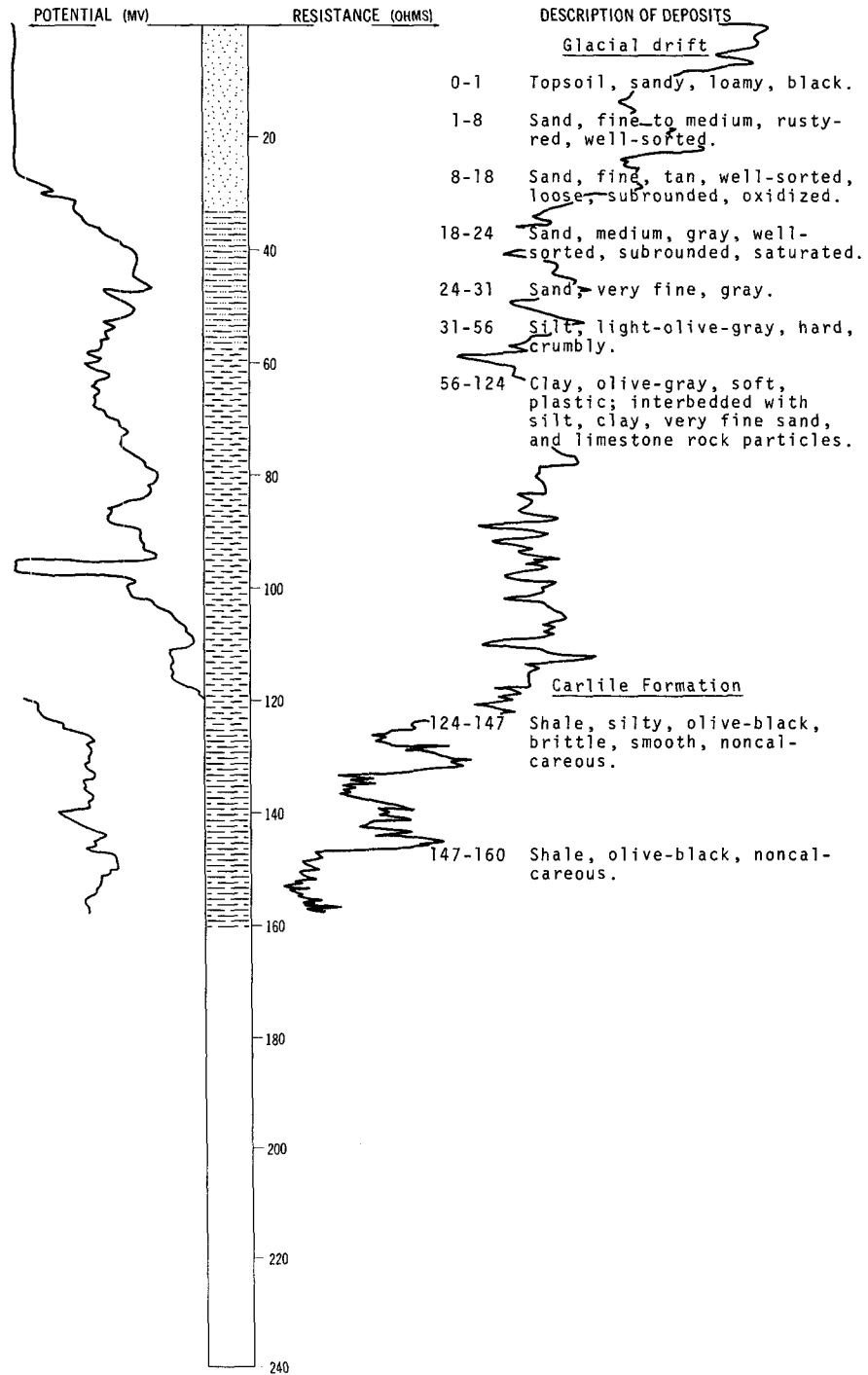


LOCATION: 161-56-21AAA
ALTITUDE: 1100
(FT, MSL)

NDSWC 3824

DATE DRILLED: September 1969

DEPTH: 160
(FT)



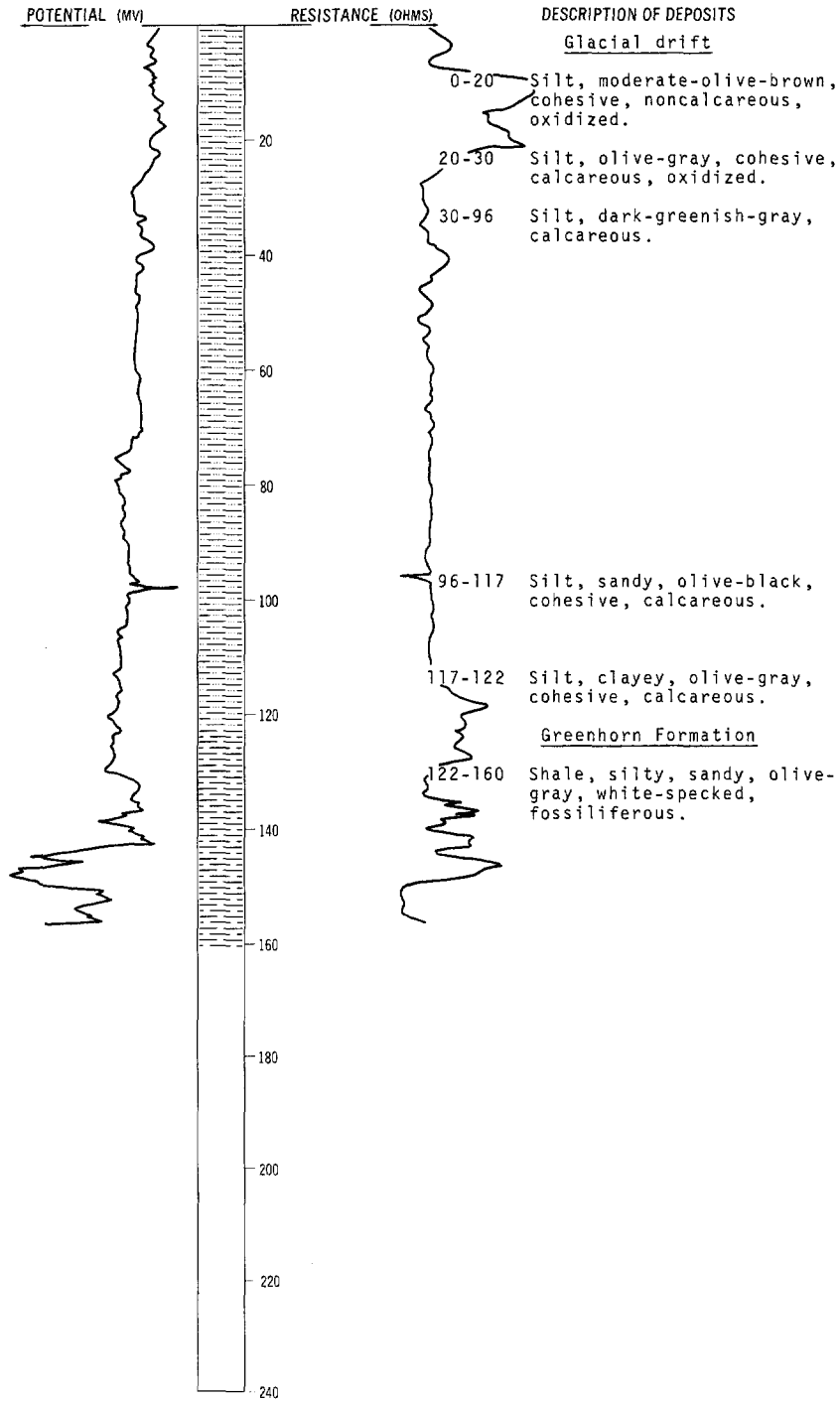
LOCATION: 161-56-22DDD

NDSWC 3561

DATE DRILLED: May 1968

ALTITUDE: 1060
(FT, MSL)

DEPTH: 160
(FT)



161-56-23BBB
USBR 452

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, fine, sandy-----	1	1
	Sand, fine, loamy-----	5	6
	Loam, fine, sandy-----	1	7
	Sand, fine, loamy-----	2	9
	Sand, fine-----	6	15
	Clay, silty-----	2	17
	Clay-----	6	23

161-56-25AAA
USBR 453

Altitude:

Glacial drift:			
	Loam, silty-----	1	1
	Clay-----	9	10
	Clay, silty-----	2	12
	Silt-----	1	13

161-56-27DDD
USBR 233

Altitude:

Glacial drift:			
	Loam, clayey-----	1	1
	Loam, silty-----	1	2
	Loam, clayey, silty-----	5	7
	Till-----	1	8
	Loam, silty-----	15	23

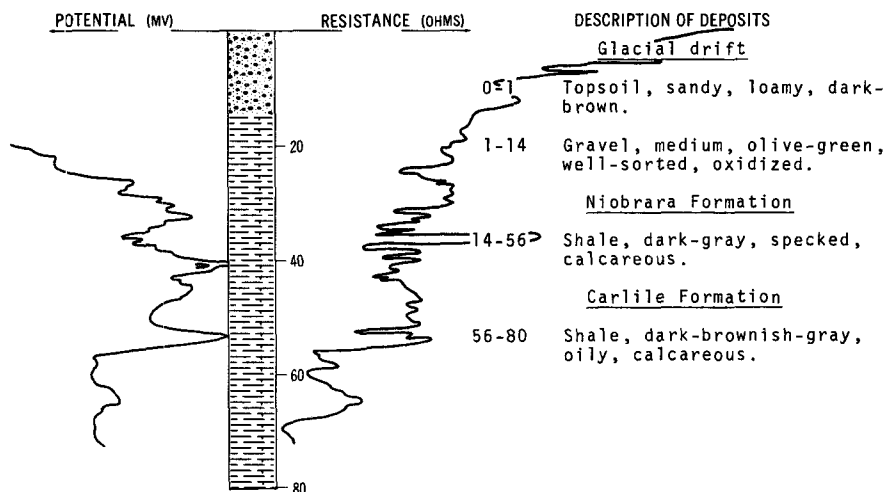
NDSWC 4219

LOCATION: 161-56-28CCC

DATE DRILLED: September 1970

ALTITUDE: 1170
(FT, MSL)

DEPTH: 80
(FT)



161-56-32BBB
 USBR 234

Altitude:

Glacial drift:

Loam, silty-----	5	5
Loam, clayey, silty-----	8	13

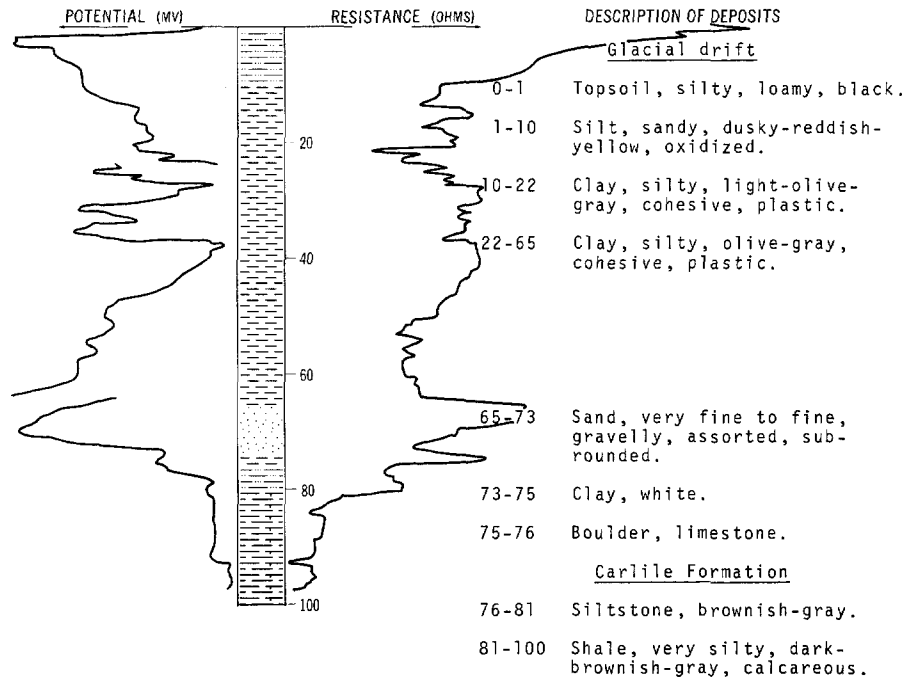
NDSWC 4218

LOCATION: 161-56-35CCC

DATE DRILLED: September 1970

ALTITUDE: 1044
 (FT. MSL)

DEPTH: 100
 (FT)



161-56-36BBB
 USBR 451

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty-----	5	5
	Silt-----	13	18

161-57-12DDD
 USBR 221

Altitude:

Glacial drift:			
	Loam, clayey, silty-----	5	5
	Loam, silty-----	3	8
	Loam, clayey-----	6	14
	Till-----	6	20

161-57-13AAA
 NDGS Cav-70-6

Altitude: 1220 feet

Glacial drift:			
	Roadfill-----	5	5
	Till, clayey, silty, sandy, slightly pebbly, light-reddish-brown-----	9	14
	Till, shaly, dark-yellow-brown; pebbles angular to subrounded; more than 75 percent shale particles-----	10	24
	Sand, fine to coarse, gravelly, slightly clayey, subangular to subrounded, saturated-----	5	29

161-57-13BAB
 USBR 220

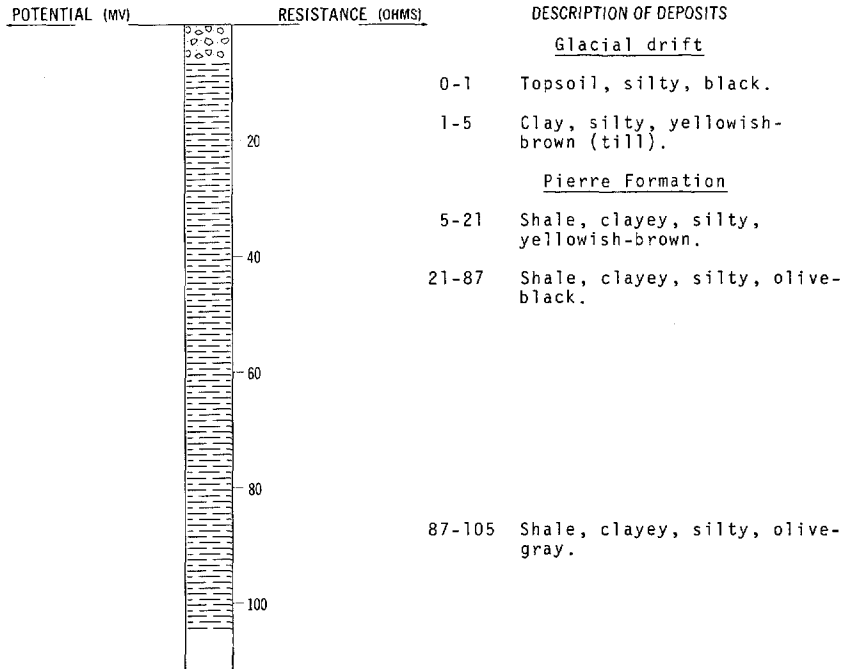
Altitude:

Glacial drift:			
	Loam, clayey, silty-----	6	6
	Loam, clayey-----	4	10

LOCATION: 161-57-14DDD
 ALTITUDE: 1475
 (FT, MSL)

NDSWC 1

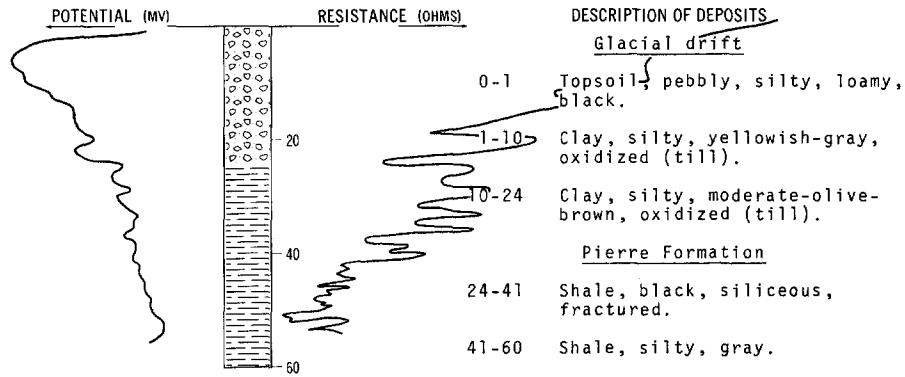
DATE DRILLED: August 1966
 DEPTH: 105
 (FT)



LOCATION: 161-57-32BBB
 ALTITUDE: 1600
 (FT, MSL)

NDSWC 4204

DATE DRILLED: September 1970
 DEPTH: 60
 (FT)

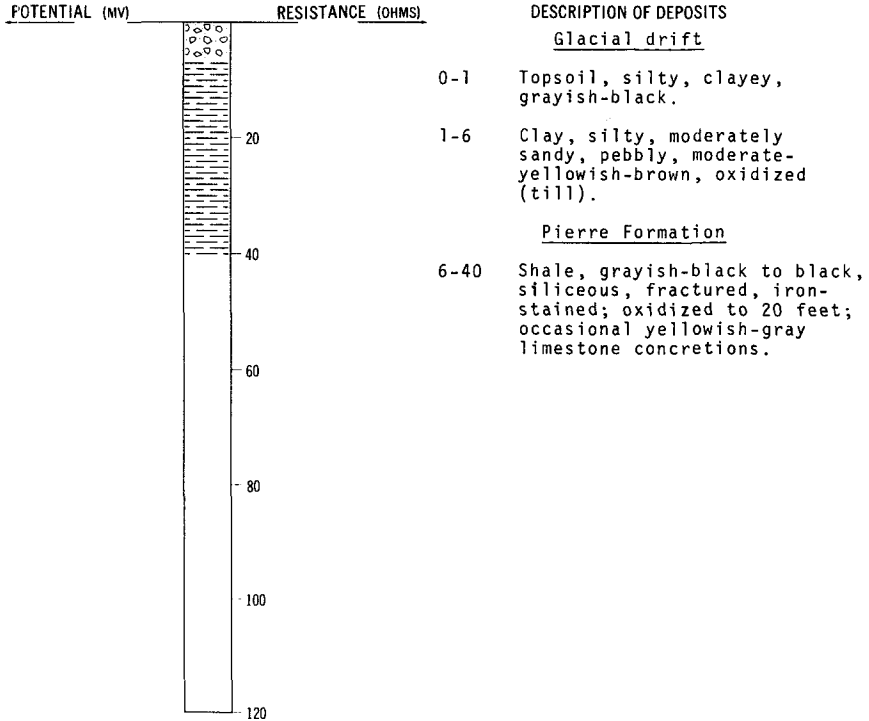


161-57-35BDA1
(Log from U.S. Air Force)

Altitude: 1535 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, sandy, silty-----	2	2
	Clay, silty-----	5	7
Pierre Formation:			
	Shale-----	123	130

LOCATION: 161-58-5CCC NDSWC 5955 DATE DRILLED: June 1971
ALTITUDE: 1632 DEPTH: 40
(FT, MSL) (FT)



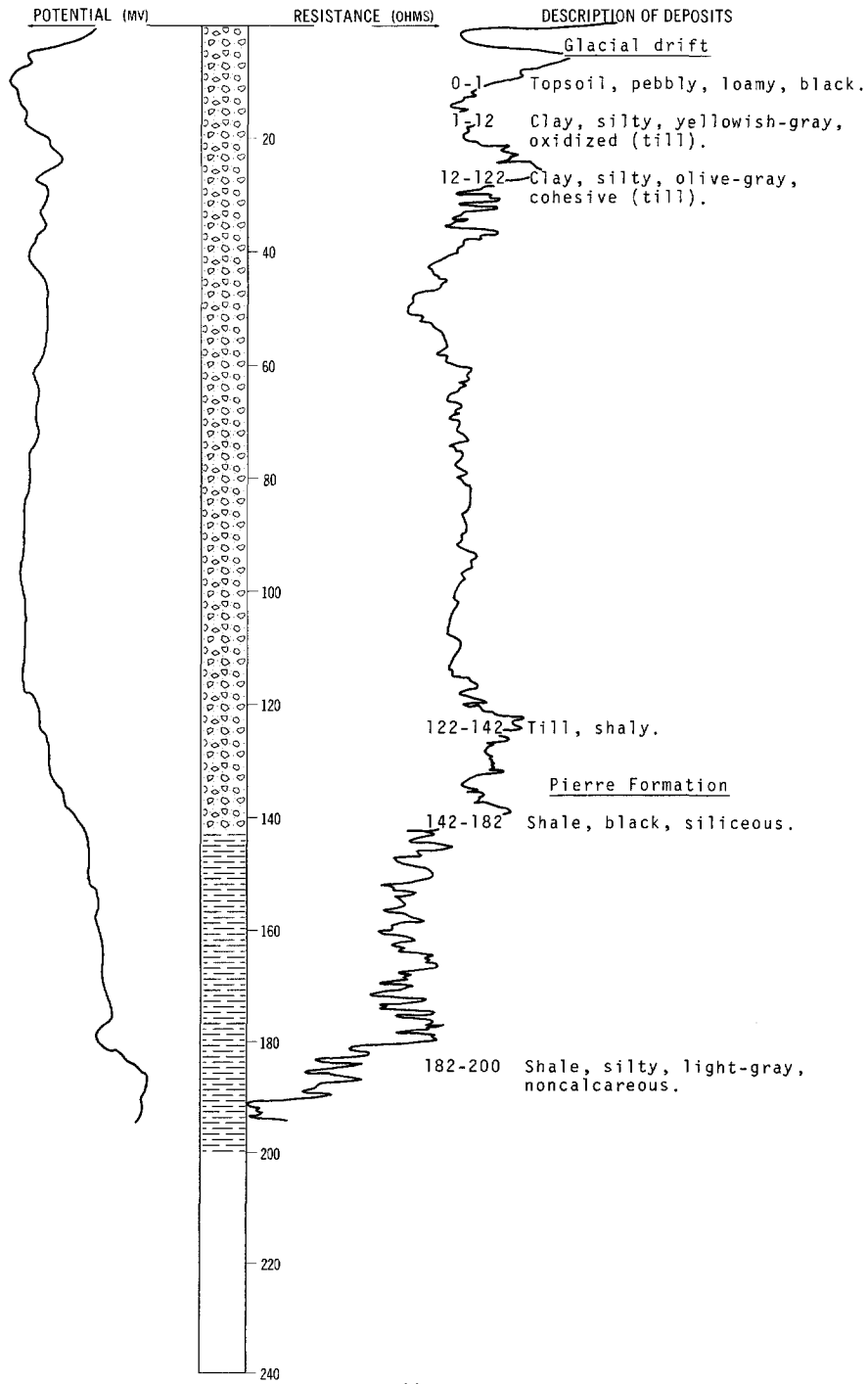
LOCATION: 161-58-7DDD

NDSWC 4201

DATE DRILLED: September 1970

ALTITUDE: 1613
(FT, MSL)

DEPTH: 200
(FT)



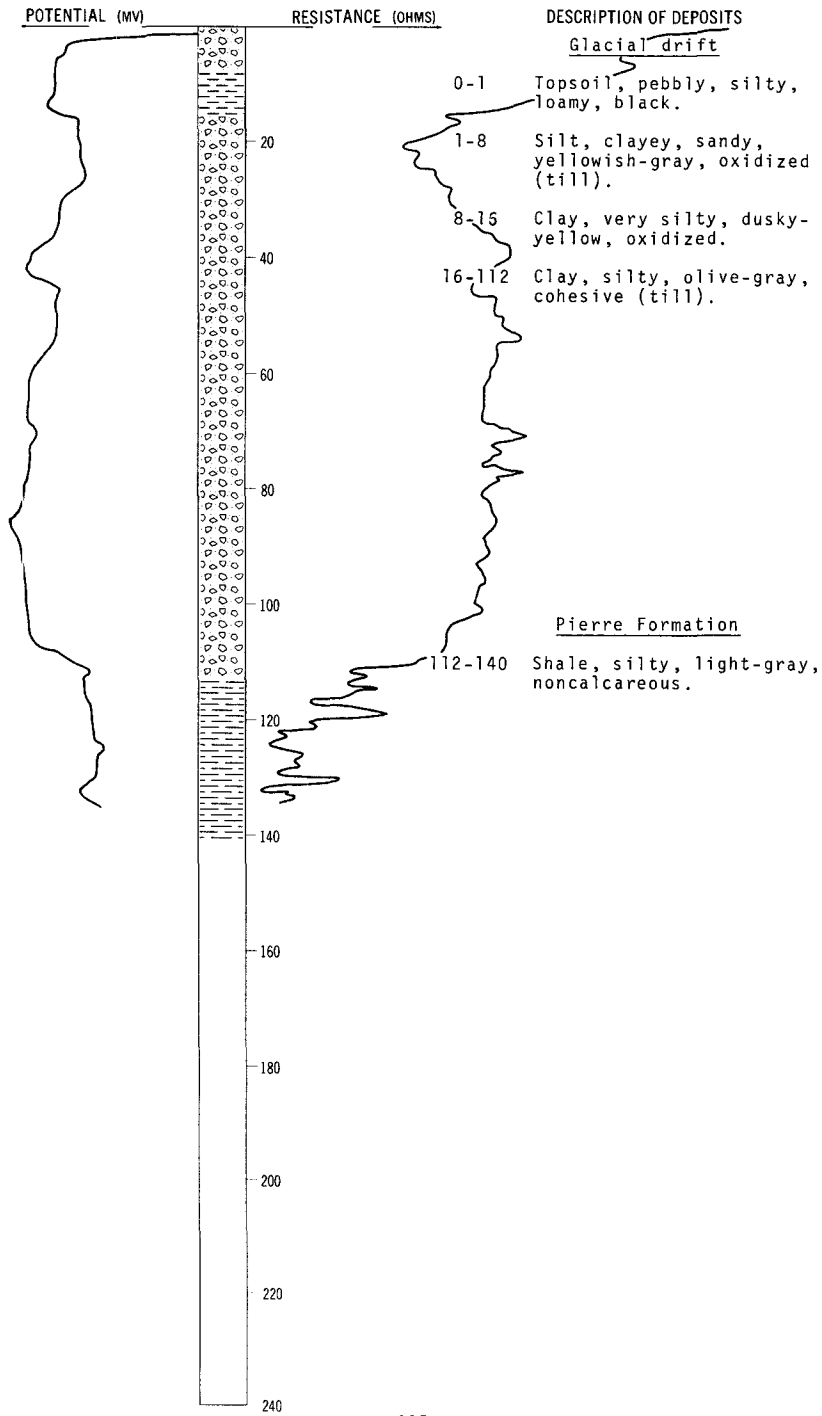
LOCATION: 161-58-10BBB

NDSWC 4202

DATE DRILLED: September 1970

ALTITUDE: 1573
(FT, MSL)

DEPTH: 140
(FT)



161-58-13DDB1
(Log from U.S. Air Force)

Altitude: 1544 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, sandy, silty-----	11	11
Pierre Formation:			
	Shale-----	11	22
	Shale; silt-----	25	47
	Shale-----	30	77
	Shale; clay-----	7	84
	Shale-----	11	95
	Shale; clay-----	13	108
	Shale-----	22	130

161-58-13DDC
(Log from U.S. Air Force)

Altitude: 1568 feet

Glacial drift:			
	Topsoil, black-----	1	1
	Silt, sandy, clayey, partly gravelly, gray and reddish-brown-----	13.5	14.5
	Shale, clayey, silty, black, highly fractured, oxidized-----	4	18.5
	Silt, clayey, sandy, dark-gray, dense-----	3	21.5
Pierre Formation:			
	Shale, silty, dark-gray, partly oxidized-----	2.5	24
	Shale, clayey, dark-gray, crushed-----	39	63
	Shale, dark-gray, highly fractured, thin-bedded, partly oxidized-----	21	84
	Shale, clayey, dark-gray-----	5.5	89.5
	Shale, silty, dark-gray, fissile-----	19.5	109
	Shale, partly silty, gray, blocky-----	21	130

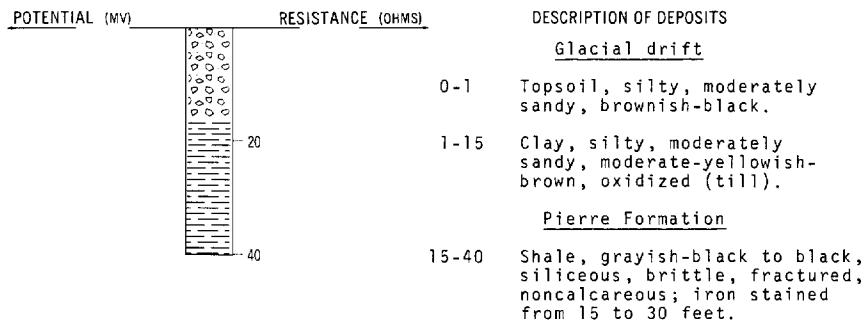
NDSWC 5953

LOCATION: 161-58-16DDD2

DATE DRILLED: June 1971

ALTITUDE: 1611
(FT, MSL)

DEPTH: 40
(FT)

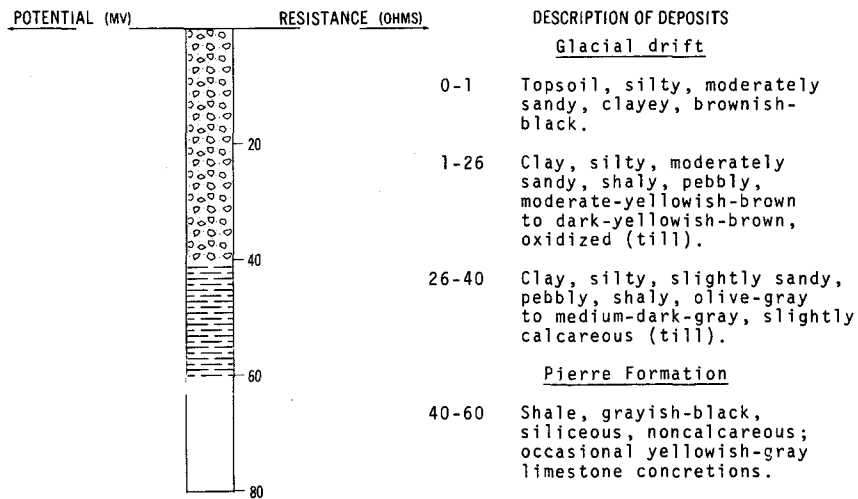


LOCATION: 161-58-17AAA

DATE DRILLED: June 1971

ALTITUDE: 1609
(FT, MSL)

DEPTH: 60
(FT)



161-58-18DDB2
(Log from U.S. Air Force)

Altitude: 1611 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
<u>Glacial drift:</u>			
	Clay, sandy, silty	8.5	8.5
	Silt, clayey, sandy	5.5	14
	Sand, fine, clayey, silty	6	20
	Clay, silty	10	30
	Clay, silty, sandy	32	62
	Clay, silty	15	77
	Sand, fine, silty	2.5	79.5
	Clay, silty	3.5	83
	Silt, clayey	9	92
	Sand, fine	2	94
	Clay, silty	10	104
	Silt, clayey, sandy	4	108
	Clay, silty	20.5	128.5
	Silt, clayey, sandy	4.5	133

161-58-18DDB4
(Log from U.S. Air Force)

Altitude: 1611 feet

<u>Glacial drift:</u>			
	Clay	148	148
<u>Cretaceous, undifferentiated:</u>			
	Shale	230	378
	Shale	278	656
	Shale; limestone; siltstone	376	1032
	Siltstone; sandstone; shale	51	1083

161-58-18DDC1
(Log from U.S. Air Force)

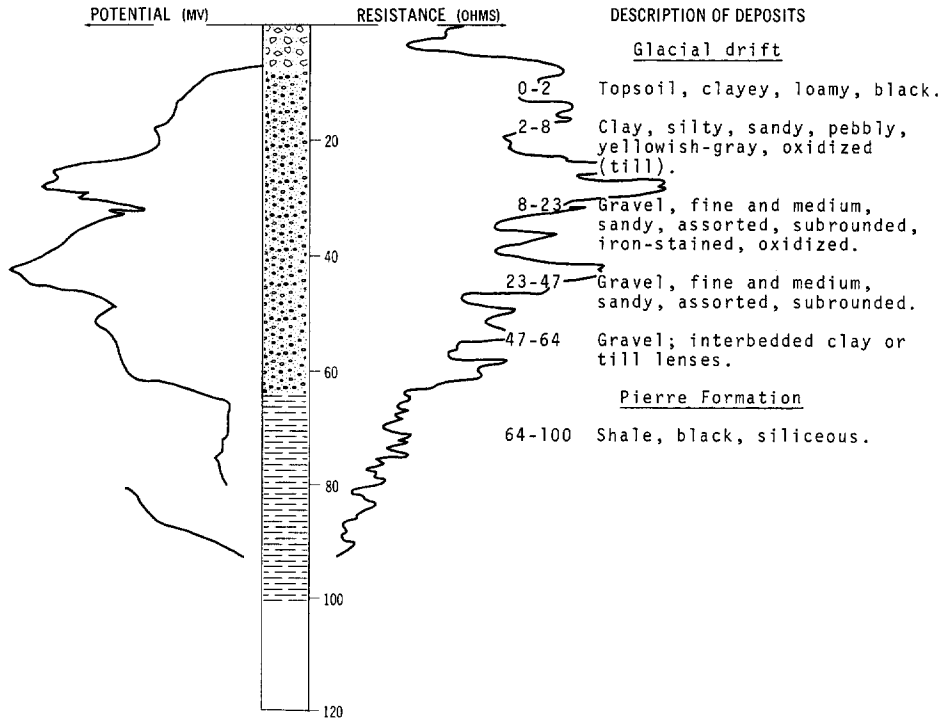
Altitude: 1611 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil, clayey, black-----	1.5	1.5
	Clay, sandy, silty, partly gravelly, brownish-gray-----	12	13.5
	Clay, silty, gray to reddish-brown-----	6.5	20
	Clay, silty, sandy, partly gravelly, dark-gray-----	64	84
	Clay, silty, gray-----	46	130

LOCATION: 161-58-20AAA
ALTITUDE: 1614
(FT, MSL)

NDSWC 4199

DATE DRILLED: September 1970
DEPTH: 100
(FT)

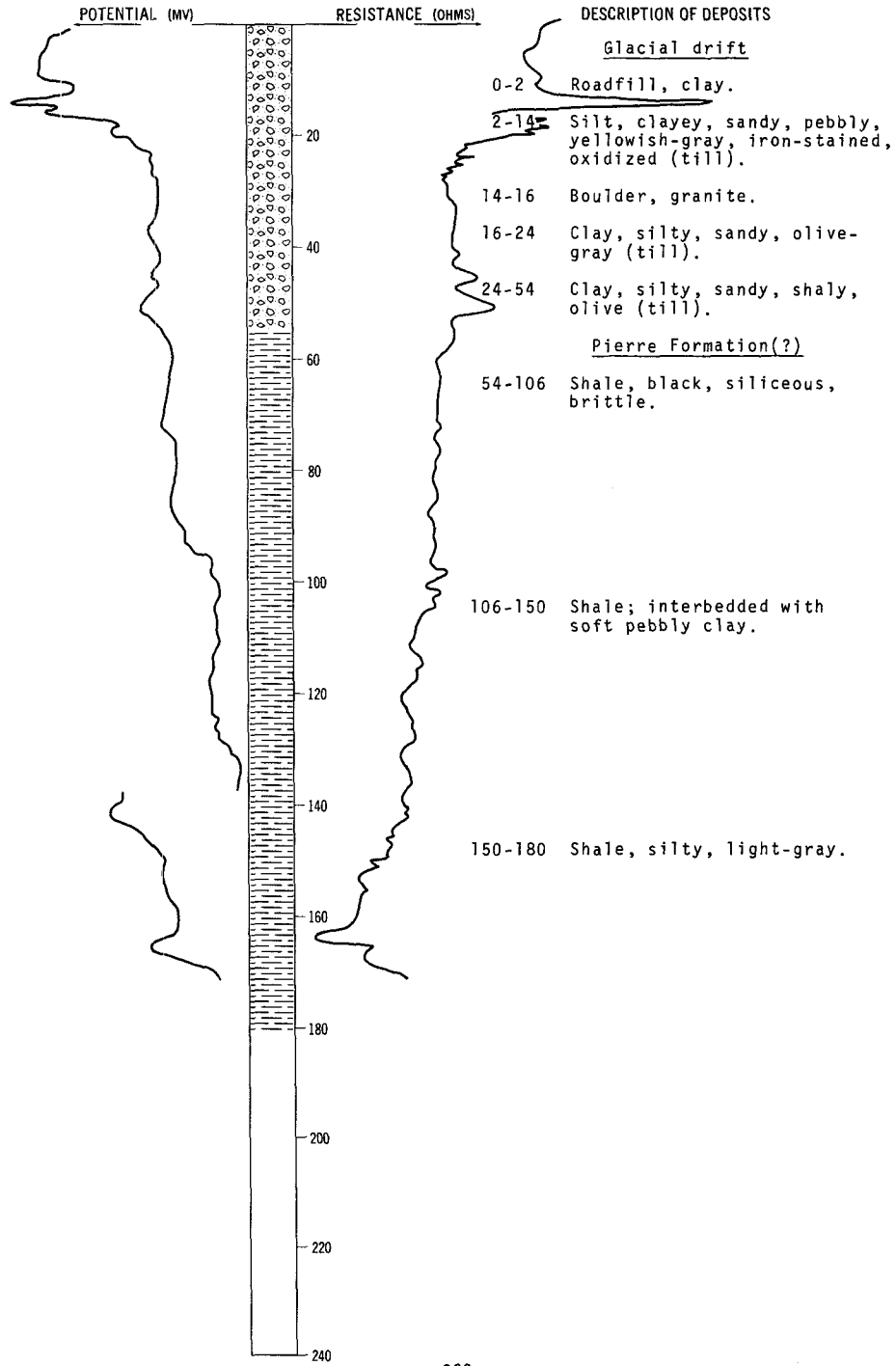


LOCATION: 161-58-20CCC

DATE DRILLED: September 1970

ALTITUDE: 1611
(FT, MSL)

DEPTH: 180
(FT)



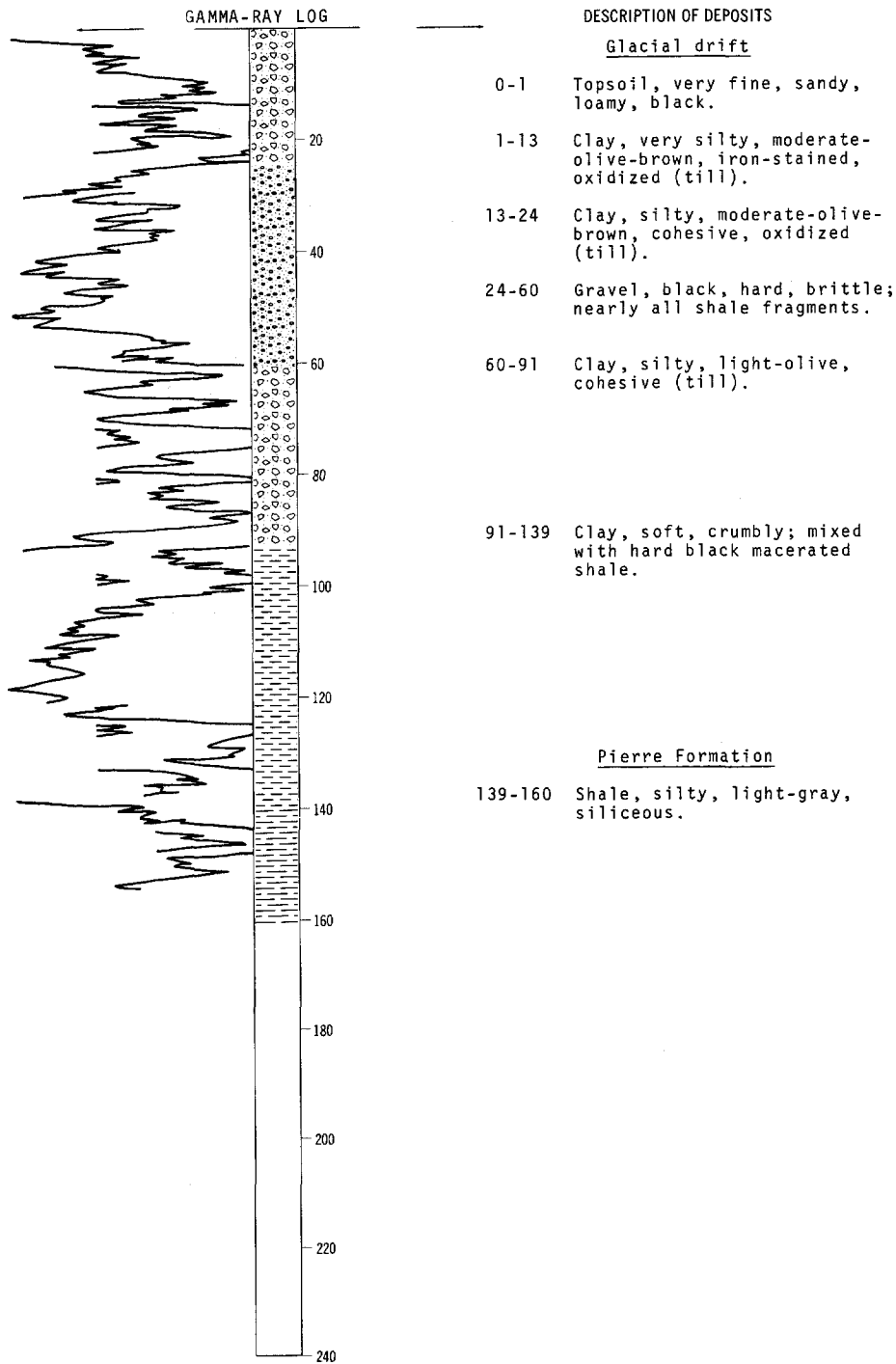
LOCATION: 161-58-33DDD

NDSWC 4203

DATE DRILLED: September 1970

ALTITUDE: 1606
(FT, MSL)

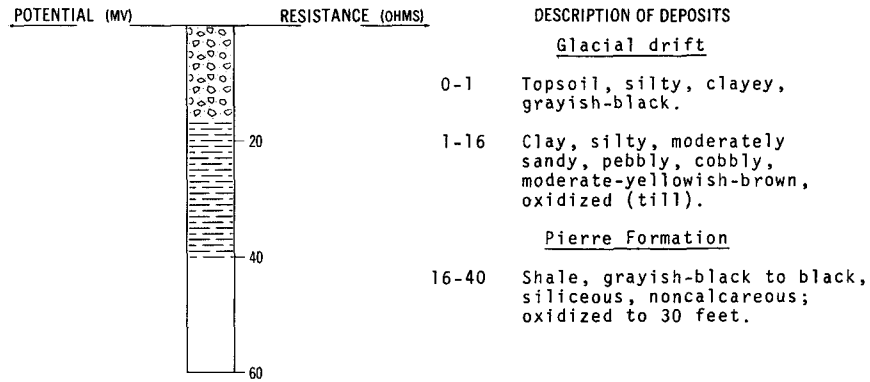
DEPTH: 160
(FT)



LOCATION: 161-59-3AAA
 ALTITUDE: 1650
 (FT, MSL)

NDSWC 5957

DATE DRILLED: June 1971
 DEPTH: 40
 (FT)



161-59-8DDB1
 (Log from U.S. Air Force)

Altitude: 1642 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Silt, clayey, sandy-----	2	2
Pierre Formation:			
	Shale; silt-----	31	33
	Shale-----	97	130

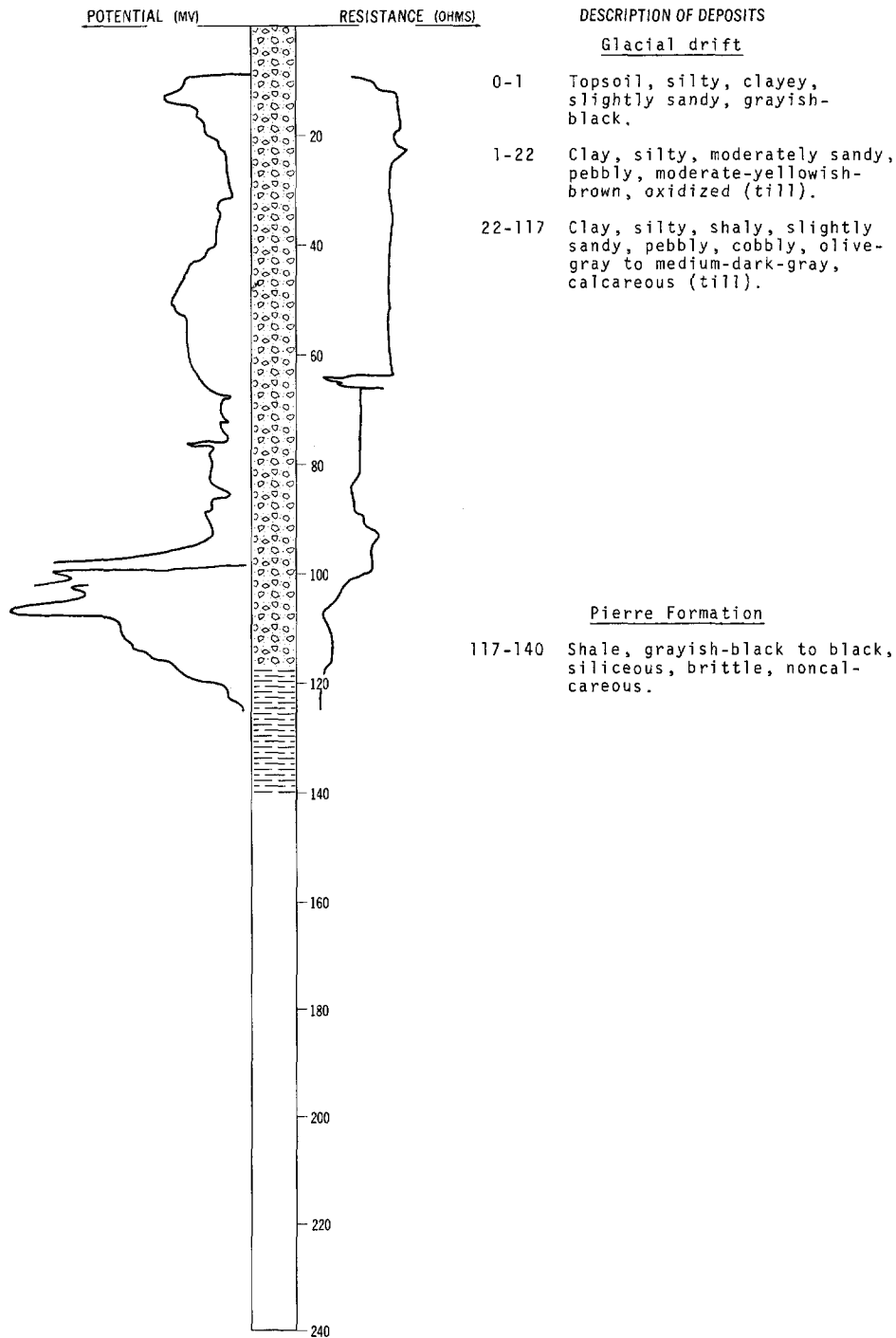
LOCATION: 161-59-14AAA

NDSWC 5956

DATE DRILLED: June 1971

ALTITUDE: 1630
(FT. MSL)

DEPTH: 140
(FT)



161-59-17AAD
(Log from U.S. Air Force)

Altitude: 1643 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, sandy, silty-----	1.5	1.5
	Silt, sandy, clayey-----	17.5	19
Pierre Formation:			
	Shale; silt-----	22	41
	Shale-----	89	130

161-59-18CCC1
(Log from Peterson Well Company)

Altitude: 1625 feet

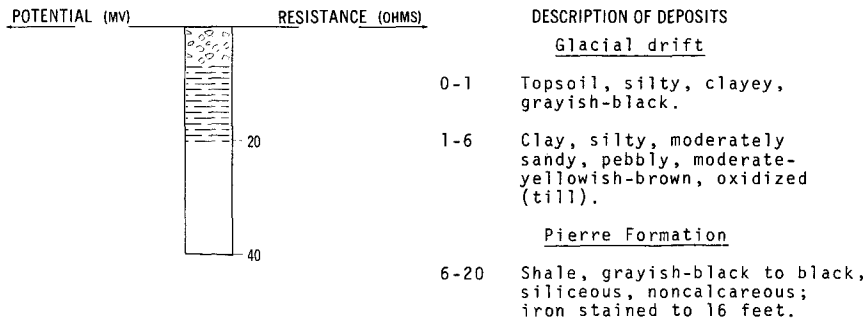
Glacial drift:			
	Clay-----	18	18
Pierre Formation:			
	Shale, blue-----	17	35
	Shale, crumbly-----	5	40
	Shale, blue-----	10	50

161-59-18CCC2
(Log from Peterson Well Company)

Altitude: 1625 feet

Glacial drift:			
	Black dirt-----	1	1
	Clay, yellow-----	3	4
	Gravel, clayey-----	1	5
	Clay, yellow-----	12	17
Pierre Formation:			
	Shale, blue-----	35	52

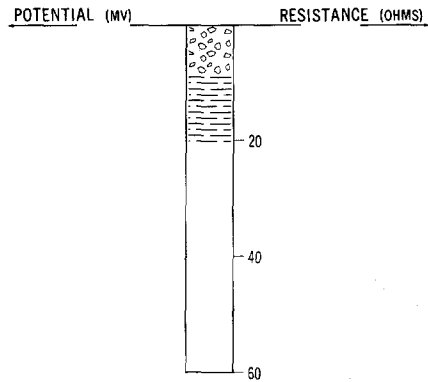
LOCATION: 161-59-22AAA NDSWC 5958 DATE DRILLED: June 1971
 ALTITUDE: 1640 DEPTH: 20
 (FT. MSL) (FT)



LOCATION: 161-59-228881
ALTITUDE: 1661
(FT, MSL)

NDSWC 5714-D

DATE DRILLED: June 1970
DEPTH: 20
(FT)

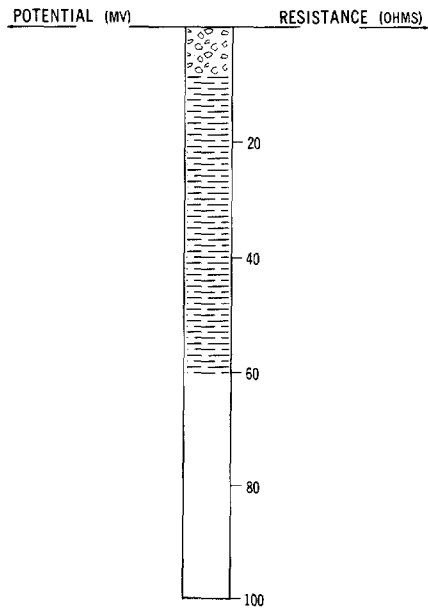


DESCRIPTION OF DEPOSITS
Glacial drift
0-1 Topsoil, silty, black.
1-8 Clay, silty, pebbly,
yellowish-brown (till).
Pierre Formation
8-20 Shale, clayey, silty, olive-
black.

LOCATION: 161-59-228882
ALTITUDE: 1660
(FT, MSL)

NDSWC 5714-C

DATE DRILLED: June 1970
DEPTH: 60
(FT)

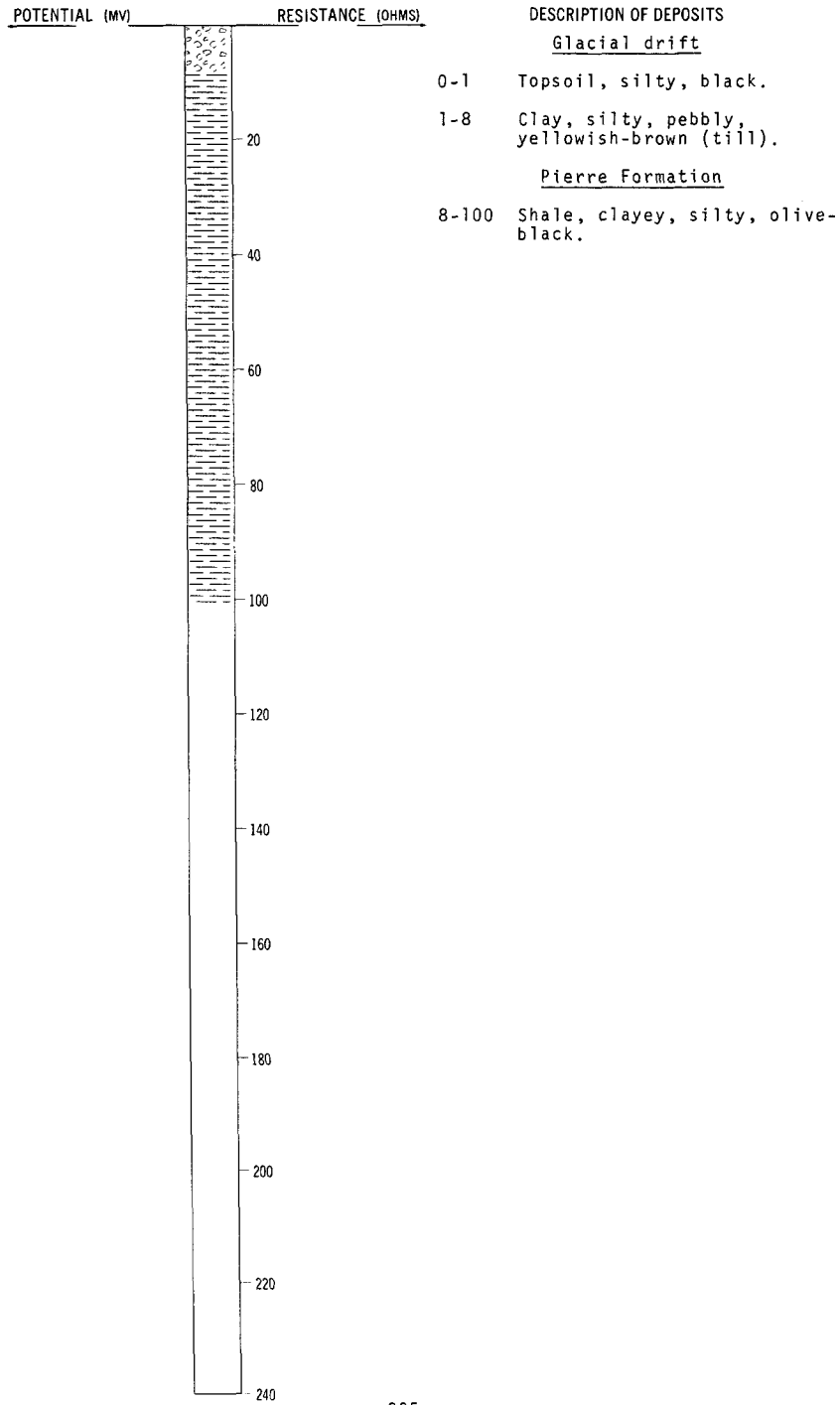


DESCRIPTION OF DEPOSITS
Glacial drift
0-1 Topsoil, silty, black.
1-8 Clay, silty, pebbly,
yellowish-brown (till).
Pierre Formation
8-60 Shale, clayey, silty, olive-
black.

LOCATION: 161-59-22BBB3
ALTITUDE: 1661
(FT, MSL)

NDSWC 5714-B

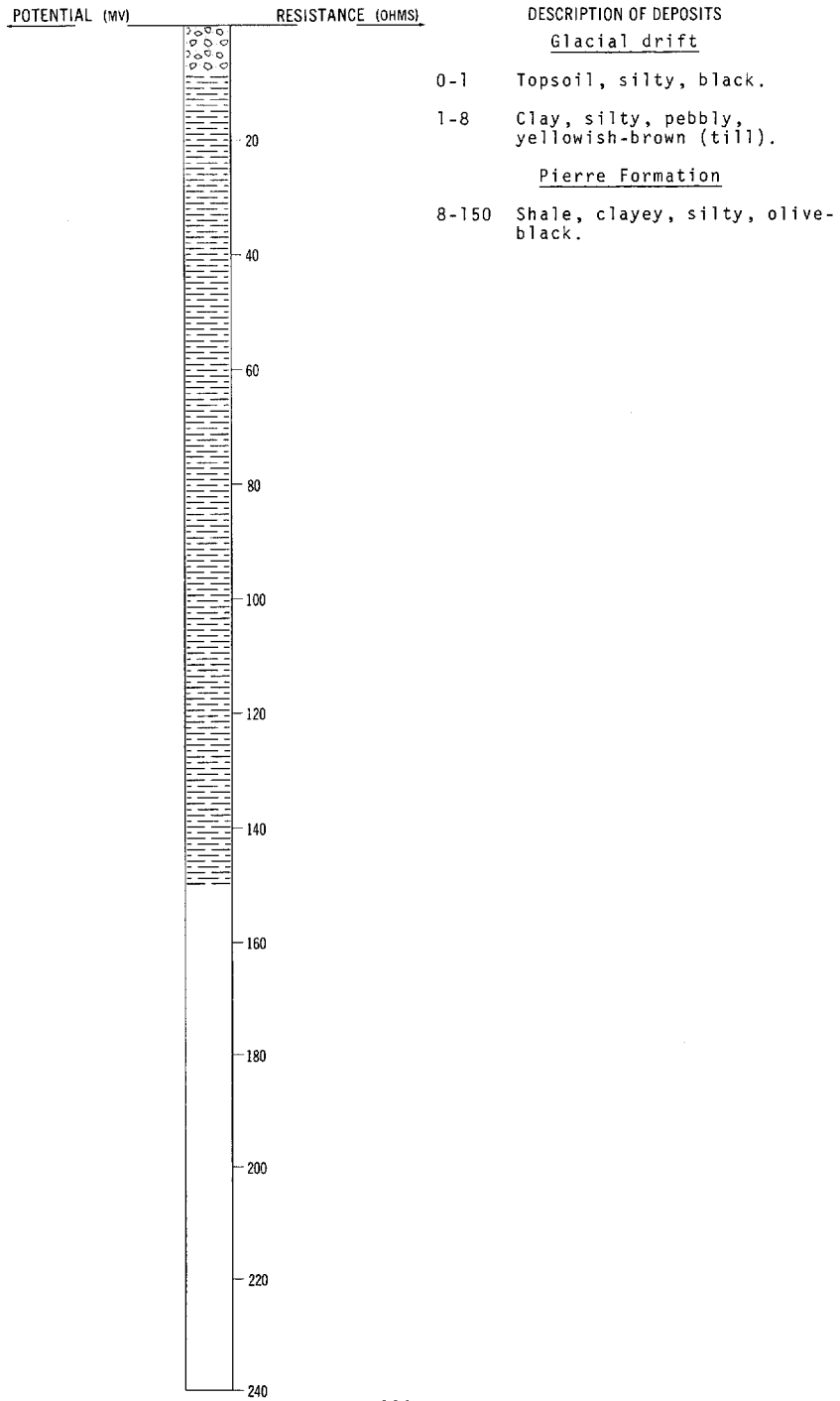
DATE DRILLED: June 1970
DEPTH: 100
(FT)



LOCATION: 161-59-228884
ALTITUDE: 1661
(FT, MSL)

NDSWC 5714-A

DATE DRILLED: June 1970
DEPTH: 150
(FT)



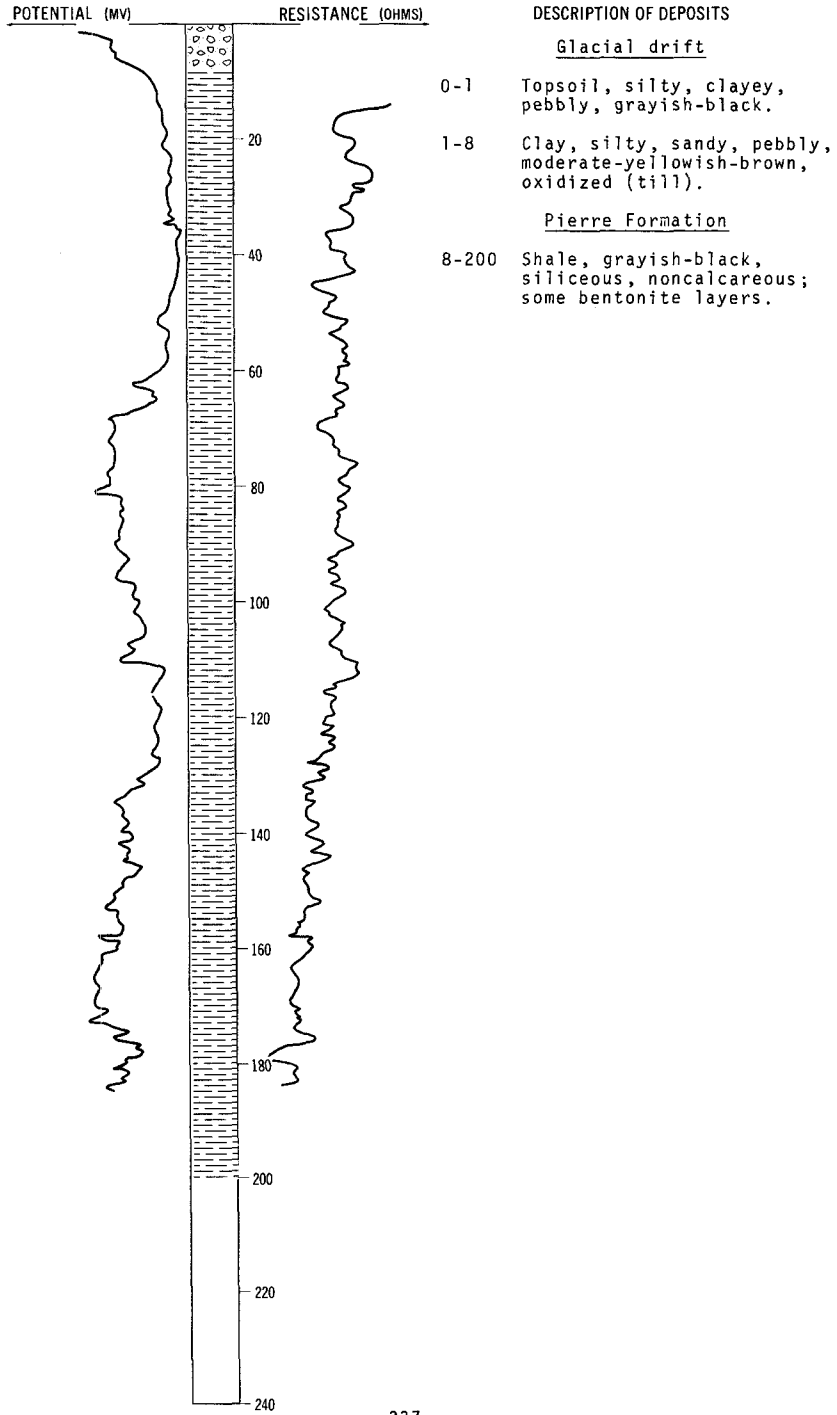
LOCATION: 161-59-22BBB5

NDSWC 5714

DATE DRILLED: June 1970

ALTITUDE: 1661
(FT, MSL)

DEPTH: 200
(FT)

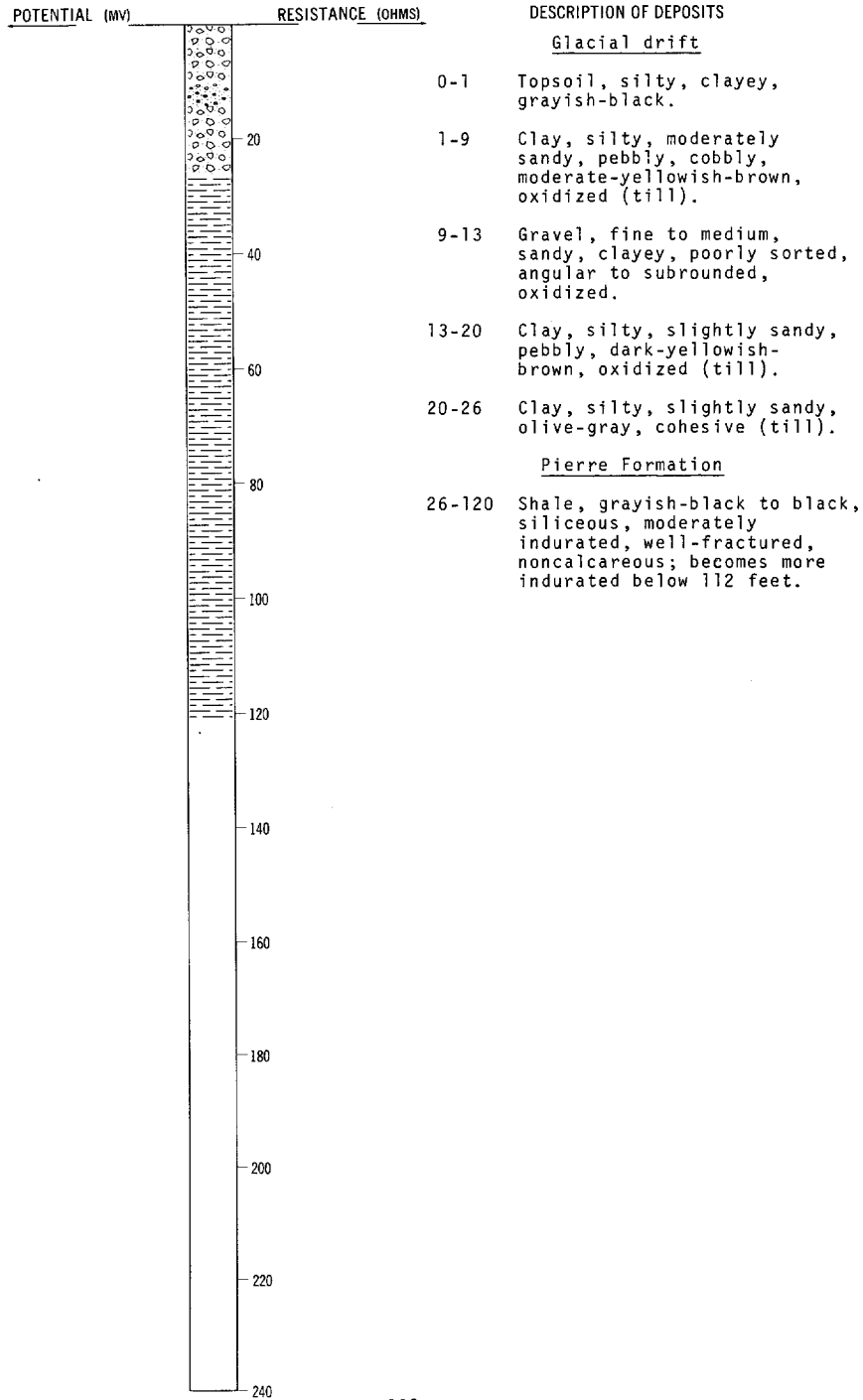


LOCATION: 161-59-23DDD

DATE DRILLED: June 1971

ALTITUDE: 1625
(FT, MSL)

DEPTH: 120
(FT)

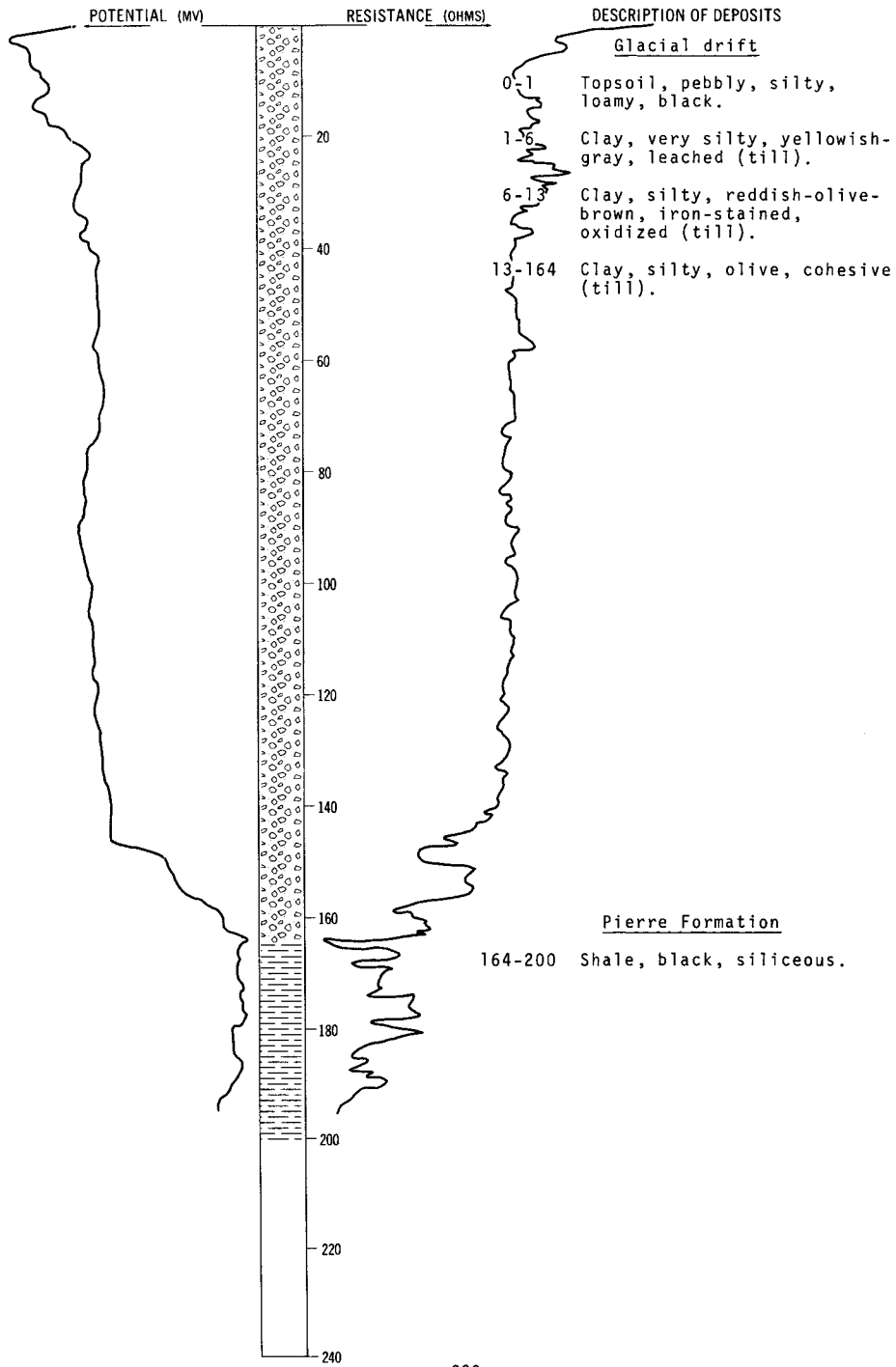


LOCATION: 161-59-24AAB

DATE DRILLED: September 1970

ALTITUDE: 1613
(FT, MSL)

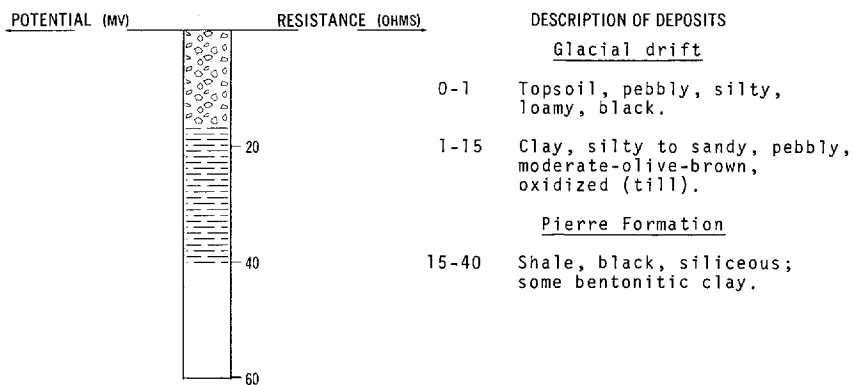
DEPTH: 200
(FT)



LOCATION: 161-59-32AAA
 ALTITUDE: 1650
 (FT, MSL)

NDSWC 4196

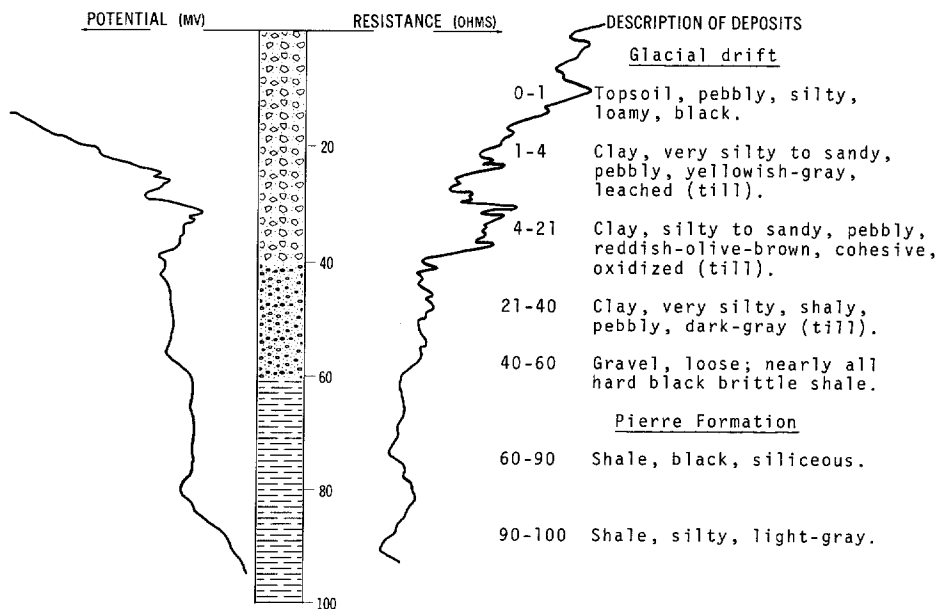
DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



LOCATION: 161-59-34DDD
 ALTITUDE: 1648
 (FT, MSL)

NDSWC 4197

DATE DRILLED: September 1970
 DEPTH: 100
 (FT)



161-60-1CCD
NDGS Cav-69-35

Altitude: 1641 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	1	1
	Sand, shaly, pebbly; about 40 percent shale particles-----	5	6
	Till, very sandy, shaly, dark-yellowish-brown; more than 50 percent shale particles-----	9.5	15.5
Pierre Formation:			
	Shale, highly fractured; may not be in place-----	-	15.5

161-60-11ADA
(Log from Peterson Well Company)

Altitude: 1620 feet

Glacial drift:			
	Black dirt-----	1	1
	Clay, yellow-----	14	15
Pierre Formation:			
	Shale, gray-----	5	20
	Shale, blue-----	90	110
	Shale, crumbly-----	-	110

161-60-12BBB
(Log from Walter Koehmstedt)

Altitude: 1629 feet

Glacial drift:			
	Clay-----	16	16
Pierre Formation:			
	Shale-----	49	65

161-60-16ADD
NDGS Cav-69-34

Altitude: 1598 feet

Glacial drift:			
	Topsoil-----	1	1
	Till, shaly, sandy, pebbly, dark-yellowish-brown; about 50 percent shale particles---	10	11
	Till, shaly, pebbly, dusky-yellowish-brown; more than 50 percent shale particles-----	6	17
	Till, clayey, silty, pebbly, dark-gray; lower 3 feet saturated-----	4	21
	Shale-----	-	21

161-60-17BBB
NDGS Cav-69-8

Altitude: 1588 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	2	2
	Silt, clayey, dark-greenish-gray, banded-----	2	4
	Silt, shaly, pebbly, clayey, slightly sandy, grayish-brown; subangular to subrounded shale fragments-----	4	8
Pierre Formation:			
	Shale-----	-	8

161-60-17CDA1
(Log from U.S. Air Force)

Altitude: 1600 feet

Glacial drift:			
	Silt, clayey, black-----	0.5	0.5
	Clay, sandy, silty, brown-----	2	2.5
	Clay, silty, sandy, partly gravelly, brown and gray-----	5.5	8
Pierre Formation:			
	Shale, dark-gray, highly fractured, oxidized-----	5	13
	Shale, silty, dark-gray, crushed-----	30.5	43.5
	Shale, dark-gray, partly fissile-----	5.5	49
	Shale, dark-gray, highly fractured, brittle-----	81	130

161-60-17CDD
(Log from U.S. Air Force)

Altitude: 1595 feet

Glacial drift:			
	Clay, silty-----	2	2
	Clay, sandy, silty-----	7	9
	Clay, silty, sandy-----	3.5	12.5
Pierre Formation:			
	Shale-----	117.5	130

161-60-19ABB
NDGS Cav-69-37

Altitude: 1592 feet

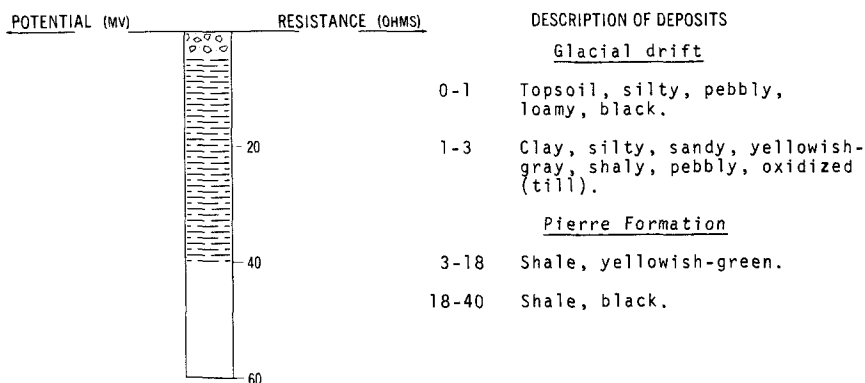
Glacial drift:			
	Topsoil-----	0.5	0.5
	Silt, sandy, pebbly-----	5.5	6
Pierre Formation:			
	Shale-----	-	6

LOCATION: 161-60-21BBB

DATE DRILLED: September 1969

ALTITUDE: 1603
(FT, MSL)

DEPTH: 40
(FT)



161-60-21CDD
NDGS Cav-69-7

Altitude: 1602 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	3	3
	Silt, clayey, slightly pebbly, shaly, grayish-black-----	5	8
	Gravel, shaly, rounded-----	1	9
Pierre Formation:			
	Shale-----	-	9

161-60-36DCD
NDGS Cav-69-40

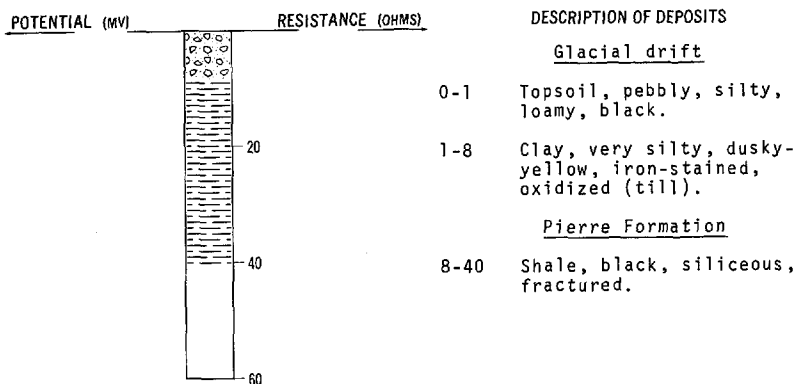
Altitude: 1610 feet

Glacial drift:			
	Topsoil-----	1	1
	Silt, sandy, pebbly, dusky-yellowish-brown, banded-----	9	10
	Sand, gravelly, clayey, saturated-----	5	15
	Boulder-----	-	15

LOCATION: 161-61-1DDD
 ALTITUDE: 1584
 (FT, MSL)

NDSWC 4258

DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



161-61-3DCC1
 NDGS Cav-69-19

Altitude: 1570 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Till, pebbly, sandy, dusky-brown-----	7	7
	Till, pebbly, sandy, moderate-yellowish-brown-----	-	7

161-61-3DCC2
 NDGS Cav-69-20

Altitude: 1570 feet

Glacial drift:			
	Topsoil-----	2	2
	Till, sandy, gravelly, shaly, moderate-brown; saturated at 4 feet-----	11	13
	Till, shaly, grayish-black, saturated-----	6	19
Pierre Formation:			
	Shale-----	-	19

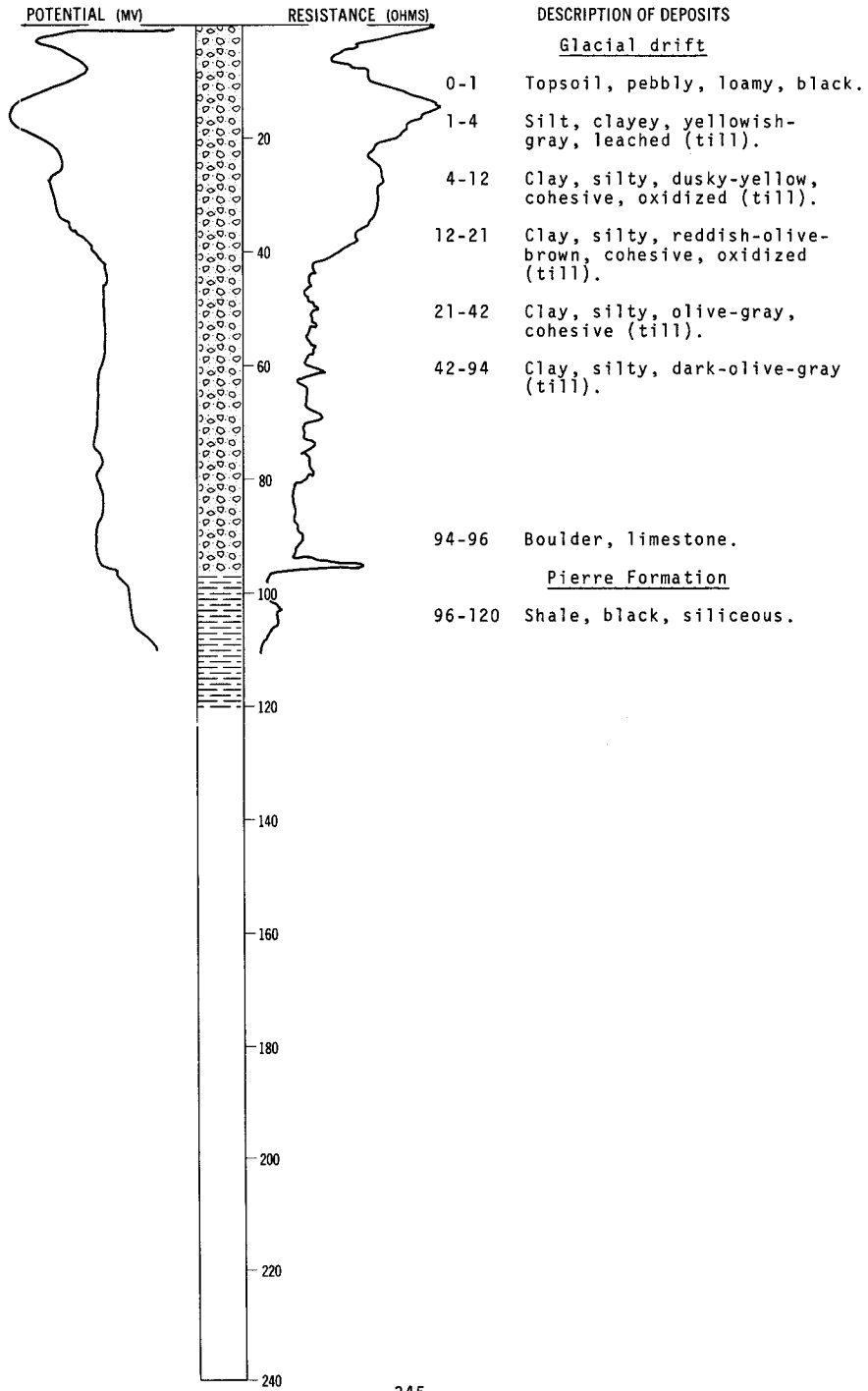
LOCATION: 161-61-5CCC

NDSWC 4259

DATE DRILLED: September 1970

ALTITUDE: 1576
(FT, MSL)

DEPTH: 120
(FT)



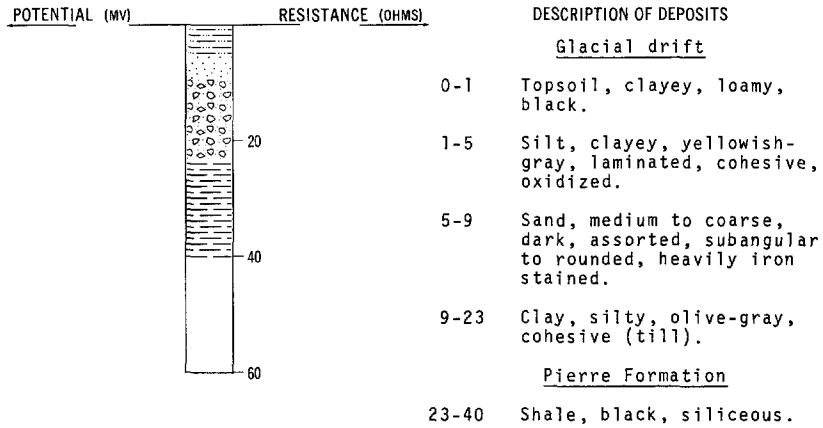
LOCATION: 161-61-6CBC

NDSWC 4261

DATE DRILLED: September 1970

ALTITUDE: 1563
(FT, MSL)

DEPTH: 40
(FT)



161-61-11BBB
NDGS Cav-69-21

Altitude: 1583 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	5	5
	Till, sandy, pebbly, shaly, dark-yellowish-brown-----	14	19
	Sand, medium to coarse, silty, clayey, saturated-----	3	22
Pierre Formation(?):			
	Shale(?); hard drilling-----	-	22

161-61-17ABA
(Log from Walter Koehmstedt)

Altitude: 1575 feet

Glacial drift:			
	Gravel; clay-----	50	50
	Lake bottom silt-----	50	100
Pierre Formation:			
	Shale-----	20	120

161-61-21BBA
(Log from U.S. Air Force)

Altitude: 1570 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Silt, sandy-----	1.5	1.5
	Silt, clayey, sandy-----	10.5	12
	Sand, fine to coarse, silty, clayey-----	2	14
	Clay, sandy, silty-----	5	19
	Silt, clayey, sandy-----	5	24
	Sand, coarse, gravelly, clayey-----	2	26
	Clay, sandy, silty-----	9	35
	Sand, fine, clayey, silty-----	1.5	36.5
	Gravel, fine to coarse, clayey, sandy-----	5	41.5
	Sand, fine, silty, gravelly-----	6.5	48
	Clay, silty-----	5	53
	Clay, sandy, silty-----	24.5	77.5
Pierre Formation:			
	Shale-----	52.5	130

161-61-21BBD1
(Log from U.S. Air Force)

Altitude: 1573 feet

Glacial drift:			
	Clay, silty, tan-----	3	3
	Sand, fine, silty, yellowish-brown-----	5	8
	Silt, clayey, partly sandy, yellowish-brown--	3	11
	Clay, silty, partly sandy, partly gravelly, brown-----	3	14
	Silt, clayey, partly sandy, yellowish-brown--	5	19
	Silt, clayey, sandy, partly gravelly, gray---	9	28
	Clay, silty, sandy, partly gravelly, gray----	49	77
Pierre Formation:			
	Shale, gray to dark-gray, moderately to slightly fractured, partly bentonitic-----	53	130

161-61-21DCC
NDGS Cav-69-16

Altitude: 1565 feet

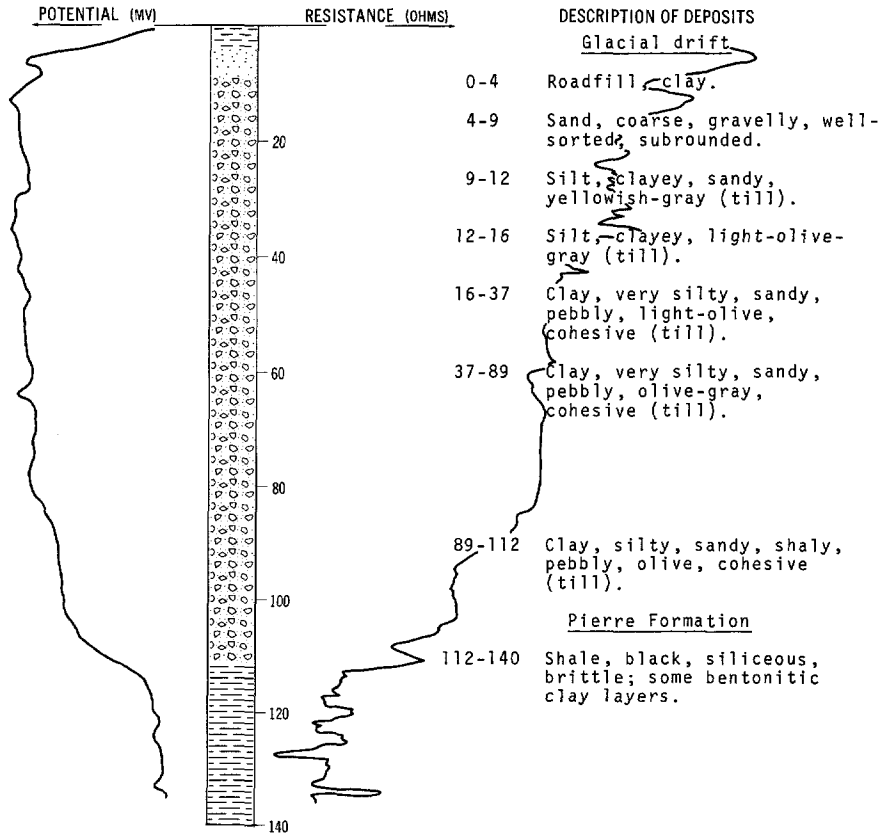
Glacial drift:			
	Roadfill-----	6	6
	Till, silty, clayey, sandy, pebbly, dark- yellowish-brown-----	2	8
	Till, pebbly, dark-yellowish-brown-----	7	15
	Till, shaly, pebbly, slightly sandy, dusky- brown; more than 50 percent shale particles	5	20
	Clay, silty, grayish-black; pebbly below 29 feet-----	41	61

161-61-27CCC
NDGS Cav-69-15

Altitude: 1569 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	1	1
	Silt, sandy, slightly clayey, moderate-brown-	4	5
	Clay, silty, grayish-black, saturated-----	6	11
	Till, very shaly, slightly pebbly, dark-		
	gray, weathered-----	7.5	18.5
Pierre Formation:			
	Shale-----	-	18.5

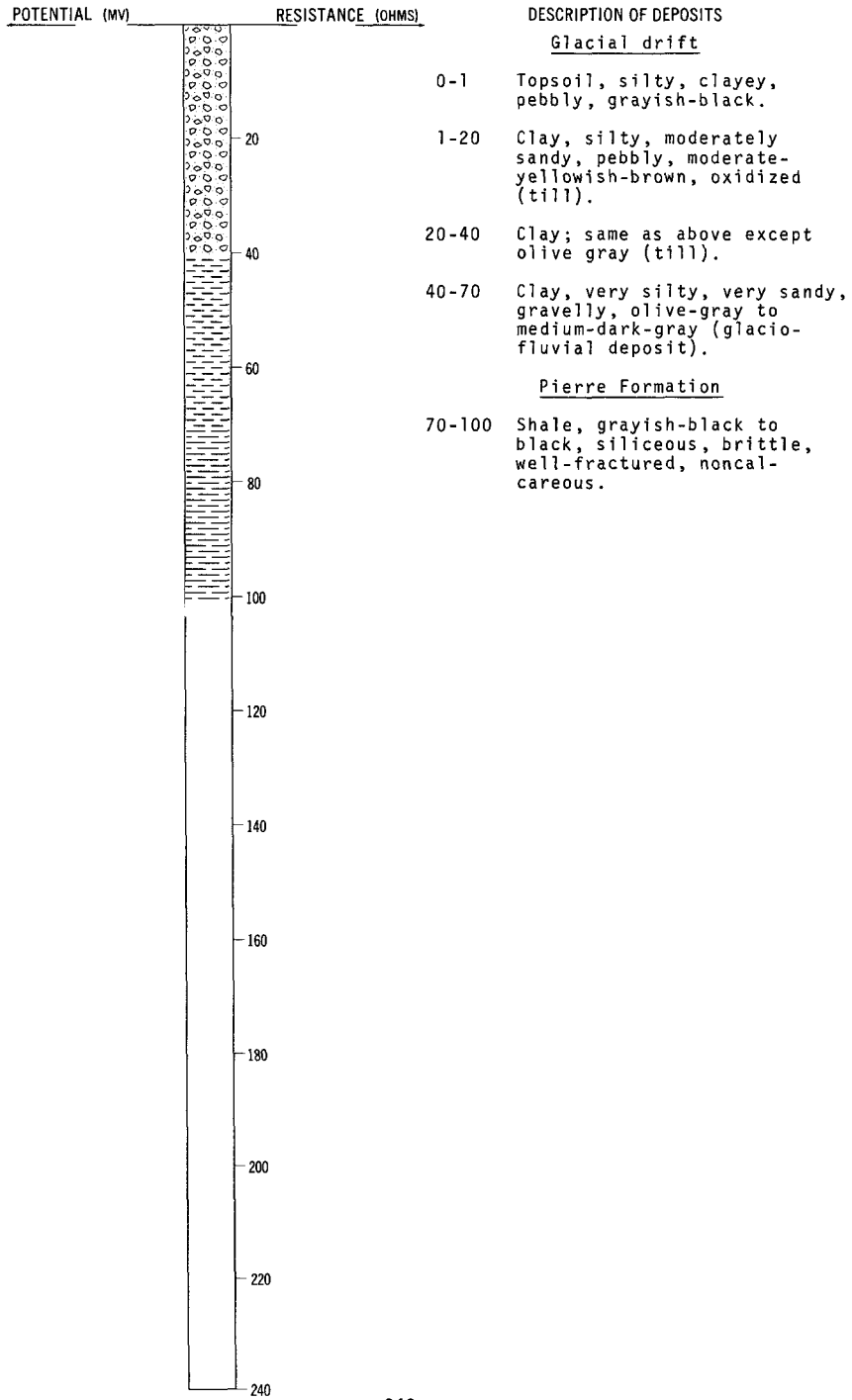
LOCATION: 161-61-29AAA NDSWC 4188 DATE DRILLED: September 1970
 ALTITUDE: 1565 DEPTH: 140
 (FT, MSL) (FT)



LOCATION: 161-62-5BBB
ALTITUDE: 1570
(FT, MSL)

NDSWC 5980

DATE DRILLED: June 1971
DEPTH: 100
(FT)



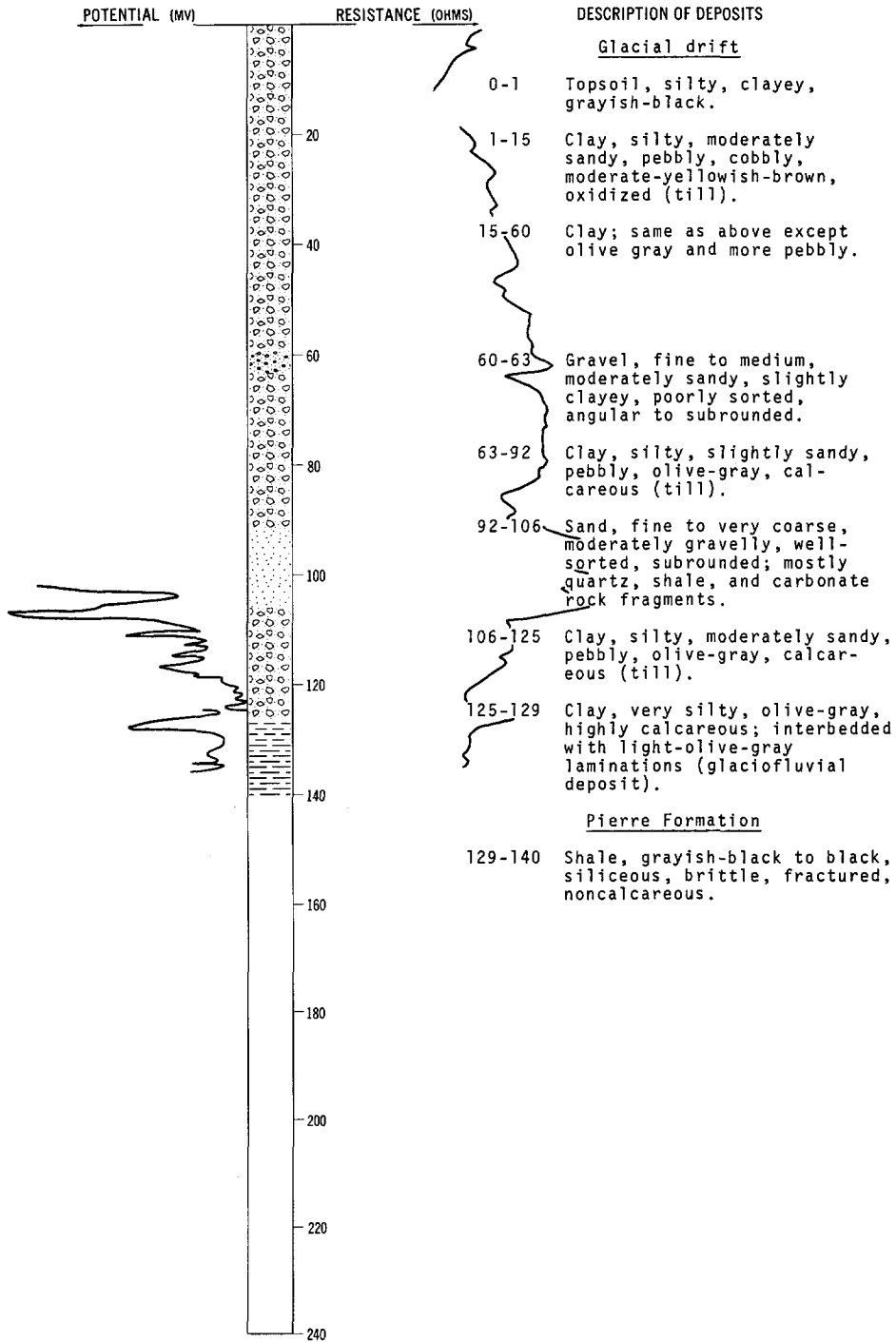
LOCATION: 161-62-5DCC

NDSWC 5979

DATE DRILLED: June 1971

ALTITUDE: 1570
(FT, MSL)

DEPTH: 140
(FT)



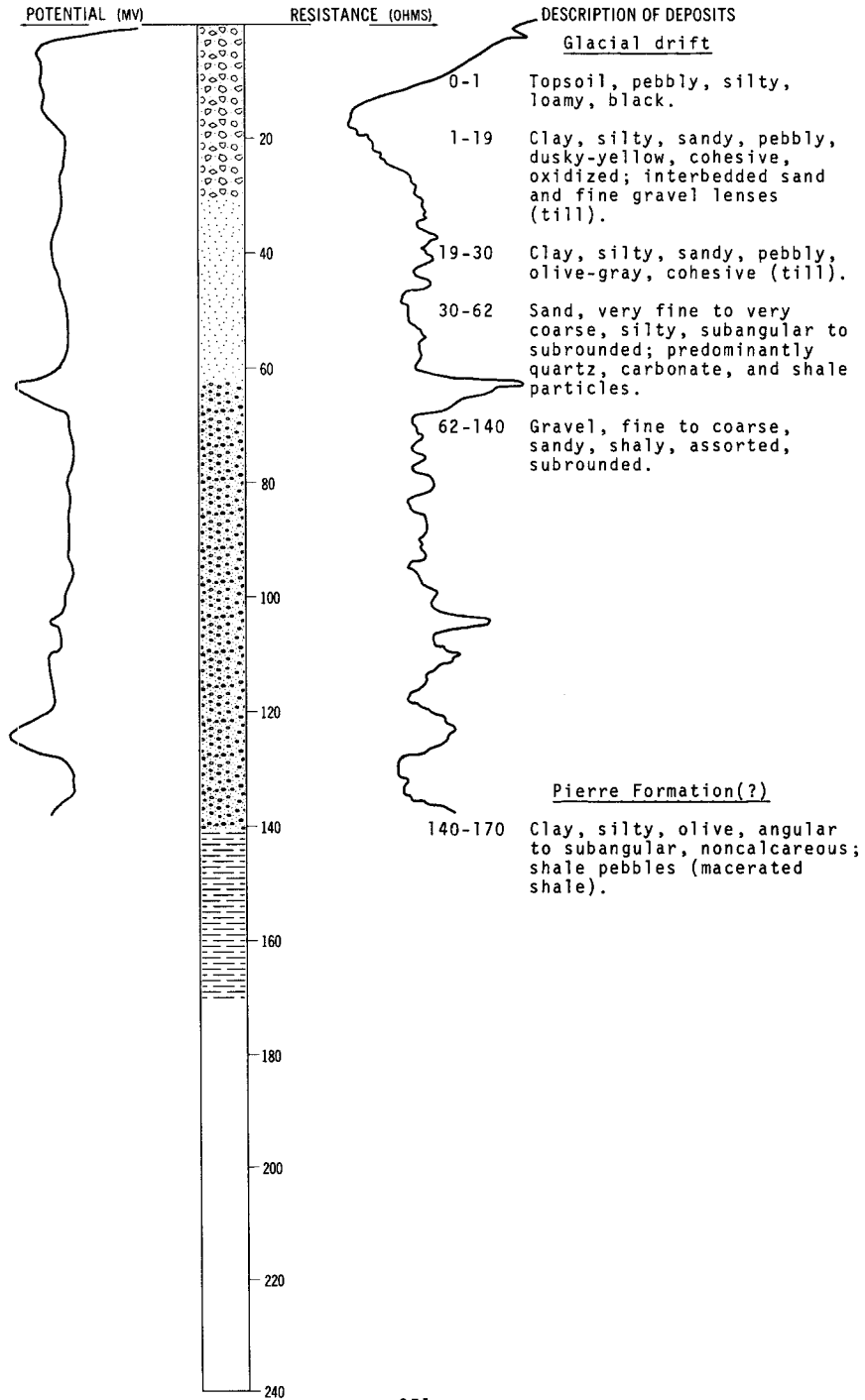
LOCATION: 161-62-6DDD

NDSWC 4152

DATE DRILLED: August 1970

ALTITUDE: 1578
(FT, MSL)

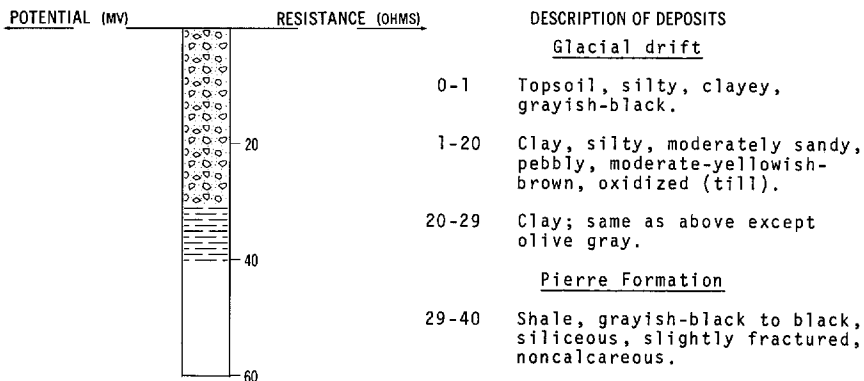
DEPTH: 170
(FT)



LOCATION: 161-62-8CCC
 ALTITUDE: 1581
 (FT, MSL)

NDSWC 5977

DATE DRILLED: June 1971
 DEPTH: 40
 (FT)



161-62-10BAA
 NDGS Cav-69-57

Altitude: 1585 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Till, shaly, sandy, pebbly, dark-yellowish-brown-----	12	14
Pierre Formation:			
	Shale-----	2	16

161-62-15CDC
 (Log from U.S. Air Force)

Altitude: 1578 feet

Glacial drift:			
	Clay, silty-----	4	4
	Clay, sandy, silty-----	37.5	41.5
Pierre Formation:			
	Shale-----	88.5	130

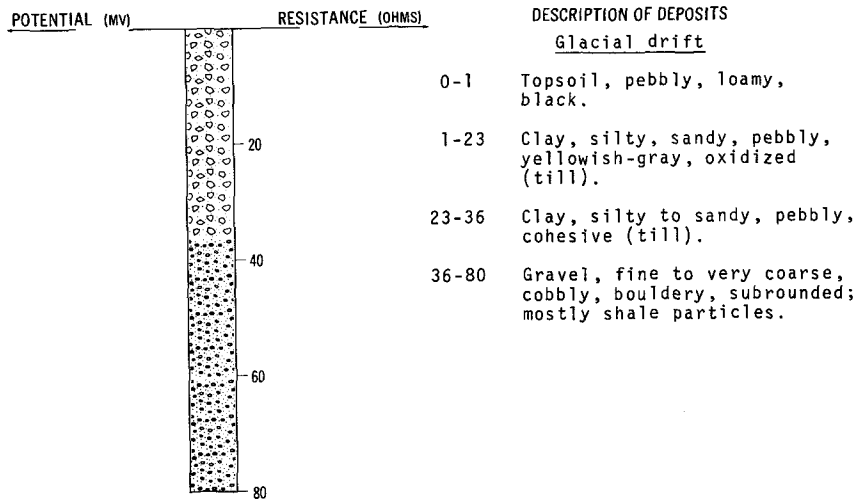
NDSWC 3821

LOCATION: 161-62-19AAB1

DATE DRILLED: September 1969

ALTITUDE: 1579
(FT, MSL)

DEPTH: 80
(FT)



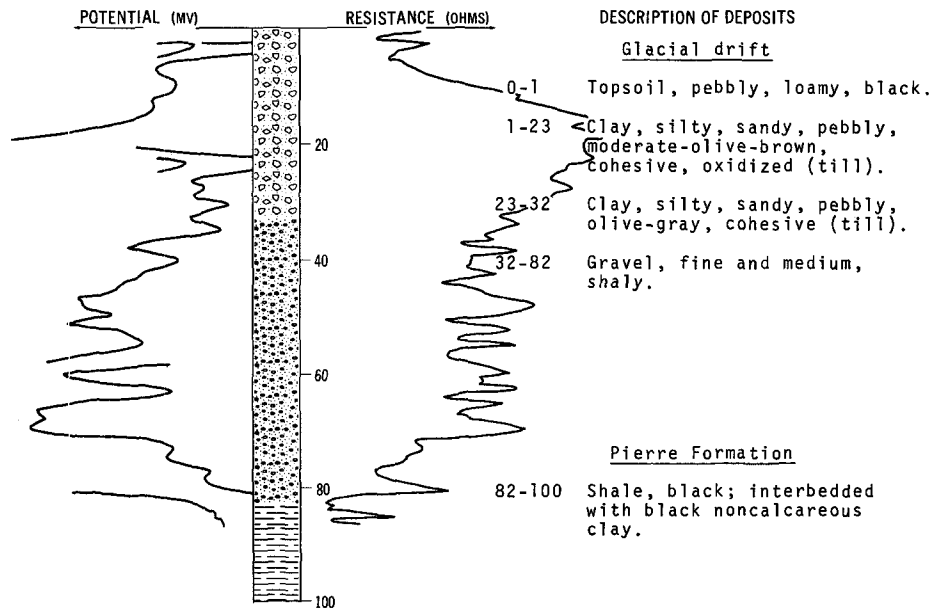
NDSWC 3821-A

LOCATION: 161-62-19AAB2

DATE DRILLED: September 1969

ALTITUDE: 1579
(FT, MSL)

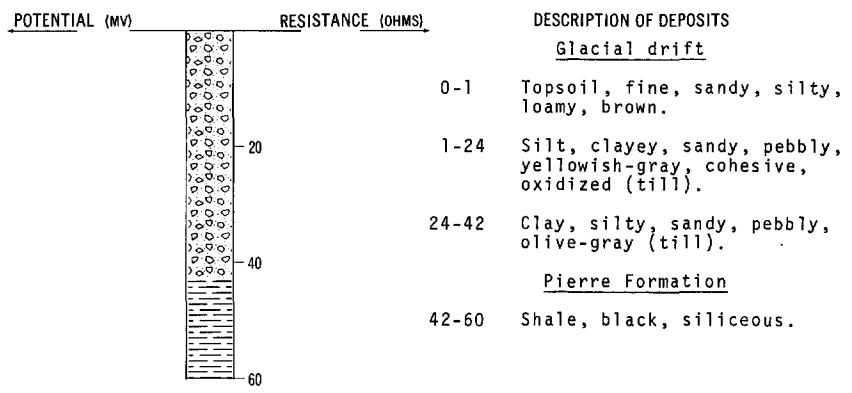
DEPTH: 100
(FT)



LOCATION: 161-62-21BBB
 ALTITUDE: 1585
 (FT, MSL)

NDSWC 4151

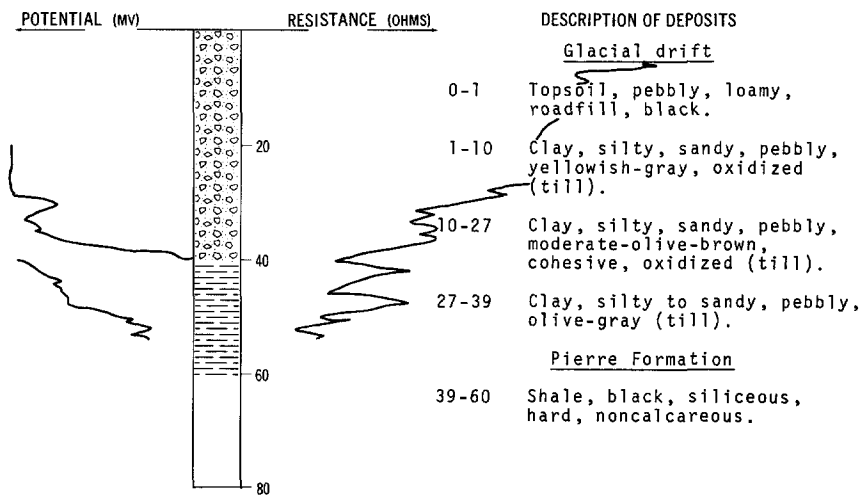
DATE DRILLED: August 1970
 DEPTH: 60
 (FT)



LOCATION: 161-62-24AAA
 ALTITUDE: 1584
 (FT, MSL)

NDSWC 3822

DATE DRILLED: September 1969
 DEPTH: 60
 (FT)



161-62-24BAA
 NDGS Cav-69-58

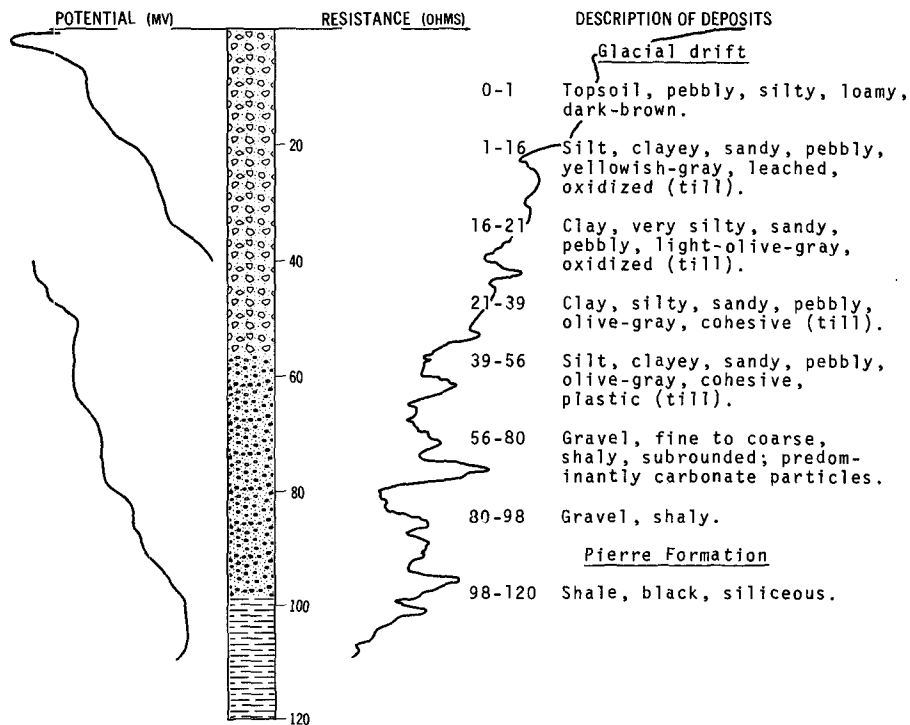
Altitude: 1570 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	0.5	0.5
	Till, sandy, pebbly, dark-yellowish-brown----	1	1.5
	Sand, fine to medium, clayey, pebbly-----	4.5	6
	Sand, clayey, saturated-----	6	12
	Sand, gravelly, saturated-----	2	14
	Gravel, saturated-----	14	28
	Till, pebbly, dark-gray, dense-----	1	29

LOCATION: 161-62-30DDD
 ALTITUDE: 1580
 (FT, MSL)

NDSWC 4150

DATE DRILLED: August 1970
 DEPTH: 120
 (FT)



161-62-31ABB
 NDGS Cav-69-56

Altitude: 1582 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	4	4
	Silt, clayey-----	4	8
	Sand, fine, shaly, pebbly-----	4	12
	Till, shaly, dark-yellowish-brown; about 50 percent shale particles-----	1	13
	Till, clayey, sandy, saturated-----	9	22
	Till, pebbly, dark-gray-----	7	29

161-62-31DCD
 (Log from U.S. Air Force)

Altitude: 1581 feet

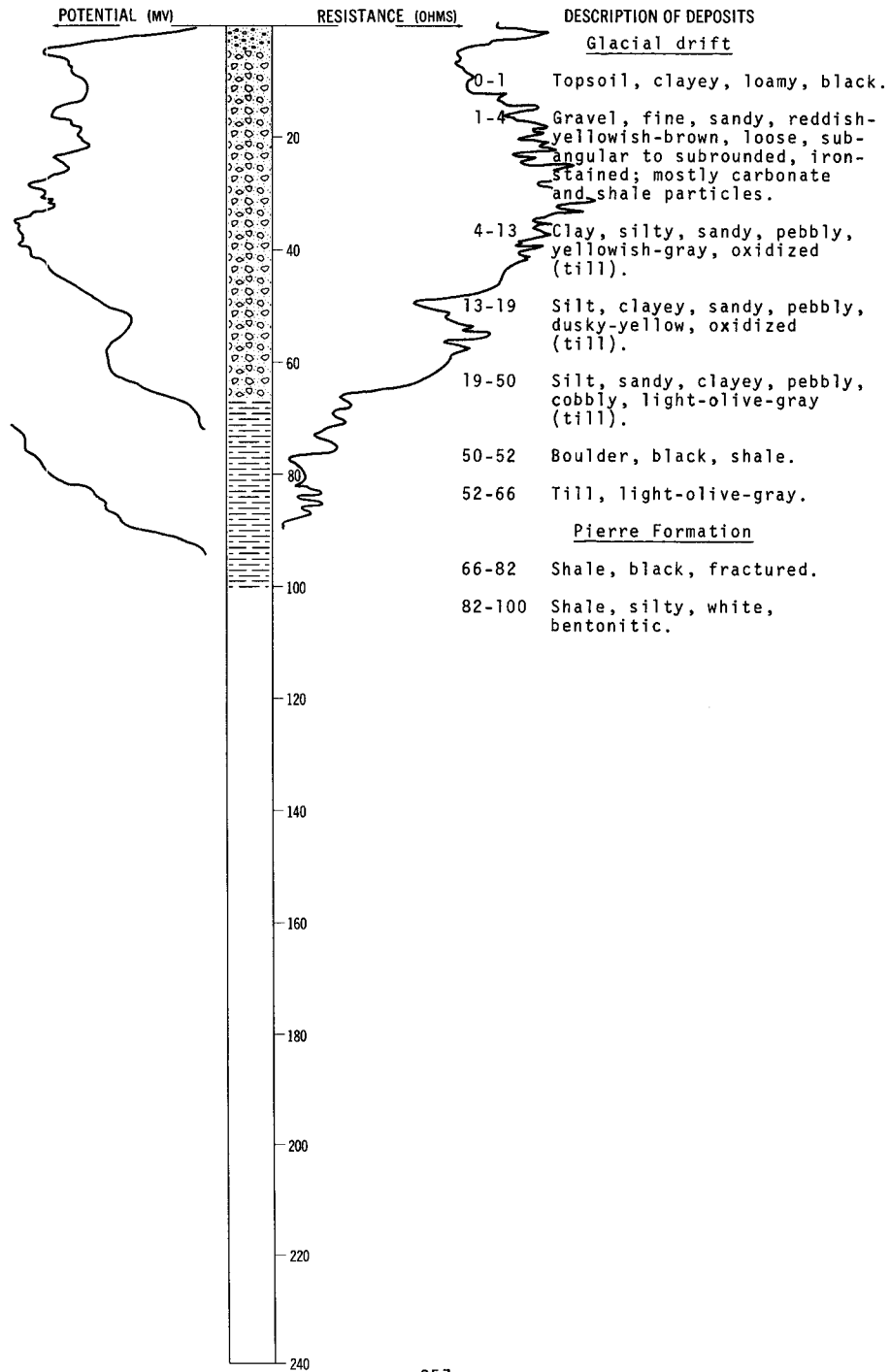
Glacial drift:			
	Clay, sandy-----	1.5	1.5
	Clay, sandy, silty-----	17	18.5
	Sand, fine, clayey, silty-----	5.5	24
	Clay, sandy, silty-----	3.5	27.5
	Sand, fine to coarse, clayey, silty-----	9.5	37
	Clay, sandy, silty-----	4.5	41.5
	Silt, clayey, sandy-----	32.5	74
Pierre Formation:			
	Shale; silt-----	56	130

LOCATION: 161-62-36DDD

DATE DRILLED: September 1970

ALTITUDE: 1574
(FT, MSL)

DEPTH: 100
(FT)



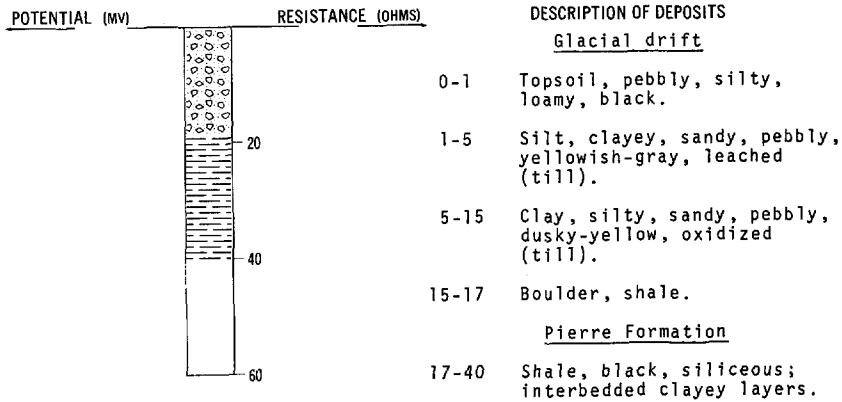
NDSWC 4156

LOCATION: 161-63-3CCC

DATE DRILLED: August 1970

ALTITUDE: 1600
(FT, MSL)

DEPTH: 40
(FT)



161-63-4DDD
NDGS Cav-69-53

Altitude: 1602 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	3	3
	Till, shaly, pebbly, slightly sandy, dark-yellowish-brown; more than 50 percent shale particles-----	9	12
	Till; like above except dusky yellowish brown-----	2	14

161-63-7BBB
NDGS Cav-69-47

Altitude: 1615 feet

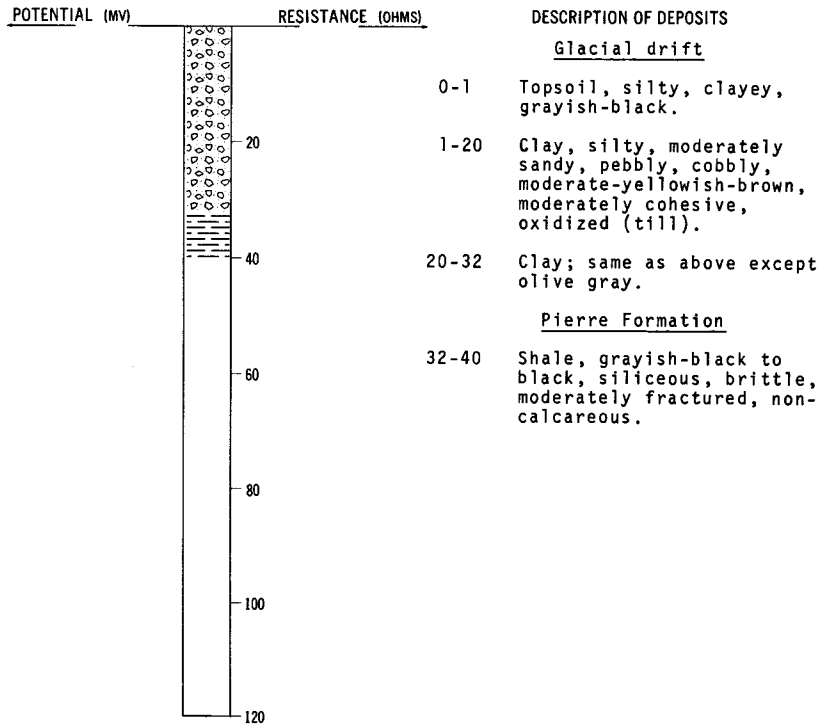
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Roadfill and topsoil-----	5	5
	Till, shaly, clayey, pebbly, dark-yellowish-brown; about 50 percent shale particles----	8	13
	Till, shaly, clayey, pebbly, dark-yellowish-brown; more than 80 percent shale particles-----	4	17
	Till, shaly, pebbly, dusky-yellowish-brown; more than 50 percent shale particles-----	3	20
	Till, shaly, pebbly, dark-gray; more than 80 percent shale particles-----	29	49

161-63-11AAA
 NDGS Cav-69-54

Altitude: 1578 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	1	1
	Sand, fine, clayey, subangular to angular; saturated at base-----	8	9
	Till, shaly, dark-yellowish-brown, saturated; about 50 percent shale particles-----	11	20
	Till, unoxidized-----	4	24

LOCATION: 161-63-12DDC NDSWC 5978 DATE DRILLED: June 1971
 ALTITUDE: 1580 DEPTH: 40
 (FT, MSL) (FT)



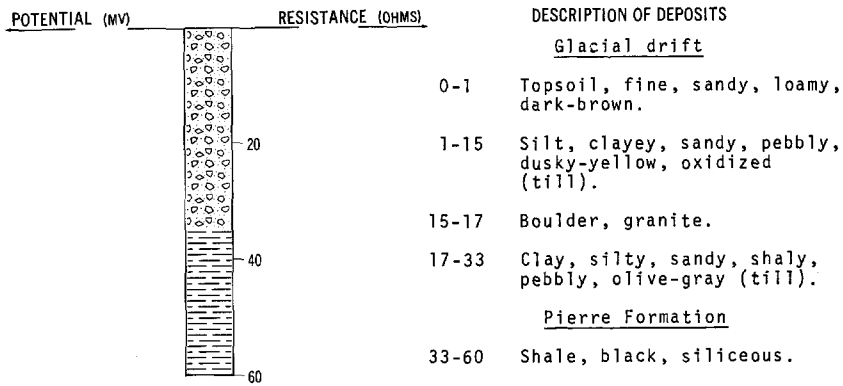
LOCATION: 161-63-13CCC

NDSWC 4149

DATE DRILLED: August 1970

ALTITUDE: 1582
(FT, MSL)

DEPTH: 60
(FT)



161-63-14BCC
NDGS Cav-69-55

Altitude: 1599 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	0.5	0.5
	Till, shaly, pebbly, dusky-yellowish-brown; about 50 percent shale particles-----	8.5	9
Pierre Formation:			
	Shale-----	-	9

161-63-14CCB
(Log from U.S. Air Force)

Altitude: 1596 feet

Glacial drift:			
	Sand, fine to coarse, clayey-----	3	3
	Sand, fine to medium, clayey, silty-----	5	8
	Sand, fine to coarse, clayey, silty-----	6	14
	Clay, sandy, silty-----	4	18
Pierre Formation:			
	Shale; clay-----	6	24
	Shale-----	106	130

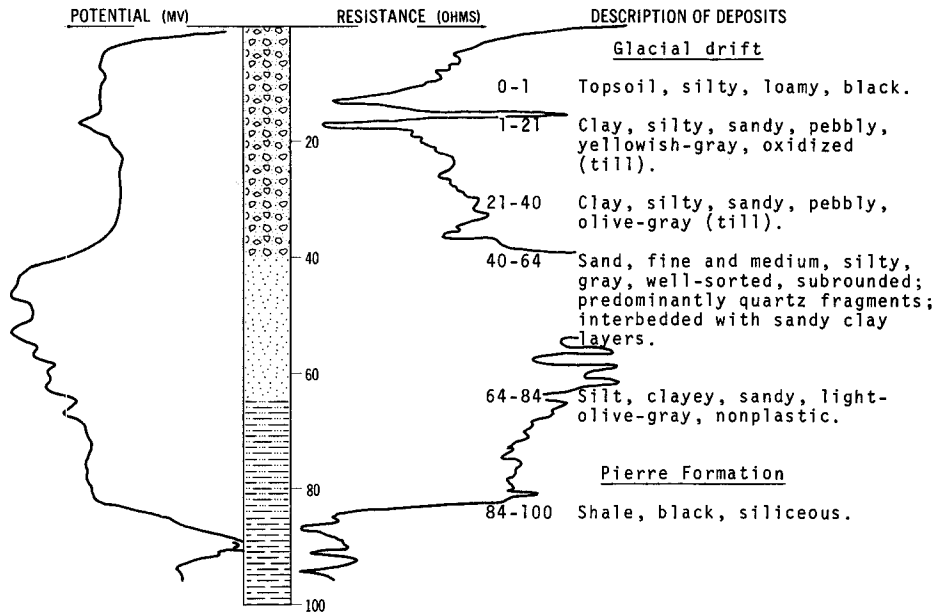
LOCATION: 161-63-15CCC

NDSWC 4148

DATE DRILLED: August 1970

ALTITUDE: 1604
(FT, MSL)

DEPTH: 100
(FT)



161-63-17CBC
(Log from Walter Koehmstedt)

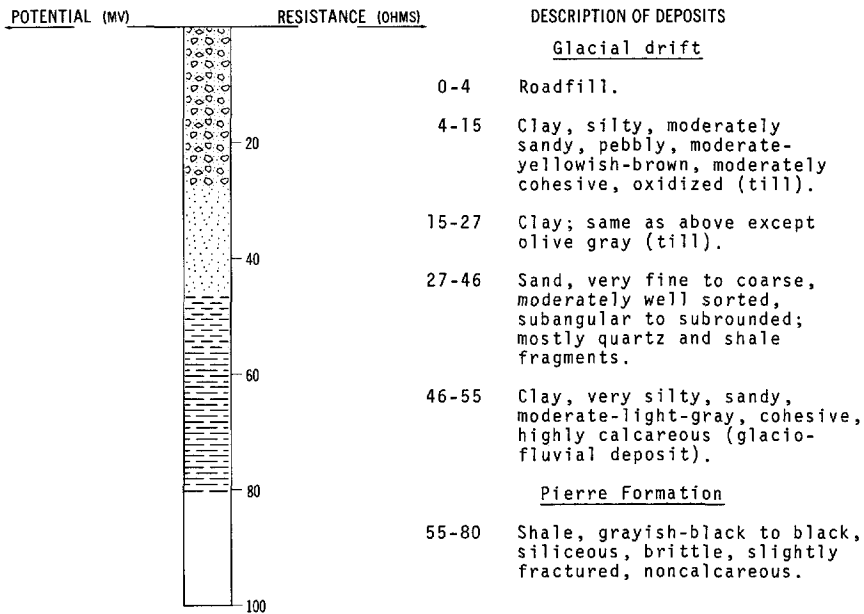
Altitude: 1612 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, silt	40	40
	Gravel, coarse	25	65
Pierre Formation:			
	Shale	72	137

LOCATION: 161-63-19BBA2
 ALTITUDE: 1617
 (FT, MSL)

NDSWC 5975

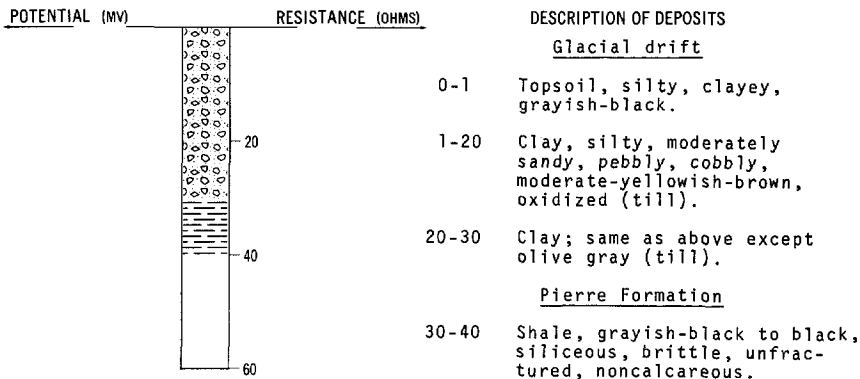
DATE DRILLED: June 1971
 DEPTH: 80
 (FT)



LOCATION: 161-63-22CCC
 ALTITUDE: 1605
 (FT, MSL)

NDSWC 5976

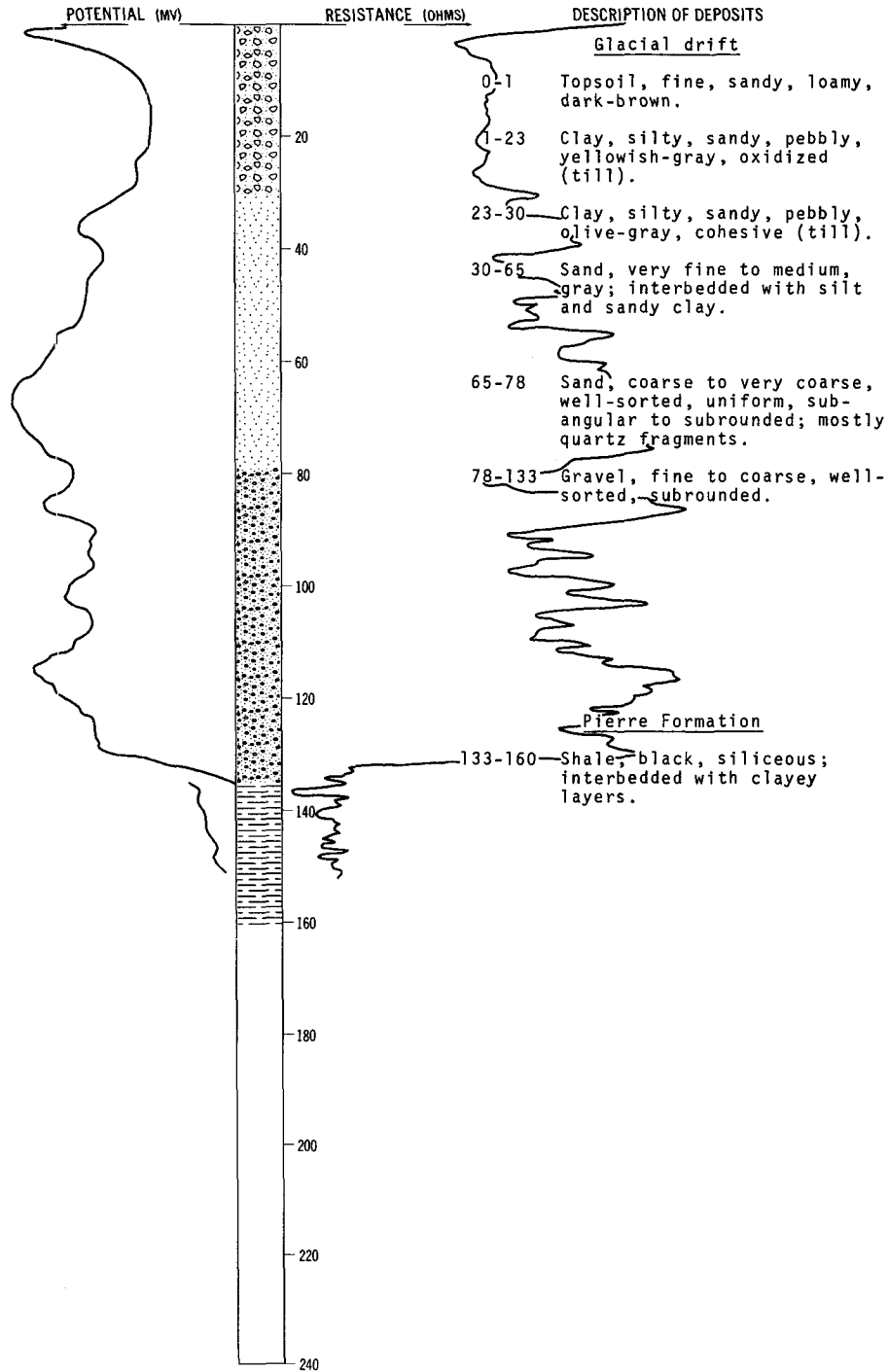
DATE DRILLED: June 1971
 DEPTH: 40
 (FT)



LOCATION: 161-63-29BBB
ALTITUDE: 1619
(FT, MSL)

NDSWC 4147

DATE DRILLED: August 1970
DEPTH: 160
(FT)



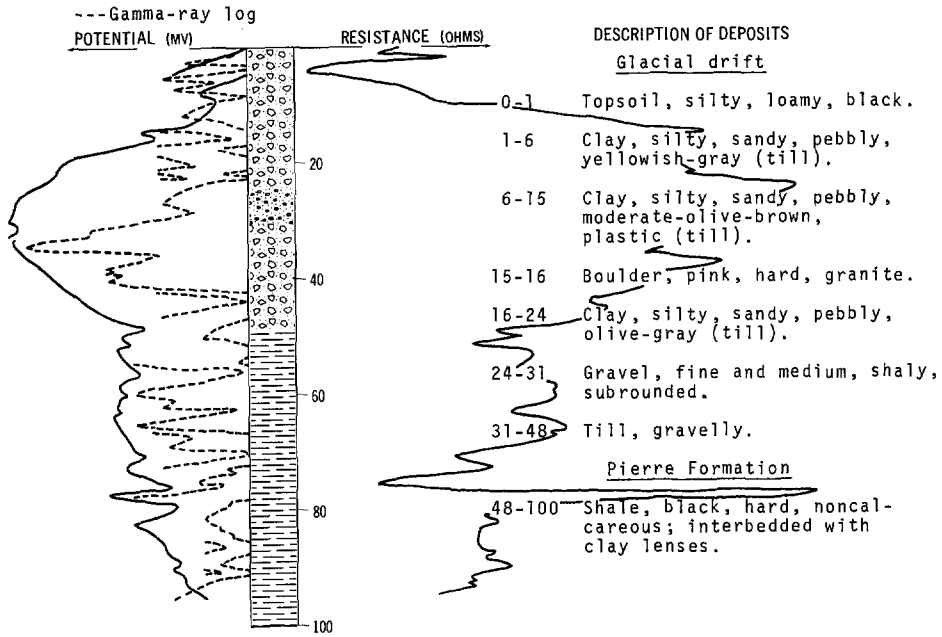
NDSWC 3820

LOCATION: 161-64-7BBB

DATE DRILLED: September 1969

ALTITUDE: 1600
(FT, MSL)

DEPTH: 100
(FT)



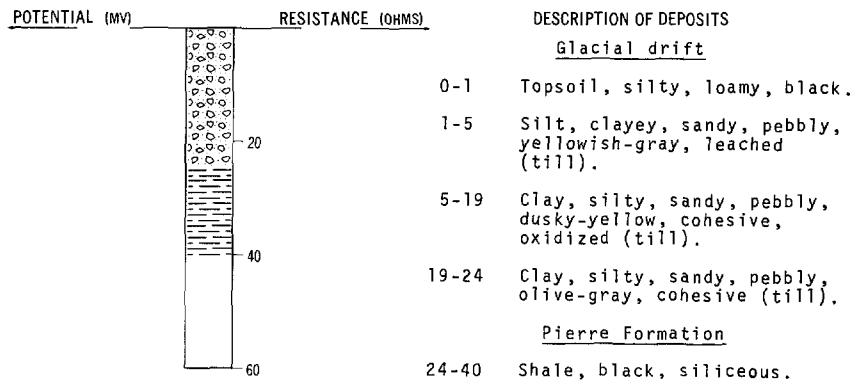
NDSWC 4161

LOCATION: 161-64-9AAA

DATE DRILLED: August 1970

ALTITUDE: 1629
(FT, MSL)

DEPTH: 40
(FT)



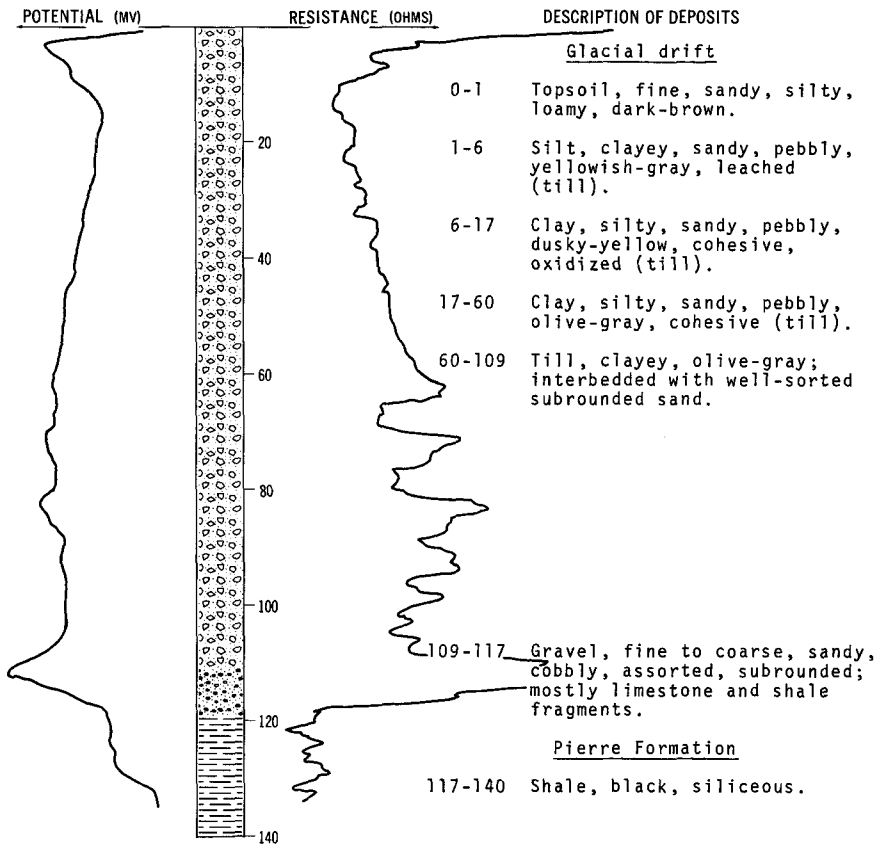
LOCATION: 161-64-12AAA

NDSWC 4146

DATE DRILLED: August 1970

ALTITUDE: 1615
(FT, MSL)

DEPTH: 140
(FT)



161-64-14ADB
(Log from Great Northern Railway Company)

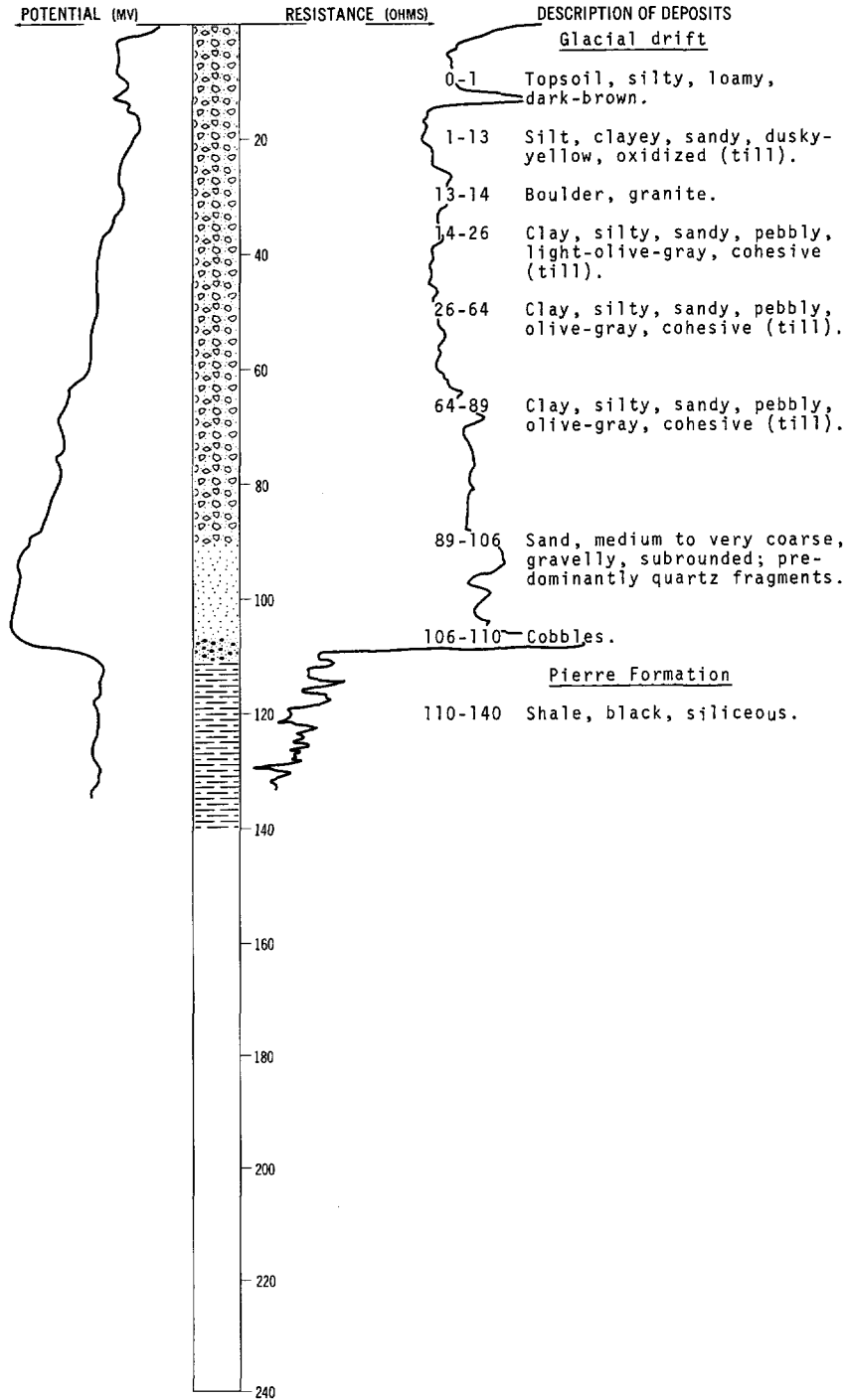
Altitude: 1615 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, yellow	19	19
	Clay, blue	138	157
	Gravel, coarse	2	159

LOCATION: 161-64-14DAD
ALTITUDE: 1615
(FT, MSL)

NDSWC 4145

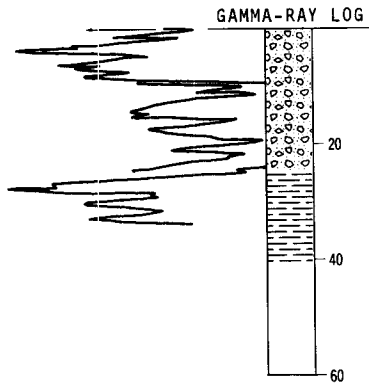
DATE DRILLED: August 1970
DEPTH: 140
(FT)



LOCATION: 161-64-15CCC
 ALTITUDE: 1615
 (FT, MSL)

NDSWC 3791

DATE DRILLED: September 1969
 DEPTH: 40
 (FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-1 Topsoil, sandy, black.
- 1-10 Clay, silty, sandy, pebbly, yellowish-gray to moderate-olive-brown, soft, dry, oxidized (till).
- 10-24 Clay, silty, sandy, pebbly, moderate-olive-brown to brownish-olive-gray, oxidized to partially oxidized (till).

Pierre Formation

- 24-40 Shale, black, hard, brittle slightly fractured.

161-64-17CCC
 NDGS Cav-69-44

Altitude: 1597 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Roadfill and topsoil-----	5	5
	Till, shaly, clayey, pebbly, grayish-brown---	4.5	9.5
Pierre Formation:			
	Shale, weathered-----	2.5	12
	Shale, solid-----	-	12

161-64-20AAA
 NDGS Cav-69-46

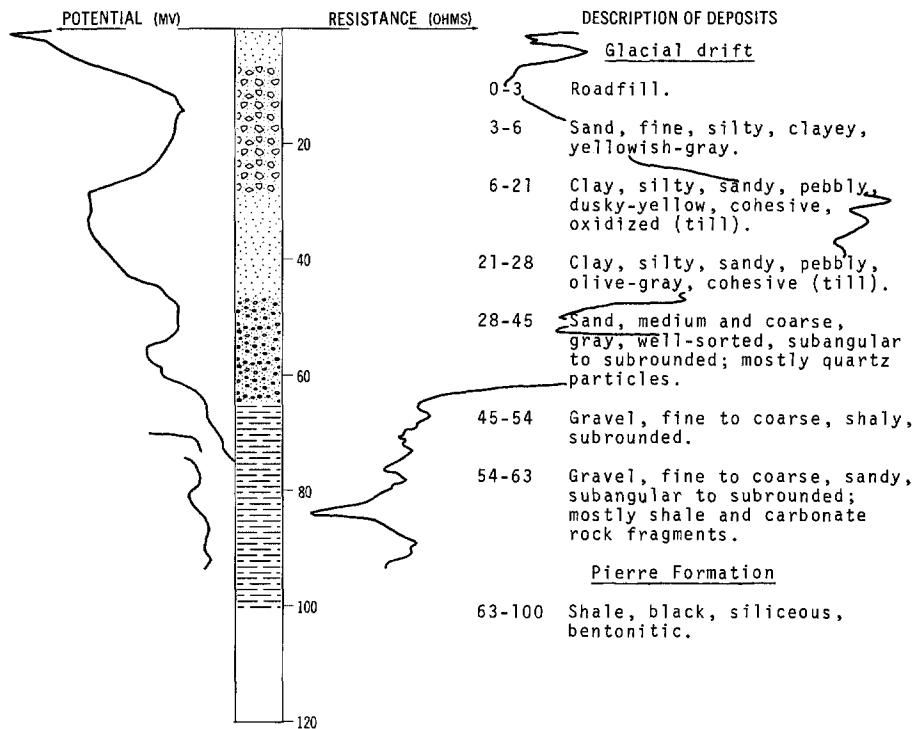
Altitude: 1613 feet

Glacial drift:			
	Topsoil-----	3	3
	Till, shaly, pebbly, moderate-yellowish-brown-----	14	17
	Till, pebbly, dusky-yellowish-brown-----	3	20
	Till; as above except dark gray-----	6	26
	Boulder-----	-	26

LOCATION: 161-64-26CCC2
 ALTITUDE: 1617
 (FT, MSL)

NDSWC 4144

DATE DRILLED: August 1970
 DEPTH: 100
 (FT)



161-64-30DDD
 NDGS Cav-69-45

Altitude: 1593 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	4.5	4.5
	Till, shaly, slightly sandy, pebbly, dark-yellowish-brown-----	11.5	16
	Till, shaly, slightly sandy, pebbly, dusky-yellowish-brown-----	4	20
	Till; same as above except dark gray-----	1	21

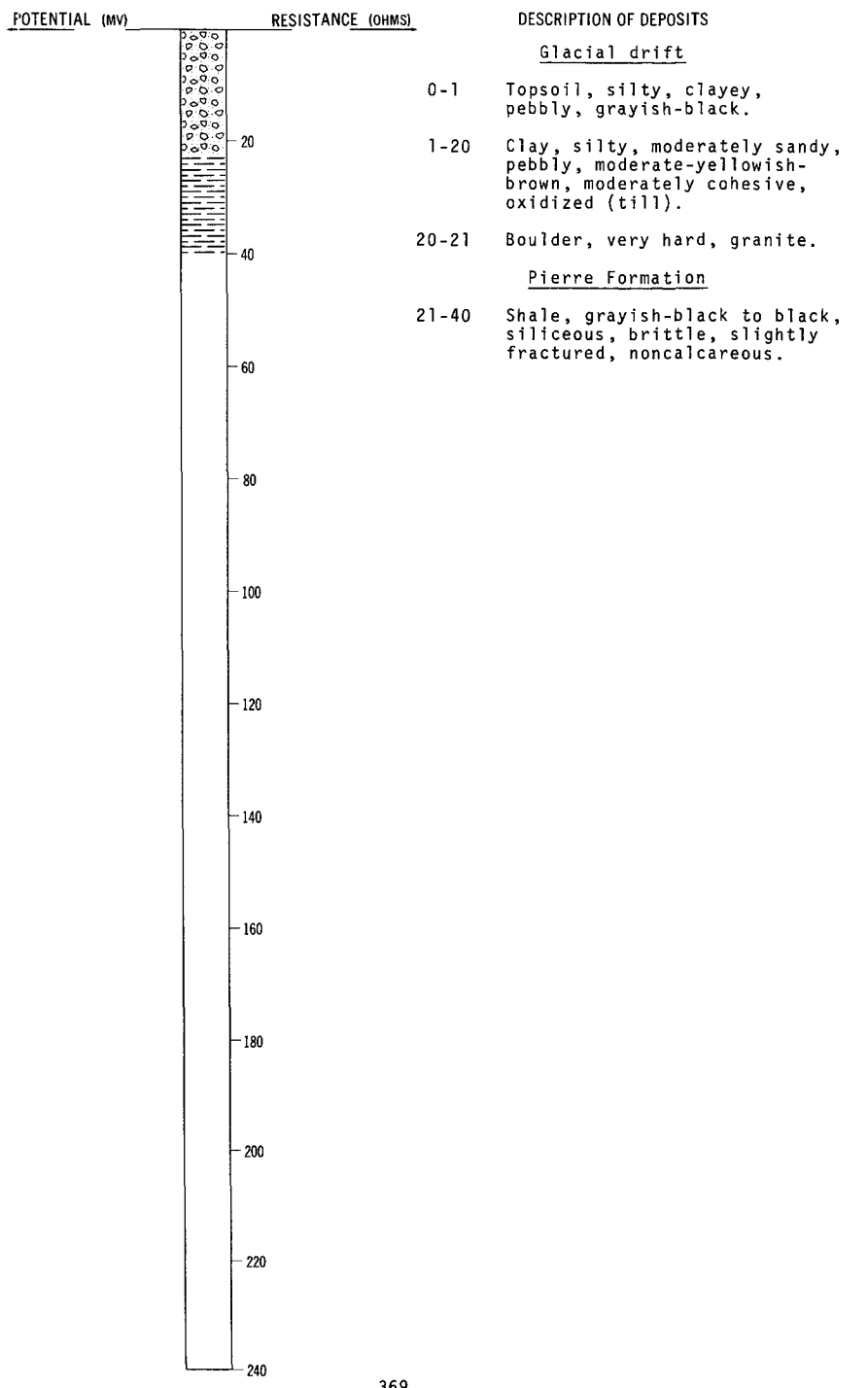
LOCATION: 161-64-33ABB

NDSWC 5974

DATE DRILLED: June 1971

ALTITUDE:
(FT, MSL)

DEPTH: 40
(FT)



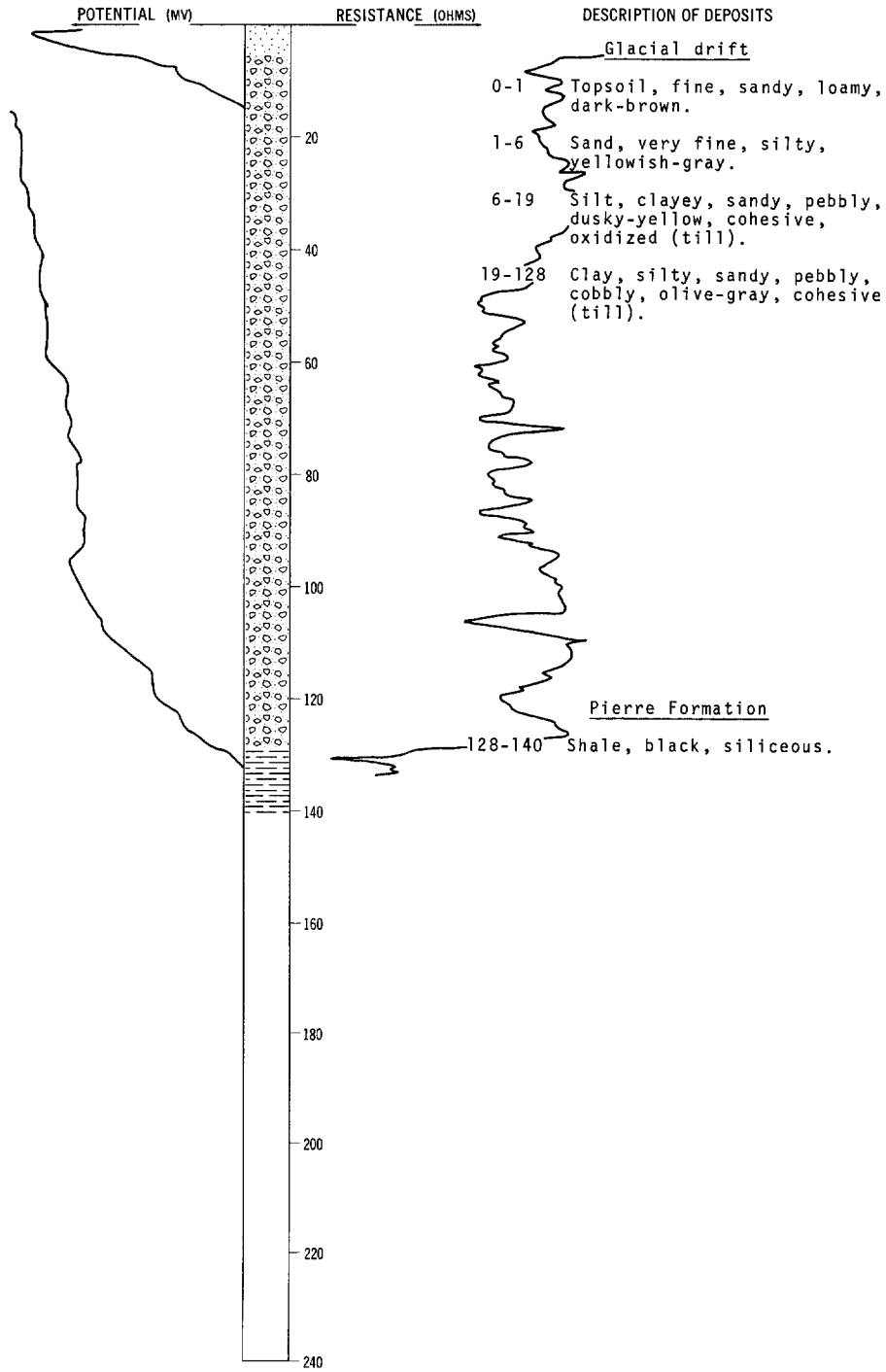
LOCATION: 161-64-33CCB

NDSWC 4143

DATE DRILLED: August 1970

ALTITUDE: 1603
(FT, MSL)

DEPTH: 140
(FT)

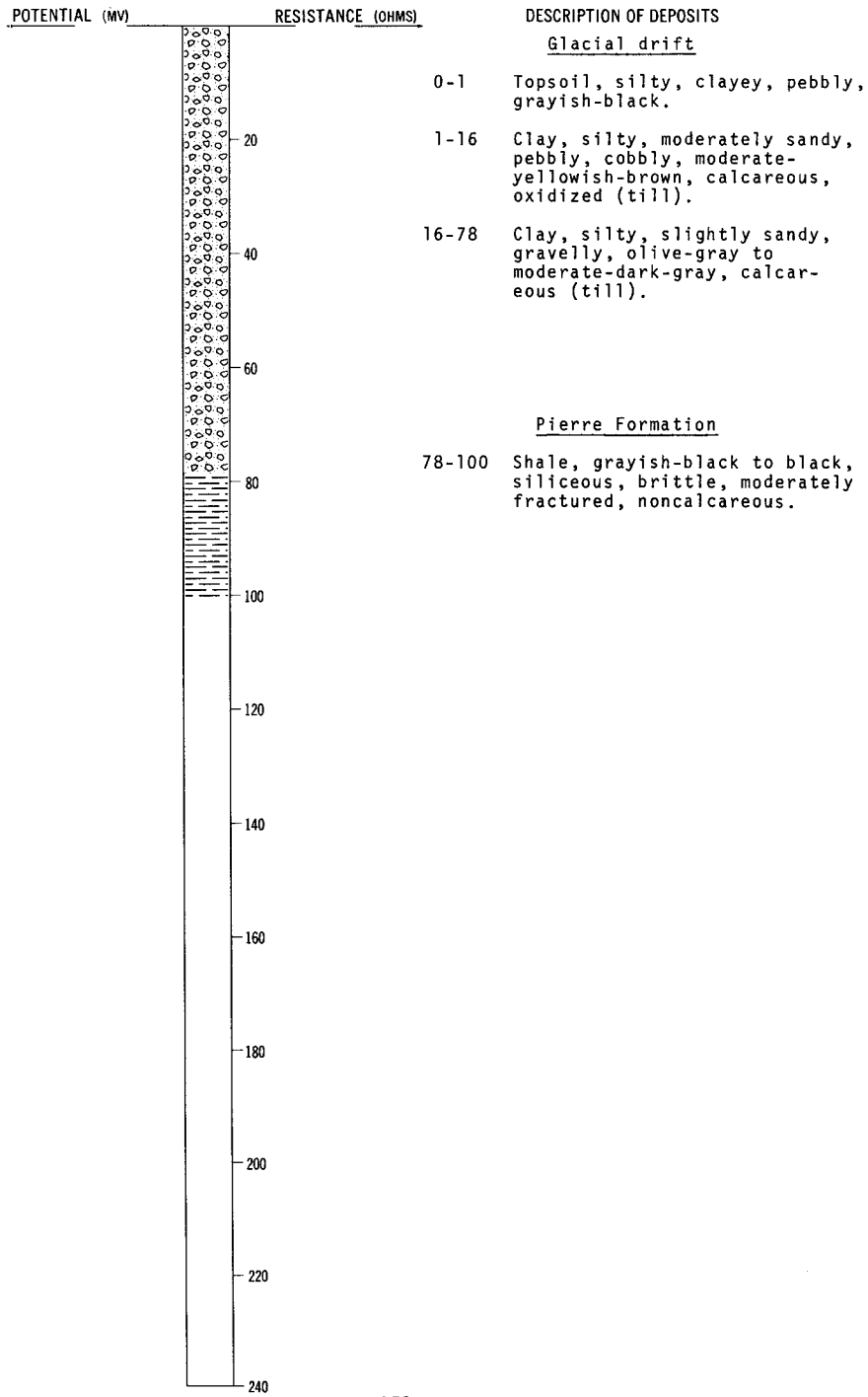


LOCATION: 161-64-34CDD

DATE DRILLED: June 1971

ALTITUDE: 1601
(FT, MSL)

DEPTH: 100
(FT)

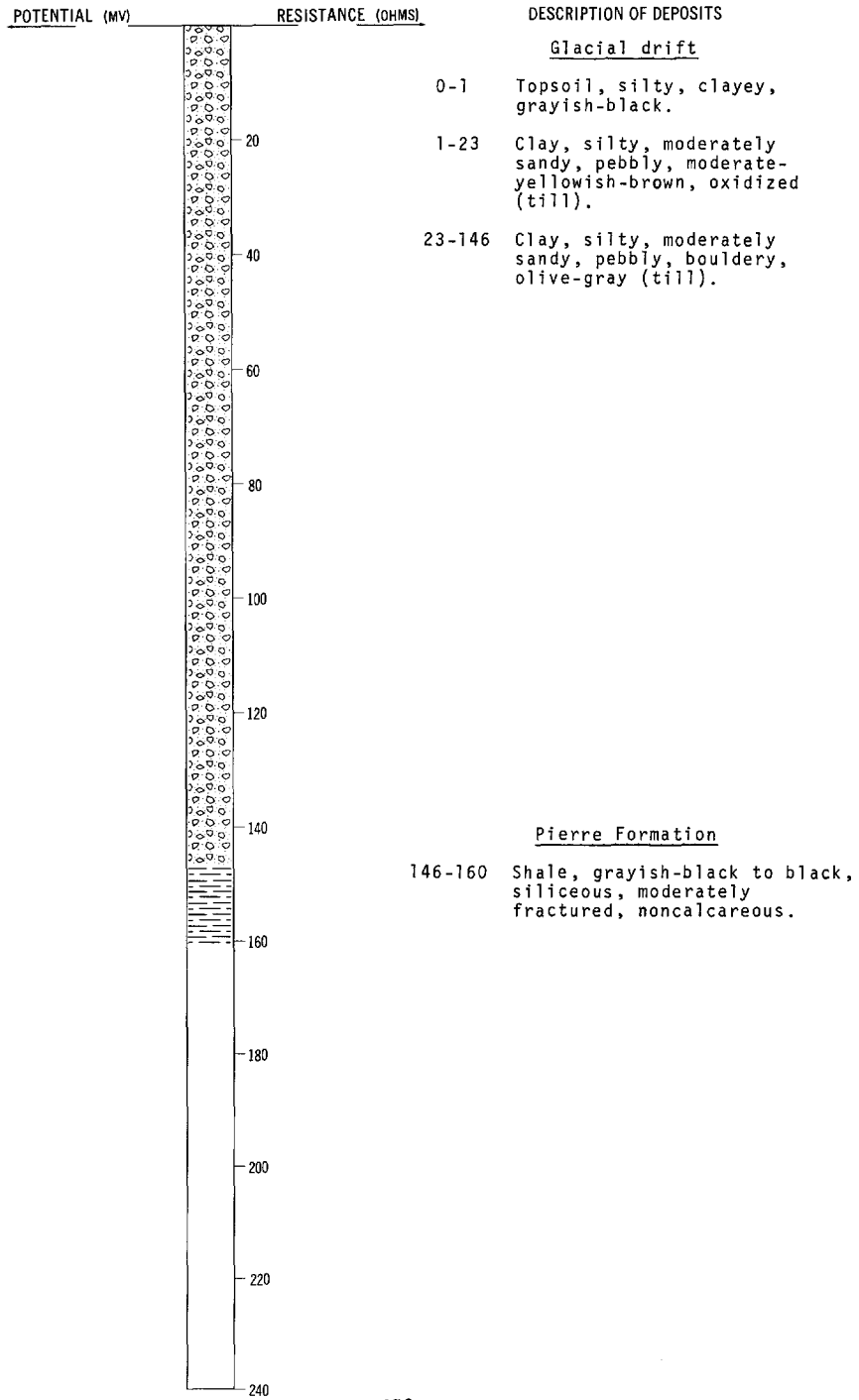


LOCATION: 161-64-35DDD

DATE DRILLED: June 1971

ALTITUDE: 1612
(FT. MSL)

DEPTH: 160
(FT)



161-64-36DDD
 NDGS Cav-69-30

Altitude: 1611 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Roadfill-----	0.5	0.5
	Till, slightly sandy, shaly, pebbly, dark-yellowish-brown; about 40 percent shale particles-----	14.5	15
	Till; as above except more pebbly-----	6	21
	Till, pebbly, dusky-yellowish-brown-----	4	25
	Till, pebbly, grayish-black to dark-gray-----	8	33
	Till, clayey, sandy, gravelly, saturated-----	2	35
	Till, pebbly, dark-yellowish-brown-----	-	35

162-51-9AAB
 (Log from North Dakota State Highway Department)

Altitude: 793 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, dark-gray, soft-----	1	1
	Clay, silty, light-brown, plastic-----	13	14
	Clay, silty, dark-gray, plastic-----	127	141
	Loam, sandy, gray, hard-----	2	143

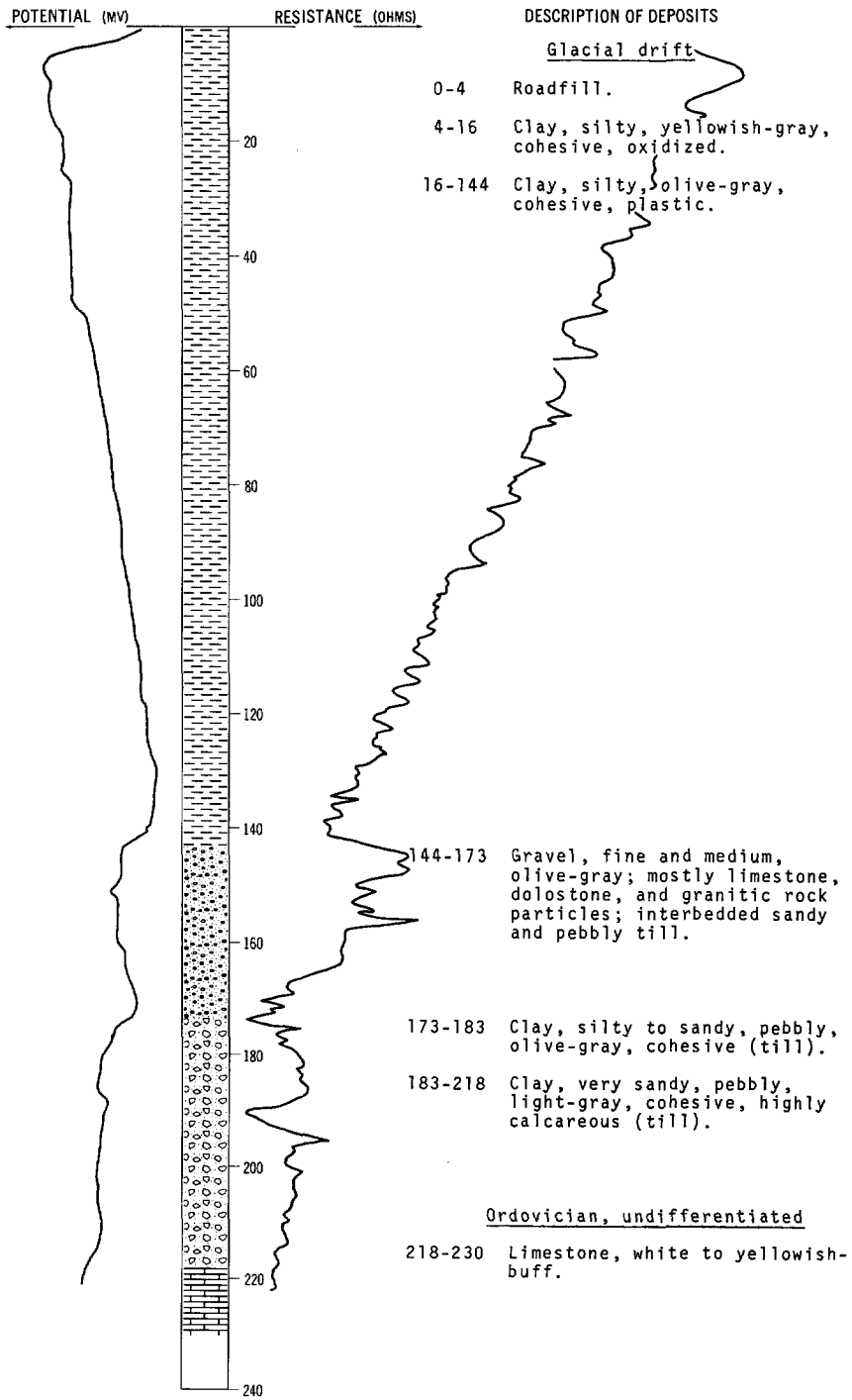
LOCATION: 162-51-34CCC

NDSWC 3859

DATE DRILLED: October 1969

ALTITUDE: 795
(FT, MSL)

DEPTH: 230
(FT)



162-52-70BC1
(Log from Frederickson's, Inc.)

Altitude: 807 feet

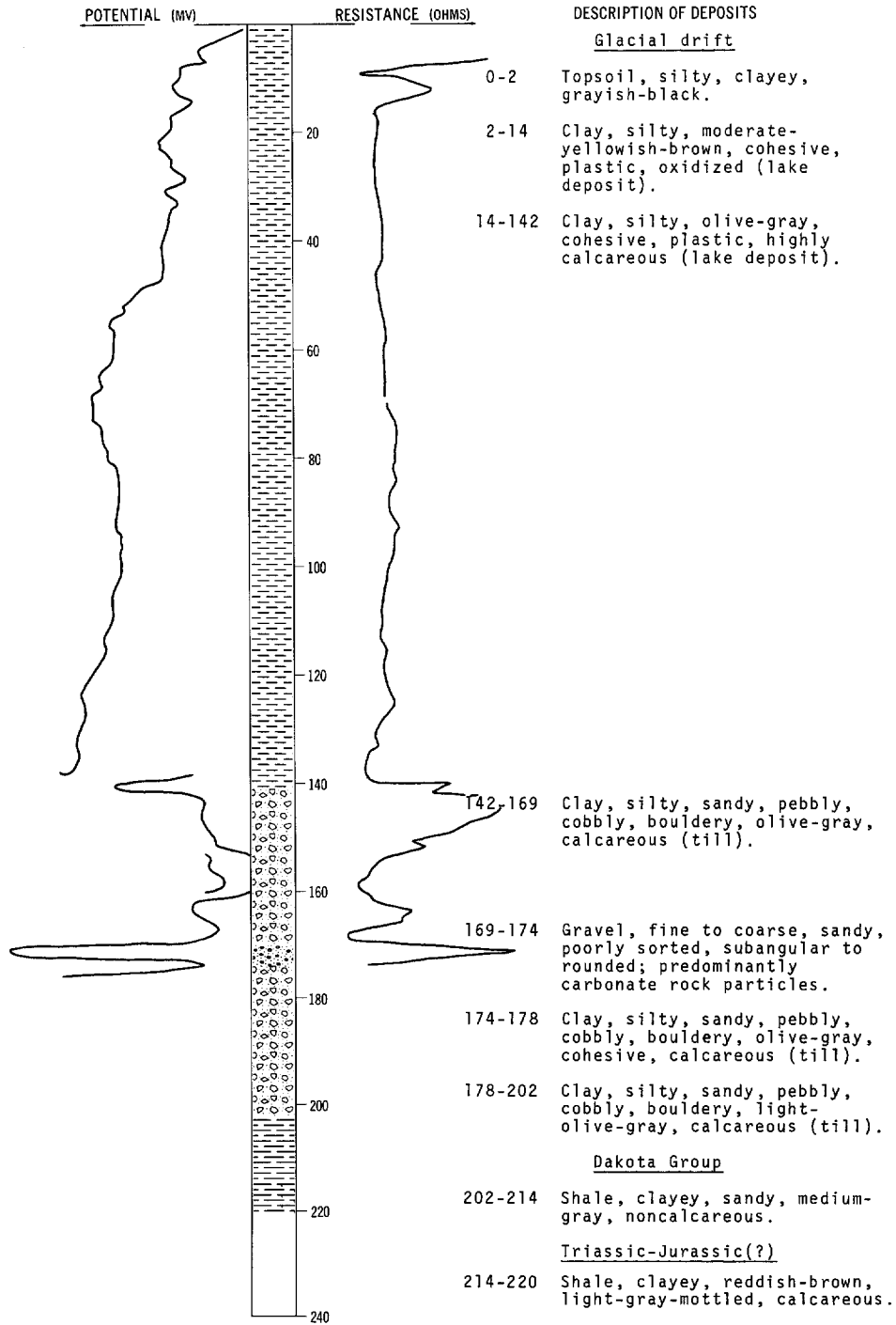
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil, black-----	1	1
	Clay, yellow-----	6	7
	Clay, brown-----	5	12
	Clay, yellow-----	6	18
	Shale, blue, soft-----	123	141
	Clay, blue-----	11	152
	Clay, gray-----	14	166
	Shale; limestone, white; interbedded with sand lenses-----	9	175
	Shale, hard; limestone; frequent boulders----	23	198
Triassic-Jurassic(?):			
	Shale, white and red-----	9	207

LOCATION: 162-52-8ADD

DATE DRILLED: June 1970

ALTITUDE: 805
(FT, MSL)

DEPTH: 220
(FT)



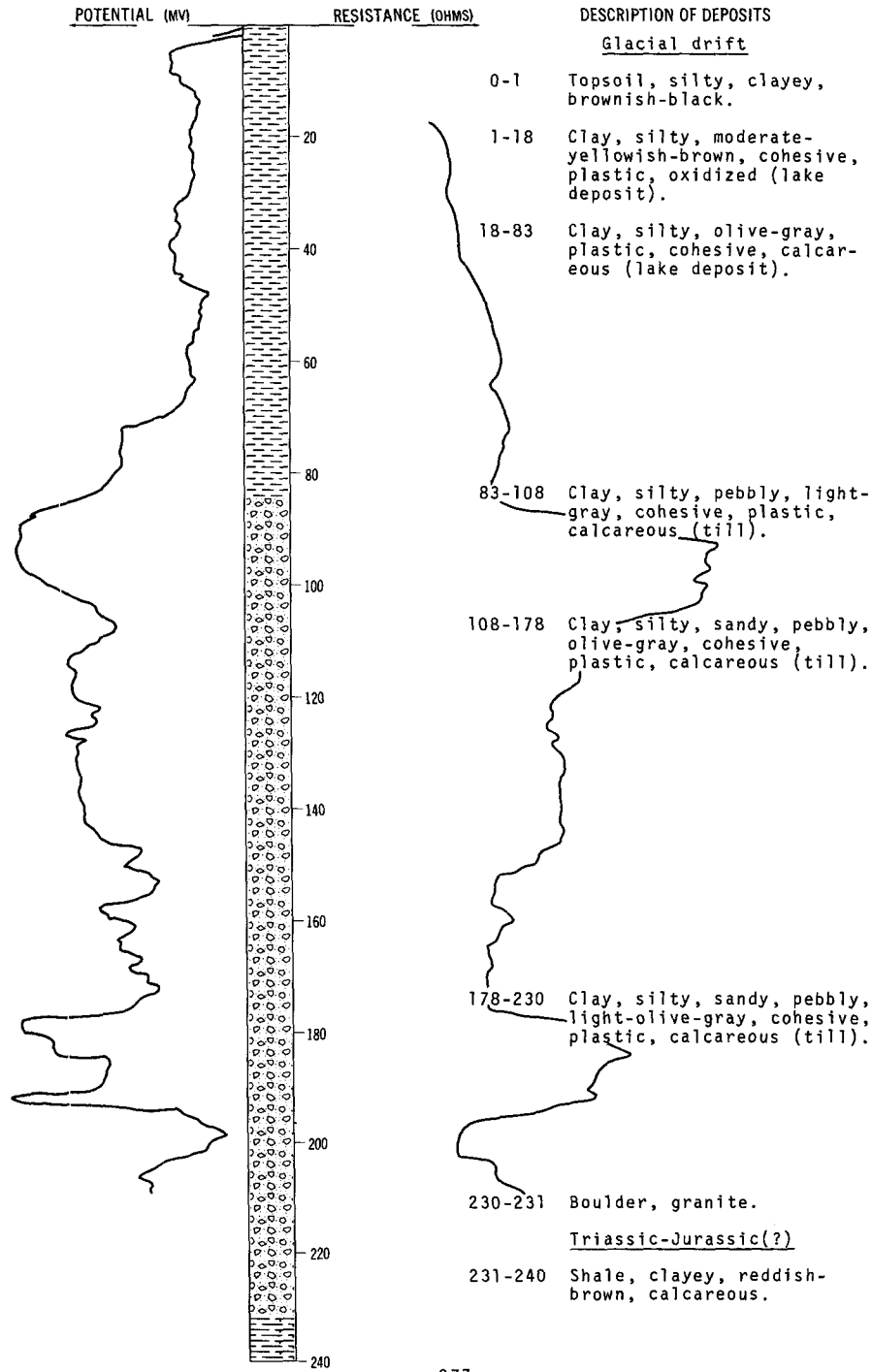
LOCATION: 162-52-33CCB

NDSWC 5708

DATE DRILLED: June 1970

ALTITUDE: 808
(FT, MSL)

DEPTH: 240
(FT)



162-53-10BAC1
(Log from Frederickson's, Inc.)

Altitude: 821 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil, black-----	2	2
	Clay, yellow-----	15	17
	Clay, blue-----	15	32
	Shale, blue, soft-----	138	170
	Clay, sandy, blue-----	12	182
	Clay, blue-----	29	211
	Sand, fine, dirty-----	3	214
Triassic-Jurassic(?):			
	Shale, red, soft-----	5	219
	Shale, blue, hard; interbedded with lenses of very hard shale and boulders-----	91	310
	Shale, white, hard-----	20	330

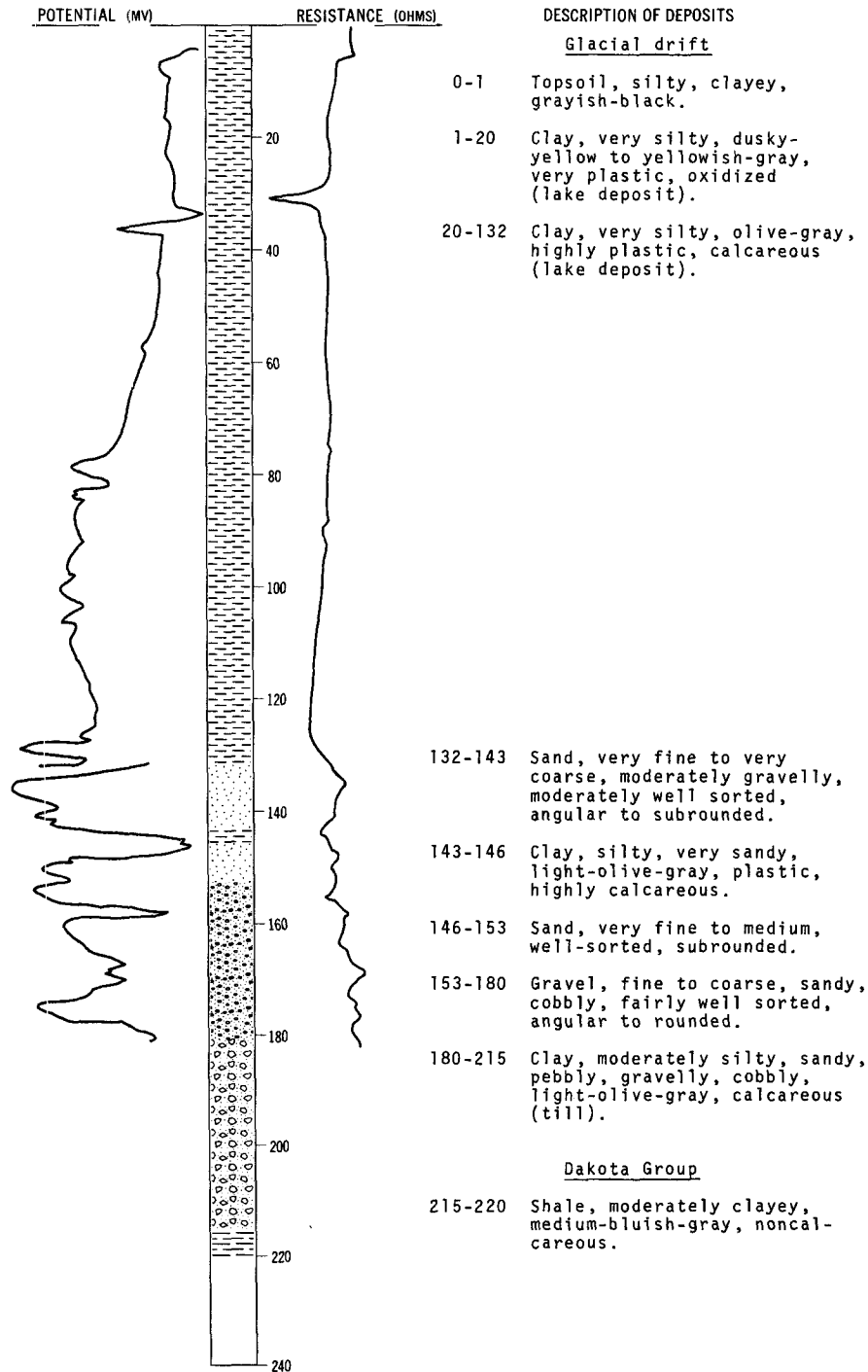
LOCATION: 162-53-26AAA

NDSWC 5938

DATE DRILLED: May 1971

ALTITUDE: 816
(FT, MSL)

DEPTH: 220
(FT)



162-53-35DAC
(Log modified from Laird, 1941, p. 28-29)

Altitude: 824 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil-----	10	10
	Clay, blue (lake deposit)-----	122	132
	Sand, coarse-----	42	174
	Hardpan (cemented gravel)-----	15	189
	Quicksand-----	4	193
Triassic-Jurassic(?):			
	Shale, red-----	32	225
	Shale, blue-----	20	245
	Shale, red-----	43	288
Ordovician, undifferentiated:			
	Limestone, gray-----	12	300
	Shale, blue; saline water-----	7	307
	Limestone, gray-----	277	584
	Limestone, pink-----	25	609
	Limestone, gray, very soft-----	153	762
Winnipeg Formation:			
	Shale, blue, caving-----	130	892
	Sandstone, white-----	5	897
Precambrian:			
	Granite, blue-----	344	1241
	Sand, white; saline water-----	.5	1241.5
	Granite, blue-----	2.5	1244
	Sandstone, white-----	316	1560

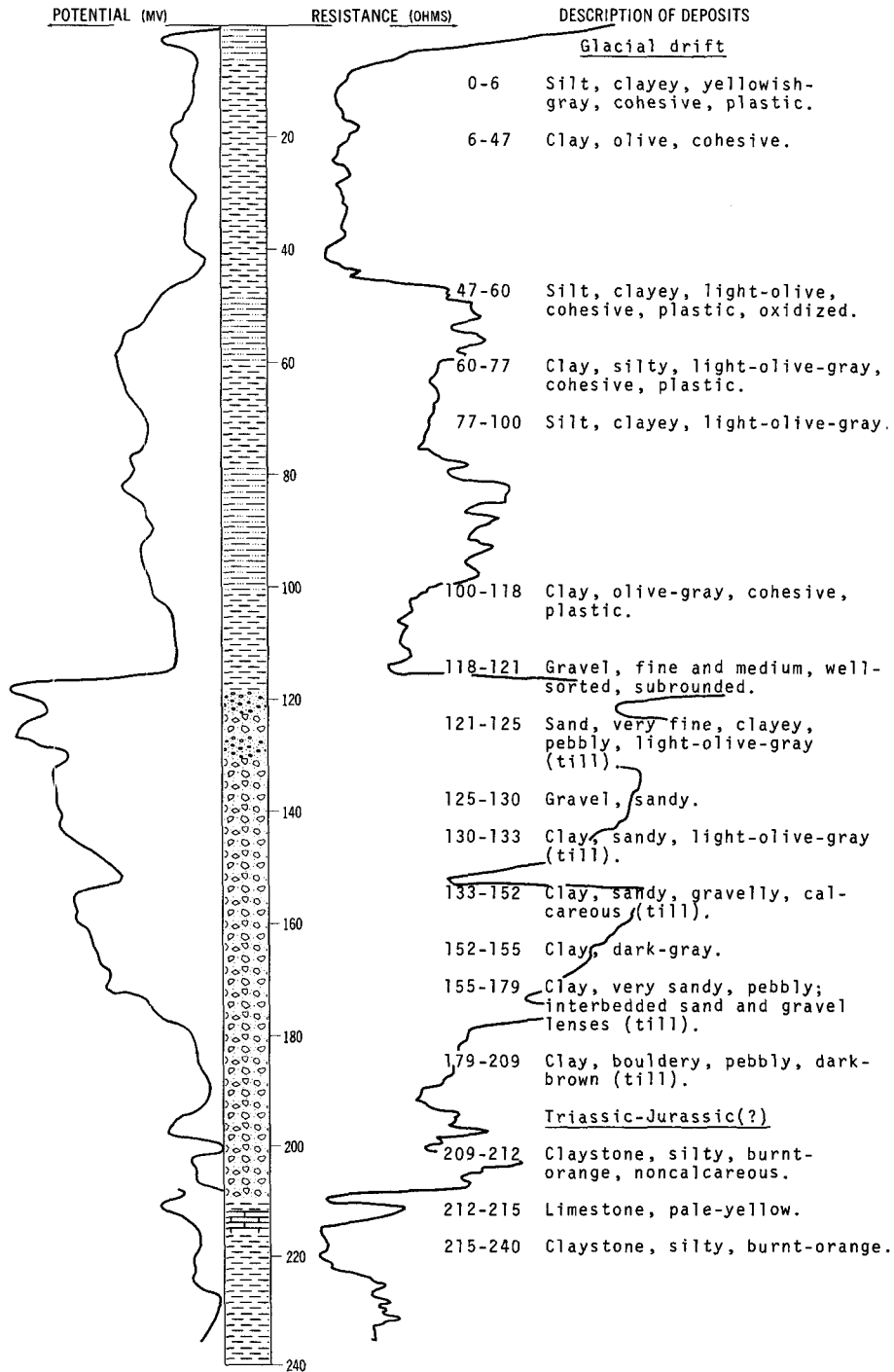
LOCATION: 162-54-1DDD

NDSWC 4231

DATE DRILLED: September 1970

ALTITUDE: 833
(FT, MSL)

DEPTH: 240
(FT)



162-54-4CCC
USBR 209

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, clayey, silty-----	1	1
	Loam, silty-----	3	4
	Loam, clayey-----	3	7
	Clay-----	1	8

162-54-7CCD
USBR 210

Altitude:

Glacial drift:			
	Loam, silty-----	1	1
	Loam-----	2	3
	Loam, silty-----	6	9
	Clay-----	4	13

162-54-17CCC
USBR 417

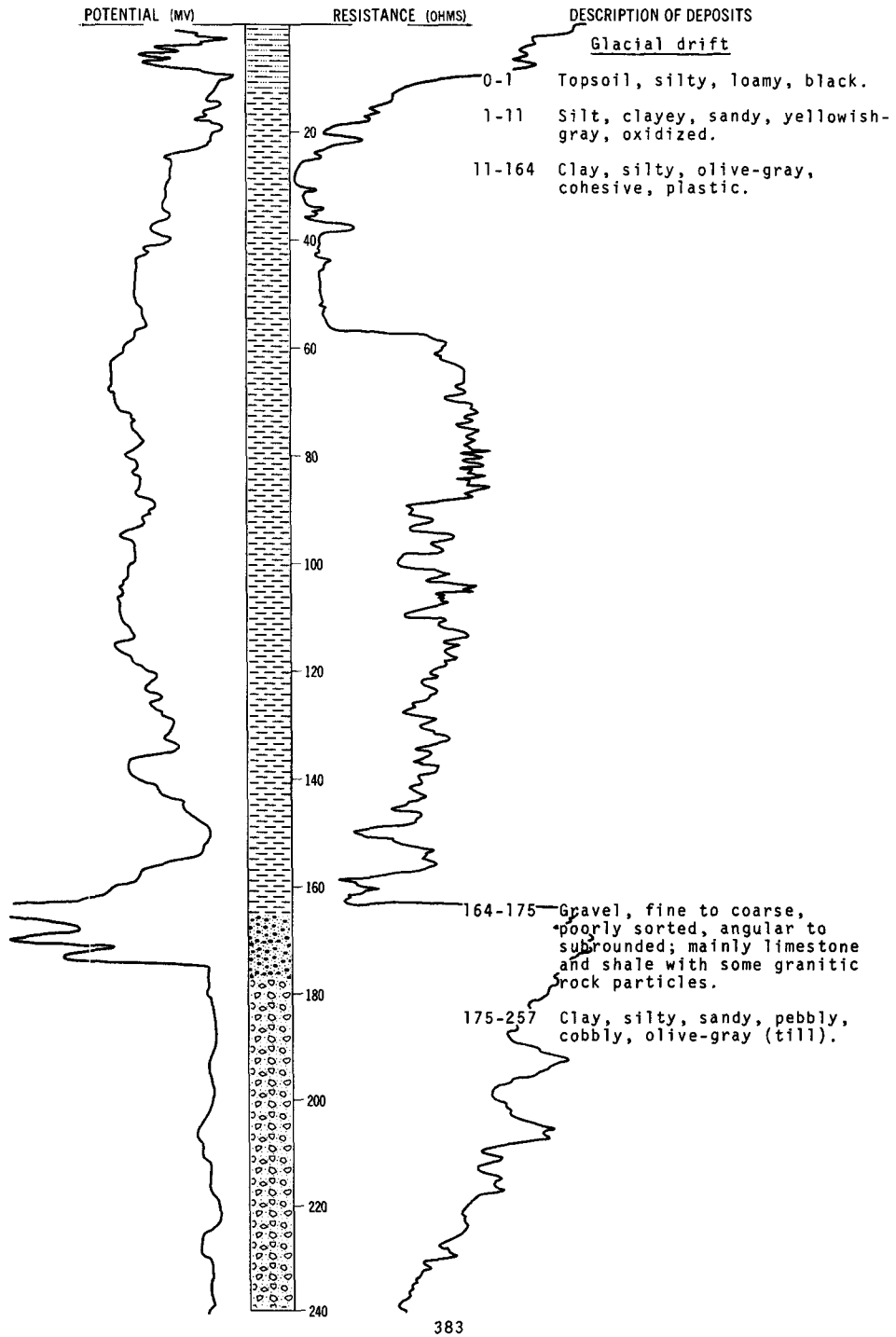
Altitude:

Glacial drift:			
	Loam, silty-----	1	1
	Loam-----	1	2
	Sand, fine-----	3	5
	Clay, silty-----	4	9
	Clay-----	4	13

LOCATION: 162-54-22BBC
ALTITUDE: 866
(FT, MSL)

NDSWC 3846

DATE DRILLED: October 1969
DEPTH: 380
(FT)

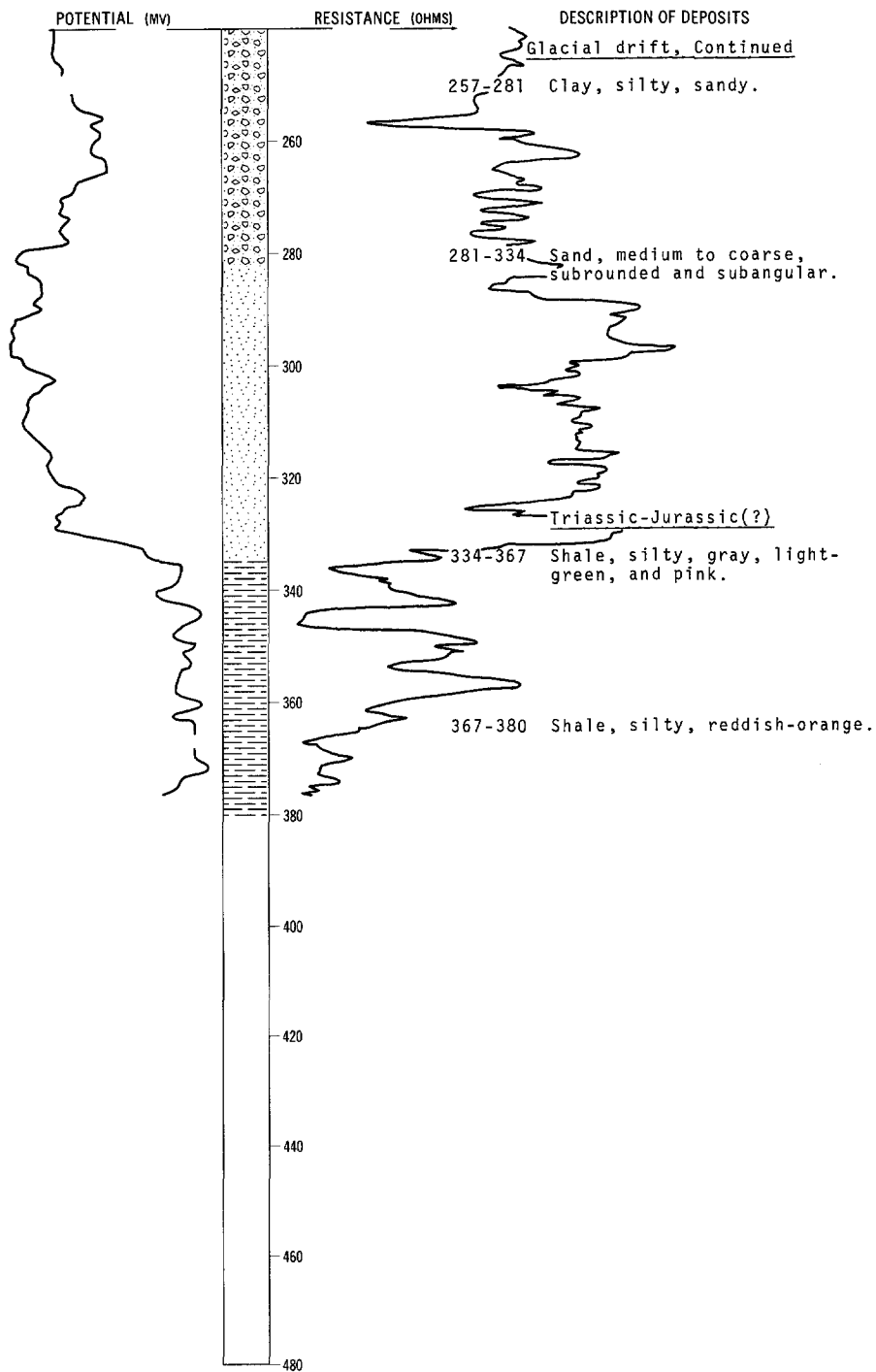


LOCATION: 162-54-22BBC

DATE DRILLED: October 1969

ALTITUDE: 866
(FT. MSL)

DEPTH: 380
(FT)



162-54-28DDD2
USBR 218

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, clayey, silty-----	3	3
	Loam, silty-----	15	18
	Clay, silty-----	3	21
	Loam, clayey, silty-----	2	23

162-54-29DCC
NDGS Pem-70-39

Altitude: 890 feet

Glacial drift:			
	Roadfill-----	6	6
	Clay, silty, yellowish-brown, banded, well-sorted-----	3	9
	Silt, clayey, very slightly pebbly, yellowish-brown, well-sorted, saturated----	10	19
	Silt; same as above except gray-----	6	25
	Clay, very plastic to dense, cohesive-----	4	29

162-54-36AAA
USBR 219

Altitude:

Glacial drift:			
	Loam, clayey, silty-----	3	3
	Loam, silty-----	19	22
	Loam, clayey, silty-----	6	28

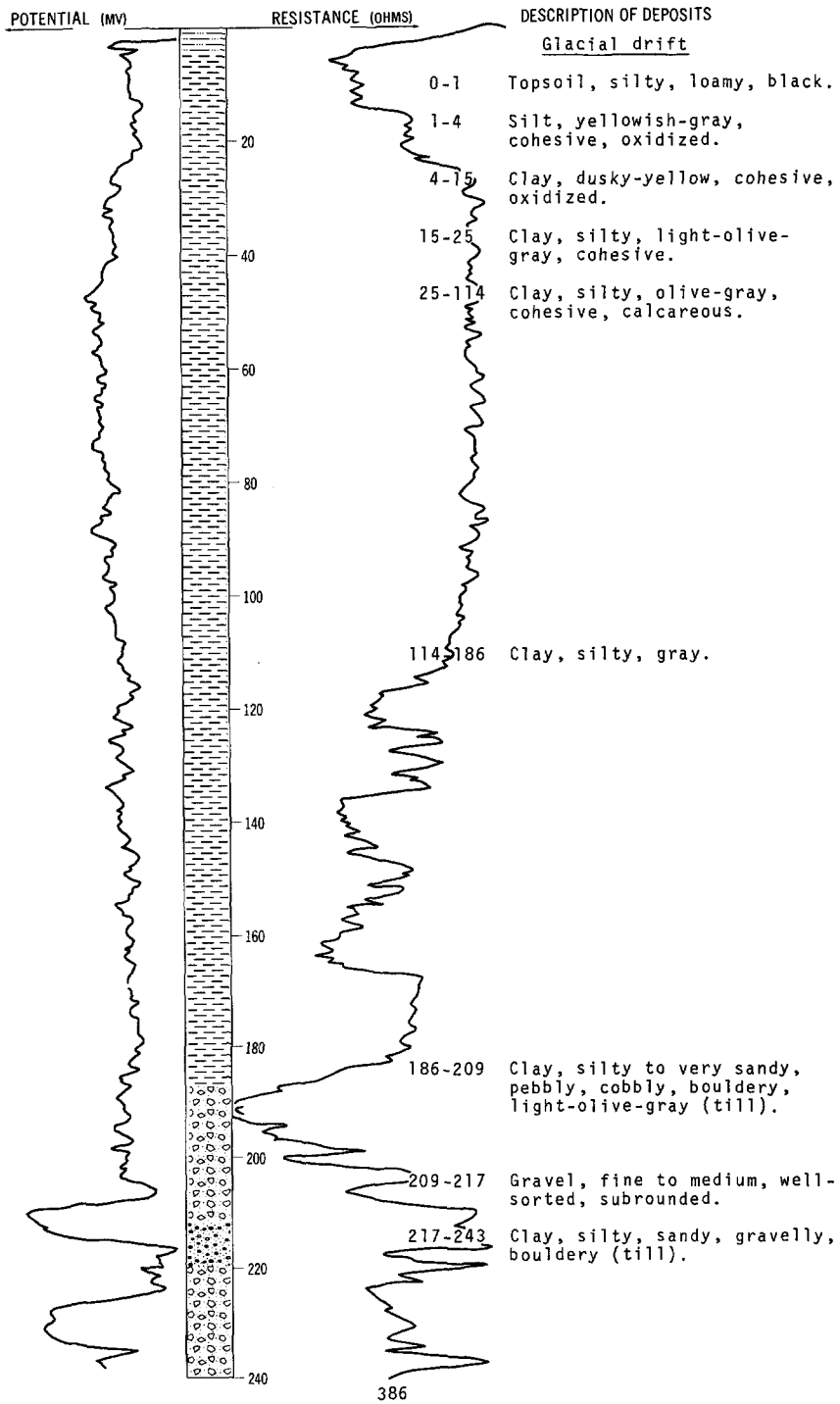
LOCATION: 162-55-1CDD

NDSWC 3857

DATE DRILLED: October 1969

ALTITUDE: 883
(FT, MSL)

DEPTH: 320
(FT)



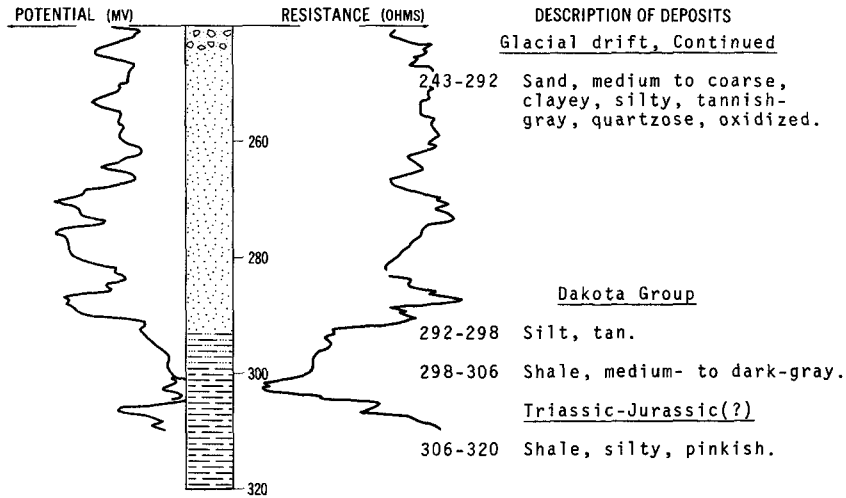
LOCATION: 162-55-1CDD

NDSWC 3857, Continued

DATE DRILLED: October 1969

ALTITUDE: 883
(FT, MSL)

DEPTH: 320
(FT)



162-55-3DCC
USBR 208

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, silty-----	2	2
	Sand, fine, loamy-----	21	23

162-55-7ABB3
USBR 207

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine-----	4	7
	Loam, sandy-----	3	10
	Silt-----	13	23

162-55-7ABB4
NDGS Pem-70-11

Altitude: 944 feet

Glacial drift:			
	Topsoil-----	2	2
	Sand, fine, very slightly clayey, yellowish-brown, well-sorted, saturated-----	4	6
	Sand, fine, very slightly clayey, gray, well-sorted-----	3	9
	Sand, fine, clayey, slightly pebbly, gray, well-sorted; pebbles subrounded-----	5	14
	Silt, clayey, gray, well-sorted, saturated---	10	24
	Clay, silty, gray, well-sorted, saturated---	10	34

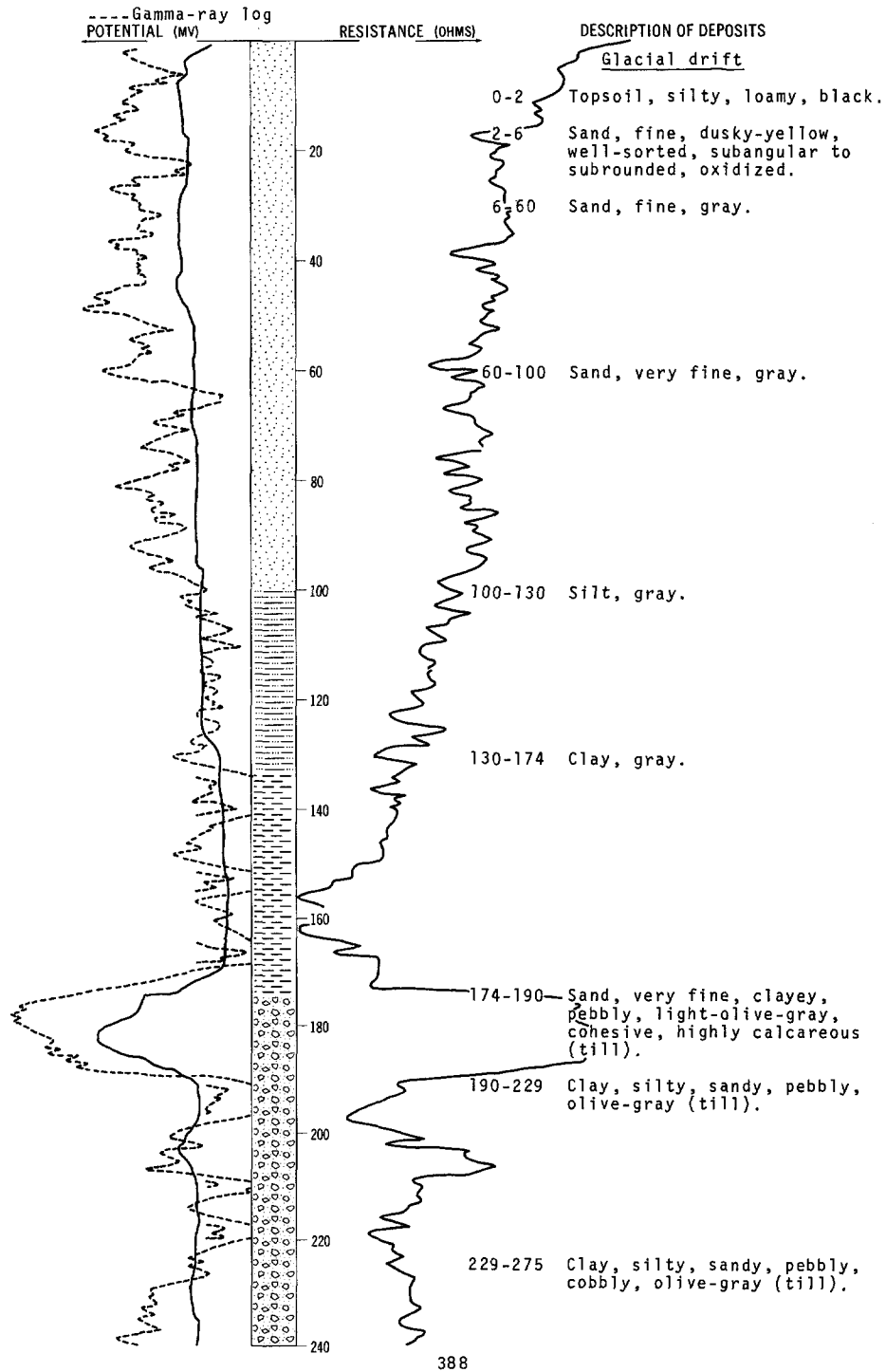
LOCATION: 162-55-8ABB

NDSWC 3856

DATE DRILLED: October 1969

ALTITUDE: 933
(FT, MSL)

DEPTH: 480
(FT)

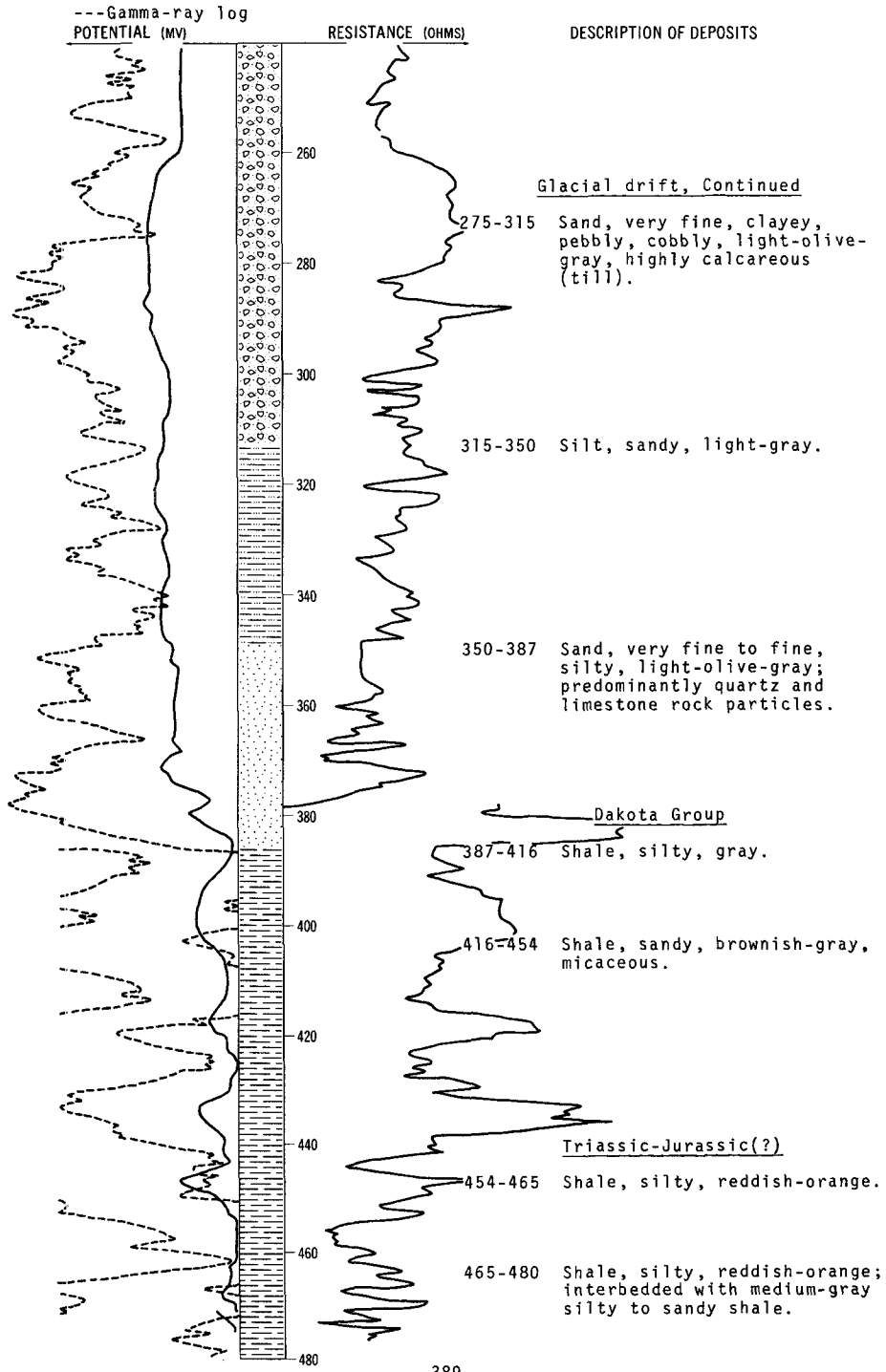


LOCATION: 162-55-8ABB

DATE DRILLED: October 1969

ALTITUDE: 933
(FT, MSL)

DEPTH: 480
(FT)



162-55-11ABB
USBR 211

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam-----	2	2
	Sand, fine-----	16	18

162-55-12CDD
NDGS Pem-70-38

Altitude: 895 feet

Glacial drift:			
	Topsoil-----	2	2
	Sand, fine, silty, yellowish-brown, well-sorted-----	4	6
	Silt, clayey, dark-yellowish-brown, banded, well-sorted; interbedded with very fine sand-----	8	14
	Clay, gray, plastic, very dense-----	5	19

162-55-13CDD
USBR 418

Altitude:

Glacial drift:			
	Loam, silty-----	1	1
	Loam-----	1	2
	Sand, fine-----	3	5
	Clay, silty-----	5	10
	Clay-----	8	18

162-55-14CCC
USBR 416

Altitude:

Glacial drift:			
	Loam, sandy-----	2	2
	Sand, fine, loamy-----	8	10
	Sand, fine-----	3	13
	Sand, fine, loamy-----	2	15
	Loam, fine, sandy-----	2	17
	Silt-----	11	28

162-55-17AAA
USBR 460

Altitude:

Glacial drift:			
	Loam, sandy-----	2	2
	Sand, very fine-----	1	3
	Loam, silty-----	5	8
	Sand, very fine, loamy-----	9	17
	Loam, very fine, sandy-----	11	28

162-55-17CCC
 USBR 415

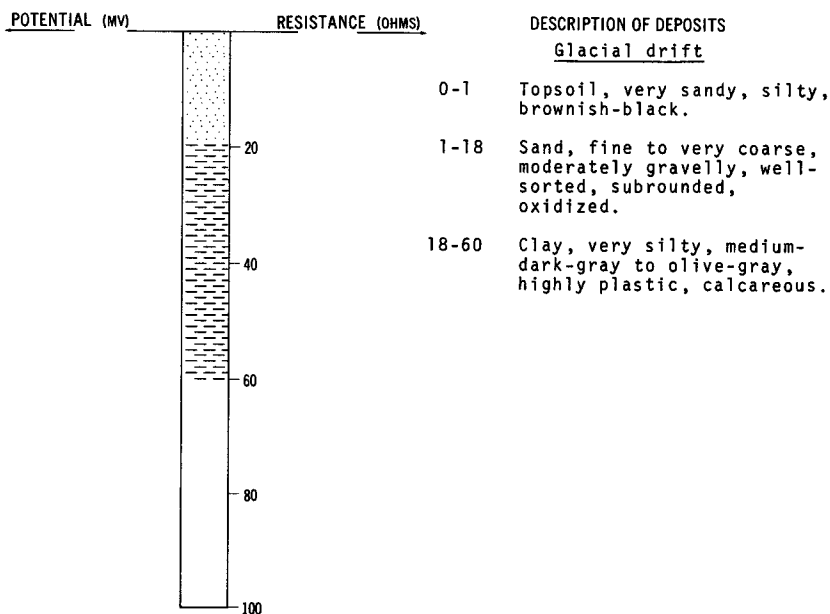
Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	1	1
	Sand, loamy-----	2	3
	Sand-----	15	18
	Silt-----	10	28

LOCATION: 162-55-19BBA
 ALTITUDE: 1020
 (FT, MSL)

NDSWC 5935

DATE DRILLED: May 1971
 DEPTH: 60
 (FT)



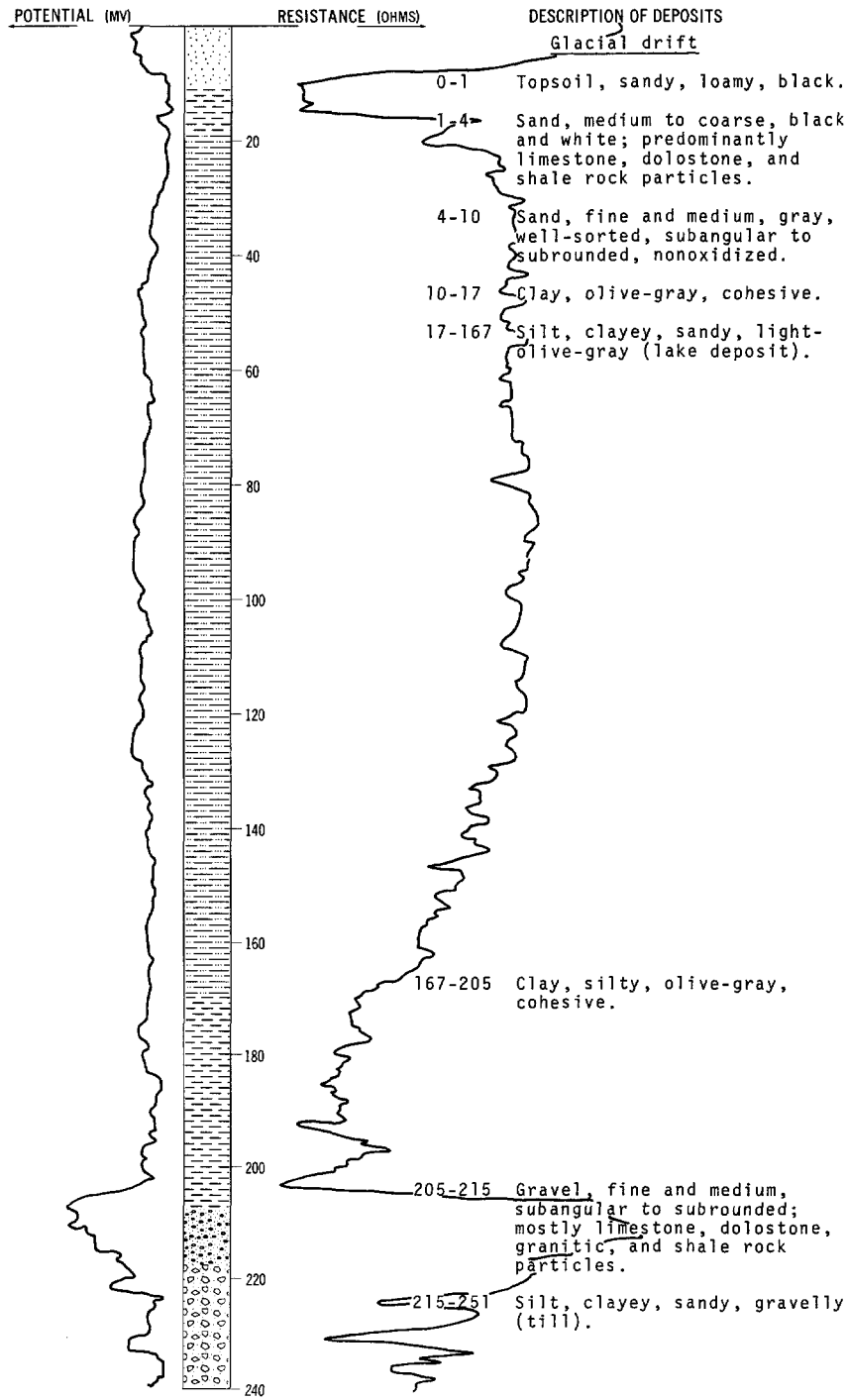
LOCATION: 162-55-28DDA

NDSWC 3847

DATE DRILLED: October 1969

ALTITUDE: 960
(FT, MSL)

DEPTH: 280
(FT)

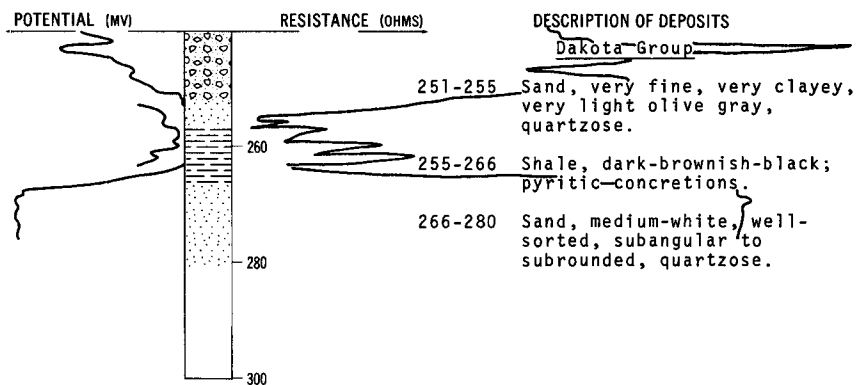


LOCATION: 162-55-28DDA

DATE DRILLED: October 1969

ALTITUDE: 960
(FT, MSL)

DEPTH: 280
(FT)



162-55-28DDD
USBR 216

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, silty-----	2	2
	Loam, sandy-----	1	3
	Sand, fine, loamy-----	5	8
	Sand, fine-----	3	11
	Loam, clayey, silty-----	7	18

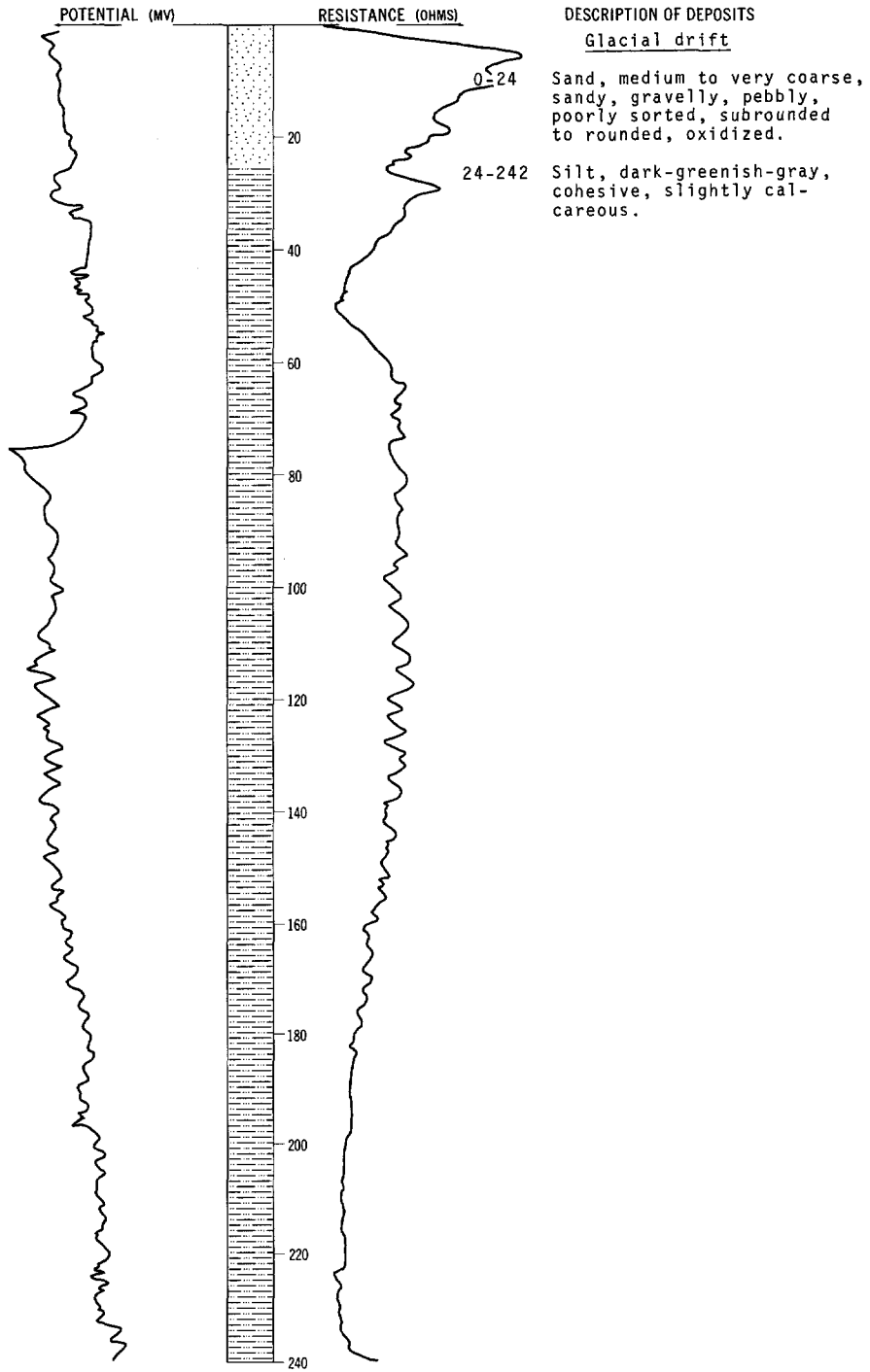
LOCATION: 162-55-29CDD

NDSWC 3565

DATE DRILLED: May 1968

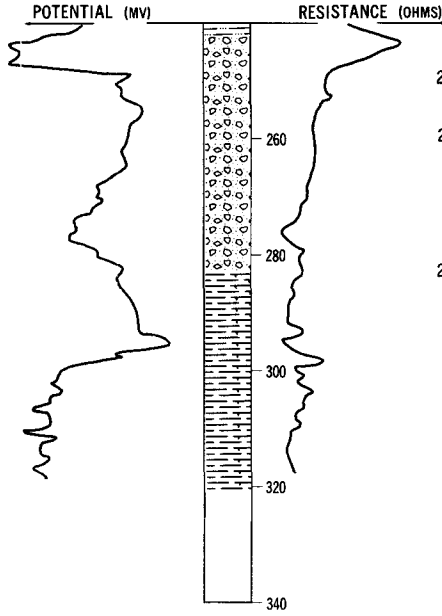
ALTITUDE: 1032
(FT, MSL)

DEPTH: 320
(FT)



LOCATION: 162-55-29CDD
 ALTITUDE: 1032
 (FT, MSL)

DATE DRILLED: May 1968
 DEPTH: 320
 (FT)



DESCRIPTION OF DEPOSITS
Glacial drift, Continued

- 242-248 Clay, light-olive-gray, highly calcareous (till).
- 248-282 Clay, sandy, clayey, olive-gray, highly calcareous (till).

Belle Fourche Formation

- 282-320 Shale, olive-black; interbedded with highly calcareous laminae.

162-55-29DDC
 USBR 461

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	6	6
	Sand, fine-----	12	18

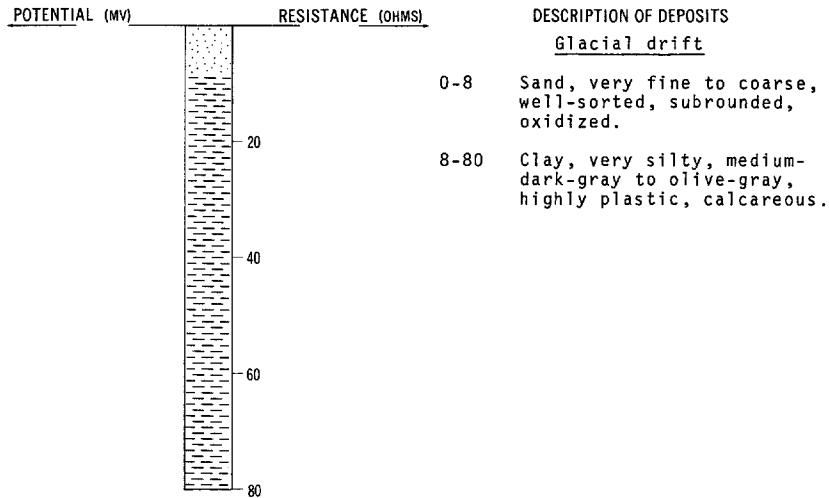
LOCATION: 162-55-30AAA

NDSWC 5934

DATE DRILLED: May 1971

ALTITUDE: 1015
(FT, MSL)

DEPTH: 80
(FT)



162-55-32BBA
NDGS Pem-70-7

Altitude: 1025 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	0.5	0.5
	Sand, coarse, pebbly, subrounded to rounded--	2.5	3
	Sand, gravelly, poorly sorted-----	2	5
	Sand, medium, gravelly, yellowish-brown-----	2	7
	Sand, medium, pebbly, fairly well sorted----	2	9
	Sand, medium, pebbly, moderately well sorted, subrounded to rounded-----	11	20
	Sand, medium, gray, well-sorted, subrounded to rounded, saturated-----	10	30
	Sand, fine to medium, gray, well-sorted, subrounded to rounded, saturated-----	2	32
	Clay, silty, dark-gray; easy drilling-----	2	34

162-55-36AAA
USBR 217

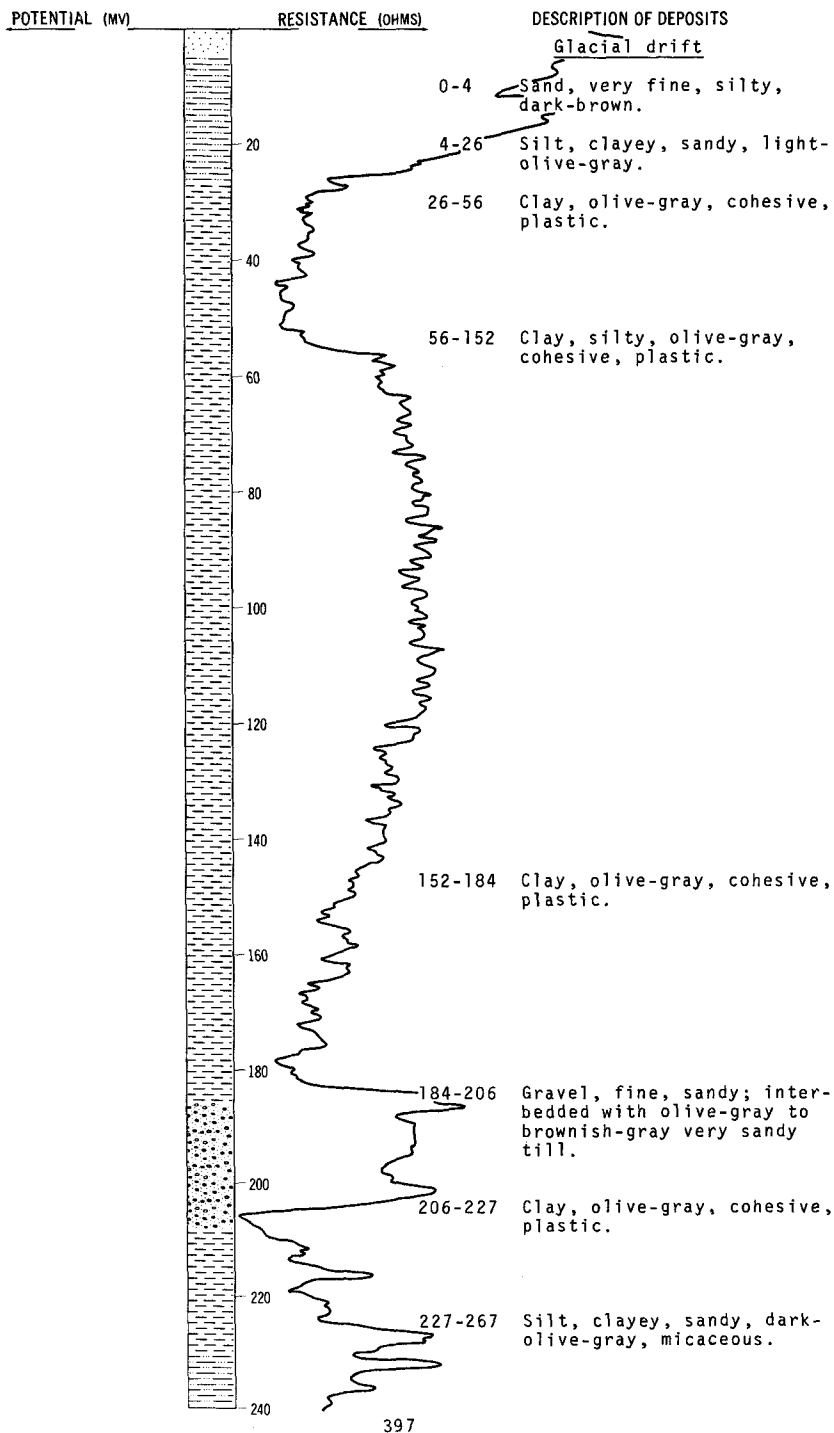
Altitude:

Glacial drift:			
	Loam, fine, sandy-----	2	2
	Loam-----	1	3
	Sand, fine, loamy-----	8	11
	Sand, very fine, loamy-----	4	15
	Sand, clayey, silty-----	2	17
	Loam, silty-----	2	19
	Loam, clayey, silty-----	2	21
	Loam, silty-----	2	23

LOCATION: 162-55-36DDD
ALTITUDE: 915
(FT, MSL)

NDSWC 3844

DATE DRILLED: October 1969
DEPTH: 380
(FT)

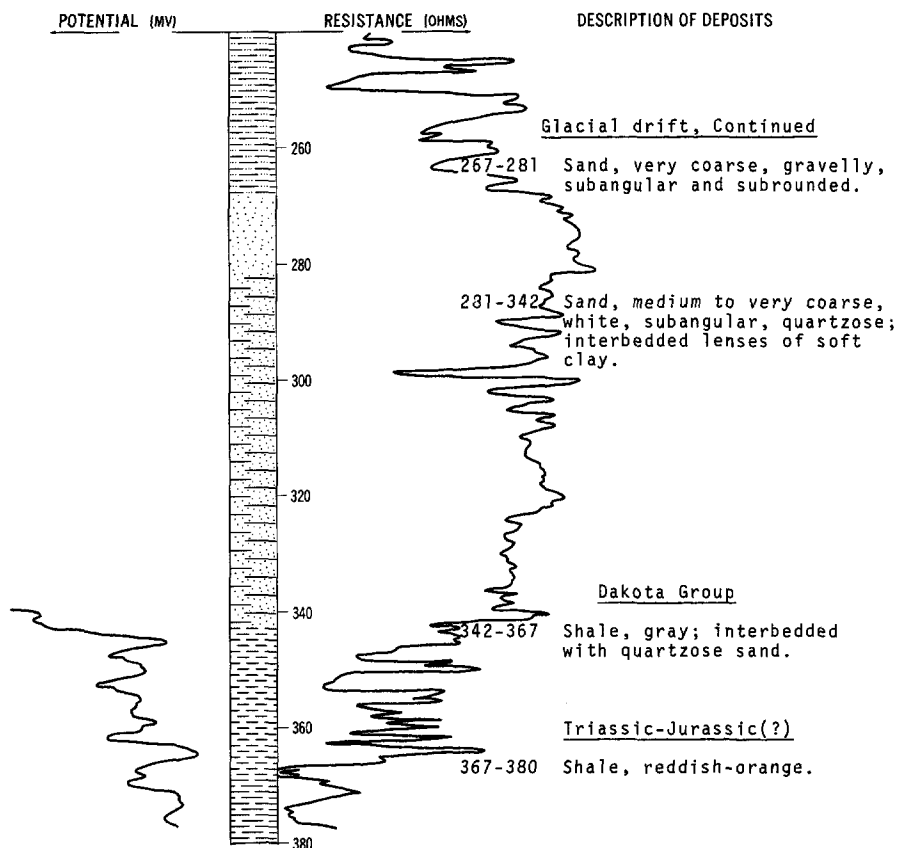


LOCATION: 162-55-36DDD
 ALTITUDE: 915
 (FT, MSL)

NDSWC 3844, Continued

DATE DRILLED: October 1969

DEPTH: 380
 (FT)



162-56-1CBB
 NDGS Pem-70-10

Altitude: 956 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
Roadfill	-----	3	3
Sand, medium, clayey, whitish-tan, well-sorted	-----	1	4
Sand, medium, clayey, reddish-brown, well-sorted, saturated	-----	1	5
Sand, medium, clayey, dark-yellowish-brown, well-sorted	-----	1	6
Sand, medium, clayey, gray-yellowish-brown, well-sorted	-----	5	11
Sand, medium, gray, well-sorted, saturated	-----	7	18
Sand, medium to coarse, gray, subangular to subrounded, moderately well sorted	-----	16	34
No samples	-----	15	49

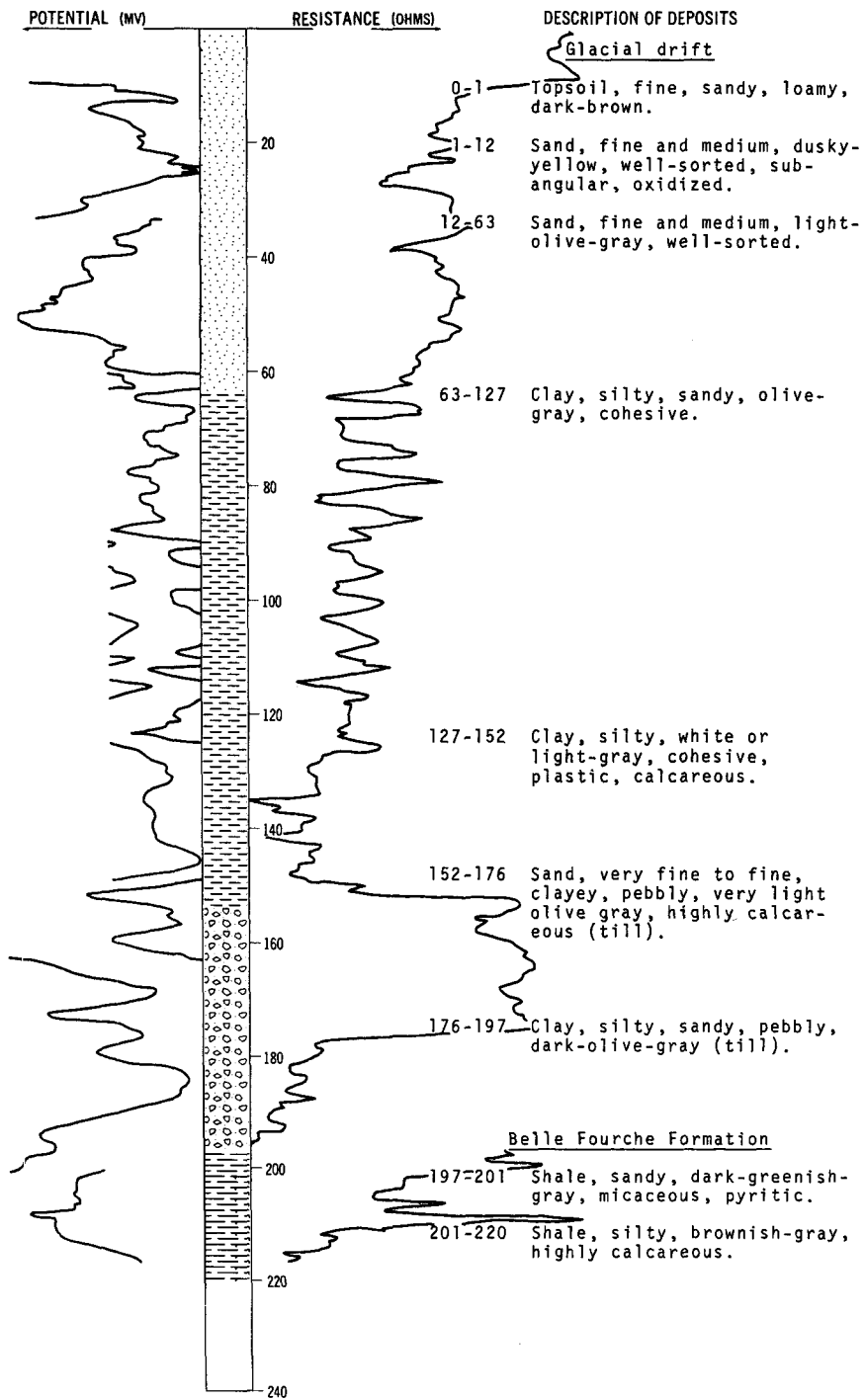
LOCATION: 162-56-1CCC1

NDSWC 3854

DATE DRILLED: October 1969

ALTITUDE: 988
(FT, MSL)

DEPTH: 220
(FT)

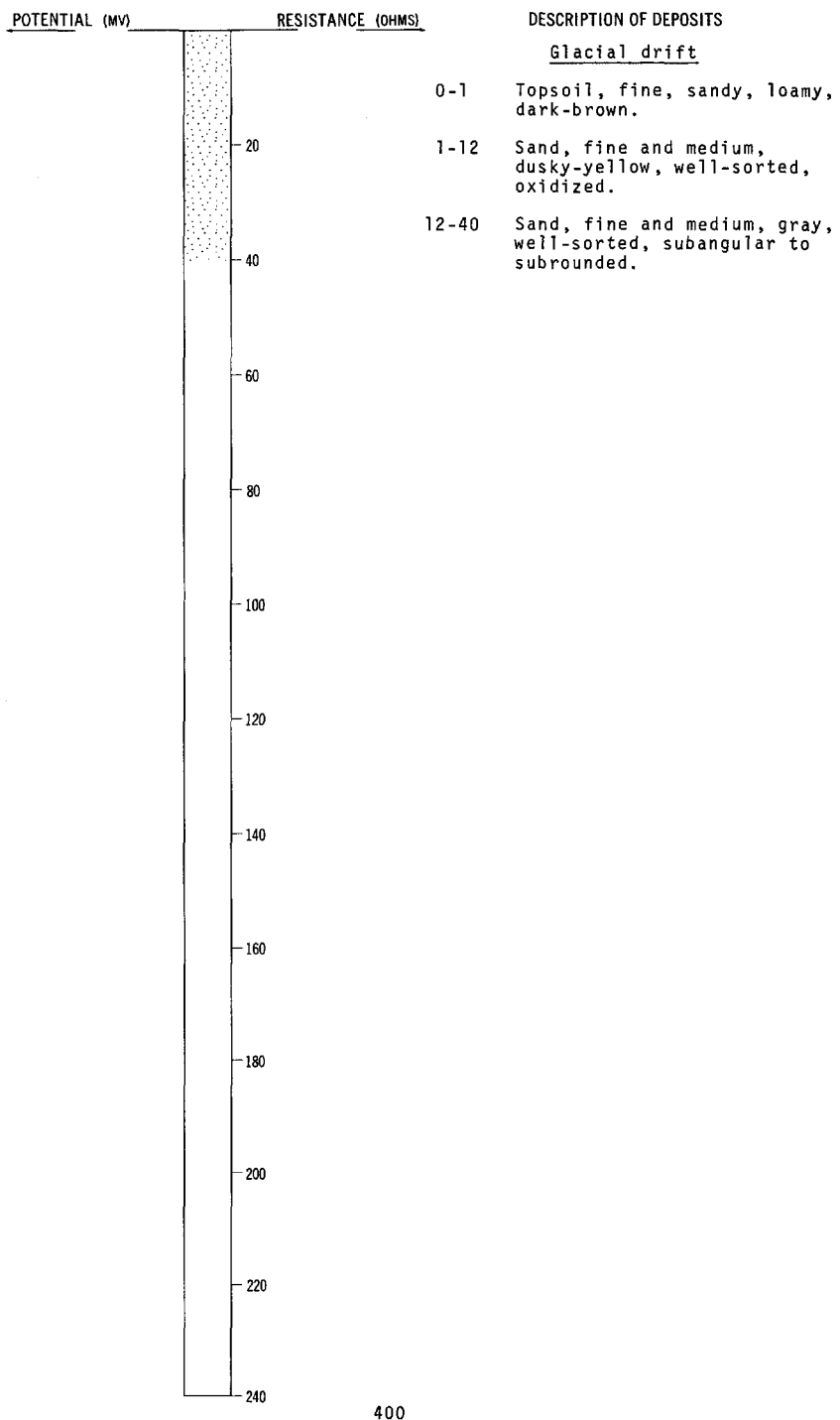


LOCATION: 162-56-1CCC2
ALTITUDE: 988
(FT, MSL)

NDSWC 3855

DATE DRILLED: October 1969

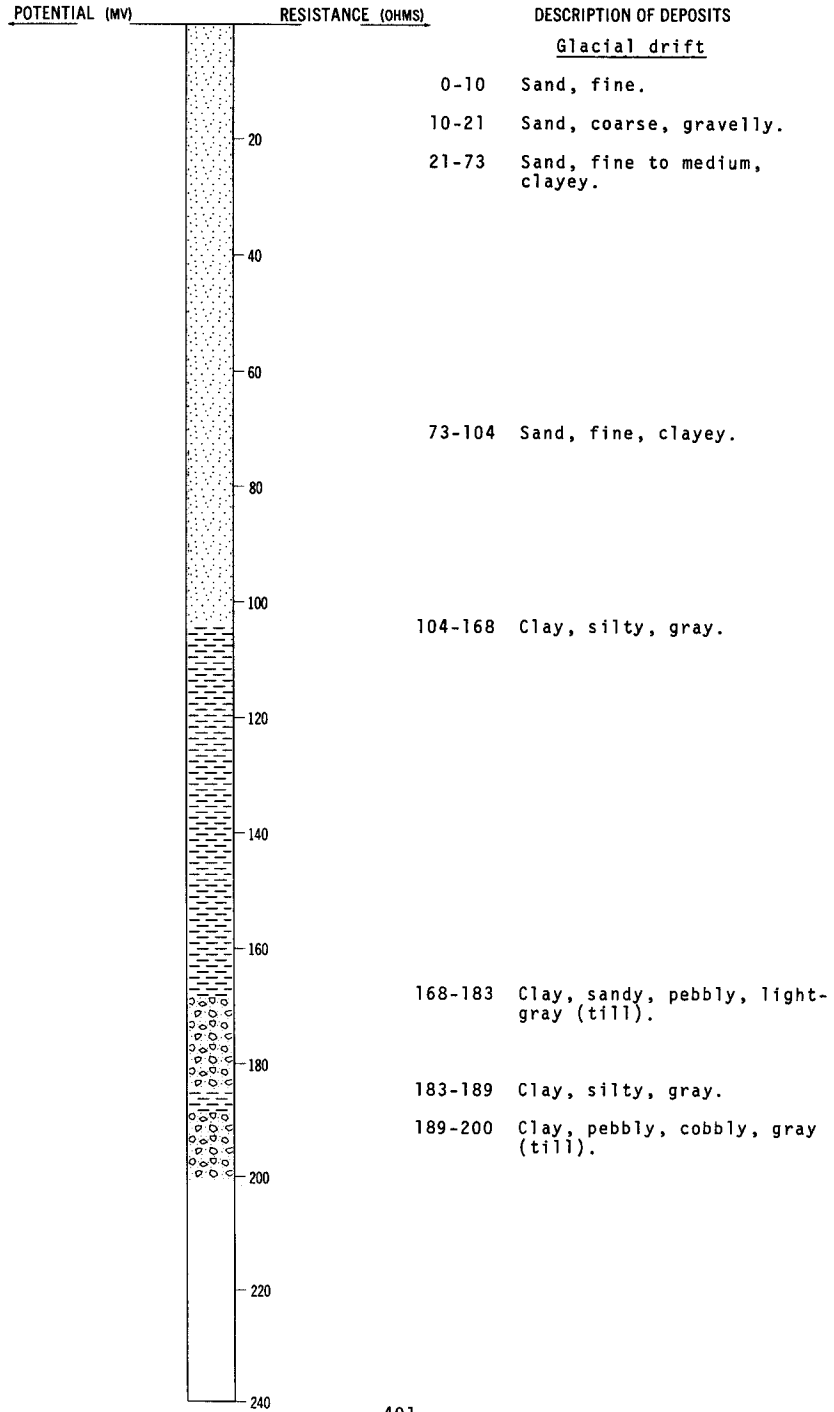
DEPTH: 40
(FT)



LOCATION: 162-56-2CDD
ALTITUDE: 1000
(FT, MSL)

NDSWC 1782

DATE DRILLED: July 1960
DEPTH: 200
(FT)



162-56-2DDD
USBR 205

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	2	2
	Sand, very fine-----	20	22
	Loam, sandy-----	2	24

162-56-4DDD
NDGS Pem-70-8

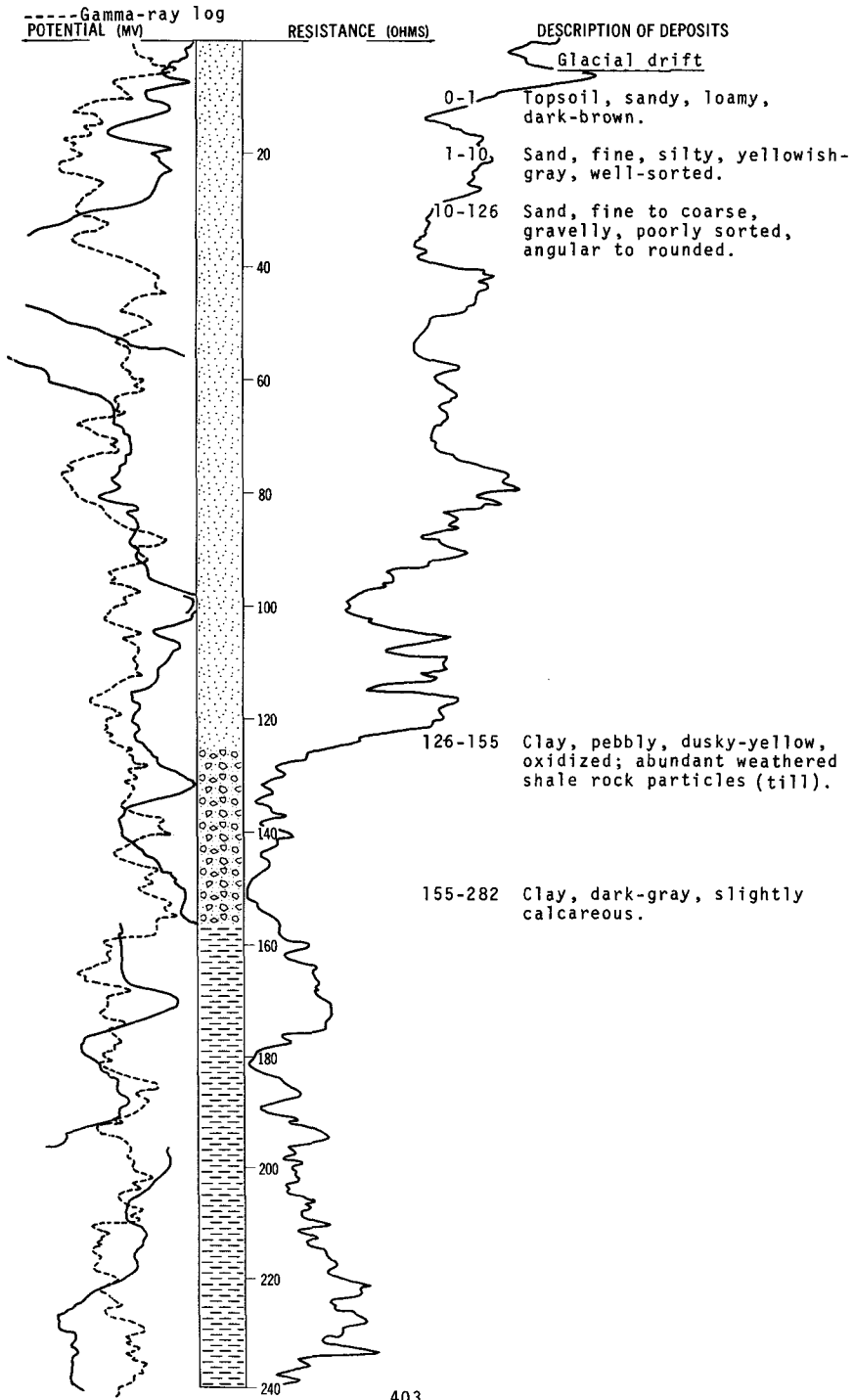
Altitude: 1179 feet

Glacial drift:			
	Topsoil, sandy-----	1	1
	Sand, fine to medium, yellowish-brown, well-sorted-----	4	5
	Sand, fine to medium, yellowish-brown, reddish-stained, well-sorted-----	6	11
	Sand, clayey, pebbly, dark-yellowish-brown, poorly sorted-----	5	16
	Sand, clayey, pebbly, dark-yellowish-brown; slightly coarser than above-----	4	20
	Sand, fine, clayey, dark-yellowish-brown, well-sorted-----	9	29

LOCATION: 162-56-5DDD
ALTITUDE: 1185
(FT, MSL)

NDSWC 3852

DATE DRILLED: October 1969
DEPTH: 300
(FT)



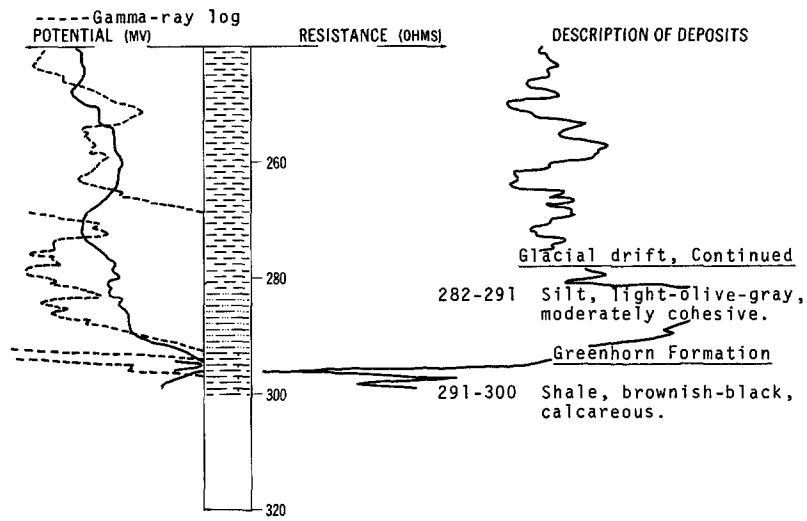
NDSWC 3852, Continued

LOCATION: 162-56-5DDD

DATE DRILLED: October 1969

ALTITUDE: 1185
(FT, MSL)

DEPTH: 300
(FT)



162-56-6CCC
USBR 203

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam-----	4	4
	Sand, very fine, loamy-----	21	25

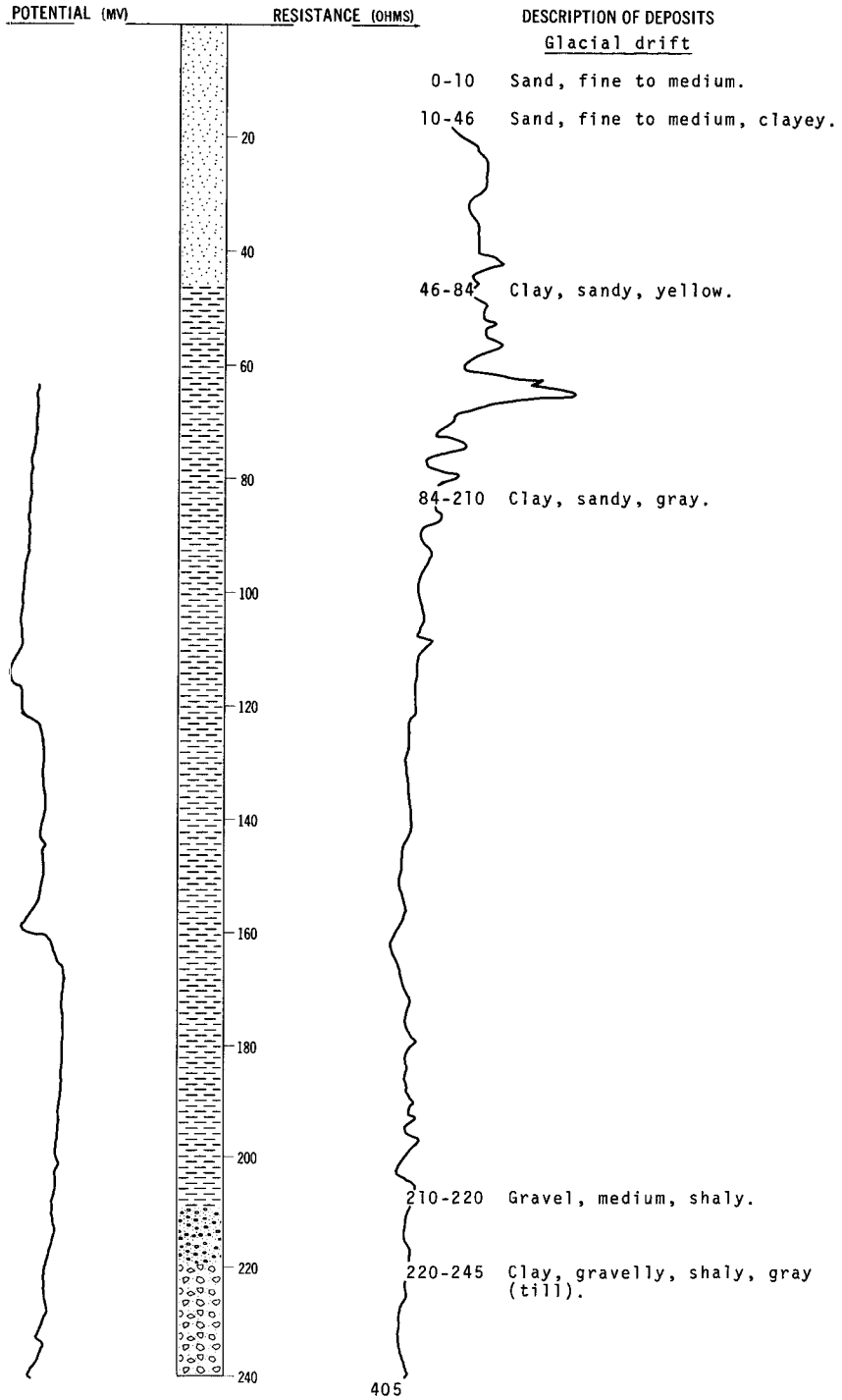
LOCATION: 162-56-6DDD

NDSWC 1777

DATE DRILLED: July 1960

ALTITUDE: 1197
(FT, MSL)

DEPTH: 252
(FT)



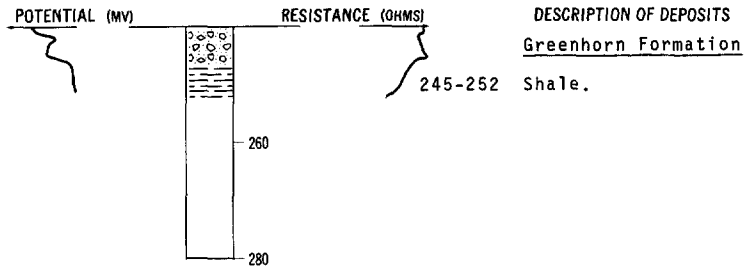
NDSWC 1777, Continued

LOCATION: 162-56-6DDD

DATE DRILLED: July 1960

ALTITUDE: 1197
(FT, MSL)

DEPTH: 252
(FT)



162-56-9BCC
USBR 457

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	1	1
	Loam, fine, sandy-----	2	3
	Sand, loamy-----	10	13
	Loam, sandy-----	2	15
	Silt-----	8	23

162-56-10AAA
USBR 204

Altitude:

Glacial drift:			
	Loam, sandy-----	1	1
	Sand, fine, loamy-----	2	3
	Sand, fine-----	6	9
	Sand, very fine-----	24	33

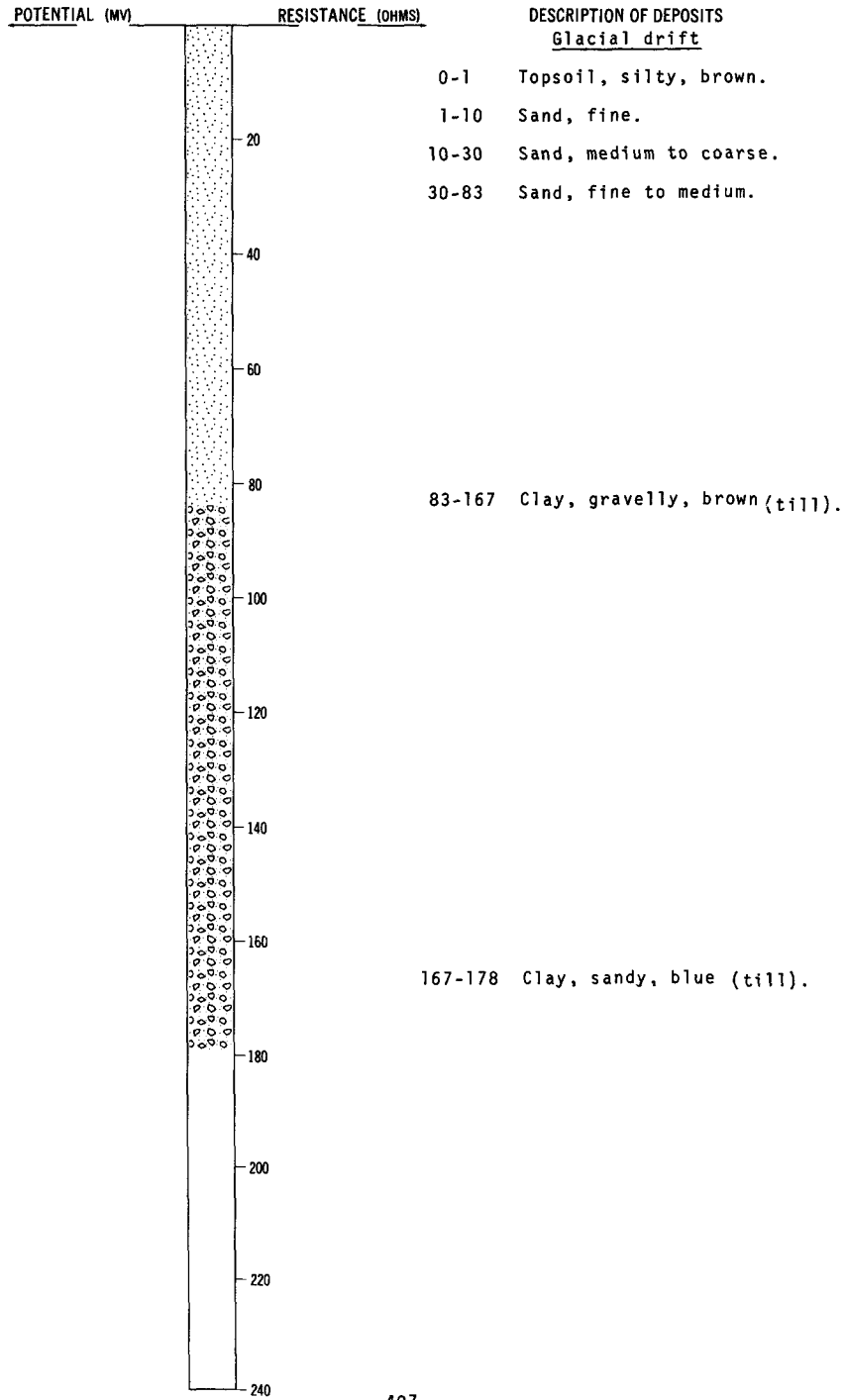
LOCATION: 162-56-10ABB1

NDSWC 1776

DATE DRILLED: July 1960

ALTITUDE: 1175
(FT, MSL)

DEPTH: 178
(FT)



LOCATION: 162-56-10ABB2
ALTITUDE: 1175
(FT, MSL)

NDSWC 3853-A

DATE DRILLED: October 1969

DEPTH: 100
(FT)

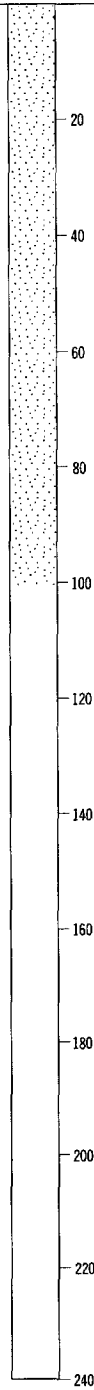
POTENTIAL (MV)

RESISTANCE (OHMS)

DESCRIPTION OF DEPOSITS

Glacial drift

0-100 Sand, very fine to fine,
silty, dusky-yellow, well-
sorted, calcareous, oxidized.

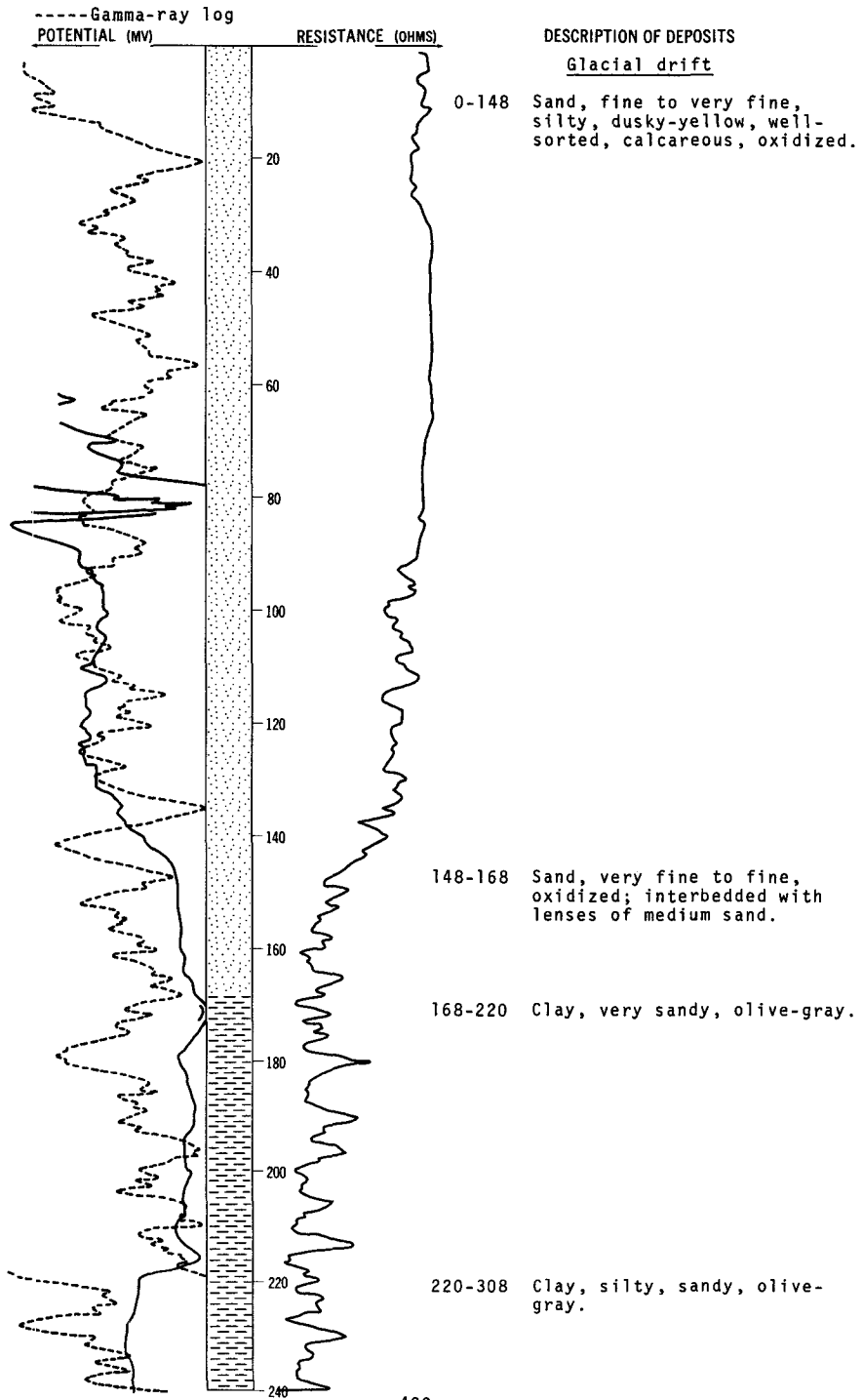


408

LOCATION: 162-56-10ABB3
ALTITUDE: 1175
(FT, MSL)

NDSWC 3853

DATE DRILLED: October 1969
DEPTH: 360
(FT)

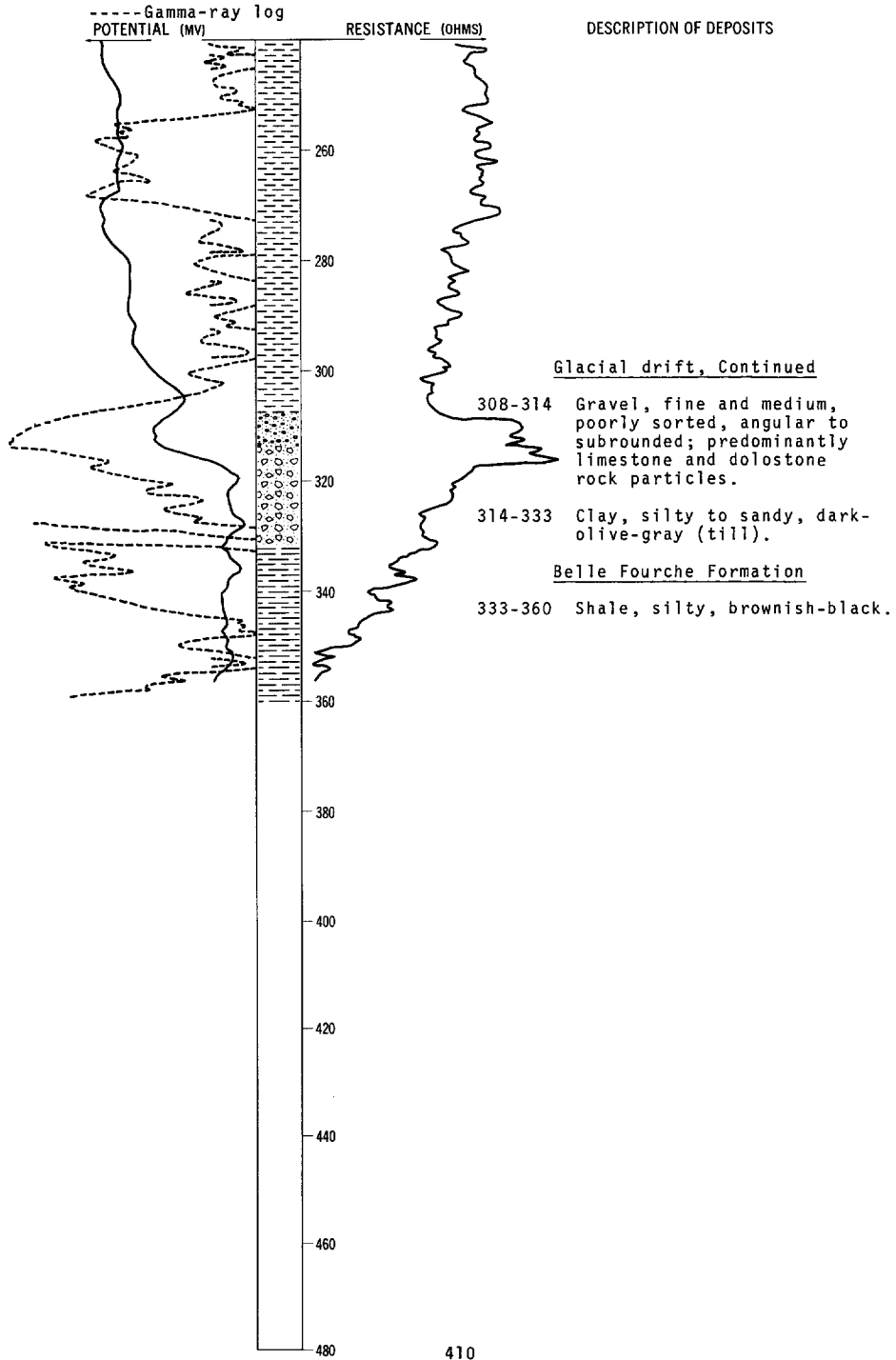


LOCATION: 162-56-10ABB3

DATE DRILLED: October 1969

ALTITUDE: 1175
(FT, MSL)

DEPTH: 360
(FT)



162-56-11AAB
NDGS Pem-70-9

Altitude: 990 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Sand, medium, yellow-brown, mottled-----	6	6
	Sand, coarse, moderately well sorted, subangular to subrounded, saturated-----	1.5	7.5
	Sand, medium, moderately well sorted to well-sorted; some coarse fragments-----	12.5	20
	Sand, medium to fine, gray, well-sorted-----	14	34
	Clay and silt(?)-----	-	34

162-56-12AAB
USBR 206

Altitude:

Glacial drift:			
	Loam, silty-----	7	7
	Loam, clayey, silty-----	1	8
	Sand, very fine, loamy-----	5	13
	Loam, very fine, sandy-----	10	23

162-56-13CCC
USBR 459

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, fine, loamy-----	16	18

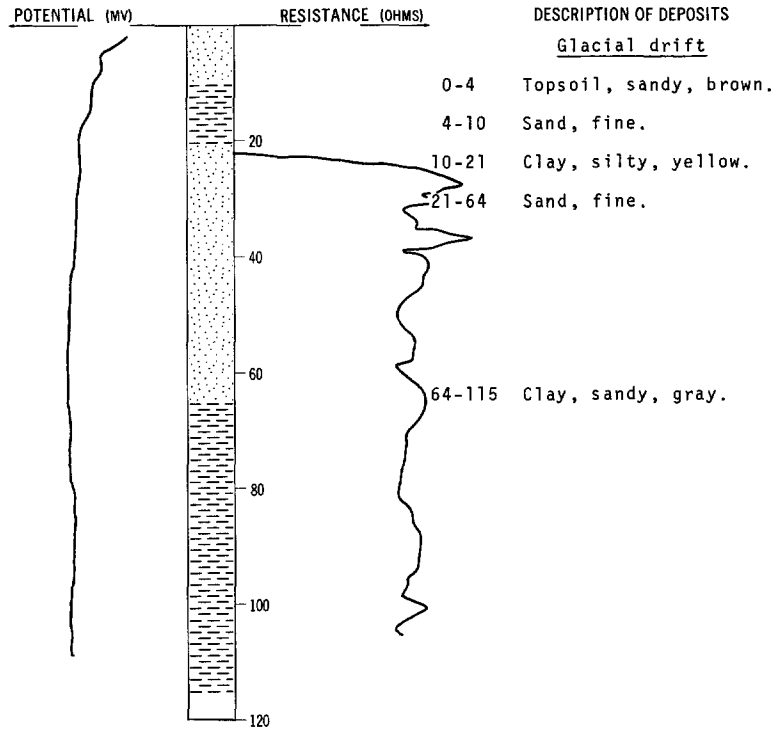
NDSWC 1794

LOCATION: 162-56-16DDD

DATE DRILLED: August 1960

ALTITUDE: 1143
(FT, MSL)

DEPTH: 115
(FT)



162-56-19BBB
USBR 413

Altitude:

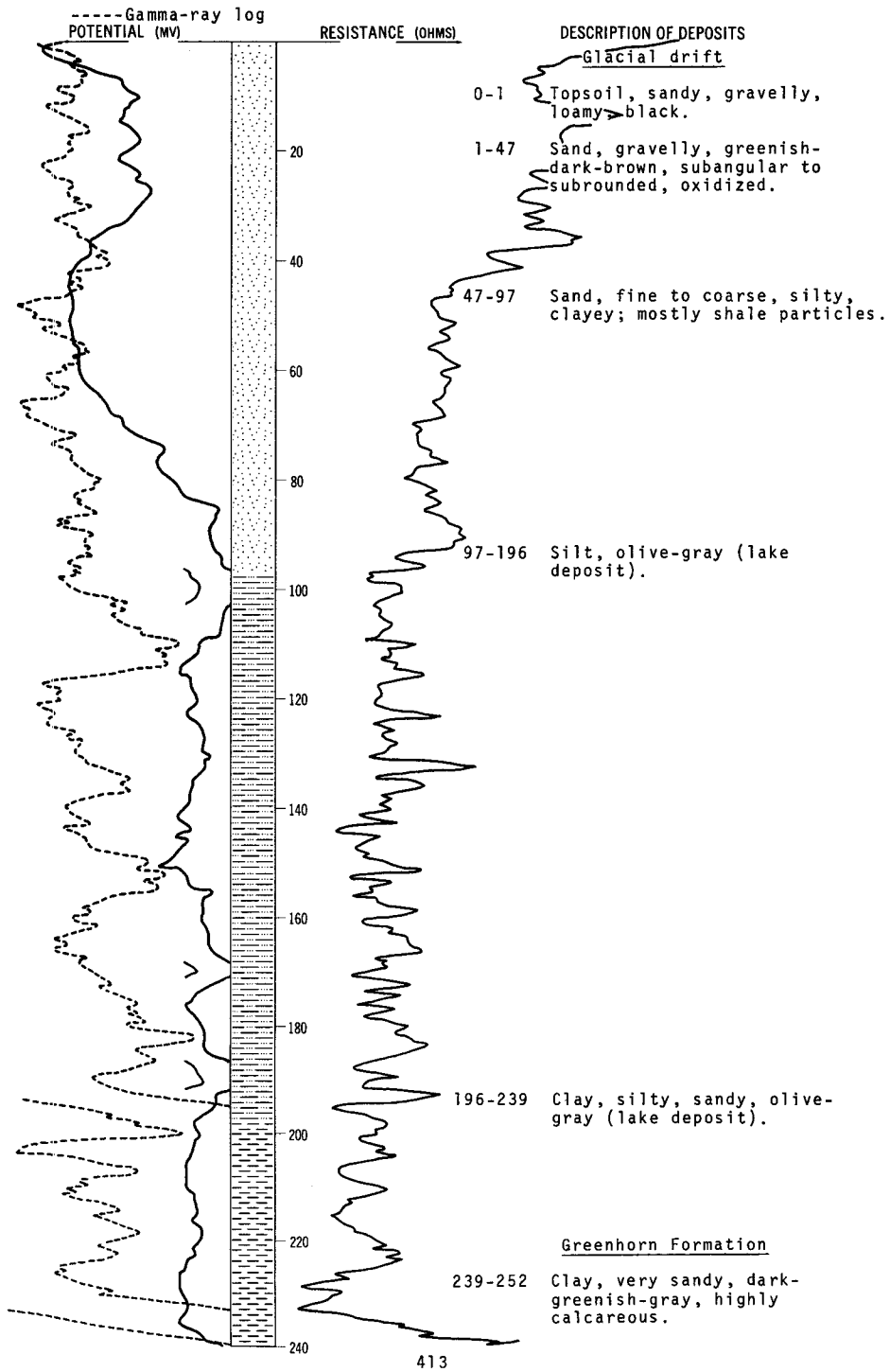
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	2	2
	Loam, clayey, sandy-----	2	4
	Sand, fine, loamy-----	5	9
	Loam, clayey, sandy-----	14	23

LOCATION: 162-56-20AAA
ALTITUDE: 1175
(FT, MSL)

NDSWC 3851

DATE DRILLED: October 1969

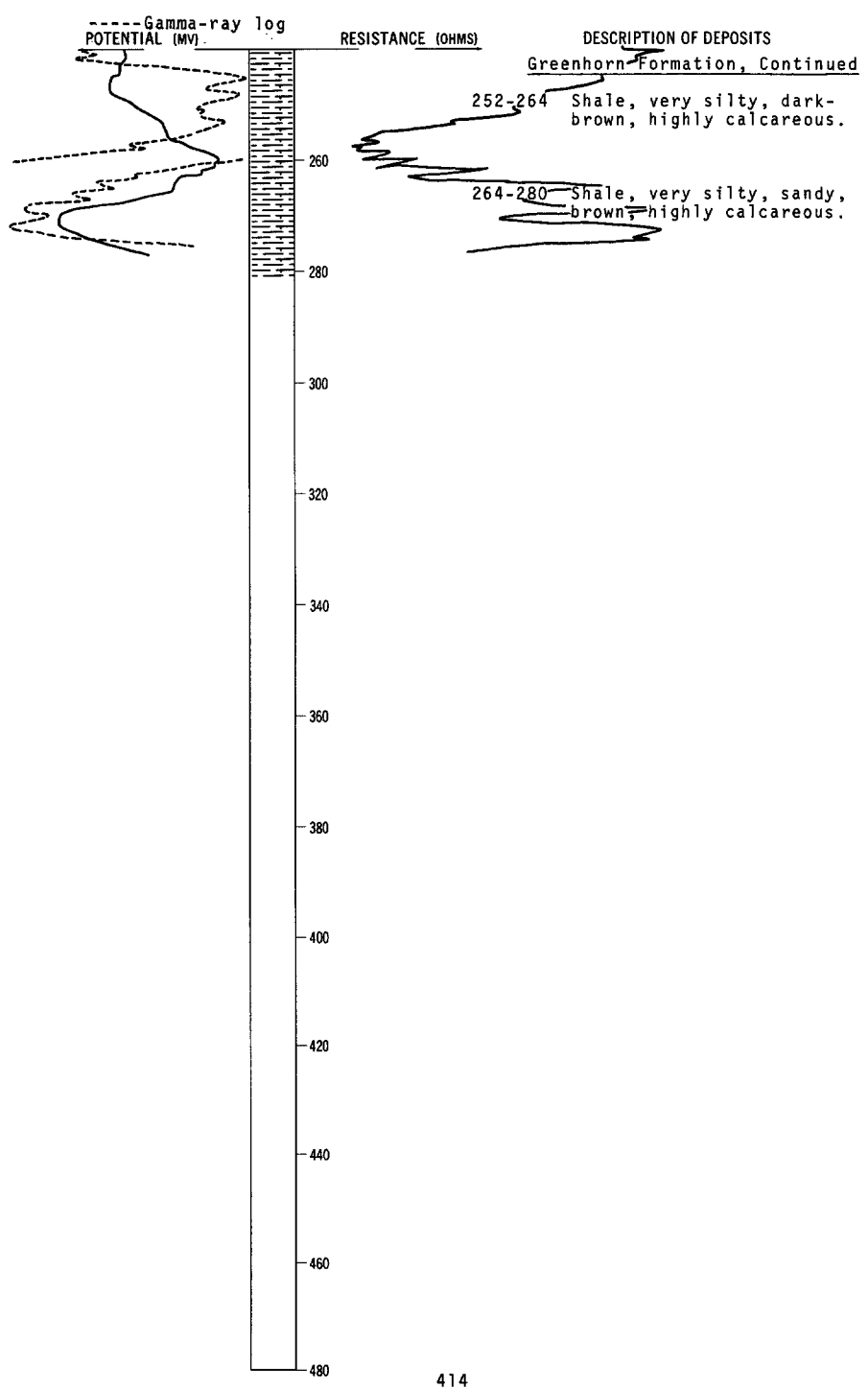
DEPTH: 280
(FT)



LOCATION: 162-56-20AAA
ALTITUDE: 1175
(FT. MSL)

NDSWC 3851, Continued

DATE DRILLED: October 1969
DEPTH: 280
(FT)



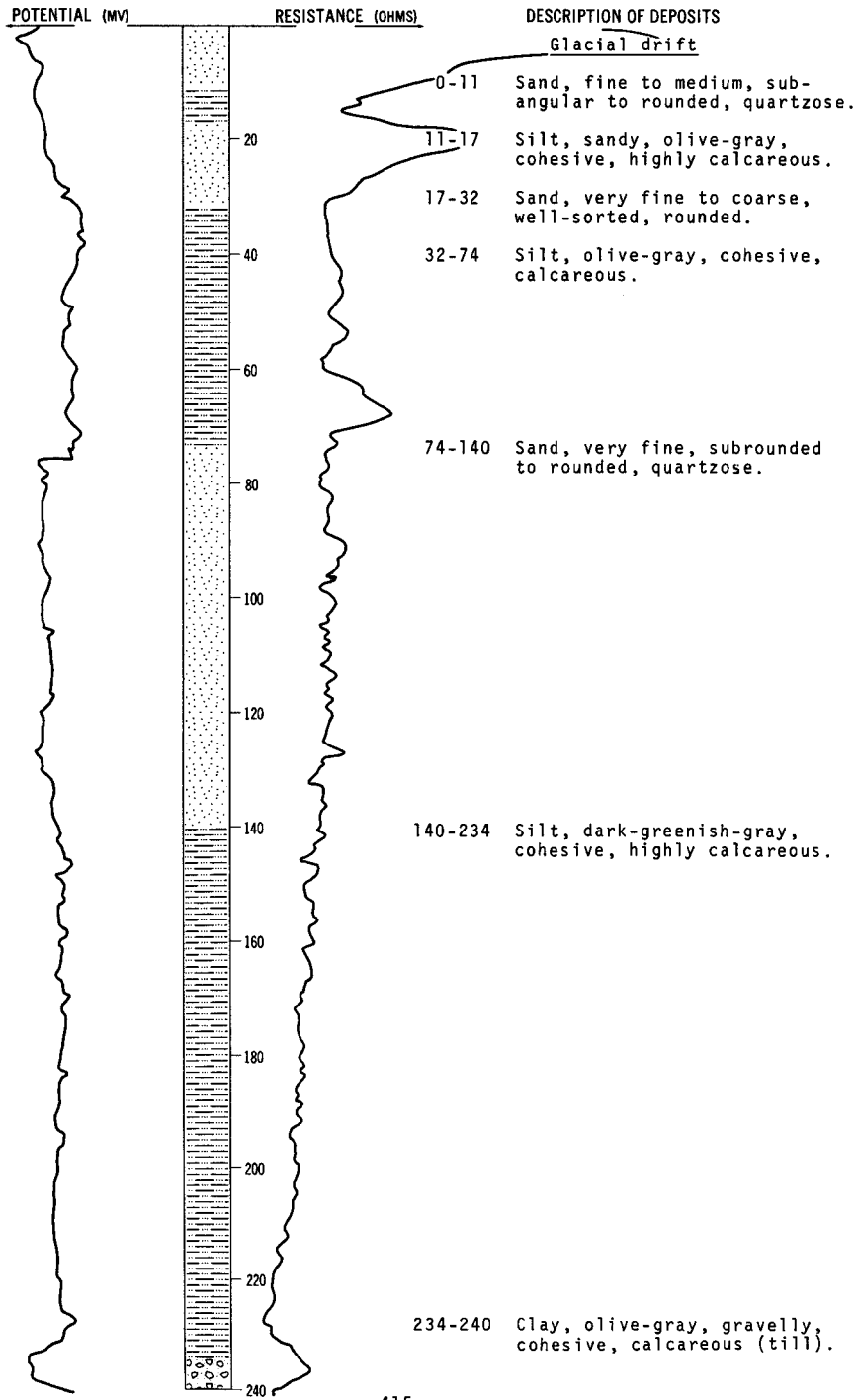
LOCATION: 162-56-26CCC

NDSWC 3564

DATE DRILLED: May 1968

ALTITUDE: 1115
(FT, MSL)

DEPTH: 260
(FT)



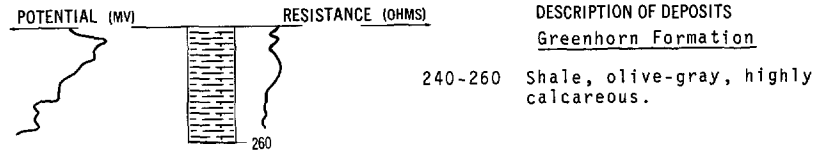
NDSWC 3564, Continued

LOCATION: 162-56-26CCC

DATE DRILLED: May 1968

ALTITUDE: 1115
(FT, MSL)

DEPTH: 260
(FT)



162-56-26DDC
NDGS Pem-70-6

Altitude: 1090 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Sand, fine, dark-yellowish-brown, well-sorted-----	5	5
	Sand, medium, yellowish-brown, well-sorted, saturated-----	8	13
	Sand, fine to medium, grayish-yellow-brown, well-sorted, saturated-----	2	15
	Sand, medium, shaly, gray, well-sorted, lignitic, saturated-----	24	39

162-56-27CCC1
USBR 214

Altitude:

Glacial drift:			
	Loam, sandy-----	1	1
	Sand, fine-----	2	3
	Sand-----	5	8
	Sand, fine, loamy-----	10	18

162-56-27CCC2
NDGS Pem-70-5

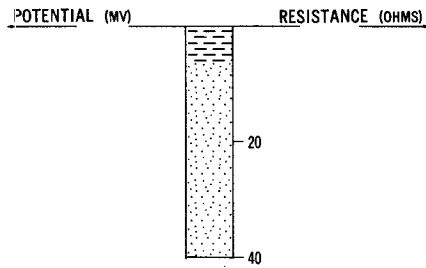
Altitude: 1133 feet

Glacial drift:			
	Sand, fine to medium, yellowish-brown, well-sorted, rounded to subrounded-----	7	7
	Sand, fine to medium, brown, well-sorted, rounded to subrounded, saturated-----	7	14
	Sand, medium, grayish-brown, well-sorted, rounded to subrounded, saturated-----	5	19
	Sand, fine to medium, gray, saturated-----	6	25
	Sand, medium, gray, well-sorted, saturated---	5	30
	Silt, clayey, dark-gray-----	9	39

LOCATION: 162-56-30ADD1
 ALTITUDE: 1210
 (FT, MSL)

NDSWC 5712-C

DATE DRILLED: June 1970
 DEPTH: 40
 (FT)



DESCRIPTION OF DEPOSITS

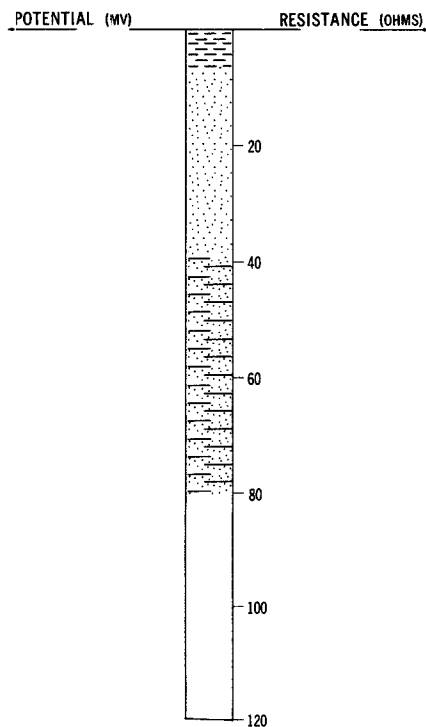
Glacial drift

- 0-1 Topsoil, silty, black.
- 1-6 Clay, silty, yellowish-brown.
- 6-40 Sand, fine to coarse, gravelly.

LOCATION: 162-56-30ADD2
 ALTITUDE: 1210
 (FT, MSL)

NDSWC 5712-B

DATE DRILLED: June 1970
 DEPTH: 80
 (FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-1 Topsoil, silty, black.
- 1-6 Clay, silty, yellowish-brown.
- 6-39 Sand, fine to coarse, gravelly.
- 39-80 Sand, fine, silty, clayey.

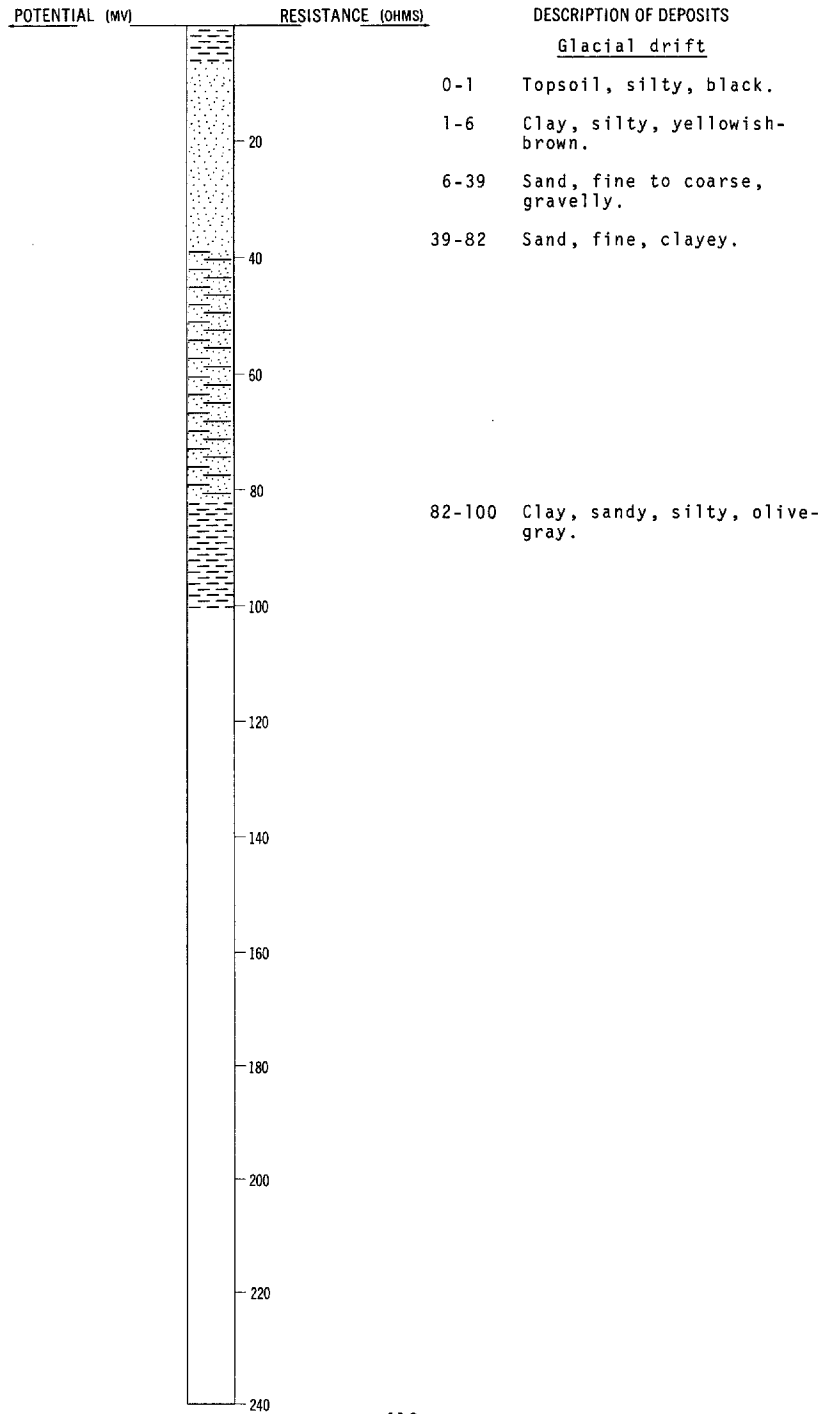
LOCATION: 162-56-30ADD3

NDSWC 5712-A

DATE DRILLED: June 1970

ALTITUDE: 1210
(FT, MSL)

DEPTH: 100
(FT)



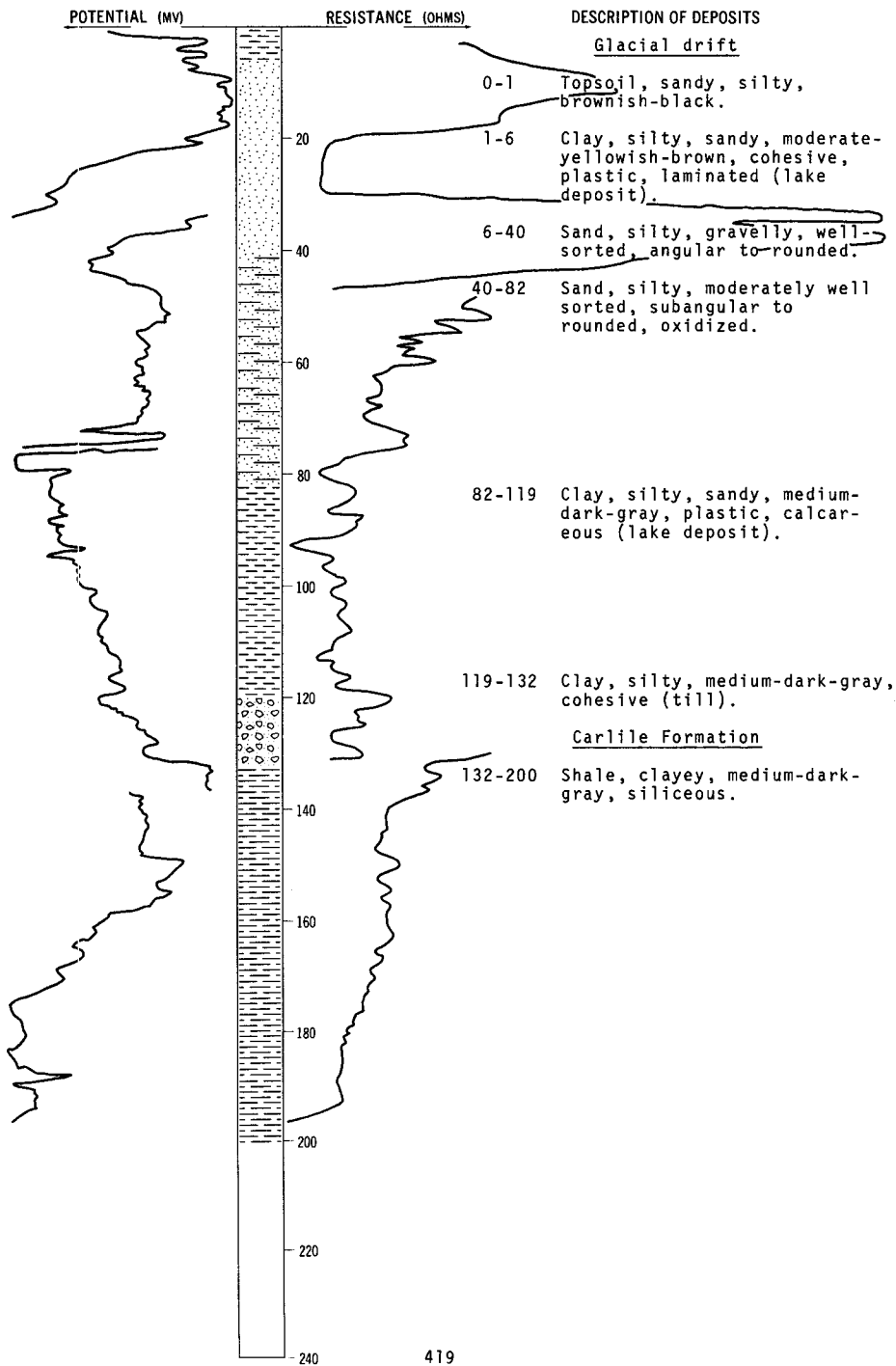
LOCATION: 162-56-30ADD4

NOSWC 5712

DATE DRILLED: June 1970

ALTITUDE: 1210
(FT, MSL)

DEPTH: 200
(FT)



162-56-31AAA
 NDGS Pem-70-4

Altitude: 1209 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	1	1
	Sand, medium, slightly clayey, subangular; shale fragments-----	4	5
	Sand, medium, slightly clayey, subrounded to subangular; shale fragments coarser than above-----	49	54
	Sand, medium-coarse grained, clayey, subangular to subrounded, saturated-----	-	54

162-56-31BBB
 USBR 212

Altitude:

Glacial drift:			
	Loam, silty-----	1	1
	Loam, clayey, silty-----	1	2
	Sand, loamy-----	23	25

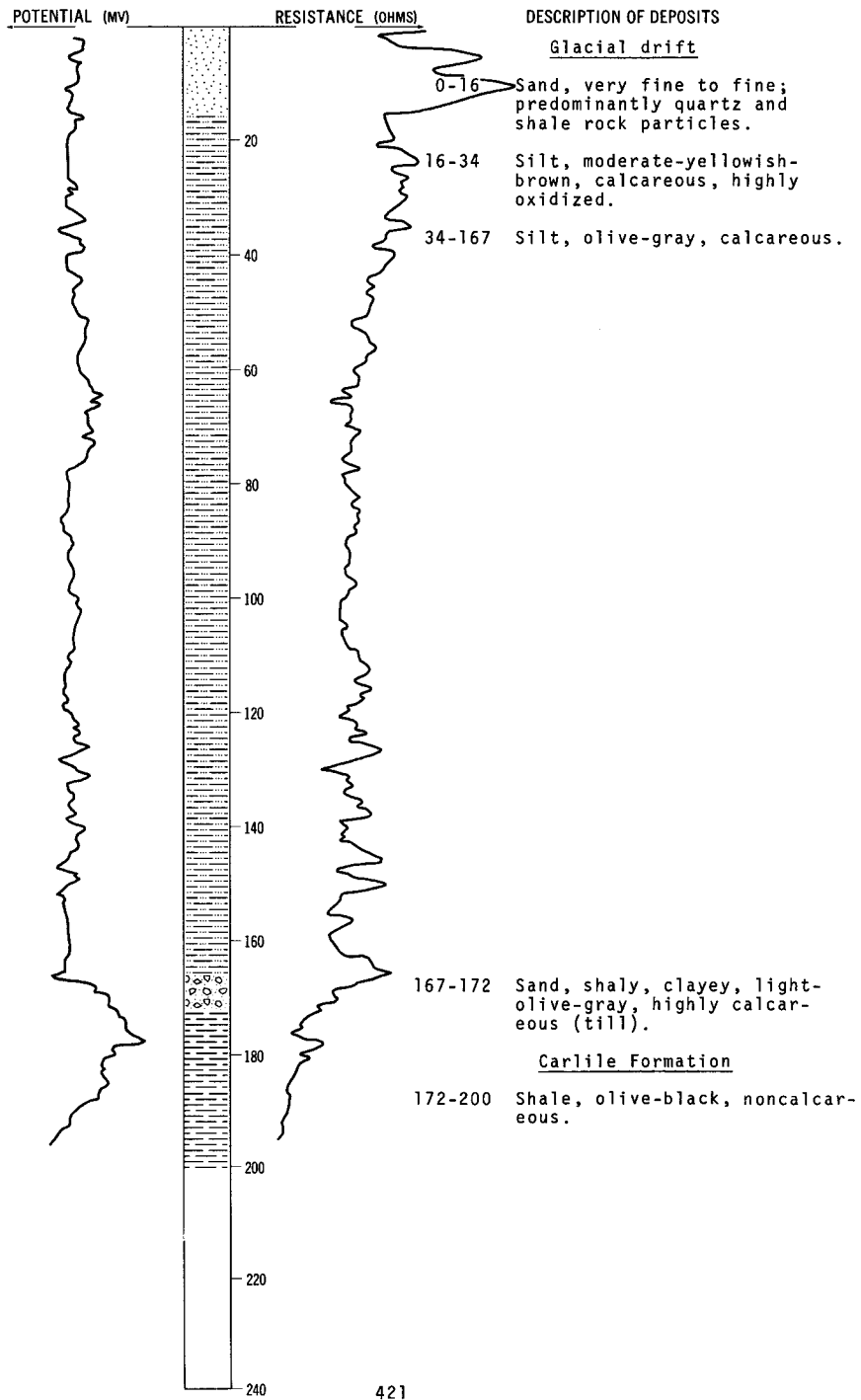
LOCATION: 162-56-33BBA

NDSWC 3574

DATE DRILLED: May 1968

ALTITUDE: 1145
(FT, MSL)

DEPTH: 200
(FT)

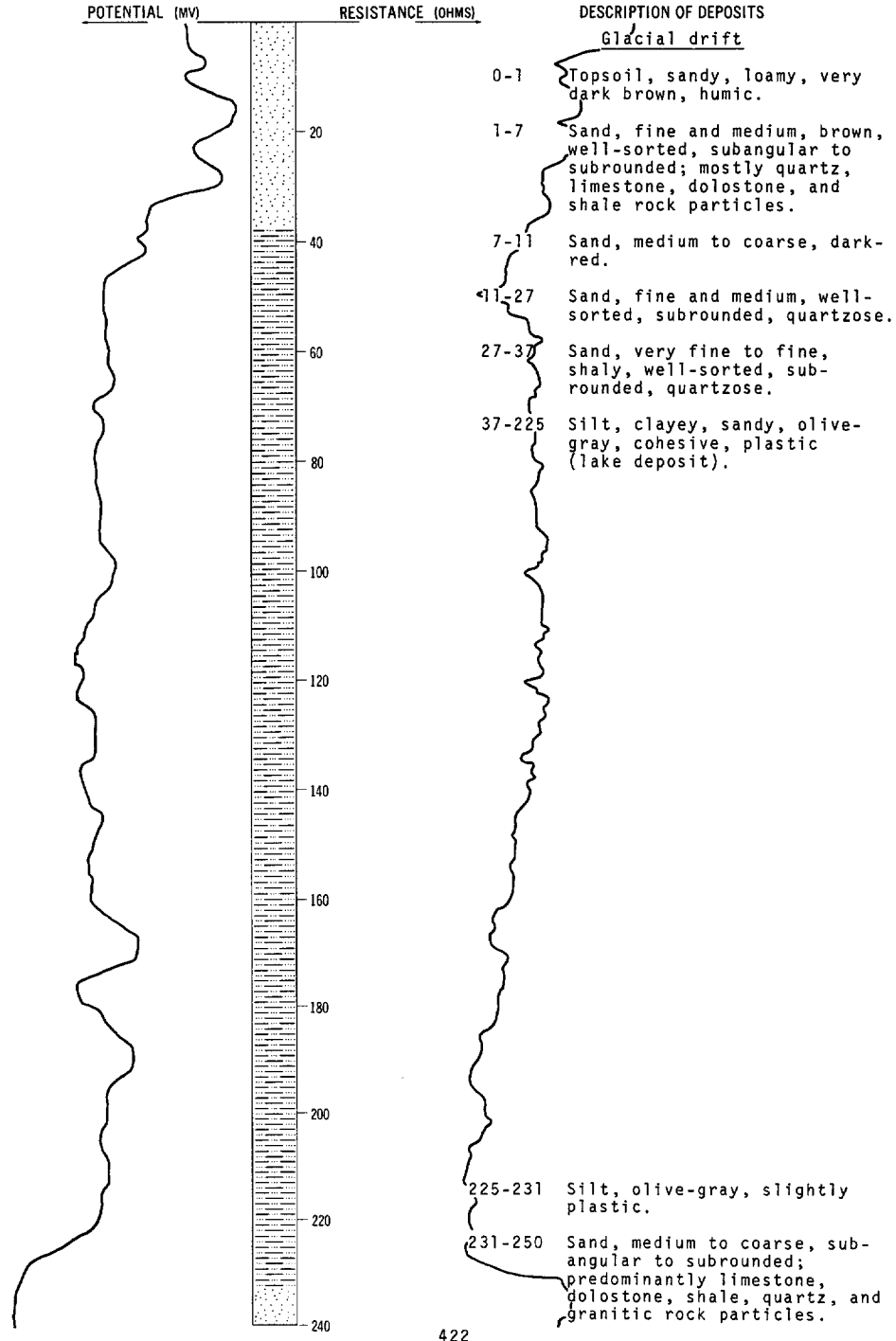


LOCATION: 162-56-36AAA1

DATE DRILLED: October 1969

ALTITUDE: 1062
(FT, MSL)

DEPTH: 400
(FT)



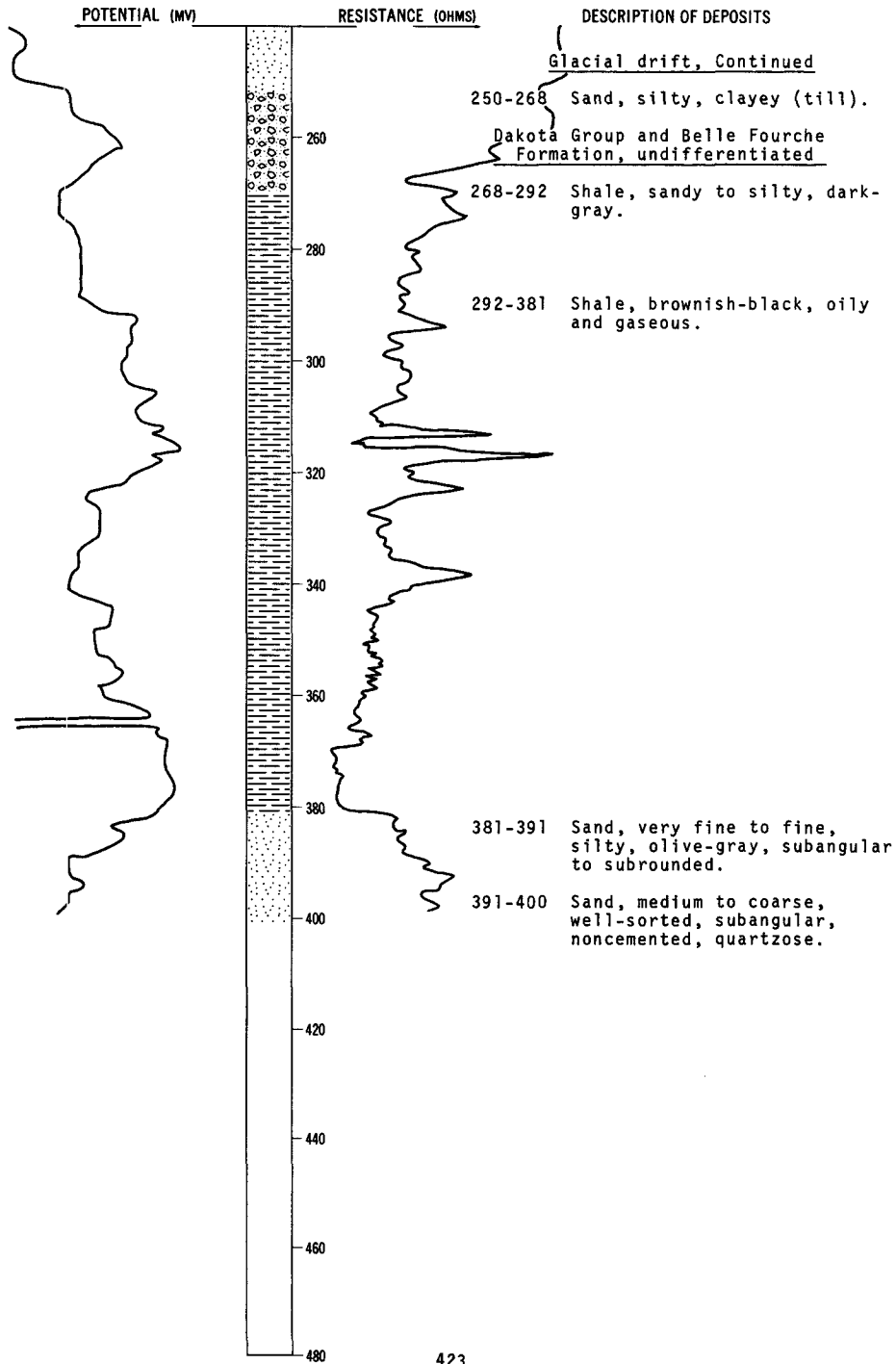
NDSWC 3848, Continued

LOCATION: 162-56-36AAA1

DATE DRILLED: October 1969

ALTITUDE: 1062
(FT, MSL)

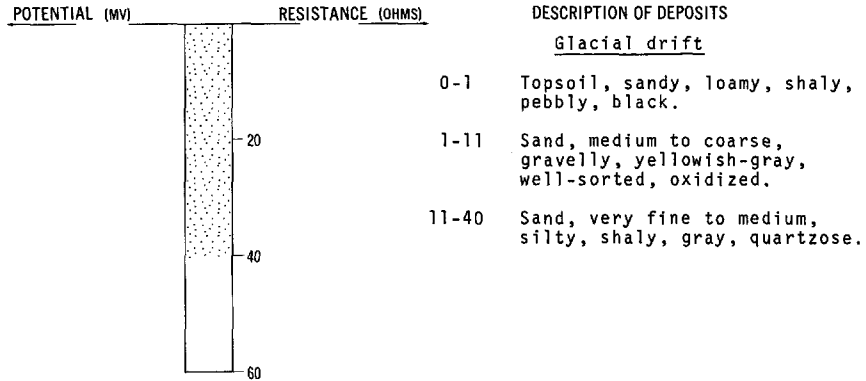
DEPTH: 400
(FT)



NDSWC 3849

LOCATION: 162-56-36AAA2
 ALTITUDE: 1062
 (FT, MSL)

DATE DRILLED: October 1969
 DEPTH: 40
 (FT)



162-56-36AAA3
 USBR 215

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Sand, fine, loamy-----	2	2
	Sand, fine-----	1	3
	Sand-----	8	11
	Sand, fine, loamy-----	12	23

162-57-2CCC
 USBR 201

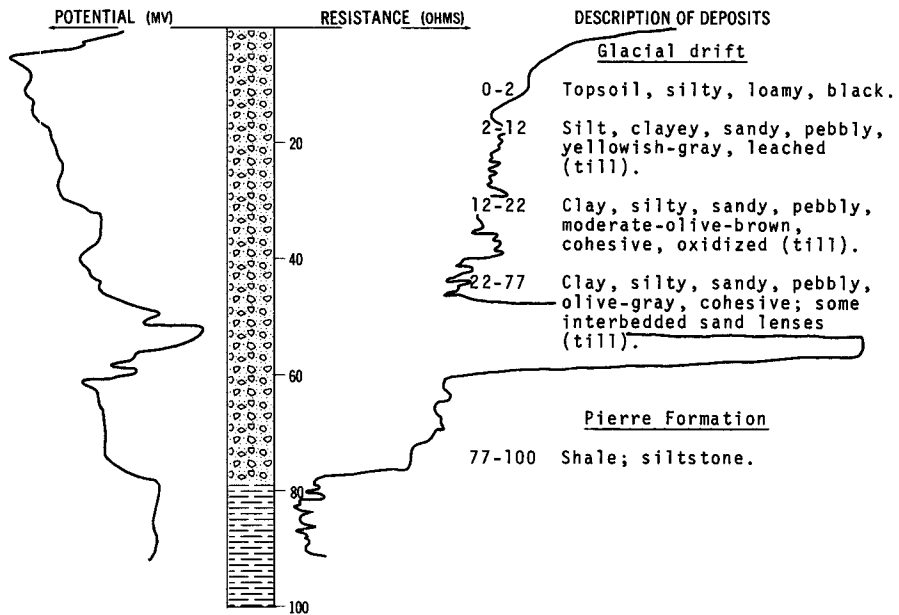
Altitude:

Glacial drift:			
	Loam, sandy-----	1	1
	Sand, loamy, gravelly-----	11	12

LOCATION: 162-57-5CCC
 ALTITUDE: 1464
 (FT, MSL)

NDSWC 4241

DATE DRILLED: September 1970
 DEPTH: 100
 (FT)



162-57-10BBA
 USBR 200

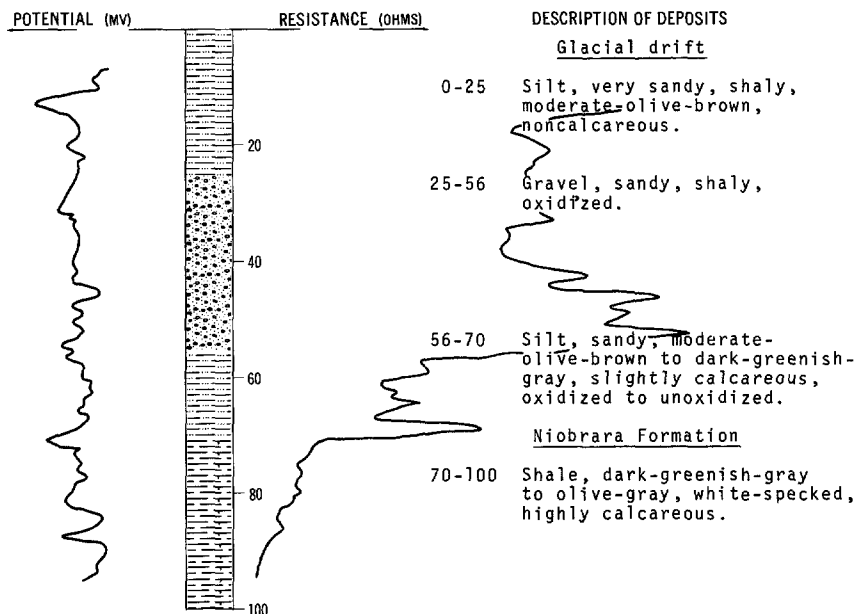
Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, clayey, silty-----	3	3
	Loam, clayey-----	10	13

LOCATION: 162-57-11AAB2
 ALTITUDE: 1250
 (FT, MSL)

NDSWC 3572

DATE DRILLED: May 1968
 DEPTH: 100
 (FT)



162-57-14CCC1
 USBR 414

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	8	8
	Loam, clayey, sandy-----	10	18

162-57-14CCC2
 NDGS Cav-70-2

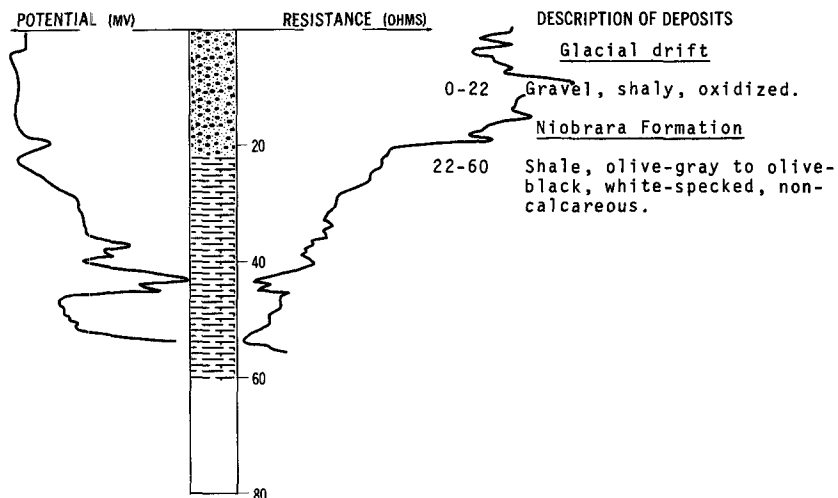
Altitude: 1210 feet

Glacial drift:			
	Topsoil-----	1.5	1.5
	Sand, gravelly, pebbly, poorly sorted, subangular to subrounded-----	5	6.5
	Sand, coarse, gravelly, clayey, subrounded to subangular, oxidized-----	7.5	14
	Sand; same as above except less clayey and finer gravel-----	6	20
Carlile Formation:			
	Shale, clayey, black, pyritic-----	4	24

LOCATION: 162-57-14DDD
 ALTITUDE: 1225
 (FT, MSL)

NDSWC 3571

DATE DRILLED: May 1968
 DEPTH: 60
 (FT)



162-57-25CCC
 NDGS Cav-70-1

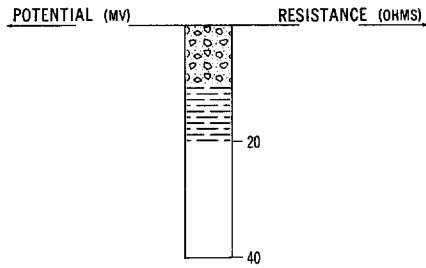
Altitude: 1220 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Roadfill and topsoil-----	3	3
	Clay, pebbly, dark-gray-----	2	5
	Sand, clayey, silty, dark-brown, poorly sorted, angular to subangular; predominantly shale particles-----	4	9
	Sand, coarse, silty, clayey, poorly sorted, subangular to subrounded; predominantly shale particles-----	13	22
	Sand, coarse, clayey, shaly, saturated-----	1	23
	Sand, medium to coarse, clayey, shaly, rounded to subangular-----	4	27
	Gravel(?); no samples; hard drilling-----	2	29
	Sand, coarse; predominantly shale particles--	4	33
	Gravel(?); no samples; hard drilling-----	6	39

LOCATION: 162-57-27CDB1
 ALTITUDE: 1469
 (FT, MSL)

NDSWC 5713-D

DATE DRILLED: June 1970
 DEPTH: 20
 (FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-1 Topsoil, silty, black.
- 1-9 Clay, silty, yellowish-brown (till).

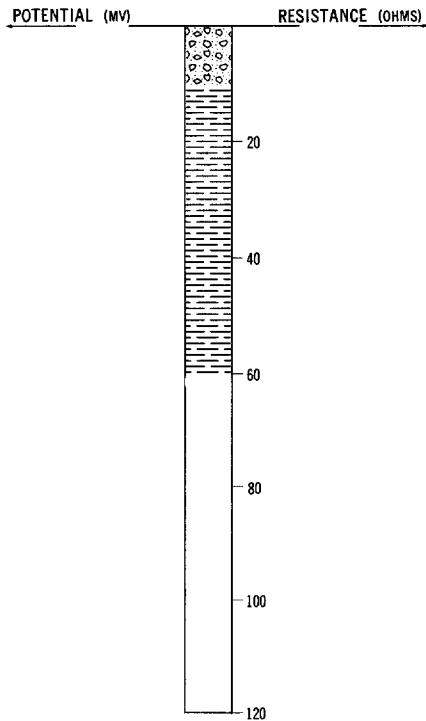
Pierre Formation

- 9-20 Shale, clayey, silty, olive-black.

LOCATION: 162-57-27CDB2
 ALTITUDE: 1470
 (FT, MSL)

NDSWC 5713-C

DATE DRILLED: June 1970
 DEPTH: 60
 (FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-1 Topsoil, silty, black.
- 1-9 Clay, silty, yellowish-brown (till).

Pierre Formation

- 9-60 Shale, clayey, silty, olive-black.

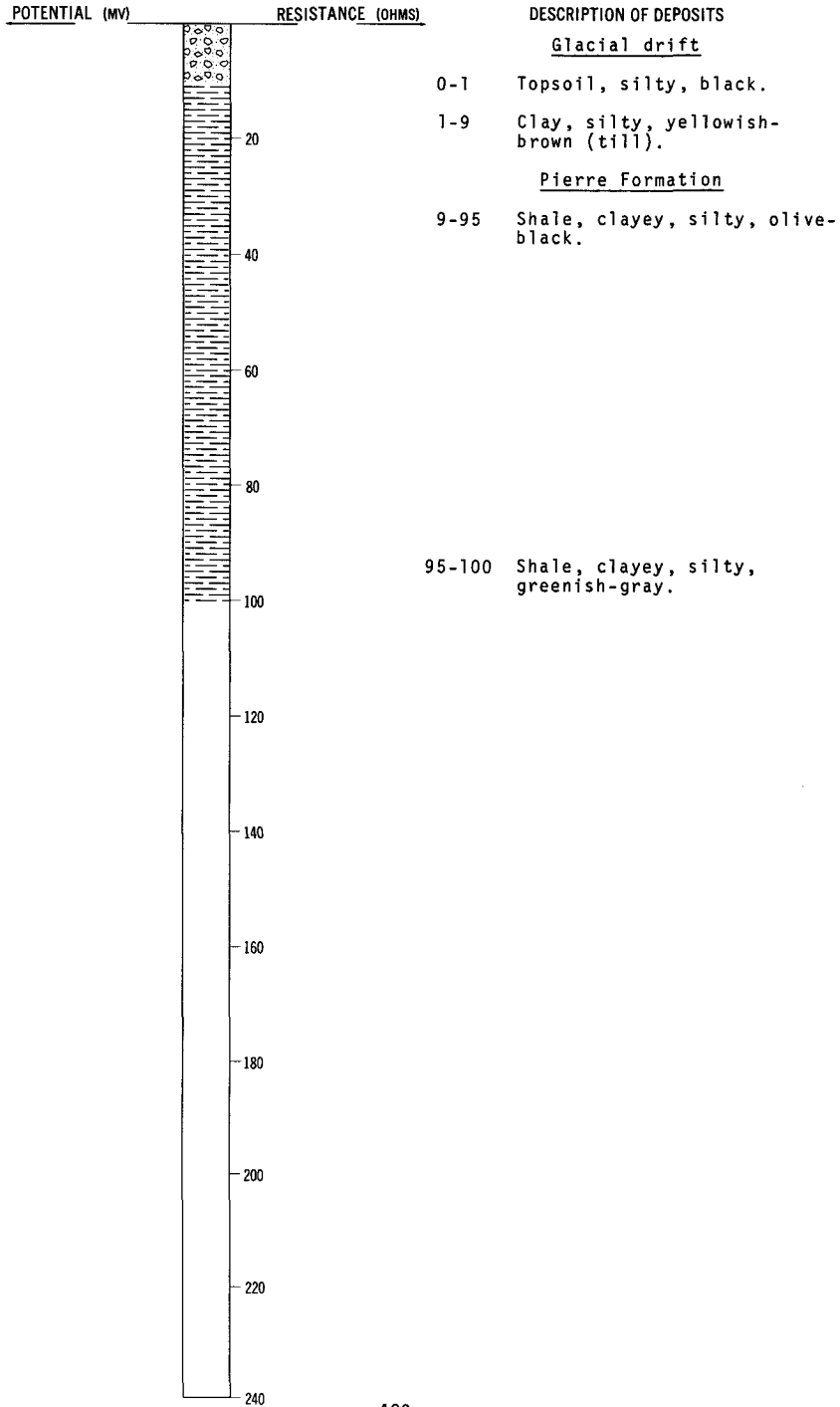
LOCATION: 162-57-27CDB3

NDSWC 5713-B

DATE DRILLED: June 1970

ALTITUDE: 1470
(FT, MSL)

DEPTH: 100
(FT)



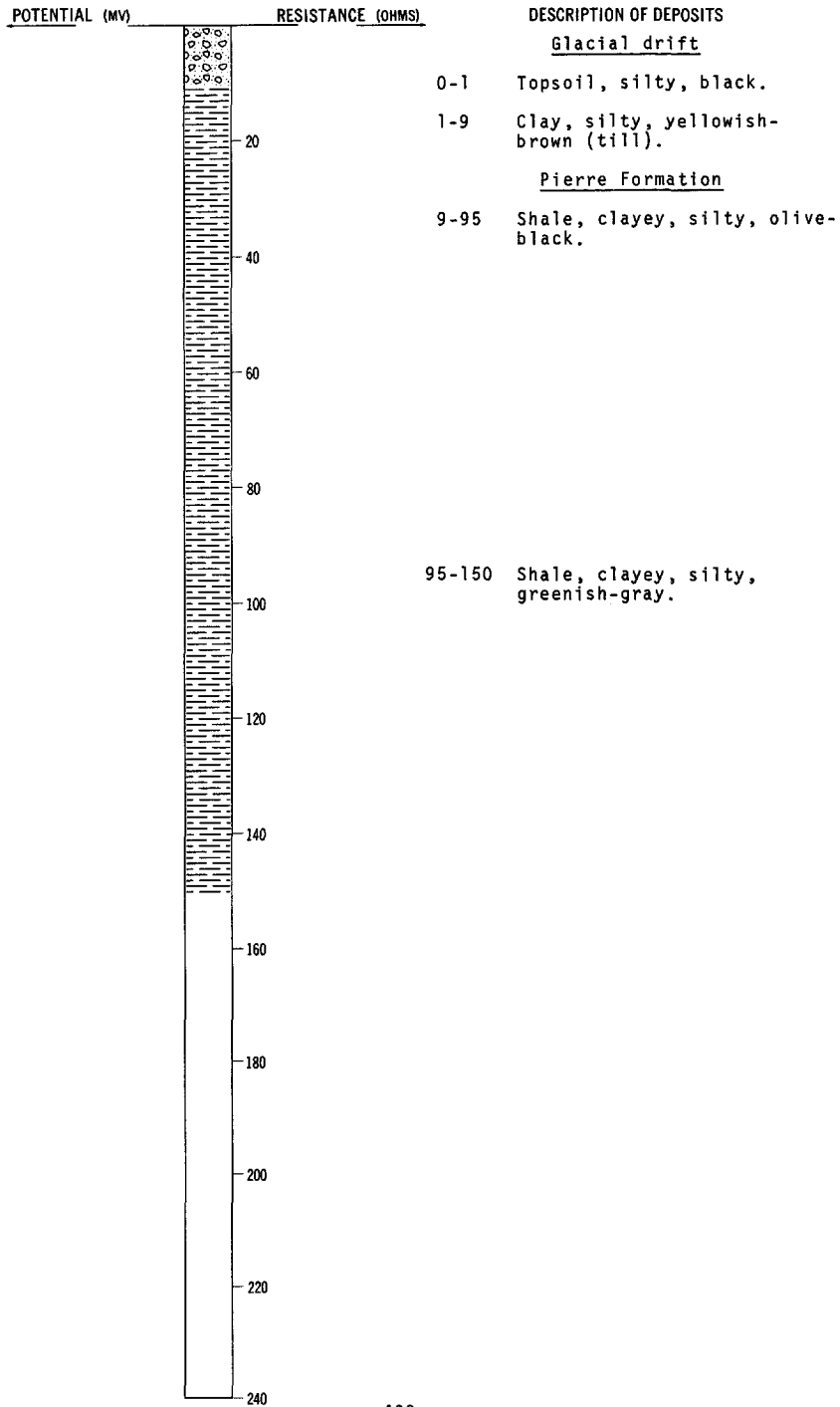
LOCATION: 162-57-27CDB4

NDSWC 5713-A

DATE DRILLED: June 1970

ALTITUDE: 1470
(FT, MSL)

DEPTH: 150
(FT)



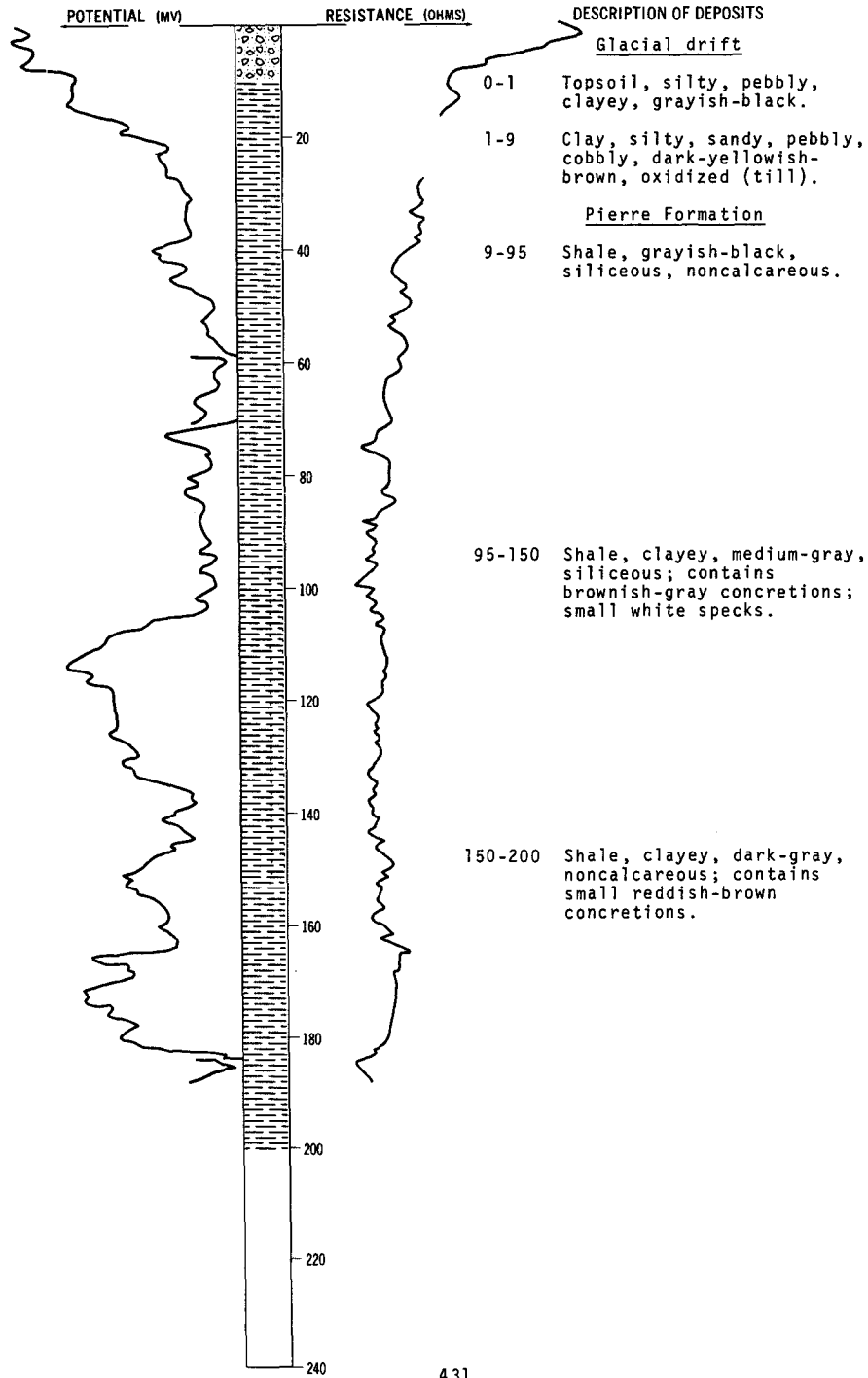
LOCATION: 162-57-27CDB5

NDSWC 5713

DATE DRILLED: June 1970

ALTITUDE: 1470
(FT, MSL)

DEPTH: 200
(FT)



162-57-27DDD
USBR 213

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, clayey, sandy-----	2	2
	Loam, silty-----	11	13

162-57-28DDC
(Log from U.S. Air Force)

Altitude: 1494 feet

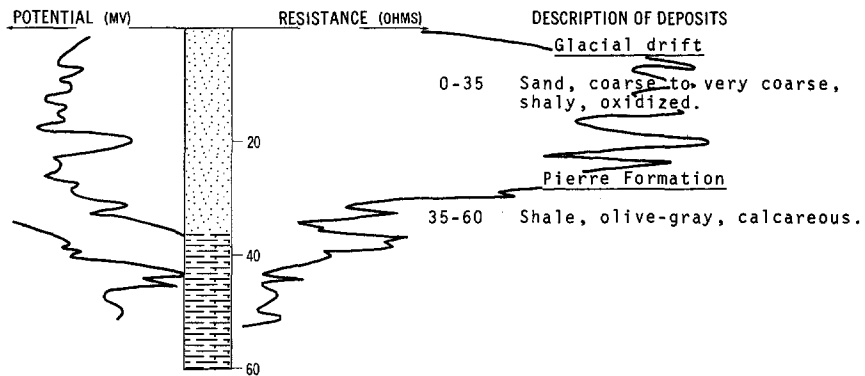
Glacial drift:			
	Clay, sandy, silty-----	5	5
	Gravel, sandy, clayey-----	5	10
Niobrara Formation:			
	Shale-----	120	130

162-57-34BAD1
(Log from U.S. Air Force)

Altitude: 1476 feet

Glacial drift:			
	Clay, silty, sandy-----	9.5	9.5
	Clay, silty-----	10.5	20
	Silt; clayey shale-----	30	50
Niobrara Formation:			
	Shale-----	77	127
	Shale-----	3	130

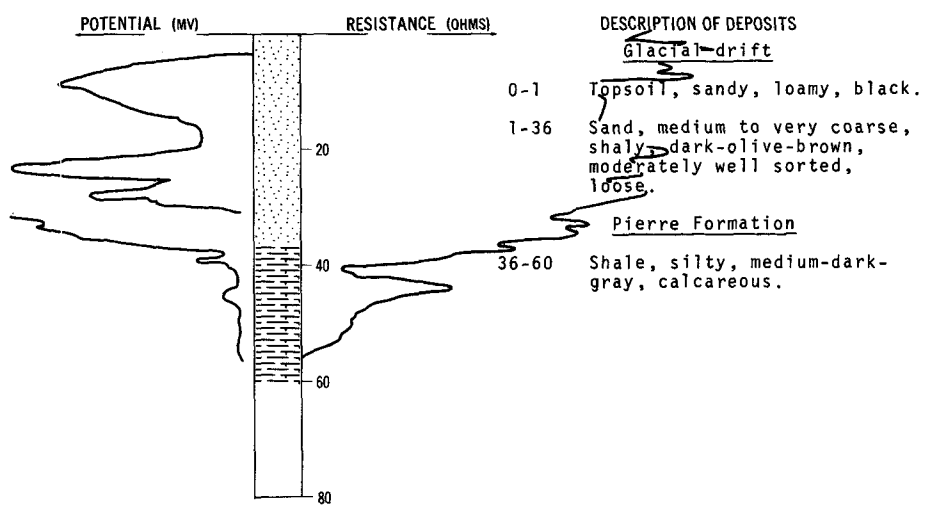
LOCATION: 162-57-36ABA NDSWC 3573 DATE DRILLED: May 1968
 ALTITUDE: 1221 DEPTH: 60
 (FT, MSL) (FT)



LOCATION: 162-57-36DDD
 ALTITUDE: 1220
 (FT, MSL)

NDSWC 4222

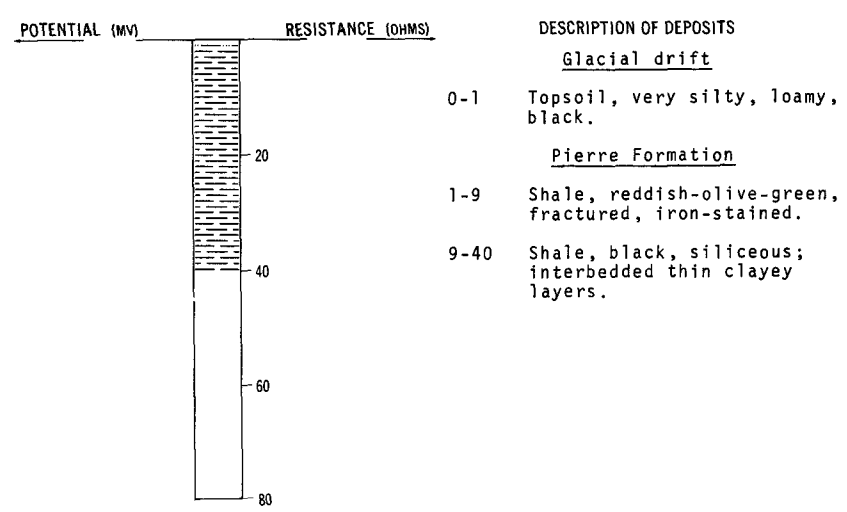
DATE DRILLED: September 1970
 DEPTH: 60
 (FT)



LOCATION: 162-58-19DDD
 ALTITUDE: 1609
 (FT, MSL)

NDSWC 4233

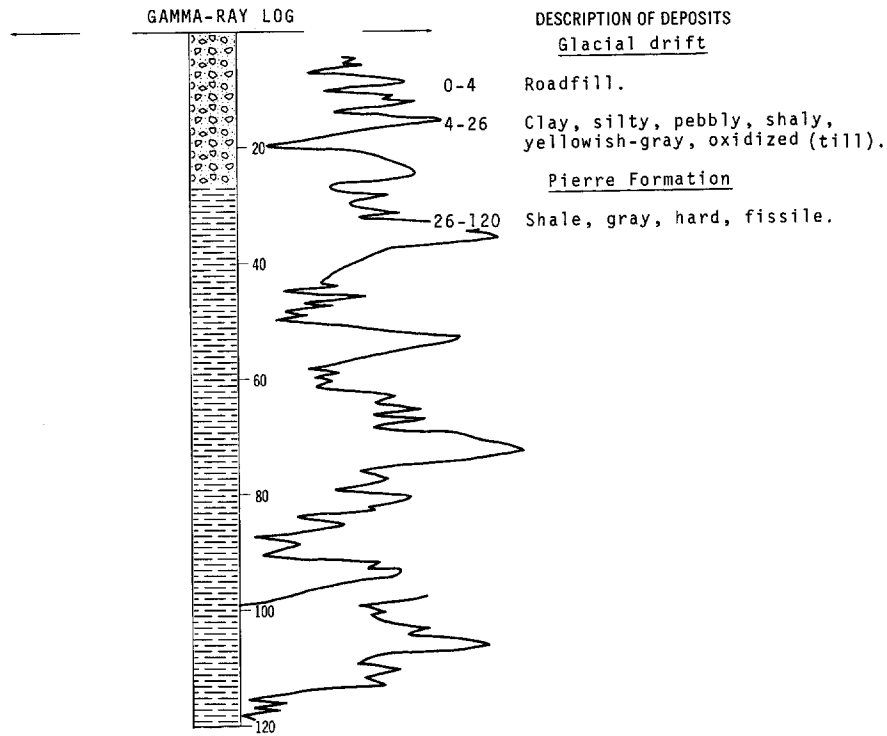
DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



LOCATION: 162-58-22BBB
 ALTITUDE: 1549
 (FT, MSL)

NDSWC 3812

DATE DRILLED: September 1969
 DEPTH: 120
 (FT)



162-58-27BBD1
 (Log from U.S. Air Force)

Altitude: 1549 feet

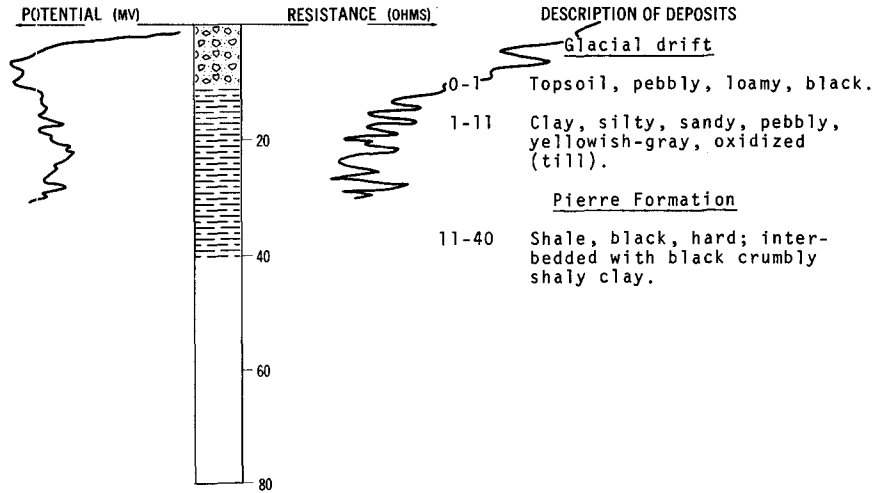
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Glacial drift:</u>			
	Clay, silty-----	2	2
	Silt, clayey, sandy-----	8	10
	Clay, silty, sandy-----	28.5	38.5
<u>Pierre Formation:</u>			
	Shale-----	9.5	48
	Shale; clay-----	5.5	53.5
	Shale-----	32.5	86
	Shale; silt-----	7.5	93.5
	Shale-----	37	130.5

162-59-3BCC
(Log from Peterson Well Company)

Altitude: 1608 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Black dirt-----	1	1
	Clay, yellow-----	4	5
	Rock-----	1	6
	Clay, yellow; rock-----	20	26
	Rock-----	1	27
	Clay, yellow-----	3	30
Pierre Formation:			
	Shale, blue-----	30	60
	Shale, crumbly; gravel-----	5	65
	Shale, blue-----	38	103

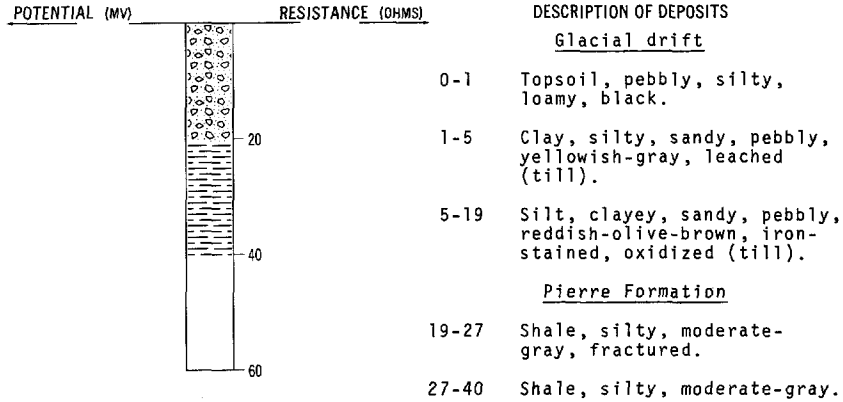
LOCATION: 162-59-16DDD NDSWC 3811 DATE DRILLED: September 1969
 ALTITUDE: 1630 (FT, MSL) DEPTH: 40 (FT)



LOCATION: 162-59-18CCC
 ALTITUDE: 1625
 (FT, MSL)

NDSWC 4235

DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



162-59-22CCD
 (Log from Peterson Well Company)

Altitude: 1638 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Black dirt-----	1	1
	Clay, gravelly, yellow, hard-----	24	25
Pierre Formation:			
	Shale-----	75	100

162-59-22DDA
 (Log from U.S. Air Force)

Altitude: 1620 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, silty-----	1.5	1.5
	Clay, gravelly, sandy-----	6.5	8
Pierre Formation:			
	Shale; clay-----	9.5	17.5
	Shale-----	112.5	130

162-59-22DDB1
 (Log from U.S. Air Force)

Altitude: 1620 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, sandy, dark-brown-----	2	2
	Silt, sandy, clayey, yellowish-brown-----	7.5	9.5
Pierre Formation:			
	Shale, grayish-brown, highly fractured, oxidized-----	8.5	18
	Shale, dark-gray, highly fractured, partly fissile-----	17	35
	Shale, dark-gray, moderately to slightly fractured-----	99	134

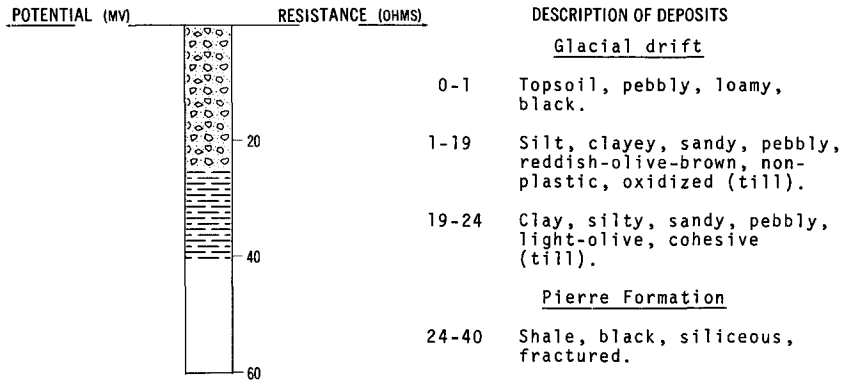
LOCATION: 162-59-33BBB

NDSWC 4234

DATE DRILLED: September 1970

ALTITUDE: 1635
(FT, MSL)

DEPTH: 40
(FT)



162-60-17DDD
(Log from U.S. Corps of Engineers)

Altitude: 1606 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, sandy; partly gravelly at 31 feet-----	32	32
Pierre Formation:			
	Shale, weathered-----	2	34
	Shale, silty, black, partly blocky, highly fractured, partly crushed-----	123	157

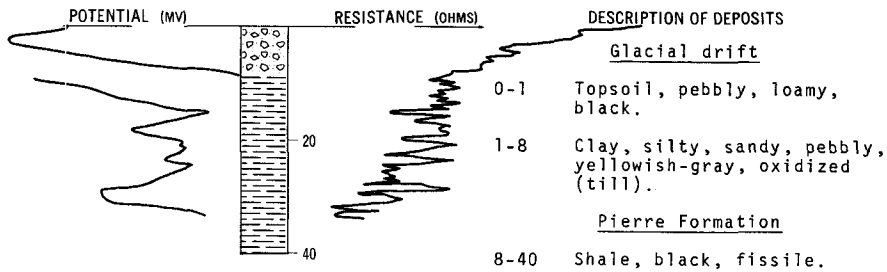
LOCATION: 162-60-21AAA

NDSWC 3810

DATE DRILLED: September 1969

ALTITUDE: 1584
(FT, MSL)

DEPTH: 40
(FT)



162-60-26ADA
(Log from U.S. Air Force)

Altitude: 1637 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Silt, clayey, sandy-----	5	5
	Silt, sandy, clayey-----	13	18
Pierre Formation:			
	Shale; clay-----	7	25
	Shale-----	45	70
	Shale; clay-----	10	80
	Shale-----	25	105
	Shale; clay-----	10	115
	Shale-----	5	120
	Shale; clay-----	6	126
	Shale-----	4	130

162-60-26ADB1
(Log from U.S. Air Force)

Altitude: 1640 feet

Glacial drift:			
	Clay, silty, sandy, black-----	2	2
	Clay, silty, sandy, partly gravelly, shaly, brown-----	17	19
Pierre Formation:			
	Shale, silty, dark-gray, highly fractured, crushed-----	15	34
	Shale, dark-gray, highly fractured, brittle, partly fissile-----	96	130

162-60-26DCC
NDGS Cav-69-36

Altitude: 1630 feet

Glacial drift:			
	Topsoil-----	5	5
	Till, shaly, sandy, pebbly, dark-yellowish-brown; more than 50 percent shale particles	7	12
	Till, gravelly, saturated-----	4	16
Pierre Formation:			
	Shale, weathered-----	-	16

162-61-12AAA
(Log from Walter Koehmstedt)

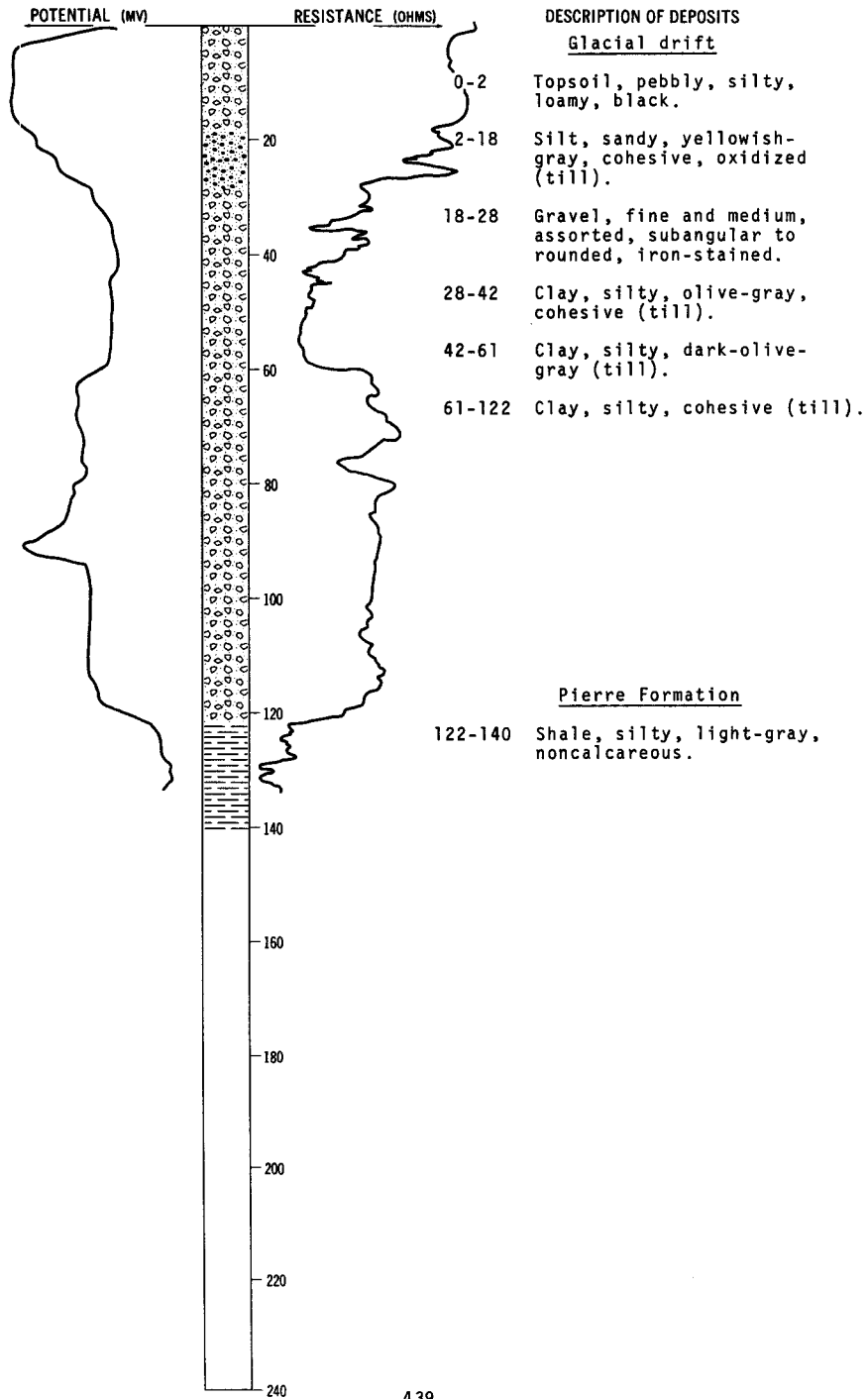
Altitude: 1586 feet

Glacial drift:			
	Clay and rock-----	30	30
	Lake bottom silt-----	90	120
Pierre Formation:			
	Shale-----	65	185

LOCATION: 162-61-12DDD
ALTITUDE: 1580
(FT, MSL)

NDSWC 4256

DATE DRILLED: September 1970
DEPTH: 140
(FT)



162-61-14ABB
NDGS Cav-69-2

Altitude: 1573 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Sand, moderate-dark-brown-----	3	5
	Till, sandy, pebbly, shaly, moderate-brown; shale fragments subangular to subrounded---	12	17

162-61-18CBC2
(Log from Walter Koehmstedt)

Altitude: 1571 feet

Glacial drift:			
	Clay, rocky, yellow-----	20	20
Pierre Formation:			
	Shale, water-bearing-----	43	63

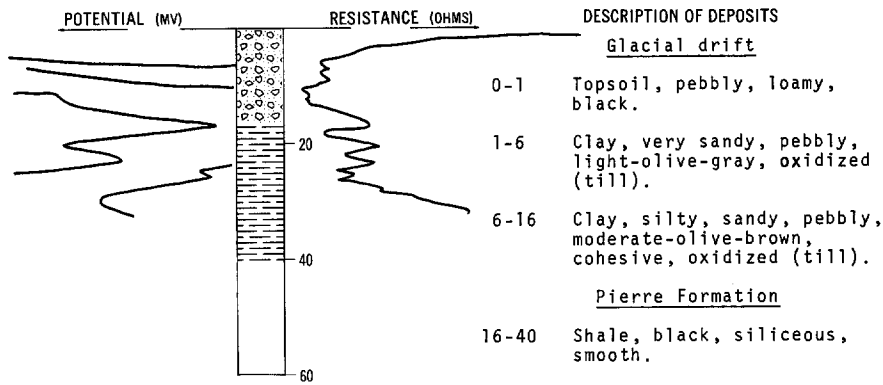
NDSWC 3809

LOCATION: 162-61-21AAA

DATE DRILLED: September 1969

ALTITUDE: 1578
(FT, MSL)

DEPTH: 40
(FT)



162-61-24DDA1
(Log from U.S. Air Force)

Altitude: 1581 feet

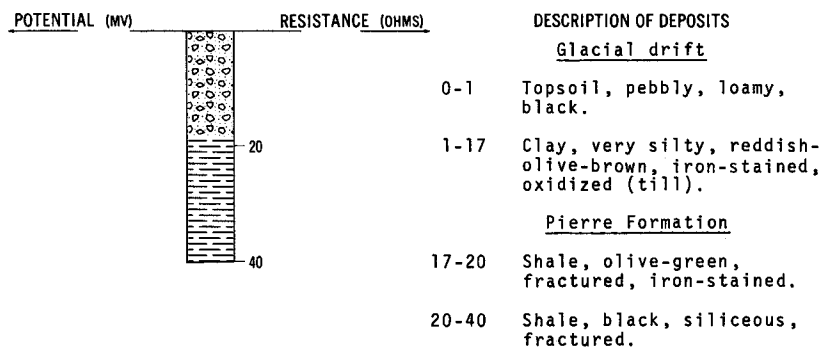
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, sandy, silty-----	9.5	9.5
	Sand, fine, silty, clayey-----	9.5	19
Pierre Formation:			
	Shale-----	111	130

LOCATION: 162-61-25DDD
 ALTITUDE: 1588
 (FT, MSL)

NDSWC 4257

DATE DRILLED: September 1970

DEPTH: 40
 (FT)



162-61-26CDB4
 (Log from U.S. Air Force)

Altitude: 1575 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:	Clay, sandy, partly gravelly, yellowish-brown-----	12	12
Pierre Formation:	Shale, dark-gray, brittle, partly oxidized---	120	132

162-61-28CBC
 NDGS Cav-69-1

Altitude: 1583 feet

Glacial drift:	Silt-----	3	3
	Till, clayey, pebbly, shaly, dusky-yellowish-brown; pebbles small, subrounded to subangular-----	21	24
	Till; same as above except olive gray and higher pebble content-----	6	30
Pierre Formation:	Shale-----	-	30

162-61-30BBC
 (Log from U.S. Air Force)

Altitude: 1565 feet

Glacial drift:	Clay, silty, gravelly-----	27	27
Pierre Formation:	Shale-----	103	130

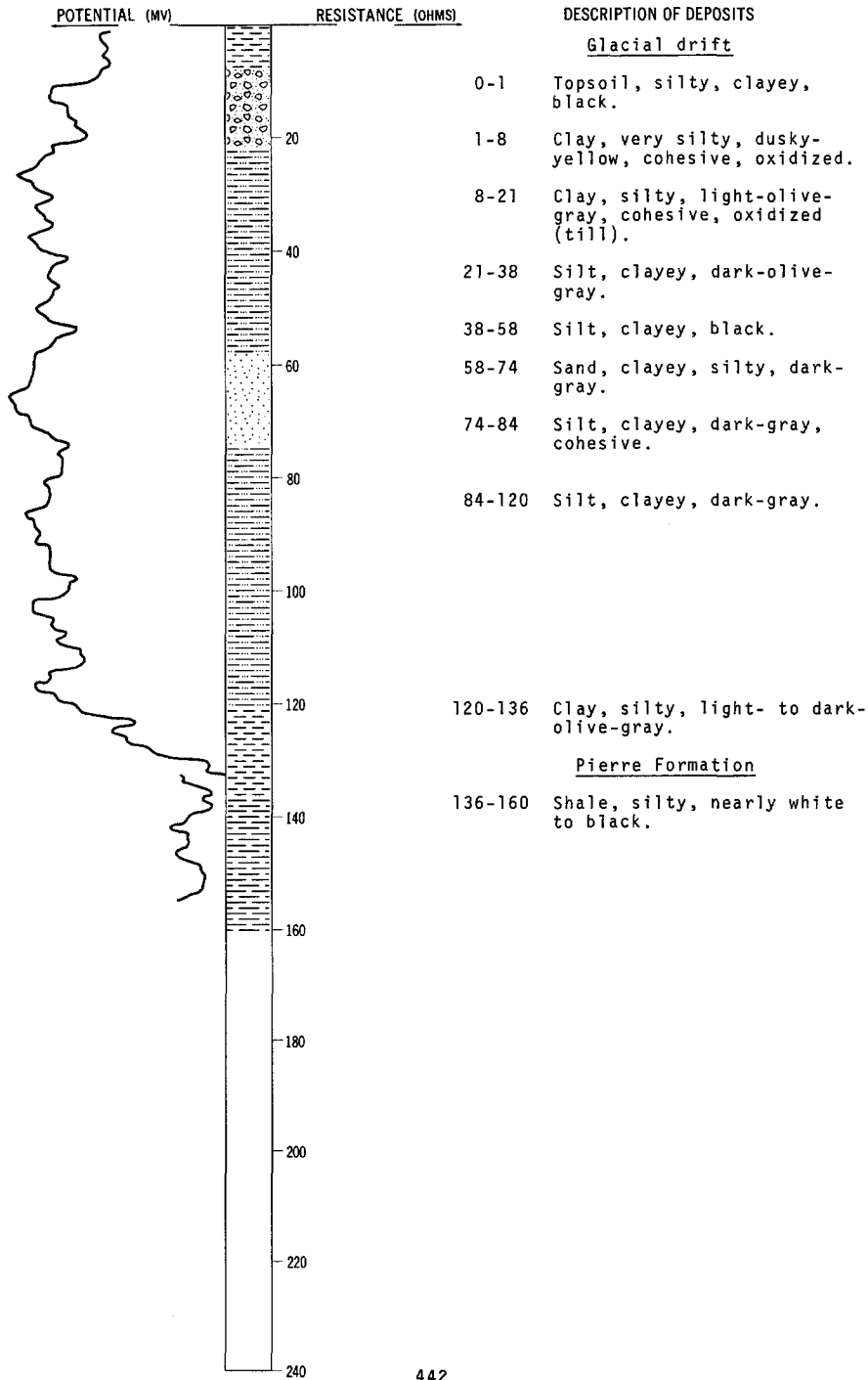
LOCATION: 162-62-3BAB

NDSWC 4253

DATE DRILLED: September 1970

ALTITUDE: 1557
(FT, MSL)

DEPTH: 160
(FT)



162-62-7ADD
(Log from Peterson Well Company)

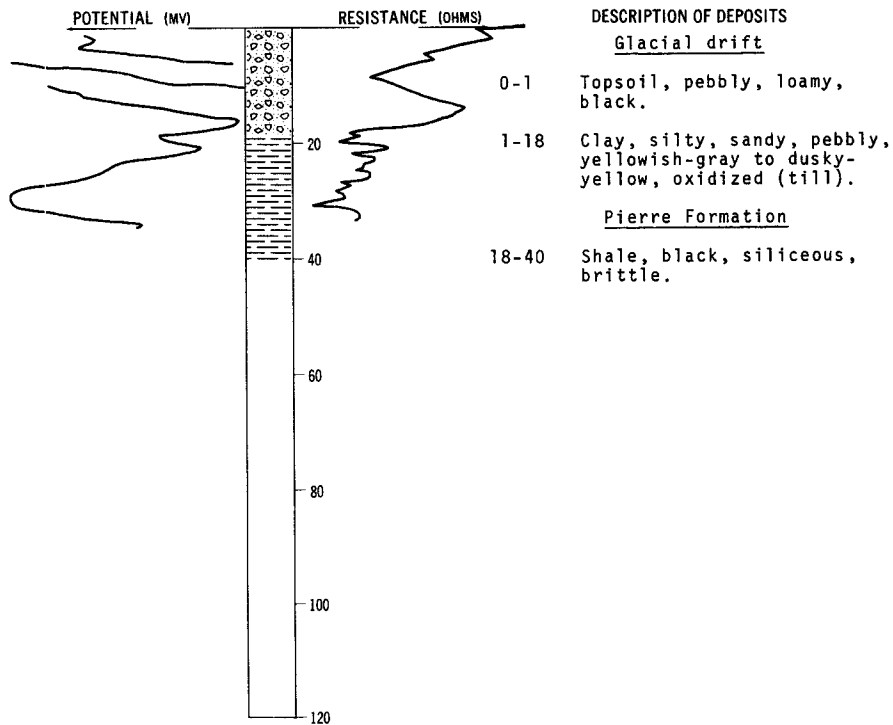
Altitude: 1560 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, yellow-----	25	25
	Clay, rocky, blue-----	52	77
	Gravel, shaly-----	3	80

LOCATION: 162-62-16DDD
ALTITUDE: 1568
(FT, MSL)

NDSWC 3808

DATE DRILLED: September 1969
DEPTH: 40
(FT)



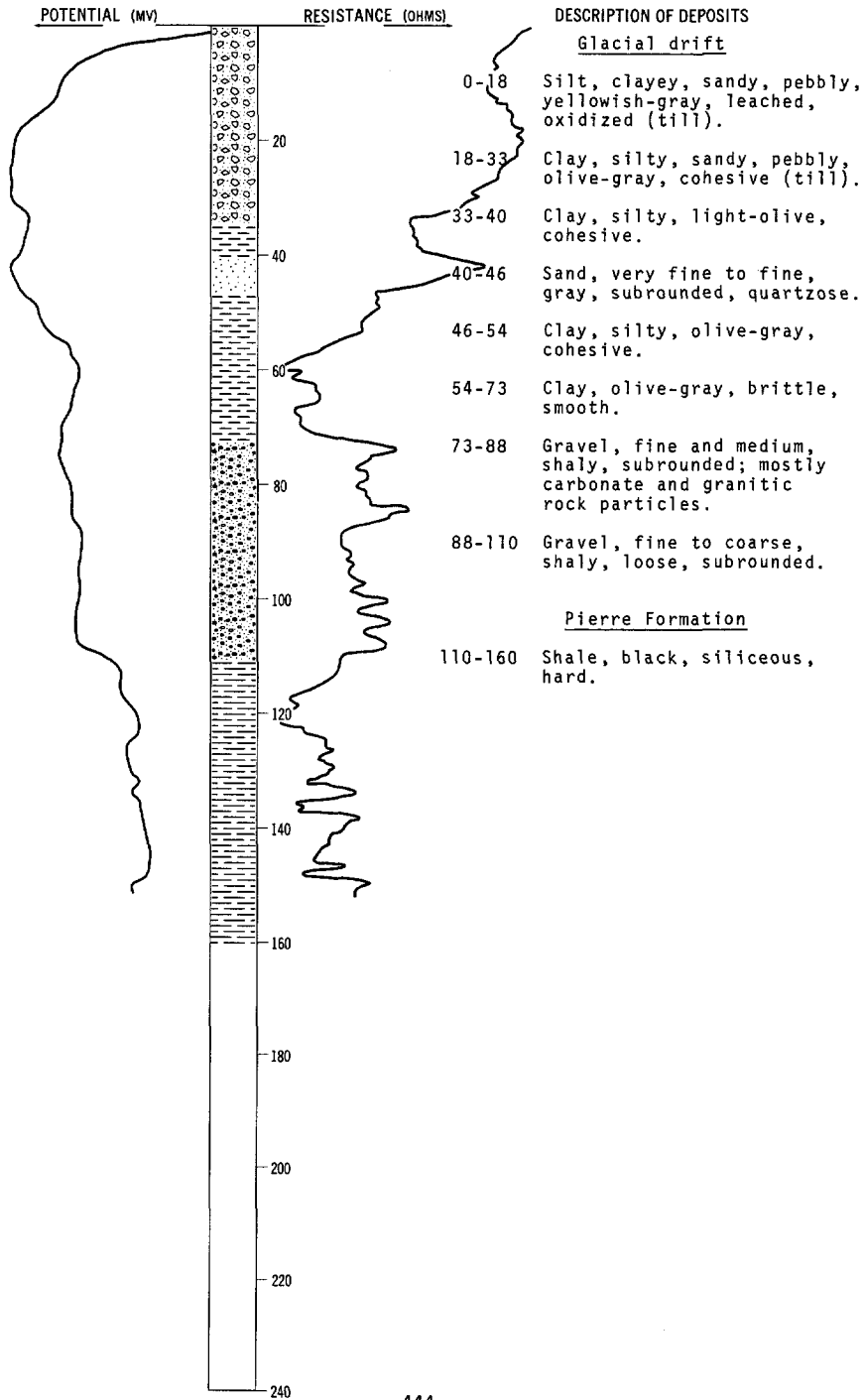
LOCATION: 162-62-18DDD

NDSWC 4175

DATE DRILLED: September 1970

ALTITUDE: 1562
(FT, MSL)

DEPTH: 160
(FT)



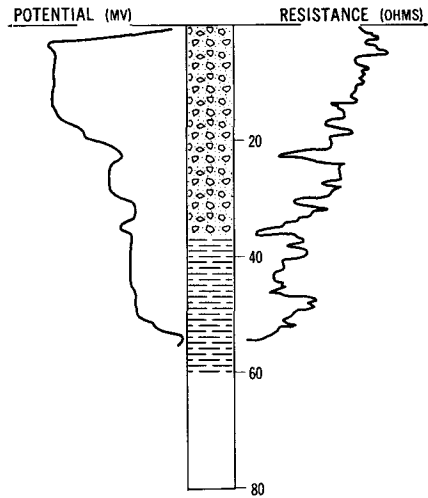
LOCATION: 162-62-26AAA

NDSWC 4260

DATE DRILLED: September 1970

ALTITUDE: 1556
(FT, MSL)

DEPTH: 60
(FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-1 Topsoil, pebbly, silty, loamy, black.
- 1-13 Clay, silty, yellowish- to reddish-olive-brown, cohesive, iron-stained, oxidized (till).
- 13-36 Clay, silty, sandy, pebbly, olive-gray, cohesive (till).

Pierre Formation

- 36-60 Shale, silty, black, noncalcareous.

162-62-30DAD
(Log from U.S. Air Force)

Altitude: 1568 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Silt, clayey-----	1.5	1.5
	Clay, sandy, silty-----	35	36.5
Pierre Formation:			
	Shale; clay-----	48.5	85
	Shale-----	45	130

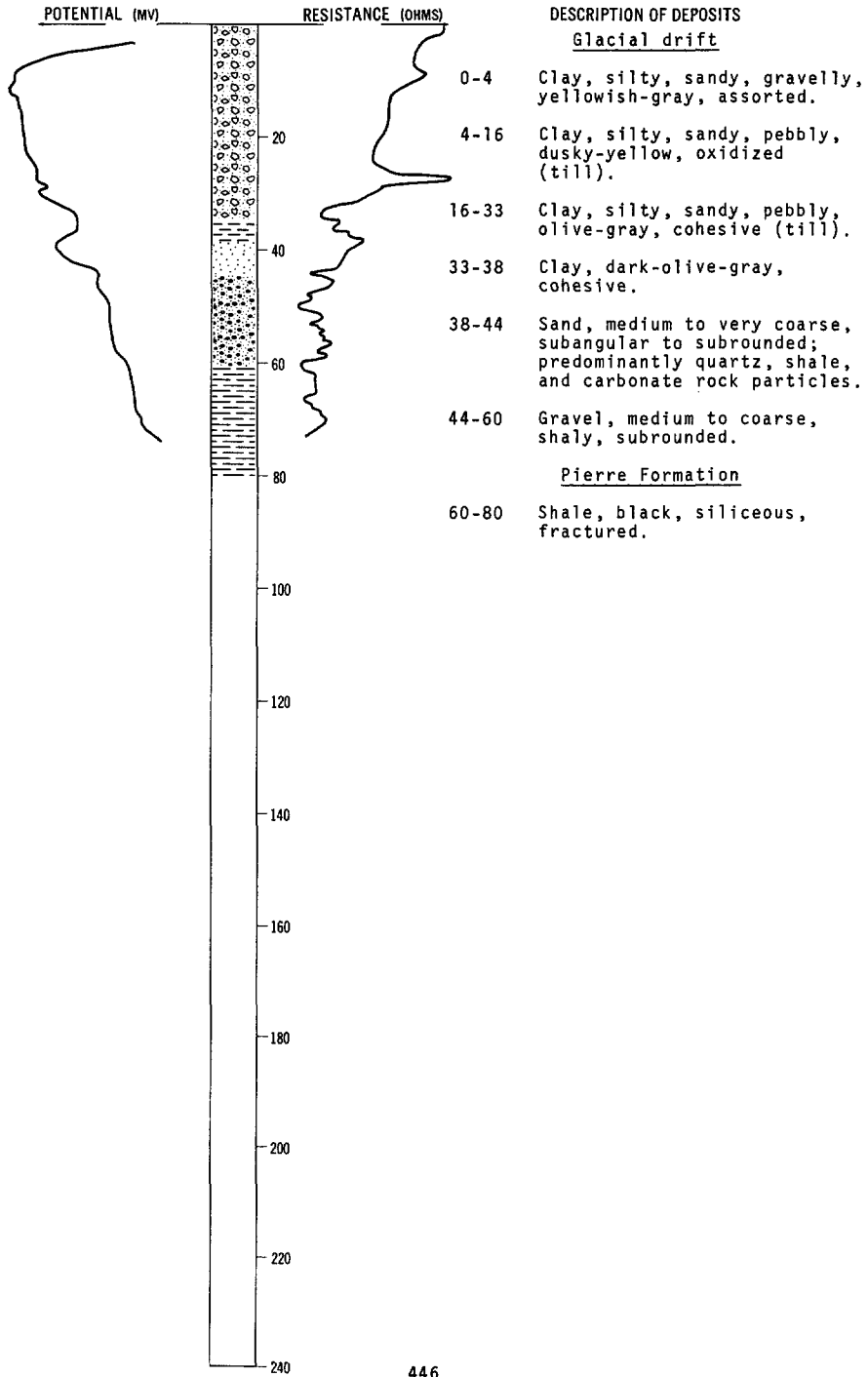
LOCATION: 162-62-32BBB

NDSWC 4153

DATE DRILLED: August 1970

ALTITUDE: 1567
(FT, MSL)

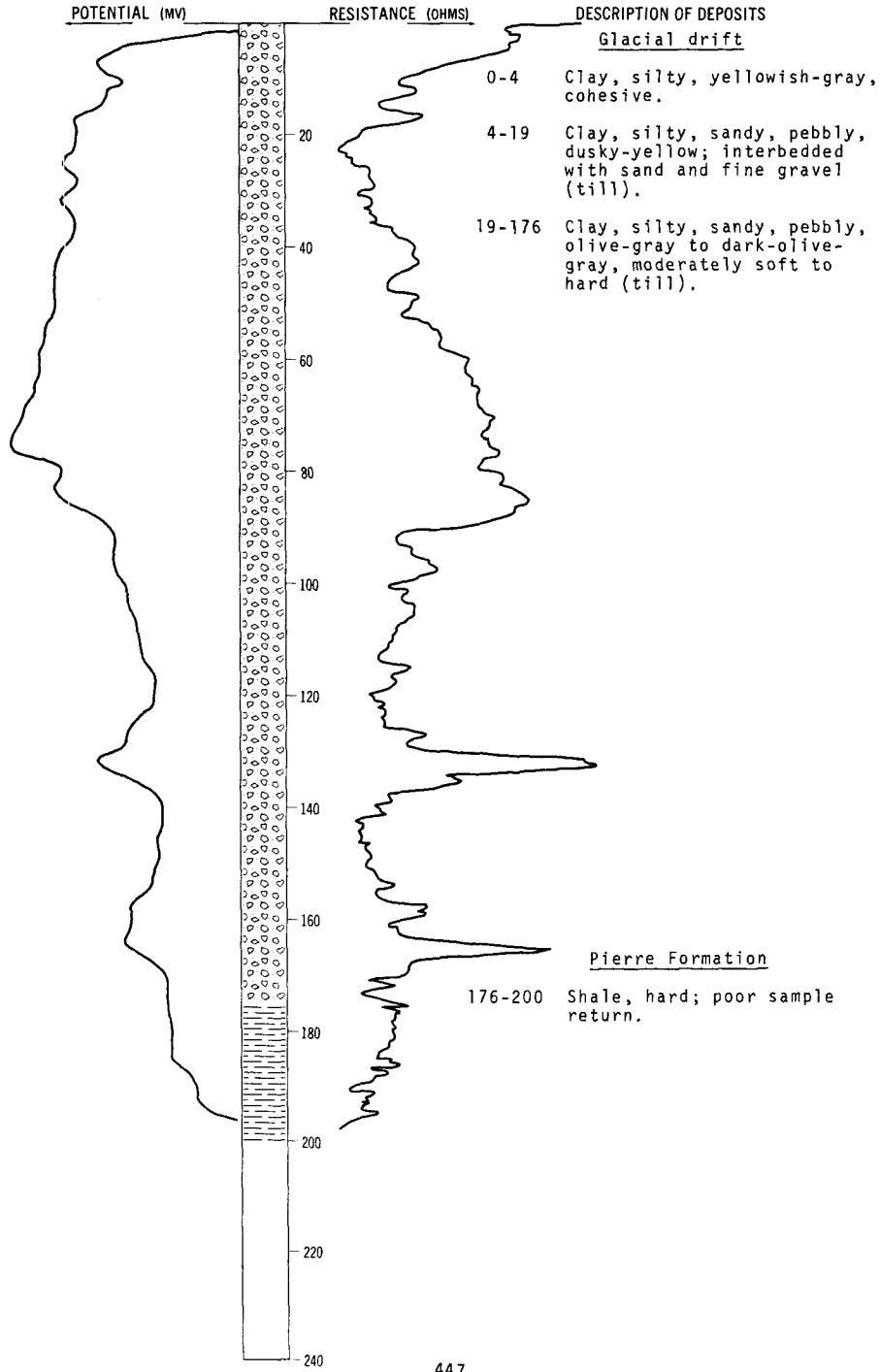
DEPTH: 80
(FT)



LOCATION: 162-63-7AAA
ALTITUDE: 1580
(FT, MSL)

NDSWC 4170

DATE DRILLED: August 1970
DEPTH: 200
(FT)

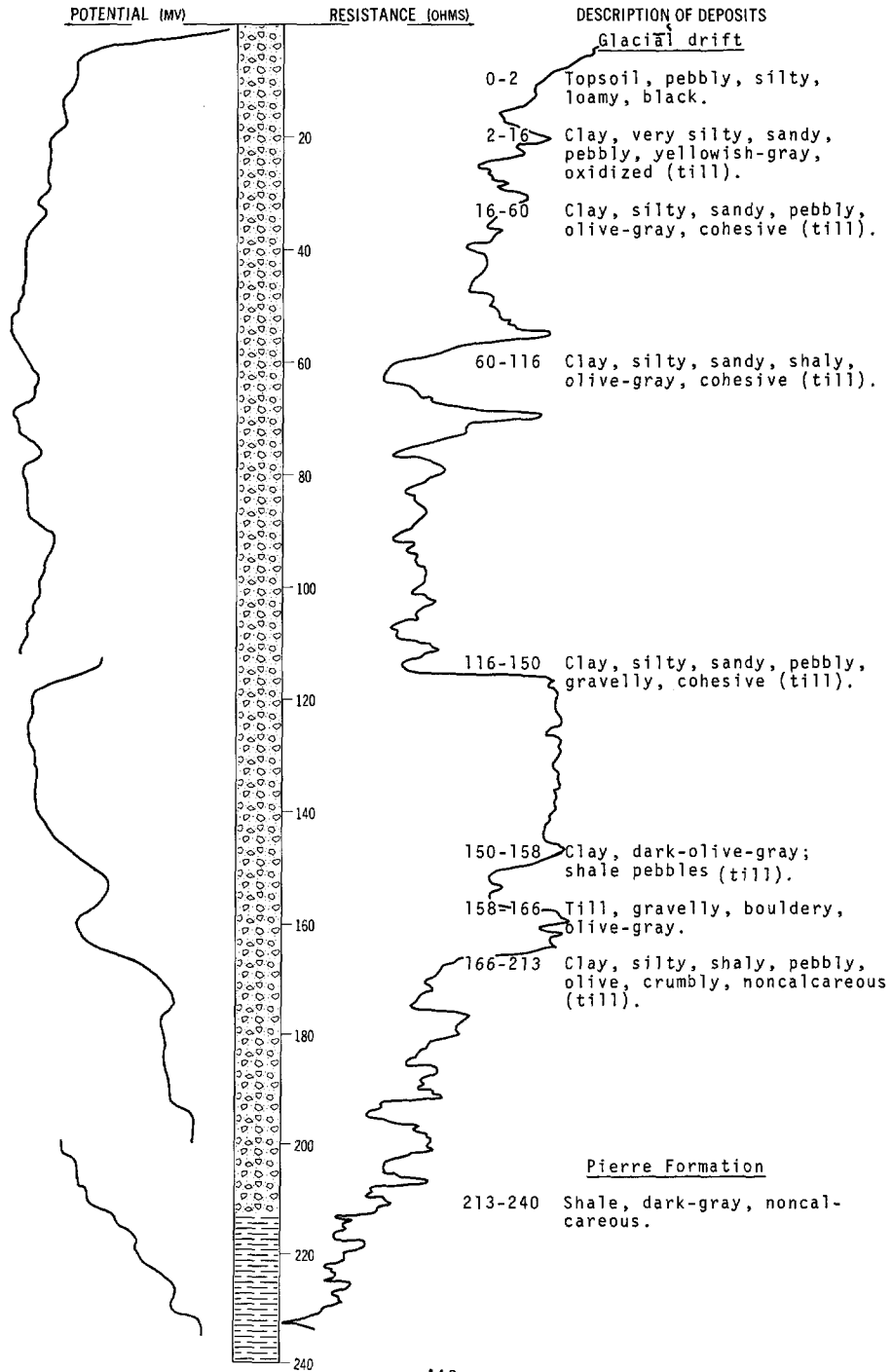


LOCATION: 162-63-10BBB
ALTITUDE: 1580
(FT. MSL)

NDSWC 4177

DATE DRILLED: September 1970

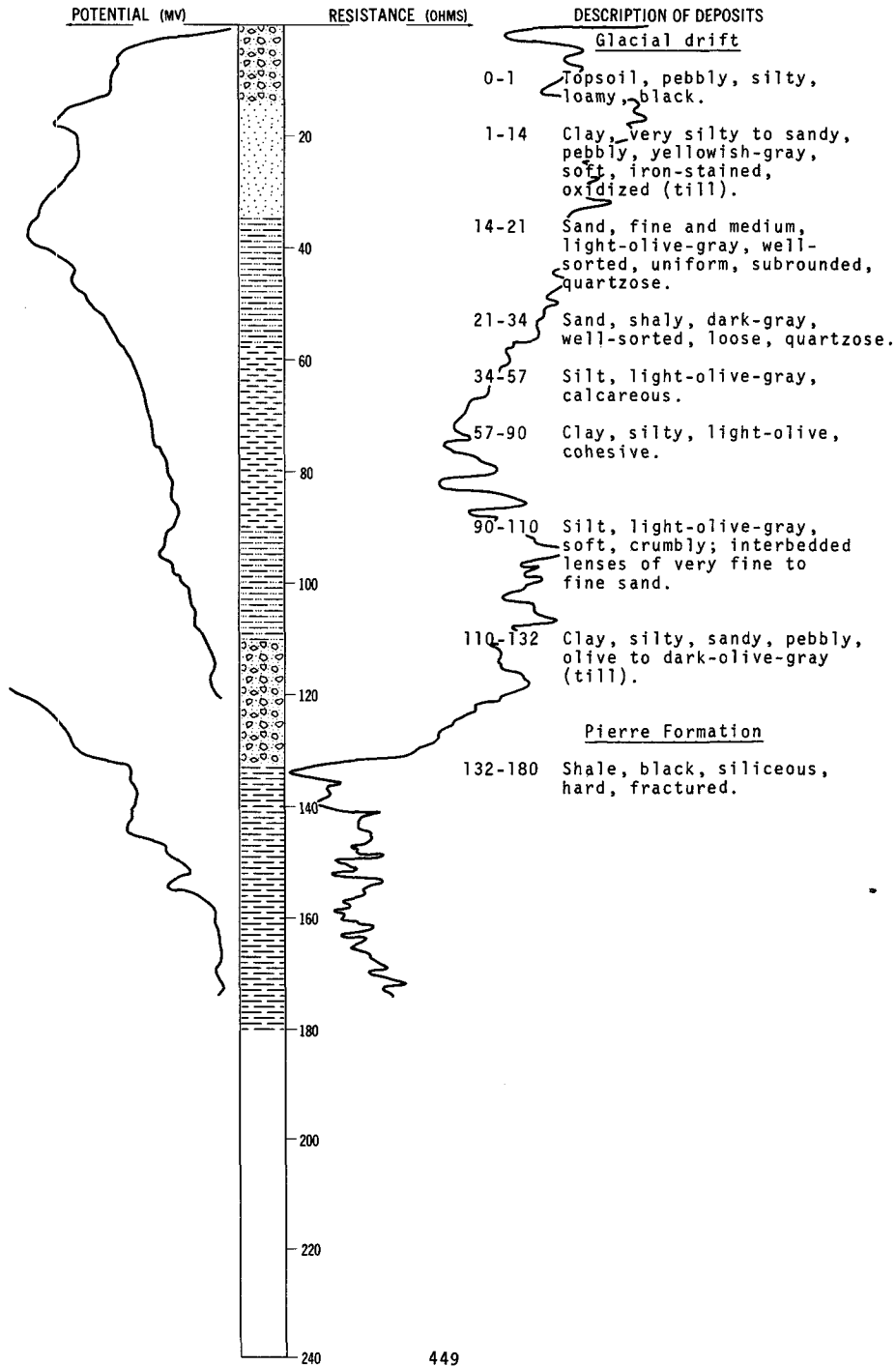
DEPTH: 240
(FT)



LOCATION: 162-63-10CCC
ALTITUDE: 1580
(FT, MSL)

NDSWC 4176

DATE DRILLED: September 1970
DEPTH: 180
(FT)



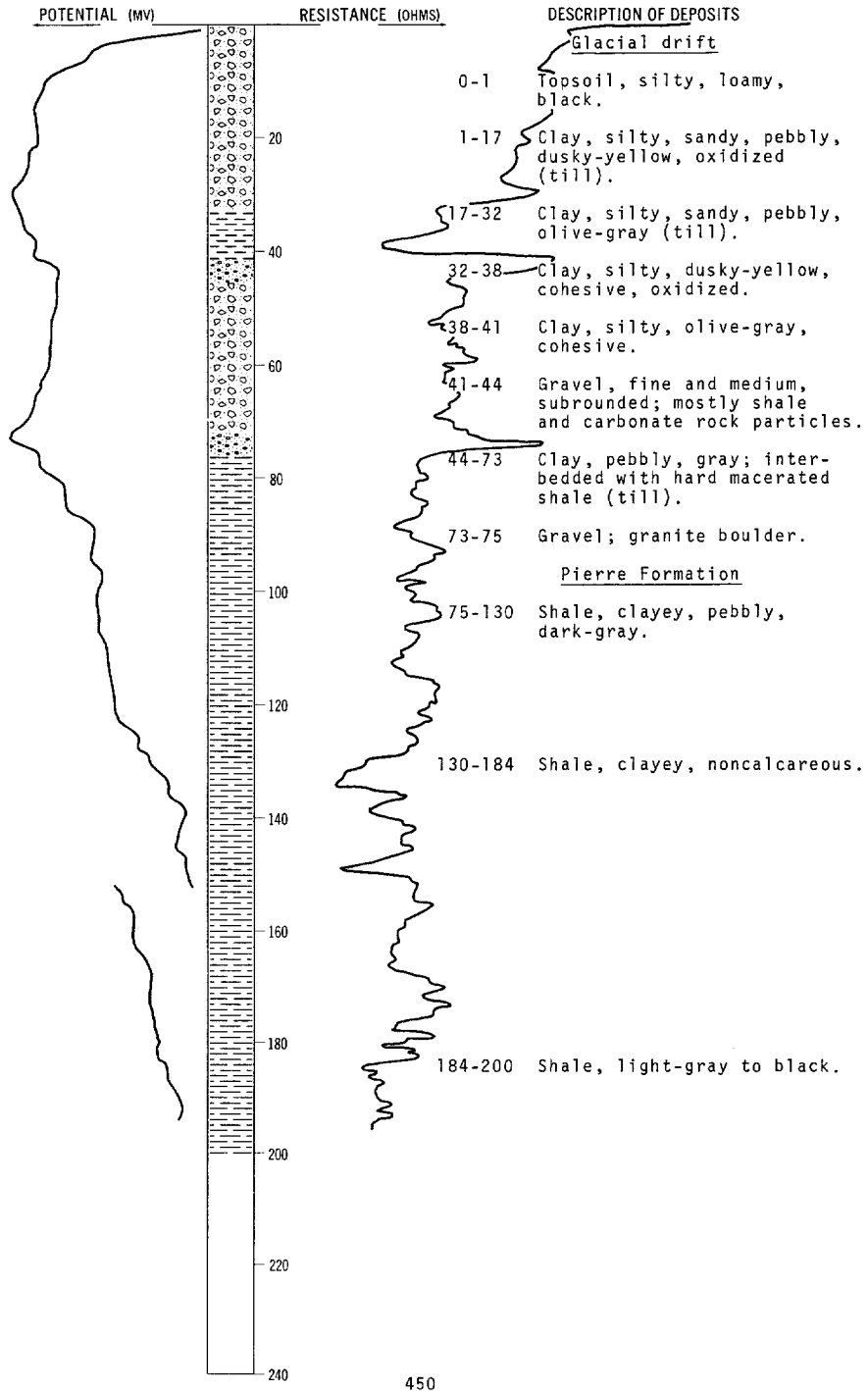
LOCATION: 162-63-13CDD

NDSWC 4174

DATE DRILLED: September 1970

ALTITUDE: 1572
(FT, MSL)

DEPTH: 200
(FT)

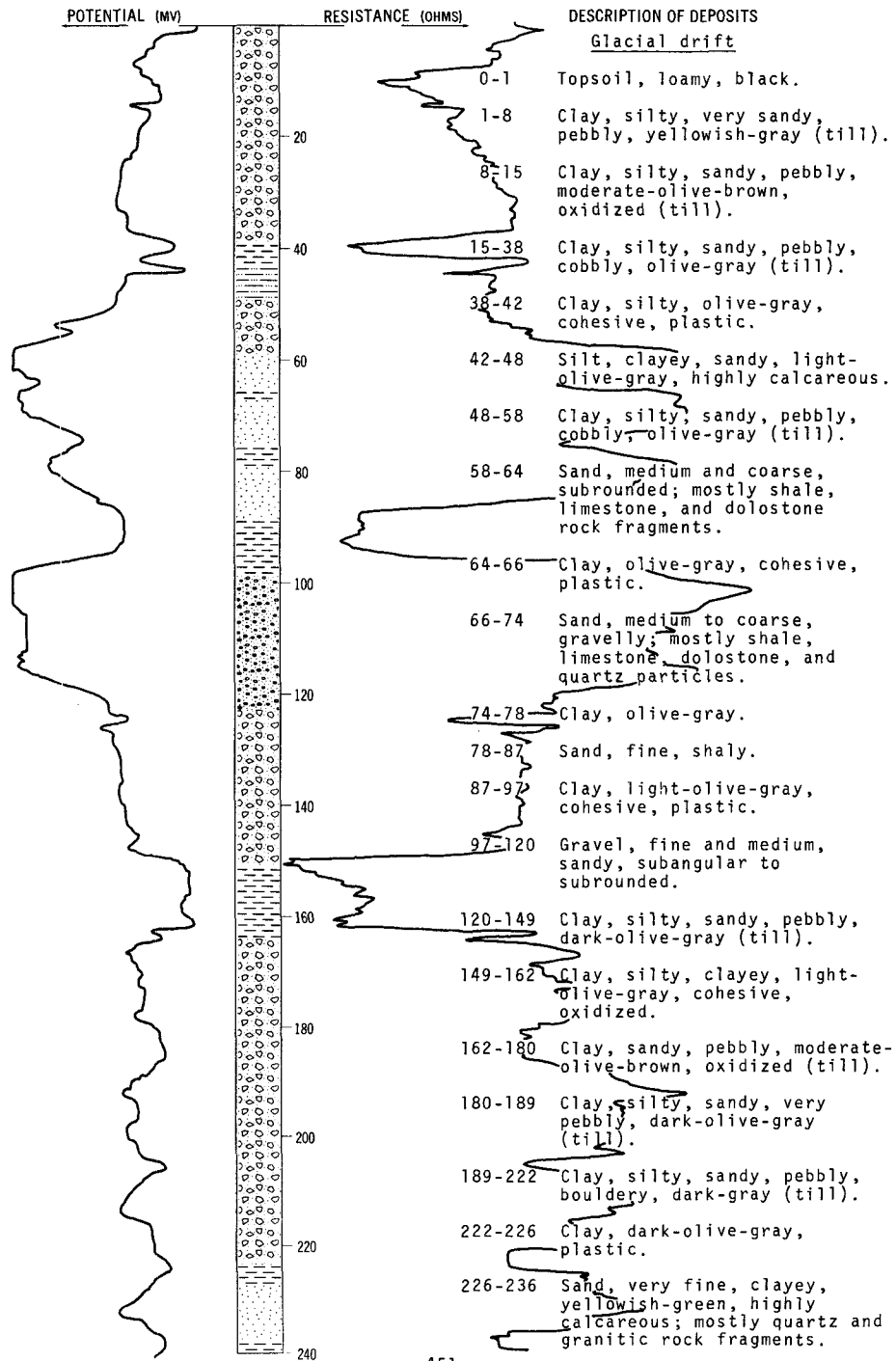


LOCATION: 162-63-15CCC

DATE DRILLED: September 1969

ALTITUDE: 1581
(FT, MSL)

DEPTH: 280
(FT)



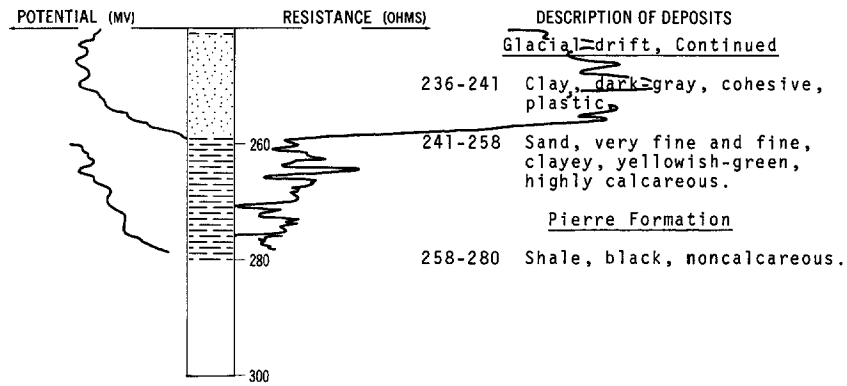
NDSWC 3807, Continued

LOCATION: 162-63-15CCC

DATE DRILLED: September 1969

ALTITUDE: 1581
(FT, MSL)

DEPTH: 280
(FT)



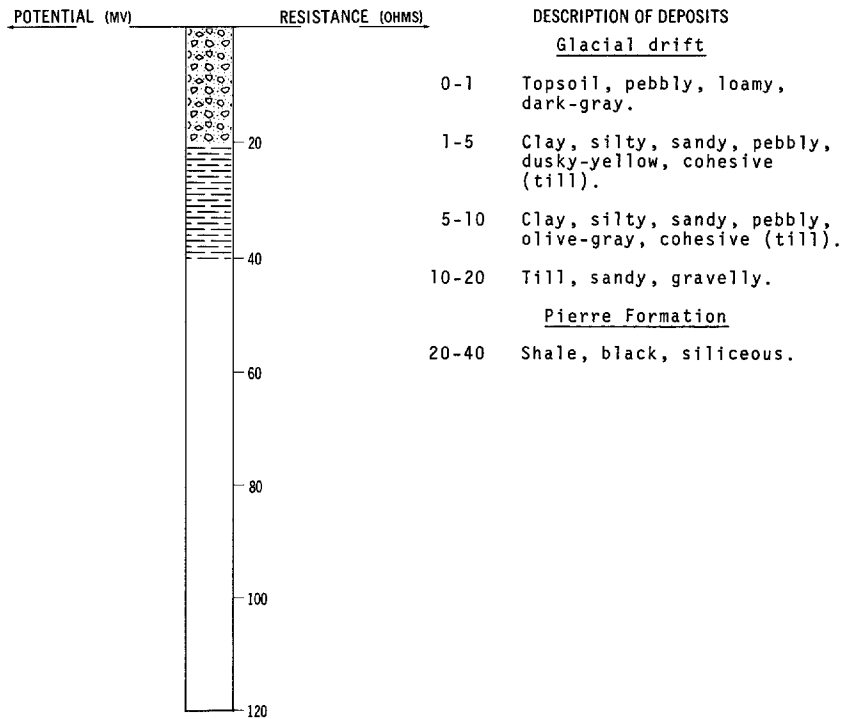
NDSWC 4171

LOCATION: 162-63-20BBB

DATE DRILLED: September 1970

ALTITUDE: 1590
(FT, MSL)

DEPTH: 40
(FT)

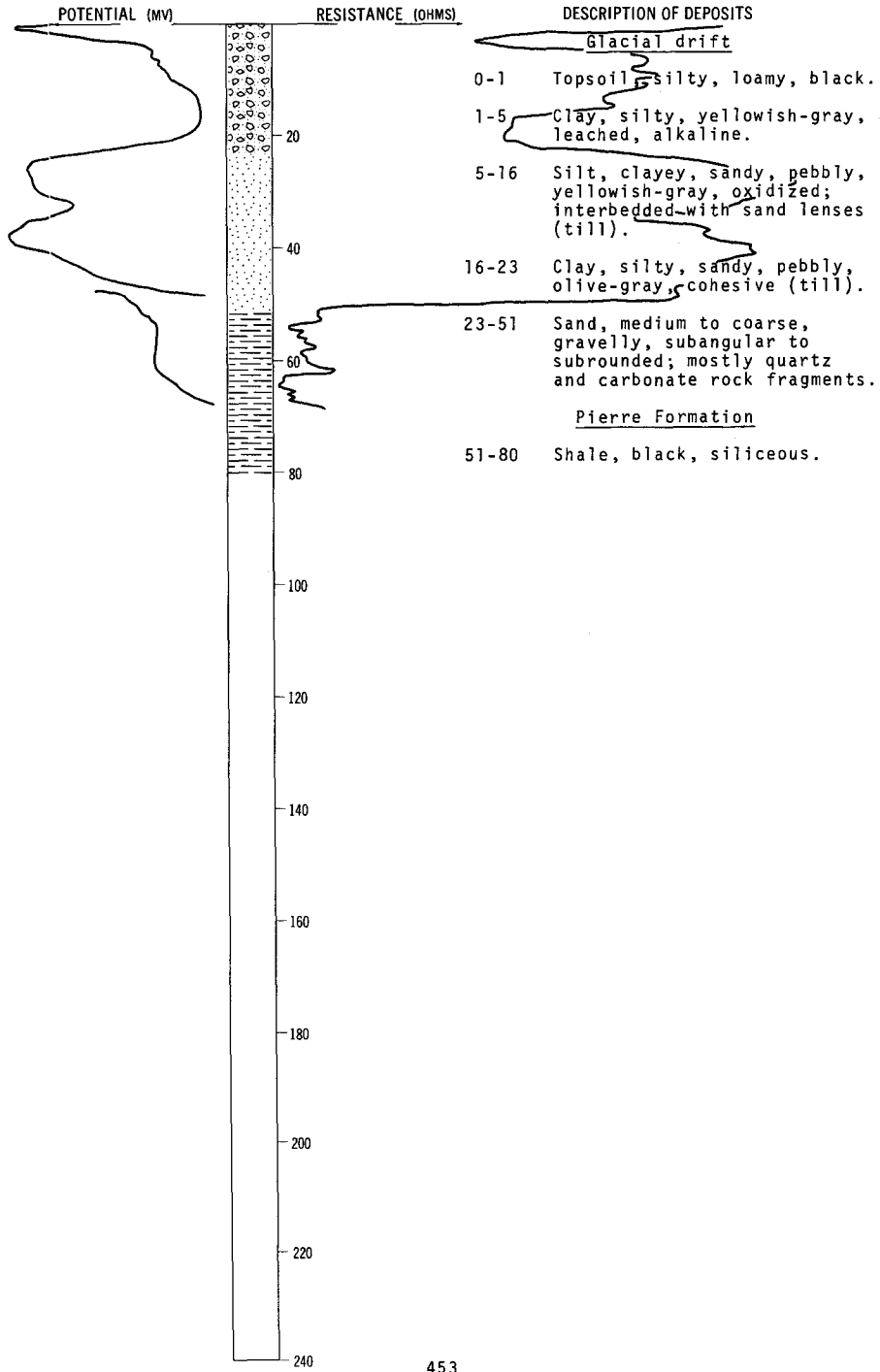


LOCATION: 162-63-21BBB
ALTITUDE: 1594
(FT, MSL)

NDSWC 4172

DATE DRILLED: September 1970

DEPTH: 80
(FT)

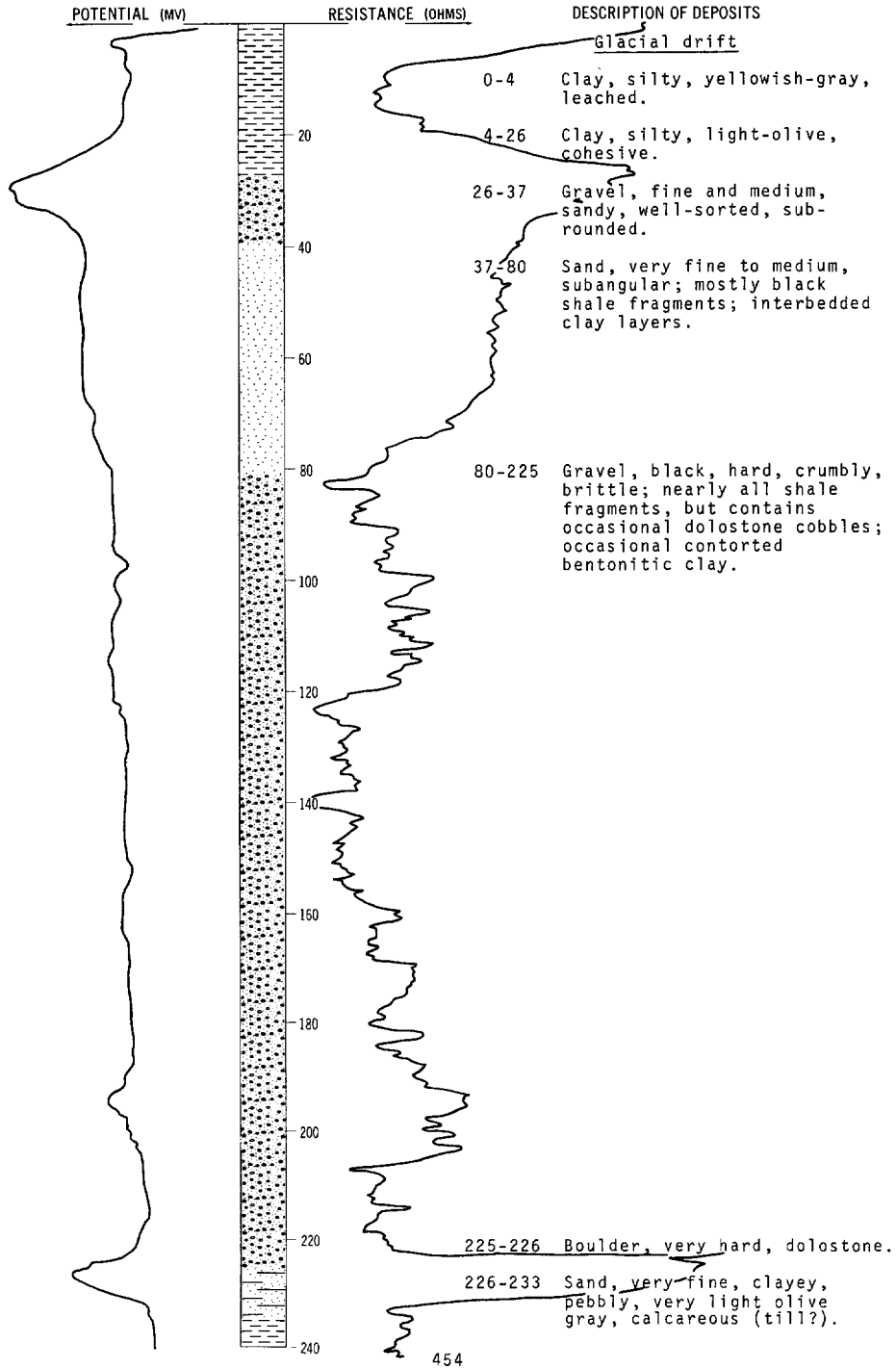


LOCATION: 162-63-22AAA
ALTITUDE: 1580
(FT, MSL)

NDSWC 4173

DATE DRILLED: September 1970

DEPTH: 430
(FT)

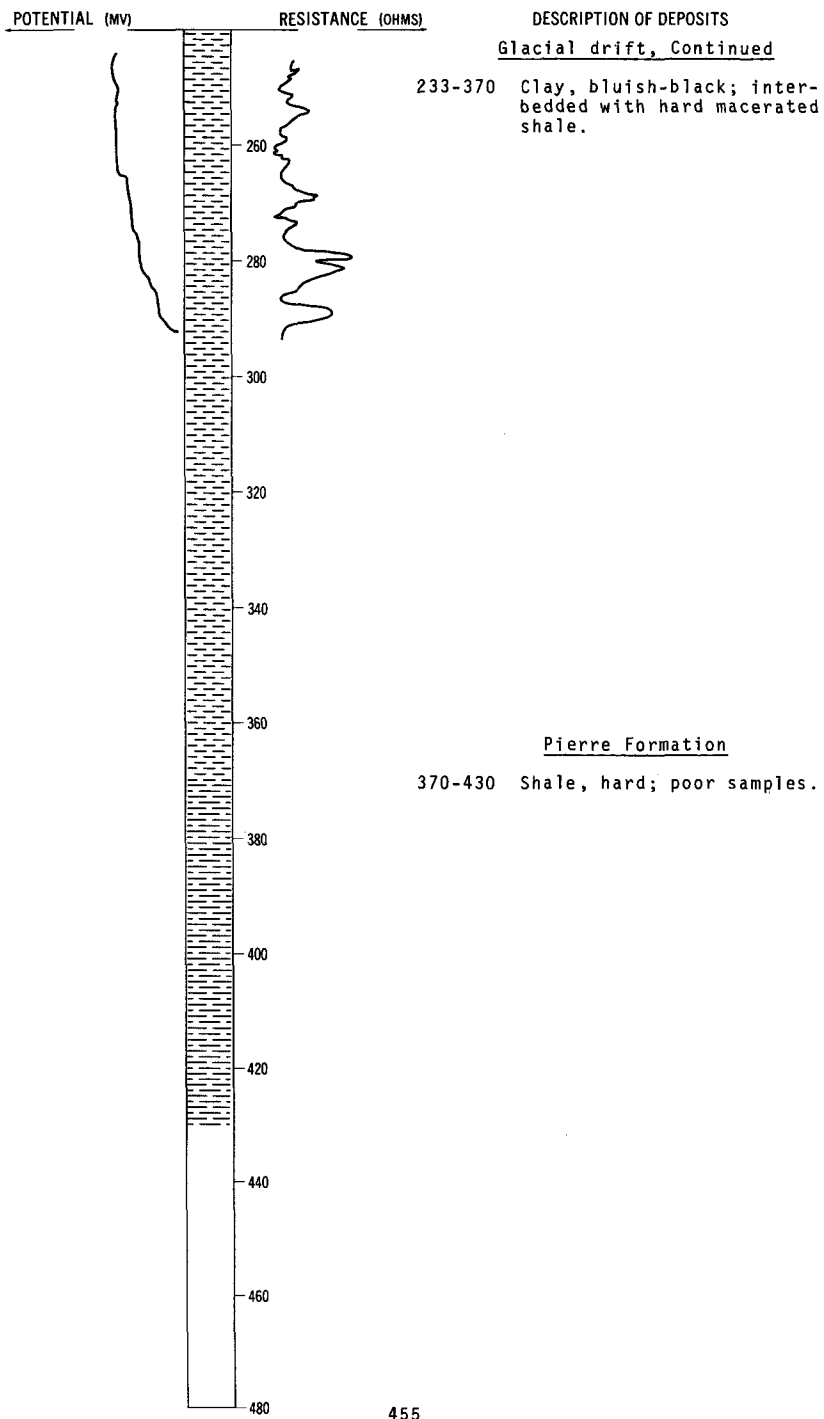


LOCATION: 162-63-22AAA
ALTITUDE: 1580
(FT, MSL)

NDSWC 4173, Continued

DATE DRILLED: September 1970

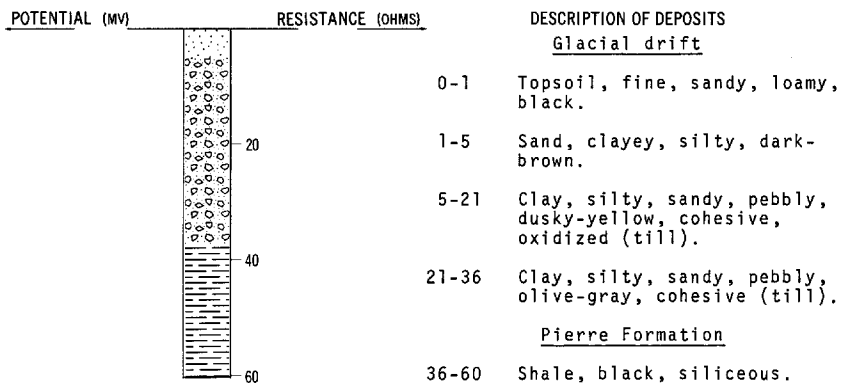
DEPTH: 430
(FT)



LOCATION: 162-63-26DDD
 ALTITUDE: 1575
 (FT, MSL)

NDSWC 4154

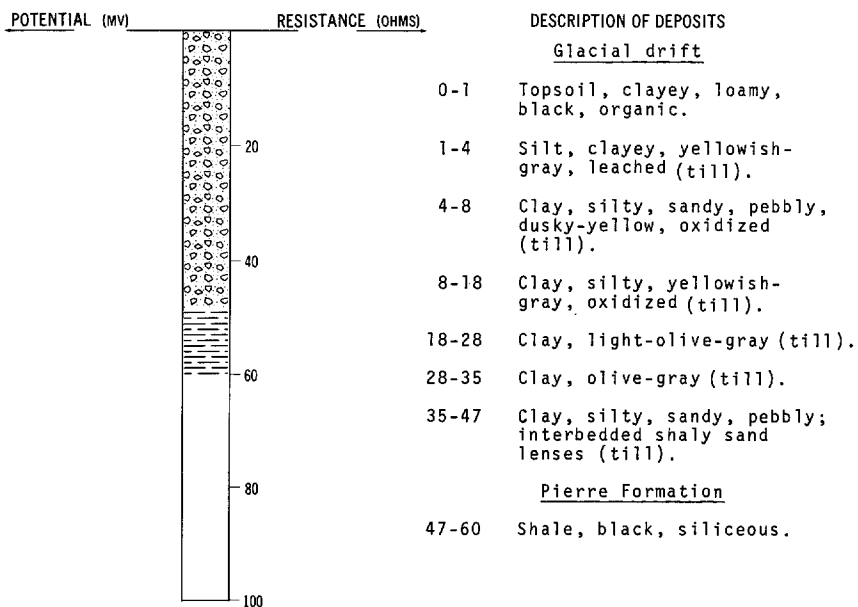
DATE DRILLED: August 1970
 DEPTH: 60
 (FT)



LOCATION: 162-63-28AAA
 ALTITUDE: 1580
 (FT, MSL)

NDSWC 4157

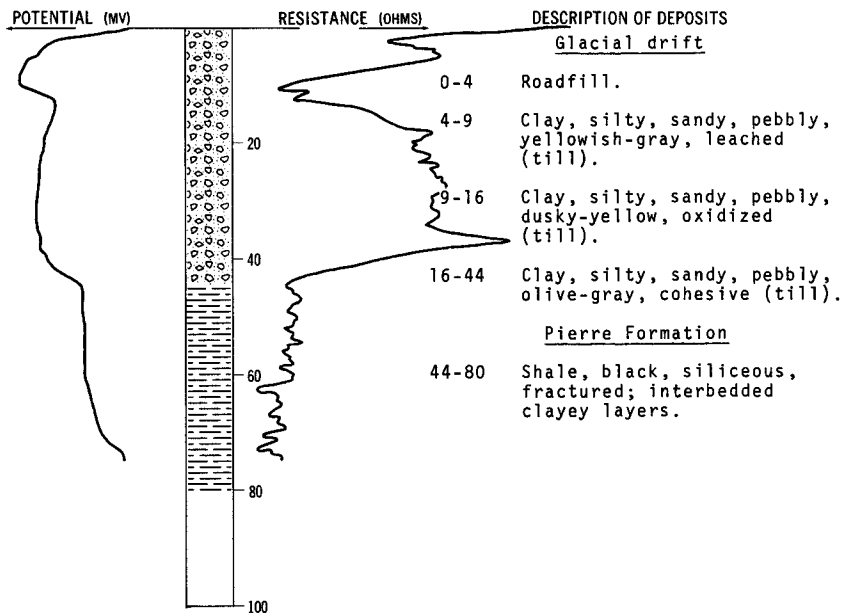
DATE DRILLED: August 1970
 DEPTH: 60
 (FT)



LOCATION: 162-63-29CCC
 ALTITUDE: 1600
 (FT, MSL)

NDSWC 4158

DATE DRILLED: August 1970
 DEPTH: 80
 (FT)



162-63-30ABB
 NDGS Cav-69-52

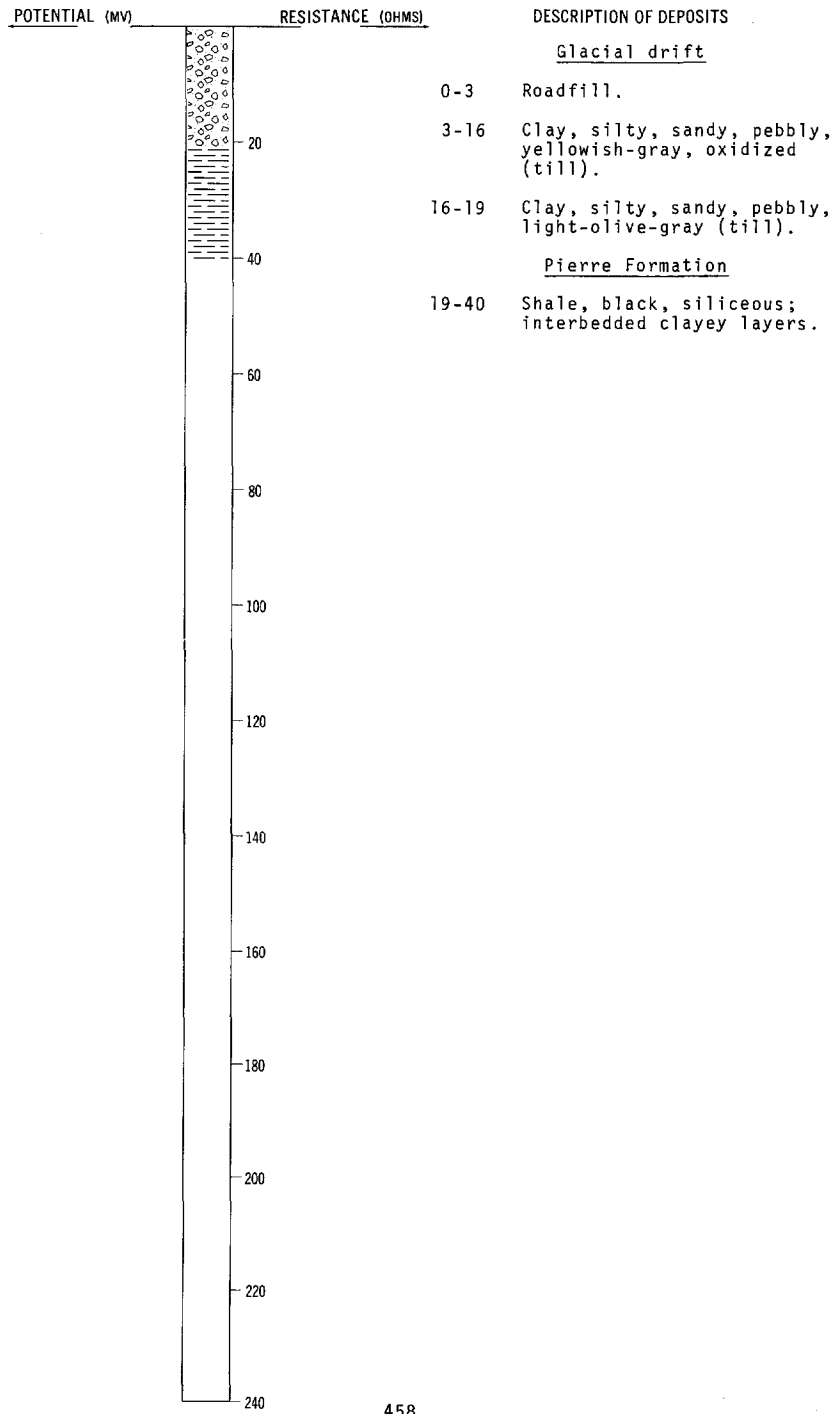
Altitude: 1589 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	4	4
	Till, shaly, pebbly, dark-yellowish-brown; about 50 percent shale particles-----	11	15
	Till, shaly, sandy, pebbly, dusky-yellowish-brown; more than 75 percent shale particles-----	4	19
	Till, pebbly, dark-gray, dense-----	5	24

LOCATION: 162-63-33AAD
ALTITUDE: 1587
(FT, MSL)

NDSWC 4155

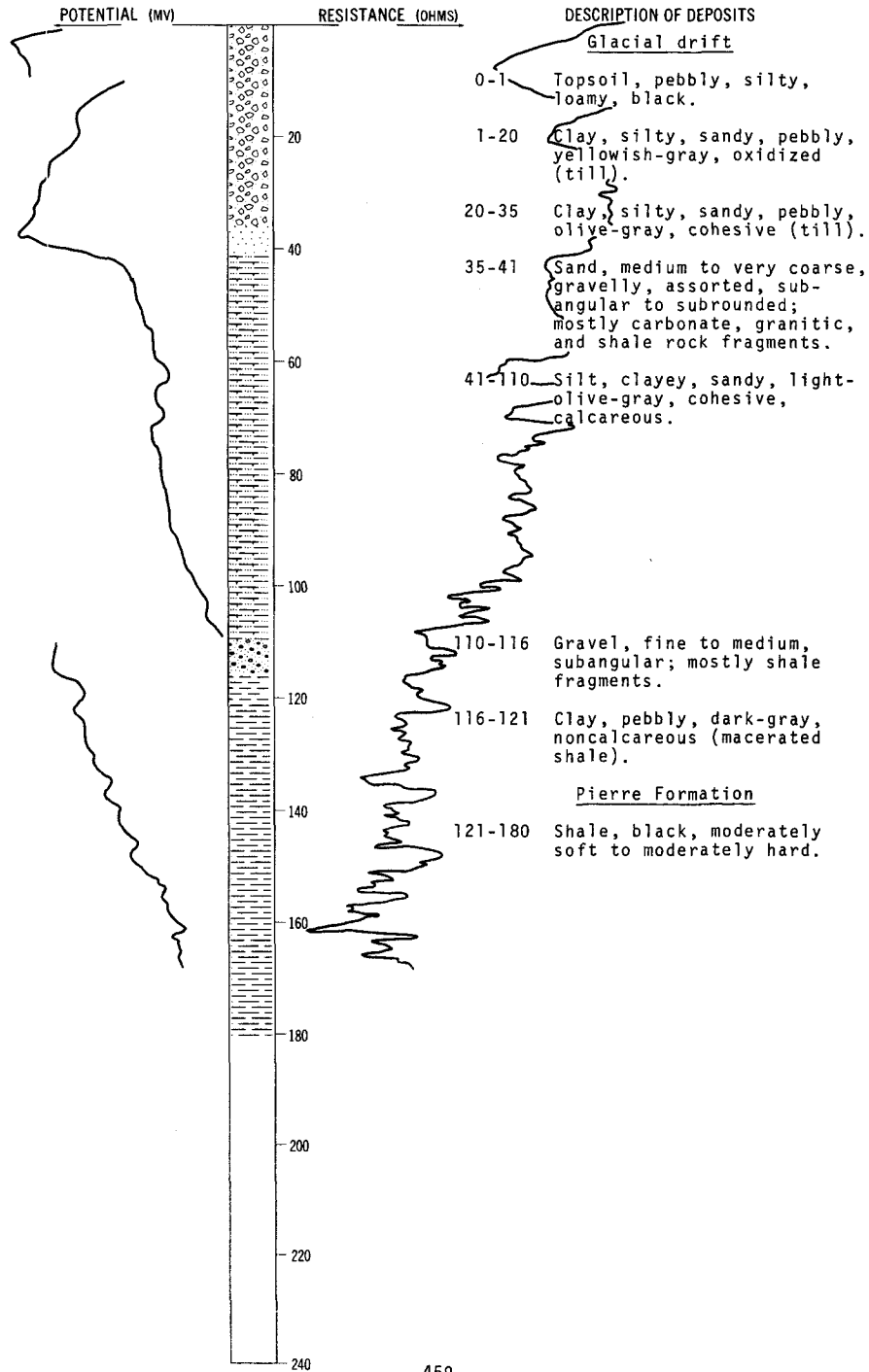
DATE DRILLED: August 1970
DEPTH: 40
(FT)



LOCATION: 162-64-5BBB
ALTITUDE: 1618
(FT, MSL)

NDSWC 4164

DATE DRILLED: August 1970
DEPTH: 180
(FT)



162-64-6CCC
NDGS Cav-69-50

Altitude: 1627 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	0.5	0.5
	Till, shaly, pebbly, dark-yellowish-brown; about 75 percent shale particles-----	14.5	15
	Till; same as above except dusky yellowish brown-----	7	22
	Till; same as above except dark gray-----	9	31
	Clay, saturated-----	2	33
	Clay, pebbly, dense, saturated-----	6	39

162-64-7DDD
NDGS Cav-69-49

Altitude: 1627 feet

Glacial drift:			
	Topsoil-----	0.5	0.5
	Till, shaly, slightly sandy, dark-yellowish- brown-----	14.5	15
	Till, dusky-yellowish-brown, saturated-----	2	17
	Till, dense-----	2	19

162-64-9AAA1
(Log from C. A. Simpson & Son)

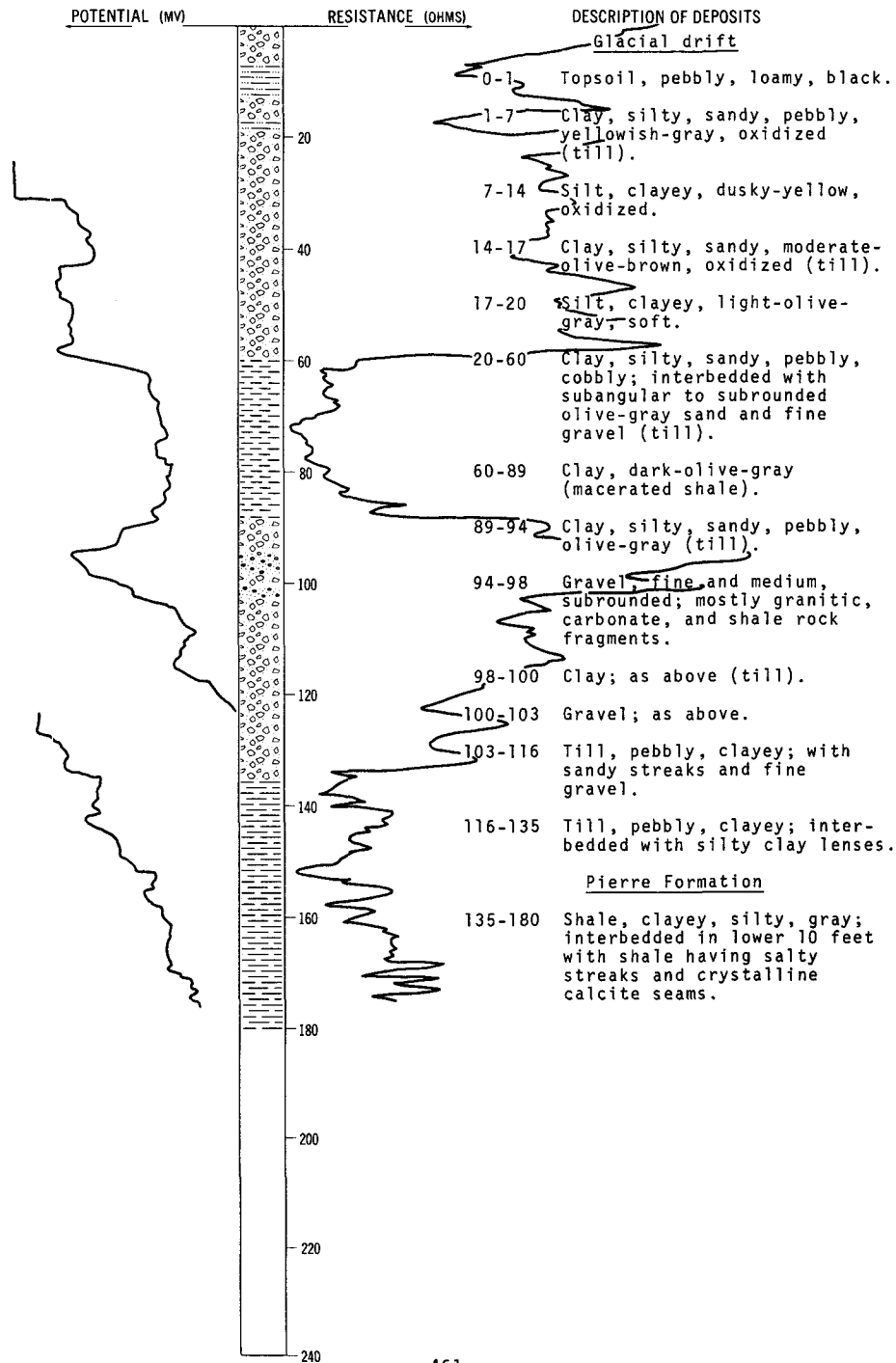
Altitude: 1602 feet

	"Cellar"-----	5	5
Glacial drift:			
	Clay, rocky, yellow-----	22	27
	Sand; blue clay-----	36	63
Pierre Formation:			
	Shale-----	59	122

LOCATION: 162-64-11CCC
 ALTITUDE: 1600
 (FT, MSL)

NDSWC 3806

DATE DRILLED: September 1969
 DEPTH: 180
 (FT)



162-64-14AAA
NDGS Cav-69-48

Altitude: 1591 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	0.5	0.5
	Sand, gravelly-----	.5	1
	Till, shaly, pebbly, slightly sandy, dark-yellowish-brown; more than 50 percent shale particles-----	10	11
	Till; same as above except dusky yellowish brown-----	5	16
	Till; same as above except dark gray-----	10	26
	Gravel, coarse, clayey, subangular to angular, saturated-----	20	46
	Sand, fine to medium, dry-----	3	49

162-64-14DCC
(Log from C. A. Simpson & Son)

Altitude: 1604 feet

	"Fill"-----	6	6
Glacial drift:			
	Clay, sandy, yellow-----	12	18
	Clay, blue-----	24	42
	Gravel, coarse, clayey-----	13	55
	Clay, blue-----	17	72
	Sand-----	45	117
Pierre Formation(?):			
	Shale, crumbly-----	50	167

162-64-16DAB
(Log from C. A. Simpson & Son)

Altitude: 1618 feet

Glacial drift:			
	Topsoil-----	1	1
	Clay, yellow-----	21	22
	Clay, blue-----	33	55
	Clay, sandy, blue-----	47	102
	Sand, fine-----	27	129
	Gravel, coarse; fine sand-----	7	136
	Clay, gravelly, blue-----	9	145
Pierre Formation:			
	Shale-----	46	191

162-64-16DAD
(Log from C. A. Simpson & Son)

Altitude: 1619 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Clay, sandy, rocky, yellow-----	20	22
	Clay, blue-----	57	79
	Clay, gravelly, blue-----	29	108
	Sand, fine-----	41	149
	Gravel, water-bearing-----	23	172
	Clay, blue-----	5	177
Pierre Formation:			
	Shale-----	29	206

162-64-16DDA
(Log from C. A. Simpson & Son)

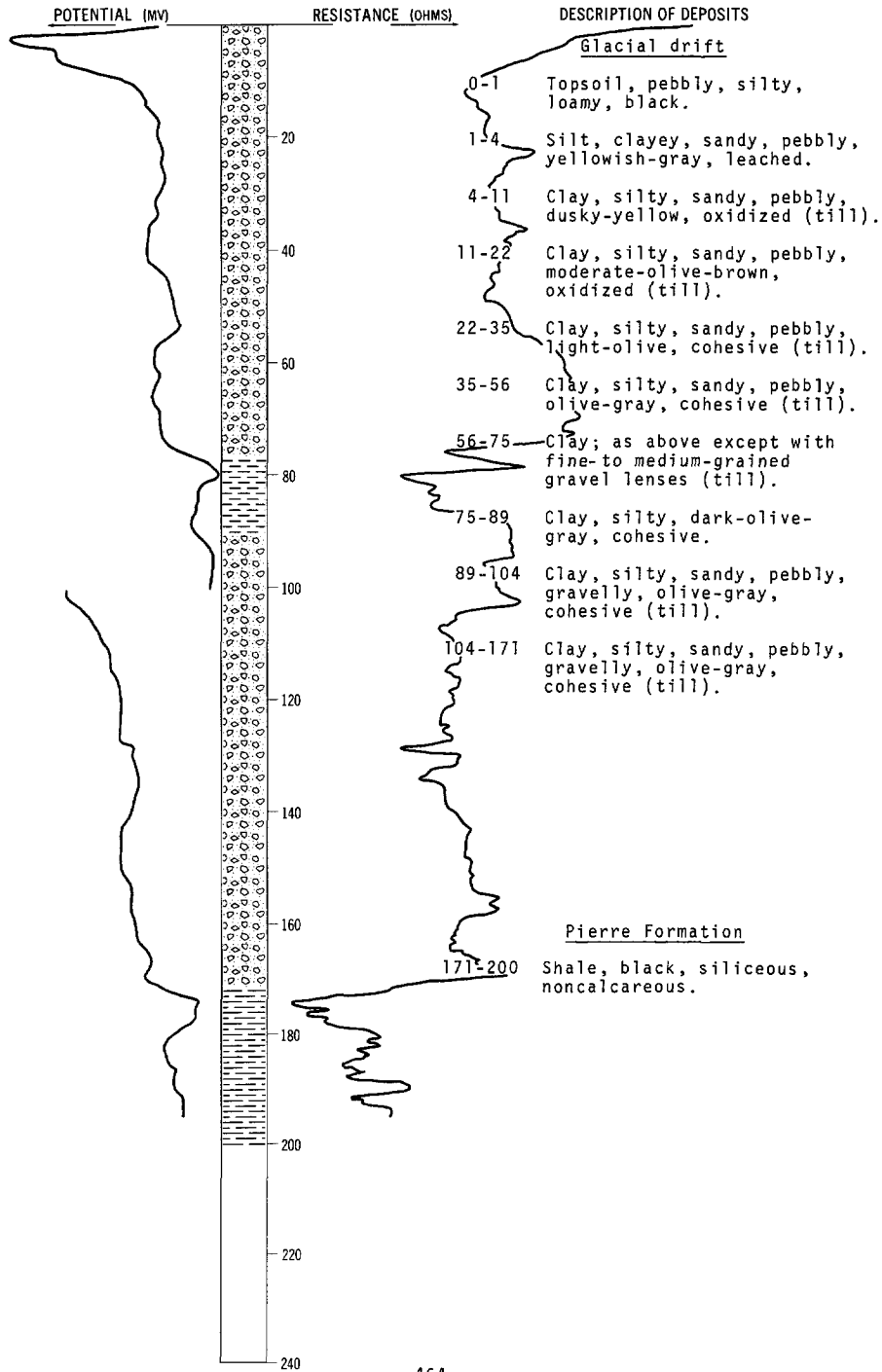
Altitude: 1615 feet

Glacial drift:			
	Topsoil-----	1	1
	Clay, yellow-----	21	22
	Clay, rocky, blue-----	26	48
	Sand-----	22	70
	Clay, blue-----	42	112
	Sand, clean-----	35	147
Pierre Formation:			
	Shale-----	33	180

LOCATION: 162-64-20BBB
ALTITUDE: 1625
(FT, MSL)

NDSWC 4162

DATE DRILLED: August 1970
DEPTH: 200
(FT)



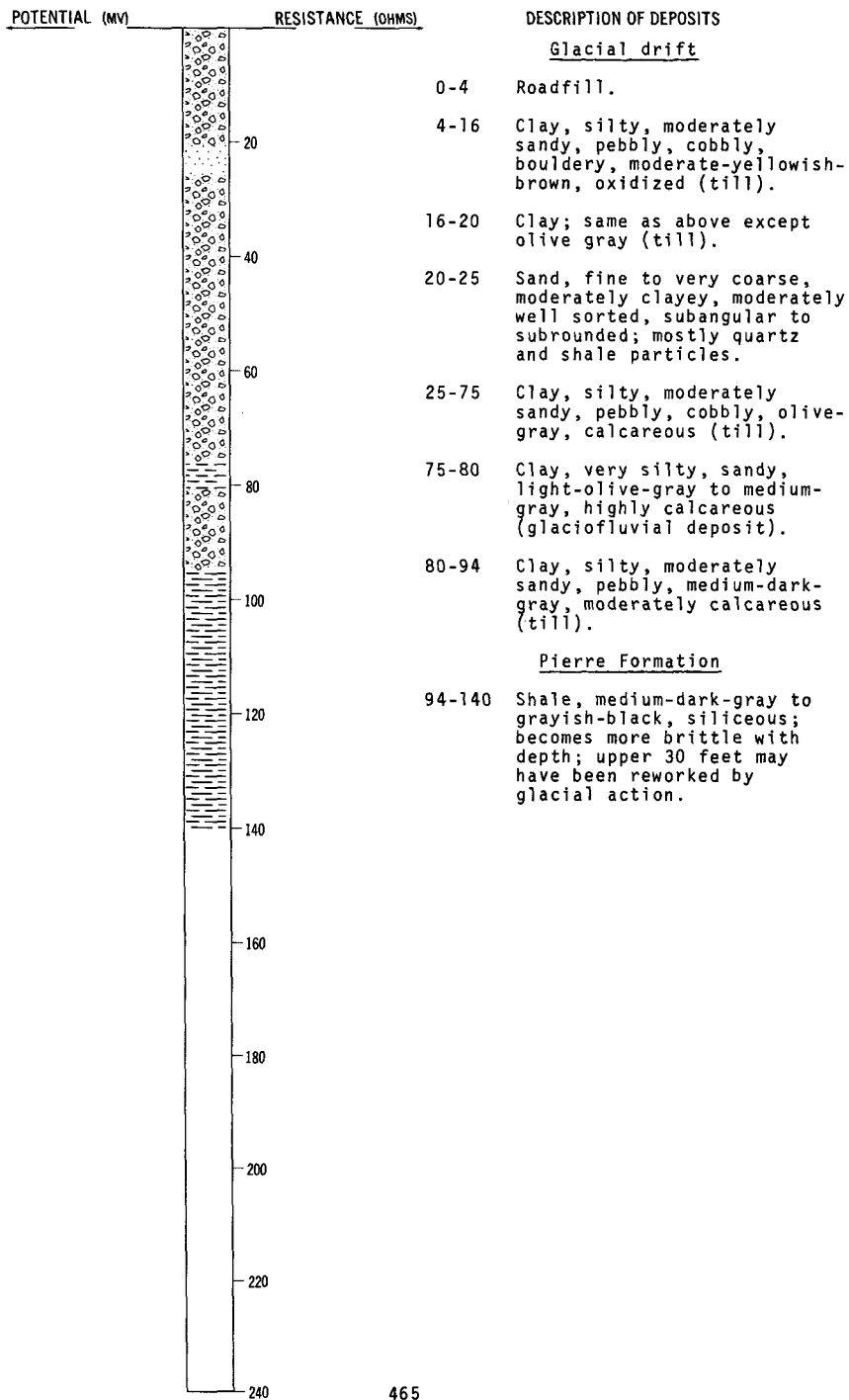
LOCATION: 162-64-258BB

NDSWC 5981

DATE DRILLED: June 1971

ALTITUDE: 1607
(FT, MSL)

DEPTH: 140
(FT)



162-64-30CCC
 NDGS Cav-69-51

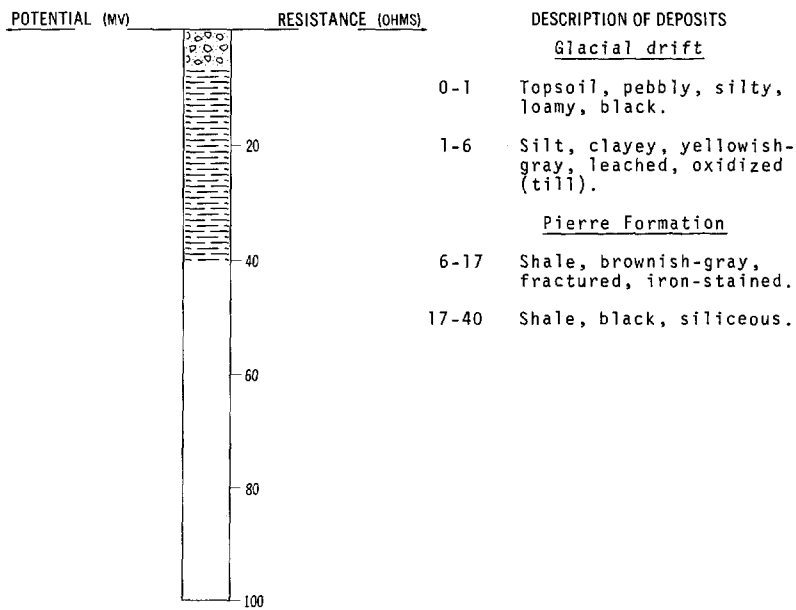
Altitude: 1608 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	4.5	4.5
	Till, shaly, slightly sandy, pebbly, dark-yellowish-brown; more than 50 percent shale particles-----	6.5	11
	Till, saturated-----	2.5	13.5
	Till, pebbly, dark-gray, dense-----	.5	14

LOCATION: 162-64-33AAA1
 ALTITUDE: 1630
 (FT, MSL)

NDSWC 4160

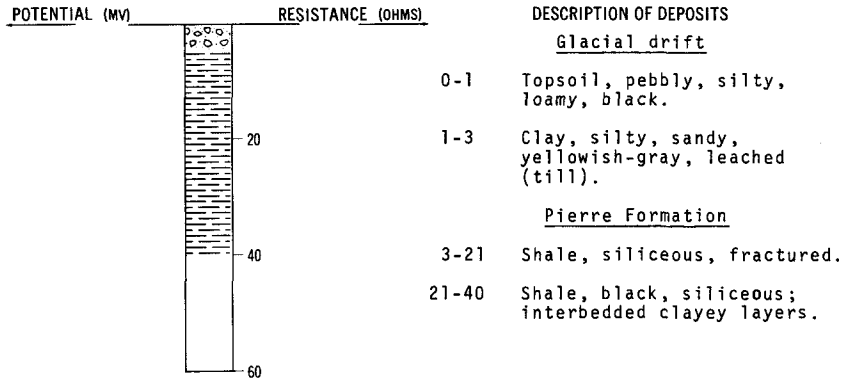
DATE DRILLED: August 1970
 DEPTH: 40
 (FT)



LOCATION: 162-64-36BBB
 ALTITUDE: 1619
 (FT, MSL)

NDSWC 4159

DATE DRILLED: August 1970
 DEPTH: 40
 (FT)



163-51-5DBA
 (Log from North Dakota State Highway Department)

Altitude: 794 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, black (topsoil)-----	1	1
	Clay, silty, light-brown, pliable-----	16	17
	Clay, dark-gray, fairly soft-----	30	47
	Clay, silty, dark-gray, fairly soft-----	88	135
	Clay, gravelly, dark-gray (till)-----	4	139

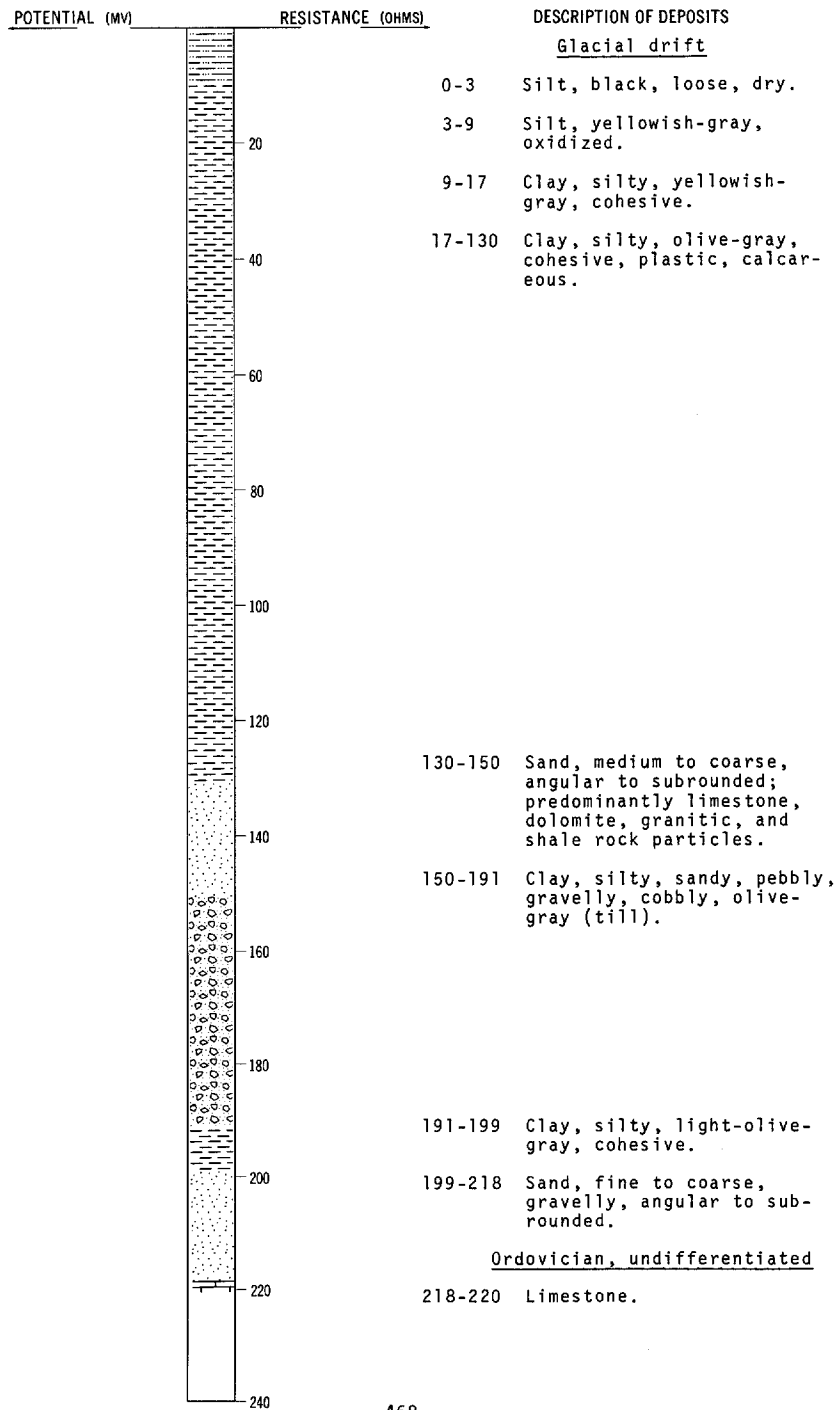
LOCATION: 163-52-24BAB

NDSWC 3860

DATE DRILLED: October 1969

ALTITUDE: 802
(FT, MSL)

DEPTH: 220
(FT)



163-53-6CBB
(USGS 6)

Altitude: 823 feet

<u>Geologic</u> <u>source</u>	<u>Material</u>	<u>Thickness</u> <u>(feet)</u>	<u>Depth</u> <u>(feet)</u>
Glacial drift:			
	Soil, silty, black-----	2	2
	Silt, grayish-tan-----	15	17
	Clay, silty, gray-----	10	27
	Clay, slightly silty, dark-gray-----	25	52

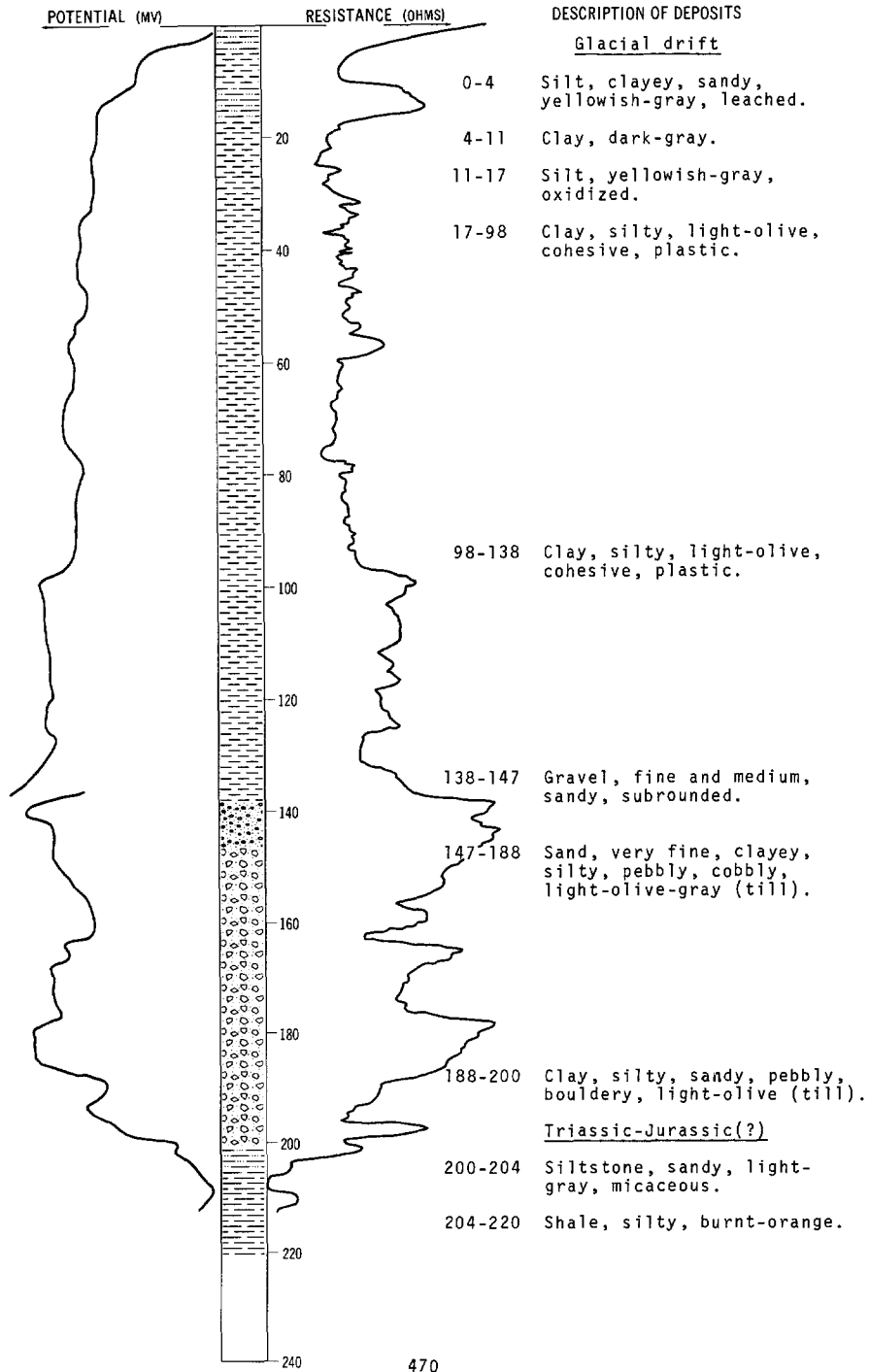
LOCATION: 163-53-7BBB

NDSWC 4230

DATE DRILLED: September 1970

ALTITUDE: 830
(FT, MSL)

DEPTH: 220
(FT)



163-53-20CCD
 NDGS Pem-70-36

Altitude: 830 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Roadfill-----	5	5
	Clay, silty, light-greenish-brown, well-sorted, dense-----	10	15
	Clay, silty, slightly pebbly, gray-----	17	32
	Clay, silty, pebbly, gray, plastic, saturated; pebbles are subangular to subrounded-----	2	34

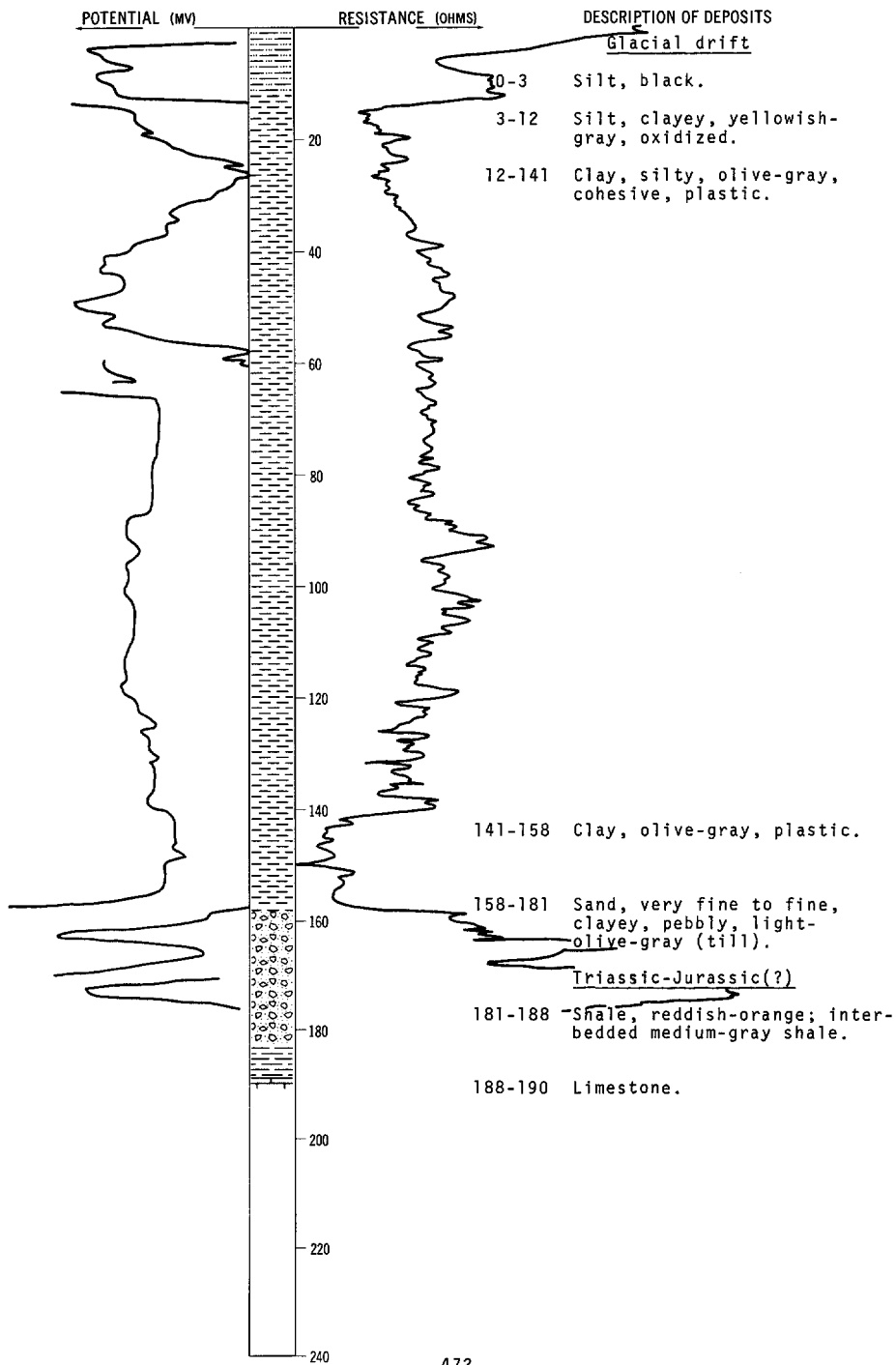
LOCATION: 163-53-23CBB

NDSWC 3861

DATE DRILLED: October 1969

ALTITUDE: 813
(FT, MSL)

DEPTH: 190
(FT)



163-54-12AAA
(USGS 7)

Altitude: 829 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, silty, black-----	2	2
	Silt, clayey, grayish-tan to buff-----	35	37
	Clay, dark-gray and tan-streaked, partially oxidized-----	60	97

163-54-12ADD
(USGS 8)

Altitude: 829 feet

Glacial drift:			
	Soil, silty, black-----	3	3
	Silt, grayish-tan-----	8	11
	Silt, clayey, buff-----	8	19
	Clay, silty, dark-gray-----	18	37

163-54-13AAA
(USGS 13)

Altitude: 829 feet

Glacial drift:			
	Soil, silty, black-----	1.5	1.5
	Silt, clayey, light-gray; intercalated with beds of fine sand-----	5.5	7
	Silt, clayey, tan-----	17	24
	Clay, tan and gray, spotty-----	15	39
	Clay, silty, dark-gray-----	3	42

163-54-13AAD
(USGS 14)

Altitude: 829 feet

Glacial drift:			
	Soil, silty, black-----	1	1
	Silt; tan clay-----	5	6
	Clay, tan-----	1	7
	Silt, tan; gray clay-----	1	8
	Silt, clayey, light-olive-brown-----	19	27
	Clay, gray and tan-----	5	32
	Clay, silty, dark-gray-----	5	37

163-54-13DAA
(USGS 15)

Altitude: 829 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, silty, black-----	2	2
	Silt, light-tan-----	4	6
	Silt; gray clay-----	1	7
	Silt; very dark gray clay; traces of shaly sand and gravel-----	5	12
	Silt, clayey, shaly, pebbly, tan and black---	5	17
	Silt, tan; rather coarse spotty material with some sand grains and gypsum-----	20	37
	Clay, silty, dark-gray-----	5	42

163-54-16BCB
(USGS 17)

Altitude: 855 feet

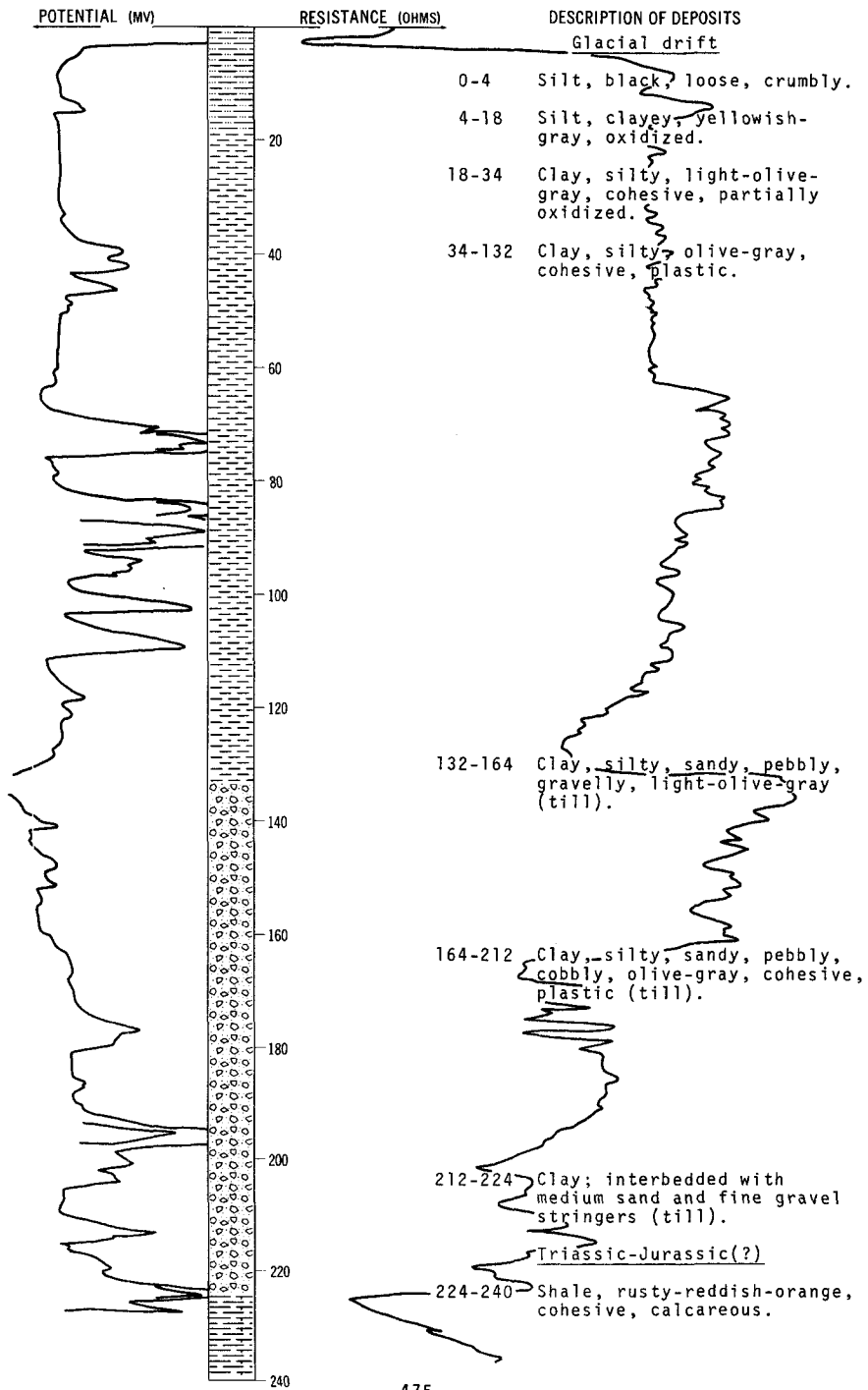
Glacial drift:			
	Soil, sandy, black-----	1	1
	Silt, sandy, tan-----	5	6
	Sand, very fine, light-brown; clay and silt-----	6	12
	Sand, very fine, light-tan; clay and silt----	15	27
	Sand, very fine, gray; clay and silt-----	4	31
	Silt, clayey, sandy, gray-----	6	37
	Sand, very fine, grayish-tan; clay and silt-----	17	54
	Clay, silty, dark-gray-----	8	62

LOCATION: 163-54-16DDD

DATE DRILLED: October 1969

ALTITUDE: 842
(FT, MSL)

DEPTH: 240
(FT)



163-54-17AAD
(USGS 18)

Altitude: 853 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, sandy, black-----	4	4
	Sand, silty, grayish-tan; clay-----	20	24
	Silt, clayey, gray and tan-----	12	36
	Clay, silty, dark-gray-----	6	42

163-54-17ADA
(USGS 16)

Altitude: 856 feet

Glacial drift:			
	Soil, sandy, black-----	2.5	2.5
	Sand, very fine, silty, light-brown-----	6.5	9
	Silt; buff clay-----	3	12
	Sand, very fine, light-brown; clay and silt-----	5	17
	Gravel, light-gray; numerous shale pebbles-----	6	23
	Clay, silty, dark-gray-----	9	32

163-54-17BCC1
NDGS Pem-70-3

Altitude: 860 feet

Glacial drift:			
	Topsoil-----	3	3
	Clay, banded, dense-----	2	5
	Sand, fine, clayey, saturated-----	20	25
	Clay, slightly pebbly, gray, plastic, dense-----	9	34

163-54-17BCC2
NDGS Pem-70-2

Altitude: 863 feet

Glacial drift:			
	Roadfill-----	6	6
	Sand, clayey, silty, brown-----	6	12
	Sand, fine, silty, clayey-----	4	16
	Sand, fine, clayey, saturated-----	13	29
	Sand, fine, slightly clayey-----	7	36
	Clay, pebbly, dark-gray, very plastic, dense, saturated-----	13	49

163-54-18ADD
NDGS Pem-70-1

Altitude: 860 feet

Glacial drift:			
	Silt, clayey, black-----	5	5
	Clay, silty, tan, saturated-----	14	19
	Silt, clayey, sandy, saturated-----	6	25
	Clay, dark-brown to gray, plastic, dense-----	4	29

163-54-27CCC
USBR 419

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	1	1
	Loam, silty-----	1	2
	Sand, very fine, loamy-----	1	3
	Loam, clayey, silty-----	2	5
	Clay-----	3	8

163-54-30CCC
USBR 420

Altitude:

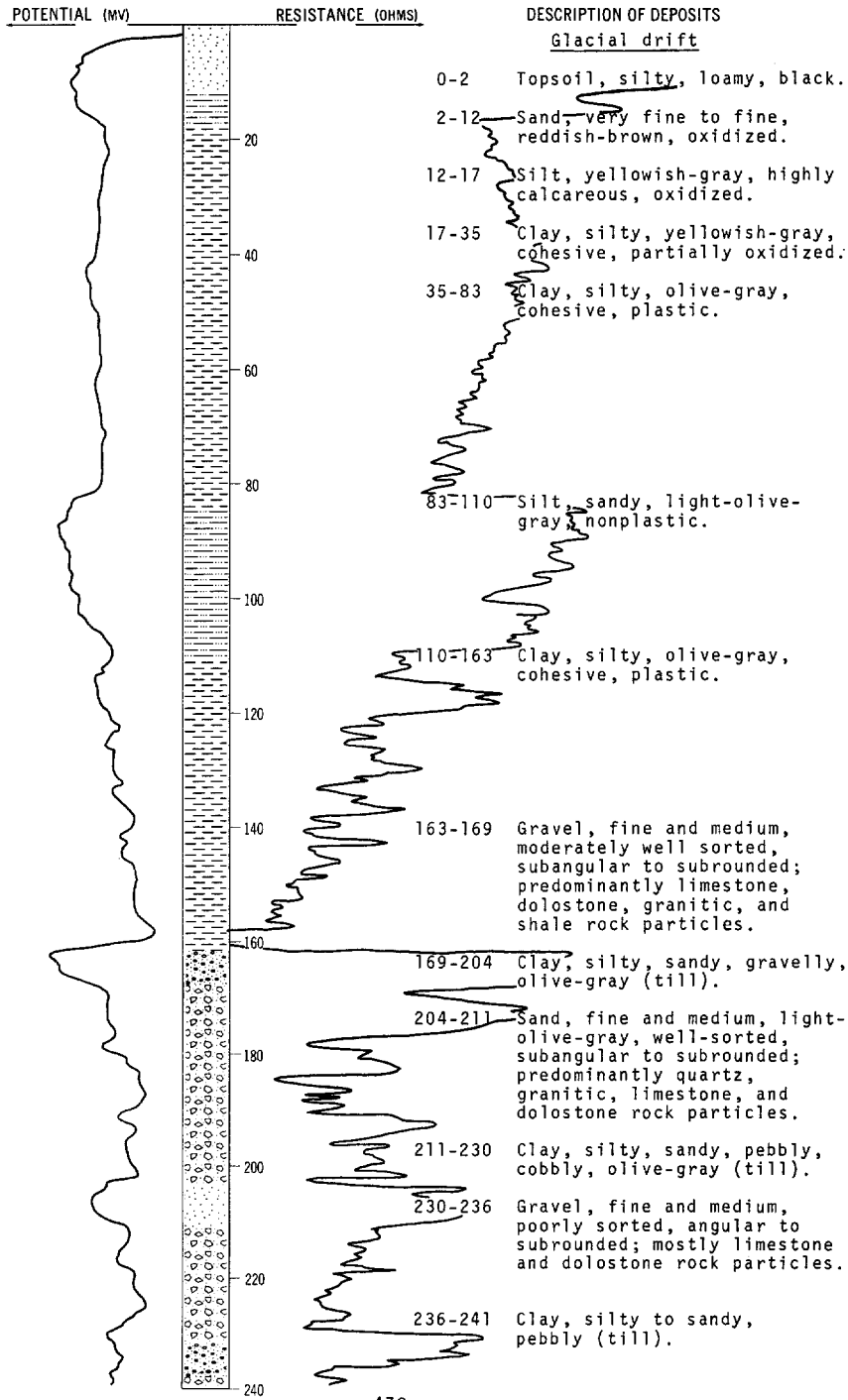
Glacial drift:			
	Loam, sandy-----	1	1
	Loam, silty-----	5	6
	Clay-----	12	18

LOCATION: 163-55-1CCD

DATE DRILLED: October 1969

ALTITUDE: 871
(FT. MSL)

DEPTH: 280
(FT)

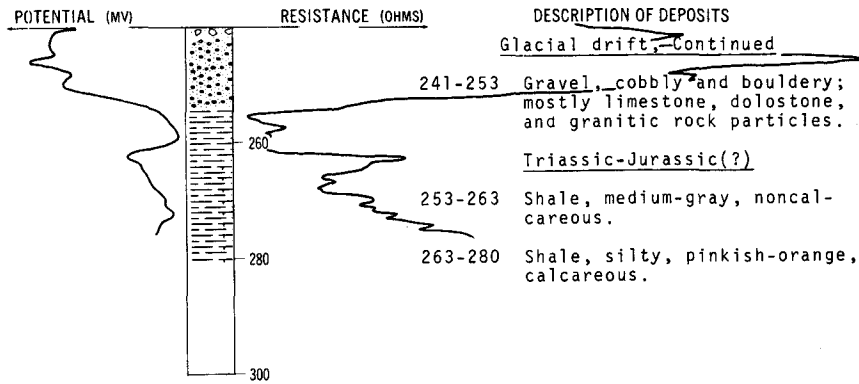


LOCATION: 163-55-1CCD

DATE DRILLED: October 1969

ALTITUDE: 877
(FT, MSL)

DEPTH: 280
(FT)



163-55-3CCC
USBR

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, silty-----	11	11
	Clay-----	4	15

163-55-4CBC
USBR DH1

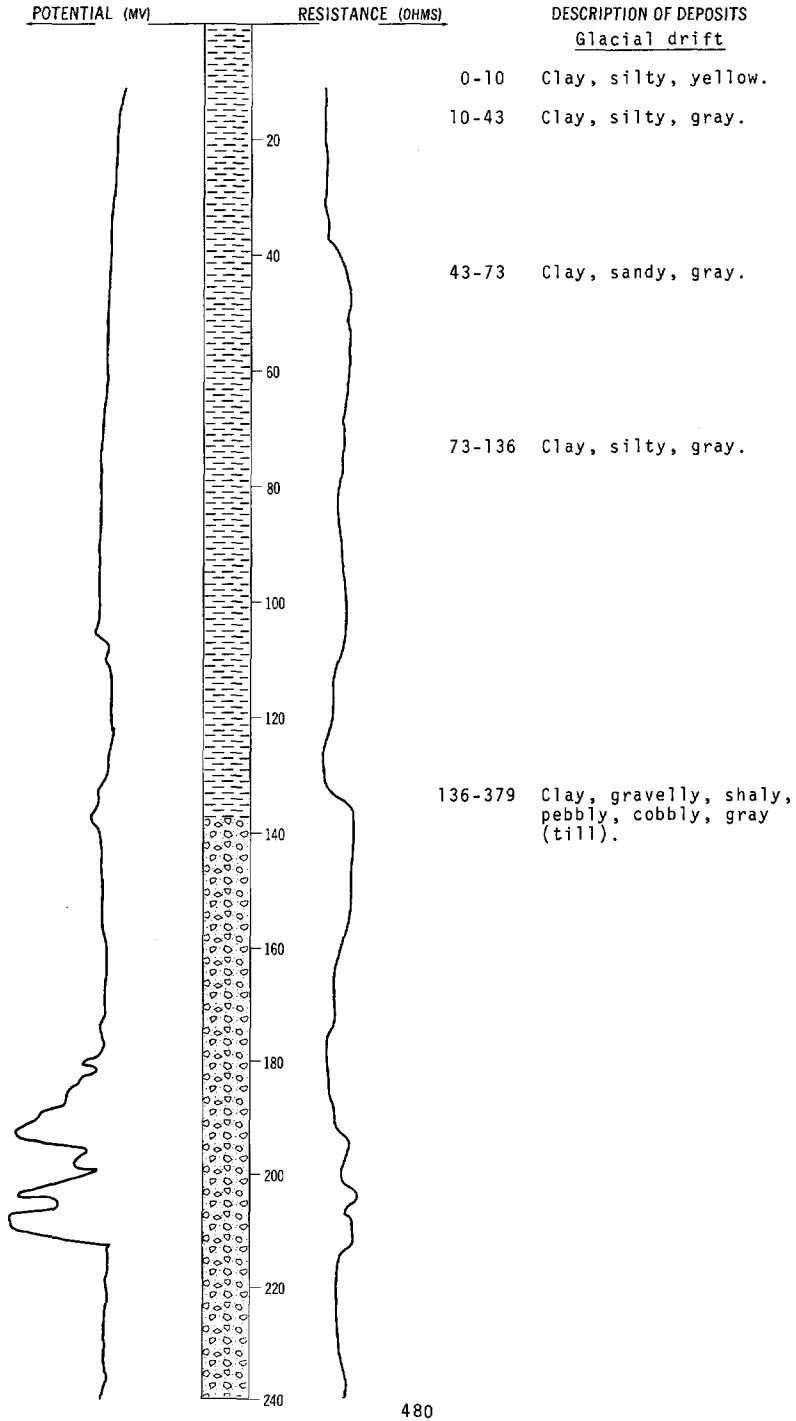
Altitude:

Glacial drift:			
	Loam-----	1	1
	Loam, sandy-----	1	2
	Loam, silty-----	4	6
	Sand, loamy-----	4	10
	Loam, very fine, sandy-----	2	12
	Clay, silty-----	8	20

LOCATION: 163-55-4CCC1
ALTITUDE: 893
(FT, MSL)

NDSWC 1771

DATE DRILLED: July 1960
DEPTH: 388
(FT)



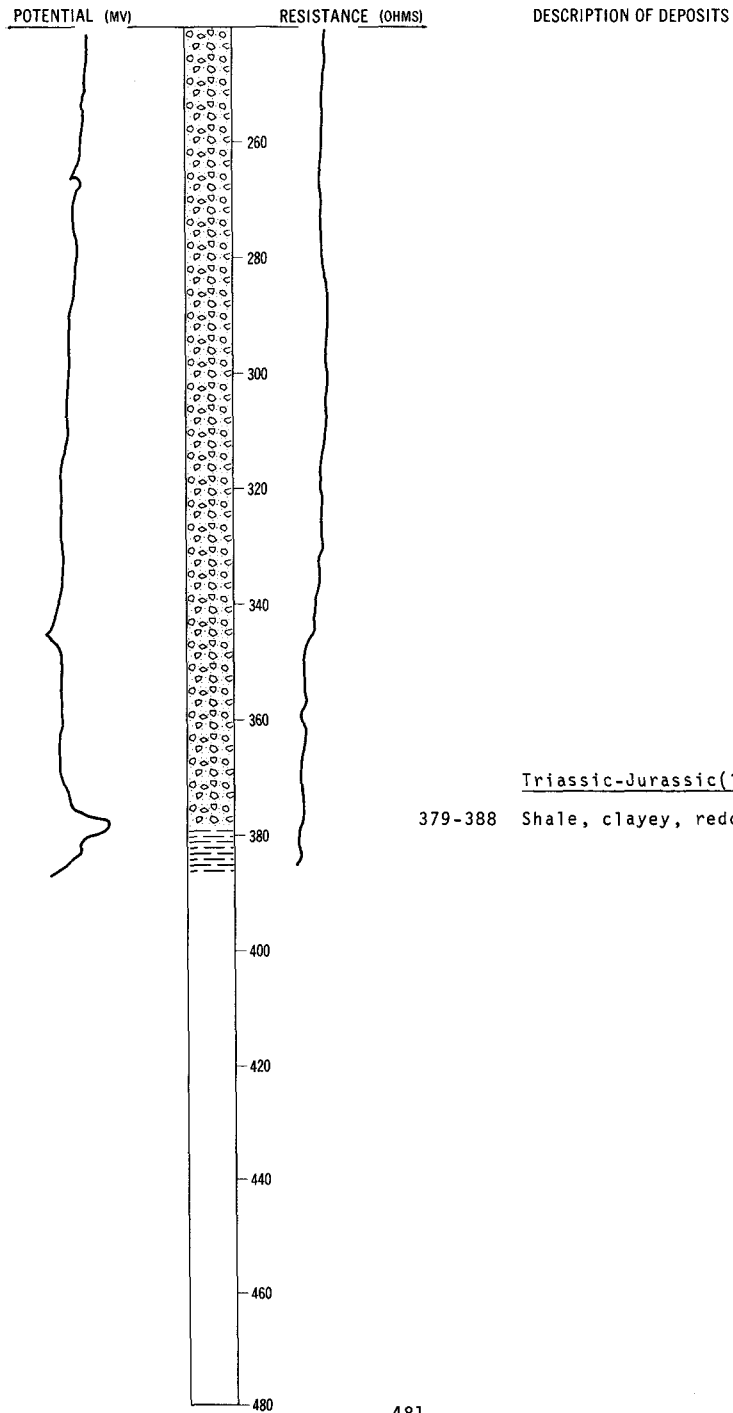
LOCATION: 163-55-4CCC1

NDSWC 1771, Continued

DATE DRILLED: July 1960

ALTITUDE: 893
(FT, MSL)

DEPTH: 388
(FT)



Triassic-Jurassic(?)
379-388 Shale, clayey, reddish-brown.

163-55-4CCC2
USBR 435

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Roadfill-----	2	2
	Loam-----	1	3
	Silt-----	15	18

163-55-5DDD
USBR DH7

Altitude:

Glacial drift:			
	Loam, sandy-----	1	1
	Loam, silty-----	1	2
	Loam, sandy-----	4	6
	Sand, loamy-----	4	10
	Loam, sandy-----	2	12
	Sand, very fine-----	3	15
	Clay, massive-----	5	20

163-55-7ADD
USBR DH8

Altitude:

Glacial drift:			
	Sand, loamy-----	2	2
	Loam-----	1	3
	Loam, very fine, sandy-----	1	4
	Sand, fine, loamy-----	7	11
	Sand, very fine-----	24	35

163-55-8CAD
USBR DHS

Altitude:

Glacial drift:			
	Loam, sandy-----	2	2
	Loam-----	4	6
	Sand, very fine-----	2	8
	Loam, silty-----	22	30

163-55-8DAD
USBR DH3

Altitude:

Glacial drift:			
	Sand, loamy-----	1	1
	Loam-----	2	3
	Loam, very fine, sandy-----	2	5
	Loam, silty-----	9	14
	Silt-----	1	15

163-55-8DCC
USBR DH4

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	3	3
	Loam-----	2	5
	Sand, fine, loamy-----	3	8
	Sand, very fine, loamy-----	8	16
	Sand, very fine-----	19	35

163-55-8DDD
USBR DH42

Altitude:

Glacial drift:			
	Sand, fine, loamy-----	1	1
	Loam-----	2	3
	Loam, silty-----	6	9
	Sand, loamy, silty-----	4	13
	Loam, silty-----	5	18
	Clay-----	1	19
	Loam, clayey, silty-----	6	25

163-55-9AAA
USBR DH37

Altitude:

Glacial drift:			
	Loam, clayey, silty-----	5	5
	Loam, silty-----	6	11
	Clay, massive-----	2	13

163-55-9BBB1
USBR 16

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, fine, loamy-----	3	5
	Loam, very fine, sandy-----	4	9
	Sand, very fine-----	8	17

163-55-9BBB2
USBR K53

Altitude:

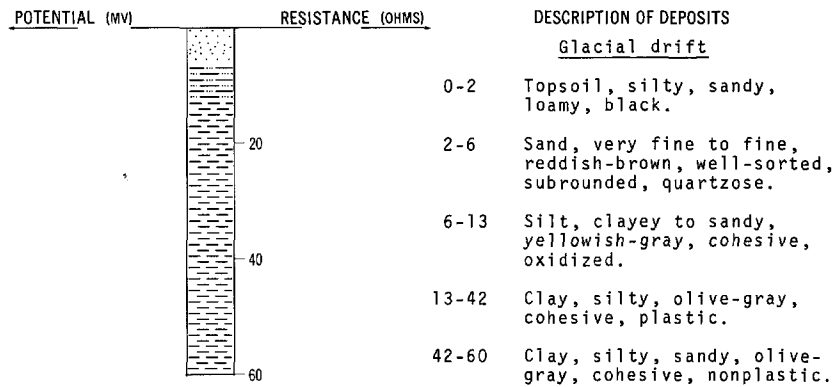
Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine, loamy-----	2	5
	Loam, silty-----	10	15
	Sand-----	1	16
	Loam, silty-----	1	17

163-55-9BBC
USBR DH2

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam-----	1	1
	Loam, sandy-----	1	2
	Loam, silty-----	6	8
	Loam, sandy-----	4	12
	Clay, silty-----	8	20

LOCATION: 163-55-9DAD NDSWC 3864 DATE DRILLED: October 1969
 ALTITUDE: 885 DEPTH: 60
 (FT. MSL) (FT)



163-55-10ABB
USBR DH38

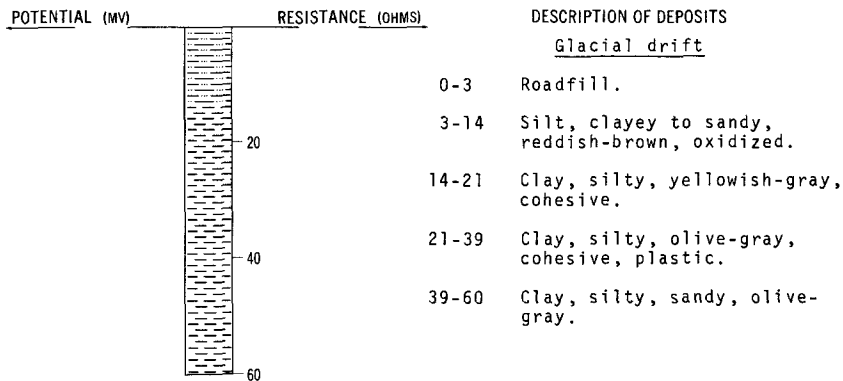
Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, clayey-----	3	3
	Clay-----	1	4
	Loam, very fine, sandy-----	2	6
	Loam, silty-----	8	14

LOCATION: 163-55-15BBC
 ALTITUDE: 885
 (FT, MSL)

NDSWC 3865

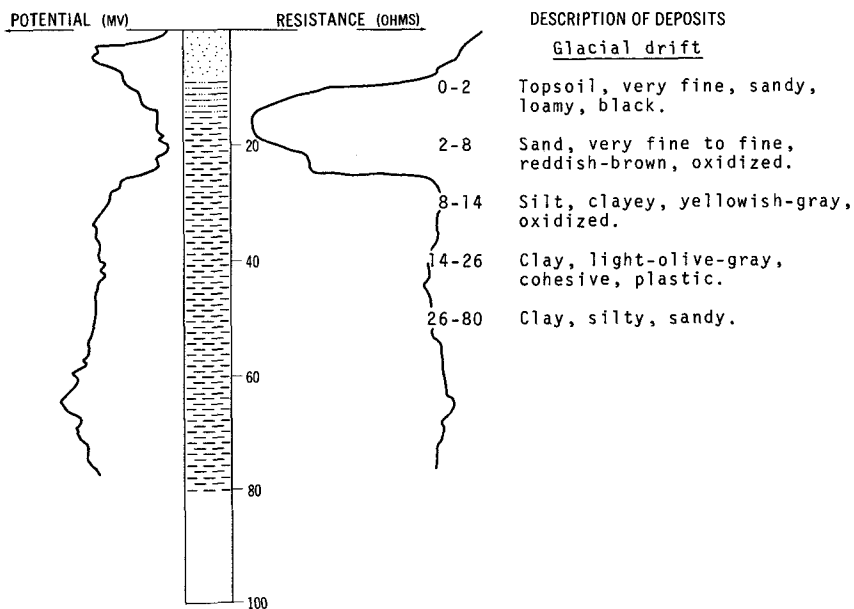
DATE DRILLED: October 1969
 DEPTH: 60
 (FT)



LOCATION: 163-55-16DAD
 ALTITUDE: 886
 (FT, MSL)

NDSWC 3866

DATE DRILLED: October 1969
 DEPTH: 80
 (FT)

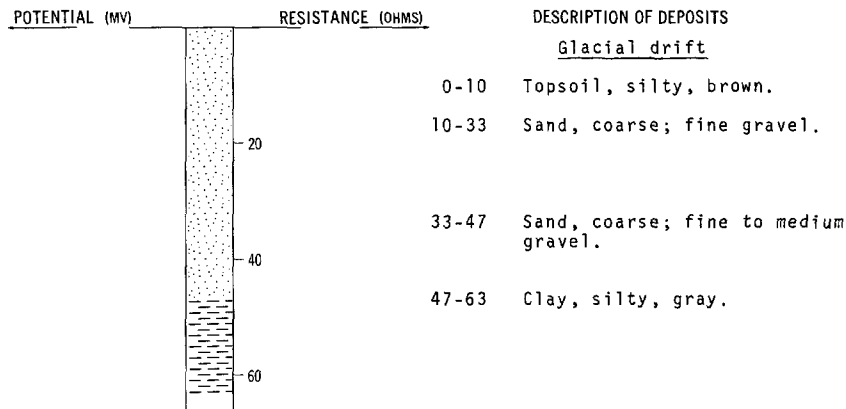


LOCATION: 163-55-16DDD1
 ALTITUDE: 885
 (FT, MSL)

NDSWC 1795

DATE DRILLED: August 1960

DEPTH: 63
 (FT)



163-55-16DDD2
 USBR 436

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, silty-----	1	1
	Loam, clayey, silty-----	1	2
	Silt-----	7	9
	Clay-----	4	13

163-55-17AAA1
 USBR K51

Altitude:

Glacial drift:			
	Loam-----	4	4
	Loam, silty-----	4	8
	Sand-----	1	9
	Loam, silty-----	1	10
	Sand-----	1	11
	Loam, silty, sandy-----	1	12

163-55-17AAA2
 USBR 14W

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, fine, loamy-----	1	3
	Loam, silty-----	3	6
	Sand-----	1	7
	Sand, fine, loamy-----	4	11
	Sand, fine-----	6	17

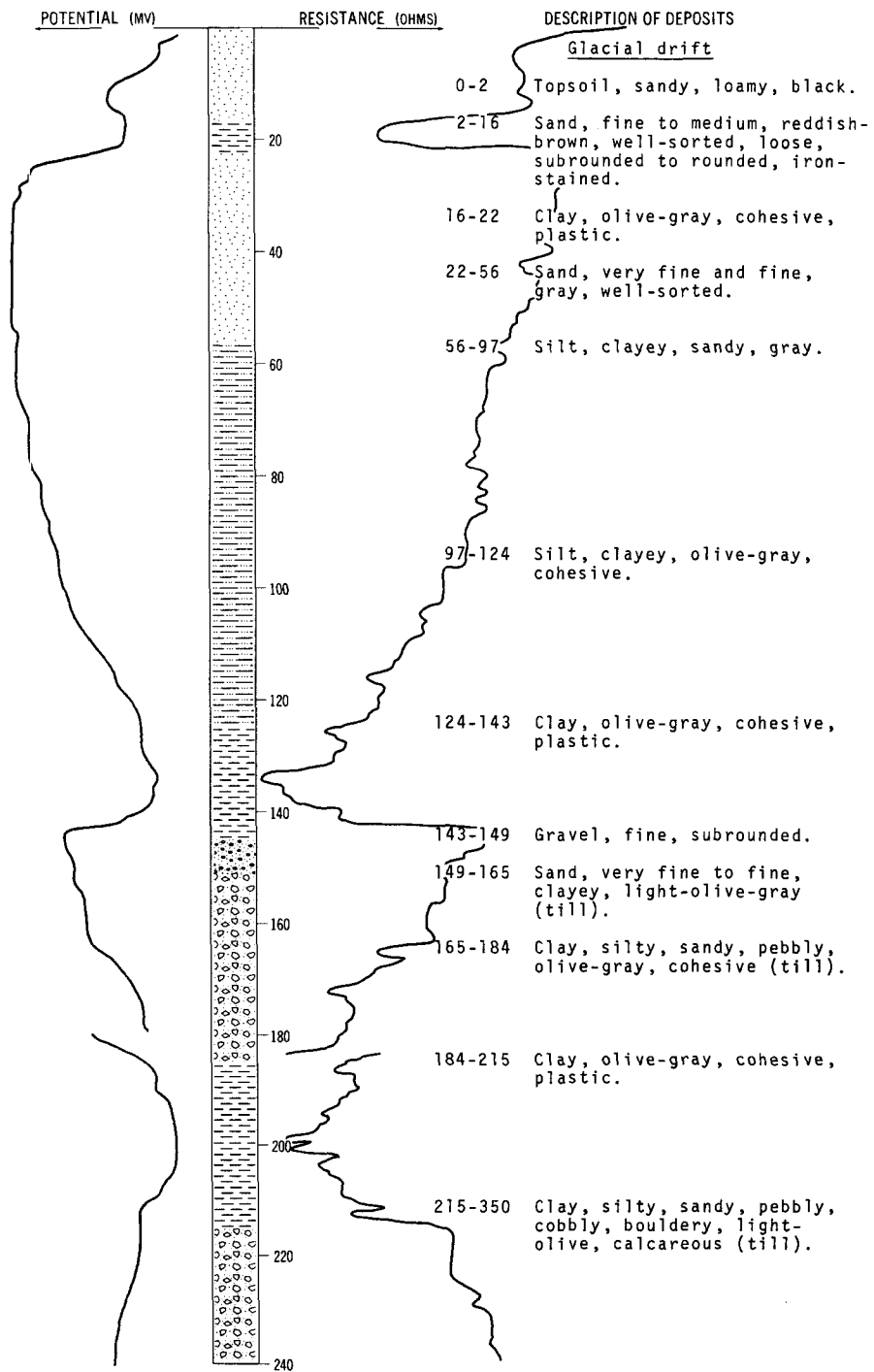
LOCATION: 163-55-17AAA3

NDSWC 4228

DATE DRILLED: September 1970

ALTITUDE: 900
(FT, MSL)

DEPTH: 400
(FT)

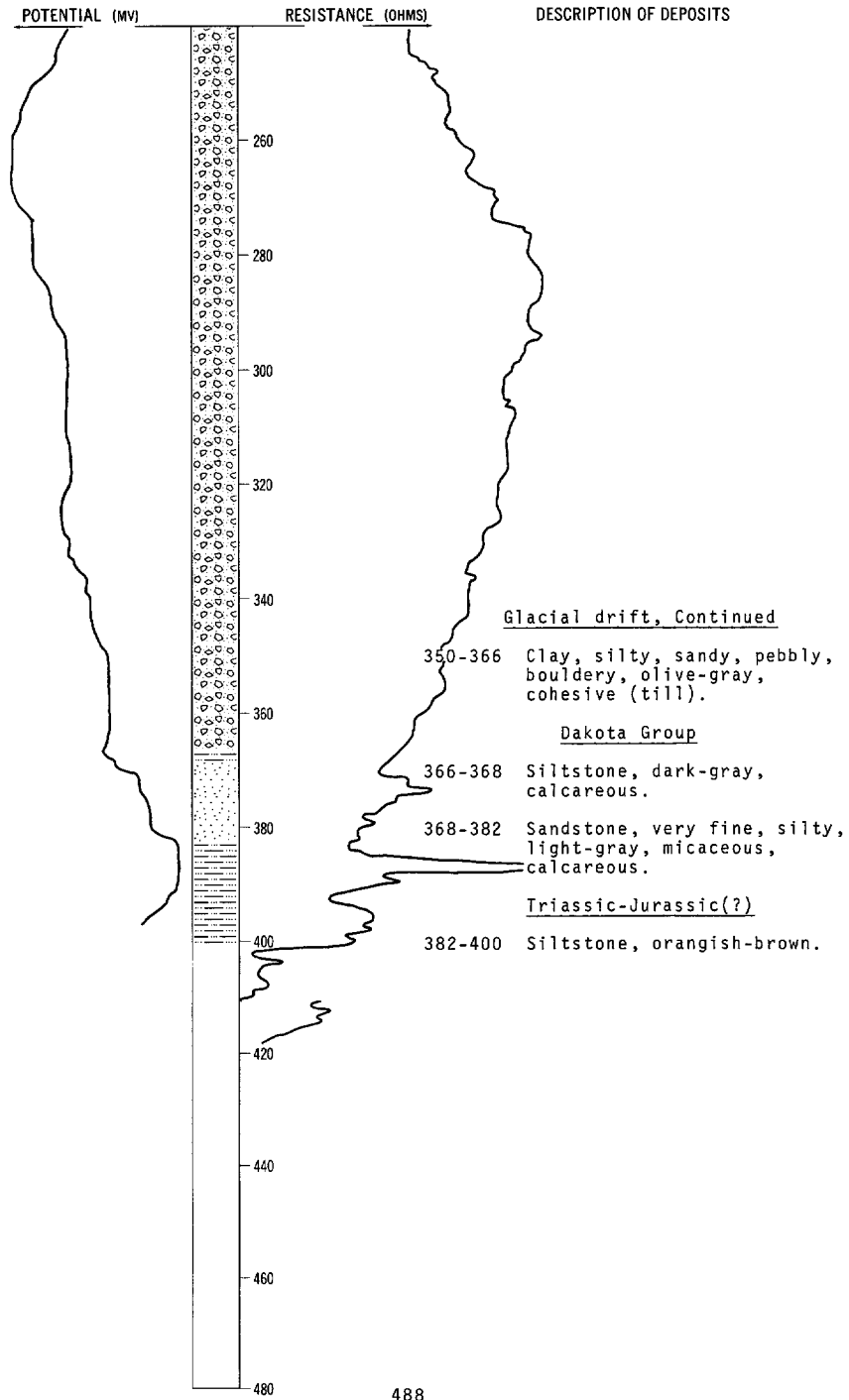


LOCATION: 163-55-17AAA3

DATE DRILLED: September 1970

ALTITUDE: 900
(FT, MSL)

DEPTH: 400
(FT)



163-55-17CCC
USBR DH10

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Sand, loamy-----	3	3
	Sand, fine, loamy-----	4	7
	Sand, very fine, loamy-----	5	12
	Loam, silty-----	1	13
	Sand, very fine, loamy-----	22	35

163-55-17DCC
USBR DH6

Altitude:

Glacial drift:			
	Loam, clayey, silty-----	2	2
	Loam, silty-----	14	16
	Sand, very fine, loamy-----	5	21
	Clay, silty-----	9	30

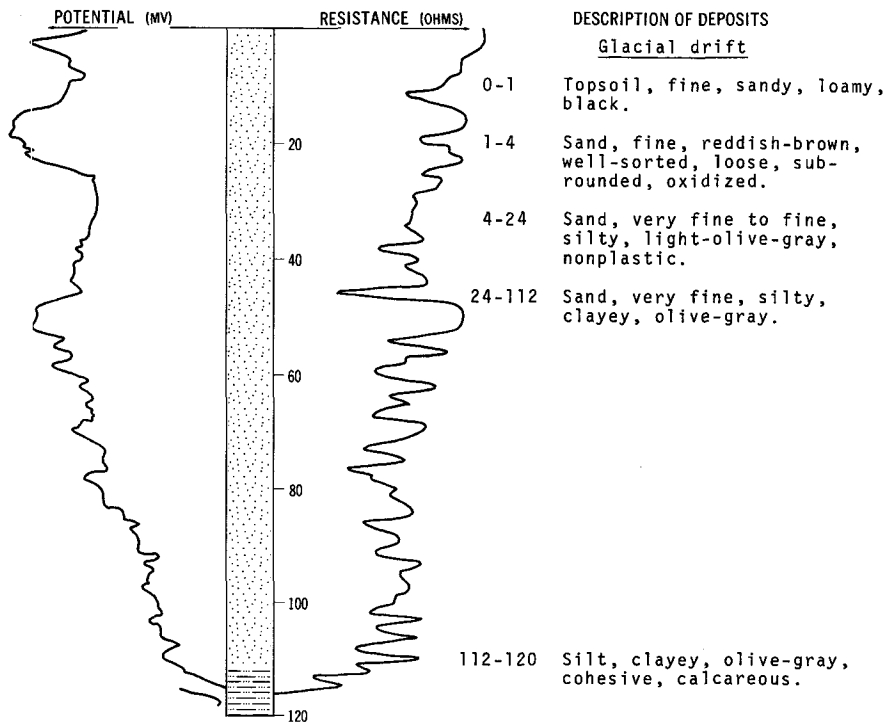
NDSWC 3867

LOCATION: 163-55-18BBB1

DATE DRILLED: October 1969

ALTITUDE: 920
(FT, MSL)

DEPTH: 120
(FT)



163-55-18BBB2
 USBR DH9

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, silty-----	2	2
	Sand, very fine, loamy-----	3	5
	Sand, fine-----	2	7
	Sand, very fine-----	18	25
	Sand, very fine, loamy-----	10	35

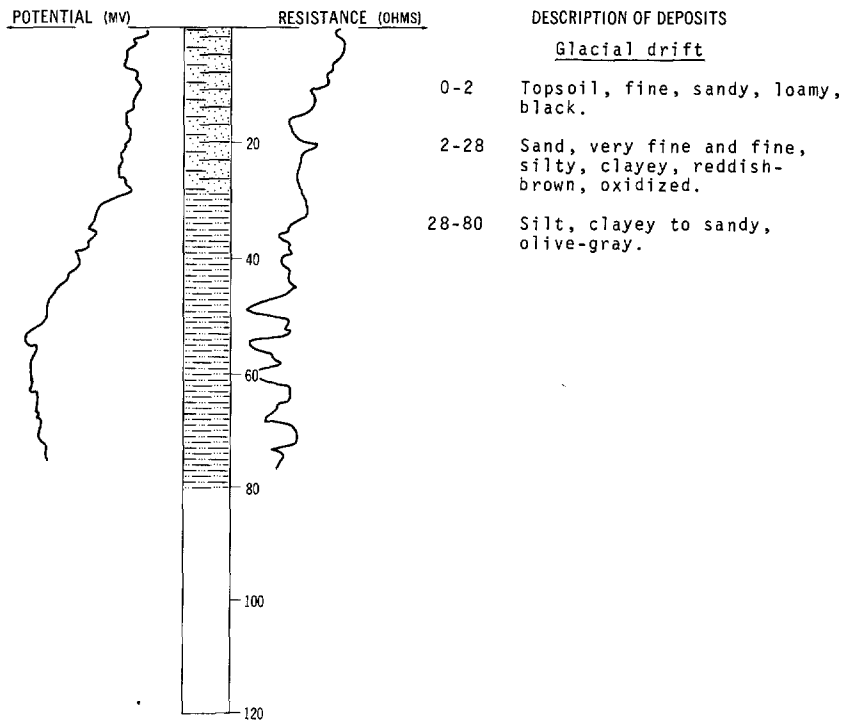
LOCATION: 163-55-18BCC

NDSWC 3868

DATE DRILLED: October 1969

ALTITUDE: 916
 (FT, MSL)

DEPTH: 80
 (FT)



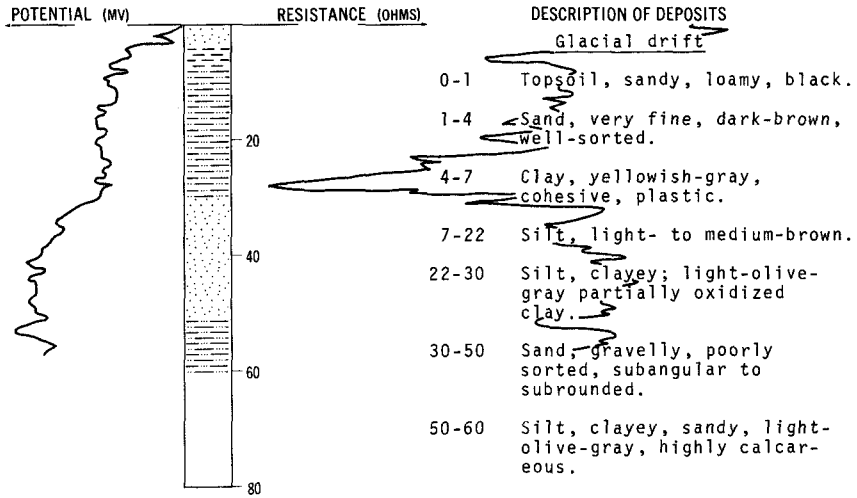
LOCATION: 163-55-21ADD

NDSWC 3876

DATE DRILLED: October 1969

ALTITUDE: 887
(FT, MSL)

DEPTH: 60
(FT)



163-55-21BBB
USBR 15

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam-----	1	1
	Loam, sandy-----	5	6
	Loam, clayey-----	3	9
	Loam, silty-----	11	20

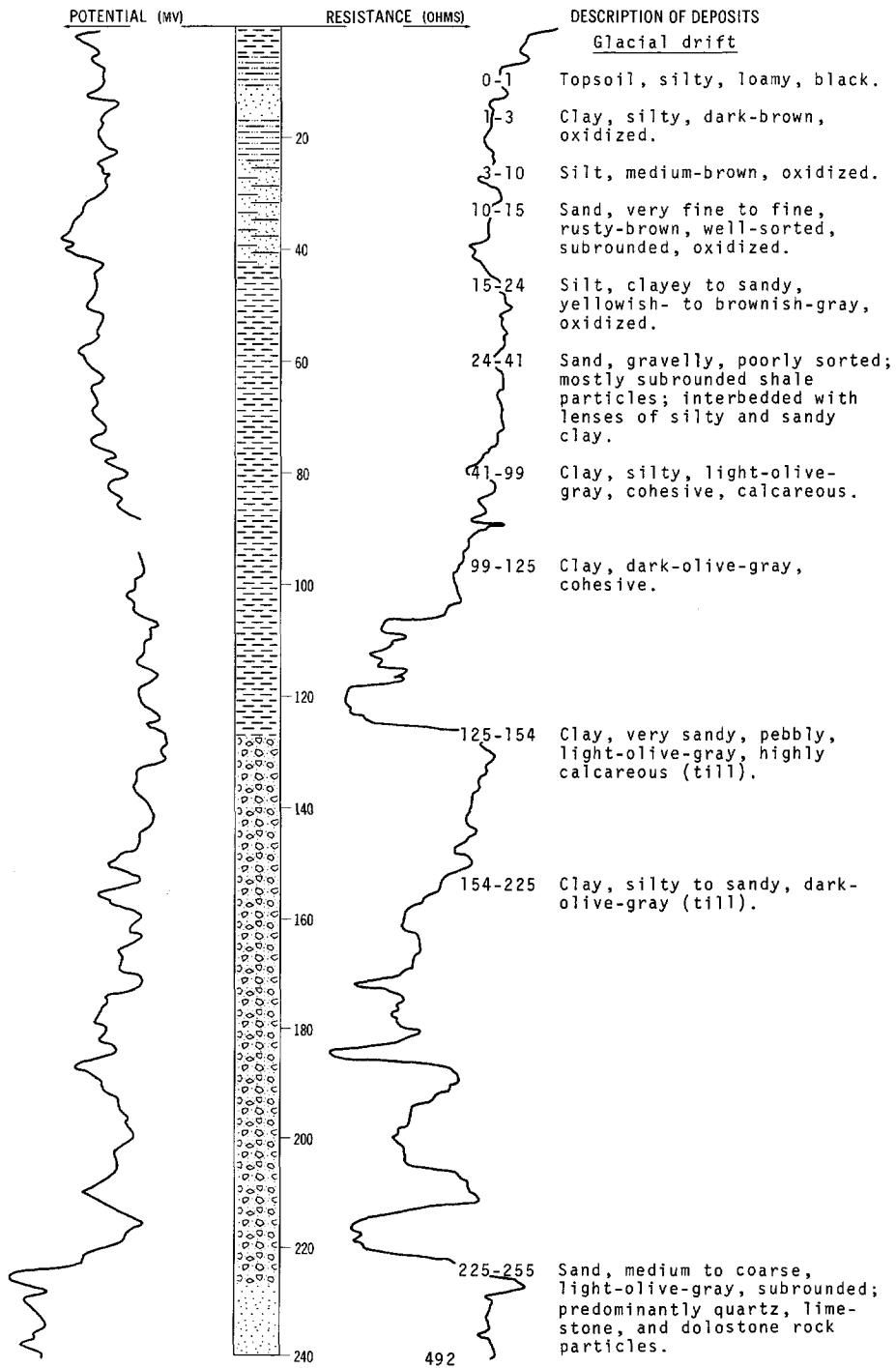
LOCATION: 163-55-22BBB

NDSWC 3875

DATE DRILLED: October 1969

ALTITUDE: 880
(FT, MSL)

DEPTH: 340
(FT)

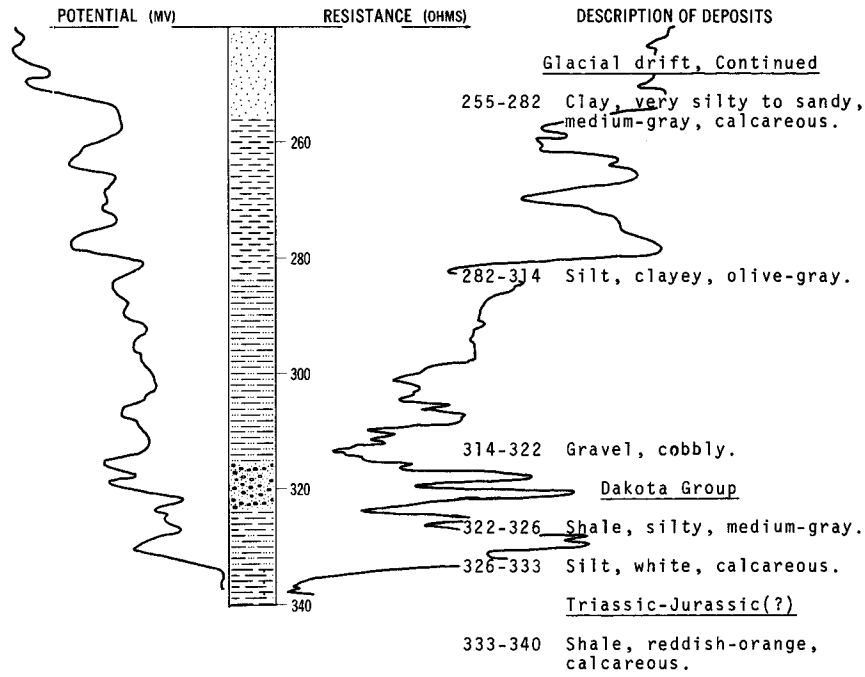


LOCATION: 163-55-22BBB

DATE DRILLED: October 1969

ALTITUDE: 880
(FT, MSL)

DEPTH: 340
(FT)



163-55-22CCC1
USBR 422

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, silty-----	2	2
	Clay, silty-----	2	4
	Silt-----	14	18

163-55-26CCC
USBR 421

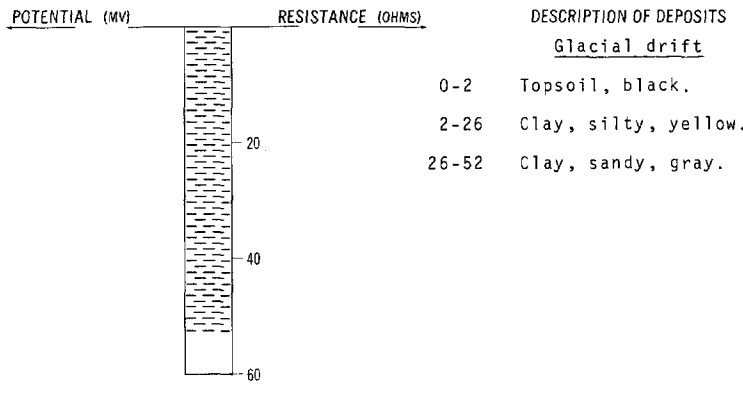
Altitude:

Glacial drift:			
	Loam, fine, sandy-----	2	2
	Loam, silty-----	1	3
	Loam, clayey, silty-----	1	4
	Clay, silty-----	4	8
	Silt-----	10	18

LOCATION: 163-55-27BBB
 ALTITUDE: 900
 (FT, MSL)

NDSWC 1772

DATE DRILLED: July 1960
 DEPTH: 52
 (FT)



163-55-30CCC
 USBR 423

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, fine, sandy-----	4	4
	Sand, fine, loamy-----	1	5
	Silt-----	13	18

163-55-33BBB
 NDGS Pem-70-40

Altitude: 920 feet

Glacial drift:			
	Roadfill-----	2	2
	Sand, fine, yellowish-brown, well-sorted-----	3	5
	Sand, fine, yellowish-brown, well-sorted, rounded to subrounded-----	10	15
	Sand; same as above except medium-----	15	30
	Clay, silty-----	4	34

163-56-3BCB
 USBR 6

Altitude:

Glacial drift:			
	Sand, loamy-----	3	3
	Sand, fine-----	3	6
	Loam, very fine, sandy-----	7	13
	Sand, loamy, gravelly-----	2	15

163-56-3CBC
USBR

Altitude:

<u>Geclogic</u> <u>source</u>	<u>Material</u>	<u>Thickness</u> <u>(feet)</u>	<u>Depth</u> <u>(feet)</u>
Glacial drift:			
	Loam-----	3	3
	Loam, clayey, silty-----	3	6
	Clay, massive-----	29	35
	Loam, very fine, sandy-----	10	45

163-56-5AAA
USBR DH40

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, fine, loamy-----	2	4
	Sand, very fine, loamy-----	5	9
	Sand, fine, loamy-----	2	11
	Clay, silty-----	4	15

163-56-5BBB
USBR DH41

Altitude:

Glacial drift:			
	Loam-----	1	1
	Clay-----	1	2
	Loam, clayey-----	1	3
	Sand, very fine, loamy-----	2	5
	Loam, silty-----	1	6
	Sand, very fine, loamy-----	2	8
	Clay, massive-----	7	15

163-56-6BCC
USBR 2A

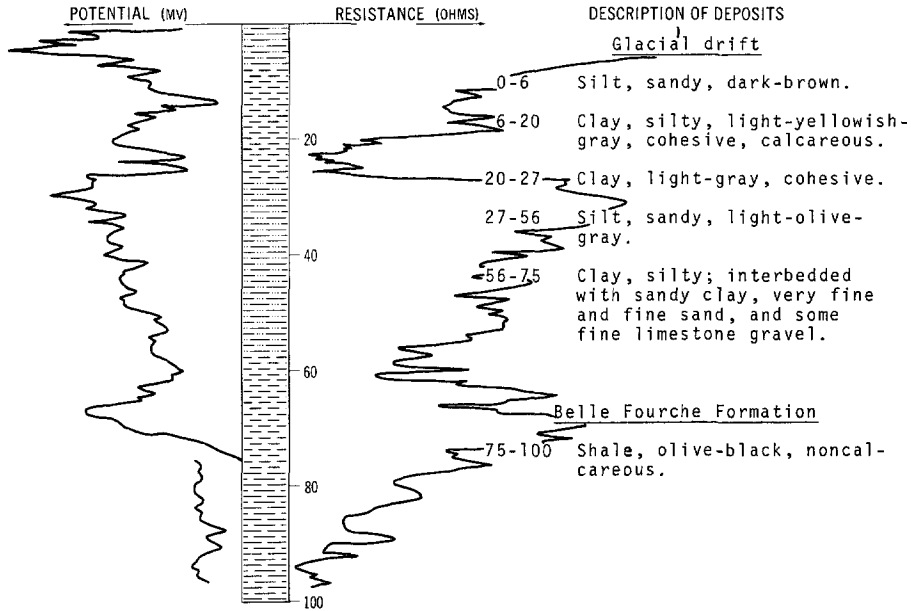
Altitude:

Glacial drift:			
	Loam-----	1	1
	Loam, clayey-----	2	3
	Sand, fine, loamy-----	6	9
	Clay-----	3	12

LOCATION: 163-56-7DAA
 ALTITUDE: 955
 (FT, MSL)

NDSWC 3877

DATE DRILLED: October 1969
 DEPTH: 100
 (FT)



163-56-8DCC
 USBR DH22

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Sand, fine, loamy-----	4	4
	Loam, very fine, sandy-----	4	8
	Loam, silty-----	7	15
	Loam, very fine, sandy-----	3	18
	Loam, silty-----	17	35

163-56-9AAA
 NDGS Pem-70-24

Altitude: 935 feet

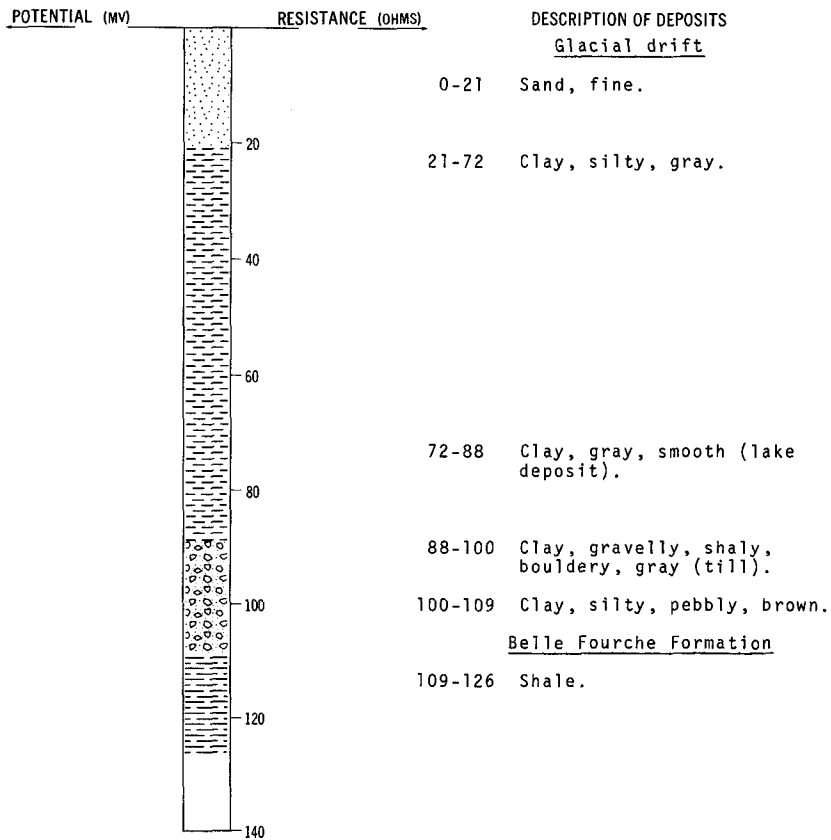
Glacial drift:			
	Topsoil-----	2	2
	Sand, medium to coarse, clayey, oxidized; sand about 75 percent shale particles-----	3	5
	Gravel, clayey, pebbly, subangular to rounded, saturated-----	11	16
	Clay, gray, plastic, dense-----	3	19

163-56-9ADD
USBR DH36

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, black-----	4	4
	Loam, sandy, yellowish-brown-----	1	5
	Sand, loamy, yellowish-brown-----	2	7
	Sand and gravel, gray-----	17	24
	Loam, silty, clayey-----	11	35

LOCATION: 163-56-9CBB NDSWC 1769 DATE DRILLED: July 1960
 ALTITUDE: 949 DEPTH: 126
 (FT, MSL) (FT)



163-56-9CCC
USBR DH20

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Sand, fine, loamy-----	2	2
	Sand, very fine, loamy-----	5	7
	Loam, very fine, sandy-----	3	10
	Loam, silty-----	25	35

163-56-9CDD
USBR DH21

Altitude:

Glacial drift:			
	Sand, fine, loamy-----	5	5
	Sand, very fine-----	1	6
	Loam, very fine, sandy-----	6	12
	Loam, silty-----	23	35

163-56-10AAA
NDGS Pem-70-25

Altitude: 930 feet

Glacial drift:			
	Roadfill; organic silty clay-----	3	3
	Clay, silty, yellowish-brown, well-sorted----	3	6
	Clay, slightly silty, pebbly, yellowish-brown, banded, very plastic, dense-----	13	19

163-56-10ADD
USBR DH15

Altitude:

Glacial drift:			
	Sand, very fine, loamy-----	5	5
	Sand, very fine-----	9	14
	Loam, very fine, sandy-----	7	21
	Loam, clayey, silty-----	1	22
	Loam, very fine, sandy-----	13	35

163-56-11AAA
USBR 8

Altitude:

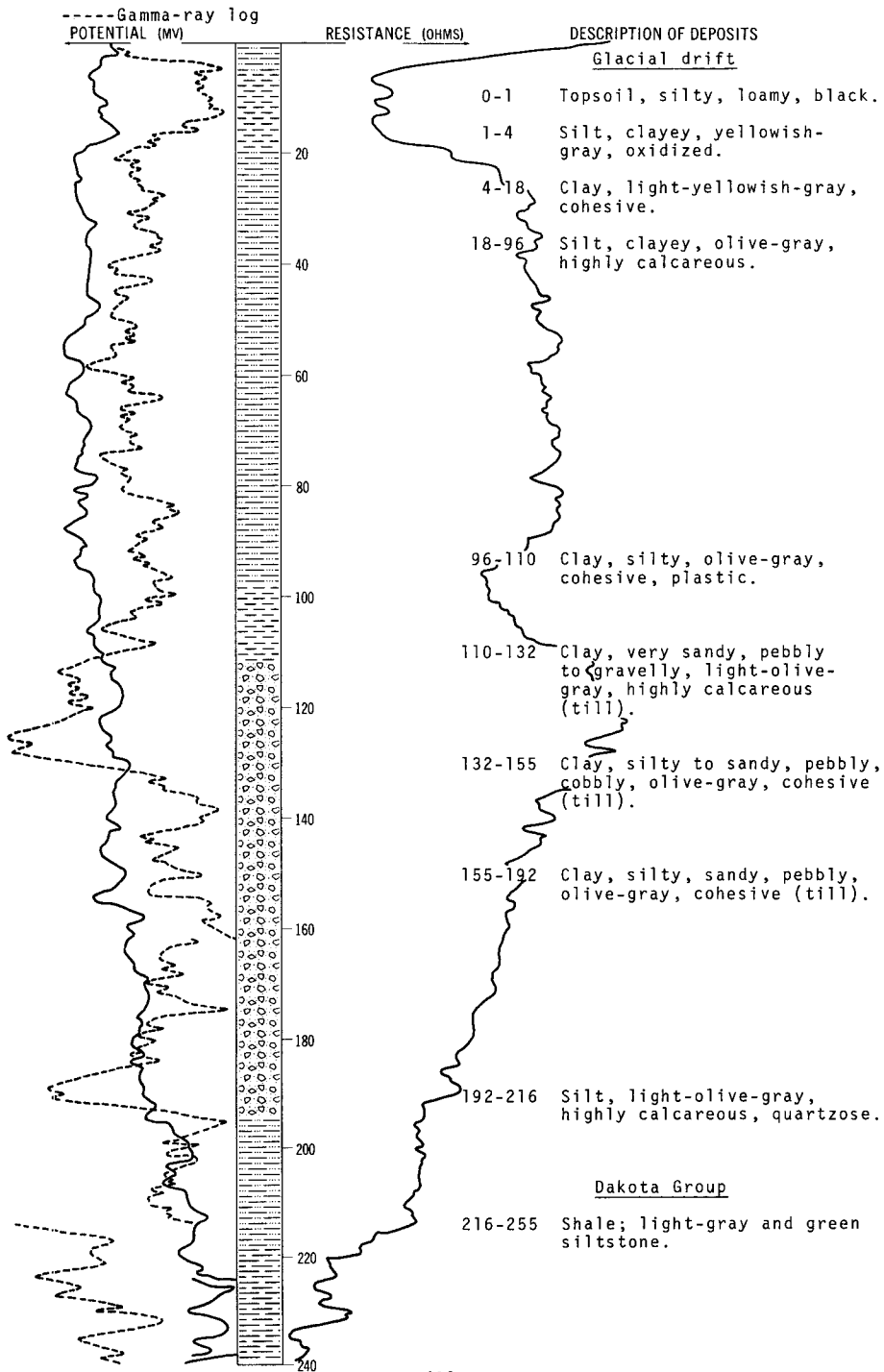
Glacial drift:			
	Loam, fine, sandy-----	1	1
	Loam, clayey-----	7	8
	Loam, silty-----	1	9
	Clay-----	2	11
	Sand, fine, loamy-----	2	13
	Sand, very fine, loamy-----	7	20

LOCATION: 163-56-11BBB

DATE DRILLED: October 1969

ALTITUDE: 927
(FT, MSL)

DEPTH: 340
(FT)

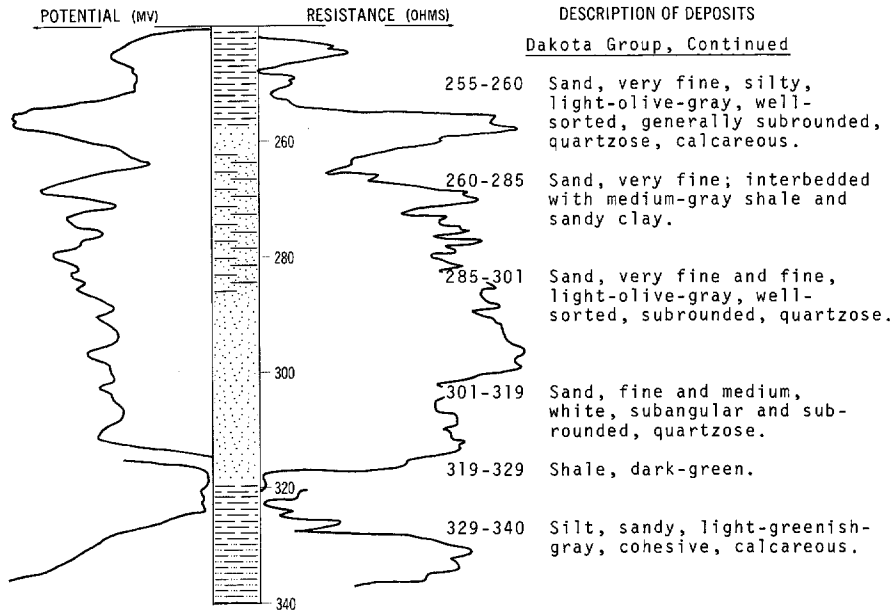


LOCATION: 163-56-11BBB

DATE DRILLED: October 1969

ALTITUDE: 927
(FT, MSL)

DEPTH: 340
(FT)



163-56-11CCA
USBR DH33

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, fine, sandy-----	1	1
	Sand, fine, loamy-----	1	2
	Loam, fine, sandy-----	3	5
	Sand, very fine-----	3	8
	Loam, silty-----	8	16
	Sand, very fine, loamy-----	4	20
	Loam-----	15	35

163-56-12CCB1
USBR DH14

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, very fine, sandy-----	3	3
	Sand, very fine, loamy-----	4	7
	Loam, silty-----	3	10
	Sand, very fine, loamy-----	25	35

163-56-12CCB2
USBR DH34

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, fine, loamy-----	3	5
	Loam, fine, sandy-----	4	9
	Sand, fine, loamy-----	26	35

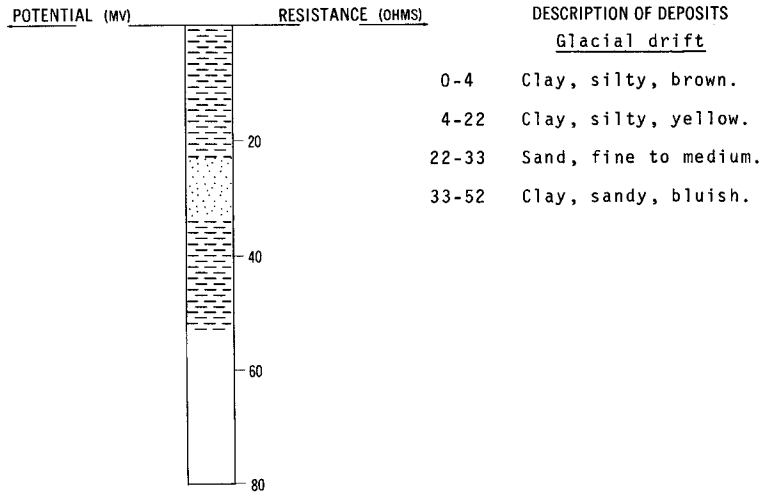
LOCATION: 163-56-13ADA1

NDSWC 1796

DATE DRILLED: August 1960

ALTITUDE: 920
(FT, MSL)

DEPTH: 52
(FT)



163-56-13ADA2
USBR 11

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, very fine, loamy-----	2	4
	Sand, fine, loamy-----	4	8
	Loam, very fine, sandy-----	2	10
	Sand, very fine, loamy-----	4	14
	Sand, very fine-----	6	20

163-56-13ADA3
USBR DH35A

Altitude:

Glacial drift:			
	Sand, fine, loamy-----	2	2
	Loam-----	1	3
	Loam, silty-----	27	30

163-56-13ADD
USBR 434

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine, loamy-----	3	6
	Silt-----	17	23

163-56-14AAA
USBR DH12

Altitude:

Glacial drift:			
	Sand, fine, loamy-----	2	2
	Sand, very fine-----	33	35

163-56-14AAD
USBR DH16

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine, loamy-----	1	4
	Sand, very fine-----	3	7
	Sand, very fine, loamy-----	5	12
	Gravel, shaly-----	6	18
	Sand, coarse, shaly-----	17	35

163-56-14BCC
USBR DH13

Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, silty-----	6	6
	Loam, clayey, silty-----	3	9
	Clay, silty-----	3	12
	Loam, clayey, silty-----	2	14
	Sand, very fine, loamy-----	4	18
	Clay, silty-----	2	20

163-56-15BBB
USBR 7

Altitude:

Glacial drift:			
	Sand, fine, loamy-----	3	3
	Loam, sandy, shaly-----	2	5
	Sand, loamy, gravelly, shaly-----	4	9
	Sand, gravelly-----	5	14

163-56-15B3C
USBR 433

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	3	3
	Clay, silty-----	2	5
	Sand, fine-----	1	6
	Sand-----	2	8
	Sand, very coarse, loamy-----	5	13
	Gravel, loamy-----	5	18

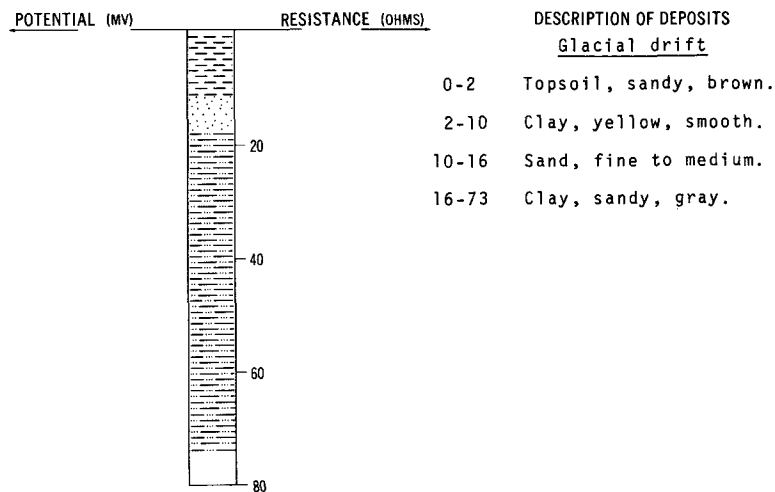
NDSWC 1786

LOCATION: 163-56-15BCC

DATE DRILLED: July 1960

ALTITUDE: 939
(FT, MSL)

DEPTH: 73
(FT)



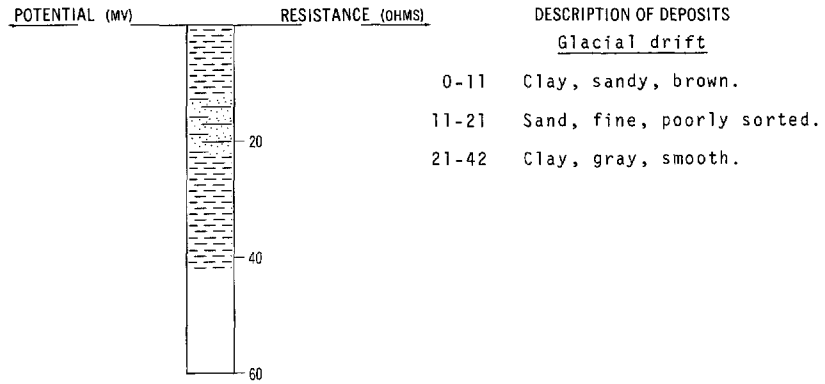
LOCATION: 163-56-15DDC

NDSWC 1797

DATE DRILLED: August 1960

ALTITUDE: 925
(FT, MSL)

DEPTH: 42
(FT)



163-56-16ACC
USBR DH18

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, silty-----	8	8
	Loam, clayey, silty-----	9	17
	Sand, coarse, shaly-----	15	32
	Clay, silty-----	3	35

163-56-16CCC
USBR DH19

Altitude:

Glacial drift:			
	Sand, loamy-----	2	2
	Sand, very fine, loamy-----	2	4
	Loam, silty-----	3	7
	Sand, coarse, shaly-----	5	12
	Sand, coarse, shaly, gravelly-----	4	16
	Gravel, shaly-----	14	30
	Silt-----	2	32
	Loam, clayey, shaly-----	3	35

163-56-17BBB
USBR 4

Altitude:

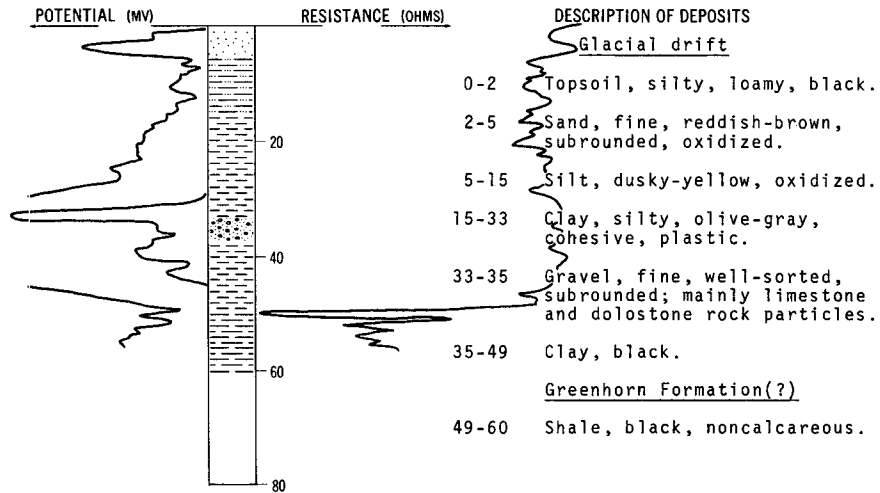
Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, sandy-----	1	1
	Sand, loamy-----	1	2
	Sand, fine-----	4	6
	Loam, very fine, sandy-----	1	7
	Sand, very fine-----	1	8
	Loam, silty-----	2	10
	Clay-----	2	12
	Sand, fine, loamy-----	8	20

163-56-17CCC
USBR DH26

Altitude:

Glacial drift:			
	Sand, fine, loamy-----	5	5
	Loam, silty-----	5	10
	Loam, clayey, silty-----	25	35

LOCATION: 163-56-18BCC NDSWC 3878 DATE DRILLED: October 1969
 ALTITUDE: 975 DEPTH: 60
 (FT, MSL) (FT)



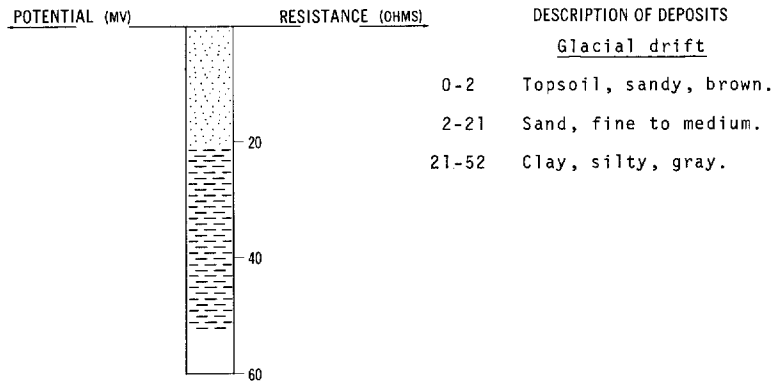
LOCATION: 163-56-19AAA

NDSWC 1780

DATE DRILLED: July 1960

ALTITUDE: 960
(FT, MSL)

DEPTH: 52
(FT)



163-56-19BBC
USBR 431

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, fine-----	3	5
	Sand-----	13	18

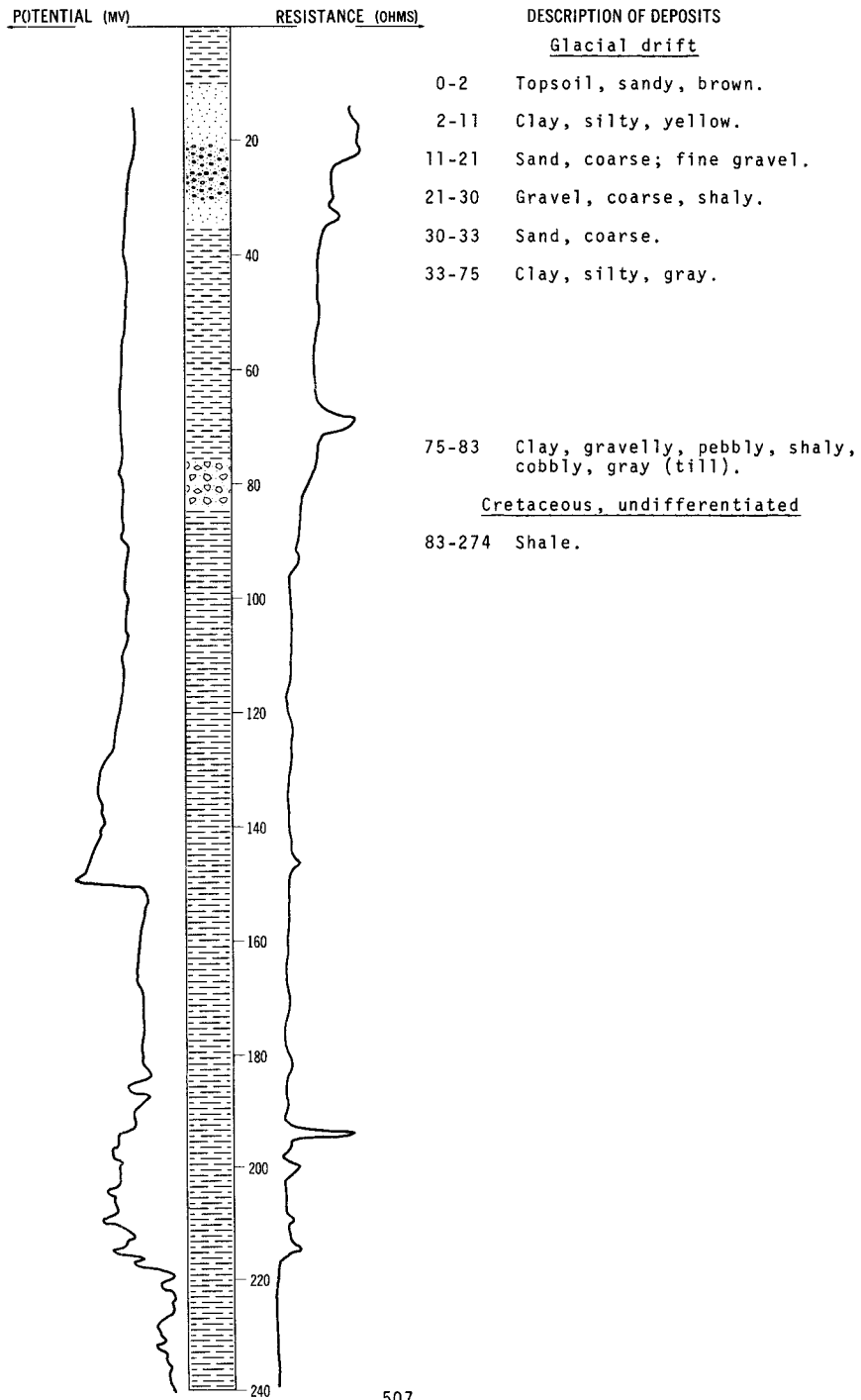
LOCATION: 163-56-20 ADC

NDSWC 1789

DATE DRILLED: August 1960

ALTITUDE: 958
(FT, MSL)

DEPTH: 315
(FT)

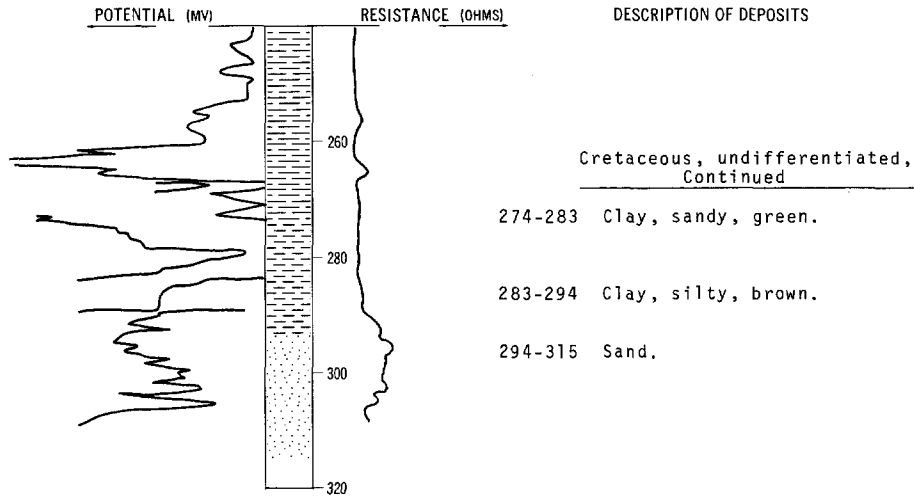


LOCATION: 163-56-20ADC

DATE DRILLED: August 1960

ALTITUDE: 958
(FT, MSL)

DEPTH: 315
(FT)



163-56-20BCC
USBR 430

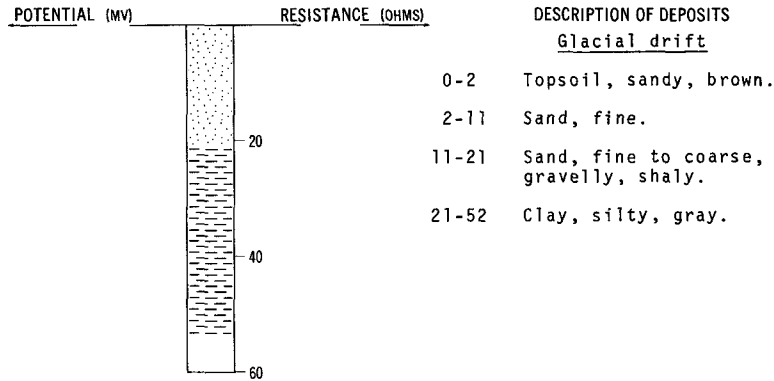
Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Sand, fine, loamy-----	3	3
	Sand, fine-----	4	7
	Sand, coarse-----	6	13

LOCATION: 163-56-20CCB
 ALTITUDE: 998
 (FT, MSL)

NDSWC 1779

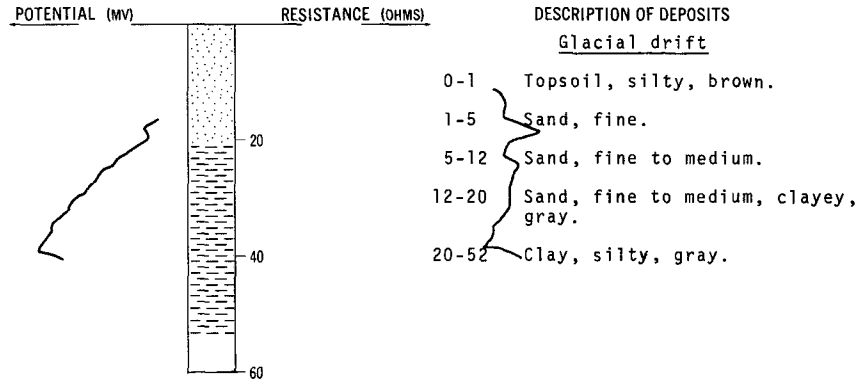
DATE DRILLED: July 1960
 DEPTH: 52
 (FT)



LOCATION: 163-56-20CDB
 ALTITUDE: 981
 (FT, MSL)

NDSWC 1785

DATE DRILLED: July 1960
 DEPTH: 52
 (FT)



163-56-21ABB
 USBR DH17

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy, fine-----	2	2
	Loam-----	3	5
	Loam, silty-----	6	11
	Sand, coarse, shaly, gravelly-----	8	19
	Loam, silty, shaly-----	2	21
	Gravel, shaly-----	21	42
	Loam, silty-----	3	45

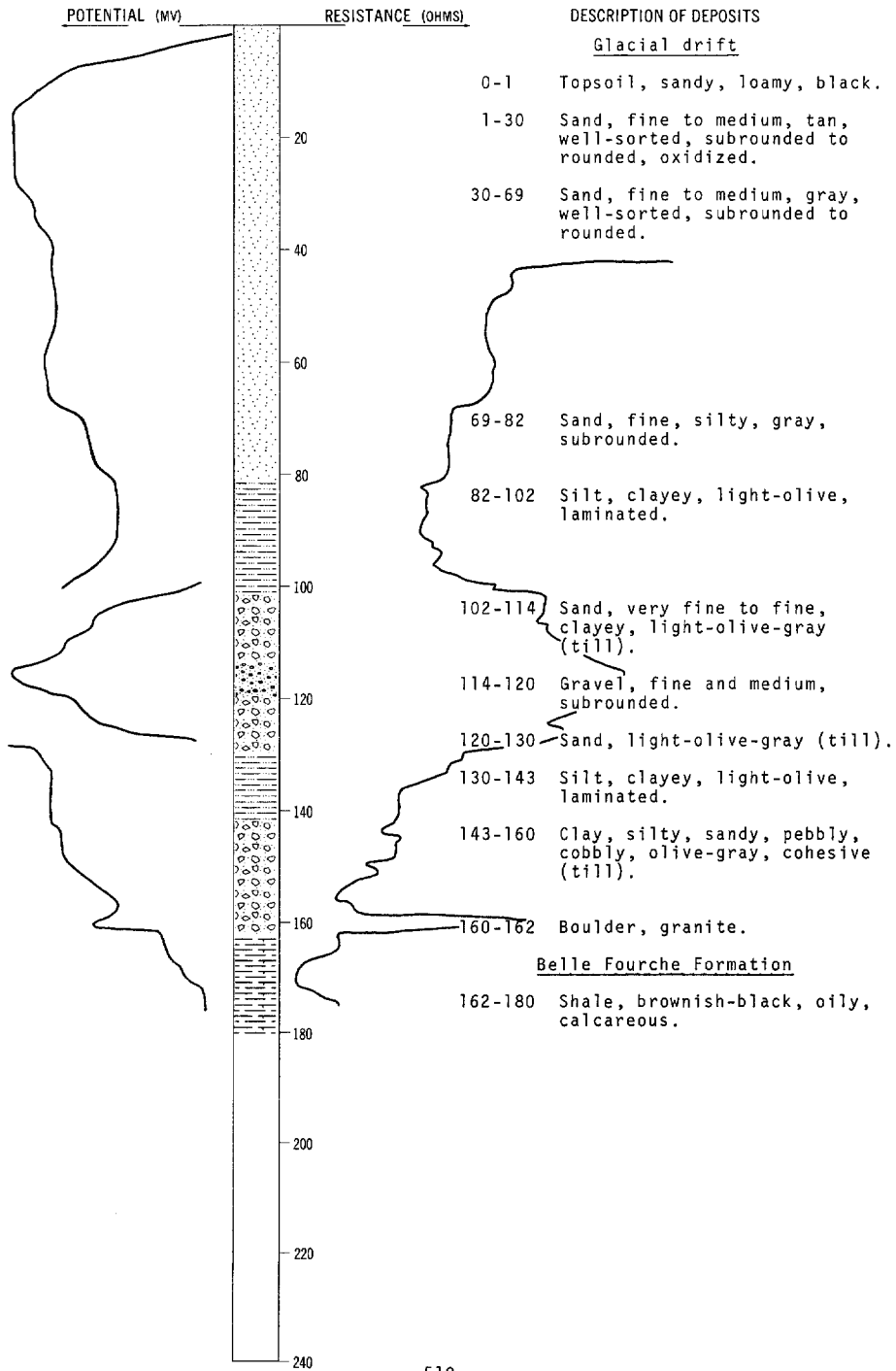
LOCATION: 163-56-23CCC

NDSWC 4227

DATE DRILLED: September 1970

ALTITUDE: 943
(FT, MSL)

DEPTH: 180
(FT)



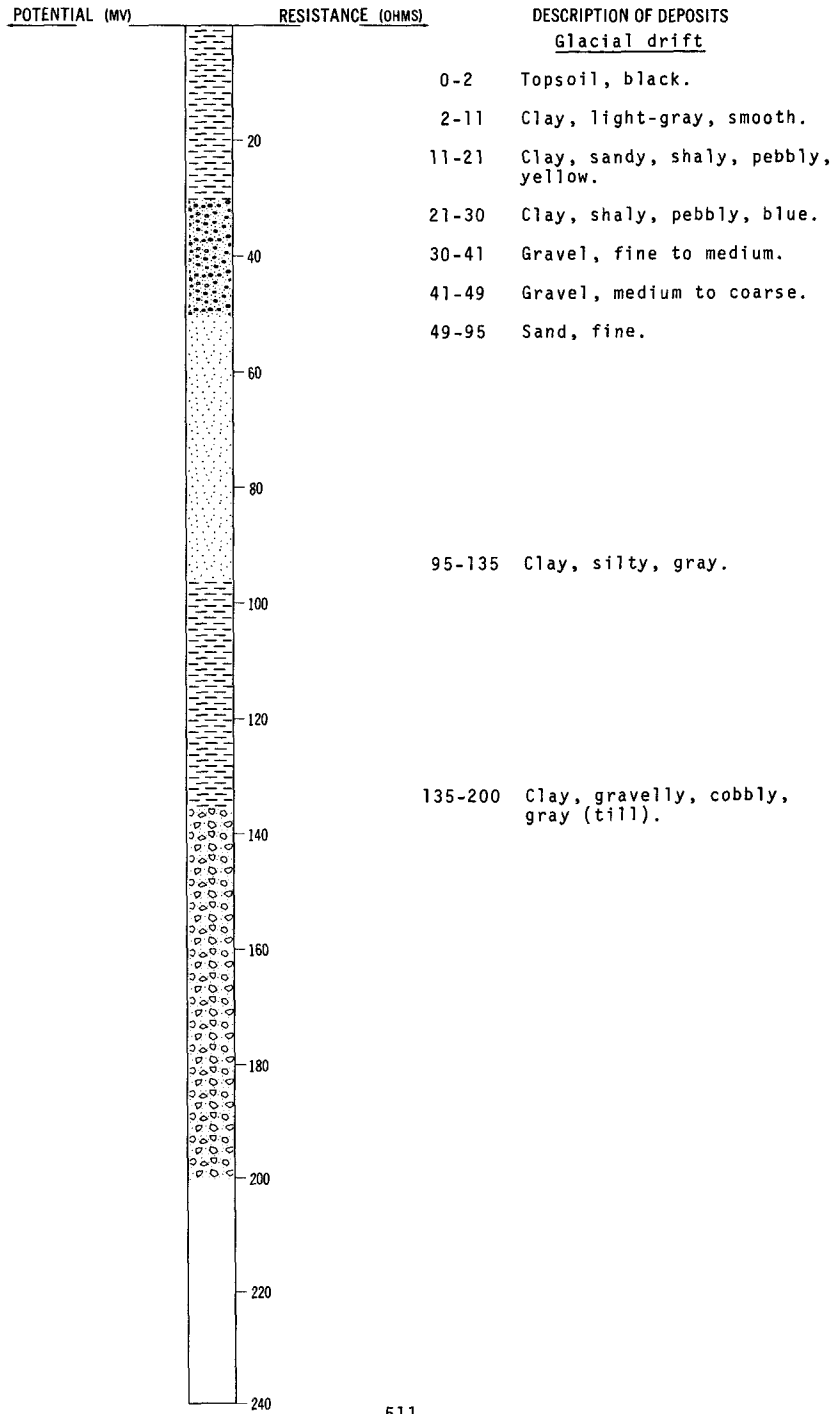
LOCATION: 163-56-24AAA1

NDSWC 1773

DATE DRILLED: July 1960

ALTITUDE: 905
(FT, MSL)

DEPTH: 200
(FT)

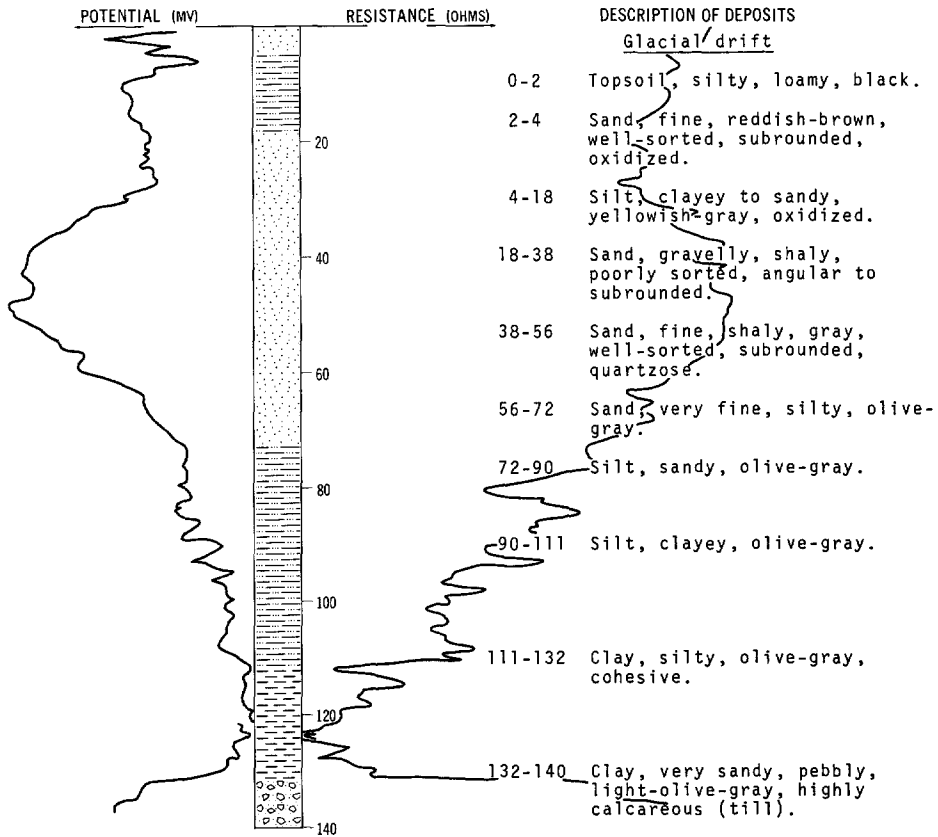


163-56-24AAA2
 USBR DH11

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, clayey, silty-----	13	13
	Clay, silty-----	7	20

LOCATION: 163-56-24AAA3 NDSWC 3869 DATE DRILLED: October 1969
 ALTITUDE: 905 DEPTH: 140
 (FT, MSL) (FT)



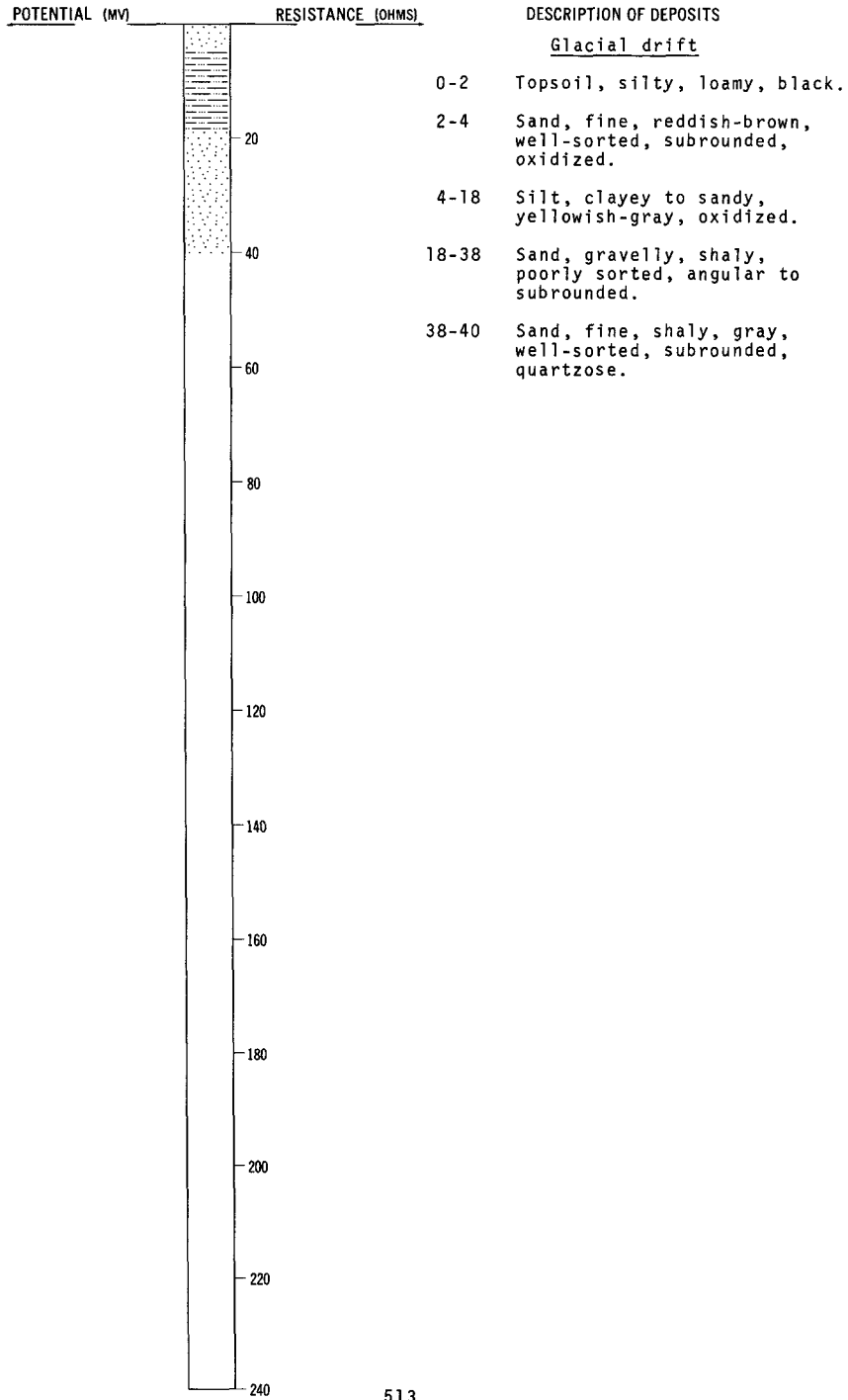
LOCATION: 163-56-24AAA4

NDSWC 3869-A

DATE DRILLED: October 1969

ALTITUDE: 905
(FT, MSL)

DEPTH: 40
(FT)



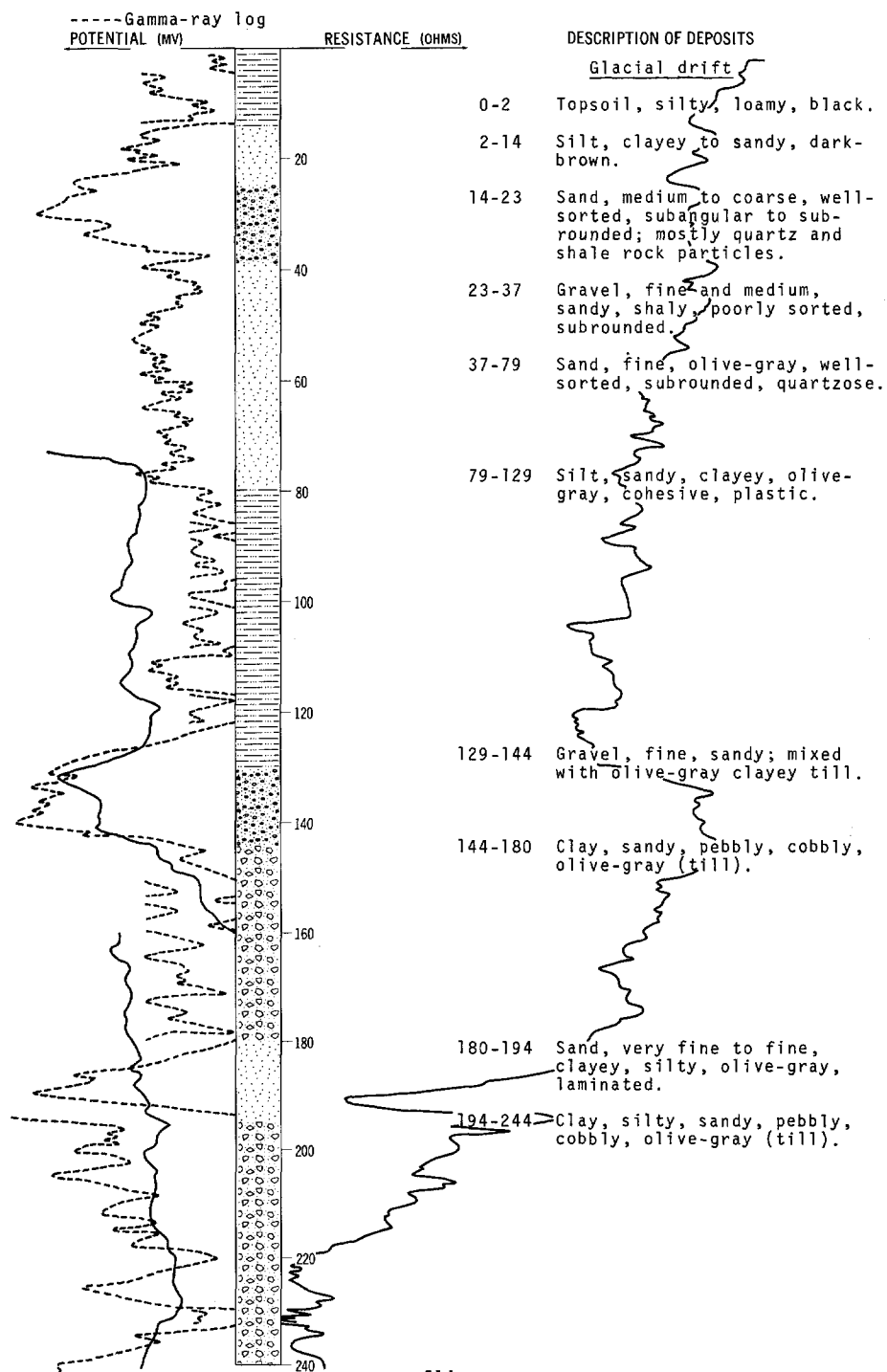
LOCATION: 163-56-24ADA1

NDSWC 3870

DATE DRILLED: October 1969

ALTITUDE: 906
(FT, MSL)

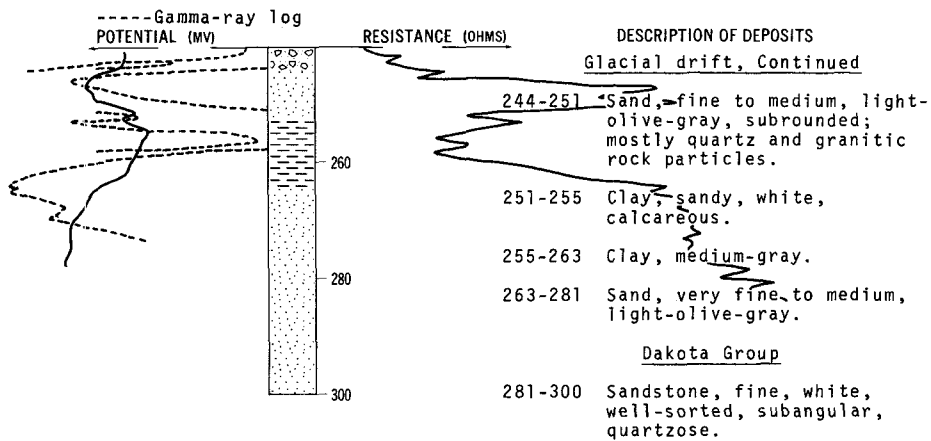
DEPTH: 300
(FT)



NDSWC 3870, Continued

LOCATION: 163-56-24ADA1
 ALTITUDE: 906
 (FT, MSL)

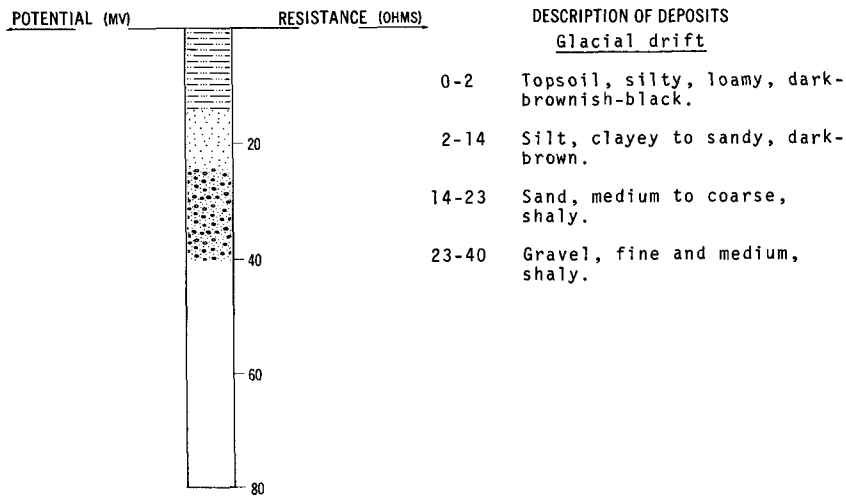
DATE DRILLED: October 1969
 DEPTH: 300
 (FT)



NDSWC 3871

LOCATION: 163-56-24ADA2
 ALTITUDE: 906
 (FT, MSL)

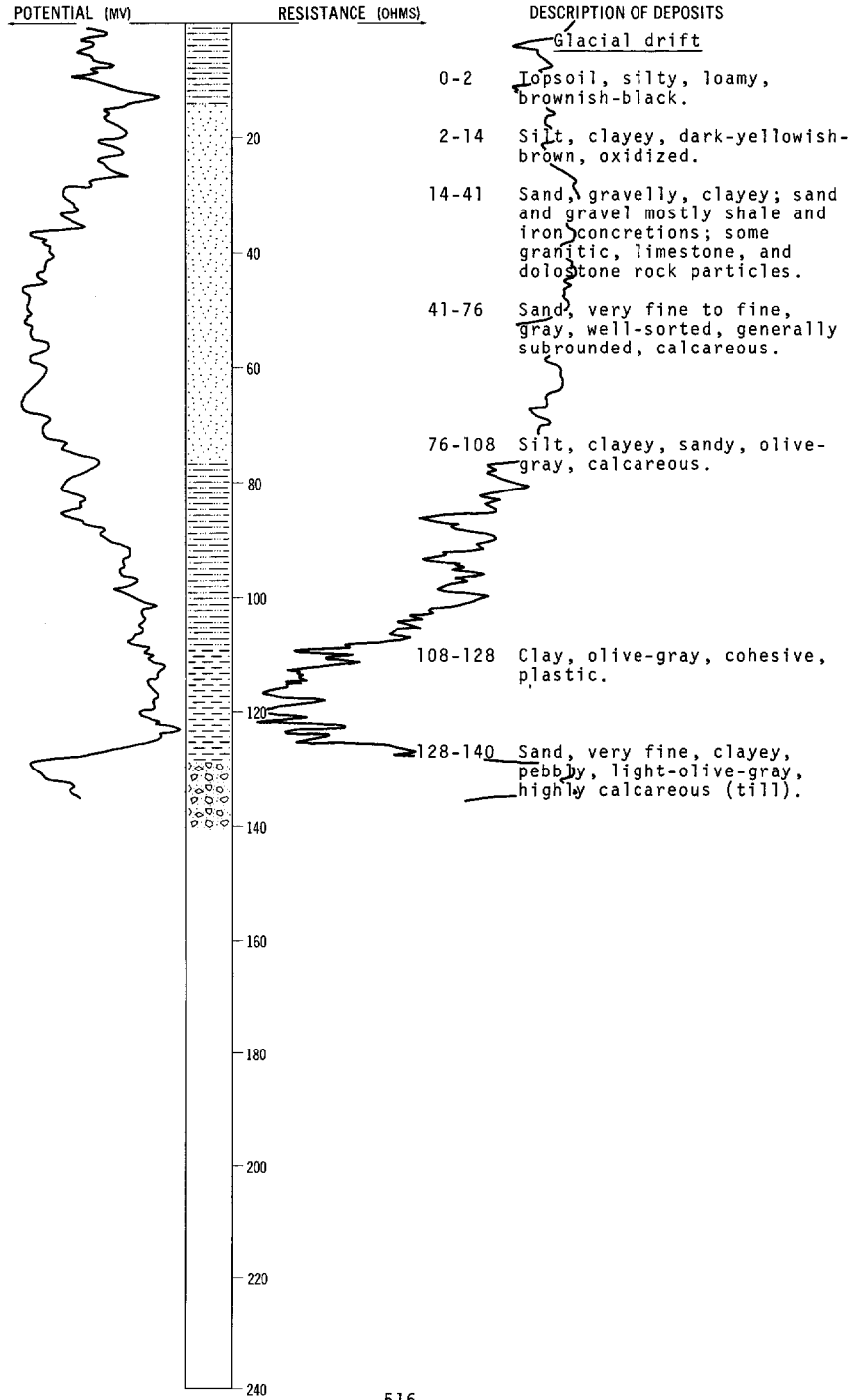
DATE DRILLED: October 1969
 DEPTH: 40
 (FT)



LOCATION: 163-56-24DAD
ALTITUDE: 905
(FT, MSL)

NDSWC 3873

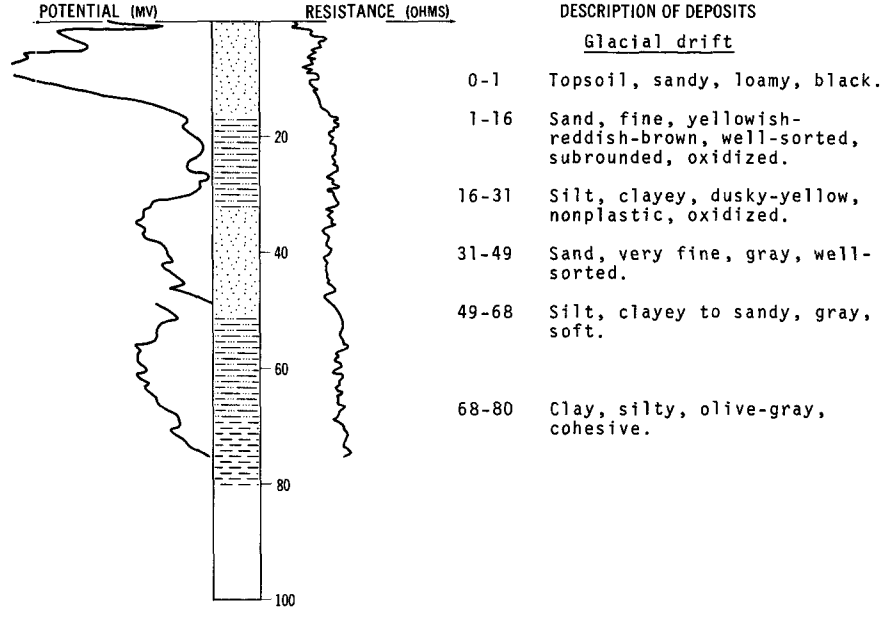
DATE DRILLED: October 1969
DEPTH: 140
(FT)



LOCATION: 163-56-24DDD
 ALTITUDE: 924
 (FT, MSL)

NDSWC 3874

DATE DRILLED: October 1969
 DEPTH: 80
 (FT)



163-56-26BBB
 USBR 458

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, sandy-----	1	1
	Sand, very fine-----	2	3
	Sand, fine-----	4	7
	Sand, very fine-----	3	10
	Sand, very fine, loamy-----	4	14
	Sand, fine, loamy-----	9	23

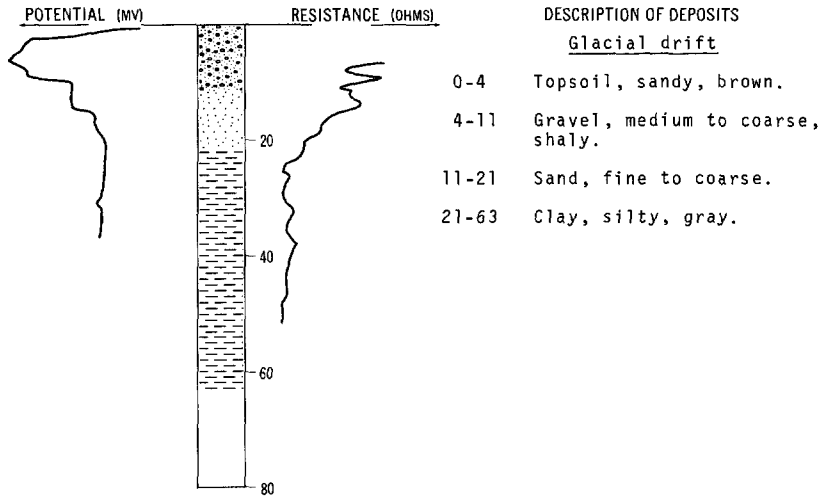
LOCATION: 163-56-28CCB

NDSWC 1787

DATE DRILLED: July 1960

ALTITUDE:
(FT, MSL)

DEPTH: 63
(FT)



163-56-28CDD
USBR 426

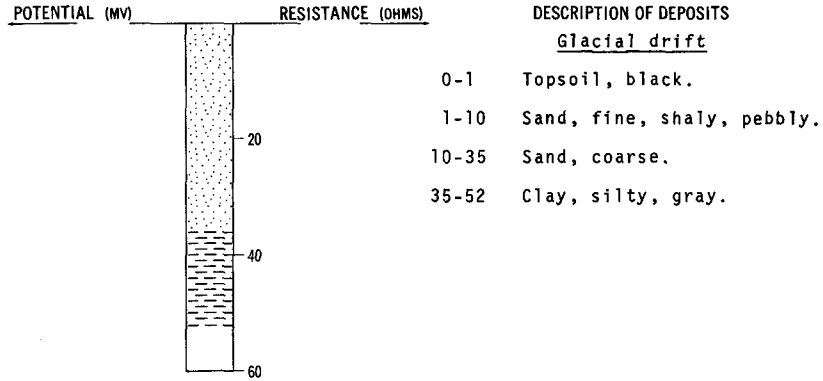
Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Glacial drift:</u>			
	Loam, fine, sandy-----	1	1
	Sand, fine-----	3	4
	Sand-----	14	18

LOCATION: 163-56-28DBC
 ALTITUDE: 988
 (FT, MSL)

NDSWC 1774

DATE DRILLED: July 1960
 DEPTH: 52
 (FT)



163-56-29ABB
 (Log from Layne Minnesota Company)

Altitude: 948 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Clay, silty, sandy-----	14	16
	Clay, shaly, gravelly-----	11	27
	Gravel and shale-----	8	35

163-56-29ABD
 (Log from Tri-State Drilling Company)

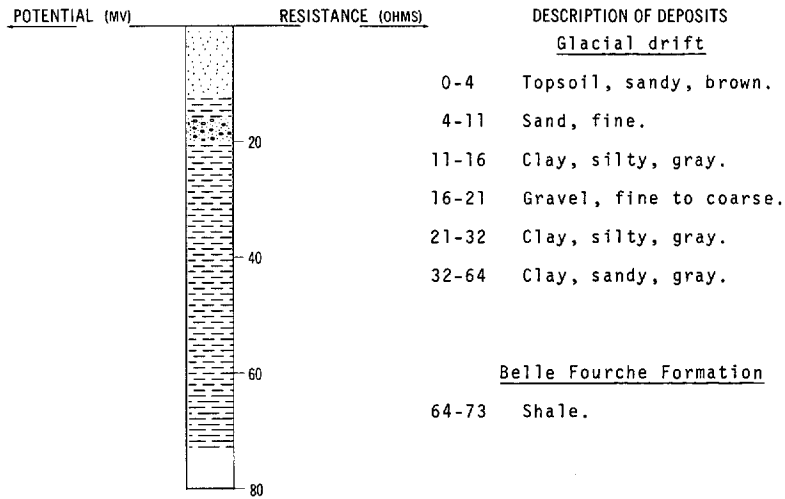
Altitude: 947 feet

Glacial drift:			
	Fill-----	5	5
	Clay, sandy-----	8	13
	Gravel, dirty-----	2	15
	Sand, coarse, gravelly-----	10	25

LOCATION: 163-56-29ADA1
 ALTITUDE: 945
 (FT, MSL)

NDSWC 1784

DATE DRILLED: July 1960
 DEPTH: 73
 (FT)



163-56-29ADA2
 USBR DH25

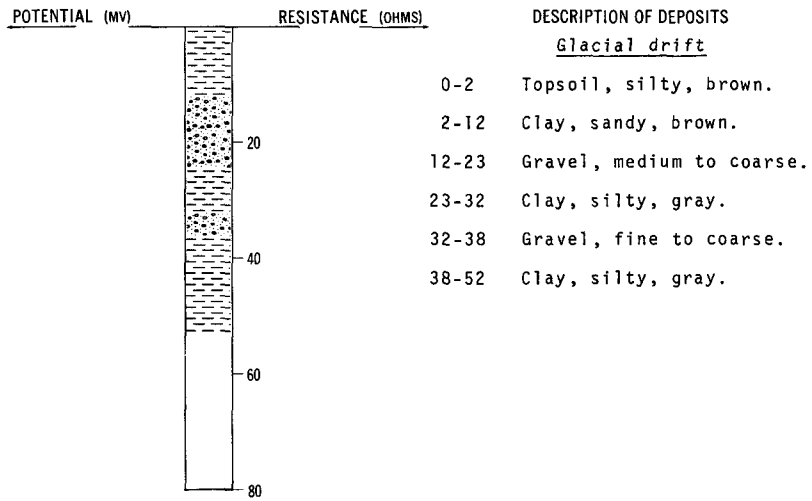
Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, clayey, silty-----	2	2
	Loam, silty-----	5	7
	Loam, clayey, silty-----	4	11
	Clay, silty-----	24	35

LOCATION: 163-56-29BAD
ALTITUDE: 960
(FT, MSL)

NDSWC 1791

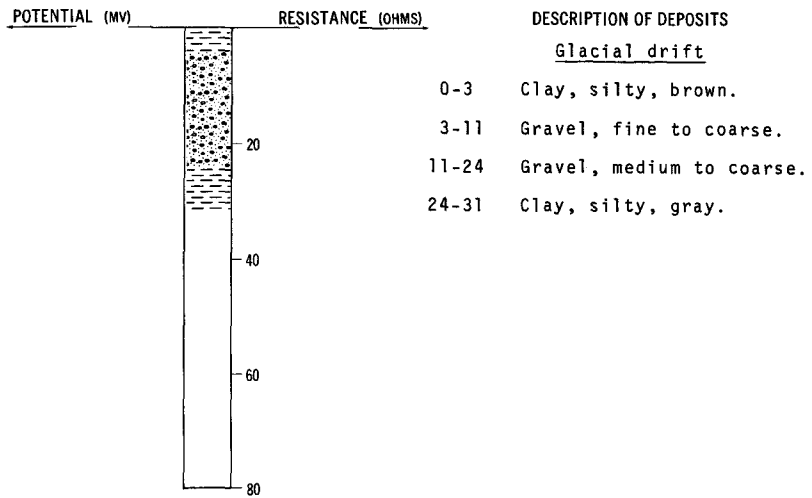
DATE DRILLED: August 1960
DEPTH: 52
(FT)



LOCATION: 163-56-29BDD
ALTITUDE: 950
(FT, MSL)

NDSWC 1778

DATE DRILLED: July 1960
DEPTH: 31
(FT)



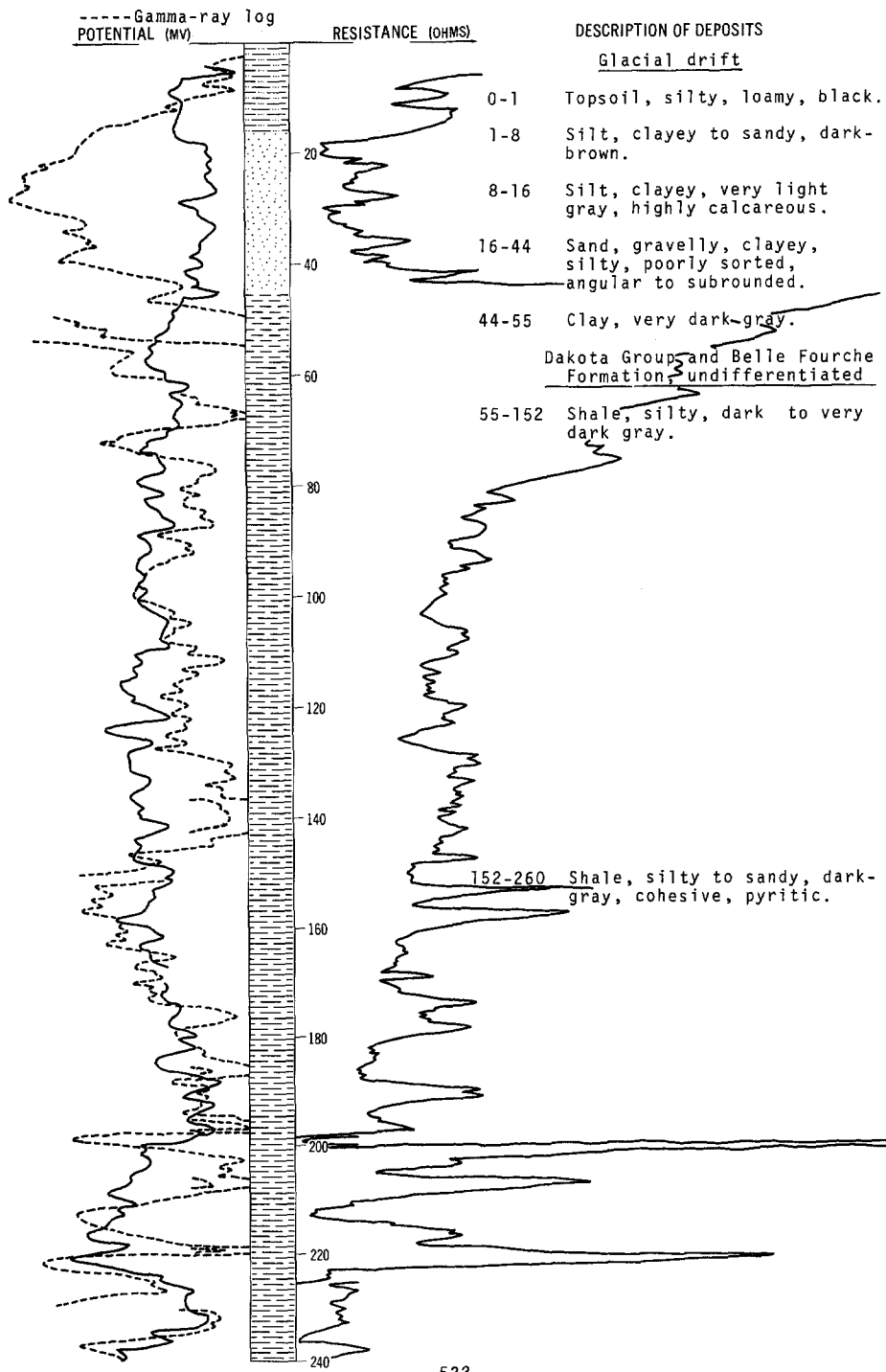
LOCATION: 163-56-29CDD1

NDSWC 3881

DATE DRILLED: October 1969

ALTITUDE: 955
(FT, MSL)

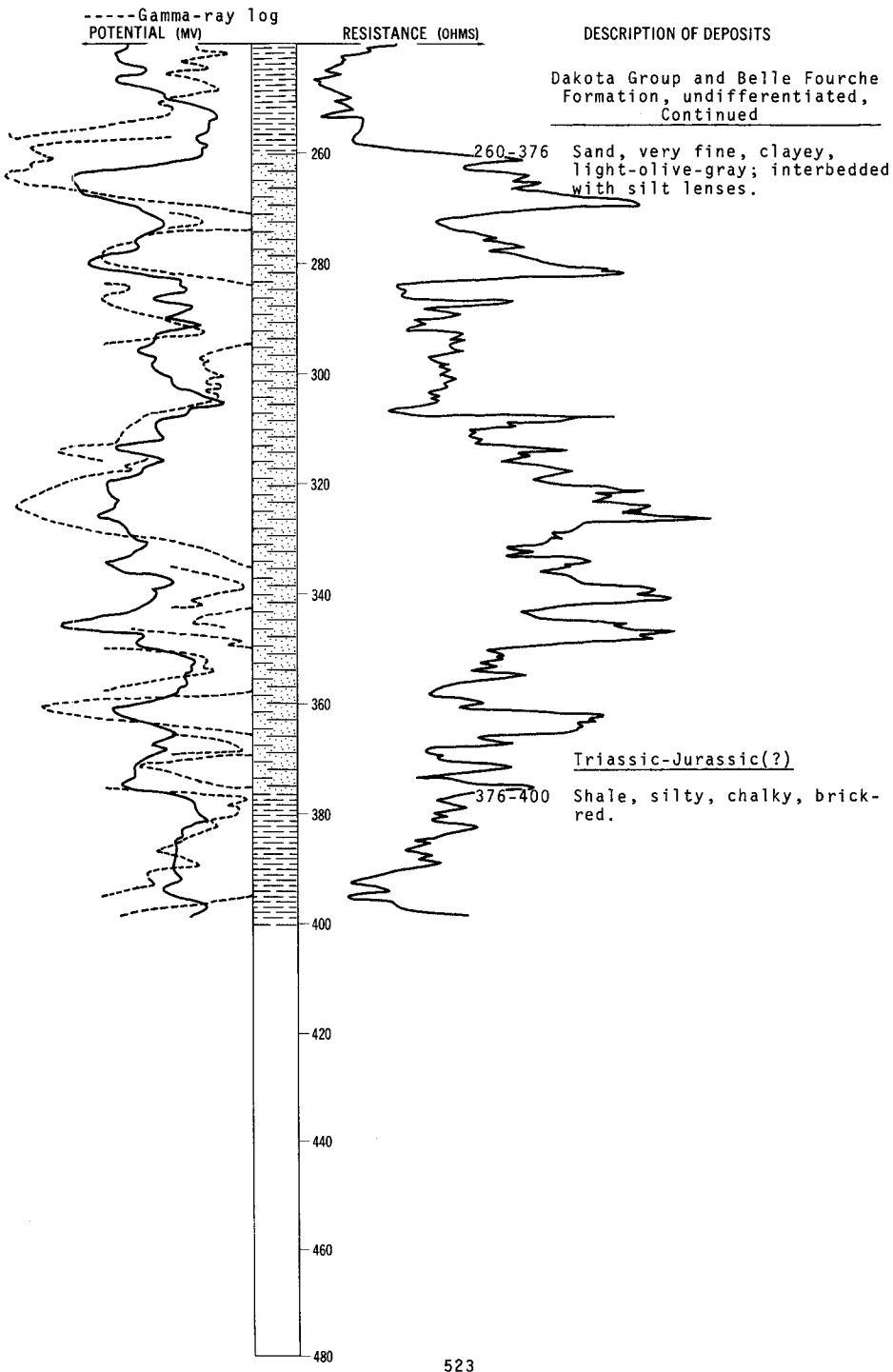
DEPTH: 400
(FT)



LOCATION: 163-56-29CDD1
ALTITUDE: 955
(FT, MSL)

NDSWC 3881, Continued

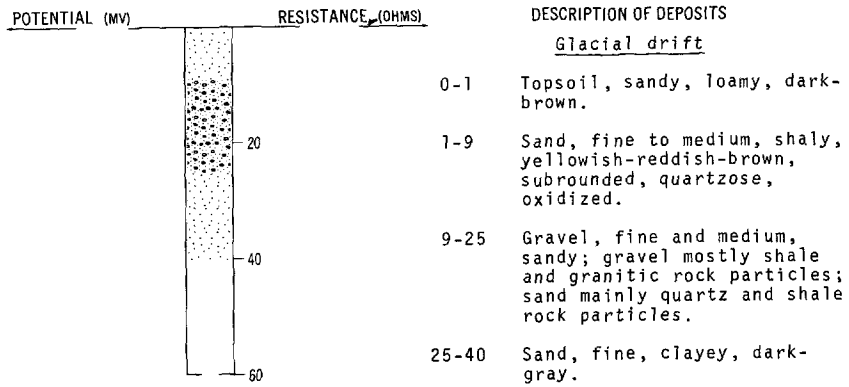
DATE DRILLED: October 1969
DEPTH: 400
(FT)



LOCATION: 163-56-29CDD2
 ALTITUDE: 957
 (FT, MSL)

NDSWC 3882

DATE DRILLED: October 1969
 DEPTH: 40
 (FT)



163-56-29DBB
 (Log from C. A. Simpson & Son)

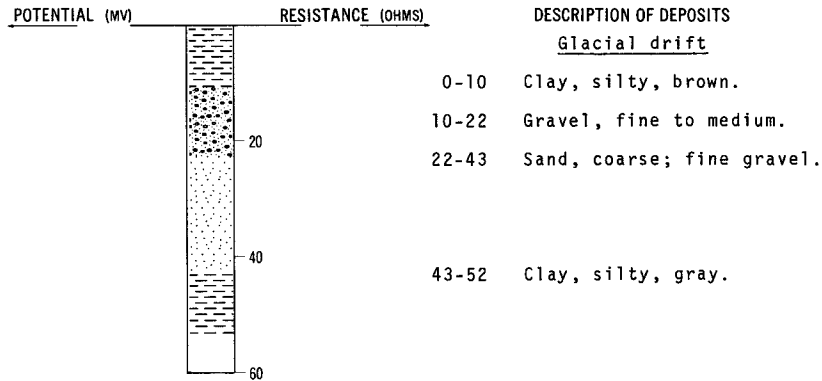
Altitude: 950 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, brown (topsoil)-----	2	2
	Clay, gray; interbedded with sand seams-----	6	8
	Sand, clayey, gravelly; includes large clay chunks and cobbles-----	23.5	31.5
	Clay, gray; interbedded with sand seams-----	2.5	34
	Clay and gravel-----	1	35
	Clay, gray-----	4	39

LOCATION: 163-56-29DCC
 ALTITUDE: 960
 (FT, MSL)

NDSWC 1788

DATE DRILLED: July 1960
 DEPTH: 52
 (FT)



163-56-30ABB
 NDGS Pem-70-23

Altitude: 1137 feet

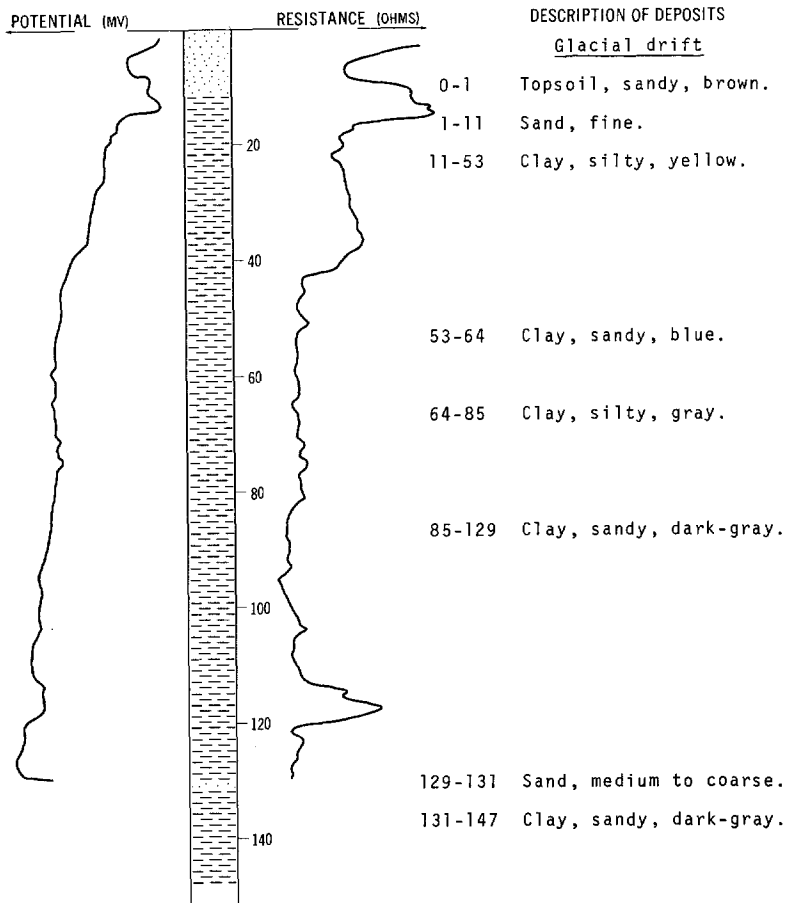
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil, sandy-----	3	3
	Sand, fine to medium, yellowish-brown, well-sorted-----	3	6
	Sand, very fine, silty, clayey, dark-yellowish-brown, well-sorted-----	4	10
	Sand, medium, clayey, dark-yellowish-brown, well-sorted-----	5	15
	Sand, medium, clayey, silty, dark-yellowish-brown-----	15	30
	Clay, silty, dark-yellowish-brown, well-sorted; some very fine sand-----	4	34
	Silt, clayey, sandy, gray, well-sorted-----	11	45
	Clay, silty, well-sorted, saturated-----	4	49

LOCATION: 163-56-30BBB1
 ALTITUDE: 1143
 (FT, MSL)

NDSWC 1790

DATE DRILLED: August 1960

DEPTH: 147
 (FT)



163-56-30BBB2
 USBR 432

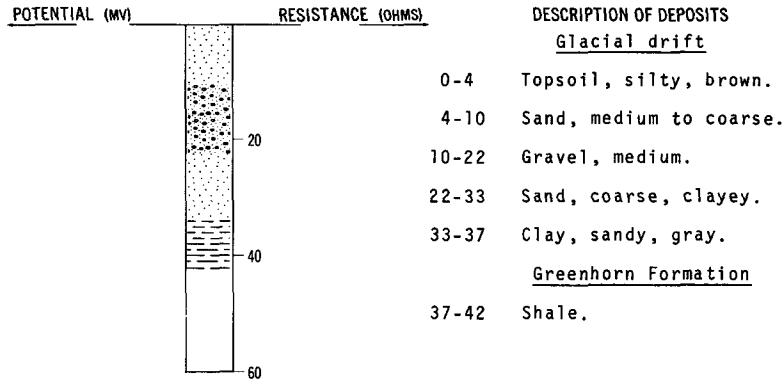
Altitude:

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Loam, clayey, silty	1	1
	Clay, silty	1	2
	Clay	1	3
	Sand, fine	10	13
	Sand, fine, loamy	5	18

LOCATION: 163-56-31DAA
 ALTITUDE: 963
 (FT, MSL)

NDSWC 1792

DATE DRILLED: August 1960
 DEPTH: 42
 (FT)



163-56-31DAC
 NDGS Pem-70-22

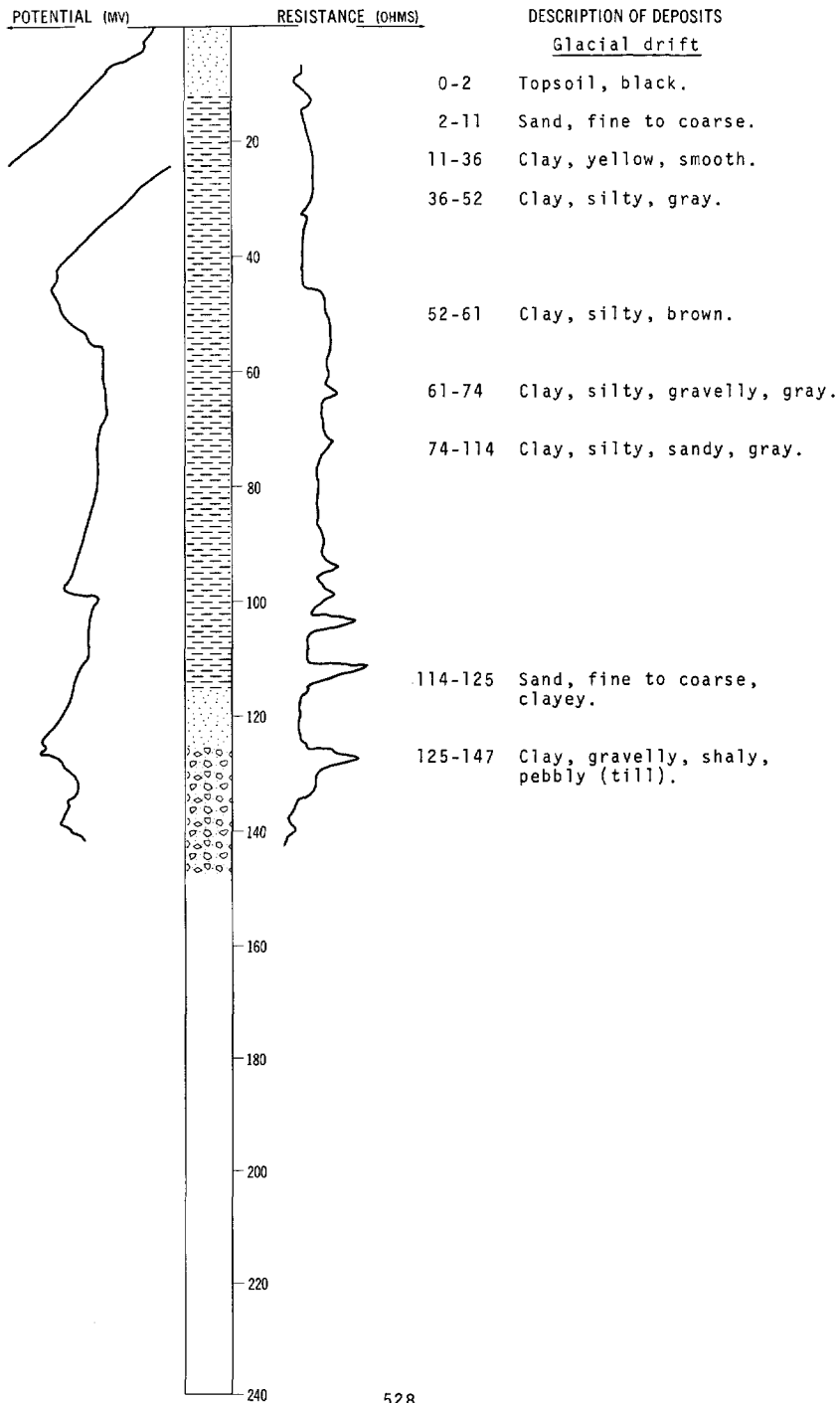
Altitude: 968 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Clay, silty, pebbly, brown-black, poorly sorted; pebbles subangular to subrounded; mostly shale-----	9	11
	Clay, gravelly, pebbly, dark-brown, poorly sorted; pebbles subangular to rounded; less clay and coarser with depth; saturated at 20 feet-----	9	20
	Gravel, coarse, clayey, moderately well sorted, rounded to subrounded; boulder at 26 feet-----	6	26

LOCATION: 163-56-32ABB
ALTITUDE: 1020
(FT, MSL)

NDSWC 1783

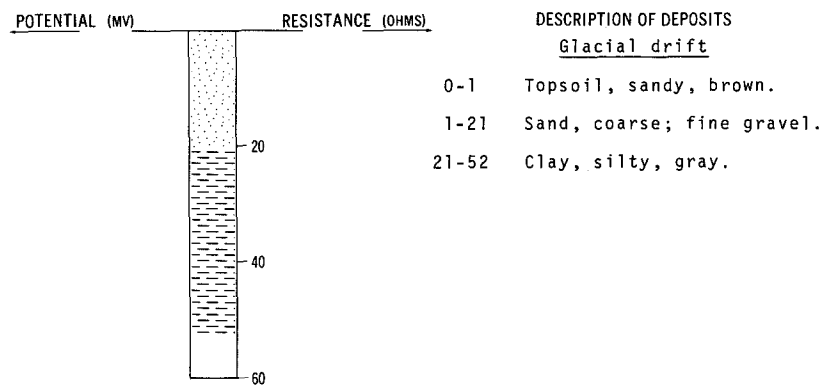
DATE DRILLED: July 1960
DEPTH: 147
(FT)



LOCATION: 163-56-34BCB2
 ALTITUDE: 980
 (FT, MSL)

NDSWC 1793

DATE DRILLED: August 1960
 DEPTH: 52
 (FT)



163-56-34BCD
 USBR 425

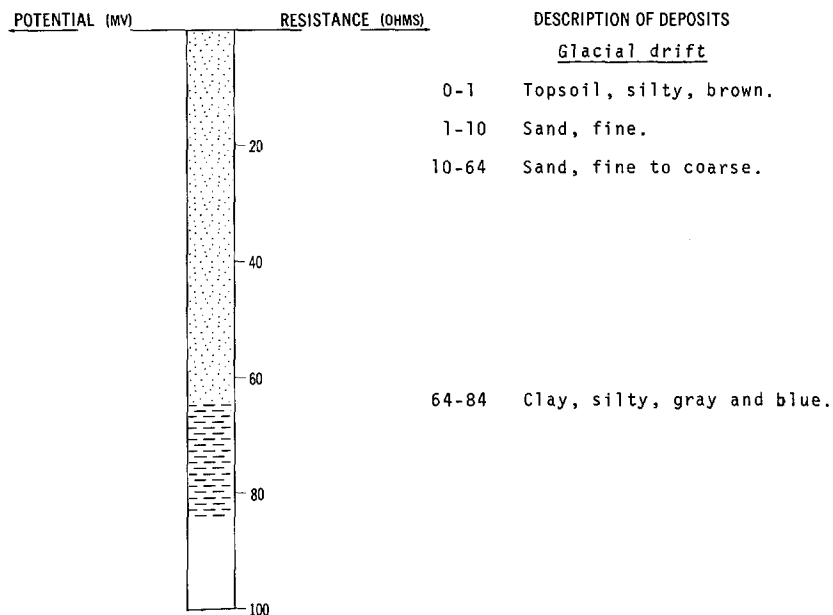
Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, fine, sandy-----	1	1
	Sand, fine, loamy-----	1	2
	Sand-----	9	11
	Loam, sandy-----	7	18
	Silt-----	5	23

LOCATION: 163-56-34DDB
 ALTITUDE: 983
 (FT, MSL)

NDSWC 1775

DATE DRILLED: July 1960
 DEPTH: 84
 (FT)



163-56-34DDC1
 USBR 424

Altitude:

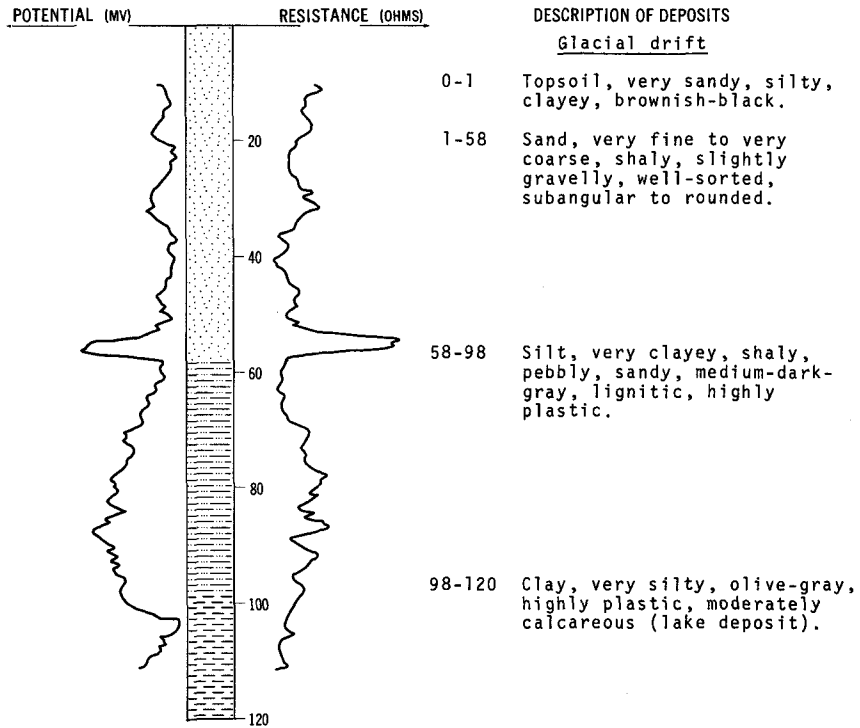
<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine-----	17	20
	Loam-----	1	21
	Loam, sandy-----	1	22
	Till-----	1	23

LOCATION: 163-56-34DDC2
 ALTITUDE: 1010
 (FT, MSL)

NDSWC 5936

DATE DRILLED: May 1971

DEPTH: 120
 (FT)



163-57-1DDD
 USBR 3

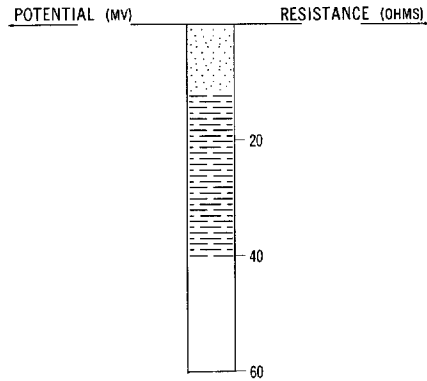
Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, clayey-----	6	6
	Loam, sandy-----	2	8
	Clay-----	12	20

LOCATION: 163-57-16AAA
 ALTITUDE: 1157
 (FT, MSL)

NDSWC 4225

DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-1 Topsoil, sandy, loamy, black.
- 1-6 Sand, fine and medium, silty, yellowish-gray, oxidized.
- 6-12 Sand, medium to coarse, gravelly, silty, red, assorted, subrounded, iron-stained; mostly carbonate and shale rock fragments.

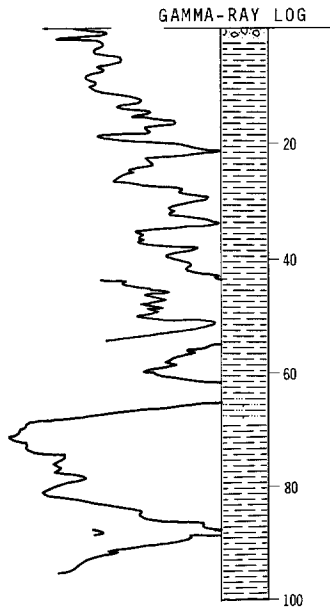
Carlile Formation

- 12-40 Shale, silty, medium-light-gray, bentonitic.

LOCATION: 163-57-21CCC
 ALTITUDE: 1258
 (FT, MSL)

NDSWC 4226

DATE DRILLED: September 1970
 DEPTH: 100
 (FT)



DESCRIPTION OF DEPOSITS

Glacial drift

- 0-1 Silt, clayey, pebbly, yellowish-gray, leached (till).

Niobrara Formation

- 1-35 Shale, light-gray; red iron stains.
- 35-46 Shale, silty, dark-gray.
- 46-56 Shale, dark-brown, bentonitic, organic.
- 56-63 Shale, dark-gray.
- 63-67 Claystone, nearly white.
- 67-88 Shale, dark-gray.
- 88-91 Shale, dark-brown, fissile, organic.
- 91-100 Shale, dark-gray, powdery.

163-57-22AAA
 NDGS Cav-70-4

Altitude: 1136 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Roadfill-----	3	3
	Sand, medium to fine, slightly pebbly, yellowish-brown, moderately well sorted; few shale pebbles-----	2	5
	Sand; same as above except slightly coarser and more shale pebbles-----	2	7
	Sand, medium, clayey, dark-yellowish-brown, well-sorted-----	3	10
	Till, clayey, pebbly, dark-yellowish-brown---	2	12
	Sand, coarse, pebbly, subrounded to rounded to subangular, saturated; pebbles are mostly shale-----	11	23
	Clay, pebbly; no samples-----	1	24

163-57-22BAA
 NDGS Cav-70-5

Altitude: 1140 feet

Glacial drift:			
	Topsoil-----	2	2
	Sand, coarse, gravelly, subrounded to subangular; more than 70 percent shale particles-----	6	8
Carlisle Formation:			
	Shale, clayey, gray and yellow, laminated, very plastic; hard drilling-----	6	14

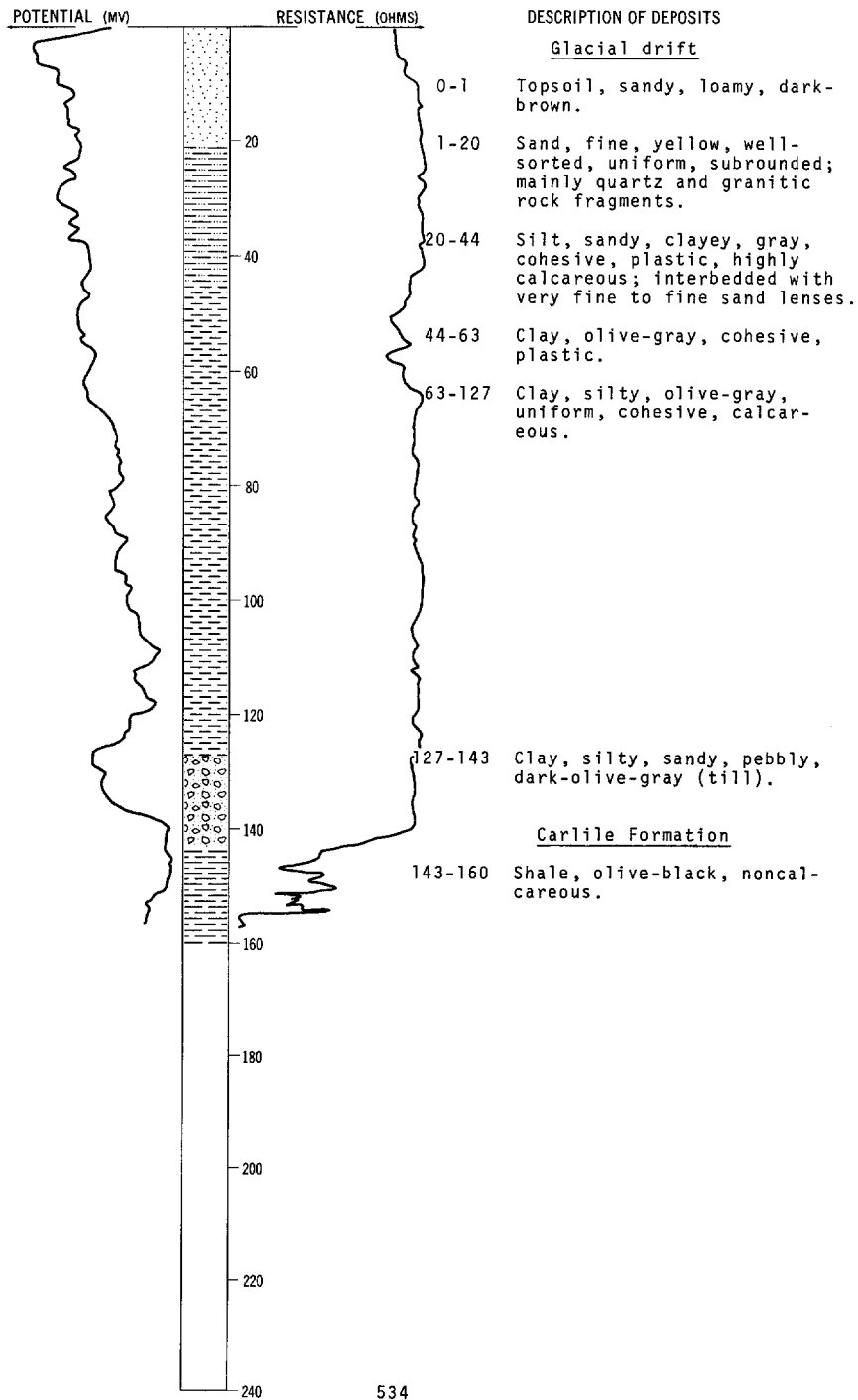
LOCATION: 163-57-24CBB

NDSWC 3879

DATE DRILLED: October 1969

ALTITUDE: 1121
(FT, MSL)

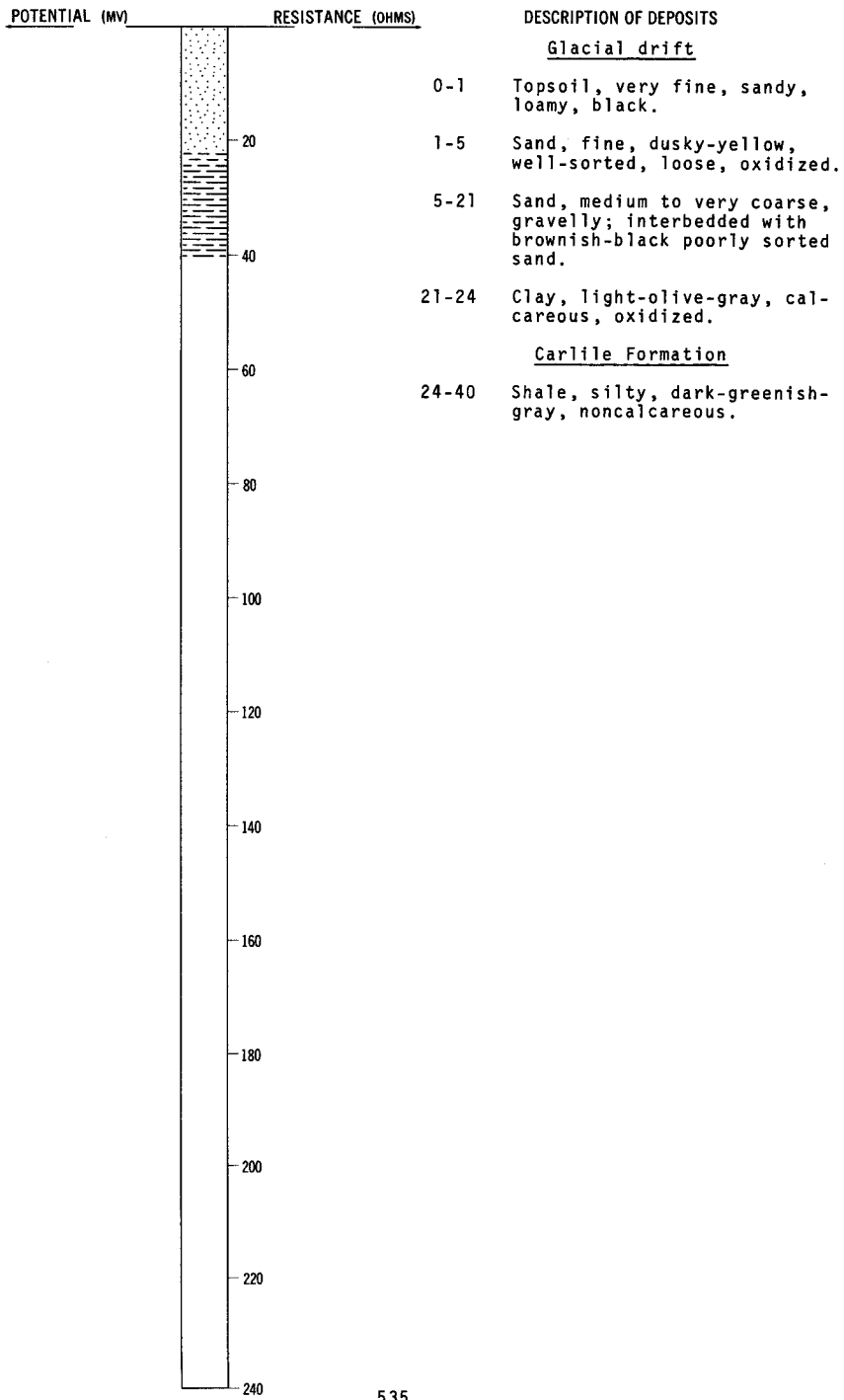
DEPTH: 160
(FT)



LOCATION: 163-57-26CBB
ALTITUDE: 1220
(FT, MSL)

NDSWC 3880

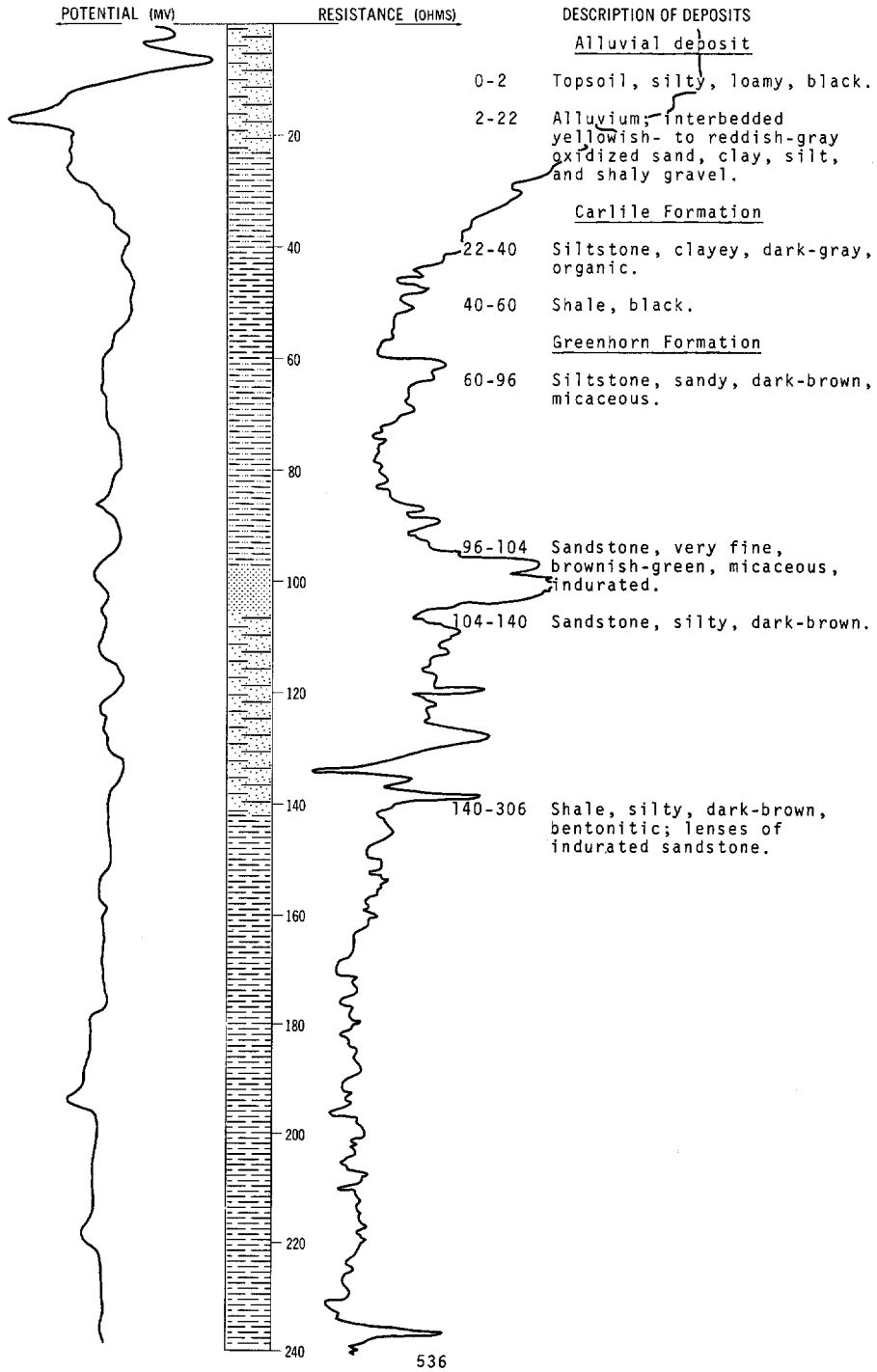
DATE DRILLED: October 1969
DEPTH: 40
(FT)



LOCATION: 163-57-33ADA
ALTITUDE: 984
(FT, MSL)

NDSWC 4242

DATE DRILLED: September 1970
DEPTH: 440
(FT)



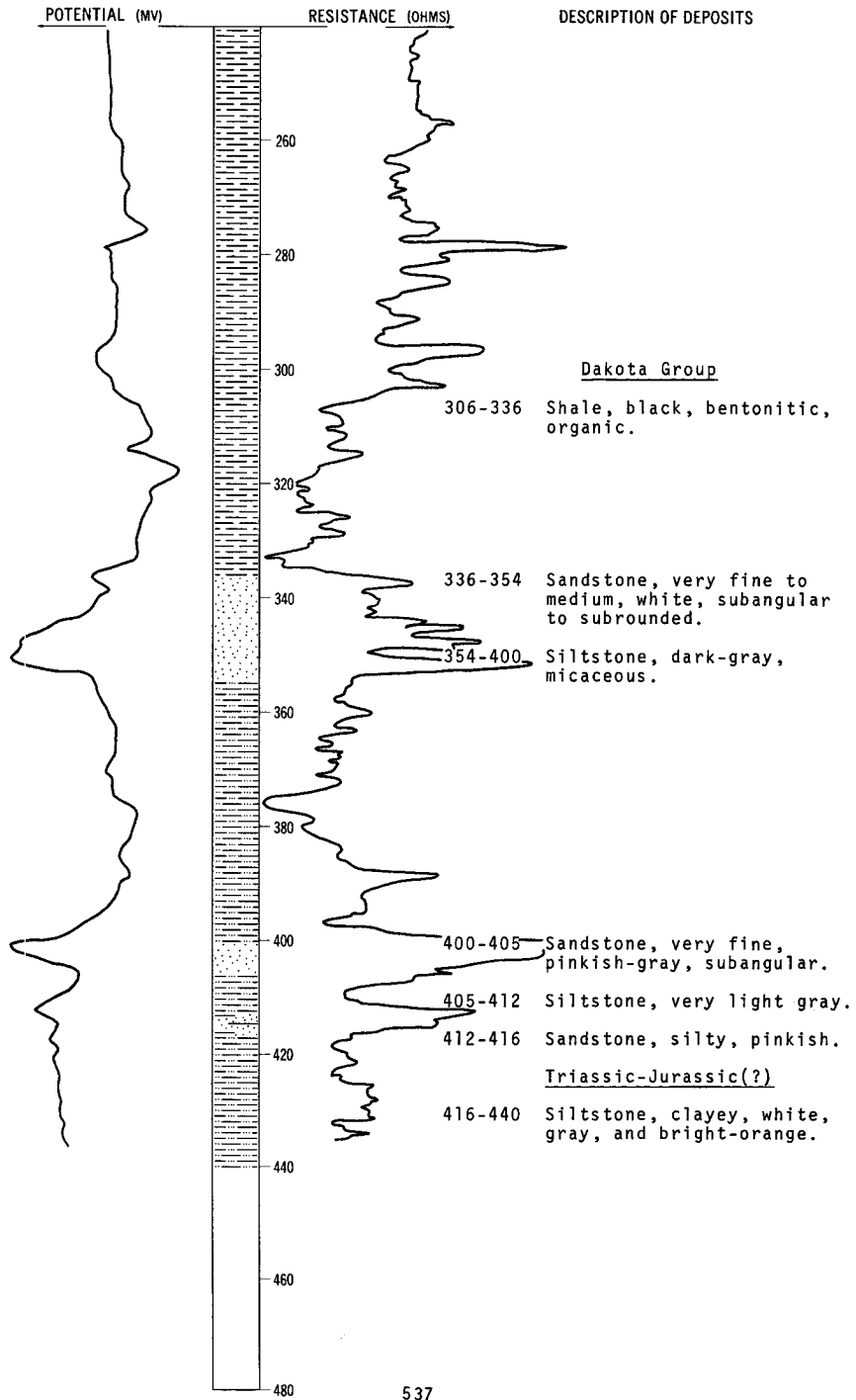
NDSWC 4242, Continued

LOCATION: 163-57-33ADA

DATE DRILLED: September 1970

ALTITUDE: 984
(FT, MSL)

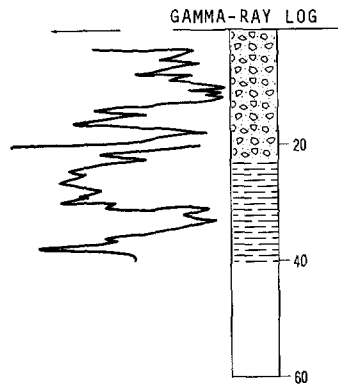
DEPTH: 440
(FT)



LOCATION: 163-58-17DDD
 ALTITUDE: 1531
 (FT, MSL)

NDSWC 3813

DATE DRILLED: September 1969
 DEPTH: 40
 (FT)



DESCRIPTION OF DEPOSITS

- Glacial drift
- 0-1 Topsoil, pebbly, loamy, black.
 - 1-14 Clay, silty, sandy, pebbly, yellowish-gray (till).
 - 14-21 Clay, silty, sandy, pebbly, olive-gray, unoxidized (till).
- Pierre Formation
- 21-40 Shale, black.

163-58-22CDD1
 (Log from Peterson Well Company)

Altitude: 1531 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Black dirt-----	1	1
	Clay, gravelly, rocky-----	24	25
	Gravel, clayey-----	10	35
	Gravel; shale-----	10	45
Pierre Formation:			
	Shale, blue-----	30	75

163-58-27CDB1
 (Log from U.S. Air Force)

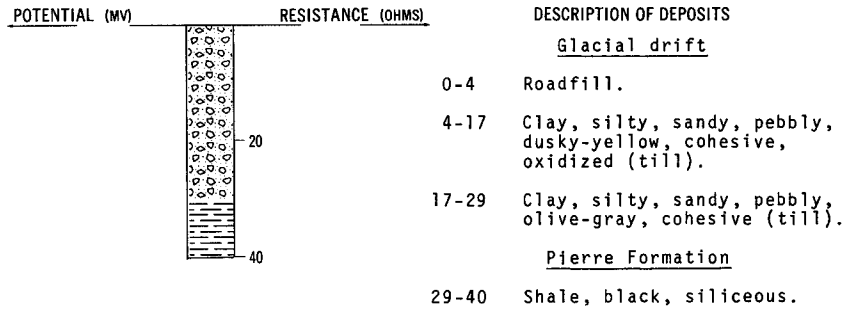
Altitude: 1531 feet

Glacial drift:			
	Clay, silty-----	2.5	2.5
	Sand, fine, clayey, silty-----	8.5	11
	Silt; shale-----	7	18
	Clay, silty, sandy-----	5	23
	Sand, fine to coarse, silty-----	1.5	24.5
Pierre Formation:			
	Silt; shale-----	4.5	29
	Shale-----	101	130

LOCATION: 163-58-32BBB
 ALTITUDE: 1558
 (FT, MSL)

NDSWC 4240

DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



163-58-33BAB
 (Log from U.S. Air Force)

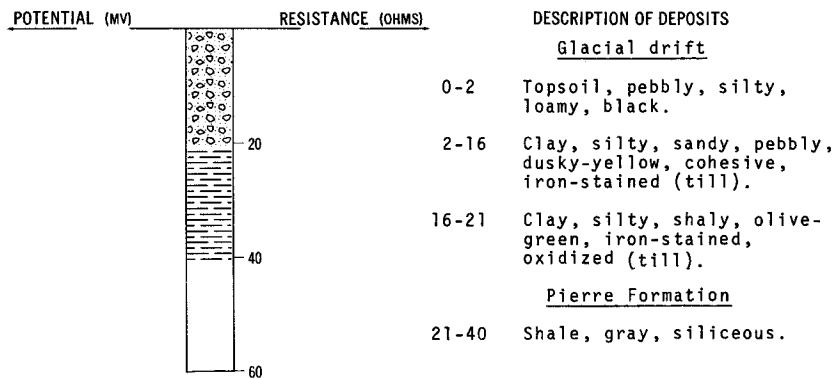
Altitude: 1550 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:	Clay, silty	8	8
Pierre Formation:	Shale	121.5	129.5

LOCATION: 163-59-3DDD
 ALTITUDE: 1553
 (FT, MSL)

NDSWC 4239

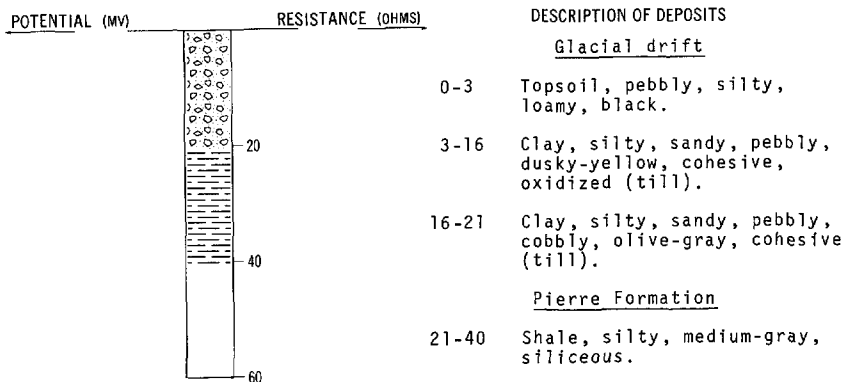
DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



LOCATION: 163-59-4BBB
 ALTITUDE: 1562
 (FT, MSL)

NDSWC 4238

DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



163-59-14BBA
 (Log from U.S. Air Force)

Altitude: 1562 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Clay, silty, sandy, dark-gray-----	1.5	1.5
	Clay, silty, sandy, brown-----	4.5	6
	Silt, sandy, clayey, brown-----	7	13
	Clay, sandy, silty, partly gravelly, brownish-gray-----	6	19
	Clay, silty, very shaly, dark-gray-----	8	27
Pierre Formation:			
	Shale, clayey, dark-gray, crushed-----	43	70
	Shale, slightly silty, dark-gray, highly fractured and broken-----	17	87
	Shale, dark-gray, highly fractured and broken-----	43	130

163-59-14BBD1
 (Log from U.S. Air Force)

Altitude: 1560 feet

Glacial drift:			
	Clay, silty, sandy-----	20	20
	Clay, silty-----	4	24
	Silt, clayey-----	40	64
	Clay, silty-----	10	74
Pierre Formation:			
	Shale; clay-----	36	110
	Shale-----	20	130

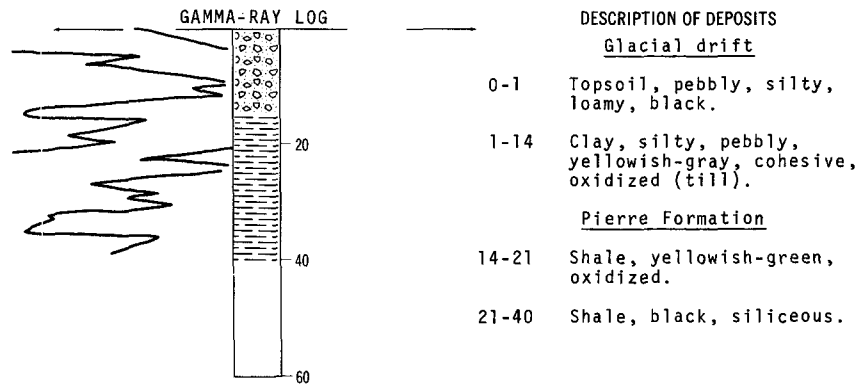
LOCATION: 163-59-15CCC

NDSWC 3814

DATE DRILLED: September 1969

ALTITUDE: 1579
(FT, MSL)

DEPTH: 40
(FT)



163-59-31DCA1
(Log from U.S. Air Force)

Altitude: 1582 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, dark-brown to black-----	3	3
	Clay, silty, sandy, partly gravelly, partly shaly, brown-----	8	11
Pierre Formation:			
	Shale, silty, dark-gray, highly fractured, crushed-----	37	48
	Shale, dark-gray, highly fractured, partly fissile-----	82	130

163-59-31DDD
(Log from U.S. Air Force)

Altitude: 1598 feet

Glacial drift:			
	Silt, sandy, clayey-----	19.5	19.5
Pierre Formation:			
	Shale; clay-----	60.5	80
	Shale-----	50	130

163-59-36BBD1
(Log from North Dakota State Highway Department)

Altitude: 1478 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, shaly, gray-----	11.5	11.5
	Clay, sandy, shaly, gray-----	13.6	25.1
Pierre Formation:			
	Shale, gray, very hard-----	11.4	36.5

163-59-36BBD2
(Log from North Dakota State Highway Department)

Altitude: 1478 feet

Glacial drift:			
	Clay, shaly, dark-gray-----	11	11
	Clay, sandy, shaly, dark-gray-----	14.6	25.6
Pierre Formation:			
	Shale, clayey, very hard-----	8.5	34.1

163-60-1CCA1
(Log from U.S. Air Force)

Altitude: 1570 feet

Glacial drift:			
	Clay, silty, sandy, black-----	2	2
	Clay, sandy, silty, partly gravelly, partly shaly, brown-----	18.5	20.5
	Clay, silty, shaly, gray-----	3	23.5
Pierre Formation:			
	Shale, clayey, silty, dark-gray, crushed-----	98	121.5
	Shale, dark-gray, moderately soft to moderately hard, bentonitic-----	5	125.5
	Shale, dark-gray, highly fractured-----	4	129.5

163-60-1CCB
(Log from U.S. Air Force)

Altitude: 1577 feet

Glacial drift:			
	Clay, sandy-----	2	2
	Silt, clayey, sandy-----	20	22
	Sand, fine to medium, silty-----	1.5	23.5
	Silt, clayey, sandy-----	6.5	30
Pierre Formation:			
	Shale-----	100	130

163-60-1CCC1
(Log from U.S. Air Force)

Altitude: 1580 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Silt, clayey, sandy, grayish-brown-----	4	4
	Clay, sandy, silty, partly gravelly, brown---	20	24
	Clay, silty, sandy, partly gravelly, dark- brown-----	3	27
	Clay, silty, sandy, gravelly, dark-gray-----	3	30
Pierre Formation:			
	Shale, dark-gray to black, highly fractured-----	100	130

163-60-4AAD1
(Log from Walter Koehmstedt)

Altitude: 1562 feet

Glacial drift:			
	Clay, sandy, gravelly-----	35	35
	Lake bottom silt-----	25	60
Pierre Formation:			
	Shale-----	60	120

163-60-7BBB
(Log from U.S. Air Force)

Altitude: 1558 feet

Glacial drift:			
	Clay, silty, sandy, gray-----	2.5	2.5
	Clay, sandy, silty, brown-----	6.5	9
	Silt, sandy, clayey, brown-----	10	19
	Shale, gray, broken, blocky, oxidized-----	18	37
	Sand, coarse, clayey, gravelly, brownish- gray-----	9	46
Pierre Formation:			
	Shale, gray, blocky, partly fractured-----	84	130

163-60-7BBD1
(Log from U.S. Air Force)

Altitude: 1555 feet

Glacial drift:			
	Silt; sandy clay-----	2	2
	Clay, silty, sandy-----	27	29
	Shale; clayey silt-----	12	41
	Clay, silty, sandy-----	63	104
Pierre Formation:			
	Shale; clayey silt-----	10	114
	Shale-----	16	130

163-60-7CBB
 NDGS Cav-69-6

Altitude: 1555 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	1	1
	Silt, sandy, clayey, dark-yellowish-brown-----	2	3
	Till, silty, dark-yellowish-brown; contains 50 to 70 percent shale particles--	10	13
	Sand, gravelly, saturated-----	15	28
Pierre Formation:			
	Shale-----	-	28

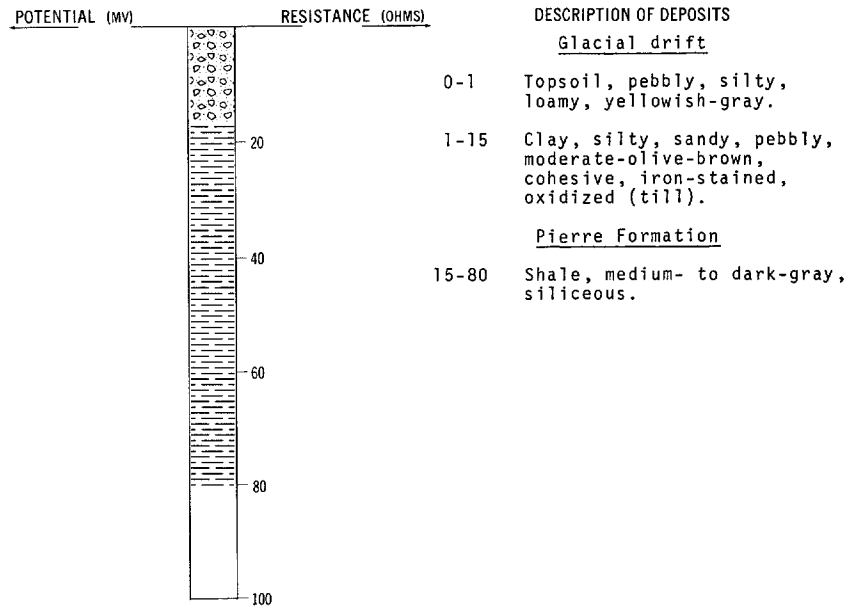
NDSWC 4236

LOCATION: 163-60-11DDD

DATE DRILLED: September 1970

ALTITUDE: 1567
 (FT, MSL)

DEPTH: 80
 (FT)



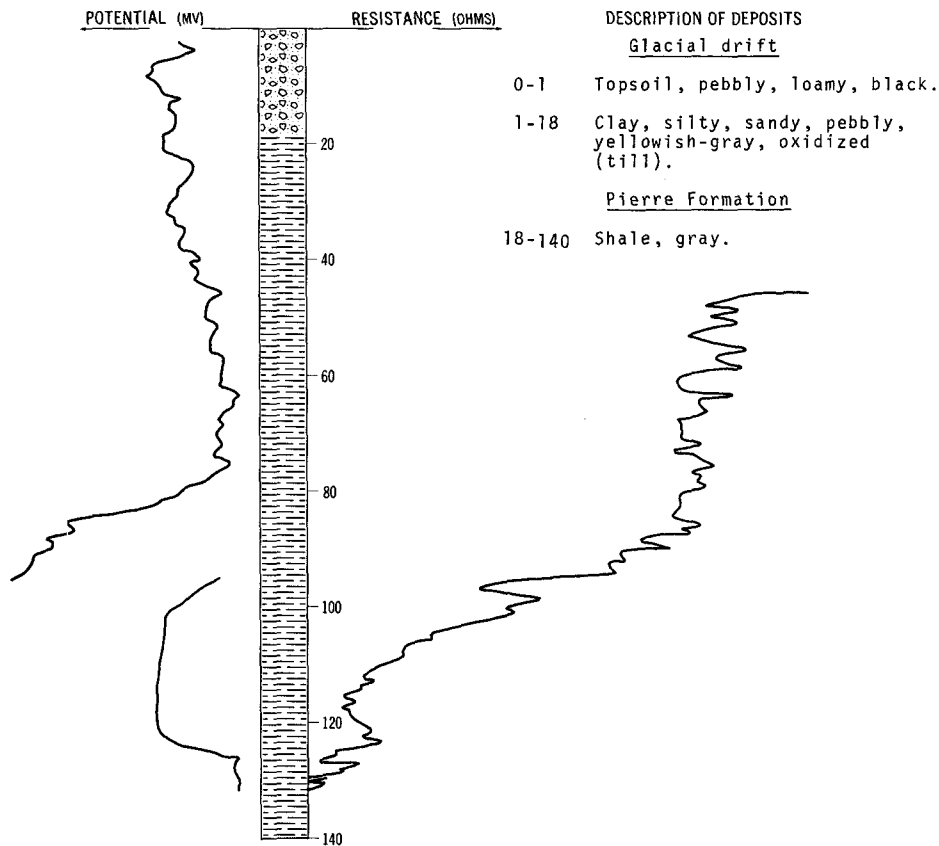
LOCATION: 163-60-15CCC

NDSWC 3815

DATE DRILLED: September 1969

ALTITUDE: 1567
(FT, MSL)

DEPTH: 140
(FT)



163-60-25BBB
(Log from Peterson Well Company)

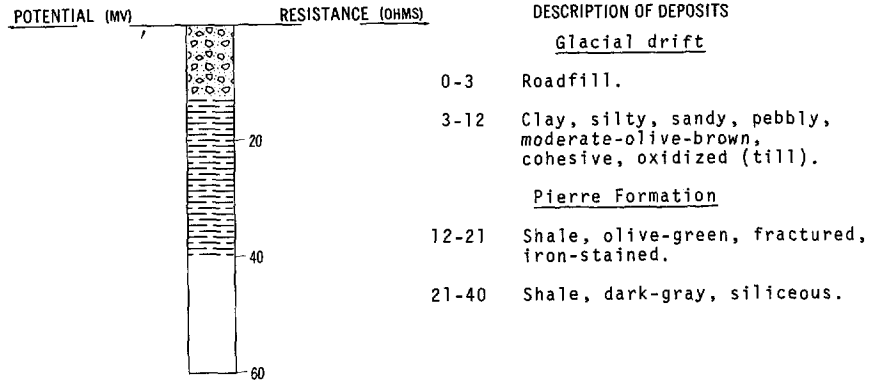
Altitude: 1584 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Glacial drift:</u>			
	Black dirt-----	1	1
	Clay, yellow-----	22	23
	Clay, shaly, yellow-----	7	30
<u>Pierre Formation:</u>			
	Shale-----	8	38
	Shale, crumbly-----	22	60
	Clay, gray; sand-----	10	70
	Shale, blue-----	30	100

NDSWC 4243

LOCATION: 163-60-31CCC
 ALTITUDE: 1568
 (FT, MSL)

DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



163-60-32ADC1
 (Log from U.S. Air Force)

Altitude: 1575 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Glacial drift:</u>			
	Clay, silty-----	3	3
	Clay; silt-----	5	8
	Clay, silty, sandy-----	11.5	19.5
	Sand, medium to coarse, clayey-----	6.5	26
	Clay; silty shale-----	11	37
	Sand, fine to coarse; clay; shale fragments-----	9	46
<u>Pierre Formation:</u>			
	Shale; clayey silt-----	3	49
	Shale-----	22.5	71.5
	Shale; silt-----	7.5	79
	Shale-----	51	130

163-60-32DAA
 (Log from U.S. Air Force)

Altitude: 1577 feet

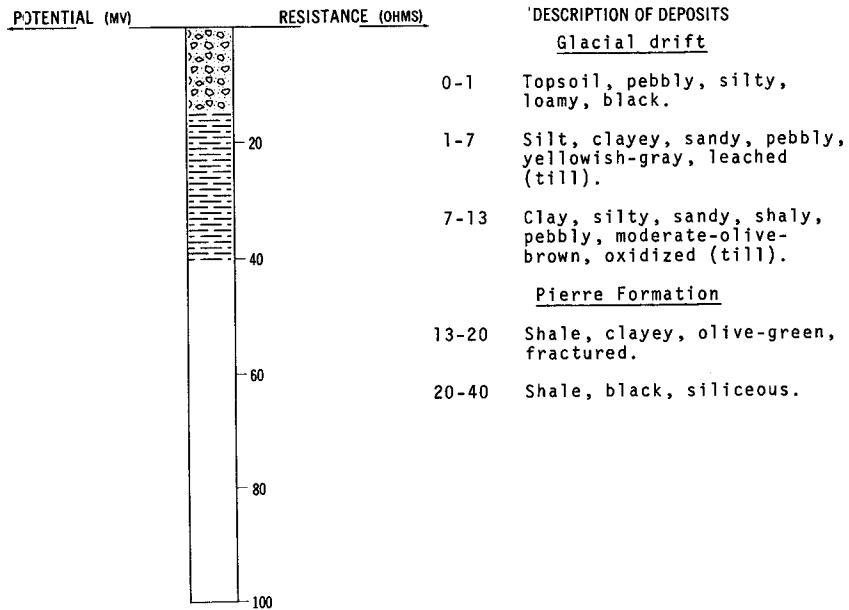
<u>Glacial drift:</u>			
	Silt, clayey, sandy, brown-----	2	2
	Silt, sandy, clayey, partly gravelly, light-grayish-brown-----	6.5	8.5
	Sand, fine to coarse, gravelly, brown-----	7.5	16
	Silt, sandy, clayey, partly gravelly, gray---	11.5	27.5
<u>Pierre Formation:</u>			
	Shale, clayey, dark-gray, crushed-----	102.5	130

163-61-2888
 NDGS Cav-69-4

Altitude: 1549 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay-----	1	1
	Till, grayish-brown, saturated; shale and limestone fragments more abundant than granitics-----	9.5	10.5
Pierre Formation:			
	Shale-----	-	10.5

LOCATION: 163-61-4DDD NDSWC 4246 DATE DRILLED: September 1970
 ALTITUDE: 1550 DEPTH: 40
 (FT, MSL) (FT)



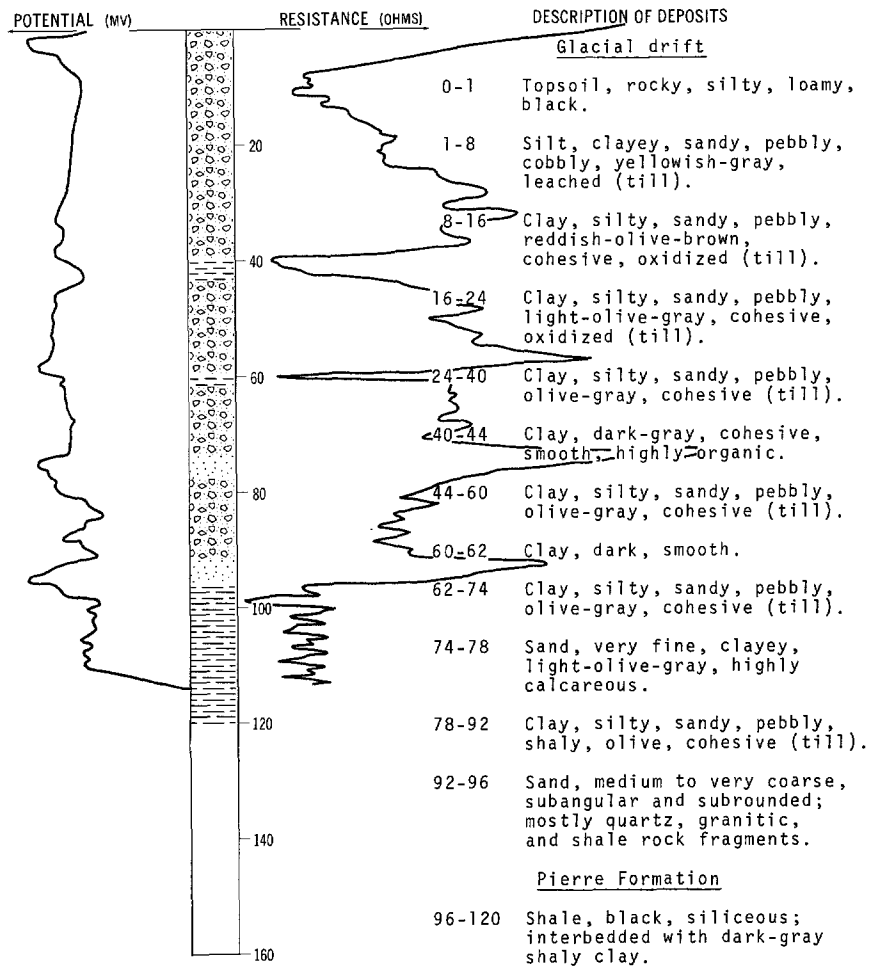
LOCATION: 163-61-13CCC

NDSWC 4244

DATE DRILLED: September 1970

ALTITUDE: 1561
(FT, MSL)

DEPTH: 120
(FT)



163-61-15AAA
NDGS Cav-69-3

Altitude: 1553 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:	Till, clayey, silty, moderate-brown; saturated at 2 feet-----	8	8

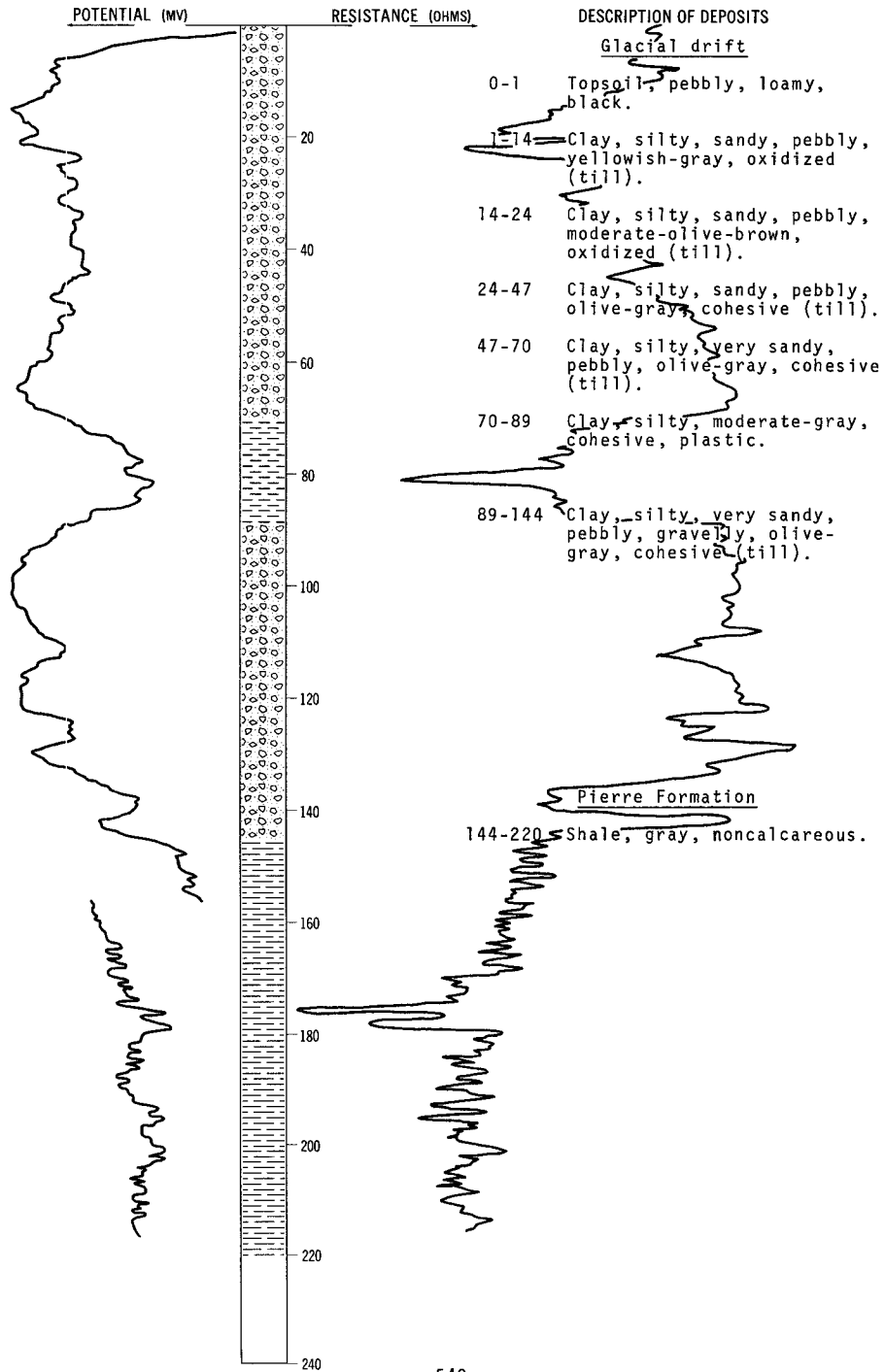
LOCATION: 163-61-16DDD

NDSWC 3816

DATE DRILLED: September 1969

ALTITUDE: 1560
(FT, MSL)

DEPTH: 220
(FT)



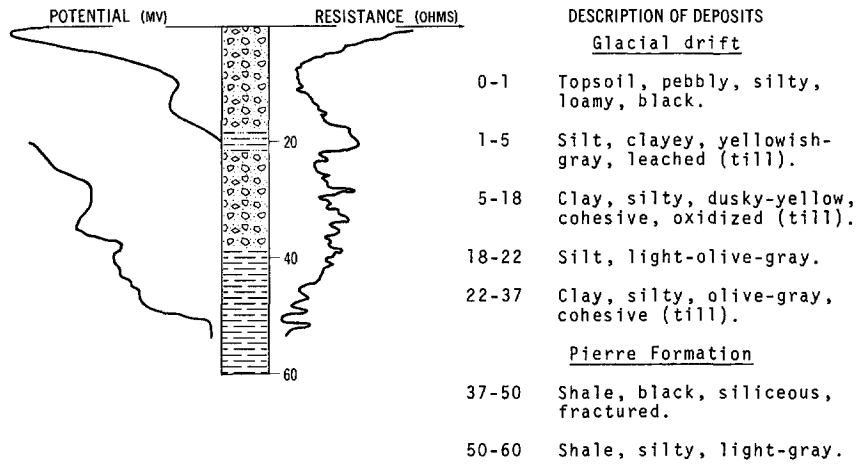
LOCATION: 163-61-33AAA

NDSWC 4255

DATE DRILLED: September 1970

ALTITUDE: 1565
(FT, MSL)

DEPTH: 60
(FT)



163-61-33CDA1
(Log from U.S. Air Force)

Altitude: 1573 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Glacial drift:</u>			
	Silt, clayey, sandy, dark-gray-----	2	2
	Clay, sandy, silty, partly gravelly, brown---	17	19
	Clay, silty, sandy, partly gravelly, partly shaly, gray-----	13	32
<u>Pierre Formation:</u>			
	Shale, dark-gray, highly fractured, partly fissile-----	56	88
	Shale, dark-gray, moderately fractured, partly fissile-----	42	130

163-61-33CDD
(Log from U.S. Air Force)

Altitude: 1573 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
<u>Glacial drift:</u>			
	Clay, silty-----	2	2
	Silt, clayey, sandy-----	13.5	15.5
	Clay, sandy, silty-----	6.5	22
	Sand, fine to medium, silty, clayey-----	3	25
	Clay, sandy, silty-----	12	37
<u>Pierre Formation:</u>			
	Shale-----	3	40

163-61-33DCB1
(Log from U.S. Air Force)

Altitude: 1573 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, black-----	1.5	1.5
	Clay, sandy, silty, partly gravelly, brown---	23.5	25
	Clay, sandy, silty, partly gravelly, gray----	14.5	39.5
Pierre Formation:			
	Shale, silty, clayey, dark-gray, fractured, crushed-----	8.5	48
	Shale, silty, dark-gray, highly fractured----	52	100

163-62-1DAD
(Log from U.S. Air Force)

Altitude: 1562 feet

Glacial drift:			
	Sand, fine to medium, clayey-----	1.5	1.5
	Clay, sandy, silty-----	15.5	17
	Clay, silty, sandy-----	17	34
Pierre Formation:			
	Shale-----	96	130

163-62-4BDD
(Log from Great Northern Railway Company)

Altitude: 1570 feet

Glacial drift:			
	Topsoil-----	3	3
	Clay, yellow-----	13	16
	Clay, gravelly-----	8	24
	Clay, blue-----	16	40
	Clay, gravelly-----	3	43
Pierre Formation:			
	Shale, blue-----	37	80
	Shale, hard; water in cracks-----	34	114

163-62-6AAC2
(Log from U.S. Air Force)

Altitude: 1578 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Clay, silty, sandy, dark-brown-----	2	2
	Silt, clayey, gravelly, yellowish-brown-----	12	14
	Clay, silty, brown to gray-----	4	18
	Clay, silty, sandy, gravelly, shaly, dark-gray-----	4	22
	Silt, shaly, clayey, brownish-gray-----	5	27
	Silt, shaly, clayey, dark-gray-----	4	31
	Clay, silty, sandy, gravelly, shaly, dark-gray-----	4	35
	Silt, clayey, gray-----	5	40
	Sand, fine to coarse, clayey, gravelly, gray-----	1.5	41.5
Pierre Formation:			
	Shale, silty, clayey, dark-gray-----	7.5	49
	Shale, dark-gray, highly fractured, brittle, crushed-----	15	64
	Shale, dark-gray, highly fractured, thin-bedded, partly fissile-----	44	108
	Shale, dark-gray, thin-bedded, brittle, partly fissile-----	22.5	130.5

162-62-12DCB1
(Log from U.S. Air Force)

Altitude: 1567 feet

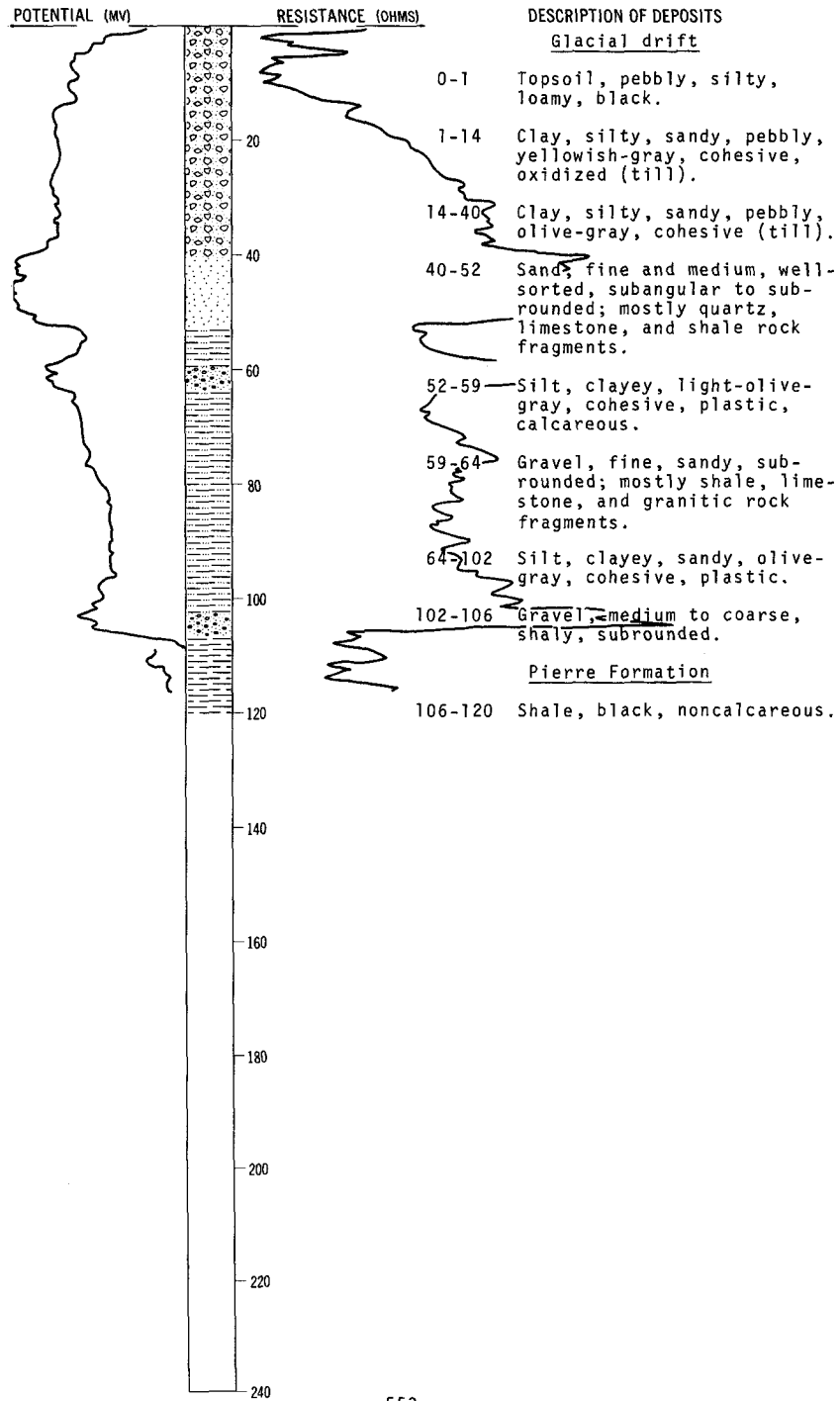
Glacial drift:			
	Clay, silty, sandy-----	8	8
	Sand, fine to medium, clayey-----	6	14
	Clay, silty, sandy-----	26	40
Pierre Formation:			
	Shale; clayey silt-----	8	48
	Shale-----	14.5	62.5
	Shale; clay-----	2.5	65
	Shale-----	65	130

LOCATION: 163-62-16DDD

DATE DRILLED: September 1969

ALTITUDE: 1559
(FT, MSL)

DEPTH: 120
(FT)



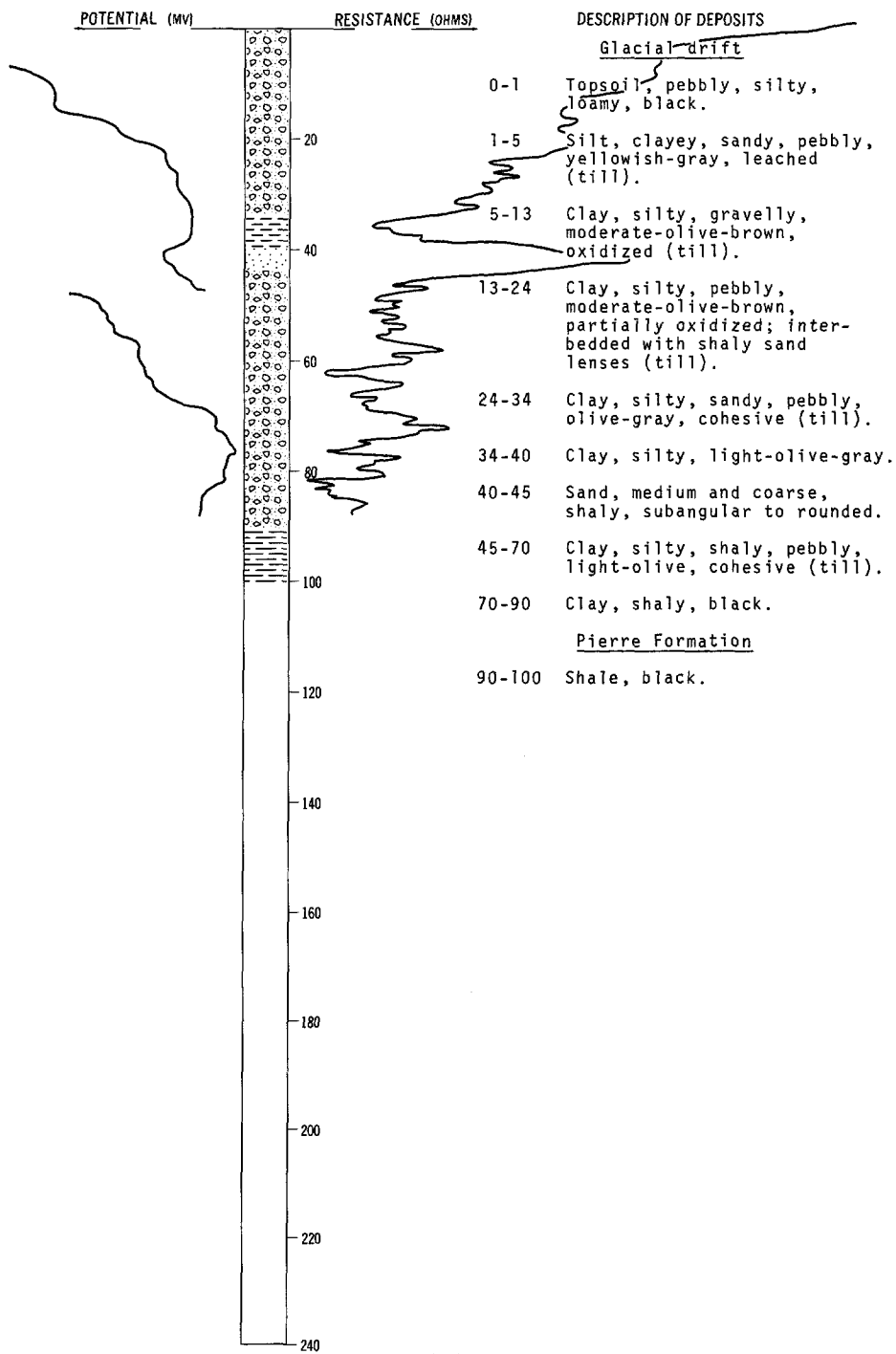
LOCATION: 163-62-17BCA

NDSWC 4251

DATE DRILLED: September 1970

ALTITUDE: 1570
(FT, MSL)

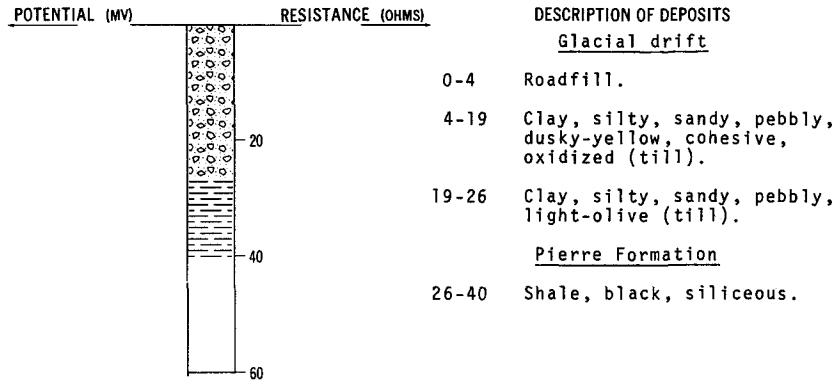
DEPTH: 100
(FT)



LOCATION: 163-62-24AAD
 ALTITUDE: 1571
 (FT, MSL)

NDSWC 4247

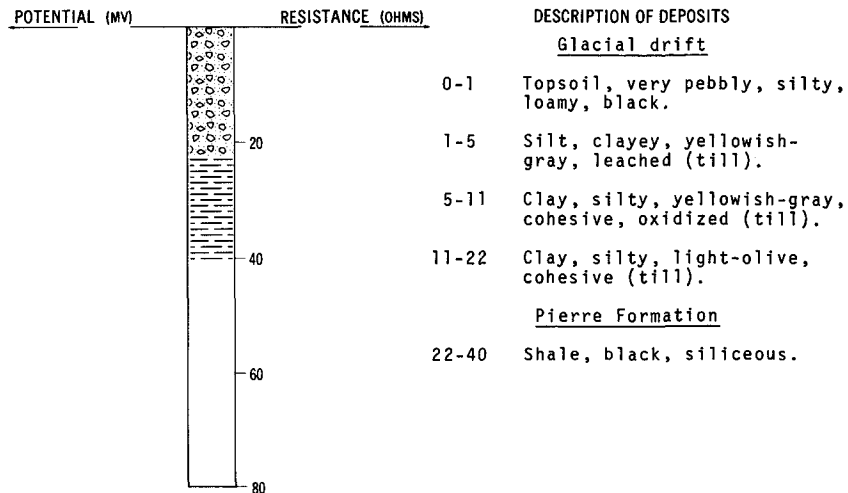
DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



LOCATION: 163-62-31AAA
 ALTITUDE: 1560
 (FT, MSL)

NDSWC 4252

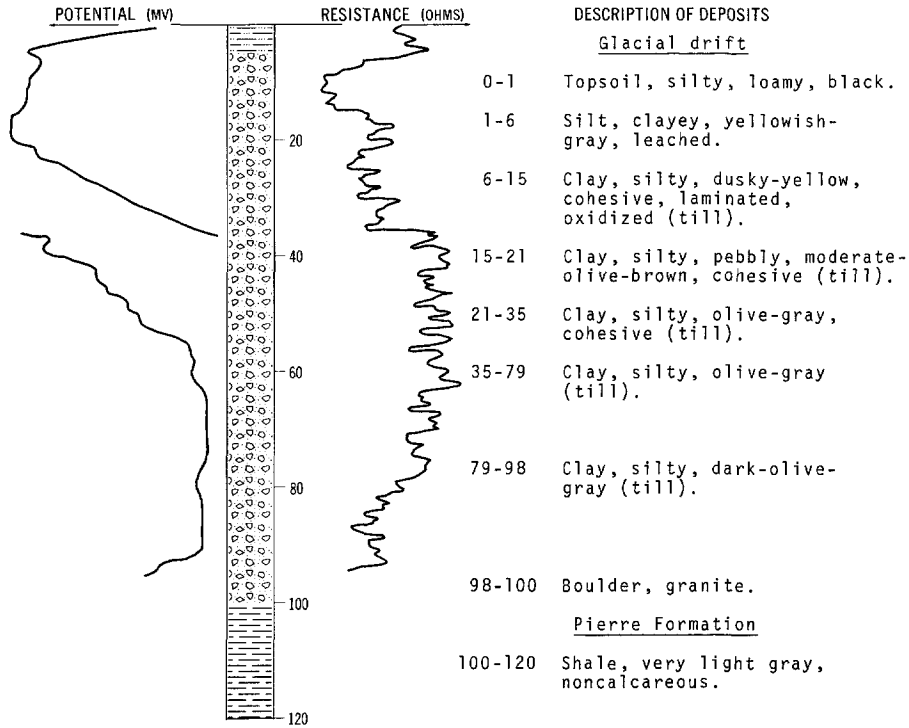
DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



LOCATION: 163-62-34DDD
 ALTITUDE: 1560
 (FT, MSL)

NDSWC 4254

DATE DRILLED: September 1970
 DEPTH: 120
 (FT)



163-62-36ADD
 NDGS Cav-69-5

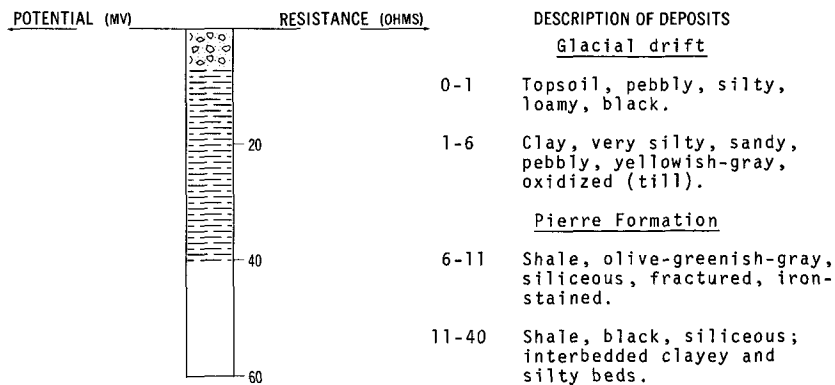
Altitude: 1564 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Till, pebbly, shaly, olive-gray, saturated---	9	9
	Till; same as above except sandier and lighter brown-----	15	24
	Till, grayish-black; contains more than 95 percent weathered shale-----	5.5	29.5
Pierre Formation:			
	Shale-----	-	29.5

LOCATION: 163-63-8DDD
 ALTITUDE: 1568
 (FT, MSL)

NDSWC 4184

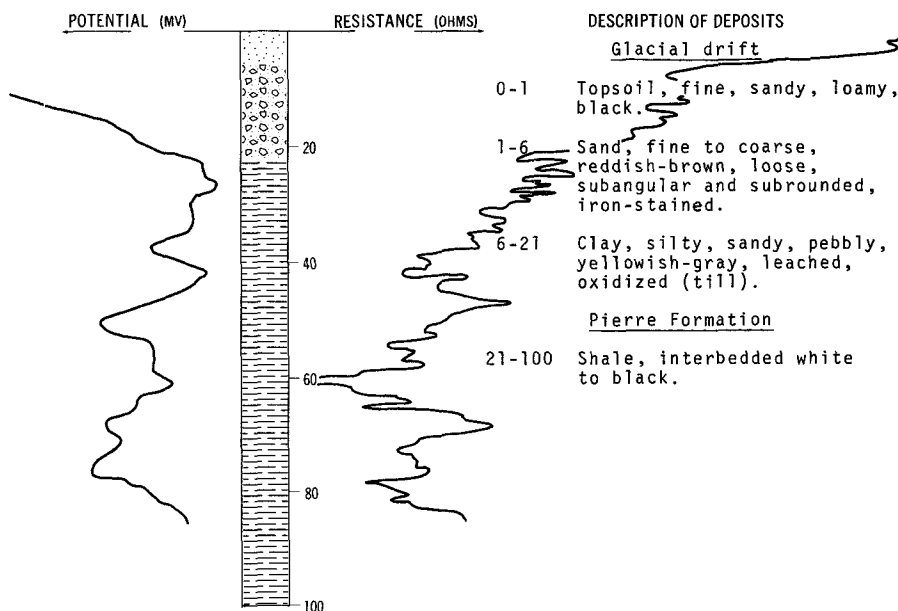
DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



LOCATION: 163-63-13BBB
 ALTITUDE: 1570
 (FT, MSL)

NDSWC 4180

DATE DRILLED: September 1970
 DEPTH: 100
 (FT)



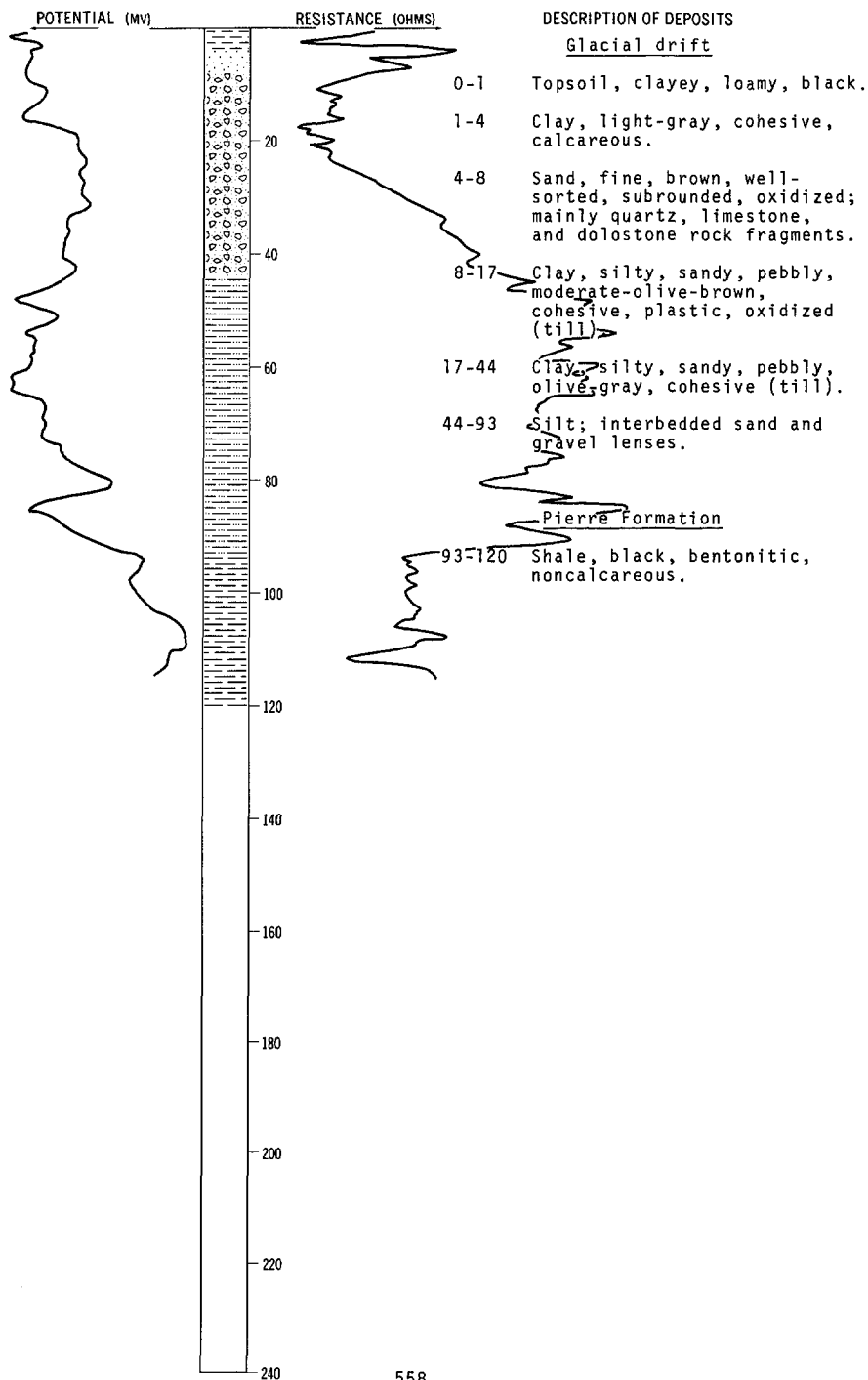
LOCATION: 163-63-16DDD

NDSWC 3818

DATE DRILLED: September 1969

ALTITUDE: 1568
(FT, MSL)

DEPTH: 120
(FT)



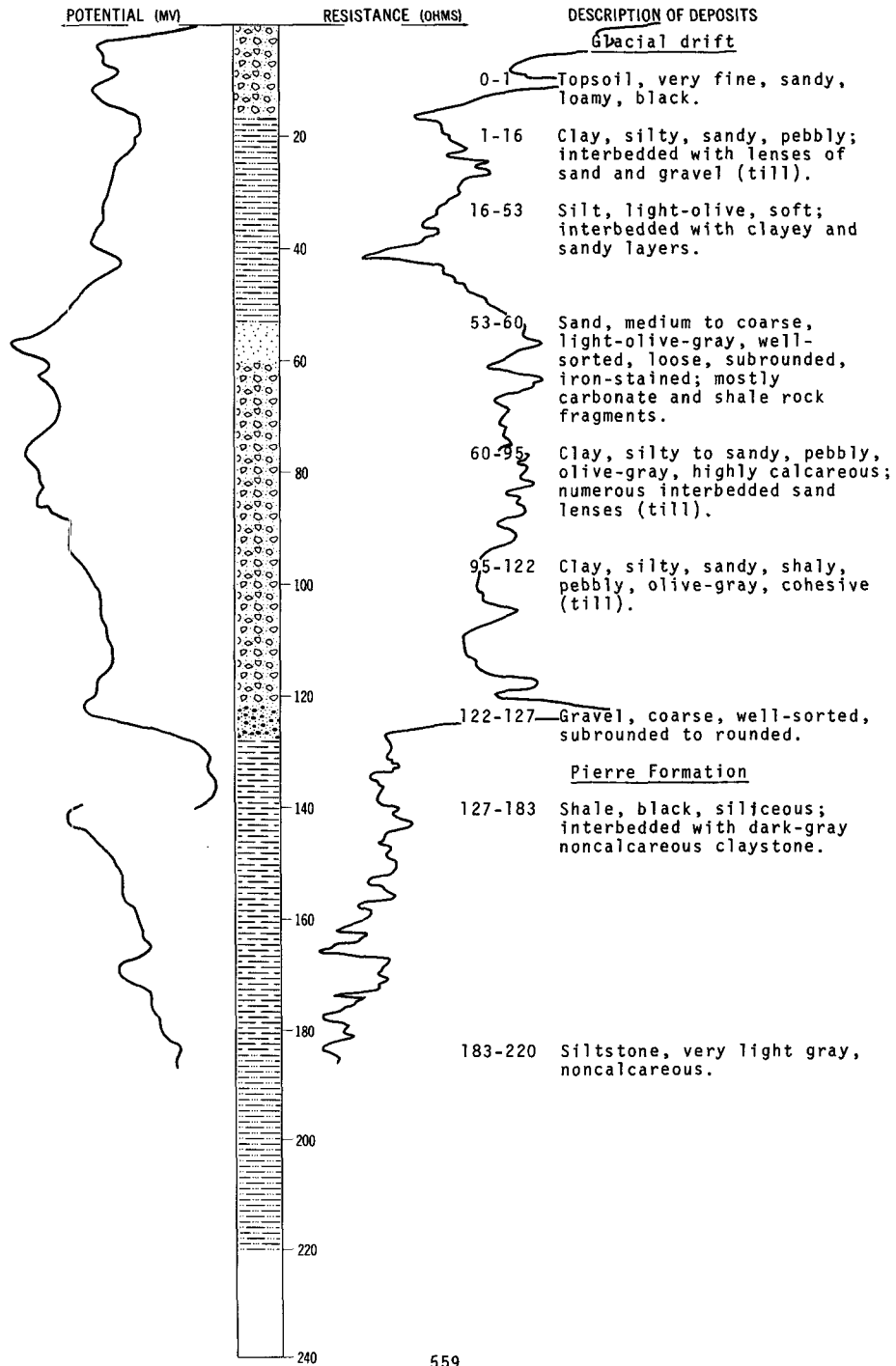
LOCATION: 163-63-25BBB

NDSWC 4179

DATE DRILLED: September 1970

ALTITUDE: 1572
(FT, MSL)

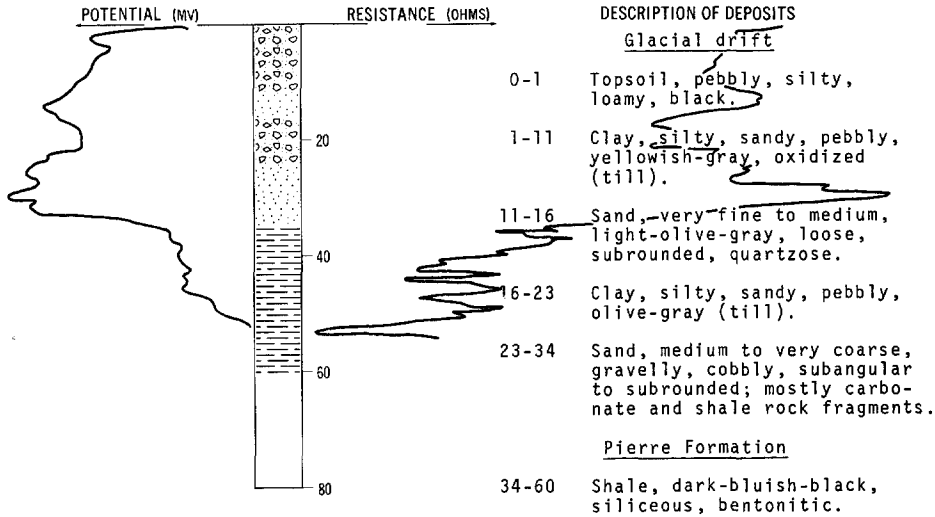
DEPTH: 220
(FT)



LOCATION: 163-63-28DDD
 ALTITUDE: 1572
 (FT. MSL)

NDSWC 4186

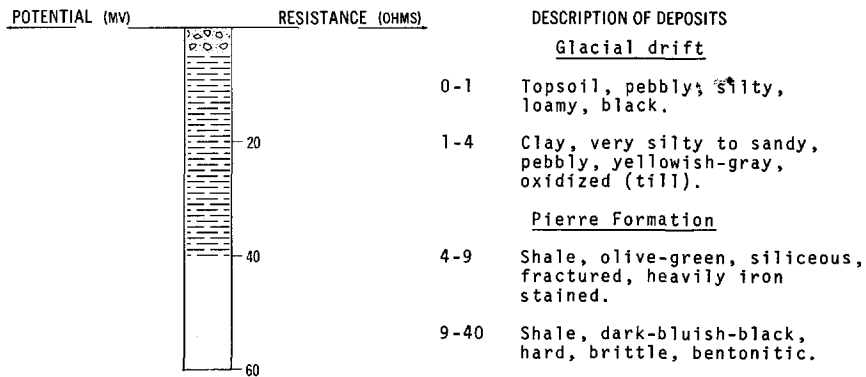
DATE DRILLED: September 1970
 DEPTH: 60
 (FT)



LOCATION: 163-63-29BBB
 ALTITUDE: 1562
 (FT. MSL)

NDSWC 4185

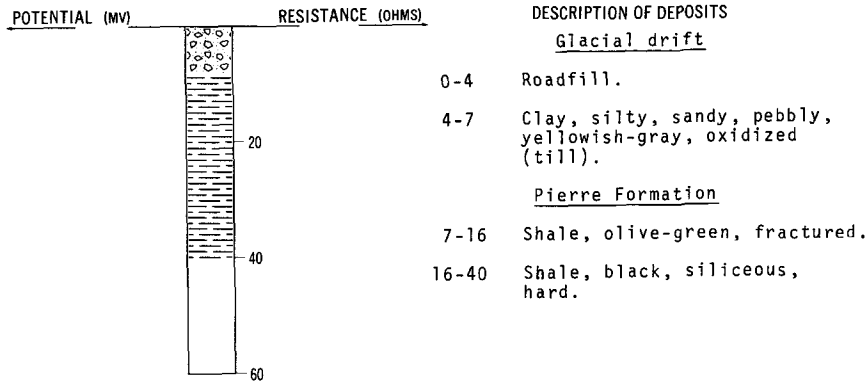
DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



LOCATION: 163-63-35DDD
 ALTITUDE: 1566
 (FT, MSL)

NDSWC 4178

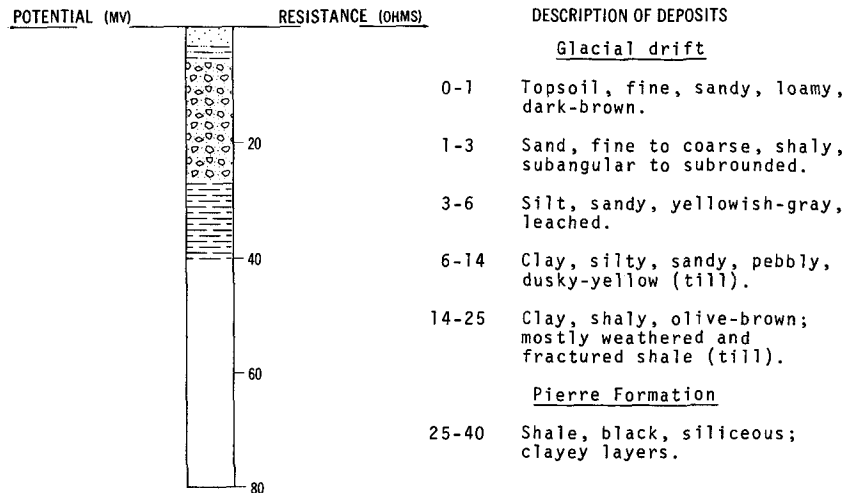
DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



LOCATION: 163-64-4AAA
 ALTITUDE: 1548
 (FT, MSL)

NDSWC 4166

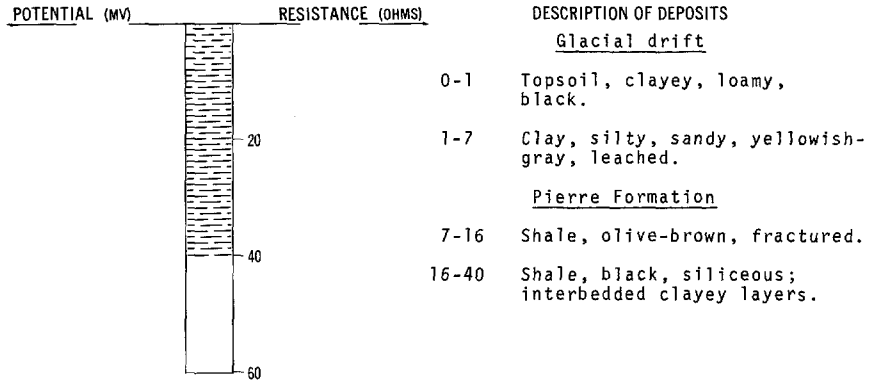
DATE DRILLED: August 1970
 DEPTH: 40
 (FT)



LOCATION: 163-64-12CCC
 ALTITUDE: 1567
 (FT, MSL)

NDSWC 4168

DATE DRILLED: August 1970
 DEPTH: 40
 (FT)



163-64-18BBD
 (Log from Peterson Well Company)

Altitude: 1585 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Black dirt-----	1	1
	Clay, yellow-----	17	18
	Clay, gray-----	27	45
	Clay, gravelly, gray-----	5	50
	Clay, gray-----	10	60
	Clay, gravelly, gray-----	10	70
	Clay, very rocky, gray-----	5	75
Pierre Formation:			
	Shale; gravel-----	35	110

163-64-18BCA
 (Log from L. A. Gjerdevig)

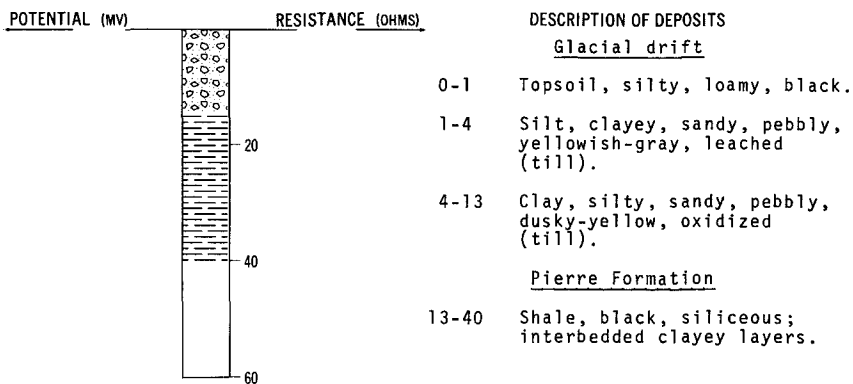
Altitude: 1585 feet

Geologic source	Material	Thickness (feet)	Depth (feet)
Glacial drift:			
	Topsoil-----	2	2
	Clay, sandy, yellow-----	8	10
	Clay, blue-----	32	42
	Clay, sandy, yellow-----	38	80
Pierre Formation:			
	Soapstone, soft-----	60	140
	Clay, blue; some slate-----	5	145
	Shale, clayey, blue, hard-----	5	150
	Shale-----	11	161

LOCATION: 163-64-19CCC
 ALTITUDE: 1599
 (FT, MSL)

NDSWC 4165

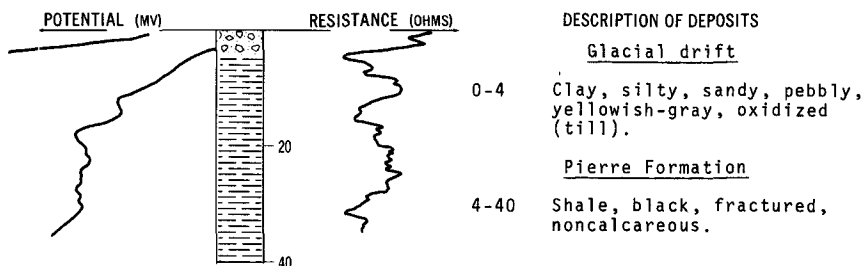
DATE DRILLED: August 1970
 DEPTH: 40
 (FT)



LOCATION: 163-64-21AAD
 ALTITUDE: 1565
 (FT, MSL)

NDSWC 3819

DATE DRILLED: September 1969
 DEPTH: 40
 (FT)



163-64-27CDC
 (Log from C. A. Simpson & Son)

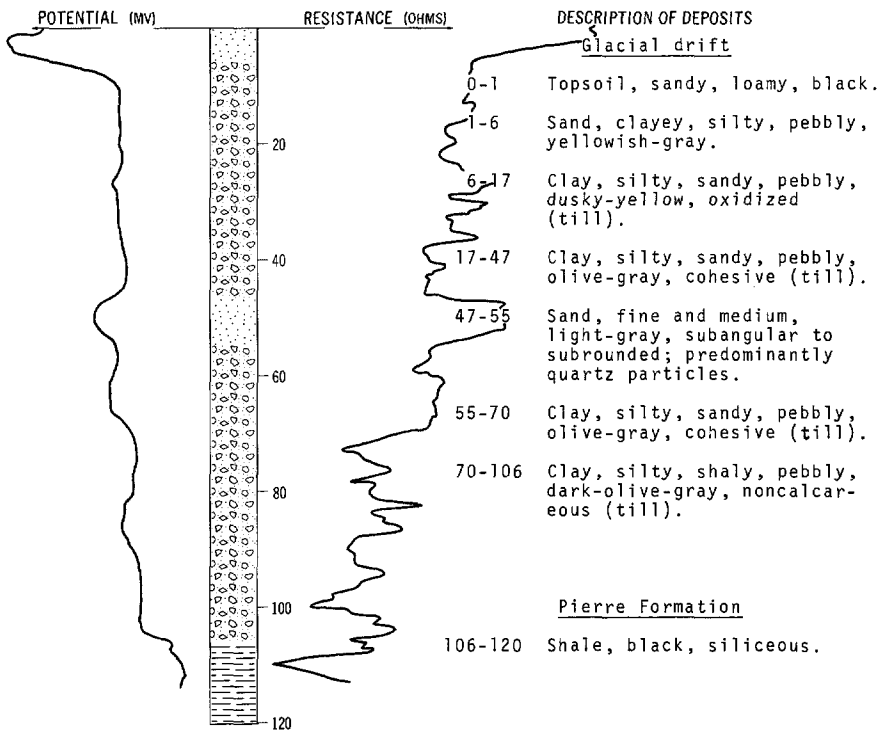
Altitude: 1582 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
	"Pit"-----	7	7
Glacial drift:	Clay, yellow-----	33	40
Pierre Formation:	Shale-----	80	120

LOCATION: 163-64-34CCC
 ALTITUDE: 1593
 (FT, MSL)

NDSWC 4163

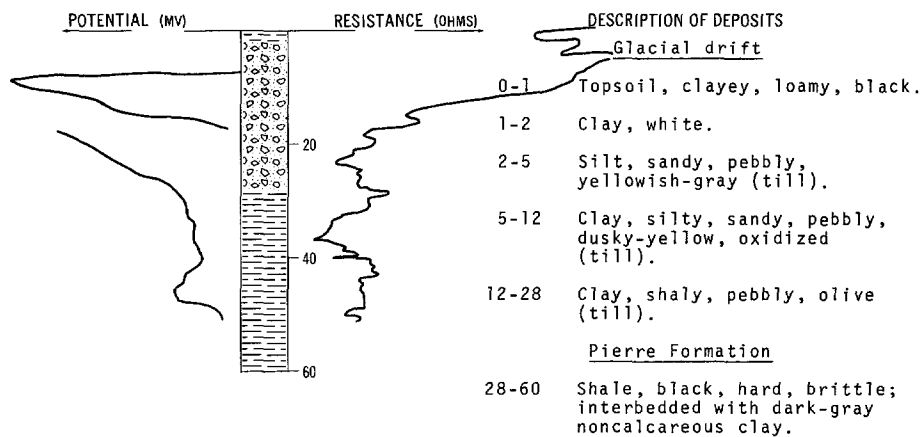
DATE DRILLED: August 1970
 DEPTH: 120
 (FT)



LOCATION: 163-64-36BBB
 ALTITUDE: 1574
 (FT, MSL)

NDSWC 4169

DATE DRILLED: August 1970
 DEPTH: 60
 (FT)



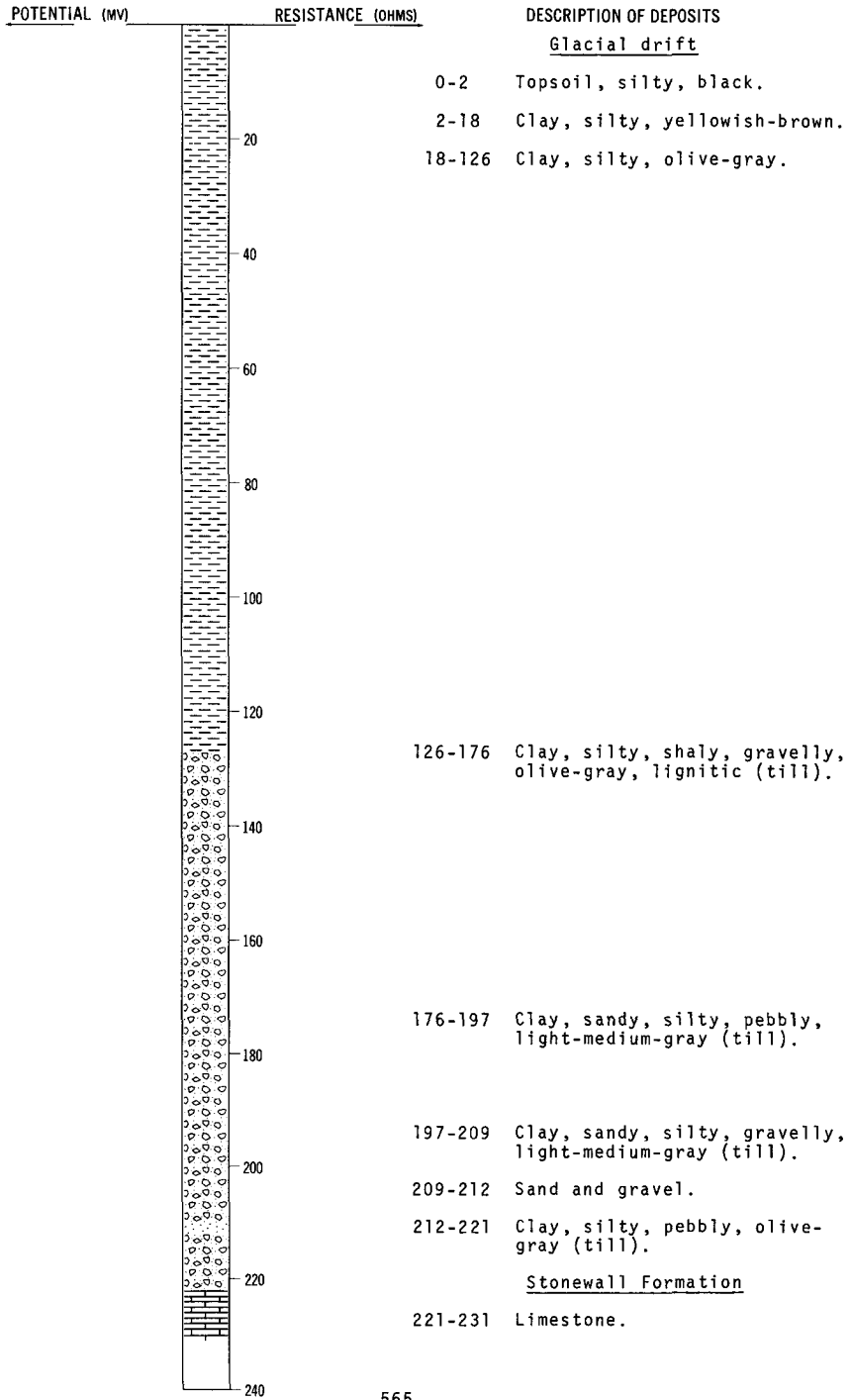
LOCATION: 164-51-28DBB

NDGS G-2

DATE DRILLED: September 1966

ALTITUDE: 780
(FT, MSL)

DEPTH: 231
(FT)



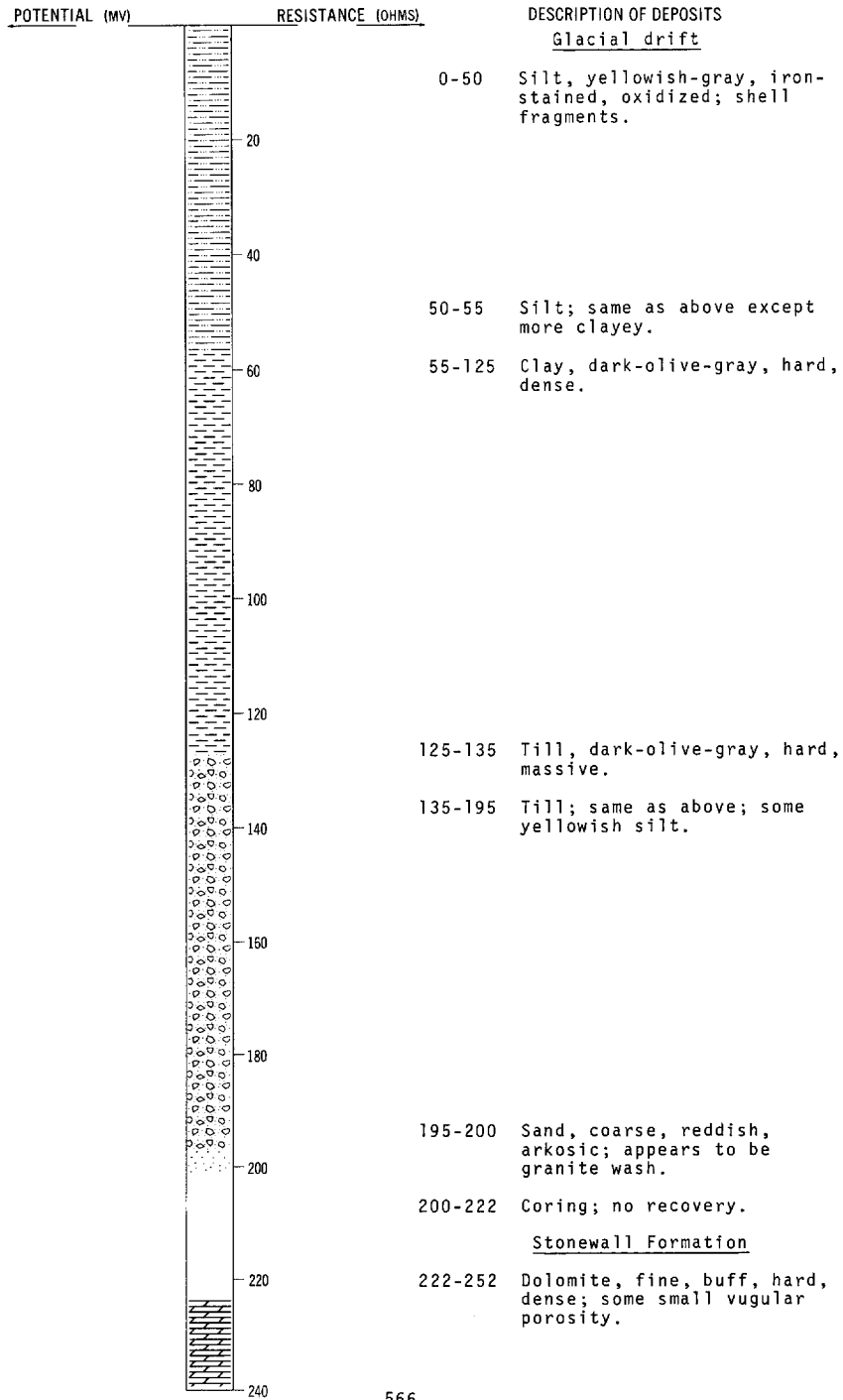
LOCATION: 164-51-28DBD1

NDGS P-1

DATE DRILLED: November 1967

ALTITUDE: 782
(FT, MSL)

DEPTH: 505
(FT)



LOCATION: 164-51-28DBD1
 ALTITUDE: 782
 (FT, MSL)

NDGS P-1, Continued

DATE DRILLED: November 1967
 DEPTH: 505
 (FT)

POTENTIAL (MV)	RESISTANCE (OHMS)	DESCRIPTION OF DEPOSITS
		<u>Stony Mountain Formation</u>
	252-254	Dolomite, very fine, very light greenish gray, argillaceous, dense; some interbedded chert at 254 feet.
260	254-262	Dolomite, fine, buff, hard, dense; some interbedded chert.
280	262-264	No samples.
	264-269	Shale, purplish-red to yellow-ochre to medium-light-gray.
300	269-270	Shale, dark-reddish-brown.
	270-272	Shale, light-greenish-gray to purplish-red, variegated.
320	272-307	Shale, dark-reddish-brown; some fractures with calcite filling; occasional light-greenish-gray shale inclusions.
340	307-308	Limestone, medium-light-gray; brecciated dark-reddish-brown shale at 308 feet.
		<u>Red River Formation</u>
360	308-387	Limestone, fine, light-yellow-brown; with darker yellow brown mottles; small calcite crystals and calcite replacement of crinoid fragments; some scattered vugular porosity; good vugular porosity and very fossiliferous 359-387 feet.
380	387-406	Limestone, fine, light-yellow-brown to light-purplish, dense, fossiliferous; appears somewhat earthy and argillaceous.
400	406-436	Limestone, fine, light-purplish to cream, dense, fossiliferous; appears earthy and somewhat argillaceous; some small intervals of yellow-brown-mottled limestone.
420	436-480	Limestone, fine, yellow-brown-mottled, dense, fossiliferous, earthy, appears argillaceous; occasional tripolitic chert inclusions.
440		
460		
480		

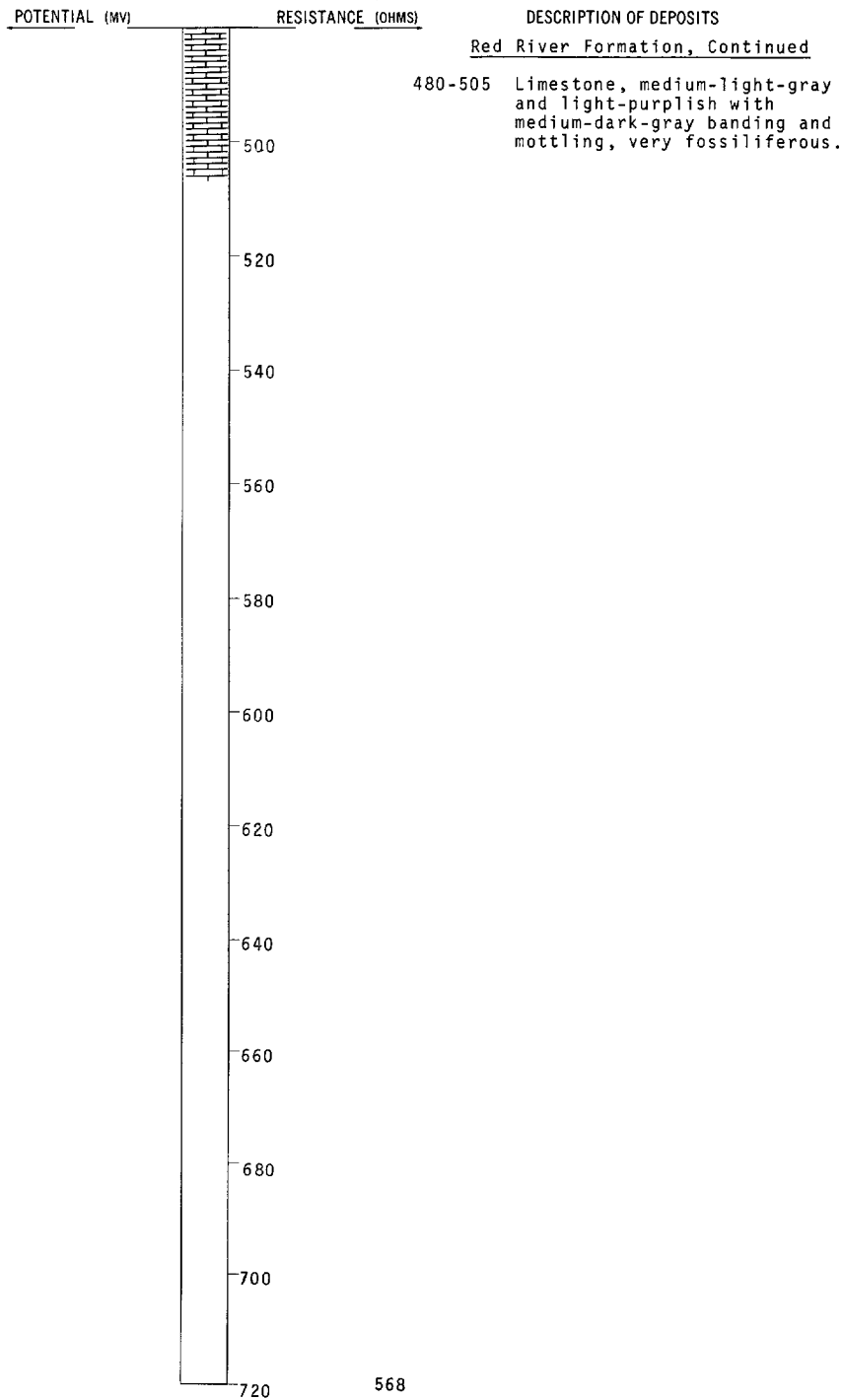
LOCATION: 164-51-28DBD1

NDGS P-1, Continued

DATE DRILLED: November 1967

ALTITUDE: 782
(FT, MSL)

DEPTH: 505
(FT)



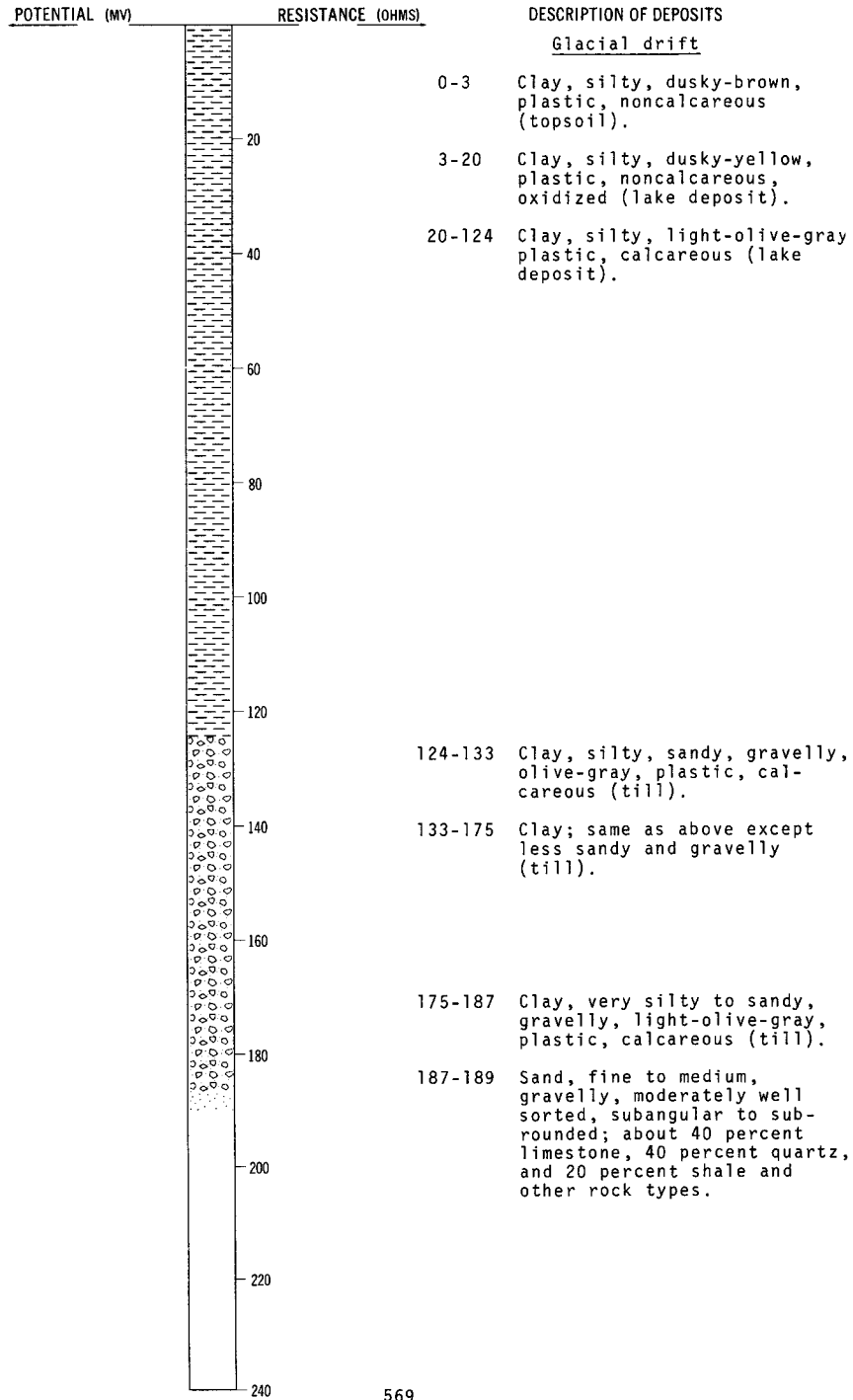
LOCATION: 164-52-29DDD

NDGS G-5

DATE DRILLED: October 1966

ALTITUDE: 794
(FT, MSL)

DEPTH: 189
(FT)



164-53-31CBC3
(USGS 2)

Altitude: 830 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, silty, black-----	2	2
	Silt, light-gray; appears to be mottled and slightly sandy-----	30	32
	Clay, silty, pebbly, dark-gray-----	15	47

164-53-31CDD1
(USGS 10)

Altitude: 828 feet

Glacial drift:			
	Soil, silty, black-----	2	2
	Silt, clayey, grayish-tan-----	4	6
	Silt, brown-----	1	7
	Silt, clayey, sandy, light-olive-brown-----	15	22
	Silt, clayey, light-brown-----	5	27
	Clay, silty, dark-gray-----	15	42

164-53-31CDD2
(USGS 9)

Altitude: 830 feet

Glacial drift:			
	Soil, silty, black-----	3	3
	Silt, clayey, gray-----	4	7
	Clay, silty, light-tan-----	10	17
	Clay, dark-gray-----	1	18
	Silt, tan; gray clay-----	4	22
	Clay, silty, dark-gray-----	10	32

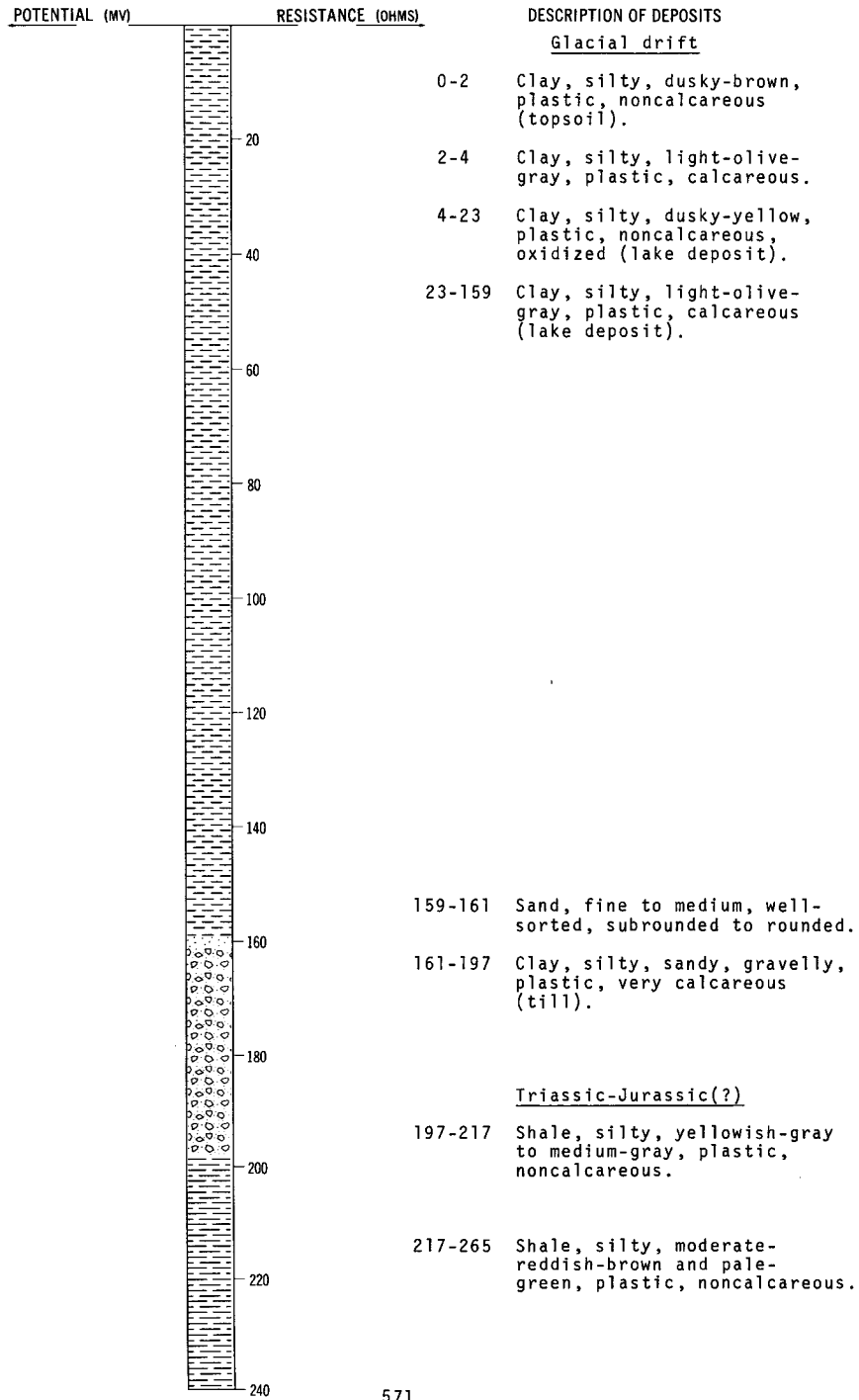
LOCATION: 164-53-34BBB

NDGS G-4

DATE DRILLED: October 1966

ALTITUDE: 815
(FT, MSL)

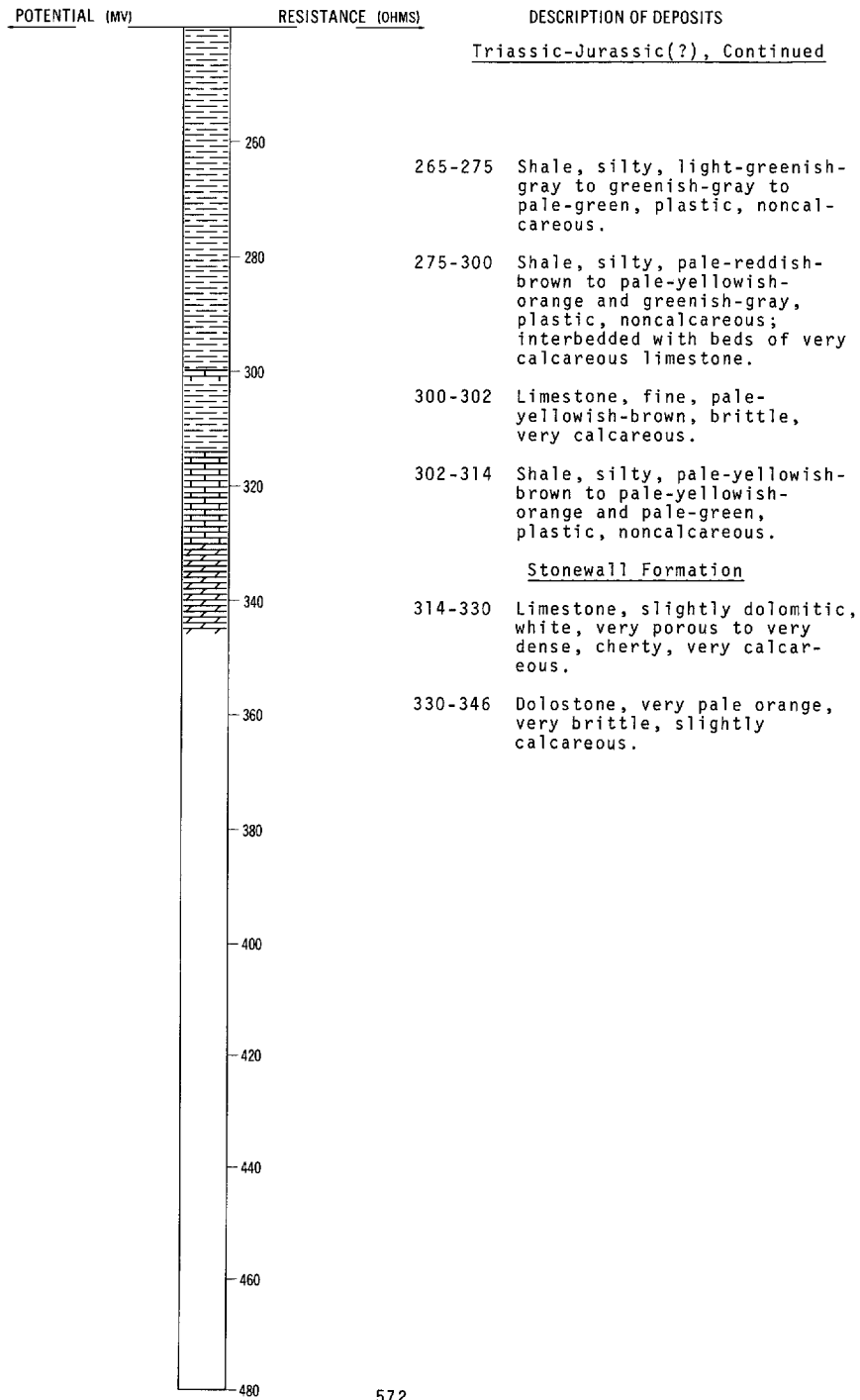
DEPTH: 346
(FT)



LOCATION: 164-53-34BBB
ALTITUDE: 815
(FT, MSL)

NDGS G-4, Continued

DATE DRILLED: October 1966
DEPTH: 346
(FT)



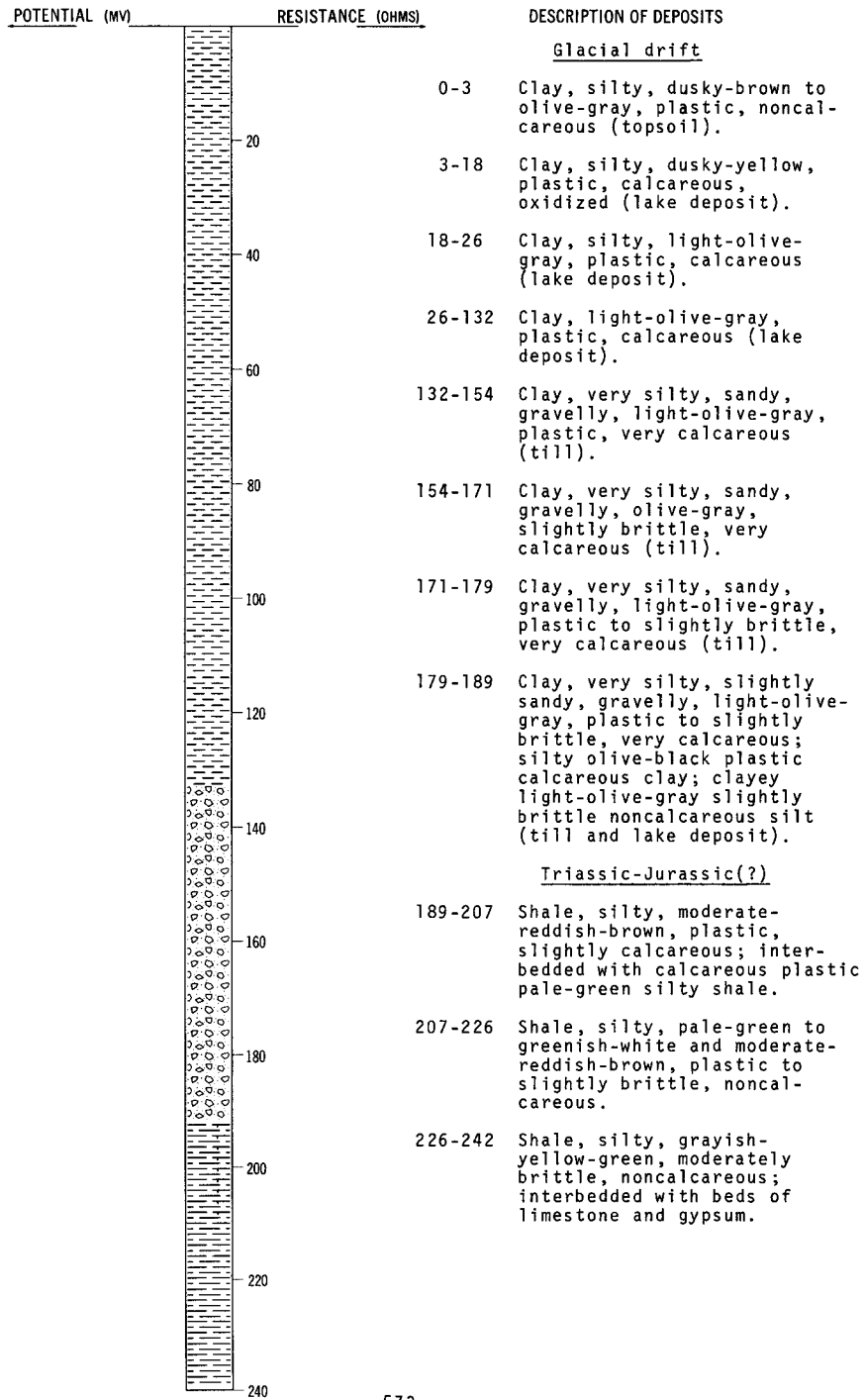
LOCATION: 164-53-36AAA

NDGS G-1

DATE DRILLED: September 1966

ALTITUDE: 800
(FT, MSL)

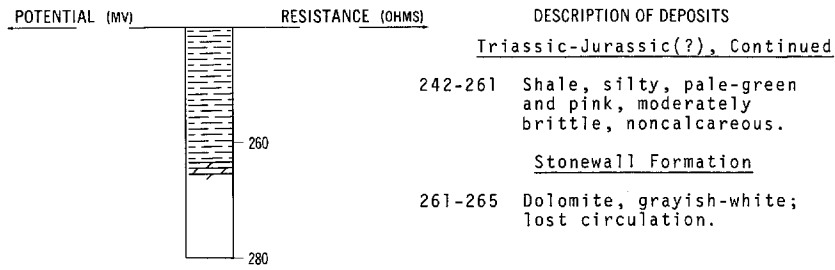
DEPTH: 265
(FT)



LOCATION: 164-53-36AAA
 ALTITUDE: 800
 (FT, MSL)

NDGS G-1, Continued

DATE DRILLED: September 1966
 DEPTH: 265
 (FT)



164-54-25DAA1
 (USGS 5)

Altitude: 830 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, silty, black-----	3	3
	Silt, light-grayish-tan-----	4	7
	Silt, sandy, tan-----	17	24
	Silt, light-brown-----	5	29
	Clay, slightly silty, dark-gray-----	78	107

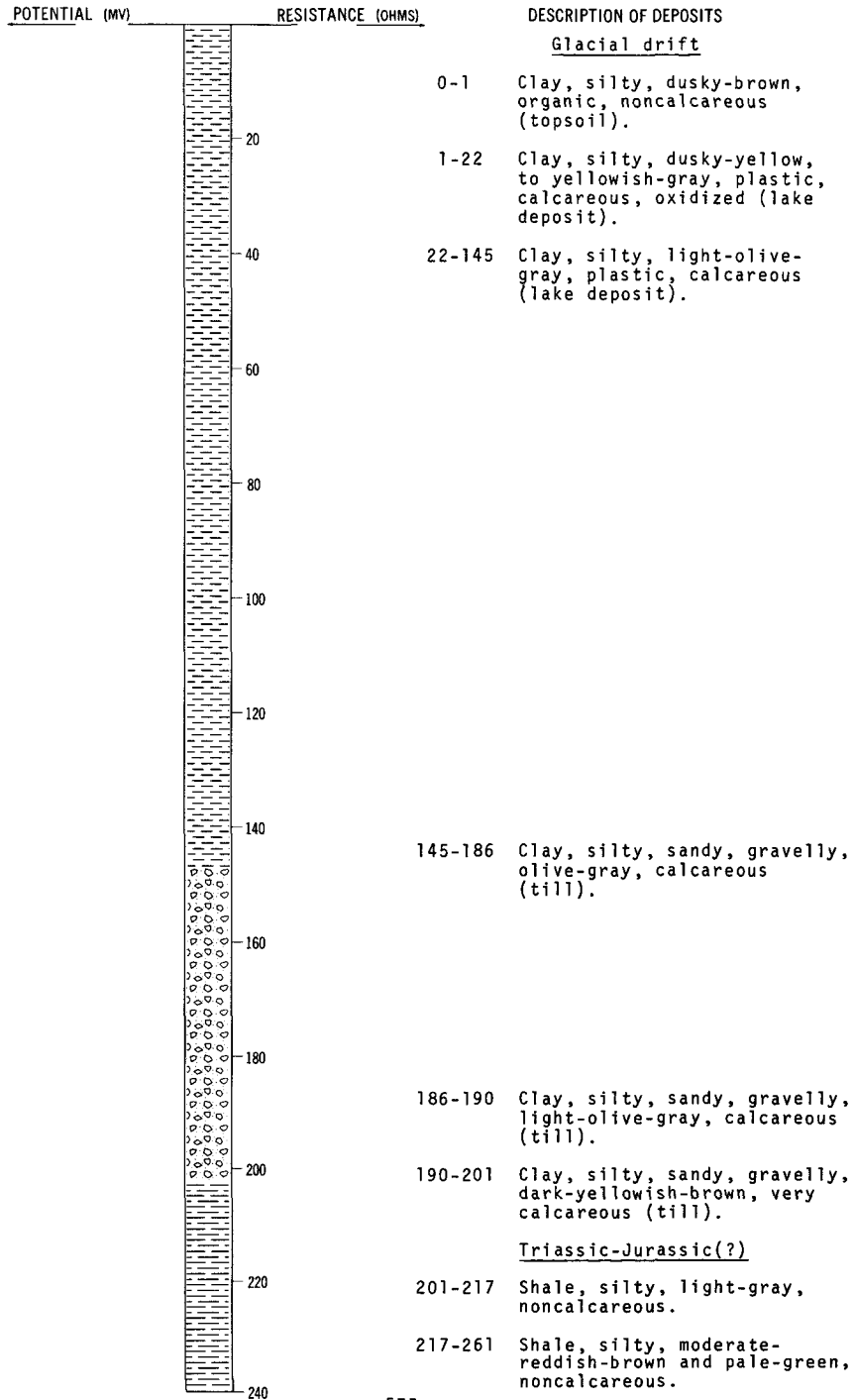
LOCATION: 164-54-25DAA2

NDGS G-3

DATE DRILLED: October 1966

ALTITUDE: 830
(FT, MSL)

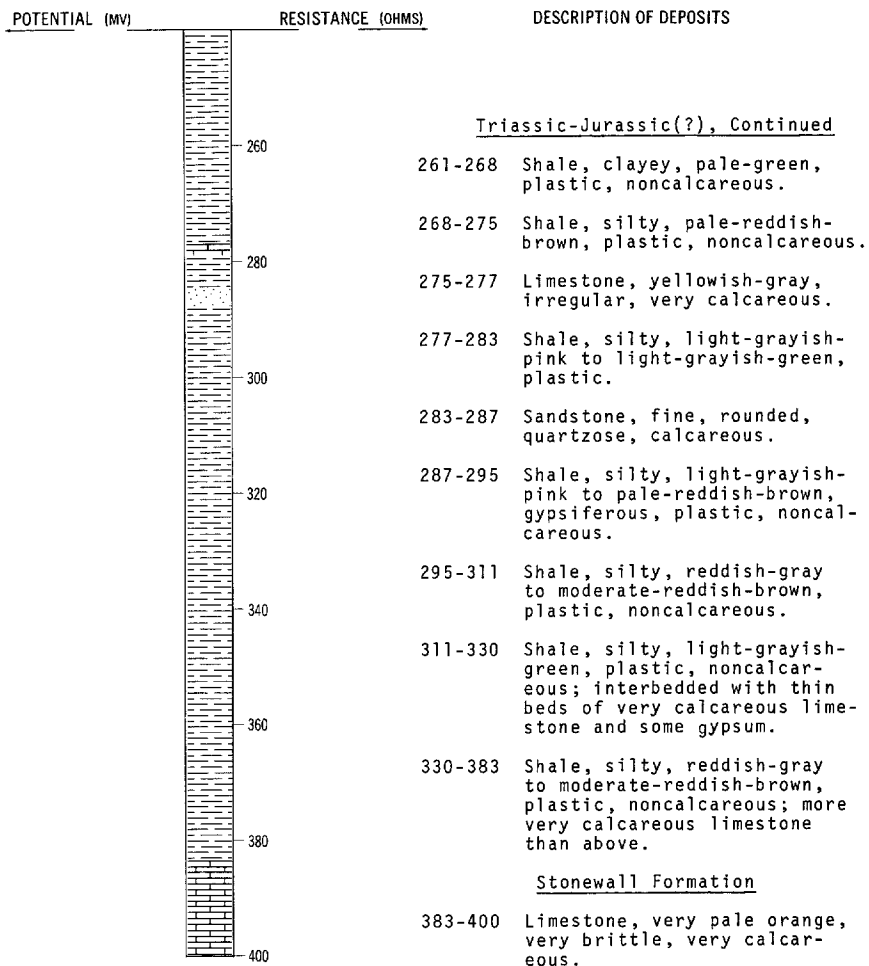
DEPTH: 400
(FT)



LOCATION: 164-54-25DAA2
 ALTITUDE: 830
 (FT, MSL)

NDGS G-3, Continued

DATE DRILLED: October 1966
 DEPTH: 400
 (FT)



164-54-25DDA
 (USGS 4)

Altitude: 831 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Soil, silty, black-----	3	3
	Silt, sandy, gray-----	6	9
	Clay, silty, buff-----	8	17
	Sand, very fine, light-buff-----	10	27
	No sample from 27 to 32 feet; probably silt--	5	32
	Clay, silty, pebbly, dark-gray-----	20	52

164-54-36AAD1
(USGS 12)

Altitude: 830 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Silt, dark-gray, stratified-----	7	7
	Sand, fine and medium, light-gray; clay and silt-----	5	12
	Sand, fine and medium, gray-----	5	17
	Sand, fine and medium, light-brown-----	5	22
	Sand, fine, gray; intercalated with silt beds-----	5	27
	Silt; clay; coarse shaly sand-----	13	40
	Clay, silty, dark-gray-----	17	57

164-54-36AAD2
(USGS 11)

Altitude: 822 feet

Glacial drift:			
	Silt, light-brown; fine sand-----	6	6
	Sand, fine, shaly, brown-----	1	7
	Sand, coarse, shaly, gray, quartzose-----	5	12
	Sand, coarse, shaly, light-gray, quartzose---	10	22
	Silt, clayey, gray; intercalated with beds of sand; shell material-----	5	27
	Sand, medium and coarse, shaly, gray-----	5	32
	Sand, gray; intercalated with beds of clay; small snail shells-----	3	35
	Clay, silty, dark-gray-----	13	48

164-54-36ADA2
(USGS 3)

Altitude: 830 feet

Glacial drift:			
	Soil, silty, black-----	2	2
	Clay, silty, grayish-tan-----	5	7
	Silt, sandy, light-olive-brown-----	20	27
	Gravel, shaly-----	5	32
	Silt, clayey, light-olive-brown; shell material-----	10	42
	Clay, silty, pebbly, dark-gray-----	20	62

164-54-36DDD
(USGS 1)

Altitude: 823 feet

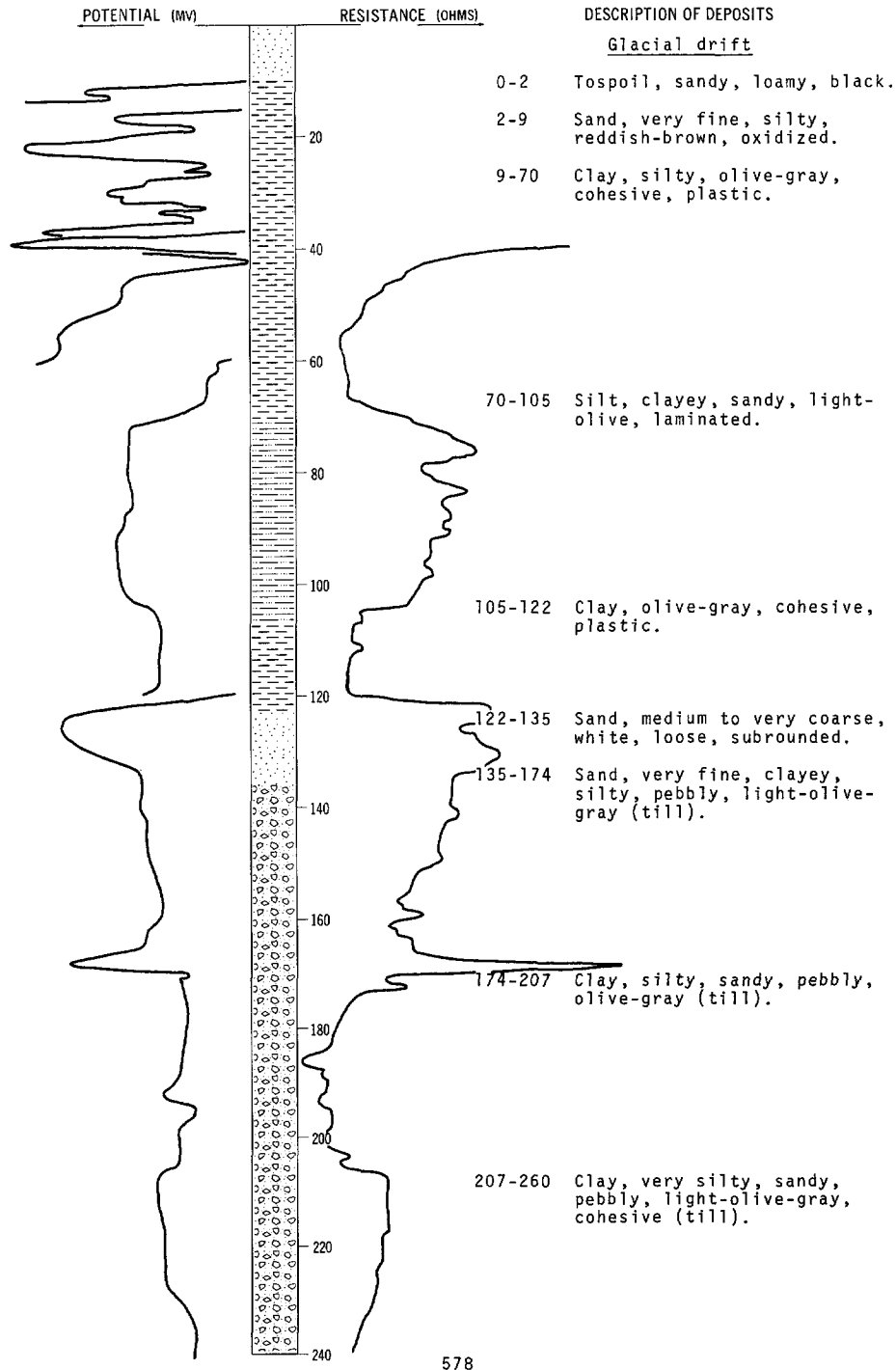
Glacial drift:			
	Soil, silty, black-----	2	2
	Silt, light-gray; appears to be mottled and slightly sandy-----	35	37
	Clay, pebbly, dark-gray-----	75	112

LOCATION: 164-55-28CCC

DATE DRILLED: September 1970

ALTITUDE: 883
(FT, MSL)

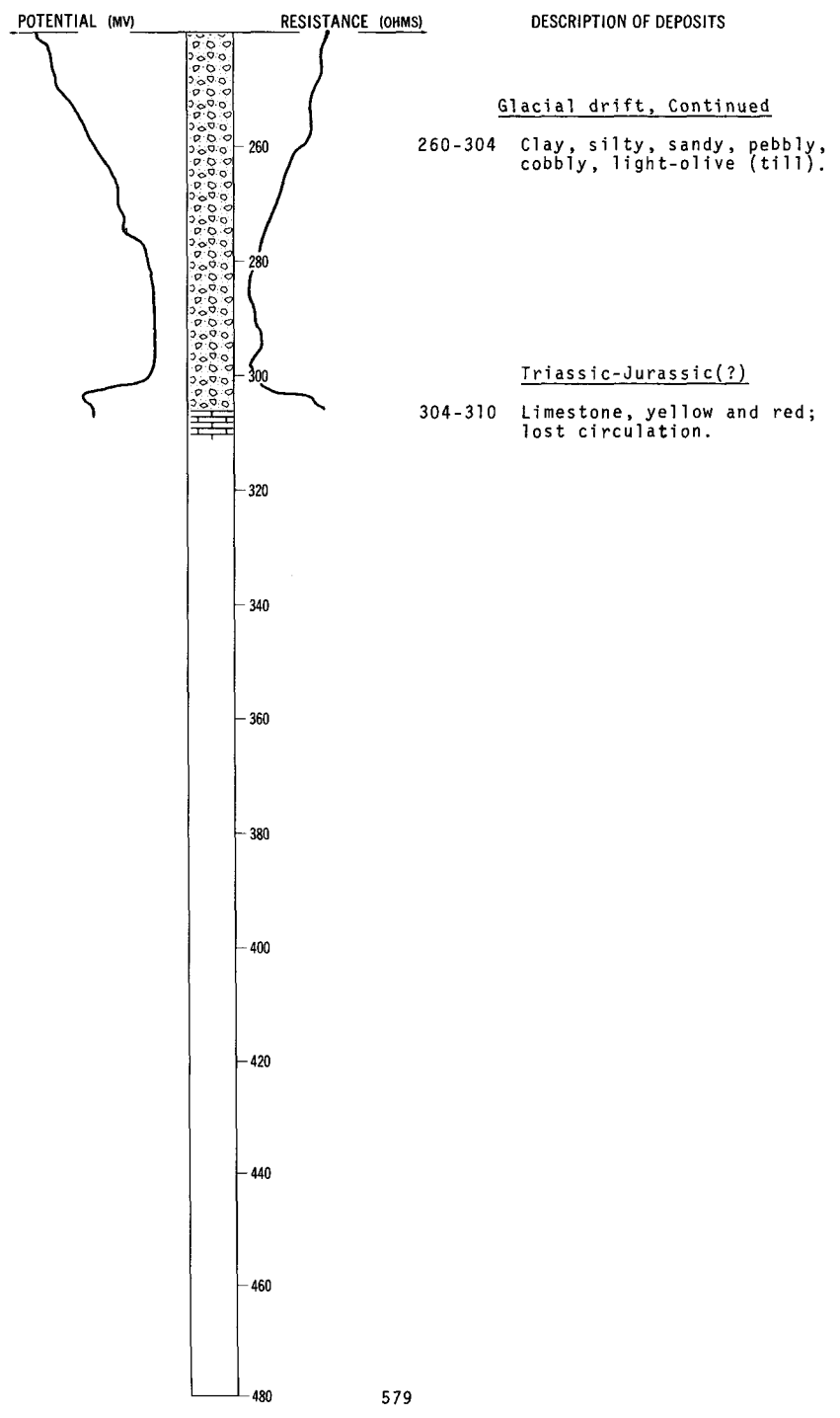
DEPTH: 310
(FT)



LOCATION: 164-55-28CCC
ALTITUDE: 883
(FT, MSL)

NDSWC 4229, Continued

DATE DRILLED: September 1970
DEPTH: 310
(FT)



164-55-29DDD
USBR 12

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, fine, loamy-----	2	4
	Sand, loamy, gravelly-----	1	5
	Loam, fine, sandy-----	2	7
	Loam, very fine, sandy-----	2	9
	Clay; very fine, sandy loam-----	3	12
	Clay-----	8	20

164-55-31CCC
USBR 10

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine-----	3	6
	Loam, very fine, sandy-----	5	11
	Clay-----	3	14

164-55-31DDD
NDGS Pem-70-37

Altitude: 898 feet

Glacial drift:			
	Roadfill-----	5	5
	Sand, medium to coarse, well-sorted, sub-angular to subrounded, saturated-----	3	8
	Clay, gray, plastic, very dense-----	6	14

164-55-33CCC
USBR 13

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, fine, loamy-----	1	3
	Loam, very fine, sandy-----	3	6
	Loam, silty-----	1	7
	Sand-----	3	10
	Clay, blue-----	8	18

164-55-33DDD
USBR

Altitude:

Glacial drift:			
	Loam-----	4	4
	Loam, sandy-----	3	7
	Loam, silty-----	1	8
	Sand, fine-----	2	10
	Sand, fine, loamy, silty-----	1	11
	Clay-----	4	15

164-56-25DDD
USBR 9

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, fine, loamy-----	1	3
	Sand, fine-----	2	5
	Sand, loamy, gravelly-----	2	7
	Loam, clayey-----	2	9
	Loam, very fine, sandy-----	3	12
	Loam, clayey-----	3	15

164-56-27CCC
USBR 5

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	1	1
	Sand, fine, loamy-----	1	2
	Sand, fine-----	7	9
	Loam, very fine, sandy-----	1	10
	Loam, clayey-----	3	13
	Clay-----	7	20

164-56-27DDA1
USBR DH29

Altitude:

Glacial drift:			
	Loam, sandy-----	7	7
	Sand, medium-----	3	10
	Loam, silty-----	1	11
	Clay, silty-----	6	17
	Clay-----	3	20

164-56-27DDA2
USBR DH39

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	2	2
	Loam, very fine, sandy-----	1	3
	Loam, silty-----	3	6
	Sand, shaly, silty-----	1	7
	Sand, medium-----	1	8
	Loam, silty, shaly-----	2	10
	Loam, clayey, silty-----	5	15
	Clay, medium-----	4	19

164-56-29ADD1
(Log from Peterson Well Company)

Altitude: 940 feet

Glacial drift:			
	Sand, yellow-----	2	2
	Clay, blue-----	78	80
	Sand, blue-----	15	95
	Sand; gravel; clay-----	15	110

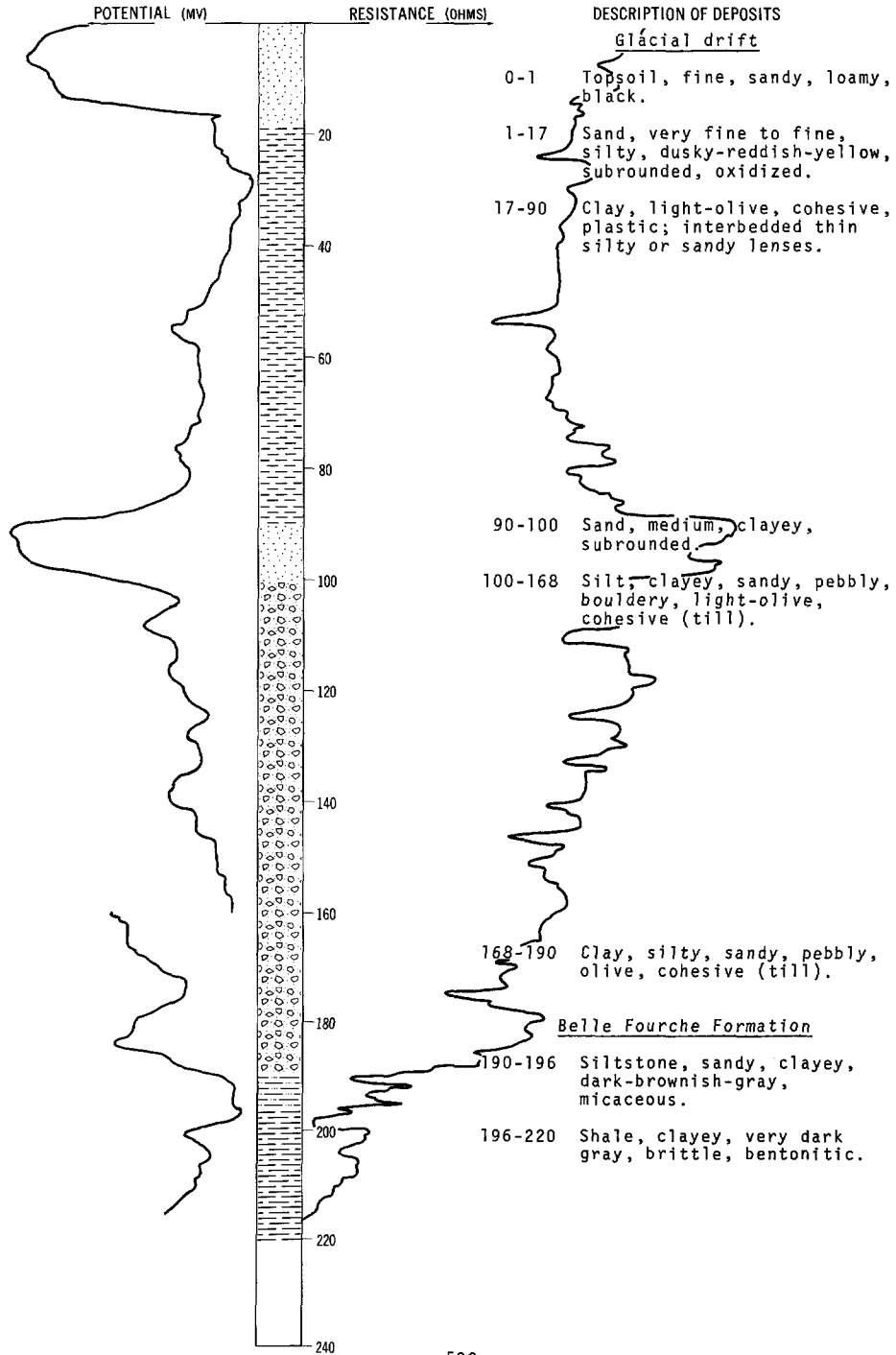
LOCATION: 164-56-29ADD2

NDSWC 4223

DATE DRILLED: September 1970

ALTITUDE: 938
(FT, MSL)

DEPTH: 220
(FT)



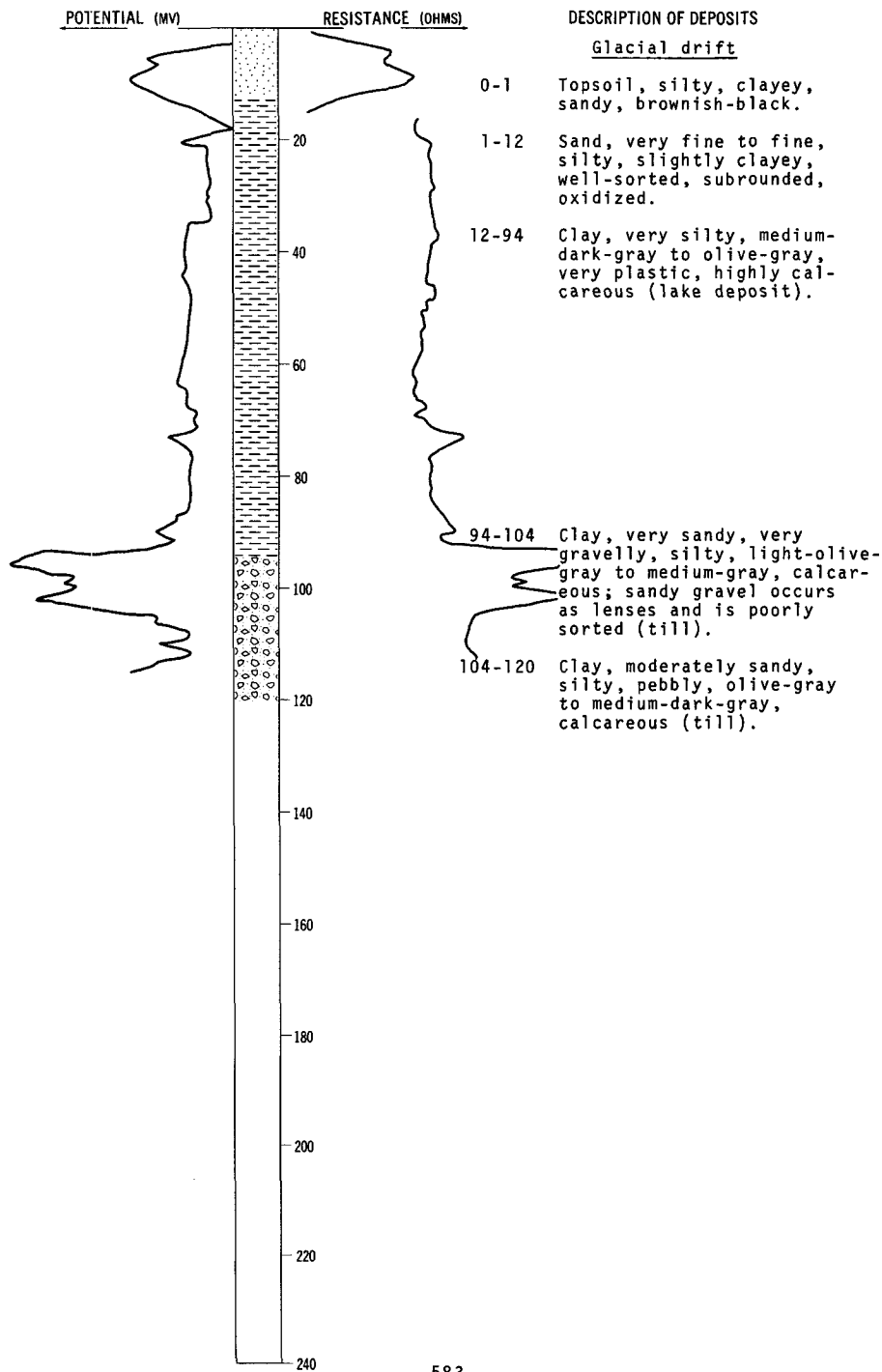
LOCATION: 164-56-29ADD3

NDSWC 5937

DATE DRILLED: May 1971

ALTITUDE: 940
(FT, MSL)

DEPTH: 120
(FT)



164-56-29DDD
USBR DH21

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, fine, sandy-----	3	3
	Sand, fine, loamy-----	3	6
	Sand, very fine, loamy-----	5	11
	Clay, silty-----	9	20

164-56-30DAA
USBR DH27

Altitude:

Glacial drift:			
	Sand, fine, loamy-----	3	3
	Sand, very fine-----	6	9
	Loam, silty-----	6	15
	Clay-----	5	20

164-56-31AAA
USBR DH24

Altitude:

Glacial drift:			
	Sand, fine, loamy-----	3	3
	Sand, very fine, loamy-----	8	11
	Loam, silty-----	2	13
	Clay, silty-----	2	15

164-56-32ADA
USBR DH35

Altitude:

Glacial drift:			
	Loam, fine, sandy-----	2	2
	Sand, very fine, loamy-----	3	5
	Sand, very fine-----	9	14
	Clay-----	3	17

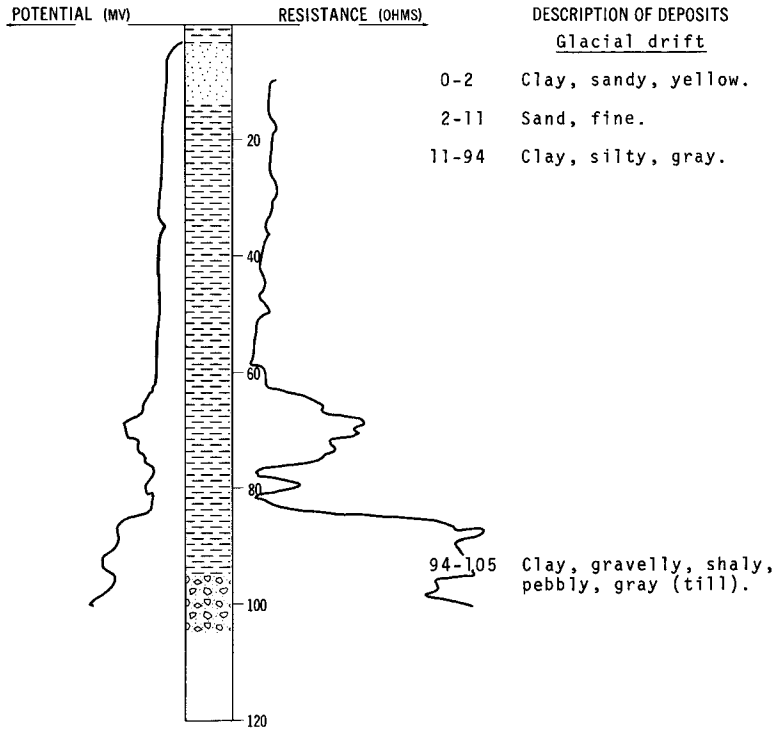
LOCATION: 164-56-33BBB

NDSWC 1770

DATE DRILLED: July 1960

ALTITUDE: 935
(FT, MSL)

DEPTH: 105
(FT)



164-56-34ADD
USBR DH30

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Sand, fine, loamy-----	3	3
	Sand, fine-----	2	5
	Loam, silty-----	4	9
	Sand, fine, loamy-----	9	18
	Clay-----	17	35

164-56-34CBB
USBR DH28

Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Sand, fine, loamy-----	1	1
	Loam, fine, sandy-----	2	3
	Sand, fine, loamy-----	2	5
	Loam, silty-----	4	9
	Clay, silty-----	1	10
	Clay-----	5	15

164-56-35AAA
USBR DH32

Altitude:

Glacial drift:			
	Loam, sandy-----	2	2
	Sand, loamy-----	2	4
	Sand, fine-----	2	6
	Loam, silty-----	6	12
	Loam, very fine, sandy-----	13	25
	Clay-----	4	29
	Loam, clayey, silty-----	1	30
	Clay-----	5	35

164-56-36BCC
USBR DH31

Altitude:

Glacial drift:			
	Sand, fine, loamy-----	2	2
	Loam, fine, sandy-----	2	4
	Sand, fine-----	2	6
	Loam, silty-----	3	9
	Loam, fine, sandy-----	2	11
	Loam, clayey, silty-----	7	18
	Clay-----	7	25

164-57-26DDD
USBR 1

Altitude:

Glacial drift:			
	Loam, clayey-----	2	2
	Loam-----	2	4
	Sand, fine-----	4	8
	Clay-----	5	13

164-57-32CBC
NDGS Cav-69-67

Altitude: 1303 feet

Glacial drift:			
	Topsoil-----	2	2
	Till, pebbly, dark-yellowish-brown-----	5	7
	Till, pebbly, moderate-yellowish-brown, banded, dense-----	5	12
	Till, clayey, pebbly, dark-yellowish-brown, dense-----	13	25
	Clay, pebbly, dark-gray to grayish-black, gypsiferous-----	-	25

164-57-32CCA
NDGS Cav-69-66

Altitude: 1307 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Till, pebbly, shaly, moderate-yellowish-brown-----	10	12
	Gravel, clayey, saturated-----	2	14
Pierre Formation:			
	Shale-----	-	14

164-57-32CCB
NDGS Cav-69-65

Altitude: 1312 feet

Glacial drift:			
	Topsoil-----	4	4
	Till, pebbly, moderate-brown-----	18	22
	Till, sandy, moderate-brown, saturated-----	2	24

164-57-32DBB1
NDGS Cav-69-70

Altitude: 1301 feet

Glacial drift:			
	Topsoil-----	2	2
	Silt, clayey, pebbly, dusky-yellowish-brown--	1	3
	Clay, pebbly, moderate-yellowish-brown-----	9	12
	Clay, yellow-----	8.5	20.5
Pierre Formation:			
	Shale-----	-	20.5

164-57-32DBB2
NDGS Cav-69-71

Altitude: 1300 feet

Glacial drift:			
	Topsoil-----	1.5	1.5
	Till, pebbly, sandy, dark-yellowish-brown---	5.5	7
	Clay, slightly silty, dark-yellowish-orange, banded-----	2	9
	Clay, yellow-----	11	20
Pierre Formation:			
	Shale-----	-	20

164-57-32DCA
NDGS Cav-69-63

Altitude: 1299 feet

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Topsoil-----	2	2
	Till, clayey, pebbly, moderate-brown, banded-----	3	5
	Till, pebbly, light-brown-----	4	9
Pierre Formation:			
	Shale-----	-	9

164-57-32DCB1
NDGS Cav-69-68

Altitude: 1308 feet

Glacial drift:			
	Topsoil-----	2	2
	Till, pebbly, moderate-yellowish-brown-----	2	4
Pierre Formation:			
	Shale-----	-	4

164-57-32DCB2
NDGS Cav-69-69

Altitude: 1305 feet

Glacial drift:			
	Topsoil-----	2	2
	Till, dark-yellowish-brown, banded-----	2.5	4.5
Pierre Formation:			
	Shale-----	-	4.5

164-57-32DCC
NDGS Cav-69-72

Altitude: 1304 feet

Glacial drift:			
	Topsoil-----	1.5	1.5
	Till, pebbly, sandy, moderate-yellowish-brown	5.5	7
	Till, pebbly, moderate-yellowish-brown, saturated-----	9	16
Pierre Formation:			
	Shale-----	-	16

164-57-32DDB
NDGS Cav-69-64

Altitude: 1282 feet

Glacial drift:			
	Topsoil-----	4	4
	Till, pebbly, light-brown, banded-----	4	8
	Till, moderate-brown-----	6	14
Pierre Formation:			
	Shale-----	-	14

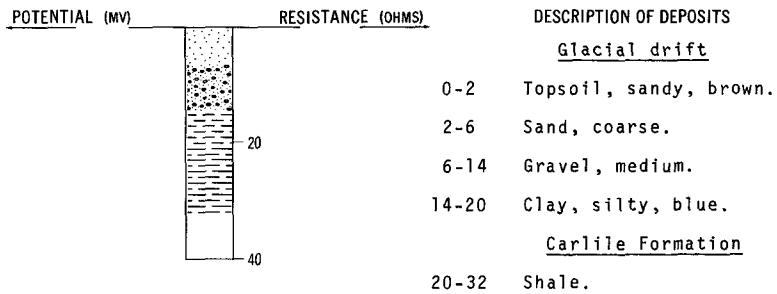
LOCATION: 164-57-34ADD

NDSWC 1781

DATE DRILLED: July 1960

ALTITUDE: 992
(FT, MSL)

DEPTH: 32
(FT)



164-57-35DDD
USBR 2

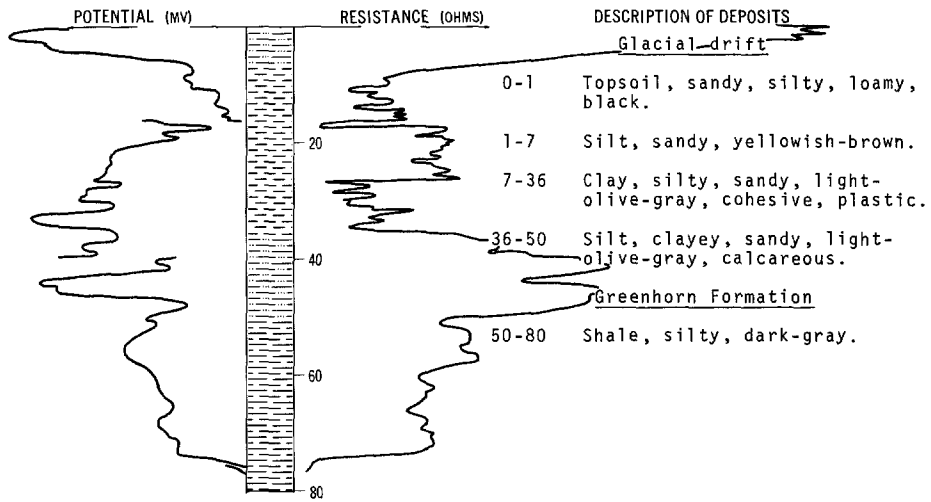
Altitude:

<u>Geologic source</u>	<u>Material</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Glacial drift:			
	Loam, clayey-----	5	5
	Clay-----	15	20

LOCATION: 164-57-36DDD
 ALTITUDE: 960
 (FT, MSL)

NDSWC 4224

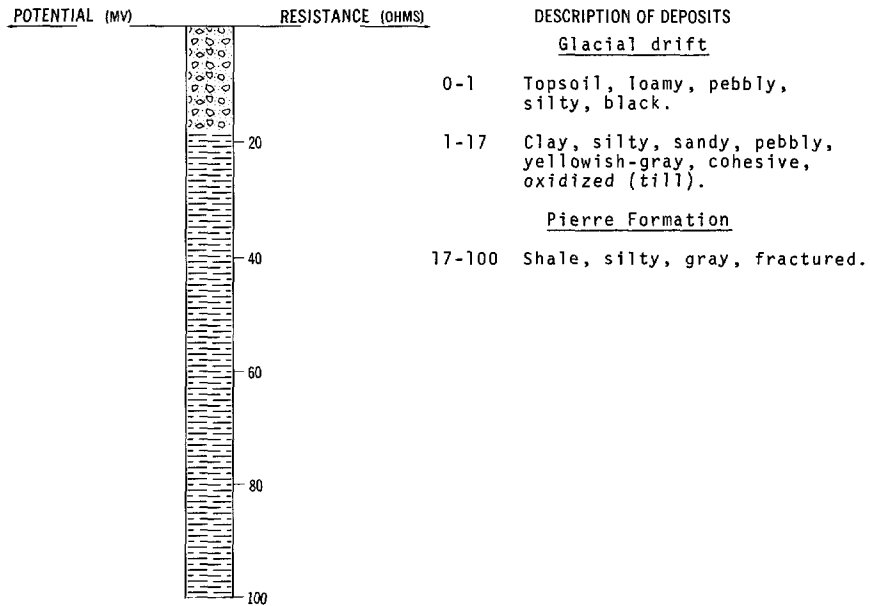
DATE DRILLED: September 1970
 DEPTH: 80
 (FT)



LOCATION: 164-60-26DAA2
 ALTITUDE: 1557
 (FT, MSL)

NDSWC 4237

DATE DRILLED: September 1970
 DEPTH: 100
 (FT)



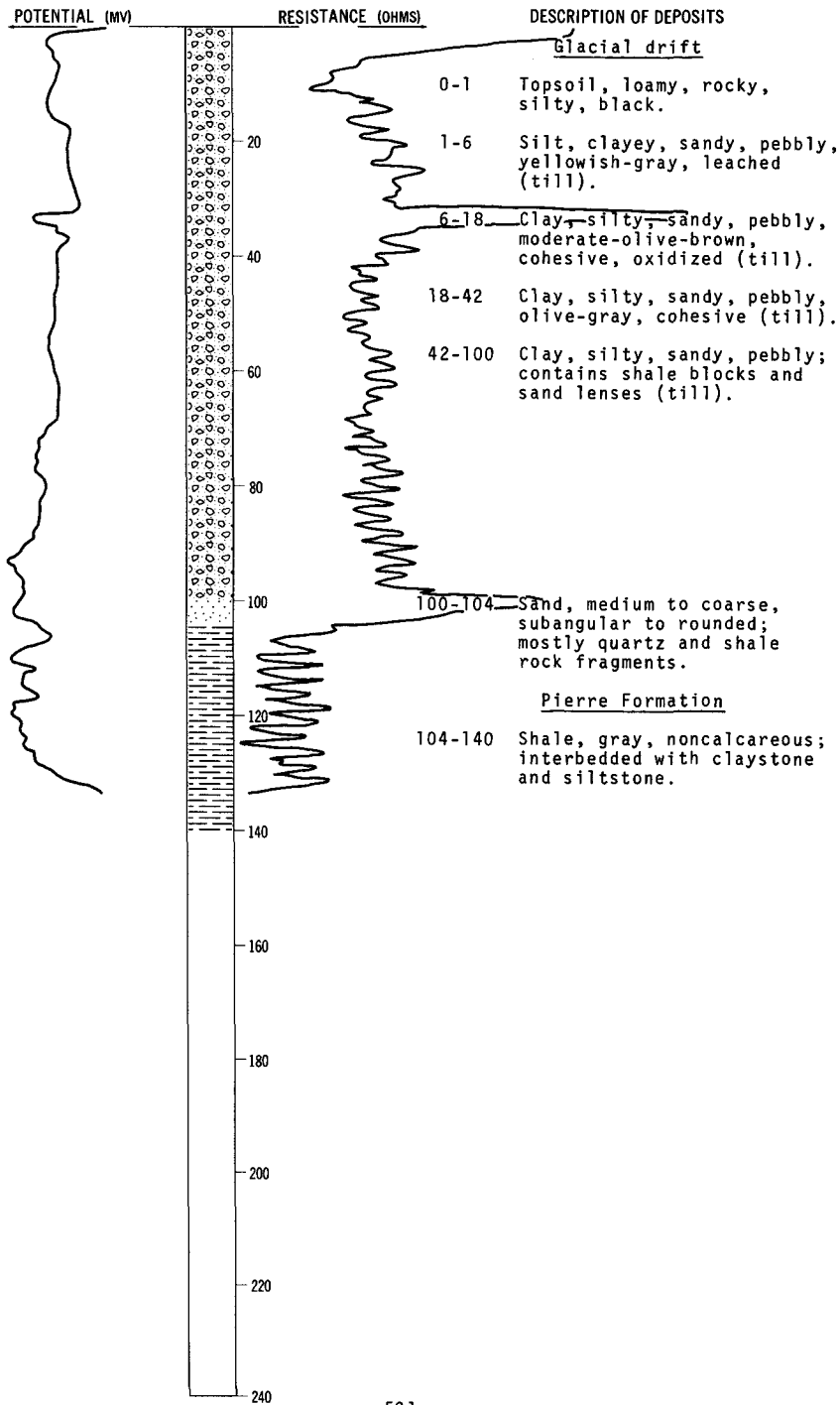
LOCATION: 164-61-31CCC

NDSWC 4248

DATE DRILLED: September 1970

ALTITUDE: 1544
(FT, MSL)

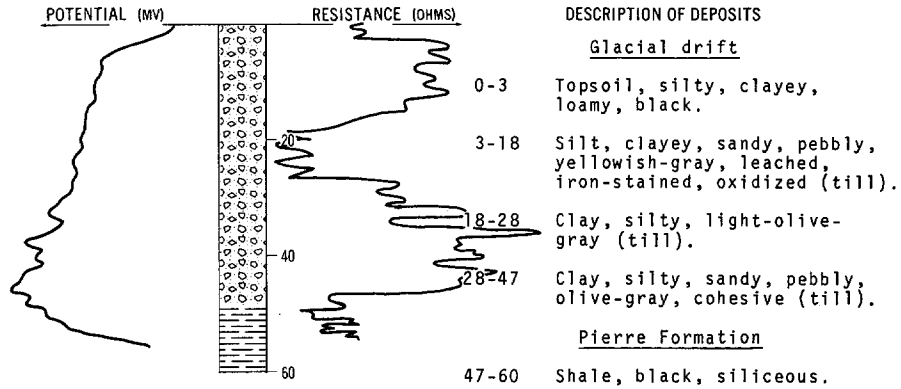
DEPTH: 140
(FT)



LOCATION: 164-61-36DAD
 ALTITUDE: 1550
 (FT, MSL)

NDSWC 4245

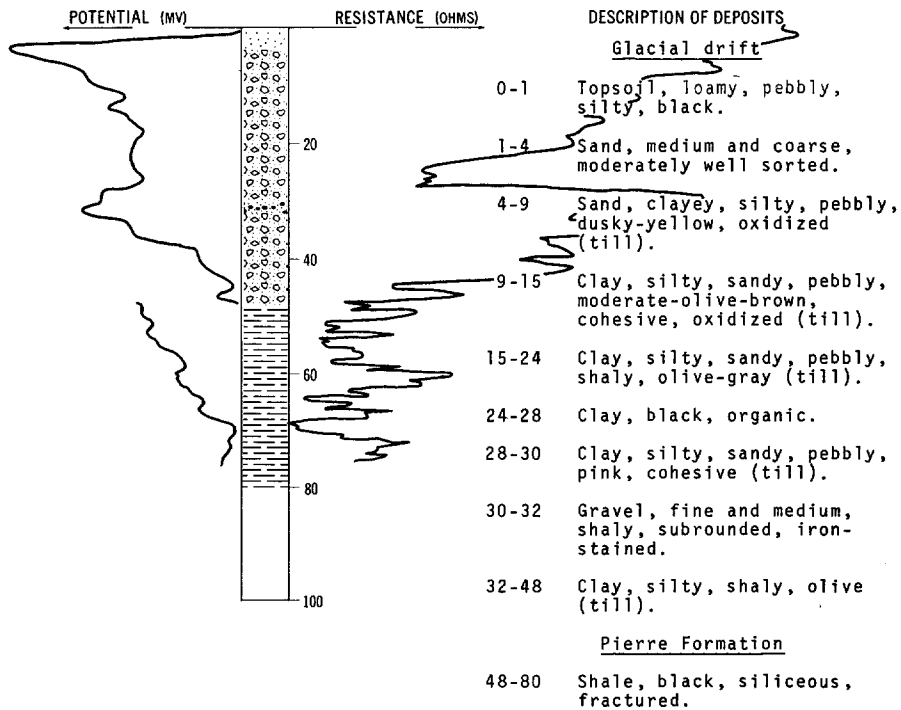
DATE DRILLED: September 1970
 DEPTH: 60
 (FT)



LOCATION: 164-62-29DAA2
 ALTITUDE: 1566
 (FT, MSL)

NDSWC 4250

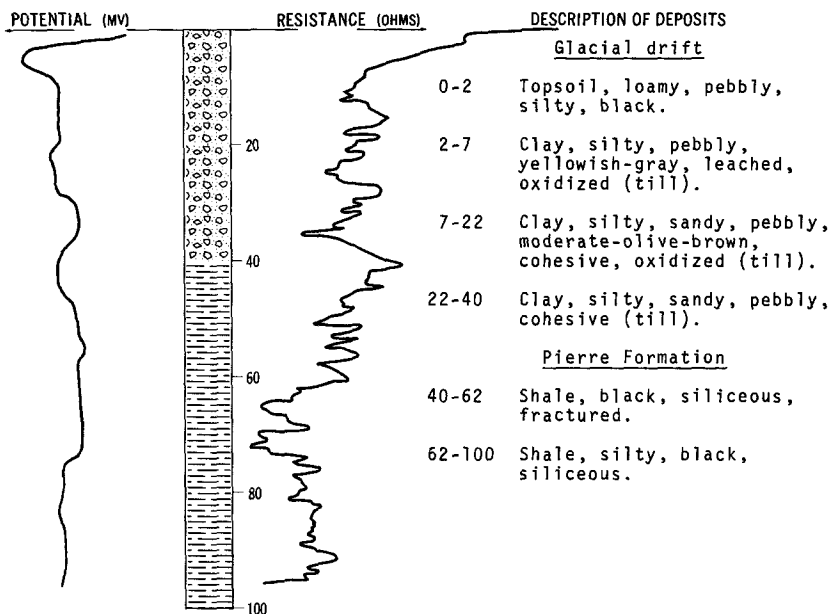
DATE DRILLED: September 1970
 DEPTH: 80
 (FT)



LOCATION: 164-62-33DDD
 ALTITUDE: 1561
 (FT, MSL)

NDSWC 4249

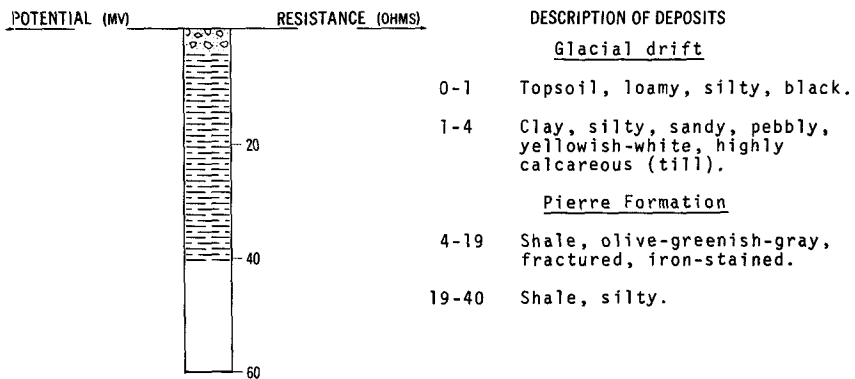
DATE DRILLED: September 1970
 DEPTH: 100
 (FT)



LOCATION: 164-63-32DDD
 ALTITUDE: 1584
 (FT, MSL)

NDSWC 4182

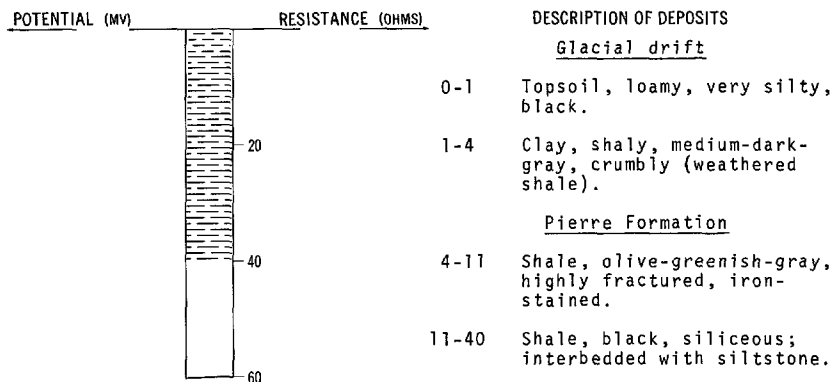
DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



LOCATION: 164-63-36CCC
 ALTITUDE: 1562
 (FT, MSL)

NDSWC 4181

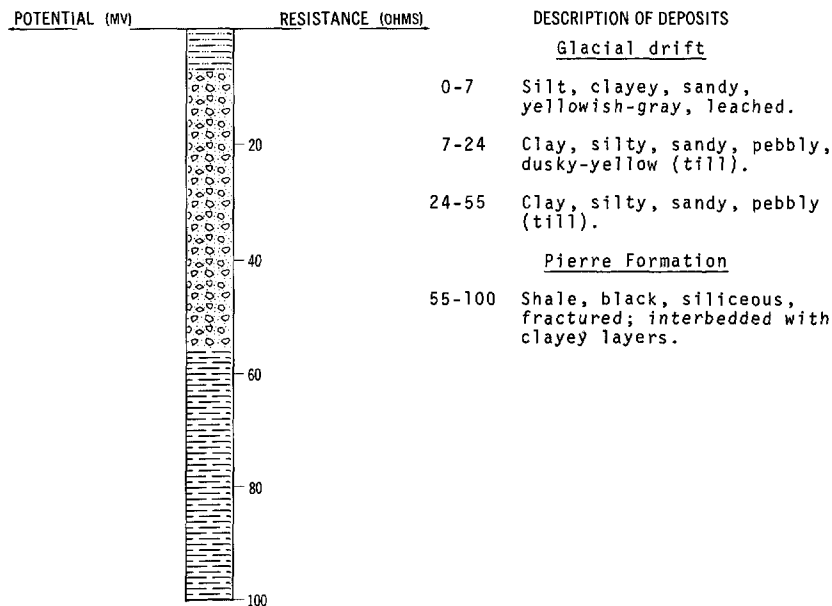
DATE DRILLED: September 1970
 DEPTH: 40
 (FT)



LOCATION: 164-64-28DAA2
 ALTITUDE: 1545
 (FT, MSL)

NDSWC 4167

DATE DRILLED: August 1970
 DEPTH: 100
 (FT)



LOCATION: 164-64-36DDD

NDSWC 4183

DATE DRILLED: September 1970

ALTITUDE: 1564
(FT, MSL)

DEPTH: 40
(FT)

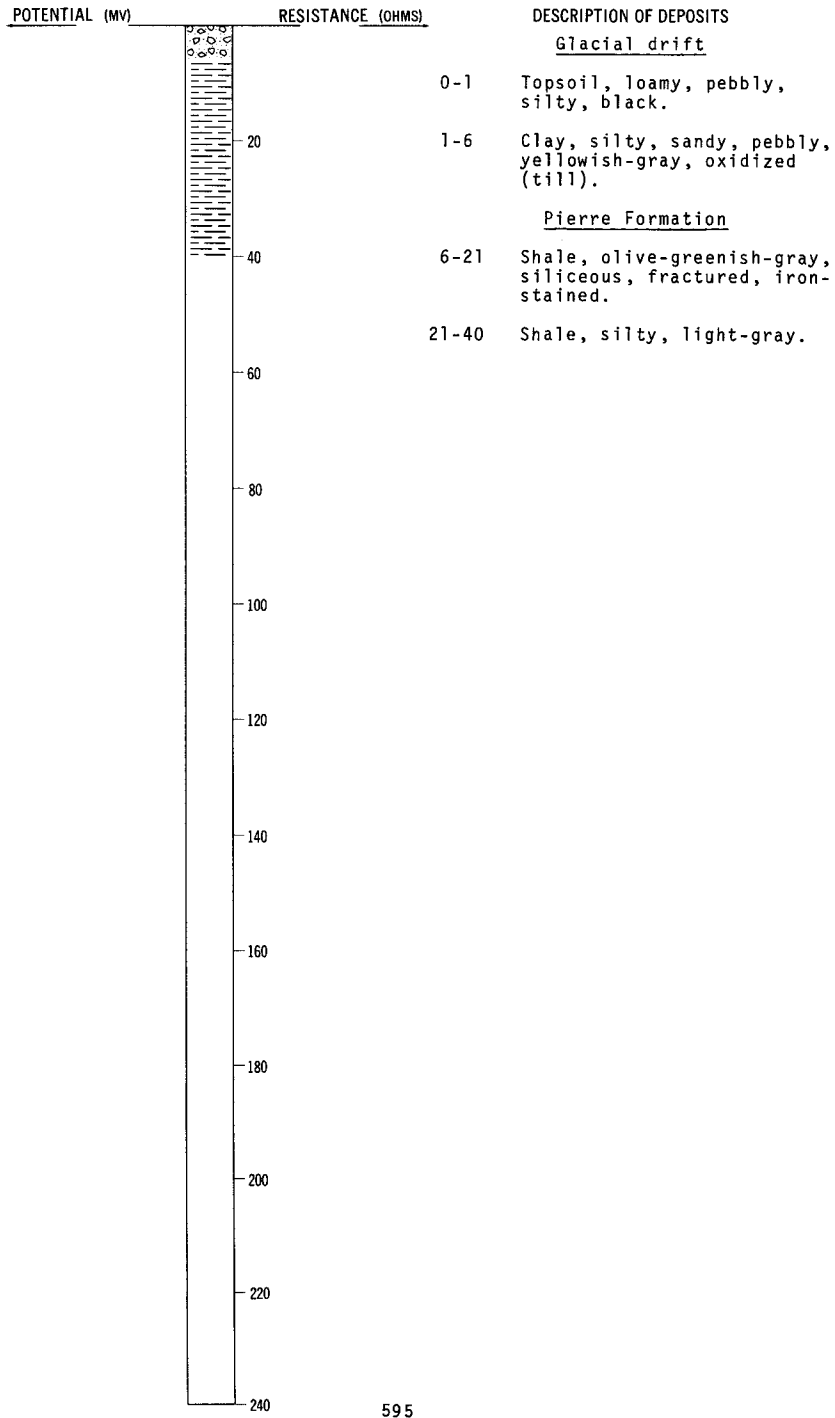


TABLE 4.--Chemical analyses of ground water

(Analyses are in milligrams per liter, except as otherwise noted)

LOCAL NUMBER	MAJOR AQUIFER	DEPTH OF WELL (FT.)	DATE OF SAMPLE	SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	MANGANESE (MNG) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	BORON (B) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM-SORPTION RATIO	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH	TEMPERATURE (DEG C)
159N051408AAA	O1	17	07-10-71	22	100	10	56	38	4.0	1.8	312	0	37	12	2	1.0	30	356	298	42	0.1	3	527	7.9	9.0
159N051423CC	RR	502	07-10-71	8.9	14000	770	1370	403	13100	28	192	0	2520	22100	1.5	2.0	5300	42200	5080	4920	80	36	54900	7.2	---
159N0514260BC	O1	17	07-02-36	22	500	100	152	121	59	---	427	---	408	16	2	8.9	---	949	677	327	---	16	---	---	---
159N051420ZEB	O1	24	06-10-16	26	1600	100	267	121	54	---	618	0	517	146	2	44	---	1460	1170	664	---	9	---	---	---
159N051420ZCC2	RR	450	04-25-21	9.4	6600	---	1380	556	13400	330	223	0	2560	23400	---	---	---	42300	5740	5560	---	34	---	---	---
159N051420ZCC2	RR	450	10-20-54	7.4	17000	0	1320	535	13600	270	201	0	2470	23300	1.6	---	---	44300	5490	5330	---	35	57600	7.0	5.5
159N051420ZCC2	RR	450	05-28-56	5.6	2000	520	1310	538	13400	260	180	0	2480	22800	1.7	---	---	44200	5480	5330	---	35	58800	6.9	6.0
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48	---	627	656	333	---	3	---	---	---
159N051420ZCC2	RR	450	04-25-21	15	1600	---	151	88	9.1	---	394	0	255	31	---	48</									

LOCAL NUMBER	MAJOR ADJUTER	DEPTH OF WELL (FT.)	DATE OF SAMPLE	SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	MANGANESE (MNE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	CONDUCTIVITY RATIO	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROHMS)	PH	TEMPERATURE (DEG C)	
160N05M20A8B3	P	30	02-01-36	23	600	100	43	30	136	---	176	0	199	124	.0	2.6	---	683	232	88	---	52	---	---		
160N05M20A8B	P	29	02-01-36	38	400	1200	164	70	341	---	383	0	888	140	.8	11	---	1910	705	391	---	56	---	---		
160N05M20A8B	P	40	02-01-36	30	1100	0	160	115	300	---	766	0	65	294	.5	500	---	1880	879	251	---	43	---	---		
160N05M20B8A	P	35	02-01-36	25	900	200	21	7.4	548	---	366	0	830	76	.8	6.7	---	1890	86	0	---	94	---	---		
160N05M21B8C	P	42	02-01-36	77	100	300	36	16	48	---	224	---	44	24	.1	.3	---	413	161	0	---	40	---	---		
160N05M21BCC1	P	60	02-01-36	35	---	450	116	48	64	---	134	0	507	69	.2	1.1	---	1020	578	468	---	22	---	---		
160N05M21BCC2	VI	30	02-01-36	38	1100	800	34	19	84	---	302	0	75	17	.0	1.8	---	425	169	0	---	53	---	---		
160N05M21BCC3	P	42	02-01-36	27	400	200	34	14	125	---	317	0	77	54	.1	2.2	---	558	146	0	---	66	---	---		
160N05M330D02	P	83	06-18-69	25	180	20	89	39	826	13	434	0	1320	372	.2	32	1300	2920	381	25	18	82	4150	7.7	---	
160N05M1699C	P	83	08-18-71	24	160	120	182	82	1270	14	650	0	1880	741	.3	98	3500	4410	794	261	20	77	6170	7.6	8.0	
160N06M04CCC	P	36	08-19-69	30	0	1400	44	14	1230	11	103	0	2220	249	.1	127	0	3980	168	84	41	94	5330	6.9	---	
160N06M110A4	P	128	09-13-66	24	100	---	---	---	879	---	598	0	262	820	---	33	0	---	103	0	---	---	94	3750	7.8	---
160N06M19A4B	P	62	08-18-69	29	300	10	28	2.2	534	7.9	552	0	708	52	.6	3.2	2000	1440	79	0	24	93	2810	8.0	---	
160N06M19A4A	P	91	08-18-71	26	50	120	---	---	1920	20	703	0	28	2970	.2	1.0	4500	4710	593	17	34	---	9030	7.9	8.0	
160N06M2688B	P	60	10-09-70	26	70	120	157	19	945	17	650	0	1150	581	.2	8.1	2200	3160	470	0	19	81	4720	8.0	---	
160N06M10588B3	P	78	05-02-69	26	200	110	30	5.1	1200	14	791	0	358	1220	.4	2.3	3900	3270	96	0	53	96	5520	7.9	---	
160N06M170CC2	P	80	08-18-71	24	70	80	32	66.4	1330	15	856	0	119	1630	.3	3.3	4800	3340	107	0	56	90	6090	8.0	6.5	
160N06M133CC44	P	25	09-10-36	24	70	60	100	36	16	---	321	---	40	96.0	---	---	---	376	155	0	---	51	---	---	---	
160N06M133CCD	P	26	09-10-36	20	1200	300	45	18	55	---	312	0	37	9.0	.2	.4	---	389	188	0	---	39	---	---	---	
160N06M133CCB	P	35	09-10-36	27	200	600	136	60	1060	---	769	0	1780	299	.0	.0	---	3770	585	0	---	80	---	---	---	
160N06M201B8C	P	111	08-14-64	---	600	100	5.0	1.0	350	---	494	36	240	15	.8	4.0	---	---	15	0	---	98	1410	8.0	---	
160N06M22CCD	P	80	05-28-69	26	660	80	26	7.1	1070	15	687	0	583	904	.5	7.9	2500	3040	94	0	48	---	95	4870	7.9	---
160N06M1988A	P	165	12-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2220	80	---	---	---	---	---	---	---
160N06M1988D	P	80	05-28-69	27	0	260	57	13	571	13	709	0	731	71	.1	.9	810	1850	195	0	18	85	2690	7.7	---	
160N06M190CC	P	119	05-12-37	36	4000	100	47	16	642	---	771	0	848	49	.2	1.3	---	2140	190	0	---	89	---	---	---	
160N06M274AAA	SI	100	09-09-70	29	160	370	81	15	381	9.6	553	0	530	82	.4	1.0	710	1430	263	0	10	75	2100	8.2	6.0	
160N06M01CCC	SI	75	10-01-70	29	4800	20	178	66	238	14	475	0	721	72	.4	1.0	520	1600	717	327	3.9	41	2120	7.7	5.0	
160N06M07DBA	P	173	05-28-69	2.8	440	10	9.0	10	717	13	453	31	227	736	.3	2.5	2200	2000	48	0	39	95	3500	8.9	5.0	
160N06M07DBA	P	173	08-21-69	2.9	940	20	9.8	7.7	740	10	465	16	230	729	.4	.0	2300	1960	56	0	43	96	3450	8.6	---	
160N06M110DA	P	190	08-20-69	27	0	20	41	9.8	855	11	651	0	744	500	.5	6.0	2300	2520	143	0	31	92	3910	8.1	---	
160N06M11DD0	SI	100	08-28-70	26	5100	30	192	38	317	14	566	0	716	39	.9	2.5	520	1500	535	71	6.0	55	2250	7.8	6.0	
160N06M15CB8	SI	83	07-26-71	28	3100	20	194	59	242	15	538	0	688	68	.3	2.5	280	1660	728	287	3.9	41	2160	7.4	6.0	
160N06M15CC4	SI	120	09-11-69	28	3000	40	206	63	320	17	448	0	859	137	.3	2.5	640	1840	773	405	5.0	47	2540	7.7	---	
160N06M15CCD	SI	78	07-26-71	27	80	20	204	60	278	16	550	0	787	99	.5	.5	450	1800	757	306	4.4	44	2360	7.4	6.0	
160N06M15DA42	SI	73	07-26-71	30	1200	40	201	64	199	16	624	0	632	12	.4	3.5	940	1480	764	252	3.1	36	1980	7.6	6.0	
160N06M20A4B	SI	56	07-19-71	28	70	530	173	54	146	11	464	0	511	36	.3	1.0	140	1220	652	272	2.5	32	1640	7.6	---	
160N06M21A4B1	SI	243	07-26-71	28	320	380	165	27	517	14	670	0	816	229	.3	6.8	970	2180	524	0	9.8	68	3090	7.8	6.0	
160N06M21A4B2	SI	113	07-26-71	28	300	1800	268	60	287	18	625	0	767	136	.4	6.8	940	2040	918	405	4.1	40	2660	7.8	6.0	
160N06M22B4B	SI	81	10-06-70	27	5900	20	141	67	279	16	394	0	719	115	.5	11	550	1570	627	304	4.9	48	2180	7.7	5.5	
160N06M22B8A1	SI	83	07-26-71	28	2500	220	193	59	283	16	546	0	762	94	.4	1.0	870	1730	725	277	4.6	45	2340	8.0	6.0	
160N06M22B8A2	SI	83	07-26-71	28	880	40	178	69	287	16	593	0	736	89	.4	2.5	1200	1700	729	243	4.6	45	2370	7.9	6.0	
160N06M22B8A3	SI	90	08-13-71	30	4800	1100	225	68	276	17	619	0	746	94	.5	.6	710	1740	844	336	4.1	41	2400	7.5	5.0	
160N06M22B8A3	SI	90	08-14-71	29	4600	1000	227	65	276	17	621	0	752	96	.5	1.0	5400	1750	834	324	4.1	41	2400	7.6	---	
160N06M22B8A3	SI	90	08-15-71	28	3300	1000	223	67	269	16	626	0	741	93	.4	2.5	750	1770	834	320	4.1	41	2400	7.6	---	
160N06M22B8A3	SI	90	08-16-71	28	4100	1000	222	66	274	16	611	0	752	94	.5	1.0	530	1770	825	324	4.1	41	2390	7.6	---	
160N06M22B8A3	SI	90	08-17-71	29	3900	1000	224	69	273	16	622	0	769	94	.5	1.0	490	1800	843	333	4.1	41	2410	7.6	---	
160N06M22D04	P	96	08-21-69	29	0	20	24	5.1	771	7.8	714	0	856	201	.2	5.0	710	2200	81	0	37	95	3300	8.2	---	
160N06M2689B	SI	38	10-07-70	27	160	0	74	40	12	4.0	331	0	102	14.8	.4	1.0	0	417	350	78	.3	7	673	7.7	---	
160N06M320C04	P	96	05-12-37	27	15000	700	165	66	194	---	461	---	561	117	.0	6.7	---	1560	712	334	---	38	---	---	---	
160N06M320C05	P	129	05-12-37	34	3000	500	122	49	356	---	564	---	448	249	.2	11	---	1560	515	53	---	60	---	---	---	
161N05M24CCC	SI	110	08-06-71	19	20000	1200	1560	917	5240	38	86	0	1250	12300	.1	1.0	2500	25000	7670	7600	26	60	32500	6.9	9.0	
161N05M20A8A	SI	86	06-22-66	20	6000	600	442	192	381	---	881	---	327	1600	.4	15	---	3260	1990	1840	---	30	---	---	---	
161N05M20A8A	SI	82	07-30-71	11	8400	560	281	99	99	8.8	153	0	203	712	.2	.0	760	1900	1110	984	1.3	16	2710	7.5	7.0	
161N05M24D4D	SM	280	06-04-71	15	20000	1200	1770	721	15300	210	176	0	2790	26900	.0	1.0	6600	52800	7390	7290	77	31	67200	6.5	---	
161N05M30B8B	SI	97	07-31-71	14	10000	1300	695	261	807	24	192	0	511	2820	.1	1.0	550	5720	2810	2650	6.6	38	8910	7.2	6.0	
161N05M30A4A	SI	140	10-14-69	21	3200	500	1090	405	3680	4.1	153	0	1110	7780	.2	1.0	2700	14800	4240	4110	25	65	22600	7.6	6.0	
161N05M40ADC1	IG	30	11-11-35	27	180	0	125	20	251	---	454	---	103	291	2.4	.9	0	1060	406	48	---	59	---	---	---	
161N05M40ADC2	IG	30	11-11-35	27	180	0	125	20	251	---	454															

LOCAL NUMBER	MAJOR AQUIFER	DEPTH OF WELL (FT.)	DATE OF SAMPLE	SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	MANGANESE (MNG) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	CHLORIDE (CL) (MG/L)	SULFATE (SO4) (MG/L)	PHOSPHATE (PO4) (MG/L)	NITRATE (NO3) (MG/L)	AMMONIUM (NH4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM AD-SORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)				
161N05W040DD	IG	47	05-25-71	24	2800	570	62	18	3.1	5.6	232	0	44	9.8	-2	1.0	30	302	229	39	-1	3	417	7.7	---	
161N05W158C01	IG	340	10-10-69	9.4	3100	50	136	44	2030	32	291	0	500	2890	1.9	4.5	4500	5930	530	291	38	89	9930	7.9	8.5	
161N05W158C02	IG	60	10-02-69	26	120	10	56	12	9.3	1.2	210	0	14	14	-1	1.0	0	221	188	16	-3	10	388	8.1	7.0	
161N05W158C03	IG	24	09-10-71	24	50	10	58	28	200	12	468	0	109	147	-4	1.0	1200	783	259	0	5.4	61	1350	7.6	---	
161N05W158C04	OL	200	09-10-71	19	0	130	106	31	79	10	496	0	128	29	-2	1.3	890	645	393	0	1.7	30	1030	7.6	---	
161N05W158C05	OL	100	09-10-71	18	320	280	86	28	42	4.9	435	0	56	2.9	-3	1.0	400	450	329	0	1.0	21	734	7.7	---	
161N05W158C06	IG	20	06-24-70	26	0	20	46	15	8.3	1.8	186	0	32	6.4	-3	4.6	120	226	177	25	-3	9	388	7.8	---	
161N05W158C07	IG	60	05-20-71	23	0	480	52	13	5.0	1.3	221	0	15	2.5	-1	1.0	70	251	184	3	-2	6	353	7.9	---	
161N05W164D04	IG	65	06-03-71	24	260	450	53	13	4.0	1.1	203	0	23	1.1	-0	1.0	30	248	186	20	-1	4	365	8.2	7.0	
161N05W164D02	IG	65	06-03-71	24	400	450	51	12	1.5	1.0	192	0	23	4.1	-0	2.0	30	245	177	20	-0	7	329	8.0	7.0	
161N05W170DD	IG	58	06-01-71	27	480	400	61	15	2.5	1.6	262	0	8.3	1.2	-1	1.0	170	279	212	0	-1	2	391	7.9	6.0	
161N05W22A0	IG	50	05-18-71	25	0	630	95	22	2.9	2.8	394	0	11	-2	-2	1.0	30	394	328	13	-1	2	278	7.9	---	
161N05W22B01	IG	70	06-04-71	34	2000	270	53	14	3.9	2.0	230	0	8.3	6.3	-1	1.0	280	241	189	1	-1	4	355	7.7	---	
161N05W22B02	IG	80	07-21-71	25	1100	570	56	13	3.5	2.0	219	0	18	3.0	-2	1.0	30	190	191	12	-1	4	341	7.5	---	
161N05W22B09	IG	80	07-22-71	25	750	560	54	13	3.5	2.0	219	0	17	1.6	-2	1.0	400	193	190	11	-1	4	348	7.5	---	
161N05W28CC	IG	50	05-19-71	25	2100	480	59	11	2.5	2.2	233	0	2.5	1.1	-1	1.0	30	242	192	1	-1	3	354	7.6	---	
161N05W060DD	N	45	10-15-70	16	50	340	63	19	50	8.4	266	0	105	12	-4	3.6	140	390	236	18	1.4	31	648	8.1	---	
161N05W078A8	OS	35	08-23-69	27	140	10	96	19	46	4.5	338	0	118	9.3	-4	14	0	521	320	43	1.1	24	772	7.8	---	
161N05W118AA	OS	20	10-30-69	27	0	20	85	11	32	4.7	338	0	36	9.8	-2	2.0	0	361	256	0	-9	21	662	8.1	---	
161N05W22AAA1	OS	18	05-02-68	32	1700	970	75	12	5.4	2.0	237	0	32	12	-4	27	100	357	320	44	-2	4	505	7.7	---	
161N05W22A0	P	103	08-14-70	25	80	40	85	33	873	19	735	0	438	116	1.0	219	1600	2760	368	0	20	84	4480	8.2	---	
161N05W18D084	P	1058	-03	9.9	180	150	440	333	6150	59	464	0	2250	10300	1.2	0	---	20800	2440	2060	---	84	---	7.5	---	
161N05W18D085	P	170	-03	27	1800	60	92	29	1070	18	670	0	16	1520	-1	1.1	---	3150	348	0	---	86	---	7.7	---	
161N05W18D085	P	170	05-14-68	27	1200	---	85	29	---	---	649	0	3.5	1680	-3	-3	---	3460	330	0	---	89	---	7.9	7.5	
161N05W18D085	P	170	04-07-69	25	1500	---	92	29	---	---	630	0	15	1760	-2	1.5	---	3460	349	0	---	88	---	6050	7.8	---
161N05W20AAA	SI	58	09-17-70	26	200	30	32	7.8	663	9.5	699	0	147	606	1.0	1.0	2800	1710	112	0	27	92	2960	8.2	5.5	
161N05W21B0A	SI	21	08-24-69	27	400	---	---	---	---	---	---	---	---	---	---	---	---	530	---	---	---	1000	---	---	---	---
161N05W18CC1	P	50	05-01-69	27	220	420	50	18	507	9.4	420	0	841	72	-2	-7	1600	1770	200	0	16	84	2510	7.6	---	
161N05W22B01	P	20	06-30-70	26	280	20	18	5.4	181	4.9	448	5	77	17	1.9	3.4	0	554	67	0	9.6	84	888	8.0	---	
161N05W22B02	P	60	06-29-70	26	840	140	51	13	1050	6.7	595	5	1940	21	-6	0	2100	3340	179	0	34	92	4570	8.3	---	
161N05W22B03	P	100	07-01-70	26	2100	290	46	15	1110	12	451	0	2080	97	-6	0	2900	3650	175	0	37	93	5000	8.1	---	
161N05W22B04	P	150	07-01-70	26	2600	30	74	25	1570	20	611	0	20	2330	-5	1.0	2600	4430	288	0	40	92	7880	7.7	---	
161N05W22B05	P	200	07-01-70	22	460	190	158	55	2070	38	424	0	63	3380	-0	1.0	2100	6020	622	274	36	87	10300	8.0	---	
161N05W30A0C	P	100	06-19-69	26	30	380	142	46	1660	21	478	0	3690	46	-2	16	2700	5670	544	152	31	86	7140	7.6	---	
161N06W11ADA	P	110	05-01-69	26	0	250	80	25	1770	25	701	0	1.7	2620	-2	1.8	3700	4940	303	0	44	92	8650	7.7	---	
161N06W14C0C	P	43	05-02-21	26	---	---	37	11	---	---	149	0	168	20	---	2.4	---	429	138	16	---	38	---	---	---	---
161N06W14C0C	P	43	10-27-54	26	3500	21000	416	143	362	14	104	0	2170	38	-2	-1	---	3360	1630	1545	---	52	3560	6.3	6.0	
161N06W14C0C	P	43	08-12-70	22	800	4600	242	77	335	11	173	0	1400	17	-7	1.0	170	2300	922	780	4.8	44	2780	7.7	6.0	
161N06W2188B	P	40	07-09-70	25	0	40	42	19	55	3.0	204	0	101	19	-2	23	0	397	182	7	1.8	39	650	7.8	6.0	
161N06W27D0B2	P	74	05-21-68	---	800	---	---	---	620	---	---	---	---	---	---	32	---	---	---	140	---	---	---	3800	---	---
161N06W178A8	P	120	05-02-69	27	0	150	32	9.2	840	13	799	0	50	922	-4	2.2	3000	2300	118	0	34	93	4070	8.1	---	
161N06W203CA0	P	90	06-19-69	26	490	20	135	4.8	2.2	345	5.7	670	0	245	3.0	-2	1.0	890	880	23	0	31	96	1480	8.2	---
161N06W06D0D	SI	117	09-02-70	27	150	30	135	4.8	446	13	495	0	805	222	-2	3	900	1840	529	156	8.4	64	2820	7.7	6.0	
161N06W19A0B1	SI	63	09-17-69	30	6400	10	110	36	243	9.2	450	0	430	98	-2	0	370	1190	421	52	5.2	55	1750	7.7	---	
161N06W30D0D	SI	85	09-08-70	29	0	390	74	13	332	7.7	480	22	361	137	-5	3	540	1230	236	0	9.4	74	1890	8.6	6.0	
161N06W340DA	P	75	06-20-69	27	400	40	12	2.9	722	8.8	716	5	226	559	-7	1.0	3000	1770	42	0	48	97	3240	8.3	---	
161N06W340DD	P	77	10-09-70	21	70	20	55	37	450	11	484	0	701	95	-7	18	900	1650	289	0	12	76	2370	8.1	---	
161N06W15AAA	P	92	08-13-70	26	9200	10	40	13	348	7.0	303	0	574	51	-7	3.7	500	1180	155	0	12	82	1790	8.2	---	
161N06W15B0C	P	103	05-19-69	26	50	70	39	9.4	686	10	777	0	739	184	-4	7.9	2400	1950	136	0	26	91	3100	8.0	---	
161N06W209B0	SI	133	05-01-70	28	4600	20	91	40	280	11	519	0	560	24	-5	1.0	410	1330	394	0	6.1	60	1890	7.9	6.0	
161N06W22B0A	P	200	08-13-70	23	2800	280	77	24	1770	17	591	0	1050	1870	-8	5.0	3300	5130								

LOCAL NUMBER	MAJOR AQUIFER ¹	DEPTH OF WELL (FT.)	DATE OF SAMPLE	SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	MANGANESE (MNG) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM SORPTION RATIO	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICRO-MHOS) (PH)	TEMPERATURE (DEG C)	
163M05M340DC2	IG	35	05-27-71	26	100	802	115	22	5.3	2.8	408	0	45	3.3	.0	1.0	140	457	379	44	.1	3	682	7.9	
163M05M14CB9	IG	90	08-14-70	20	0	180	48	19	34	3.5	289	0	76	14	.7	3.8	100	347	248	28	.9	23	605	6.0	
163M05M0298A	P	23	08-14-70	21	340	390	74	37	425	12	769	0	611	9.3	1.1	1.0	170	1540	336	0	10	72	2190	8.1	
163M05M22C0D2	S1	20	05-01-69	28	70	40	286	101	38	4.4	383	0	291	322	.4	195	0	1620	1130	816	.5	7	2200	7.6	
163M05M16AAA	P	118	08-18-71	28	0	110	---	---	726	12	900	0	515	328	.4	7.3	2400	1960	149	0	26	---	3180	7.9	
163M05M250CD	P	100	06-18-68	---	2000	---	---	---	765	---	---	---	---	---	---	---	---	---	620	---	---	---	---	4538	---
163M06M04A4D2	P	114	01-23-68	---	---	---	---	---	517	---	683	40	---	---	---	11	---	---	70	590	---	---	---	2390	---
163M06M070DDA	P	120	08-18-71	24	70	20	---	---	391	6.0	713	0	268	28	.7	3.4	5300	1050	50	0	24	---	1620	7.9	
163M06M110DD	P	80	09-23-70	33	180	20	23	10	472	17	750	0	459	37	.7	8.3	2400	1450	99	0	21	90	2120	8.2	
163M06M2598B	P	100	05-02-69	27	100	200	54	12	956	14	957	0	382	229	.2	.0	5000	1750	185	0	16	87	2730	7.9	
163M06M1908A	P	60	08-13-70	26	980	200	61	19	502	11	604	0	752	24	.5	6.9	700	1610	229	0	14	82	2450	8.1	
163M06M313CB	P	73	07-23-36	45	600	100	79	36	739	---	651	---	1290	57	.6	26	---	2658	375	0	---	82	---	---	---
163M06M313CCB	P	---	07-25-36	30	1000	200	78	25	744	---	709	---	1230	53	.0	1.3	---	2544	319	0	---	84	---	---	---
163M06M313CDA	P	63	07-25-36	32	200	200	58	20	348	---	615	---	438	20	.3	1.8	---	1190	230	0	---	77	---	---	---
163M06M33AAA	P	41	10-09-70	26	400	40	208	156	729	18	460	0	2270	37	.3	9.9	520	3730	1160	783	9.3	57	4470	8.0	
163M06M203AD	P	160	08-13-70	24	100	20	19	20	694	11	814	0	74	676	.8	5.5	3600	1830	129	0	27	91	3320	7.9	
163M06M216DD	S1	105	09-17-69	---	4200	20	210	65	308	14	417	0	957	130	.1	7.6	860	1940	792	450	4.7	45	2590	7.7	
163M06M217BCA	S1	43	10-08-70	24	280	10	39	18	194	9.0	453	0	204	15	.4	3.4	550	726	173	0	6.4	70	1120	8.0	
163M06M306CJC	P	110	08-21-69	27	1500	560	111	22	436	12	370	0	876	89	.2	6.0	970	1770	368	65	9.9	71	2490	7.9	
163M06M160DD	S1	87	09-18-69	30	3790	40	168	199	591	18	541	0	1660	207	.3	12	710	3180	1240	796	7.3	50	4090	7.8	
163M06M308AB	P	40	08-21-69	28	760	10	52	13	180	6.6	337	6	231	25	.0	2.5	220	677	183	0	5.8	67	1070	8.4	
163M06M188BD	P	110	05-28-69	27	520	180	52	24	637	10	548	0	1060	55	.3	5.3	1800	2150	227	0	18	85	3020	7.8	
163M06M21AAD	P	39	10-07-70	26	130	50	73	34	403	13	495	0	711	26	.6	15	590	1510	323	0	9.8	72	2180	8.1	
164M05M280DD1	RR	505	10-07-67	4.4	3600	---	672	316	4490	100	168	0	1460	11300	1.0	.0	6700	21300	2980	2640	53	83	32000	7.6	
164M05M290DD	S1	189	10-07-66	21	7200	---	1503	593	13300	230	217	0	2700	22800	1.3	3.9	5400	42800	6190	6010	72	32	57100	7.6	
164M05M318CB	01	20	10-23-48	---	---	---	27	36	161	---	391	0	189	30	.7	17	---	852	530	210	---	62	---	7.1	---
164M05M318CD2	01	20	10-23-48	---	1400	---	88	49	36	---	368	14	130	29	.0	---	---	715	420	94	---	16	---	8.3	---
164M05M313CA8	01	23	10-23-48	---	1500	---	400	316	0	---	575	0	1840	136	.4	87	---	2480	2300	1830	---	0	---	7.3	---
164M05M313CB2	01	20	10-23-48	---	150	---	400	146	40	---	488	0	1120	85	.2	6.5	---	2280	1600	1200	---	5	---	7.2	---
164M05M313CB1	01	13	10-23-48	---	450	---	560	232	35	---	505	0	1920	33	6.2	---	---	3280	2350	1940	---	3	---	7.2	---
164M05M313CCD2	01	20	10-23-48	---	530	---	416	73	166	---	583	0	634	308	.0	174	---	2350	1340	862	---	21	---	7.0	---
164M05M313DCB	01	20	10-23-48	---	880	---	176	63	45	---	438	0	388	1.0	.5	6.5	---	1120	700	941	---	12	---	8.1	---
164M05M3488B	S0	346	10-04-66	---	---	---	1830	709	---	---	145	0	2890	28700	---	---	---	53800	7460	7370	83	33	71400	7.3	---
164M05M29ADD3	S1	103	05-28-71	20	0	120	128	52	254	10	418	0	63	516	.2	1.0	1000	1340	533	190	4.8	50	2210	8.2	---
164M05M320AC	N	35	08-14-70	14	1600	20	589	39	73	6.6	307	0	1340	52	.4	36	400	2500	1630	1380	---	9	---	2760	7.5
164M05M330DB	P	40	08-14-70	23	460	30	104	31	21	14	356	0	44	61	.5	22	400	956	388	96	.5	10	836	8.1	---
164M06M20DA1	P	105	08-12-70	28	0	40	11	1.6	310	6.4	546	0	227	7.1	.7	1.0	1700	899	34	0	23	44	1320	8.0	---
164M06M26DA2	---	100	09-27-70	31	240	10	33	18	382	14	622	0	328	82	.7	5.4	1700	1160	160	0	13	82	1830	8.2	---
164M06M29DA1	P	113	08-13-70	27	120	320	53	17	1010	12	354	0	1920	107	1.1	9.7	2000	3220	200	0	31	91	4470	7.9	---
164M06M20DA1	P	187	08-13-70	25	580	60	20	6.1	744	10	731	0	71	770	1.1	4.5	3260	2070	75	0	37	95	3560	8.2	---
164M06M28DA2	P	100	08-31-70	27	140	30	27	14	729	12	740	0	94	739	.8	38	2400	1990	124	0	28	92	3530	8.2	6.0

¹ See table 1 for explanation.

TABLE 5.--Chemical analyses of water from streams, springs, and reservoirs
(Analyses are in milligrams per liter, except as otherwise noted)

Location	Source	Date of collection	Discharge (gpm)	Temperature (°C)	Silica (SiO ₂) (g)	Total Iron (Fe) (ug/l)	Manganese (Mn) (ug/l)	Calcium (Ca) (mg)	Magnesium (Mg) (mg)	Sodium (Na) (mg)	Potassium (K) (mg)	Bicarbonate (HCO ₃) (mg)	Carbonate (CO ₃) (mg)	Sulfate (SO ₄) (mg)	Chloride (Cl) (mg)	Fluoride (F) (mg)	Nitrate (NO ₃) (mg)	Boron (B) (ug/l)	Dissolved solids		Hardness as CaCO ₃		Percent sodium	Specific conductance (micro-mhos at 25°C)	pH
																			Residue on evaporation at 180°C	Sum	Calcium, magnesium	Noncarbonate			
159-57-32	Middle Br. Park River	8-20-70	9	--	27	160	10	57	17	62	6.0	288	0	88	11	1.1	0	140	410	411	212	0	38	640	7.9
160-56-4CAD	Spring	9-3-69	90	--	29	0	30	62	11	9.8	1.5	212	0	32	3.9	.4	0	0	255	200	27	10	397	8.1	
161-54-4ADC	Tongue River at Cavalier	63	--	--	0	0	0	64	15	30	--	232	0	30	5	.2	4.0	--	380	220	30	--	530	7.8	
161-56-20DAA	Spring	8-18-77	9	12.5	34	0	50	126	36	44	3.2	357	0	158	39	.6	41	310	660	658	462	30	17	995	7.5
161-57-211	Sahsior Young Reservoir	11-19-69	--	--	17	0	60	92	29	51	--	260	0	216	13	.4	1.9	--	--	1,640	349	136	--	--	7.9
161-60-23ACA ¹	Langdon Reservoir	63	--	--	0	0	0	46	0	65	--	142	0	150	36	.2	.2	--	439	102	0	--	600	7.9	
161-60-23ACA	Langdon Reservoir	8-12-70	0	19.0	17	0	20	56	12	56	7.4	194	0	123	13	.2	3.0	120	412	384	188	29	38	598	7.6
162-56-330BD	Smith Coulee Little Pembina River	10-20-69	10	4.5	26	0	10	96	21	23	5.1	350	0	64	9.4	.3	1	0	389	416	325	38	13	652	8.2
162-57-10CDC	Little Pembina River	8-21-70	900	--	22	0	10	81	20	53	7.8	260	0	169	17	1.3	0	80	481	499	285	72	28	758	7.9
163-51-4 ²	Red River at Pembina	8-17-36	32,000	--	24	3,000	100	74	26	43	--	248	0	162	14	0	2.2	--	475	476	300	96	--	--	--
163-56-29ADD	Pembina River	8-21-70	104,000	--	27	30	10	89	31	50	8.8	289	0	207	8.7	.2	2.5	370	564	567	351	114	23	829	8.2
163-56-29ADD	Pembina River	9-1-70	67,000	17.0	26	900	20	89	34	51	9.1	304	0	205	13	.2	2.5	90	562	580	364	115	23	848	8.1
163-59-27D0D	Little Pembina River	8-21-70	5	--	19	50	10	67	19	93	8.7	352	0	135	23	1.0	1.0	140	537	540	247	0	44	854	8.1
163-62-160DD	Snowflake Creek	8-21-70	7,000	--	5.3	50	10	57	27	49	13	272	0	117	12	.9	0	50	454	415	255	32	28	677	7.8

¹ Analysis by North Dakota State Dept. of Health, Bismarck, N. Dak.
² Analysis by U.S. Army, Corps of Engineers, Omaha, Neb.
³ Analysis by North Dakota Geological Survey, Grand Forks, N. Dak.

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TABLE 6A.--Particle-size analyses
(Data from U.S. Geological Survey, except as indicated)

Location	Depth in feet	Aquifer code ¹	Percent particle size (diameter in millimeters)											Median grain size (mm)	Sorting coefficient ²	Remarks		
			Clay <0.004	Silt 0.004-0.0625	Sand					Gravel								
					Very fine 0.0625-0.125	Fine 0.125-0.25	Medium 0.25-0.5	Coarse 0.5-1.0	Very coarse 1-2	Very fine 2-4	Fine 4-8	Medium 8-16	Coarse 16-32				Very coarse 32-64	
159-55-22CCC	445-455	D		0.5	2.3	8.6	32.9	37.0	12.9		4.6	1.2	0.0	0.0	0.0	0.58	1.59	
160-54-31CCC	330-340	D		2.1	7.7	49.7	28.2	10.4	1.3		.4	.1	.0	.0	.0	.22	1.35	
160-56-2AAA	375-380	D		.7	.5	4.7	48.8	39.8	5.5		.0	.0	.0	.0	.0	.47	1.30	
160-56-5CCD	3-5	O2		.9	.5	4.7	9.9	15.1	22.4		22.0	14.5	7.3	2.7	.0	1.8	2.61	From gravel pit.
160-56-16AAA4	420-430	D		.5	.5	2.5	31.6	54.7	10.3		.0	.0	.0	.0	.0	.61	1.35	
160-56-16AAA4	470-480	D	2.7	20.0	19.5	34.8	15.9	6.8	.2		.0	.0	.0	.0	.0	.14	1.77	
160-56-16AAA4	570-580	D		.7	1.4	9.4	64.3	24.0	.2		.0	.0	.0	.0	.0	.41	1.27	
160-56-30ABD	2-5	O2	2.6	2.0	.4	.7	1.5	1.6	2.6		10.4	19.6	27.5	23.8	7.2	9.8	2.00	From gravel pit.
160-56-30DBD	2-10	O2	.0	.6	.3	.5	3.3	3.7	3.1		9.4	10.8	13.8	21.5	33.0	20.0	2.64	From gravel pit.
160-64-1AAB	50-60	S1	.0	7.7	2.6	20.5	41.5	15.4	2.6		5.3	2.8	.9	.7	.0	.34	1.57	
160-64-1AAB	80-90	S1	.0	3.9	.4	1.2	3.3	8.9	11.8		18.4	24.4	23.9	3.8	.0	4.3	2.35	
160-64-15CCD	50-70	S1	--	--	--	34	47	--	--		--	--	--	--	--	--	--	(3)
160-64-15CCD	70-75	S1	--	--	--	19	51	16	6		--	--	--	--	--	--	--	(3)
160-64-15CCD	75-80	S1	--	--	--	2	17	35	32		--	--	--	--	--	--	--	(3)
160-64-15CCD	80-85	S1	--	--	--	10	38	27	13		--	--	--	--	--	--	--	(3)
160-64-15CCD	85-90	S1	--	--	--	13	24	17	15		--	--	--	--	--	--	--	(3)
160-64-22BBA1	50-65	S1	--	--	--	40	39	11	--		--	--	--	--	--	--	--	(3)
160-64-22BBA1	65-80	S1	--	--	--	16	68	12	--		--	--	--	--	--	--	--	(3)
160-64-22BBA1	80-85	S1	--	--	--	7	26	25	19		--	--	--	--	--	--	--	(3)
160-64-22BBA1	85-90	S1	--	--	--	3	10	22	30		--	--	--	--	--	--	--	(3)
161-53-2AAA	130-140	S1	9.4	56.9	9.9	12.4	8.3	2.1	.9		.0	.0	.0	.0	.0	.05	1.58	
161-54-32CCC2	35-40	1G	3.4	39.3	48.3	7.4	1.3	.2	.0		.0	.0	.0	.0	.0	.07	1.36	
161-55-15BCD1	310-320	D		1.5	6.1	17.2	65.4	9.6	.3		.0	.0	.0	.0	.0	.34	1.31	
161-55-15BCD1	335-340	D		.8	1.8	6.4	35.9	47.6	7.4		.2	.0	.0	.0	.0	.55	1.46	
161-55-15BCD2	20-30	1G		2.7	53.5	28.2	12.0	1.9	.8		.6	.2	.1	.0	.0	.12	1.36	
161-55-15BCD2	30-40	1G	.0	15.1	61.4	21.9	1.4	.2	.0		.0	.0	.0	.0	.0	.09	1.24	
161-55-15BCD2	40-50	1G	.0	10.0	57.0	23.3	7.6	1.8	.4		.0	.0	.0	.0	.0	.10	1.32	
161-55-15BCD2	50-60	1G	5.5	9.6	63.6	19.8	1.4	.2	.0		.0	.0	.0	.0	.0	.10	1.29	
161-55-34BAC	2-4	1G		.9	.3	22.5	41.6	5.5	2.1		3.7	6.0	7.4	4.7	5.3	.35	3.40	From sand pit.
161-56-6DDD	35-38	1G	11.0	5.1	.2	.7	2.6	21.7	28.6		21.4	6.8	1.9	.0	.0	1.3	1.79	

Location	Depth in feet	Aquifer code ¹	Percent particle size (diameter in millimeters)												Median grain size (mm)	Sorting coefficient ²	Remarks
			Clay <0.004	Silt 0.004-0.0625	Sand					Gravel							
					Very fine 0.0625-0.125	Fine 0.125-0.25	Medium 0.25-0.5	Coarse 0.5-1.0	Very coarse 1-2	Very fine 2-4	Fine 4-8	Medium 8-16	Coarse 16-32	Very coarse 32-64			
161-56-21AAA	10-20	03	8.1	17.7	32.9	37.8	2.7	.5	.0	.3	.0	.0	.0	.0	.11	1.55	
161-56-30DCA	3-8	02	10.9	4.5	.6	1.8	3.4	3.2	2.8	11.9	17.8	22.3	16.0	4.7	6.2	3.70	From gravel pit.
161-56-32AAA	3-10	02	.0	.5	.4	3.1	8.6	19.6	17.8	18.9	16.1	9.1	2.9	3.1	2.0	2.56	From gravel pit.
161-61-22BCA	3-10	16	14.1	11.0	.8	3.5	11.4	15.4	11.6	15.0	8.0	5.6	2.2	1.4	.72	4.82	From gravel pit.
162-55-36DDD	275-280	0	.2		.6	1.0	5.2	23.6	45.7	9.4	9.8	4.5	.0	.0	1.3	1.41	
162-56- 1CCC1	30-40	16	9.2	9.2	12.7	29.2	18.4	10.3	4.4	2.8	2.6	1.2	.0	.0	.19	2.06	
162-56- 5BCD	3-20	03	.0	1.0	.5	1.3	2.9	21.8	22.5	2.7	2.8	8.8	13.3	19.7	2.0	5.41	From gravel pit.
162-56- 5DDD	20-30	03	4.1	2.1	.2	.4	1.9	11.4	12.6	15.3	17.4	31.4	3.3	.0	4.5	2.72	
162-56- 5DDD	55-65	03	8.8	6.0	.6	3.6	5.9	14.8	16.5	15.7	10.8	11.0	6.4	.0	1.5	3.10	
162-56- 5DDD	90-100	03	7.5	8.4	1.1	2.8	15.0	22.4	10.8	8.3	8.8	10.5	4.4	.0	.71	2.99	
162-56-10ABB3	0-10	03		1.6	14.8	66.4	8.1	8.1	1.1	.0	.0	.0	.0	.0	.17	1.14	
162-56-10ABB3	100-110	03	7.7	9.0	2.9	6.0	29.3	27.9	7.7	4.4	3.3	1.9	.0	.0	.48	1.76	
162-56-20AAA	0-10	03	3.9	2.8	.6	3.6	17.4	20.6	12.2	11.3	11.0	12.2	4.4	.0	1.0	3.30	
162-56-20AAA	40-50	03	3.8	2.0	.1	.4	2.2	9.7	12.6	15.0	16.1	24.7	3.0	10.3	5.2	2.65	
162-57-11ACC	2-5	03		1.2	.8	1.4	2.9	8.2	15.2	14.0	11.2	13.8	15.9	8.7	6.0	3.62	From gravel pit; 6.7 percent greater than 64 mm.
162-57-13CDD	2-5	03		2.8	.7	2.7	13.7	17.8	9.6	9.1	10.3	13.4	16.6	3.3	2.5	4.48	From gravel pit.
163-56-24AAA4	30-40	51	8.8	5.3	.1	.7	8.4	25.1	15.5	18.1	12.9	5.2	.0	.0	1.1	2.36	
163-56-24ADA1	290-300	0		1.6	4.2	58.7	33.6	1.6	.3	.0	.0	.0	.0	.0	.21	1.34	
163-56-29BBC	10-15	03	13.5	14.6	28.8	37.7	4.5	.7	.2	.0	.0	.0	.0	.0	.12	1.79	From road cut.
163-56-31BCA	3-5	03		.9	.2	.8	3.9	22.4	32.6	13.5	5.2	7.6	6.6	6.3	1.6	2.22	From gravel pit
163-56-33BAB	5-10	03	10.8	10.4	53.2	23.6	1.4	.4	.2	.0	.0	.0	.0	.0	.10	1.36	From road cut.
163-57-23CBB	3-5	02		1.5	.5	1.6	2.3	15.8	27.0	24.4	14.5	8.2	4.2	.0	2.0	1.98	From gravel pit.
163-57-26AAA	5-6	03		.4	3.6	75.1	11.4	5.6	2.6	1.0	.2	.1	.0	.0	.2	1.27	From sand pit.
164-57-34AAD	3-5	02		.6	.6	8.1	13.9	13.8	18.7	24.9	15.0	3.3	1.6	.0	1.7	2.52	From gravel pit.

¹ See table 1 for explanation.
² The smaller the sorting coefficient, which has a lower limit of 1, the more uniform the grain size of the sediment.
³ Analysis by Johnson Division, Universal Oil Products Company, St. Paul, Minnesota.

TABLE 6B.--Particle-size analyses
(Data from U.S. Bureau of Reclamation)

Location	Depth in feet	Particle size percentage (diameter in millimeters)		
		Clay <0.002	Silt 0.002-0.05	Sand 0.05-2
159-52-14BBB	0-3	56.0	34.4	9.6
159-52-14BBB	3-8	32.3	66.5	1.2
159-52-14BBB	8-13	21.3	77.0	1.7
159-52-17BBB	1.5-2.7	30.0	47.8	22.2
159-52-17BBB	3.1-5	29.5	67.5	3.2
159-52-17BBB	5-8	58.2	40.7	1.1
159-52-35CCC	0-2.5	12.1	66.9	21.0
159-52-35CCC	2.5-4.5	45.4	46.4	8.2
159-52-35CCC	4.5-8	51.5	44.0	4.5
159-53-14BBB	2.2-12.2	18.8	78.1	3.1
159-53-14BBB	12.2-23	26.8	71.5	1.7
159-54-14BBB	3-18	7.3	26.7	66.0
159-54-18BBB	2-3	13.7	22.2	64.1
159-54-18BBB	3-15	18.1	73.6	8.3
159-54-18BBB	15-28	5.7	32.1	62.2
159-54-29BBB	3-6	8.3	37.5	54.2
159-54-35CCC	4-13	4.8	86.7	8.5
159-54-35CCC	13-18	5.7	89.4	4.9
159-55- 7CCC	0-3	22.1	47.1	30.5
159-55- 7CCC	3-13	24.8	37.6	37.6
159-55- 7CCC	13-18	30.5	53.9	15.6
159-55-16AAA	0-2	9.6	49.3	41.1
159-55-16AAA	2-12.7	16.2	71.7	12.7
159-55-16AAA	12.7-23	5.4	32.4	62.2
159-55-31CCC	2-3	11.7	43.6	44.7
159-55-31CCC	3-6	6.6	46.7	46.7
159-55-31CCC	6-7	1.0	15.4	83.6
159-55-31CCC	7-13	3.9	46.5	49.6
159-55-33DDD	2-6	4.8	52.6	42.6
159-55-33DDD	6-23	--	--	4.9
159-56-16AAA	0-2.5	24.6	22.8	52.6
159-56-16AAA	2.5-8	25.2	35.2	39.6
159-56-18CAA	0-1.5	30.5	53.8	15.7
159-56-18CAA	1.5-3	41.4	53.2	5.4
159-56-18CAA	3-12	34.3	60.6	5.1
159-56-18CAA	12-13.5	27.4	49.0	23.6
159-56-31CCC	0-2.2	16.9	44.5	38.6
159-56-31CCC	2.2-8	15.3	34.2	50.5
159-56-33DDC	1-4.1	--	--	48.5
159-56-33DDC	4.1-8.5	15.3	47.2	37.5
160-52-30CCC	6.5-13	70.2	28.1	1.7
162-54-17CCC	0-1.5	15.3	22.5	62.2
162-54-17CCC	1.5-5	6.1	22.1	71.8
162-54-17CCC	5-13	49.3	47.8	2.9
163-56-34DDC1	0-3	17.4	16.7	65.9
163-56-34DDC1	3-20	8.2	13.4	78.4
163-56-34DDC1	20-23	13.5	25.5	61.0

TABLE 7A.--Hydraulic conductivities determined by laboratory tests
(Data from U.S. Geological Survey)

Location	Interval sampled, in feet	Aquifer code ¹	Lithology	Hydraulic conductivity, in feet per day
159-54-11CCC	7-8	01	Fine sand and silt	0.4
159-56-22BBB	7-8	02	Poorly sorted sand and gravel	5.4
159-59-18CCC	7-8	41	Pebbly clay	² .01
160-53-14CDD	7-8	01	Silt	.3
160-54-31CCC	330-340	D	Fine sandstone	² 3.9
160-55- 8CCD	7-8	1G	Fine sand	1.1
160-56-16AAA	470-480	D	Fine sandstone	² 1.3
160-63-30BBB	7-8	41	Pebbly clay	3.4
160-64- 1AAB	50-60	51	Very coarse sand	² 18.7
161-55-15BCD1	335-340	D	Coarse sandstone	² 55.4
161-55-15BCD2	30-40	1G	Very fine sand	² 12.1
161-55-15BCD2	40-50	1G	Very fine sand	² 14.8
161-55-15BCD2	50-60	1G	Very fine sand	² 11.2
161-56-21AAA	10-20	03	Very fine sand	² 1.5
161-58-16CCC	7-8	41	Pebbly clay	.0001
161-61-15CCD	7-8	41	Pebbly clay	.003
162-51-31DDD	7-8	01	Silt (strongly saline)	.4
162-56- 9BBC	7-8	03	Silty medium sand	.04
162-56-27CCC	7-8	03	Silty fine sand	.03
162-57-14DDD	7-8	03	Silty shaly sand	.5
162-60-13CCC	7-8	41	Pebbly clay	.01
162-64-15CCB	7-8	41	Pebbly clay	.003
163-56-24AAA4	30-40	51	Very coarse sand	² 16.7
163-56-24ADA1	290-300	D	Fine sandstone	² 44.0

¹See table 1 for explanation.

²Repacked sample.

TABLE 7B.--Hydraulic conductivities determined by field tests
(Data from U.S. Bureau of Reclamation)

Location	Interval tested, in feet	Lithology	Hydraulic conductivity	
			Inches per hour	Feet per day
159-53-25AAA	5.9-9.8	Oxidized silty clay loam	0.78	1.56
159-55-29BBB	8.0-11.7	Silt loam and silty clay loam	1.1	2.2
159-56- 1DDD	6.0-10.1	Oxidized silt loam and sand	3.7	7.4
160-53- 9ABB	8.0-10.9	Oxidized silt loam and silty clay loam	.32	.64
160-53-32CCC	6.4-10.3	Oxidized silt loam	1.33	2.66
160-54-17AAA	7.8-10.6	Oxidized very fine sandy loam	.75	1.50
160-54-22CCC	7.1-9.5	Oxidized silt loam	4.25	8.50
160-55-15ABB	7.0-9.5	Oxidized fine sand	8.0	16.0
160-56-12CCC	7.7-9.9	Oxidized very fine sand and clay loam	1.6	3.2
160-56-22DDD	5.2-8.0	Oxidized silty clay loam	.38	.76
161-53-16CCC	5.0-7.0	Oxidized silty clay loam	2.3	4.6
161-53-34DDD	6.0-9.7	Highly oxidized silty clay loam and silt loam	3.5	7.0
161-54- 5BCC	7.6-9.6	Partly oxidized fine sand	3.5	7.0
161-54-10DDD	7.9-11.8	Oxidized silt loam	1.4	2.8
161-54-20AAA	5.4-9.0	Oxidized silt and loamy fine sand	1.23	2.46
161-55- 3ADD	4.8-7.2	Oxidized fine sand	2.6	5.2
161-56-23BBB	3.3-6.0	Oxidized very fine and fine sand	4.9	9.8
161-56-36BBB	6.5-9.5	Sandy loam and loamy sand and gravel	5.1	10.2
162-55- 3DCC	7.0-9.5	Oxidized silt loam	5.92	11.84
162-55-14DDD	6.0-8.5	Oxidized very fine sandy loam	2.9	5.8
162-55-33BBB	4.5-8.1	Oxidized loamy sand	3.58	7.16